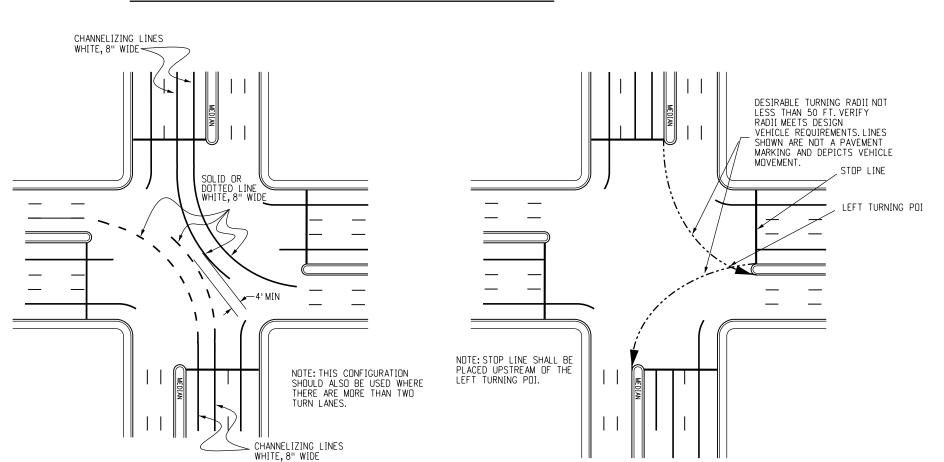
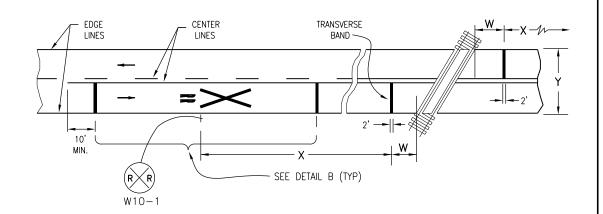


#### DETAIL A

→ DIRECTION OF TRAVEL

#### TYPICAL SPEED MEASUREMENT MARKING





### TYPICAL PAVEMENT MARKING AT RAILROAD CROSSING

- W= APP
  ACTI
  FLAS

  20'

  X= THE
  NEAI
  THE
  BUT

  Y= ON
  ACRI
  BE

  AREA = 69 SQ.FT.
  (BARS NOT INCLUDED)
  - W= APPROXIMATELY 15 FT. (STOP LINE SHOULD BE 8' IN ADVANCE OF ACTIVE TRAFFIC CONTROL SYSTEMS; I.E., AUTOMATIC GATES AND/OR FLASHING SIGNALS).
  - X= THE DISTANCE FROM THE RAILROAD CROSSING MARKING TO THE NEAREST TRACK WILL VARY ACCORDING TO THE APPROACH SPEED AND THE SIGHT DISTANCE OF THE VEHICULAR TRAFFIC APPROACHING, BUT NOT LESS THAN 100 FT. (REFERENCE NOTE 1).
  - Y= ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL RR SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

#### NOTES

- THE WARNING SIGN SHALL BE PLACED ACCORDING TO THE WARNING SIGN PLACEMENT TABLE IN THE MUTCD (CHAPTER 2C, TABLE 2C-4).
   IF CONDITIONS DO NOT ALLOW PLACEMENT ACCORDING TO THE TABLE, IT SHALL BE AS APPROVED BY THE ENGINEER.
- 2. FOR RR SYMBOL DETAILS, REFER TO "THE STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION.

## TYPICAL DOUBLE LEFT TURN MARKINGS TYPICAL STOP LINE PLACEMENT

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2829 W. Howard Pl. Denver, CD 80204 Phone: 303-757-9654 FAX: 303-757-9219

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Traffic Safety & Engineering

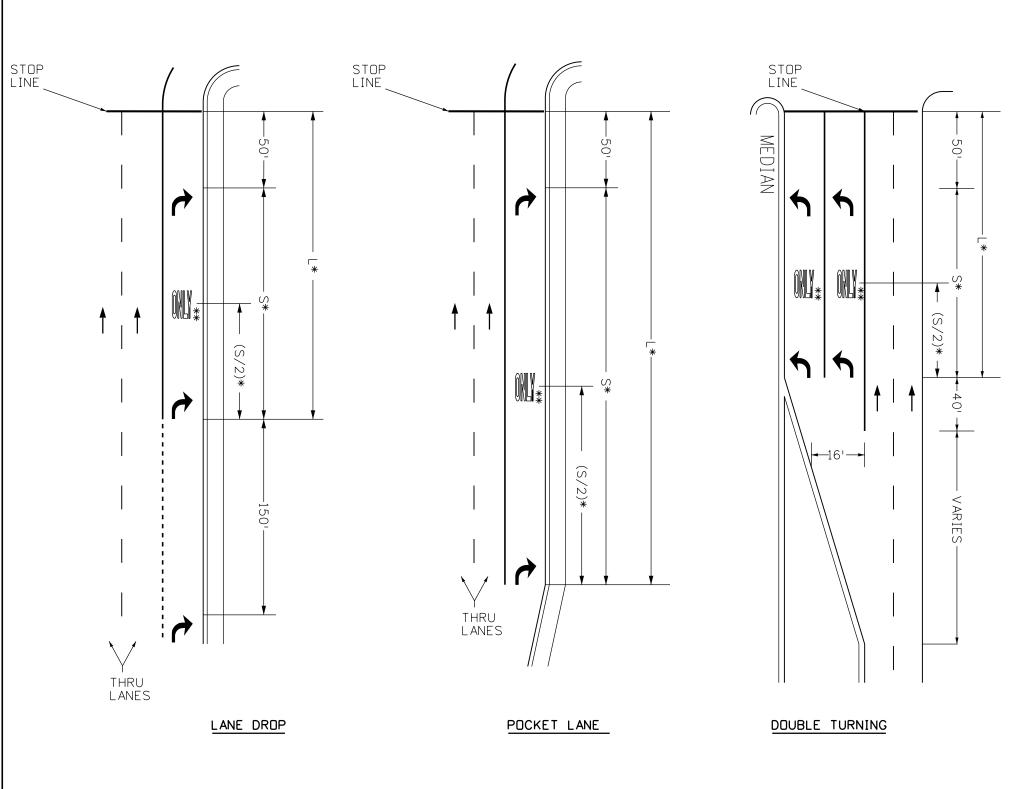
PAVEMENT MARKINGS

**DETAIL B** 

STANDARD PLAN NO.
S-627-1
Standard Sheet No. 4 of 11

Issued By: Traffic Safety & Engineering Branch July 31, 2019

Project Sheet Number:



## GENERAL NOTES

- 1. THE SPACING, IN THE TABLE APPLIES TO LEFT & RIGHT TURN LANES.
- 2. \*\* 'ONLY' MARKING IS OPTIONAL. CONTACT REGION TRAFFIC ENGINEER FOR DIRECTION.
- 3. WHEN ONE (1) ARROW IS USED, IT SHALL BE PLACED AT THE BEGINNING OF THE FULL WIDTH TURN LANE, OTHERWISE USE THE TABLE BELOW FOR ARROW PLACEMENT.

	LEFT AND RIGH	T TURN ARROW	NO. OF 'ONLY'
LENGTH (L)	NO. OF ARROWS	SPACING (S)	PER LANE
	PER LANE	SPACING (3)	FLITLANL
L < 200'	1	NA	NA
200' - 350'	2	EVENLY SPACED	1
350' - 650'	3	BETWEEN	2
650' - 950'	4	150'-300'	3
950′ ≤	≥5	130 -300	≥4

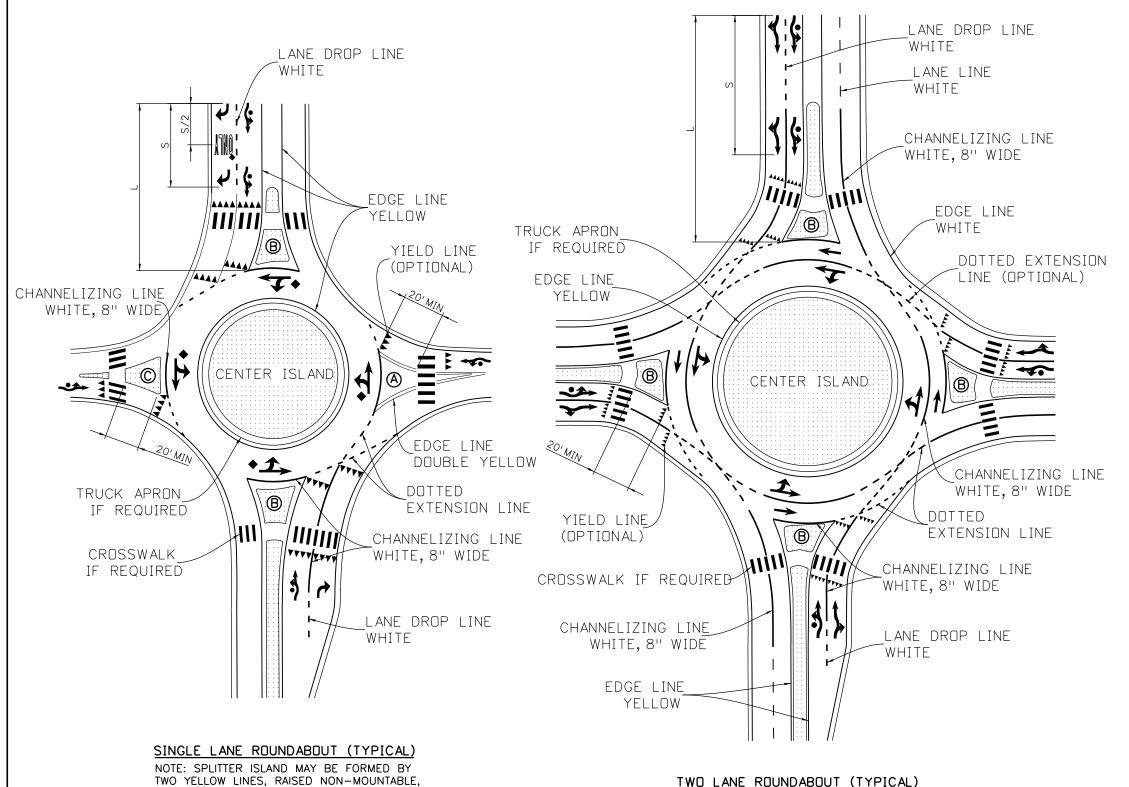
\*L (LENGTH) AND \*S (SPACING) PROVIDED IN THE TABLE ABOVE WILL HELP DETERMINE THE NUMBER OF ARROWS AND ONLY MARKINGS NEEDED PER LANE.

## **LEGEND**

→ Direction of Travel

## ARROW PLACEMENTS AT INTERSECTIONS

Computer File Information			Sheet Revisions	☐ Colorado Department of Transportation	,		STANDARD PLAN NO.
Creation Date: 02/08/17		Date:	Comments	2829 W. Howard Pl.		PAVEMENT	
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Last Modification Date: 04/14/23				Phone: 303-757-9654 FAX: 303-757-9219		MAKKINOS	Standard Sheet No. 5 of 11
Last Modified By: AVu					⊢		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	0			Traffic Safety & Engineering EB		Issued By: Traffic Safety & Engineering Branch July 31, 2019	Project Sheet Number:



OR RAISED MOUNTABLE.

#### **NOTES**

- 1. UNLESS SHOWN IN THIS STANDARD, THE WIDTHS OF PAVEMENT MARKINGS SHALL MATCH THE LARGEST LINE WIDTH OF THE ADJACENT FACILITIES.
- 2. PAVEMENT MARKING LINES ALONG NON-MOUNTABLE SPLITTER ISLANDS ARE OPTIONAL.
- 3. NORMAL LANE-USE ARROWS SHALL BE USED IN THE ROUNDABOUT.
- 4. NORMAL OR FISH-HOOK LANE-USE ARROWS MAY BE USED ON THE APPROACH. ADVANCED SIGNING SHALL MATCH THE PAVEMENT MARKING USED.
- A. WHEN ONE (1) ARROW IS USED ON THE APPROACH, IT SHALL BE PLACED AT THE BEGINNING OF THE CHANNELIZING LINE. OTHERWISE, USE TABLE BELOW.

	LEFT AND RIGH	T TURN ARROW	NO. OF 'ONLY'	
LENGTH (L)	NO. OF ARROWS	SPACING (S)	PER LANE	
	PER LANE	SPACING (S)	PERLANE	
L < 200'	1	NA	NA	
200' - 350'	2	EVENLY SPACED	1	
350' - 650'	3	BETWEEN	2	
650' - 950'	4	150'-300'	3	
950' ≤	≥5	130 -300	≥4	

- 5. THE INSCRIBED OVAL IS OPTIONAL AND MAY BE COMBINED WITH THE LANE-USE ARROW IN THE LEFT-MOST LANE.
- 6. SEE SHEET 10 FOR LANE-USE ARROW DIMENSIONS.
- 7. YIELD LINES UTILIZED AT CROSSWALK SHALL BE PLACED 20 TO 50 FEET IN ADVANCED OF THE CROSSWALK.

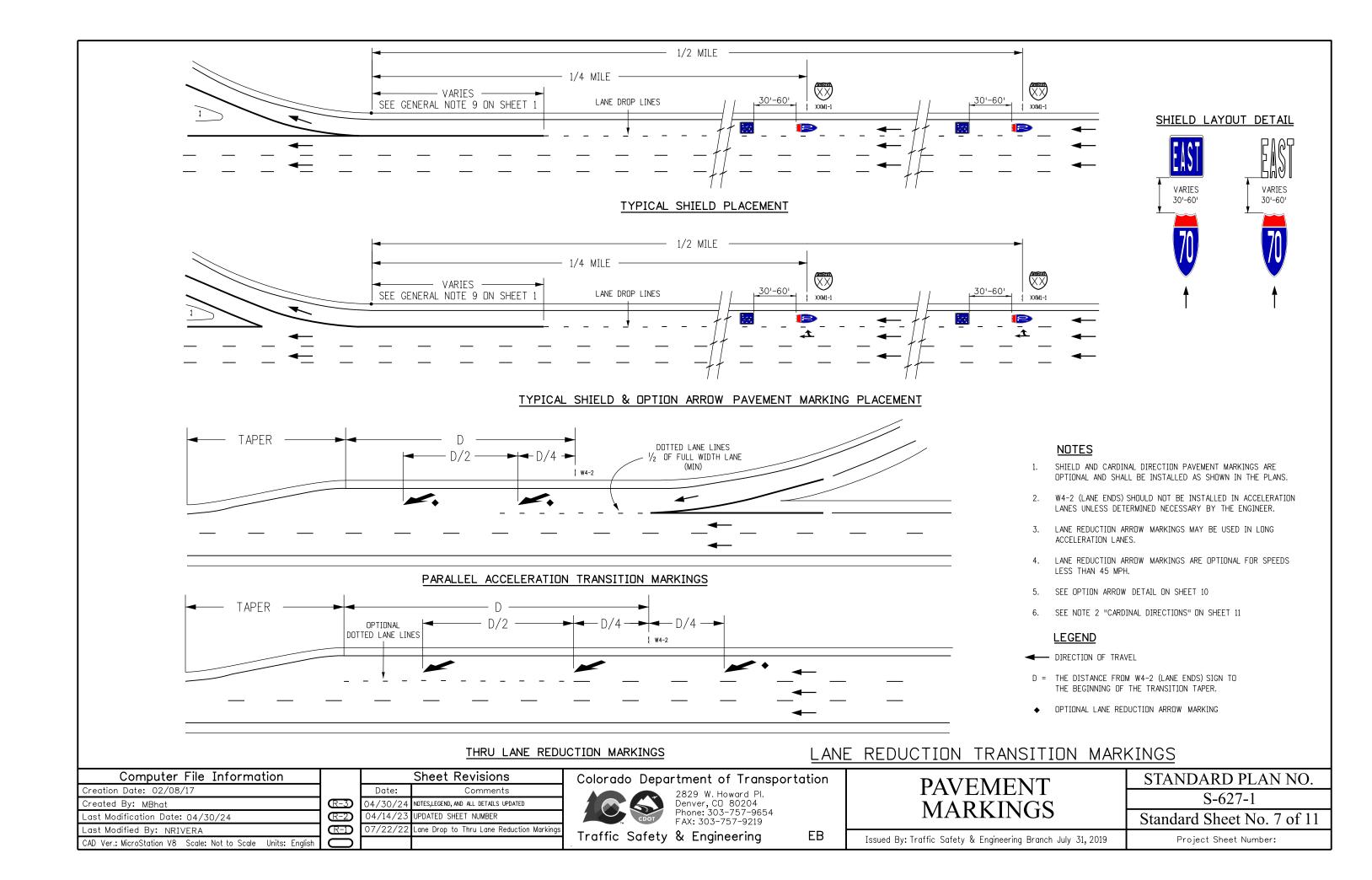
#### **LEGEND**

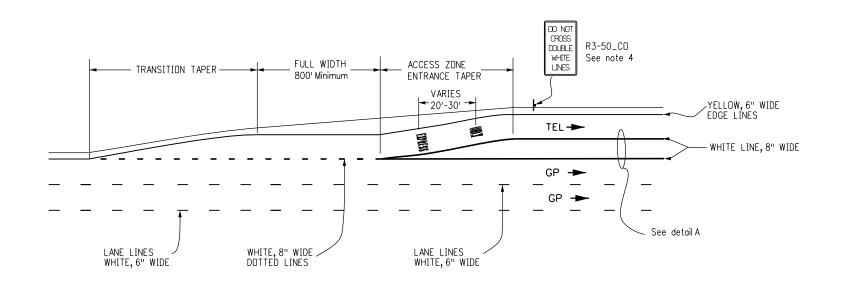
- A SPLITTER ISLAND FORMED BY TWO YELLOW LINES
- (B) RAISED NON-MOUNTABLE SPLITTER ISLAND
- (C) MOUNTABLE SPLITTER ISLAND
- ◆ OPTIONAL

TWO LANE ROUNDABOUT (TYPICAL)

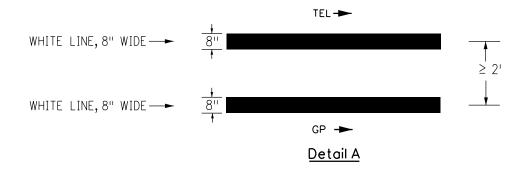
## ROUNDABOUT PAVEMENT MARKINGS

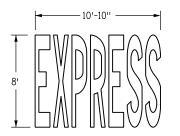
	Computer File Information		Sheet Revisions	Colorado Department of Transportatio	n	DAYEMENIT	STANDARD PLAN NO.
С	reation Date: 04/14/23	Date:	Comments	2829 W. Howard Pl.		PAVEMENT	S-627-1
С	reated By: AVu			Denver, CD 80204		MARKINGS	3-02/-1
L	ast Modification Date:			Phone: 303-757-9654 FAX: 303-757-9219		MAKKINUS	Standard Sheet No. 6 of 11
L	ast Modified By:				, h		
С	AD Ver.: MicroStation V8 Scale: Not to Scale Units: English			Traffic Safety & Engineering EE	<u> </u>	Issued By: Traffic Safety & Engineering Branch July 31, 2019	Project Sheet Number:

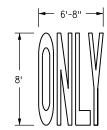




## TYPICAL ENTRANCE MARKING FOR BUFFER WIDTH ≥2' AND WHERE BUFFER CROSSING IS PROHIBITED







#### GENERAL NOTES

- 1. For transition taper use 25:1 ratio.
- 2. For access zone entrance taper length use:

 $L = S \times W$ 

L = MINIMUM LENGTH OF TAPER

S = DESIGN SPEED FOR NEW CONSTRUCTION OR NUMERICAL VALUE OF THE POSTED SPEED LIMIT

**W** = WIDTH TRANSITIONED

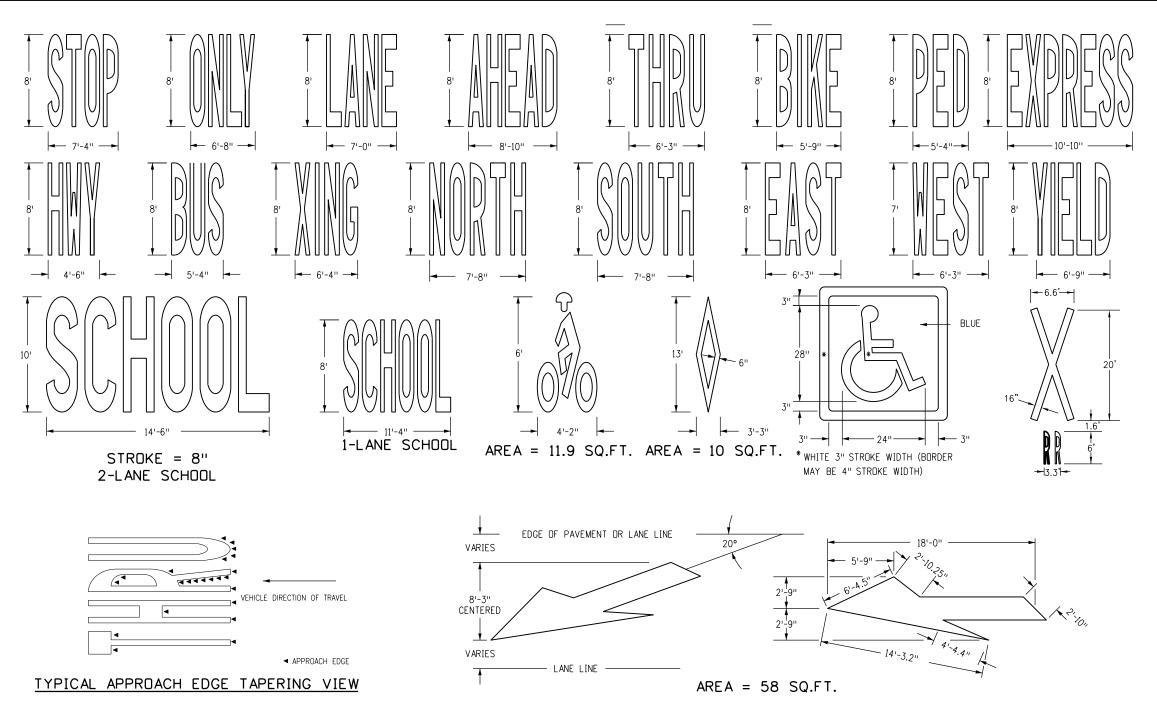
- 3. If buffer space is wider than 4 feet, chevron markings are required (See MUCTD Section 3B.24 and figure 3D.2(A)).
- 4. For each section prohibiting entering and exiting movements, the R3-50\_CD sign shall be installed within 300 feet of the start of the express lane. Additional R3-50\_CD signing shall be installed as shown in the plans.
- 5. For each section prohibiting entering and exiting movements, an EXPRESS ONLY marking should be placed within 50 feet of the start of the express lane.
- 6. EXPRESS ONLY markings should supplement the signs.

#### <u>LEGEND</u>

TEL - TOLL/EXPRESS LANE
GP - GENERAL PURPOSE LANE

## TOLL EXPRESS LANE PAVEMENT MARKINGS

	Computer File Information			Sheet Revisions	Colorado Department of Trans	portation	DAYENTENIT	l STANDARD PLAN NO. I
	Creation Date: 07/31/19		Date:	Comments	2829 W. Howard Pl.	•	PAVEMENT	
Γ	Created By: EButta	R-2	04/14/23	ADD LEGEND & UPDATED SHEET NUMBER	Danver CD 80204		MARKINGS	S-627-1
	Last Modification Date: 04/14/23	R-1	04/17/20	STRIPING LAYOUT & GENERAL NOTE UPDATE	Phone: 303-757-9654 FAX: 303-757-9219		MAKKINUS	Standard Sheet No. 8 of 11
	Last Modified By: AVu					EB		
	CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English				Traffic Safety & Engineering		Issued By: Traffic Safety & Engineering Branch July 31, 2019	Project Sheet Number:



#### WORD AND SYMBOL NOTES

- 1. IF HEIGHT IS INCREASED OR DECREASED THEN ALL MEASUREMENTS CHANGE PROPORTIONATELY. EXAMPLE: "H" MEASUREMENT FOR STOP IS REDUCED TO 4 FT. FROM 8 FT. THEN SQUARE FEET 5.75 (1/4 OF 23.0 SQ. FT.).
- 2. PAVEMENT WORD AND SYMBOL MARKINGS, TRANSVERSE AND LONGITUDINAL (CONTINENTAL) CROSSWALK LINES, AND STOP LINES WILL BE PAID FOR IN. SQUARE FEET USING THEIR SPECIFIC BID ITEMS.
- 3. LETTER SPACING SHALL BE 8 IN. EXCEPT FOR THE LETTER "A" WHICH IS 6 IN..
- 4. USE THE MARKING WORD "BIKE" IF 6 FT. TO 8 FT. BIKE LANES ARE INSTALLED.

#### TAPERING NOTES

1. ALL PAVEMENT MARKING APPROACH EDGES FROM THE VEHICLE DIRECTION OF TRAVEL\_SHALL BE TAPERED USING A PUTTY KNIFE OR SIMILAR TOOL.

#### DESIGNATED PAYMENT AREAS

FOR THE FOLLOWING H, W, AND S DIMENSIONS PAY:

#### H = 4'WORDS

BIKE - 5.5 SQ.FT. LANE - 6.0 SQ.FT.

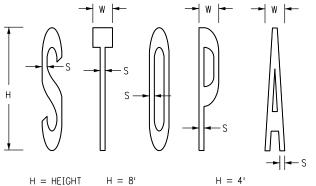
ONLY - 6.0 SQ.FT. XING - 5.0 SQ.FT.

#### H = 8' WORDS

STOP - 23.0 SQ.FT. XING - 20.0 SQ.FT. ONLY - 22.5 SQ.FT. LANE - 22.5 SQ.FT. AHEAD - 29.0 SQ.FT. BIKE - 21.0 SQ.FT. BUS - 18.5 SQ.FT. HWY - 16.5 SQ.FT. SCHOOL(1L) - 33.0 SQ.FT. THRU - 22.0 SQ.FT. SCHOOL(2L) - 85.0 SQ.FT. PED - 17.5 SQ.FT. SOUTH - 28.5 SQ.FT. NORTH - 30.6 SQ.FT. WEST - 23.7 SQ.FT. EAST - 22.1 SQ.FT. X with RR - 69 SQ.FT. EXPRESS - 41 SQ.FT.

YIELD - 23 SQ.FT.

#### TYPICAL LETTER MEASUREMENTS



W = 1'-3.4" TO 1'-4" W = XX TO XXW = WIDTH

## PAVEMENT MARKING WORDS AND SYMBOLS (PAGE 1)

Computer File Information	
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Created By: SCL	R-1
Last Modification Date: 04/14/23	U
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TYPICAL APPROACH EDGE TAPERING PROFILE VIEW

VEHICLE DIRECTION OF TRAVEL

		Sheet Revisions
	Date:	Comments
D	04/14/23	MOVED ARROWS DIMENSIONS TO SHEET 10
<b>O</b>		UPDATED SHEET NUMBER
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## Colorado Department of Transportation



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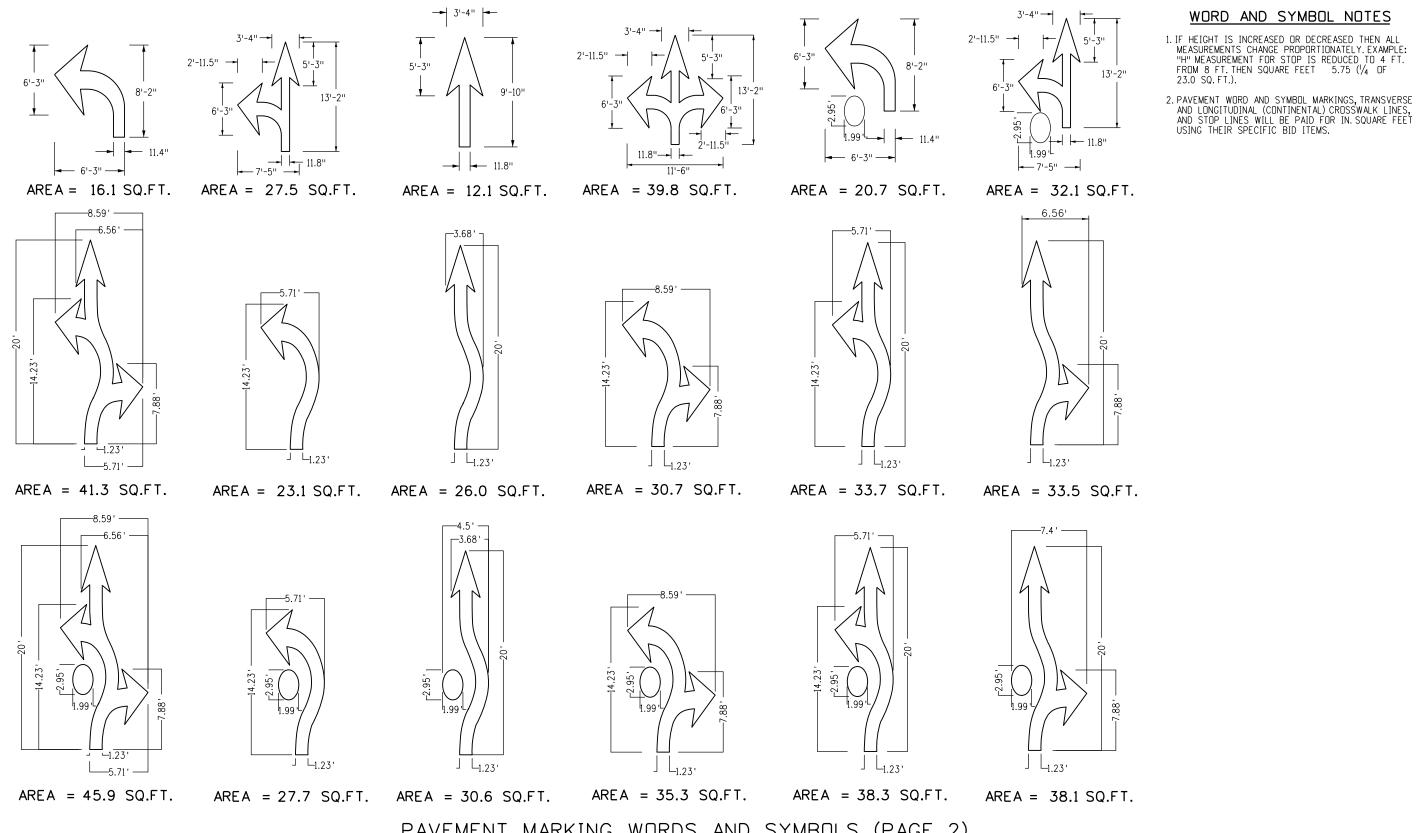
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**PAVEMENT MARKINGS**  STANDARD PLAN NO. S-627-1

Standard Sheet No. 9 of 11

Issued By: Traffic Safety & Engineering Branch July 31, 2019

Project Sheet Number:

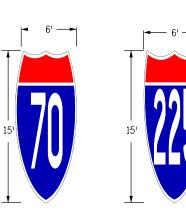


## PAVEMENT MARKING WORDS AND SYMBOLS (PAGE 2)

WORD AND SYMBOL NOTES

Computer File Information		Sheet Revisions	Colorado Department of Transpor	tation	DAYEMENIT	STANDARD PLAN NO.
Creation Date: 04/14/23	Date:	Comments	2829 W. Howard Pl.		PAVEMENT	
Created By: AVu			Denver, CD 80204		MARKINGS	S-627-1
Last Modification Date:			Phone: 303-757-9654 FAX: 303-757-9219		MAKKINUS	Standard Sheet No. 10 of 11
Last Modified By:				EB		
CAD Ver.; MicroStation V8 Scale: Not to Scale Units: English			Traffic Safety & Engineering	CD.	Issued By: Traffic Safety & Engineering Branch July 31, 2019	Project Sheet Number:

#### ELONGATED INTERSTATE ROUTE SHIELDS







#### DESIGNATED PAYMENT AREAS

FOR THE FOLLOWING ROUTE SHIELDS & CARDINAL DIRECTIONS DIMENSIONS PAY:

#### INTERSTATE

6' X 15' - 75 SQ.FT.

8' X 20' - 128 SQ.FT.

#### COLORADO STATE

6' X 15' - 90 SQ.FT.

8' X 20' - 160 SQ.FT.

#### <u>US HIGHWAYS</u>

7' X 16' - 112 SQ.FT.

9' X 21' - 189 SQ.FT.

#### CARDINAL

8' X 10' - 80 SQ.FT. 9' X 10' - 90 SQ.FT.

#### 1. <u>DIMENSIONS</u>

ELONGATED ROUTE SHIELDS SHALL BE AT LEAST 8'x20' WHEN USED ON HIGH SPEED ROADWAYS (55 MPH OR MORE).

NOTES

PER FIGURE 3B-25 OF THE 2009 MUTCD ELONGATED ROUTE SHIELD COLORS SHALL CONFORM WITH THE STANDARD HIGHWAY SIGNS AND MARKINGS BOOK.

#### 2. CARDINAL DIRECTIONS

USE CARDINAL DIRECTIONS WITH WHITE ON BLUE WHEN USING INTERSTATE ROUTE SHIELDS

USE CARDINAL DIRECTIONS WITH BLACK ON WHITE WHEN USING EITHER COLORADO STATE OR US HIGHWAY ROUTE SHIELDS.

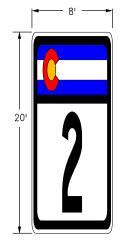
CARDINAL DIRECTION MARKING WORD SYMBOL FROM SHEET 9 OF 11 MAY BE USED INSTEAD OF PLAQUE.

#### ELONGATED COLORADO STATE ROUTE SHIELDS









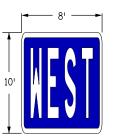


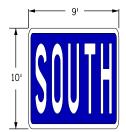


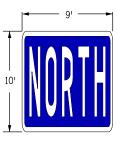


## CARDINAL DIRECTIONS (WHITE LETTERING ON BLUE BACKGROUND)

CARDINAL DIRECTIONS



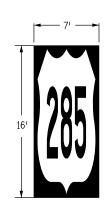


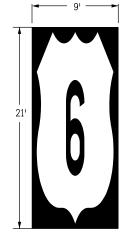


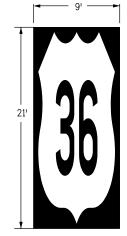
#### ELONGATED US HIGHWAY ROUTE SHIELDS

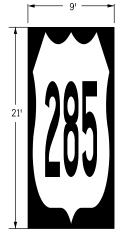




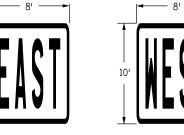


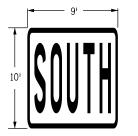


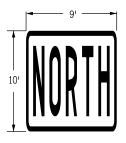




# (BLACK LETTERING ON WHITE BACKGROUND WITH BLACK BORDER)







ELONGATED ROUTE SHIELDS & CARDINAL DIRECTION MARKINGS

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		Sheet Revisions
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R-2		UPDATED SHEET NUMBER
$\mathbb{R}$ -D	02/16/21	GENERAL NOTE UPDATE
		UPDATED NOTE TITLE

## Colorado Department of Transportation 2829 W. Howard Pl.



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## PAVEMENT MARKINGS

STANDARD PLAN NO.

S-627-1

Standard Sheet No. 11 of 11

Project Sheet Number: