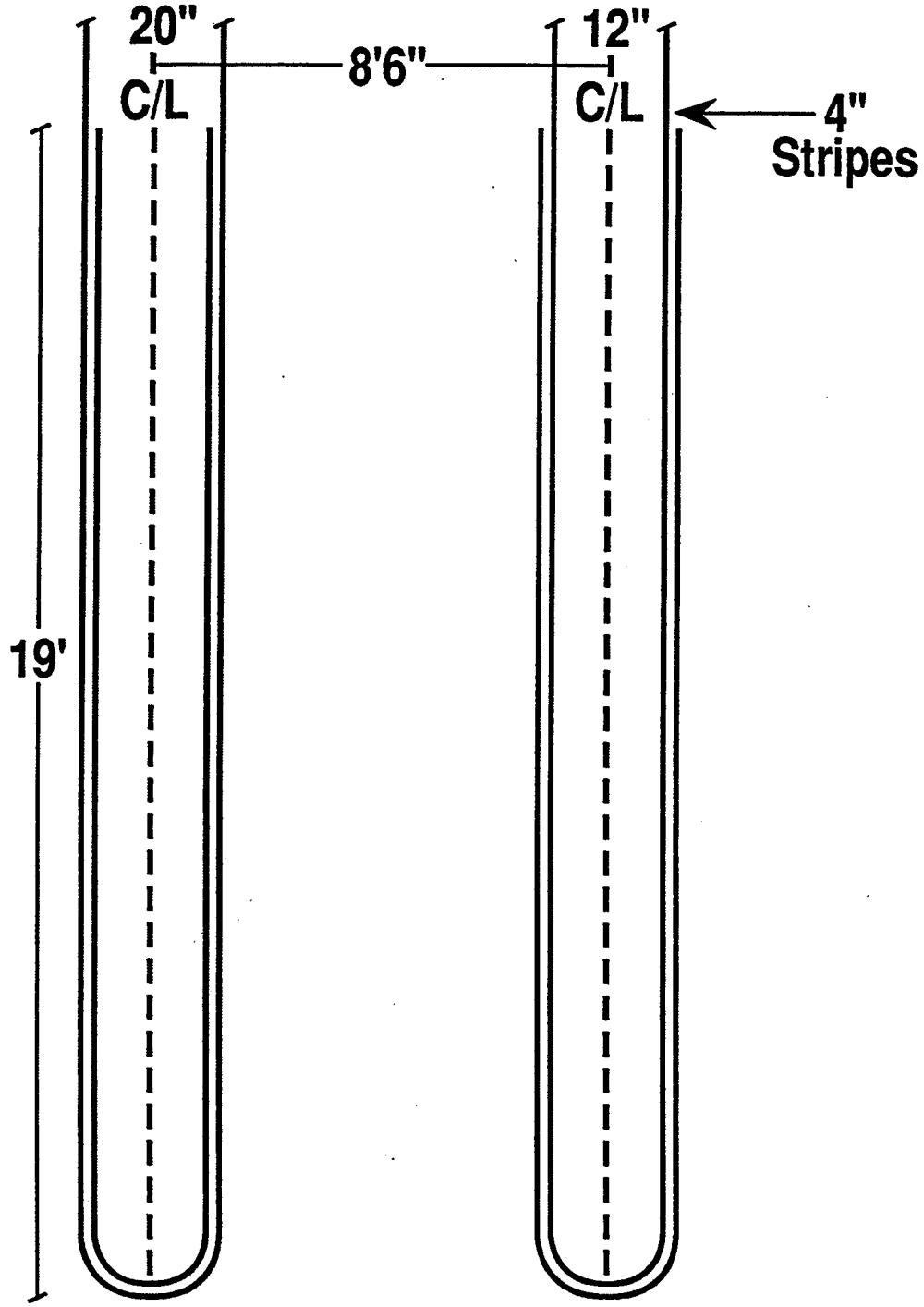
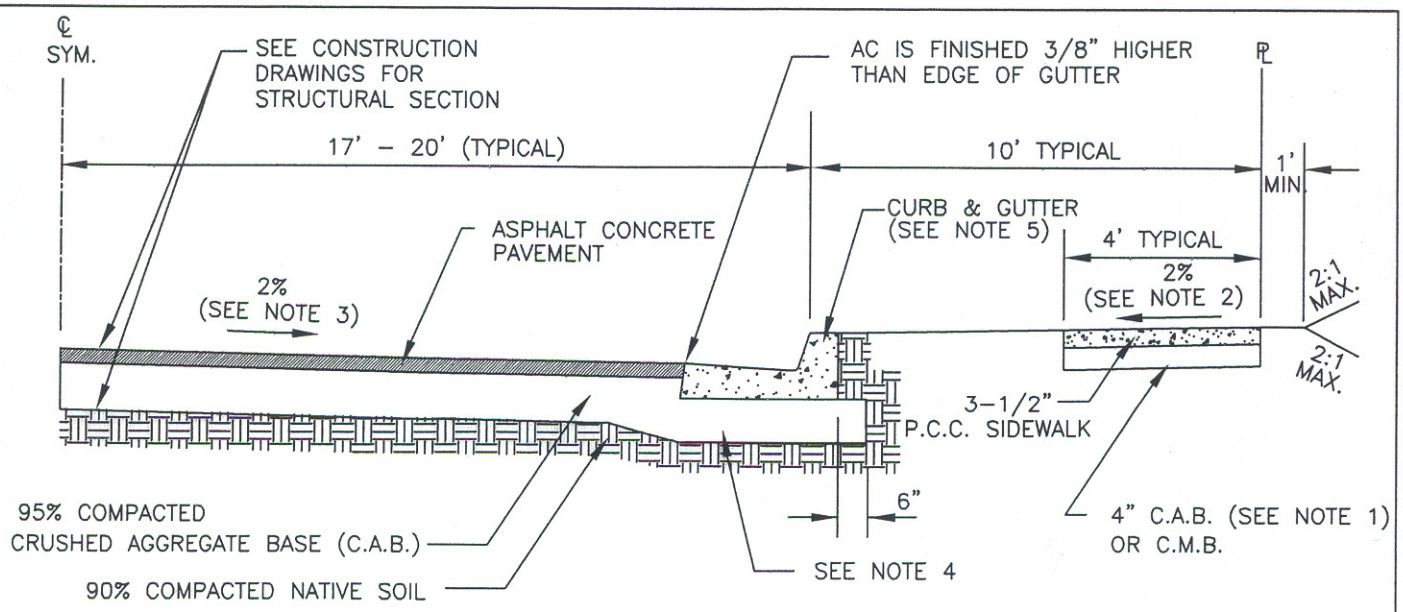
CITY OF TORRANCE

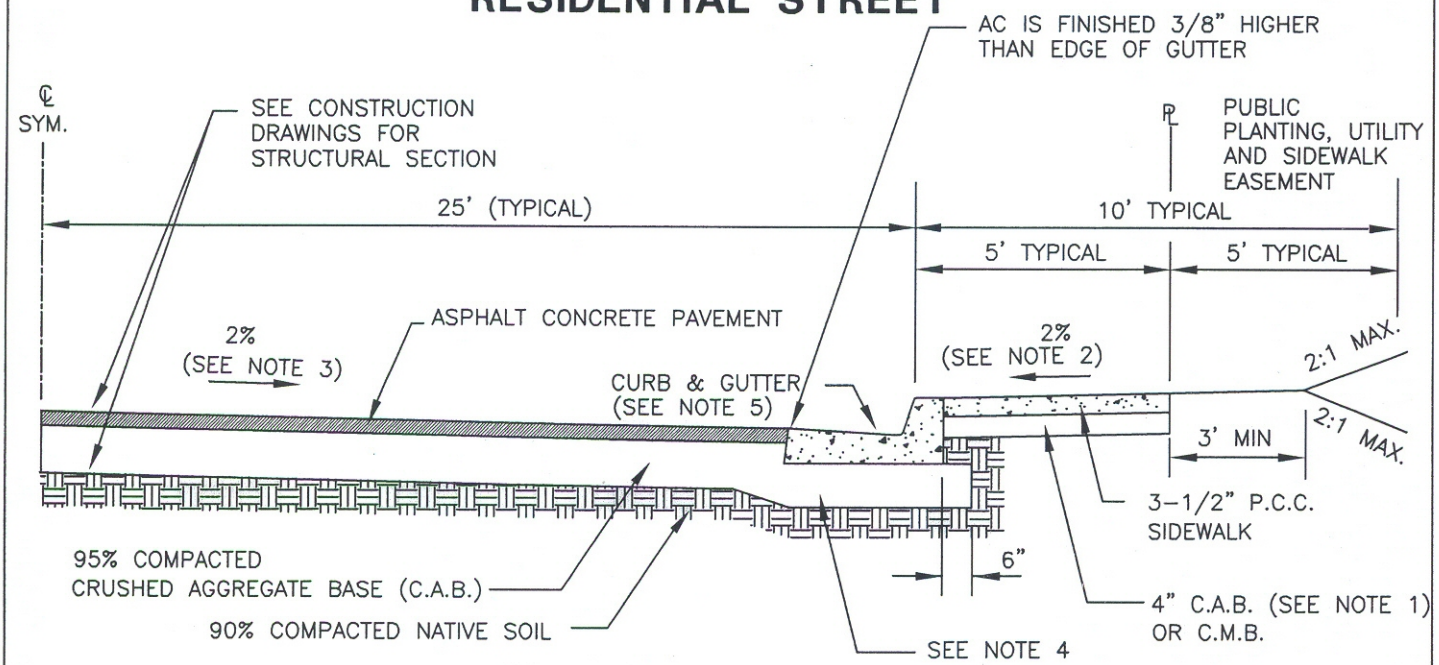
STANDARD PARKING STRIPING



Not To Scale



RESIDENTIAL STREET



INDUSTRIAL STREET

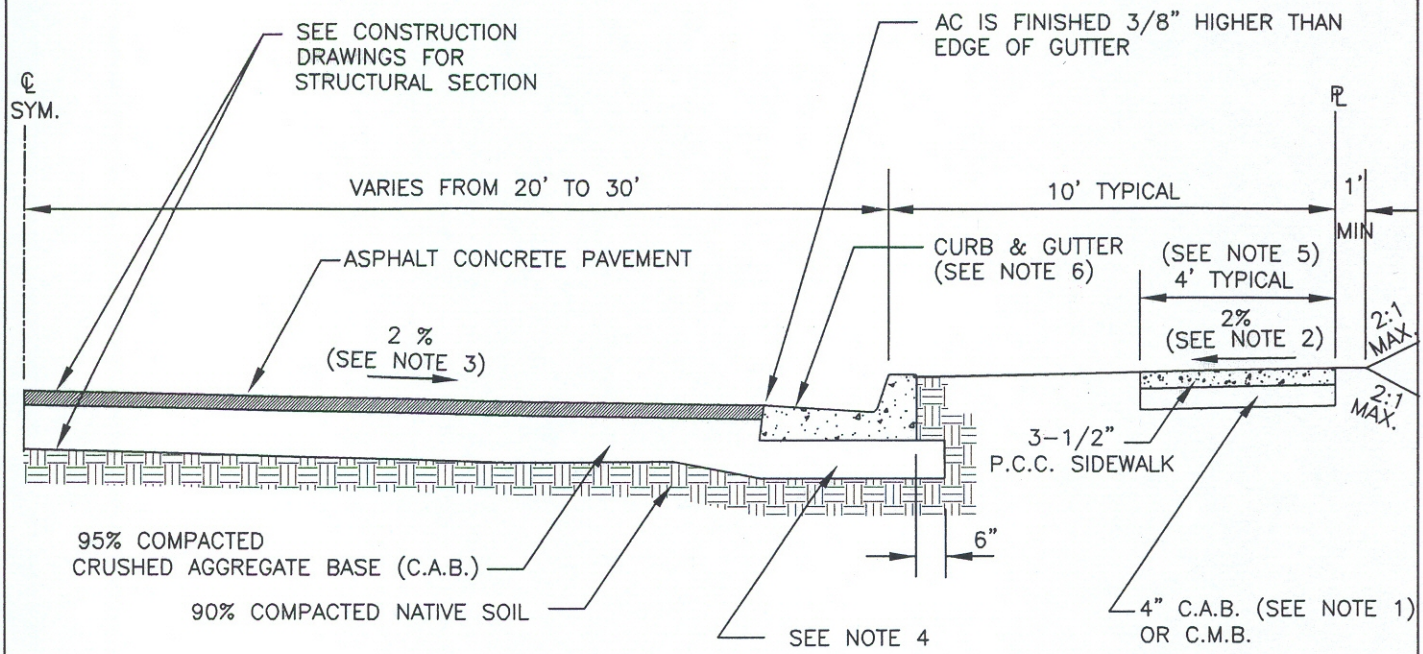
NOTES:

1. THE BASE MAY BE OMITTED UNDER SIDEWALK IF SUBGRADE IS SANDY SOIL AND WHEN AUTHORIZED BY THE PUBLIC WORKS INSPECTOR.
2. TYPICAL – MAY VARY 0.5% MIN. TO 2.0% MAX TO MATCH EXISTING CONDITIONS AND TO FACILITATE JOINS.
3. TYPICAL – MAY VARY 1% MIN. TO 4.0% MAX TO MATCH EXISTING CONDITONS AND TO FACILITATE JOINS.
4. THICKNESS OF BASE REQUIRED UNDER CURB & GUTTER SHALL BE 8".
5. CURB AND GUTTER AS PER SPPWC STANDARD 120 TYPE A2 UNLESS OTHERWISE NOTED.
6. SIDEWALK NOT TO BE PLACED MONOLITHICALLY WITH CURB.

CITY OF TORRANCE

DATE ISSUED	TYPICAL SECTION LOCAL STREET	STANDARD NO.
DEC 2012	ROBERT J. BESTE PUBLIC WORKS DIRECTOR R.C.E. NO. 50737	T102 SHEET 1 OF 1

TS/TT/T102



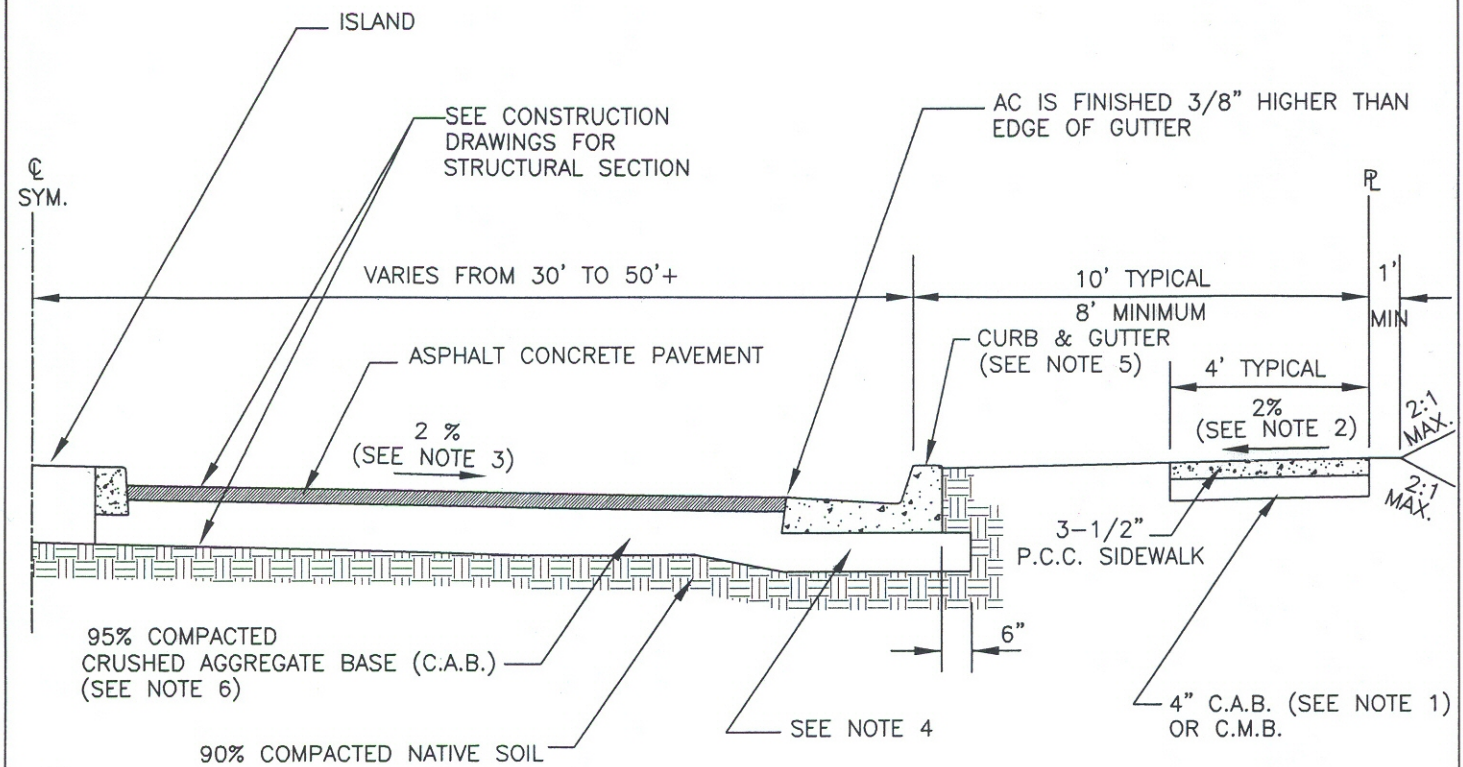
COLLECTOR

NOTES:

1. THE BASE MAY BE OMITTED UNDER SIDEWALK IF SUBGRADE IS SANDY SOIL AND WHEN AUTHORIZED BY THE PUBLIC WORKS INSPECTOR.
2. TYPICAL – MAY VARY 0.5% MIN. TO 2% MAX TO MATCH EXISTING CONDITIONS AND TO FACILITATE JOINS.
3. TYPICAL – MAY VARY 1% MIN. TO 4.0% MAX TO MATCH EXISTING CONDITIONS AND TO FACILITATE JOINS.
4. THICKNESS OF BASE REQUIRED UNDER CURB & GUTTER SHALL BE 8".
5. IF SIDEWALK IS ADJACENT TO CURB, SIDEWALK WIDTH SHALL BE 5' MINIMUM AND HAVE 4' CLEAR AROUND ANY OBSTRUCTION. ALSO SEE T108 AND T109.
6. CURB AND GUTTER AS PER SPPWC STANDARD 120 TYPE A2 UNLESS OTHERWISE NOTED.

CITY OF TORRANCE		
DATE ISSUED DEC 2012	TYPICAL SECTION COLLECTOR AND ARTERIAL STREET ROBERT J. BESTE PUBLIC WORKS DIRECTOR R.C.E. NO. 50737	STANDARD NO. T103 SHEET 1 OF 2

TT/T103-1



MINOR AND MAJOR ARTERIAL

NOTES:

1. THE BASE MAY BE OMITTED UNDER SIDEWALK IF SUBGRADE IS SANDY SOIL AND WHEN AUTHORIZED BY THE PUBLIC WORKS INSPECTOR.
2. TYPICAL – MAY VARY 0.5% MIN. TO 2% MAX TO MATCH EXISTING CONDITIONS AND TO FACILITATE JOINS.
3. TYPICAL – MAY VARY 1% MIN. TO 4.0% MAX TO MATCH EXISTING CONDITIONS AND TO FACILITATE JOINS.
4. THICKNESS OF BASE REQUIRED UNDER CURB & GUTTER SHALL BE 8".
5. CURB AND GUTTER AS PER SPPWC STANDARD 120 TYPE A2 UNLESS OTHERWISE NOTED.
6. IN CLAY SOILS, EITHER LIME TREAT THE SUBGRADE OR INSTALL GEOTEXTILE MEMBRANE OVER SUBGRADE AND PLACE 12" OF CRUSHED AGGREGATE BASE ON MEMBRANE. GEOTEXTILE MEMBRANE SHALL BE NON-WOVEN AND MEET THE REQUIREMENTS FOR TYPE 250N PER GREEN BOOK SECTION 213-2 GEOSYNTHETICS- TABLE 213-2.2(A)

CITY OF TORRANCE

DATE ISSUED	TYPICAL SECTION COLLECTOR AND ARTERIAL STREET	STANDARD NO.
DEC 2012	ROBERT J. BESTE PUBLIC WORKS DIRECTOR R.C.E. NO. 50737	T103 SHEET 2 OF 2

TT/T103-2

TT/T1003

CITY OF TORRANCE - WORK AREA TRAFFIC CONTROL

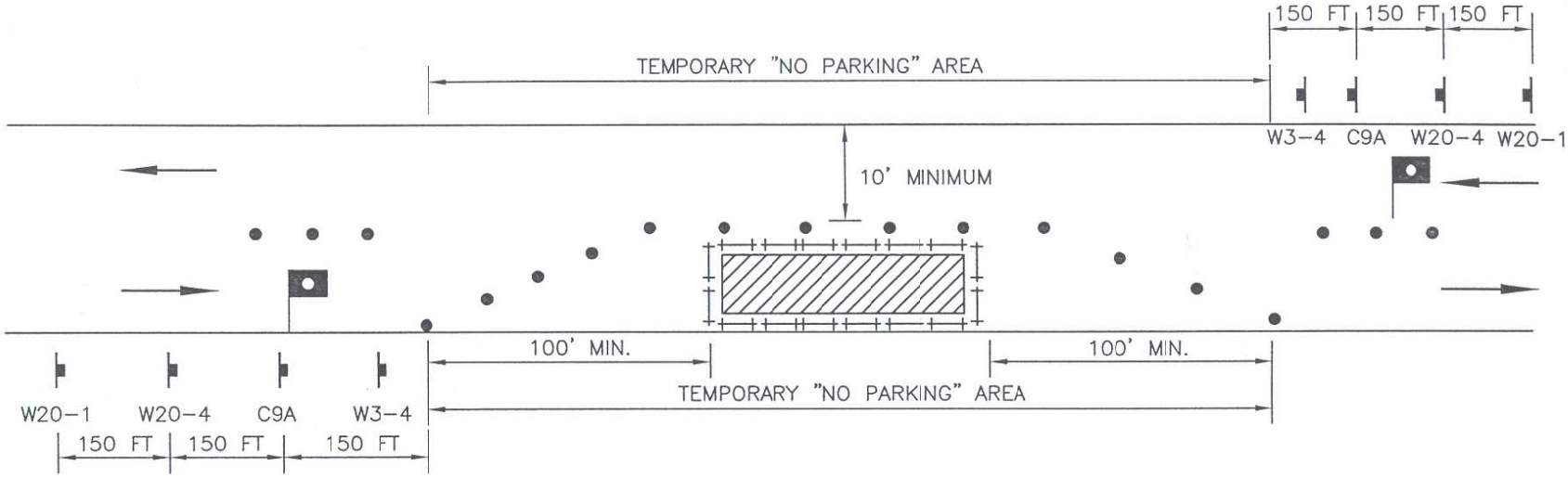
TYPICAL LOCAL STREET CLOSURE WITH FLAGGERS

DATE ISSUED: 19 FEB 2008

STANDARD NO. T1003

SHEET 1 OF 1

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737



DESIGN TRAFFIC SPEED
25 MPH

DELINEATOR SPACING	
(TAPER)	(TANGENT)
25 FT.	25 FT.

CONSTRUCTION SIGNS:

C9A : FLAGGER

W3-4 : PREPARE TO STOP (OPTIONAL)

W20-1 : ROAD WORK AHEAD

W20-4 : ONE LANE ROAD AHEAD

EYE CONTACT MUST BE MAINTAINED BETWEEN FLAGGERS OR USE 2-WAY RADIO COMMUNICATION

FLAGGERS MUST BE TRAINED AS REQUIRED BY SECTION 3203 OF THE CAL-OSHA GENERAL INDUSTRIAL SAFETY ORDERS

LEGEND:

FLAGGER

TRAFFIC DIRECTION

28" TRAFFIC CONE OR 36" POST TUBE DELINEATOR

SIGN

WORK AREA

BARRICADE (FOR EXCAVATION ONLY)

TT/T1004

CITY OF TORRANCE - WORK AREA TRAFFIC CONTROL

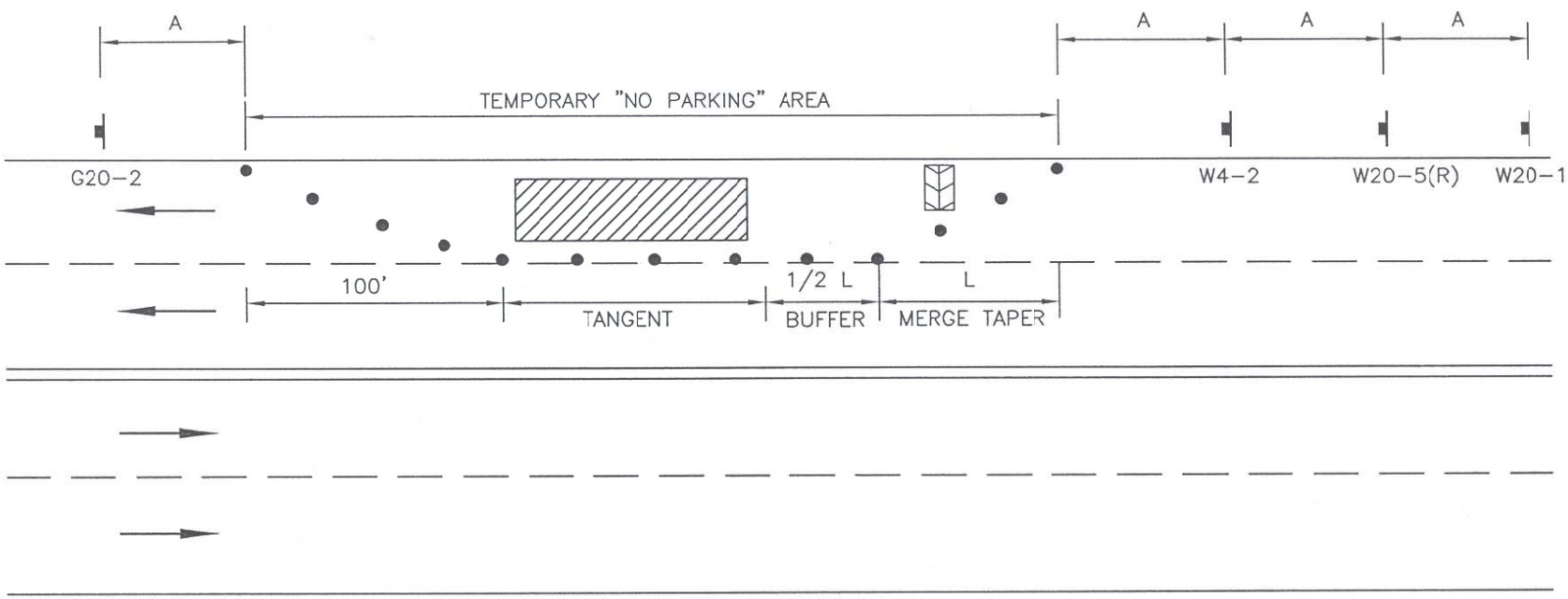
ARTERIAL & COLLECTOR
RIGHT LANE CLOSURE

DATE ISSUED
19 FEB 2008

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

STANDARD NO.
T1004

SHEET 1 OF 1



MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT					
DESIGN SPEED	MERGE TAPER LENGTH (L)	DELINEATOR SPACING		DISTANCE BETWEEN SIGNS (A)	BUFFER LENGTH (1/2 L)
		(TAPER)	(TANGENT)		
30 MPH	180 FT.	30 FT.	60 FT.	100 FT.	90 FT
35 MPH	245 FT.	35 FT.	70 FT.	100 FT.	125 FT
40 MPH	320 FT.	40 FT.	80 FT.	100 FT.	160 FT
45 MPH	540 FT.	45 FT.	90 FT.	350 FT.	270 FT
50 MPH	600 FT.	50 FT.	100 FT.	350 FT.	300 FT

LEGEND:

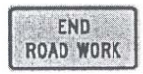
- TRAFFIC DRUM OR 36" POST TUBE DELINEATOR
- SIGN WITH FLAG TREE
- FLASHING LEFT ARROW
- WORK AREA
- TRAFFIC DIRECTION

CONSTRUCTION SIGNS:

W20-1 ROAD WORK AHEAD

W20-5(R): RIGHT LANE CLOSED AHEAD

W4-2 : LANE END (SYMBOL)



G20-2 : END ROAD WORK (OPTIONAL)

TT/T1005

CITY OF TORRANCE - WORK AREA TRAFFIC CONTROL

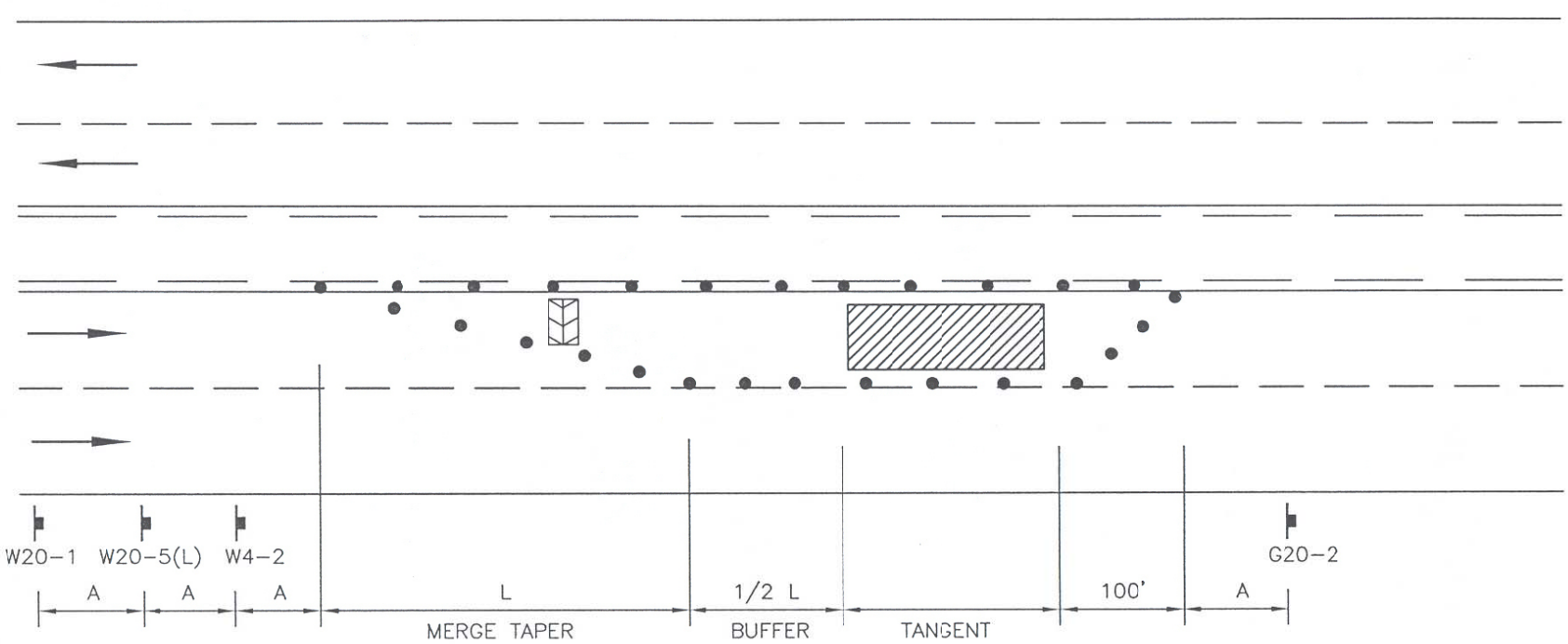
ARTERIAL & COLLECTOR
LEFT LANE CLOSURE

DATE ISSUED
19 FEB 2008

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

STANDARD NO.
T1005

SHEET 1 OF 1



MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT					
DESIGN SPEED	MERGE TAPER LENGTH (L)	DELINEATOR SPACING (TAPER)	DELINEATOR SPACING (TANGENT)	DISTANCE BETWEEN SIGNS (A)	BUFFER LENGTH (1/2 L)
30 MPH	180 FT.	30 FT.	60 FT.	100 FT.	90 FT
35 MPH	245 FT.	35 FT.	70 FT.	100 FT.	125 FT
40 MPH	320 FT.	40 FT.	80 FT.	100 FT.	160 FT
45 MPH	540 FT.	45 FT.	90 FT.	350 FT.	270 FT
50 MPH	600 FT.	50 FT.	100 FT.	350 FT.	300 FT

CONSTRUCTION SIGNS:

W20-1 : ROAD WORK AHEAD

W20-5(L): LEFT LANE CLOSED AHEAD

W4-2 : LANE END (SYMBOL)

G20-2 : END ROAD WORK (OPTIONAL)

LEGEND:

- TRAFFIC DRUM OR 36" POST TUBE DELINEATOR
- SIGN WITH FLAG TREE
- FLASHING RIGHT ARROW
- WORK AREA
- TRAFFIC DIRECTION

TT/T1006

CITY OF TORRANCE - WORK AREA TRAFFIC CONTROL

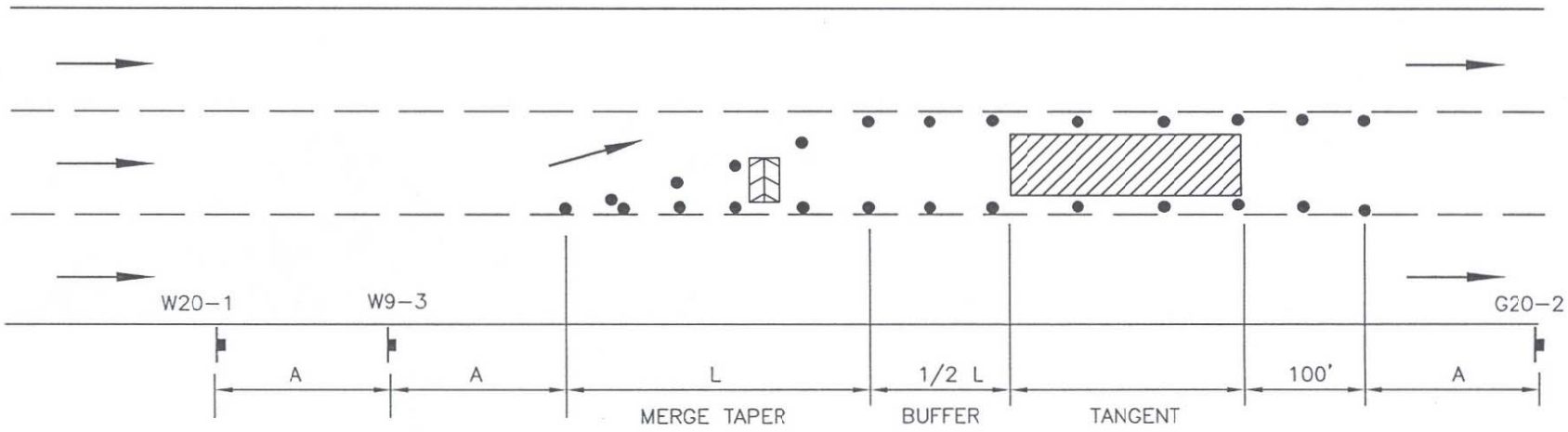
ARTERIAL & COLLECTOR
CENTER LANE CLOSURE

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

DATE ISSUED
19 FEB 2008

STANDARD NO.
T1006

SHEET 1 OF 1



MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT					
DESIGN SPEED	MERGE TAPER LENGTH (L)	DELINEATOR SPACING (TAPER)	DELINEATOR SPACING (TANGENT)	DISTANCE BETWEEN SIGNS (A)	BUFFER LENGTH (1/2 L)
30 MPH	180 FT.	30 FT.	60 FT.	100 FT.	90 FT
35 MPH	245 FT.	35 FT.	70 FT.	100 FT.	125 FT
40 MPH	320 FT.	40 FT.	80 FT.	100 FT.	160 FT
45 MPH	540 FT.	45 FT.	90 FT.	350 FT.	270 FT
50 MPH	600 FT.	50 FT.	100 FT.	350 FT.	300 FT

LEGEND:

- ● TRAFFIC DRUM OR 36" POST TUBE DELINEATOR
- SIGN WITH FLAG TREE
- FLASHING LEFT ARROW
- WORK AREA
- TRAFFIC DIRECTION

CONSTRUCTION SIGNS:

W20-1 ROAD WORK AHEAD

W9-3: CENTER LANE CLOSED AHEAD

G20-2 : END ROAD WORK (OPTIONAL)

TT/T1007

CITY OF TORRANCE - WORK AREA TRAFFIC CONTROL

DATE ISSUED
27 FEB 2008

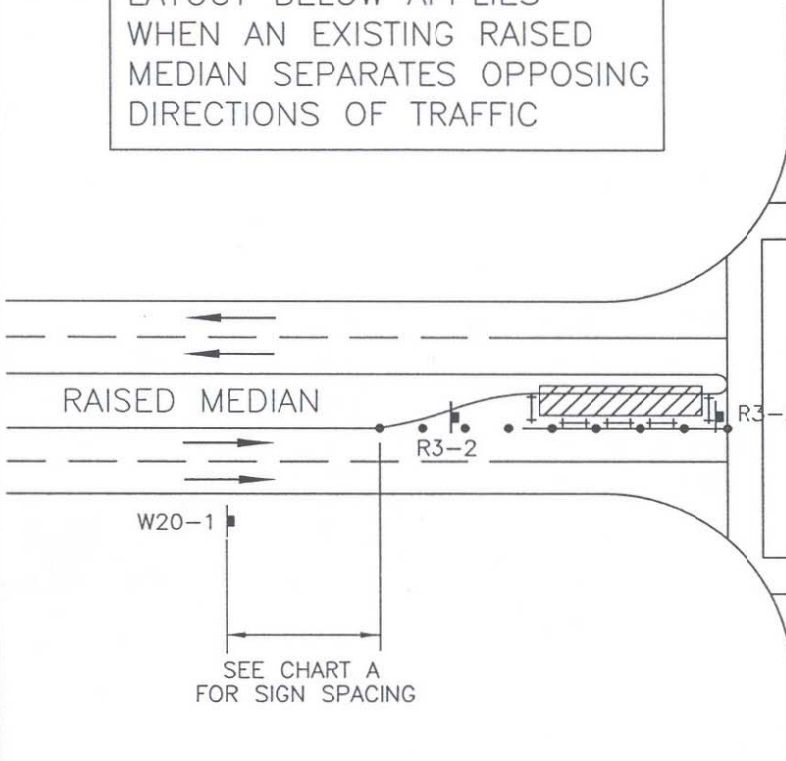
ARTERIAL & COLLECTOR
LEFT TURN LANE CLOSURE

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

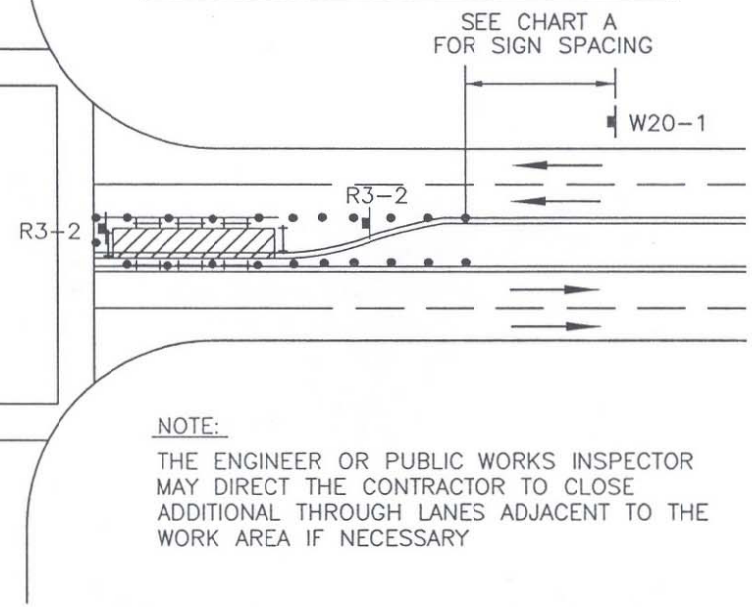
STANDARD NO.
T1007

SHEET 1 OF 1

LAYOUT BELOW APPLIES WHEN AN EXISTING RAISED MEDIAN SEPARATES OPPOSING DIRECTIONS OF TRAFFIC



LAYOUT BELOW APPLIES WHEN THERE IS NO RAISED MEDIAN TO SEPARATE OPPOSING TRAFFIC



NOTE:

THE ENGINEER OR PUBLIC WORKS INSPECTOR MAY DIRECT THE CONTRACTOR TO CLOSE ADDITIONAL THROUGH LANES ADJACENT TO THE WORK AREA IF NECESSARY

CHART A

MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

DESIGN SPEED	TAPER LENGTH (EACH LANE)	DELINEATOR SPACING (TAPER)	DELINEATOR SPACING (TANGENT)	SIGN SPACING (ADVANCE OF TAPER AND BETWEEN SIGNS)
35 MPH	250 FT.	25 FT.	50 FT.	250 FT.
40 MPH	350 FT.	25 FT.	50 FT.	350 FT.
45 MPH	550 FT.	25 FT.	50 FT.	550 FT.
50 MPH	600 FT.	25 FT.	50 FT.	600 FT.

CONSTRUCTION SIGNS:

W20-1 :
ROAD WORK AHEAD

R3-2 :
NO LEFT TURN

LEGEND:

- TRAFFIC DRUM OR 36" POST TUBE DELINEATOR
- SIGN
- HIGH LEVEL WARNING DEVICE
- TRAFFIC DIRECTION
- WORK AREA
- BARRICADE (FOR EXCAVATION ONLY)

TT/T1008

CITY OF TORRANCE - WORK AREA TRAFFIC CONTROL

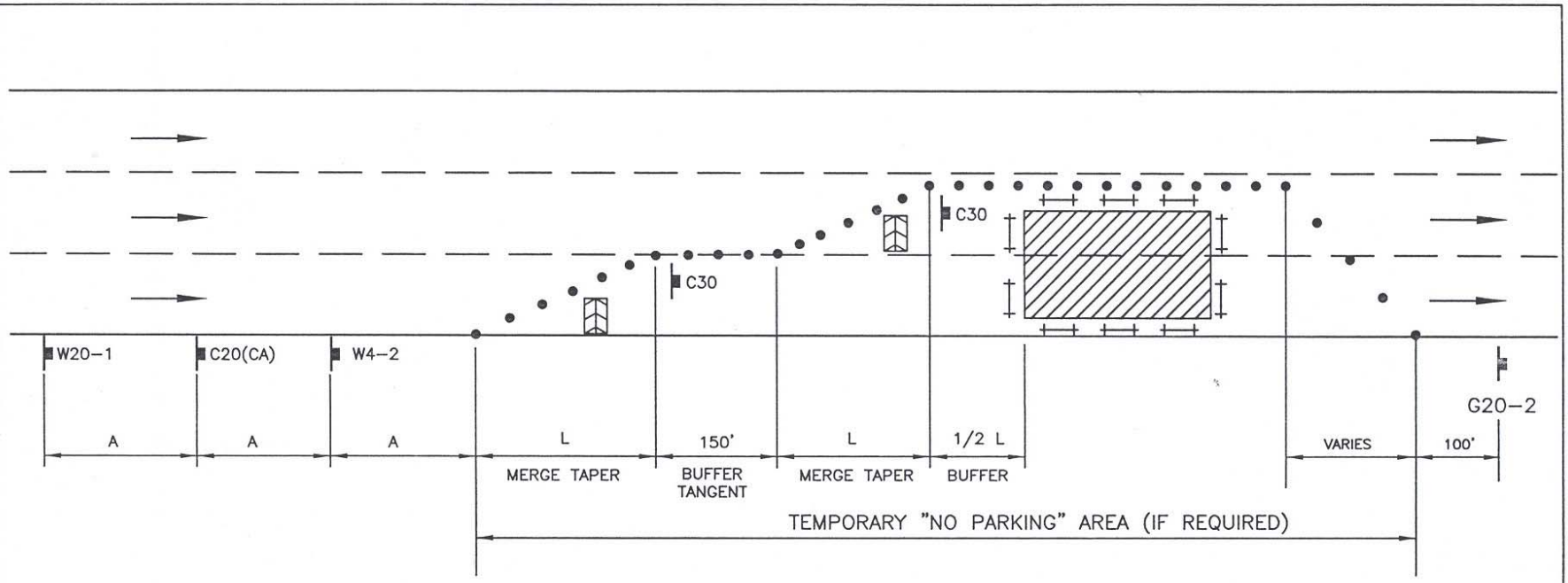
DATE ISSUED
23 JUL 2009

ARTERIAL
MULTI-LANE CLOSURE

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

STANDARD NO.
T1008

SHEET 1 OF 1



MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT					
DESIGN SPEED	MERGE TAPER LENGTH (L)	DELINEATOR SPACING		DISTANCE BETWEEN SIGNS (A)	BUFFER LENGTH (1/2 L)
		(TAPER)	(TANGENT)		
30 MPH	180 FT.	30 FT.	60 FT.	100 FT.	90 FT
35 MPH	245 FT.	35 FT.	70 FT.	100 FT.	125 FT
40 MPH	320 FT.	40 FT.	80 FT.	100 FT.	160 FT
45 MPH	540 FT.	45 FT.	90 FT.	350 FT.	270 FT
50 MPH	600 FT.	50 FT.	100 FT.	350 FT.	300 FT

NOTE:

MERGE TAPER LENGTH AND BUFFER LENGTH WAS CALCULATED BASED ON 12–FOOT WIDE LANES.

LEGEND:

- TRAFFIC DRUM OR 36" POST TUBE DELINEATOR
- SIGN WITH FLAG TREE
- FLASHING RIGHT ARROW
- WORK AREA
- TRAFFIC DIRECTION
- BARRICADE

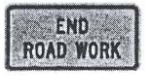
CONSTRUCTION SIGNS:

W20–1 : ROAD WORK AHEAD

C20(CA): 2 RIGHT LANES CLOSED AHEAD

W4–2 : LANE END (SYMBOL)

C30: LANE CLOSED



G20–2 : END ROAD WORK (OPTIONAL)

TT/T1011

CITY OF TORRANCE - WORK AREA TRAFFIC CONTROL

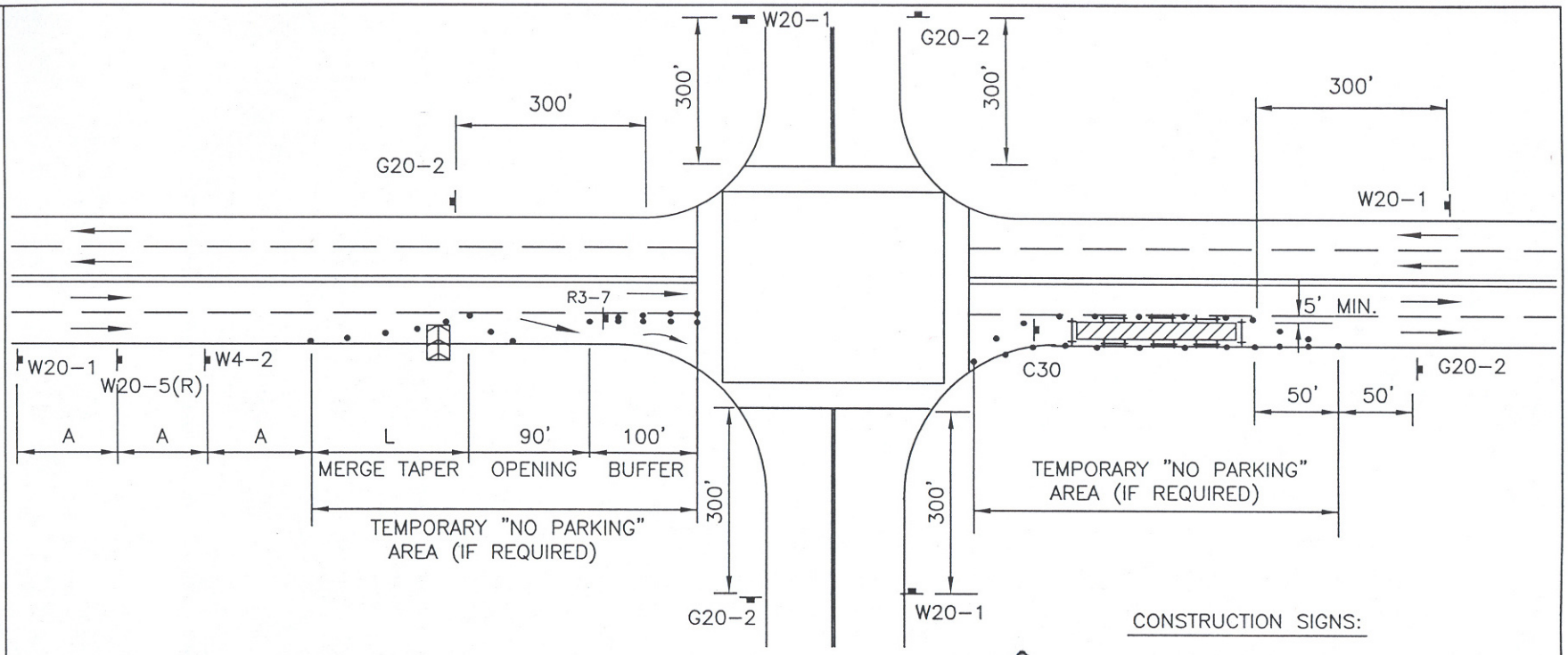
RIGHT LANE CLOSURE FOR WORK BEYOND INTERSECTION

DATE ISSUED: 1 SEP 2009

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

STANDARD NO. **T1011**

SHEET 1 OF 1



MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

DESIGN SPEED	MERGE TAPER LENGTH (L)	DELINEATOR SPACING		DISTANCE BETWEEN SIGNS (A)
		(TAPER)	(TANGENT)	
30 MPH	180 FT.	30 FT.	60 FT.	100 FT.
35 MPH	245 FT.	35 FT.	70 FT.	100 FT.
40 MPH	320 FT.	40 FT.	80 FT.	100 FT.
45 MPH	540 FT.	45 FT.	90 FT.	350 FT.
50 MPH	600 FT.	50 FT.	100 FT.	350 FT.

NOTE: MERGE TAPER LENGTH WAS CALCULATED BASED ON 12-FOOT WIDE LANES.

LEGEND:

- TRAFFIC DRUM OR 36" POST TUBE DELINEATOR
- SIGN WITH FLAG TREE
- TRAFFIC DIRECTION
- FLASHING LEFT ARROW
- WORK AREA
- BARRICADE (FOR EXCAVATION ONLY)

CONSTRUCTION SIGNS:

W20-1 ROAD WORK AHEAD

W20-5(R): RIGHT LANE CLOSED AHEAD

W4-2 : LANE END (SYMBOL)

G20-2 : END ROAD WORK (OPTIONAL)

R3-7: RIGHT LANE MUST TURN RIGHT

C30: LAND CLOSED

TT/T1013

CITY OF TORRANCE - WORK AREA TRAFFIC CONTROL

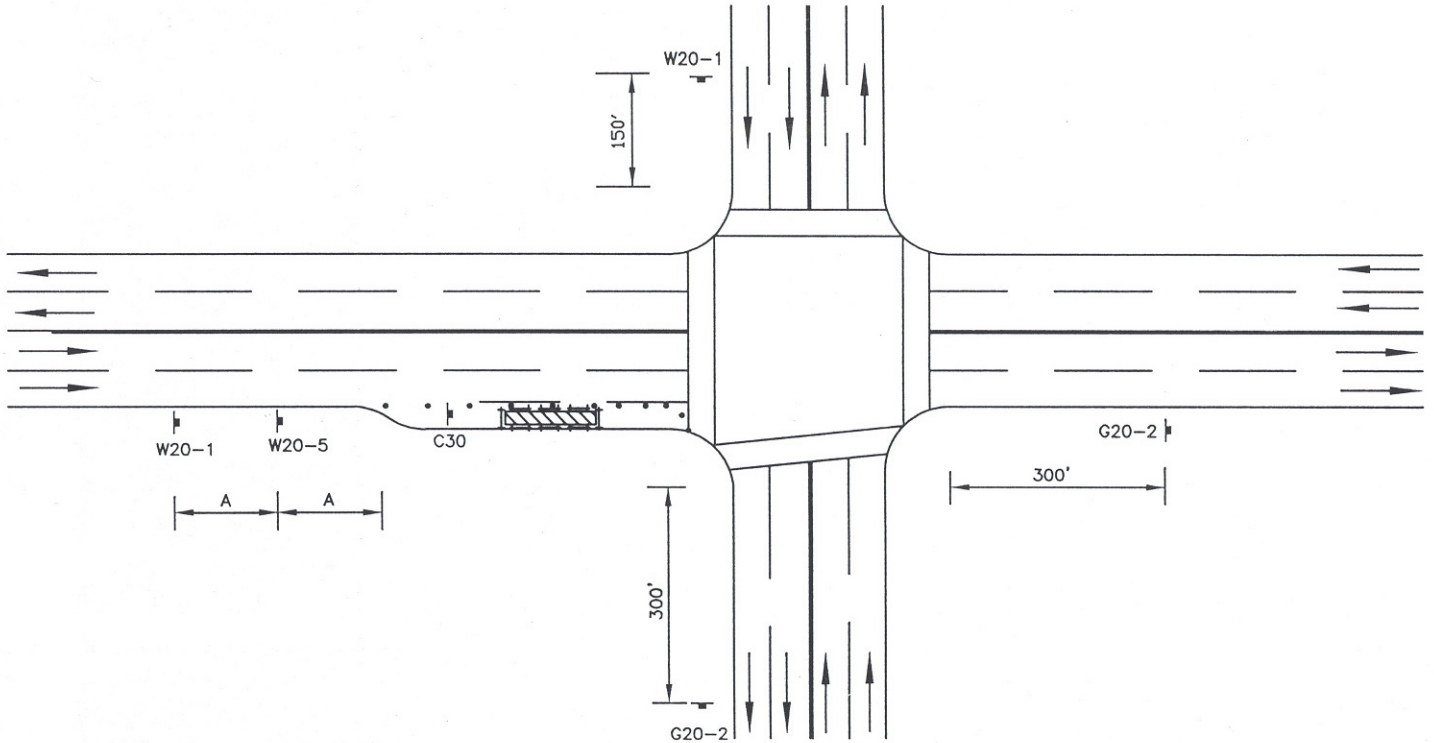
ARTERIAL & COLLECTOR STREET
RIGHT TURN LANE CLOSURE

DATE ISSUED: 1 SEP 2009

ROBERT J. BESTE
PUBLIC WORKS DIRECTOR
R.C.E. NO. 50737

STANDARD NO. **T1013**

SHEET 1 OF 1



MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

DESIGN SPEED	MERGE TAPER LENGTH (L)	DELINEATOR SPACING		DISTANCE BETWEEN SIGNS (A)
		(TAPER)	(TANGENT)	
30 MPH	180 FT.	30 FT.	60 FT.	100 FT.
35 MPH	245 FT.	35 FT.	70 FT.	100 FT.
40 MPH	320 FT.	40 FT.	80 FT.	100 FT.
45 MPH	540 FT.	45 FT.	90 FT.	350 FT.
50 MPH	600 FT.	50 FT.	100 FT.	350 FT.

LEGEND:

- TRAFFIC DRUM OR 36" POST TUBE DELINEATOR
- SIGN WITH FLAG TREE
- WORK AREA
- TRAFFIC DIRECTION
- BARRICADE (FOR EXCAVATION ONLY)

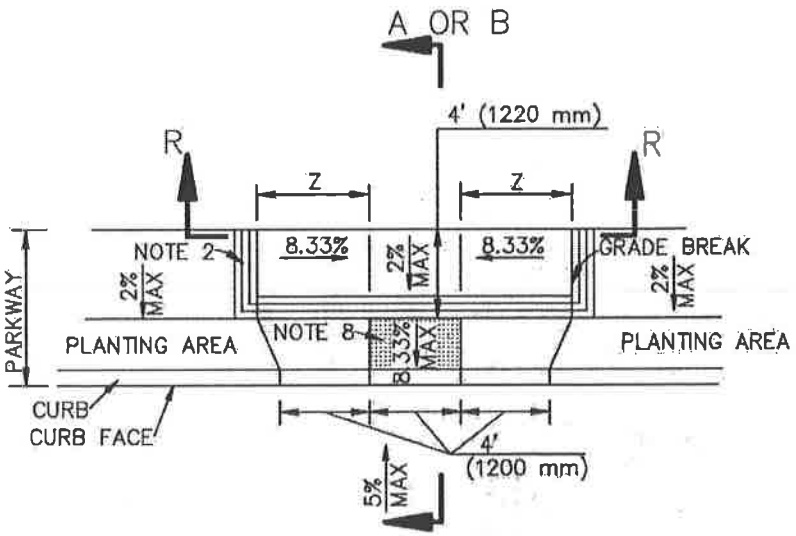
CONSTRUCTION SIGNS:

W20-1 ROAD WORK AHEAD

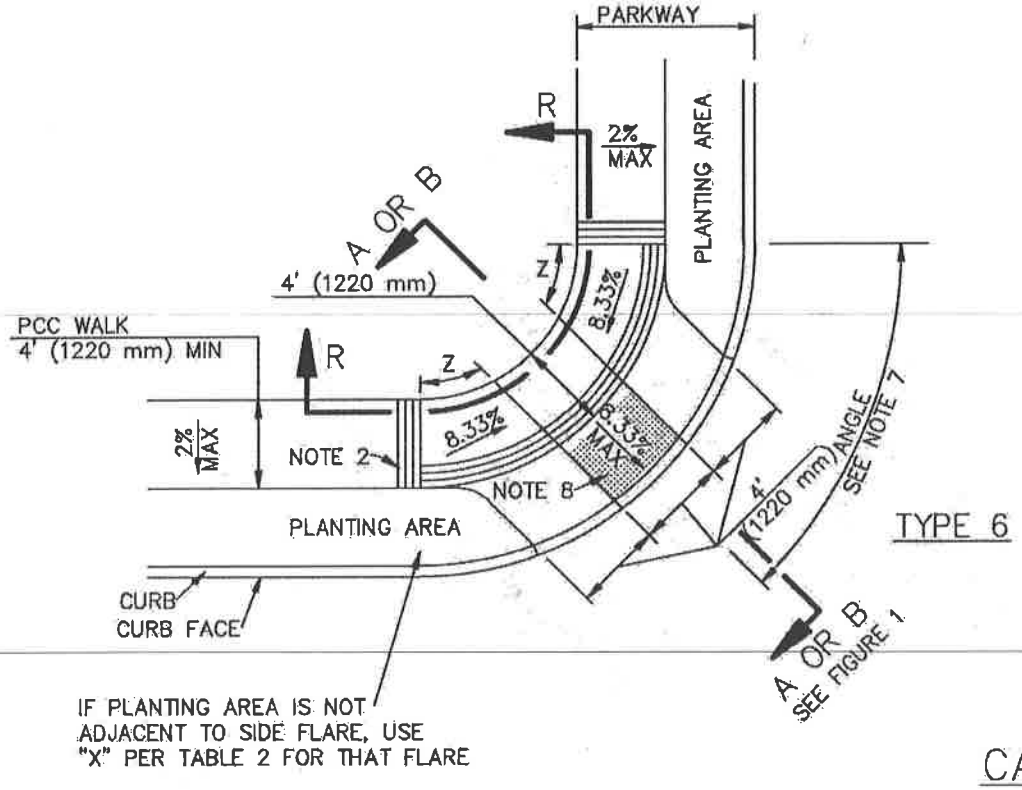
W20-5(R): RIGHT LANE CLOSED AHEAD

G20-2 : END ROAD WORK (OPTIONAL)

C30: LAND CLOSED



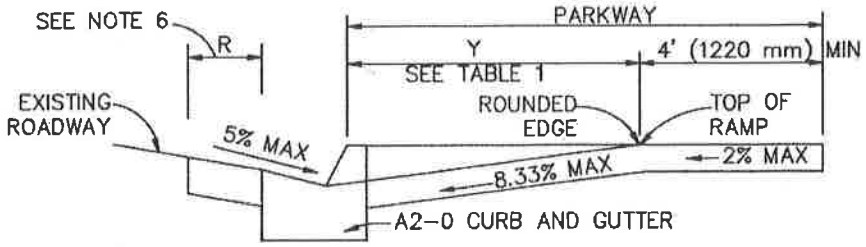
TYPE 5



TYPE 6

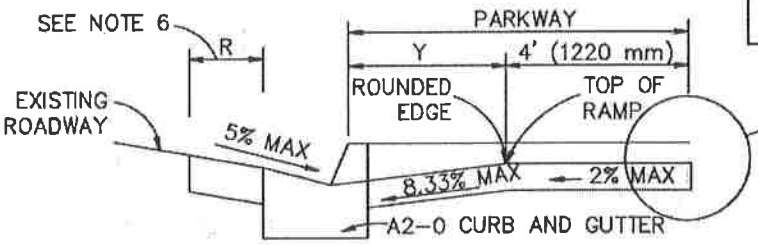
CASE A

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION	STANDARD PLAN
CURB RAMP	**111-5**
	SHEET 3 OF 10

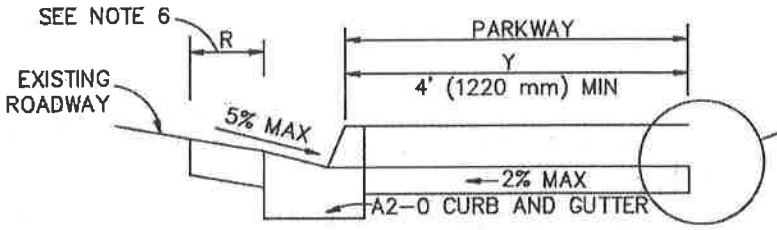


SECTION A–A

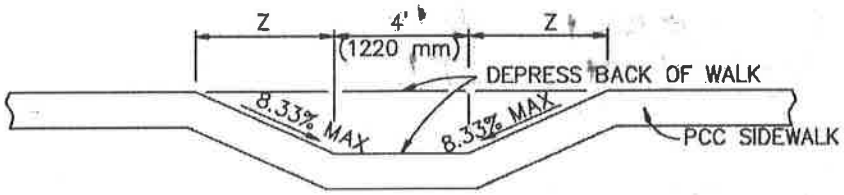
USE FIGURE 1 TO DETERMINE WHICH OF SECTIONS A–A, B–B OR C–C IS APPROPRIATE.



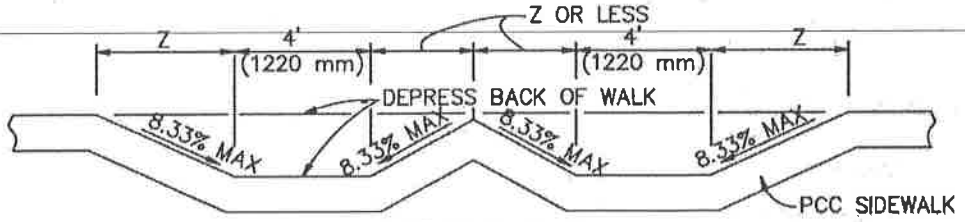
SECTION B–B



SECTION C–C



SECTION R–R



SECTION S–S

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION	STANDARD PLAN
CURB RAMP	**111–5**
	SHEET 7 OF 10

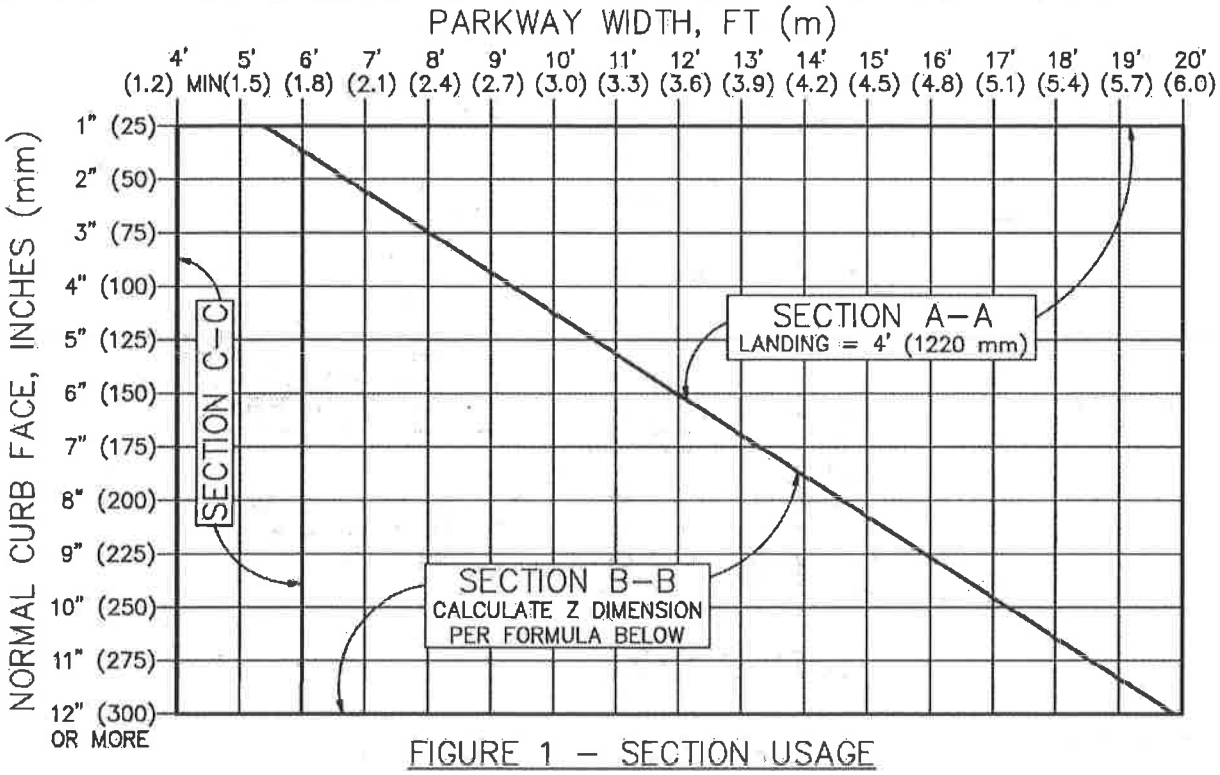


FIGURE 1 – SECTION USAGE

NORMAL CURB FACE, INCHES (mm)	X, FT (mm) (10% SLOPE)	SECTION Y–Y Y, FT (mm)
2" (50)	4.00' (1220) MIN	2.63' (790)
3" (75)	4.00' (1220) MIN	3.95' (1185)
4" (100)	4.00' (1220) MIN	5.26' (1580)
5" (125)	4.17' (1275)	6.58' (1975)
6" (150)	5.00' (1525)	7.90' (2370)
7" (175)	5.83' (1775)	9.21' (2765)
8" (200)	6.67' (2035)	10.53' (3160)
9" (225)	7.50' (2285)	11.84' (3555)
10" (250)	8.33' (2540)	13.16' (3950)
11" (275)	9.17' (2795)	14.47' (4340)
12" (300)	10.00' (3050)	15.79' (4735)

SEE SHEET 9 FOR STREET SLOPE ADJUSTMENT FACTORS, ALL STREETS

TABLE 1 – X AND Y VALUES

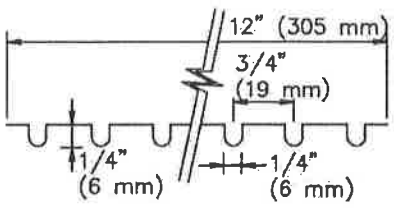
WHERE FIGURE 1 SHOWS USE OF SECTION B–B, FIGURE Z DIMENSION AS FOLLOWS:

W = PARKWAY WIDTH
L = LANDING WIDTH, 4' (1220 mm) TYP
Z = [(Y+L)–W] x 0.760

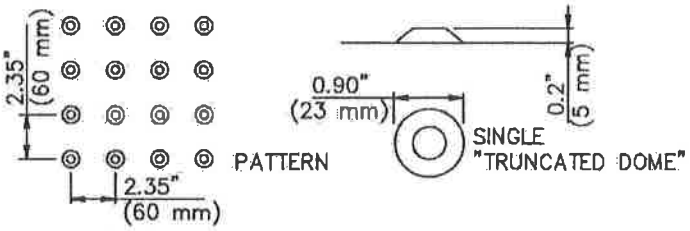
IF (Y+L) < W, THEN Z = 0

TABLE 1 REFERENCE FORMULAS:
X = CF / 8.333%
Y = CF / (8.333% – 2% WALK CROSS SLOPE)

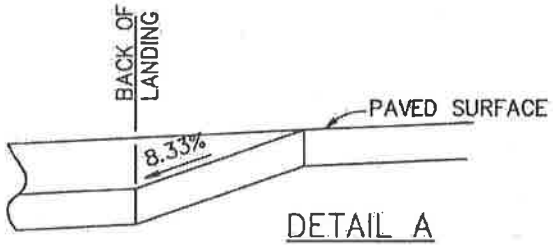
STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION	STANDARD PLAN
CURB RAMP	**111–5**
	SHEET 8 OF 10



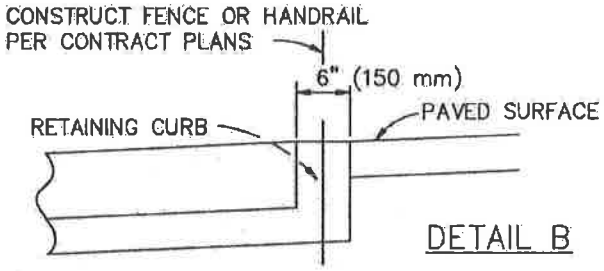
GROOVING DETAIL



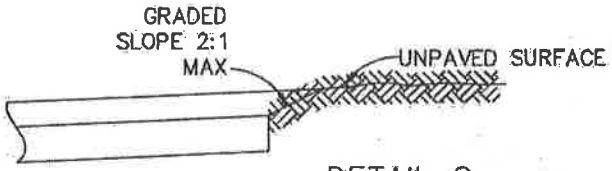
DETECTABLE WARNING DETAIL



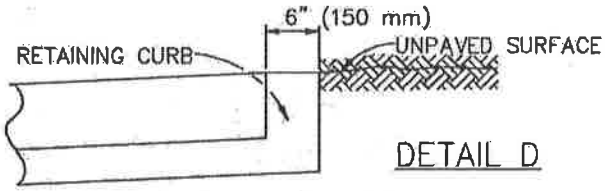
DETAIL A



DETAIL B



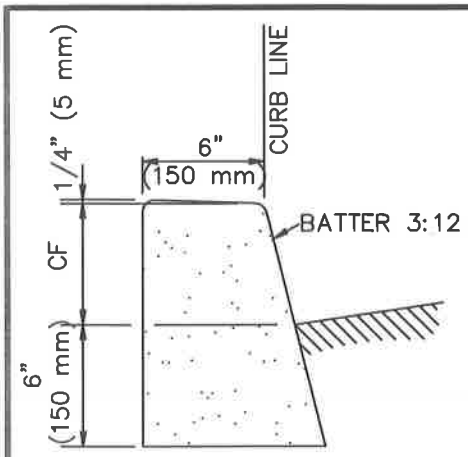
DETAIL C



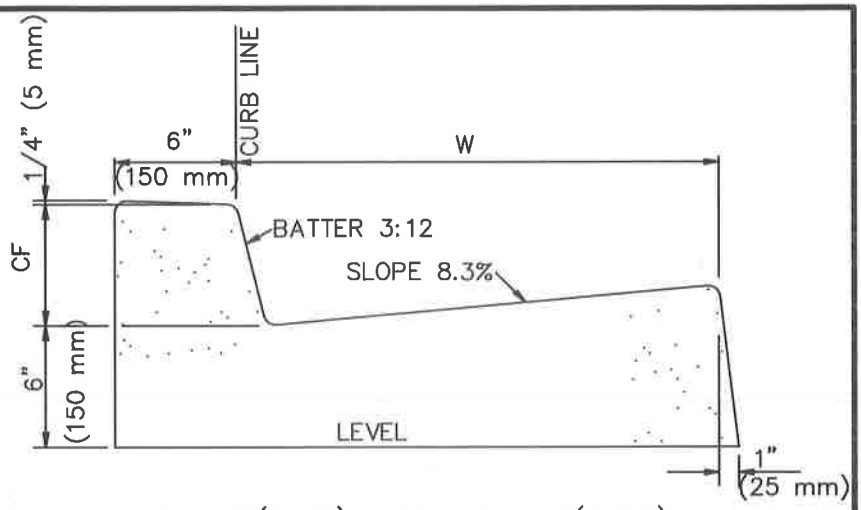
DETAIL D

GENERAL NOTES:

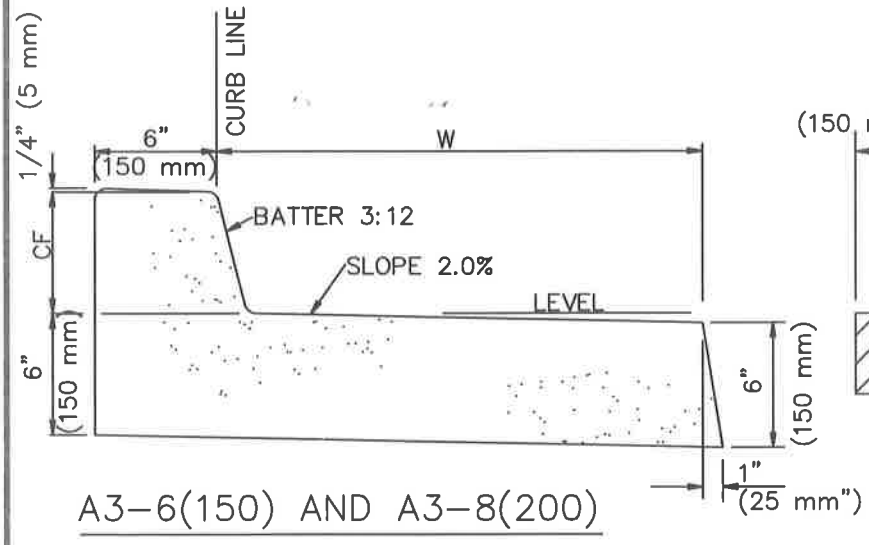
1. CONCRETE SHALL BE CLASS 520-C-2500 (310-C-17) CONFORMING TO SSPWC 201-1.1.2 AND SHALL BE 4" (100 mm) THICK.
2. THE RAMP SHALL HAVE A 12" (305 mm) WIDE BORDER WITH 1/4" (6 mm) GROOVES APPROXIMATELY 3/4" (19 mm) OC. SEE GROOVING DETAIL.
3. THE RAMP SURFACE SHALL HAVE A TRANSVERSE BROOMED SURFACE TEXTURE CONFORMING TO SSPWC 303-1.9.
4. USE DETAIL "A" OR "B" IF EXISTING SURFACE BEHIND LANDING IS PAVED.
5. USE DETAIL "C" OR "D" IF EXISTING SURFACE BEHIND LANDING IS UNPAVED.
6. R = 3' (900 mm) UNLESS OTHERWISE SHOWN ON PLAN. SEE SHEET 7.
7. ANGLE = $\Delta/2$ UNLESS OTHERWISE SHOWN ON PLAN.
8. CONSTRUCT DETECTABLE WARNING SURFACE PER DETAIL THIS SHEET. MATERIALS SHALL BE PER CONTRACT DOCUMENTS.



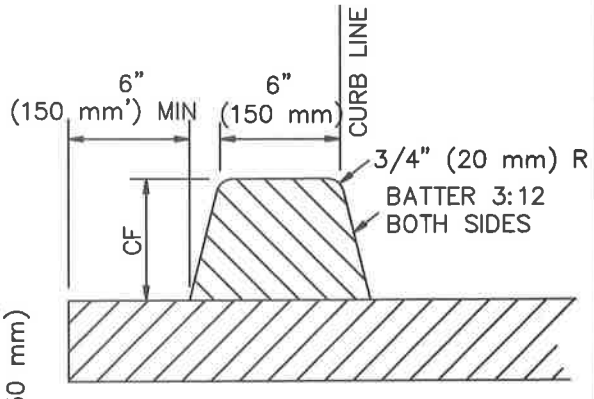
A1–6(150) AND
A1–8(200)



A2–6(150) AND A2–8(200)



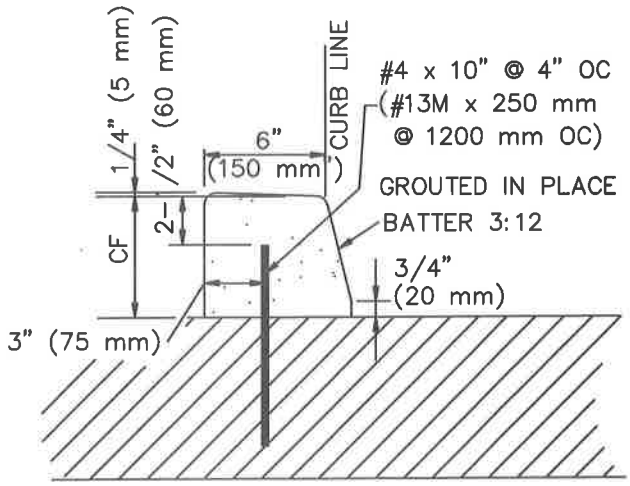
A3–6(150) AND A3–8(200)



D1–6(150) AND
D1–8(200)

NOTES:

1. THE LAST NUMBER IN THE DESIGNATION IS THE CURB FACE (CF) HEIGHT, INCHES (mm).
2. GUTTER WIDTH, W, IS 24" (600 mm) UNLESS OTHERWISE SPECIFIED.
3. TYPES A1, A2, A3 AND C1 SHALL BE CONSTRUCTED FROM PCC.
4. TYPE D1 CURB SHALL BE CONSTRUCTED FROM ASPHALT CONCRETE.
5. TYPE C1 CURB SHALL BE ANCHORED WITH STEEL DOWELS AS SHOWN OR WITH AN EPOXY APPROVED BY THE ENGINEER.
6. ALL EXPOSED CORNERS ON PCC CURBS AND GUTTERS SHALL BE ROUNDED WITH A 1/2" (15 mm) RADIUS.



C1–6(150) AND C1–8(200)

STANDARD PLAN FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE
PUBLIC WORKS STANDARDS INC.
GREENBOOK COMMITTEE
1984
REV. 1996, 2009

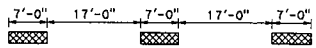
CURB AND GUTTER – BARRIER

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

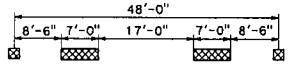
STANDARD PLAN
120–2
SHEET 1 OF 1

CENTERLINES
(2 LANE HIGHWAYS)

DETAIL 1

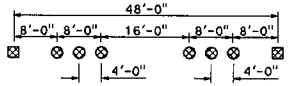


DETAIL 2

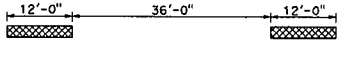


~~DETAIL 3~~ DETAIL 3 DELETED

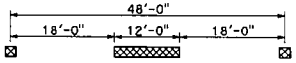
DETAIL 4



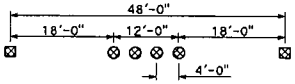
DETAIL 5



DETAIL 6

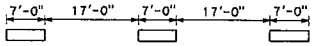


DETAIL 7

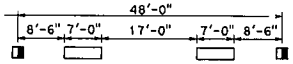


LANELINES
(MULTILANE HIGHWAYS)

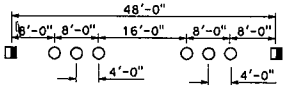
DETAIL 8



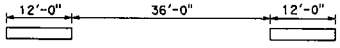
DETAIL 9



DETAIL 10

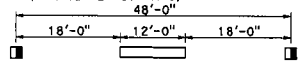


DETAIL 11

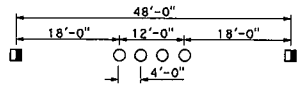


LANELINES (Cont)
(MULTILANE HIGHWAYS)

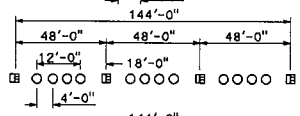
DETAIL 12



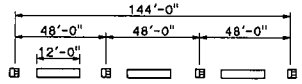
DETAIL 13



DETAIL 14

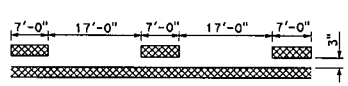


DETAIL 14A

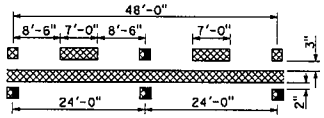


NO PASSING ZONES-ONE DIRECTION

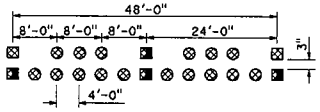
DETAIL 15



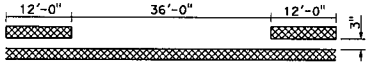
DETAIL 16



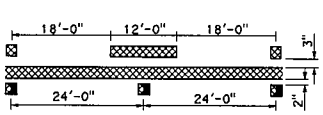
DETAIL 17



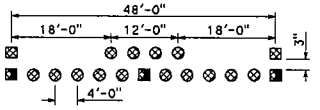
DETAIL 18



DETAIL 19



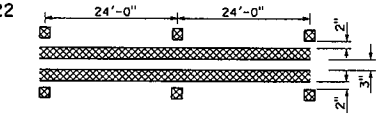
DETAIL 20



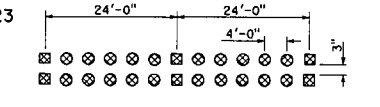
NO PASSING ZONES-TWO DIRECTION

DETAIL 21

DETAIL 22



DETAIL 23



LEGEND

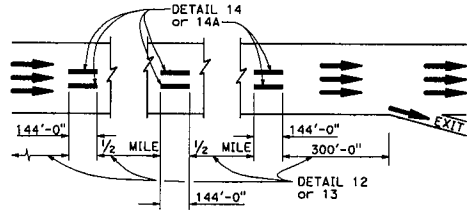
MARKERS

- TYPE A WHITE NON-REFLECTIVE
- TYPE AY YELLOW NON-REFLECTIVE
- TYPE C RED-CLEAR RETROREFLECTIVE
- TYPE D TWO-WAY YELLOW RETROREFLECTIVE
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE
- TYPE H ONE-WAY YELLOW RETROREFLECTIVE

LINES

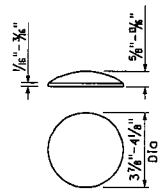
- 4" WHITE
- 4" YELLOW
- DIRECTION OF TRAVEL

TYPICAL LANE LINE DELINEATION IN ADVANCE OF EXIT RAMP

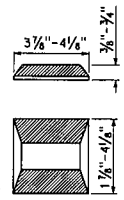


NOTE:
Detail 14 is to be used in combination with Detail 13. Detail 14A is to be used in combination with Detail 12.

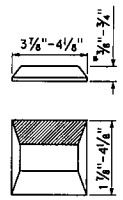
MARKER DETAILS



TYPE A AND TYPE AY



TYPE C AND TYPE D



TYPE G AND TYPE H

RETROREFLECTIVE FACE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
Roberta L. McLaughlin
No. C40375
CIVIL
3-31-13
STATE OF CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

NO SCALE

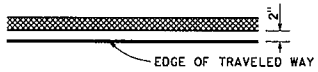
A20A

10-19-09

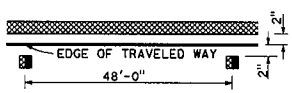
2010 STANDARD PLAN A20A

LEFT EDGELINES
(DIVIDED HIGHWAYS)

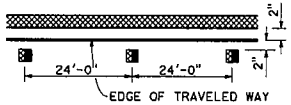
DETAIL 24



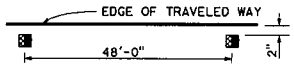
DETAIL 25



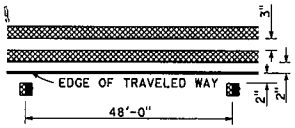
DETAIL 25A



DETAIL 26



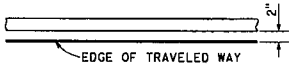
DETAIL 27



RIGHT EDGELINES

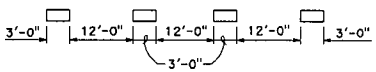
~~DETAIL 27A~~ DETAIL 27A DELETED

DETAIL 27B



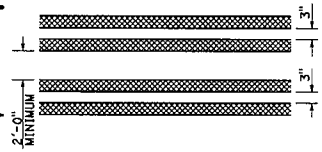
RIGHT EDGELINE EXTENSION THROUGH INTERSECTIONS

DETAIL 27C

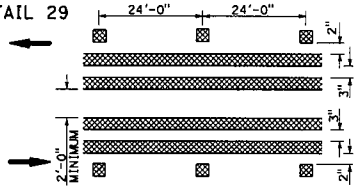


MEDIAN ISLANDS

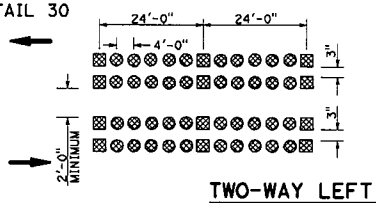
DETAIL 28



DETAIL 29

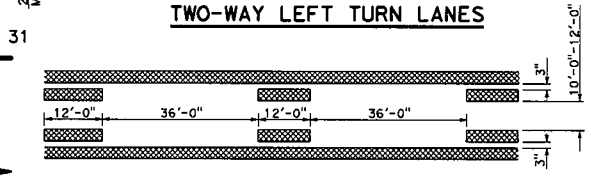


DETAIL 30

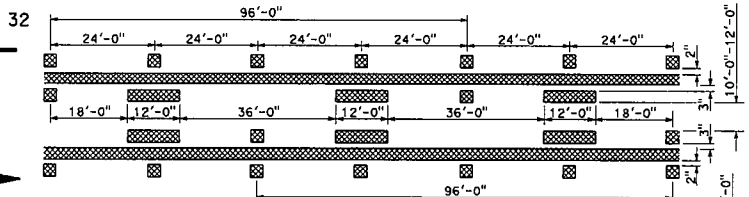


TWO-WAY LEFT TURN LANES

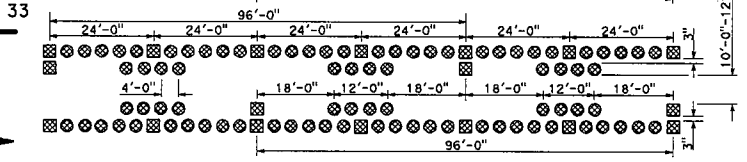
DETAIL 31



DETAIL 32



DETAIL 33



LEGEND

MARKERS

- TYPE AY YELLOW NON-REFLECTIVE
- TYPE D TWO-WAY YELLOW RETROREFLECTIVE
- TYPE H ONE-WAY YELLOW RETROREFLECTIVE

LINES

- 4" WHITE
- 4" YELLOW
- DIRECTION OF TRAVEL

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

Registered Professional Engineer — Roberta L. McLaughlin — No. C40375 — Exp. 3-31-13 — CIVIL — State of California

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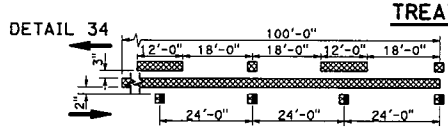
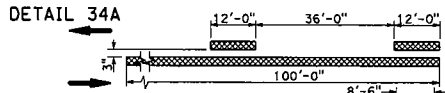
INTERSECTION TREATMENTS

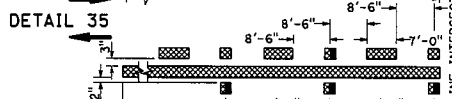
DETAIL 34



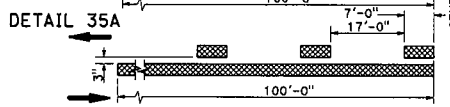
DETAIL 34A



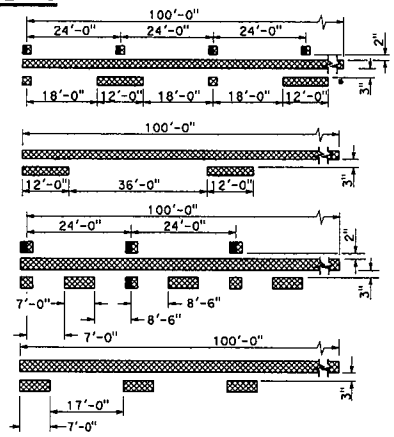
DETAIL 35



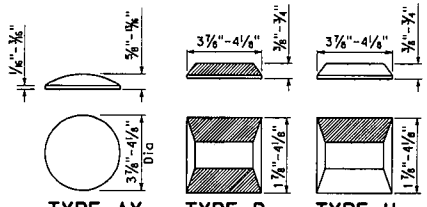
DETAIL 35A



CENTERLINE INTERSECTING STREET



MARKER DETAILS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

NO SCALE

A20B

10-19-08

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

Roberta L. McLaughlin
No. C40375
Exp. 3-31-13
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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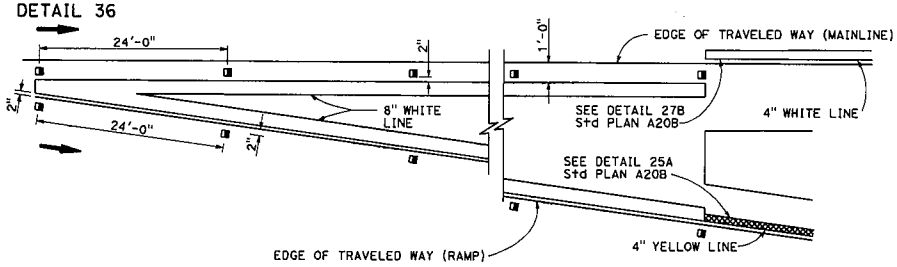
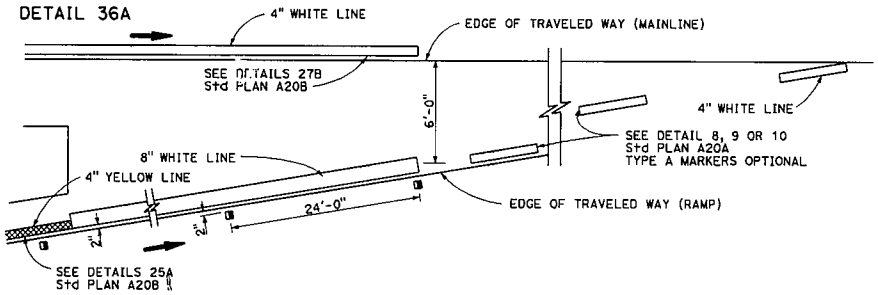
EXIT RAMP NEUTRAL AREA (GORE) TREATMENT

DETAIL 36



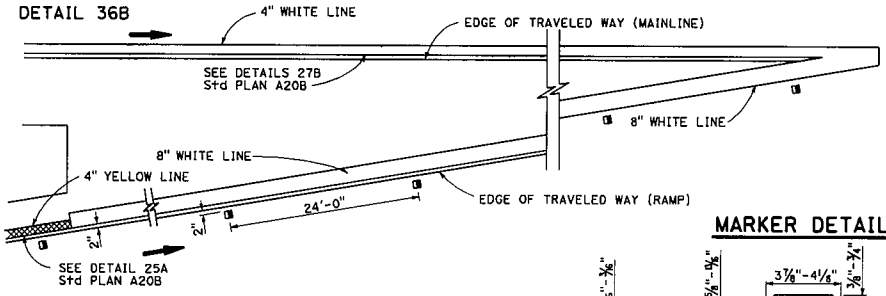
ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT

DETAIL 36A



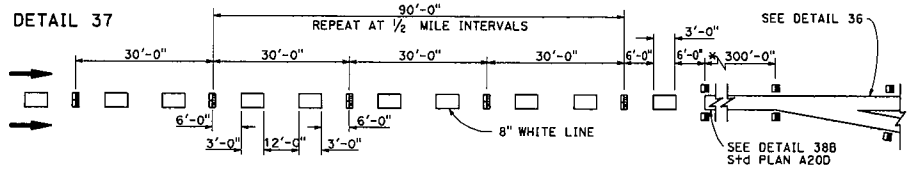
ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT

DETAIL 36B

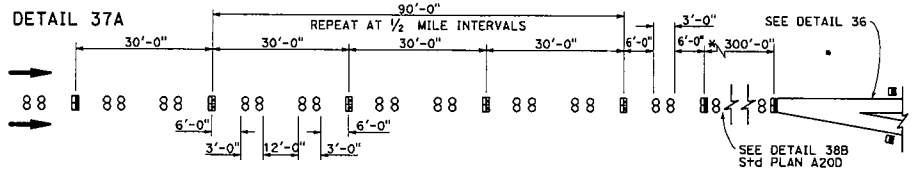


LANE DROP AT EXIT RAMPS

DETAIL 37



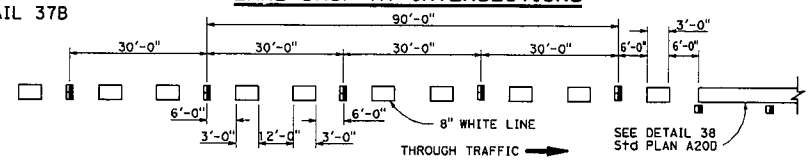
DETAIL 37A



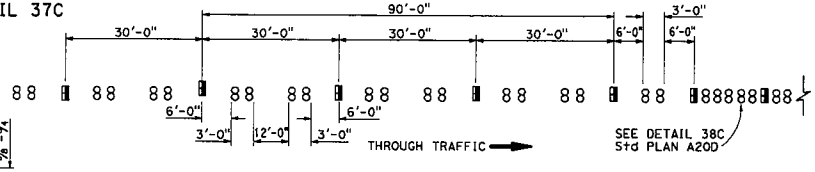
* The solid channelizing line shown may be omitted on short auxiliary lanes where weaving length is critical.

LANE DROP AT INTERSECTIONS

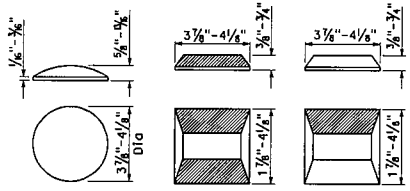
DETAIL 37B



DETAIL 37C



MARKER DETAILS



LEGEND

MARKERS

- ○ TYPE A WHITE NON-REFLECTIVE
- TYPE C RED-CLEAR RETROREFLECTIVE
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE
- DIRECTION OF TRAVEL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS

NO SCALE

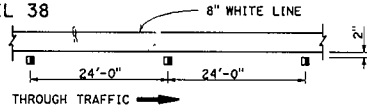
A20C

10-19-08

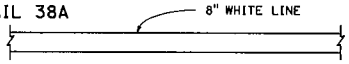
2010 STANDARD PLAN A20C

CHANNELIZING LINE

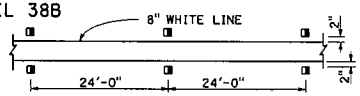
DETAIL 38



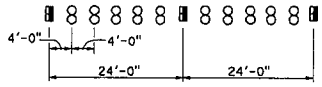
DETAIL 38A



DETAIL 38B

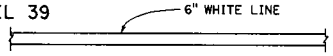


DETAIL 38C



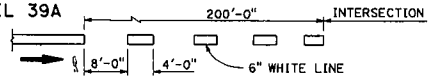
BIKE LANE LINE

DETAIL 39



INTERSECTION LINE BIKE LANE

DETAIL 39A

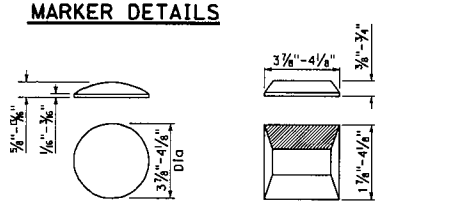


LEGEND

MARKERS

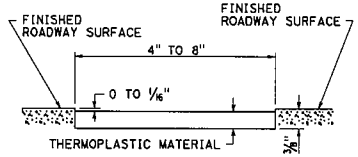
- TYPE A WHITE NON-REFLECTIVE
- TYPE AY YELLOW NON-REFLECTIVE
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE
- 4" YELLOW LINE
- DIRECTION OF TRAVEL

MARKER DETAILS



TYPE A AND TYPE AY — TYPE G

RETROREFLECTIVE FACE



DETAIL FOR RECESSED THERMOPLASTIC TRAFFIC STRIPE

See Notes A and B.

RECESSED THERMOPLASTIC NOTES

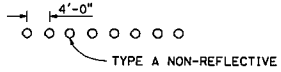
A. See typical traffic line details for pavement marking patterns.

B. The top of the thermoplastic installed in recessed pavement shall be 0 to 1/16" below the pavement surface.

LANE LINE EXTENSIONS THROUGH INTERSECTIONS

DETAIL 40

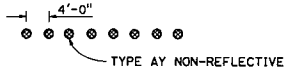
DETAIL 40A



CENTER LINE EXTENSIONS THROUGH INTERSECTIONS

DETAIL 41

DETAIL 41A



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 20, 2011

PLANS APPROVAL DATE

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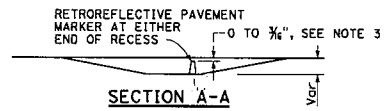
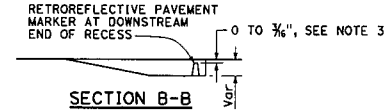
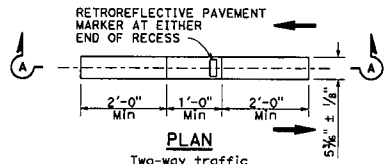
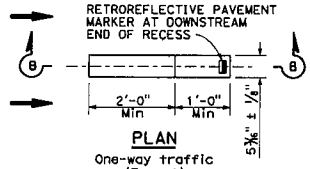






PLAN

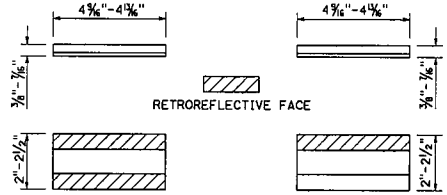
Two-way traffic (Type 2)



PLAN

One-way traffic (Type 1)

RECESS DETAIL FOR RETROREFLECTIVE PAVEMENT MARKER



TYPE C AND TYPE D — TYPE G AND TYPE H

See Notes 1 and 2.

RECESSED MARKER NOTES:

1. See typical traffic line details for marker patterns to be used with recessed pavement markers. Detail 14A requires a Type 2 recess.
2. The retroreflective pavement markers shown for recessed installations are not to be used for non-recessed installations.
3. The top of pavement markers installed in recesses shall be 0 to 3/16" below the pavement surface.

RETROREFLECTIVE PAVEMENT MARKER FOR RECESSED INSTALLATION

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

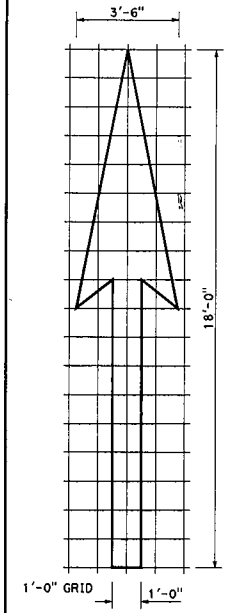
PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

NO SCALE

A20D

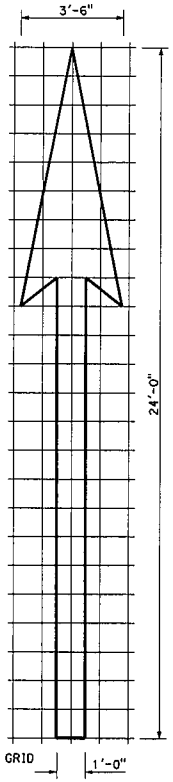
10-22-08

2010 STANDARD PLAN A20D



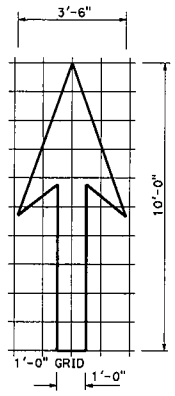
A=25 ft²

TYPE I 18'-0" ARROW



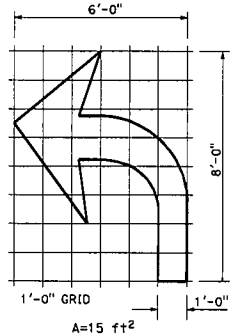
A=31 ft²

TYPE I 24'-0" ARROW



A=14 ft²

TYPE I 10'-0" ARROW



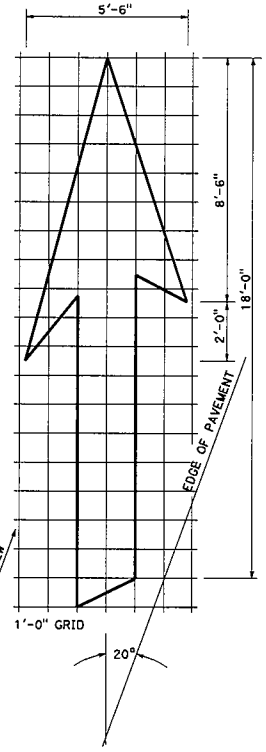
A=15 ft²

TYPE IV (L) ARROW

(For Type IV (R) arrow, use mirror image)

NOTE:

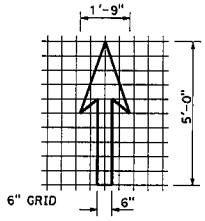
Minor variations in dimensions may be accepted by the Engineer.



A=42 ft²

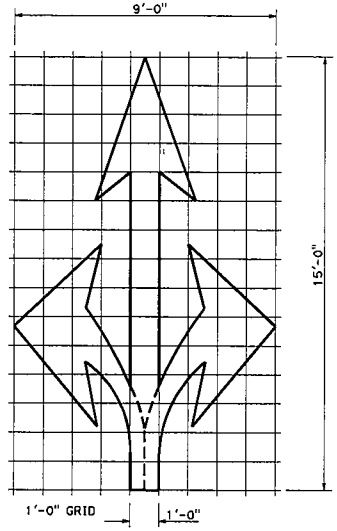
TYPE VI ARROW

Right lane drop arrow (For left lane, use mirror image)



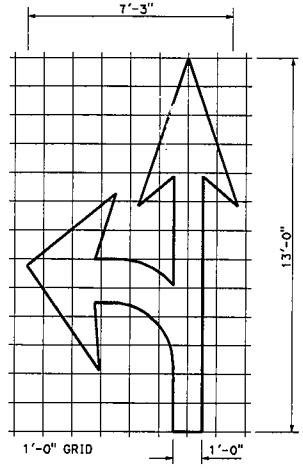
A=7 ft²

BIKE LANE ARROW



A=36 ft²

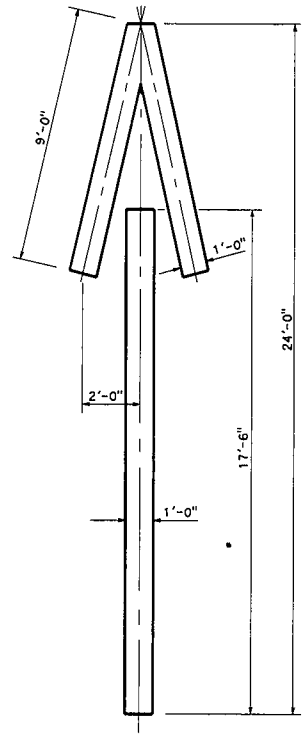
TYPE VIII ARROW



A=27 ft²

TYPE VII (L) ARROW

(For Type VII (R) arrow, use mirror image)



A=33 ft²

TYPE V ARROW

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 20, 2011

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STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

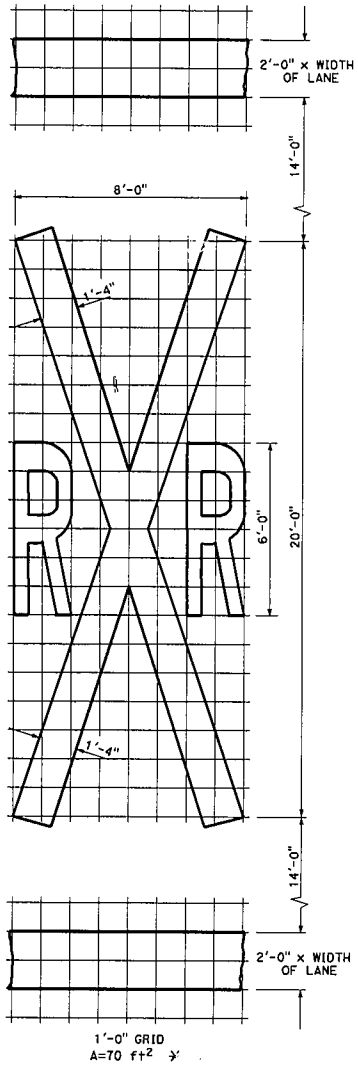
PAVEMENT MARKINGS ARROWS

NO SCALE

A24A

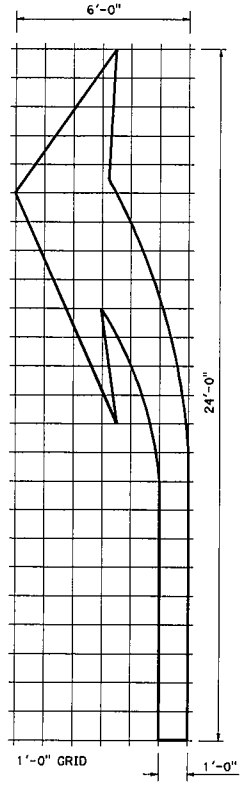
11-3-08

2010 STANDARD PLAN A24A



RAILROAD CROSSING SYMBOL

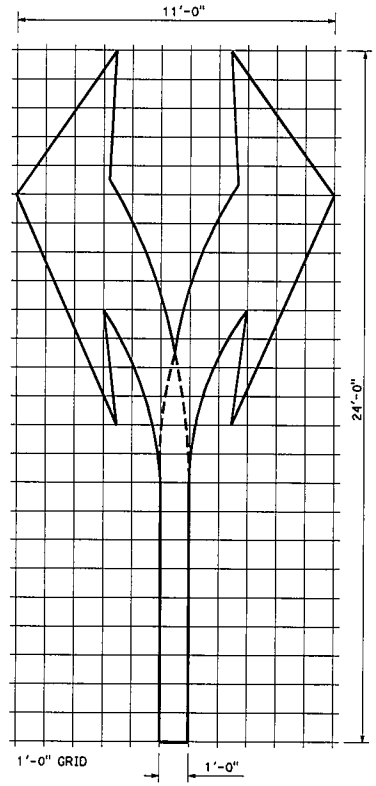
* 70 ft² does not include the 2'-0" x variable width transverse lines.



A=42 ft²

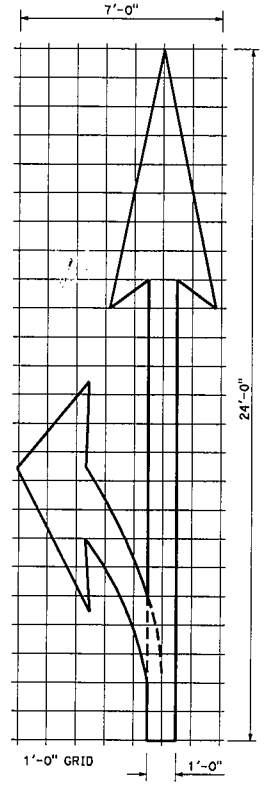
TYPE III (L) ARROW

(For Type III (R) use mirror image)



A=73 ft²

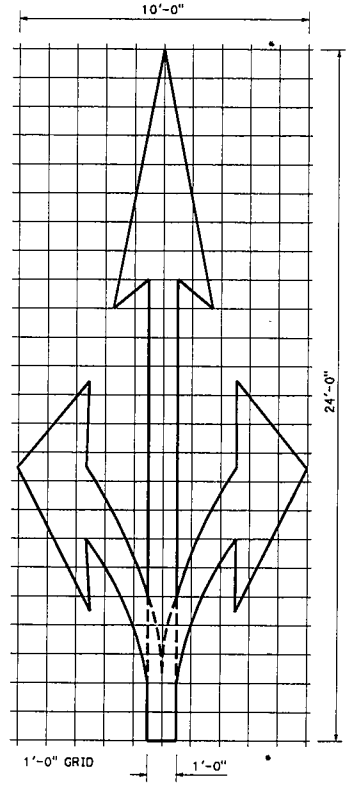
TYPE III (B) ARROW



A=45 ft²

TYPE II (L) ARROW

(For Type II (R) use mirror image)



A=59 ft²

TYPE II (B) ARROW

NOTE:

Minor variations in dimensions may be accepted by the Engineer.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 20, 2011

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER — Roberta L. McLaughlin — No. C40375 — 3-31-13 — CIVIL — STATE OF CALIFORNIA

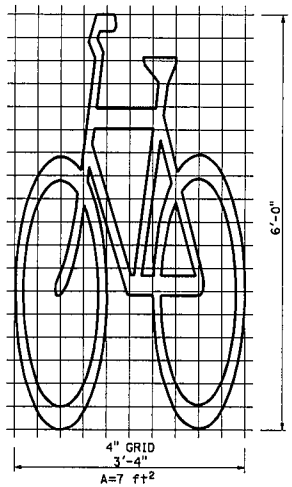
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS
ARROWS AND SYMBOLS

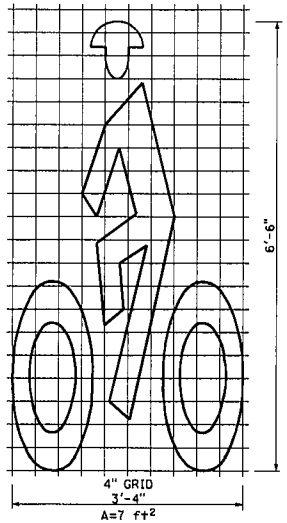
NO SCALE

A24B

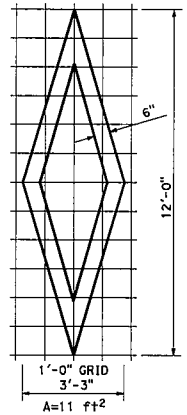
11-3-08



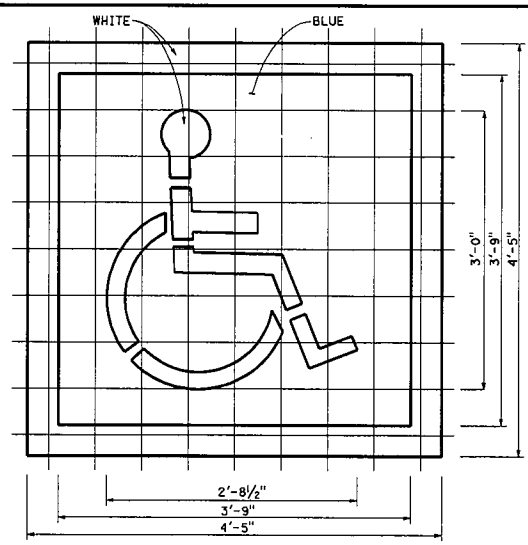
BIKE LANE SYMBOL WITHOUT PERSON



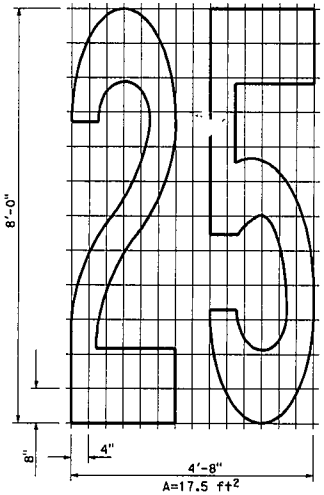
BIKE LANE SYMBOL WITH PERSON

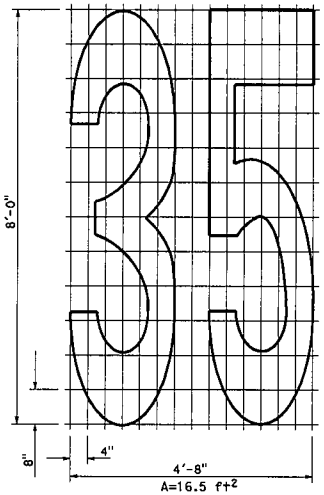


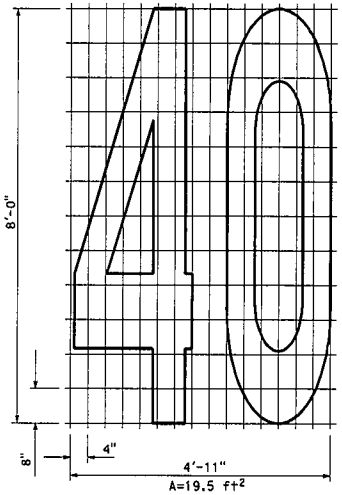
DIAMOND SYMBOL



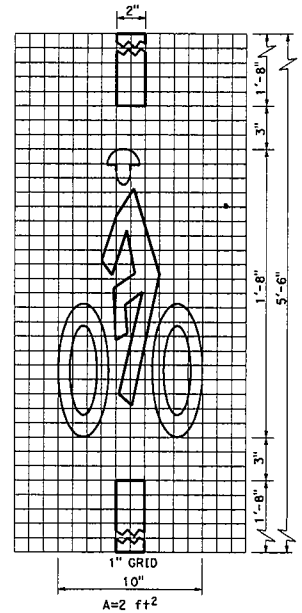
INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) MARKING







NUMERALS



BICYCLE LOOP DETECTOR SYMBOL

NOTE:

Minor variations in dimensions may be accepted by the Engineer.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 20, 2011

PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER
Roberta L. McLaughlin
No. C40375
EXP. 3-31-13
CIVIL
STATE OF CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

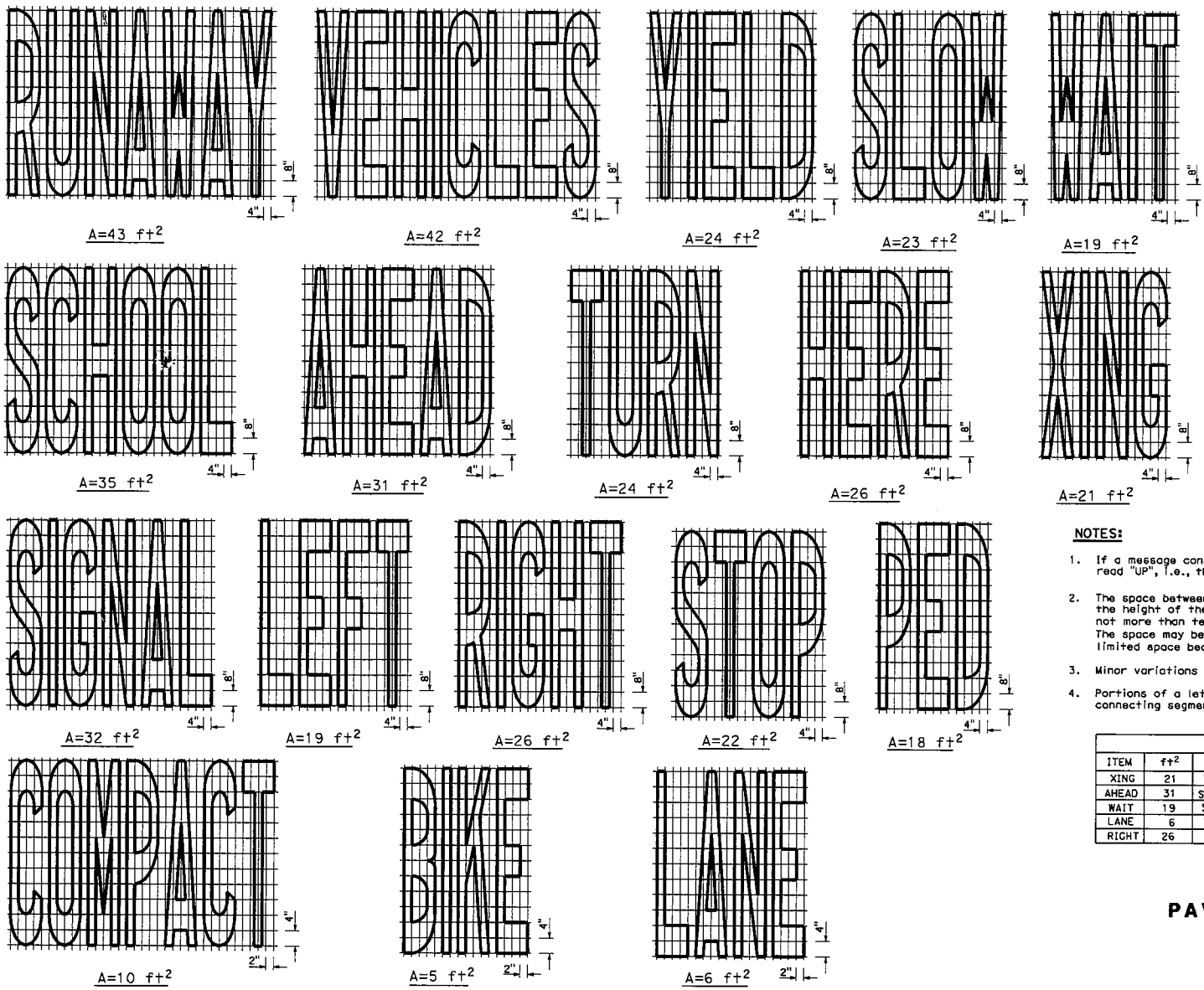
PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

A24C

2010 STANDARD PLAN A24C

11-3-08



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Roberta L. McLaughlin
REGISTERED CIVIL ENGINEER

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NOTES:

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.

WORD MARKINGS

ITEM	ft²	ITEM	ft²	ITEM	ft²	ITEM	ft²
XING	21	YIELD	24	BIKE	5	PED	18
AHEAD	31	SCHOOL	35	SLOW	23	COMPACT	10
WAIT	19	SIGNAL	32	STOP	22	RUNAWAY	43
LANE	6	TURN	24	LEFT	19	VEHICLES	42
RIGHT	26	HERE	26				

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

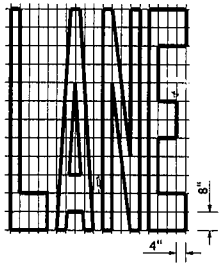
PAVEMENT MARKINGS WORDS

NO SCALE

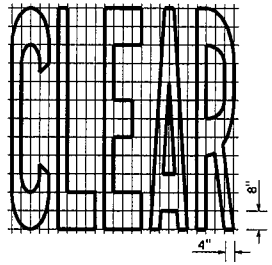
A24D

11-3-08

2010 STANDARD PLAN A24D



A=24 ft²



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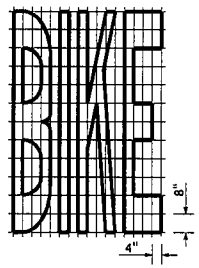
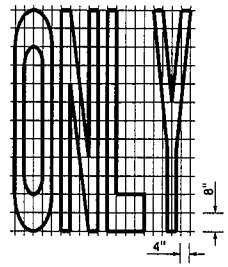
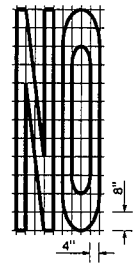


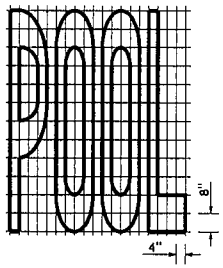
A=21 ft²



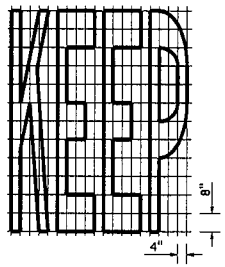
A=22 ft²



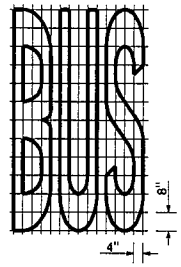
A=14 ft²



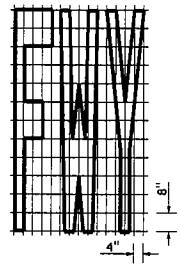
A=23 ft²



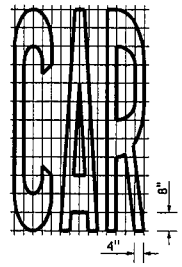
A=24 ft²



A=20 ft²

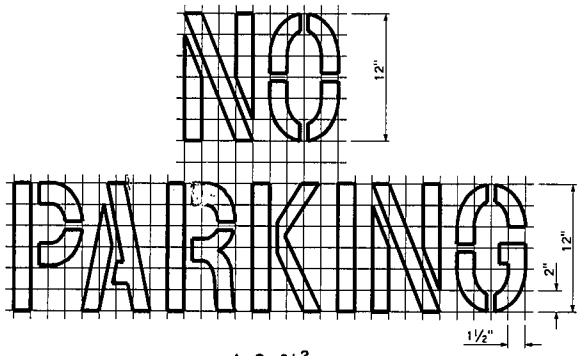


A=16 ft²

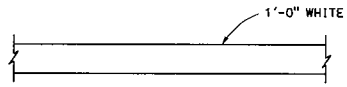


A=17 ft²

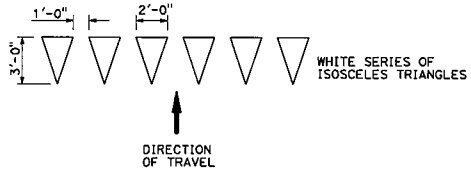
WORD MARKINGS			
ITEM	ft²	ITEM	ft²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



CROSSWALK AND LIMIT LINE
See Note 5



YIELD LINE

NOTES:

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. Crosswalks contiguous to school grounds are to be 1'-0" yellow lines in place of 1'-0" white shown.
6. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
7. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

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DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS WORDS AND CROSSWALKS

NO SCALE

A24E

2010 STANDARD PLAN A24E

17

11-3-08