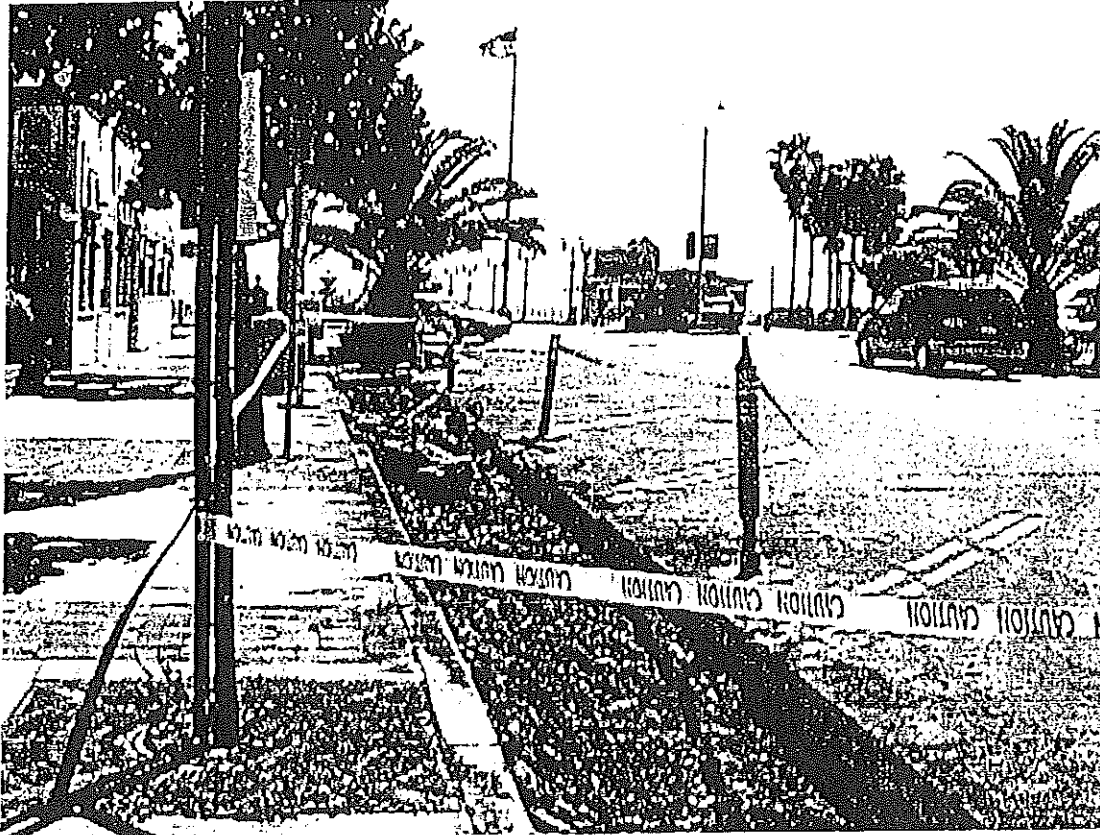


PRICE: \$ 2.00

## **STANDARD PLANS for STREETS**

*City of Seal Beach*  
Department of  
**Public Works**



### **FEBRUARY 2004 EDITION**

The following Standard Plans have been adopted by the City of Seal Beach as a guide for standardization of "Public Works" within the City and have been prepared for the guidance of engineers, contractors and developers who have an interest in the preparation of plans and construction of facilities and improvements under the jurisdiction of the City of Seal Beach. Standard plans are to be used in conjunction with the currently adopted edition of the Standard Specifications for Public Works Construction, any adopted supplements or Department amendments as well as any adopted Design Criteria/Manuals and Master Plans. Conformance with these standards will reduce design costs and the processing time needed to review and approve plans. They are not intended to be a substitute for professional engineering knowledge, experience or judgment. Any deviations from what is contained in the following documents must be approved in writing by the Director of Public Works/City Engineer. These standards may be modified from time to time as required. Please visit the Department website at [www.sb-publicworks.com](http://www.sb-publicworks.com) to check for new or updated standards.

**Douglas A. Dancs, P.E., Director of Public Works/City Engineer**

## **Table of Contents**

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044 – 115-1	Residential Sidewalk/Parkway Standards
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044 – 132-1	Excavation, Backfill and Repair of Concrete Alleys
044 – 133-1	Pavement Repair Detail
044 – 133-2	Pavement Repair for Recently Paved or Sealed Streets
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RESOLUTION NO. 5221

A RESOLUTION OF THE CITY COUNCIL OF THE  
CITY OF SEAL BEACH APPROVING STANDARD PLANS FOR  
STREET FACILITIES,  
2004 EDITION

WHEREAS, The Public Works Department of the City of Seal Beach has presented to the City Council a certain publication which is desired by the Public Works Department to be used in the permitting, design and construction of street facilities within the City of Seal Beach; and

WHEREAS, Said publication is the Standard Plans for Street Facilities, 2004 Edition; and

WHEREAS, The City Council desires to approve said publication as the minimum standard to be followed for the permitting, design and construction of street facilities within the City of Seal Beach and for projects requiring a Public Works Permit; and to authorize the Director of Public Works/City Engineer to make changes to said publication as required by new regulations, for improvements to the street infrastructure, and for the protection of public health and safety;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SEAL BEACH DOES HEREBY RESOLVE, DECLARE, DETERMINE AND ORDER AS FOLLOWS:

SECTION 1. Adoption, adopts said publication as the minimum standard to be followed for the permitting, design and construction of street facilities with the City of Seal Beach.

SECTION 2. Authorization, Authorizes the Director of Public Works/City Engineer to make changes to said publication as required by new regulations, for improvements to the street infrastructure, and for the protection of public health and safety.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Seal Beach at a meeting thereof held on the 22nd day of March, 2004 by the following vote:

AYES: Councilmembers Grates, Campbell, Deane, Larson, Yost

NOES: Councilmembers None

ABSENT: Councilmembers None

Patricia L. Campbell  
Mayor

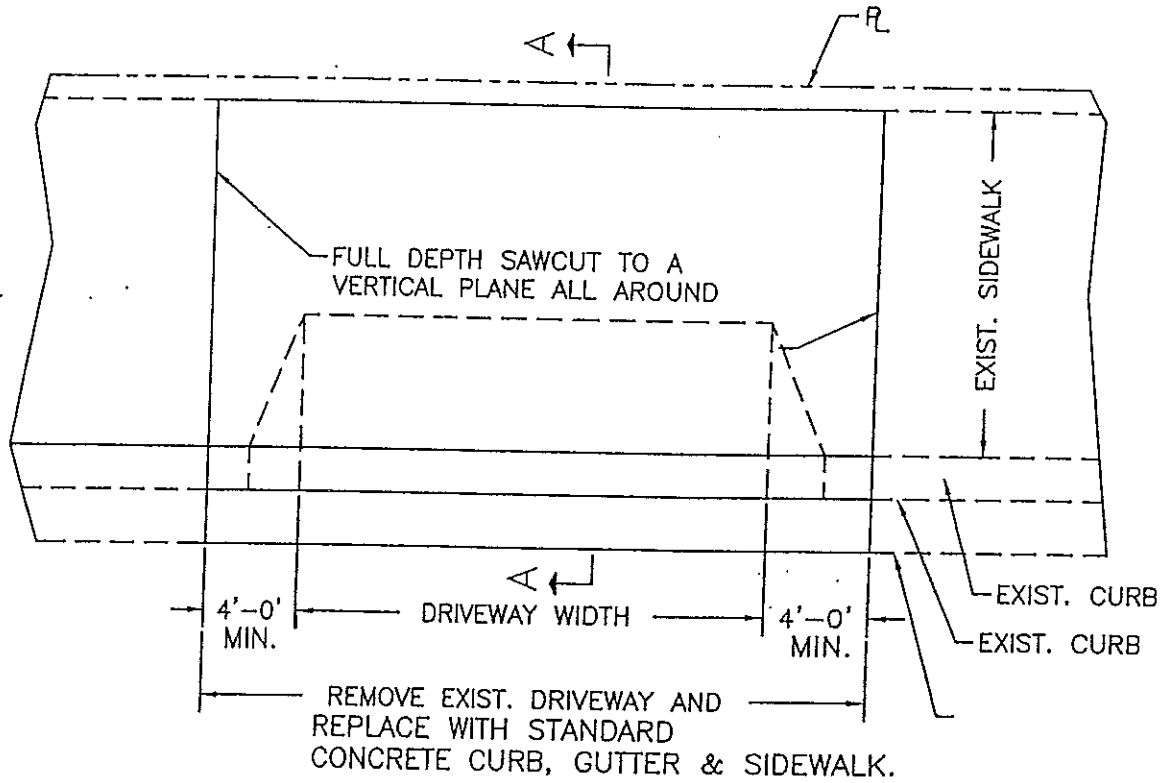
ATTEST:  
Joanne M. Yeo  
City Clerk

STATE OF CALIFORNIA )  
COUNTY OF ORANGE ) SS  
CITY OF SEAL BEACH )

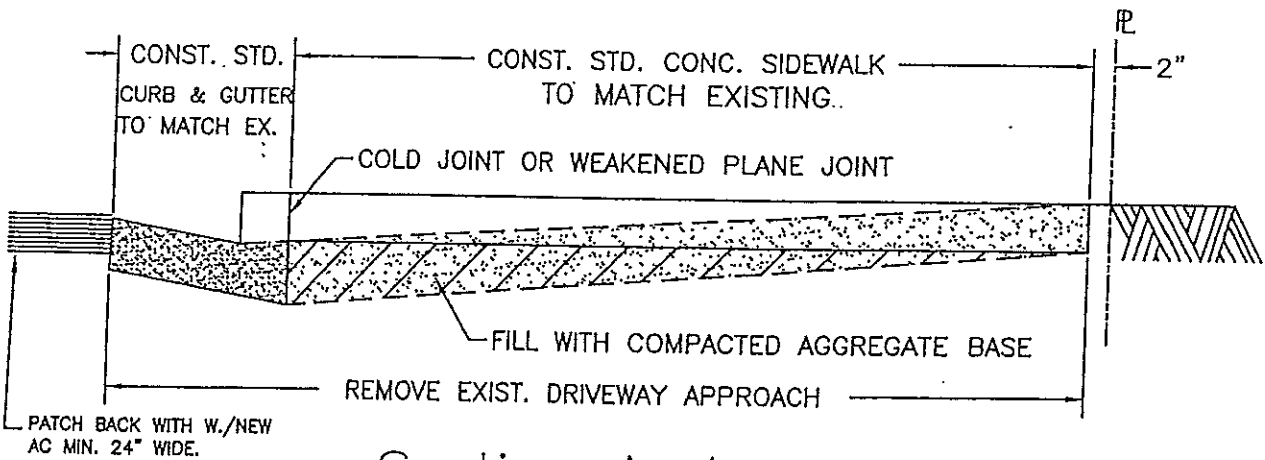
I, Joanne M. Yeo, City Clerk of the City of Seal Beach, California, do hereby certify that the foregoing resolution is an original copy of Resolution Number 5221 on file in the Office of the City Clerk, passed, approved and adopted by the City Council of the City of Seal Beach at a meeting thereof held on the 22nd day of March, 2004.

Joanne M. Yeo  
City Clerk

DEPARTMENT OF PUBLIC WORKS STANDARD PLAN



Plan



Section A-A

PLUG FOR ABANDONED DRIVEWAY (TYPICAL)

STANDARD PLAN  
STD 110-4

PUBLIC		REVISIONS		SUPERSEDES	REFERENCES
NO.	DESCRIPTION				
					STD-182

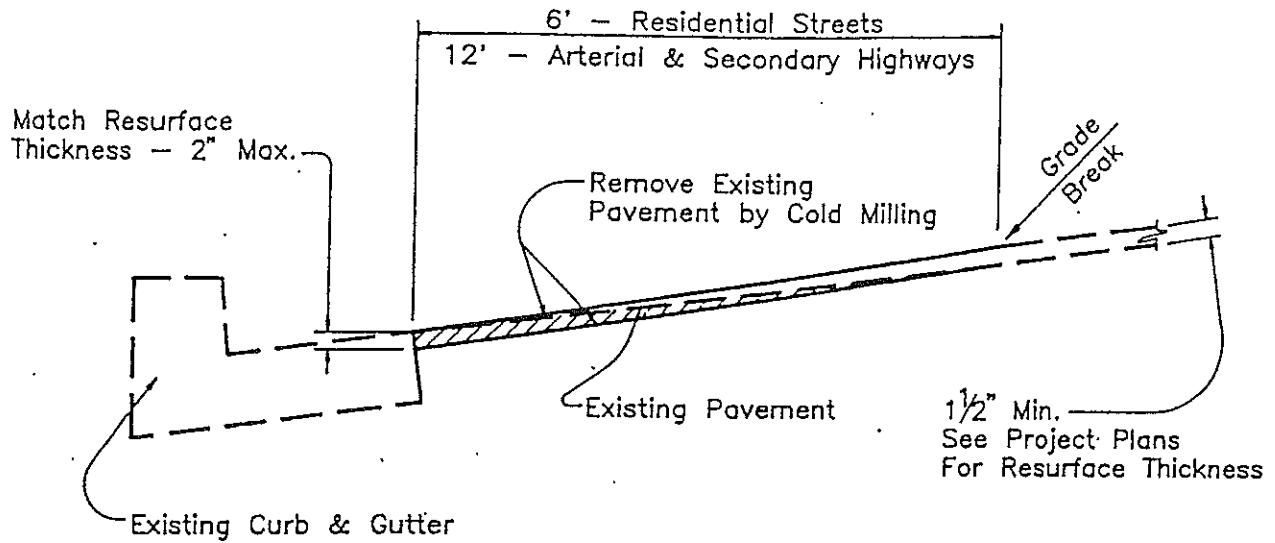
  

Reviewed by Asst. City Engineer RCE61527	Date: 3-15-04
Approved by Director of Public Works RCE57202	Date: 3/15/04
Drawn:	Checked:
Noted:	

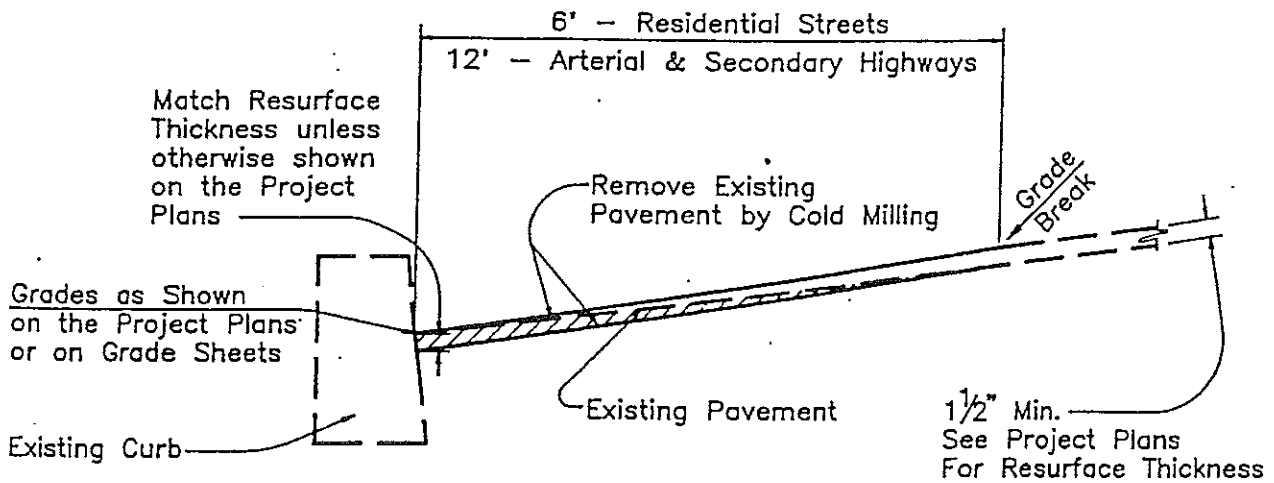


WORKS

DEPARTMENT OF PUBLIC WORKS STANDARD PLAN  
Asphalt Concrete Cold Milling Details




DETAIL AT CURB & GUTTER

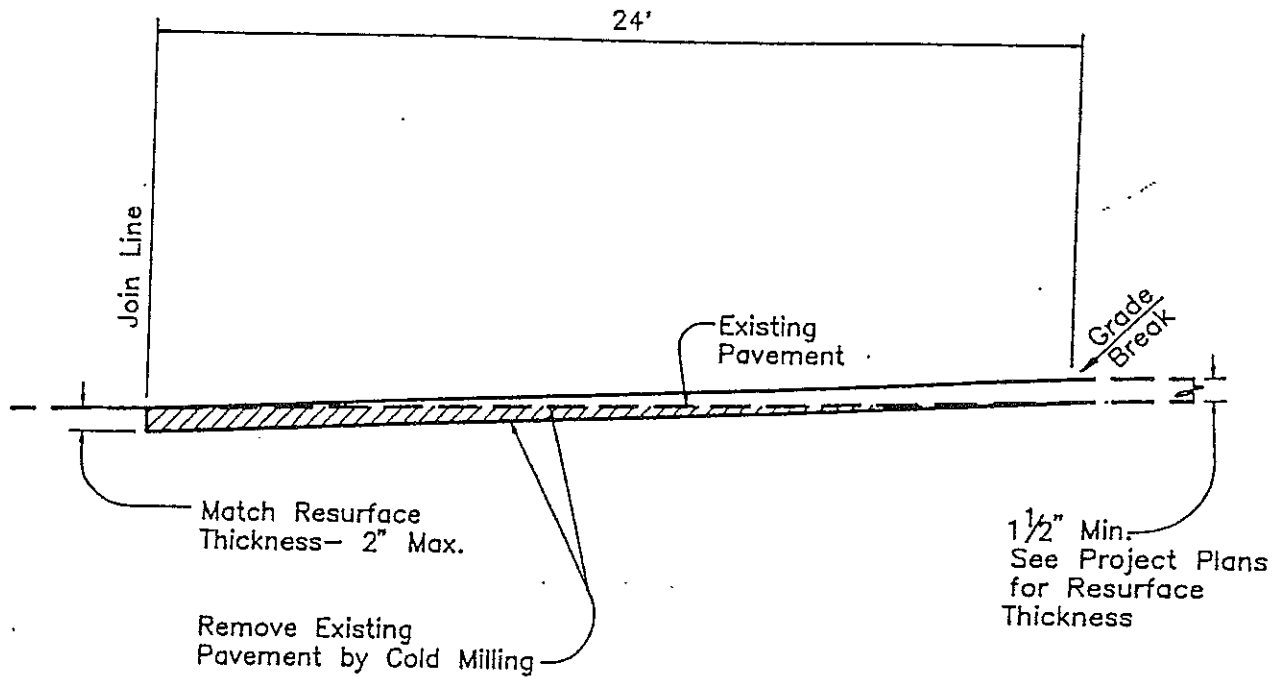


DETAIL AT CURB


ASPHALT CONCRETE COLD MILLING DETAILS : Sheet: 1 of 2

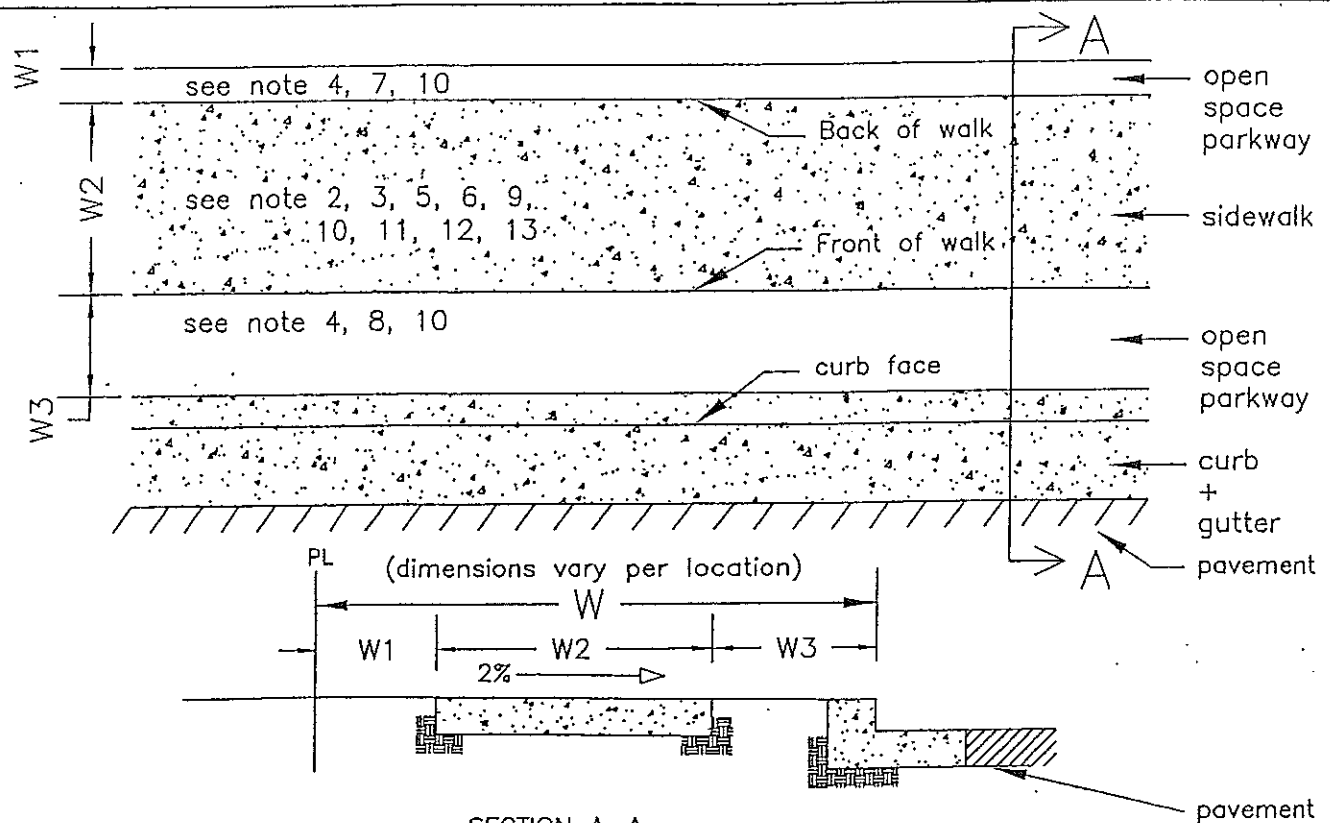
STANDARD PLAN  
STD 114

Reviewed by Asst. City Engineer RCE61527 Date: <u>2-12-02</u> <i>Mark V...</i>			PUBLIC  WORKS	REVISIONS		SUPERSEDES	REFERENCES
Approved by Director of Public Works RCE57202 Date: <u>2/13/02</u> <i>[Signature]</i>		NO.		DESCRIPTION			
Drawn: _____ Checked: _____ Noted: _____							



DETAIL AT PROJECT LIMITS AND SIDE STREETS

ASPHALT CONCRETE COLD MILLING DETAILS : Sheet: 2 of 2						STANDARD PLAN STD 114	
Reviewed by Asst. City Engineer RCE61527 <i>Mark Vukobratovic</i> 2/12/02		Date:		REVISIONS		SUPERSEDES	REFERENCES
Approved by Director of Public Works RCE57202 <i>[Signature]</i> 2/12/02		Date:		NO.	DESCRIPTION		
Drawn:		Checked:					
Noted:							
WORKS							



SECTION A-A

NOTES:

1. W=Overall parkway width, W1=Width of parkway from property line to back of walk, W2= Width of sidewalk, W3=Width of parkway from curb face to front of walk. Verify actual dimensions with Engineering division.
2. Concrete for sidewalk shall be 560-C-3250. Sidewalk surfacing other than standard concrete requires a nonstandard improvement agreement.
3. The top 6" sub grade underneath sidewalk shall be compacted to 90% relative density.
4. Parkway in zones W1 and W3 shall be a min. 75% softscape plantings or grass. A maximum of 25% hardscape is allowed to include decorative borders or carriage walks.
5. Provide adequate sidewalk closure including "sidewalk closed" signs.
6. See City standard for sidewalk scoring patterns.
7. Encroachment into W1 parkway zone with a wall/fence requires a nonstandard encroachment. A minimum clear distance of 18" must be maintained from back of walk to proposed wall. If W1 is less than 18" no encroachments are allowed.
8. See City standard for installation of root barriers at existing tree locations.
9. Match existing sidewalk width.
10. Construction of new improvements for new development in W-zone (parkway right-of-way) shall require correcting all deficiencies to current standards including but not limited to removing illegal encroachments, concrete parkway, and replacement of inadequate curb gutter sidewalk as required by City Engineer.
11. Graffiti on newly placed concrete will require replacement from score line to score line.
12. Sidewalk shall have a fine broom finish.
13. Minimum thickness for sidewalk is 4".
14. For all pedestrian walkway areas including sidewalks, cross slope shall not exceed 2%.

RESIDENTIAL SIDEWALK/ PARKWAY STANDARDS

STANDARD PLAN  
STD - 115-1


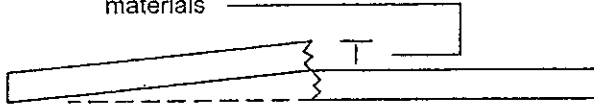
REVIEWED <i>Mark N. [Signature]</i> DATE: 3-15-04 DEPUTY CITY ENGINEER-RCE 61527		PUBLIC  WORKS	REVISIONS NO. DESCRIPTIONS		SUPERSEDES  	REFERENCES  
APPROVED <i>[Signature]</i> DATE: 3/15/04 DIRECTOR OF PUBLIC WORKS-RCE 57202						
DRAWN BY: K.Y. CHECKED BY:		SHEET 1 OF 1				

FIG. 1

Grind if displacement is less than  $\frac{3}{4}$ " If greater than  $\frac{3}{4}$ " apply appropriate materials

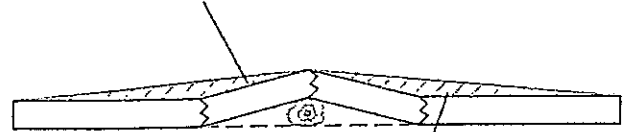


Repaired slope should be 6:1



FIG. 4

Repair when slope is 5:1



Repaired slope should be 6:1

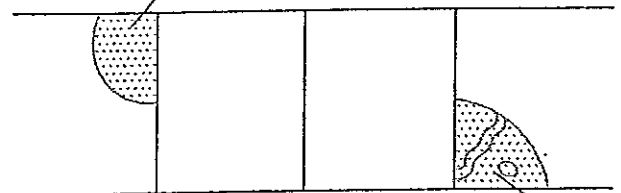
FIG. 2

Repair when slope is greater than 5:1



FIG. 5

Worn out patch should be repaired

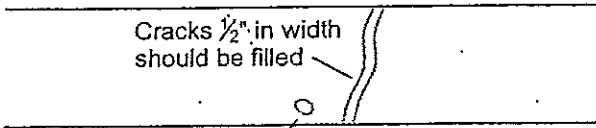


Patches with holes, displacements or cracks should be evaluated for removal and replacement

FIG. 3


Cracks  $\frac{1}{2}$ " in width should be filled

Holes greater than  $\frac{1}{2}$ " in diameter and in depth should be filled



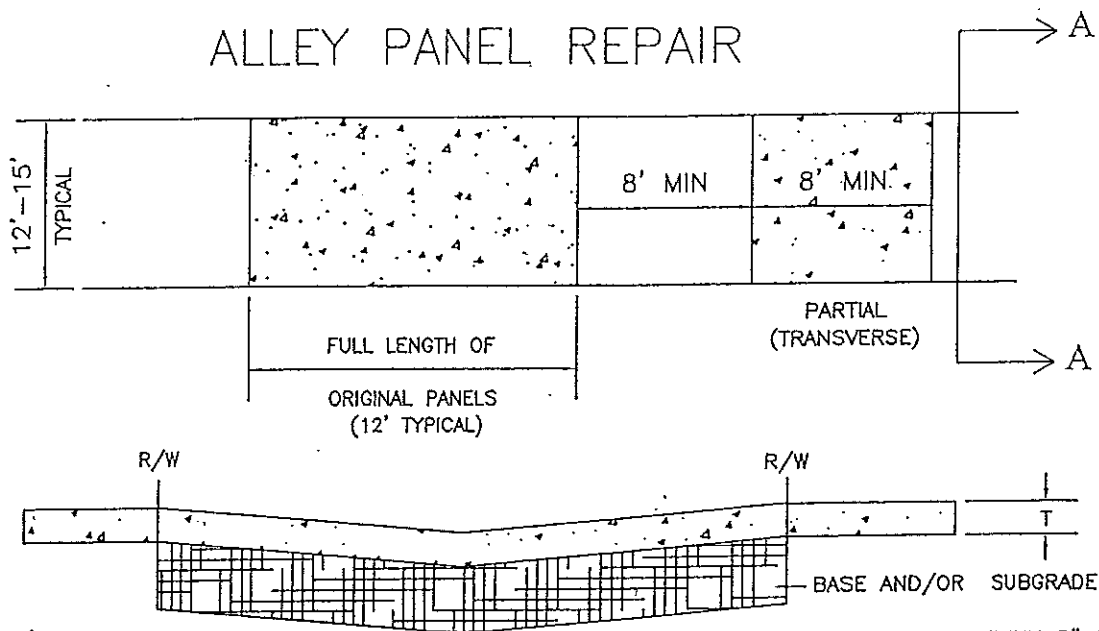
## SIDEWALK PATCHING

STANDARD PLAN  
116

REVIEWED		PUBLIC	REVISIONS		SUPERCEDES	REFERENCES
8-1-03			NO.	DESCRIPTIONS	044-160	
DEPUTY CITY ENGINEER-RCE 61527						
APPROVED						
8/1/03						
DIRECTOR OF PUBLIC WORKS-RCE 57202						
DRAWN BY: L.B. CHECKED BY:			WORKS			SHEET 1 OF 1



# ALLEY PANEL REPAIR



SECTION A-A  
N.T.S.

T = MINIMUM 8" OR EXISTING  
WHICHEVER IS GREATER

## NOTES:

1. Any cut into an existing concrete alley shall require full panel replacement. Partial Transverse replacement is allowed at the discretion of the City Engineer.
2. Saw-cut prior to removal of concrete.
3. Backfill and Compact in 6" lifts.
4. Trench backfill shall be densified to a minimum 90% relative compaction. When concrete is placed directly on subgrade material, the top 6" of subgrade material shall be compacted to a relative compaction of 95%. The contractor shall over excavate for poor soil and import 3/4" crushed aggregate base as directed by the City Engineer.
5. Concrete shall be class 560-C-3250.
6. Finish concrete to match existing.
7. If concrete up to 4' adjacent to the repair is in poor condition and will be undermined or damaged by the repair, replace additional concrete alley at the direction of the City Engineer. The panel size of the entire repair can be increased as long as the adjacent panel will not be less than 8'.

8. When applicable, stamp location of sewer lateral connection with "S".
9. Graffiti on newly placed concrete will require replacement from scoreline to scoreline.
10. During excavation and subgrade preparation, the contractor shall take all necessary steps to ensure protection of all improvements, whether public or private, including utilities and their services, from any damage that could occur due to contractor's operation.
11. Temporary pavement replacement shall be placed at contractor's expense. It shall be placed level with the existing pavement on compacted trench backfill and be a minimum of 2" thick.
12. Concrete shall be replaced within 2 weeks and only after settlement has taken place and the fill surface has sufficiently dried.
13. Provide adequate alley closure signage including road closed signs during construction.

## EXCAVATION, BACKFILL AND REPAIR OF CONCRETE ALLEYS

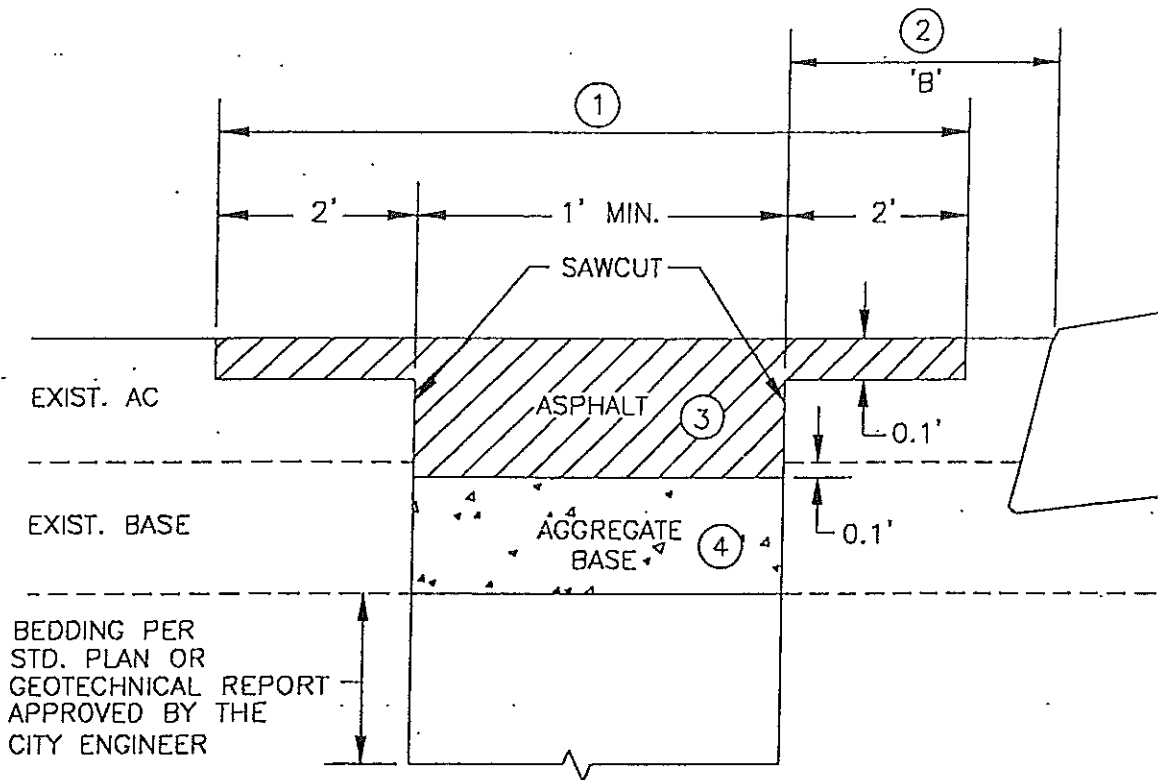
STANDARD PLAN  
132-1

REVIEWED	02/26/01
DEPUTY CITY ENGINEER-RCE 57202	
APPROVED	02/26/01
DIRECTOR OF PUBLIC WORKS-RCE 36106	
DRAWN BY: K.Y. CHECKED BY:	



REVISIONS	
NO.	DESCRIPTIONS
1	Change Format

SUPERSEDES	REFERENCES



### NOTES:

- ① COLD PLANE AND REPLACE A.C., SAWCUT PRIOR TO EXCAVATION IN NEAT, STRAIGHT LINES MINIMUM OF 1-1/2 INCHES DEEP.
- ② REMOVE AND REPLACE A.C. TO EDGE OF GUTTER (OR TO CURB FACE IF NO GUTTER EXISTS) WHERE 'B' IS LESS THAN OR EQUAL TO 5'. (REMOVE ALL REMAINING PAVEMENT SECTIONS LESS THAN 3' WIDE). ENGINEER MAY REQUIRE ADDITIONAL PAVEMENT REMOVAL WHEN UNDERMINING OCCURS.
- ③ USE TYPE C2-AR4000 FOR AC REPLACEMENT. USE TYPE B-AR4000 AHRM FOR AC RUBBER REPLACEMENT (SEE CITY SPECS. SECTION 600).
- ④ COMPACT TO 95% RELATIVE COMPACTION. CONTRACTOR TO PAY FOR COMPACTION TESTS IF REQUIRED BY CITY ENGINEER.
- ⑤ NO LONGITUDINAL JOINTS ARE ALLOWED IN WHEEL PATH.
- ⑥ RESTORE ANY TRAFFIC STRIPING (MINIMUM TWO COATS FOR PAINT).
- ⑦ STEEL PLATE ALL OPEN EXCAVATIONS AT THE END OF EACH WORKDAY.
- ⑧ REMOVE EXCAVATED MATERIAL FROM THE JOB SITE AT CLOSE OF EACH DAY.
- ⑨ MINIMUM 72 HOUR POSTING OF TOW-AWAY NOTICES.
- ⑩ TEMPORARY PAVEMENT REPLACEMENT SHALL BE PLACED AT THE CONTRACTOR'S EXPENSE. IT SHALL BE PLACED LEVEL WITH THE EXISTING PAVEMENT ON COMPACTED TRENCH BACKFILL AND SHALL BE A MINIMUM OF 2" THICK.
- ⑪ PERMANENT PAVEMENT RESURFACING SHALL BE DONE WITHIN TWO WEEKS AFTER BACKFILLING OF TRENCHES HAS BEEN COMPLETED, AND ONLY AFTER SETTLEMENT HAS TAKEN PLACE AND THE FILL SURFACE HAS SUFFICIENTLY DRIED.
- ⑫ CONTACT SURFACES OF EXISTING PAVEMENT, MANHOLE FRAMES AND SHAFTS AND CONCRETE SURFACES SHALL BE GIVEN A TACK COAT BEFORE PERMANENT ASPHALT TRENCH RESURFACING IS PLACED.

## SEAL BEACH ENGINEERING DEPT. STANDARD DRAWING

### PAVEMENT REPAIR DETAIL

REVISIONS				DRAWN JN	REVIEWED BY <i>[Signature]</i>	DATE 9/28/99	CITY OF SEAL BEACH INCORPORATED JAN 27 1984 SANTA CLARA COUNTY, CALIFORNIA	STD133-1
NO.	BY	DATE	APPROVED					
				CHECKED BZ	DEPUTY CITY ENGINEER			
				DATE SEPT. 99	APPROVED BY ENGINEERING DEPT.			
				NO SCALE	DIRECTOR OF PUBLIC WORKS	9/28/99		

## BACKGROUND:

The following conditions are designed to preserve the integrity of new streets and forestall deterioration by preventing storm water intrusion and differential settlement that is often associated with street patching. It is not the intention of this section to prohibit necessary improvements to the infrastructure. Certain emergencies may occur that necessitate the open cutting of new street pavement. If an installation or repair is critically needed and no other alternatives exist, the City Engineer may approve an open cut within new pavements under the following criteria:

### STREETS PAVED/OVERLAID WITHIN 5 YEARS

#### Minimum Depth:

- Final resurfacing shall include the grinding of existing surrounding pavement and repaving at a minimum depth of 1 1/2".

#### Trenches perpendicular to traffic lanes:

- Grind 10' on either side of the trench line for residential streets and
- Grind 50' for arterial streets on either side of the trench line and for the full width of any traffic lane(s) that has been cut.

#### Trenches parallel to the traffic lanes:

- Grind the entire width of the traffic lane(s) for the full length of the trench, but not less than 100'.

#### Trenches other than perpendicular or parallel to traffic lanes:

- The City Engineer shall establish appropriate limits of paving.

#### Transverse paving joints:

- Place perpendicular to the direction of travel and longitudinal paving joints shall not be permitted in vehicle wheel paths.

All work shall meet all applicable standards including STD 133-1.

### STREETS SEALED WITHIN 3 YEARS (Slurry Seal, Rubberized Chip)

#### Time frame:

- Apply seal to patched area no sooner than 30 days or later than 90 days after the completion of the pavement repair.

#### Trenches perpendicular to traffic lanes:

- Seal 10' on either side of the trench line for residential streets and
- Seal 50' for arterial streets on either side of the trench line and for the full width of any traffic lane(s) that has been cut.


#### Trenches parallel to the traffic lanes:

- Seal the entire width of the traffic lane(s) for the full length of the trench, but not less than 100'.

#### Transverse paving joints:

- Place perpendicular to the direction of travel and longitudinal paving joints shall not be permitted in vehicle wheel paths.

All work shall meet all applicable standards.

PAVEMENT REPAIR FOR RECENTLY PAVED OR SEALED STREETS				STANDARD PLAN STD 133-2	
 Date: 1/8/2002 Approved by Director of Public Works 57202 PUBLIC WORKS		REVISIONS		SUPERSEDES	REFERENCES
	NO.	DESCRIPTION			STD 133-1
DRAWN:	CHECKED:				

TRAFFIC CONTROL GENERAL NOTES:

1. All work shall be done in accordance with the Work Area Traffic Control Handbook (WATCH), latest edition, and the Caltrans Manual, Section 5, 1992 edition, and the City of Seal Beach Standard Plans. In case of discrepancy, this provision takes precedence over WATCH, which takes precedence over the Caltrans Manual, Section 5. WATCH is published by Building News, Inc.
2. The 85<sup>th</sup> percentile speed shall be used to determine detour taper lengths and sign/delineator spacing. This information will be supplied by the City Traffic Engineering Section upon request.
3. Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners and commuters.
4. The Contractor shall have all signs, delineators, barricades, etc. properly installed prior to commencing construction and shall not attempt to switch to a subsequent phase during working hours. All traffic detours shall be approved by the City Traffic Engineering Section.
5. The Contractor shall maintain, on a 24-hour basis, all signs, delineators, barricades, etc., to ensure proper flow and traffic safety.
6. The Contractor shall utilize flaggers during work hours, as deemed necessary by the City.
7. Flashing Arrow Boards shall be used on all primary and secondary arterial streets, or where deemed necessary by the City Traffic Engineer. The Flashing Arrow Board shall be stationary and kept in place at all times. In or near residential areas, the Flashing Arrow Board shall be solar-powered.
8. The City Traffic Engineering Section and the Inspector reserve the right to observe the traffic control plans in use and require the Contractor to make any necessary changes as field conditions warrant.
9. Speed Limit Signs:
  - A. "Road Work Speed Limit 25" (C17)(25)) signs shall be posted approximately every 300 feet throughout the construction zone and after each intersection, starting at the "Road Construction Ahead" (C18) signs. "End 25

Speed Limit" (C17)(Back)) signs shall be posted at the ends of the construction zone.

- B. If the posted speed limit is greater than 35 MPH, "Reduce Speed Ahead" (R2-5) signs shall be posted with the C18 signs, and the first C17(25) signs shall be posted with the "Rt/Lt Lane Closed Ahead" (C20) signs.
  - C. Any existing speed limit signs or other conflicting signs in the construction zone shall be covered during construction with black heavy-duty plastic bags, which are secured with tape to the signpost below the sign. In no case shall tape be applied to any sign.
10. Warning Signs:
    - A. All advance warning sign installation shall be equipped with flags for daytime closures.
    - B. All signs shall be reflectorized and of standard size.
  11. It is the responsibility of the contractor performing work on a public street to install and maintain the traffic control devices as shown herein, as well as any such additional traffic control devices as may be required to ensure the safe movement of traffic and pedestrians through or around the work area and provide maximum protection and safety to construction workers.
  12. All temporary traffic control devices shall be removed following completion of each construction stage and the permanent traffic control devices, including but not limited to pavement markers, pavement striping and traffic signs shall be restored by the contractor upon completion of project.
  13. Contractor shall replace/repair all damaged striping with temporary striping or raised pavement markers at the end of each working day.
  14. Contractor shall maintain pedestrian access at all times.
  15. All traffic control devices shall be kept in their proper position at all times, and shall be repair, replaced, or cleaned as necessary to preserve their appearance and continuity.
  16. All delineators shall be equipped with nighttime reflective bands.
  17. Contractor shall cover or remove all conflicting signs.

TRAFFIC CONTROL PLANS				STANDARD PLAN STD 134-1																							
<b>PUBLIC</b>   Date: 6/19/03 Approved by Director of Public Works		 <b>WORKS</b>		<b>REVISIONS</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">NO.</th> <th style="width: 90%;">DESCRIPTION</th> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	NO.	DESCRIPTION											<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">SUPERSEDES</th> <th style="width: 50%;">REFERENCES</th> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	SUPERSEDES	REFERENCES								
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DEPARTMENT OF PUBLIC WORKS STANDARD PLAN  
Traffic Control Plans (Page 1 of 2)

A traffic control plan (Plan) is required whenever work is to be performed within the public right-of-way and is deemed necessary by the City of Seal Beach (City) Traffic Engineer. Work cannot start until the traffic control plan has been approved by the City Traffic Engineer.

The Plan shall be prepared under the supervision of, signed and sealed by a California-registered Civil Engineer practicing Traffic Engineering. The Plan, which shall be designed in 1"= 40' or 1"= 50' scale and printed on a 24"x 36" sheet(s) of mylar, shall include the following:

1. The name, address and telephone number of the responsible engineering firm.
2. The estimated number of working days to complete the work.
3. The "Construction General Notes: and the Traffic Control General Notes".
4. The City of Seal Beach block.
5. A legend of the various traffic control devices, i.e. Type II and Type III barricades, delineators, flashing arrow boards, and high-level warning devices.
6. A legend of the various signs used on Plan. The legend is only necessary on the first sheet of the Plan.
7. Existing striping and pavement markings, street center line(s) with stations, curb lines, relevant existing signs, existing curb markings, driveways in critical locations, and type of intersection control, i.e. signals or stop signs.
8. Existing and proposed lane widths, construction zone widths, and other dimensions.
9. The means of traffic control by signing, striping and delineation.
10. The tapers of any detour striping, i.e. 100:1, and also identify the length, and beginning and end of each taper.
11. The locations where parking is to be removed during construction.

CONSTRUCTION GENERAL NOTES:

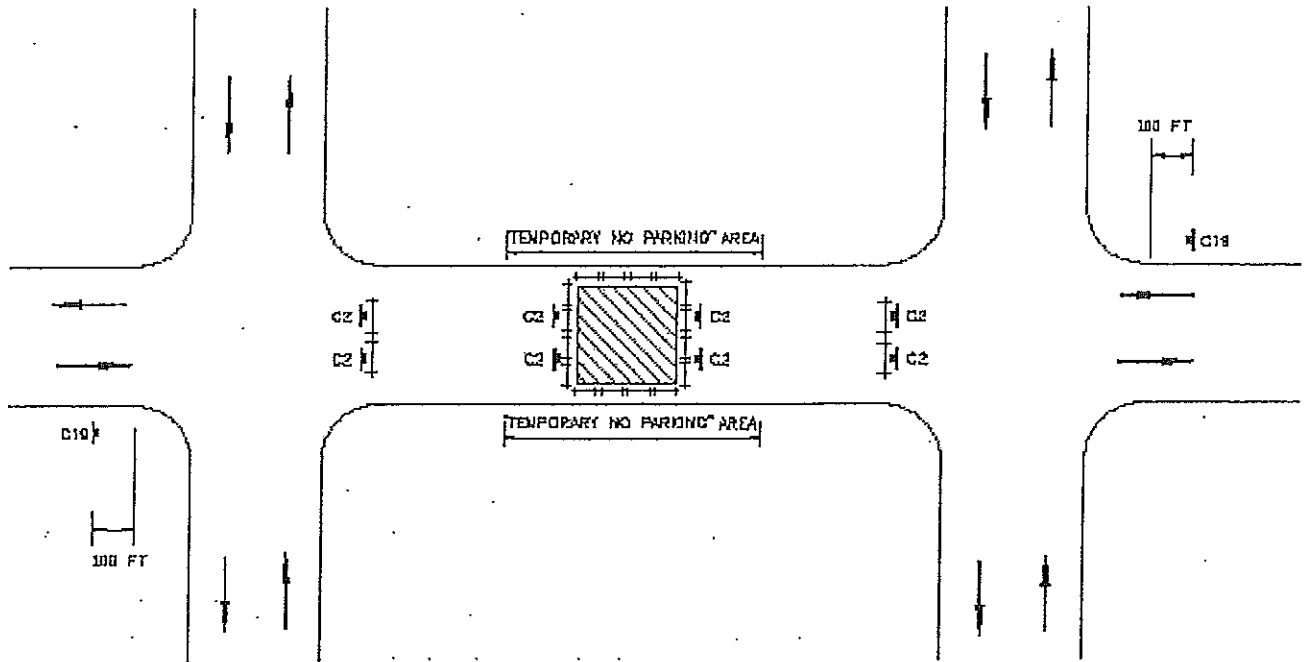
1. Street closures or lane closures shall be confined to the hours between 9 a.m. and 3 p.m., Monday through

Friday. All other times must be approved by the City Traffic Engineer. All lanes shall be open for traffic during non-work hours, unless approved otherwise by the City Traffic Engineer. On major arterials, two through lanes in each direction and left turn lanes in each direction must be maintained at all times, unless approved otherwise by the City Traffic Engineer.

2. Contractor shall replace all traffic detector loops damaged during construction, per Caltrans Standard. Layout of traffic loop shall be verified by the City Traffic Engineering Section prior to installation. Contact Signal Operations at 562 431-2527.
3. Wherever pavement is offset vertically by one (1) inch or more, the Contractor must ramp it with asphalt for a smooth transition, to the satisfaction of the City Construction Inspector (Inspector)
4. No water or other hoses shall be laid across traffic lanes at any time. Any hoses laid across sidewalks or other pedestrian paths shall be ramped.
5. All steel plate bridging shall have a non-skid surface.
6. Notify the City Engineer two working days in advance for inspection prior to starting work at (562) 594-8553.
7. Notify the Operation Division two working days in advance at (562) 493-8660 ext 432 prior to any work within 150 feet of a signal system.
8. Notify Orange County Transportation Authority (OCTA) at (714) 638-5000 ext 450 or any other affected transit services at least five working days prior to construction.
9. Contractor shall post uneven pavement signs, and ramp vertical pavement offset of one inch or more with asphalt for smooth transition.
10. All private driveways and side streets shall be kept open at all time except when construction takes place directly in front of the driveway/side street.
11. All open excavation on public streets shall backfilled or steel plated for traffic outside the working hours.
12. Traffic shall be restored to normal conditions outside the working hours.
13. Contractor shall provide a 24 hour contact number: \_\_\_\_\_ with phone number: \_\_\_\_\_
14. Any sign or equipment that contains "graffiti" shall be replaced by the Contractor.

TRAFFIC CONTROL PLANS		STANDARD PLAN STD 134-1																									
<p style="text-align: center;">PUBLIC</p> <div style="display: flex; align-items: center; justify-content: center;"> <p style="font-size: small;">Date: 6/9/03</p> </div> <p style="font-size: small; text-align: center;">Approved by Director of Public Works</p> <div style="display: flex; align-items: center; justify-content: center; margin-top: 10px;"> <p style="font-size: small;">WORKS</p> </div>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center; padding: 5px;">REVISIONS</th> <th style="text-align: center; padding: 5px;">SUPERSEDES</th> <th style="text-align: center; padding: 5px;">REFERENCES</th> </tr> <tr> <th style="width: 10%; text-align: center; padding: 5px;">NO.</th> <th style="text-align: center; padding: 5px;">DESCRIPTION</th> <th></th> <th></th> </tr> </thead> <tbody> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> </tbody> </table>	REVISIONS		SUPERSEDES	REFERENCES	NO.	DESCRIPTION																				
REVISIONS		SUPERSEDES	REFERENCES																								
NO.	DESCRIPTION																										
<p>DRAWN: _____</p> <p>CHECKED: _____</p>																											





DEPARTMENT OF PUBLIC WORKS STANDARD PLAN  
Typical Street Closure for Local Street



CONSTRUCTION SIGNS:

C2 : ROAD CLOSED  
C18 : ROAD CLOSED AHEAD

LEGEND:

-  SIGN
-  BARRICADE  
(FOR EXCAVATION ONLY)
-  WORK AREA
-  TRAFFIC DIRECTION

TRAFFIC CONTROL: Typical Street Closure for Local Street : Sheet: 1 of 1

STANDARD PLAN  
STD 135-1

Reviewed by Asst. City Engineer RCE61527

Date:

Approved by Director of Public Works RCE57202

Date:

Drawn:

Checked:

Noted:

PUBLIC



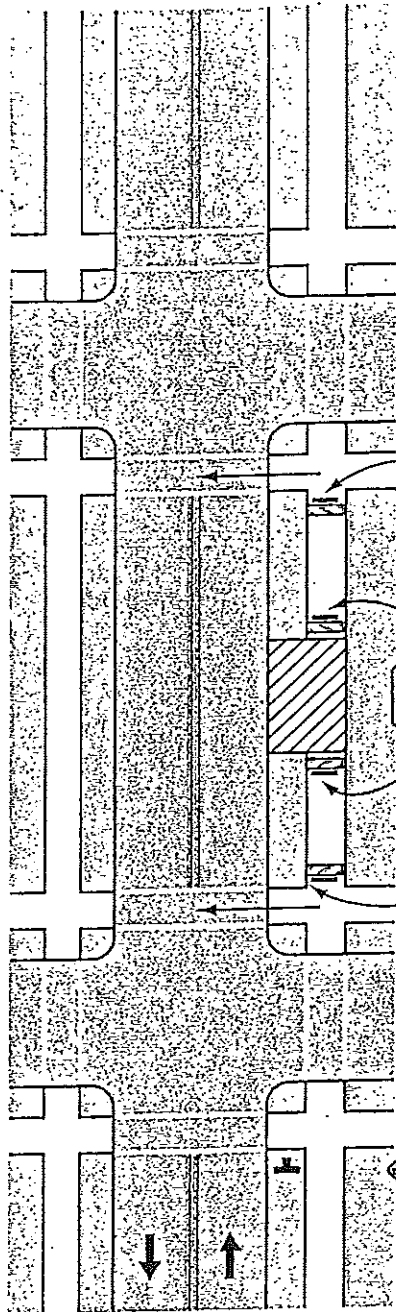
WORKS

REVISIONS

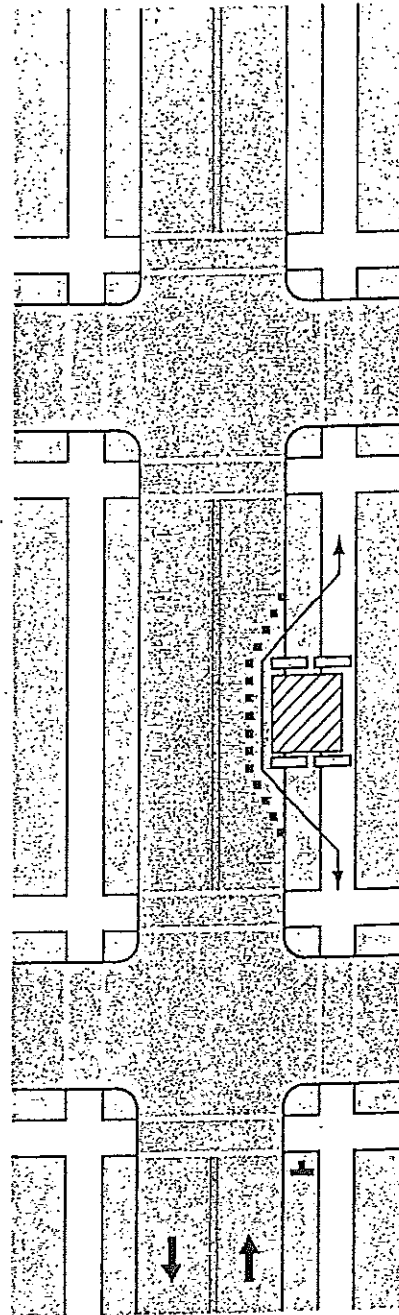
SUPERSEDES

REFERENCES

NO. DESCRIPTION



SIDEWALK DETOUR



SIDEWALK DIVERSION

Sidewalk Closures & Bypass Sidewalks Sheet: 1 of 2

STANDARD PLAN  
STD 135-2

Reviewed by Asst. City Engineer RCE61527

Date:

*Mark H. ...* 3-15-04

Approved by Director of Public Works RCE57202

Date:

*R. ...* 3/15/04

Drawn:

Checked:

Noted:

PUBLIC



WORKS

REVISIONS

SUPERSEDES

REFERENCES

NO.	DESCRIPTION

## Sidewalk Closures and Bypass Sidewalks

### Standard:

1. Where sidewalks exist, provisions shall be made for disabled pedestrians.

### Guidance:

2. Where high speeds are anticipated, a temporary traffic barrier and, if necessary, a crash cushion should be used to separate the temporary sidewalks from motor vehicle traffic.

### Option:

3. Street lighting may be considered.
4. Only the temporary traffic control devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS signs, may be used to control motor vehicle traffic.
5. For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs and close sidewalks.
6. Type C Steady-Burn warning lights may be used on channelizing devices separating the temporary sidewalks from motor vehicle traffic flow.
7. Signs, such as KEEP RIGHT (LEFT), may be placed along a temporary sidewalk to guide or direct pedestrians.


Sidewalk Closures & Bypass Sidewalks Sheet: 2 of 2

STANDARD PLAN  
STD 135-2

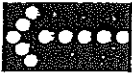









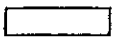



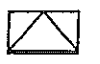

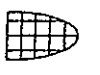
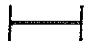

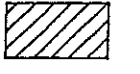

PUBLIC		REVISIONS		SUPERSEDES	REFERENCES
NO.	DESCRIPTION				

Reviewed by Asst. City Engineer RCE61527 <i>Mark H. H. H.</i> 3-15-04	Date:	
Approved by Director of Public Works RCE57202 <i>[Signature]</i> 3/15/04	Date:	
Drawn:	Checked:	Noted:

WORKS






	Arrow panel
	Arrow panel support or trailer
	Channelizing device
	Direction of traffic
	Direction of temporary traffic detour
	Flagger
	High-level warning device (Flag tree)
	Luminaire
	Pavement markings that should be removed for a long-term project
	Sign (Shown facing left)
	Temporary barrier
	Temporary barrier with warning lights
	Surveyor
	Traffic or Pedestrian signal
	Truck-mounted attenuator
	Type III Barricade
	Crash Cushion
	Changeable message sign or support trailer
	Warning lights
	Work space
	Work vehicle

Meaning of Symbols on Typical Traffic Control Application Diagrams Sheet: 1 of 1

STANDARD PLAN  
STD 135-3

Reviewed by Asst. City Engineer RCE61527 <i>Mark V...</i> 3-15-04		Date: 3-15-04			PUBLIC		REVISIONS		SUPERSEDES	REFERENCES
Approved by Director of Public Works RCE57202 <i>[Signature]</i> 3/15/04		Date: 3/15/04			WORKS		NO. DESCRIPTION			
Drawn:		Checked:			Note:					

**DEPARTMENT OF PUBLIC WORKS STANDARD PLAN**  
**Sidewalk Encroachments in Main Street Specific Plan Area**




The following standards are applicable for sidewalk encroachments in the public right of way in the area designated in the *Main Street Specific Plan*.

General Requirements:

Any type of sidewalk encroachment, including but not limited to, street furniture, structural or architectural elements of adjacent improvements, balconies, stairways, and overhangs, bike racks, tables, public telephones, kiosks, vending machines, awnings, banners, private lighting systems, walls, or other type of outdoor encroachments placed on sidewalk within the public right of way shall comply with the following general requirements:

- A minimum distance of not less than a five-foot wide pedestrian travel aisle shall be maintained within the public right of way at all times. Areas with heavy pedestrian traffic may be required to maintain a minimum of eight feet clear width on the sidewalk as determined by the City Engineer;
- A minimum distance of not less than a two-foot wide pedestrian aisle shall be maintained on each side of where the parking stall line intersects the curb line to allow for adequate egress and ingress of pedestrians from their vehicles to the sidewalk area;
- To ensure the required pedestrian travel aisle, all encroachments shall be set back a minimum of three feet from any fixed sidewalk obstruction, including but not limited to, tree wells, street trees, parking meters, water hydrants, light poles, utility equipment boxes, newspaper racks and bus benches.
- Encroachments shall not be located within ten-feet of a cross walk.
- All sidewalk encroachments shall comply with all applicable provisions of the Uniform Building Code, including but not limited to, maintaining proper building egress and ingress at all times, and providing appropriate handicap access; This includes for doorways that open in a four-foot clear distance from the doorway for the width of the door plus one-foot from the strike side of the door jamb and for doorways that open out a five-foot clear distance from the doorway for the width of the door plus two-feet from the strike side of the door jamb.
- Any encroachments, which are cantilevered or hung above the sidewalk, shall have a minimum of eight-foot clearance from the ground to the lowest element of the encroachment to provide for adequate height clearance for pedestrians.
- Any encroachments within thirty five feet from the intersection of street property lines shall not be in excess of two and one-half feet high to provide for adequate vision clearance for vehicles.
- Any encroachments within four feet from the intersection of an alley with any street right of way , or at the intersection of any alley with any other alley, shall not be in excess of three feet high to provide for adequate vision clearance for vehicles.
- Encroachment shall be located at least one and a half feet from the curb face. In areas where vehicles do not park or otherwise extend over sidewalk, this set back may be reduced at the discretion of the City Engineer.
- Encroachments may not be chained or otherwise anchored to any tree, street light, parking meter or other property.

Any application shall be denied if the City Engineer shall find that the maintenance of the encroachment would tend to obstruct passage along any public way or create a hazard or would otherwise be detrimental to the public safety, welfare or convenience.

SIDEWALK ENCROACHMENTS IN MAIN STREET SPECIFIC PLAN AREA (Sheet 1 of 1)				STANDARD PLAN STD 140-1																									
 Date: 4/15/03 Reviewed by Deputy City Engineer RCE _____  Date: 4/15/03 Approved by Director of Public Works RCE _____ DRAWN: _____ CHECKED: _____		PUBLIC  WORKS		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="padding: 5px;">REVISIONS</th> <th style="padding: 5px;">SUPERSEDES</th> <th style="padding: 5px;">REFERENCES</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px; text-align: center;">NO.</td> <td style="padding: 5px;">DESCRIPTION</td> <td></td> <td></td> </tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		REVISIONS		SUPERSEDES	REFERENCES	NO.	DESCRIPTION																		
REVISIONS		SUPERSEDES	REFERENCES																										
NO.	DESCRIPTION																												

DEPARTMENT OF PUBLIC WORKS STANDARD PLAN  
Sidewalk Encroachments in Main Street Specific Plan Area

Benches:

When applying the above-mentioned general requirements to benches, a two-feet allowance shall be made for the space required for a person sitting on the bench.

Benches to be installed in an area where there is a theme or bench style shall conform to that theme or style

No bench shall be more than forty-two inches high nor more than two feet, six inches wide, nor more than seven feet long, overall.

Each bench must have displayed thereon, in a conspicuous place, the name of the permittee and the permit number.

It shall be the duty of the permittee to maintain each bench at all times in a safe condition and at its proper and lawful location, and to inspect each bench periodically.

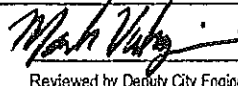
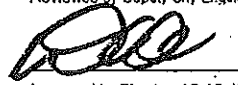

Each bench must be placed parallel to the curb.

Bicycle Racks:

Bicycle racks shall be located to allow bicycles to extend five feet from the center of the rack and comply with the above requirements.

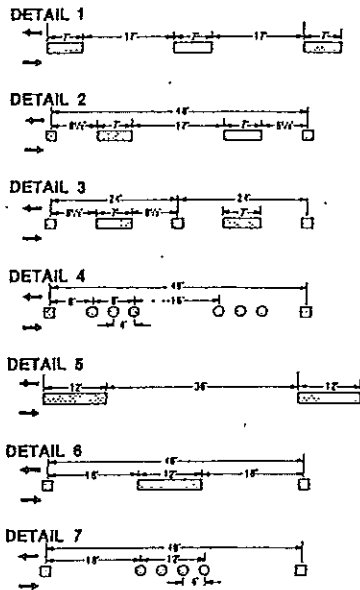
SIDEWALK ENCROACHMENTS IN MAIN STREET SPECIFIC PLAN AREA (Sheet 2 of 2)

STANDARD PLAN  
STD 140-1

 Reviewed by Deputy City Engineer RCE  Approved by Director of Public Works RCE DRAWN: _____ CHECKED: _____	Date: <u>4-15-03</u>	 PUBLIC WORKS	REVISIONS		SUPERSEDES	REFERENCES
	NO.		DESCRIPTION			

Use Detail 2 unless otherwise shown on the project plans.

### CENTERLINES (2 LANE HIGHWAYS)



### LEGEND

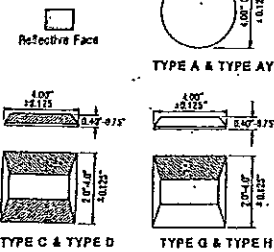
#### MARKERS

- TYPE A White Non-reflective
- ⊙ TYPE AY Yellow Non-reflective
- ◻ TYPE C Red-clear Reflective
- ◻ TYPE D Two-way Yellow Reflective
- ◻ TYPE G One-way Clear Reflective
- ◻ TYPE H One-way Yellow Reflective

#### LINES

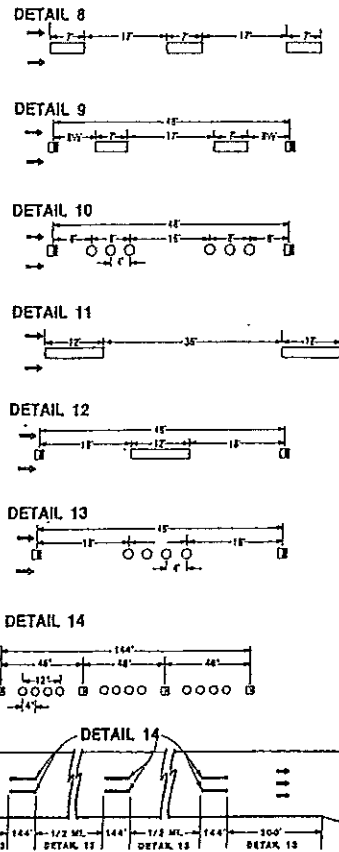
- 4" White
- 4" Yellow
- Direction of Travel
- No Scale

### MARKER DETAILS



NOTES: 1. Minimum Projected Area of Reflective Face = 1.00 Square Inch  
2. Marker Need Not Be Rectangular

### LANELINES (MULTILANE HIGHWAYS)



Pavement Markers and Traffic Lines (Sheet: 1 of 6)

STANDARD PLAN  
STD 150-1

Reviewed by Asst. City Engineer RCE61527	Date: 3-15-04
Approved by Director of Public Works RCE52702	Date: 3-15-04
Drawn:	Checked:
Noted:	

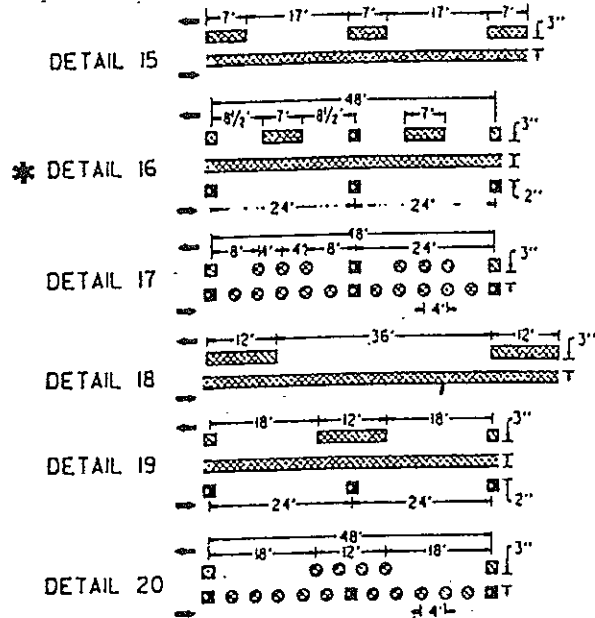


WORKS

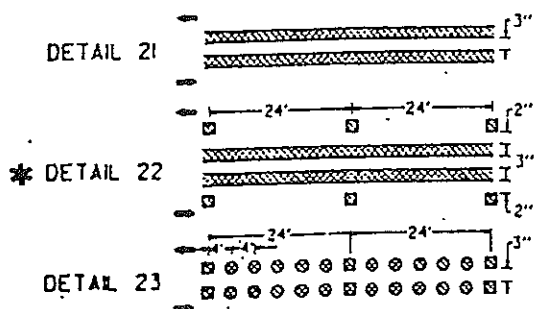
REVISIONS		SUPERSEDES	REFERENCES
NO.	DESCRIPTION		

Use Detail 16 and 22 unless otherwise shown on the project plans.

### NO PASSING ZONES - ONE DIRECTION



### NO PASSING ZONES - TWO DIRECTIONS



### LEGEND

#### MARKERS

- TYPE A White Non-reflective
- TYPE AY Yellow Non-reflective
- ◻ TYPE C Red-clear Reflective
- ◻ TYPE D Two-way Yellow Reflective
- ◻ TYPE G One-way Clear Reflective
- ◻ TYPE H One-way Yellow Reflective

#### LINES

- 4" White
- 4" Yellow

- Direction of Travel
- No Scale

\* DENOTES DETAIL TO BE USED UNLESS OTHERWISE SHOWN ON THE PROJECT PLANS

Pavement Markers and Traffic Lines (Sheet: 2 of 6)

STANDARD PLAN  
STD 150-1

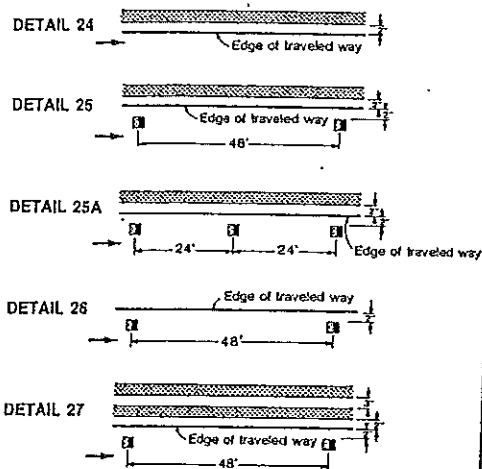
PUBLIC				REVISIONS		SUPERSEDES	REFERENCES
Reviewed by Asst. City Engineer RCE61527		Date:		NO.	DESCRIPTION		
		3-15-04					
		3-15-04					
Drawn:	Checked:	Noted:					



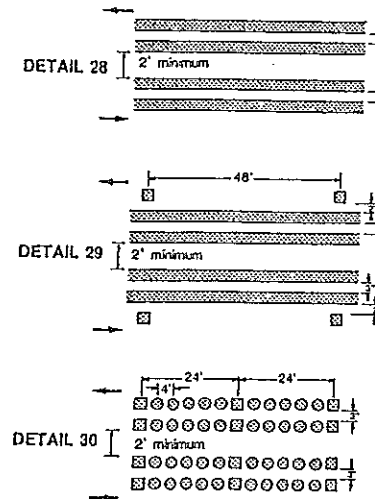
WORKS

Use Detail 25A and 26 unless otherwise shown on the project plans.

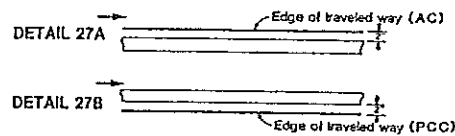
### LEFT EDGELINES (Divided Highways)



### MEDIAN ISLANDS



### RIGHT EDGELINES



### LEGEND

#### MARKERS

- TYPE A White Non-reflective
- ⊙ TYPE AY Yellow Non-reflective
- ◻ TYPE C Red-clear Reflective
- ◻ TYPE D Two-way Yellow Reflective
- ◻ TYPE G One-way Clear Reflective
- ◻ TYPE H One-way Yellow Reflective

#### LINES

- 4" White
- 4" Yellow


→ Direction of Travel  
No Scale

Pavement Markers and Traffic Lines (Sheet: 3 of 6)

STANDARD PLAN  
STD 150-1

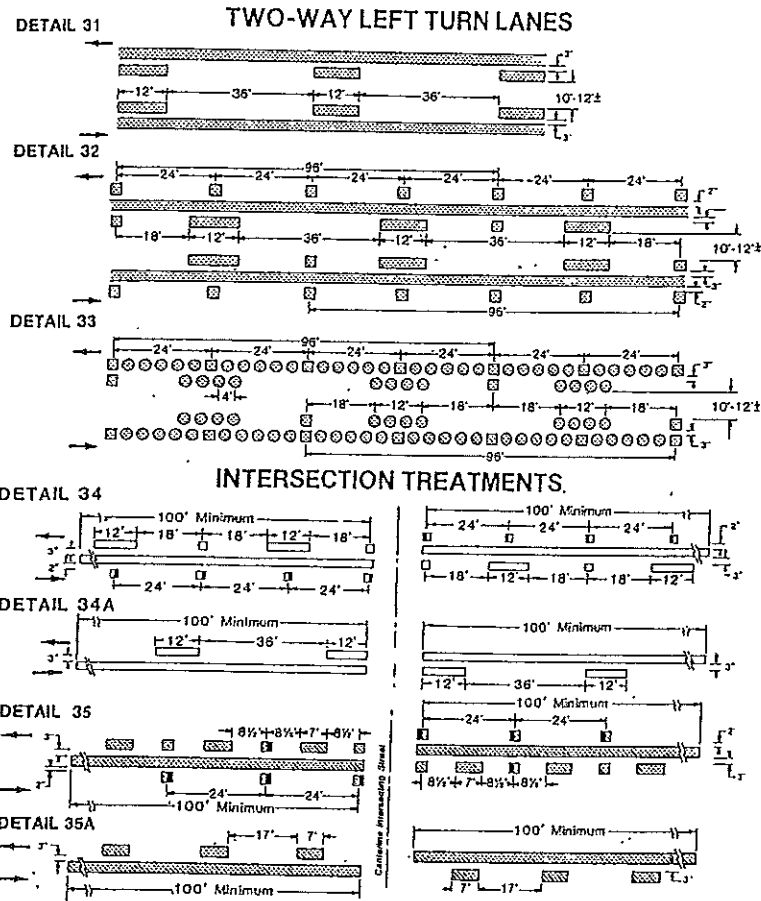
PUBLIC WORKS				REVISIONS		SUPERSEDES	REFERENCES
NO.		DESCRIPTION					

Reviewed by Asst. City Engineer RCE61527	Date:
<i>Mark Vukobratovic</i>	3-15-04
Approved by Director of Public Works RCE52702	Date:
<i>[Signature]</i>	3-15-04
Drawn:	Checked:
	Noted:



PUBLIC WORKS

Use Detail 32 unless otherwise shown on the project plans.



## Pavement Markers and Traffic Lines (Sheet: 4 of 6)

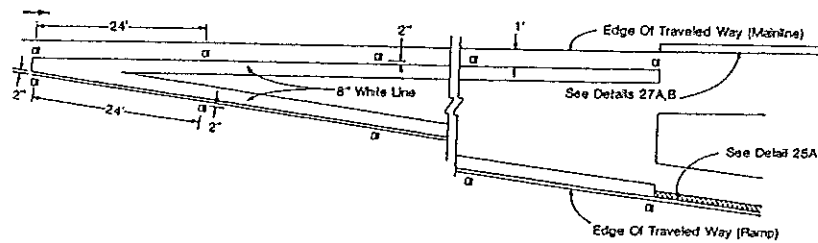
STANDARD PLAN  
STD 150-1

PUBLIC			REVISIONS		SUPERSEDES	REFERENCES
NO.	DESCRIPTION					

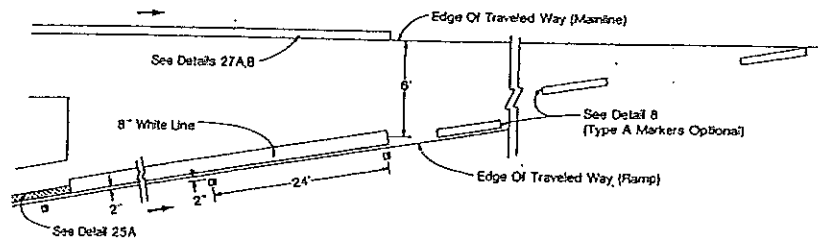
Reviewed by Asst. City Engineer RCE61527	Date: 3-15-04	
Approved by Director of Public Works RCE52702	Date: 3-15-04	
Drawn:	Checked:	Noted:

WORKS

DETAIL 36-Exit Ramp Neutral Area (Gore) Treatment

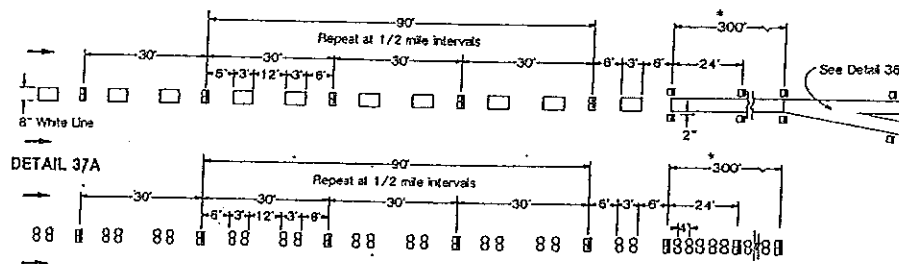


DETAIL 36A-Entrance Ramp Neutral Area (Gore) Treatment



\* Lane drop line should be continued where available weaving length is less than the theoretical weaving length.

DETAIL 37-Lane Drop at Exit Ramps



Pavement Markers and Traffic Lines (Sheet: 5 of 6)

STANDARD PLAN  
STD 150-1

Reviewed by Asst. City Engineer RCE61527

Date:

Approved by Director of Public Works RCE52702

Date:

Drawn:

Checked:

Noted:

PUBLIC



WORKS

REVISIONS

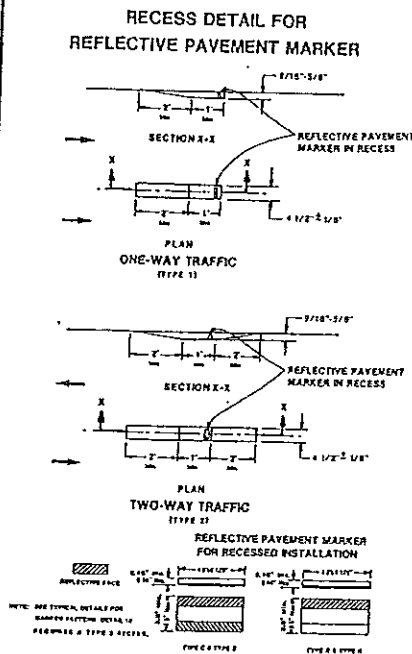
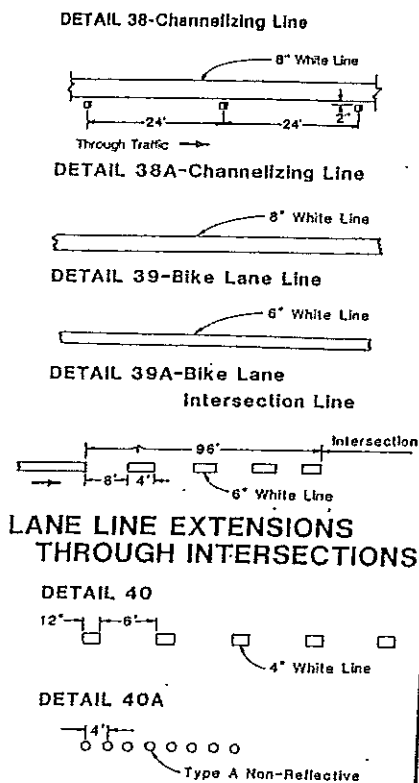
NO. DESCRIPTION

SUPERSEDES

REFERENCES



Use Detail 38, 39, 39A unless otherwise shown on the project plans.



**LEGEND**

**MARKERS**

- TYPE A White Non-reflective
- TYPE AY Yellow Non-reflective
- TYPE C Red-clear Reflective
- TYPE D Two-way Yellow Reflective
- TYPE G One-way Clear Reflective
- TYPE H One-way Yellow Reflective

**LINES**

- 4" White
- 4" Yellow

- Direction of Travel
- No Scale

Pavement Markers and Traffic Lines (Sheet: 6 of 6)

STANDARD PLAN  
STD 150-1

Reviewed by Asst. City Engineer RCE61527

Date:

Approved by Director of Public Works RCE62702

Date:

Drawn:

Checked:

Noted:

PUBLIC



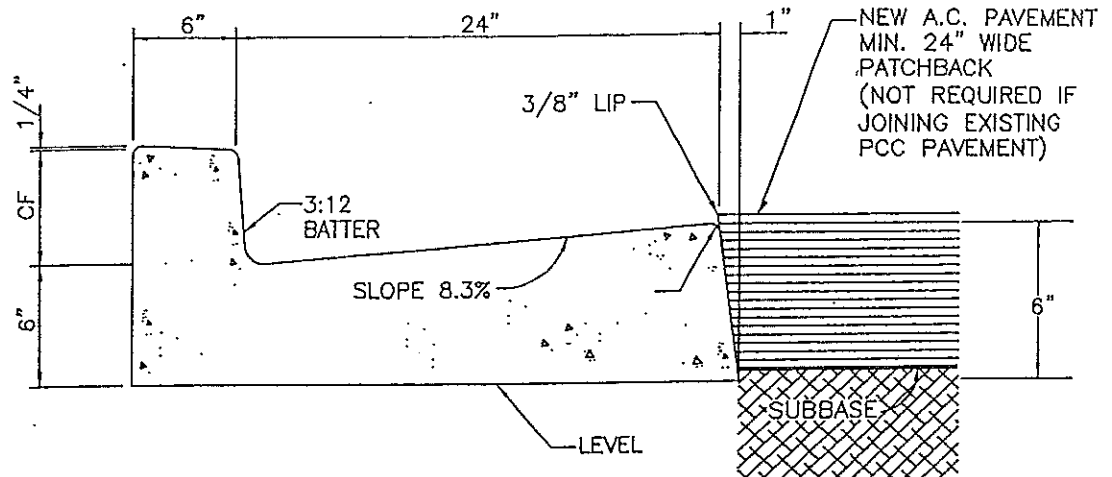
WORKS

REVISIONS

NO. DESCRIPTION

SUPERSEDES

REFERENCES




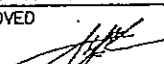
**TYPE A P.C.C CURB AND GUTTER**  
 (CURB FACE SHALL BE 6" OR 8" UNLESS OTHERWISE NOTED)  
 N.T.S

**NOTES:**

1. ALL CONCRETE SURFACES WITHIN 4" OF ALL GUTTER FLOW LINES SHALL BE GIVEN A STEEL TROWEL FINISH. (APPLIES TO TYPE "A" CURB).
2. PRE FORMED 3/8" THICK EXPANSION FILLER SHALL BE INSTALLED IN ALL TYPES OF CURB AT THE B.C. AND E.C. OF RETURNS, AT INTERVALS OF 60' BETWEEN RETURNS AND AT THE ENDS OF DRIVEWAYS. SIMILAR EXPANSION JOINTS SHALL BE INSTALLED IN ALL GUTTERS ADJOINING CURB. WEAKENED PLANE JOINTS SHALL BE FORMED AT INTERVALS OF 20' BETWEEN RETURNS.
3. CONCRETE SHALL BE 560-C-3250.
4. AC SHALL BE SAWN-CUT A MINIMUM OF 24" BEYOND THE CONCRETE GUTTER. SUBBASE SHALL BE COMPACTED TO RELATIVE DENSITY OF 95%.
5. CURB FACE SHALL BE 6" OR 8" UNLESS PREVIOUSLY APPROVED BY CITY ENGINEER IN WRITING.
6. ALL EXPOSED CORNERS ON PCC CURBS AND GUTTERS SHALL BE ROUNDED WITH A 1/2" RADIUS.
7. PROTECT EXISTING SPRINKLER SYSTEMS, ELECTRICAL CONDUIT, WATER METERS, SERVICE LATERALS, AND ALL OTHER UNDERGROUND UTILITIES ADJACENT TO CURB & GUTTER AND CURB REPLACEMENT.
8. BACKFILL EXCAVATED AREA WITH CLEAN EARTH FROM EXCAVATION.
9. RESEED TO MATCH EXISTING LAWNS IN EXCAVATED AREAS.

**STANDARD CURB SECTIONS TYPE A**

**STANDARD PLAN  
182**

REVIEWED  02/26/01  
 DEPUTY CITY ENGINEER-RCE 57202  
 APPROVED  02/26/01  
 DIRECTOR OF PUBLIC WORKS-RCE 36106  
 DRAWN BY: K.Y. CHECKED BY:

**PUBLIC**

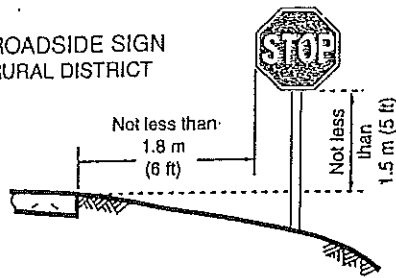


**WORKS**

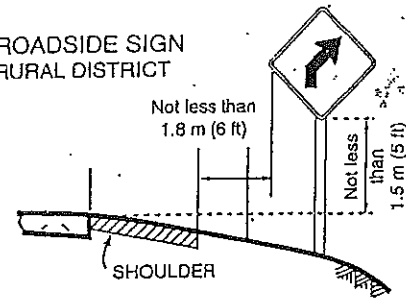
REVISIONS	
NO.	DESCRIPTIONS
1	Change Format

SUPERSEDES	REFERENCES
SHEET 1 OF 1	

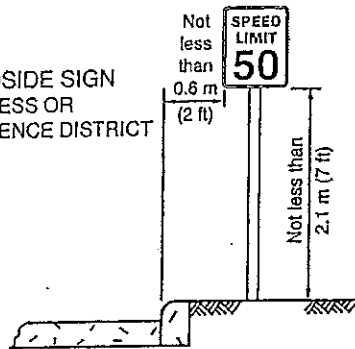
ROADSIDE SIGN  
RURAL DISTRICT



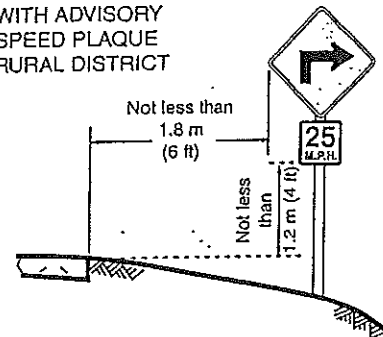
ROADSIDE SIGN  
RURAL DISTRICT



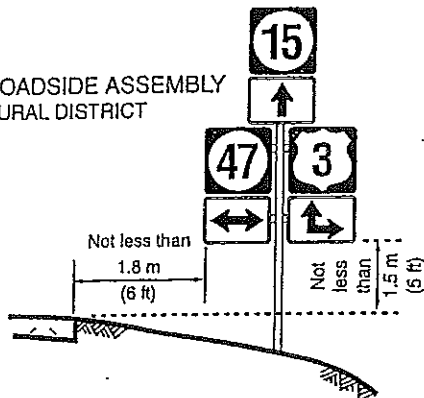
ROADSIDE SIGN  
BUSINESS OR  
RESIDENCE DISTRICT



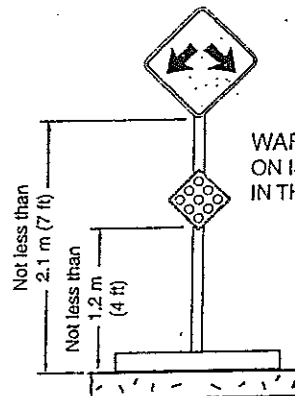
WARNING SIGN  
WITH ADVISORY  
SPEED PLAQUE  
RURAL DISTRICT



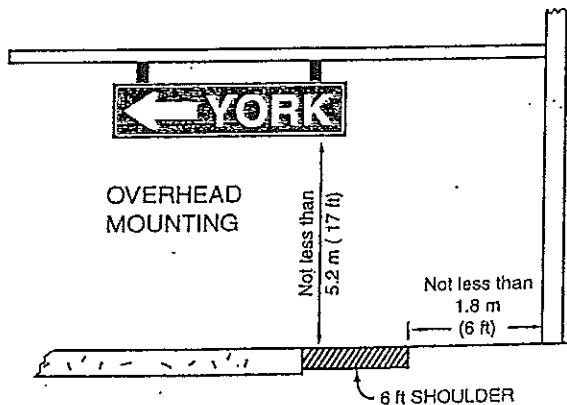
ROADSIDE ASSEMBLY  
RURAL DISTRICT



WARNING SIGN  
ON ISLAND  
IN THE LINE OF TRAFFIC



OVERHEAD  
MOUNTING



Heights and Lateral Locations of Signs for Typical Installations Sheet: 1 of 1

STANDARD PLAN  
STD 1409-1

Reviewed by Asst. City Engineer RCE61527

Date:

Approved by Director of Public Works RCE57202

Date:

Drawn:

Checked:

Noted:

PUBLIC



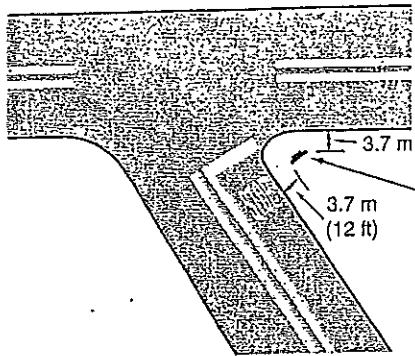
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REVISIONS

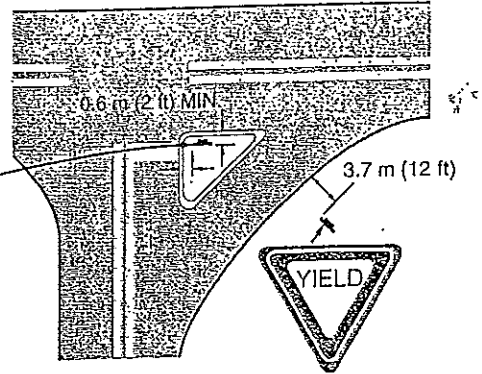
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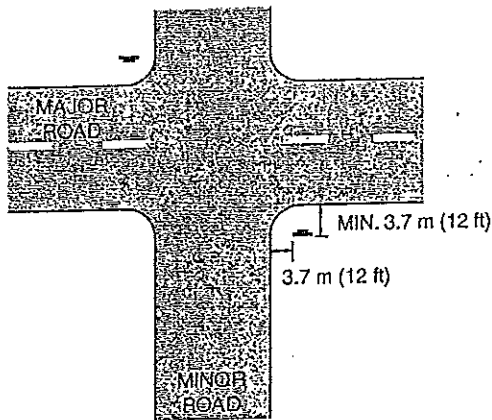
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ACUTE ANGLE INTERSECTION

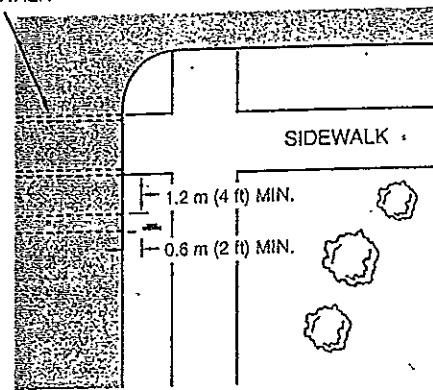


CHANNELIZED INTERSECTION

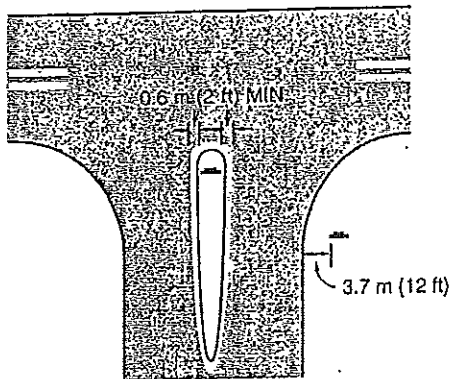


MINOR CROSSROAD

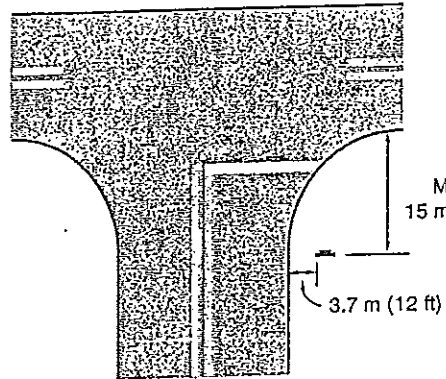
MARKED OR  
UNMARKED  
CROSSWALK



URBAN INTERSECTION



DIVISIONAL ISLAND



WIDE THROAT INTERSECTION

Typical Locations for Signs at Intersections Sheet: 1 of 1

STANDARD PLAN  
STD 1409-2

Reviewed by Asst. City Engineer RCE61527

Date:

*Mark Vigneri* 3-15-04

Approved by Director of Public Works RCE7202

Date:

*R. J. [Signature]* 3/15/04

Drawn:

Checked:

Noted:

PUBLIC



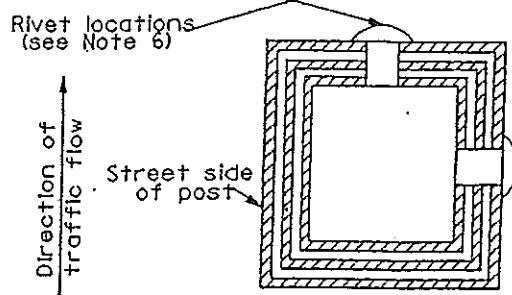
WORKS

REVISIONS

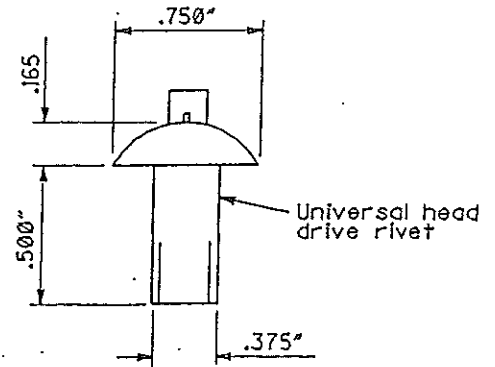
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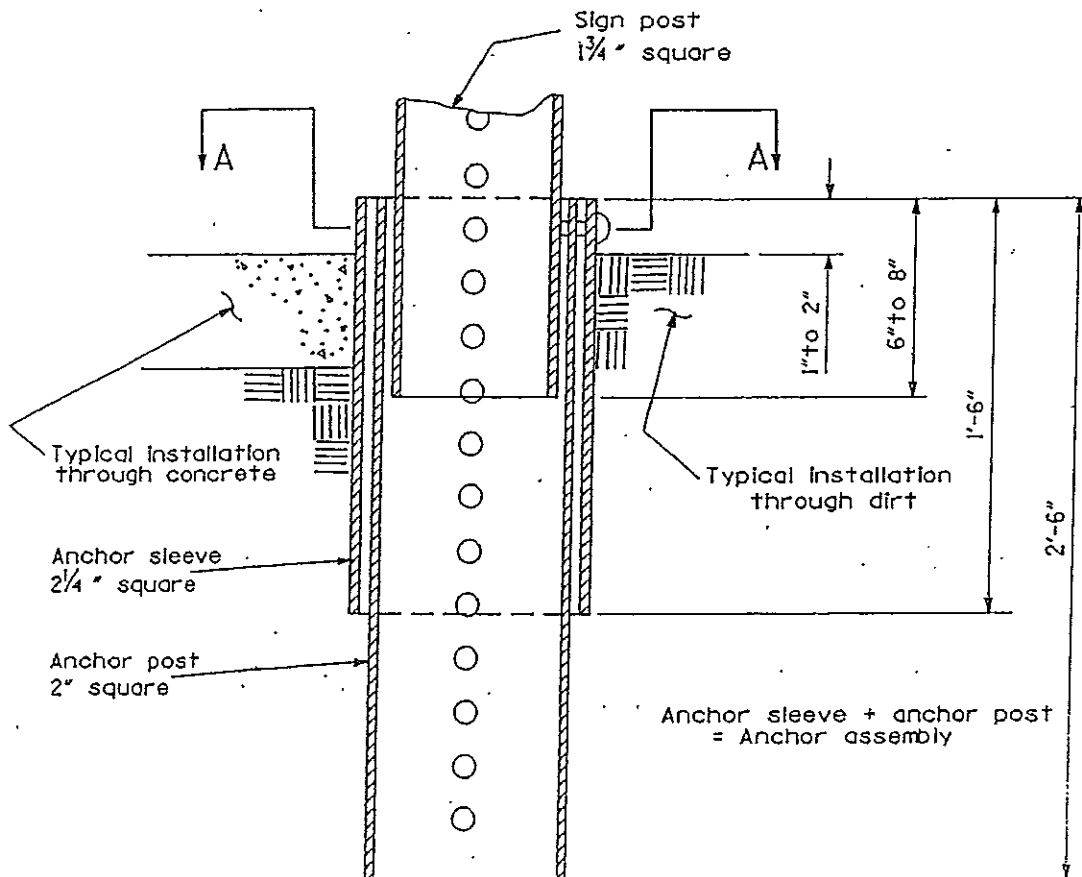
REFERENCES



SECTION A-A



RIVET DETAIL



TYPICAL SECTION

SIGN POST INSTALLATION: Sheet: 1 of 2

STANDARD PLAN  
STD: 1417

Reviewed by Asst. City Engineer RCE61527

Date:

2-12-02

Approved by Director of Public Works RCE57202

Date:

2/12/02

Drawn:

Checked:

Noted:

PUBLIC



WORKS

REVISIONS

NO. DESCRIPTION

SUPERSEDES


REFERENCES

NOTES

1. Square perforated steel tube posts with break-away base, "Telespar", shall be used for all traffic control and informational signs within road right-of-way, with the exception of street name signs per Standard Plan 1407.
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 less than 48", with the exception of a 48" x 48" stop sign. Double posts shall be used where either the length or the width exceeds 48".
3. The anchor assembly shall consist of a 2" square by 2'-6" Anchor Post and a 2 1/4" square by 1'-6" Anchor Sleeve.
4. The Anchor Assembly, consisting of the Anchor Post and Anchor Sleeve, shall be driven simultaneously until only 1" to 2' remains above ground level. The tops of both pieces shall be flush.
5. All dirt shall be removed from the inside top 8" of the Anchor Assembly to allow for installation of the sign post.
6. Install the 1 3/4" square Sign Post 6" to 8" into the Anchor Assembly and secure in place with two 5/16" Universal Head Drive Rivets as shown. The rivets shall be installed on the side opposite traffic flow and the side away from traffic as shown in order to achieve the maximum break-away effect.
7. Installation according to these requirements is essential to maintain the break-away characteristics of the post system. Under NO circumstances shall the Anchor Assembly be secured in concrete footings.

SIGN POST INSTALLATION: Sheet 2 of 2

STANDARD PLAN  
STD: 1417

Reviewed by Asst. City Engineer RCE61527 <i>Mark Virginia</i> Approved by Director of Public Works RCE57202 <i>[Signature]</i>		Date: 2-12-02 Date: 2/12/02	PUBLIC  WORKS	REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	NO.	DESCRIPTION									SUPERSEDES REFERENCES
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