

STANDARD CONSTRUCTION DETAILS

TRAFFIC

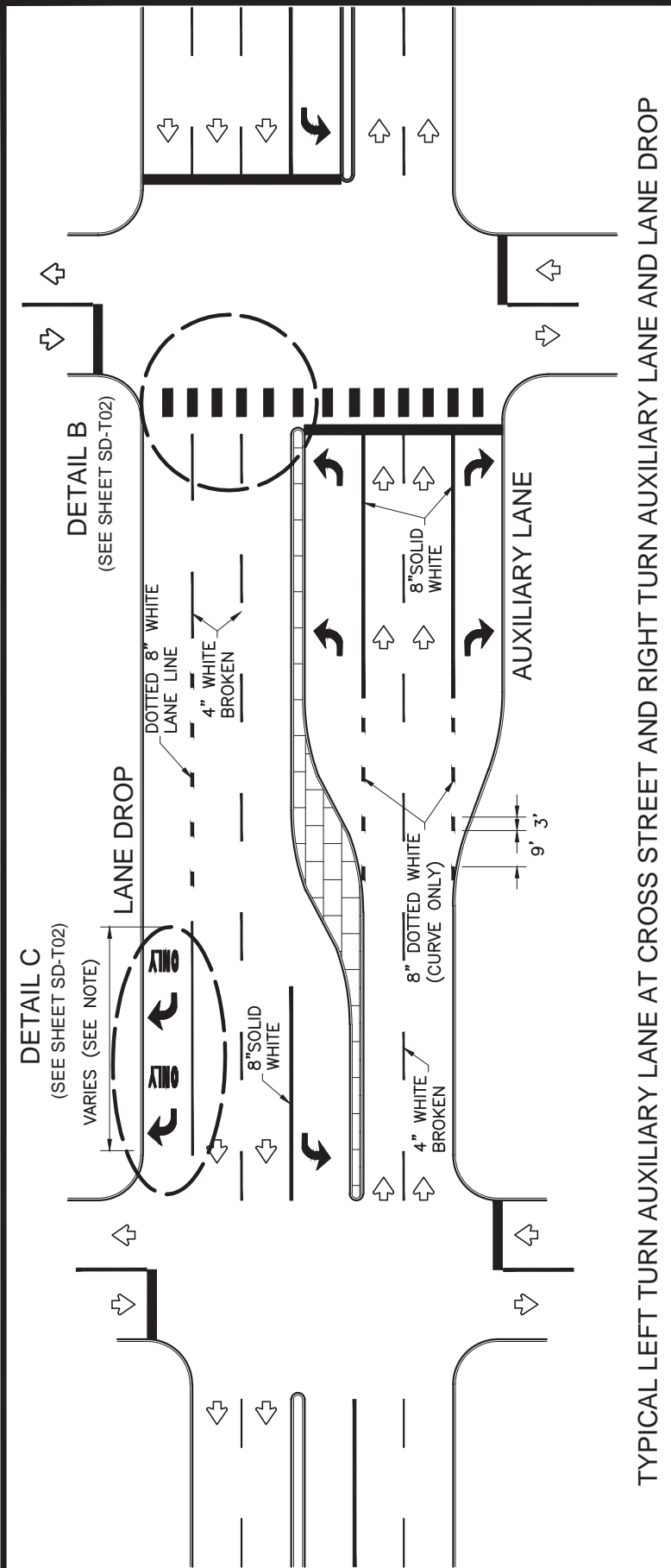
REVISED AUGUST 2018



TRAFFIC DETAILS

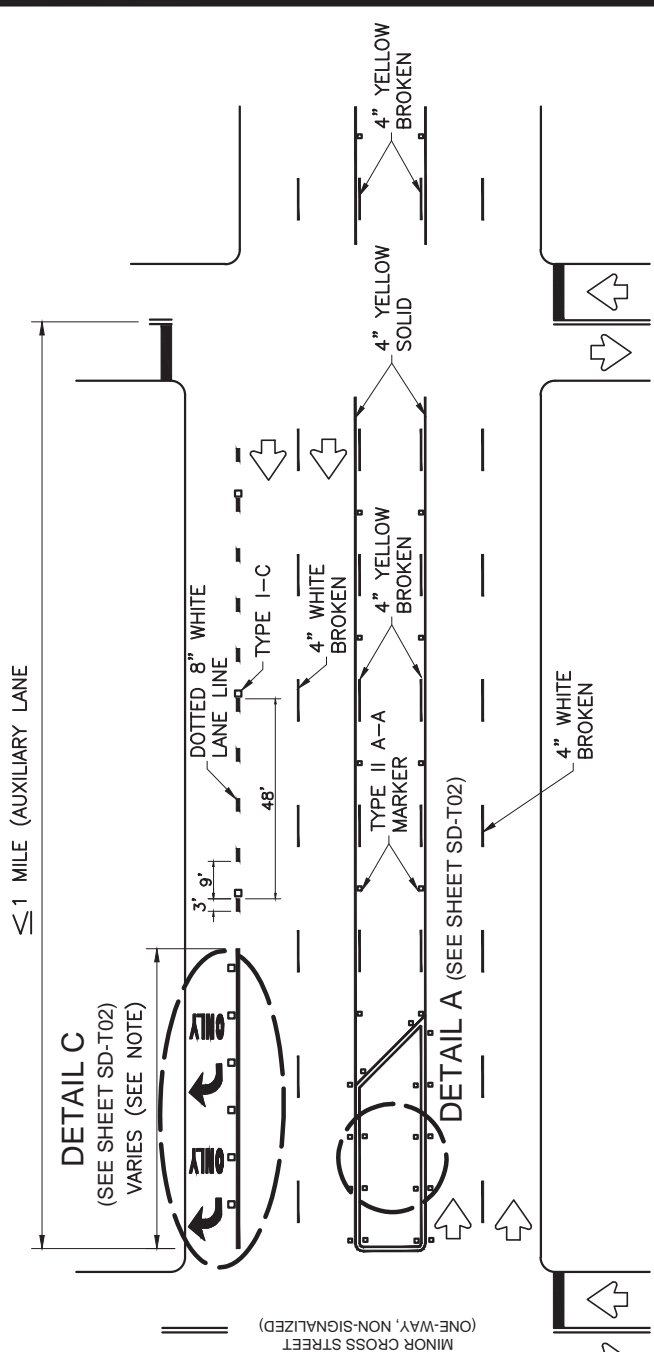
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TYPICAL LEFT TURN AUXILIARY LANE AT CROSS STREET AND RIGHT TURN AUXILIARY LANE AND LANE DROP

NOTE:
WHEN REQUIREMENT TO USE "WORD AND ARROW" OR "ARROW" MARKINGS, TWO SETS SHOULD BE USED IF THE LENGTH OF THE BAY IS GREATER THAN 180 FEET. WHEN A "WORD AND ARROW" OR "ARROW" MARKING IS USED FOR A SHORT TURN LANE, IT SHOULD BE LOCATED AT OR NEAR THE UPSTREAM END OF THE FULL-WIDTH TURN LANE.



TYPICAL TWO WAY LEFT TURN LANE AT CROSS STREET AND RIGHT TURN LANE DROP



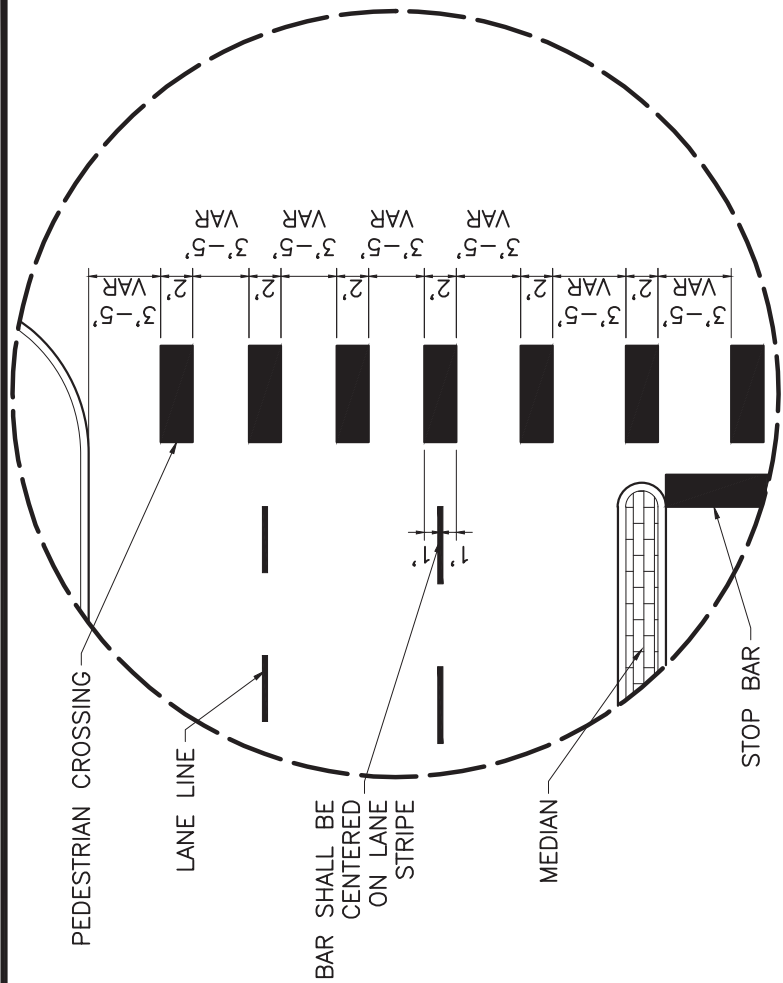
PAVEMENT MARKINGS LAYOUT

STANDARD CONSTRUCTION DETAILS
TRAFFIC

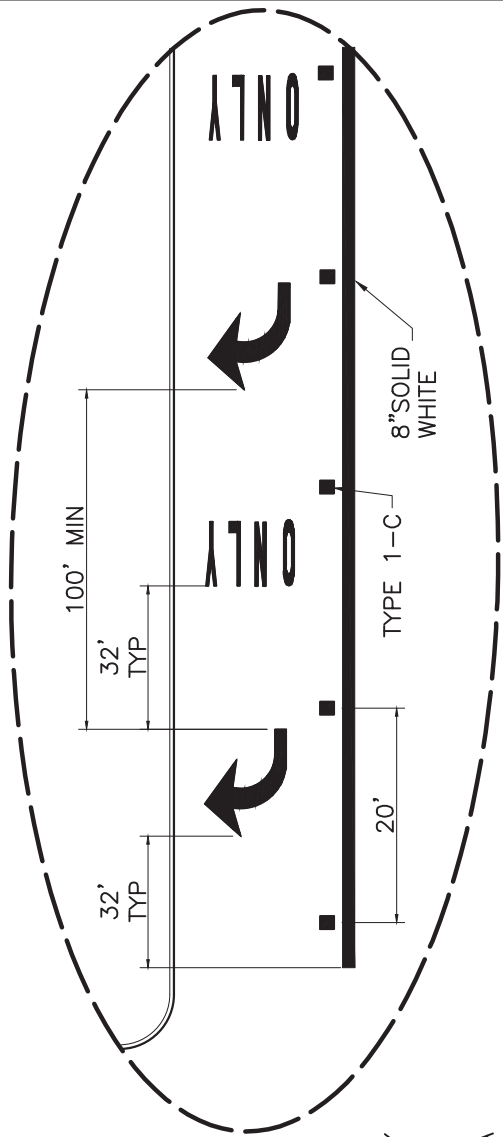
DATE:
AUG 2018

REV DATE:

SHEET :
SD-T01

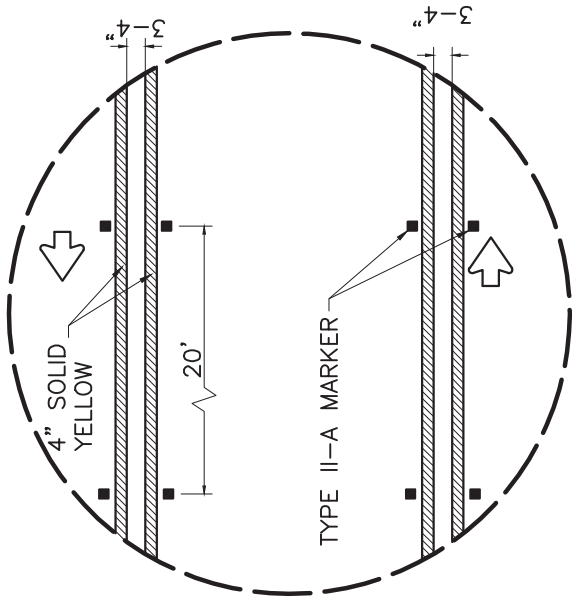


DETAIL B



DETAIL C

NOTE:
 WHEN REQUIREMENT TO USE "WORD AND ARROW" OR "ARROW" MARKINGS, TWO SETS SHOULD BE USED IF THE LENGTH OF THE BAY IS GREATER THAN 180 FEET.
 WHEN A "WORD AND ARROW" OR "ARROW" MARKING IS USED FOR A SHORT TURN LANE, IT SHOULD BE LOCATED AT OR NEAR THE UPSTREAM END OF THE FULL-WIDTH TURN LANE.



DETAIL A



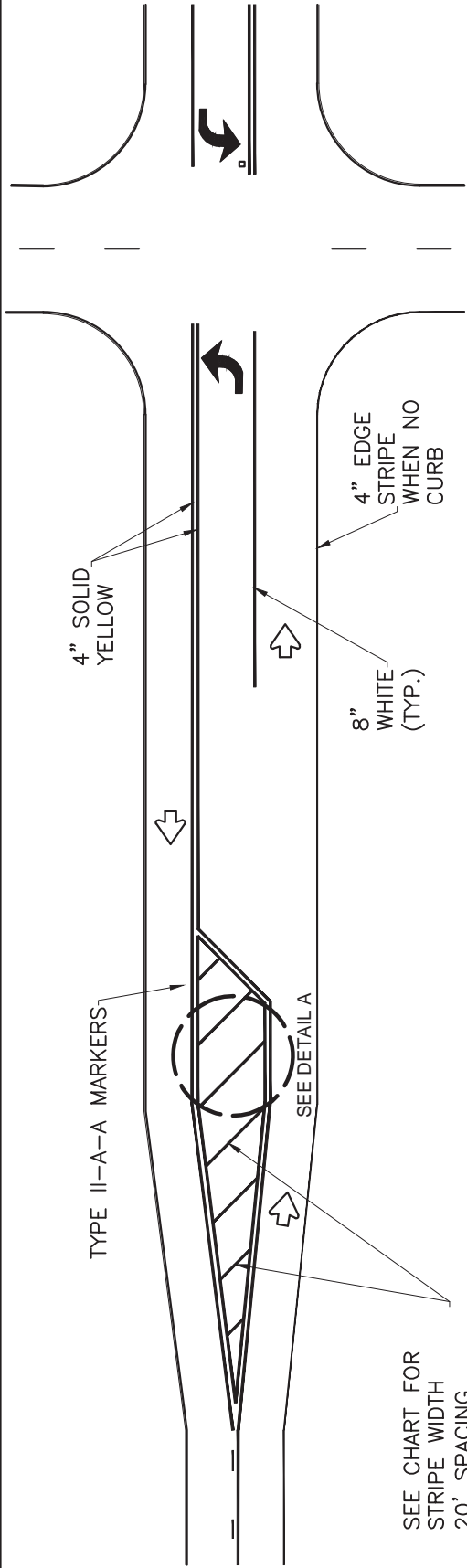
PAVEMENT MARKING DETAILS
 DETAIL "A", "B" & "C"

STANDARD CONSTRUCTION DETAILS
 TRAFFIC

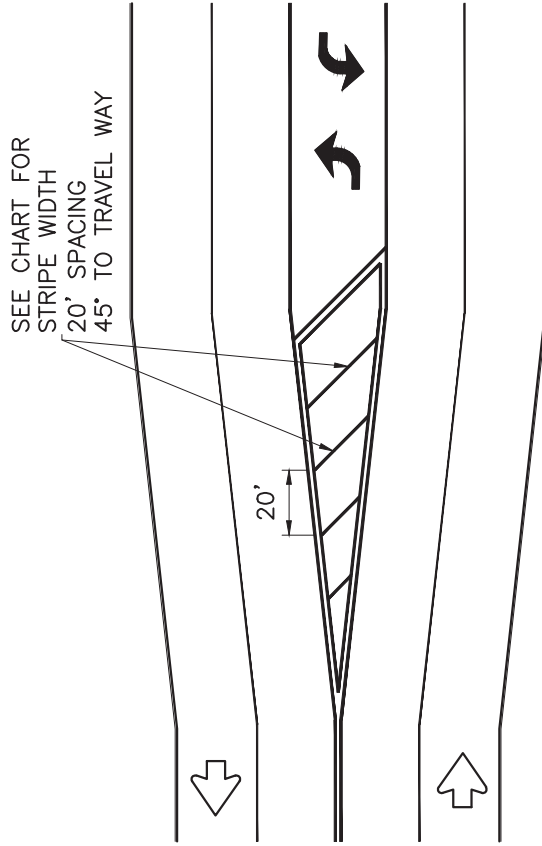
DATE:
 AUG 2018

REV DATE:

SHEET :
 SD-T02



TYPICAL TWO-LANE ROADWAY INTERSECTION WITH LEFT TURN BAYS



TYPICAL TRANSITION FOR TWL TL AND DIVIDED ROADWAY

GORE STRIPE	STRIPE
SPEED (MPH)	
≤45	8" STRIPE
>45	12" STRIPE

SEE CHART FOR STRIPE WIDTH
20' SPACING
45' TO TRAVEL WAY

SEE CHART FOR STRIPE WIDTH
20' SPACING
45' TO TRAVEL WAY



TABLE 1 – TYPICAL LENGTH (L)

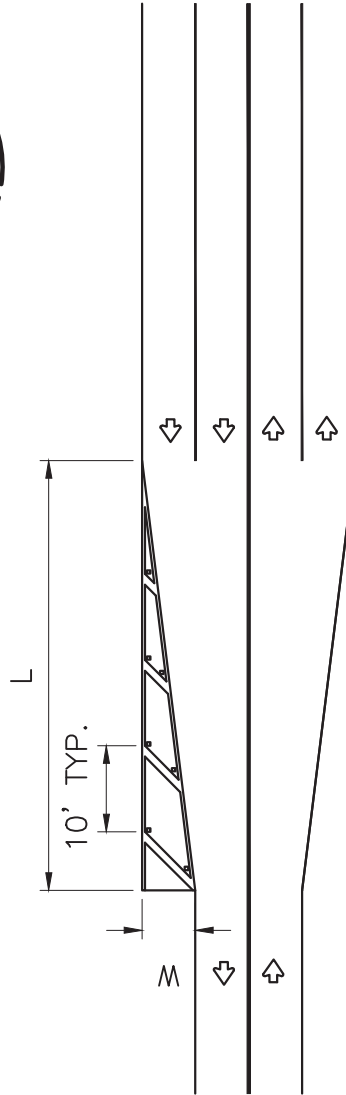
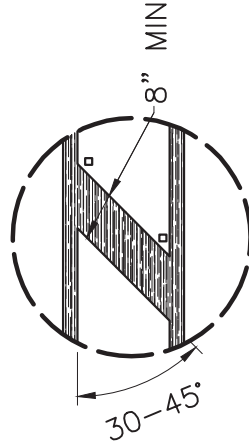
POSTED SPEED *	FORMULA
≤ 40	$L = \frac{WS^2}{60}$
≥ 45	L=WS

*85TH PERCENTILE SPEED MAY BE USED ON ROADS WHERE TRAFFIC SPEEDS NORMALLY EXCEED THE POSTED SPEED LIMIT. CROSSHATCHING LENGTH SHOULD BE ROUNDED UP TO NEAREST 5 FOOT INCREMENT.

L= TAPER LENGTH (FT.)

W= WIDTH OF OFFSET (FT.)

S= POSTED SPEED (MPH)/85TH PERCENTILE SPEED(MPH).



GORE LAYOUT FOR TRANSITION



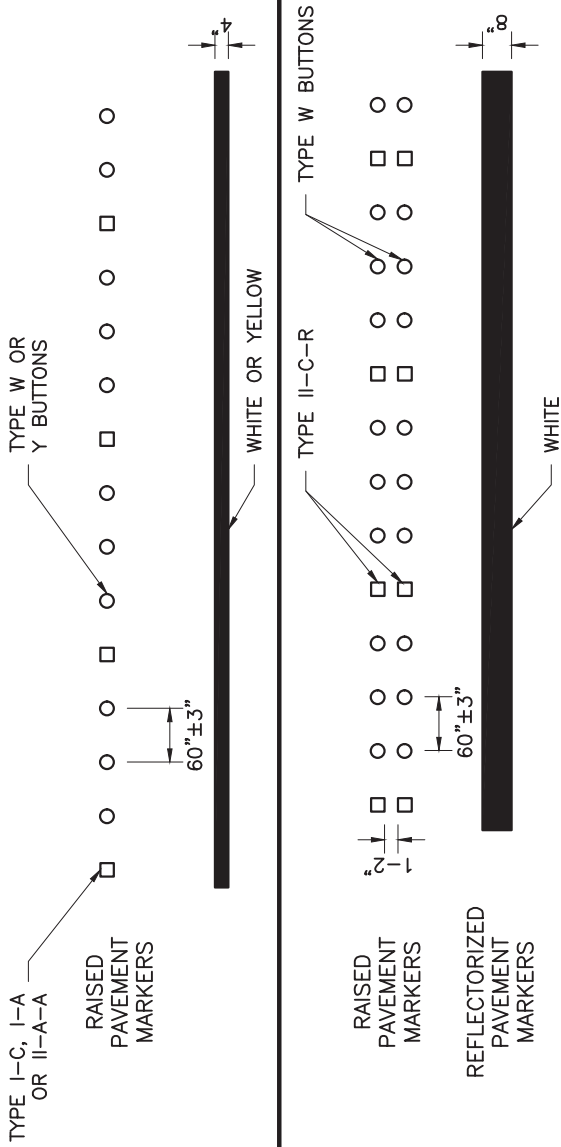
PAVEMENT MARKINGS
GORE LAYOUT SHEET 2 OF 2

STANDARD CONSTRUCTION DETAILS
TRAFFIC

DATE:
AUG 2018

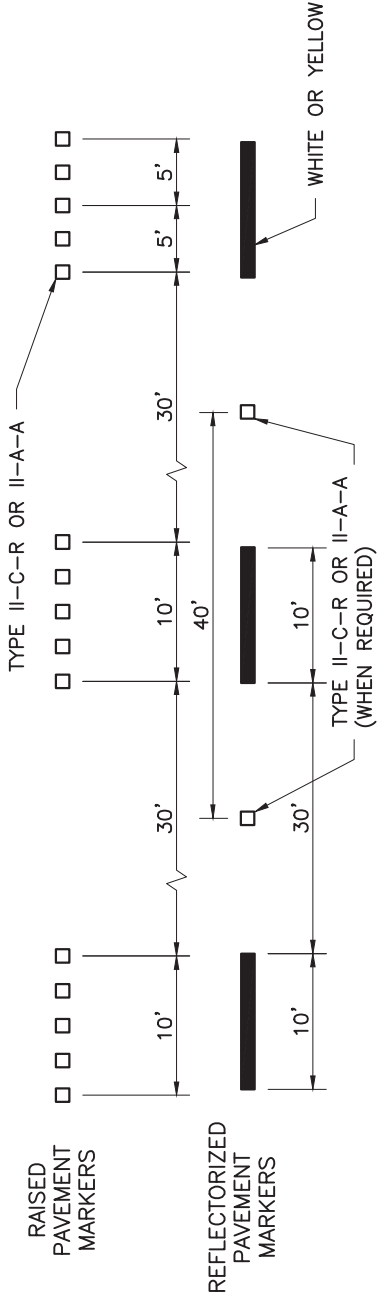
REV DATE:

SHEET :
SD-T04



EDGE LINE OR SINGLE NO-PASSING LINE

SOLID LINES



CENTER LINE OR LANE LINE

BROKEN LINES

AUXILIARY OR LANEDROP LINE

NOTE: BUTTON STRIPPING SHALL ONLY BE USED AT ENGINEERS APPROVAL



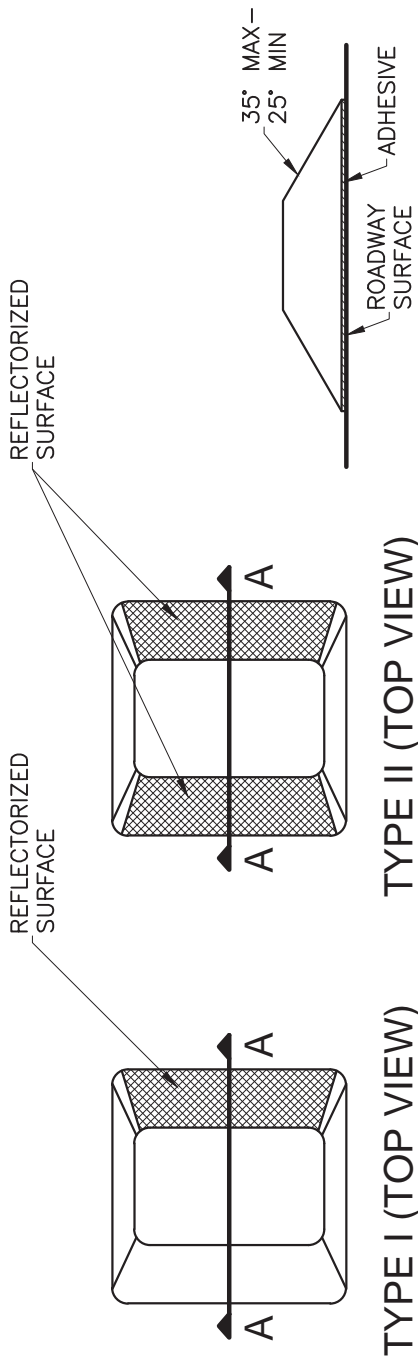
PAVEMENT MARKING PATTERNS
SOLID LINES & BROKEN LINES

STANDARD CONSTRUCTION DETAILS
TRAFFIC

DATE:
AUG 2018

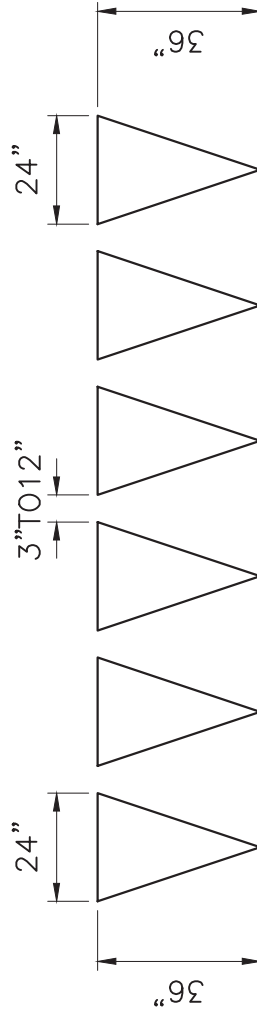
REV DATE:

SHEET :
SD-T05

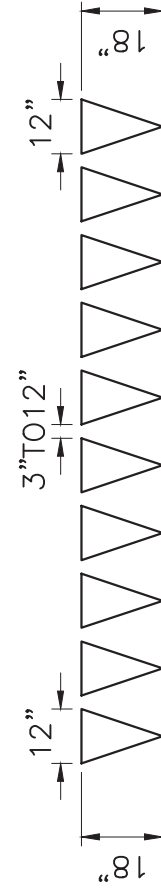


RAISED PAVEMENT MARKERS

FOR POSTED SPEED ON ROAD BEING MARKED EQUAL TO OR GREATER THAN 45 MPH



FOR POSTED SPEED ON ROAD BEING MARKED EQUAL TO OR LESS THAN 40 MPH



YIELD LINES



RAISED PAVEMENT MARKERS & YIELD LINES

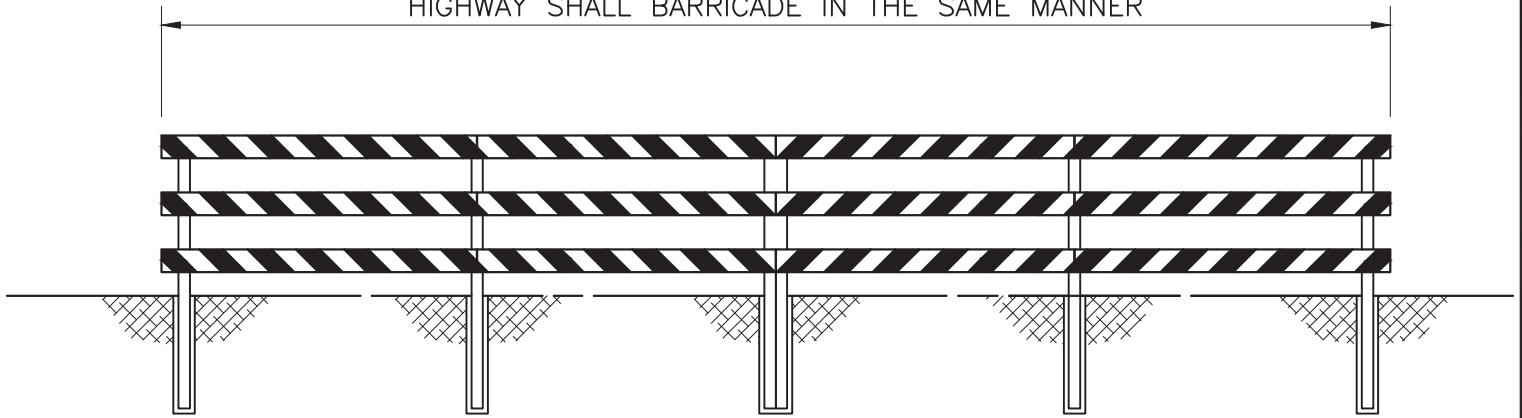
STANDARD CONSTRUCTION DETAILS TRAFFIC

DATE: AUG 2018

REV DATE:

SHEET : SD-T06

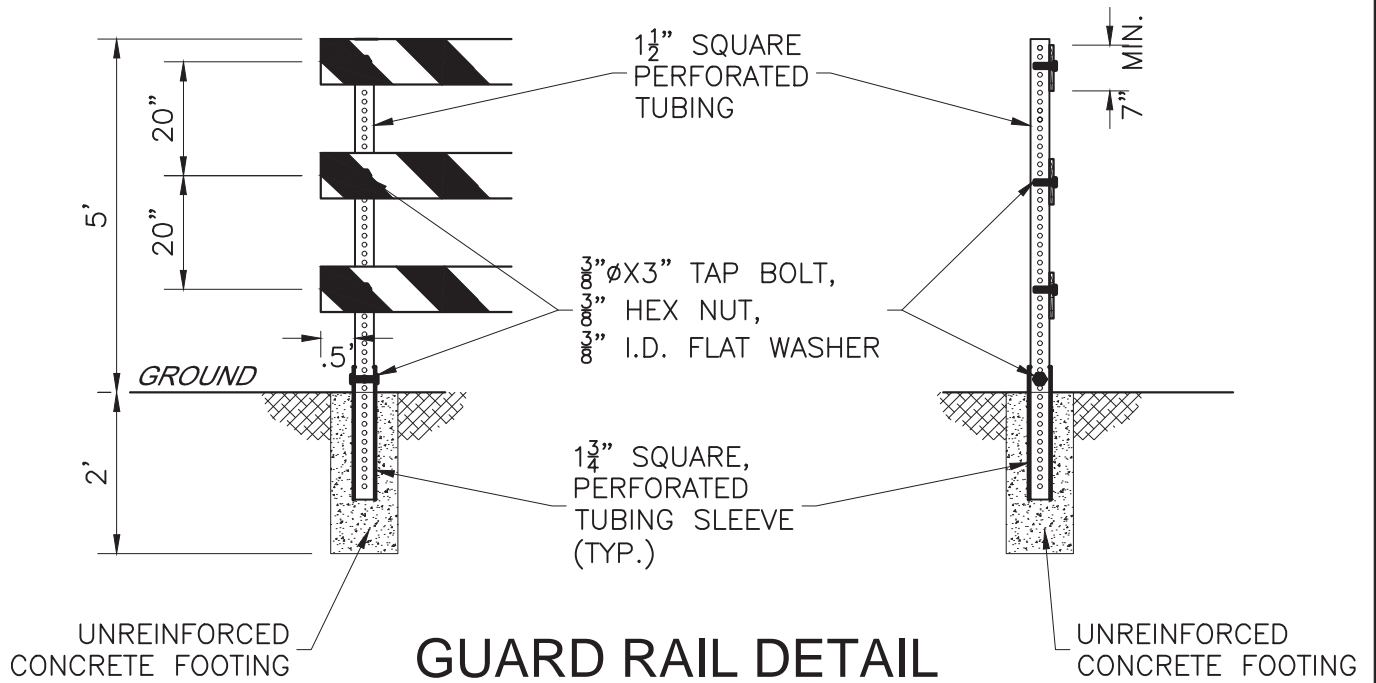
MINIMUM BARRICADE LENGTH SHALL BE THE STREET WIDTH MINUS 2' EACH ROADWAY. A DIVIDED HIGHWAY SHALL BARRICADE IN THE SAME MANNER



FRONT ELEVATION

TYPE III

THE THREE RAILS ON TYPE III BARRICADES SHALL BE REFLECTIVE RED AND WHITE STRIPES ON ONE SIDE FACING ONE WAY TRAFFIC AND BOTH SIDES FOR TWO WAY TRAFFIC. STRIPE WIDTH = 6"




TYPE III
PERMANENT BARRICADE DETAIL

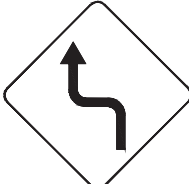
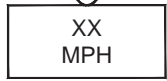
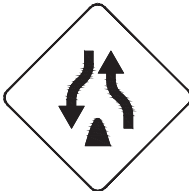

STANDARD CONSTRUCTION DETAILS
TRAFFIC

DATE:
SEPT 1991

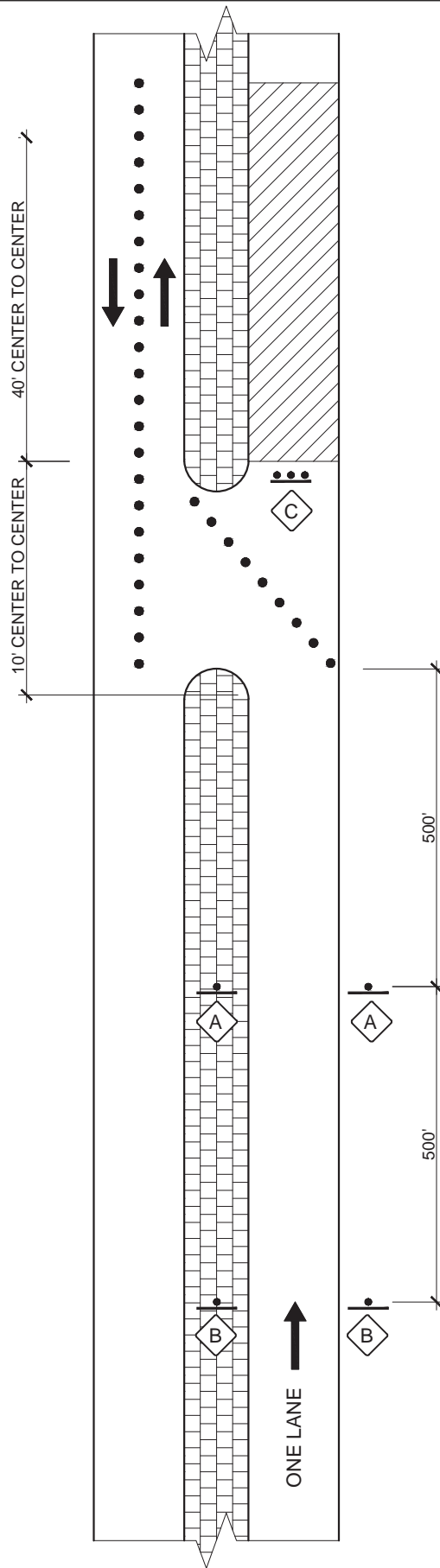
REV DATE:
MAY 2017

SHEET :
SD-T07

SYMBOL	DESCRIPTION
●	CHANNELING DEVICE
●●●	TYPE III BARRICADE
	WORK AREA

TYPE	SIGN
A	 CW1-3  CW13-1
B	 CW6-2
C	 R11-2

* - DIMENSIONS MAY VARY.
 XX - TO BE DETERMINED BY ENGINEER.



TYPICAL APPLICATION TO
 TRANSITION ACROSS
 A MEDIAN OPENING

STANDARD CONSTRUCTION DETAILS
 TRAFFIC

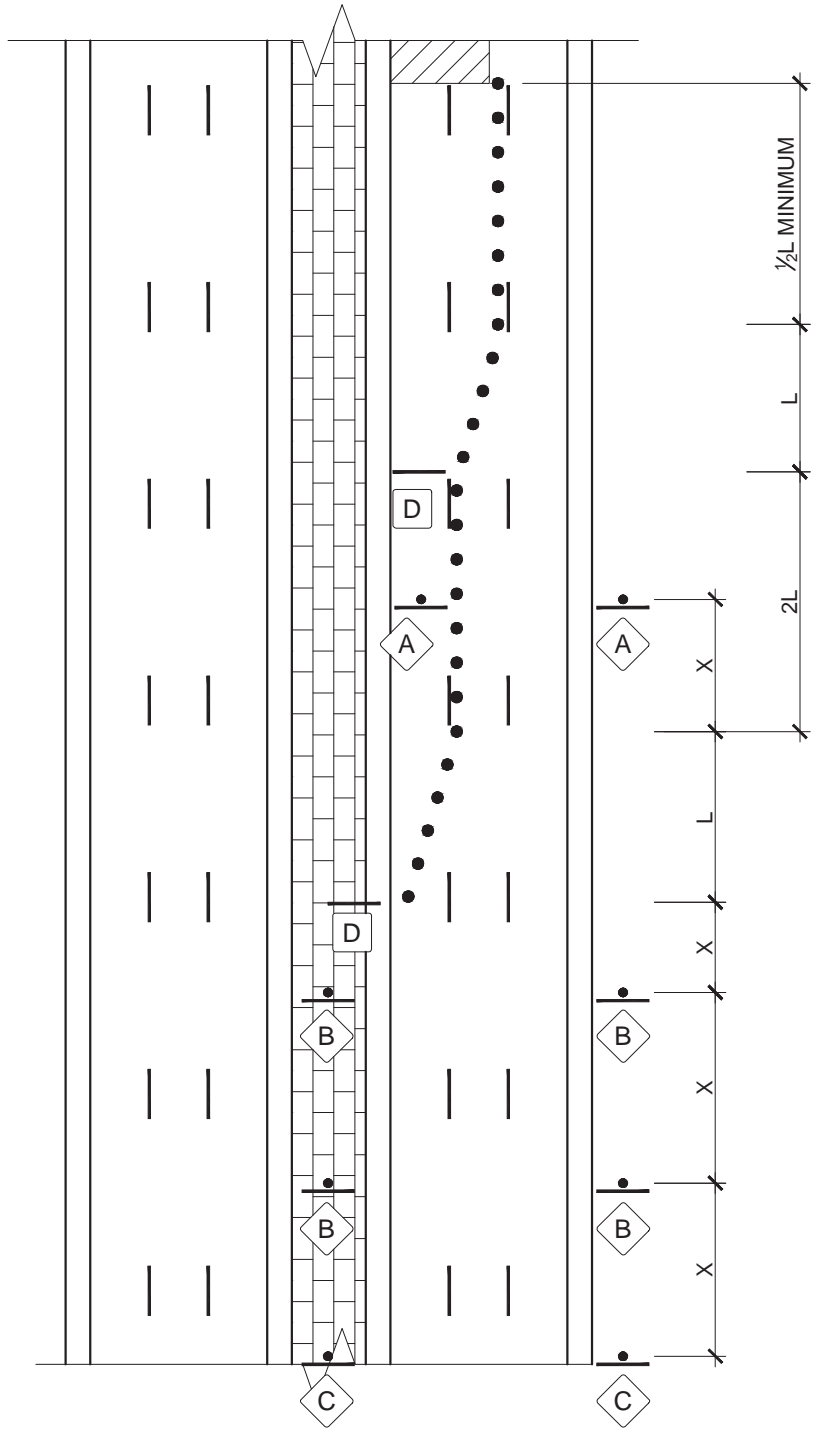
DATE:
 JUNE 2005

REV DATE:
 AUG. 2006

SHEET :
 SD-T08

TYPE	SIGN
A	LEFT LANE CLOSED AHEAD
B	LEFT TWO LANES CLOSED AHEAD
C	ROAD WORK AHEAD
D	

SYMBOL	DESCRIPTION
●	CHANNELING DEVICE
—●—	SIGN MOUNT
	WORK AREA



POSTED SPEED (MPH)	"X" SIGN SPACINGS (FEET)	"L" TAPER LENGTH (FEET)
30 or LESS	120	180
35	160	245
40	240	320
45	320	540
50	400	600
55	500	660
60	600	720
65	700	780
70	800	840

* TAPER LENGTH MAY BE REDUCED IF OFFSET IS LESS THAN 12 FEET.




TWO LANE- LANE CLOSURE






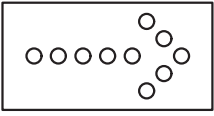
STANDARD CONSTRUCTION DETAILS
TRAFFIC

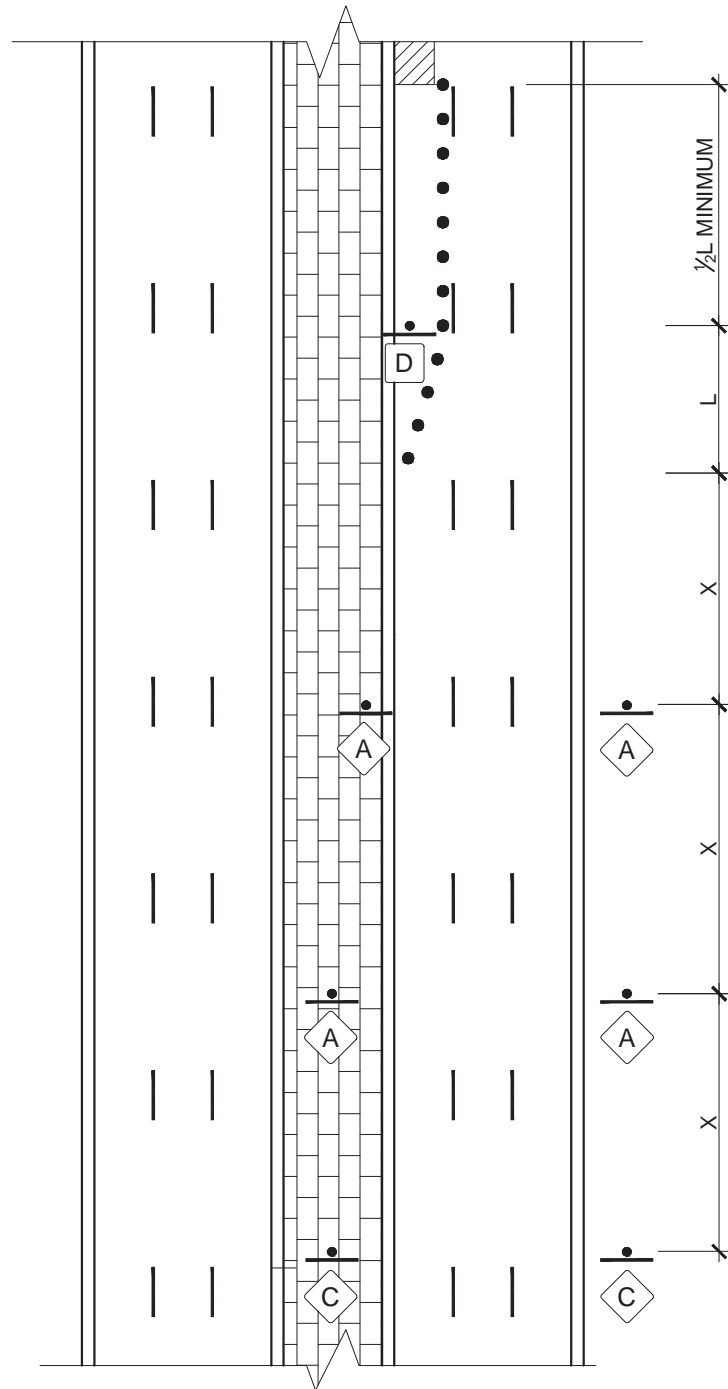
DATE:
JUNE 2005

REV DATE:
AUG. 2006

SHEET :
SD-T09

SYMBOL	DESCRIPTION
●	CHANNELING DEVICE
—●—	SIGN MOUNT
	WORK AREA

TYPE	SIGN
	
	
	



POSTED SPEED (MPH)	"X" SIGN SPACINGS (FEET)	"L" TAPER LENGTH (FEET)
30 or LESS	120	180
35	160	245
40	240	320
45	320	540
50	400	600
55	500	660
60	600	720
65	700	780
70	800	840

* TAPER LENGTH MAY BE REDUCED IF OFFSET IS LESS THAN 12 FEET.



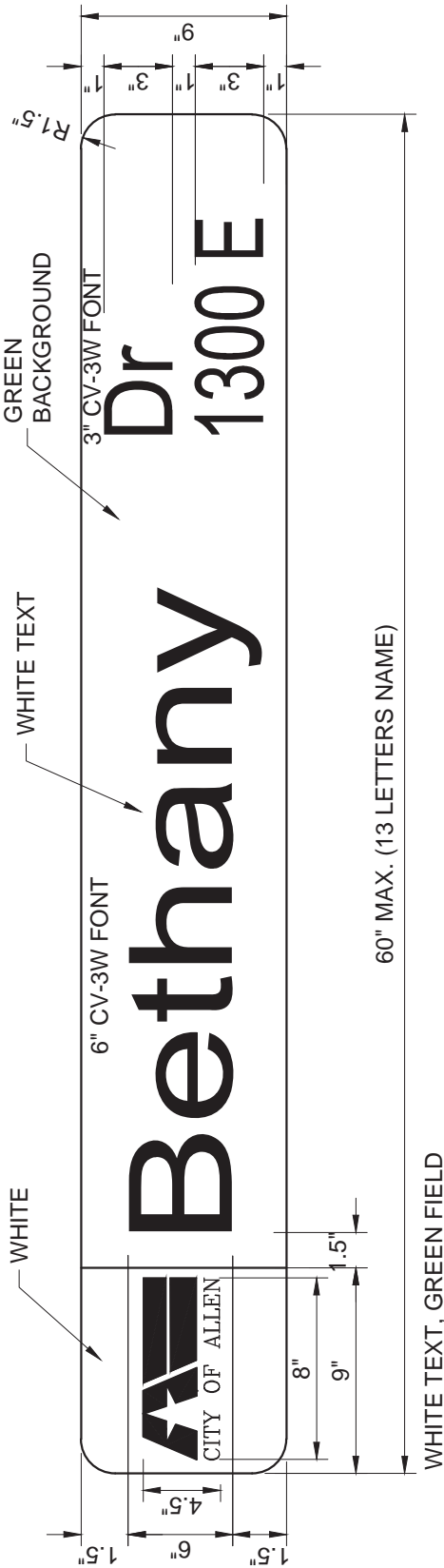
ONE LANE- LANE CLOSURE

STANDARD CONSTRUCTION DETAILS
TRAFFIC

DATE:
FEB. 2007

REV DATE:
JUNE 2011

SHEET :
SD-T10



NOTES :

CONTRACTOR SHALL PLACE SIGNS IN CONFORMANCE WITH THE 2011 "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".

BLOCK NUMBERS (CARDINAL DIRECTION) SHALL BE INCLUDED ON SIGNS AND VERIFIED PRIOR TO SIGN FABRICATION.

CONTRACTOR SHALL SUBMIT THE SIGN DESIGN TO THE CITY OF ALLEN TRAFFIC ENGINEER FOR APPROVAL PRIOR TO SIGN FABRICATION.

ALPHABETS AND LATERAL SPACING BETWEEN LETTERS AND NUMERALS SHALL CONFORM WITH THE STATE OF TEXAS "STANDARD HIGHWAY SIGN DESIGNS, 2012", LATEST EDITION AND ANY APPROVED CHANGES THERETO.

LATERAL SPACING OF TEXT SHALL BE AS TO PROVIDE A BALANCED APPEARANCE.

SIGN BACKGROUNDS SHALL BE OF FLAT SURFACE REFLECTIVE SHEETING (DG3 SHEETING) CONFORMING WITH THE COA SPECIFICATIONS.

SIGN LEGENDS SHALL BE APPLIED USING E.C. FILM ONLY. SHEETING AND EC FILM MUST BE FROM MATCHING SIGNING SYSTEM (3M).

SIGN BLANKS SHALL BE ONE PIECE SHEET ALUMINUM ALLOY 0.125" THICK CONFORMING TO THE TXDOT ITEM "ALUMINUM SIGNS (TYPE A)".

ALL FOUR-SIDED SIGNS SHALL HAVE 1.5-INCH RADIUS CORNERS. ALL SIGNS SHALL BE EC FILM OVER TYPE XI (DG3) SHEETING. ALL SIGN SIZES AND FONTS SHALL CONFORM TO 2011 TEXAS MUTCD. ALL GROUND MOUNTED SIGNS SHALL BE GALVANIZED 12-GAUGE YIELDING BREAKAWAY GROUND MOUNTED SIGN SYSTEM. THE SYSTEM SHALL CONSIST OF THE FOLLOWING THREE ELEMENTS. 1) 12-FOOT LONG 2-INCH SQUARE POLES WITH HOLES. 2) 30-INCH LONG 2.25-INCH SQUARE BASE, AND 3) 18-INCH LONG 2.5-INCH SQUARE SLEEVE.

RIVETS FOR SIGN INSTALLATION SHALL MEET THE FOLLOWING CHARACTERISTICS:

- HEAD DIAMETER = 1"
- LENGTH = 5/8"
- STEM DIAMETER = 3/8"



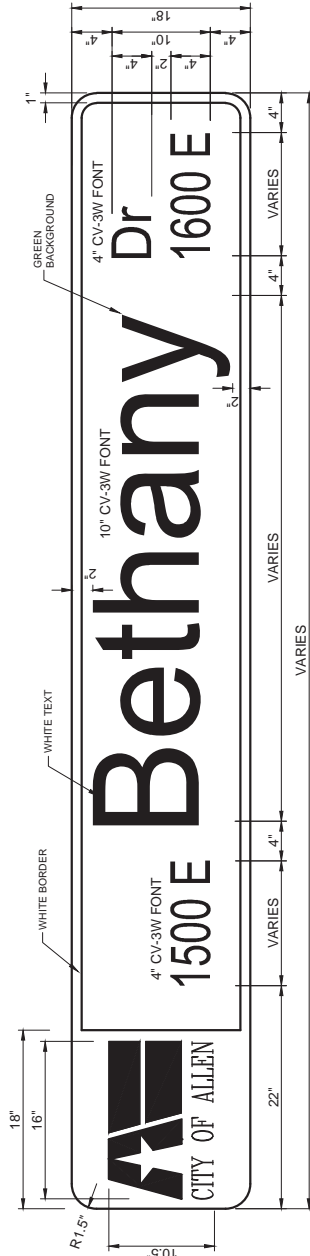
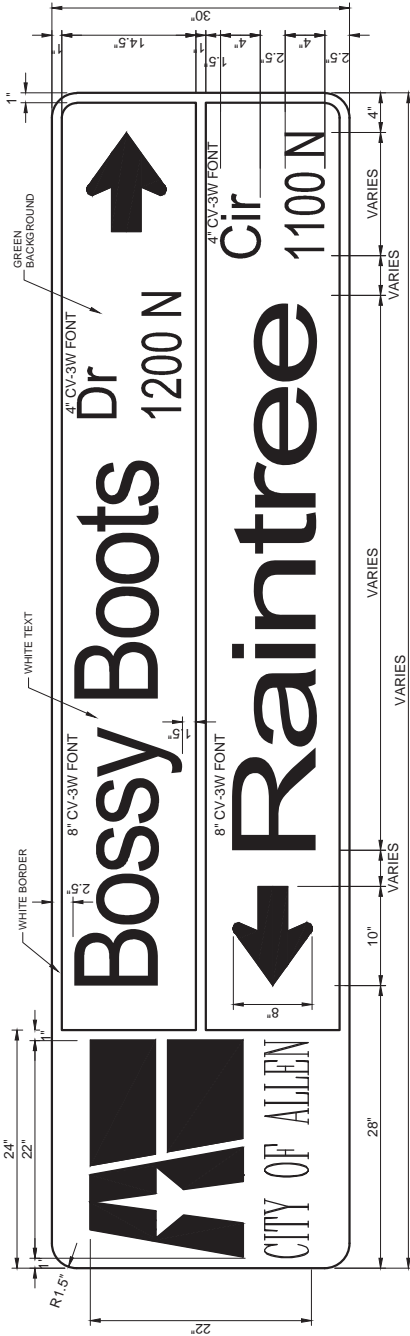
9" STREET NAME BLADE

STANDARD CONSTRUCTION DETAILS
TRAFFIC

DATE:
FEB. 2007

REV DATE:
FEB 2018

SHEET :
SD-T11



1" WHITE BORDER, WHITE TEXT, GREEN FIELD

NOTES :

CONTRACTOR SHALL PLACE SIGNS IN CONFORMANCE WITH THE 2011 "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

BLOCK NUMBERS AND CARDINAL DIRECTION SHALL BE INCLUDED ON SIGNS AND VERIFIED PRIOR TO SIGN FABRICATION.

CONTRACTOR SHALL SUBMIT THE SIGN DESIGN TO THE CITY OF ALLEN TRAFFIC ENGINEER FOR APPROVAL PRIOR TO SIGN FABRICATION.

ALPHABETS AND LATERAL SPACING BETWEEN LETTERS AND NUMERALS SHALL CONFORM WITH THE STATE OF TEXAS "STANDARD HIGHWAY SIGN DESIGNS, 2012", LATEST EDITION AND ANY APPROVED CHANGES THERETO.

LATERAL SPACING OF TEXT SHALL BE AS TO PROVIDE A BALANCED APPEARANCE.

SIGN BACKGROUNDS SHALL BE OF FLAT SURFACE REFLECTIVE SHEETING (TYPE XI DG3 SHEETING) CONFORMING WITH THE COA SPECIFICATIONS.

SIGN LEGENDS SHALL BE APPLIED USING E.C. FILM ONLY. SHEETING AND EC FILM MUST BE FROM MATCHING SIGNING SYSTEM (3M).

SIGN BLANKS SHALL BE ONE PIECE SHEET ALUMINUM ALLOY 0.080" THICK CONFORMING TO THE TXDOT ITEM "ALUMINUM SIGNS (TYPE A)".

CITY OF ALLEN LOGO STICKER (18" X 18" & 24" X 24") WILL BE PROVIDED TO THE CONTRACTOR BY THE CITY. CONTRACTOR SHALL CONTACT MIKE KEALY WITH THE CITY OF ALLEN (214-509-3160) TO OBTAIN LOGOS AND VERIFY THE PLACEMENT OF LOGO ON THE STREET NAME SIGN AT COST TO THE CONTRACTOR.

ALL SIGNS SHALL BE 0.080 GAUGE ANODIZED ALUMINUM EXCEPT FOR 9-INCH STREET NAME BLADES. ALL FOUR-SIDED SIGNS SHALL HAVE 1.5-INCH RADIUS CORNERS. ALL SIGNS SHALL BE EC FILM OVER TYPE XI (DG3) SHEETING. ALL SIGN SIZES AND FONTS SHALL CONFORM TO 2011 TEXAS MUTCD. ALL GROUND MOUNTED SIGNS SHALL BE GALVANIZED 12-GAUGE YIELDING BREAKAWAY GROUND MOUNTED SIGN SYSTEM. THE SYSTEM SHALL CONSIST OF THE FOLLOWING THREE ELEMENTS. 1) 12-FOOT LONG 2-INCH SQUARE POLES WITH HOLES. 2) 30-INCH LONG 2.25-INCH SQUARE BASE. AND 3) 18-INCH LONG 2.5-INCH SQUARE SLEEVE.

RIVETS FOR SIGN INSTALLATION SHALL MEET THE FOLLOWING CHARACTERISTICS:

- HEAD DIAMETER = 1"
- LENGTH = 5/8"
- STEM DIAMETER = 3/8"



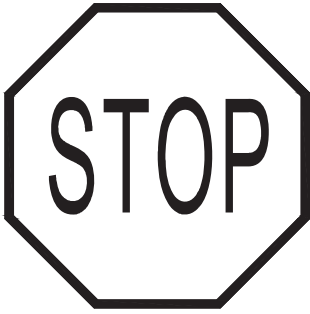
18" & 30" OVERHEAD/MAST ARM STREET NAME BLADE

STANDARD CONSTRUCTION DETAILS TRAFFIC

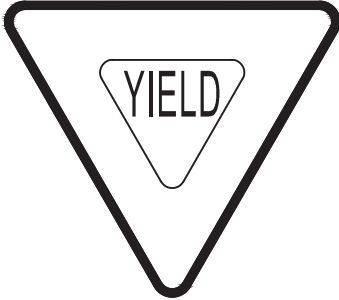
DATE:
FEB. 2007

REV DATE:
APRIL 2014

SHEET :
SD-T12



STOP SIGNS SHALL BE 30-INCHES OR LARGER.



YIELD SIGNS SHALL BE 36-INCHES OR LARGER.



ALL SIGNS SHALL BE 0.080 GAUGE ANODIZED ALUMINUM. ALL FOUR-SIDED SIGNS SHALL HAVE 1.5-INCH RADIUS CORNERS. ALL SIGNS SHALL BE EC FILM OVER TYPE XI (DG-3) SHEETING. ALL SIGN SIZES AND FONTS SHALL CONFORM TO 2011 TEXAS MUTCD. ALL GROUND MOUNTED SIGNS SHALL BE GALVANIZED 12-GAUGE YIELDING BREAKAWAY GROUND MOUNTED SIGN SYSTEM. THE SYSTEM SHALL CONSIST OF THE FOLLOWING THREE ELEMENTS. 1) 12-FOOT LONG 2-INCH SQUARE POLES WITH HOLES. 2) 30-INCH LONG 2.25-INCH SQUARE BASE, AND 3) 18-INCH LONG 2.5-INCH SQUARE SLEEVE.

RIVETS FOR SIGN INSTALLATION SHALL MEET THE FOLLOWING CHARACTERISTICS:

- HEAD DIAMETER = 1"
- LENGTH = $\frac{5}{8}$ "
- STEM DIAMETER = $\frac{3}{8}$ "



ALL WARNING SIGNS SHALL BE TYPE XI (DG3) FLOURESCENT YELLOW SHEETING. ALL PEDESTRIAN CROSSING SIGNS SHALL BE TYPE XI (DG3) FLOURESCENT YELLOW GREEN SHEETING.



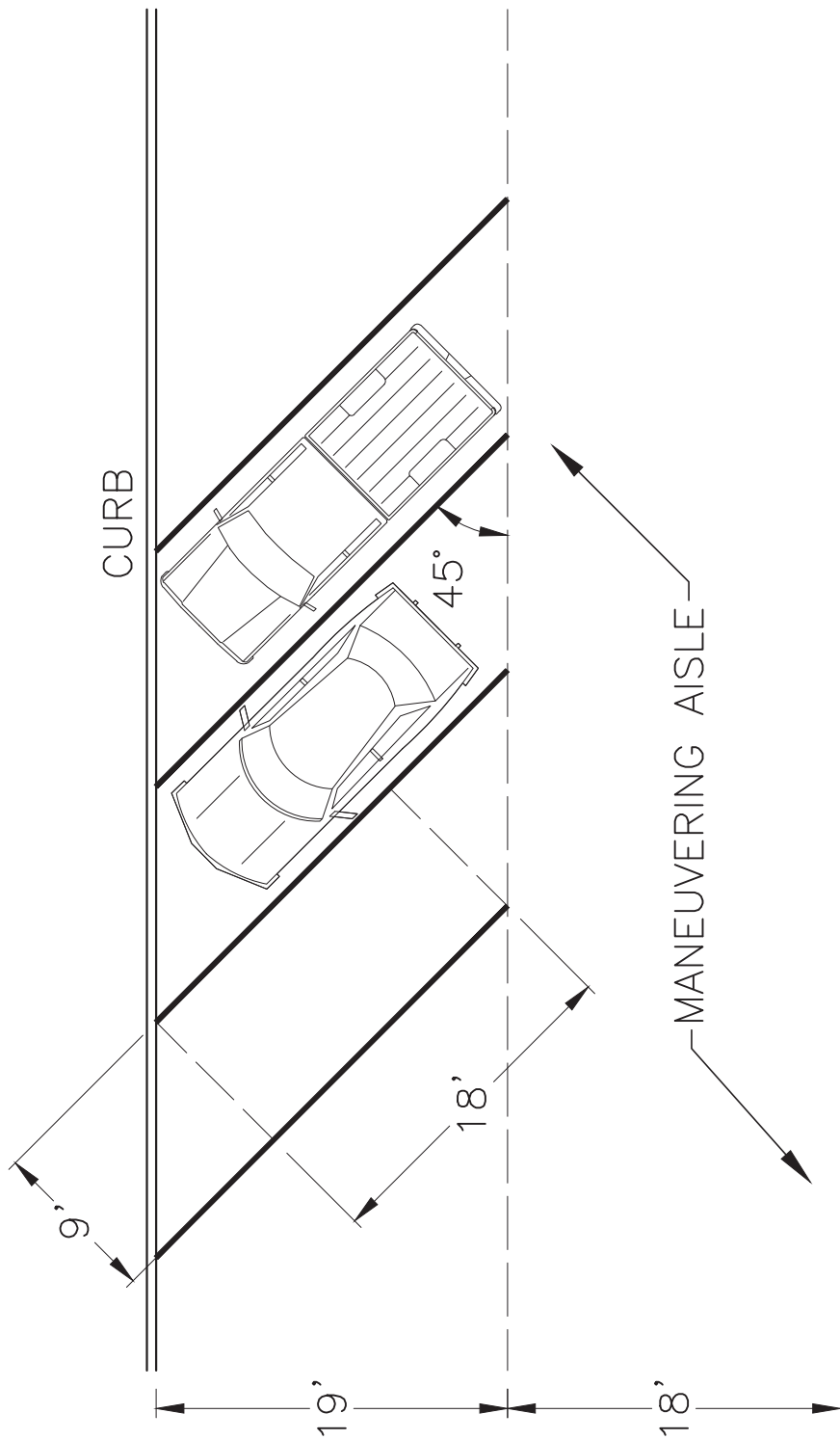
REGULATORY SIGNS

STANDARD CONSTRUCTION DETAILS
TRAFFIC

DATE:
FEB. 2010

REV DATE:
JULY 2012

SHEET :
SD-T13

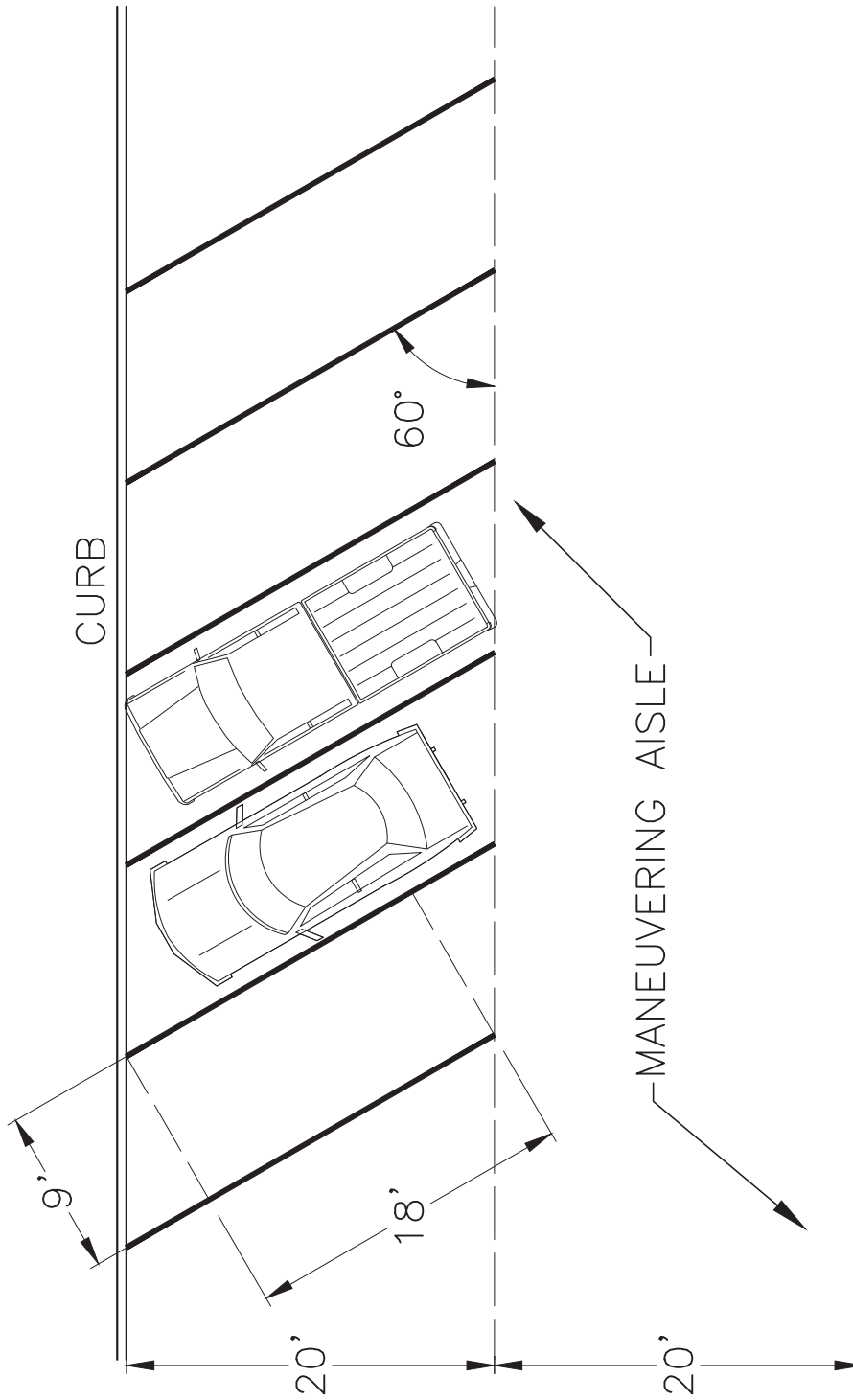


45° PARKING

STANDARD CONSTRUCTION DETAILS
TRAFFIC

DATE:
MARCH 2011

SHEET :
SD-T14



60° PARKING

STANDARD CONSTRUCTION DETAILS
TRAFFIC

DATE:
MARCH 2011

SHEET :
SD-T15