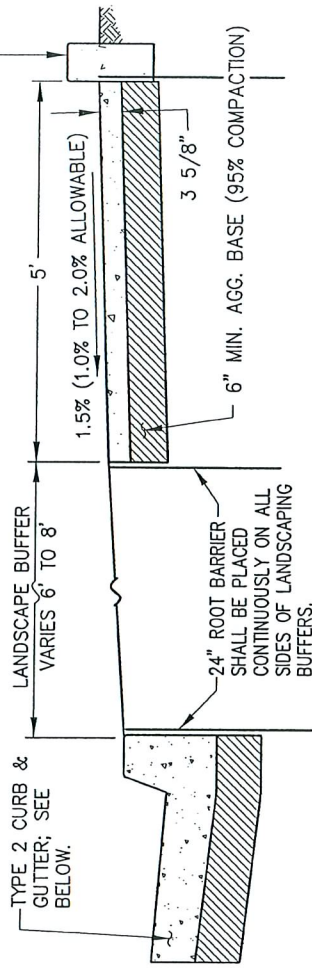
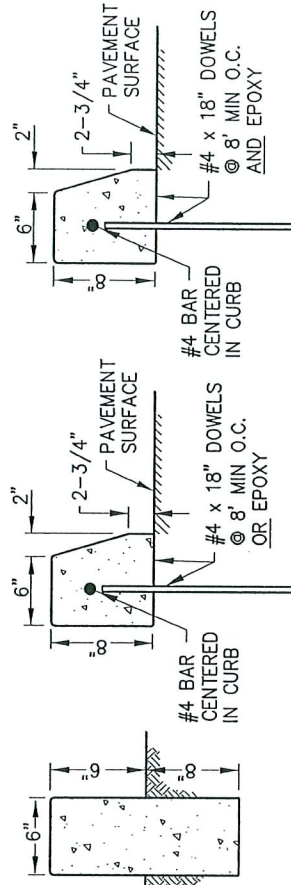


DRAWING NUMBER	TITLE
4-30	SIDEWALK CURB AND GUTTER SECTION
4-31	MEDIAN DETAILS
4-32	CONCRETE JOINT DETAILS
4-33	BARRIER CURB DETAIL
4-34	UNDER SIDEWALK DRAIN
4-35	TYPE A DRIVEWAY
4-36	TYPE B DRIVEWAY
4-37	PEDESTRIAN REFUGE AREA
4-38	CLASS A, CLASS C AND D STREETS
4-40	CROSS GUTTER
4-42	PAVEMENT WIDENING DETAIL
4-43	BUS TURNOUTS
4-44	BUST STOP DETAILS
4-49	SIDEWALK RAMP INSTALLATION DETAIL – AC CONFORM IN EXISITNG PAVEMENT
4-50	SIDEWALK RAMP DETAILS, PLAZA STYLE
4-51	SIDEWALK RAMP DETAILS, PARALLEL STYLE
4-52	SIDEWALK RAMP PLACEMENT MAJOR STREET INTERSECTION
4-53	TYPICAL CURB EXTENSION FOR RESIDENTIAL AND COLLECTOR STREETS
4-54	SIDEWALK RAMP DETAILS FOR RETROFIT OF EXISTING 4' WIDE SIDEWALKS
4-55	SIDEWALK RAMPS AT "T" INTERSECTION FOR ARTERIAL STREETS & THOROUGHFARE STREETS
4-56	SIDEWALK RAMPS AT "T" INTERSECTIONS FOR RESIDENTIAL STREETS & COLLECTOR STREETS
4-57	PEDESTRIAN LANDINGS AT CLASS D STREETS
4-59	SIDEWALK CONFORM END OF SEPARATED SIDEWALK
4-60	SIDEWALK FLAIR AT UTILITY STRUCTURE OR OTHER MAJOR CONFLICT
4-61	SIDEWALK BARRICADE
4-62	SIGNING OF LOCATIONS WITH ABRUPT CHANGE OF PAVEMENT WIDTH
4-63	STREET CLOSURE BARRICADES
4-64	TRENCH SECTIONS
4-70	STREET NAME SIGNS
4-71	STREET NAME SIGN LOCATION REQUIREMENTS
4-72	STREET NAME SIGN PLACEMENT DETAILS ON WOOD POLE INSTALLATIONS
4-73	STREET NAME PLACEMENT DETAILS ON STREET LIGHT POLE INSTALLATIONS
4-74	STREET NAME SIGN INSTALLATION ON STREET LIGHT POLE
4-77	STRIPING AND PAVEMENT MARKING DETAILS
4-80	UTILITY POLE PLACEMENT LOCATIONS DETAILS
4-81	UTILITY POLE PLACMENT LOCATION NOTES

INSTALL TYPE 3 OR TYPE 4 CURB IF ABUTTING PARKING AREA OR LANDSCAPING (EXCEPT LAWN AREA). SEE DWG. 4-33.
USE ROOT BARRIER ALONG BACK OF SIDEWALK FOR A LENGTH OF TWENTY FEET WHERE TREE TRUNK IS WITHIN FIVE FEET OF SIDEWALK.



BIFURCATED SIDEWALK WITH TYPE 2 CURB & GUTTER



TYPE 4A

TYPE 4

TYPE 3

NOTES:

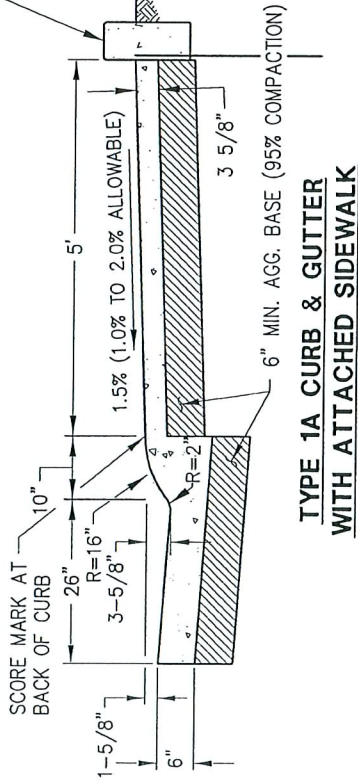
1. SEE SECTION 27-3.01 OF STANDARD CONSTRUCTION REQUIREMENT FOR EXPANSION JOINTS, WEAKENED PLANE JOINTS AND SCORE MARKS. 1/2" RADIUS ON EXPOSED EDGES UNLESS NOTED OTHERWISE.
2. SEE DRAWING 4-31 FOR ADDITIONAL MEDIAN CURB DETAILS.

CHIEF, DEPT. OF TRANSPORTATION

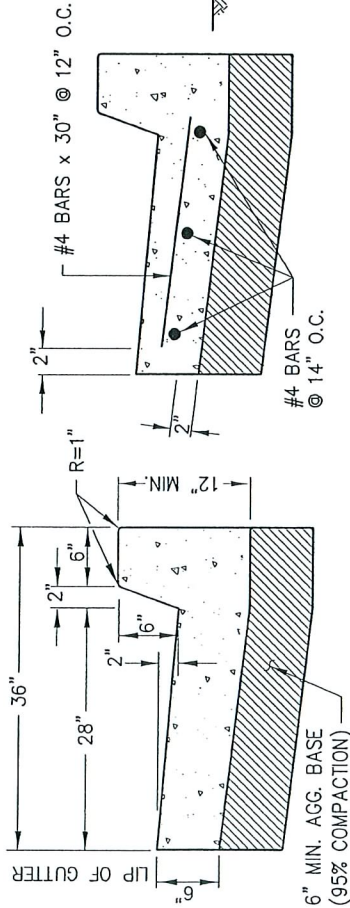
COUNTY OF SACRAMENTO MUNICIPAL SERVICES AGENCY

SIDEWALK CURB & GUTTER SECTIONS

SCALE: NONE
DATE: 07/20/09
DRAWN BY: B.R. & TRU P. **4-30**

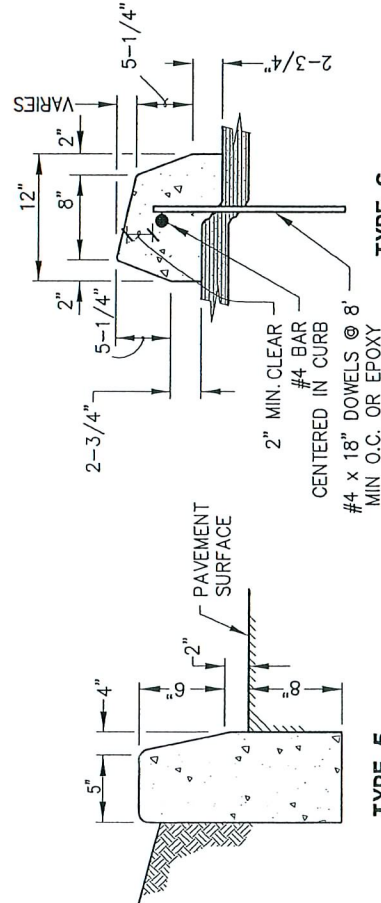


TYPE 1A CURB & GUTTER WITH ATTACHED SIDEWALK



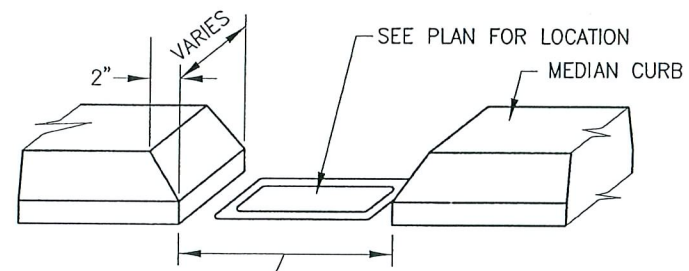
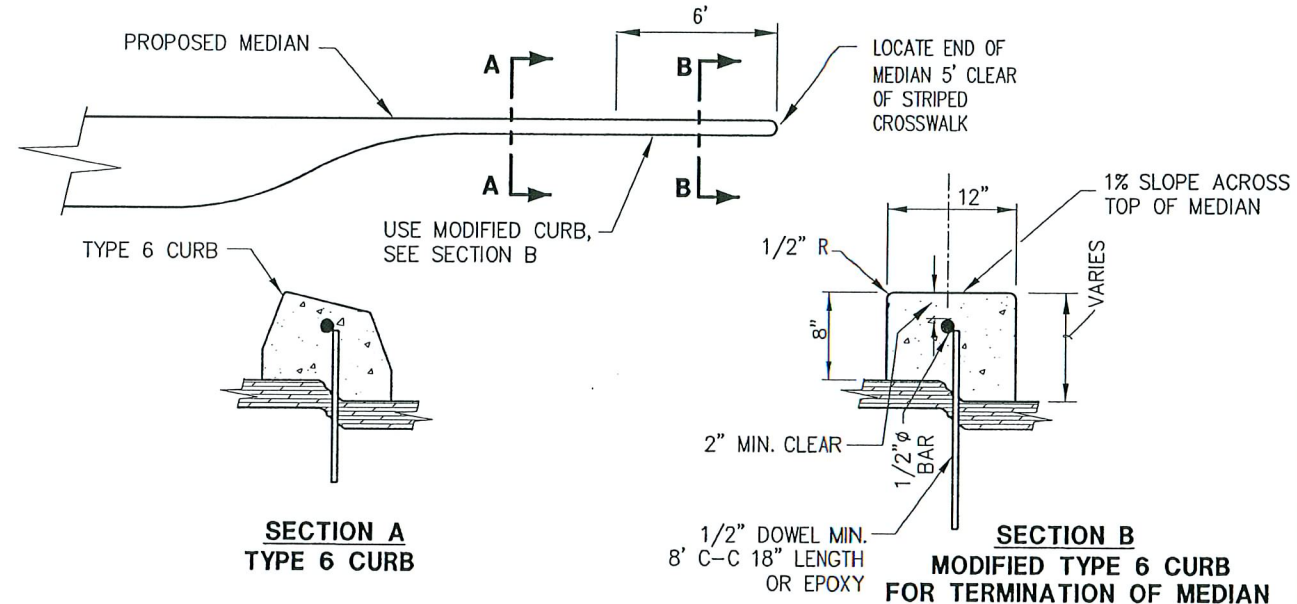
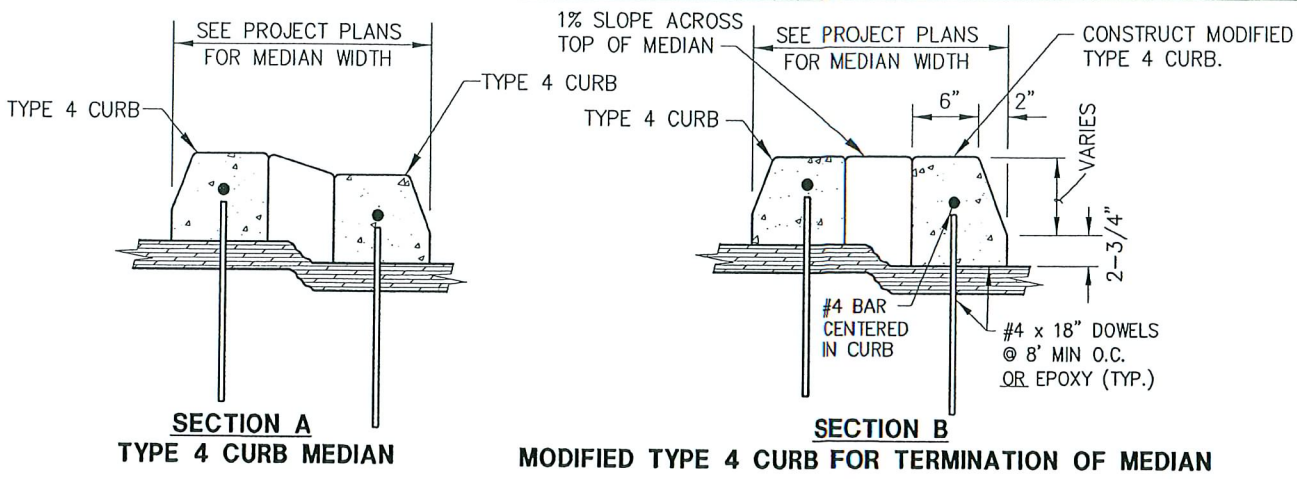
TYPE 2

TYPE 2 REINFORCED



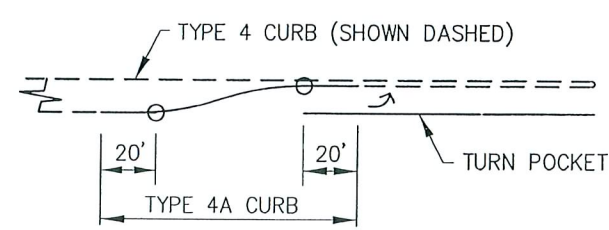
TYPE 5

TYPE 6



MEDIAN OPENING, SEE TABLE FOR TYPE AND WIDTH.

OPENING IN MEDIAN



PLAN FOR TYPICAL PLACEMENT OF TYPE 4A CURB

OPENING TYPE	OPENING WIDTH
DRAINAGE	1'-0"
PULL BOX - #5(T)	3'-0"
PULL BOX - #6(T)	3'-6"

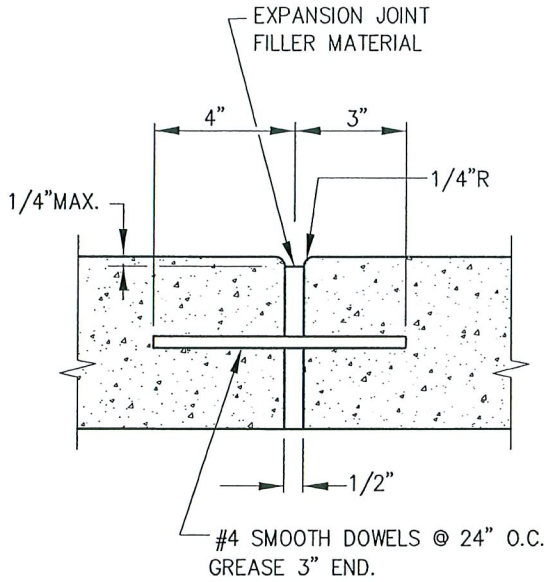
[Signature]

CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

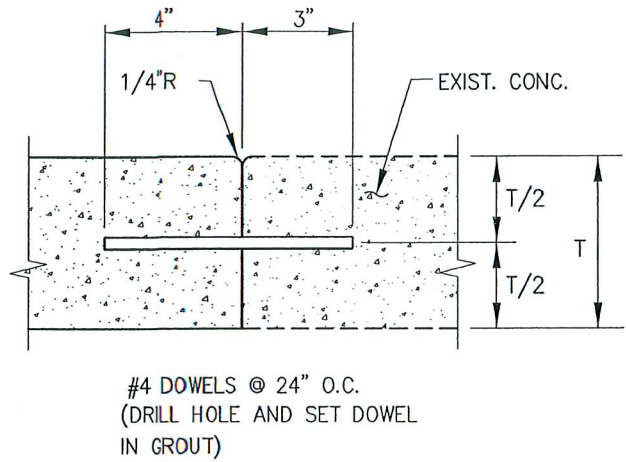
MEDIAN DETAILS

SCALE: NONE
DATE: 01/26/09
DRAWN BY: B.R & N.S.



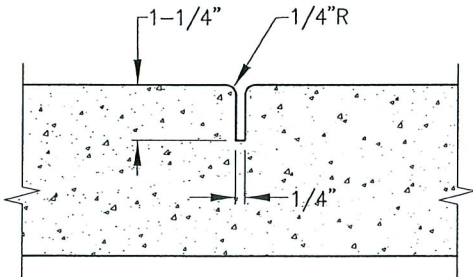
EXPANSION JOINT

USE AT 60' ON CENTER IN SIDEWALK CURB & GUTTER, MEDIAN CURBS, & MEDIAN FLATWORK. ALSO USE AT MAJOR CORNER RETURNS, SIDES OF RAMPS, DRIVEWAYS & LOCATIONS SHOWN ON PLANS & AS SPECIFIED IN SPECIFICATIONS.

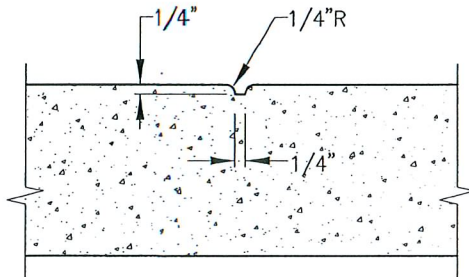


SIDEWALK CONTACT JOINT

USE WHERE NEW CONSTRUCTION OF SIDEWALK, RAMP AND/OR CURB & GUTTER ABUTTS EXISTING IMPROVEMENTS.



WEAKENED PLANE JOINT



SCORE MARK

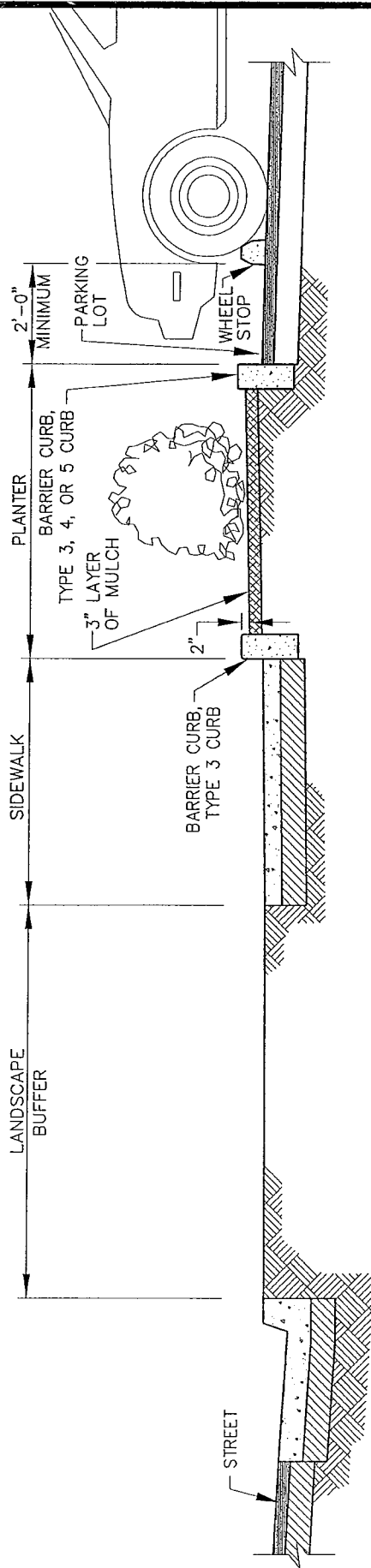

 CHIEF, DEPT. OF TRANSPORTATION

COUNTY OF SACRAMENTO
 MUNICIPAL SERVICES AGENCY

**CONCRETE
 JOINT DETAILS**

SCALE: NONE
 DATE: 07/18/08
 DRAWN BY: TRU P.

4-32



NOTES:

1. USE BARRIER CURB ADJACENT TO SIDEWALK ON ALL ARTERIAL AND THOROUGHFARE STREETS AND ALONG ALL COMMERCIAL DEVELOPMENTS.
2. SEE SECTION 4-21 OF COUNTY IMPROVEMENT STANDARDS FOR REQUIREMENTS.
3. TYPE 3 CURB AT THE BACK OF SIDEWALK MAY BE OMITTED IF LAWN IS PLANTED TO THE BACK OF SIDEWALK.
4. 24" ROOT BARRIERS ARE REQUIRED ON ALL SIDES OF LANDSCAPED BUFFER AREAS AND ALONG BACK OF SIDEWALK IF TREE IS WITHIN 5' (NOT SHOWN).

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

BARRIER CURB DETAIL

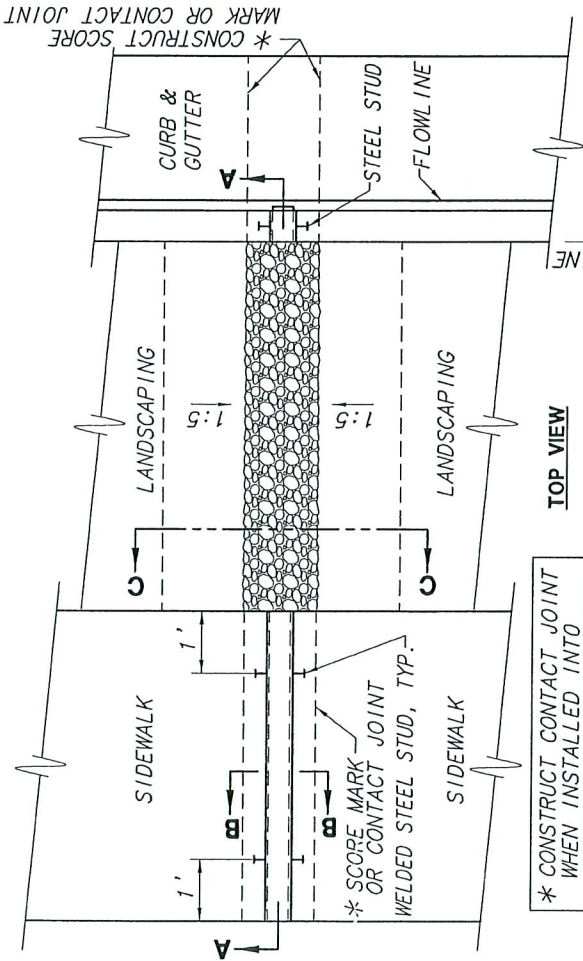
SCALE: NONE
DATE: 01/21/09
DRAWN BY: TRU P. & B.R.

4-33

CHIEF, DEPT. OF TRANSPORTATION

NOTE:

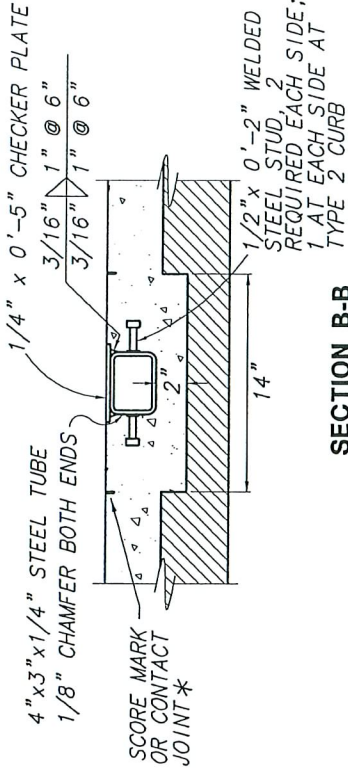
UTILIZE MIN. G-90 GALVANIZED ELEMENTS
GALVANIZE WELDS AFTER FABRICATION



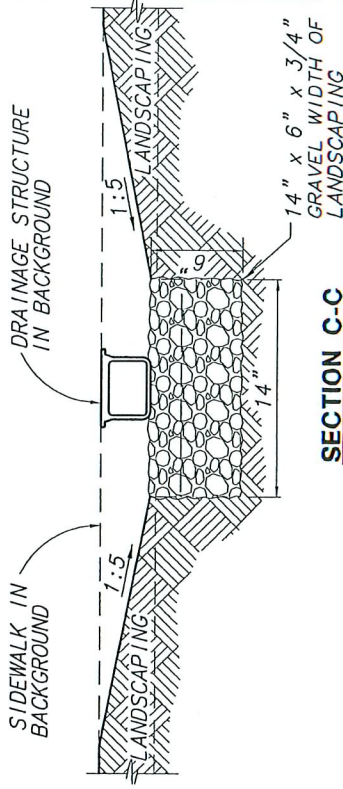
* CONSTRUCT CONTACT JOINT WHEN INSTALLED INTO EXISTING CURB & GUTTER PER STD. DWG. 4-32

TOP VIEW

TOP OF DRAIN TUBE TO BE FLUSH WITH SIDEWALK AND TYPE 2 CURB



SECTION B-B



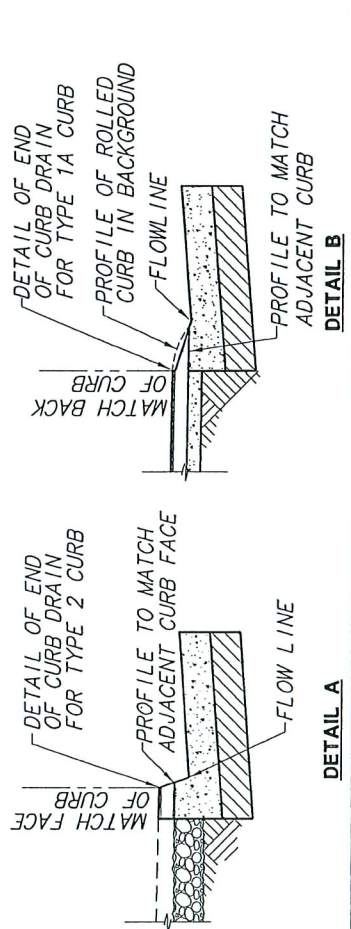
SECTION C-C

[Handwritten Signature]

CHIEF, DEPT. OF TRANSPORTATION

COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY

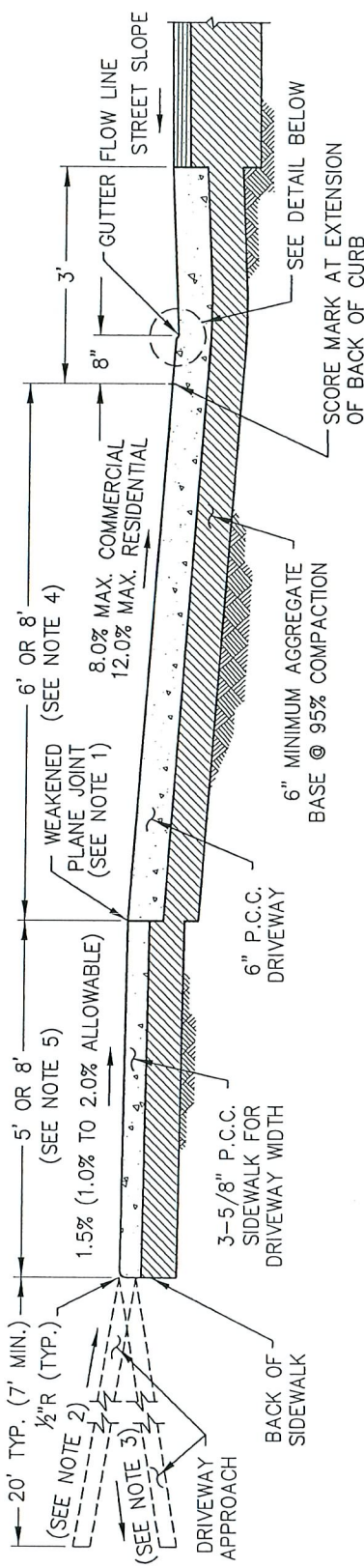
**UNDER
SIDEWALK DRAIN**



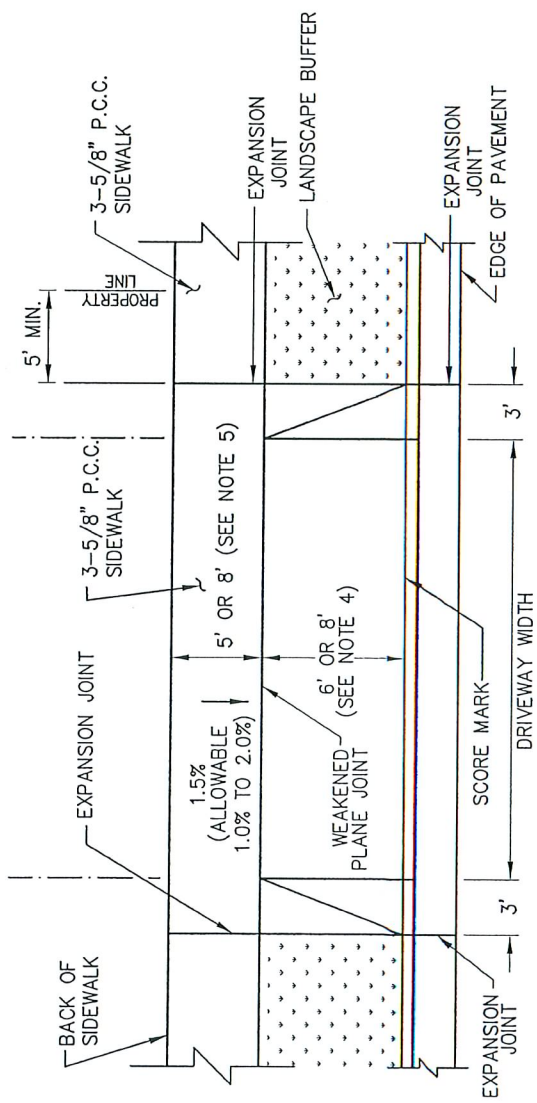
DETAIL A

DETAIL B

SCALE: NONE
DATE: 08/05/08
DRAWN BY: R. GOODRICH



TYPICAL DRIVEWAY SECTION



[Signature]

CHIEF, DEPT. OF TRANSPORTATION

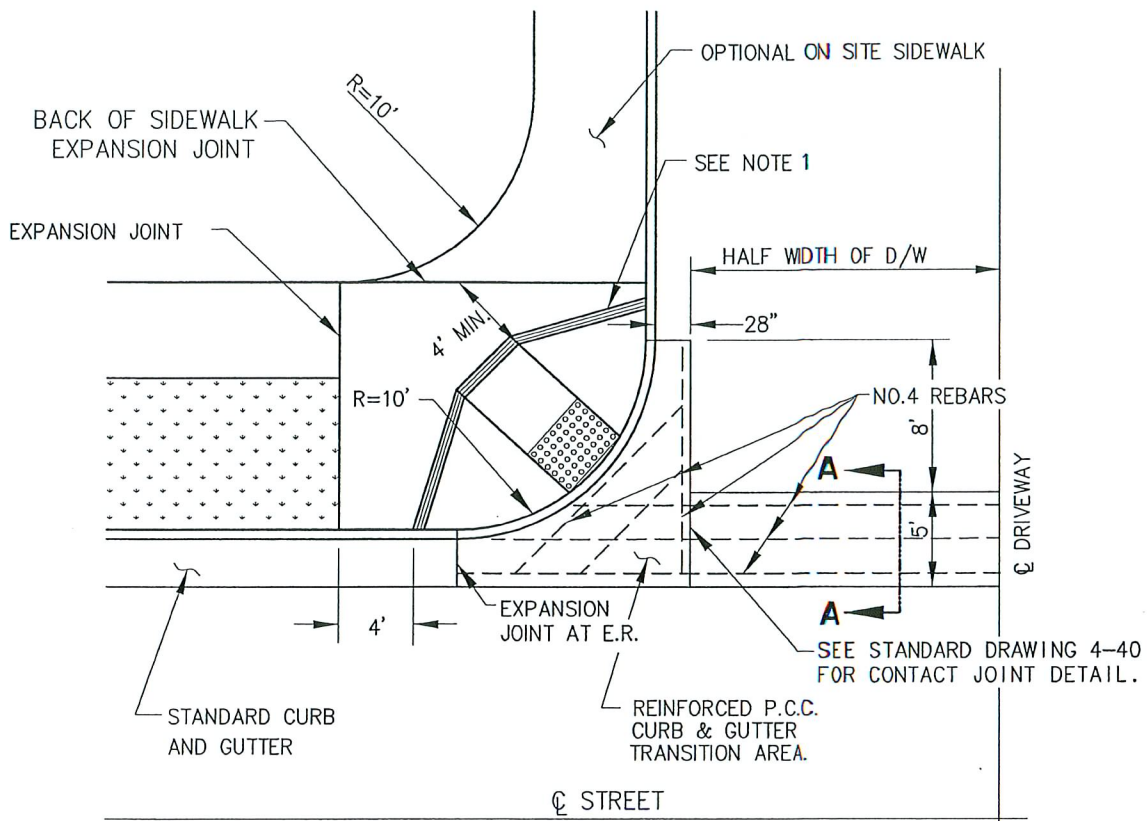
NOTES:

1. FRONT OF WALK SHALL BE A MINIMUM OF SIX INCHES ABOVE GUTTER FLOW LINE.
2. DRIVEWAY APPROACH SLOPES: 5% MAXIMUM COMMERCIAL & LEVEE AND 12% MAXIMUM RESIDENTIAL SLOPE.
3. DRIVEWAY APPROACH SLOPES: -5% MAXIMUM COMMERCIAL & LEVEE AND -8% MAXIMUM RESIDENTIAL SLOPE.
4. SEE TYPICAL SECTION STANDARD PLANS 4-1 TO 4-3 FOR STANDARD WIDTH.
5. SIDEWALK STANDARD WIDTH IS 5'; EXCEPT SIDEWALK WIDTH SHALL BE 8' AT SCHOOLS, HOSPITALS, AND IN PEDESTRIAN DISTRICTS.

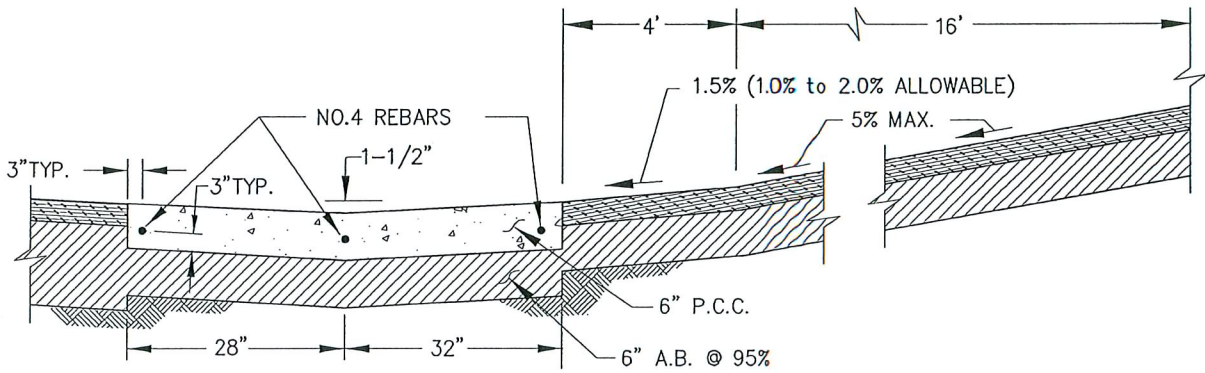
**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**TYPE A
DRIVEWAY**

SCALE: NONE
DATE: 01/21/09
DRAWN BY: B.R. & TRU P.



PLAN VIEW



SECTION A-A

NOTES:

1. FOR DETAILS OF PLAZA RAMP SEE DRAWING 4-50.

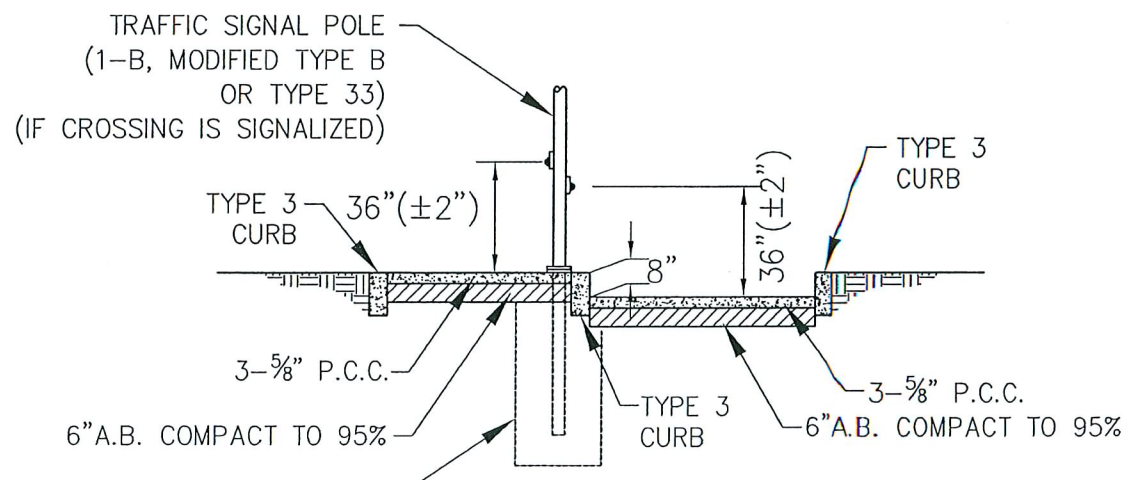
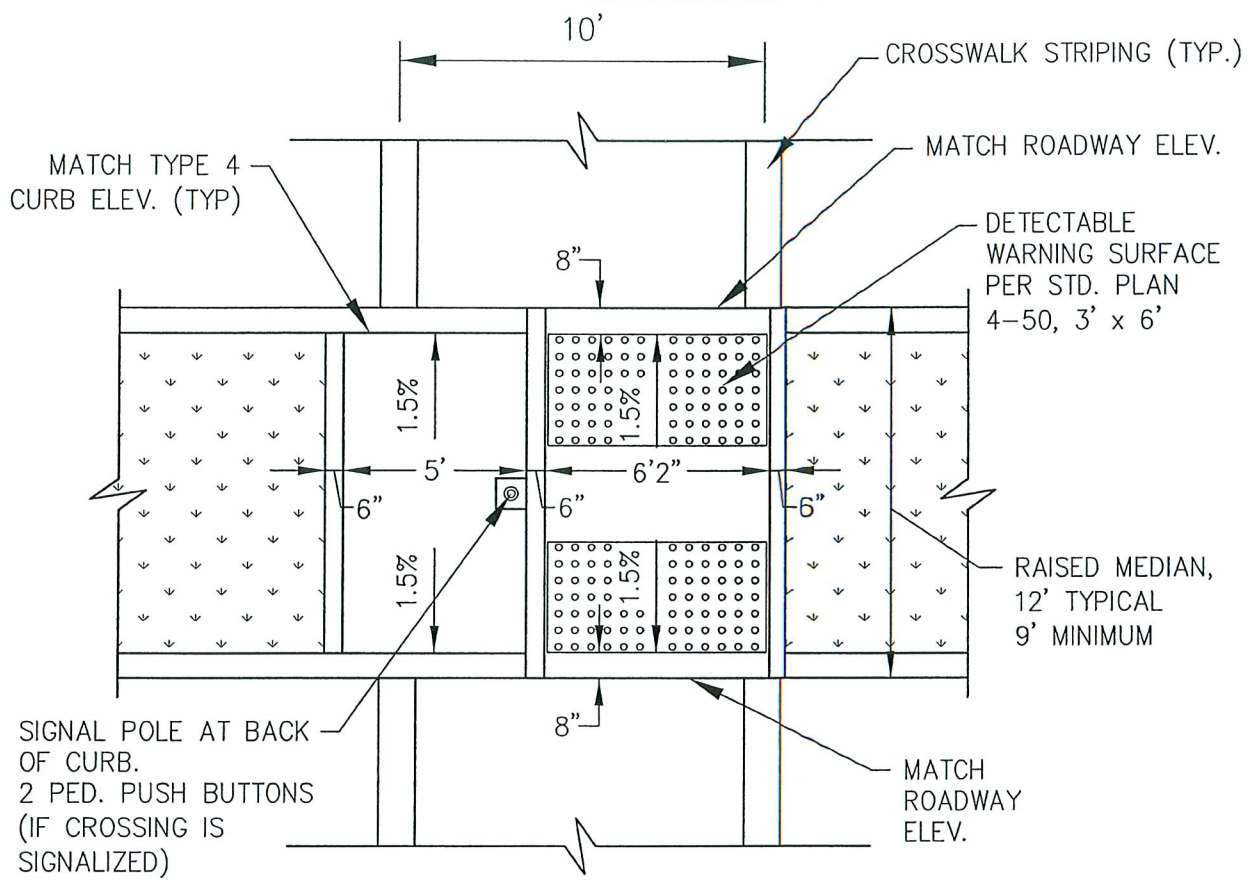
[Signature]
 CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
 MUNICIPAL SERVICES AGENCY**

TYPE B DRIVEWAY

SCALE: NONE
 DATE: 08/06/08
 DRAWN BY: TRU P.

4-36

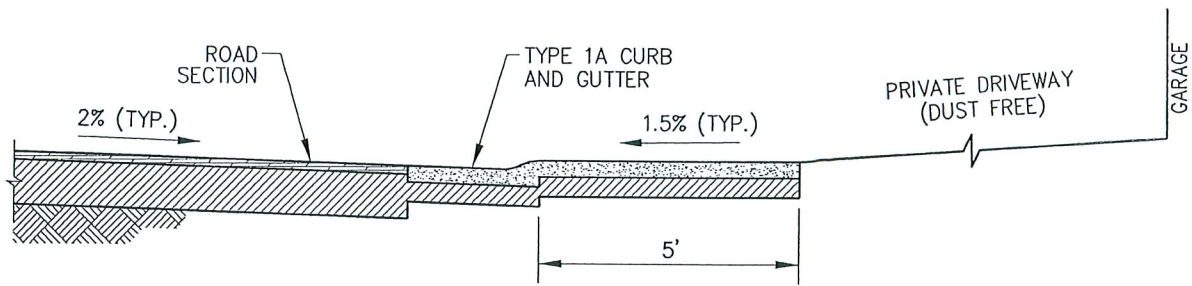


SECTION VIEW

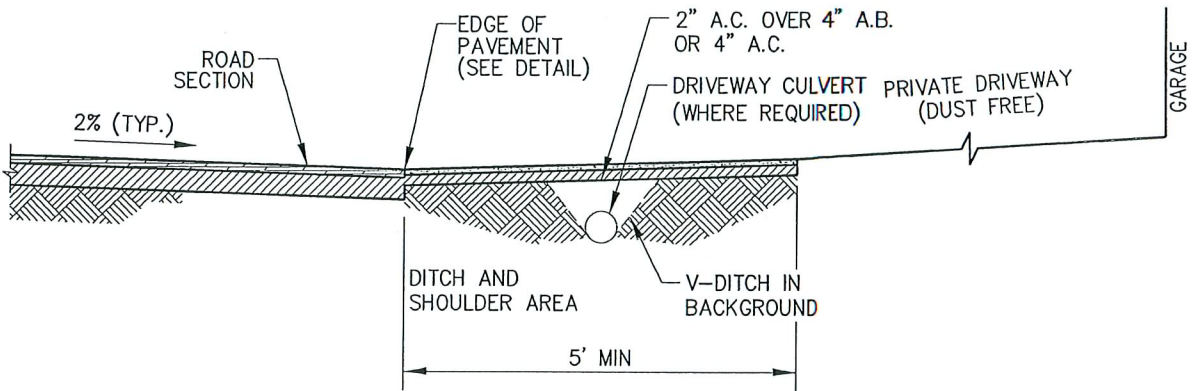
POLE FOUNDATION PER CALTRANS STANDARD (IF CROSSING IS SIGNALIZED)

[Signature]
 CHIEF, DEPT. OF TRANSPORTATION

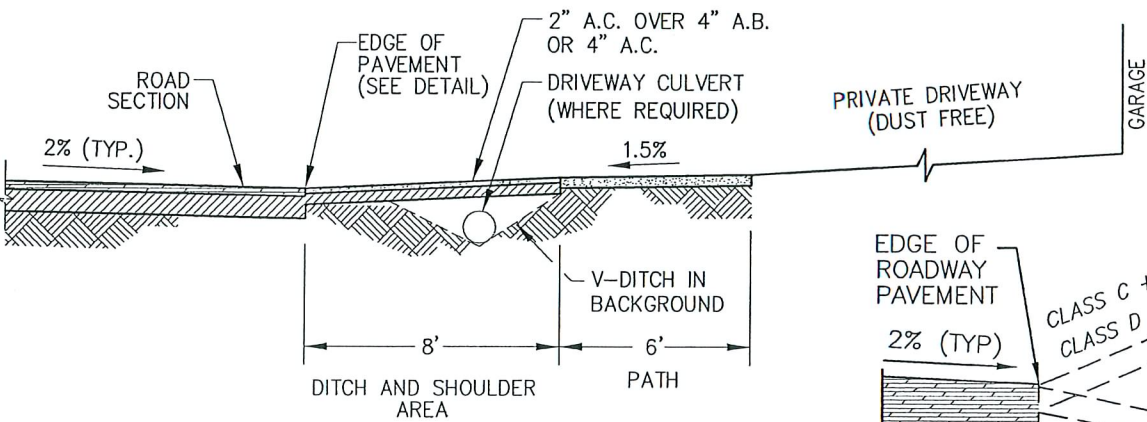
COUNTY OF SACRAMENTO MUNICIPAL SERVICES AGENCY	
PEDESTRIAN REFUGE AREA	
SCALE: NONE DATE: 07/15/09 DRAWN BY: GODO C.	4-37



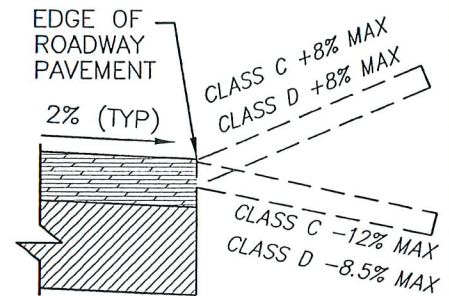
CLASS A



CLASS C



CLASS D



EDGE OF PAVEMENT DETAIL

NOTES:

1. SEE SACRAMENTO COUNTY IMPROVEMENT STANDARDS SECTION 4-11 FOR DRIVEWAY REQUIREMENTS.
2. NO CONCRETE DRIVEWAYS WITHIN 15' OF EDGE OF PAVEMENT WITHOUT PRIOR WRITTEN APPROVAL BY THE DIRECTOR OF COUNTY ENGINEERING.
3. MAXIMUM ALGEBRAIC DIFFERENCE OF A GRADE CHANGE BETWEEN ANY INTERSECTING ROADWAY AND A DRIVEWAY AND OR ANY PORTION OF PUBLIC RIGHT OF WAY AND A DRIVEWAY SHALL NOT BE GREATER THAN 10% (SEE EDGE OF PAVEMENT DETAIL).

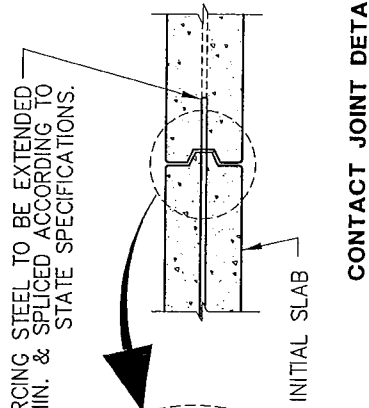
CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

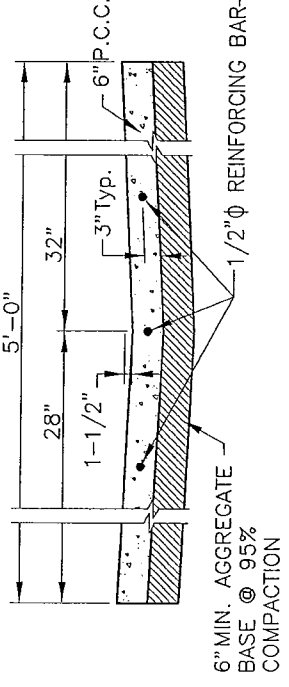
**RESIDENTIAL DRIVEWAY
SECTIONS: CLASS A,
CLASS C AND D STREETS**

SCALE: NONE
DATE: 06/11/2009
DRAWN BY: TRU P.

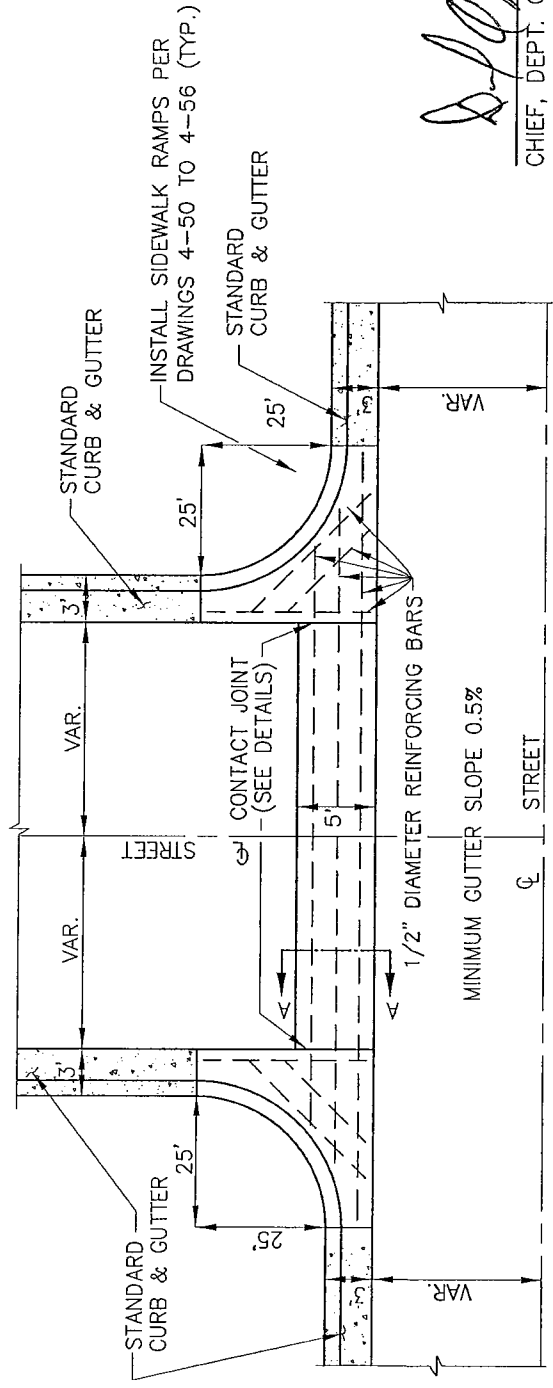
4-38



CONTACT JOINT DETAIL



SECTION A-A



PLAN

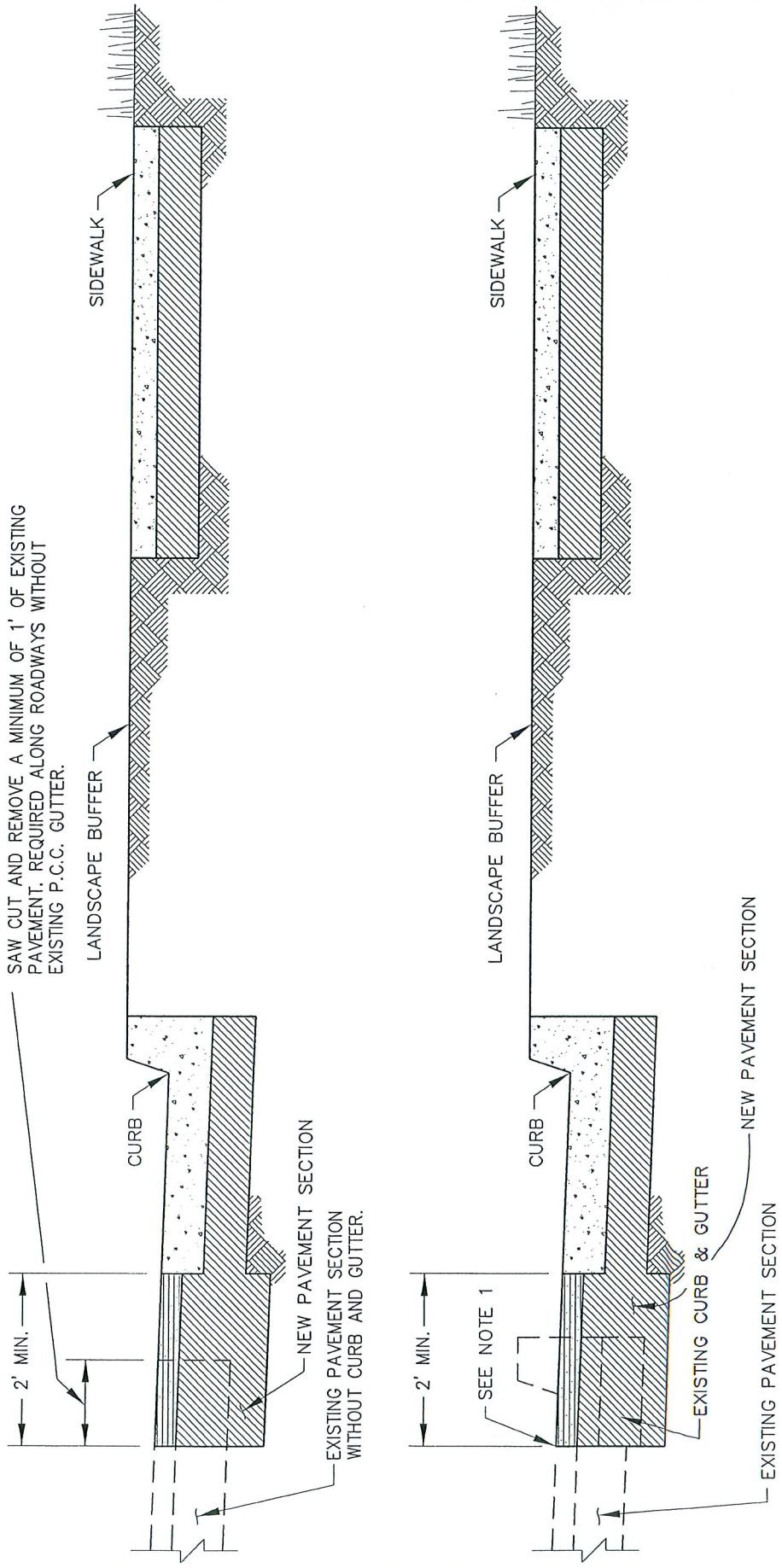
[Signature]
 CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
 MUNICIPAL SERVICES AGENCY**

CROSS GUTTER

SCALE: NONE
 DATE: 09/02/2008
 DRAWN BY: TRU P. **4-40**

NOTE:
 CROSS GUTTERS ARE NOT ALLOWED WITHIN
 A SIGNALIZED INTERSECTION.

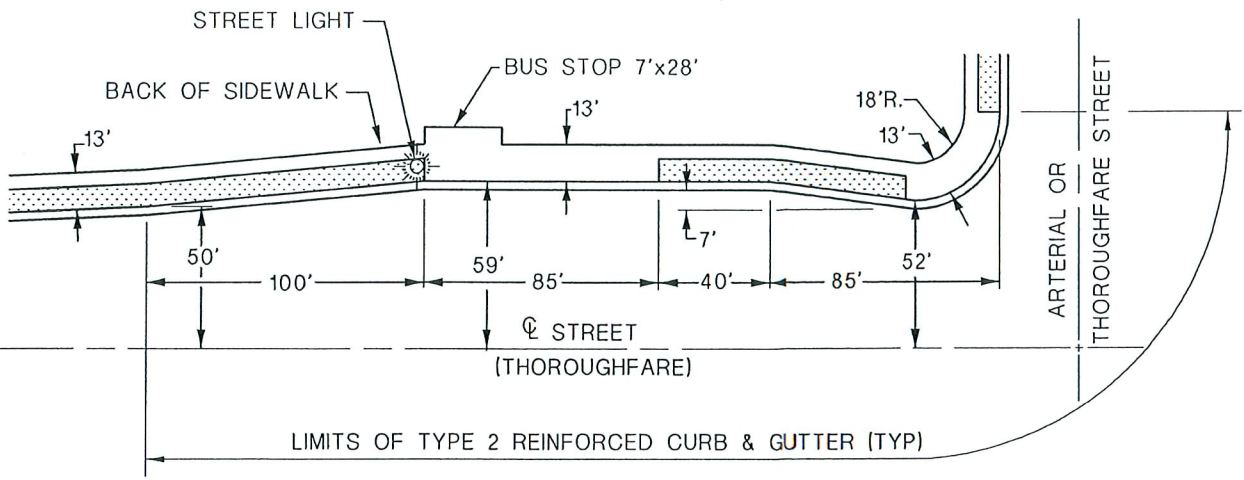


COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY

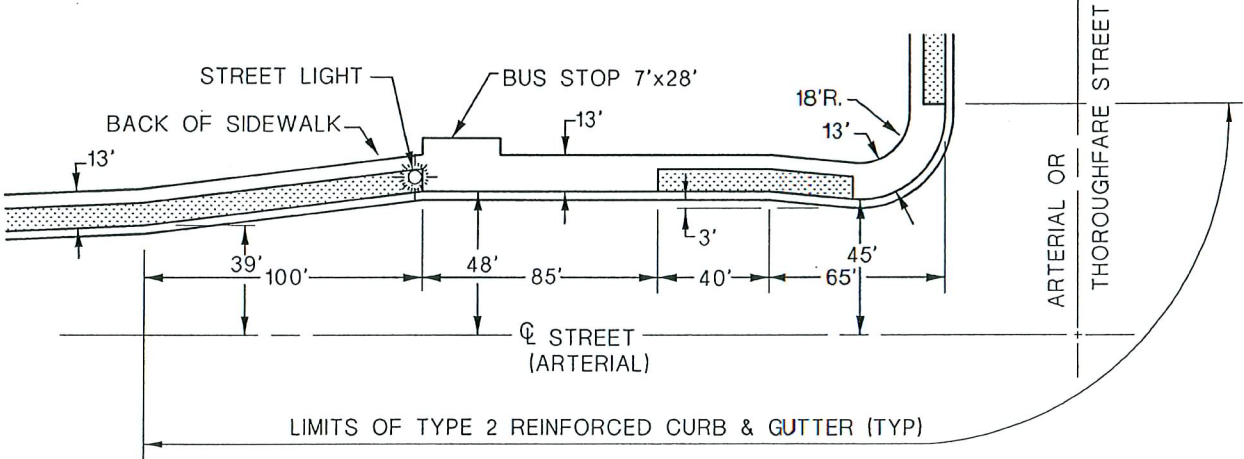
PAVEMENT WIDENING
DETAIL

SCALE: NONE
DATE: 01/21/09
DRAWN BY: TRU P. & B.R.

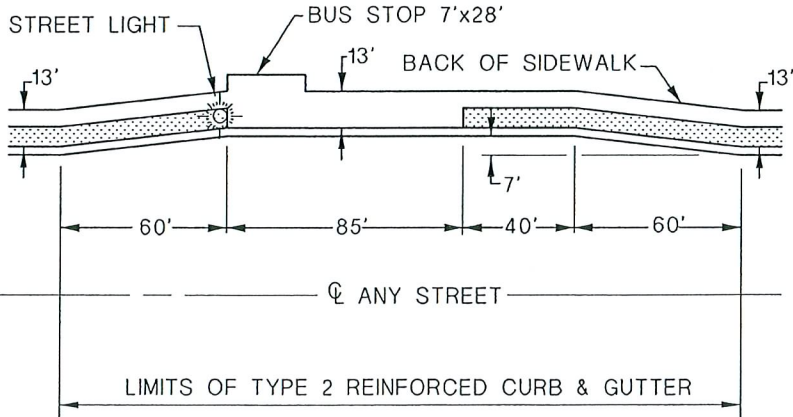
CHIEF, DEPT. OF TRANSPORTATION



BUS TURNOUT ON THOROUGHFARE STREETS



BUS TURNOUT ON ARTERIAL STREETS



TYPICAL MID-BLOCK BUS TURNOUT

[Signature]

CHIEF, DEPT. OF TRANSPORTATION

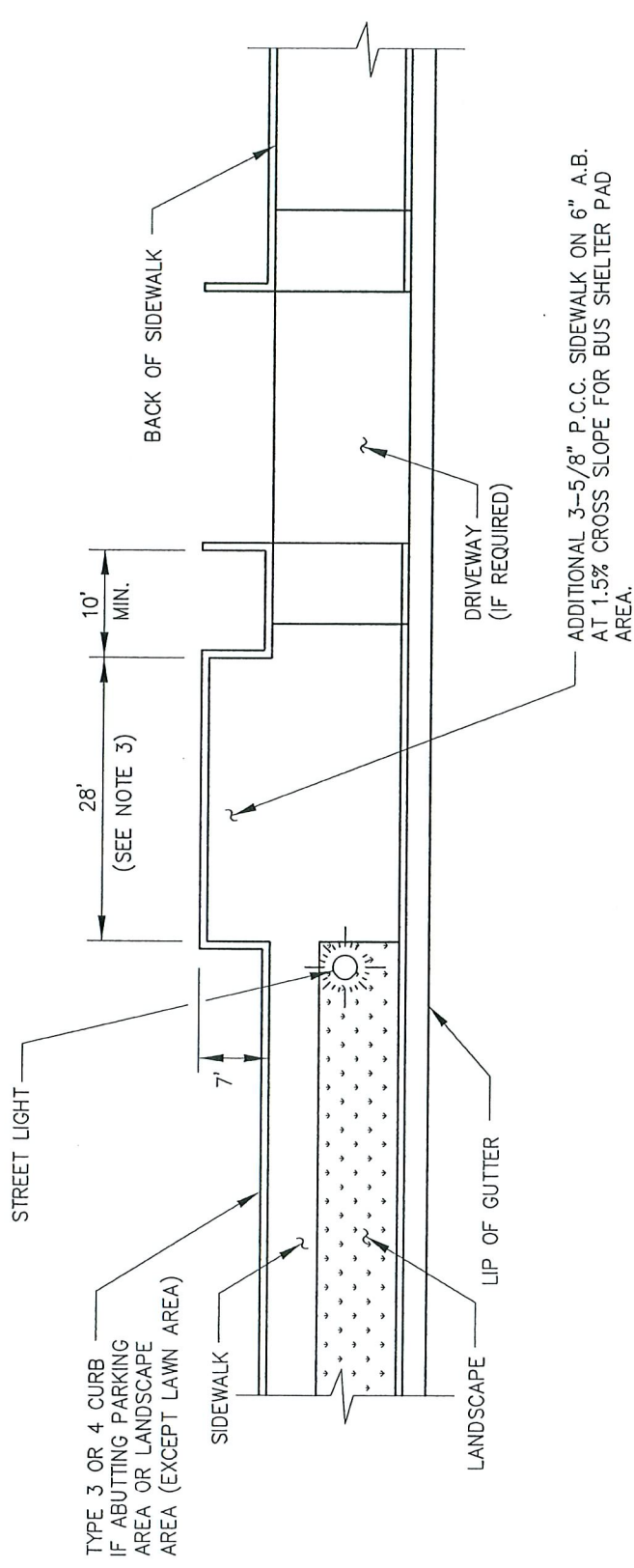
**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

BUS TURNOUTS

- NOTES:
- SEE DRAWINGS 4-6 THRU 4-8, 4-10, 4-12 THRU 4-14 FOR ADDITIONAL BUS STOP GEOMETRY.
 - USE SIMILAR LIMITS FOR REINFORCED TYPE 2 CURB ALONG BUS STOPS ON ARTERIAL AND THOROUGHFARE STREETS THAT INTERSECT WITH COLLECTOR STREETS.

SCALE: NONE
DATE: 07/15/09
DRAWN BY: TRU P.

4-43



NOTES:

1. FOR BUS STOPS WITHOUT TURNOUTS, TYPE 2 REINFORCED CURB & GUTTER SECTION SHALL BE USED FOR 100' EACH SIDE OF BUS STOP SIGN.
2. SEE STANDARD DRAWING 4-43 FOR APPLICATIONS OF TYPE 2 REINFORCED CURB & GUTTER AT BUS STOP TURNOUTS.
3. PAD LENGTH MAY BE 14' AT MINOR STREET INTERSECTIONS & MID BLOCK LOCATIONS.

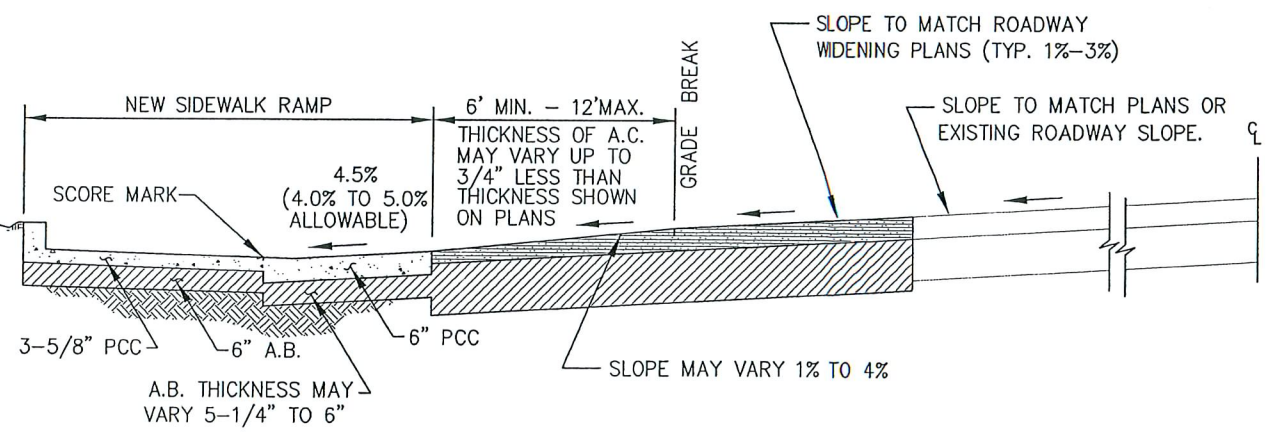
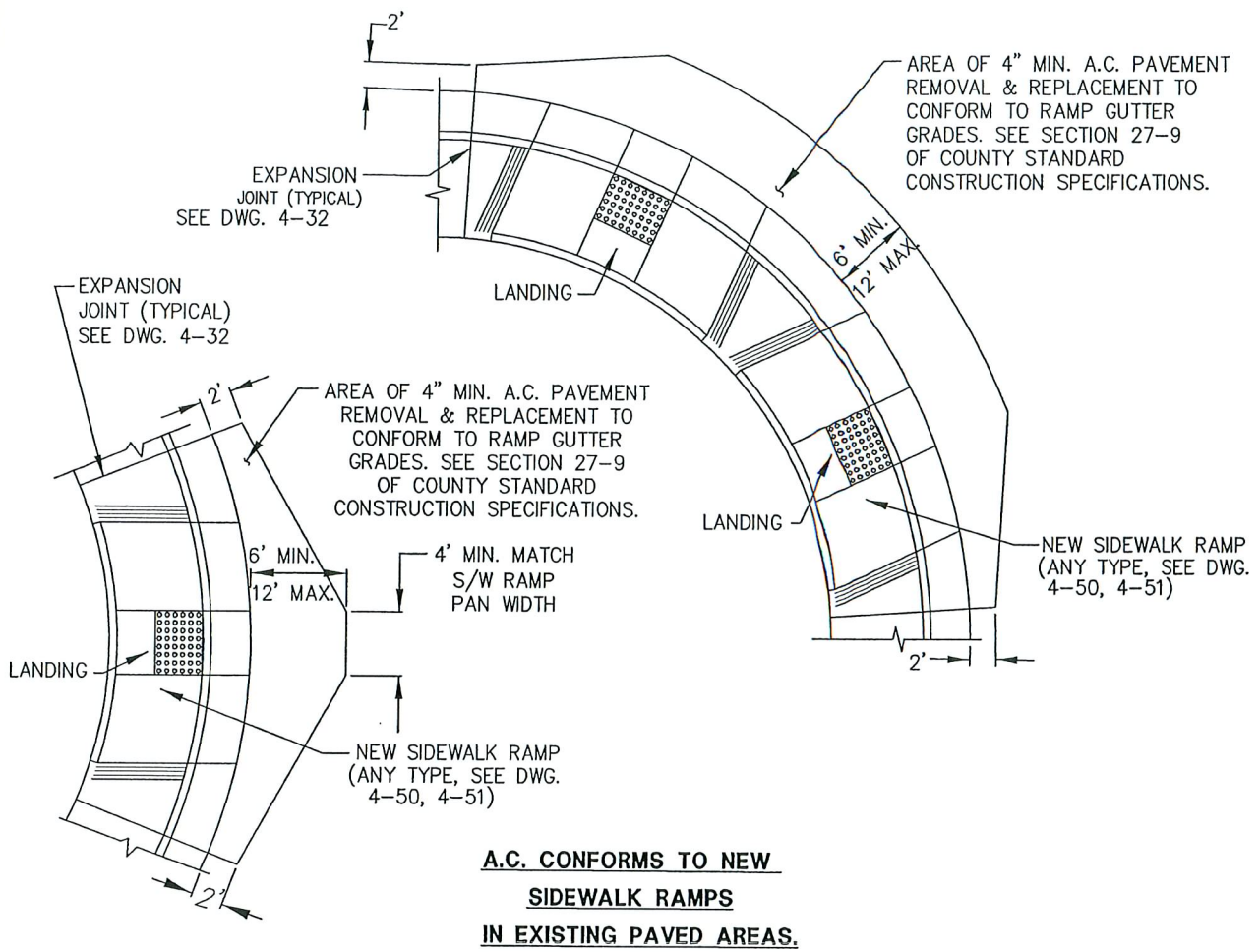
**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

BUS STOP DETAILS

SCALE: NONE
DATE: 06/08/09
DRAWN BY: TRU P.

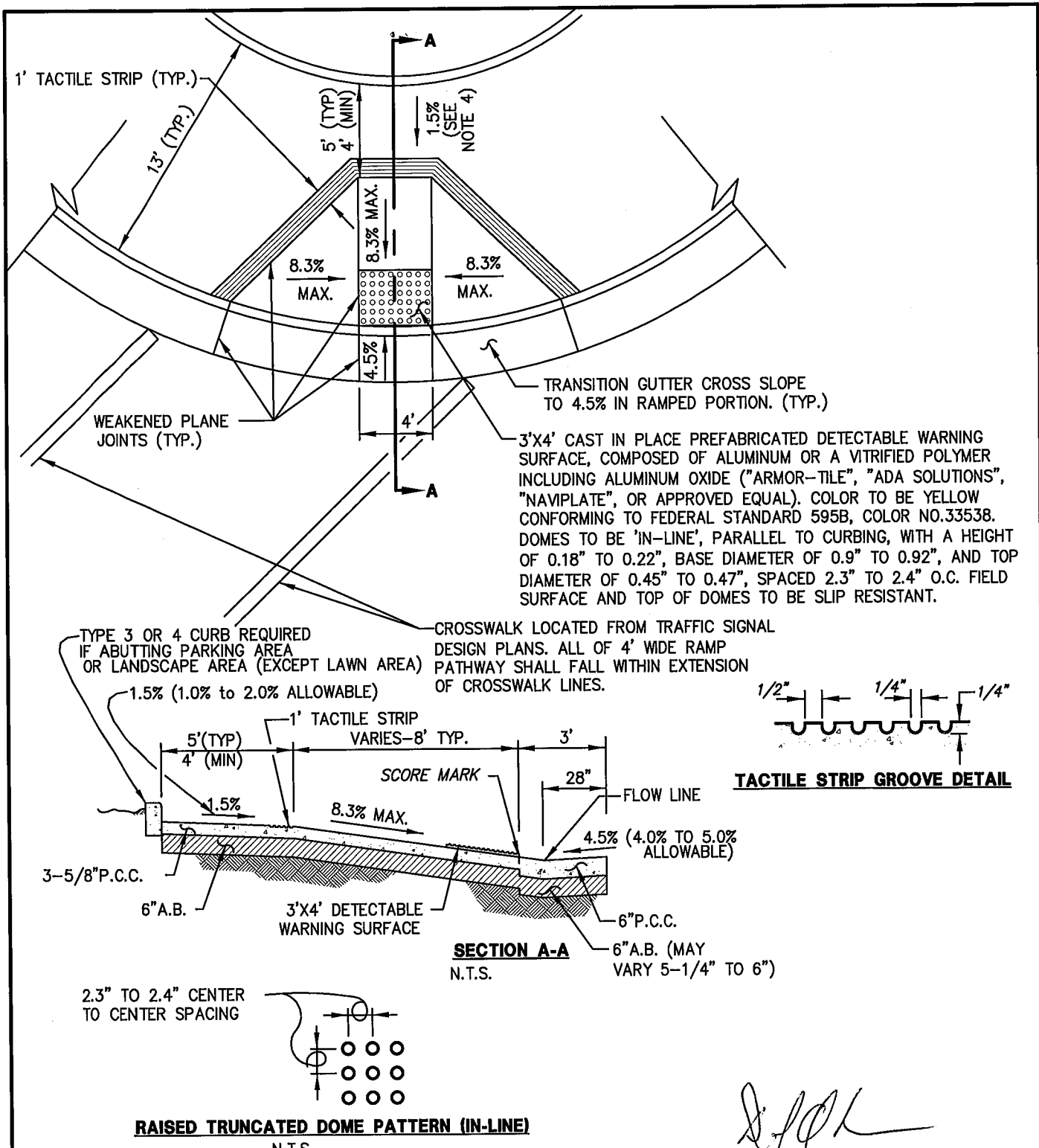
4-44

[Signature]
CHIEF, DEPT. OF TRANSPORTATION



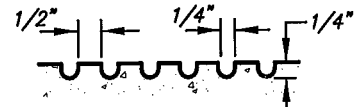
[Signature]
 CHIEF, DEPT. OF TRANSPORTATION

COUNTY OF SACRAMENTO MUNICIPAL SERVICES AGENCY	
SIDEWALK RAMP INSTALLATION DETAIL - AC CONFORMS IN EXISTING PAVEMENT	
SCALE: NONE	4-49
DATE: 01/09/09	
DRAWN BY: TRU P. & B.R.	



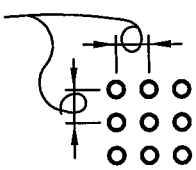
TYPE 3 OR 4 CURB REQUIRED IF ABUTTING PARKING AREA OR LANDSCAPE AREA (EXCEPT LAWN AREA)

CROSSWALK LOCATED FROM TRAFFIC SIGNAL DESIGN PLANS. ALL OF 4' WIDE RAMP PATHWAY SHALL FALL WITHIN EXTENSION OF CROSSWALK LINES.



TACTILE STRIP GROOVE DETAIL

2.3" TO 2.4" CENTER TO CENTER SPACING



RAISED TRUNCATED DOME PATTERN (IN-LINE)

N.T.S.

[Signature]
CHIEF, DEPT. OF TRANSPORTATION

NOTES:

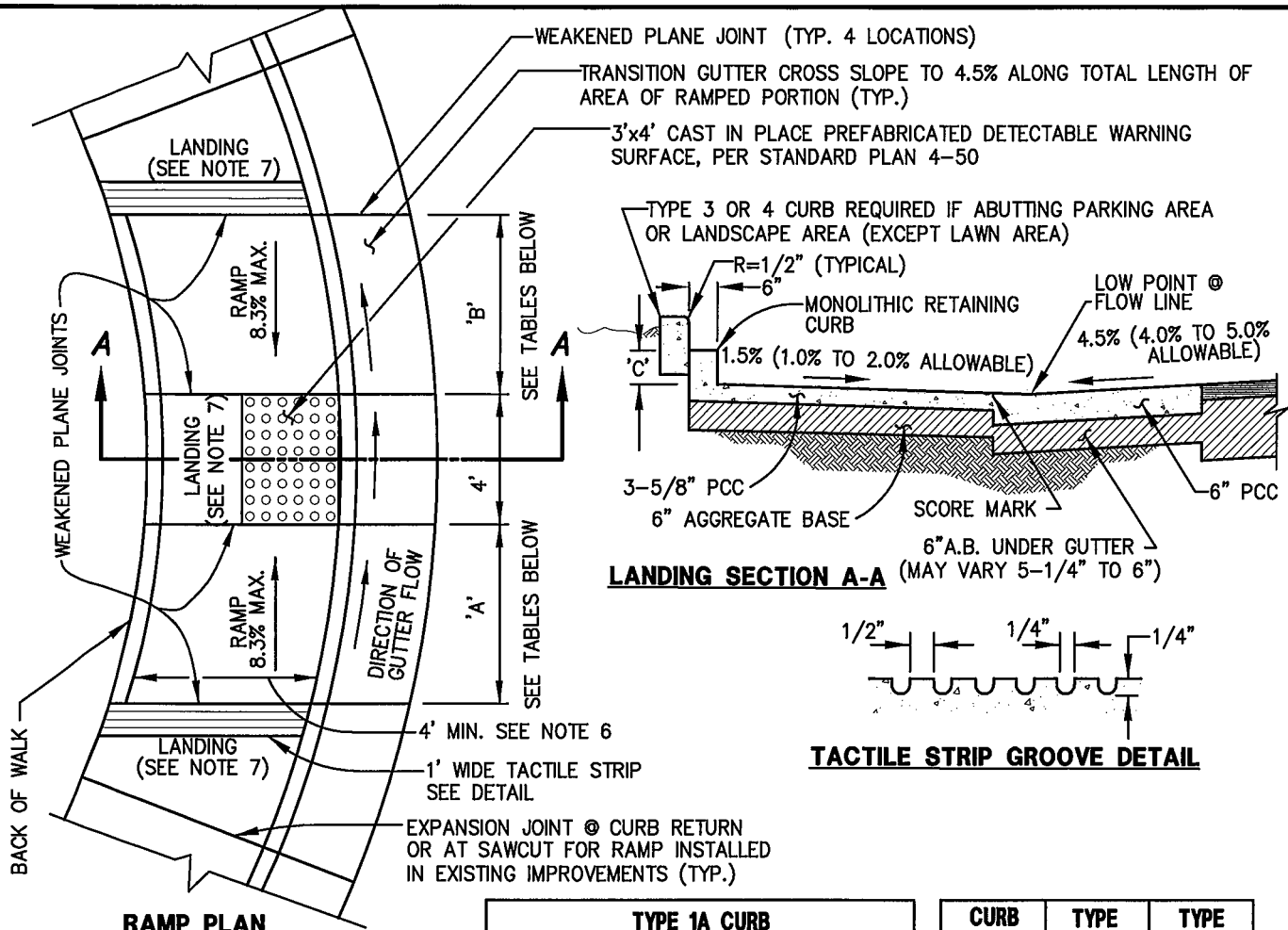
- SEE DWG. 4-51 TO 4-56 FOR RAMP PLACEMENT REQUIREMENTS.
- NO PULL BOX, UTILITY VAULT, UTILITY POLE, MANHOLE, TRAFFIC SIGNAL POLE, OR SIMILAR APPURTENANCE SHALL BE LOCATED WITHIN SIDEWALK RAMP AREA.
- IT IS DESIRABLE TO LOCATE ALL DRAIN INLETS OUT OF SIDEWALK RAMP AREA. USE OF DRAIN INLET WITHIN RAMP AREA REQUIRES SPECIAL DESIGN OF INLETS.
- SLOPE OF LANDING AT TOP OF RAMP TO BE 1.5% (1.0% MIN, 2.0% MAX) TOWARDS RAMP, AND 2.0% MAX IN ALL OTHER DIRECTIONS.

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**SIDEWALK RAMP DETAILS
PLAZA STYLE**

SCALE: NONE
DATE: 11/20/2015
DRAWN BY: DANIEL L.

4-50



TYPE 2 CURB			
SLOPE OF GUTTER		APPROX. RAMP LENGTH	
FROM (%)	TO (%)	A	B
0.5%	1.0%	7'-6"	6'-0"
1.0%	1.5%	8'-0"	6'-0"
1.5%	1.8%	8'-6"	5'-6"
1.8%	2.1%	9'-0"	5'-6"
2.1%	2.7%	10'-0"	5'-0"
2.7%	3.2%	11'-0"	5'-0"
3.2%	3.7%	12'-6"	4'-6"
3.7%	4.1%	14'-0"	4'-6"
4.1%	4.7%	15'-0"	4'-6"
> 4.7%		SEE NOTE #4	

TYPE 1A CURB			
SLOPE OF GUTTER		APPROX. RAMP LENGTH	
FROM (%)	TO (%)	A	B
0.5%	1.0%	4'-6"	4'-0"
1.0%	1.7%	5'-0"	3'-6"
1.7%	2.2%	5'-6"	3'-6"
2.2%	2.7%	6'-0"	3'-0"
2.7%	3.1%	6'-6"	3'-0"
3.1%	3.4%	7'-0"	3'-0"
3.4%	3.7%	7'-6"	3'-0"
3.7%	3.9%	8'-0"	3'-0"
3.9%	4.3%	9'-0"	3'-0"
4.3%	5.0%	10'-0"	2'-6"
5.0%	6.0%	15'-0"	2'-6"
> 6.0%		SEE NOTE #4	

CURB TYPE	TYPE 1A	TYPE 2
DIM 'C' *	3-5/8"	6"

* OR AS NEEDED TO MATCH EXISTING ON SITE IMPROVEMENTS, 8" MAX.

NOTES:

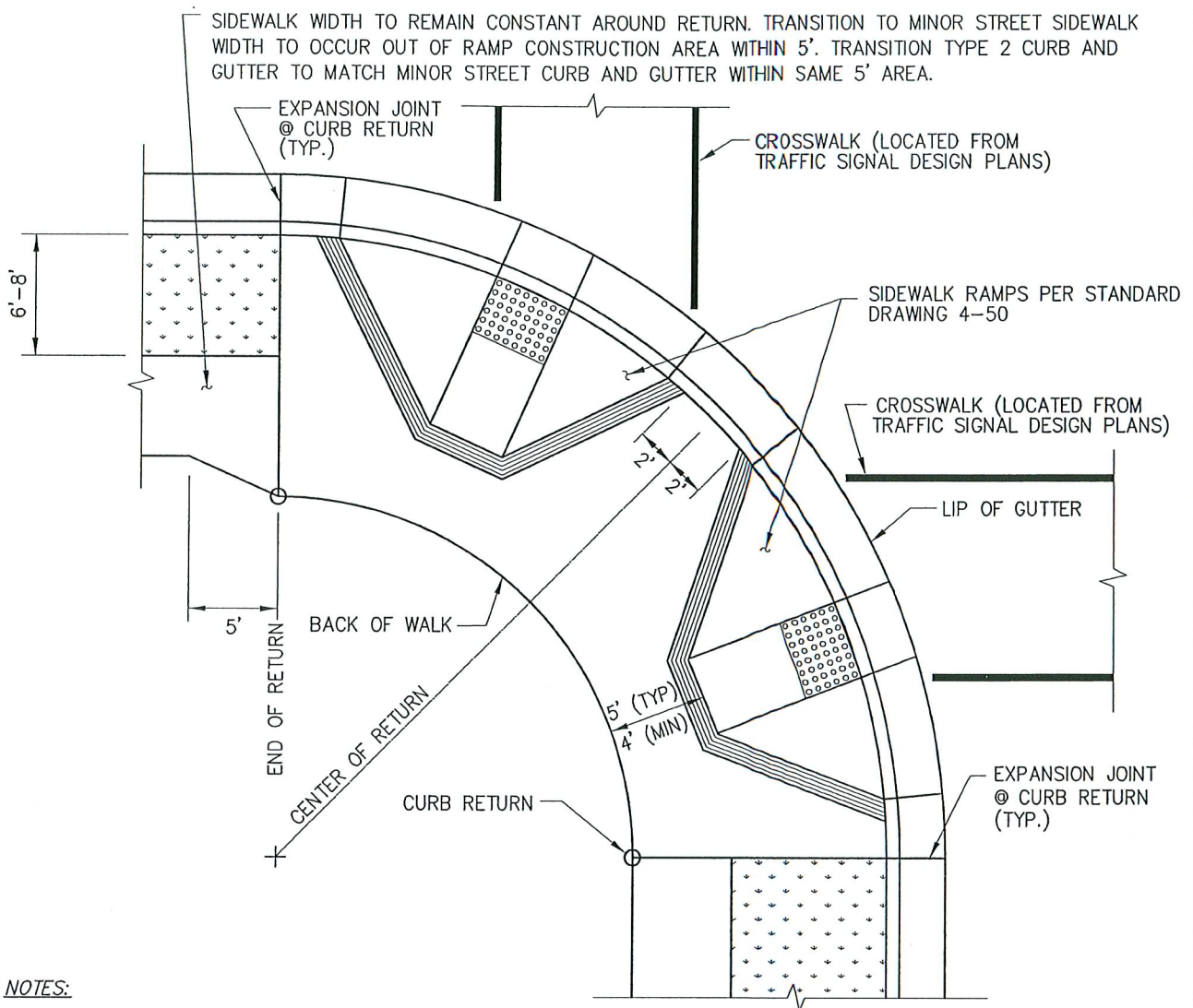
- DIMENSION 'A' IS THE LENGTH OF THE INCLINED PORTION OF THE RAMP THAT SLOPES IN THE SAME DIRECTION AS THE FLOW OF THE GUTTER.
- DIMENSION 'B' IS THE LENGTH OF THE INCLINED PORTION OF THE RAMP THAT SLOPES IN THE OPPOSITE DIRECTION AS THE FLOW OF THE GUTTER.
- RAMPS SHALL HAVE A HEAVY BROOM FINISH TRANSVERSE TO THEIR SLOPE.
- REQUIRES SPECIAL DESIGN APPROVAL BY THE CHIEF OF THE DEPARTMENT OF TRANSPORTATION.
- NO PULL BOX, UTILITY VAULT, UTILITY POLE, TRAFFIC SIGNAL POLE, MANHOLE, OR SIMILAR APPURTENANCE SHALL BE LOCATED WITHIN SIDEWALK RAMP AREA.
- FOR CURB RETURNS WITH 4' SIDEWALK SEE DRAWING 4-54.
- SLOPE OF LANDINGS (AREA AT BACK OF WARNING SURFACE AND 4' EITHER SIDE OF RAMP) TO BE 1.5% (1.0% MIN, 2% MAX) TOWARDS CURB, AND 2.0% MAX IN ALL OTHER DIRECTIONS

[Signature]
CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**SIDEWALK RAMP DETAILS
PARALLEL STYLE**

SCALE: NONE
DATE: 11/2015
DRAWN BY: DANIEL L.



NOTES:

1. AT INTERSECTIONS WITH ARTERIALS AND/OR THOROUGHFARES, THE CORNER RETURNS SHALL HAVE TWO (2) RAMPS AS SHOWN. EXCEPTIONS SEE NOTES 4 & 5.
2. AT INTERSECTIONS WITH NO ARTERIAL OR THOROUGHFARE STREET, SINGLE RAMPS AT THE CENTER OF THE RETURNS MAY BE USED. SEE STANDARD DRAWINGS 4-53, 4-54, 4-56, 4-57.
3. FULL WIDTH OF RAMP SHALL BE LOCATED WITHIN THE EXTENSION OF THE ASSOCIATED CROSSWALK STRIPES, WHERE STRIPED CROSSWALKS EXIST.
4. ON STREETS WITH A CONTINUOUS RAISED MEDIAN ACROSS THE INTERSECTION, A SINGLE SIDEWALK RAMP IS TO BE INSTALLED ON EACH CORNER AT THE CENTER OF RETURN.
5. FOR CORNERS WITH TWO STRIPED CROSSWALKS AND WITH OBSTRUCTIONS THAT PREVENT THE CONSTRUCTION OF TWO STANDARD RAMPS, A SINGLE SIDEWALK RAMP MAY BE INSTALLED CENTERED IN THE TWO CROSSWALKS. THE WIDTH OF RAMP IS TO BE 6'. THE WARNING SURFACE MATERIAL SHALL BE THREE FEET BY SIX FEET. USE OF THIS OPTION REQUIRES PRIOR WRITTEN APPROVAL BY CHIEF OF THE DEPARTMENT OF TRANSPORTATION.


 CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**SIDEWALK RAMP
PLACEMENT
MAJOR STREET INTERSECTION**

SCALE: NONE
 DATE: 04/02/2009
 DRAWN BY: B.R. & TRU P.

4-52

PLAZA CONSTRUCTION NOTE

- GRADE PLAZA AREA BEHIND RAMP AND ASSOCIATED SIDEWALK CONFORMS TO DRAIN. TYPICAL SLOPE IS 1.5% TOWARD STREET. MAXIMUM SLOPE IS 2.0% IN EITHER DIRECTION.

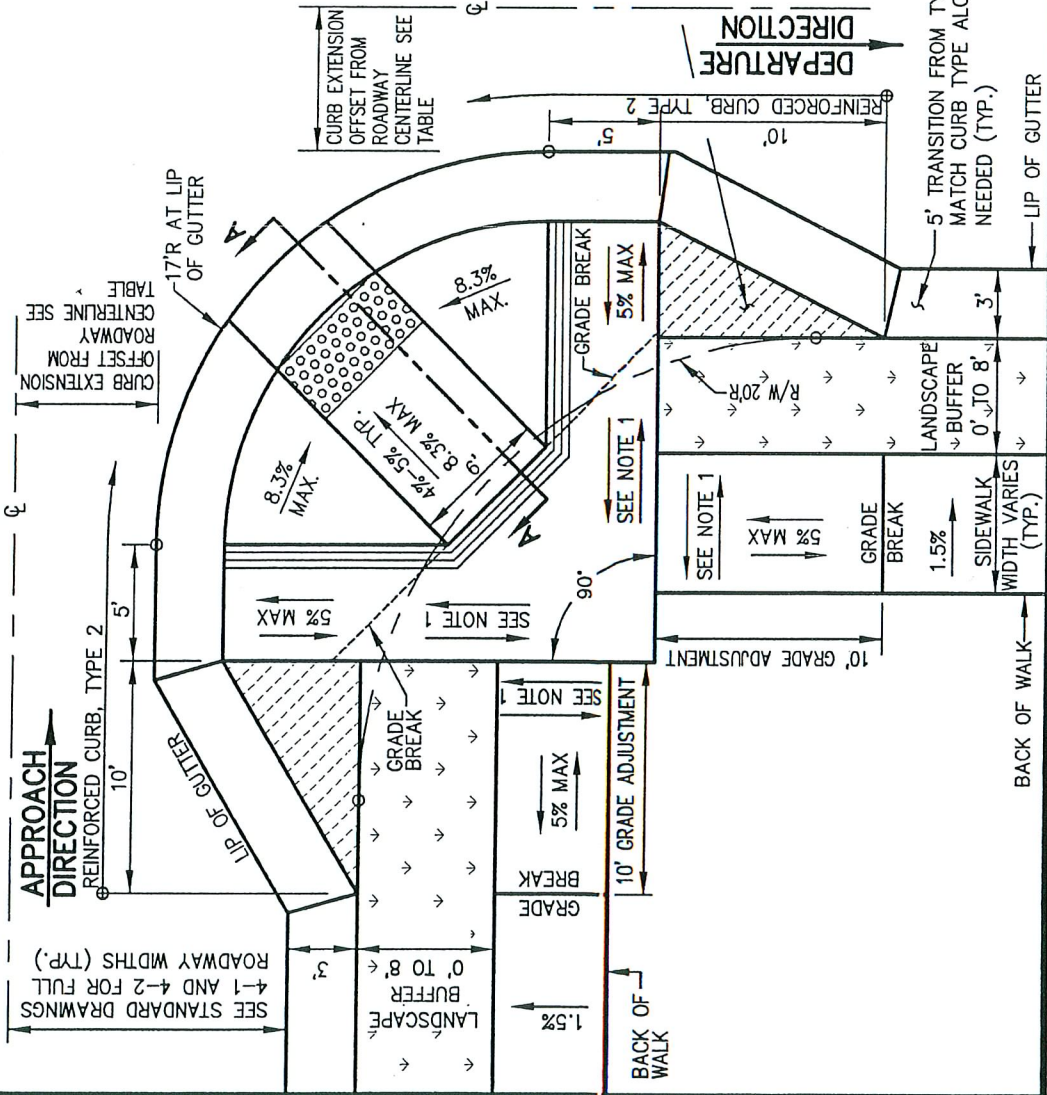
SEE DRAWING 4-49 FOR PAVEMENT TREATMENT

CONSTRUCT CURB EXTENSION AREA AND RAMP PER DRAWING 4-50, AND INCORPORATE DIMENSIONS AND REINFORCEMENT NOTES AS INDICATED ON THIS DRAWING.

REINFORCE CURB PER TYPE 2 REINFORCED CURB NOTATIONS ON DRAWING 4-30. SEE PLAN VIEW THIS SHEET FOR AREA OF REINFORCEMENT.

SECTION 'A-A'

NO SCALE



CURB EXTENSION OFFSETS

STREET DESIGNATION	APPROACH OFFSET	DEPARTURE OFFSET
MINOR RESIDENTIAL	11'	13'
PRIMARY RESIDENTIAL COLLECTOR	15'	15'
MAJOR COLLECTOR	22'	22'

[Signature]

CHIEF, DEPT. OF TRANSPORTATION

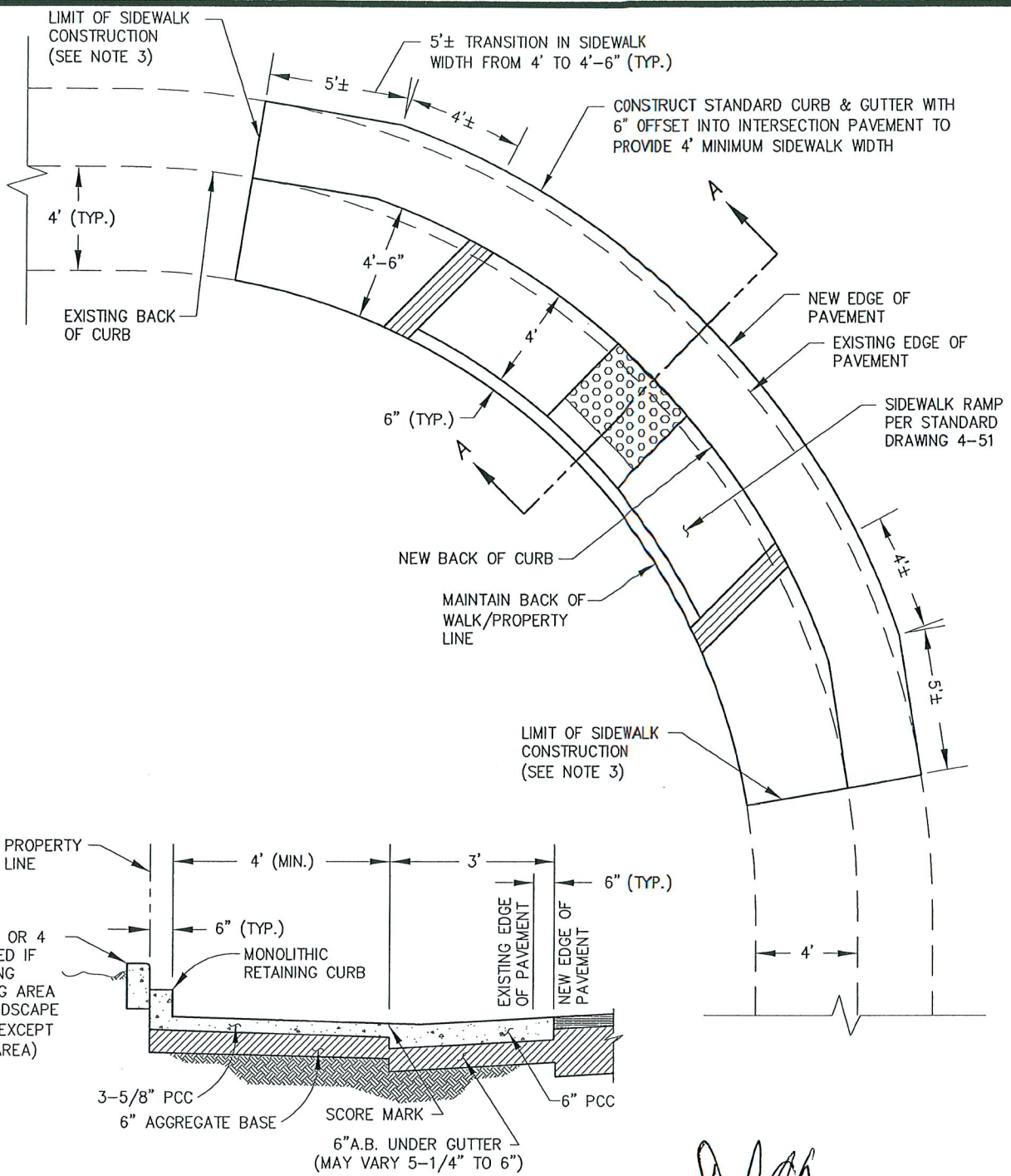
**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY
TYPICAL CURB EXTENSION
FOR RESIDENTIAL &
COLLECTOR STREETS**

SCALE: NONE

DATE: 07/28/09

DRAWN BY: G. CORNEJO

4-53



LANDING SECTION A-A

NOTES:

1. RAMP SHALL HAVE A HEAVY BROOM FINISH TRANSVERSE TO THEIR SLOPE.
2. NO PULL BOX, UTILITY VAULT, UTILITY POLE, TRAFFIC SIGNAL POLE, MANHOLE, OR SIMILAR APPURTENANCE SHALL BE LOCATED WITHIN SIDEWALK RAMP AREA.
3. REMOVE AND REPLACE SIDEWALK TO NEAREST JOINT (CONSTRUCTION, EXPANSION, OR WEAKENED PLANE). DOWELL TO EXISTING PER DRAWING 4-32.
4. ASPHALT CONCRETE RECONSTRUCTION ALONG NEW RAMP SHALL CONFORM TO DRAWING 4-49.
5. USE THIS DETAIL WHERE CURB EXTENSION (STANDARD DRAWING 4-53) IS NOT USED WITH PERMISSION OF DIRECTOR OF COUNTY ENGINEERING.

[Handwritten Signature]

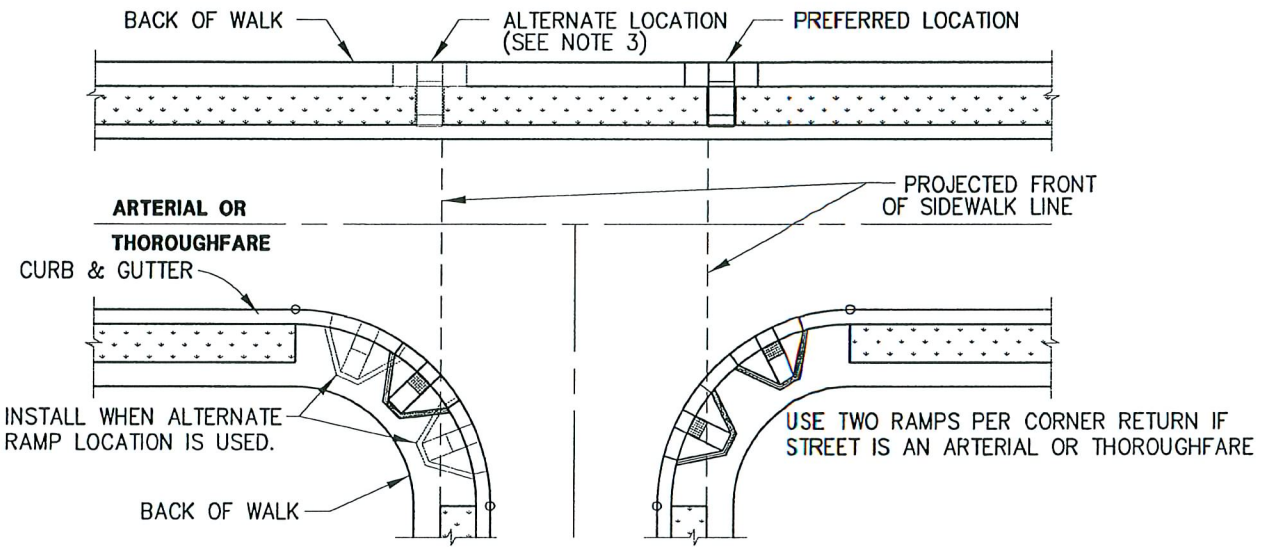
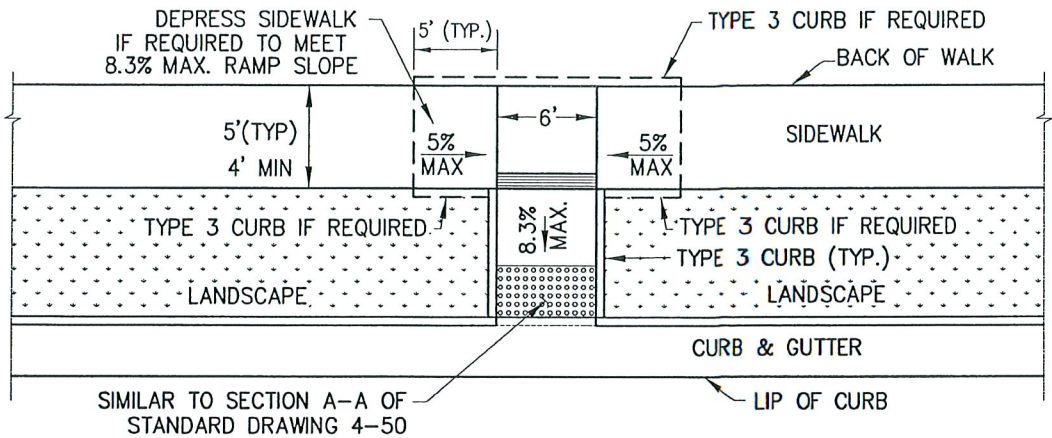
CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**SIDEWALK RAMP DETAILS
FOR RETROFIT OF EXISTING
4' WIDE SIDEWALKS**

SCALE: NONE
DATE: 04/21/09
DRAWN BY: B.R.

4-54



[Handwritten Signature]

CHIEF, DEPT. OF TRANSPORTATION

NOTES:

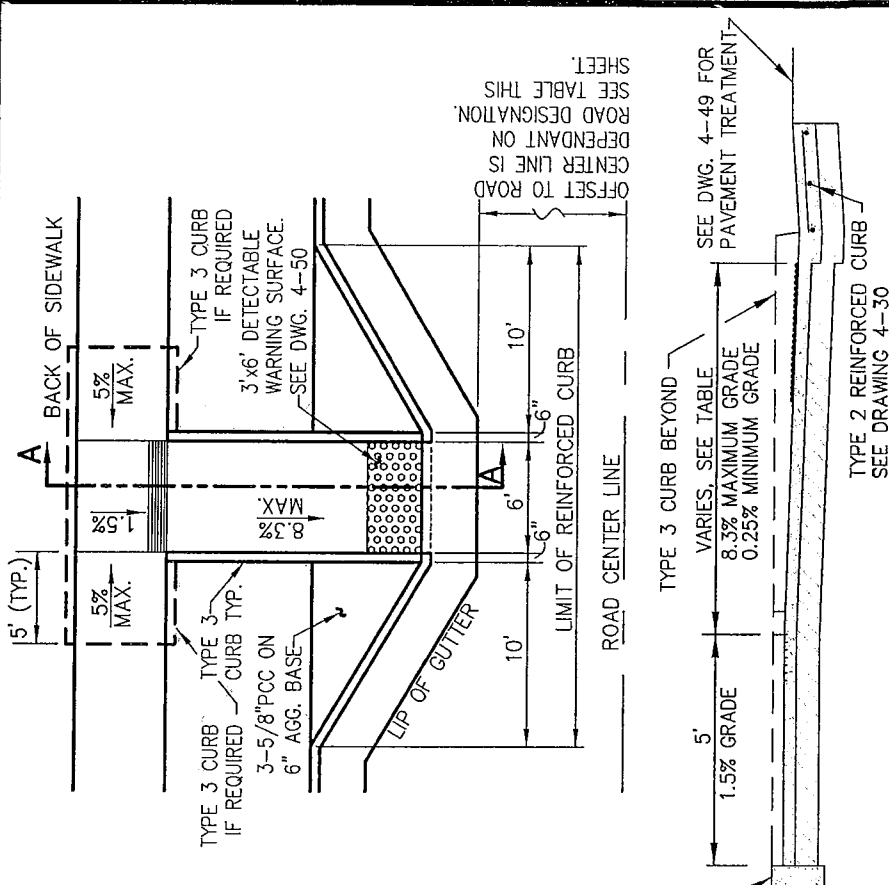
1. MARKED CROSSWALKS SHALL HAVE RAMPS AT BOTH ENDS WITH THE RAMP TERMINATING WITHIN THE MARKED CROSSWALK.
2. AT "T" INTERSECTIONS WITH UNMARKED CROSSWALKS ONLY 1 RAMP (REFERRED TO AS THE "T-RAMP") IS REQUIRED AT THE TOP OF THE "T" INTERSECTION.
3. AT "T" INTERSECTIONS ADJACENT TO SCHOOLS TWO RAMPS ARE REQUIRED AT TOP OF THE "T" WHETHER THE CROSSWALK IS MARKED OR UNMARKED
4. WHEN CROSSWALK IS UNMARKED, THE T-RAMP SHOULD BE LOCATED IN LINE WITH THE EXTENSION OF THE SIDEWALK FROM ACROSS THE STREET.
5. THIS DETAIL SHALL BE USED IN LOCATIONS WHERE NO CURB EXTENSION EXISTS.

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**SIDEWALK RAMPS AT
"T" INTERSECTIONS FOR
ARTERIAL STREETS &
THOROUGHFARE STREETS**

SCALE: NONE
DATE: 04/01/09
DRAWN BY: TRU P. & B.R.

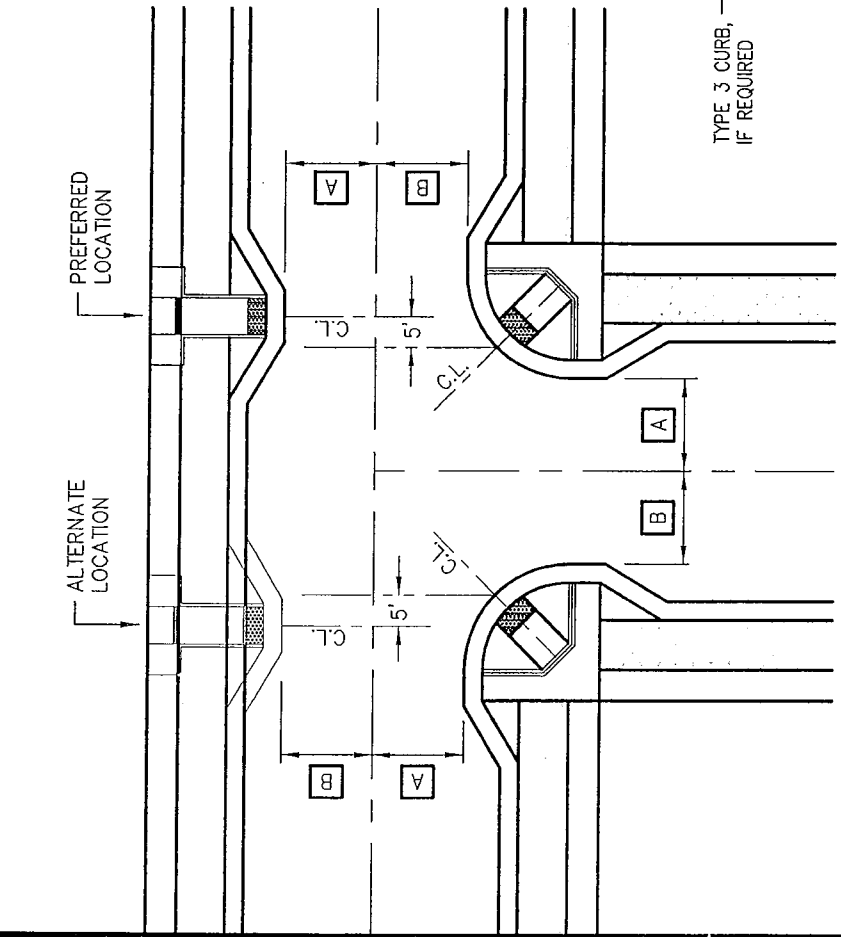
4-55



SECTION 'A-A'
NO SCALE

COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY
SIDEWALK RAMPS AT
"T" INTERSECTIONS FOR
RESIDENTIAL STREETS &
COLLECTOR STREETS

SCALE: NONE
DATE: 01/22/09
DRAWN BY: G. CORNEJO
4-56



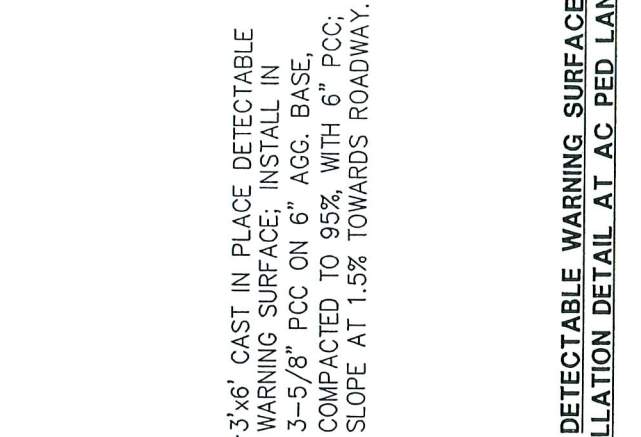
STREET DESIGNATION	APPROACH OFFSET	DEPARTURE OFFSET
MAJOR COLLECTOR	22'	22'
COLLECTOR	15'	15'
MINOR RESIDENTIAL AND PRIMARY RESIDENTIAL	11'	13'

SEE DWG. 4-53 FOR TYPICAL CORNER EXTENSION DESIGN.

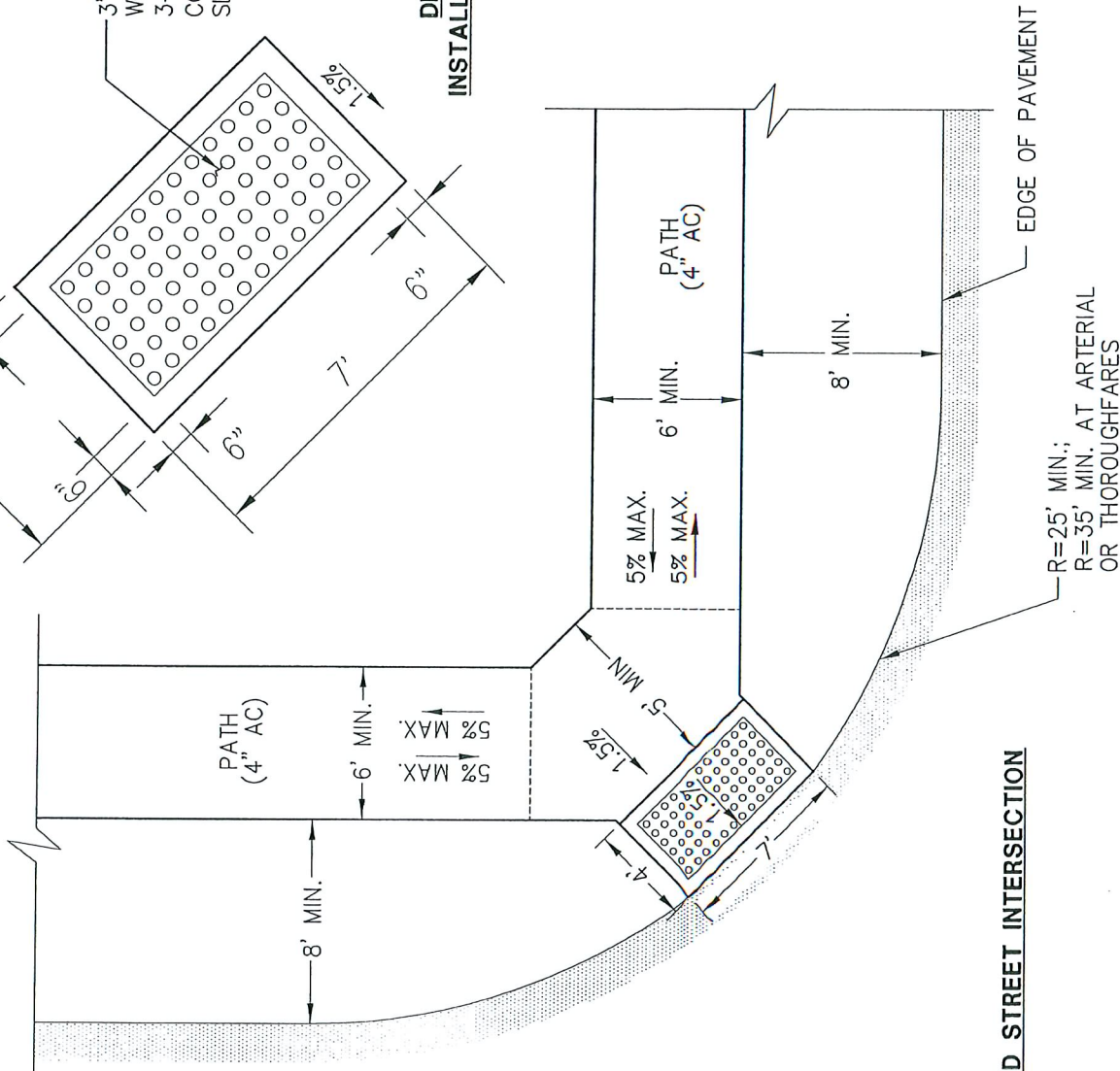
[Signature]

CHIEF, DEPT. OF TRANSPORTATION

OFFSET TO ROAD CENTER LINE IS DEPENDANT ON ROAD DESIGNATION. SEE TABLE THIS SHEET.



**DETECTABLE WARNING SURFACE
INSTALLATION DETAIL AT AC PED LANDINGS**



CLASS D STREET INTERSECTION

[Handwritten Signature]

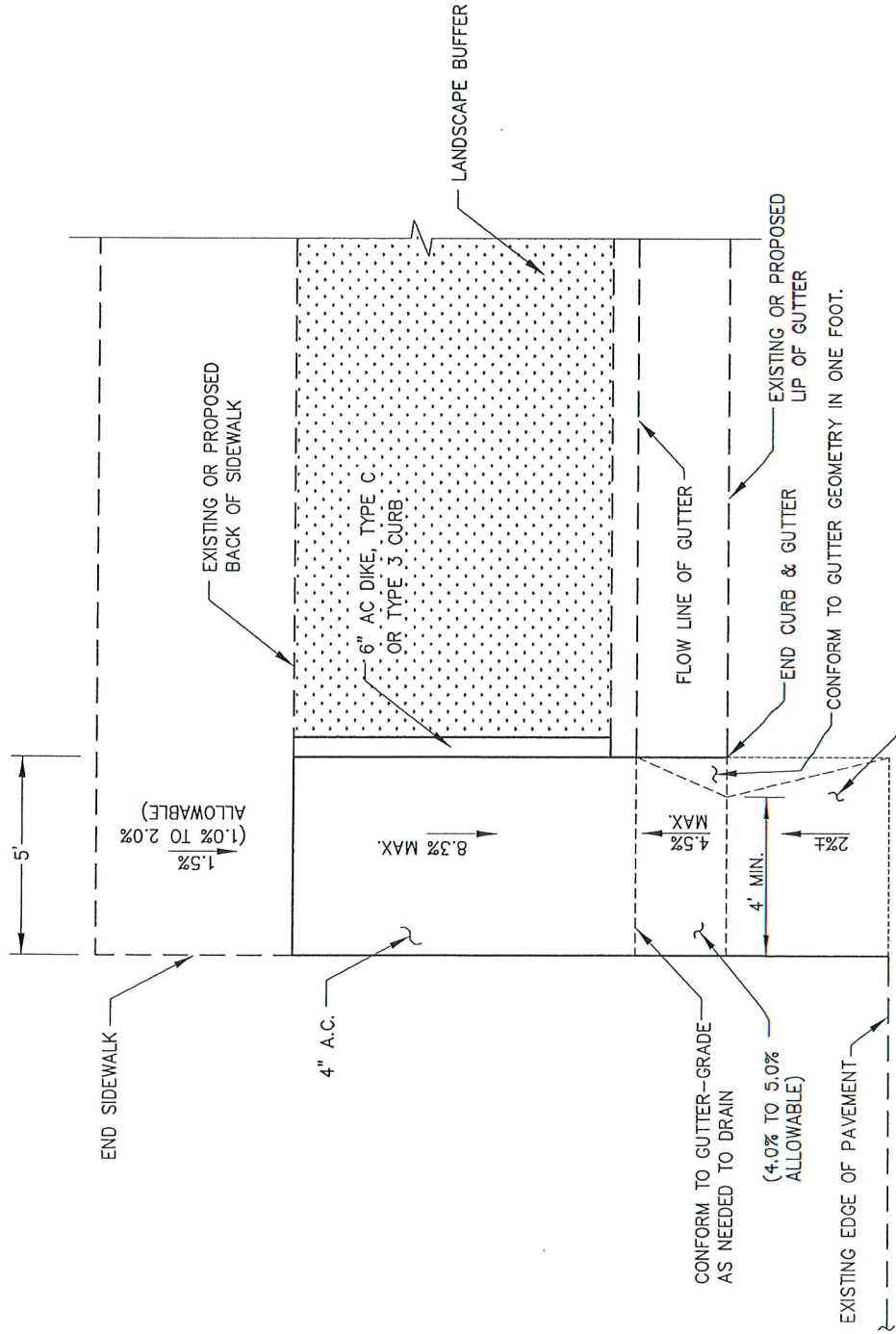
CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**PEDESTRIAN LANDINGS
AT CLASS D STREETS**

SCALE: NONE
DATE: 04/01/2009
DRAWN BY: J.S.

4-57



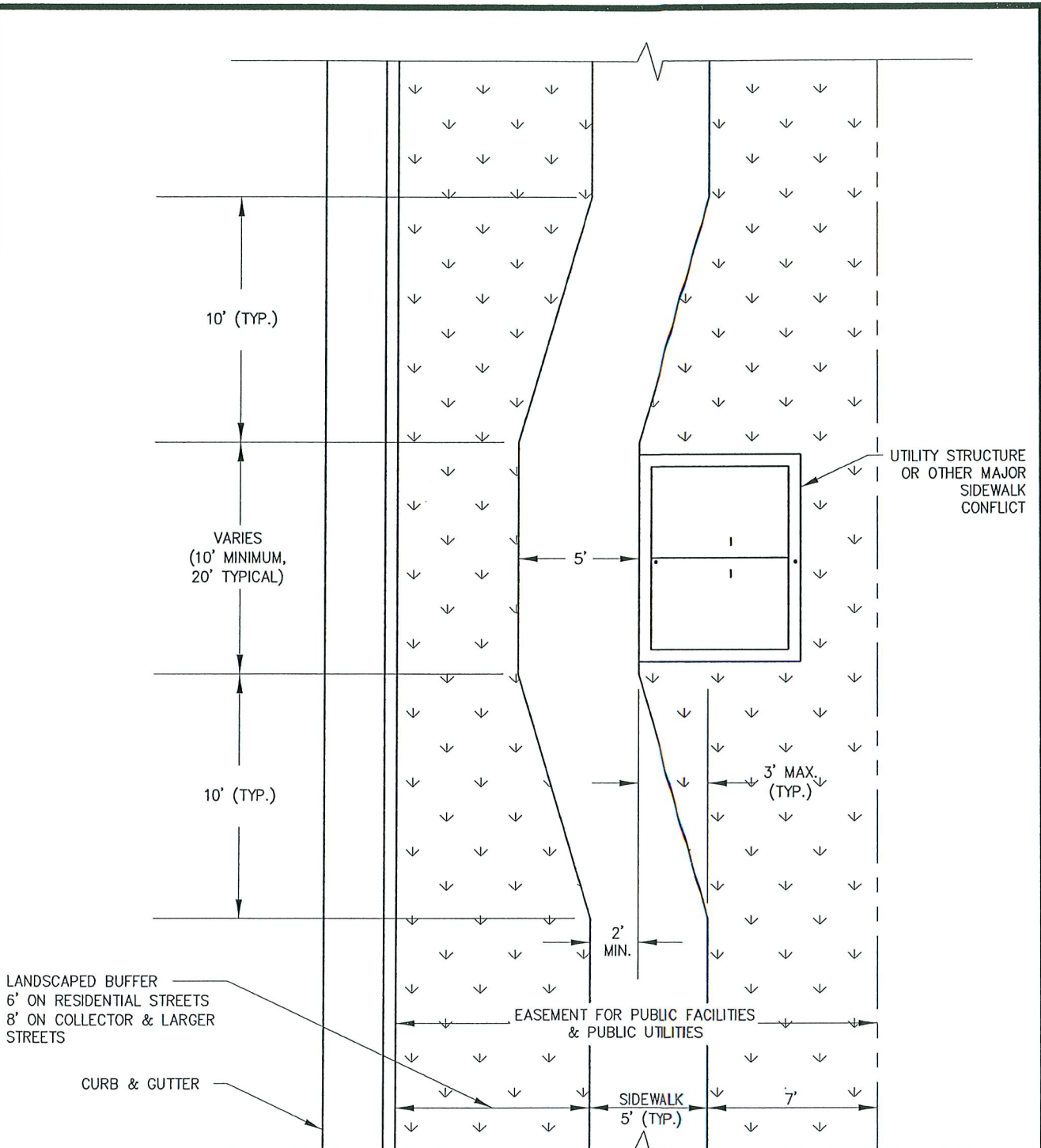
CONSTRUCT PORTION OF AC SIDEWALK CONFORM BEYOND EXTENSION OF LIP OF GUTTER TO ROADWAY STANDARDS IF CONSTRUCTED WITH ROADWAY WIDENING.

NOTE: A SIDEWALK BARRICADE SHALL BE REQUIRED IF THE END OF THE A.C. SIDEWALK CONFORM ABUTS A DRAINAGE DITCH OR ANY OTHER SURFACE THAT WOULD POSE A HAZARD TO PEDESTRIANS.

SEE DWG. 4-62 FOR ROADSIDE NARROWING STANDARDS

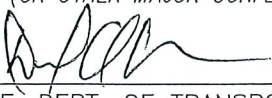
CHIEF, DEPT. OF TRANSPORTATION

COUNTY OF SACRAMENTO MUNICIPAL SERVICES AGENCY	
SIDEWALK CONFORM END OF SEPARATED SIDEWALK	
SCALE: NONE DATE: 04/01/09 DRAWN BY: B.R. & TRU P.	4-59



NOTES:

1. THIS DETAIL IS TO BE USED TO RESOLVE CONFLICTS BETWEEN SEPARATED SIDEWALKS AND UTILITY STRUCTURES (OR OTHER MAJOR CONFLICTS).
2. WHERE REASONABLY POSSIBLE, LOCATE UTILITY FACILITIES OUTSIDE OF SIDEWALK AREA OR WITHIN SIDEWALK AT SIDEWALK GRADE TO MINIMIZE USE OF THIS DETAIL.
3. INSTALL EXPANSION JOINTS ACROSS FULL WIDTH OF SIDEWALK ON BOTH SIDES OF THE UTILITY STRUCTURE (OR OTHER MAJOR CONFLICTING FACILITY).

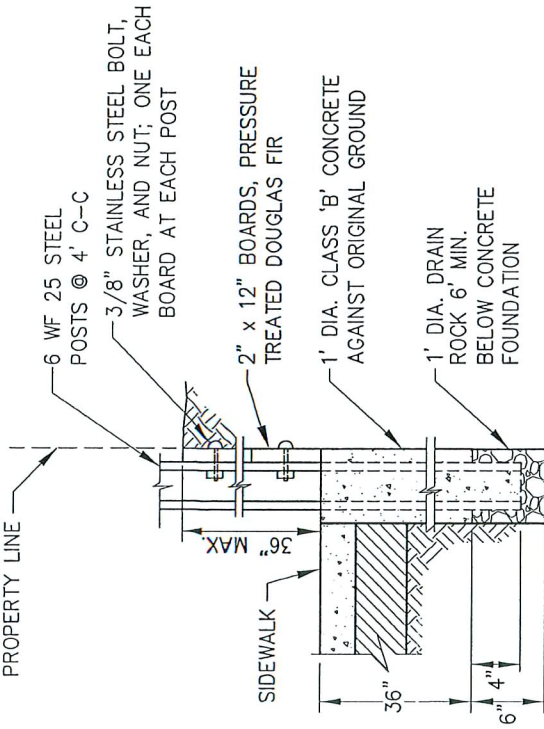
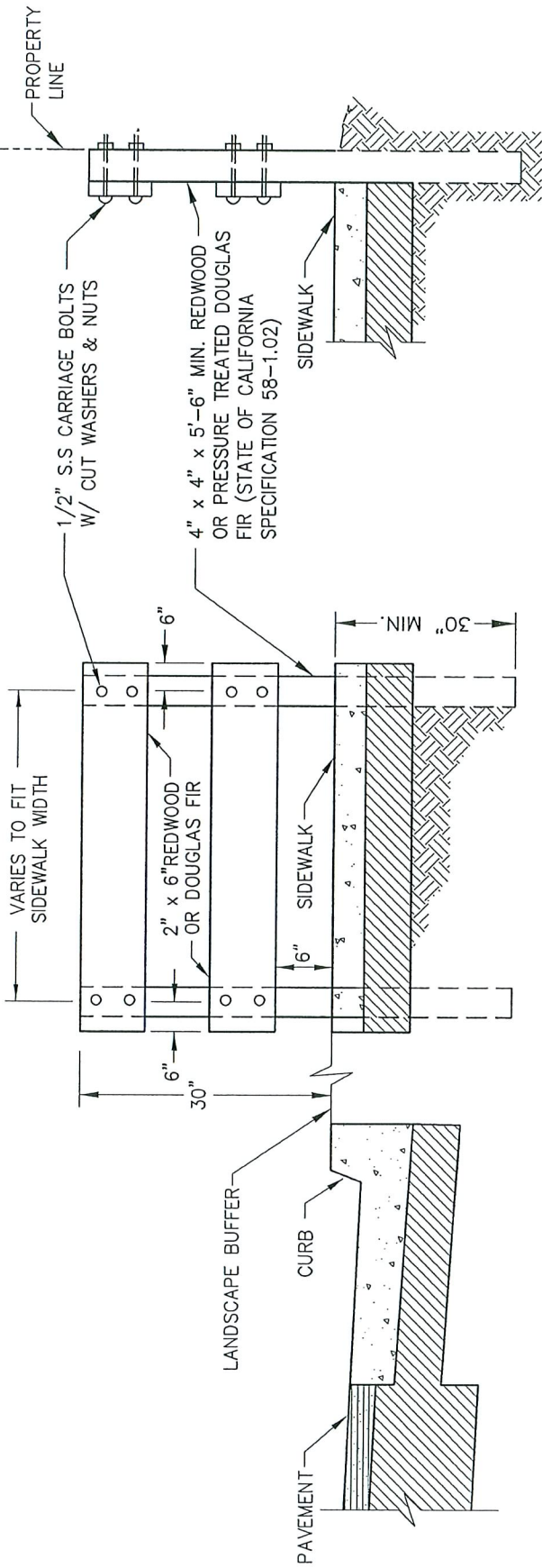

CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**SIDEWALK FLAIR AT UTILITY
STRUCTURE OR OTHER
MAJOR CONFLICT**

SCALE: NONE
DATE: 05/29/09
DRAWN BY: B.R.

4-60



NOTES:

1. SIDEWALK BARRICADES TO BE ERRECTED AT EACH LOCATION WHERE SATISFACTORY PROVISION CAN NOT BE MADE FOR PEDESTRIAN TO CONTINUE BEYOND THE TERMINUS OF A SIDEWALK AND A HAZARD IS PRESENT.
2. ALL EXPOSED SURFACES TO BE PAINTED WITH TWO (2) COATS OF WHITE PAINT CONFORMING TO SECTION 91-3 OF STATE SPECIFICATIONS.

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

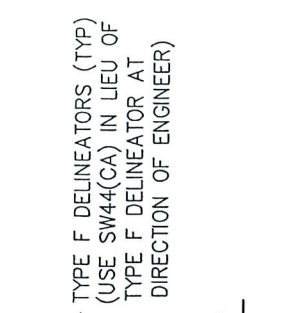
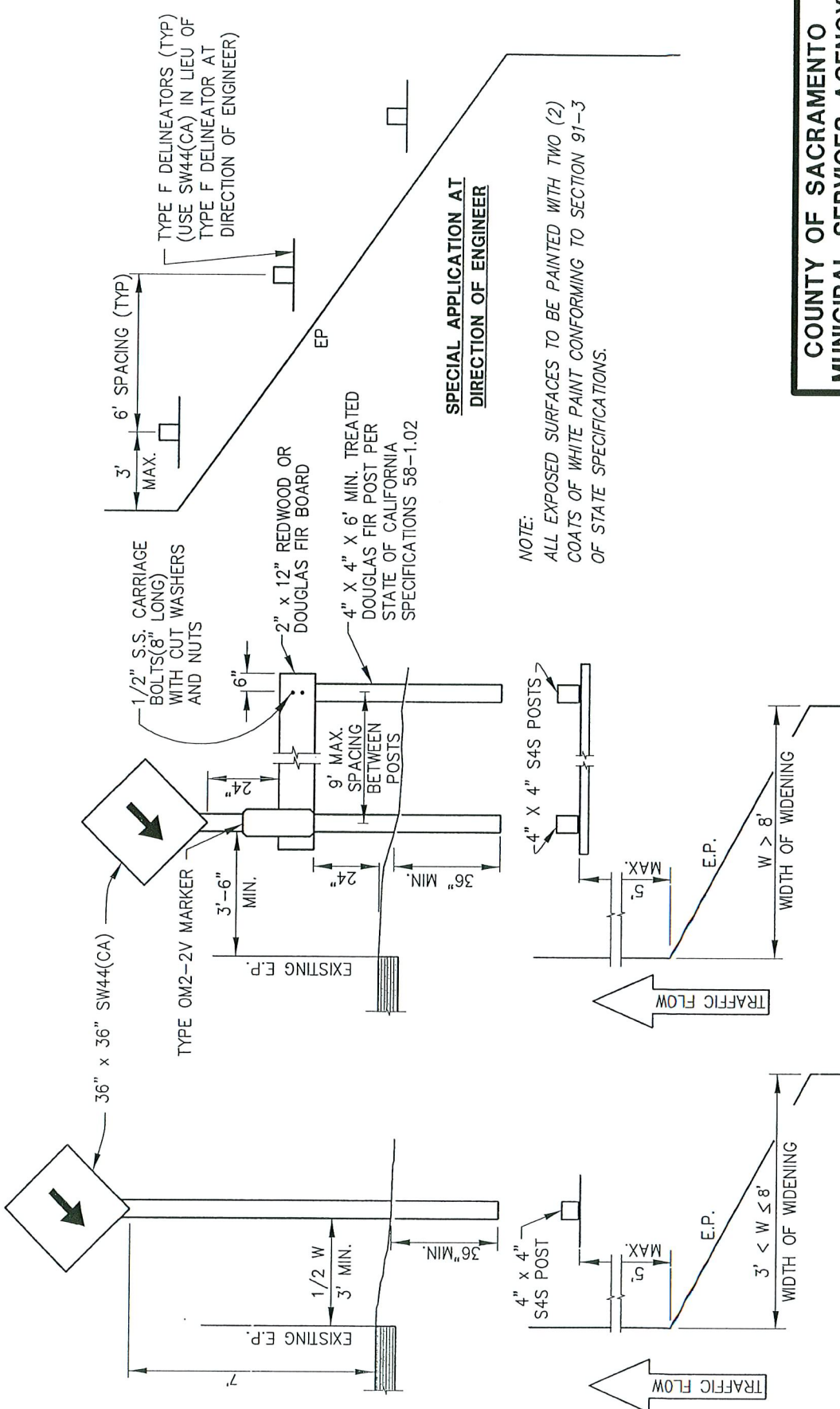
SIDEWALK BARRICADE

SCALE: NONE
DATE: 07/24/08
DRAWN BY: TRU P.

CHIEF, DEPT. OF TRANSPORTATION

**DETAIL FOR SIDEWALK BARRICADE
WITH RETAINING WALL**

4-61

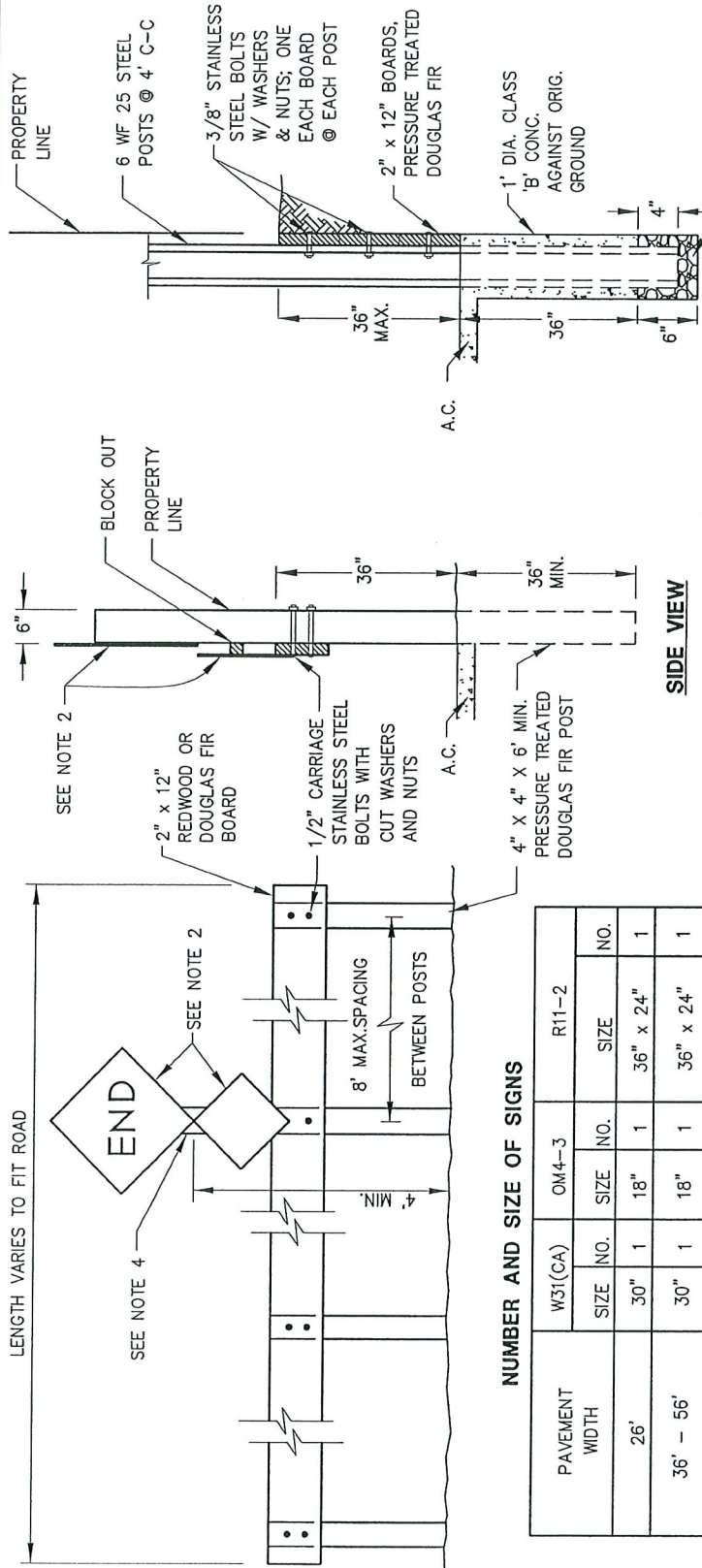


**SPECIAL APPLICATION AT
DIRECTION OF ENGINEER**

NOTE:
ALL EXPOSED SURFACES TO BE PAINTED WITH TWO (2)
COATS OF WHITE PAINT CONFORMING TO SECTION 91-3
OF STATE SPECIFICATIONS.

COUNTY OF SACRAMENTO MUNICIPAL SERVICES AGENCY	
SIGNING OF LOCATIONS WITH ABRUPT CHANGE OF PAVEMENT WIDTH	
SCALE: NONE	4-62
DATE: 08/06/08	
DRAWN BY: TRU P.	

[Signature]
CHIEF, DEPT. OF TRANSPORTATION



NUMBER AND SIZE OF SIGNS

PAVEMENT WIDTH	W31(CA)		OM4-3		R11-2	
	SIZE	NO.	SIZE	NO.	SIZE	NO.
26'	30"	1	18"	1	36" x 24"	1
36' - 56'	30"	1	18"	1	36" x 24"	1
66'	30"	2	18"	2	48" x 30"	1
90' - 110'	30"	3	18"	3	48" x 30"	1

NOTES:

- WHERE PERMISSION HAS BEEN GRANTED TO CLOSE AN EXISTING PUBLIC STREET, A R11-2 "ROAD CLOSED" SIGN MAY BE REQUIRED ON THE CENTERLINE OF THE ROAD IN ADDITION TO THE W31(CA) "END" SIGN.
- 30" x 30" W31(CA) SIGN AND 18" x 18" OM4-3 MARKER. BLOCK OUT AS NECESSARY FOR OM4-3 MARKER TOP MOUNTING BOLT (BOTTOM MOUNTING BOLT NORMALLY THROUGH BARRIER RAIL). OM4-3 MARKER TO HAVE SOLID RED REFLECTIVE BACKGROUND WITHOUT ADDED REFLECTORS.
- ALL EXPOSED SURFACES OF BARRICADE SHALL BE PAINTED WITH WHITE PAINT CONFORMING TO STATE STANDARD SPECIFICATION 91-3.
- POST AT CENTER OR NEAREST TO CENTER ON RIGHT HAND SIDE TO BE EXTENDED TO PROVIDE MOUNTING FOR SIGNS.
- POSTS SHALL BE PRESSURE TREATED PER STATE SPECIFICATION 58-1.02

CHIEF, DEPT. OF TRANSPORTATION

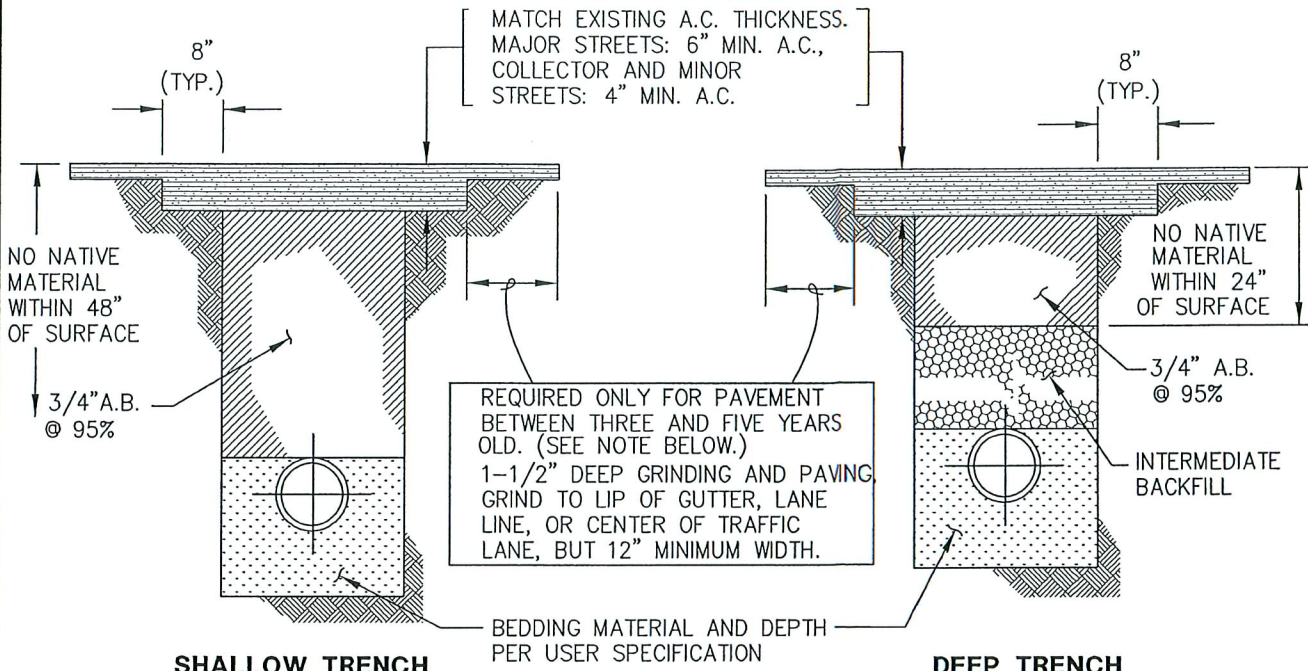
**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**STREET CLOSURE
BARRICADE**

SCALE: NONE
DATE: 04/28/09
DRAWN BY: TRU P. & B.R.

4-63

**CUT ENDING IN
CUT WHERE SLOPE
NOT OBTAINABLE**



SHALLOW TRENCH

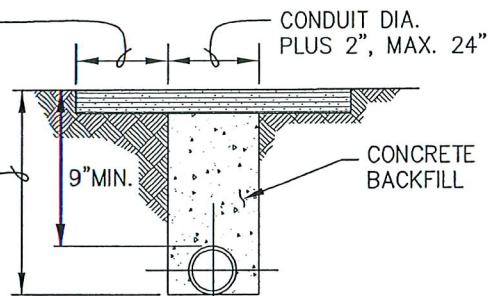
IN EXISTING PAVEMENT
(LESS THAN 4' COVER)

DEEP TRENCH

IN EXISTING PAVED AREAS
AND OTHER TRENCHING
(4' OR MORE COVER)

REQUIRED ONLY FOR PAVEMENT BETWEEN THREE AND FIVE YEARS OLD. (SEE NOTE BELOW.)
1-1/2" DEEP GRINDING AND PAVING. GRIND TO LIP OF GUTTER IF CENTER OF TRENCH IS WITHIN 20" OF LIP OF GUTTER, OTHERWISE 6" MINIMUM.

MAXIMUM DEPTH 15" OR ROADWAY STRUCTURAL SECTION LESS 2", WHICHEVER IS GREATER

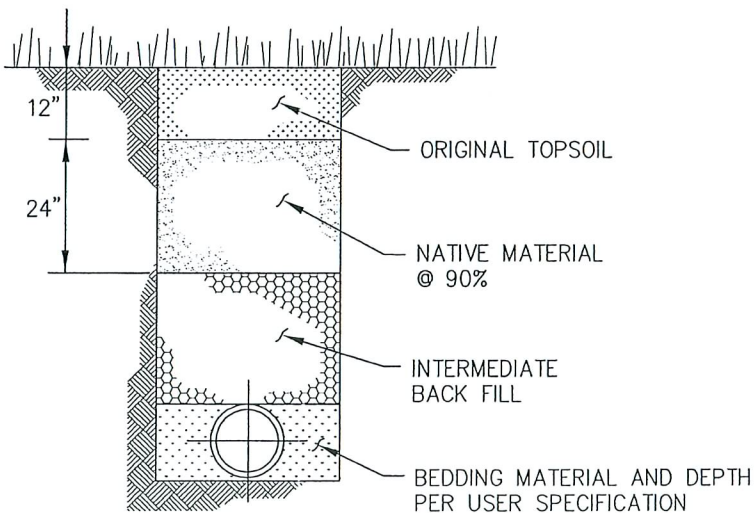


EARTH SAW TRENCH SECTION

(SEE SECTION 49-2.02)

NOTE:

NO PAVEMENT CUTS OR TRENCHES ARE ALLOWED IN PAVEMENT LESS THAN THREE YEARS OLD.



**HORTICULTURE, LAWN, OR
CULTIVATED AREAS**

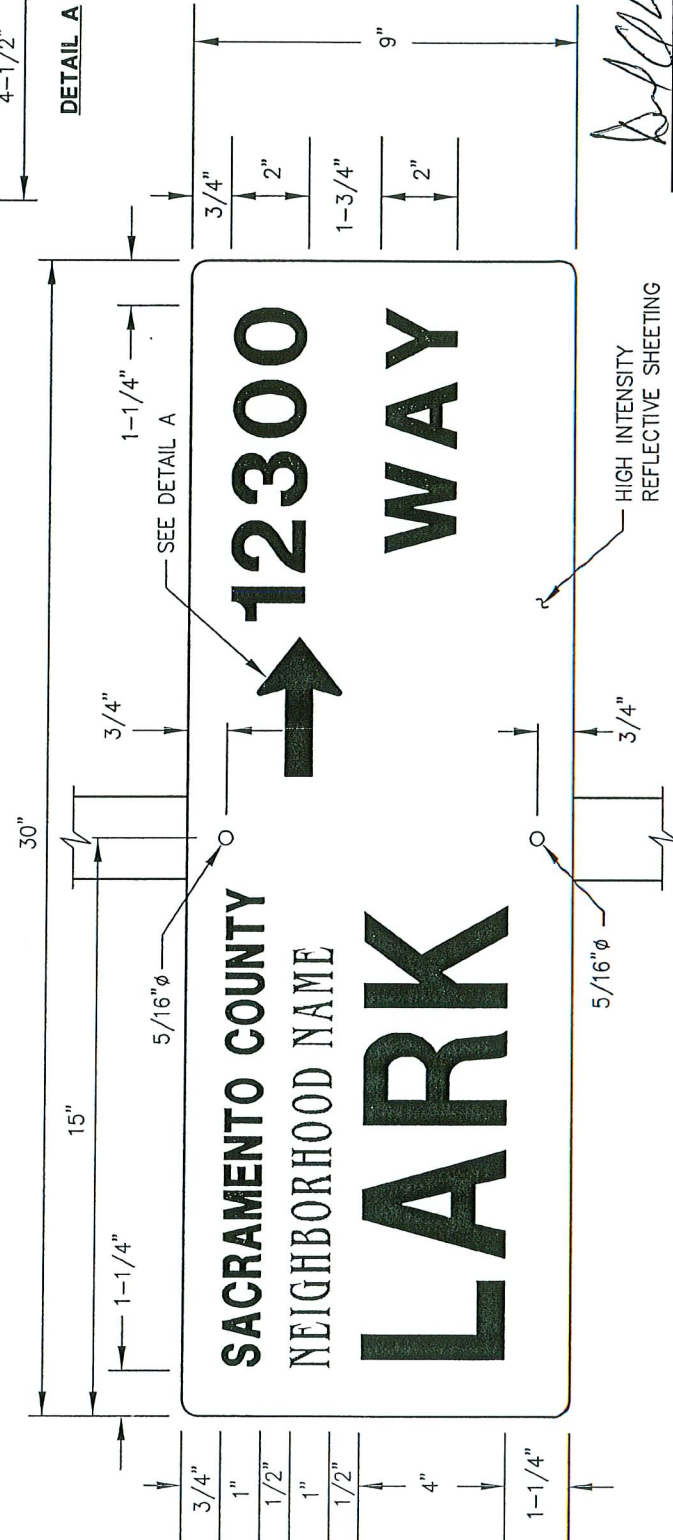
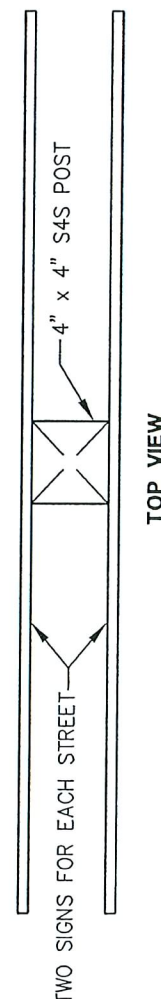
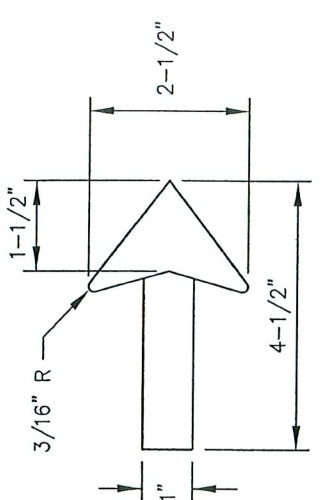
[Signature]
CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

TRENCH SECTIONS

SCALE: NONE
DATE: 04/28/09
DRAWN BY: TRJ P. & B.R.

4-64



CHIEF, DEPT. OF TRANSPORTATION

[Signature]

COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY

STREET NAME SIGN

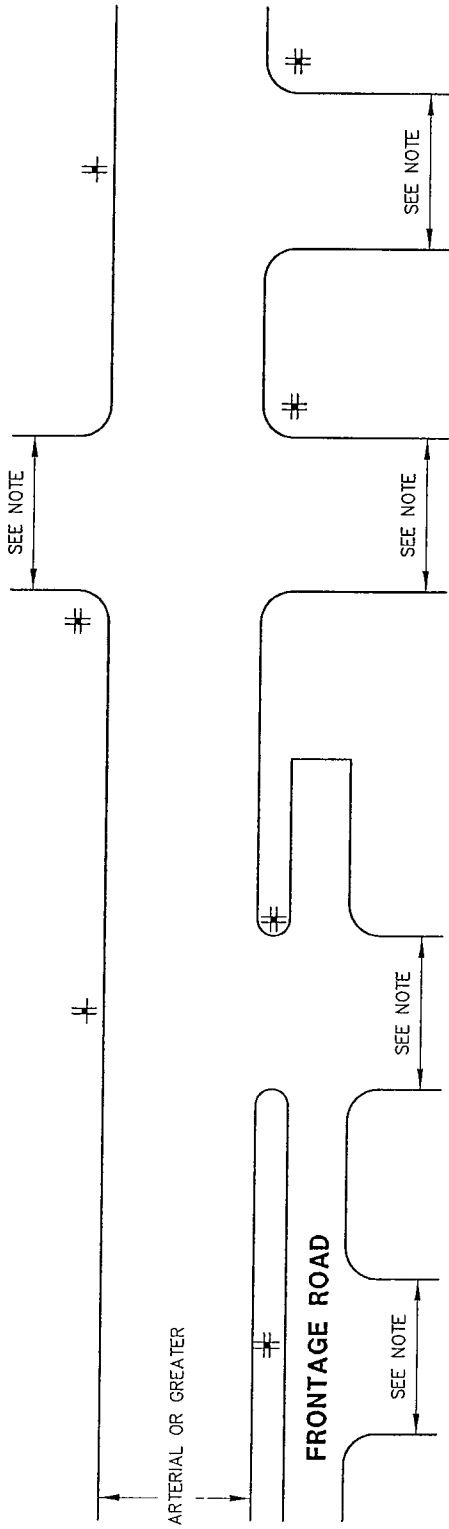
SCALE: NONE
DATE: 06/08/2009
DRAWN BY: TRU P. & B.R.

4-70

SIGN DETAILS FOR SINGLE STREET

NOTES:

1. ALUMINUM SHEET ALLOY 6061-T6 0.080" GAUGE ROUNDED CORNERS 1/4" RADIUS.
2. FOR TWO (2) STREETS, PLACE SECOND PAIR OF SIGNS AT 90° TO SIGNS AS SHOWN.
3. POSTS SHALL BE REDWOOD OR TREATED DOUGLAS FIR (STATE OF CALIFORNIA SPEC. NO. 56-2.02B).
4. FONTS FOR LETTERING AND NUMBERS SHALL BE "HIGHWAY C" EXCEPT FOR THE NEIGHBORHOOD NAME WHICH SHALL BE "BENGEL MD".
5. USE "NEIGHBORHOOD NAME" WHERE NEIGHBORHOOD DESIGNATION EXISTS. CONFIRM APPROPRIATE NEIGHBORHOOD NAME WITH DEPARTMENT OF TRANSPORTATION PRIOR TO SIGN FABRICATION.



STREETS CLASSIFIED AS ARTERIAL OR GREATER

NOTE:

SIDE STREETS INDICATED ARE CLASSIFIED EQUAL TO OR LESS THAN THROUGH STREET AS SHOWN ON THE PLAN.

LEGEND:

STANDARD STREET NAME SIGN INSTALLATION. FOUR (4) SIGN PLATES ON 4" x 4" POST OR ON STREET LIGHT POLE.

THREE (3) SIGN PLATES ON 4" x 4" POST OR ON STREET LIGHT POLE.

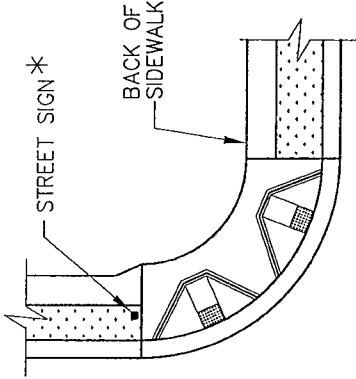
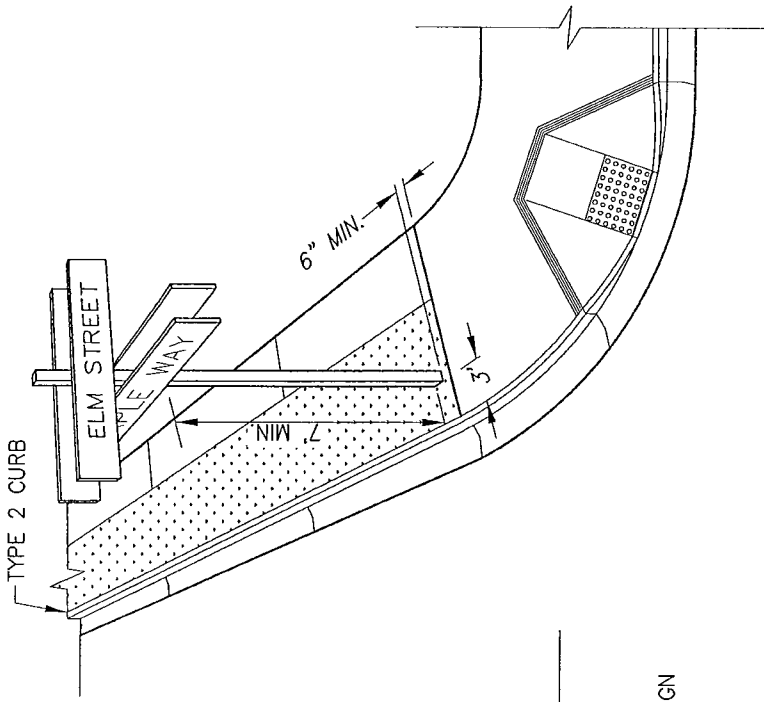
STREETS CLASSIFIED AS MAJOR COLLECTOR OR LESS

CHIEF, DEPT. OF TRANSPORTATION

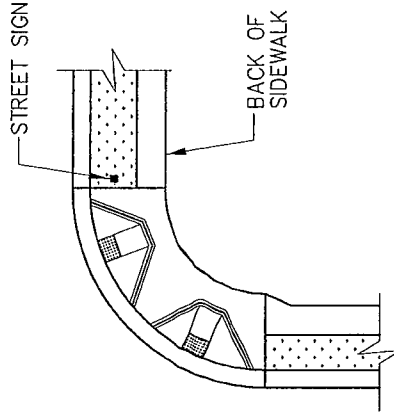
COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY

STREET NAME SIGN
LOCATION REQUIREMENTS

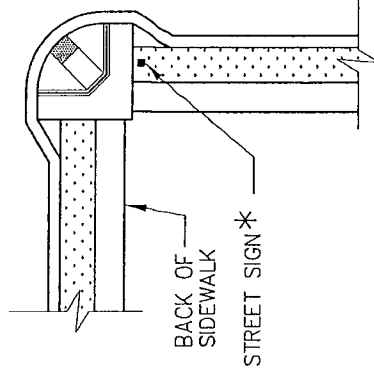
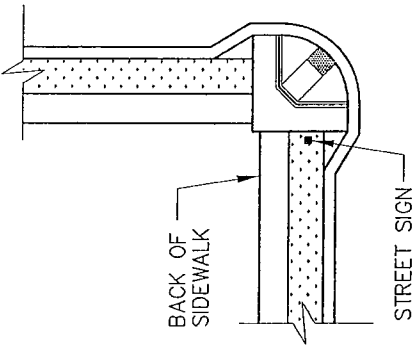
SCALE: NONE
DATE: 07/18/2008
DRAWN BY: TRU P.



LARGER STREET (OR GREATER TRAFFIC VOLUME FOR EQUAL WIDTH STREETS)



SMALLER STREET (OR LESSER TRAFFIC VOLUME FOR EQUAL WIDTH STREETS)



* ADDITIONAL STREET SIGN NEEDED IF LARGER STREET IS AN ARTERIAL OR THOROUGHFARE.

NOTE: IN LIEU OF INSTALLATION OF STREET NAME SIGNS ON NEW POST, SIGNS MAY BE INSTALLED ON STREET LIGHT POLES PER DWG. 4-73.

CHIEF, DEPT. OF TRANSPORTATION

COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY

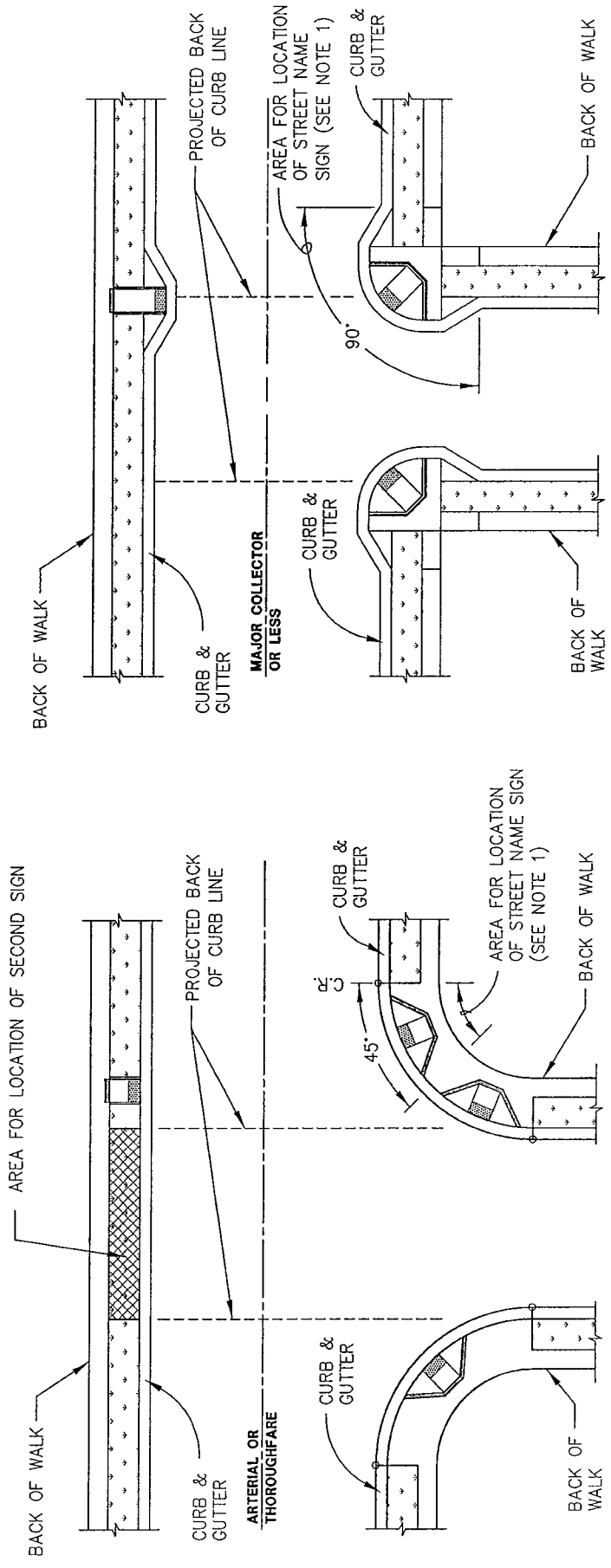
STREET NAME SIGN
PLACEMENT DETAILS ON
WOOD POLE INSTALLATIONS

SCALE: NONE

DATE: 07/20/09

DRAWN BY: B.R. & TRU P.

4-72



NOTES:

1. STREET NAME SIGNS SHALL BE INSTALLED ON STREET LIGHT POLES WHEN THEY ARE LOCATED WITHIN THE LOCATION LIMITS DEFINED ON THIS DETAIL.
2. ALL OTHER STREET NAME SIGN REQUIREMENTS IN SECTIONS 4-28 & 4-29 AND IN DRAWINGS 4-70, 4-71, 4-72 & 4-74 SHALL APPLY.

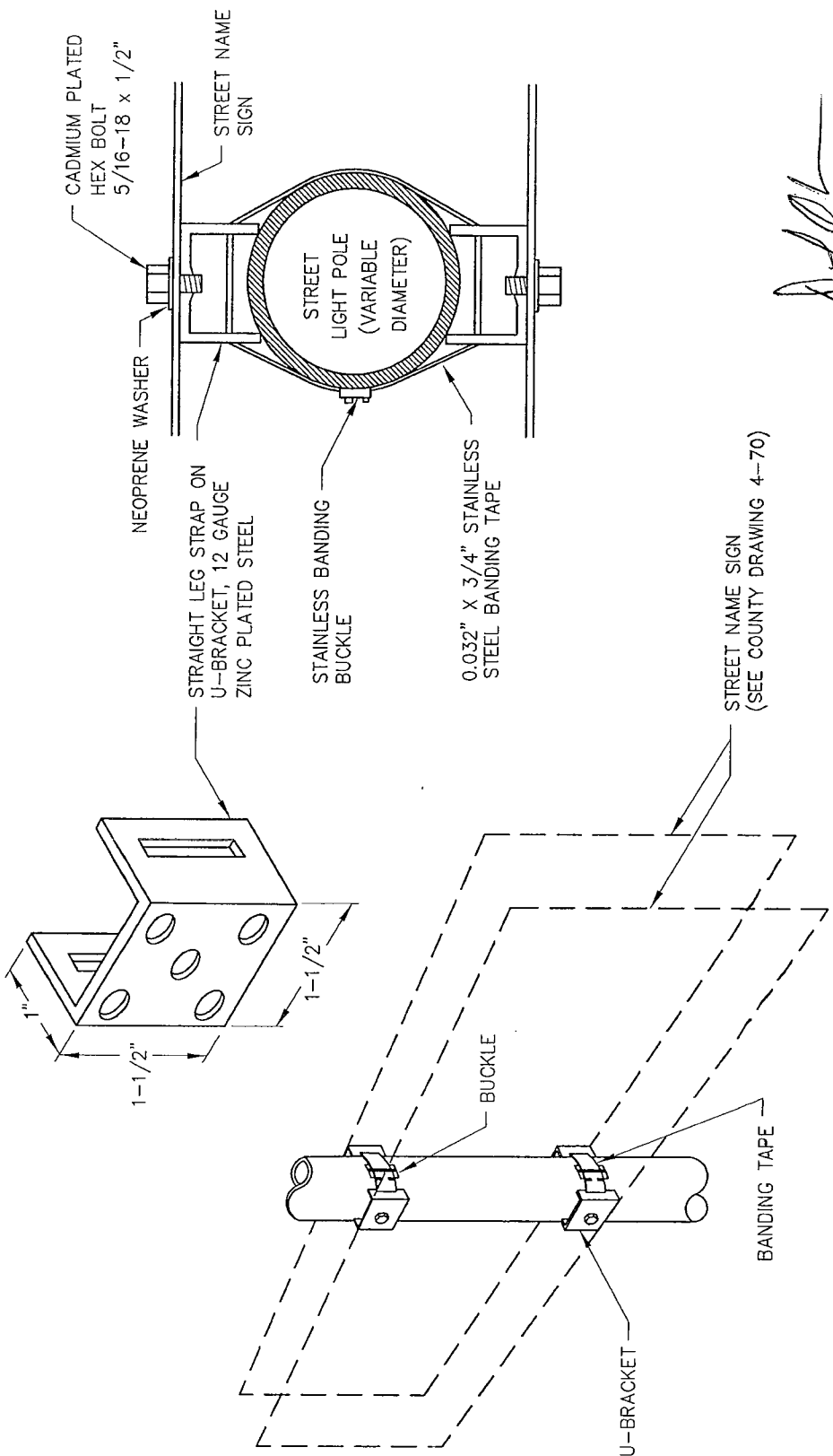
**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**STREET NAME PLACEMENT
DETAILS ON STREET LIGHT
POLE INSTALLATIONS**

SCALE: NONE
DATE: 07/20/09
DRAWN BY: B.R. & TRU P.

4-73

CHIEF, DEPT. OF TRANSPORTATION



[Handwritten Signature]

CHIEF, DEPT. OF TRANSPORTATION

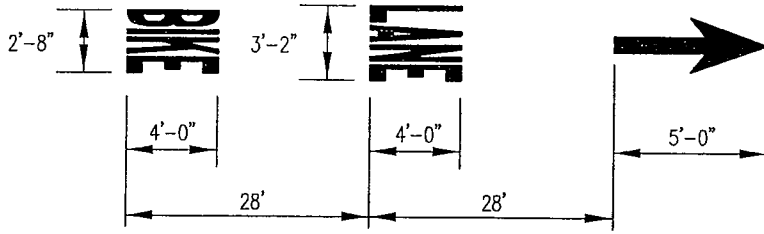
COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY

STREET NAME SIGN
INSTALLATION ON
STREET LIGHT POLE

SCALE: NONE
DATE: 07/18/2008
DRAWN BY: TRU P. 4-74

NOTES:

1. DETAIL SHOWN IS FOR A TWO SIGN INSTALLATION. FOUR SIGN INSTALLATIONS MAY BE MADE, WHERE APPLICABLE, BY FASTENING A SECOND PAIR OF SIGNS IN THE SAME MANNER.
2. STANDARD CLEARANCE TO BOTTOM OF LOWEST SIGN IS 7 FEET MINIMUM.



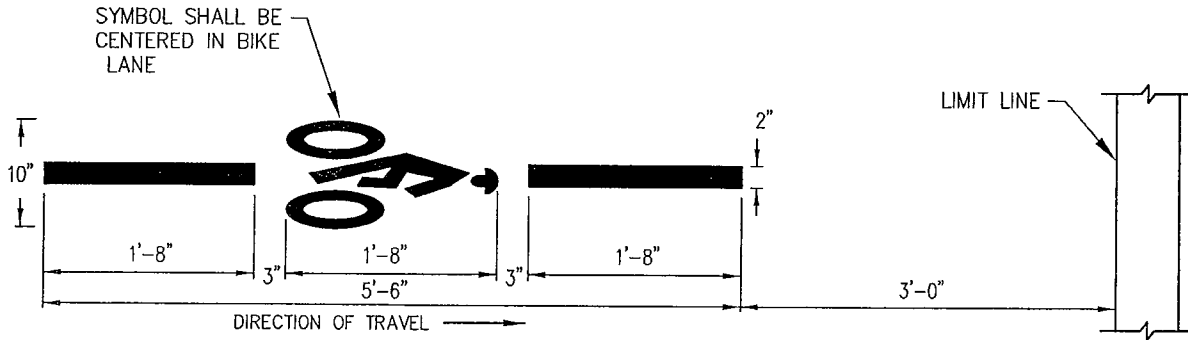
BIKE LANE LEGEND DETAIL

SEE CALTRANS STANDARD PLAN A24A AND A24D FOR PAVEMENT MARKING WORDS AND ARROW.

BIKE LANE LEGEND

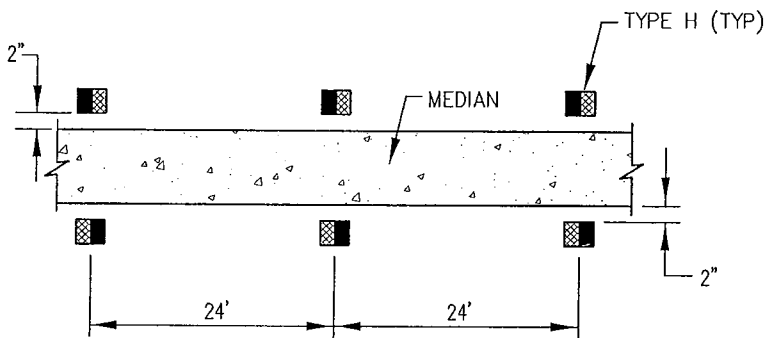
TYPICAL LOCATIONS:

- 10' AFTER START OF BIKE LANE AT INTERSECTION
- 10' AFTER START OF BIKE LANE ALONG RIGHT TURN LANE
- BEFORE 39A STRIPE AT APPROACH TO A TRAFFIC SIGNAL WITHOUT RIGHT TURN LANE



BICYCLE LOOP DETECTOR SYMBOL

SEE CALTRANS STANDARD PLAN A24C FOR PAVEMENT MARKINGS SYMBOLS.



DETAIL MODIFIELD 26 - FOR USE ADJACENT TO MEDIANS

SEE CALTRANS STANDARD PLAN A20B FOR PAVEMENT MARKER TYPE.

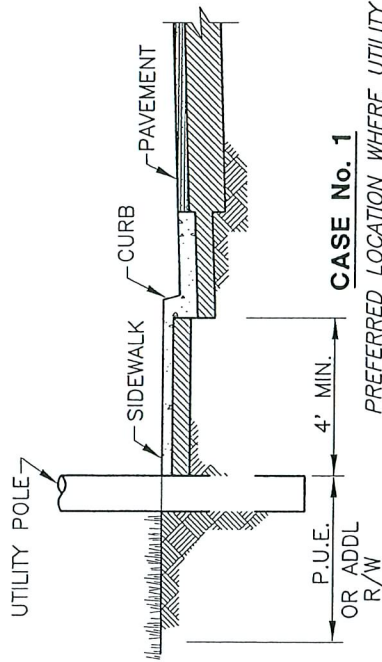
CHIEF, DEPT. OF TRANSPORTATION

**COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY**

**STRIPING AND PAVEMENT
MARKING DETAILS**

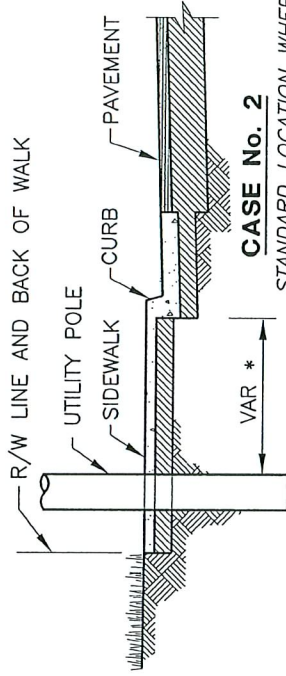
SCALE: NONE
DATE: 03/30/2009
DRAWN BY: TRU P.

4-77



CASE No. 1

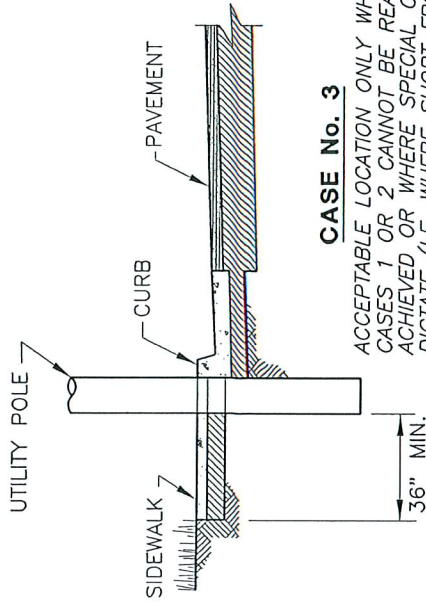
PREFERRED LOCATION WHERE UTILITY CONFLICTS AND PHYSICAL CONDITIONS ALLOW AND AN EASEMENT OR RIGHT OF WAY EXISTS BEHIND WALK.



CASE No. 2

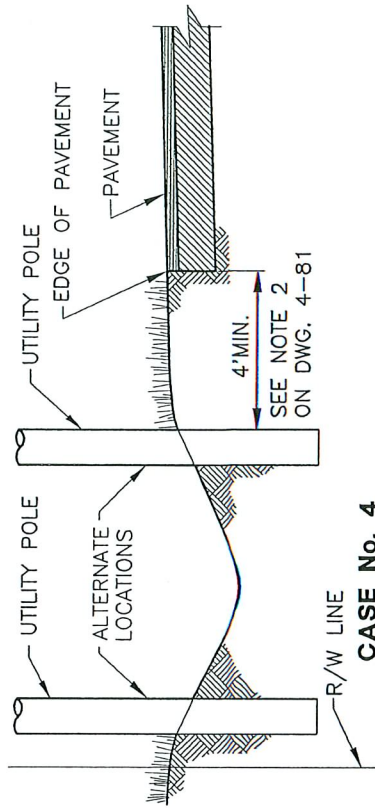
STANDARD LOCATION WHERE CASE #1 IS NOT REASONABLY ACHIEVABLE

* PEDESTRIAN CLEARANCE OF 36" MINIMUM IN FRONT OF THE POLE IS DESIRABLE. POLE CAN BE PLACED 12" MINIMUM FROM BACK OF CURB IF 36" MINIMUM PEDESTRIAN CLEARANCE IS PROVIDED BEHIND POLE. POLE TO BE PLACED WITH BACK OF POLE FLUSH WITH BACK OF WALK IF NOT IN CONFLICT WITH OTHER UTILITIES.



CASE No. 3

ACCEPTABLE LOCATION ONLY WHERE CASES 1 OR 2 CANNOT BE REASONABLY ACHIEVED OR WHERE SPECIAL CONDITIONS DICTATE (I.E. WHERE SHORT FRONTAGE IMPROVEMENT CAUSES SIGNIFICANT DEVIATION FROM POLE LINE RESULTING IN UNDESIRABLE GUYING REQUIREMENTS.



CASE No. 4

REFER TO NOTE 1 ON DWG. 4-81

COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY

UTILITY POLE
PLACEMENT LOCATIONS
DETAILS

SCALE: NONE
DATE: 01/20/09
DRAWN BY: TRU P. & B.R.
4-80

[Signature]
CHIEF, DEPT. OF TRANSPORTATION

SEE 4-81 FOR NOTES

NOTES:

1. WHERE STREET IMPROVEMENTS WILL ULTIMATELY BE CLASS A OR B, THE POLE SHOULD BE LOCATED IN CONFORMANCE TO THE APPROPRIATE CASE #1 OR #2 BASED ON THE FUTURE LOCATION OF THE STREET IMPROVEMENTS. IN THE CASE WHERE NO CURBS WOULD EVER BE ANTICIPATED, THE POLE SHOULD BE LOCATED 4 FEET MINIMUM FROM THE EDGE OF PAVEMENT SO AS NOT TO ENCROACH IN AN ADJACENT DITCH AS SHOWN IN CASE #4.
2. WITH ROAD WIDENING PROJECTS, UTILITY POLES MAY BE ALLOWED TO REMAIN AT THE EDGE OF PAVEMENT, WITH 0.5 FEET MINIMUM CLEARANCE (CASE #4). HOWEVER, WHERE THE PRE-PROJECT UTILITY POLE LOCATION IS WITHIN THE PROPOSED PAVEMENT SECTION, UTILITY POLES SHOULD BE RELOCATED TO THE ULTIMATE LOCATION PER CASE #1 OR #2, IN ORDER TO AVOID RELOCATION OF THE UTILITY POLE IN THE FUTURE.
3. UTILITY POLE PLACEMENT UNDER THE FOLLOWING CONDITIONS IS SUBJECT TO APPROVAL BY THE CHIEF OF THE DEPARTMENT OF TRANSPORTATION:
 - A- POLES IN VISIBILITY CONTROL AREAS (SEE STANDARD DRAWING 4-18).
 - B- POLES LARGER THAN 18 INCHES IN DIAMETER WITHIN 9 FEET OF EDGE OF PAVEMENT IN CLASS A OR CLASS B STREETS.
 - C- POLES LARGER THAN 18 INCHES IN DIAMETER WITHIN 9 FEET OF THE EDGE OF TRAVELED WAY ON CLASS C STREETS.
 - D- POLES LOCATED ON THE OUTSIDE OF SHARP CURVES, OR IN THE TANGENT OF THE CURVES WITHIN 200 FEET OF THE BEGINNING OR END OF CURVE (FOR 45 MPH OR GREATER SPEED LIMIT) OR 100 FEET (FOR A LESSER SPEED LIMIT). IN THESE CASES, SPECIAL DELINEATION AND/OR A GUARDRAIL MAY BE REQUIRED. FOR PURPOSES OF THIS SECTION, SHARP CURVES SHALL BE CONSIDERED THOSE WITH RADII OF LESS THAN 800 FEET FOR URBAN 2 LANE STREETS, AND WITH RADII OF LESS THAN 2000 FEET FOR RURAL ROADS OR MULTI-LANE STREETS.
4. RISERS PROPOSED IN A LOCATION THAT WOULD REDUCE PEDESTRIAN CLEARANCE TO LESS THAN 36 INCHES SHALL NOT BE ALLOWED.
5. FOR LOCATIONS WITH SEPERATED SIDEWALK, UTILITY FACILITIES SHALL BE PLACED OUTSIDE OF THE SIDEWALK AREA. SIDEWALK LOCATION MAY BE ADJUSTED TO RESOLVE CONFLICT WITH EXISTING UTILITIES WITH WRITTEN APPROVAL OF DIRECTOR OF COUNTY OF ENGINEERING.

SEE 4-80 FOR DETAILS



CHIEF, DEPT. OF TRANSPORTATION

COUNTY OF SACRAMENTO
MUNICIPAL SERVICES AGENCY

UTILITY POLE
PLACEMENT LOCATIONS
NOTES

SCALE: NONE
DATE: 01/20/09
DRAWN BY: TRU P. & B.R.

4-81