



# National Committee on Uniform Traffic Control Devices

12615 West Keystone Drive \* Sun City West, AZ, 85375  
Telephone (623)680-9592 \* e-mail: ncutcd@aol.com

Attachment No.: 10  
Item No.: 18B-GMI-01

## NCUTCD Proposal for Changes to the Manual on Uniform Traffic Control Devices

### TECHNICAL

#### COMMITTEE:

GMI Committee

#### ITEM NUMBER:

18B-GMI-01

#### TOPIC:

Exit Numbering

#### ORIGIN OF REQUEST:

Missouri DOT (MoDOT)

#### AFFECTED SECTIONS OF MUTCD:

Section 2E.31 Interchange Exit Numbering, Figure 2E-19  
Examples of Interchange Numbering for Mainline and  
Circumferential Routes, Figure 2E-20 Example of Interchange  
Numbering for Mainline, Loop, and Spur Routes, Figure 2E-21  
Example of Interchange Numbering or Overlapping Routes

### DEVELOPMENT HISTORY:

- Approved by Technical Committee: 06/21/2018 and 01/09/2019
- Approved by NCUTCD Council: 01/10/2019

*This is a proposal for recommended changes to the MUTCD that has been approved by the NCUTCD Council. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, or options. It will be submitted to FHWA for consideration for inclusion in a future MUTCD revision. The MUTCD can be revised only through the federal rulemaking process.*

### SUMMARY:

The proposed changes contained in this ballot elaborate on the guidance found in the current MUTCD in the text and figures for exit numbering with the enhancements based on letters of interpretation supplied by the MUTCD team. Currently, the majority of the guidance for various exit numbering scenarios is only conveyed via the figures in the manual. In addition to adding clarifying text, the proposal also modifies the existing figures by eliminating details to make each existing figure clearer and easier to use and relate more clearly to the title of each figure. All the additional interchange configurations and exit numbering examples deleted from these figures are now being represented in a new figure.

### DISCUSSION

The MUTCD provides guidance for exit numbering in both text and figure form, however, the text relies heavily on interpretation of the figures for many details and the figures can be overwhelming with the amount of detail provided. The exit numbering sequences, which are important details on these figures, are difficult to pick out with the various examples of

interchanges overlaid along the roadway segments. While these example interchange images provide useful information on how exit numbers relate to interchange design and placement, they are out of context with respect to the key purpose of each figure. This information was removed from the three original figures and consolidated into one new figure to more clearly illustrate the information. These changes are being recommended based primarily on an interpretation MoDOT received from FHWA on the proper choice of exit numbers as well as input from GMI technical committee members. The intent of these changes is to enhance both the text and figure guidance to make it clearer without altering the original intent of the manual.

## RECOMMENDED MUTCD CHANGES

The following present the proposed changes to the current MUTCD within the context of the current MUTCD language. Proposed additions to the MUTCD are shown in blue underline and proposed deletions from the MUTCD are shown in ~~red strikethrough~~. Changes previously approved by NCUTCD Council (but not yet adopted by FHWA) are shown in green double underline for additions and ~~green double strikethrough~~ for deletions. In some cases, background comments may be provided with the MUTCD text. These comments are indicated by highlighted light blue in brackets.

### Section 2E.31 Interchange Exit Numbering

Support:

01 Interchange exit numbering provides valuable orientation for the road user on a freeway or expressway. The feasibility of numbering interchanges or exits on an expressway will depend largely on the extent to which grade separations are provided. Where there is appreciable continuity of interchange facilities, interrupted only by an occasional ~~interSection~~ intersection at grade, the numbering will be helpful to the expressway user.

Standard:

02 Interchange exit numbering shall be used in signing each freeway interchange exit departure point. Interchange exit numbers shall be displayed with each Advance Guide sign, Exit Direction sign, and Exit Gore sign. The exit number shall be displayed on a separate plaque at the top of the Advance Guide or Exit Direction sign. The exit number (E1-5P) plaque (see Figure 2E-22) shall be 30 inches in height and shall include the word EXIT and the appropriate exit number in a single-line format. ~~Suffix letters shall be used for exit numbering at a multi-exit interchange.~~ Exit suffix letters shall only be used to supplement exit numbers. Exit suffix letters shall be used when there is more than one exit departure point within the limits of a mile segment. The suffix letter shall also be included on the exit number plaque and shall be separated from the exit number by a space having a width of between 1/2 and 3/4 of the height of the suffix letter. Exit numbers shall not include the cardinal initials corresponding to the directions of the cross route. The ~~M~~minimum numeral and letter sizes are given in Tables 2E-2 through 2E-5. If used on expressways, the interchange exit numbering system ~~for expressways and non-Interstate freeways~~ shall comply with the provisions of this section. ~~prescribed for freeways. Interstates.~~

03 At ~~a multi-exit interchange~~ an interchange with multiple exit departure points from the mainline ~~where suffix letters are used for exit numbering~~, an exit of the same number without a suffix letter shall not be used on the same route in the same direction. For example, if an exit is designated as EXIT 256 A, then there shall not be an exit designated

as EXIT 256 on the same route in the same direction. Exit suffix letters shall increase or decrease in the same manner as exit numbering as described in paragraphs 10-15.

04 Interchange exit numbering shall use the reference location sign exit numbering method. The consecutive exit numbering method shall not be used.

Support:

05 Reference location sign exit numbering assists road users in determining their destination distances and travel mileage, and assists highway agencies because the exit numbering sequence does not have to be changed if new interchanges are added to a route.

Guidance:

05a *Exit numbering should be determined based on where the cross road of the interchange intersects the mainline with respect to the mainline mile segments. For example, if a cross road intersects the mainline at or after mile 15 and before mile 16 the interchange should be designated as EXIT 15 (see Drawing A of Figure 2E-XX). If a cross road is split into two roadways by direction, for example a split diamond, where one direction of the cross road is down stream of mile 18 and the other direction of the cross road is upstream of mile 18, the interchange exit number should be based on the mile marker located between the two roadways (see Drawings A and B of Figure 2E-XX).*

05b *Where exit suffix letters are used for interchanges with multiple exit departure points from the mainline and the number of exit departure points are not equal in both directions, the exit suffix lettering should be based on the number of departure points per direction. For example, if in one direction there are three exit departure points within the mile 25 segment, there should be an EXIT 25 A, EXIT 25 B and EXIT 25 C; however, if in the opposite direction there are only two exit departure points, the exits in that direction should be designated as EXIT 25 B followed by EXIT 25 A (see Drawing D of Figure 2E-XX).*

05c *Exit suffix letters should only be used to designate individual exit departure points from the mainline. When a ramp splits into two ramps after leaving the mainline, the two directions at the ramp splits should not be numbered with separate exit numbers or exit suffix letters (see Drawings A and D of Figure 2E-19).*

**Option:**

~~06 Exit numbers may also be used with Supplemental Guide signs and Motorist Service signs.~~

~~Guidance:~~

~~0706 Exit number (E1-5P) plaques should be added to the top right-hand edge of the advance guide and exit direction signs for an exit to the right.~~

**Standard:**

~~0807~~ Because road users might not expect an exit to the left and might have difficulty in maneuvering to the left, a left exit number (E1-5bP) plaque (see Figure 2E-22) shall be added to the top left-hand edge of the sign for all left-hand exits (see Figures 2E-14 and 2E-15). The word LEFT on the E1-5bP plaque shall be a black legend on a yellow rectangular sign panel and shall be centered above the word EXIT.

Support:

~~0908~~ Example exit number plaque designs are shown in Figure 2E-22. Figures 2E-3, 2E-7, 2E-22, 2E-26, and 2E-27 illustrate the incorporation of exit number plaques on guide signs.

~~4009~~ The general plan for numbering interchange exits is shown in Figures 2E-19 through 2E-21. Figure 2E-19 shows a circumferential route, which is a route that makes a complete circle around a city or town and usually has two interchanges (one on each side of the city or town) with each of the mainline routes that travel through the city or town. Figure 2E-20 shows a loop route, which is

a route that departs from a mainline route and then rejoins the same mainline route at a subsequent point downstream, and a spur route, which is a route that departs from a mainline route and never rejoins the same mainline route. Figure 2E-21 shows two mainline routes that overlap each other.

**Standard:**

**10** Regardless of whether a mainline route originates within a State or crosses into a State from another State, the southernmost or westernmost terminus within that State shall be the beginning point for interchange **exit** numbering.

**11** For circumferential routes, interchange **exit** numbering shall be in a clockwise direction. The numbering shall begin with the first interchange west of the south end of an imaginary north-south line bisecting the circumferential route, at a radial freeway or other Interstate route, or some other conspicuous landmark in the circumferential route near a south polar location (see Figure 2E-19).

**12** The interchange **exit** numbers on loop routes shall begin at the loop interchange nearest the south or west mainline junction and increase in magnitude toward the north or east mainline junction (see Figure 2E-20).

**13** Spur route interchanges shall be numbered in ascending order starting at the interchange where the spur leaves the mainline route (see Figure 2E-20).

**14** If a circumferential, loop, or spur route crosses State boundaries, the numbering sequence shall be coordinated by the States to provide continuous interchange numbering.

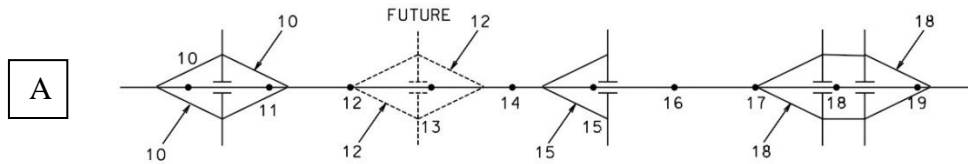
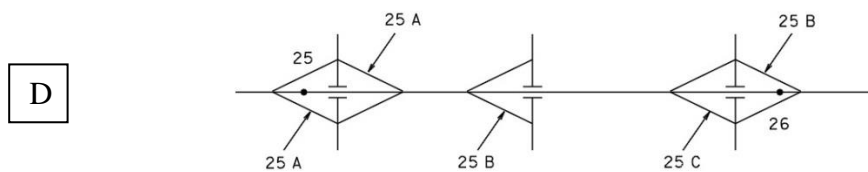
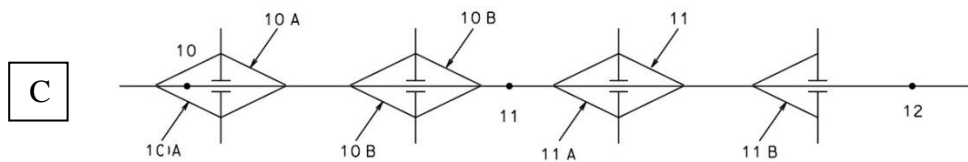
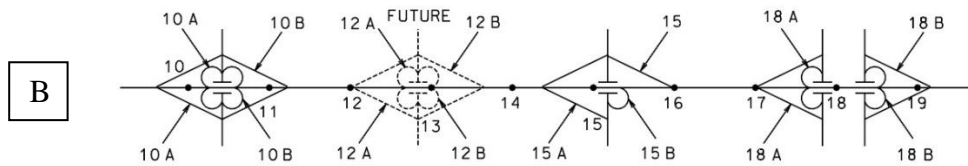
**15** Where numbered routes overlap, continuity of interchange numbering shall be established for only one of the routes (see Figure 2E-21). If one of the routes is an Interstate and the other route is not an Interstate, the Interstate route shall maintain continuity of interchange numbering.

**Option:**

15a Interchange exit numbers at the beginning of a loop or a spur route, at the point a route crosses a state line, or where a route simply begins within the boundaries of a state may be referenced as either EXIT 0 or EXIT 1.

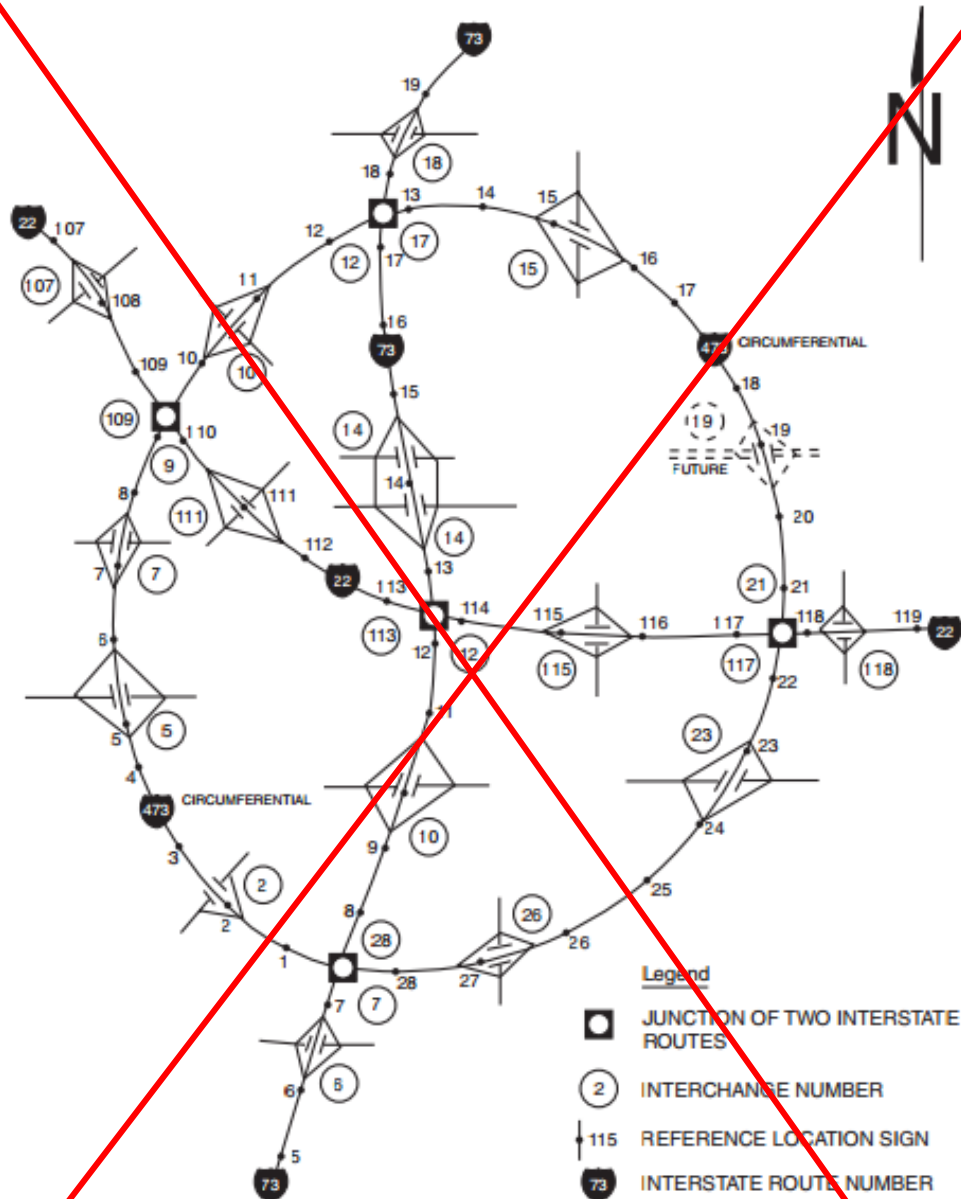
**Guidance:**

**16** The route chosen for continuity of interchange **exit** numbering should also have reference location sign continuity (see Figure 2E-21).

**Figure 2E-XX EXAMPLES OF INTERCHANGE EXIT NUMBERING****EXAMPLES OF EXIT NUMBERING WITH SUFFIXES**Legend

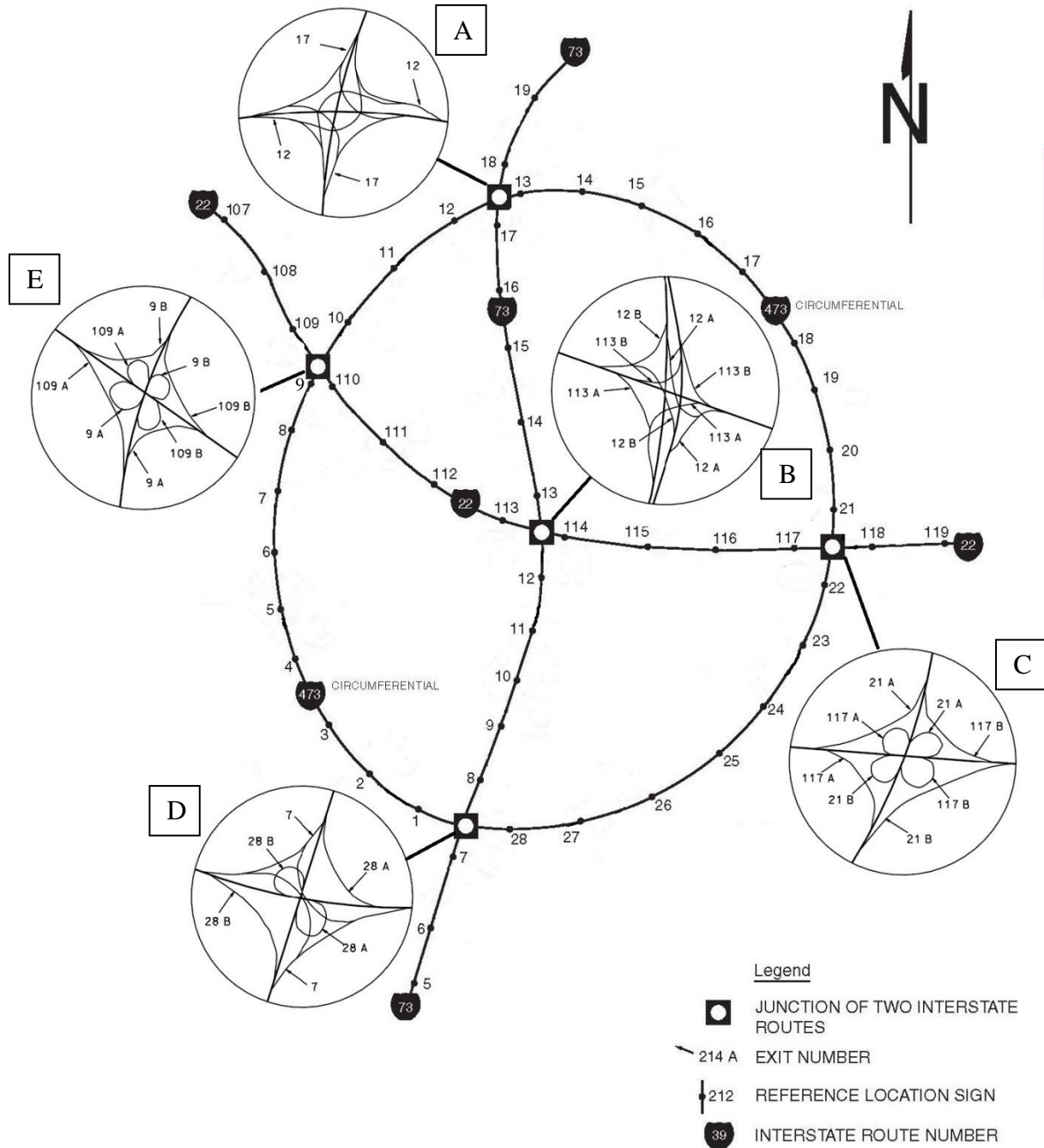
- 9 A EXIT NUMBER  
 115 REFERENCE LOCATION SIGN

**Figure 2E-19. Example of Interchange Numbering for Mainline and Circumferential Routes**

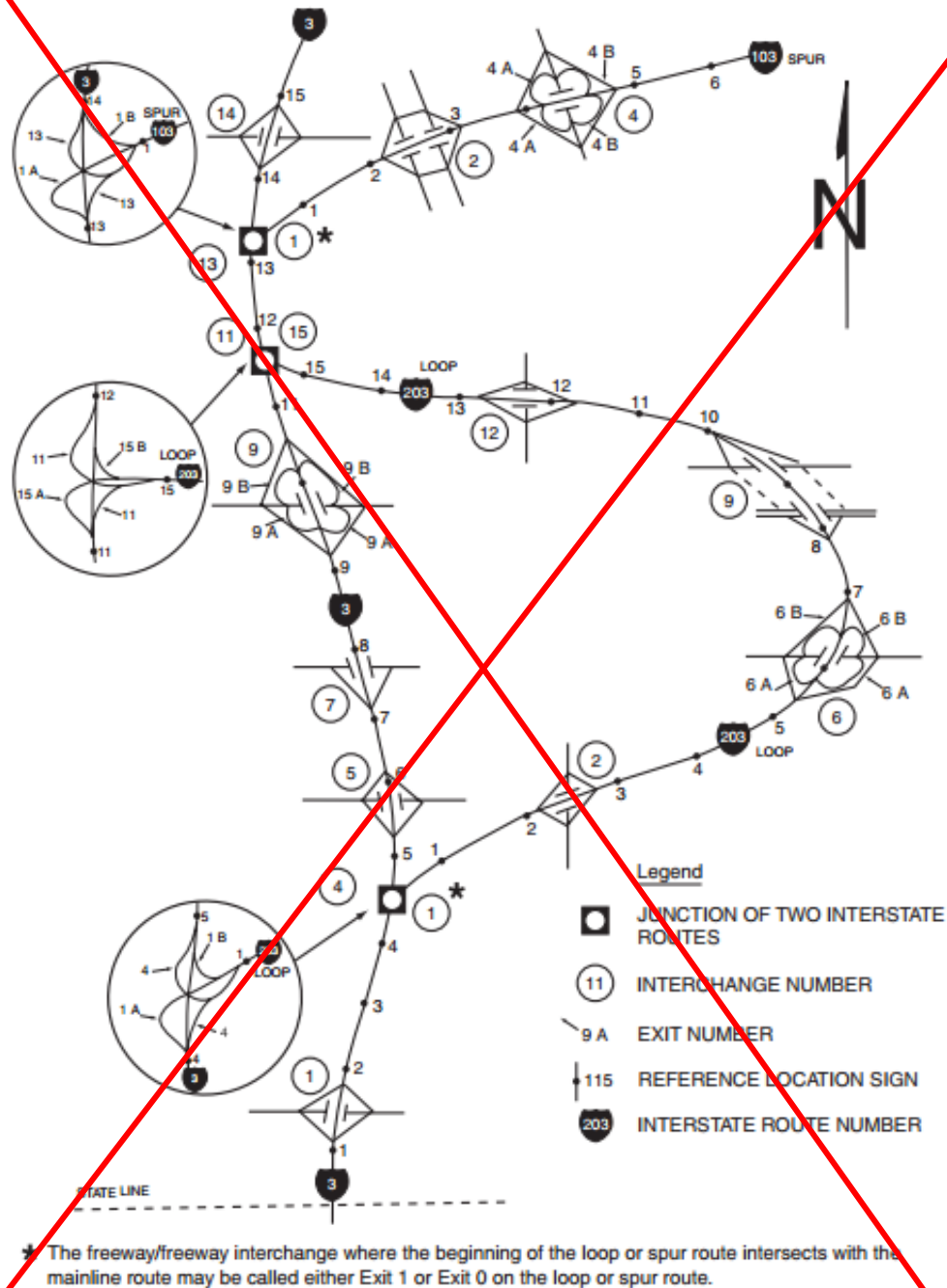




**Figure 2E-19. Example of Interchange Numbering for Mainline and Circumferential Routes**

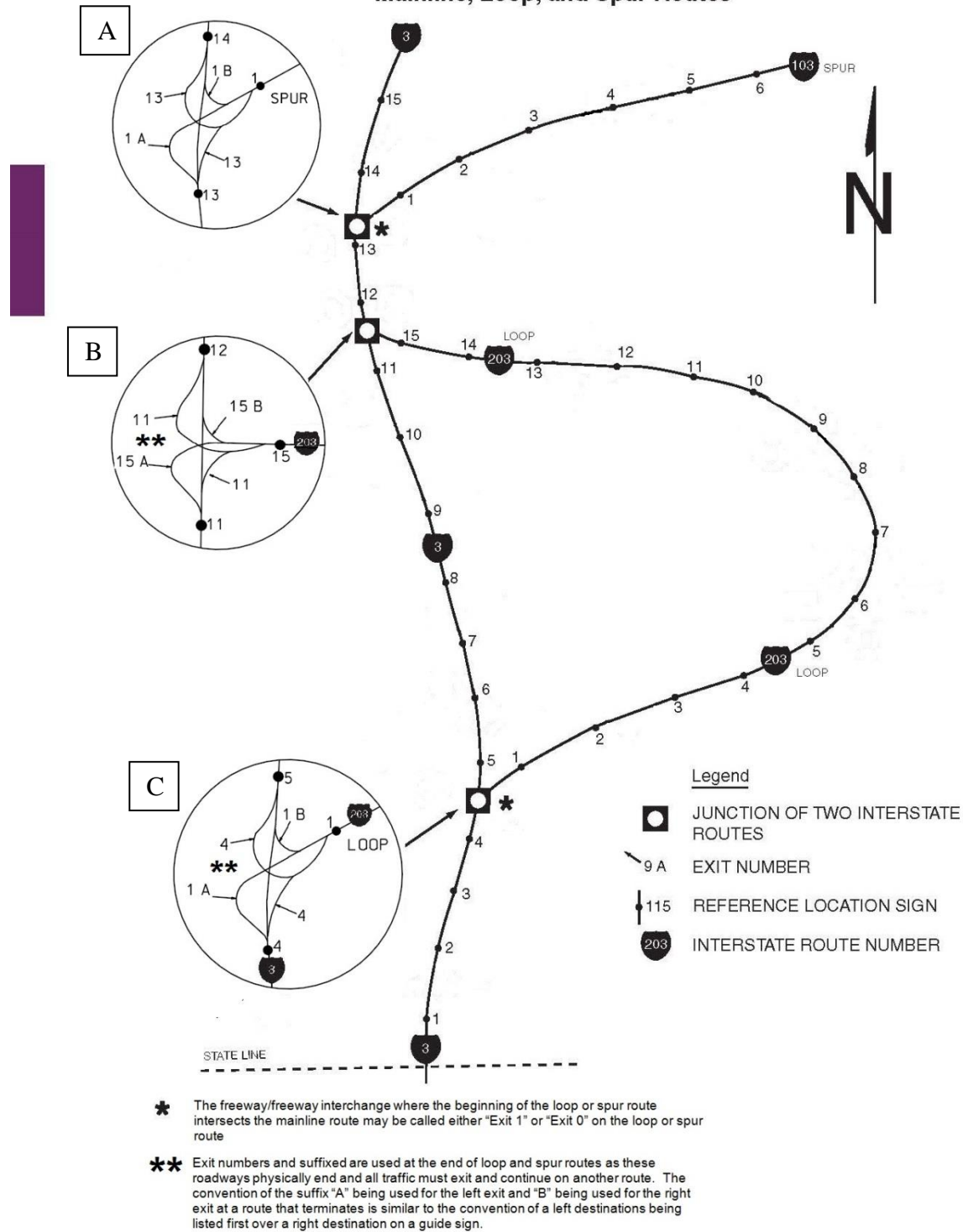


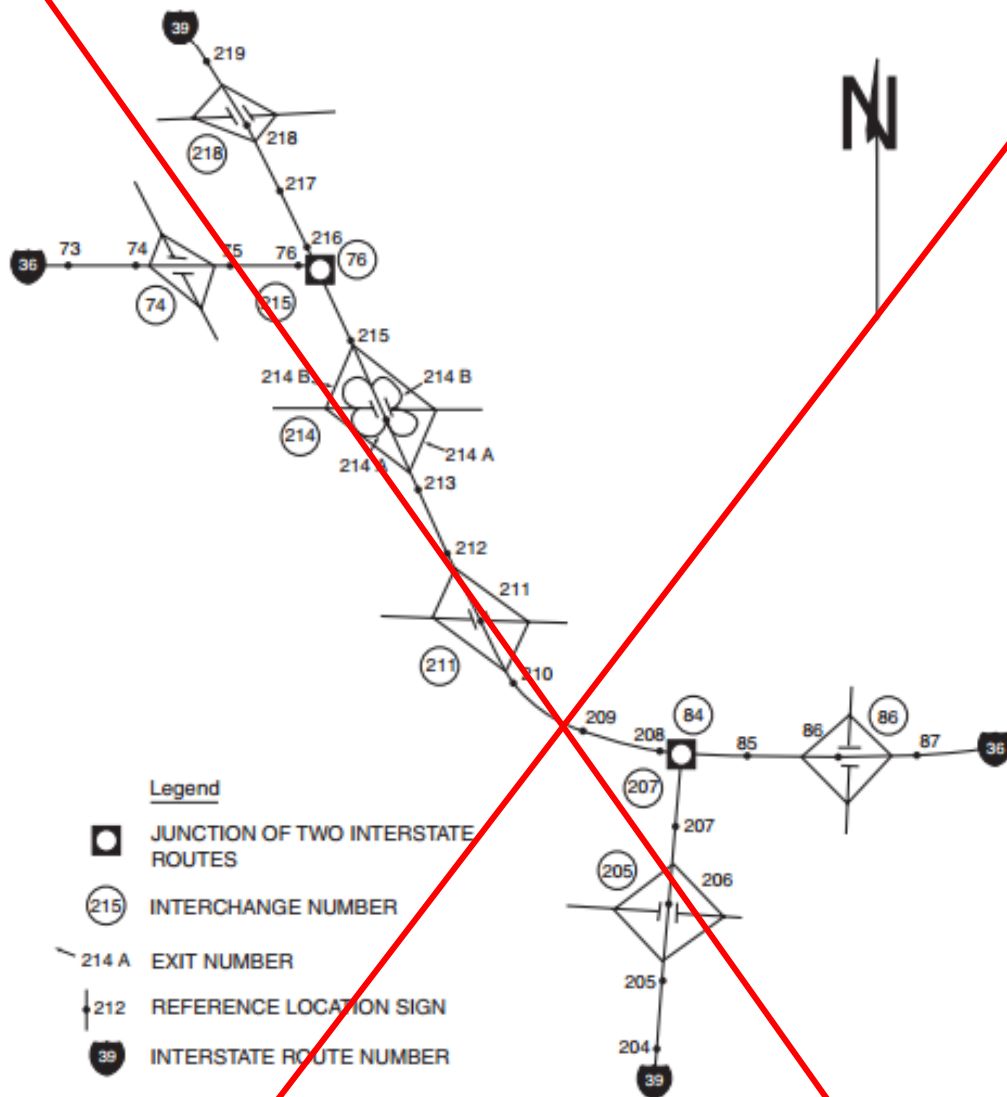
**Figure 2E-20. Example of Interchange Numbering for Mainline, Loop, and Spur Routes**





**Figure 2E-20. Example of Interchange Numbering for Mainline, Loop, and Spur Routes**



**Figure 2E-21. Example of Interchange Numbering for Overlapping Routes**

**Figure 2E-21. Example of Interchange Numbering for Overlapping Routes**