- B. During earthwork activities.
- C. During trenching activities.
- D. During roadway structural section activities.
- E. When vehicles are entering and leaving the job site.
- F. After soil disturbing activities.
- G. After observing offsite tracking of material.

Contractor's Water Pollution Control Manager shall inspect adjacent paved areas at job site entrances and exits and paved roadways within the job site on a minimum daily basis, and more frequently when activities that require street sweeping are being performed. Contractor's Water Pollution Control Manager shall maintain a "Tracking Inspection Log." Street sweeping shall be conducted:

A. Within 1 hour, if sediment or debris is observed on paved areas or paved roadways.

At least one sweeper, in good working order, must be on the job site at all times when sweeping work may be required.

Perform street sweeping to minimize dust. If dust generation is excessive or sediment pickup is ineffective, water may be used but shall be contained, collected (e.g. vacuum), and properly disposed.

Material collected during street sweeping must be removed and disposed of under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way" of the Standard Specifications.

#### Payment

Full compensation to conform with the requirements of this section shall be considered as included in the contract lump sum price paid for Water Pollution Control including furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in street sweeping, including disposal of collected material, as shown on the plans, as specified in the Standard Specifications, these Special Provisions, and as directed by the Engineer. Therefore, no additional compensation will be allowed for street sweeping.

## TRAFFIC CONTROL SYSTEM/ PUBLIC CONVENIENCE/ PUBLIC SAFETY:

Contractor shall prepare construction staging and traffic control plans for review and approval by the Transportation Department.

Proposed plans shall be submitted by the Contractor for review and approval by the Transportation Department at least two weeks prior to the start of construction. The construction staging and traffic control plans shall be prepared, signed and stamped by a Civil Engineer or Traffic Engineer who is registered as such in the State of California, unless otherwise specifically allowed by the Engineer. The Contractor shall revise and implement the plans as directed by the Construction Engineer. Construction shall not begin until the Engineer provides Contractor with County approval of the plans.

Construction staging and traffic control plans shall be in accordance with the appropriate standards and specifications for construction staging, detour roads, traffic control, including the State of California Highway Design Manual, the Manual on Uniform Traffic Control Devices 2012 Edition, the corresponding California Supplement, and subsequent modifications as adopted by the State of California Department of Transportation, Standard Plans and Standard Specifications, and the Work Area Traffic Control Handbook (WATCH), as published by Building News, Inc. Any requests for deviation from the established design standards or specifications are to be submitted to the Construction Engineer for review and approval prior to submission of the required plans.

With regard to the preparation and implementation of the plans, attention is especially directed to Sections 7-1.06, 7-1.08, 7-1.09, 7-1.11, 7-1.12 and Section 12 of the State of California Standard Specifications. Section 12-2.02 of the Standard Specifications is deleted.

Maintaining traffic shall conform to the provisions in 7 1.02 "Load Limitations", 7 1.06 "Safety and Health Provisions", 7 1.08 "Public Convenience", 7 1.09 "Public Safety", and 12 3.04 "Portable Delineators" of the Standard Specifications, the Manual on Uniform Traffic Control Devices 2012 Edition, the corresponding California Supplement, and subsequent modifications as adopted by the State of California Department of Transportation, the Section of these contract documents entitled "Insurance - Hold Harmless", and these Special Provisions.

All existing traffic control signs and street name signs shall be maintained in visible locations as directed by the Engineer.

No detours will be allowed, unless specifically allowed herein. The Contractor will be required to conduct his operations in such a manner that traffic will be permitted to pass through the work area with as little delay as possible.

All warning lights, signs, flares, barricades and other facilities for the sole convenience and direction of public traffic shall be furnished and maintained by the Contractor. All traffic control devices shall conform to and be placed in accordance with the Manual on Uniform Traffic Control Devices 2012 Edition, the corresponding California Supplement, and subsequent modifications as adopted by the State of California Department of Transportation.

All construction signs shall be either covered or removed when not required by the nature of the work or if no present hazard to the motorist exists.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing excavation for construction area sign posts. The regional notification centers include, but not limited to, the following:

#### **Notification Center**

Underground Service Alert-Southern California (USA)

**Telephone Number** 1-800-422-4133, 1-800-227-2600 or 811

Excavations required to install construction area signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes.

No payment for extra work will be allowed for work performed as specified in Section 12 2.02 (Flagging Costs) of the Standard Specifications. Flagging costs will be borne entirely by the Contractor.

The Contractor shall be responsible to distribute an information letter pertaining to the planned work to all affected residences and businesses, at least one week prior to commencing work adjacent to those residences and businesses. It shall be the responsibility of the Contractor to design the information letter, obtain design approval from the Engineer, print sufficient copies, and distribute the letter. The Transportation Department logo shall be included on the letter. A computer file of the logo may be obtained from the Engineer in .WPG, .DXF, .DGN or .DWG format. The letter shall be similar to the sample provided by the Engineer, and shall include a project description, the scope of work, the anticipated construction schedule, and other information as appropriate.

The Contractor shall post temporary no parking signs on affected streets 24 hours prior to work on those streets. The temporary no parking signs shall state the anticipated dates and hours of work on those streets.

#### Payment

Full compensation, except as otherwise provided herein, for conforming to the requirements of this article, including furnishing, installing and maintaining all traffic control devices shown on the construction staging and traffic control plans, including construction area signs, channelizers, portable changeable message signs, temporary pavement markers, temporary traffic stripes, shall be considered as included in the contract lump sum price paid for Traffic Control System, and no additional compensation will be allowed therefor.

#### **MAINTAINING TRAFFIC:**

Maintaining traffic shall conform to the provisions in Section 7-1.08, "Public Convenience", Section 7-1.09, "Public Safety" and Section 12, "Construction Area Traffic Control Devices" of the Standard Specifications and "Public Safety" of these Special Provisions.

Daily working hours shall be between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, except legal holidays, as approved by the Engineer. Exceptions and specific work schedules shall be submitted to the Engineer for consideration.

Closure is defined as the closure of a traffic lane or lanes, including shoulder, ramp or connector lanes, within a single traffic control system.

Closure shall conform to the provisions in "Traffic Control System" of these Special Provisions.

Local authorities shall be notified at least five (5) business days before work begins. The Contractor shall cooperate with local authorities to handle traffic through the work area and shall make arrangements to keep the work area clear of parked vehicles.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders including sections closed to public traffic.

When work vehicles or equipment are parked on the shoulder within six (6) feet of a traffic lane, the shoulder area shall be closed.

When work vehicles or equipment are parked on the shoulder within six (6) feet of a traffic lane, the shoulder area shall be closed with fluorescent orange traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 traffic cones or portable delineators shall be used for the taper. A W20-1 (ROAD WORK AHEAD) or W21-5b (RIGHT/LEFT SHOULDER CLOSED AHEAD) or C24 (CA) (SHOULDER WORK AHEAD) sign shall be mounted on a crashworthy portable sign support with flags. The sign shall be placed where designated by the Engineer. The sign shall be a minimum of 48" x 48" in size. The Contractor shall immediately restore to the original position and location a traffic cone or delineator that is displaced or overturned, during the progress of work.

If minor deviations are required on traffic control plan, a written request shall be submitted to the Engineer at least 15 days before the proposed date of the closure. The Engineer may approve the deviations if there is no significant increase in the cost to the County and if the work can be expedited and better serve the public traffic.

Designated County legal holidays are January 1<sup>st</sup>, the third Monday in January, February 12th, the third Monday in February, the last Monday in May, July 4<sup>th</sup>, the first Monday in September, the second Monday in October, November 11<sup>th</sup>, Thanksgiving Day, the Friday following Thanksgiving Day, December 24th and 31st when they fall on Monday, December 25<sup>th</sup>, December 26th and January 2nd when they fall on Friday, When a designated legal holiday falls on a Sunday, the following Monday shall be a designated legal holiday. When January 1st, February 12th, July 4th, November 11<sup>th</sup>, or December 25th fall on a Saturday, the preceding Friday shall be a designated legal holiday.

#### **Payment**

Full compensation for furnishing, erecting, maintaining, removing and disposing of the signs shall be considered as included in the contract lump sum price paid for Traffic Control System and no additional compensation will be allowed therefor.

#### **CLEARING AND GRUBBING:**

Clearing and grubbing (including but not limited to removal and disposal of small trees, bushes, plants, lawn, wood headers, tree stumps and removal, relocation, stockpile or disposal of split rail fence, railroad ties, brick edging, decorative rocks or other items as directed) shall conform to the provisions in Section 16 of the Standard Specifications.

Nothing in this section shall relieve the Contractor from providing for public safety in conformance with the provisions in Section 7-1.09, "Public Safety" of the Standard Specifications.

#### Payment

Full compensation, except as otherwise provided herein, for conforming to the requirements of this article including all labor, equipment, materials and incidentals, for performing clearing and grubbing (including but not limited to removal and disposal of small trees, bushes, plants, lawn, wood headers, tree stumps and removal, relocation, stockpile or disposal of split rail fence, railroad ties, brick edging, decorative rocks or other items as directed) shall be considered as included in the contract price paid per lump sum for Clearing and Grubbing and no additional compensation will be allowed therefor.

#### **RELOCATE IRRIGATION SYSTEMS:**

Relocation of existing irrigation systems shall be performed when encountered or where directed by the Engineer.

Attention is directed to Section 20-5.025, "Maintain Existing Water Supply", of the Standard Specifications.

Existing irrigation facilities that are damaged by the contractor's operation shall be reported immediately to the Engineer, and shall be adjusted and repaired as necessary and as directed by the Engineer. Existing irrigation facilities that are in conflict with the planned improvements shall be relocated as required, and as directed by the Engineer.

The Contractor shall be responsible for the restoration of landscaping and irrigation facilities in kind. This shall include relocation of irrigation pipes, pipe connections, sprinklers and associated equipment, re-seeding of disturbed lawn and landscaped areas that are damaged by construction activities and other such work as may be required.

#### Payment:

Full compensation for conforming to the requirements of this article including all labor, equipment, materials and incidentals, to Relocate Irrigation Systems shown on the plans or as directed by the engineer, shall be included in the contract lump sum amount paid for 'Clearing and Grubbing' and no additional compensation will be allowed therefor.

#### **REMOVE TREE:**

Trees shall be removed including roots as shown on the plan and/or as directed by the Engineer.

Removed trees, roots, stumps and trimmings shall be the property of the Contractor and shall be disposed of by the Contractor, as provided in Section 7-1.13 of the Standard Specifications.

Tree trimming shall be considered as included in the lump sum price paid for Clearing and grubbing and no additional compensation will be allowed.

The removal or trimming of any tree or large bush occurring between March 1<sup>st</sup> and September 1<sup>st</sup> will require a pre-construction survey for nesting birds. The Contractor shall schedule accordingly.

The nesting survey, if required, will be provided by Riverside County staff.

Tree trimming and tree removal shall be in accordance with the applicable American National Standard and ANSI Z133.

#### **Regulatory Requirements**

Attention is directed to the Federal Migratory Bird Treaty Act (15 USC 703-711) 50 CFR Part 21 and 50 CFR Part 10, and the California Department of Fish and Game Code Sections 3503, 3513 and 3800, that protect migratory birds, their occupied nests, and their eggs from disturbance or destruction.

#### Construction

Ground disturbance, tree, shrub and/or vegetation removal that occurs between March 1st and September 1st will not commence until a preconstruction survey for nesting birds has verified that no active nests have been located or the Engineer has approved the beginning of work. If an active nest is located, construction within 500 feet of the nest must be avoided until the nest has been vacated and the young are independent of their parents.

Between March 1st and September 1st, the Contractor shall notify the Engineer 15 working days prior to beginning work disturbing structures, the ground or vegetation. The Engineer will approve the beginning of work disturbing the ground or vegetation between March 1st and September 1st.

The Contractor shall use exclusion techniques directed by the Engineer to prevent migratory birds from nesting on the ground, on structures or in trees, shrubs or other vegetation within the project limits.

If evidence of bird nesting is discovered, the Contractor shall not disturb the nesting birds or nests until the birds have naturally left the nests. If evidence of migratory bird nesting is discovered after beginning work, the Contractor shall immediately stop work within 500 feet of the nests and notify the Engineer. Work shall not resume until the Engineer provides a

written notification that work may begin at or adjacent areas of the discovered bird nest locations.

Attention is directed to Section 8-1.05, "Temporary Suspension of Work" of the Standard Specifications.

Nothing in this section shall relieve the Contractor from providing for public safety in conformance with the provisions in Section 7-1.09, "Public Safety" of the Standard Specifications.

#### Method of Payment and Penalties

If, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in approving the disturbance structures, ground or vegetation, the Contractor will be compensated for resulting losses, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays" of the Standard Specifications.

Preventing nesting by using appropriate exclusion techniques will be paid for as extra work as provided in Section 4-1.03D,"Extra Work" of the Standard Specifications.

Notwithstanding any other remedies authorized by law, the County may retain or withhold monies due the Contractor under the contract, in an amount determined by the Department, up to and including the entire amount of penalties proposed, assessed, or levied as a result of the Contractor's violation of Federal or State law, regulations or requirements. Funds may be retained by the County until final disposition has been made as to the penalties. The Contractor shall remain liable for the full amount of penalties until such time as they are finally resolved with the entity seeking the penalties. Upon final disposition, the County shall inform the Contractor or the withheld amount.

Penalties as used in this section, "General Migratory Bird Protection" shall include fines, penalties, and damages whether proposed, assessed, or levied against the County or the Contractor. Penalties shall also include payments or costs incurred in settlement for alleged violations of applicable laws, regulations, or requirements. Costs incurred could include sums spent instead of penalties, in mitigation or to remediate or correct violations.

Exclusion devices, nesting prevention measures, and nest removal that are ordered by the Engineer shall be compensated per Section 5-1.15 "Force Account Payment" of the General Provisions.

Full compensation, except as otherwise provided herein, for conforming to the requirements of this article, including all labor, equipment, materials and incidentals, to remove trees as shown on the plans or as directed by the engineer, shall be paid **per each** as listed in bid proposal and no additional compensation will be allowed therefor.

#### **ROADWAY EXCAVATION:**

Roadway excavation shall conform to the provisions of Section 19 of the Standard Specifications and these Special Provisions.

At road connections and at limits of asphalt paving, existing pavement shall be header cut as shown on the plans or as directed by the Engineer. Full compensation for furnishing all labor, tools and doing all the work necessary including grinding, and sawcutting shall be considered as included in the contract prices paid for the various asphalt concrete items and no additional compensation will be allowed therefor.

Existing pavement including any base material shall be cut back to neat lines and removed as shown on the plans or as directed by the Engineer. Excess material will become the property of the Contractor and will be disposed of as provided in Section 7-1.13 of the Standard Specifications.

Removal of pavement and base material will be considered as roadway excavation for payment purposes.

#### **Relative Compaction:**

Relative compaction shall conform to the provisions of Section 19-5.03, "Relative Compaction (95 Percent)" of the Standard Specifications, these Special Provisions and/or as directed by the Engineer.

Whenever relative compaction is specified to be determined by Test Method No. Calif. 216, the in-place density may be determined by Test Method No. Calif. 231. The in-place density required by Test Method No. Calif. 312 may be determined by Test Method No. 231. The wet weight or dry weight basis and English Units of Measurement may be used at the option of the Materials Engineer.

#### Payment

The contract unit bid price paid per cubic yard for Roadway Excavation shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all work involved including the compaction of the subgrade and the grading of the shoulder as directed by the Engineer and no additional compensation will be allowed therefor.

#### **AGGREGATE BASE:**

Aggregate base shall be Class 2 and shall conform to the provisions in Section 26, "Aggregate Bases" of the Standard Specifications and these Special Provisions and shall meet the gradation requirements for ¾ inch maximum.

The first paragraph of Section 26-1.02A, "Class 2 Aggregate Base" shall be modified to read:

Aggregate for Class 2 aggregate base shall be free from organic matter and other deleterious matter, and shall be of such nature that it can be compacted readily under

watering and rolling to form a firm and stable base. Aggregate may consist of broken and crushed asphalt concrete or Portland cement concrete and may contain crushed aggregate base or other rock materials. The material may contain no more than 3 percent brick by weight as determined by California Test Method 202 as modified: Brick material retained on a No.4 sieve shall be identified visually and separated manually. Brick quantification shall be based on total weight of dry sample. Also, material retained on the 4.75 mm (No.4) sieve shall contain no more than 15 percent of particles (gravel) that have no more than one fractured face.

The Quality Requirements contained in Section 26-1.02A shall be modified to read:

#### **QUALITY REQUIREMENTS**

Test	Contract Compliance
Resistance (R-Value)	
Virgin Rock	78 Minimum
Crushed Miscellaneous	80 Minimum
Sand Equivalent	
Virgin Rock	25 Minimum
Crushed Miscellaneous	35 Minimum
Durability Index	35 Minimum
Percentage Wear	
100 Revolutions	15 Maximum
500 Revolutions	52 Maximum

#### **Payment**

Quantities of Aggregate Base will be paid for at the contract unit price per cubic yard and in accordance with the provisions of Sections 26-1.06 and 26-1.07 of the Standard Specifications, and will include the base requirements under all proposed AC pavement improvements. No adjustment in the bid price per cubic yard for overages or underages from the stated quantity will be allowed.

#### **HOT MIX ASPHALT:**

Asphalt concrete shall be Type "A" and shall conform to the requirements of Section 39 of the Standard Specifications and the following:

Aggregate grading shall be three-quarter inch (3/4") maximum.

The asphalt lift thickness table, as shown in Section 39-6.01, "General Requirements" of the Standard Specifications, is revised as follows:

Total Thickness Shown on Plans	Minimum No. of Layers	Layer	Γορ Γhickness οot)	Layer '	Lower Thickness Toot)	Thi	Lower Layer ckness foot)
	<u></u>	Min.	Max.	Min.	Max.	Min.	Max.
0.24-foot or less <sup>a</sup>	1	<del>-</del>	-	-	-	- 1	· -
0.25-foot	2 <sup>b</sup>	0.12	0.13	0.12	0.13	-	-
0.26 - 0.46 foot	2	0.12	0.21	0.14	0.25	-	-
0.47-foot or more	3 or more	0.15	0.21	0.15	0.25	0.17	0.25

Footnotes to asphalt thickness table are revised as follows:

- a. No Change.
- b. One layer of 0.25 foot thick may be placed as approved by the Engineer. When the Traffic Index specified is 5.5 or below, two layers shall be placed.

#### **Asphalts:**

Asphalt shall conform to the provisions in this Section, "Asphalts". Section 92, "Asphalts" of the Standard Specifications shall not apply.

Asphalt shall consist of refined petroleum or a mixture of refined liquid asphalt and refined solid asphalt, prepared from crude petroleum. Asphalt shall be:

- 1. Free from residues caused by the artificial distillation of coal, coal tar, or paraffin;
- 2. Free from water;
- 3. Homogeneous.

#### General:

The Contractor shall furnish asphalt in conformance with the State California Department of Transportation's "Certification Program for Suppliers of Asphalt". The Department maintains the program requirements, procedures, and a list of approved suppliers at:

http://www.dot.ca.gov/hq/esc/Translab/fpmcoc.htm

The Contractor shall ensure the safe transportation, storage, use, and disposal of asphalt.

The Contractor shall prevent the formation of carbonized particles caused by overheating asphalt during manufacturing or construction.

Performance graded (PG) asphalt binder shall conform to the following:

	AASHTO	Spe	ecification Gr	ade
Property	Test Method	PG 64-10	PG 64-16	PG 70-10
	Original Binder	•	<u> </u>	· · · · · · · · · · · · · · · · · · ·
Flash Point, Minimum <sup>O</sup> C	T48	230	230	230
Solubility, Minimum % <sup>b</sup>	T44	99	99	99
Viscosity at 135 °C, Maximum, Pa's	T316	3.0	3.0	3.0
Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G*/sin(delta), kPa	T315	64 1.00	64 1.00	70 1.00
RTFO Test <sup>e</sup> , Mass Loss, Maximum, %	T240	1.00	1.00	1.00
R	ΓFO Test Aged Bind	er		
Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G*/sin(delta), kPa	T315	64 2.20	64 2.20	70 2.20
Ductility at 25 °C Minimum, cm	T51	75	75	75
PAV <sup>f</sup> Aging, Temperature, °C	R28	100	100	110
RTFO '	Test and PAV Aged	Binder		
Dynamic Shear, Test Temp. at 10 rad/s, °C Maximum G*/sin(delta), kPa	T315	31 <sup>d</sup> 5000	28 <sup>d</sup> 5000	34 <sup>d</sup> 5000
Creep Stiffness, Test Temperature, °C Maximum S-value, Mpa Minimum M-value	T313	0 300 0.300	-6 300 0.300	0 300 0.300

#### Notes:

Grade:

- a. Not used.
- b. The Engineer will waive this specification if the supplier is a Quality Supplier as defined by Department's "Certification Program for Suppliers of Asphalt".
- c. The Engineer will waive this specification if the supplier certifies the asphalt binder can be adequately pumped and mixed at temperatures meeting applicable safety standards.
- d. Test the sample at 3 °C higher if it fails at the specified test temperature. G\*sin(delta) shall remain 5000 kPa maximum.
- e. "RTFO Test" means the asphaltic residue obtained using the Rolling Thin Film Oven Test, AASHTO Test Method T240 or ASTM Designation: D2827.
- f. "PAV" means Pressurized Aging Vessel.

# Performance graded polymer modified asphalt binder (PG Polymer Modified) is:

Performance Graded Polymer Modified Asphalt Binder a

Tottomance	Graded Folymer Modified	Asphan Dinu		
			Specification	1
			Grade	
Property	AASHTO Test Method			
		PG.	PG	PG
	]	58-34 PM	64-28 PM	76-22 PM
	Original Binder			
Flash Point, Minimum °C	T 48	230	230	230
Solubility, Minimum % b	T 44°	98.5	98.5	98.5
Viscosity at 135°C, d	T 316			
Maximum, Pa·s		3.0	3.0	3.0
Dynamic Shear,	T 315			
Test Temp. at 10 rad/s, °C		58	64	76
Minimum G*/sin(delta), kPa		1.00	1.00	1.00
RTFO Test,	T 240			
Mass Loss, Maximum, %		1.00	1.00	1.00
	RTFO Test Aged Binder			
Dynamic Shear,	T 315			
Test Temp. at 10 rad/s, °C		58	64	76
Minimum G*/sin(delta), kPa		2.20	2.20	2.20
Dynamic Shear,	T 315			
Test Temp. at 10 rad/s, °C		Note e	Note e	Note e
Maximum (delta), %		80	80	80
Elastic Recovery <sup>f</sup> ,	T 301			
Test Temp., °C		25	25	25
Minimum recovery, %		75	75	65
PAV <sup>g</sup> Aging,	R 28			
Temperature, °C		100	100	110
RT	FO Test and PAV Aged Bi	nder	<u></u>	
Dynamic Shear,	T 315			
Test Temp. at 10 rad/s, °C		16	22	31
Maximum G*sin(delta), kPa		5000	5000	5000
Creep Stiffness,	T 313			
Test Temperature, °C		-24	-18	-12
Maximum S-value, MPa		300	300	300
Minimum M-value		0.300	0.300	0.300

#### Notes:

- a. Do not modify PG Polymer Modifier using acid modification.
- b. The Engineer waives this specification if the supplier is a Quality Supplier as defined by the Department's "Certification Program for Suppliers of Asphalt".
- c. The Department allows ASTM D5546 instead of AASHTO T44.
- d. The Engineer waives this specification if the supplier certifies the asphalt binder can be adequately pumped and mixed at temperatures meeting applicable safety standards.
- e. Test temperature is the temperature at which G\*/sin(delta) is 2.2 kPa. A graph of log G\*/sin(delta) plotted against temperature may be used to determine the test temperature when G\*/sin(delta) is 2.2 kpa. A graph of (delta) versus temperature may be used to determine delta at the temperature when G\*/sin(delta) is 2.2 kPa. The Engineer also accepts direct measurement of (delta) at the temperature when G\*/sin(delta) is 2.2 kPa.
- f. Test without a force ductility clamp may be performed.
- g. "PAV" means Pressurized Aging Vessel.

#### Sampling:

The Contractor shall provide a sampling device in the asphalt feed line connecting the plant storage tanks to the asphalt weighing system or spray bar. The sampling device shall be accessible between 24 and 30 inches above the platform. The Contractor shall provide a receptacle for flushing the sampling device.

The sampling device shall include a valve:

- 1. With a diameter between 1/2 and 3/4 inches;
- 2. Manufactured in a manner that a one-quart sample may be taken slowly at any time during plant operations;
- 3. Maintained in good condition.

The Contractor shall replace failed valves.

In the presence of the Engineer, the Contractor shall take 2 one-quart samples per operating day. The Contractor shall provide round friction top containers with one-quart capacity for storing samples.

#### **Applying Asphalt:**

Unless otherwise specified, the Contractor shall heat and apply asphalt in conformance with the provisions in Section 93, "Liquid Asphalts" of the Standard Specifications.

Section 39-2.01, "Asphalts" is replaced in its entirety with the followings:

Asphalt binder to be mixed with aggregate shall conform to the provisions in "Asphalts" of these Special Provisions.

The grade of asphalt binder shall be: PG 64-10 (Inland valleys).

Liquid asphalt for prime coat shall conform to the provisions in Section 93, "Liquid Asphalts" of the Standard Specifications and shall be the Grade 64-10 unless otherwise designated by the contract item or otherwise specified in these Special Provisions.

Asphaltic emulsion for paint binder (tack coat) shall conform to the provisions in Section 94, "Asphaltic Emulsion" of the Standard Specifications for the rapid-setting or slow-setting type and grade approved by the Engineer. Grade 64-10 shall be used if not otherwise specified.

Section 39-3.01B (1) shall be amended to include:

Aggregate of the 3/4 inch or 1/2 inch maximum size and aggregate for asphalt concrete base shall be separated into 3 or more sizes and each size shall be stored in separate bins.

If 3 sizes are used, one bin shall contain that portion of the material which will pass the maximum size specified and be retained on a 3/8 inch sieve; one bin shall contain that portion of the material which will pass a 3/8 inch sieve and be retained on a No. 8 sieve; and one bin shall contain that portion of the material which will pass a No. 8 sieve.

Aggregate of 3/8 inch maximum size shall be separated into 2 sizes and each size shall be stored in separate bins. One bin shall contain that portion of the material which will pass the maximum size specified and be retained on a No. 8 sieve and one bin shall contain that portion of the material which will pass a No. 8 sieve.

The bin containing the fine material shall not contain more than 15 percent of material retained on the No. 8 sieve. The material in any of the other bins shall not contain more than 15 percent of material passing a No. 8 sieve. Failure to comply with this requirement shall be corrected immediately, and the material in the bins not meeting these requirements shall be re-screened or wasted.

All asphalt concrete for this project shall be supplied from one source unless approved by the Engineer. Said source shall be listed on the Contractors Source of Materials List as required in Section 6 of the Standard Specifications.

Asphaltic emulsion shall be furnished and applied as provided in Section 39-4.02.

In addition to the provisions in Section 39-5.01, "Spreading Equipment" of the Standard Specifications, asphalt paving equipment shall be equipped with automatic screed controls and a sensing device or devices.

When placing asphalt concrete to the lines and grades established by the Engineer, the automatic controls shall control the longitudinal grade and transverse slope of the screed. Grade and slope references shall be furnished, installed, and maintained by the Contractor. The Contractor shall use a ski device with a minimum length of 30 feet or as directed by the Engineer. The ski device shall be a rigid one piece unit and the entire length shall be utilized in activating the sensor.

When placing the initial mat of asphalt concrete on existing pavement, the end of the screed nearest the centerline shall be controlled by a sensor activated by a ski device not less than 30 feet. The end of the screed farthest from centerline shall be controlled by an automatic transverse slope device set to reproduce the cross slope designated by the Engineer, by a sensor activated by a similar ski device or as directed by the Engineer.

When paving contiguously with previously placed mats, the end of the screed adjacent to the previously placed mat shall be controlled by a sensor that responds to the grade of the previously placed mat and will reproduce the grade in the new mat within a 0.12 inch tolerance. The end of the screed farthest from the previously placed mat shall be controlled in the same way it was controlled when placing the initial mat.

Should the methods and equipment furnished by the Contractor fail to produce a layer of asphalt concrete conforming to the provisions, including straightedge tolerance, of Section 39-6.03, "Compacting" of the Standard Specifications or elsewhere in these Special Provisions,

the paving operations shall be discontinued and the Contractor shall modify the equipment or methods, or furnish substitute equipment.

Should the automatic screed controls fail to operate properly during a day's work, the Contractor may manually control the spreading equipment for the remainder of that day. However, the equipment shall be corrected or replaced with alternative automatically controlled equipment conforming to the provisions in this section before starting another day's work.

#### **General Criteria For Profiling:**

In addition to the straightedge provisions in Section 39-6.03, "Compacting" of the Standard Specifications, asphalt concrete pavement shall conform to the surface tolerances specified herein.

The uppermost layer of asphalt concrete surfacing shall be profiled in the presence of the Engineer using a California Profilograph or equivalent in conformance with California Test 526 and as specified in these Special Provisions.

The California Profilograph or equivalent will not be required for the following areas of the pavement surface but shall conform to the straightedge requirements in Section 39-6.03, "Compacting" of the Standard Specifications:

- 1. Pavement with a total thickness less than 0.24 foot;
- 2. Pavement on horizontal curves with a centerline curve radius of less than 1,000 feet and the pavement within the superelevation transition on those curves;
- 3. Pavement placed in a single lift when required by the Special Provisions;
- 4. Pavement with extensive grade or cross slope correction which does not receive advance leveling operations in conformance with the provisions in Section 39-6.02, "Spreading" of the Standard Specifications;
- 5. Pavement for ramps and connectors with steep grades and high rates of superelevation, as determined by the Engineer;
- 6. Shoulders and miscellaneous areas.

The Contractor shall conform to California Test 526, except a zero (null) blanking band shall be used for determining the Profile Index. Prior to beginning profiles, the profilograph shall be calibrated in the presence of the Engineer. Two profiles shall be obtained within each traffic lane, 3 feet from and parallel with the edges of the lane.

Pavements profiled shall conform to the following Profile Index requirements:

1. Pavement on tangent alignment and pavement on horizontal curves having a centerline curve radius of 2,000 feet or more shall have a Profile Index of 0.16 foot or less for each 330 feet section profiled;

- 2. Pavement on horizontal curves having a centerline curve radius of 1,000 feet or more but less than 2,000 feet, including the pavement within the superelevation transition of these curves, shall have a Profile Index of 0.32 foot or less for each 330 feet section profile;
- 3. Pavement within any 330 feet section, containing high point areas with deviations in excess of 0.025 foot in a length of 25 feet or less, when tested in conformance with the requirements in California Test 526, shall be corrected by the Contractor regardless of the Profile Index.

The Contractor shall complete initial runs of the profilograph prior to opening the pavement to public traffic. If initial profiles cannot made prior to opening the pavement to public traffic, the initial runs of the profilograph shall be made the next day that traffic control is permitted for the area to be profiled.

Areas of the top surface of the uppermost layer of asphalt concrete pavement that do not meet the specified surface tolerances shall be brought within tolerance by abrasive grinding.

Abrasive grinding shall be performed to reduce individual deviations in excess of 0.025 foot, and to reduce the Profile Index of the pavement to be within the specified tolerance. Areas which have been subjected to abrasive grinding shall receive a seal coat. Deviations in excess of 0.025 foot which cannot be brought into specified tolerance by abrasive grinding shall be corrected by either (1) removal and replacement or (2) placing an overlay of asphalt concrete. The corrective method for each area shall be selected by the Contractor and shall be approved by the Engineer prior to beginning the corrective work. Replacement or overlay pavement not meeting the specified tolerances shall be corrected by the methods specified above. Corrective work shall be at the Contractor's expense. The Contractor shall run profilograms on the areas that have received abrasive grinding or corrective work until the final profilograms indicate the Profile Index of the area is within the specified tolerance.

When abrasive grinding is used to bring the top surface of the uppermost layer of asphalt concrete surfacing within the specified surface tolerances, additional abrasive grinding shall be performed as necessary to extend the area ground in each lateral direction so that the lateral limits of grinding are at a constant offset from, and parallel with, the nearest lane line or pavement edge, and in each longitudinal direction so that the grinding begins and ends at lines normal to the pavement centerline, within a ground area. Ground areas shall be neat rectangular areas of uniform surface appearance.

The original of the final profilograms that indicate the pavement surface is within the Profile Index specified shall become the property of the County and shall be delivered to the Engineer prior to acceptance of the contract.

#### Payment

Hot Mix Asphalt will be paid for at a unit price **per ton** as a combined item, including mineral aggregate and asphalt binder in place on the roadbed.

Full compensation for furnishing and applying asphaltic emulsion for paint binder (tack coat) shall be considered as included in the contract price paid for Hot Mix Asphalt.

The contract bid price paid per ton for Hot Mix Asphalt shall include full compensation for furnishing all labor, tools, materials, equipment, and incidentals, and for doing all the work involved including the furnishing/application of asphaltic emulsion (paint binder) and header cutting and joining existing pavement as shown on the plans and/or as directed by the Engineer

#### **Header Cuts:**

At road connections and at limits of asphalt paving, existing pavement shall be header cut as shown on the plans or as directed by the Engineer. Full compensation for furnishing all labor, tools and doing all the work necessary including grinding, and sawcutting shall be considered as included in the contract prices paid per ton for the various asphalt concrete items and no additional compensation will be allowed therefor.

#### **COMPENSATION ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS:**

The provisions of this section shall apply only to the following contract items:

ITEM CODE	ITEM
390130	Hot Mix Asphalt

The compensation payable for asphalt binder used in hot mix asphalt will be increased or decreased in conformance with the provisions of this section for paving asphalt price fluctuations exceeding 10 percent (Iu/Ib is greater than 1.10 or less than 0.90) which occur during performance of the work.

The adjustment in compensation will be determined in conformance with the following formulae when the item of asphalt concrete and asphalt rubber hot mix are included in a monthly estimate:

- A. Total monthly adjustment = AQ
- B. For an increase in paving asphalt price index exceeding 10 percent:

$$A = 0.90 (Iu/Ib - 1.10) Ib$$

C. For a decrease in paving asphalt price index exceeding 10 percent:

$$A = 0.90 (Iu/Ib - 0.90) Ib$$

- D. Where:
- A = Adjustment in dollars per ton of paving asphalt used to produce hot mix asphalt rounded to the nearest \$0.01.

- Iu = The California Statewide Paving Asphalt Price Index which is in effect on the first business day of the month within the pay period in which the quantity subject to adjustment was included in the estimate.
- Ib = The California Statewide Paving Asphalt Price Index for the month in which the bid opening for the project occurred.
- Q = Quantity in tons of paving asphalt that was used in producing the quantity of asphalt concrete shown under "This Estimate" on the monthly estimate using the amount of asphalt determined by the Engineer.

The adjustment in compensation will also be subject to the following:

- A. The compensation adjustments provided herein will be shown separately on payment estimates. The Contractor shall be liable to the County for decreased compensation adjustments and the Department may deduct the amount thereof from moneys due or that may become due the Contractor.
- B. Compensation adjustments made under this section will be taken into account in making adjustments in conformance with the provisions in Section 4-1.03B, "Increased or Decreased Quantities" of the Standard Specifications.
- C. In the event of an overrun of contract time, adjustment in compensation for paving asphalt included in estimates during the overrun period will be determined using the California Statewide Paving Asphalt Price Index in effect on the first business day of the month within the pay period in which the overrun began.

The California Statewide Paving Asphalt Price Index is determined each month on the first business day of the month by the Department using the median of posted prices in effect as posted by Chevron, Mobil, and Unocal for the Buena Vista, Huntington Beach, Kern River, Long Beach, Midway Sunset, and Wilmington fields.

In the event that the companies discontinue posting their prices for a field, the Department will determine an index from the remaining posted prices. The Department reserves the right to include in the index determination the posted prices of additional fields.

The California Statewide Paving Asphalt Price Index is available on the Division of Engineering Services website at: <a href="http://www.dot.ca.gov/hq/esc/oe/asphalt\_index/astable.html">http://www.dot.ca.gov/hq/esc/oe/asphalt\_index/astable.html</a>.

#### **MINOR CONCRETE:**

Minor Concrete spandrel, curb & gutter, driveway, driveway approach, sidewalk, access ramps, monolithic retaining curb at back of sidewalk, shall be constructed in accordance with the County Road Improvement Standards and Specifications, plans, as directed by the Engineer and in conformance with Section 51, 73 and 90 of Standard Specifications, except as herein modified:

Class 2 concrete shall be used for Spandrel.

Class 3 concrete shall be used for curb & gutter, driveway, driveway approach, sidewalk, access ramps, monolithic retaining curb at back of sidewalk.

Construction of concrete improvements shall include all removal and restoration of the affected irrigation and hardscape, and related work, to return the area adjacent to the new improvements to its original condition and to conform the area to the new improvements.

The area behind and along the concrete improvements shall be filled and compacted with native or select material and graded to match and provide a smooth transition from the edge of the new improvements, to the satisfaction of the Engineer.

Preparation of subgrade for the concrete structures shall be done in conformance with the requirements of Section 73-1.02 of the Standard Specifications. Unless otherwise specified, all curbs and gutters will be backfilled as shown on the plans.

Excess material resulting from the excavation of the subgrade shall be disposed of as elsewhere provided in these Special Specifications.

The Contractor is responsible for meeting requirements of all American with Disability Act (ADA).

Construction of spandrel, curb & gutter, driveway, driveway approach, sidewalk, access ramps, monolithic retaining curb at back of sidewalk shall include, but not be limited to, the following:

- Removal and disposal of existing spandrel, curb & gutter, driveway, driveway approach, sidewalk, access ramps, and existing soil and aggregate as required;
- 2) Establishing grades, and assuring that all grades are met;
- Performing all grading and compaction including all required aggregate import, as directed by the Engineer and in accordance with County Standard 403;
- 4) Construction of new spandrel, curb & gutter, driveway, driveway approach, sidewalk, access ramps, monolithic retaining curb at back of sidewalk;
- 5) All scoring/grooving and required saw cutting;
- 6) Repair of existing asphalt and PCC surfacing;
- 7) Installing 1/2" wide expansion joints;
- 8) All landscaping, and related work, to return the area adjacent to the sidewalk, cur ramps, driveways, driveway approaches, curb and/or curb and gutter to its original condition and to conform the area to the new improvements;

At a minimum, the area from the BCR to ECR shall meet all required ADA standards. Therefore, to conform to existing conditions and/or to achieve the required four-foot level area (maximum of 1.5% crossfall) at the top potion of the curb ramp, it may be necessary to extend the work beyond the BCR/ECR in certain instances.

Driveway approaches shall be constructed as shown on the plans or as directed by the Engineer.

With the exception of unimproved driveways and concrete driveway aprons, surfacing for driveways shall consist of a replacement in kind of the existing driveway surfacing, using the contract item material most resembling that in place on the driveway. If there is no item in the contract for a similar material or if a special driveway surfacing is requested by the Engineer, said special surfacing shall be furnished and placed by the Contractor, and the cost thereof will be paid for as extra work as elsewhere provided herein.

Except as noted above, all other driveway work shall be paid for on the basis of the applicable contract item and no additional allowance will be made therefor.

#### Payment

The contract payment per square foot for Minor Concrete (Driveway Approach) shall include full compensation for the construction of the driveway approaches and the concrete driveways and no additional compensation will be allowed therefor.

The contract unit bid prices paid per each for Minor Concrete (access ramp); per square foot for Minor Concrete (spandrel, driveway, driveway approach, sidewalk); and per linear foot for Minor Concrete (curb & gutter, monolithic retaining curb at back of sidewalk), shall include full compensation for furnishing all labor, equipment, including the removal of existing gutter, spandrel, curb & gutter, driveway, driveway approach, sidewalk, access ramps, excavation, placing of suitable fill to prepare the sub-grade, furnishing and placing expansion joint material, materials and tools, and incidentals, and for doing all the work involved in the construction and complete in place as shown on the plans, or as herein specified, or as directed by the Engineer.

#### **CURB DRAIN:**

Curb drains (private drain through curb) shall conform to the County of Riverside Road Improvement Standards and Specification, and as specified and directed by the Engineer.

#### Payment

The contract unit bid price paid **per each** for Curb Drain shall include full compensation for furnishing all labor, materials, tools, equipment, and complete in place including removal/salvage of any existing drain and no separate compensation will be allowed therefor.

#### **MAIL DELIVERY / MAILBOX RELOCATION:**

#### Coordination

Contractor shall notify the local Post Master at least 15 working days in advance of the start of construction. Contractor shall coordinate with the Post Master the method of mail delivery after construction begins. If mail delivery will be disrupted, rescheduled or held by the local post office, Contractor shall notify all affected residences at least 5 days in advance of the start of construction, in writing, disclosing any changes in delivery of the mail. The notice to residents shall be approved by the Engineer is advance of distribution.

#### Relocation

Relocate mailbox shall conform to the approved plans and as directed by the Engineer. Existing mailbox shall be removed and reset on temporary portable mount, typically a timber post supported in five gallon can or bucket, in accordance with Section 15 of the Standard Specifications and these Special Provisions, or as directed by the Engineer. During construction operations, the portable mount shall be moved as necessary to clear the Contractor's operations, but at all times shall be easily accessible for mail delivery. When construction is complete, the mailbox shall reset at its final position as directed by the Engineer.

At the direction of the Engineer, and prior to final placement, a damaged mailbox or support may require replacement with a new T1 or C1 standard mailbox and/or a new single, 4 inch x  $4\frac{1}{2}$  inch diameter wooden post or a 2" metal post. The cost of a new mailbox and support, as described above, shall be at the Contractor's expense. Mailboxes with non-standard supports shall be relocated as directed by the Engineer.

Groups of mailboxes, on single-post or multiple post supports, shall be set on two-post portable mounts as herein specified for single-post mountings and shall be provided with a supporting cross member between the tops of the portable mounts.

#### Payment

The contract unit bid price paid **per each** for Relocate Mailbox shall include full compensation for furnishing all labor, material, tools, equipment, and incidentals and for doing all the work involved in coordinating, removing and relocating the boxes, to final locations including all necessary concrete, excavation, and backfill, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

#### **RELOCATE SIGNS:**

Relocation of existing roadside signs shall conform to the provisions in Section 56-2, "Roadside Signs" of the Standard Specifications and as directed by the Engineer.

Unless otherwise approved by the Engineer, each roadside sign shall be installed at the new location on the same day that the sign is removed from its original location.

All signs shall be installed using hex head bolts, washers, nuts and jam nuts in accordance with Standard Plans RS2 or as directed by the Engineer.

All Signs shall be installed on new square perforated steel tube posts in accordance with County Standard No. 1222.

Roadside signs shall be relocated at the locations shown on the construction plans or where directed by the Engineer.

#### Payment

The contract unit prices paid **per each** for Relocating Roadside Signs shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work including all necessary concrete, excavation and backfill as specified in the Standard Specification and these Special Provisions and no additional compensation will be allowed therefor.

# **RELOCATE FENCE (CHAIN LINK FENCE):**

Relocate Fence shall be in accordance with the approved construction plans or as directed by the Engineer. Full compensation for Relocate Fence and any gates shall include construction of fence posts, concrete footings, the replacement of hardware and the fence material (if necessary) as directed by the Engineer.

Where it is necessary and/or required by property owner, temporary fence shall be placed for the safety of the homeowner or the protection of children, pets/livestock. The cost for this temporary fencing is included in the contract price paid per linear foot for Relocate Fence.

#### Payment

Full compensation for Chain Link Fence [Relocate] shall be paid **per linear feet** and shall include full compensation for furnishing all labor, tools, materials, equipment, and incidentals for doing all work involved and as necessary in accordance with these Special Provisions and no additional compensation will be allowed therefor.

# REMOVE AND REPLACE FENCE (CHAIN LINK SLATED AND WOOD FENCE):

Remove and Replace Fence shall be in accordance with the approved construction plans or as directed by the Engineer. Full compensation for Remove and Replace Fence shall include construction of metal fence posts, concrete footings, new fence material specified, the replacement of hardware, one block high block wall and other work as directed by the Engineer.

Where it is necessary and/or required by property owner, temporary fence shall be placed for the safety of the homeowner or the protection of children, pets/livestock. The cost for this temporary fencing is included in the contract price paid per linear foot for Remove and Replace Fence.

#### Payment

Full compensation for Chain Link Fence (Type CL-6, Slated) [Remove and Replace) and for Wood Fence [Remove and Replace] shall be paid **per linear feet** and shall include full compensation for furnishing all labor, tools, materials, equipment, and incidentals for doing all work involved and as necessary in accordance with these Special Provisions and no additional compensation will be allowed therefor.

## **BLOCK WALL (MASONRY WALL):**

Block Wall (Masonry wall) shall be constructed in accordance with the plans, Standard Specification and these Special Provisions, and as directed by the Engineer.

#### Payment

Payment for Block Wall (masonry wall) shall be considered as included in the contract unit bid price paid per linear feet for Chain Link Fence (Type CL-6, Slated) [Remove and Replace) and shall include full compensation for furnishing all labor materials, tools and equipment, for doing all the work involved in the complete block wall structure as directed by the Engineer, including excavation and backfill, no additional compensation will be allowed therefor.

#### **REMOVE AND REPLACE ROLLING CHAIN LINK GATE:**

Remove and Replace Rolling Gate shall be in accordance with the approved construction plans or as directed by the Engineer. Full compensation for Remove and Replace Rolling Gate shall include construction of metal posts, concrete footings, hardware and the fence material in accordance with the approved construction plans or as directed by the Engineer.

Where it is necessary and/or required by property owner, temporary fence shall be placed for the safety of the homeowner or the protection of children, pets/livestock. The cost for this temporary fencing is included in the contract price paid for Remove and Replace Rolling Gate.

#### **Payment**

Full compensation for Remove and Replace Rolling Chain Link Gate shall be paid **per each** and shall include full compensation for furnishing all labor, tools, materials, equipment, and incidentals for doing all work involved and as necessary in accordance with these Special Provisions and no additional compensation will be allowed therefor.

#### **TEMPORARY FENCE:**

Temporary fence shall be furnished and constructed, maintained, and later removed by Contractor. Temporary fence shall be placed immediately after removal of existing fence or wall to provide for continuous access control to private properties. The Contractor is responsible for maintaining access control for those areas in which the existing fencing has been removed, and the planned permanent fencing is not yet in place.

Temporary fencing shall be maintained by the Contractor on a daily basis. Damage to temporary fence shall be repaired by the Contractor, at his expense, within twenty-four (24) hours from initial observation or report. Access-control shall be maintained at all times. Failure to maintain access-control by the Contractor will result in the Engineer directing County forces or another Contractor to perform remedial access-control work. If performed, the cost for County forces or another Contractor to perform remedial access-control work will be tabulated and deducted from other payments due the Contractor via an administrative deduction taken on the next available progress payment. Such a deduction shall be permanent.

Used materials may be installed providing the used materials are good, sound, and are suitable for the purpose intended, as determined by the Engineer. Materials may be commercial quality providing the dimensions and sizes of the materials are equal to, or greater than, the dimensions and sizes shown on the plans. Posts shall be metal and shall be suitable for the purpose intended. Post spacing shall be adequate to completely support the fence in an upright position. Galvanizing and painting of steel items will not be required. When no longer required for the work as determined by the Engineer, temporary fence shall be removed. Removed facilities shall become the property of the Contractor and shall be removed from the site of the work. Holes caused by the removal of temporary fences shall be backfilled in accordance with the provisions in the "Preservation of Property," of the Standard Specifications.

#### Payment:

Payment for temporary fence shall be considered as included in contract price paid for other items of work and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in temporary fence, complete in place, including installation, maintenance, removal and disposal of materials, and for conducting daily checks on the integrity of temporary fence when used for access-control purposes. No adjustment of compensation will be made for any increase or decrease in the quantities of temporary fence required, regardless of the reason for the increase or decrease.

# THERMOPLASTIC CROSSWALK AND PAVEMENT MARKING:

Thermoplastic pavement markings shall conform to the provisions in Sections 84-1, "General," and 84-2, "Thermoplastic Traffic Stripes and Pavement Markings," of the Standard Specifications and these Special Provisions.

Newly painted pavement markings shall be protected from damage by public traffic or other causes until the paint is thoroughly dry. Any newly painted traffic striping which are

damaged as a result of the construction, including wheel markings by public traffic and the construction equipment, shall be repainted by the Contractor and any associated removals shall be performed as called for in these Special Provisions

#### Payment:

The contract unit bid price paid per square foot for Thermoplastic Crosswalk and Pavement Marking shall be considered as full compensation for furnishing all labor, materials, tools, equipment, and incidentals and doing all the work necessary to place the pavement markings complete in place and no additional compensation will be allowed therefor.

#### **MISCELLANEOUS DIRECTED WORK:**

Miscellaneous directed work shall consist of necessary work that is not included in other contract bid items, as determined by the Engineer. Miscellaneous directed work shall be performed as directed by the Engineer and in accordance with the applicable standards and specifications.

#### Payment:

Payment for implementing miscellaneous directed work will be paid for on a force account basis, in accordance with Section 9-1.03 of the Standard Specifications, up to the fixed bid price, for the work performed.

#### **OBSTRUCTIONS:**

Attention is directed to Sections 8-1.10, "Utility and Non-Highway Facilities", and 15, "Existing Highway Facilities" of the Standard Specifications and these Special Provisions.

Existing utility and privately owned facilities shall be protected in accordance with Section 7-1.11, "Preservation of Property" and these Special Provisions. The Contractor is also responsible to protect those facilities that are to be relocated by others prior to or during construction, and shall protect those facilities in both their existing and their ultimate locations. The Contractor shall cooperate with owners and their Contractors of utility and privately owned facilities, for the relocation of said facilities, in accordance with Section 7-1.14, "Cooperation" of the Standard Specifications.

All water valves and covers, clean out valve, gas valves and covers, sewer manholes, survey monuments, survey markers and any other utility appurtenances shall be protected in place.

The Contractor's attention is directed to the existence of certain underground facilities that may require special precautions be taken by the Contractor to protect the health, safety and welfare of workmen and the public. Facilities requiring special precautions include, but are not limited to: conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases; natural gas in pipe lines greater than 6 inches in diameter or pipe lines operating at pressures greater than 60 psi (gage); underground electric supply system conductors or cables either directly buried or in duct or conduit which do not have concentric neutral conductors or

other effectively grounded metal shields or sheaths; and underground electrical conductors with potential to ground of more than 300 volts. The Contractor shall notify the Engineer at least twenty-four hours prior to performing any work in the vicinity of such facilities.

Attention is directed to the requirements of Government Code Sections 4216-4216.9 pertaining to existing utility facilities.

The Contractor shall assume that every house, building and lot within the project limits has utility service pipes and conductors (laterals), and that utility main and trunk facilities exist within the project limits. The Contractor shall determine if it is warranted to determine the exact location of these utility service laterals and existing main lines, unless directed by the Engineer to pot-hole at specific locations, or as otherwise required herein. The Contractor will not be directly reimbursed for determining the exact location of the utility main lines or services laterals but shall include any compensation for this work in the contract price paid for the various items of work. Any damage to existing main lines or service laterals for which pot-holing was not performed shall be considered damage due to not using reasonable care and the damage shall be repaired at the Contractor's expense.

The Contractor shall conduct his operations with the assumption that underground utility facilities exist within the project limits. The Contractor shall exercise caution and best construction practices for safety and for protection of underground facilities. The approximate locations of underground utility facilities, as shown on the plans, are based on information provided by the respective owners, listed below. The Contractor shall also utilize the markings of the regional notification center (Underground Service Alert), and aboveground utility appurtenances to determine the existence and approximate location of underground utilities.

No excavation shall be made within 4 feet of any underground utilities, as listed below, unless and until such utilities have been positively located as to horizontal and vertical position. This requirement applies to all underground electric, natural gas, toxic or flammable gas, chlorine, oxygen or petroleum facilities.

Forty-eight hours prior to beginning construction, the Contractor shall notify the following agencies:

800-227-2600
951-928-8318
909-335-7561
951-925-5319
951-549-3977
951-765-3710
951-658-3241
951-354-4220

#### **Payment**

Full compensation for all costs, including labor, equipment, materials and incidentals, required to comply with the requirements of this section above, including protection of water valves and covers, gas valves and covers, sewer manholes, survey monuments, survey markers and any other utility appurtenances, shall be considered as included in the various items of work, and no additional compensation will be allowed therefor.

#### Adjustments to Grade for Obstructions

The Contractor shall adjust to finish grade any valve covers encountered within the project limits, as required, for those utility valves that are provided with slip cans and are adjustable without the replacement of parts or the removal of concrete collars. In cases where the owning utility company insists upon upgrades in the standards, or when additional parts or the removal of concrete collars are required for the adjustment, said adjustment will be the responsibility of the owning utility company.

Communication and coordination with the owning utility company shall be the responsibility of the contractor.

For public safety, traffic shall not be allowed on temporary or permanent pavement until all manholes are either adjusted to grade or otherwise protected, as approved by the Engineer. The Contractor shall adjust to grade manholes and valves when and as necessary for the protection of the traveling public during construction, and shall coordinate all work on said facilities with the owning utility companies. This requirement is intended for traffic that is to be allowed on temporary surfaces during the course of construction. Final adjustment to grade will be the responsibility of the owning utility company, except as provided herein.

Said work shall be performed in accordance with Section 15-2.05A, "Frames, Covers, Grates, and Manholes" of the Standard Specifications. Full compensation for adjustment of valve covers shall be considered as included in the contract price paid for asphalt concrete, or applicable items of work in the event that there is no asphalt concrete bid item, and no additional compensation will be allowed therefor.

All existing utility facilities shall be protected from damage by the Contractor's operations.

Unless otherwise provided herein, the owning utility companies will not be obligated to lower their surface utilities (manholes and valve covers) for Contractor's grading, grinding and/or paving operations. The contractor shall lower surface facilities, including manholes and valve covers, to facilitate construction, and the following shall apply:

- 1. Contractor shall coordinate all work with the utility owner.
- 2. Contractor shall be responsible for all costs and shall be responsible for any damage caused to the owner's facilities. If the Contractor observes any pre-existing damage to the utility facilities, the Contractor shall notify the Engineer and the utility owner of that damage prior to performing additional work on the facility.

- 3. Contractor shall, after removing grade rings and covers, arrange for pickup by, or delivery to, the owner's yard. Any and all concrete collars removed by the Contractor shall become the property of the Contractor, and shall be disposed of as specified elsewhere in these special provisions.
- 4. The Contractor is advised that he is responsible for ensuring that construction materials do not enter the utility owner's facilities. The Contractor shall install traffic bearing steel plates for this purpose, and provide all coordination and transportation necessary. It is recommended that the Contractor request the utility owner to provide such steel plates. If the Contractor provides steel plates, it shall be the Contractor's responsibility to coordinate with the utility owner for the return of the steel plates to the Contractor after final adjustment to grade. If the Contractor utilizes utility owner's steel plates, and if the Contract items of work include adjustment to final grade, the Contractor shall return the steel plates to the Utility owner's yard, or as otherwise arranged with the Utility owner.
- 5. Prior to paving or covering the plated utility facility, the Contractor shall tie-out the facility utilizing a method acceptable to the utility owner and provide notes and data of all covered facilities to both the utility owner and the Engineer.

#### 6. Final Adjustment to Grade

- a. The Contractor shall adjust to finish grade all manhole and valve covers that are not designated on the construction plans to be adjusted to grade by the utility owner.
- b. The utility owner is expected to adjust to finish grade all manhole and valve covers that are designated on the construction plans to be adjusted to grade by the utility owner, unless there is a contract item for that work.
- c. The Contractor shall notify the utility owner, upon completion of the Contractor's work, when the utility owner may move in to make the final adjustments to grade. The utility owner shall be given adequate notice and allowed sufficient time for that work, as directed by the Engineer.
- 7. The requirements for lowering of surface facilities shall not apply to vaults. The Contractor shall notify the utility owner of the need to make adjustments to such major facilities.
- 8. The Contractor is reminded that the utility facilities are owned by public and private utility companies that operate their facilities within public rights of way. The utility owner's preferences with regards to the handling of its facilities shall be complied with to the greatest extent feasible.

#### **Payment**

Full compensation for all costs, including labor, equipment, materials and incidentals, required to comply with the requirements of this section above, including protection of water valves and covers, gas valves and covers, sewer manholes, survey monuments, survey markers and any other utility appurtenances, shall be considered as included in the various items of work, and no additional compensation will be allowed therefor.

Full compensation for initial lowering of surface utilities facilities shall be considered as included in the contract price paid for asphalt concrete, or applicable items of work in the event that there is no asphalt concrete bid item, and no additional compensation will be allowed therefor.

# **CONSTRUCTION PROJECT FUNDING IDENTIFICATION SIGNS:**

The Contractor shall furnish and install **two (2)** Construction Project Funding Identification Signs (4' X 4'); the signs shall be installed at locations on Columbia Street to be determined by the Engineer, within or near the project limits, in accordance with the relevant requirements of Section 56-2 of the Standard Specifications and the appropriate details of Standard Plans RS1 through RS4 for two post installation of signs, and as directed by the Engineer.

A reference exhibit displaying the text and colors of the sign will be provided to the Contractor prior to construction. The Contractor shall submit a copy of the final sign design for approval by the resident Engineer prior to fabrication.

The Contractor shall submit to the Engineer the final sign design in the form of an editable picture file in .eps format – Encapsulated PostScript file.

At the completion of the project, the signs will become property of the County. When directed by the Engineer, the Contractor shall remove all hardware from the signs. Posts and hardware shall become the property of the Contractor. The Contractor shall deliver and off-load the signs to the address listed below or as directed by the Engineer:

595 N. Juanita Street Hemet, California 92543 Telephone (951) 314-9441

#### **Payment**

The contract unit price paid **per each** for Funding Awareness Sign (Construction Project Funding Identification Sign) and shall include furnishing all labor, materials, tools, equipment, incidentals and for doing all the work including sign installation, transportation, maintenance, removal, delivery, excavation and backfill as specified in the Standard Specification and these Special Provisions and no additional compensation will be allowed therefor.

# Appendix A

# **AQMD Recommendations**

# **Dust Abatement Attachments**

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# **AQMD SIGNAGE RECOMMENDATIONS**

#### November, 2001

Plan holder shall post signage at specified locations on the subject property in accordance with the standards specified below. The exception to the standards is that all letters shall be 4 inches high, with the names and telephone numbers of appropriate contacts and services in bold print, as indicated in the standards. These signs shall also include the SCAQMD toll free complaint line 1-800-CUT-SMOG (1-800-288-7664) and the telephone number for the Environmental Observer. These signs shall be posted within 50 feet of the curb on all four (4) corners of the subject property.

For each Dust Control Plan aggregating less than, or equal to, ten (10) acres:

- 1. The applicant shall install a sign on such property which is visible to the public that meets the following requirements:
  - (a) Such sign shall measure at least four (4) feet wide by four (4) feet high and conform to the specifications in 1 (a) below.

For each Dust Control Plan aggregating over ten (10) acres:

- 2. The applicant shall install a sign on such property which is visible to the public that meets the following requirements:
  - (a) Such sign shall measure at least eight (8) feet wide by four (4) feet high and conform to the specifications in 1 (b) below.

# THE SIGN SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

- 1. The sign boards shall be constructed with materials capable of withstanding the environment in which they are placed.
  - (a) For 4' x 4' signs, the District recommends the following:
    - 1. 3/4 " A/C laminated plywood board
    - II. Two 4" x 4" posts
    - III. The posts should be attached to the edges of the plywood board with at least 2 carriage bolts on each post.
    - IV. The front surface of the sign board should be painted in the contrasting color of a white background with black lettering.
  - (b) For 4' x 8' signs, the District recommends the following:
    - I. 1" A/C laminated plywood board
    - II. Two 5" x 6" posts
    - III. The posts should be attached to the 4' edges of the plywood board with at least 2 carriage bolts on each post.
    - IV. The front surface of the sign board should be painted in the contrasting color of a white background with black lettering.

# 2. The sign board shall be installed and maintained in a condition such that members of the public can easily view, access, and read the sign at all times until the expiration date of the Dust Control plan.

- (a) For 4' x 4' signs, the District recommends the following:
  - The lower edge of the sign board should be mounted at least 2' above the existing ground surface to facilitate ease of viewing.
  - II. The posts should be set in a hole at least 3' deep with concrete footings to preclude downing by high winds.
  - III. On the construction site, the sign should be positioned such that nothing obstructs the public's view from the primary street access point.
  - IV. For construction projects that are developed in phases, the sign should be moved to the area that is under active construction.
  - V. In situations where all phases of the construction project are completed on a property prior to expiration of the Dust Control Plan, a written request for cancellation of the Dust Control Plan must be submitted to the Engineer.
- (b) For 4' x 8' signs, the District recommends the following:
  - 1. The lower edge of the sign board should be mounted at least 2' above the existing ground surface to facilitate ease of viewing.
  - II. The posts should be set in a hole at least 4' deep with concrete footings to preclude downing by high winds.
  - III. On the construction site, the sign should be positioned such that nothing obstructs the public's view from the primary street access point.
  - IV. For construction projects that are developed in phases, the sign should be moved to the area that is under active construction.
  - V. In situations where all phases of the construction project are completed on a property prior to expiration of the Dust Control Plan, a written request for cancellation of the Dust Control Plan must be submitted to the Engineer.

## 3. The sign board shall contain the following information:

- (a) Project Name
- (b) Name of Prime Contractor
- (c) Phone Number of Contractor's Employee Responsible for Dust Control Matters
- (d) County designated phone number (to be provided by the Engineer)
- (e) South Coast Air Quality Management District Phone Number

- 4. The sign board shall be designed to the following alpha and numeric text dimensions (sign boards written in longhand are unacceptable).
  - (a) For a permittee subject to the 4' x 4' sign requirement, the District provides the following example: (as modified by the County of Riverside for use on County Public Works projects)

1" Title Case Letters	Phone Number:	SCAQMD 1-800-CUT-SMOG	3 ½ " Bold Numbers
1" Title Case Letters	County of Riverside Phone #		3" Bold Numbers ◀
1" Title Case Letters	Contractor's Dust Control Phone #		3" Bold Numbers
1" UPPERCASE Letters	CONTRACTOR		3 ½ " Title Case Bold Letters
1" UPPERCASE Letters	PROJECT NAME:		3 ½ " Title Case Bold Letters

<sup>&</sup>quot;Title Case" means the first letter of a word is capitalized and subsequent letters are lower case.

(b) For a permittee subject to the  $4' \times 8'$  sign requirement, the District provides the following example: (as modified by the County of Riverside)

PROJECT NAME:		4" Title Case Bold Letters
CONTRACTOR		4" Title Case Bold Letters
Contractor's Dust		4" Bold Numbers
 County of Riverside	-606	4" Bold Numbers
 Phone # Phone Number:	SCAQMD	4 1/2 " Bold Numbers
	1-800-CUT-SMOG	<b>*</b>
 COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT	COUNTY OF RIVERSIDE PORTATION DEPARTMENT	

### Plan Review Checklist Clearing/Grubbing/Mass Grading Phase

If feasible, use grading permit conditions to break the project into phases so that only a portion of the site is disturbed at any given time to ensure control of fugitive dust. This technique is critical for project sites with greater than 100 acres.
Prior to initiating activity, pre-water site through use of portable imigation lines. At least 72 hours of pre-watering is recommended for each area prior to initiating earth-movement. Require the Applicant to specify water source and available flow rate (g/m).
Water applied continuously to all disturbed portions of the site by means of water truck/water pull as necessary to maintain sufficient visible moisture on the soil surface. For reference, one 2,000 gallon water truck can treat approximately 4 acres of active construction per hour. Also, for cut and fill activities, one 10,000 gallon water pull is estimated to be necessary for each 7,000 cubic yards of daily earth-movement. Multiple 4,000-gallon water trucks may be used in place of one 10,000-gallon water pull. Touch and visual contrast are reasonably good indicators of soil moisture. Surface areas that are dry to the touch and appear lighter-colored require the application of additional water to prevent visible or fugitive dust. Require the Applicant to specify the number of watering vehicles available for dust control during mass grading and during off-hours as well as availability of back-up water trucks if the site experiences dust control problems.
Water towers are necessary for projects with more than 10 acres of active construction. Without a water tower, it can take up to 30 minutes to fill a 2.000 gallon water truck. Also, multiple water towers are necessary for projects that use water pulls as filling one 10.000 gallon water pull can drain a water tower which takes up to 40 minutes to refill.
Wind fencing is necessary between the site and nearby residences or businesses. Off-site upwind fencing and on-site wind fencing for larger projects can also keep blowsand from being deposited onto the site or traveling through the site.
A perimeter watering system consisting of portable intigation equipment may be an effective mitigation system to protect surrounding residences and businesses. The portable watering system may be used in place of or in conjunction with watering trucks. The local jurisdiction may also be provided access to this equipment.

### **AQMD Recommendations**

Construction site accesses are to be improved with 1.5" gravel maintained to a depth of 4", at least 20' wide, and extending 100 feet into the site. If the project site is not balanced, a wheel washing system and/or ribbed steel plates should be placed in the roadway before the vehicle enters the graveled area to clean the tires and prevent trackout.
Equipment staging areas are to be treated with 1.5" gravel maintained to a depth of 4".
Employee parking areas are to be covered with 1.5" gravel maintained to a depth of 4" or treated with chemical dust suppressants at a 4 to 1 ratio on at least a monthly basis to prevent fugitive dust.
Chemical dust suppressants are to be mixed at a ratio of 20 to 1 and applied to all disturbed surfaces that are proposed to remain inactive for a period of at least 10 consecutive days. These products are effective in preventing and controlling dust. Recordkeeping is necessary to demonstrate compliance.
All project sites greater than 100 acres shall monitor daily wind speeds and AQMD forecasted wind events (call 1.800.CUT.SMOG, press one for air quality information, and then press five for Coachella Valley wind forecasts). Operators shall maintain these records for review by any local code enforcement officer or AQMD inspector.
An environmental observer whose primary duty is to oversee dust control at the site is to be used for construction projects greater than 100 acres and/or sites with more than 50 acres of active construction. The environmental observer is tasked with monitoring dust abatement measures and authorized to deploy additional water trucks and other dust control actions (i.e., wind fencing, street sweepers, chemical dust suppressants, etc.) as necessary to prevent or control fugitive dust.
Other (specify):

### Plan Review Checklist Finish Grading Phase

truck/water pull as necessary to maintain sufficient visible moisture on the soil surface. For reference, one 2,000 gallon water truck can treat approximately 4 acres of active construction per hour. Also, for cut and fill activities, one 10,000 gallon water pull is estimated to be necessary for each 7,000 cubic yards of daily earth-movement. Multiple 4,000-gallon water trucks may be used in place of a 10,000-gallon water pull. Touch and visual contrast are reasonably good indicators of soil moisture. Surface areas that are dry to the touch and appear lighter-colored require the application of additional water to prevent visible or fugitive dust. Require the Applicant to specify the number of watering vehicles available for dust control during finish grading and during off-hours as well as availability of back-up water trucks if the site experiences dust control problems.
Water towers are necessary for projects with more than 10 acres of active construction. Without a water tower, it can take up to 30 minutes to fill a 2,000 gallon water truck. Also, multiple water towers are necessary for projects that use water pulls as filling one 10,000 gallon water pull can drain a water tower which takes up to 40 minutes to refill.
Wind fencing is necessary between the site and nearby residences or businesses to reduc fugitive dust. Off-site upwind fencing and on-site wind fencing for larger projects can also keep blowsand from being deposited onto the site or traveling through a site.
Chemical dust suppressants are to be applied at a concentration of at least 10 to 1 to finish graded areas once final elevations have been reached. For areas that will remain inactive for longer periods, vegetation can be a cost-effective alternative to chemical stabilization. Wind fencing or other obstructions can keep the stabilized area free from future disturbances.
Construction site access(es) are to be improved with 1.5" gravel maintained to a depth of at least 4", with a minimum width of at least 20', extending 100 feet into the project site.
Equipment staging areas are to be treated with 1.5" gravel maintained to a depth of 4".
Internal roadway networks are to be treated with chemical dust suppressants at a minimum rate of at least 4 to 1 and retreated on a monthly basis once final roadway elevations have been reached.
Employee parking areas are to be treated with chemical dust suppressants at a mix ratio of at least 4 to 1 and retreated on at least a monthly basis or covered with 1.5" gravel maintained to a depth of 4" to prevent fugitive dust.
Other (specify):

### Plan Review Checklist Construction Phase

	Water applied continuously to all disturbed portions of the site by means of water truck/water pull is necessary to maintain sufficient visible moisture on the soil surface. For reference, one 2,000 gallon water truck can treat approximately 4 acres of active construction per hour. Touch and visual contrast are reasonably good indicators of soil moisture. Surface areas that are dry to the touch and appear lighter-colored require the application of additional water to prevent visible or fugitive dust. Require the Applicant to specify the number of watering vehicles available for dust control during the construction phase and during off-hours as well as availability of back-up water trucks if the site experiences dust control problems.
	Wind fencing is necessary between the site and nearby residences or businesses. Off-site upwind fencing and on-site wind fencing for larger projects can also keep blowsand from being deposited onto the site or traveling through the site. Block walls, if part of the final project, can replace wind fencing during the construction phase.
	Chemical dust suppressants are to be applied at a concentration of at least 20 to 1 to finish graded areas once final elevations have been reached. For areas that will remain inactive for longer periods, vegetation can be a cost-effective alternative to chemical stabilization. Wind fencing or other obstructions can keep the stabilized area free from future disturbances.
	Construction site accesses are to be improved with 1.5" gravel, maintained to a depth of 4", with a width of at least 20", extending 100" into the project site. Paving internal roadways can substitute for gravel.
	Internal roadway networks are to be paved as early as feasible in the construction phase. Street sweeping of internal and/or external access roads will likely be required to control entrained road dust.
<u> </u>	Employee parking areas are to be treated with chemical dust suppressants at a mix ratio of no less than 4 to 1 and retreated on a monthly basis, or more frequently if fugitive dust is observed. If internal roadway is complete, employees are to be instructed to park on paved roads.
	Other (specify):

### RULE 403 IMPLEMENTATION HANDBOOK

### REASONABLY AVAILABLE CONTROL MEASURES

Paragraph (d)(3) of Rule 403 allows activities <u>outside the South Coast Air Basin</u> (see Figure 2-1) to implement reasonably available control measures in lieu of best available control measures. Additionally, as specified by subparagraph (f)(3)(D) of Rule 403, any person seeking approval of a fugitive dust emissions control plan for projects <u>outside the South Coast Air Basin</u> must demonstrate to the satisfaction of the District that the given activity is employing all reasonably available fugitive dust control measures.

The District has prepared the attached listing of reasonably available fugitive dust control measures for a variety of source categories. This list is based on the U.S. Environmental Protection Agency's reference document entitled, "Control of Open Fugitive Dust Sources," Midwest Research Institute, September 1988.

The District encourages the use of those dust control measures that minimize the use of potable water. When water is needed, reclaimed water should be utilized to the greatest extent feasible.

# RULE 403 IMPLEMENTATION HANDBOOK

# REASONABLY AVAILABLE CONTROL MEASURES

The left column contains a listing of the sources of fugitive dust which are intended for emission control under District Rule 403 and a listing of control measures and high-wind measures. The right column contains a description of the reasonably available fugitive dust control measures for each of the sources.

Source: (1)	Land Clearing/Earth-Moving	
CONTROL MEASURES		DESCRIPTION
(A) Watering		(1) Application of water by means of trucks, hoses and/or sprinklers prior to conducting any land clearing. This will increase the moisture content of the soils; thereby
		increasing its statility.  (2) Pre-application of water to depths of proposed cuts.  (3) Once the land clearing/earth moving activities are complete, a second application of water can generate a thin crust that stabilizes the disturbed surface area provided that it is not disturbed. (Security fencing can be used to prevent unwanted future disturbances of sites where a surface crust has been created).
(B) Chemical stabilizers		(1) Only effective in areas which are not subject to daily disturbances.* (2) Vendors can supply information on product application and required concentrations to meet the specifications established by the Rule.
(C) . Wind fencing		(1) Three- to five-foot barriers with 50% or less porosity located adjacent to roadways or urban areas can be effective in reducing the amount of windblown material
,		(2) Would likely be used in conjunction with other measures (e.g., watering, chemical stabilization, etc.) to ensure that visible emissions do not cross a property line.
(D) Cover haul vehicles	•	(1) Entire surface area of hauled earth should be covered once vehicle is full.
(E) Bedliners in haul vehicles		(1) When feasible, use in bottom-dumping haul vehicles.
HIGH WIND MEASURE	<u>1EASURE</u>	

Apply water within 15 minutes to any soil surface which is being moved or otherwise disturbed. Cease all active operations; or **E E** 

Š	Source:	3	Unpaved Roads	, `	
Ö	CONTROL MEASURES	MEASI	URES	DE	DESCRIPTION
<b>E</b>	(F) Paving			Ξ	(1) Requires street sweeping/cleaning if subject to material accumulation.
Ð)	(G) Chemical stabilization	al stabili	zation	(3) (E)	<ol> <li>Vendors can supply information as to application methods and concentrations to meet the specifications established by the Rule</li> <li>Not recommended for high volume or heavy equipment traffic use.</li> </ol>
<b>E</b>	(H) Watering	<b>50</b>		<u> </u>	In sufficient quantities to keep surface moist. Required application frequency will vary according to soil type, weather conditions, and vehicular use.
<b>(E)</b>	(I) Reduce speed limits	speed lii	mits	. <b>(1)</b>	(1) 15 mile per hour maximum. May need to be used in conjunction with watering or chemical stabilization to prevent visible emissions from crossing the property line.
ට	(J) Reduce vehicular trips	vehicula	ır trips	E)	Access restriction or redirecting traffic to reduce vehicle trips by a minimum of 60 percent.
<b>8</b>	(K) Gravel	-		(E) (S)	Gravel maintained to a depth of four inches can be an effective measure. Should only be used in areas where paving, chemical stabilization or frequent watering is not feasible.

## HIGH WIND MEASURE

Apply a chemical stabilizer (to meet the specifications established by the Rule) prior to wind events; or Apply water once each hour; or Stop all vehicular traffic.

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January 1999

## 403 IMPLEMENTATION HANDBOOK RULE

Source: (3) Storage Piles  CONTROL MEASURES  (L) Wind sheltering  (M) Watering	(1) Enclose in silos. (2) Install three-sided barriers equal to height of material, with no more than 50 percent porosity. (1) Application methods include: spray bars, hoses and water trucks.
(N) Chemical stabilizers	<ul> <li>(2) Frequency of application will vary on site-specific conditions;</li> <li>(1) Best for use on storage piles subject to infrequent disturbances.</li> </ul>
(O) Altering load-in/load-out procedures	(1) Confine load-in/load-out procedures to leeward (downwind) side of the material.  (2) May need to be used in conjunction with wind sheltering to prevent
(P) Coverings	(1) Tarps, plastic, or other material can be used as a temporary covering. (2) When used, these should be anchored to prevent wind from removing coverings.

## HIGH WIND MEASURE

- Apply chemical stabilizers (to meet the specifications established by the Rule) prior to wind events; or **€**8€
  - Apply water once per hour; or install temporary covers.

rack-Out
Road Ti
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Source:

Source:	€	(4) Paved Road Track-Out		,
CONTROL		MEASURES	DESCRIPTION	
(Q) Chemica	al stabil	il stabilization	(1) Most effective when used on areas where active open	ď
	•		(2) Vandore can enamely information on motheds for	į

- erations have Vendors can supply information on methods for application and required concentrations. 3
- Either sweeping or water flushing may be used.
- Entire surface area should be covered once vehicle is full  $\Xi$

Bedliners in haul vehicles

 $\epsilon$ 

Sweep/clean roadways

3

Cover haul vehicles

<u>S</u>

Site access improvement

3

Pave internal roadway system. Most important segment, last 100 yards from the connection with paved public roads When feasible, use in bottom dumping vehicles. **≘**®

## HIGH WIND MEASURE

Cover all haul vehicles; and Clean streets with water flushing, unless prohibited by the Regional Water Quality Control Board. **E**S

	*				uction Sites
-		¥			Disturbed Surface Areas/ Inactive Construction Sites
				•	irface Areas/ I
			,		Disturbed Su
,					(2)
					Source:

### DESCRIPTION

(Q) Chemical stabilization

Wind fencing

<u>S</u>

(R) Watering

CONTROL MEASURES

- Most effective when used on areas where active operations have ceased.
- Vendors can supply information on methods for application and required concentrations.
- Requires frequent applications unless a surface crust can be developed.
- Three- to five-foot barriers with 50% or less porosity adjacent to roadways or urban areas can be effective in reducing the amount of wind blown material leaving a site.
- Establish as quickly as possible when active operations have ceased. **E**@
  - Use of drought tolerant, native vegetation is encouraged.

## HIGH WIND MEASURES

(T) Vegetation

Apply chemical stabilizers (to meet the specifications established by the Rule); or Apply water to all disturbed surface areas 3 times per day. 38

### RULE 403 IMPLEMENTATION HANDBOOK

### BEST AVAILABLE CONTROL MEASURES

Rule 403, paragraph (d)(2) requires active operations [defined in Rule 403, paragraph (c)(1)] within the South Coast Air Basin (see Figure 2-1) to implement at least one best available control measure for each fugitive dust source type on site. Additionally, as specified by subparagraph (f)(3)(D) of Rule 403, any person seeking approval of a fugitive dust emissions control plan for projects within the South Coast Air Basin must demonstrate to the satisfaction of the AQMD that the given activity is employing all best available fugitive dust control measures.

The AQMD has prepared the attached listing of best available fugitive dust control measures for a variety of source categories. This list is based on the U.S. Environmental Protection Agency's reference document entitled, "Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures," Office of Air and Radiation, September 1992.

The AQMD encourages the use of those dust control measures that minimize the use of potable water. When water is needed, reclaimed water should be utilized to the greatest extent feasible.

# RULE 403 IMPLEMENTATION HANDBOOK

## BEST AVAILABLE CONTROL MEASURES

The left column contains a listing of the sources of fugitive dust which are intended for emission control under District Rule 403 and a listing of control measures and high-wind measures. The right column contains a description of the best available fugitive dust control measures for each of the sources.

Source: (1) Land Clearing/Earth-Moving

ding)	DESCRIPTION  (1) Application of water by means of trucks, hoses and/or sprinklers prior to conducting any land clearing. This will increase the moisture content of the soils; thereby increasing its stability.  (2) Pre-application of water to depths of proposed cuts.  (1) In active earth-moving areas water should be applied at sufficient frequency and quantity to prevent visible emissions from extending more than 100 feet from the point of origin.  (2) Grade each phase separately, timed to coincide with construction phase; or Grade entire project, but apply chemical stabilizers or ground cover to graded areas where construction phase begins more than 60 days after grading phase ends.  (3) Only effective in areas which are not subject to daily disturbances.  (4) Only effective in areas which are not subject to daily disturbances.  (5) Vendors can supply information on product application and required concentrations to meet the specifications established by the Rule.  (6) Three- to five-foot barriers with 50% or less porosity located adjacent to roadways or urban areas can be effective in reducing the amount of windblown material leaving a site. Must be implemented in conjunction with either measure (A-1) or (B).
(D) Cover hauf vehicles (1)	(1) Entire surface area of hauled earth should be covered once vehicle is full.
(E) Bedliners in haul vehicles (1)	1) When feasible, use in bottom-dumping haul vehicles.
HIGH WIND MEASURE	

Cease all active operations; or Apply water within 15 minutes to any soil surface which is being moved or otherwise disturbed.

**E** 

January 1999

HIGH WIND MEASURE

# Apply a chemical stabilizer (to meet the specifications established by the Rule) prior to wind events; or Apply water once each hour; or Stop all vehicular traffic.

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January 1999

Unpaved Roads

3

Source:

HANDBOOK

403 IMPLEMENTATION

RULE

CONTROL MEASURES	DES
(F) Paving	E
(G) Chemical stabilization	(3)

CRIPTION

Vendors can supply information as to application methods and concentrations to meet the specifications established by the Rule Not recommended for high volume or heavy equipment traffic use.  $\widehat{\Xi}$ 

Requires street sweeping/cleaning if subject to material accumulation.

In sufficient quantities to keep surface moist.
Required application frequency will vary according to soil type,

weather conditions, and vehicular use.

15 mile per hour maximum. May need to be used in conjunction with watering or chemical stabilization to prevent visible emissions from crossing the property line.  $\hat{\Xi}$ 

Access restriction or redirecting traffic to reduce vehicle trips by minimum of 60 percent.

(J) Reduce vehicular trips

(K) Gravel

Reduce speed limits

 $\in$ 

Watering

 $\Xi$ 

Gravel maintained to a depth of four inches can be an effective measure.  $\in$ 

Should only be used in areas where paving, chemical stabilization or frequent watering is not feasible. 3

## 2 403 IMPLEMENTATION HANDS

RULE 403 IMPLEMENTATION HANDBOOK	N HANDBOOK
Source: (3) Storage Piles	
CONTROL MEASURES	DESCRIPTION
(L) Wind sheltering	(1) Enclose in silos. (2) Install three-sided barriers equal to height of material, with no more than 50 percent porosity.
(M) Watering	(1) Application methods include: spray bars, hoses and water trucks. (2) Frequency of application will vary on site-specific conditions.
(N) Chemical stabilizers	(1) Best for use on storage piles subject to infrequent disturbances.
(O) Altering load-in/load-out procedures	(1) Confine load-in/load-out procedures to leeward (downwind) side of the material.  Must be used in conjunction with either measure (L), (M), (N), or (P).
(P) Coverings	<ol> <li>Tarps, plastic, or other material can be used as a temporary covering.</li> <li>When used, these should be anchored to prevent wind from removing coverings.</li> </ol>

## HIGH WIND MEASURE

Apply chemical stabilizers (to meet the specifications established by the Rule) prior to wind events; or Apply water once per hour; or Install temporary covers. <u>ම</u>ෙලිල

# RULE 403 IMPLEMENTATION HANDBOOK

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NTROL MEASURES	mpliance with District Rule 403.
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Paragraph (d)(5).

## 403 IMPLEMENTATION HANDBOOK RULE

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Source:	<b>3</b>	Disturbed Surface Areas/	(5) Disturbed Surface Areas/ Inactive Construction Sites	
CONTROL MEASURES	MEAS	URES	DESCRIPTION	
(Q) Chemical stabilization	al stabili	•	(1) Most effective when used on areas where active operations have	Š
			(2) Vendors can supply information on methods for application and required concentrations.	ъ

## Three to five-foot barriers with 50% or less porosity adjacent to roadways or urban areas can be effective in reducing the amount of wind blown material leaving a site. Must be used in conjunction with either measure (Q), (R), or (T). $\widehat{\Xi}$ (S) Wind fencing

Requires frequent applications unless a surface crust can be developed.

 $\equiv$ 

(R) Watering

## Establish as quickly as possible when active operations have ceased. $\equiv$

## HIGH WIND MEASURES

(T) Vegetation

Apply chemical stabilizers (to meet the specifications established by the Rule); or Apply water to all disturbed surface areas 3 times per day. <u>@</u>

TABLE 1

BEST [REASONABLY]' AVAILABLE CONTROL MEASURES FOR HIGH WIND CONDITIONS

FUGITIVE DUST SOURCE CATEGORY		CONTROL MEASURES
Earth-moving	(1A)	Cease all active operations; OR
	(2A)	Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas		On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR
*newsorous en		Apply chemical stabilizers prior to wind event; OR
		Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR Take the actions specified in Table 2, Item (3c); OR
	(4B)	Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C)	Apply chemical stabilizers prior to wind event; OR
	(2C)	Apply water twice [once] per hour during active operation; OR
	(3C)	Stop all vehicular traffic.
Open storage piles	(1D)	Apply water twice [once] per hour; OR
	(2D)	Install temporary coverings.
Paved road track-out	(1E)	Cover all haul vehicles; OR
		Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories		Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 1 may be used.

<sup>\*</sup> Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

TABLE 2
DUST CONTROL ACTIONS FOR EXEMPTION FROM PARAGRAPH (d)(4)\*

FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	(1a)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations;
	(1a-1)	OR For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas:	(1b)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.

<sup>\*</sup> Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

TABLE 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Earth-moving: Construction cut areas and mining operations:	(1c)	Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b)	Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 [70] percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c) (2d)	Apply chemical stabilizers within five working days of grading completion; OR  Take actions (3a) or (3c) specified for inactive
		disturbed surface areas.
Inactive disturbed surface areas	(3a)	Apply water to at least 80 [70] percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR
·	(3b)	Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR
	(3c)	Establish a vegetative ground cover within 21 [30] days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR
	(3d)	Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

<sup>\*</sup> Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

### TABLE 2 (Continued)

FUGITIVE DUST		
SOURCE CATEGORY		CONTROL ACTIONS
Unpaved Roads	(4a)	Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR
	(4b)	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR
	(4c)	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a) (5b)	Apply chemical stabilizers; OR Apply water to at least 80 [70] percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR
	(5c) (5d)	Install temporary coverings; OR Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile.
All Categories	(6a)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.

<sup>\*</sup> Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

### AQMD Recommendations TABLE 3 TRACK-OUT CONTROL OPTIONS PARAGRAPH (d)(5)(B)

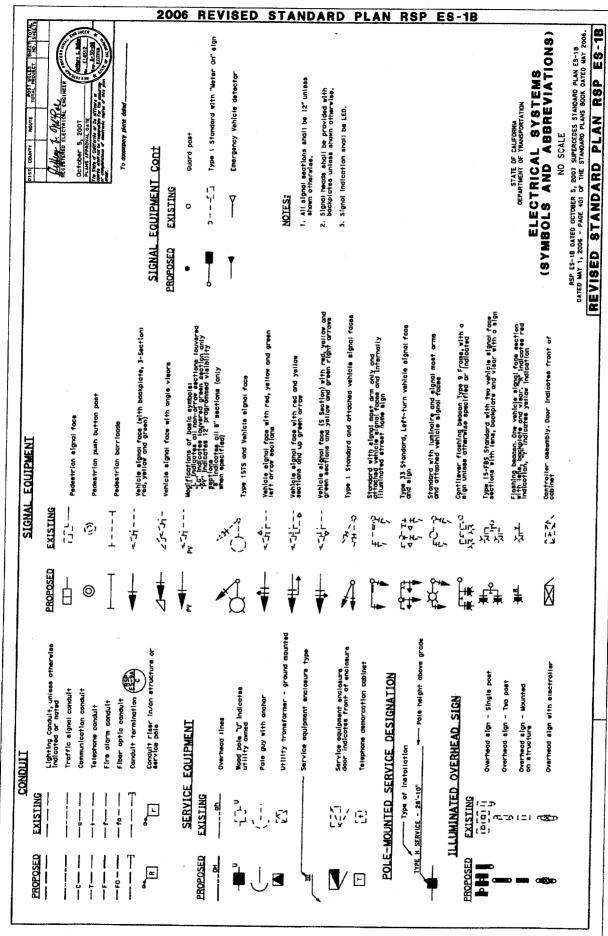
### CONTROL OPTIONS

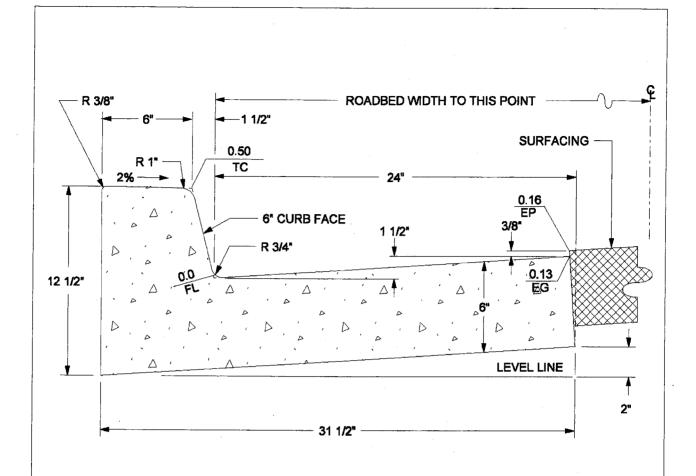
(1)	Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.
(2)	Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.
(3)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

### Appendix B

### **Reference Drawings**

Colon LEGS   Colon forms   Update   Colon Log   Colo	F	<u>,,,  </u>			Г	Т				20	00	6	RE	٧	ISE	D	S	TA	N	D /	\R	D	P	LA	N	R	S	P	ES	- 1	A	 						1
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(Future installation)  (Future installation)  (Future installation)  (Future installation)  (Future installation)  (Future installation)			NS AND EQUIPMENT DESIGNATIONS STING																2															Communication Roadwoy weother information system			RSP OATEO MA	REVIS
ECTROLIERS  PODE    High mast light pole   Condition   Electroller foundation (Future instillation)   NOIES:   Limitors shouls by 10.0 Mery strain   Specified. Unforter shouls by 10.0 Mery specified.   Limitors and in the last of the strain of the specified.   Limitors and in the last of the strain of the specified.   Limitors and in the strain of the specified.   Limitors and of specified. On the specified.   Weight   Mery shouls on the specified.   Worlet notes or project plans.     Londition notes of project plans.     Londition notes of project plans.     Londition notes or project plans.     Londition notes plans.     Londit plans.		CITATYDOODA	PROPOSED EXIS																																			
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**CLASS "B" CONCRETE** 

1.601 CU. FT. / L.F.

1 CU. YD. = 16.86 L.F.

### ABBREVIATIONS:

TC = TOP OF CURB

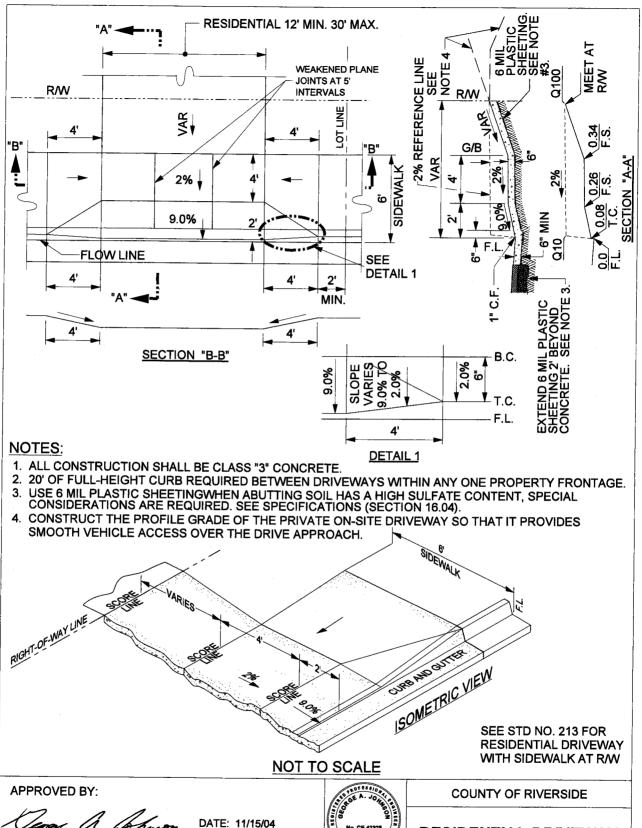
FL = FLOWLINE

EG = EDGE OF GUTTER

**EP = EDGE OF PAVEMENT** 

APPROVED BY:								JOHN CO	COUNTY OF RIVERSIDE
DIRECTOR OF TRAI GEORGE A. JOHNS	VSPORT ON, RCE	ATIO 4232	N .	TE: 05/01/	07		Emp	E 47729 5-31-48 VIL DELL'S	TYPE A-6 CURB
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8-71, 9-88	1				4		T		
2-90, 11-04	2				5				STANDARD NO 200

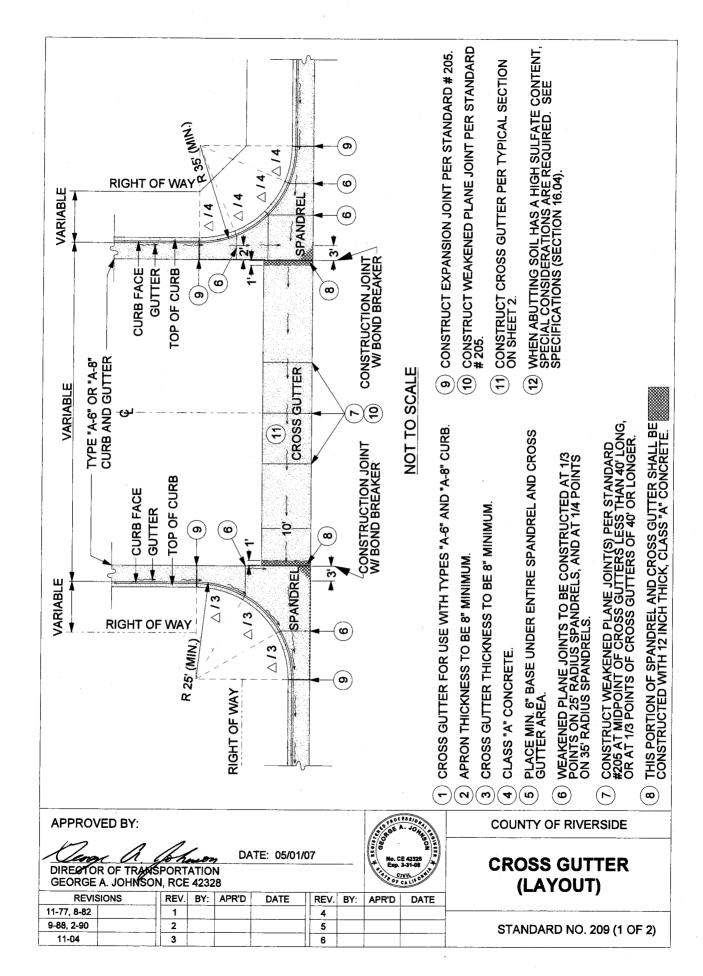
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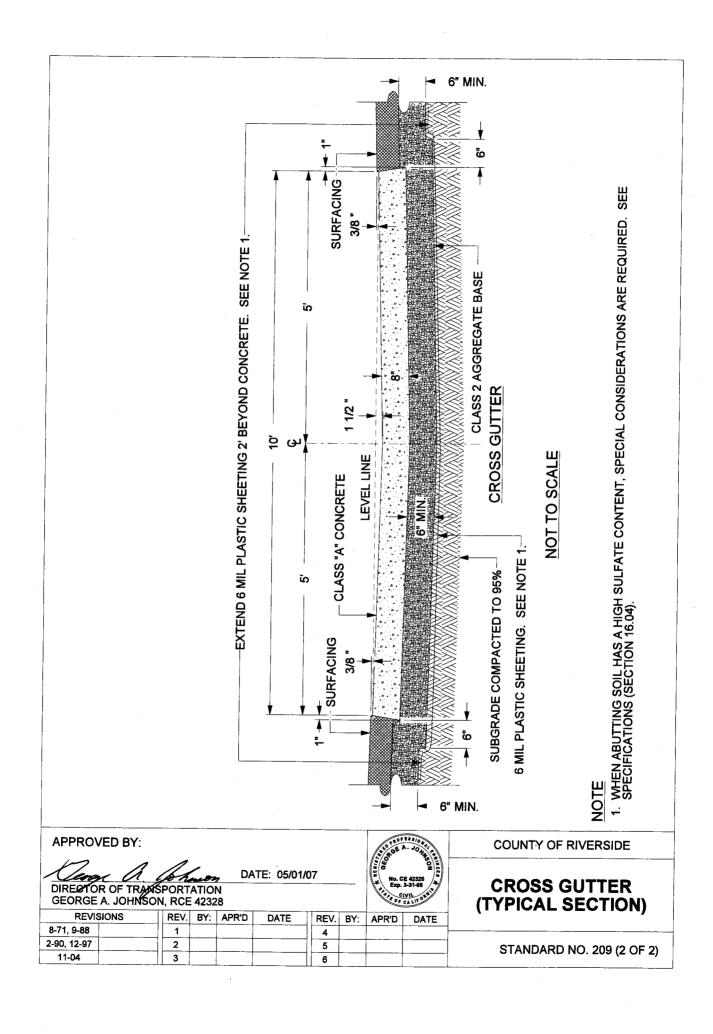


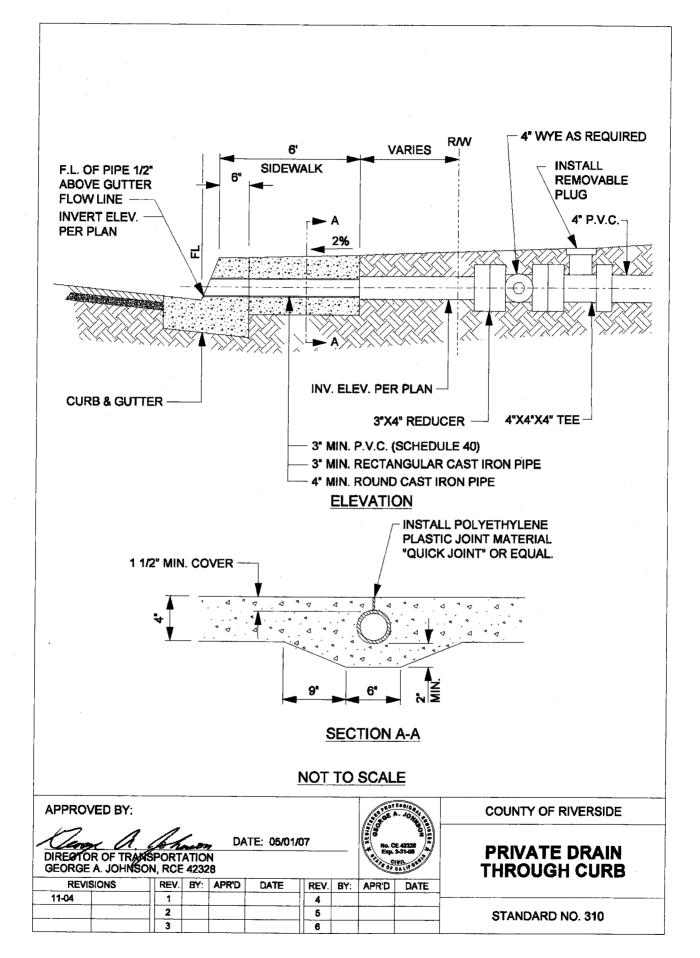
DIRECTOR OF TRANSPORTATION GEORGE A. JOHNSON, RCE 42328 REVISIONS REV. BY: APR'D DATE REV. BY: APR'D DATE 8-71, 8-77 11-04 1 4 5-80, 2-82 2 5 2-90, 12-97 3 6

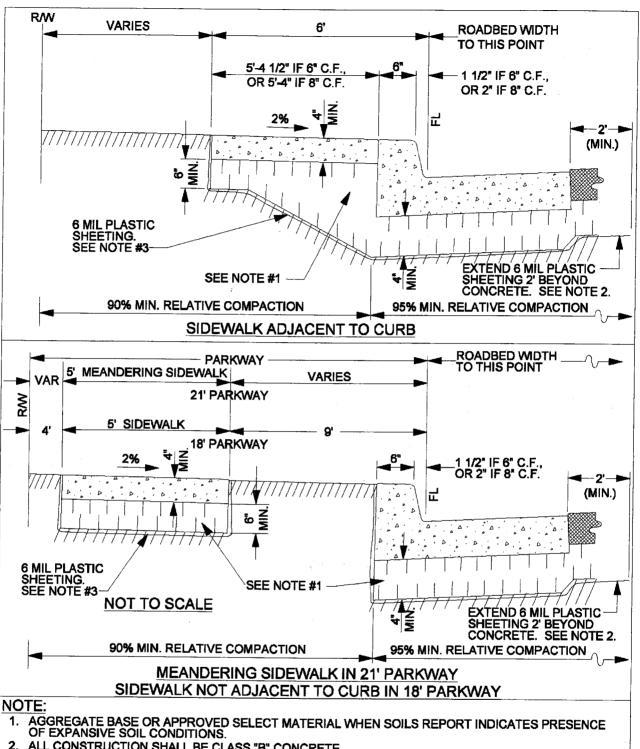
RESIDENTIAL DRIVEWAY WITH SIDEWALK AT CURB

STANDARD NO. 207

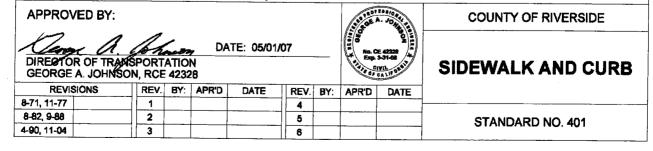


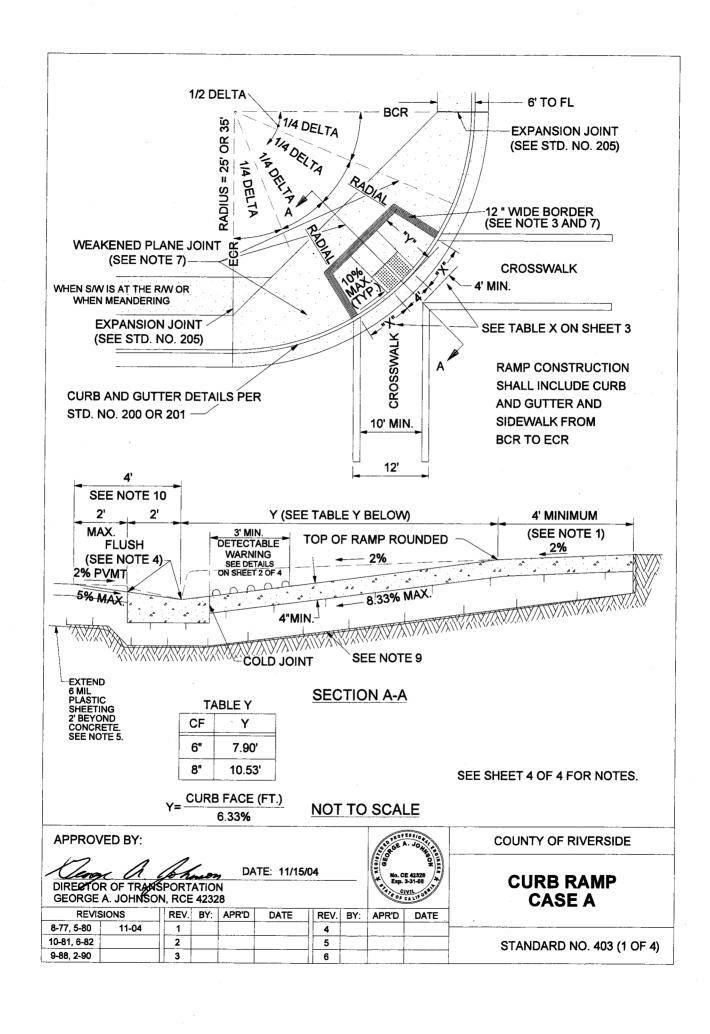


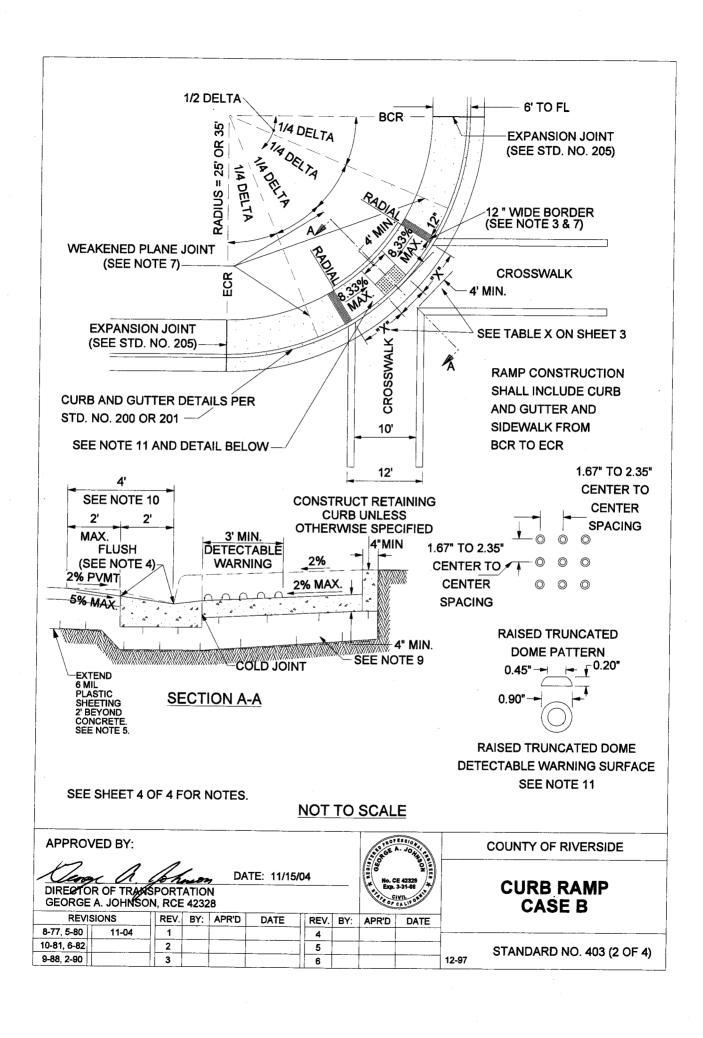


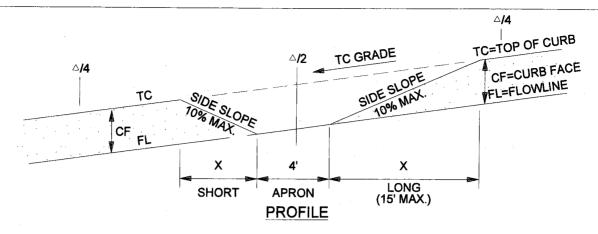


- 2. ALL CONSTRUCTION SHALL BE CLASS "B" CONCRETE.
- WHEN ABUTTING SOIL HAS A HIGH SULFATE CONTENT, SPECIAL CONSIDERATIONS ARE REQUIRED. SEE SPECIFICATIONS (SECTION 16.04).









### **TABLE X**

CF	RADIUS	SIDE		TC GRADE (ALONG CURB RETURN)								
(IN) (FT)		SLOPE	X	1%	2%	3%	4%	5%	6%			
6"	35'	10%	Xs	4.6	4.2	3.9	3.6	3.4	3.2			
			XL	5.6	6.3	7.2	8.4	10.0	12.5			
8"	35'	10%	Xs	6.1	5.6	5.2	4.8	4.5	4.2			
			XL	7.5	8.4	9.6	11.2	13.4	15.0			

### **TO CALCULATE "X" DIMENSION:**

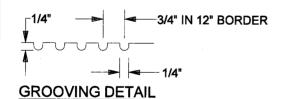
SHORT SIDE (DOWN SLOPE):

LONG SIDE (UP SLOPE):

CURB FACE (FT) X<sub>S</sub> (FT)= SIDE SLOPE + TC GRADE

CURB FACE (FT) X<sub>L</sub> (FT)=SIDE SLOPE - TC GRADE

ENGINEER TO SHOW  $\mathbf{X}_{S}$  AND  $\mathbf{X}_{L}$  ON IMPROVEMENT PLANS



APPROVED BY:					
APPRUVELLAY	Λ.	$\neg$	$\sim$		D\/.
	AP	ᇊ		/ <b>-</b> 1 1	HY.

DATE: 05/05/07

**COUNTY OF RIVERSIDE** 

DIRECTOR OF TRANSPORTATION

GEORGE A. JOHNSON, RCE 42328

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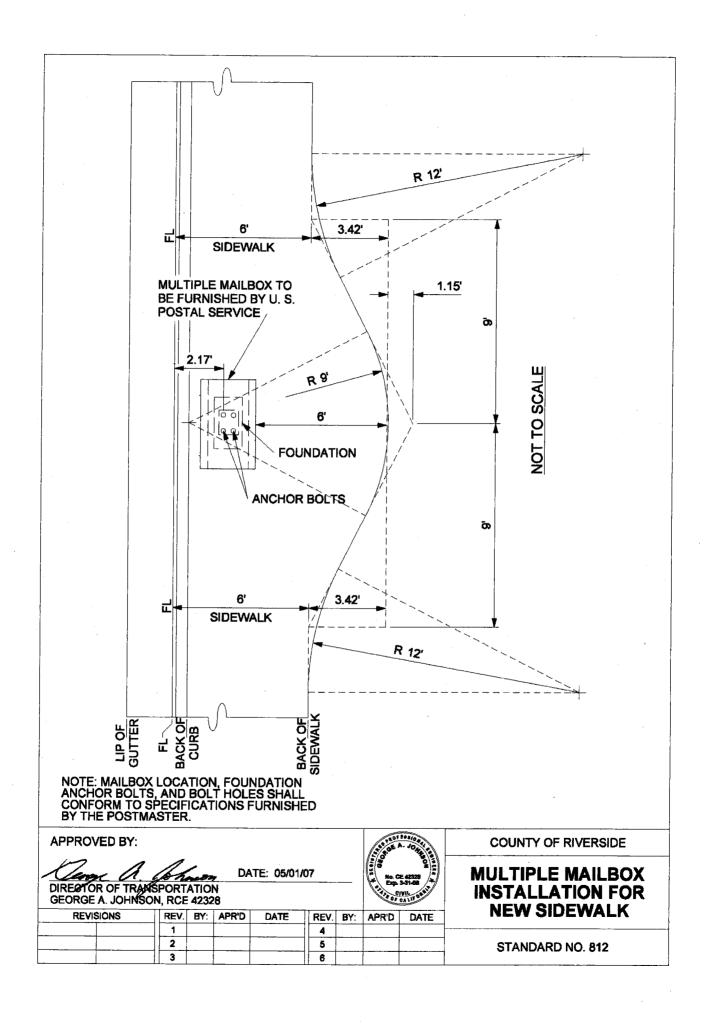
### **CURB RAMP**

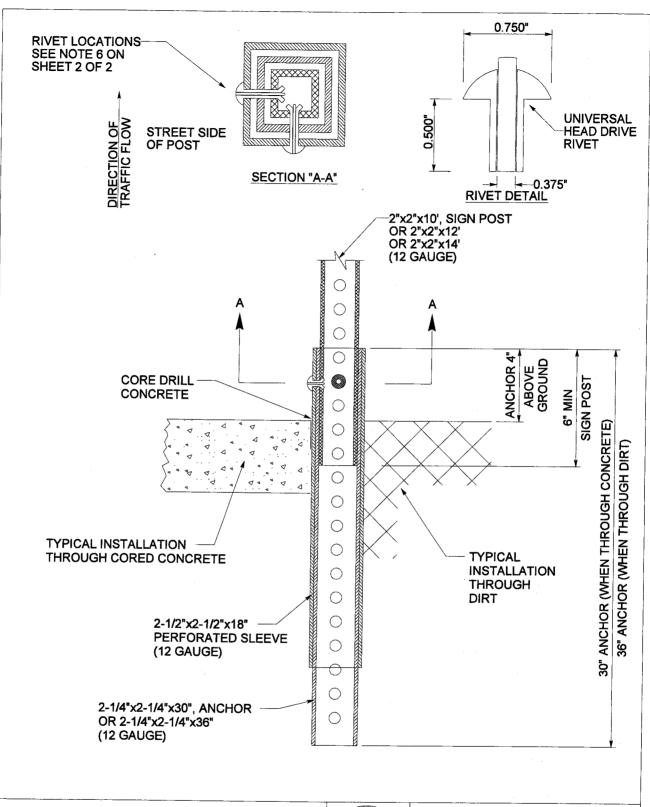
STANDARD NO. 403 (3 OF 4)

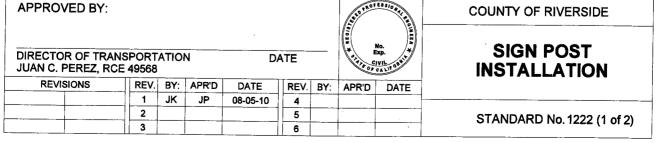
### **CONSTRUCTION NOTES:**

- 1. IF DISTANCE FROM CURB TO BACK OF SIDEWALK IS TOO SHORT TO ACCOMODATE RAMP AND 4' LANDING, THEN USE THE CASE "B" RAMP.
- 2. IF SIDEWALK IS LESS THAN 6' WIDE, THE FULL WIDTH OF THE SIDEWALK SHALL BE DEPRESSED AS SHOWN IN CASE B. MINIMUM SIDEWALK WIDTH IS 4' FROM BACK OF CURB.
- 3. THE RAMP SHALL HAVE A 12" WIDE BORDER WITH GROOVES 1/4" WIDE AND 1/4" DEEP APPROXIMATELY 3/4" ON CENTER. SEE GROOVING DETAIL.
- 4. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
- 5. WHEN ABUTTING SOIL HAS A HIGH SULFATE CONTENT, SPECIAL CONSIDERATIONS ARE REQUIRED. SEE SPECIFICATIONS (SECTION 16.04).
- RAMP SIDE SLOPE VARIES UNIFORMLY FROM A MAXIMUM OF UP TO 10% AT CURB TO CONFORM WITH LONGITUDINAL SIDEWALK SLOPE ADJACENT TO TOP OF THE RAMP (EXCEPT IN CASE B).
- 7. CONSTRUCT WEAKENED PLANE JOINTS AT 1/4 DELTAS WHEN RADIUS EQUALS 35' AND AT INSIDE EDGE OF GROOVED BORDER WHEN RADIUS EQUALS 25'.
- 8. IF EXPANSIVE SOIL IS ENCOUNTERED, THEN RAMP SHALL BE CONSTRUCTED OVER CLASS 2 AGGREGATE MATERIAL.
- 9. CONCRETE SHALL BE CLASS B.
- 10. MAXIMUM SLOPES OF ADJOINING GUTTERS: THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP AND CONTINUOUS PASSAGE TO THE CURB RAMP SHALL NOT EXCEED 5% WITHIN 4' OF THE BOTTOM OF THE CURB RAMP.
- 11. DETECTABLE WARNING SURFACES ARE REQUIRED ON ALL CURB RAMPS THAT ENTER INTO A VEHICULAR TRAVEL WAY.

APPROVED BY: **COUNTY OF RIVERSIDE** DATE: 11/15/04 DIRECTOR OF TRANSPORTATION GEORGE A. JOHNSON, RCE 42328 **CURB RAMP CONSTRUCTION NOTES** REVISIONS REV. BY: APR'D DATE REV. BY: APR'D DATE 8-77, 5-80 11-04 4 10-81, 6-82 2 5 STANDARD NO. 403 (4 OF 4) 9-88, 2-90 3 12-97 6







### NOTES:

- SQUARE PERFORATED STEEL TUBE POST WITH TWO PIECE ANCHOR AND SLEEVE, "TELESPAR", SHALL BE USED FOR ALL TRAFFIC CONTROL AND INFORMATIONAL SIGNS WITHIN ROAD RIGHT-OF-WAY.
- 2. THE NUMBER OF POSTS REQUIRED FOR SIGN INSTALLATION SHALL BE DETERMINED BY THE AREA OF THE SIGN OR COMBINATION OF SIGNS TO BE INSTALLED. A SINGLE POST SHALL BE USED WHERE BOTH THE LENGTH AND WIDTH ARE 48" OR LESS. DOUBLE POSTS SHALL BE USED WHERE EITHER THE LENGTH OR WIDTH EXCEEDS 48".
- 3. THE 2 PIECE ANCHOR AND SLEEVE ASSEMBLY SHALL CONSIST OF A 2 1/4" SQUARE BY 30" (THROUGH SIDEWALK) OR 36" (THROUGH SOIL) ANCHOR WITH A 2 1/2" SQUARE BY 18" SLEEVE. ALL SLEEVES AND ANCHORS SHALL BE 12 GAUGE.
- 4. THE ANCHOR AND SLEEVE ASSEMBLIES SHALL BE DRIVEN SIMULTANEOUSLY UNTIL ONLY 4" REMAINS ABOVE GROUND LEVEL.
- 5. ALL DIRT SHALL BE REMOVED FROM THE INSIDE TOP 6" MINIMUM OF THE ANCHOR ASSEMBLY TO ALLOW FOR THE INSTALLATION OF THE SIGN POST.
- 6. INSTALL 2" SQUARE SIGN POST MINIMUM 6" INTO THE ANCHOR ASSEMBLY AND SECURE IN PLACE WITH TWO 3/8" DRIVE RIVETS AS SHOWN. THE RIVETS SHALL BE INSTALLED ON THE SIDE FACING TRAFFIC FLOW AND THE SIDE OF APPROACHING TRAFFIC AS SHOWN IN ORDER TO ACHIEVE THE MAXIMUM BREAK-AWAY EFFECT.
- 7. INSTALLATION ACCORDING TO THESE REQUIREMENTS IS ESSENTIALTO MAINTAIN BREAK-AWAY CHARACTERISTICS OF THE POST SYSTEM.
- 8. SEE STANDARD No's. 815 AND 816 FOR PLACEMENT OF SIGN POST.
- 9. ALL ANCHOR ASSEMBLIES SHALL BE CORE DRILLED THROUGH CONCRETE AND ASPHALT.
- 10. ALL SIGNS ATTACHED TO PERFORATED POSTS SHALL HAVE ZINC COATED OR S.S. WASHERS BEHIND THE RIVET THAT ARE LARGER THAN THE HEAD OF THE RIVET.
- 11. ALL REGULATORY, WARNING AND GUIDE SIGNS INSTALLED SHALL BE 0.080 INCHES IN THICKNESS.
- 12. ALL SIGNS 36" OR LARGER SHALL BE INSTALLED WITH BACK BRACES SPECIFICALLY DESIGNED FOR 2" SQUARE PERFORATED POSTS. (2" RISE)
- 13. IN SOME INSTANCES CONCRETE FOUNDATION MAY BE REQUIRED TO ENSURE PROPER STABILITY, THIS OPTION IS TO BE USED AT THE DISCRESTION OF THE ENGINEER OR ONSITE INSPECTOR.

APPROVED BY:							440 1101	ED BIO PAI	COUNTY OF RIVERSIDE		
DIRECTOR OF TRA JUAN C. PEREZ, RO		ATIO	N	D	ATE		100	No. Exp.	SIGN POST		
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### OFFICE OF CLERK OF THE BOARD OF SUPERVISORS 1st FLOOR, COUNTY ADMINISTRATIVE CENTER P.O. BOX 1147, 4080 LEMON STREET RIVERSIDE, CA 92502-1147

PHONE: (951) 955-1060 FAX: (951) 955-1071 KECIA HARPER-IHEM Clerk of the Board of Supervisors

KIMBERLY A. RECTOR Assistant Clerk of the Board

April 10, 2014

THE PRESS ENTERPRISE ATTN: LEGALS PO BOX 792 RIVERSIDE, CA 92501

FAX (951) 368-9018 E-MAIL: legals@pe.com

RE: NOTICE INVITING BIDS: COLUMBIA STREET C4-0048

To Whom It May Concern:

Attached is a copy for publication in your newspaper for TEN (10) TIMES:

Monday	- April 14, 2014	Saturday	- April 19, 2014
Tuesday	- April 15, 2014	Sunday	- April 20, 2014
Wednesday	- April 16, 2014	Monday	- April 21, 2014
Thursday	- April 17, 2014	Tuesday	- April 22, 2014
Friday	- April 18, 2014	Wednesday	- April 23, 2014

We require your affidavit of publication immediately upon completion of the last publication.

Your invoice must be submitted to this office in duplicate, WITH TWO CLIPPINGS OF THE PUBLICATION.

NOTE: PLEASE COMPOSE THIS PUBLICATION INTO A SINGLE COLUMN FORMAT.

Thank you in advance for your assistance and expertise.

Sincerely,

Cecilia Gil

Board Assistant to: KECIA HARPER-IHEM, CLERK OF THE BOARD

### Gil, Cecilia

From:

mtinajero@pe.com on behalf of Master, PEC Legals <legalsmaster@pe.com>

Sent:

Thursday, April 10, 2014 9:46 AM

To:

Gil, Cecilia

Subject:

Re: [Legals] FOR PUBLICATION: Columbia Street C4-0048

Received for publication from April 14 - 23. Proof with cost to follow.

### Thank You! Legal Advertising

Phone: 1-800-880-0345 / Fax: 951-368-9018 / E-mail: legals@pe.com

Please Note: Deadline is 10:30 AM two (2) business days prior to the date you would like to publish.

\*\*Additional days required for larger ad sizes\*\*

On Thu, Apr 10, 2014 at 9:22 AM, Gil, Cecilia < CCGIL@rcbos.org > wrote:

Notice Inviting Bids, for publication from April 14 to April 23, 2014. Please confirm. THANK YOU!

### Cecilia Gil

**Board Assistant** 

Clerk of the Board

951-955-8464

MS# 1010

### **NOTICE TO BIDDERS**

County of Riverside, herein called Owner, invites sealed proposals for:

### Columbia Street

Sidewalk Safety Project Acacia Avenue to Tava Lane East Hemet Community Project No. C4-0048

Bid shall be delivered to the County of Riverside Transportation Department, 14<sup>th</sup> Street Annex, 3525 14<sup>th</sup> Street, Riverside, California 92501, telephone (951) 955-6780 not later than 2:00 p.m., on Wednesday, **April 30, 2014** to be promptly opened in public at said address. Each bid shall be in accordance with plans, specifications and other contract documents, dated **March 2014**, and prepared by County of Riverside, whose address is same as the above, from whom they may be obtained upon deposit of **\$25.00** per set with 24" x 36" plans, plus mailing costs. No refund. Prospective bidders may preview the plans, specifications and other contract documents at no charge prior to purchase at the above noted location.

The Contractor is required to have a Class "A" or C12 (Earthwork and Paving) license at the time of bid submission.

**Engineering Estimate** 

\$207,000 - \$241,000

Bid Bond

10%

Performance Bond Payment Bond

100% 100%

Working Days

30 Working Days

Website:

http://www.rctlma.org/trans/con\_bid\_advertisements.html

Dated: April 10, 2014

Kecia Harper-Ihem, Clerk of the Board

By: Cecilia Gil, Board Assistant

### enterprise media



### THE PRESS-ENTERPRISE PEcon













Page 1 of 1

10 DATE		DESCRIPTION - OTHER COMMENTS/CHARGES	PRODUCT/ZONE	15 SIZE	16 BILLED UNITS	17 TIMES 1	8] [ RATE	19 GROSS 20 AMOUNT	NET AMOUNT
04/14/2014	101260600-04142014	PO# Columbia Street C4-0048, NOTI	CE Press-Enterprise	2 x 52 L1	104	1	1.29	133.90	133.90
04/15/2014	101260600-04142014	PO# Columbia Street C4-0048, NOTI	CE Press-Enterprise	2 x 52 Li	104	1	1.19	123.60	123.60
04/16/2014	101260600-04142014	PO# Columbia Street C4-0048, NOTI	CE Press-Enterprise	2 x 52 LI	104	1	1.19	123.60	123.60
04/17/2014	101260600-04142014	PO# Columbia Street C4-0048, NOTI	CE Press-Enterprise	2 x 52 Li	104	1	1.19	123.60	123.60
04/18/2014	101260600-04142014	PO# Columbia Street C4-0048, NOTI	CE Press-Enterprise	2 x 52 LI	104	1	1.19	123.60	123.60
04/19/2014	101260600-04142014	PO# Columbia Street C4-0048, NOTI	CE Press-Enterprise	2 x 52 LI	104	1	1.19	123.60	123.60
04/20/2014	101260600-04142014	PO# Columbia Street C4-0048, NOTI	CE Press-Enterprise	2 x 52 LI	104	1	1.19	123.60	123.60
04/21/2014	101260600-04142014	PO# Columbia Street C4-0048, NOTI	CE Press-Enterprise	2 x 52 Li	104	1	1.19	123.60	123.60
04/22/2014	101260600-04142014	PO# Columbia Street C4-0048, NOTI	CE Press-Enterprise	2 x 52 LI	104	1	1.19	123.60	123.60
04/23/2014	101260600-04142014	PO# Columbia Street C4-0048, NOTI	CE Press-Enterprise	2 x 52 LI	104	1	1.19	123.60	123.60
		Order Placed by: Cecilia Gil							

ENK / BOARO OF SUPERVISORS
2014 MAY -8 PM 4: 21

Legal Advertising Invoice

\$1,246.30

Transp. 3-27 of 04/08/14

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 25
 ADVERTISER INFORMATION

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 BILLING PERIOD
 6
 BILLED ACCOUNT NUMBER
 7
 ADVERTISER/CLIENT NUMBER
 2
 ADVERTISER/CLIENT NAME

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 BOARD OF SUPERVISORS

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		BOARD OF SUPERVISORS	
1	BILLING PERIOD	6 BILLED ACCOUNT NUMBER	7 ADVERTISER/CLIENT NUMBER
	04/23/2014 - 04/23/2014	100141323	100141323
23	BALANCE	24 INVOICE NUMBER	3 TERMS OF PAYMENT
	\$1,246.30	101260600-04142014	DUE UPON RECEIPT

8	BILLING ACCOUNT NAME AND ADDRESS

Enterprise Media
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**RIVERSIDE, CA 92502-2209** 

REMITTANCE ADDRESS

BOARD OF SUPERVISORS COUNTY OF RIVERSIDE P.O. BOX 1147 RIVERSIDE, CA 92502

### THE PRESS-ENTERPRISE

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PROOF OF PUBLICATION (2010, 2015.5 C.C.P)

Publication(s): The Press-Enterprise

PROOF OF PUBLICATION OF

Ad Desc.: / Columbia Street C4-0048

I am a citizen of the United States. I am over the age of eighteen years and not a party to or interested in the above entitled matter. I am an authorized representative of THE PRESS-ENTERPRISE, a newspaper in general circulation, printed and published daily in the County of Riverside, and which newspaper has been adjudicated a newspaper of general circulation by the Superior Court of the County of Riverside, State of California, under date of April 25, 1952, Case Number 54446, under date of March 29, 1957, Case Number 65673, under date of August 25, 1995, Case Number 267864, under date of February 4, 2013, Case Number RIC 1215735, under date of July 25, 2013, Case Number RIC 1305730, and under date of September 16, 2013, Case Number RIC 1309013; that the notice, of which the annexed is a printed copy, has been published in said newspaper in accordance with the instructions of the person(s) requesting publication, and not in any supplement thereof on the following dates, to

04/14, 04/15, 04/16, 04/17, 04/18, 04/19, 04/20, 04/21, 04/22, 04/23/2014

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date: April 23, 2014 At: Riverside, California

**BOARD OF SUPERVISORS** COUNTY OF RIVERSIDE P.O. BOX 1147 RIVERSIDE, CA 92502

Ad Number: 0001260600-01

P.O. Number: Columbia Street C4-0048

### Ad Copy:

### NOTICE TO BIDDERS

County of Riverside, herein called Owner, invites sealed proposals for:

### Columbia Street

Sidewalk Safety Project Acacia Avenue to Tava Lane East Hemet Community Project No. C4-0048

Bid shall be delivered to the County of Riverside Transportation Department, 14th Street Annex, 3525 14th Street, Riverside, California 92501, telephone (951) 955-6780 not later than 2:00 p.m., on Wednesday, April 30, 2014 to be promptly opened in public at said address. Each bid shall be in accordance with plans, specifications and other contract documents, dated March 2014, and prepared by County of Riverside, whose address is same as the above, from whom they may be obtained upon deposit of \$25.00 per set with 24 x 36" plans, plus mailing costs. No refund. Prospective bidders may preview the plans, specifications and other contract documents at no charge prior to purchase at the above noted location.

The Contractor is required to have a Class \*A\* or C12 (Earthwork and Paving) license at the time of bid sub-

Engineering Estimate Bid Bond Performance Bond Payment Bond Working Days

\$207,000 - \$241,000 10%

100% 100% 100% 30 Working Days

http://www.rctlma.org/trans/con\_bid\_advertisements.ht

Dated: April 10, 2014 Kecia Harper-Ihem, Clerk of the Board By: Cecilia Gil, Board Assistant

4/14 - 4/23