



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Design Memorandum No. 10-28 Technical Advisory

November 22, 2010

TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/ David Boruff
David Boruff
Traffic Administration Section Supervisor
Traffic Support Division

SUBJECT Construction-Zone Reduced-Speed-Limit Sign

REVISES: *Indiana Design Manual Section 83-2.03(01) item 7*

EFFECTIVE: March 9, 2011, Letting

The regulatory sign, R2-15b, "Reduced Speed XX Ahead" should not be specified. Instead, reduced-speed-limit warning sign W3-5 or W3-5a should be specified. The details are shown on Recurring Plan Detail 801-R-174d, attached herewith. Only one of the sign designations should be specified for the entire project.

The recurring plan detail should be called for through the August 10, 2011, letting. It will be superseded by standard drawings beginning with the September 8, 2011, letting.

db:alu
Attachment



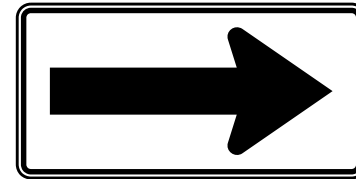
XW3-5



XW3-5a



XW13-1-A
(To be used below a warning sign only.)



XW1-6
XW1-6-A ①



XW6-2a-A
XW6-2a-B ①



XW8-3-A

NOTE:

① See Standard Drawing E 801-TCSN-11 for additional general notes.

INDIANA DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
SIGNS

SIGN NUMBER	SIGN MESSAGE	POST DESIGN		SIGN SIZE	SIGN COLOR		BORDER WIDTH	MARGIN WIDTH	LETTER HEIGHT SERIES-LINE 1	LETTER HEIGHT SERIES-LINE 2	LETTER HEIGHT SERIES-LINE 3	WORD OR LINE (1)	PCT. (1)	ARROW SIZE		CORNER RADIUS	NUMBER OF POSTS	
		4 x 4 WOOD	STEEL		BACKGROUND	COPY								HEAD	SHAFT		ONE	TWO
		XG20-1	"Road Construction Next ____ Miles"		*	B								60 x 36	Orange		Black	3/4
XG20-2	"End Construction"	*	B	60 x 24	Orange	Black	1/2	3/8	6 - Series C	6 - Series C						1 1/2		X
XG20-2a	"End Road Work"	*	B	48 x 18	Orange	Black	1/2	3/8	6 - Series C	6 - Series C						1 1/2		X
XG20-4	"Pilot Car Follow Me"	—	—	36 x 18	Orange	Black	1/2	3/8	5 - Series C	5 - Series C						1 1/2		X
XG20-5	(Route number or) "Lane Closed" __ (date)	*	B	48 x 36	Orange	Black	3/4	1/2	6 - Series C	6 - Series C	6 - Series C					2 1/4		X
XG20-5-B	"Worksite" plate	—	—	48 x 16	Orange	Black	1/2	3/8	8 - Series C							1 1/2	—	—
XW20-6	"Lane Restrictions On Or After **** 2007	*	B	60 x 30	Orange	Black	3/4	1/2	5 - Series C	5 - Series C	4 - Series C					1 7/8		X
XW20-6a	"Lane Restrictions On Or After **** 2007	*	B	72 x 36	Orange	Black	7/8	5/8	6 - Series C	6 - Series C	5 - Series C					2 1/4		X
XM4-9 (R or L)	"Detour" (above black arrow)	*	A	30 x 24	Orange	Black	1/2	3/8	5 - Series D			"Detour"		7 x 8	11 x 3 1/2	1 1/2		X
XM4-9-B (R or L)	"Detour" (above black arrow)	*	B	60 x 48	Orange	Black	1 1/4	3/8	10 - Series D			"Detour"		14 3/4 x 16	21 3/4 x 7	3		X
XM4-10 (R or L)	"Detour" (Inside orange arrow)	*	B	48 x 18	Black & Orange	Black	—	3/8	6 - Series D					12 x 13 3/8	29 3/4 x 8	1 1/2		X
XW1-1-A (R or L)	(Turn symbol)	*	A	36 x 36	Orange	Black	3/4	1/2						10 5/8 x 12	5 1/4	2 1/4		X
XW1-1-B (R or L)	(Turn symbol)	*	B	48 x 48	Orange	Black	1 1/4	3/4						14 1/8 x 16	7	3		X
XW1-2-A (R or L)	(Curve symbol)	*	A	36 x 36	Orange	Black	3/4	1/2						10 5/8 x 12	5 1/4	2 1/4		X
XW1-2-B (R or L)	(Curve symbol)	*	B	48 x 48	Orange	Black	1 1/4	3/4						14 1/8 x 16	7	3		X
XW1-3-A (R or L)	(Reverse turn symbol)	*	A	36 x 36	Orange	Black	3/4	1/2						10 5/8 x 12	5 1/4	2 1/4		X
XW1-3-B (R or L)	(Reverse turn symbol)	*	B	48 x 48	Orange	Black	1 1/4	3/4						14 1/8 x 16	7	3		X
XW1-4-A (R or L)	(Reverse curve symbol)	*	A	36 x 36	Orange	Black	3/4	1/2						10 5/8 x 12	5 1/4	2 1/4		X
XW1-4-B (R or L)	(Reverse curve symbol)	*	B	48 x 48	Orange	Black	1 1/4	3/4						14 1/8 x 16	7	3		X
XW1-6	(Single headed arrow)	*	B	48 x 24	Orange	Black	3/4	3/4						13 1/8 x 15	26 x 6 1/2	1 1/2		X
XW1-6-A	(Single headed arrow)	*	B	60 x 30	Orange	Black	3/4	1/2						16 3/8 x 18	32 1/2 x 8	2 1/4		X
XW4-2 (R or L)	(Lane ends merge __ symbol)	*	A	36 x 36	Orange	Black	3/4	1/2	See Standard Sheet 3A Detours							2 1/4		X
XW4-2-A (R or L)	(Lane ends merge __ symbol)	*	B	48 x 48	Orange	Black	1 1/4	3/4	See Standard Sheet 3A Detours							1 1/2		X
XW6-2a-A	(Divided highway ends symbol)	*	A	36 x 36	Orange	Black	3/4	1/2	5 - Series D	5 - Series D	5 - Series D					2 1/4		X
XW6-2a-B	(Divided highway ends symbol)	*	B	48 x 48	Orange	Black	1 1/4	3/4	7 - Series D	7 - Series D	7 - Series D					3		X
XW3-5-A	Arrow - "Speed Limit __"	*	A	36 x 36	Orange	Black	7/8	5/8	3 - Series E	3 - Series E	12 - C					2 1/4		X
XW3-5-B	Arrow - "Speed Limit __"	*	B	48 x 48	Orange	Black	1 1/4	3/4	4 - Series E	4 - Series E	15 C					3		X
XW3-5a-A	"__ - MPH - Speed Zone Ahead"	*	A	36 x 36	Orange	Black	7/8	5/8	5 - Series C	5 - Series C	5 - Series C					2 1/2		X
XW3-5a-B	"__ - MPH - Speed Zone Ahead"	*	B	48 x 48	Orange	Black	1 1/4	3/4	7 - Series C	7 - Series C	7 - Series C					3		X

*Wood post permitted.

NOTES:

- ① Spacing between letters of this word or line shall be reduced by this percentage as shown in the FHWA document, Standard Highway Sign.
2. See Standard Drawing E801-TCSN-11 for additional general notes.
3. All dimensions are in inches.

INDIANA DEPARTMENT OF TRANSPORTATION

SIGN DESIGN DETAILS
(Sheet 1 of 2)

SIGN NUMBER	SIGN MESSAGE	POST DESIGN		SIGN SIZE	SIGN COLOR		BORDER WIDTH	MARGIN WIDTH	LETTER HEIGHT SERIES-LINE 1	LETTER HEIGHT SERIES-LINE 2	LETTER HEIGHT SERIES-LINE 3	WORD OR LINE ①	PCT. ①	ARROW SIZE		CORNER RADIUS	NUMBER OF POSTS	
		4 x 4 WOOD	STEEL		BACKGROUND	COPY								HEAD	SHAFT		ONE	TWO
XW6-3-B	(Two way traffic symbol)	*	B	48 x 48	Orange	Black	1 1/4	3/4						11 5/8 x 13 3/4	23 1/2 x 6	3		X
XW8-1-A	"Bump"	*	A	36 x 36	Orange	Black	3/4	1/2	10 - Series D								2 1/4	X
XW8-1-B	"Bump"	*	B	48 x 48	Orange	Black	1 1/4	3/4	12 - Series D								3	X
XW8-2-A	"Dip"	*	A	36 x 36	Orange	Black	3/4	1/2	10 - Series E								2 1/4	X
XW8-2-B	"Dip"	*	B	48 x 48	Orange	Black	1 1/4	3/4	12 - Series E								3	X
XW8-3-A	"Pavement Ends"	*	A	36 x 36	Orange	Black	3/4	1/2	6 - Series C	6 - Series C							2 1/4	X
XW8-4-A	"Soft Shoulder"	*	A	36 x 36	Orange	Black	3/4	1/2	6 - Series C	6 - Series C							2 1/4	X
XW8-4-B	"Soft Shoulder"	*	B	48 x 48	Orange	Black	1 1/4	3/4	8 - Series C	8 - Series C							3	X
XW8-6-A	"Truck Crossing"	*	A	36 x 36	Orange	Black	3/4	1/2	6 - Series C	6 - Series C							2 1/4	X
XW8-6-B	"Truck Crossing"	*	B	48 x 48	Orange	Black	1 1/4	3/4	8 - Series C	8 - Series C							3	X
XW9-1-A (R or L)	" ___ Lane Ends"	*	A	36 x 36	Orange	Black	3/4	1/2	6 - Series D	6 - Series D	6 - Series D						2 1/4	X
XW9-1-B (R or L)	" ___ Lane Ends"	*	B	48 x 48	Orange	Black	1 1/4	3/4	8 - Series D	8 - Series D	8 - Series D						3	X
XW9-2-A (R or L)	"Lane Ends Merge ___"	*	B	48 x 48	Orange	Black	1 1/4	3/4	6 - Series C	8 - Series D	8 - Series D						2 1/4	X
XW12-1-C	(Double headed arrow)	*	B	48 x 48	Orange	Black	1 1/4	3/4						12 1/2 x 15	12 x 5 1/4	3		X
XW13-1-A	" ___ MPH" (Advisory speed plate)	*	A	24 x 24	Orange	Black	1/2	3/8	10 - Series E	4 - Series E							1 1/2	---
XW20-1	"Road Construction Ahead"	*	B	48 x 48	Orange	Black	1 1/4	3/4	7 - Series C	7 - Series C	7 - Series C	"Construction"	25				3	X
XW20-1-A	"Road Construction Ahead"	*	B	60 x 60	Orange	Black	1 1/2	1	8 - Series C	8 - Series C	8 - Series C	"Construction"	25				95	X
XW20-1a	"Road Repairs Next ___ Miles"	*	B	48 x 48	Orange	Black	1 1/4	3/4	8 - Series C	8 - Series C	6 - Series C						3	X
XW20-2	"Detour Ahead"	*	B	48 x 48	Orange	Black	1 1/4	3/4	8 - Series D	8 - Series D		"Detour"	25				3	X
XW20-3	"Road Closed Ahead"	*	B	48 x 48	Orange	Black	1 1/4	3/4	7 - Series D	7 - Series D	7 - Series D						3	X
XW20-4	"One Lane Road Ahead"	*	B	48 x 48	Orange	Black	1 1/4	3/4	7 - Series C	7 - Series C	7 - Series C						3	X
XW20-5 (R, C, or L)	" ___ Lane Closed Ahead"	*	B	48 x 48	Orange	Black	1 1/4	3/4	6 - Series C	6 - Series C	6 - Series C			2			3	X
XW20-7a-A	(Flagger symbol)	*	B	48 x 48	Orange	Black	1 1/4	3/4									1 1/2	X
XW21-1a	(Workers symbol)	*	A	36 x 36	Orange	Black	3/4	1/2	6 - Series D								2 1/4	X
XW21-2	"Fresh Oil"	*	A	30 x 30	Orange	Black	3/4	3/8	6 - Series D	6 - Series D		"Fresh"	2/4				1 7/8	X
XW21-2-A	"Fresh Oil"	*	A	36 x 36	Orange	Black	3/4	1/2	7 - Series D	7 - Series D		"Fresh"	3/4				2 1/4	X
XW21-3-A	"Road Machinery Ahead"	*	B	48 x 48	Orange	Black	1 1/4	3/4	7 - Series D	7 - Series D	7 - Series D	"Machinery"	25				3	X
XW21-4-A	"Road Work Ahead"	*	B	48 x 48	Orange	Black	1 1/4	3/4	7 - Series D	7 - Series D	7 - Series D						3	X
XW21-5-A	"Shoulder Work"	*	A	36 x 36	Orange	Black	3/4	1/2	6 - Series C	6 - Series C		"Shoulder"	1				2 1/4	X
XW21-6-A	"Survey Crew"	*	A	36 x 36	Orange	Black	3/4	1/2	6 - Series C	6 - Series C							2 1/4	X

*Wood post permitted.

NOTES:

- ① Spacing between letters of this word or line shall be reduced by this percentage as shown in the FHWA document, Standard Highway Sign.
2. See Standard Drawing E801-TCSN-11 for additional general notes.
3. All dimensions are in inches.

INDIANA DEPARTMENT OF TRANSPORTATION

SIGN DESIGN DETAILS
(Sheet 2 of 2)

SIGN NUMBER	SIGN MESSAGE	POST DESIGN		SIGN SIZE	SIGN COLOR		BORDER WIDTH	MARGIN WIDTH	LETTER HEIGHT SERIES-LINE 1	LETTER HEIGHT SERIES-LINE 2	LETTER HEIGHT SERIES-LINE 3	LETTER HEIGHT SERIES-LINE 4	ARROW SIZE		CORNER RADIUS	NUMBER OF POSTS	
		4 x 4 WOOD	STEEL		BACKGROUND	COPY							HEAD	SHAFT		ONE	TWO
XW101-1	"Mowing Crews Ahead"	*	A	36 x 36	Orange	Black	3/4	1/2	6 - Series C	6 - Series C	6 - Series C				2 1/4		X
XW101-1-A	"Mowing Crews Ahead"	*	B	48 x 48	Orange	Black	1 1/4	3/4	8 - Series C	8 - Series C	8 - Series C				3		X
XW102-1	"Mowing Crews Next ___ Miles"	*	A	36 x 36	Orange	Black	3/4	1/2	6 - Series C	6 - Series C	4 - Series C	4 - Series C			2 1/4		X
XW102-1-A	"Mowing Crews Next ___ Miles"	*	B	48 x 48	Orange	Black	1 1/4	3/4	8 - Series C	8 - Series C	6 - Series C	6 - Series C			3		X
XW103-1	"Watch For Stopped Traffic"	*	B	48 x 48	Orange	Black	1 1/4	3/4	7 - Series C	7 - Series C	7 - Series C				3		X
XW104-1	"Overhead Sign Installation"	*	B	60 x 24	Orange	Black	1/2	3/8	6 - Series C	6 - Series C					1 1/2		X
XW105-1-A	"Right Lane Exit Open"	*	B	48 x 48	Orange	Black	1 1/4	3/4	6 - Series C	6 - Series C					3		X
XW106-1-A	"Exit Closed"	*	B	48 x 48	Orange	Black	1 1/4	3/4	7 - Series C	7 - Series C					3		X
XW106-2-A	"Exit Open"	*	B	48 x 48	Orange	Black	1 1/4	3/4	7 - Series C	7 - Series C					3		X
XW108-1	"Utility Work Ahead"	*	A	36 x 36	Orange	Black	3/4	1/2	6 - Series D	6 - Series D	6 - Series D				2 1/4		X
XW108-1-A	"Utility Work Ahead"	*	B	48 x 48	Orange	Black	1 1/4	3/4	6 - Series C	6 - Series C	6 - Series C				3		X
XW109-1	"Exit" (above black arrow)	*	B	48 x 48	Orange	Black	1 1/4	3/4	12 - Series D						3		X
R2-1	"Speed limit ____"	*	A	24 x 30	White	Black	1/2	3/8	4 - Series E	4 - Series E	10 - Series E				1/2	X	
R2-1-B	"Speed limit ____"	*	B	48 x 60	White	Black	1 1/4	3/4	8 - Series E	8 - Series E	16 - Series E				3		X
R3-2-A (R or L)	(No ___ turn symbol)	*	A	30 x 30	White	Black	3/4	3/8							2	X	
R3-2-C (R or L)	(No ___ turn symbol)	*	B	48 x 48	White	Black	1 1/4	3/4							3		X
R4-1	"Do Not Pass"	*	A	24 x 30	White	Black	1/2	3/8	6 - Series D	6 - Series D	5 - Series D				1 7/8	X	
R4-1-B	"Do Not Pass"	*	B	48 x 60	White	Black	1 1/4	3/4	10 - Series D	10 - Series D	10 - Series D				3		X
R5-1-A	"Do Not Enter" (inside symbol)	*	A	36 x 36	Red	White	Radius 17	1/2	5 - Series D	6 x 30 Bar	5 - Series D				2 1/4		X
R5-1-B	"Do Not Enter" (inside symbol)	*	B	48 x 48	Red	White	Radius 23	1/2	6 - Series D	8 x 40 Bar	6 - Series D				3		X
R6-1 (R or L)	"One Way" (inside white arrow)	*	A	36 x 36	Black & White	Black	---	3/8	4 - Series D			7 1/2 x 8 1/2	22 1/4 x 5 1/4		1 1/2		X
R6-2-A (R or L)	"One Way" (above black arrow)	*	A	24 x 30	White	Black	1/2	3/8	6 - Series D	6 - Series D		5 1/4 x 6	8 x 2 1/4		1 1/2	X	
R11-2	"Road Closed"	*	B	48 x 30	White	Black	3/4	3/8	8 - Series D	8 - Series D					1 7/8		X
R11-3	"Road Closed Miles Ahead "Local Traffic Only"	*	B	60 x 30	White	Black	3/4	3/8	6 - Series C	5 - Series C	4 - Series C				1 7/8		X
R11-4	"Road Closed To Thru Traffic"	*	B	60 x 30	White	Black	3/4	3/8	6 - Series C	5 - Series C	6 - Series C				1 7/8		X
R12-1	"Weight Limit ____ Tons"	*	A	24 x 30	White	Black	1/2	3/8	4 - Series D	4 - Series D	5 - Series E	5 - Series D			1 1/2	X	
R12-1-A	"Weight Limit ____ Tons"	*	B	36 x 48	White	Black	3/4	1/2	6 - Series D	6 - Series D	8 - Series E	10 - Series D			2 1/4		X
S 4-4	"When Flashing" plate	---	---	48 x 20	White	Black	1/2	3/8	5 - Series D	5 - Series D					1 1/2	---	---

* Wood post permitted.

GENERAL NOTES

1. See Standard Drawing E 801-TCSN-11 for additional general notes.
2. All dimensions are in inches.

INDIANA DEPARTMENT OF TRANSPORTATION

SIGN DESIGN DETAILS