

**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:

- I. 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:

- I. 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" UPPERCASE Letters →	PROJECT NAME:		3 ½" Title Case Bold Letters ←
1" UPPERCASE Letters →	CONTRACTOR		3 ½" Title Case Bold Letters ←
1" Title Case Letters →	Contractor's Dust Control Phone #		3" Bold Numbers ←
1" Title Case Letters →	County of Riverside Phone #		3" Bold Numbers ←
1" Title Case Letters →	Phone Number:	<b>SCAQMD 1-800-CUT-SMOG</b>	3 ½" Bold Numbers ←

"Title Case" means the first letter of a word is capitalized and subsequent letters are lower case.

AQMD Recommendations

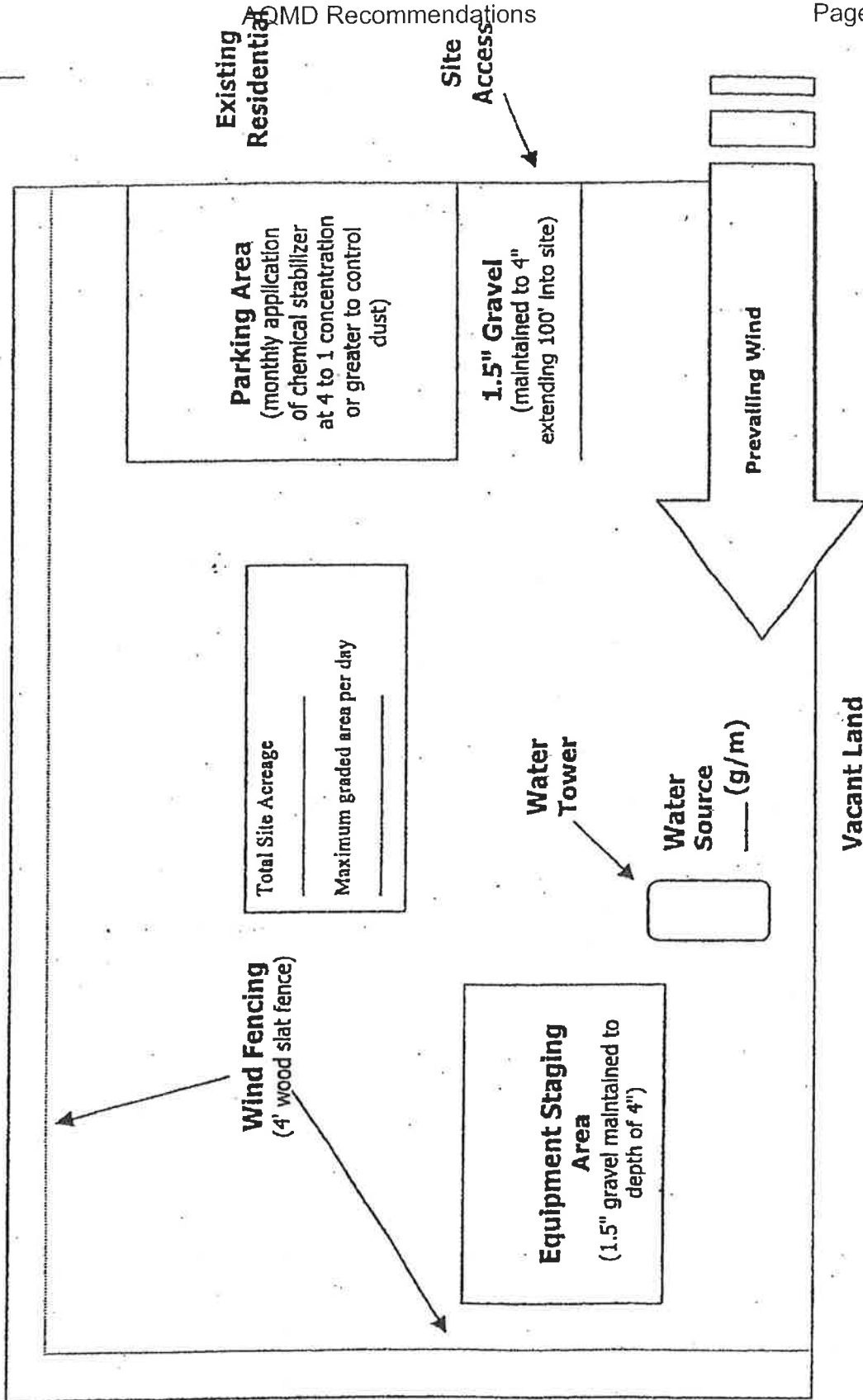
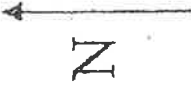
(b) For a permittee subject to the 4' x 8' sign requirement, the District provides the following example: (as modified by the County of Riverside)

2" UPPERCASE Letters	PROJECT NAME:	4" Title Case Bold Letters
2" UPPERCASE Letters	CONTRACTOR	4" Title Case Bold Letters
2" Title Case Letters	Contractor's Dust Control Phone #	4" Bold Numbers
2" Title Case Letters	County of Riverside Phone #	4" Bold Numbers
2" Title Case Letters	Phone Number:	4 1/2" Bold Numbers
2" Title Case Letters	<p style="text-align: center;"><b>SCAQMD</b> <b>1-800-CUT-SMOG</b></p> <p style="text-align: center;"><b>COUNTY OF RIVERSIDE</b> <b>TRANSPORTATION DEPARTMENT</b></p>	

Distance and location of nearest:  
 Residence \_\_\_\_\_  
 Business \_\_\_\_\_

Section 1  
Simplified Sample Site Plan

Existing Residential



Existing Residential

Site Access

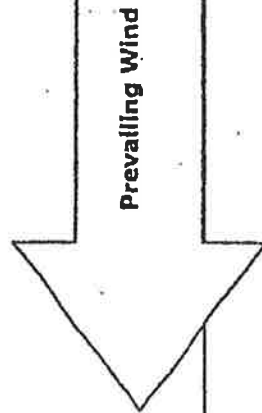
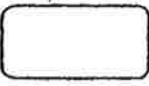
**Parking Area**  
 (monthly application of chemical stabilizer at 4 to 1 concentration or greater to control dust)

**1.5" Gravel**  
 (maintained to 4" extending 100' into site)

Total Site Acreage \_\_\_\_\_  
 Maximum graded area per day \_\_\_\_\_

Water Tower

Water Source \_\_\_\_\_ (g/m)



Vacant Land

Existing Residential

Remember...  
**DUST CONTROL IS REQUIRED 24 HOURS A DAY, 7 DAYS A WEEK, REGARDLESS OF CONSTRUCTION STATUS**

### 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 irrigation 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 irrigation 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.

**Remember...**

**DUST CONTROL IS REQUIRED 24 HOURS A DAY, 7 DAYS A WEEK,  
REGARDLESS OF CONSTRUCTION STATUS**

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): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Remember...**  
**DUST CONTROL IS REQUIRED 24 HOURS A DAY, 7 DAYS A WEEK,**  
**REGARDLESS OF CONSTRUCTION STATUS**

### Plan Review Checklist Finish Grading Phase

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 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 reduce 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): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Remember...  
DUST CONTROL IS REQUIRED 24 HOURS A DAY, 7 DAYS A WEEK,  
REGARDLESS OF CONSTRUCTION STATUS**

### 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.

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): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Remember...  
DUST CONTROL IS REQUIRED 24 HOURS A DAY, 7 DAYS A WEEK,  
REGARDLESS OF CONSTRUCTION STATUS**



## RULE 403 IMPLEMENTATION HANDBOOK

---

### REASONABLY AVAILABLE CONTROL MEASURES

Paragraph (d)(3) of Rule 403 allows activities outside the South Coast Air Basin (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 outside the South Coast Air Basin 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                   | <ul style="list-style-type: none"> <li>(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.</li> <li>(2) Pre-application of water to depths of proposed cuts.</li> <li>(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).</li> </ul> |
| (B) Chemical stabilizers       | <ul style="list-style-type: none"> <li>(1) Only effective in areas which are not subject to daily disturbances.</li> <li>(2) Vendors can supply information on product application and required concentrations to meet the specifications established by the Rule.</li> </ul>   |
| (C) Wind fencing               | <ul style="list-style-type: none"> <li>(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 leaving a site.</li> <li>(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.</li> </ul>   |
| (D) Cover haul vehicles        | <ul style="list-style-type: none"> <li>(1) Entire surface area of hauled earth should be covered once vehicle is full.</li> </ul>   |
| (E) Bedliners in haul vehicles | <ul style="list-style-type: none"> <li>(1) When feasible, use in bottom-dumping haul vehicles.</li> </ul>   |

**HIGH WIND MEASURE**

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

Source: (2) Unpaved Roads

**CONTROL MEASURES**

(F) Paving

(G) Chemical stabilization

(H) Watering

(I) Reduce speed limits

(J) Reduce vehicular trips

(K) Gravel

**DESCRIPTION**

- (1) Requires street sweeping/cleaning if subject to material accumulation.
- (1) Vendors can supply information as to application methods and concentrations to meet the specifications established by the Rule
- (2) Not recommended for high volume or heavy equipment traffic use.
- (1) In sufficient quantities to keep surface moist.
- (2) Required application frequency will vary according to soil type, weather conditions, and vehicular use.
- (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.
- (1) Access restriction or redirecting traffic to reduce vehicle trips by a minimum of 60 percent.
- (1) Gravel maintained to a depth of four inches can be an effective measure.
- (2) Should only be used in areas where paving, chemical stabilization or frequent watering is not feasible.

**HIGH WIND MEASURE**

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

January 1999

**RULE 403 IMPLEMENTATION 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.
  - (2) May need to be used in conjunction with wind sheltering to prevent visible emissions from crossing the property line.
- (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**

- (f) Apply chemical stabilizers (to meet the specifications established by the Rule) prior to wind events; or
- (g) Apply water once per hour; or
- (h) Install temporary covers.

Source: (4) Paved Road Track-Out

**CONTROL MEASURES**

**DESCRIPTION**

- |                                |  |
|--------------------------------|--|
| (Q) Chemical stabilization     | (1) Most effective when used on areas where active operations have ceased.                 |
| (R) Sweep/clean roadways       | (2) Vendors can supply information on methods for application and required concentrations. |
| (S) Cover haul vehicles        | (1) Either sweeping or water flushing may be used.   |
| (T) Bedliners in haul vehicles | (1) Entire surface area should be covered once vehicle is full.                            |
| (U) Site access improvement    | (1) When feasible, use in bottom dumping vehicles.   |
|                                | (1) Pave internal roadway system.  |
|                                | (2) Most important segment, last 100 yards from the connection with paved public roads     |

**HIGH WIND MEASURE**

- (i) Cover all haul vehicles; and
- (j) Clean streets with water flushing, unless prohibited by the Regional Water Quality Control Board.

Source: (S) Disturbed Surface Areas/ Inactive Construction Sites

CONTROL MEASURES

DESCRIPTION

- (Q) Chemical stabilization
  - (1) Most effective when used on areas where active operations have ceased.
  - (2) Vendors can supply information on methods for application and required concentrations.
- (R) Watering
  - (1) Requires frequent applications unless a surface crust can be developed.
- (S) Wind fencing
  - (1) 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.
- (T) Vegetation
  - (1) Establish as quickly as possible when active operations have ceased.
  - (2) Use of drought tolerant, native vegetation is encouraged.

HIGH WIND MEASURES

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

**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

### CONTROL MEASURES

### DESCRIPTION

- |                                |   |
|--------------------------------|---|
| (A) Watering (pre-grading)     | (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.   |
| (A-1) Watering (post-grading)  | (2) Pre-application of water to depths of proposed cuts.  |
| (A-2) Pre-grading planning     | (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.  |
| (B) Chemical stabilizers       | (1) Grade each phase separately, timed to coincide with construction phase; or<br>(2) 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.    |
| (C) Wind fencing               | (1) Only effective in areas which are not subject to daily disturbances.<br>(2) Vendors can supply information on product application and required concentrations to meet the specifications established by the Rule.                                     |
| (D) Cover haul vehicles        | (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 leaving a site. Must be implemented in conjunction with either measure (A-1) or (B). |
| (E) Bedliners in haul vehicles | (1) Entire surface area of hauled earth should be covered once vehicle is full.<br>(1) When feasible, use in bottom-dumping haul vehicles.  |

### HIGH WIND MEASURE

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



RULE 403 IMPLEMENTATION HANDBOOK

Source: (2) Unpaved Roads

CONTROL MEASURES

DESCRIPTION

- (F) Paving
  - (1) Requires street sweeping/cleaning if subject to material accumulation.
- (G) Chemical stabilization
  - (1) Vendors can supply information as to application methods and concentrations to meet the specifications established by the Rule
  - (2) Not recommended for high volume or heavy equipment traffic use.
- (H) Watering
  - (1) In sufficient quantities to keep surface moist.
  - (2) Required application frequency will vary according to soil type, weather conditions, and vehicular use.
- (I) Reduce speed limits
  - (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.
- (J) Reduce vehicular trips
  - (1) Access restriction or redirecting traffic to reduce vehicle trips by a minimum of 60 percent.
- (K) Gravel
  - (1) Gravel maintained to a depth of four inches can be an effective measure.
  - (2) Should only be used in areas where paving, chemical stabilization or frequent watering is not feasible.

HIGH WIND MEASURE

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

# RULE 403 IMPLEMENTATION 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
  - (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

- (a) Apply chemical stabilizers (to meet the specifications established by the Rule) prior to wind events; or
- (b) Apply water once per hour; or
- (c) Install temporary covers.

**RULE 403 IMPLEMENTATION HANDBOOK**

---

Source: (4) Paved Road Track-Out

CONTROL MEASURES

Compliance with District Rule 403.

DESCRIPTION

Paragraph (d)(5).

January 1999

**RULE 403 IMPLEMENTATION HANDBOOK**

---

Source: (5) Disturbed Surface Areas/ Inactive Construction Sites

**CONTROL MEASURES**

**DESCRIPTION**

- (Q) Chemical stabilization
  - (1) Most effective when used on areas where active operations have ceased.
  - (2) Vendors can supply information on methods for application and required concentrations.
- (R) Watering
  - (1) Requires frequent applications unless a surface crust can be developed.
- (S) Wind fencing
  - (1) 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).
- (T) Vegetation
  - (1) Establish as quickly as possible when active operations have ceased.\*

**HIGH WIND MEASURES**

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

---

\* Use of drought tolerant, native vegetation is encouraged.

TABLE 1

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

<b>FUGITIVE DUST SOURCE CATEGORY</b>	<b><u>CONTROL MEASURES</u></b>
<b>Earth-moving</b>	(1A) Cease all active operations; OR (2A) Apply water to soil not more than 15 minutes prior to moving such soil.
<b>Disturbed surface areas</b>	(0B) 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 (1B) Apply chemical stabilizers prior to wind event; OR (2B) 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 (3B) 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.
<b>Unpaved roads</b>	(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.
<b>Open storage piles</b>	(1D) Apply water twice [once] per hour; OR (2D) Install temporary coverings.
<b>Paved road track-out</b>	(1E) Cover all haul vehicles; OR (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
<b>All Categories</b>	(1F) 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.

\* 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)\***

<u>FUGITIVE DUST SOURCE CATEGORY</u>	<u>CONTROL ACTIONS</u>
<b>Earth-moving (except construction cutting and filling areas, and mining operations)</b>	<p>(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; OR</p> <p>(1a-1) 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.</p>
<b>Earth-moving: Construction fill areas:</b>	<p>(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.</p>

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

TABLE 2 (Continued)

<b>FUGITIVE DUST SOURCE CATEGORY</b>	<b>CONTROL ACTIONS</b>
<b>Earth-moving: Construction cut areas and mining operations:</b>	(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.
<b>Disturbed surface areas (except completed grading areas)</b>	(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.
<b>Disturbed surface areas: Completed grading areas</b>	(2c) Apply chemical stabilizers within five working days of grading completion; OR  (2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas.
<b>Inactive disturbed surface areas</b>	(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.

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

TABLE 2 (Continued)

<u>FUGITIVE DUST SOURCE CATEGORY</u>	<u>CONTROL ACTIONS</u>
<b>Unpaved Roads</b>	(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.
<b>Open storage piles</b>	(5a) Apply chemical stabilizers; OR (5b) 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) Install temporary coverings; OR (5d) 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.
<b><u>All Categories</u></b>	(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.

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

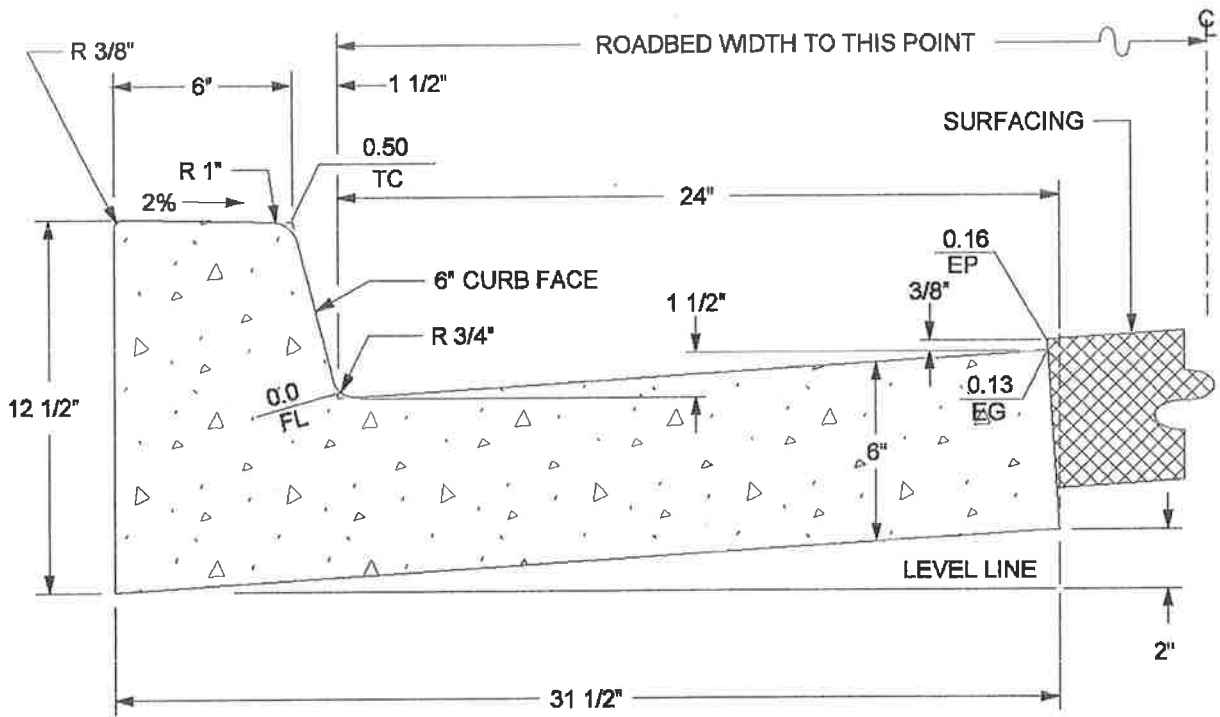


AQMD Recommendations  
**TABLE 3**  
**TRACK-OUT CONTROL OPTIONS**  
**PARAGRAPH (d)(5)(B)**

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**



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:

*George A. Johnson*

DATE: 05/01/07

DIRECTOR OF TRANSPORTATION  
GEORGE A. JOHNSON, RCE 42328

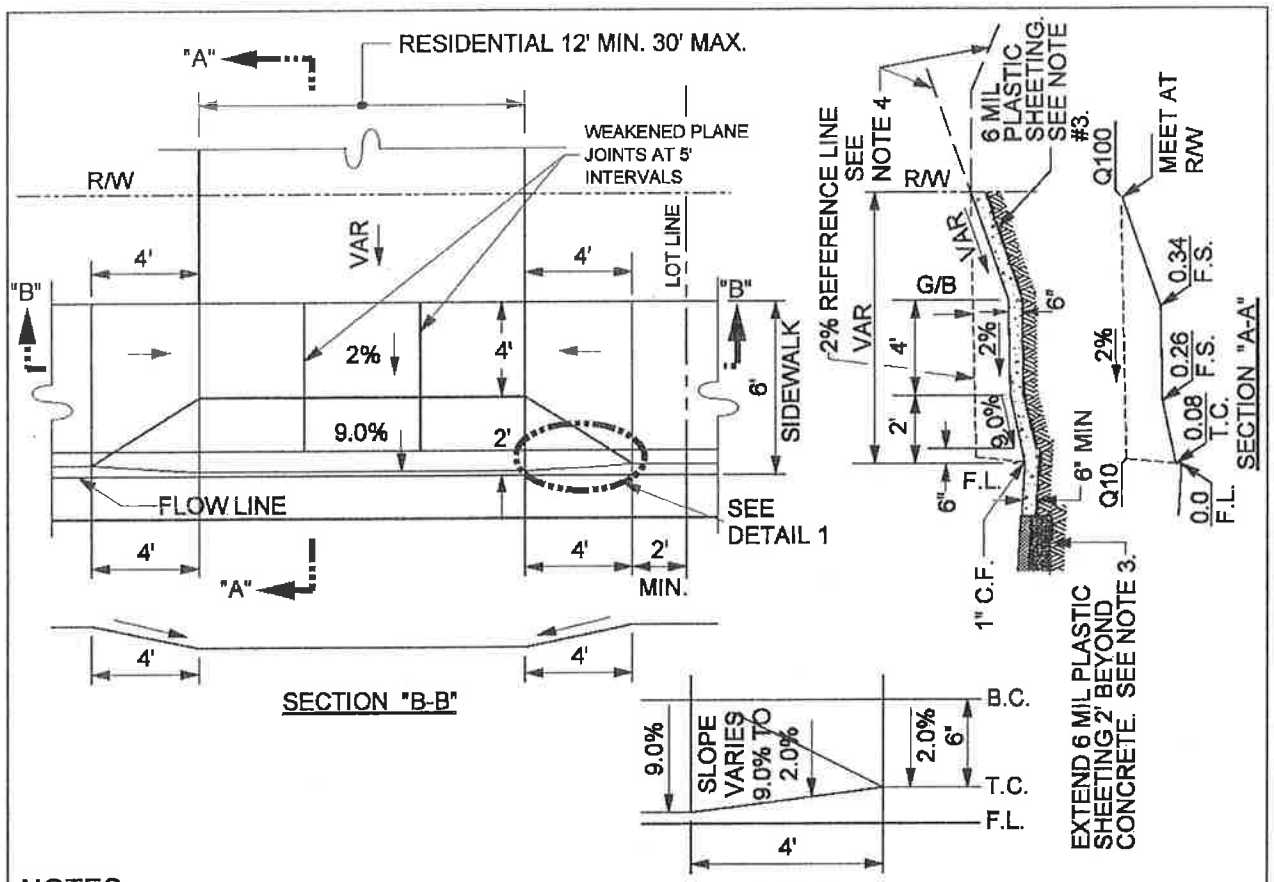


COUNTY OF RIVERSIDE

**TYPE A-6 CURB**

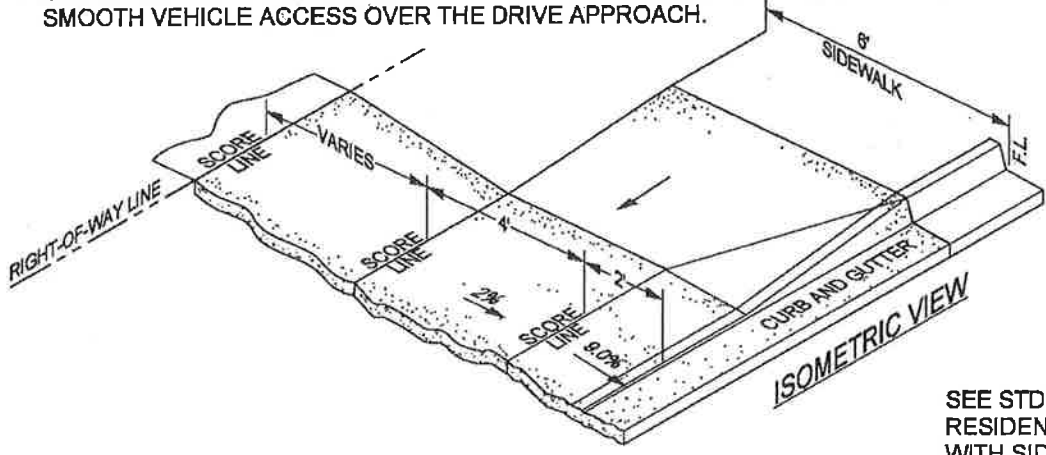
STANDARD NO. 200

REVISIONS	REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE
8-71, 9-88	1				4			
2-90, 11-04	2				5			
	3				6			




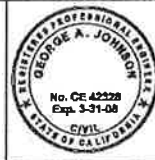
**NOTES:**

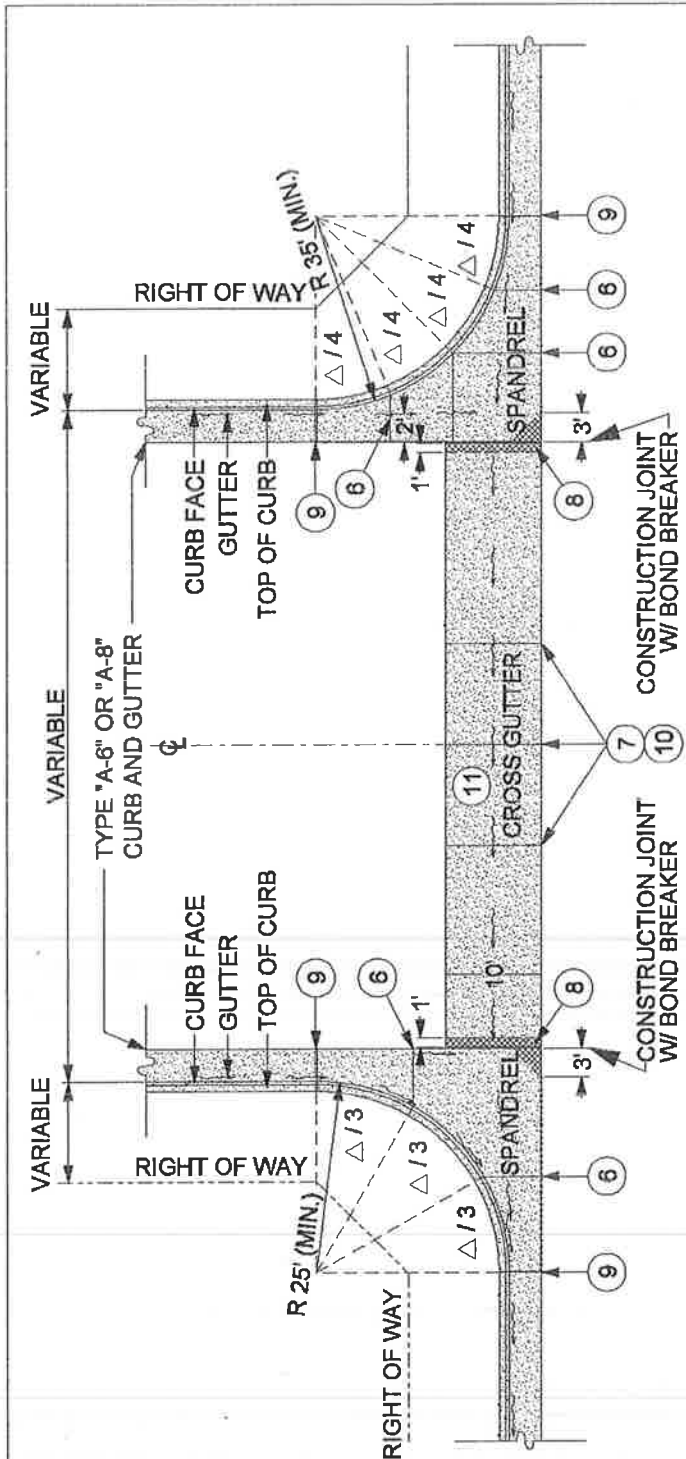
1. ALL CONSTRUCTION SHALL BE CLASS "3" CONCRETE.
2. 20' OF FULL-HEIGHT CURB REQUIRED BETWEEN DRIVEWAYS WITHIN ANY ONE PROPERTY FRONTAGE.
3. USE 6 MIL PLASTIC SHEETING WHEN ABUTTING SOIL HAS A HIGH SULFATE CONTENT, SPECIAL CONSIDERATIONS ARE REQUIRED. SEE SPECIFICATIONS (SECTION 16.04).
4. CONSTRUCT THE PROFILE GRADE OF THE PRIVATE ON-SITE DRIVEWAY SO THAT IT PROVIDES SMOOTH VEHICLE ACCESS OVER THE DRIVE APPROACH.



NOT TO SCALE

SEE STD NO. 213 FOR RESIDENTIAL DRIVEWAY WITH SIDEWALK AT R/W

APPROVED BY:				COUNTY OF RIVERSIDE				
 DIRECTOR OF TRANSPORTATION GEORGE A. JOHNSON, RCE 42328				DATE: 11/15/04 				
<b>RESIDENTIAL DRIVEWAY WITH SIDEWALK AT CURB</b>				<b>STANDARD NO. 207</b>				
REVISIONS	REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE
8-71, 8-77	1				4			
5-80, 2-82	2				5			
2-90, 12-97	3				6			



NOT TO SCALE

- 1 CROSS GUTTER FOR USE WITH TYPES "A-6" AND "A-8" CURB.
- 2 APRON THICKNESS TO BE 8" MINIMUM.
- 3 CROSS GUTTER THICKNESS TO BE 8" MINIMUM.
- 4 CLASS "A" CONCRETE.
- 5 PLACE MIN. 6" BASE UNDER ENTIRE SPANDREL AND CROSS GUTTER AREA.
- 6 WEAKENED PLANE JOINTS TO BE CONSTRUCTED AT 1/3 POINTS ON 25' RADIUS SPANDRELS, AND AT 1/4 POINTS ON 35' RADIUS SPANDRELS.
- 7 CONSTRUCT WEAKENED PLANE JOINT(S) PER STANDARD #205 AT MIDPOINT OF CROSS GUTTERS LESS THAN 40' LONG, OR AT 1/3 POINTS OF CROSS GUTTERS OF 40' OR LONGER.
- 8 THIS PORTION OF SPANDREL AND CROSS GUTTER SHALL BE CONSTRUCTED WITH 12 INCH THICK, CLASS "A" CONCRETE.
- 9 CONSTRUCT EXPANSION JOINT PER STANDARD # 205.
- 10 CONSTRUCT WEAKENED PLANE JOINT PER STANDARD # 205.
- 11 CONSTRUCT CROSS GUTTER PER TYPICAL SECTION ON SHEET 2.
- 12 WHEN ABUTTING SOIL HAS A HIGH SULFATE CONTENT, SPECIAL CONSIDERATIONS ARE REQUIRED. SEE SPECIFICATIONS (SECTION 16.04).

APPROVED BY:

*George A. Johnson*  
 DIRECTOR OF TRANSPORTATION  
 GEORGE A. JOHNSON, RCE 42328

DATE: 05/01/07



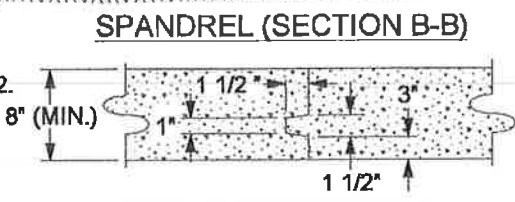
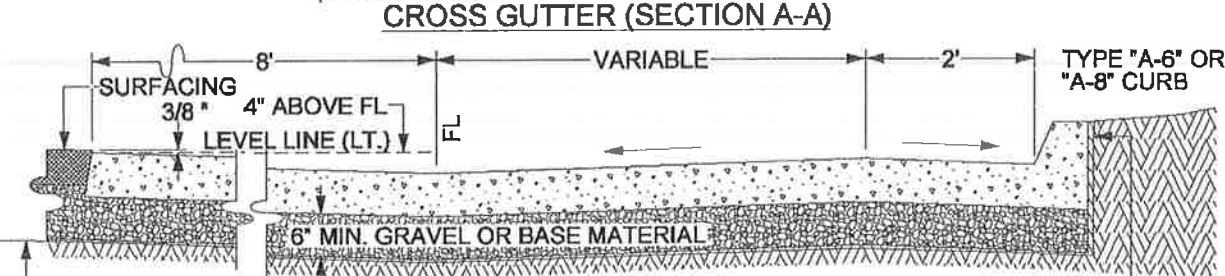
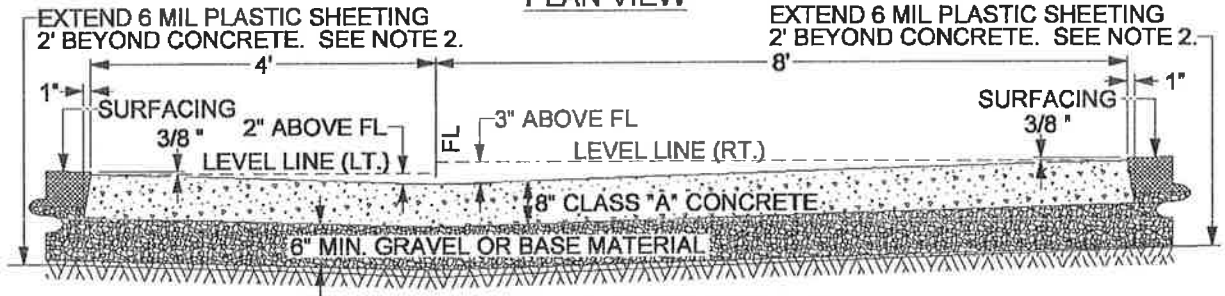
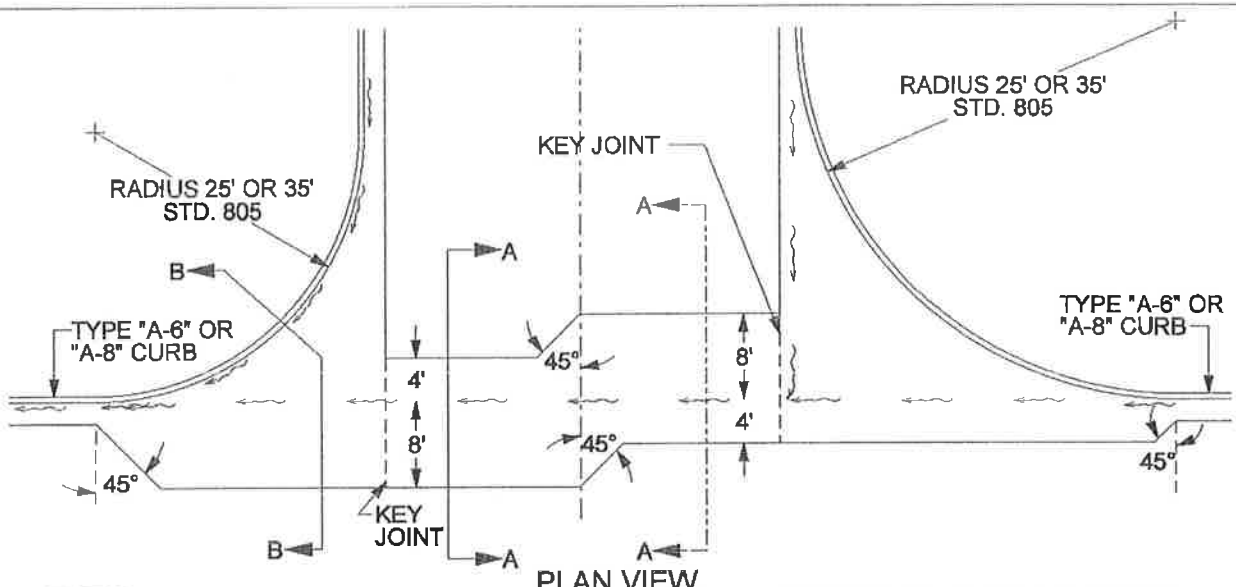
COUNTY OF RIVERSIDE

**CROSS GUTTER  
(LAYOUT)**

REVISIONS	REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE
11-77, 8-82	1				4			
9-88, 2-90	2				5			
11-04	3				6			


STANDARD NO. 209 (1 OF 2)





**NOTE:**

1. THIS CROSS GUTTER STANDARD TO BE CONSTRUCTED IN AREAS WHERE STREET GUTTERS HAVE CONSTANT OR FREQUENT FLOWS FROM LANDSCAPED PARKWAYS AND MEDIANS, GOLF COURSE, AND AGRICULTURAL RUNOFF OR WHEN GRADIENT IS LESS THAN 0.8%.
2. WHEN ABUTTING SOIL HAS A HIGH SULFATE CONTENT, SPECIAL CONSIDERATIONS ARE REQUIRED. SEE SPECIFICATIONS (SECTION 16.04).

APPROVED BY:  
  
 DATE: 05/01/07  
 DIRECTOR OF TRANSPORTATION  
 GEORGE A. JOHNSON, RCE 42328

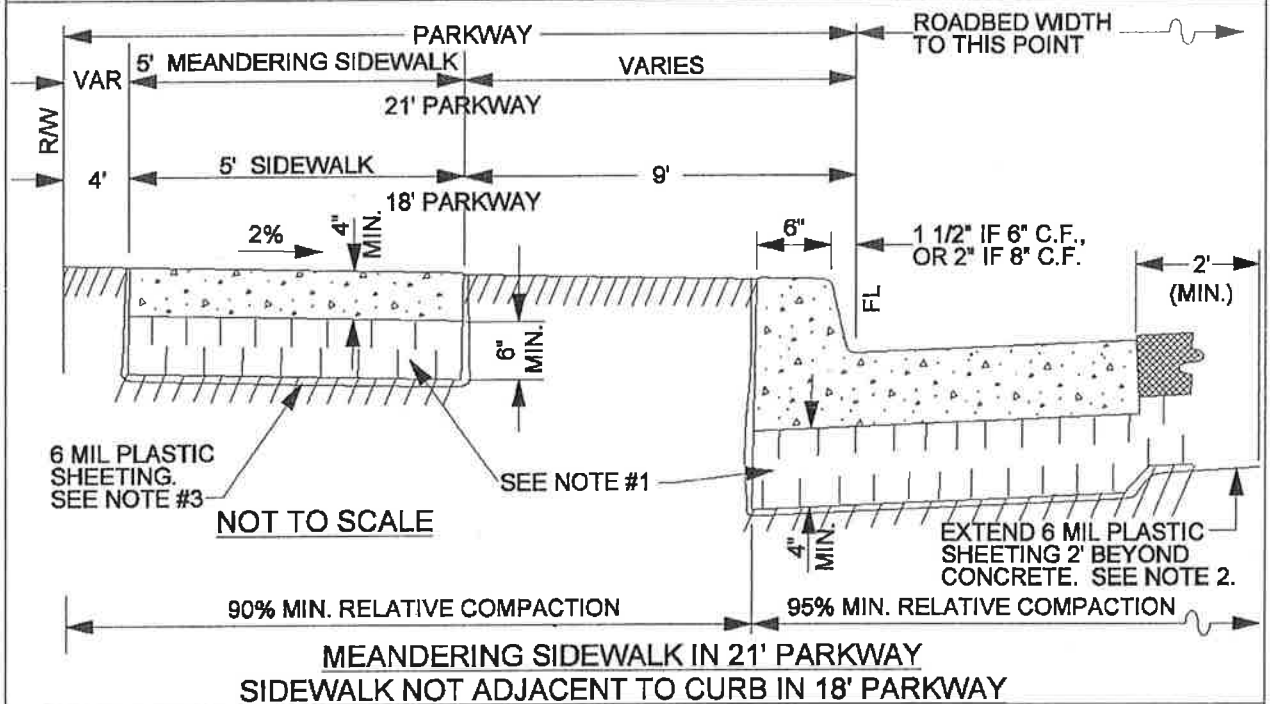
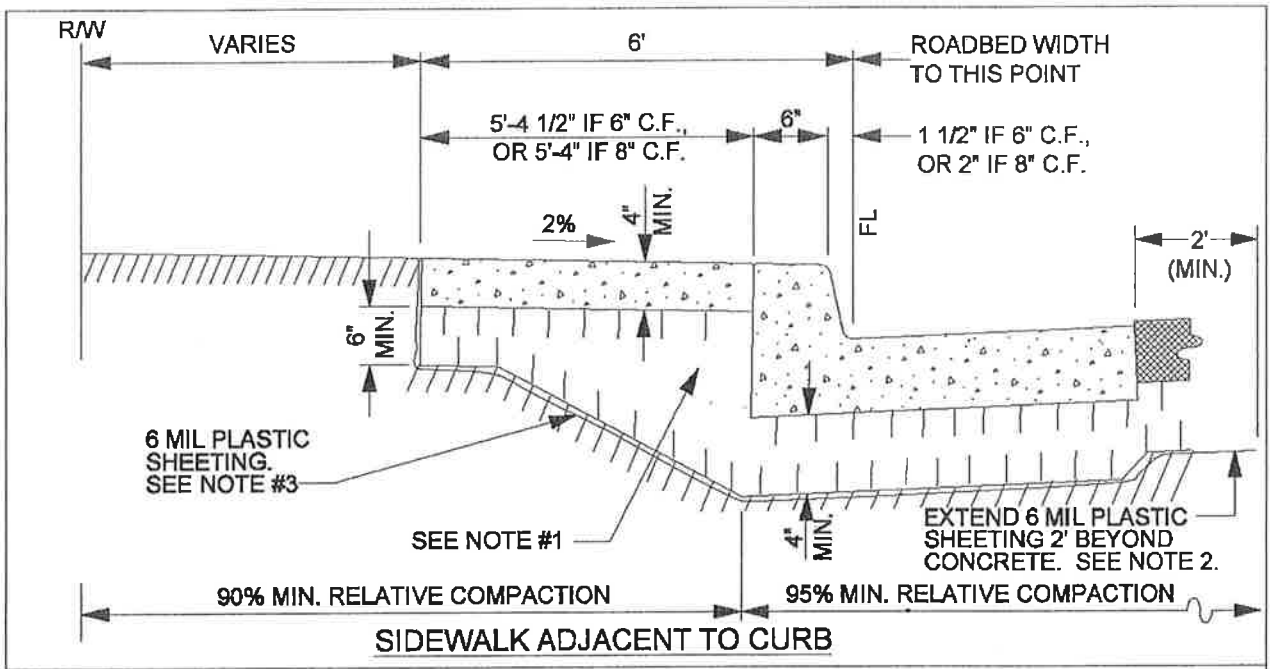


COUNTY OF RIVERSIDE

**CROSS GUTTER WITH SPLASH AREA**


REVISIONS	REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE
11-04	1				4			
	2				5			
	3				6			

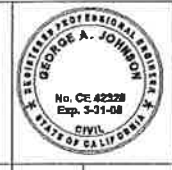
STANDARD NO. 210



**NOTE:**

1. AGGREGATE BASE OR APPROVED SELECT MATERIAL WHEN SOILS REPORT INDICATES PRESENCE OF EXPANSIVE SOIL CONDITIONS.
2. ALL CONSTRUCTION SHALL BE CLASS "B" CONCRETE.
3. WHEN ABUTTING SOIL HAS A HIGH SULFATE CONTENT, SPECIAL CONSIDERATIONS ARE REQUIRED. SEE SPECIFICATIONS (SECTION 16.04).

APPROVED BY:  
  
 DATE: 05/01/07  
 DIRECTOR OF TRANSPORTATION  
 GEORGE A. JOHNSON, RCE 42328



COUNTY OF RIVERSIDE

**SIDEWALK AND CURB**

REVISIONS	REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE
8-71, 11-77	1				4			
8-82, 9-88	2				5			
4-90, 11-04	3				6			

STANDARD NO. 401



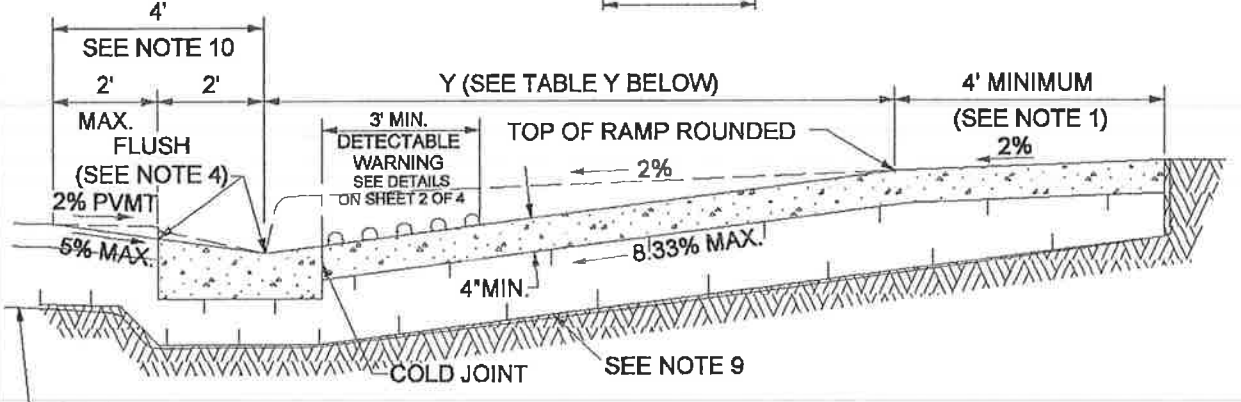
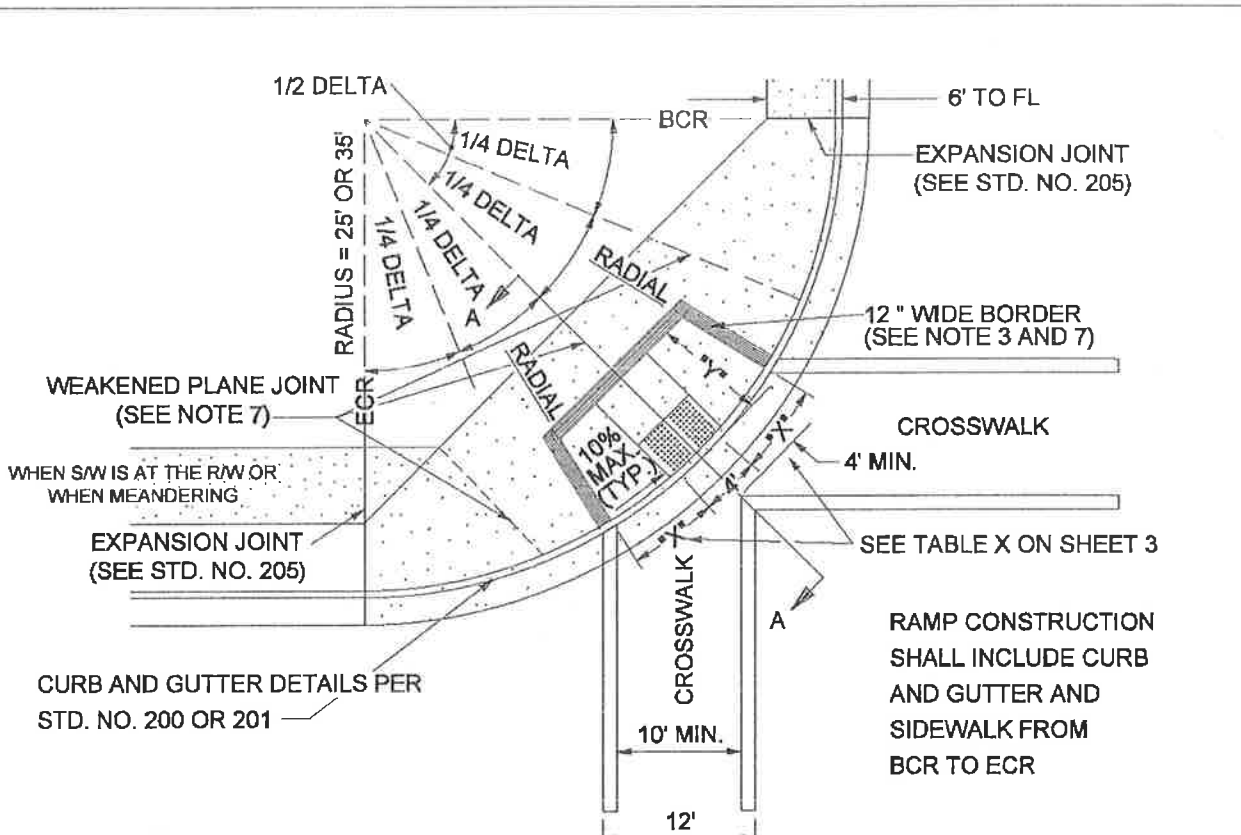


TABLE Y


CF	Y
6'	7.90'
8'	10.53'

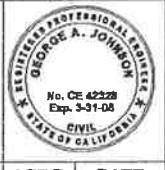
$$Y = \frac{\text{CURB FACE (FT.)}}{6.33\%}$$

SECTION A-A

NOT TO SCALE

SEE SHEET 4 OF 4 FOR NOTES.

APPROVED BY:  
  
 DIRECTOR OF TRANSPORTATION  
 GEORGE A. JOHNSON, RCE 42328  
 DATE: 11/15/04

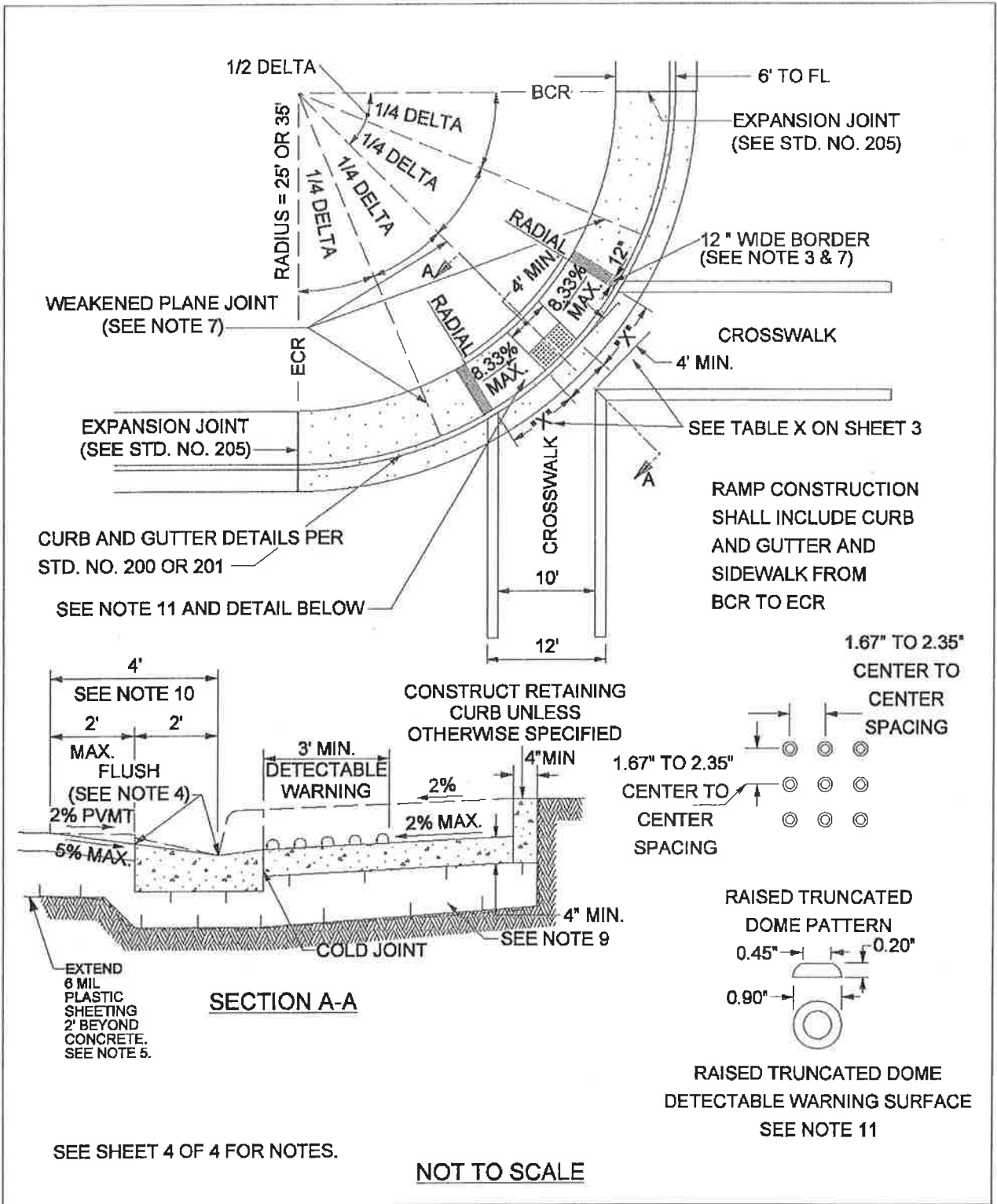


COUNTY OF RIVERSIDE

**CURB RAMP CASE A**

REVISIONS	REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE
8-77, 5-80	11-04	1			4			
10-81, 6-82		2			5			
9-88, 2-90		3			6			

STANDARD NO. 403 (1 OF 4)



APPROVED BY:

*George A. Johnson*  
 DIRECTOR OF TRANSPORTATION  
 GEORGE A. JOHNSON, RCE 42328

DATE: 11/15/04



COUNTY OF RIVERSIDE

**CURB RAMP  
 CASE B**

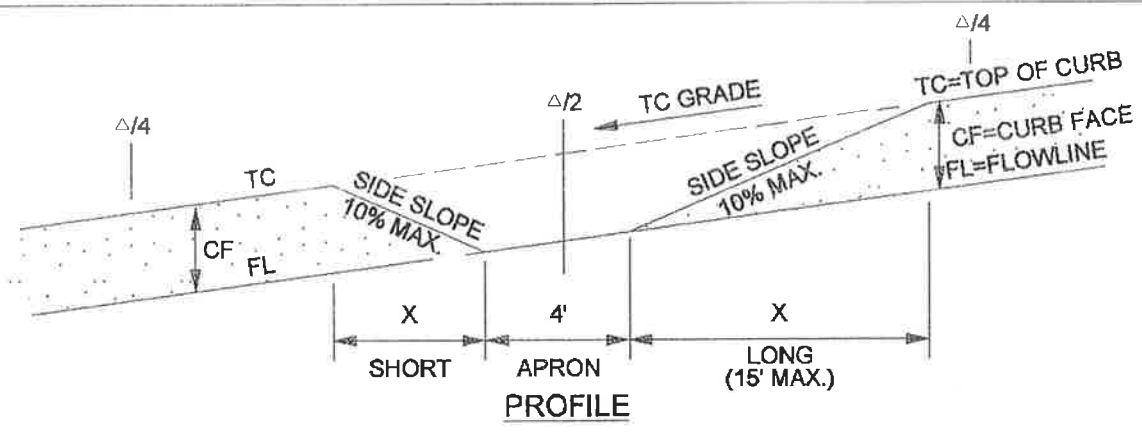
REVISIONS		REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE
8-77, 5-80	11-04	1				4			
10-81, 6-82		2				5			
9-88, 2-90		3				6			

12-97 STANDARD NO. 403 (2 OF 4)

NOT TO SCALE

SEE SHEET 4 OF 4 FOR NOTES.

RAISED TRUNCATED DOME  
 DETECTABLE WARNING SURFACE  
 SEE NOTE 11



PROFILE  
TABLE X

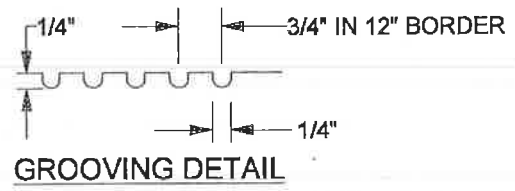
CF (IN)	RADIUS (FT)	SIDE SLOPE	X	TC GRADE (ALONG CURB RETURN)					
				1%	2%	3%	4%	5%	6%
6"	35'	10%	X <sub>S</sub>	4.6	4.2	3.9	3.6	3.4	3.2
			X <sub>L</sub>	5.6	6.3	7.2	8.4	10.0	12.5
8"	35'	10%	X <sub>S</sub>	6.1	5.6	5.2	4.8	4.5	4.2
			X <sub>L</sub>	7.5	8.4	9.6	11.2	13.4	15.0

TO CALCULATE "X" DIMENSION:

SHORT SIDE (DOWN SLOPE):  $X_S (FT) = \frac{\text{CURB FACE (FT)}}{\text{SIDE SLOPE} + \text{TC GRADE}}$

LONG SIDE (UP SLOPE):  $X_L (FT) = \frac{\text{CURB FACE (FT)}}{\text{SIDE SLOPE} - \text{TC GRADE}}$

ENGINEER TO SHOW X<sub>S</sub> AND X<sub>L</sub> ON IMPROVEMENT PLANS


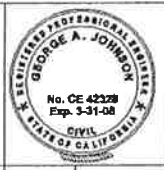


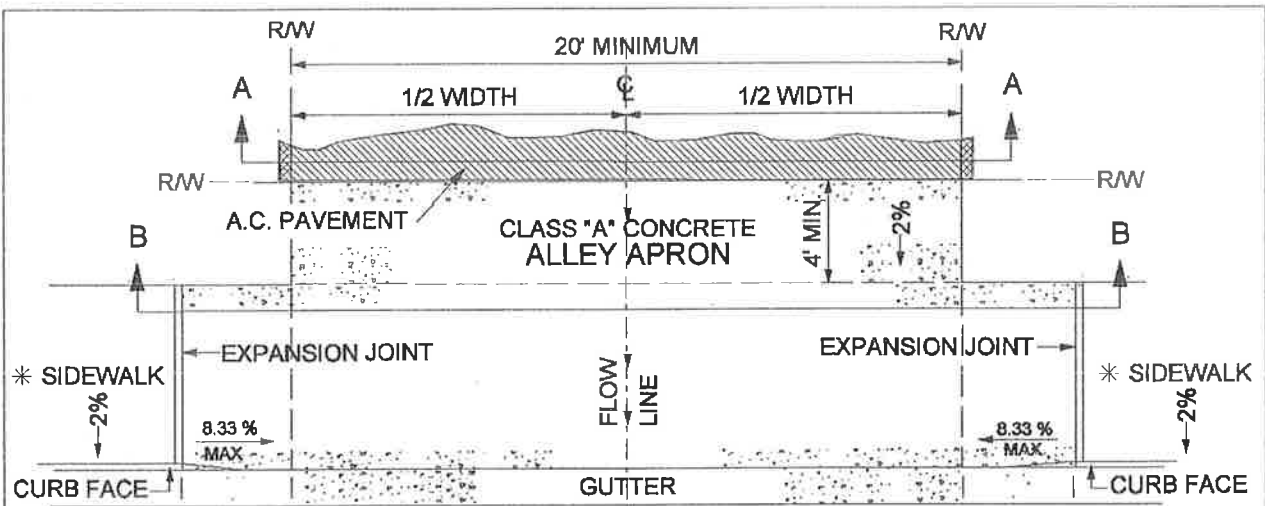
APPROVED BY: <i>George A. Johnson</i> DIRECTOR OF TRANSPORTATION GEORGE A. JOHNSON, RCE 42328				DATE: 05/05/04				COUNTY OF RIVERSIDE			
								<b>CURB RAMP</b>			
								STANDARD NO. 403 (3 OF 4)			
REVISIONS		REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE		
8-77, 5-80	11-04	1				4					
10-81, 8-82		2				5					
9-88, 2-90		3				6					



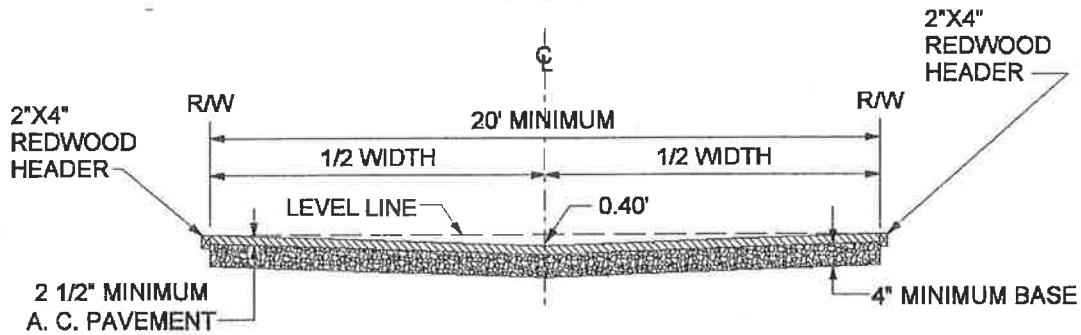
**CONSTRUCTION NOTES:**

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).
6. 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.

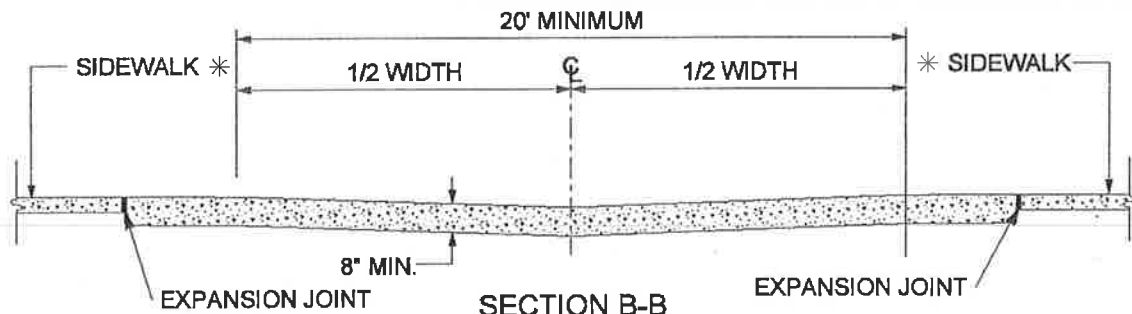
APPROVED BY:  DATE: 11/15/04										COUNTY OF RIVERSIDE				
DIRECTOR OF TRANSPORTATION GEORGE A. JOHNSON, RCE 42328					<b>CURB RAMP CONSTRUCTION NOTES</b>					STANDARD NO. 403 (4 OF 4)				
REVISIONS		REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE	12-97				
8-77, 5-80		11-04	1			4								
10-81, 8-82			2			5								
9-88, 2-90			3			6								



PLAN



SECTION A-A



SECTION B-B

ALLEY WIDTH AS SPECIFIED BY THE DIRECTOR OF TRANSPORTATION.

\* WHEN REQUIRED OR PERMITTED

NOT TO SCALE

APPROVED BY:

*George A. Johnson*  
 DIRECTOR OF TRANSPORTATION  
 GEORGE A. JOHNSON, RCE 42328

DATE: 05/01/07



COUNTY OF RIVERSIDE

**TYPICAL ALLEY and ALLEY APRON SECTIONS**

REVISIONS		REV.	BY:	APR'D	DATE	REV.	BY:	APR'D	DATE
8-24-71		1				4			
8-18-77		2				5			
11-80, 11-04		3				6			

STANDARD NO. 500

STD SUFFIXES

SUFFIX	ABBREV
AVENUE	Ave
BOULEVARD	Blvd
CIRCLE	Cir
COURT	C+
DRIVE	Dr
LANE	Ln
PARKWAY	Pkwy
PLACE	Pl
ROAD	Rd
STREET	St
TERRACE	Ter
TRAIL	Tr
WAY	Way
LOOP	Lp

NOTES:

- WHEN ONE OF THE INTERSECTING ROADWAYS HAS AN ULTIMATE PAVED WIDTH OR CURBED WIDTH GREATER THAN 60 FEET, STD 1220 SHALL BE USED.
- TWO SIGNS ARE REQUIRED FOR EACH DIRECTION OF TRAVEL, ON THE FAR RIGHTHAND SIDE OF THE INTERSECTION FOR TRAFFIC ON THE MAJOR STREET. SEE SIGN INSTALLATION DETAIL.
- AT "T" INTERSECTIONS, ONLY TWO STREET NAME SIGNS SHALL BE REQUIRED.
- MORE THAN FOUR STREET NAME SIGNS MAY BE REQUIRED AT INTERSECTIONS WITH MORE THAN FOUR LEGS.
- WHEN ALL INTERSECTING STREETS HAVE ULTIMATE PAVED WIDTHS OR CURBED WIDTHS OF 60 FEET OR LESS, AND THEY ARE NOT GENERAL PLAN ROADS, USE STANDARD 1221.

WHITE HIGH INTENSITY PRISMATIC (HIP) REFLECTIVE LETTERS ON GREEN (HIP) SHEETING

Regency Ranch Rd

2" SQUARE (MIN 12 GAUGE)

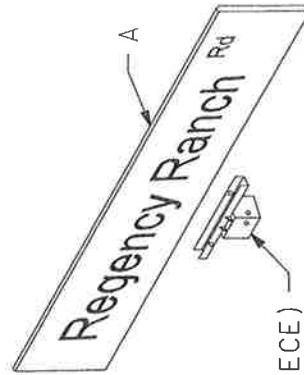
SEE STANDARD NO. 1222 FOR SIGN POST INSTALLATION

SIDEWALK

COMPACTED EARTH

10' - 0"

32"



B (ONE PIECE)

A - SIGN PLATES (5052-H38 ALUMINUM ALLOY MATERIAL)

B - 2" SQ X 12" CAST ANODIZED ALUMINUM POST CAP WITH SIX 3/8" ALLEN HEAD STAINLESS STEEL SET SCREWS TO FIT 0.125 SIGN BLANK

APPROVED BY:

JUAN C. PEREZ  
TLMA DIRECTOR

DATE



COUNTY OF RIVERSIDE

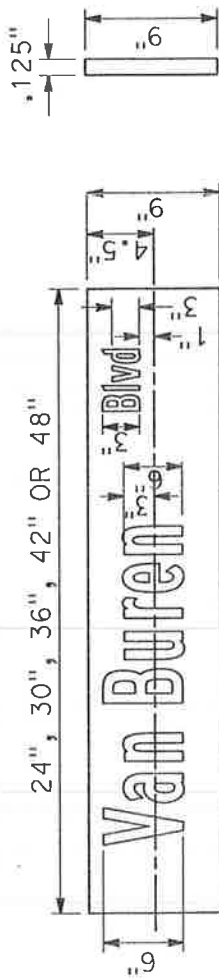
**STREET NAME SIGN  
(CURB TO CURB WIDTH  
GREATER THAN 60')**  
NO SCALE

STANDARD No. 1220 (1 OF 2)

REVISIONS	REV	BY:	APR'D	DATE	REV	BY:	APR'D	DATE
	1	GR	KN	01/2014				

**NOTE:**

1. FOR NOTES, SEE SHEET 1.



MAJOR STREET NAME SIGN SPECS (SIGN LOCATION A)



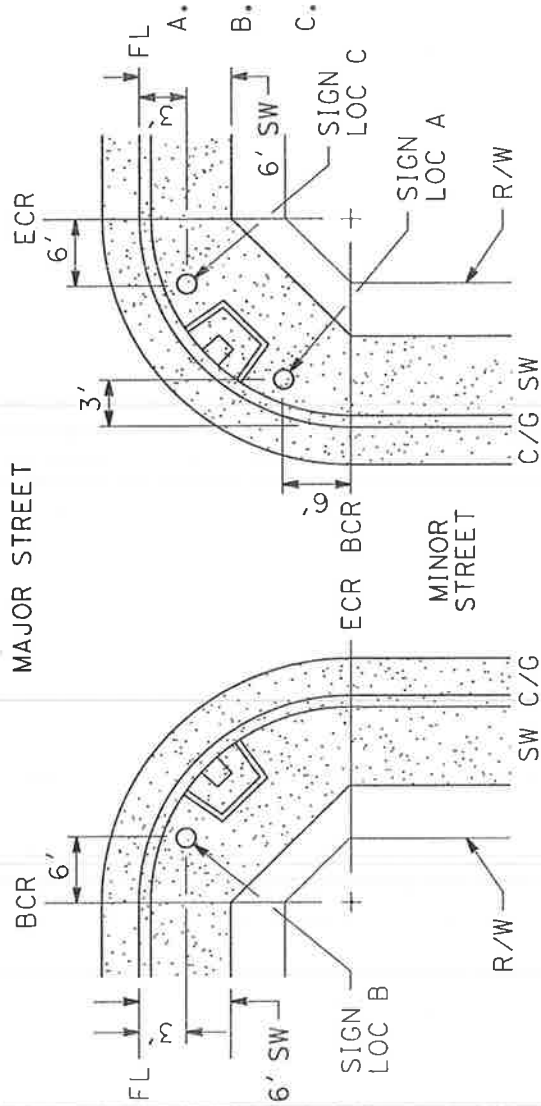
MINOR STREET NAME SIGN SPECS (SIGN LOCATION B)

\* LETTER SIZING AND SPACING MUST MEET FHWA SPACING GUIDE LINES. MINOR VARIATIONS AS APPROVED BY ENGINEER.

• SIGNS SHALL NOT EXCEED 48" IF STREET NAME CONTAINS A SECOND WORD, SECOND WORD MAY BE ABBREVIATED AS FOLLOWS:

WORD	ABBREV
CENTER	C+r
CANYON	Cyn
RANCH	Rch
SPRING	Spr
SCHOOL	Sch

(CROSS-SECTION) (CROSS-SECTION)



**SIGN INSTALLATION DETAIL**

9" BLADE, WITH MAJOR STREET NAME, PERPENDICULAR TO MINOR STREET.

12" BLADE, WITH MINOR STREET NAME, PERPENDICULAR TO MAJOR STREET.

12" BLADE, WITH MINOR STREET NAME, PERPENDICULAR TO MAJOR STREET.

\*(ONLY USED IF SIGN LOCATION B DOES NOT PROVIDE GOOD SIGN VISIBILITY)

APPROVED BY:

JUAN C. PEREZ  
TLMA DIRECTOR

DATE



COUNTY OF RIVERSIDE

**STREET NAME SIGN  
(CURB TO CURB WIDTH  
GREATER THAN 60')**

NO SCALE

STANDARD No. 1220 (2 OF 2)

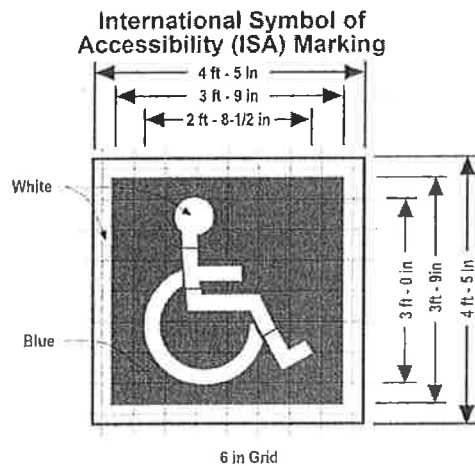
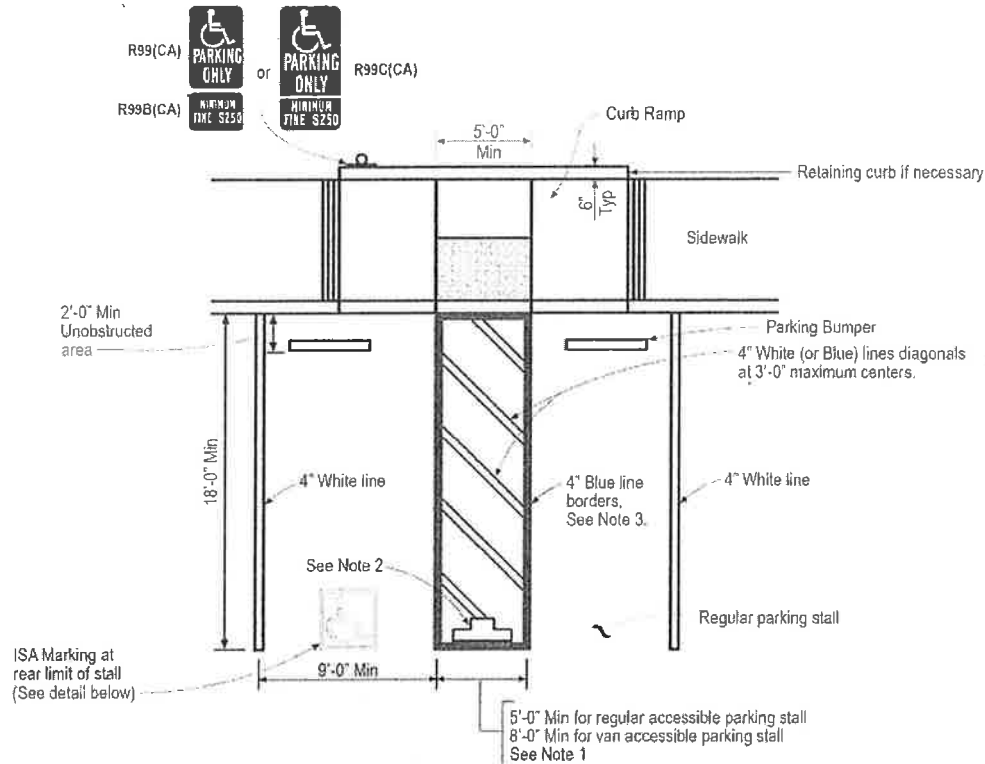
REVISIONS	REV	BY:	APR'D	DATE	REV	BY:	APR'D	DATE
	1	GR	KN	01/2014				



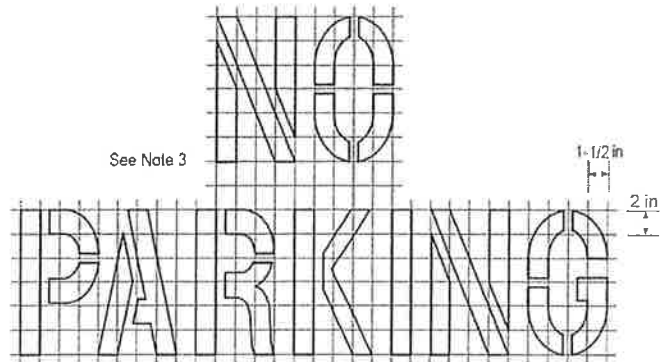




**Figure 3B-22 (CA). Examples of Disabled Persons Parking Symbol, Legend and Related Markings (Sheet 1 of 2)**



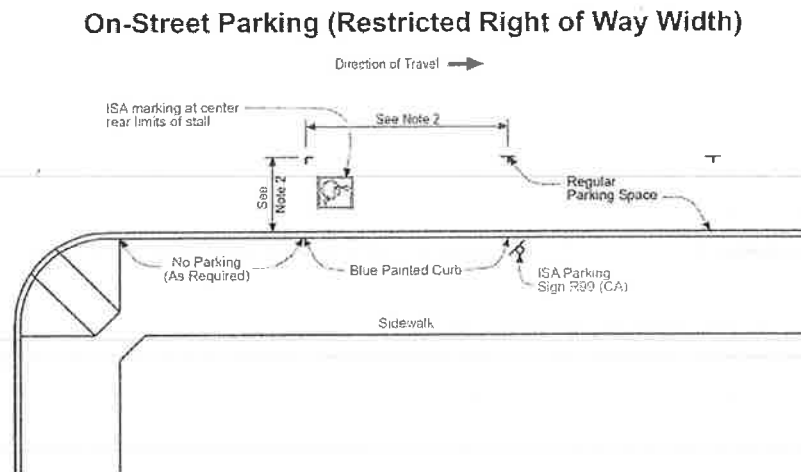
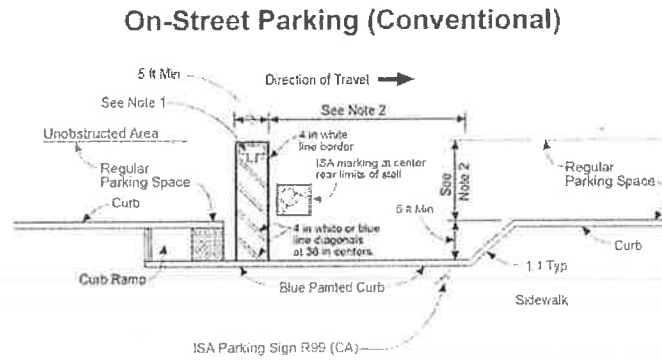
**Loading and Unloading Area Pavement Marking Legend**



**NOTES:**

1. The design details for this symbol, legends, and related markings are shown in the Department of Transportation's Standard Plans. See Standard Plan A24C for square unit area for painting the ISA parking space marking.
2. The words "NO PARKING" shall be painted in the loading and unloading area in white letters no less than 12 in high on a contrasting background and located so that it is visible to traffic enforcement officials. See Standard Plan A24E for square unit area for painting the legend "NO PARKING".
3. Loading and unloading area border shall be marked in blue paint. The border shall be painted blue and the hatched lines shall be painted a suitable contrasting color to the parking space. Blue or white paint is preferred.

Figure 3B-22 (CA). Examples of Disabled Persons Parking Symbol, Legend and Related Markings (Sheet 2 of 2)



NOTES:

1. The words "NO PARKING", shall be painted in white letters no less than 12 in high on a contrasting background and located so that it is visible to traffic enforcement officials. See Standard Plan A24E for square unit area for painting the legend "NO PARKING".
2. Accessible on-street parking spaces shall not be smaller in length or width than that specified by the local jurisdiction for other parking spaces, but not less than 20 ft in length and not less than 8 ft in width.
3. Blue paint, instead of white may be used for marking accessibility aisles in areas where snow may cause white markings to not be visible.



Riverside Office: 2300 Market St., Ste. 150, Riverside, CA 92501 Ph. (951) 955-4777 Fax (951) 955-4886  
 Palm Desert Office: 77-933 Las Montañas Rd., # 201 Palm Desert, CA 92211-4131 Ph. (760) 863-8886 (760) 863-7072

# Fire Prevention Standard

<b>Title: Blue Reflective Pavement Markers</b>			
<b>Standard:#</b> 06-11	<b>Effective Date:</b> 02/09/2007	<b>Revised Date:</b> 06/30/2011	
<b>Code References: 2010 CFC, Sec. 501</b>			
<b>Note:</b> <i>This standard is a summary of Fire Department clarifications of County and State Codes. Information contained herein applies to typical circumstances and may not address all situations.</i>			
<b>Author:</b> Committee	<b>Date:</b>	<b>Approved:</b> T. Hobday, FM	<b>Date:</b>
<b>Sign:</b>		<b>Sign:</b> On File	02-09-07

## Scope

This standard has been developed to assist development applicants, architects, and contractors in determining the minimum requirements for the proper placement of blue reflective pavement markers for indicating the location and identification of fire hydrants and water supply locations for fire fighting purposes only. Blue markers used for any other purpose should be removed.

The applicant must obtain approval from Caltrans where blue markers are to be placed on roadways/highways regulated and maintained by Caltrans prior to installation. Encroachment permits may be required.

## Codes and Standards

This standard has been based upon the 2010 California Fire Code (CFC), Chapter 5.

## Plans Required

The location of blue reflective markers shall be indicated on the appropriate water plans that are required to be submitted to the Riverside County Fire Department for the installation of all fire hydrants and water supply locations used for the fire fighting purposes.

## Specific Requirements

- 1) **Two-Way Streets and Roads:** Markers are to be placed six inches from the edge of the painted centerline on the side nearest the fire hydrant. If the street has no centerline, the marker should be placed six inches from the approximate center of the roadway on the side nearest the hydrant. (Ref. Fig. 1 through 3)
- 2) **Streets With Left Turn Lane at Intersection:** Markers are to be placed six inches from the edge of the painted white channelizing line on the side nearest the hydrant. (Ref. Fig. 4)
- 3) **Streets With Continuous Two-Way Left Turn Lane:** Markers are to be placed six inches from the edge of the painted yellow barrier line on the side nearest the fire hydrant. (Ref. Fig. 5)
- 4) **Freeways and Expressways:** Because of higher maintenance at these locations, if placed on the roadway, markers are to be placed on the shoulder on-foot to the right of the painted edgeline opposite the off-right of way from the fire hydrant location. (Ref. Fig. 6)

# TYPICAL HYDRANT MARKER LOCATION

⊙ = Fire Hydrant

◆ = Blue Pavement Marker

Figure 1  
Two Lane Streets

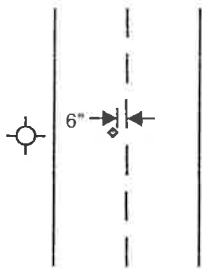


Figure 2  
Multi-Lane Streets

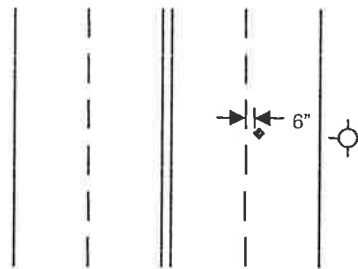


Figure 3  
An Intersection

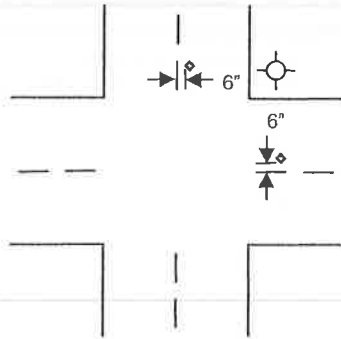


Figure 4  
Four Lane Streets with  
Turn Lane at Intersection

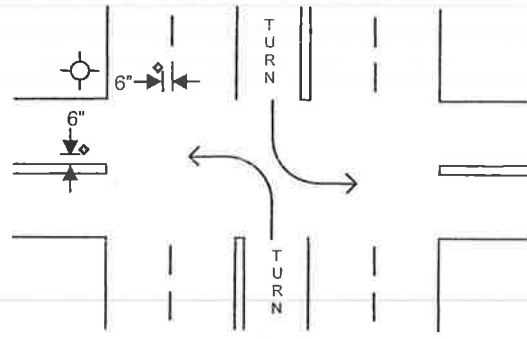


Figure 5  
Multi-Lane Streets  
With Turn Lane

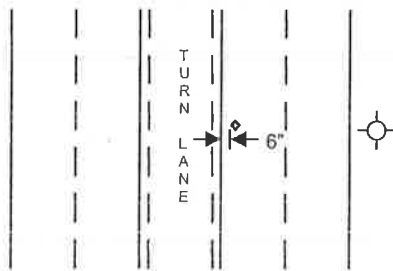


Figure 6  
Freeways and Expressways

