# APPENDIX B2 – REGULATORY SIGNS DIMENSION DESCRIPTIONS

### **R3-9g:** Advance Reversible Lane Control Transition – Sheet 1

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first line and for the second and third words on the second line.
- G is the space between the lines.
- H is the width of the first word on the first line.
- J is the space between each word.
- K is the distance from the vertical center of the sign to the left edge of the second word on the first line.
- L is the distance from the vertical center of the sign to the right edge of the second word on the first line.
- M is the width of the third word on the first line.
- N is the distance from the vertical center of the sign to the left and right edges of the second line.
- P is the width of the first word on the second line.
- Q is the width of the second word on the second line.
- R is the width of the third word on the second line.
- S is the letter height and FHWA standard font for the first word on the second line.
- T is the corner radius.

### **R3-9g:** Advance Reversible Lane Control Transition – Sheet 2

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for each line.
- G is the space between the lines.
- H is the width of the first word on the first line.
- J is the space between each word.
- K is the distance from the vertical center of the sign to the left edge of the second word on the first line.
- L is the distance from the vertical center of the sign to the right edge of the second word on the first line.
- M is the width of the third word on the first line.
- N is the distance from the vertical center of the sign to the left and right edges of the second line.
- P is the width of the first word on the second line.
- Q is the width of the second word on the second line.
- R is the corner radius.

### **R3-9h:** Advance Reversible Lane Control Transition – Sheet 1

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first line and for the second and third words on the second line.
- G is the space between the lines.
- H is the width of the first word on the first line.
- J is the space between words.
- K is the distance from the vertical center of the sign to the left edge of the second word on the first line.
- L is the distance from the vertical center of the sign to the right edge of the second word on the first line.
- M is the width of the third word on the first line.
- N is the distance from the vertical center of the sign to the left and right edges of the second line.
- P is the width of the first word on the second line.
- Q is the width of the second word on the second line
- R is the width of the third word on the second line.
- S is the letter height and FHWA standard font for the first word on the second line.
- T is the corner radius.

### **R3-9h:** Advance Reversible Lane Control Transition – Sheet 2

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for each line.
- G is the space between the lines.
- H is the width of the first word on the first line.
- J is the space between each word.
- K is the distance from the vertical center of the sign to the left edge of the second word on the first line.
- L is the distance from the vertical center of the sign to the right edge of the second word on the first line.
- M is the width of the third word on the first line.
- N is the distance from the vertical center of the sign to the left and right edges of the second line.
- P is the width of the first word on the second line.
- Q is the width of the second word on the second line.
- R is the corner radius.

### **R3-9i: End Reverse Lane**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border and the width of the panel border.
- D is the border width of the sign.
- E is the distance from the top of both the panel and the first line to the top of the sign, and from the bottom of both the panel and the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for each line.
- G is the space between the lines.
- H is the height of the panel.
- J is the width of the panel.
- K is the distance from the vertical center of the sign to the right edge of the panel.
- L is the distance from the vertical center of the sign to the left edge of the word on the first line.
- M is the width of the word on the first line.
- N is the distance from the vertical center of the sign to the left edge of the word on the second line.
- P is the distance from the vertical center of the sign to the right edge of the word on the second line.
- Q is the distance from the vertical center of the sign to the left edge of the word on the third line.
- R is the width of the word on the third line.
- S is the corner radius of the sign.
- T is the corner radius of the panel.

# **R3-10:** Preferential Lane Vehicle Occupancy Definition (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the horizontal center of the symbol to the top of the sign.
- F is the distance from the horizontal center of the symbol to the bottom of the black panel.
- G is the distance from the bottom of the black panel to the top of the first line.
- H is the letter height and FHWA standard font for the first line.
- J is space between the lines.
- K is the letter height and FHWA standard font for the second, third, and fourth lines.
- L is the distance from the bottom of the last line to the bottom of the sign.
- M is the distance from the vertical center of the sign to the left and right edges of the first line.
- N is the width of the first word on the first line.
- P is the space between the first and second words on the first line and between the number and words on the second and fourth lines.
- Q is the width of the second word on the first line
- R is the space between the second and third word on the first line.
- S is the width of the third word on the first line.
- T is the distance from the vertical center of the sign to the left and right edges of the second line.
- U is the width of the number on the second line.
- V is the width of the first word on the second line.
- W is the width of the second word on the second line.
- X is the distance from the vertical center of the sign to the left edge of the word on the third line.
- Y is the distance from the vertical center of the sign to the right edge of the word on the third line.
- Z is the width of the first word on the fourth line.
- AA is the distance from the vertical center of the sign to the left edge of the second word on the fourth line.
- BB is the distance from the vertical center of the sign to the right edge of the second word on the fourth line.
- CC is the distance from the horizontal center of the symbol to the top and bottom of the symbol.
- DD is the distance from the vertical center of the symbol to the left and right edges of the symbol.
- EE is the line width of the symbol.
- FF is the corner radius.

### **R3-11:** Preferential Lane Operation - High-Occupancy Vehicles (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the horizontal center of the symbol to the top of the sign.
- F is the distance from the horizontal center of the symbol to the bottom of the panel.
- G is the distance from the bottom of the panel to the top of the first line.
- H is the letter height and FHWA standard font for the first and second lines.
- J is the space between the first and second lines.
- K is the space between the second and third lines.
- L is the letter height and FHWA standard font for the third and fourth lines.
- M is the space between the third and fourth lines.
- N is the distance from the bottom of the last line to the bottom of the sign.
- P is the distance from the vertical center of the sign to the left and right edges of the first line.
- Q is the width of the first word on the first line.
- R is the space between the words on the first line.
- S is the width of the second word on the first line.
- T is the distance from the vertical center of the sign to the left and right edges of the word on the second line.
- U is the distance from the vertical center of the sign to the left and right edges of the third line.
- V is the distance from the vertical center of the sign to the left and right edges of the fourth line.
- W is the distance from the horizontal center of the symbol to the top and bottom of the symbol.
- X is the distance from the vertical center of the symbol to the right and left edges of the symbol.
- Y is the line width of the symbol.
- Z is the corner radius.

# **R3-11a:** Preferential Lane Operation - High-Occupancy Vehicles (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the sign to the top of the first line.
- F is the letter height and FHWA standard font for the first and second lines.
- G is the space between the first and second line.
- H is the distance from the bottom of the second line to the bottom of the panel.
- J is the distance from the bottom of the panel to the top of the third line.
- K is the letter height and FHWA standard font for the third and fourth lines.
- L is the space between the third and fourth line.
- M is the space between the fourth and fifth line.
- N is the letter height and FHWA standard font for the fifth and sixth lines.
- P is the space between the fifth and sixth line.
- Q is the distance from the bottom of the last line to the bottom of the sign.
- R is the distance from the horizontal center of the symbol to the bottom of the panel.
- S is the distance from the horizontal center of the symbol to the top of the sign.
- T is the distance from the vertical center of the sign to the left edge of the word on the first line.
- U is the distance from the vertical center of the sign to the right edge of the word on the first line.
- V is the distance from the vertical center of the sign to the left edge of the word on the second line.
- W is the distance from the vertical center of the sign to the right edge of the word on the second line.
- X is the distance from the horizontal center of the symbol to the top and bottom edges of the symbol.
- Y is the distance from the vertical center of the symbol to the left and right edges of the symbol.
- Z is the symbol line width.
- AA is the distance from the vertical center of the sign to the vertical center of the symbol.
- BB is the distance from the vertical center of the sign to the left and right edges of the third line.
- CC is the width of the word on the third line.
- DD is the space between the word and the number on the third line.
- EE is the width of the number and plus sign on the third line.
- FF is the distance from the vertical center of the sign to the left and right edges of the fourth line.
- GG is the distance from the vertical center of the sign to the left and right edges of the fifth line.
- HH is the distance from the vertical center of the sign to the left and right edges of the last line.
- JJ is the corner radius.

### **R3-11d:** Preferential Lane Operation (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top the sign to the top of the first line.
- F is the letter height and FHWA standard font for the first and second lines.
- G is the space between the first and second line.
- H is the distance from the bottom of the second line to the bottom of the panel.
- J is the distance from the bottom of the panel to the top on the third line.
- K is the letter height and FHWA standard font for the third and fourth lines.
- L is the space between the third and fourth line.
- M is the space between the fourth and fifth line.
- N is the letter height and FHWA standard font for the fifth and sixth lines.
- P is the space between the fifth and sixth line.
- Q is the distance from the bottom of the last line to the bottom of the sign.
- R is the distance from the vertical center of the sign to the left and right edges of the word on the first line.
- S is the distance from the vertical center of the sign to the left edge of the word on the second line.
- T is the distance from the vertical center of the sign to the right edge of the word on the second line.
- U is the distance from the vertical center of the sign to the left and right edges of the word on the third line.
- V is the distance from the vertical center of the sign to the left and right edges of the word on the fourth line.
- W is the distance from the vertical center of the sign to the left and right edges of the fifth and sixth lines.
- X is the corner radius.

# **R3-12:** Preferential Lane Ahead - High-Occupancy Vehicles (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the horizontal center of the symbol to the top of the sign.
- F is the distance from the horizontal center of the symbol to the bottom of the panel.
- G is the distance from the bottom of the panel to the top of the first line.
- H is the letter height and FHWA standard font for each line.
- J is the space between the lines.
- K is the distance from the bottom of the last line to the bottom of the sign.
- L is the distance from the vertical center of the sign to the left and right edges of the first line.
- M is the width of the first word on the first line.
- N is the space between the words on the first line.
- P is the width of the second word on the first line.
- Q is the distance from the vertical center of the sign to the left edge of the word on the second line.
- R is the distance from the vertical center of the sign to the right edge of the word on the second line.
- S is the distance from the vertical center of the sign to the left edge of the word on the third line.
- T is the distance from the vertical center of the sign to the right edge of the word on the third line.
- U is the distance from the vertical center of the sign to the left and right edges of the symbol.
- V is the distance from the horizontal center of the symbol to the top and bottom of the symbol.
- W is the line width of the symbol.
- X is the corner radius.

# **R3-12a:** Preferential Lane Ends - High-Occupancy Vehicles (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the horizontal center of the symbol to the top of the sign.
- F is the distance from the horizontal center of the symbol to the bottom of the panel.
- G is the space between the panel and the first line.
- H is the letter height and FHWA standard font for each line.
- J is the space between the lines.
- K is the distance from the bottom of the last line to the bottom of the sign.
- L is the distance from the vertical center of the sign to the left edge of the word on the first line.
- M is the distance from the vertical center of the sign to the right edge of the word on the first line.
- N is the distance from the vertical center of the sign to the left edge of the word on the second line.
- P is the distance from the vertical center of the sign to the right edge of the word on the second line.
- Q is the distance from the vertical center of the sign to the left edge of the word on the third line.
- R is the distance from the vertical center of the sign to the right edge of the word on the third line.
- S is the distance from the vertical center of the symbol to the left and right edges of the symbol.
- T is the distance from the horizontal center of the symbol to the top and bottom of the symbol.
- U is the line width of the symbol.
- V is the corner radius.

# **R3-12b:** Preferential Lane Ends - High-Occupancy Vehicles (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the horizontal center of the symbol to the top of the sign.
- F is the distance from the horizontal center of the symbol to the bottom of the panel.
- G is the space between the bottom edge of the panel and the top of the first line.
- H is the letter height and FHWA standard font for the first, second, and third lines.
- J is the space between the first, second, and third lines.
- K is the space between the third line and the word on the fourth line.
- L is the letter height and FHWA standard font for the word and numbers on the fourth line.
- M is the distance from the bottom of the word on the last line to the bottom of the sign.
- N is the distance from the bottom of the fraction on the last line to the bottom of the sign.
- P is the height of the fraction.
- Q is the distance from the vertical center of the sign to the left edge of the word on the first line.
- R is the distance from the vertical center of the sign to the right edge of the word on the first line.
- S is the distance from the vertical center of the sign to the left edge of the word on the second line.
- T is the distance from the vertical center of the sign to the right edge of the word on the second line.
- U is the distance from the vertical center of the sign to the left edge of the word on the third line.
- V is the distance from the vertical center of the sign to the right edge of the word on the third line.
- W is the distance from the vertical center of the sign to the left and right edges of the third line.
- X is the width of the fraction.
- Y is the space between the fraction and the word on the third line.
- Z is the width of the last word on the third line.
- AA is the distance from the vertical center of the symbol to the left and right edges of the symbol.
- BB is the distance from the horizontal center of the symbol to the top and bottom of the symbol.
- CC is the line width of the symbol.
- DD is the corner radius.

### R3-12c: Preferential Lane Restriction Ends - High-Occupancy Vehicles (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the horizontal center of the symbol to the top of the sign.
- F is the distance from the horizontal center of the symbol to the bottom of the panel
- G is the distance from the bottom of the panel to the top of the first line.
- H is the letter height and FHWA standard font for the first and third line.
- J is the space between the lines.
- K is the letter height and FHWA standard font for the second line.
- L is the distance from the bottom of the last line to the bottom of the sign.
- M is the distance from the vertical center of the sign to the left edge of the word on the first line.
- N is the distance from the vertical center of the sign to the right edge of the word on the first line.
- P is the distance from the vertical center of the sign to the left edge of the word on the second line.
- Q is the distance from the vertical center of the sign to the right edge of the word on the second line.
- R is the distance from the vertical center of the sign to the left edge of the word on the third line.
- S is the distance from the vertical center of the sign to the right edge of the word on the third line.
- T is the distance from the vertical center of the sign to the left and right edges of the symbol.
- U is the distance from the horizontal center of the symbol to the top and bottom of the symbol.
- V is the symbol's line width.
- W is the corner radius.

### R3-12d: Preferential Lane Restriction Ends - High-Occupancy Vehicles (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the horizontal center of the symbol to the top of the sign.
- F is the distance from the horizontal center of the symbol to the bottom of the panel.
- G is the space between the panel and the first line.
- H is the letter height and FHWA standard font for the first and third lines.
- J is the space between the first, second, and third lines.
- K is the letter height and FHWA standard font for the second line.
- L is the space between the third line and the word on the fourth line.
- M is the letter height and FHWA standard font for the word and numbers on the fourth line.
- N is the distance from the word on the fourth line to the bottom of the sign.
- P is the distance from the bottom of the fraction on the fourth line to the bottom of the sign.
- Q is the height of the fraction.
- R is the distance from the vertical center of the sign to the left edge of the word on the first line.
- S is the distance from the vertical center of the sign to the right edge of the word on the first line.
- T is the distance from the vertical center of the sign to the left edge of the word on the second line.
- U is the distance from the vertical center of the sign to the right edge of the word on the second line.
- V is the distance from the vertical center of the sign to the left edge of the word on the third line.
- W is the distance from the vertical center of the sign to the right edge of the word on the third line.
- X is the distance from the vertical center of the sign to the left and right edges of the fourth line.
- Y is the width of the fraction.
- Z is the space between the fraction and the word on the fourth line.
- AA is the width of the word on the fourth line.
- BB is the distance from the vertical center of the symbol to the left and right edge of the symbol.
- CC is the distance from the horizontal center of the symbol to the top and bottom of the symbol.
- DD is the line width of the symbol.
- EE is the corner radius.

# R3-12e: Preferential Lane Ahead - High-Occupancy Vehicles (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first and second lines.
- G is the space between the first and second lines.
- H is the distance from the bottom of the second line to the bottom of the panel.
- J is the distance from the bottom of the panel to the top of the third line.
- K is the letter height and FHWA standard font for the third and fourth lines and the numbers in the fraction on the fifth line.
- L is the space between the third, fourth, and lines.
- M is the letter height and FHWA standard font for the fifth line.
- N is the distance from the bottom of the last line to the bottom of the sign.
- P is the distance from the bottom of the fraction on the last line to the bottom of the sign.
- Q is the height of the fraction on the last line.
- R is the distance from the horizontal center of the symbol to the bottom of the panel.
- S is the distance from the horizontal center of the symbol to the top of the sign.
- T is the distance from the vertical center of the sign to the left edge of the word on the first line.
- U is the distance from the vertical center of the sign to the right edge of the word on the first line.
- V is the distance from the vertical center of the sign to the left edge of the word on the second line.
- W is the distance from the vertical center of the sign to the right edge of the word on the second line.
- X is the distance from the horizontal center of the symbol to the top and bottom edges of the symbol.
- Y is the distance from the vertical center of the symbol to the left and right edges of the symbol.
- Z is the line width of the symbol.
- AA is the distance from the vertical center of the sign to the vertical center of the symbol.
- BB is the distance from the vertical center of the sign to the left and right edges of the third line.
- CC is the width of the word on the third line.
- DD is the space between the word and the number on the third line.
- EE is the width of the number and plus sign on the third line.
- FF is the distance from the vertical center of the sign to the left and right edges of the fourth line.
- GG is the distance from the vertical center of the sign to the left and right edges of the fifth line.
- HH is the width of the fraction.
- JJ is the space between the fraction and the word on the fifth line.

- KK is the width of the word on the fifth line.
- LL is the corner radius.

### **R3-12h:** Preferential Lane Ends (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the word on the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first, second, and third lines.
- G is the space between the lines.
- H is the letter height and FHWA standard font for the word and the numbers in the fraction on the fourth line.
- J is the distance from the bottom of the fraction on the fourth line to the bottom of the sign.
- K is the height of the fraction on the fourth line.
- L is the distance from the vertical center of the sign to the left and right edges of the word on the first line.
- M is the distance from the vertical center of the sign to the left edge of the word on the second line.
- N is the distance from the vertical center of the sign to the right edge of the word on the second line.
- P is the distance from the vertical center of the sign to the left edge of the word on the third line.
- Q is the distance from the vertical center of the sign to the right edge of the word on the third line.
- R is the distance from the vertical center of the sign to the left and right edges of the fourth line.
- S is the width of the fraction.
- T is the space between the fraction and the word on the fourth line.
- U is the width of the word on the fourth line.
- V is the corner radius.

# **R3-13:** Preferential Lane Vehicle Occupancy Definition (overhead)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first line.
- G is the space between the first and second lines.
- H is the letter height and FHWA standard font for the second and third lines.
- J is the space between the second and third lines.
- K is the distance from the bottom of the last line to the bottom of the sign.
- L is the distance from the vertical center of the sign to the left and right edges of the first line.
- M is the width of the first word on the first line.
- N is the space between the words on the first line.
- P is the width of the second word on the first line.
- Q is the width of the third word on the first line.
- R is the distance from the vertical center of the sign to the left and right edges of the second line.
- S is the width of the number on the second line.
- T is the space between the words on the second and third lines.
- U is the width of the first word on the second line.
- V is the width of the second word on the second line.
- W is the width of the third word on the second line.
- X is the width of the first word on the third line.
- Y is the distance from the vertical center of the sign to the left edge of the second word on the third line.
- Z is the distance from the vertical center of the sign to the right edge of the second word on the third line.
- AA is the distance from the bottom of the panel to the top of the sign.
- BB is the distance from the horizontal center of the symbol to the top and bottom edges of the symbol.
- CC is the distance from the left edge of the sign to the right edge of the panel.
- DD is the distance from the vertical center of the symbol to the left edge of the sign.
- EE is the distance from the vertical center of the symbol to the right edge of the panel.
- FF is the distance from the vertical center of the symbol to the left and right edges of the symbol.
- GG is the line width of the symbol.
- HH is the corner radius.

# R3-13a: Preferential Lane Vehicle Occupancy Definition (overhead)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first line.
- G is the space between the first and second lines.
- H is the letter height and FHWA standard font for the second and third lines.
- J is the space between the second and third lines.
- K is the space between the third and fourth lines.
- L is the letter height and FHWA standard font for the fourth line.
- M is the distance from the bottom of the last line to the bottom of the sign.
- N is the distance from the vertical center of the sign to the left and right edges of the first line.
- P is the width of the first word on the first line.
- Q is the space between the words on the first line.
- R is the width of the second word on the first line.
- S is the width of the third word on the first line.
- T is the distance from the vertical center of the sign to the left and right edges of the second line.
- U is the width of the number on the second line.
- V is the space between the words on the second and third lines.
- W is the width of the first word on the second line.
- X is the width of the second word on the second line.
- Y is the width of the third word on the second line.
- Z is the width of the first word on the third line.
- AA is the distance from the vertical center of the sign to the left edge of the second word on the third line.
- BB is the distance between the vertical center of the sign to the right edge of the second word on the third line.
- CC is the distance from the vertical center of the sign to the left and right edges of the fourth line.
- DD is the width of the first phrase (time range) on the fourth line.
- EE is the space between the phrases on the fourth line.
- FF is the width of the second phrase (day-of-week range) on the fourth line.
- GG is the height of the black panel.
- HH is the distance from the horizontal center of the diamond symbol to the top and bottom of the symbol.
- JJ is the distance from the right edge of the black panel to the left edge of the sign.
- KK is the distance from the vertical center of the diamond symbol to the left edge of the sign.
- LL is the distance from the vertical center of the diamond symbol to the right edge of the panel.

- MM is the distance from the vertical center of the diamond symbol to the left and right edges of the diamond symbol.
- NN is the line width of the diamond symbol.
- PP is the corner radius.

### **R3-14: HOV Lane Operation (overhead)**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first and second lines.
- G is the space between the first and second lines.
- H is the space between the second and third lines.
- J is the letter height and FHWA standard font for the third line.
- K is the space between the third and fourth lines.
- L is the height of the arrow symbol.
- M is the distance from the bottom of the arrow symbol to the bottom of the sign.
- N is the distance from the bottom of the diamond symbol to the bottom of the black panel.
- P is the height of the diamond symbol.
- Q is the distance from the top of the diamond symbol to the top of the sign.
- R is the line width of the diamond symbol.
- S is the distance from the left edge of the diamond symbol to the left edge of the sign.
- T is the width of the diamond symbol.
- U is the distance from the right edge of the diamond symbol to the right edge of the panel.
- V is the distance from the vertical center of the sign to the vertical center of the first line.
- W is the distance from the vertical center of the first line to the left and right edges of the first line.
- X is the width of the first word on the first line.
- Y is the space between the words on the first line.
- Z is the width of the second word on the first line.
- AA is the distance from the vertical center of the first line to the left edge of the second line.
- BB is the distance from the vertical center of the first line to the right edge of the second line.
- CC is the distance from the vertical center of the sign to the left and right edges of the third line.
- DD is the width of the first phrase (time range) on the third line.
- EE is the space between the phrases on the third line.
- FF is the width of the second phrase (day-of-week range) on the third line.
- GG is the distance from the vertical center of the sign to the left and right edges of the arrow symbol on the fourth line.
- HH is the corner radius.

# **R3-14a: HOV Lane Operation (overhead)**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first and second lines.
- G is the space between the first and second lines.
- H is the space between the second and third lines.
- J is the letter height and FHWA standard font for the third and fourth lines.
- K is the space between the third and fourth lines.
- L is the space between the fourth and fifth lines.
- M is the height of the arrow symbol on the fifth line.
- N is the distance from the bottom of the last line to the bottom of the sign.
- P is the distance from the bottom of the diamond symbol to the bottom of the panel.
- Q is the height of the diamond symbol.
- R is the distance from the top of the diamond symbol to the top of the sign.
- S is the line width of the diamond symbol.
- T is the distance from the left edge of the diamond symbol to the left edge of the sign.
- U is the width of the diamond symbol.
- V is the distance from the right edge of the diamond symbol to the right edge of the panel.
- W is the distance from the vertical center of the sign to a vertical reference line for the first two lines.
- X is the distance from the vertical reference line to the left and right edges of the first line.
- Y is the width of the first word on the first line.
- Z is the space between the words on the first line.
- AA is the width of the second word on the first line.
- BB is the distance from the vertical reference line to the left edge of the word on the second line.
- CC is the distance from the vertical reference line to the right edge of the word on the second line.
- DD is the distance from the vertical center of the sign to the left and right edges of the third line.
- EE is the distance from the vertical center of the sign to the left and right edges of the fourth line.
- FF is the distance from the vertical center of the sign to the left and right edges of the arrow symbol.
- GG is the corner radius.

### **R3-14b: HOV Lane Operation (overhead)**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first and second lines.
- G is the space between the first and second lines.
- H is the space between the second and third lines.
- J is the height of the arrow symbol.
- K is the distance from the bottom of the last line to the bottom of the sign.
- L is the distance from the bottom of the diamond symbol to the bottom of the panel.
- M is the height of the diamond symbol.
- N is the distance from the top of the diamond symbol to the top of the sign.
- P is the line width of the symbol.
- Q is the distance from the left edge of the diamond symbol to the left edge of the sign.
- R is the width of the diamond symbol.
- S is the distance from the right edge of the diamond symbol to the right edge of the panel.
- T is the distance from the vertical center of the sign to the vertical center of the first line.
- U is the distance from the vertical center of the first line to the left and right edges of the first line.
- V is the distance from the vertical center of the first line to the left edge of the first word on the first line.
- W is the space between the words on the first line.
- X is the width of the second word on the first line.
- Y is the distance from the vertical center of the first line to the left edge of the word on the second line.
- Z is the distance from the vertical center of the first line to the right edge of the word on the second line.
- AA is the distance from the vertical center of the sign to the left and right edges of the arrow symbol.
- BB is the corner radius.

# **R3-14c:** Preferential Lane Operation (overhead)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first line.
- G is the space between the first and second lines.
- H is the letter height and FHWA standard font for the second line.
- J is the distance from the bottom of the second line to the top of the arrow symbol on the third line.
- K is the distance from the bottom of the second line to the top of the words on the third line.
- L is the letter height and FHWA standard font for words on the third line.
- M is the distance from the bottom of the words on the last line to the bottom of the sign.
- N is the distance from the vertical center of the sign to the left edge of the first line.
- P is the distance from the vertical center of the sign to the right edge of the first line.
- Q is the width of the first word on the first line.
- R is the width of the hyphen and the space between the hyphen and the words on the first line.
- S is the width of the second word on the first line.
- T is the distance from the vertical center of the sign to the left edge of the word on the second line.
- U is the distance from the vertical center of the sign to the right edge of the word on the second line.
- V is the width of each word on the third line.
- W is the space between the hyphens and words on the third line.
- X is the width of the hyphens on the third line.
- Y is the space between the arrow symbol and the words.
- Z is the distance from the vertical center of the sign to the right and left edges of the arrow.
- AA is the height of the arrow.
- BB is the corner radius.

### **R3-15: HOV Lane Ahead (overhead)**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for each line.
- G is the space between the lines.
- H is the distance from the top of the symbol to the top of the sign and from the bottom of the symbol to the bottom of the sign.
- J is the distance from the horizontal center of the symbol to the top and bottom of the symbol.
- K is the distance from the vertical center of the symbol to the left edge of the sign.
- L is the distance from the vertical center of the symbol to the right edge of the panel.
- M is the distance from the vertical center of the sign to the right edge of the panel.
- N is the distance from the vertical center of the sign to the vertical center of the white section of the sign.
- P is the distance from the vertical center of the symbol to the left and right edges of the symbol.
- Q is the line width of the symbol.
- R is the distance from the vertical center of the white section of the sign to the left and right edges of the first line.
- S is the width of the first word on the first line.
- T is the space between the words on the first line.
- U is the width of the second word on the first line.
- V is the distance from the vertical center of the white section of the sign to the left edge of the word on the second line.
- W is the distance from the vertical center of the white section of the sign to the right edge of the word on the second line.
- X is the distance from the vertical center of the white section of the sign to the left edge of the word on the third line.
- Y is the distance from the vertical center of the white section of the sign to the right edge of the word on the third line.
- Z is the corner radius.

# R3-15a: HOV Lane Begins XX Miles (overhead)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first line.
- G is the space between the first and second lines.
- H is the letter height and FHWA standard font for the second and third lines.
- J is the space between the second and third lines.
- K is the space between the third and fourth lines.
- L is the height of the arrow symbol.
- M is the distance from the tip of the arrow to the bottom of the sign.
- N is the distance from the vertical center of the sign to the vertical center of the white section of the sign.
- P is the distance from the vertical center of the white section of the sign to the left and right edges of the first line.
- Q is the width of the first word on the first line.
- R is the space between the first and second words on the first line.
- S is the width of the second word on the first line.
- T is the space between the second and third words on the first line.
- U is the width of the third word on the first line.
- V is the distance from the vertical center of the white section of the sign to the left and right edges of the word on the second line.
- W is the distance from the vertical center of the white section of the sign to the left and right edges of the third line.
- X is the width of the first word on the third line.
- Y is the space between the words on the third line.
- Z is the width of the second word on the third line.
- AA is the distance from the vertical center of the white section of the sign to the left and right edges of the arrow symbol.
- BB is the distance from the top of the diamond symbol to the top of the sign and from the bottom of the diamond symbol to the bottom of the sign.
- CC is the height of the diamond symbol.
- DD is the distance from the vertical center of the diamond symbol to the left edge of the sign.
- EE is the distance from the vertical center of the diamond symbol to the right edge of the panel.
- FF is the line width of the symbol.
- GG is the distance from the vertical center of the symbol to the left and right edges of the symbol.
- HH is the corner radius.

### **R3-15b: HOV Lane Ends (overhead)**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for each line.
- G is the space between the lines.
- H is the distance from the top of the symbol to the top of the sign and from the bottom of the symbol to the bottom of the sign.
- J is the distance from the horizontal center of the symbol to the top and bottom of the symbol.
- K is the distance from the vertical center of the symbol the left edge of the sign.
- L is the distance from the vertical center of the symbol to the right edge of the black panel.
- M is the distance from the vertical center of the sign to the right edge of the black panel.
- N is the distance from the vertical center of the sign to the vertical center of the white section of the sign.
- P is the distance from the vertical center of the symbol to the left and right edges of the symbol.
- Q is the symbol line width.
- R is the distance from the vertical center of the white section of the sign to the left edge of the word on the first line.
- S is the distance from the vertical center of the white section of the sign to the right edge of the word on the first line.
- T is the distance from the vertical center of the white section of the sign to the left edge of the word on the second line.
- U is the distance from the vertical center of the white section of the sign to the right edge of the word on the second line.
- V is the distance from the vertical center of the white section of the sign to the left edge of the word on the third line.
- W is the distance from the vertical center of the white section of the sign to the right edge of the word on the third line.
- X is the corner radius.

# **R3-15c: HOV Lane Ends (overhead)**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first and third lines.
- G is the space between the lines.
- H is the letter height and FHWA standard font for the second line.
- J is the distance from the top of the symbol to the top of the sign and from the bottom of the symbol to the bottom of the sign.
- K is the distance from the horizontal center of the symbol to the top and bottom of the symbol.
- L is the distance from the vertical center of the symbol to the left edge of the sign.
- M is the distance from the vertical center of the symbol to the right edge of the panel.
- N is the distance from the vertical center of the sign to the right edge of the black panel.
- P is the distance from the vertical center of the sign to the vertical center of the white section of the sign.
- Q is the distance from the vertical center of the symbol to the right and left edges of the symbol.
- R is the line width of the symbol.
- S is the distance from the vertical center of the white section of the sign to the left edge of the word on the first line.
- T is the distance from the vertical center of the white section of the sign to the right edge of the word on the first line.
- U is the distance from the vertical center of the white section of the sign to the left edge of the word on the second line.
- V is the distance from the vertical center of the white section of the sign to the right edge of the word on the second line.
- W is the distance from the vertical center of the white section of the sign to the left edge of the word on the third line.
- X is the distance from the vertical center of the white section of the sign to the right edge of the word on the third line.
- Y is the corner radius.

### R3-28: Toll Rate

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first line.
- G is the space between the first and second lines.
- H is the letter height and FHWA standard font for the second line and for the dollar amount on the third line.
- J is the space between the second and third lines, between the first and second words on the second line, and between the first, second, and third words on the third line.
- K is the distance from the bottom of the third line to the bottom of the sign.
- L is the distance from the vertical center of the sign to the left and right edges of the word on the first line.
- M is the width of the first word on the second line.
- N is the width of the second word on the second line.
- P is the distance from the vertical center of the sign to the right edge of the second word on the second line.
- Q is the distance from the vertical center of the sign to the left edge of the third word on the second sign.
- R is the width of the dollar amount on the second and third lines.
- S is the distance from the left edge of the second and third lines to the left edge of the sign and from the right edge of the second and third lines to the right edge of the sign.
- T is the width of the first word on the third line.
- U is the distance from the vertical center of the sign to the left edge of the second word on the third line.
- V is the distance from the vertical center of the sign to the right edge of the second word on the third line.
- W is the width of the third word on the third line.
- X is the space between the third and fourth words on the third line.
- Y is the letter height and FHWA standard font for the words on the third line.
- Z is the corner radius.

# **R3-40:** Priced Managed Lane Vehicle Occupancy Definition (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first line and for the number on the second line.
- G is the space between the first line and the words on the second line.
- H is the letter height and FHWA standard font for the second and third lines.
- J is the space between the lines of words on the second, third, and fourth lines.
- K is the letter height and FHWA standard font for the fourth line.
- L is the distance from the bottom of the last line to the bottom of the sign.
- M is the space between the number on the second line and the top of the third line.
- N is the distance from the vertical center of the sign to the left and right edges of the first line.
- P is the width of the first word on the first line.
- Q is the space between the words on the first line.
- R is the width of the second word on the first line.
- S is the distance from the vertical center of the sign to the left and right edges of the second line.
- T is the width of the number on the second line.
- U is the space between the number and the first word on the second line.
- V is the width of the first word on the second line.
- W is the space between the first and second words on the second line.
- X is the width of the third word on the second line.
- Y is the distance from the vertical center of the sign to the left edge of the word on the third line.
- Z is the distance from the vertical center of the sign to the right edge of the word on the third line.
- AA is the width of the first word on the fourth line.
- BB is the space between the words on the fourth line.
- CC is the distance from the vertical center of the sign to the left edge of the second word on the fourth line.
- DD is the distance from the vertical center of the sign to the right edge of the second word on the fourth line.
- EE is the corner radius.

# R3-42a: Priced Managed Lane Ends Advance (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the words and numbers on the first and fourth lines.
- G is space between the lines.
- H is the letter height and FHWA standard font for the second and third lines.
- J is the distance from the vertical center of the sign to the left and right edges of the word on the first line.
- K is the distance from the vertical center of the sign to the left and right edges of the word on the second line.
- L is the distance from the vertical center of the sign to the left edge of the word on the third line.
- M is the distance from the vertical center of the sign to the right edge of the word on the third line.
- N is the distance from the vertical center of the sign to the left and right edges of the fourth line.
- P is the width of the fraction on the fourth line.
- Q is the space between the fraction and the word on the fourth line.
- R is the width of the word on the fourth line.
- S is the height of the fraction on the fourth line.
- T is the corner radius.

# R3-42c: Priced Managed Lane Restriction Ends Advance (post-mounted)

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the words and numbers on the first and fourth lines.
- G is space between the lines.
- H is the letter height and FHWA standard font for the second line.
- J is the letter height and FHWA standard font for the third line.
- K is the distance from the vertical center of the sign to the left and right edges of the word on the first line.
- L is the distance from the vertical center of the sign to the left edge of the word on the second line.
- M is the distance from the vertical center of the sign to the right edge of the word on the second line.
- N is the distance from the vertical center of the sign to the left edge of the word on the third line.
- P is the distance from the vertical center of the sign to the right edge of the word on the third line.
- Q is the distance from the vertical center of the sign to the left and right edges of the fourth line.
- R is the width of the fraction on the fourth line.
- S is the space between the fraction and the word on the fourth line.
- T is the width of the word on the fourth line.
- U is the height of the fraction on the fourth line.
- V is the corner radius.

# **R3-43:** Priced Managed Lane Vehicle Occupancy Definition

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the first line.
- G is the space between the first and second lines and the distance from the bottom of the last line to the bottom of the sign.
- H is the letter height and FHWA standard font for the second and third lines.
- J is the space between the second and third lines.
- K is the distance from the vertical center of the sign to the left and right edges of the first line.
- L is width of the first word on the first line.
- M is the space between the words on the first line.
- N is the width of the second word on the first line.
- P is the distance from the vertical center of the sign to the left and right edges of the second line.
- Q is the width of the number on the second line.
- R is the space between the words on the second and third lines.
- S is the width of the first word on the second line.
- T is the width of the second word on the second line.
- U is the width of the third word on the second line.
- V is the width of the first word on the third line.
- W is the distance from the vertical center of the sign to the left edge of the second word on the third line.
- X is the distance from the vertical center of the sign to the right edge of the second word on the third line.
- Y is the corner radius.

# **R3-44: Priced Managed Lane Operation (overhead)**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the pictograph to the top of the sign.
- F is the height of the pictograph.
- G is the space between the lines.
- H is the letter height and FHWA standard font for the second line.
- J is the height of the arrow symbol.
- K is the distance from the tip of the arrow to the bottom of the sign.
- L is the distance from the vertical center of the sign to the left and right edges of the pictograph on the first line.
- M is the distance from the vertical center of the sign to the left and right edges of the word on the second line.
- N is the distance from the vertical center of the sign to the left and right edges of the arrow on the third line.
- P is the corner radius.

# **R3-44a: Priced Managed Lane Operation (overhead)**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the pictograph to the top of the sign.
- F is the height of the pictograph.
- G is the distance from the top of the word on the first line to the top of the pictograph, the distance from the bottom of the word on the first line to the bottom of the pictograph, and the space between the lines.
- H is the letter height and FHWA standard font for the word on the first line.
- J is the letter height and FHWA standard font for the second line.
- K is the height of the arrow symbol.
- L is the distance from the tip of the arrow to the bottom of the sign.
- M is the distance from the left edge of the pictograph to the left edge of the sign.
- N is the distance from the vertical center of the sign to the left edge of the pictograph.
- P is the distance from the vertical center of the sign to the right edge of the pictograph.
- Q is the space between the pictograph and the word on the first line.
- R is the width of the word on the first line.
- S is the distance from the vertical center of the sign to the left and right edges of the second line.
- T is the width of the first word on the second line.
- U is the space between the words on the second line.
- V is the width of the second word on the second line.
- W is the width of the third word on the second line.
- X is the distance from the vertical center of the sign to the left and right edges of the arrow symbol.
- Y is the corner radius.

# **R3-48: Priced Managed Lane Toll Rate**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the white border width.
- D is the distance from the top of the first line to the top of the sign.
- E is the letter height and FHWA standard font for the first line and for the word on the second line.
- F is the distance from the bottom of the first line to the bottom of the green panel.
- G is the distance from the bottom of the green panel to the top of the word on the second line and the space between the pictogram, the state highway marker symbol, and the interstate highway marker symbol on the second, third, and fourth lines.
- H is the distance from the bottom of the word on the second line to the top of the first changeable legend display.
- J is the height of each changeable legend display.
- K is the letter height and standard FHWA font for the legend on each changeable legend display.
- L is the space between the changeable legend displays.
- M is the distance from the bottom of the last line to the bottom of the sign.
- N is the black border width.
- P is the inset from the edge of the sign to the black border.
- Q is the distance from the bottom of the highway marker symbol on the last line to the bottom of the sign.
- R is the letter height and FHWA standard font for the word on the third and fourth lines.
- S is the height of the highway marker symbol on the third and fourth lines.
- T is the height of the pictograph on the second line.
- U is the distance from the bottom of the green panel to the top of the pictograph on the second line.
- V is the height of green panel.
- W is the distance from the vertical center of the sign to the left edge of the first word on the first line.
- X is the distance from the vertical center of the sign to the right edge of the first word on the first line.
- Y is the space between the words, word and symbol, or word and pictograph on each line.
- Z is the width of the second word on the first line.
- AA is the width of the pictograph on the second line.
- BB is the width of the word on the second line.
- CC is the distance from the left edge of the word on the third and fourth lines to the left edge of the sign and from the right edge of the changeable legend displays to the right edge of the sign.
- DD is the width of the word on the third and fourth lines.
- EE is the width of the highway marker symbol on the third and fourth lines.
- FF is the space between the highway marker symbol and changeable legend display on the third and fourth lines.

- GG is the distance from the vertical center of the sign to the left edge of the changeable legend display on the third and fourth lines.
- HH is the distance from the vertical center of the sign to the right edge of the changeable legend display on the third and fourth lines.
- JJ is the distance from the horizontal center of each changeable legend display to the top and bottom of the display.
- KK is the distance between the horizontal centers of the changeable legend displays on the third and fourth lines.
- LL is the corner radius.

# **R3-48a: Priced Managed Lane Toll Rate**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the white border width.
- D is the distance from the top of the first line to the top of the sign.
- E is the letter height and FHWA standard font for the words on the first, second, and fifth lines.
- F is the distance from the bottom of the first line to the bottom of the green panel.
- G is the distance from the bottom of the green panel to the top of the word on the second line.
- H is the distance from the bottom of the word on the second line to the top of the first changeable legend display.
- J is the height of each changeable legend display.
- K is the letter height and FHWA standard font for the legend on each changeable legend display.
- L is the space between the changeable legend displays on the third and fourth lines.
- M is the distance from the bottom of the fourth line to the top of the dividing line and from the bottom of the green panel to the top of the pictograph on the second line.
- N is the width of the black border and dividing line.
- P is the inset from the edge of the sign to the black border.
- Q is the distance from the bottom of the highway marker symbol on the fourth line to the top of the dividing line.
- R is the letter height and FHWA standard font for the word on the third and fourth lines.
- S is the height of the highway marker symbols on the third and fourth lines.
- T is the height of the pictograph on the second line.
- U is the height of the green panel.
- V is the distance from the vertical center of the sign to the left edge of the first word on the first line.
- W is the distance from the vertical center of the sign to the right edge of the first word on the first line.
- X is the space between the words, word and symbol, or word and pictograph on each line.
- Y is the width of the word on the first line.
- Z is the width of the pictograph on the second line.
- AA is the width of the word on the second line and of the fourth word on the fifth line.
- BB is the distance from the left edges of the word on the third and fourth lines to the left edge of the sign and from the right edges of the changeable legend displays to the right edge of the sign.
- CC is the width of the word on the third and fourth lines.
- DD is the width of the highway marker symbol on the third and fourth lines.
- EE is the space between the highway marker symbol and the changeable legend display on the third and fourth lines.
- FF is the distance from the vertical center of the sign to the left edge of the changeable legend display on the third and fourth lines.

- GG is the distance from the vertical center of the sign to the right edge of the changeable legend display on the third and fourth lines.
- HH is the distance from the horizontal center of each changeable legend display to the top and bottom of the display and the space between the pictograph, the state highway marker symbol, and the interstate highway marker symbol on the second, third, fourth lines.
- JJ is the distance between the horizontal centers of the changeable legend displays on the third and fourth lines.
- KK is the distance from the top of the last line to the top of the dividing line and from the bottom of the last line to the bottom of the sign.
- LL is the distance from the vertical center of the sign to the left and right edges of the fifth line.
- MM is the width of the first word on the fifth line.
- NN is the width of the second word on the fifth line.
- PP is the distance from the vertical center of the sign to the right edge of the second word on the fifth line.
- QQ is the distance from the vertical center of the sign to the left edge of the third word on the fifth line.
- RR is the width of the third word on the fifth line.
- SS is the corner radius.

# R4-7: Keep Right

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the tip of the arrowhead to the top of the sign.
- F is the distance from the bottom of the sign to the top of the first straight section of the arrow shaft and to the vertex of the angle of the first curve in the arrow shaft.
- G is the distance from the base of the arrow shaft to the bottom of the sign.
- H is the height of the traffic island symbol.
- J is the distance from the top of the traffic island symbol to the top of the sign.
- K is the distance from the vertical center of the traffic island symbol to the left edge of the sign.
- L is the distance from the tip of the arrowhead to the right edge of the sign.
- M is the width of the traffic island symbol.
- N is the radius of the curves that form the left and right edges of the traffic island.
- P is the length of the second straight section of the arrow shaft.
- Q is the radius of the first and second curves in the centerline of the arrow and the distance from the vertex of the angle of the first curve to the centerline of the first straight section of the arrow shaft.
- R is the radius of the curves that form the left and right bottom edges of the traffic island.
- S is the width of the arrowhead.
- T is the sign corner radius.

# R4-7a: Keep Right

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first and third lines.
- G space between the lines.
- H is the height of the arrow symbol on the second line.
- J is the distance from the vertical center of the sign to the left edge of the word on the first line.
- K is the distance from the vertical center of the sign to the right edge of the word on the first line.
- L is the distance from the vertical center of the sign to the left edge of the arrow symbol on the second line.
- M is the distance from the vertical center of the sign to the right edge of the arrow symbol on the second line.
- N is the distance from the vertical center of the sign to the left edge of the word on the third line.
- P is the distance from the vertical center of the sign to the right edge of the word on the third line.
- Q is the corner radius.

# R4-7b: Keep Right

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first and third lines.
- G is the distance from the bottom of the first line to the top of the arrow symbol.
- H is the distance from the bottom of the arrow symbol to the top of the third line.
- J is the distance from the vertical center of the sign to the left edge of the word on the first line.
- K is the distance from the vertical center of the sign to the right edge of the word on the first line.
- L is the length of the arrow on the second line.
- M is the width of the arrowhead on the second line.
- N is the distance from the vertical center of the sign to the left edge of the word on the third line.
- P is the distance from the vertical center of the sign to the right edge of the word on the third line.
- Q is the corner radius.

## R4-7c: Narrow Keep Right

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the tip of the arrowhead to the top of the sign and from the base of the arrow shaft to the bottom of the sign.
- F is the distance from the end of the first straight section of the arrow to the tip of the arrowhead.
- G is the length of the first straight section of the arrow shaft and the distance from the bottom of the arrow to the vertex of the angle of the first curve in the arrow shaft.
- H is the height of the traffic island symbol.
- J is the distance from the top of the traffic island symbol to the top of the sign.
- K is the distance from the vertical center of the traffic island symbol to the left edge of the sign and to the vertex of the angle of the second curve of the arrow shaft.
- L is the distance from the tip of the arrowhead to the right edge of the sign.
- M is the width of the traffic island symbol.
- N is the radius of the curves that form the right and left edges of the traffic island symbol.
- P is the length of the second straight section of the arrow shaft.
- Q is the radius of the first and second curves in the centerline of the arrow and the distance from the vertex of the angle of the first curve to the centerline of the first straight section of the arrow shaft.
- R is the radius of the curves that form the right and left bottom edges of the traffic island and the distance from the bottom of the traffic island to the vertex of the angle of the second curve of the arrow shaft.
- S is the width of the arrow shaft.
- T is the width of the arrowhead.
- U is the corner radius.

# R4-8: Keep Left

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the tip of the arrowhead to the top of the sign.
- F is the distance from the bottom of the sign to the top of the first straight section of the arrow shaft and to the vertex of the angle of the first curve in the arrow shaft.
- G is the distance from the base of the arrow shaft to the bottom of the sign.
- H is the height of the traffic island symbol.
- J is the distance from the top of the traffic island symbol to the top of the sign.
- K is the distance from the vertical center of the traffic island symbol to the right edge of the sign.
- L is the distance from the tip of the arrowhead to the left edge of the sign.
- M is the width of the traffic island symbol.
- N is the radius of the curves that form the left and right edges of the traffic island.
- P is the length of the second straight section of the arrow shaft.
- Q is the radius of the first and second curves in the centerline of the arrow and the distance from the vertex of the angle of the first curve to the centerline of the first straight section of the arrow shaft.
- R is the radius of the curves that form the left and right bottom edges of the traffic island.
- S is the width of the arrowhead.
- T is the sign corner radius.

## R4-8a: Keep Left

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first and third lines.
- G space between the lines.
- H is the height of the arrow symbol on the second line.
- J is the distance from the vertical center of the sign to the left edge of the word on the first line.
- K is the distance from the vertical center of the sign to the right edge of the word on the first line.
- L is the distance from the vertical center of the sign to the left edge of the arrow symbol on the second line.
- M is the distance from the vertical center of the sign to the right edge of the arrow symbol on the second line.
- N is the distance from the vertical center of the sign to the left edge of the word on the third line.
- P is the distance from the vertical center of the sign to the right edge of the word on the third line.
- Q is the corner radius.

# R4-8b: Keep Left

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the words on the first and third lines.
- G is the distance from the bottom of the first line to the top of the arrow symbol.
- H is the distance from the bottom of the arrow symbol to the top of the third line.
- J is the distance from the vertical center of the sign to the left edge of the word on the first line.
- K is the distance from the vertical center of the sign to the right edge of the word on the first line.
- L is the length of the arrow on the second line.
- M is the width of the arrowhead on the second line.
- N is the distance from the vertical center of the sign to the left edge of the word on the third line.
- P is the distance from the vertical center of the sign to the right edge of the word on the third line.
- Q is the corner radius.

## R6-1: One Way

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the border width.
- D is the distance from the top of the arrowhead to the top of the sign and from the bottom of the arrowhead to the bottom of the sign.
- E is the distance from the top of the arrow shaft to the top of the arrowhead and from the bottom of the arrow shaft to the bottom of the arrowhead.
- F is the space from the top of the line to the top of the arrow shaft and from the bottom of the line to the bottom of the arrow shaft.
- G is the letter height and FHWA standard font for the line.
- H is the distance from the left edge of the sign to the base of the arrow shaft.
- J is the distance from the base of the arrow shaft to the left edge of the first word on the line.
- K is the width of the first word on the line.
- L is the space between the words on the line.
- M is the width of the second word on the line.
- N is the distance from the right edge of the second word on the line to the arrow tip.
- P is the distance from the tip of the arrowhead to the right edge of the sign.
- Q is the width of the arrow shaft.
- R is the kerning width between the "A" and the "Y" in the second word on the line.
- S is the width of the arrowhead.
- T is the corner radius.

# R6-2: One Way

# R6-2R

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first and second words.
- G is the space between the lines.
- H is the height of the arrow symbol.
- J is the distance from the vertical center of the sign to the left edge of the word on the first line.
- K is the distance from the vertical center of the sign to the right edge of the word on the first line.
- L is the distance from the vertical center of the sign to the left edge of the word on the second line.
- M is the distance from the vertical center of the sign to the right edge of the word on the second line.
- N is the distance from the vertical center of the sign to the left and right edges of the arrow symbol.
- P is the corner radius.

#### *R6-2L*

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first and second lines.
- G is the space between the lines.
- H is the height of the arrow symbol.
- J is the distance from the vertical center of the sign to the left edge of the word on the first line.
- K is the distance from the vertical center of the sign to the right edge of the word on the first line.
- L is the distance from the vertical center of the sign to the left edge of the word on the second line.
- M is the distance from the vertical center of the sign to the right edge of the word on the second line.
- N is the distance from the vertical center of the sign to the left and right edges of the arrow symbol.
- P is the corner radius.

#### **R6-3: Divided Highway Crossing**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first and third lines.
- G is the space between the symbol and the first line.
- H is the distance from the top of the vertical line to the upper barb of the bottom arrow in the symbol.
- J is the width of each arrowhead in the symbol.
- K is the space between the symbol and the third line.
- L is the distance from the bottom of the vertical line of the symbol to the bottom of the sign.
- M is the distance from the bottom of the lower barb of the top arrowhead to the bottom of the vertical line of the symbol.
- N is the distance from the vertical center of the sign to the left and right edges of the word on the first line.
- P is the distance from the vertical center of the sign to the tip of each arrowhead in the symbol.
- Q is the distance from the vertical center of the sign to the base of each arrow shaft in the symbol.
- R is the radius of the fillet in the lower left corner of the top intersection and in the lower right corner of the bottom intersection.
- S is the distance from the vertical center of the sign to the left edge of the word on the third line.
- T is the distance from the vertical center of the sign to the right edge of the word on the third line.
- U is the corner radius.

## **R6-3a: Divided Highway Crossing**

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first and third lines.
- G is the distance from the bottom of the first line to the upper barb of the bottom arrow in the symbol.
- H is the width of each arrowhead in the symbol.
- J is the space between the symbol and the third line.
- K is the distance from the bottom of the vertical line of the symbol to the bottom of the sign.
- L is the distance from the bottom of the lower barb of the top arrowhead to the bottom of the vertical line of the symbol.
- M is the distance from the vertical center of the sign to the left and right edges of the word on the first line.
- N is the distance from the vertical center of the sign to the tip of each arrowhead in the symbol.
- P is the distance from the vertical center of the sign to the base of each arrow shaft in the symbol.
- Q is the radius of the fillet in the lower left corner of the top intersection and in the lower right corner of the bottom intersection.
- R is the distance from the vertical center of the sign to the left edge of the word on the third line.
- S is the distance from the vertical center of the sign to the right edge of the word on the third line.
- T is the corner radius.

## **R6-5P: Roundabout Circulation (plaque)**

- A is the length of each edge of the plaque.
- B is the inset from the edge of the plaque to the border.
- C is the border width.
- D is the distance from the top of the symbol to the top of the plaque and from the left edge of the symbol to the left edge of the plaque.
- E is the distance from the horizontal center of the plaque to the top of the symbol and from the vertical center of the plaque to the left edge of the symbol.
- F is the distance from the horizontal center of the plaque to the bottom of the symbol.
- G is the distance from the bottom of the symbol to the bottom of the plaque.
- H is the distance from the vertical center of the plaque to the right edge of the symbol.
- J is the distance from the right edge of the symbol to the right edge of the plaque.
- K is the distance up and to the left from the center of the plaque to the center of the symbol.
- L is the corner radius.

# **R8-10a: Stop Here When Flashing**

## R8-10aL

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first line.
- G is the space between the first and second lines.
- H is the letter height and FHWA standard font for the second and third line.
- J is the space between the second and third lines.
- K is the space between the third and fourth lines.
- L is the letter height and FHWA standard font for the fourth line.
- M is the distance from the tip of the arrow to the bottom of the sign.
- N is the height of the arrow symbol.
- P is the distance from the vertical center of the sign to the left edge of the word on the first line.
- Q is the distance from the vertical center of the sign to the right edge of the word on the first line.
- R is the distance from the vertical center of the sign to the left and right edges of the word on the second line.
- S is the distance from the vertical center of the sign to the left edge of the arrow symbol.
- T is the distance from the vertical center of the sign to the right edge of the arrow symbol.
- U is the distance from the vertical center of the sign to the left edge of the word on the third line.
- V is the distance from the vertical center of the sign to the right edge of the word on the third line.
- W is the distance from the vertical center of the sign to the left and right edges of the word on the fourth line.
- X is the corner radius.

#### R8-10aR

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first line.
- G is the space between the first and second lines.
- H is the letter height and FHWA standard font for the second and third lines.
- J is the space between the second and third line.

- K is the space between the third and fourth line.
- L is the letter height and FHWA standard font for the fourth line.
- M is the distance from the tip of the arrow to the bottom of the sign.
- N is the height of the arrow symbol.
- P is the distance from the vertical center of the sign to the left edge of the word on the first line.
- Q is the distance from the vertical center of the sign to the right edge of the word on the first line.
- R is the distance from the vertical center of the sign to the left and right edges of the word on the second line.
- S is the distance from the vertical center of the sign to the right edge of the arrow symbol.
- T is the distance from the vertical center of the sign to the left edge of the arrow symbol.
- U is the distance from the vertical center of the sign to the right edge of the word on the third line.
- V is the distance from the vertical center of the sign to the left edge of the word on the third line.
- W is the distance from the vertical center of the sign to the left and right edges of the word on the fourth line.
- X is the corner radius.

# R10-3a: Push Button to Cross Street – Wait for Walk Signal

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign.
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign.
- F is the letter height and FHWA standard font for the words on the first line. The bottom of the words are aligned with the bottom of the line.
- G is the space between the first and second lines and the space between the words on the second line.
- H is the letter height and FHWA standard font for the second, third, and fourth lines.
- J is the space between the second, third, fourth, and fifth lines.
- K is the distance from the top of the pedestrian symbol to the top of the black background and from the bottom of the pedestrian symbol to the bottom of the black background on the fifth line.
- L is the height of the pedestrian symbol on the fifth line and the length of the arrow on the third line.
- M is the distance from the bottom of the last line to the bottom of the sign.
- N is the distance from the bottom of the first line to the tip of the arrowhead.
- P is the height of the symbol on the first line.
- Q is the distance from the top of the first line to the top of the sign.
- R is the width of the first word on the first line.
- S is the distance from the vertical center of the sign to the right edge of the first word on the first line.
- T is the distance from the vertical center of the sign to the left edge of the second word on the first line.
- U is the width of the second word on the first line.
- V is the width of the first word on the second line.
- W is the distance from the vertical center of the sign to the left edge of the second word on the second line.
- X is the distance from the vertical center of the sign to the right edge of the second word on the second line.
- Y is the width of the arrowhead on the third line.
- Z is the space between the arrow symbol and the word on the third line.
- AA is the distance from the vertical center of the sign to the left edge of the word on the third line.
- BB is the distance from the vertical center of the sign to the right edge of the word on the third line.
- CC is the width of the first word on the fourth line.
- DD is the distance from the vertical center of the sign to the right edge of the first word on the fourth line.
- EE is the distance from the vertical center of the sign to the left edge of the second word on the fourth line.
- FF is the width of the second word on the fourth line.

- GG is the distance from the vertical center of the sign to the left and right edges of the pedestrian symbol background on the fifth line.
- HH is the corner radius.

# R12-2: Weight Limit

- A is the horizontal dimension of the sign.
- B is the vertical dimension of the sign
- C is the inset from the edge of the sign to the border.
- D is the border width.
- E is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- F is the letter height and FHWA standard font for the first, second, and third lines.
- G is the space between the first, second, and third lines.
- H is the space between the third and fourth lines.
- J is the letter height and FHWA standard font for the fourth line
- K is the distance from the vertical center of the sign to the left edge of the word on the first line.
- L is the distance from the vertical center of the sign to the right edge of the word on the first line.
- M is the distance from the vertical center of the sign to the left edge of the word on the second line.
- N is the distance from the vertical center of the sign to the right edge of the word on the second line.
- P is the distance from the vertical center of the sign to the left and right edges of the word on the third line.
- Q is the distance from the vertical center of the sign to the left and right edges of the fourth line.
- R is the width of the number on the fourth line.
- S is the space between the number and the word on the fourth line.
- T is the width of the second word on the fourth line.
- U is the corner radius.

## R15-7: Light Rail Divided Highway Symbol

- A is the length of each side of the sign.
- B is the inset from the edge of the sign to the border.
- C is the border width.
- D is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- E is the letter height and FHWA standard font for the lines.
- F is the space between the symbol and the lines.
- G is the height of the symbol.
- H is the distance from the vertical center of the sign to the left and right edges of the word on the first line.
- J is the distance from the vertical center of the sign to the left and right edges of the word on the second line.
- K is the corner radius.

# R15-7a: Light Rail Divided Highway Symbol (T-Intersection)

- A is the length of each side of the sign.
- B is the inset from the edge of the sign to the border.
- C is the border width.
- D is the distance from the top of the first line to the top of the sign and from the bottom of the last line to the bottom of the sign.
- E is the letter height and FHWA standard font for the lines.
- F is the space between the symbol and the lines.
- G is the height of the symbol.
- H is the distance from the vertical center of the sign to the left and right edges of the word on the first line.
- J is the distance from the vertical center of the sign to the left and right edges of the word on the second line.
- K is the corner radius.