National Committee on
Uniform Traffic Control Devices

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Item Number: 26B-SIG-01

NCUTCD PROPOSAL FOR CHANGES TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

COMMITTEE / TASK FORCE:	Signals Technical Committee
ITEM NUMBER:	26B-SIG-01
TOPIC:	Signals for No Thru Movement
ORIGIN OF REQUEST:	Signals TC
AFFECTED SECTIONS OF MUTCD:	4D.05, 4D.07, 4D.08, 4F.01, 4F.16, Figure 4F.15

DEVELOPMENT HISTORY:
Approved by Signals TC: 06/24/2026
Approved by NCUTCD Council: .....

This is a proposed change to the MUTCD that has been developed by a technical committee, joint committee, or joint task force of the NCUTCD. The NCUTCD is distributing this to its sponsoring organizations for review and comment. Sponsor comments will be considered in revising the proposal prior to NCUTCD Council consideration. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, options, or support. If approved by the NCUTCD Council, the recommended changes 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:
This proposal modifies Section 4F.16 of the MUTCD to further restrict the use of circular indications where traffic cannot go through, and to extend the requirement of two signals per approach to also include two lane approaches with one mandatory left-turn lane and one mandatory right-turn lane.

DISCUSSION:
In the 11th Edition of the *MUTCD*, FHWA established a new Standard allowing the use of only two signal faces with ARROW displays for a single lane approach with a combined left/right turn lane while otherwise continuing to require the use of 2 signal heads for the major movement in all other situations. For a single lane approach with combined left/right turn movement, this created a situation where only one signal head was used for each direction.

While it is not unusual at many intersections where traditionally only one signal face is used to control a turning movement, the new Standard was a change in that it did not require a second display for the major turning movement. At most conventional intersections, the major movement is the through movement and at least two displays are required by the MUTCD. If a single mandatory lane for a turning movement is present, usually only one signal face is displayed for the turning movement, whether it be an exclusive signal face or part of a shared face. In many jurisdictions, multiple signal faces are only used for turning movements when multiple (dual or triple) mandatory turn lanes are provided. When multiple (dual or triple) turn lanes are provided, each turn lane is often served by a

separate signal face displaying ARROWs. As such, when motorists see two ARROW signal indications displayed side by side, it may be associated with multiple turn lanes, even if only a single turn lane for that direction exists.

The requirement for two displays for the major movement (through or turning if no through movement exists) has long been required for signal head redundancy, but the advent of LED signal displays in place of incandescent bulbs in displays has reduced the likelihood of a complete failure in a signal section. The requirement of two displays for the major movement provided redundancy for the display; in the event of a failure in one head, the display was mirrored in the adjacent head.

The 11th Edition also required the use of either a GREEN ARROW or flashing YELLOW ARROW display for approaches where vehicles cannot go through and prohibited the use of CIRCULAR GREEN in most cases.

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 [bracketed white text in shaded green]. Deletions made by a technical committee, joint committee, or task force after initial distribution to sponsoring organizations are shown in ~~highlighted red strikethrough and sans-serif text~~. Additions made by a technical committee, joint committee, or task force after initial distribution to sponsoring organizations are shown in underline blue and sans-serif text.

PART 4
HIGHWAY TRAFFIC SIGNALS

CHAPTER 4D. DESIGN FEATURES OF TRAFFIC CONTROL SIGNALS

Section 4D.05 Number of Signal Faces on an Approach

Standard:

01 **The signal faces for each approach to an intersection or a midblock location shall be provided as follows:**

A. If a signalized motor vehicle through movement exists on an approach, a minimum of two primary signal faces shall be provided for the through movement. Except for single lane approaches or two lane approaches with one mandatory left-turn lane and one mandatory right-turn lane, if a signalized motor vehicle through movement does not exist on an approach, a minimum of two primary signal faces shall be provided for the signalized motor vehicle turning movement that is considered to be the major movement from the approach (also see Section 4F.16).

B. See Sections 4F.02 through 4F.08 for left-turn (and U-turn to the left) signal faces.

C. See Sections 4F.09 through 4F.15 for right-turn (and U-turn to the right) signal faces.

Option:

02 Where a movement (or a certain lane or lanes) at the intersection never conflicts with any other signalized vehicular or pedestrian movement, a continuously-displayed single-section GREEN ARROW signal indication may be used to inform road users that the movement is free-flow and does not need to stop.

Support:

03 In some circumstances where the through movement never conflicts with any other signalized vehicular or pedestrian movement at the intersection, such as at T-intersections with appropriate geometrics and/or pavement markings and signing, an engineering study might determine that the through movement (or certain lanes of the through movement) can be free-flow and not signalized.

Guidance:

04 If two or more left-turn lanes are provided for a separately controlled left-turn movement, or if a left-turn movement represents the major movement from an approach, two or more primary left-turn signal faces should be provided.

05 If two or more right-turn lanes are provided for a separately controlled right-turn movement, or if a right-turn movement represents the major movement from an approach, two or more primary right-turn signal faces should be provided.

Support:

06 Locating primary signal faces overhead on the far side of the intersection has been shown to provide safer operation by reducing intersection entries late in the yellow interval and by reducing red signal violations, as compared to post-mounting signal faces at the roadside or locating signal faces overhead within the intersection on a diagonally-oriented mast arm or span wire. On approaches with two or more lanes for the through movement, one signal face per through lane, centered over each through lane, has also been shown to provide safer operation.

Guidance:

07 If the posted or statutory speed limit or the 85th-percentile speed on an approach to a signalized location is 45 mph or higher, signal faces should be provided as follows for all new or reconstructed signal installations (see Figure 4D-1):

A. The minimum number and location of primary (non-supplemental) signal faces for through traffic should be provided in accordance with Table 4D-1.

B. If the number of overhead primary signal faces for through traffic is equal to the number of through lanes on an approach, one overhead signal face should be located approximately over the center of each through lane.

C. Except for shared left-turn and right-turn signal faces, any primary signal face required by Sections 4F.02 through 4F.16 for a mandatory turn lane should be located overhead approximately over the center of each mandatory turn lane.

D. All primary signal faces should be located on the far side of the intersection.

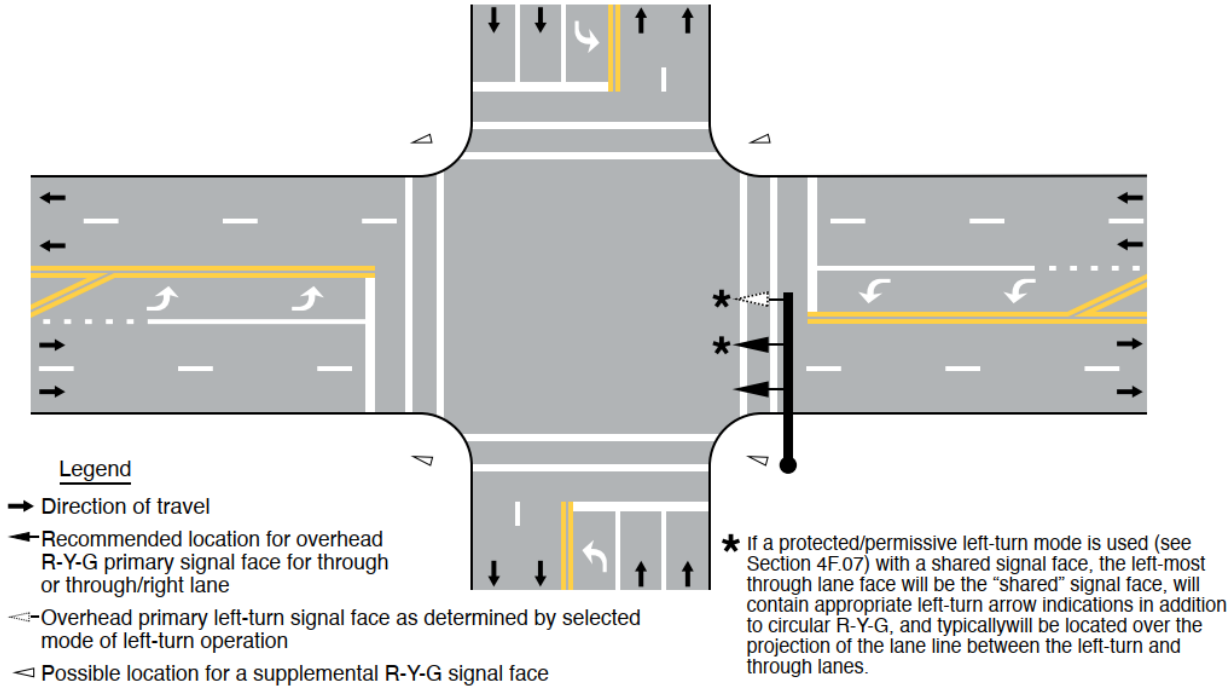
E. In addition to the primary signal faces, one or more supplemental pole-mounted or overhead signal faces should be considered to provide added visibility for approaching traffic that is traveling behind large vehicles.

F. All signal faces should have backplates.

08 This layout of signal faces should also be considered for any major urban or suburban arterial street with four or more lanes and for other approaches with speeds of less than 45 mph.

[Figure 4D-1 and Table 4D-1 are included for reference. No changes are proposed].

Figure 4D-1. Recommended Vehicular Signal Faces for Approaches With Posted, Statutory, or 85th Percentile Speed of 45 mph or Higher



Notes:

1. Signal faces for only one direction and only one possible set of geometrics (number of lanes, etc.) are illustrated. If there are fewer or more than two through lanes on the approach, see Table 4D-1.
2. Any primary left-turn and /or right-turn signal faces, as determined by Sections 4F.02 through 4F-15, should be overhead for each mandatory lane.
3. One or more pole-mounted or overhead supplemental faces should be considered, based on the geometrics of the approach, to maximize visibility for approaching traffic.
4. All signal faces should have backplates.

Table 4D-1. Recommended Minimum Number of Primary Signal Faces for Through Traffic on Approaches with Posted, Statutory, for 85th-Percentile Speed of 45 mph or Higher

Number of Through Lanes on the Approach	Total Number of Primary Through Signal Faces for the Approach*	Minimum Number of Overhead-Mounted Primary Through Signal Faces for the Approach
1	2	1
2	2	1
3	3	2**
4 or more	4 or more	3**

Notes:
* A minimum of two through signal faces is always required (see Section 4D.05). These recommended numbers of through signal faces may be exceeded. Also, see cone of vision requirements otherwise indicated in Section 4D.07. than two through lanes on the approach, see Table 4D-1.
** If practical, all of the recommended number of primary through signal faces should be located overhead

Section 4D.07 Lateral Positioning of Signal Faces

Standard:

01 **At least one and preferably both of the minimum of two primary signal faces required in Section 4D.05 ~~for the through movement (or the major turning movement if there is no through movement) on the approach~~ shall be located between two lines intersecting with the center of the approach at a point 10 feet behind the stop line, one making an angle of approximately 20 degrees to the right of the center of the approach extended, and the other making an angle of approximately 20 degrees to the left of the center of the approach extended. The signal face that satisfies this requirement shall simultaneously satisfy the longitudinal placement requirement described in Section 4D.08 (see Figure 4D-2).**

02 **If both of the minimum of two primary signal faces required in Section 4D.05 ~~for the through movement (or the major turning movement if there is no through movement) on the approach,~~ are post-mounted, they shall both be on the far side of the intersection, one on the right and one on the left of the approach lane(s).**

03 **The required signal faces for through traffic on an approach shall be located not less than 8 feet apart measured horizontally perpendicular to the approach between the centers of the signal faces.**

04 **If more than one separate turn signal face is provided for a turning movement and if one or both of the separate turn signal faces are located over the roadway, the signal faces shall be located not less than 8 feet apart measured horizontally perpendicular to the approach between the centers of the signal faces.**

Guidance:

05 *If horizontally-arranged or clustered signal faces are used, the minimum 8-foot horizontal separation between the two signal faces should be measured from the center of the right-most signal indication in the signal face on the left to the center of the left-most signal indication in the signal face on the right.*

06 *Except as provided in Paragraph 7 of this Section, for signal faces located over the roadway, separate turn signal faces should be located at least 8 feet from the nearest traffic signal face for a different movement on the same approach measured horizontally perpendicular to the approach between the centers of the signal faces.*

Option:

07 For modifications to existing traffic signals, the minimum horizontal separation between a separate turn signal face and the nearest traffic signal face for a different movement may be reduced to 3 feet.

Guidance:

08 *If a signal face controls a specific lane or lanes of an approach, its position should make it readily visible to road users making that movement.*

Support:

09 Section 4D.05 contains additional provisions regarding lateral positioning of signal faces for approaches having a posted or statutory speed limit or an 85th-percentile speed of 45 mph or higher.

Guidance:

10 If a mandatory left-turn, right-turn, or U-turn lane is present on an approach and if a primary separate turn signal face controlling that lane is mounted over the roadway, the primary separate turn signal face should not be positioned any farther to the right than the extension of the right-hand edge of the mandatory turn lane or any farther to the left than the extension of the left-hand edge of the mandatory turn lane.

Support:

11 Supplemental turn signal faces mounted over the roadway are not subject to the positioning recommendations in Paragraph 10 of this Section.

Guidance:

12 For new or reconstructed signal installations, on an approach with a mandatory turn lane(s) for a permissive left-turn (or U-turn to the left) movement, signal faces that display a CIRCULAR GREEN signal indication should not be post-mounted on the far-side median or mounted overhead above the mandatory turn lane(s) or the extension of the lane(s).

Standard:

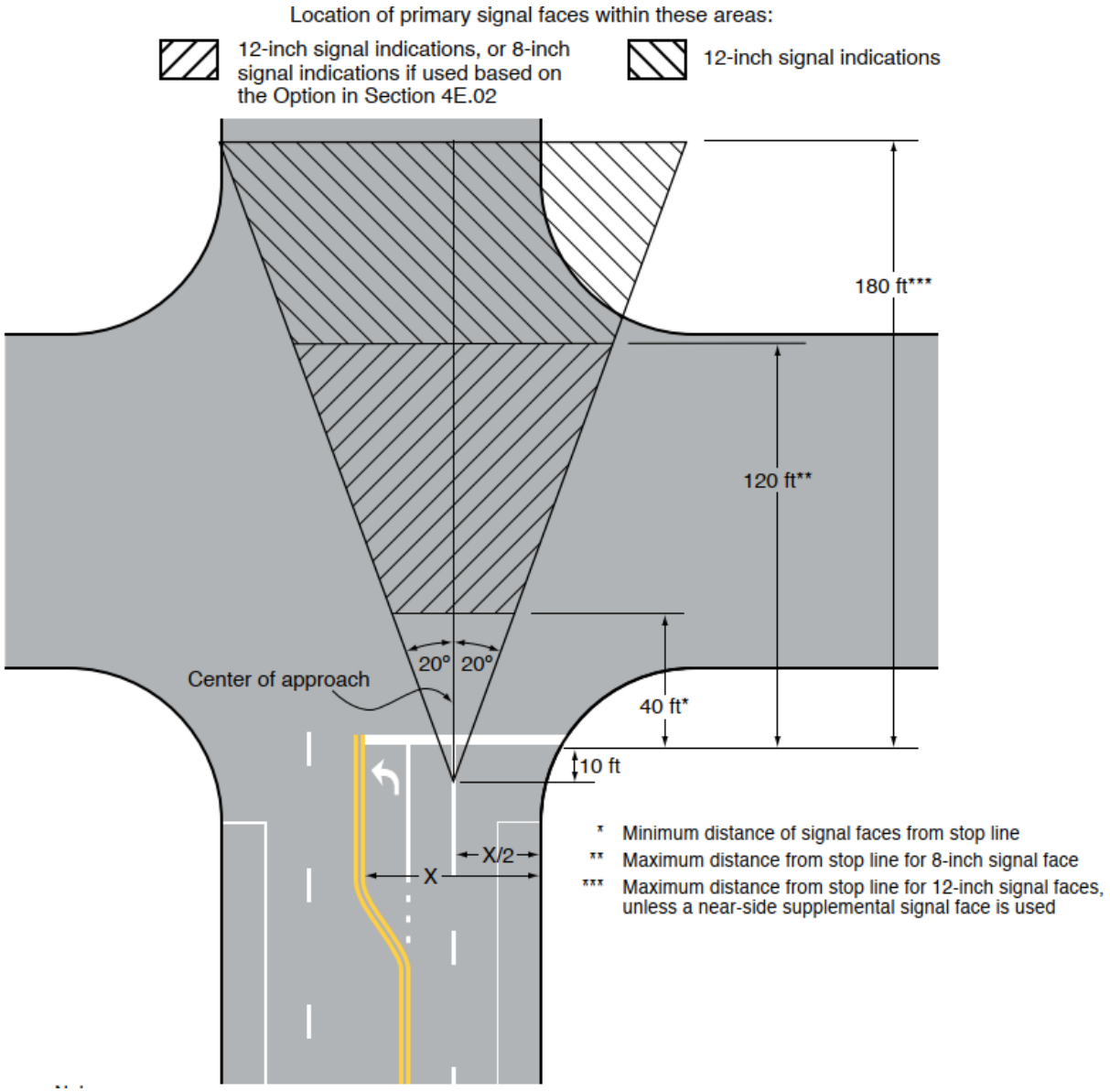
13 If supplemental post-mounted signal faces are used, the following limitations shall apply:

A. Left-turn arrows and U-turn arrows to the left shall not be used in near right signal faces that are located to the right of the through and/or right-turn lanes.

B. Right-turn arrows and U-turn arrows to the right shall not be used in far left signal faces that are located to the left of the through and/or left-turn lanes. A far-side median-mounted signal face shall be considered a far left signal face for this application.

[Figure 4D-2 is included for reference. No changes are proposed.]

Figure 4D-2. Lateral and Longitudinal Location of Primary Signal Faces



Notes:

1. See Section 4D.05 for approaches with posted, statutory, or 85th-percentile speeds of 45 mph or higher
2. See Section 4D.07 regarding location of signal faces that display a CIRCULAR GREEN signal indication for a permissive left-turn movement on approaches with a mandatory left-turn lane or lanes

Section 4D.08 Longitudinal Positioning of Signal Faces

Standard:

01 **Except where the width of an intersecting roadway or other conditions make it physically impractical, the signal faces for each approach to an intersection or a midblock location shall be provided as follows:**

- **A. A signal face installed to satisfy the requirements for primary left-turn signal faces (see Sections 4F.02 through 4F.08) and primary right-turn signal faces (see Sections 4F.09 through 4F.15), and at least one and preferably both of the minimum of two primary signal faces required in Section 4D.05 ~~for the through movement (or the major turning movement if there is no through movement) on the approach~~ shall be located:**
  - **1. No less than 40 feet beyond the stop line, and**
  - **2. No more than 180 feet beyond the stop line unless a supplemental near-side signal face is provided.**
- **B. The primary signal faces that are used to satisfy the requirements of Item A shall simultaneously satisfy the lateral placement requirement described in Section 4D.07 (see Figure 4D-2).**

Guidance:

02 *Where the nearest signal face is located between 150 and 180 feet beyond the stop line, engineering judgment of the conditions, including the worst-case visibility conditions, should be used to determine if the provision of a supplemental near-side signal face would be beneficial.*

03 *Supplemental near-side signal faces should be located as near as practicable to the stop line.*

Support:

04 Section 4D.05 contains additional provisions regarding longitudinal positioning of signal faces for approaches having a posted or 85th-percentile speed of 45 mph or higher.

CHAPTER 4F. STEADY (STOP-AND-GO) OPERATION OF TRAFFIC CONTROL SIGNALS

Section 4F.01 Application of Steady and Flashing Signal Indications during Steady (Stop-and-Go) Operation

Standard:

01 **When a traffic control signal is being operated in a steady (stop-and-go) mode, at least one indication in each signal face shall be displayed at any given time.**

02 **A signal face(s) that controls a particular vehicular movement during any interval of a cycle shall control that same movement during all intervals of the cycle.**

03 **Steady and flashing signal indications shall be applied as follows:**

- **A. A steady CIRCULAR RED signal indication:**
  - **1. Shall be displayed when it is intended to prohibit traffic, except pedestrians directed by a pedestrian signal head, from entering the intersection or other controlled area. Turning after stopping is permitted as stated in Item C.1 in Paragraph 1 of Section 4A.03.**
  - **2. Shall be displayed with the appropriate GREEN ARROW signal indications when it is intended to permit traffic to make a specified turn or turns, and to prohibit traffic from proceeding straight ahead through the intersection or other controlled area, except in protected only mode operation (see Sections 4F.06 and 4F.13), or in protected/permissive mode operation with separate turn signal faces (see Sections 4F.08 and 4F.15).**
- **B. A steady CIRCULAR YELLOW signal indication:**
  - **1. Shall be displayed following a CIRCULAR GREEN or straight-through GREEN ARROW signal indication in the same signal face.**
  - **2. Shall not be displayed in conjunction with the change from the CIRCULAR RED signal indication to the CIRCULAR GREEN signal indication.**
  - **3. Shall be followed by a CIRCULAR RED signal indication except that, when entering preemption operation as described in the Option in Paragraph 03a of this Section., ~~the return~~**

~~to the previous CIRCULAR GREEN signal indication shall be permitted following a steady CIRCULAR YELLOW signal indication (see Section 4F.19).~~ [25A-SIG-01, June 2025]

4. **Shall not be displayed to an approach from which drivers are turning left permissively using a shared signal face or making a U-turn to the left permissively using a shared signal face unless one of the following conditions exists:**
   - **(a) A steady CIRCULAR YELLOW signal indication is also simultaneously being displayed to the opposing approach;**
   - **(b) An engineering study has determined that, because of unique intersection conditions, the condition described in Item (a) cannot reasonably be implemented without causing significant operational or safety problems and that the volume of impacted left-turning or U-turning traffic is relatively low, and those left-turning or U-turning drivers are advised that a steady CIRCULAR YELLOW signal indication is not simultaneously being displayed to the opposing traffic if this operation occurs continuously by the installation of a W25-1 sign (see Section 2C.44) with the legend ONCOMING TRAFFIC HAS EXTENDED GREEN; or**
   - **(c) Drivers are advised of the operation if it occurs only occasionally, such as during a preemption sequence, by the installation of a W25-2 sign (see Section 2C.44) with the legend ONCOMING TRAFFIC MAY HAVE EXTENDED GREEN.**

C. A steady CIRCULAR GREEN signal indication shall be displayed only when it is intended to permit traffic to proceed in any direction that is lawful and practical.

D. A steady RED ARROW signal indication shall be displayed when it is intended to prohibit traffic, except pedestrians directed by a pedestrian signal head, from entering the intersection or other controlled area to make the indicated turn. Except as described in Item C.2 in Paragraph 1 of Section 4A.03, turning on a steady RED ARROW signal indication shall ~~not~~ be ~~permitted~~ prohibited. [25A-SIG-01, June 2025]

E. A flashing RED ARROW signal indication shall be displayed as part of a steady (stop-and-go) mode of operation only when it is intended to permit traffic, after coming to a full stop, to cautiously enter the intersection to make a turn in the direction indicated by the arrow after yielding to pedestrians, if any, and/or to opposing traffic, if any.

F. A steady YELLOW ARROW signal indication:

1. **Shall be displayed in the same direction as a GREEN ARROW signal indication following a GREEN ARROW signal indication in the same signal face, unless:**
   - **(a) The GREEN ARROW signal indication and a CIRCULAR GREEN (or straight-through GREEN ARROW) signal indication terminate simultaneously in the same signal face, or**
   - **(b) The green arrow is a straight-through GREEN ARROW (see Item B.1 in this Paragraph).**
2. **Shall be displayed in the same direction as a flashing YELLOW ARROW signal indication or flashing RED ARROW signal indication following a flashing YELLOW ARROW signal indication or flashing RED ARROW signal indication in the same signal face, when the flashing arrow indication is displayed as part of a steady mode operation, if the signal face will subsequently display a steady red signal indication.**
3. **Shall not be displayed in conjunction with the change from a steady RED ARROW, flashing RED ARROW, or flashing YELLOW ARROW signal indication to a GREEN ARROW signal indication, except when entering preemption operation as provided in Item F.5(a) of this Paragraph.**
4. ~~**Shall not be displayed when any conflicting vehicular movement has a green or yellow signal indication (except for the situation regarding U-turns to the left provided in Paragraph 4 of this Section) or any conflicting pedestrian movement has a WALKING PERSON (symbolizing WALK) or flashing UPRAISED HAND (symbolizing DONT WALK) signal indication, except that a steady left-turn (or U-turn to the left) YELLOW ARROW signal indication used to terminate a flashing left-turn (or U-turn to the left) YELLOW ARROW or a flashing left-turn (or U-turn to the left) RED ARROW signal indication in a signal face controlling a permissive left-turn (or U-turn to the left) movement as described in Sections 4F.04 and 4F.08 shall be permitted to be displayed when a CIRCULAR YELLOW signal indication is displayed for the opposing through movement.~~ Shall not be displayed when any conflicting vehicular movement

has a green or yellow signal indication, except as described in the Option in Paragraph 03b of this Section. It shall not be displayed when a conflicting pedestrian movement has a WALKING PERSON or a flashing UPRAISED HAND signal indication. [25A-SIG-01, June 2025] Vehicles departing in the same direction shall not be considered in conflict if, for each turn lane with moving traffic, there is a separate departure lane, and pavement markings or raised channelization clearly indicate which departure lane to use.

5. Shall not be displayed to terminate a flashing arrow signal indication on an approach from which drivers are turning left permissively or making a U-turn to the left permissively unless one of the following conditions exists:
   (a) A steady CIRCULAR YELLOW signal indication is also simultaneously being displayed to the opposing approach;
   (b) An engineering study has determined that, because of unique intersection conditions, the condition described in Item (a) cannot reasonably be implemented without causing significant operational or safety problems and that the volume of impacted left-turning or U-turning traffic is relatively low, and those left-turning or U-turning drivers are advised that a steady CIRCULAR YELLOW signal indication is not simultaneously being displayed to the opposing traffic if this operation occurs continuously by the installation of a W25-1 sign (see Section 2C.44) with the legend ONCOMING TRAFFIC HAS EXTENDED GREEN; or
   (c) Drivers are advised of the operation if it occurs only occasionally, such as during a preemption sequence, by the installation of a W25-2 sign (see Section 2C.44) with the legend ONCOMING TRAFFIC MAY HAVE EXTENDED GREEN.
6. Shall be terminated by a RED ARROW signal indication for the same direction or a CIRCULAR RED signal indication except as described in the Options in Paragraphs 03c or 03d of this Section.~~:~~
   ~~(a) When entering preemption operation, the display of a GREEN ARROW signal indication or a flashing arrow signal indication shall be permitted following a steady YELLOW ARROW signal indication.~~
   ~~(b) When the movement controlled by the arrow is to continue on a permissive mode basis during an immediately following signal phase, the display of a CIRCULAR GREEN signal indication or flashing YELLOW ARROW signal indication shall be permitted following a steady YELLOW ARROW signal indication. To provide a red clearance interval, it shall be permitted to display a steady left-turn RED ARROW signal indication immediately following the steady left-turn YELLOW ARROW signal indication.~~ [25A-SIG-01, June 2025]

G. A flashing YELLOW ARROW signal indication shall be displayed as part of a steady (stop-and-go) mode of operation only when it is intended to permit traffic to cautiously enter the intersection to make a turn in the direction indicated by the arrow after yielding to pedestrians, if any, and/or to opposing traffic, if any.

H. A steady GREEN ARROW signal indication:
1. Shall be displayed only to allow vehicular movements, in the direction indicated, that are not in conflict with other vehicles moving on a green or yellow signal indication (except for the situation regarding U-turns provided in Paragraph 4 of this Section and straight-through GREEN ARROWs provided in Paragraph 5 of this Section), even if the other vehicles are required to yield the right-of-way to the traffic moving on the GREEN ARROW signal indication, and are not in conflict with pedestrians crossing in compliance with a WALKING PERSON (symbolizing WALK) or flashing UPRAISED HAND (symbolizing DONT WALK) signal indication. Vehicles departing in the same direction shall not be considered in conflict if, for each turn lane with moving traffic, there is a separate departure lane, and pavement markings or raised channelization clearly indicate which departure lane to use.
2. Shall be displayed on a signal face that controls a left-turn movement when said movement is not in conflict with other vehicles moving on a green or yellow signal indication (except for the situation regarding U-turns provided in Paragraph 4 of this Section) and is not in conflict with pedestrians crossing in compliance with a WALKING PERSON (symbolizing WALK) or

flashing UPRAISED HAND (symbolizing DONT WALK) signal indication. Vehicles departing in the same direction shall not be considered in conflict if, for each turn lane with moving traffic, there is a separate departure lane, and pavement markings or raised channelization clearly indicate which departure lane to use.

3. Shall not be required ~~on the stem of a T-intersection or~~ for turns from a one-way street.

Option:

03a When entering preemption or priority operation, the return of the previous CIRCULAR GREEN signal indication may follow a steady CIRCULAR YELLOW signal indication (see Sections 4F.18 through 4F.20).

03b For a signal face controlling a permissive left-turn movement or a permissive U-turn to the left, a steady left-turn YELLOW ARROW used to terminate a flashing left-turn YELLOW ARROW or flashing RED ARROW, as described in Sections 4F.04 and 4F.08, may be displayed when a CIRCULAR YELLOW signal indication is displayed for the opposing through movement.

03c When entering preemption operation, the display of a GREEN ARROW signal indication or a flashing arrow signal indication may follow a steady YELLOW ARROW signal indication.

03d When a movement is to continue on a permissive mode basis during the immediately following signal phase, a CIRCULAR GREEN signal indication or a flashing YELLOW ARROW signal indication may be displayed following a steady YELLOW ARROW signal indication. [25A-SIG-01, June 2025]

04 If U-turns are permitted from the approach and a right-turn GREEN ARROW signal indication is simultaneously being displayed to road users making a right turn from the conflicting approach to the left, road users making a U-turn may be advised of the operation by the installation of a U-TURN YIELD TO RIGHT TURN (R10-16) sign (see Section 2B.59).

05 A steady straight-through green arrow signal indication may be used instead of a circular green signal indication in a signal face to discourage wrong-way turns under the following conditions, even if opposed by a simultaneous permissive left-turn movement:

A. On an approach intersecting a one-way street;
B. On an approach intersecting an interchange exit ramp;
C. On an approach with unique geometric design that prohibits turns; or
D. On an approach with pre-signals and the adjacent lanes are controlled separately (see Sections 8D.11 and 8D.12).

06 If not otherwise prohibited, steady red, yellow, and green turn arrow signal indications may be used instead of steady circular red, yellow, and green signal indications in a signal face on an approach where all traffic is required to turn or where the straight-through movement is not physically possible.

Support:

07 Section 4F.16 contains information regarding the signalization of approaches that have a combined left-turn/right-turn lane and no through movement.

08 Section 4D.07 contains information regarding limitations on left-turn arrows, right-turn arrows, and U-turn arrows in supplemental signal faces.

Standard:

09 A straight-through RED ARROW signal indication or a straight-through YELLOW ARROW signal indication shall not be displayed on any signal face, either alone or in combination with any other signal indication.

10 The following combinations of signal indications shall not be simultaneously displayed on any one signal face:

A. CIRCULAR YELLOW with CIRCULAR RED,
B. CIRCULAR GREEN with CIRCULAR RED, or
C. Straight-through GREEN ARROW with CIRCULAR RED.

11 Except as provided in Paragraph 13 of this Section, the above combinations shall not be simultaneously displayed on an approach as a result of the combination of displays from multiple signal faces unless the display is created by a signal face(s) devoted exclusively to the control of a right-turn movement and:

A. **The signal face(s) controlling the right-turn movement is visibility limited from the adjacent through movement or positioned to minimize potential confusion to approaching road users, or**
B. **A RIGHT TURN SIGNAL (R10-10) sign (see Sections 4F.09, 4F.11, 4F.13, and 4F.15) is mounted adjacent to the signal face(s) controlling the right-turn movement.**

12 **Except as provided in Paragraph 13 of this Section, the following combinations of signal indications shall not be simultaneously displayed on any one signal face or as a result of the combination of displays from multiple signal faces on an approach:**

A. **CIRCULAR GREEN with CIRCULAR YELLOW,**
B. **Straight-through GREEN ARROW with CIRCULAR YELLOW,**
C. **GREEN ARROW with YELLOW ARROW pointing in the same direction,**
D. **YELLOW ARROW with RED ARROW pointing in the same direction, or**
E. **GREEN ARROW with RED ARROW pointing in the same direction.**

~~13 If a separate signal face is provided at a pre-signal (see Section 8D.11) or at a queue cutter signal (see Section 8D.12) for a left-turn and/or right-turn lane that extends from the downstream signalized intersection back to and across a grade crossing, the following combinations of signal indications shall be permitted to be simultaneously displayed as a result of the combination of displays from multiple signal faces at the pre-signal or queue cutter signal:~~

~~A. Straight-through GREEN ARROW with CIRCULAR RED,~~
~~B. Straight-through GREEN ARROW with CIRCULAR YELLOW, and~~
~~C. CIRCULAR YELLOW with CIRCULAR RED.~~

Option:

13 If a separate signal face is provided at a pre-signal (see Section 8D.11) or at a queue cutter signal (see Section 8D.12) for a left-turn and/or right-turn lane that extends from the downstream signalized intersection back to and across a grade crossing, the following combinations of signal indications may be permitted to may be simultaneously displayed as a result of the combination of displays from multiple signal faces at the pre-signal or queue cutter signal:

A. Straight-through GREEN ARROW with CIRCULAR RED,
B. Straight-through GREEN ARROW with CIRCULAR YELLOW, and
C. CIRCULAR YELLOW with CIRCULAR RED.

Standard: [25A-SIG-01, June 2025]

14 **Except as otherwise provided in Sections 4F.08, 4F.15, 4J.03, and 4N.03, the same signal section shall not be used to display both a flashing yellow and a steady yellow indication during steady mode operation. Except as otherwise provided in Sections 4F.04, 4F.08, 4F.11, and 4F.13, the same signal section shall not be used to display both a flashing red and a steady red indication during steady mode operation.**

Guidance:

15 *No movement that creates an unexpected crossing of pathways of moving vehicles or pedestrians should be allowed during any green or yellow interval, except when all three of the following conditions are met:*

A. The movement involves only slight conflict, and
B. Serious traffic delays are substantially reduced by permitting the conflicting movement, and
C. Drivers and pedestrians subjected to the unexpected conflict are effectively warned thereof by a sign.

Section 4F.16 Signal Indications for Approaches with No Through Movement

Support:

01 The provisions of this section apply only to approaches where no through movement exists, such as the stem of a T-intersection or where the opposite approach is a one-way roadway in the opposing direction.

Standard:

02 **Except for single-lane approaches or a two-lane approach with one mandatory left-turn lane and one mandatory right-turn lane, a minimum of two primary signal faces shall be provided for the signalized turning movement that is considered to be the major movement from the approach (see Section 4D.05). For**

single-lane approaches or a two-lane approach with one mandatory left-turn lane and one mandatory right-turn lane, a minimum of two primary signal faces shall be provided for the approach.

Option:

03 The ~~required~~ two primary signal faces required in Section 4D.05 and any supplemental primary signal faces may continuously display a steady CIRCULAR RED signal indication while steady or flashing YELLOW and steady GREEN ARROW signal indications are displayed during times when the traffic control signal is being operated in the steady (stop-and-go) mode. The continuous display of steady CIRCULAR RED is intended to reinforce that there is no through movement for safety-critical locations.

Standard:

04 CIRCULAR GREEN and CIRCULAR YELLOW signal indications shall not be displayed to an approach with no through movement if one or both of the following conditions are met:

A. The posted or statutory speed limit on the approach is 35 mph or higher,

B. ~~The~~ A one-way roadway ~~that~~ opposes the approach. ~~is an exit ramp from a freeway or expressway, or~~

~~C. The one-way roadway that opposes the approach has a posted or statutory speed limit of 35 mph or higher.~~

Guidance:

04a A CIRCULAR GREEN and CIRCULAR YELLOW signal indication should not be displayed on an approach where there is no through movement.

Support:

05 A lane from which left-turn and right-turn movements can both be made is sometimes provided on an approach that has no through movement, either as the only approach lane or as one of several approach lanes.

Option:

06 If all of the lanes on the approach are designated as mandatory turn lanes and no lane is designated as a combined left-turn/right-turn lane, the left-turn and right-turn movements may start and terminate independently, and the left-turn and right-turn movements each may be operated in one or more of the modes of operation as described in Sections 4F.02 through 4F.15.

Standard:

07 When a combined left-turn/right-turn lane exists on an approach, the left-turn and right-turn movements shall start and terminate simultaneously and the red signal indication used in each of the signal faces on the approach shall be a CIRCULAR RED.

07a When only two signal faces are used on a two-lane approach with one mandatory left-turn lane and one mandatory right-turn lane, the red signal indication used in each of the signal faces on the approach shall be a CIRCULAR RED.

Support:

08 This requirement for the use of CIRCULAR RED signal indications in signal faces for approaches having a combined lane for left-turn and right-turn movements or on a two-lane approach with no through movement with one mandatory left-turn lane and one mandatory right-turn lane, is a specific exception to other provisions in this Chapter that would otherwise require the use of RED ARROW signal indications.

Standard:

09 The signal faces provided for an approach with ~~a combined left-turn/right-turn lane and~~ no through movement shall be one of the following:

A. ~~Except as provided in Paragraph 6 of Section 4F.01 and Paragraph 4 of this Section, two or more signal faces, each capable of displaying CIRCULAR RED, CIRCULAR YELLOW, and GREEN signal indications, shall be provided for the approach. This display shall be permissible regardless of the number of mandatory left-turn and/or right-turn lanes that exist on the approach in addition to the combined left-turn/right-turn lane and regardless of whether or not there are pedestrian or opposing vehicular movements that conflict with the left-turn or right-turn movements. However, if there is an opposing approach and the signal phasing protects the left-turn movement on the~~

~~approach with the combined left-turn/right-turn lane from conflicts with the opposing vehicular movements and any signalized pedestrian movements, a left-turn GREEN ARROW signal indication shall also be included in the left-most signal face and shall be displayed simultaneously with the CIRCULAR GREEN signal indication.~~ [Moved to paragraph 09a below as an Option and removed language about GREEN ARROW]

If the approach has only a single combined left-turn/right-turn lane or has a two lane approach with one mandatory left-turn lane and one mandatory right-turn lane:

1. **A signal face(s) capable of displaying CIRCULAR RED, YELLOW ARROW, and GREEN ARROW signal indication(s), with the arrow(s) pointing in the direction of the turn(s) without a conflict if there is no conflict with a signalized vehicular or pedestrian movement, or**
2. **A signal face(s) capable of displaying CIRCULAR RED, YELLOW ARROW, and flashing YELLOW ARROW signal indication(s), with the arrow(s) pointing in the direction of the turn(s) with a conflict if there is a conflict with a signalized vehicular or pedestrian movement.**

B. If the approach has one or more mandatory turn lanes in addition to the combined left-turn/right-turn lane and there is no conflict with a signalized vehicular or pedestrian movement, and GREEN ARROW signal indications are used ~~in place of CIRCULAR GREEN signal indications~~ on the approach, the signal faces for the approach shall be:

1. **A signal face(s) capable of displaying CIRCULAR RED, YELLOW ARROW, and GREEN ARROW signal indications for the mandatory turn lane(s), with the arrows pointing in the direction of the turn, and**
2. **A shared left-turn/right-turn signal face capable of displaying CIRCULAR RED, left-turn YELLOW ARROW, left-turn GREEN ARROW, right-turn YELLOW ARROW, and right-turn GREEN ARROW signal indications, in an arrangement of signal sections that complies with the provisions of Section 4E.04 or 4E.05.**

C. If the approach has one or more mandatory turn lanes in addition to the combined left-turn/right-turn lane and there is a conflict with a signalized vehicular or pedestrian movement, and flashing YELLOW ARROW signal indications are used ~~in place of CIRCULAR GREEN signal indications~~ on the approach, the signal faces for the approach shall be as described in Items B.1 and B.2 of this Paragraph, except that flashing YELLOW ARROW signal indications shall be used in place of the GREEN ARROW signal indications for the turning movement(s) that conflicts with the signalized vehicular or pedestrian movement.

Option:

09a Except as provided in Paragraph 6 of Section 4F.01 and Paragraph 4 of this Section, two or more signal faces, each capable of displaying CIRCULAR RED, CIRCULAR YELLOW, and CIRCULAR GREEN signal indications, may be provided for an approach with no through movement. These signal faces may be provided regardless of the number of mandatory left-turn and/or right-turn lanes that exist on the approach or the presence of a combined left-turn/right-turn lane and regardless of whether or not there are pedestrian movements that conflict with the left-turn or right-turn movements.

09b If variable phasing is used for one or both of the turning movements based on the presence of pedestrian or vehicular conflicts, a signal face capable of displaying one of the following may be used for one or both signal faces on an approach with no through movement:

A. A 4-section signal face capable of displaying CIRCULAR RED, steady YELLOW ARROW, flashing YELLOW ARROW, and GREEN ARROW signal indications;
B. A 3-section signal face capable of displaying CIRCULAR RED, a bimodal section capable of displaying either a steady YELLOW ARROW or flashing YELLOW ARROW in the same section, and GREEN ARROW signal indications, or
C. A 3-section signal face with signal indications of a CIRCULAR RED, steady YELLOW ARROW, and a bimodal section capable of displaying either a GREEN ARROW or a flashing YELLOW ARROW in the same section.

Support:

10 Figure 4F-15 illustrates application of these Standards on approaches that have only a combined left-turn/right-turn lane, and on approaches that have one or more mandatory turn lanes in addition to the combined left-turn/right-turn lane.

10a Figure 4F-15a illustrates application of these Standards on a two-lane approach with one mandatory left-turn lane and one mandatory right-turn lane.

Option:

11 If the lane-use regulations on an approach are variable such that at certain times all of the lanes on the approach are designated as mandatory turn lanes and no lane is designated as a combined left-turn/right-turn lane:

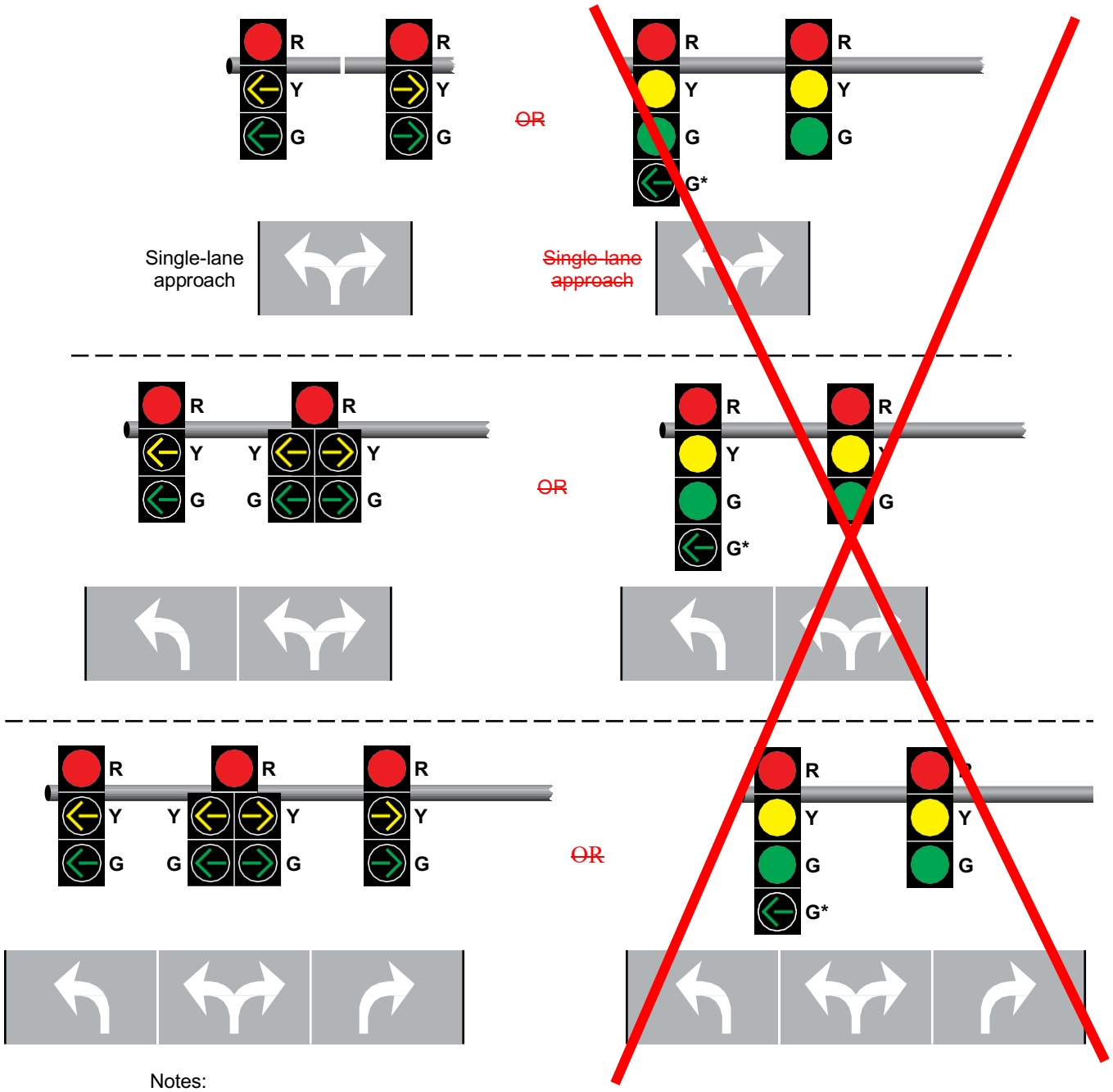
A. During the times that no lane is designated as a combined left-turn/right-turn lane, the left-turn and right-turn movements may start and terminate independently, and the left-turn and right-turn movements may be operated in one or more of the modes of operation as described in Sections 4F.02 through 4F.15; and

B. If a protected/permissive mode is used, the operation of the shared left-turn/right-turn signal face provided in Paragraph 9 may be modified to display ~~the steady left-turn (right-turn) YELLOW ARROW signal indication and the~~ a flashing YELLOW ARROW signal indication for the left-turn and/or ~~(~~right-turn~~) YELLOW ARROW signal indication in the same section~~ as part of a bi-modal section in order to not exceed the maximum of five sections per signal face provided in Section 4E.03. The bi-modal section may be capable of either:

1. Displaying either a steady YELLOW ARROW or flashing YELLOW ARROW signal indication in the same section, or
2. Displaying either a GREEN ARROW or flashing YELLOW ARROW in the same section.

Figure 4F-15. Signal Indications for Approaches with a Combined Left-Turn/Right-Turn Lane and No Through Movement (Sheet 1 of ~~3~~4)

A – No conflicting vehicular or pedestrian movements

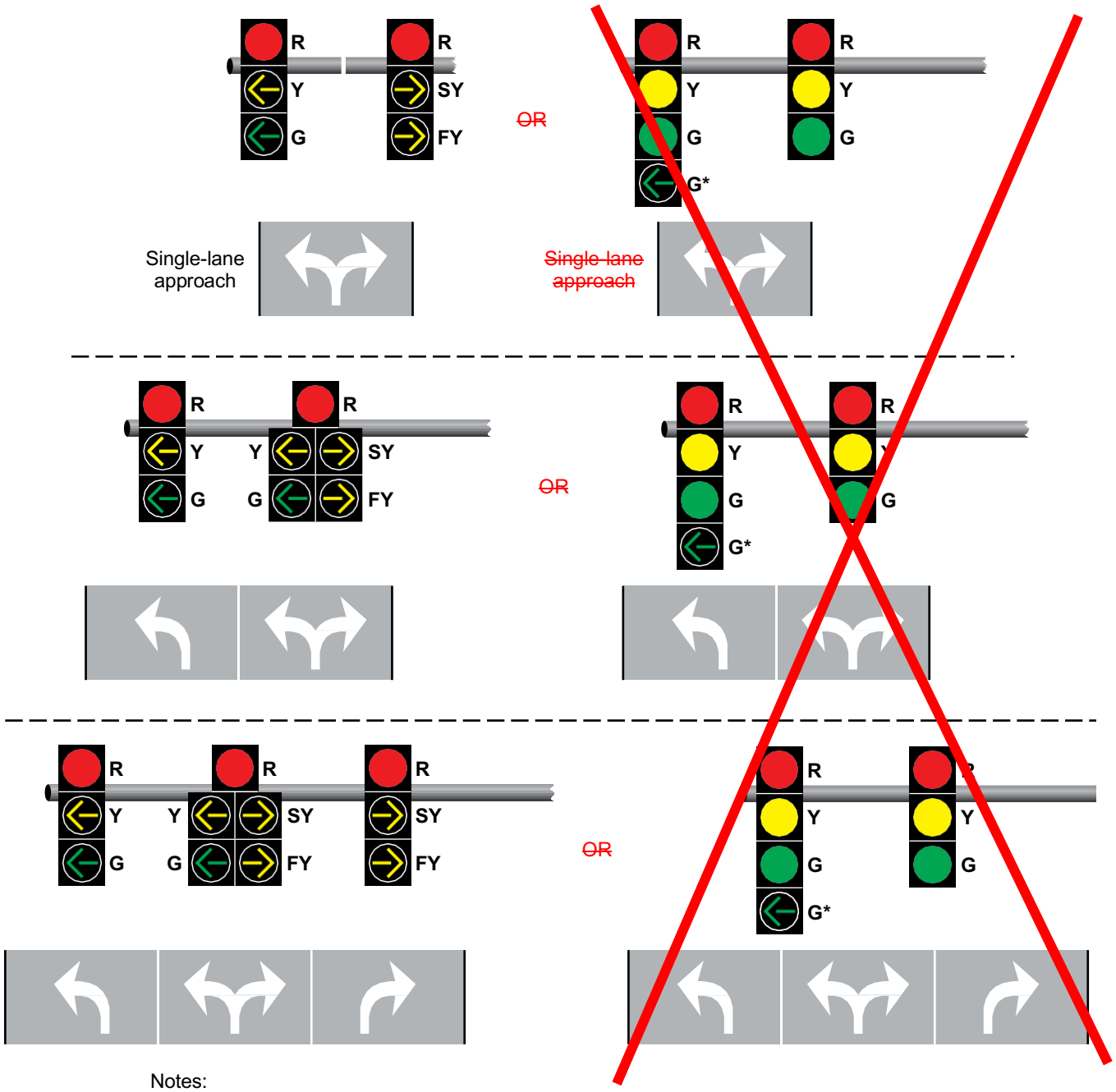


Notes:
1. Horizontally-aligned signal faces may be used.
2. Shared signal faces may also be 5 sections in a vertical straight line instead of a cluster.

~~*Left-turn GREEN ARROW section shall be included if there is an opposing one-way approach and the signal phasing eliminates conflicts.~~

Figure 4F-15. Signal Indications for Approaches with a Combined Left-Turn/Right-Turn Lane and No Through Movement (Sheet 2 of ~~3~~4)

B – Pedestrian or vehicular conflict with one turn movement



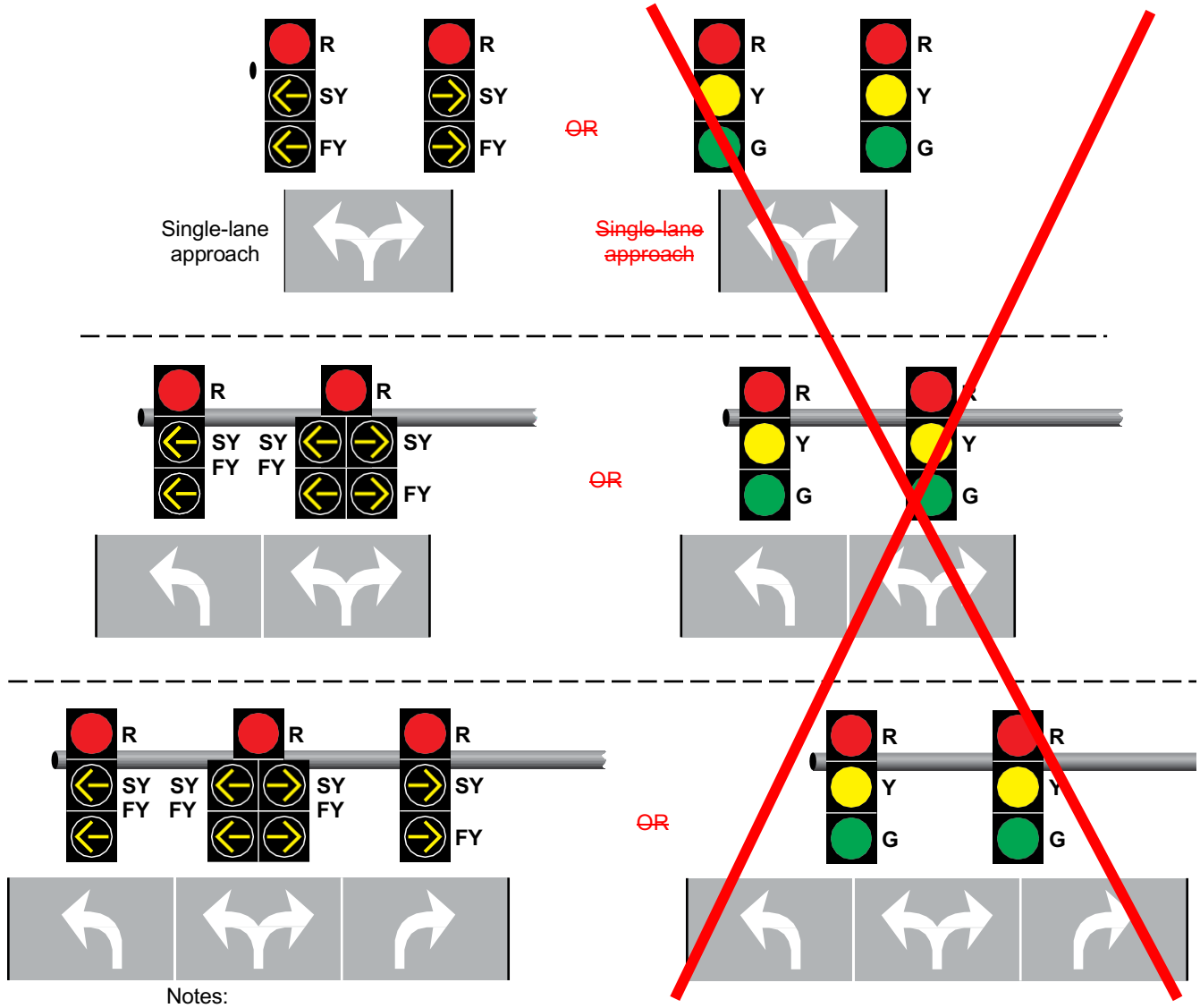
Notes:

1. A conflict with the right-turn is illustrated.
2. Horizontally-aligned signal faces may also be used.
3. Shared signal faces may also be 5 sections in a vertical straight line instead of a cluster.

~~*Left-turn GREEN ARROW section shall be included if there is an opposing one-way approach and the signal phasing eliminates conflicts.~~

Figure 4F-15. Signal Indications for Approaches with a Combined Left-Turn/Right-Turn Lane and No Through Movement (Sheet 3 of ~~3~~4)

C – Pedestrian or vehicular conflicts with both turn movements

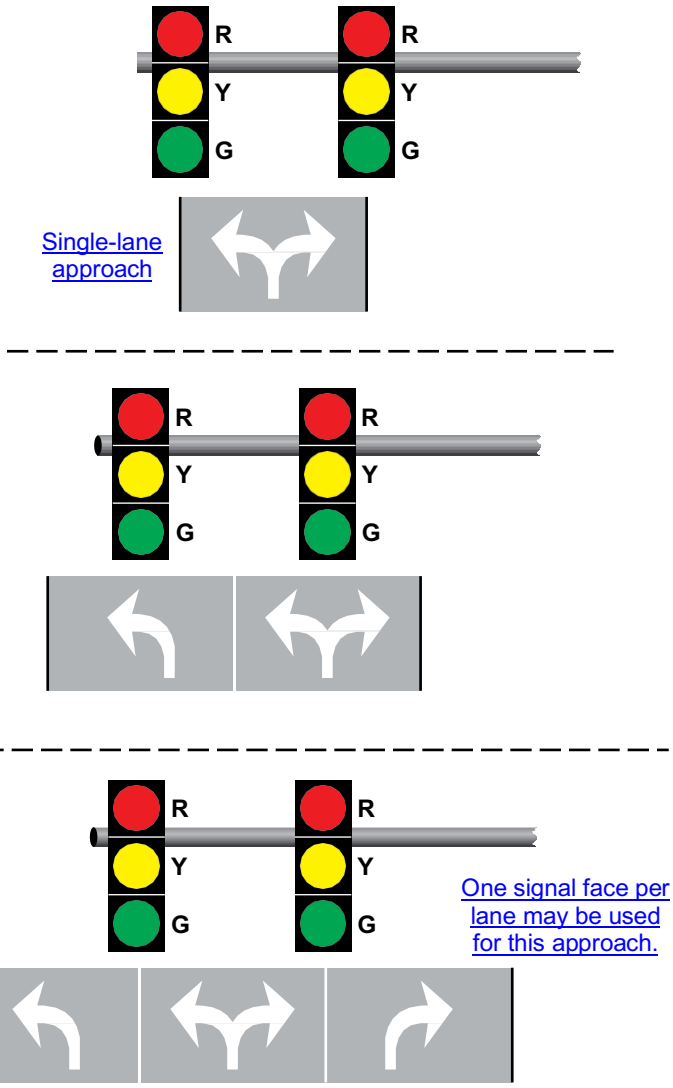


Notes:

1. Horizontally-aligned signal faces may also be used.
2. Shared signal faces may also be 5 sections in a vertical straight line instead of a cluster.
3. 4-section signal face(s) or bi-modal signal section(s) may also be used.

Figure 4F-15. Signal Indications for Approaches with a Combined Left-Turn/Right-Turn Lane and No Through Movement (Sheet 4 of 4)

D – Pedestrian or vehicular conflicts with both turn movements

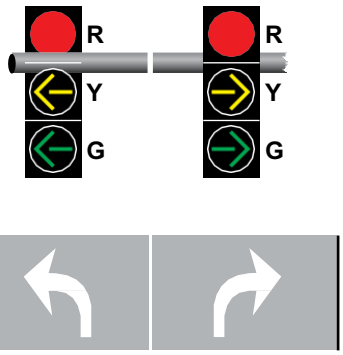


Note: Horizontally-aligned signal faces may also be used.

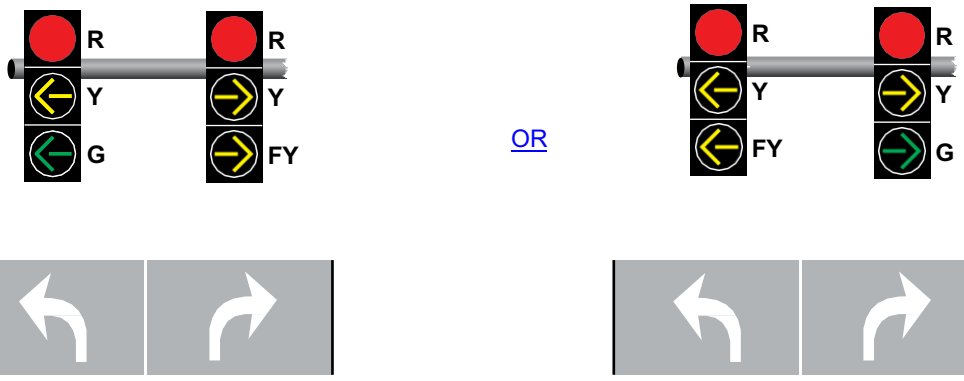
[Proposed changes to existing Figure 4F-15 are noted above. The proposal is to remove the right side of the existing graphics that included CIRCULAR indications and have the first three pages focused on ARROW indications only. A 4th page has been added to the graphic to reincorporate the CIRCULAR indications. Finally, since the proposal does not allow CIRCULAR indications if there is an opposing roadway, the 4-section signal face with CIRCULAR indications and a GREEN ARROW has also been removed.]

Figure 4F-15a. Signal Indications for Approach with a Single Left-Turn Lane and a Single Right-Turn Lane and No Through Movement (Sheet 1 of 2)

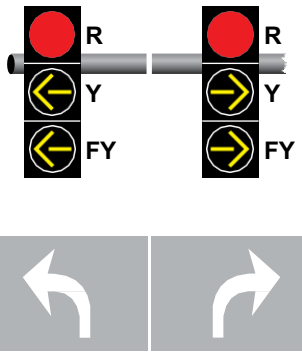
A – No conflicting vehicular or pedestrian conflicts



B - Pedestrian or vehicular conflict with one turn movement



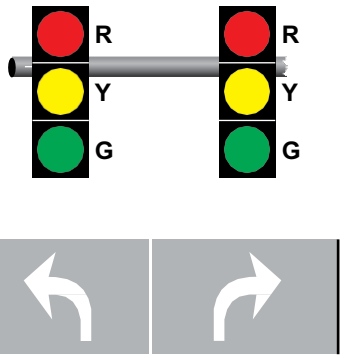
C - Pedestrian or vehicular conflicts with both turn movements



Notes:
1. Horizontally-aligned signal faces may also be used.
2. 4-section signal face(s) or bi-modal signal section(s) may also be used.

Figure 4F-15a. Signal Indications for Approach with a Single Left-Turn Lane and a Single Right-Turn Lane and No Through Movement (Sheet 2 of 2)

D – Optional Display for Approaches less than 35 MPH with or without conflicting pedestrian movements



Note: Horizontally-aligned signal faces may also be used.

[4F-15a is a proposed new graphic for the allowance of two signal heads per approach for a two-lane approach with one mandatory left-turn lane and one mandatory right-turn lane.]