



National Committee on Uniform Traffic Control Devices

13236 North 7th Street, Suite 4-259, Phoenix, Arizona 85022
Phone/Text: 231-4-NCUTCD (231-462-8823)
E-mail: secretary@ncutcd.org

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NCUTCD Approved Changes to the Manual on Uniform Traffic Control Devices

TECHNICAL COMMITTEE: Signals Technical Committee
ITEM NUMBER: 19B-SIG-03
TOPIC: Pedestrian Pushbutton Locations
ORIGIN OF REQUEST: Signals Technical Committee
AFFECTED SECTIONS OF MUTCD: 4I.06 Pedestrian Detectors

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DEVELOPMENT HISTORY

- Approved by Technical Committee: 06/19/2019
- Approved by NCUTCD Council: 01/10/2020

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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 by the FHWA through the federal rulemaking process.

SUMMARY

This proposal provides more specific guidance regarding the placement of pedestrian detection. In addition, the proposal creates a new standard regarding the amount of force required to press a pedestrian push button, which reflects a provision in the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

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DISCUSSION

Provisions for pedestrian detectors were reviewed with respect to updating guidelines to better reflect accessibility needs. There are ideal locations for the placement of pedestrian detectors to serve accessibility needs. However, field conditions do not always allow for the optimal placement. Accordingly, revised language is proposed which would clarify optimal placement of pedestrian detectors while allowing for defined flexibility and latitude, where necessary, to accommodate unique conditions for a given location. These revisions are shown in a revised Figure 4I-X, formerly Figure 4E-3.

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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.

PART 4. HIGHWAY TRAFFIC SIGNALS

CHAPTER ~~4E.08~~ 4I.06 ~~TRAFFIC CONTROL SIGNALS FOR FREEWAY ENTRANCE RAMP~~ PEDESTRIAN CONTROL FEATURES

Section ~~4E.08~~ 4I.06 Pedestrian Detectors [Renumbered from Section 4E.08 to 4I.06, as per 14A-STC-01, approved June 2014. When 4I.02 as per 14A-STC-01, approved June 2014 “Application of Pedestrian Signal Heads” was deleted per 18B-SIG-02 January 2019, 4I.06 was renumbered to 4I.05]

Option:

01 Pedestrian detectors may be pushbuttons or passive detection devices.

Support:

02 Passive detection devices register the presence of a pedestrian in a position indicative of a desire to cross, without requiring the pedestrian to push a button. Some passive detection devices are capable of tracking the progress of a pedestrian as the pedestrian crosses the roadway for the purpose of extending or shortening the duration of certain pedestrian timing intervals.

03 The provisions in this Section place pedestrian pushbuttons within easy reach of pedestrians who are intending to cross each crosswalk and make it obvious which pushbutton is associated with each crosswalk. These provisions also position pushbutton poles in optimal locations for installation of accessible pedestrian signals (see Sections ~~4E.09~~ 4J-01 through ~~4E.13~~ 4J-05). Information regarding reach ranges and other important accessibility needs [Approved January 2020, 19B-SIG-03 Added in address sponsor comments concerning the proposed Standard language, being deleted, referencing specific details to ADAAG rather than provide specific specifications in the MUTCD] can be found in the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)” (see Section ~~1A.11~~ 1A.04). The provisions in this Section place pedestrian pushbuttons where pedestrians using wheelchairs or other mobility aids can readily actuate the pushbutton and quickly reach the access ramp.

03a These provisions place the pedestrian pushbutton close to the crosswalk where a pedestrian is more likely to use the pushbutton. [Approved January 2020, 19B-SIG-03 Added to provide more clarity to the practitioner on how to best determine placement of pedestrian signals]

Guidance:

04 *If pedestrian pushbuttons are used, they should be capable of easy activation and conveniently located near each end of the crosswalks. Except as provided in Paragraphs 5 and 6, pedestrian pushbuttons should be located to meet all of the following criteria (see ~~Figure 4E-3~~ Figure 4I-X):*

- A. *Unobstructed and adjacent to a level all-weather surface to provide access from a wheelchair;*
- B. *Where there is an all-weather surface, a wheelchair accessible route from the pushbutton to the ramp;*

C. ~~Between the edge of the crosswalk line (extended) farthest from the center of the intersection and the side of a curb ramp (if present), but not greater than 5 feet from said crosswalk line;~~

[Approved January 2020, 19B-SIG-03 Removed because it is often better for blind pedestrians to

stand at the edge of the access ramp farthest from the intersection nearer the tangent section of the curb so as to provide clearer delineation of the edge of the roadway. The removed language does not allow this.]

C. On the side of the curb ramp which is farthest from the center of the intersection; [Approved January 2020, 19B-SIG-03 Added language attempts to provide more uniformity as well as greater separation between buttons on a corner]

D. Not greater than 10 feet from the edge of the associated curb ramp which is farthest from the center of the intersection; [Approved January 2020, 19B-SIG-03 Added language clarifies that the button should not be greater than 10 feet from the ramp]

E. Not greater than 5 feet from the outside edge of the marked crosswalk farthest from the center of the intersection; [Approved January 2020, 19B-SIG-03 Added language clarifies how close to the ramp the buttons should be placed]

F. Not farther from the crosswalk than the stop line is, if present;

G. Between 1.5 and 6 feet from the edge of the curb, shoulder, or pavement;

H. With the face of the pushbutton parallel to the crosswalk to be used; and

I. At a mounting height of approximately 3.5 feet, but no more than 4 feet, above the sidewalk.

J. Allow a minimum 4-foot continuous clear width for a pedestrian access route. [Approved January 2020, 19B-SIG-03 Added language ensures there is enough space for wheelchairs to maneuver.]

K. Outside the sloped area of the curb ramp, if present. [Approved January 2020, 19B-SIG-03 Changed to reflect ITE comment and changed again in Council]

05 *Where there are physical constraints that make it impractical to place the pedestrian pushbutton adjacent to a level all-weather surface, the surface should be as level as feasible.*

06 *Where there are physical constraints that make it impractical to place the pedestrian pushbutton between 1.5 and 6 feet from the edge of the curb, shoulder, or pavement, it should not be farther than 10 feet from the edge of curb, shoulder, or pavement.*

07 *Except as provided in Paragraph 8, where two pedestrian pushbuttons are provided on the same corner of a signalized location, the pushbuttons should be separated by a distance of at least 10 feet.*

Option:

08 *Where there are physical constraints on a particular corner that make it impractical to provide the 10-foot separation between the two pedestrian pushbuttons, ~~the pushbuttons may be placed closer together~~ or when an exclusive pedestrian phase is used at an intersection, and the pedestrian signals controlling the crosswalks on a given corner of the intersection both operate together such that the "Walk" indication is always simultaneous for both crosswalks, the pushbuttons may be placed closer together or on the same pole. [Revised June 2013, 14A-STC-01]*

Support:

09 Figure 4E-4 shows typical pedestrian pushbutton locations for a variety of situations.

Standard:

10 **Signs (see Section 2B.52) shall be mounted adjacent to or integral with pedestrian pushbuttons, explaining their purpose and use.**

Option:

11 At certain locations, a supplemental sign in a more visible location may be used to call attention to the pedestrian pushbutton.

Standard:

12 **The positioning of pedestrian pushbuttons and the legends on the pedestrian pushbutton signs shall clearly indicate which crosswalk signal is actuated by each pedestrian pushbutton.**

13 **If the pedestrian clearance time is sufficient only to cross from the curb or shoulder to a median of sufficient width for pedestrians to wait and the signals are pedestrian actuated, an additional pedestrian detector shall be provided in the median.**

131 *Guidance:*
132 14 *The use of additional pedestrian detectors on islands or medians where a pedestrian might become*
133 *stranded should be considered.*
134 15 *If used, special purpose pushbuttons (to be operated only by authorized persons) should include a*
135 *housing capable of being locked to prevent access by the general public and do not need an*
136 *instructional sign.*

137 **Standard:**

138 16 **If used, a pilot light or other means of indication installed with a pedestrian pushbutton shall**
139 **not be illuminated until actuation. Once it is actuated, the pilot light shall remain illuminated**
140 **until the pedestrian's green or WALKING PERSON (symbolizing WALK) signal indication is**
141 **displayed.**

142 ~~17 **If a pilot light is used at an accessible pedestrian signal location (see Sections 4E.09 through**~~
143 ~~**4E.13), each actuation shall be accompanied by the speech message "wait."**~~

144 [Revised June 2013, 14A-STC-01 Repeat of Paragraph 23 in Section 4E.11.]

145 Option:

146 ~~17~~ 18 At signalized locations with a demonstrated need and subject to equipment capabilities, pedestrians
147 with special needs may be provided with additional crossing time by means of an extended pushbutton
148 press.

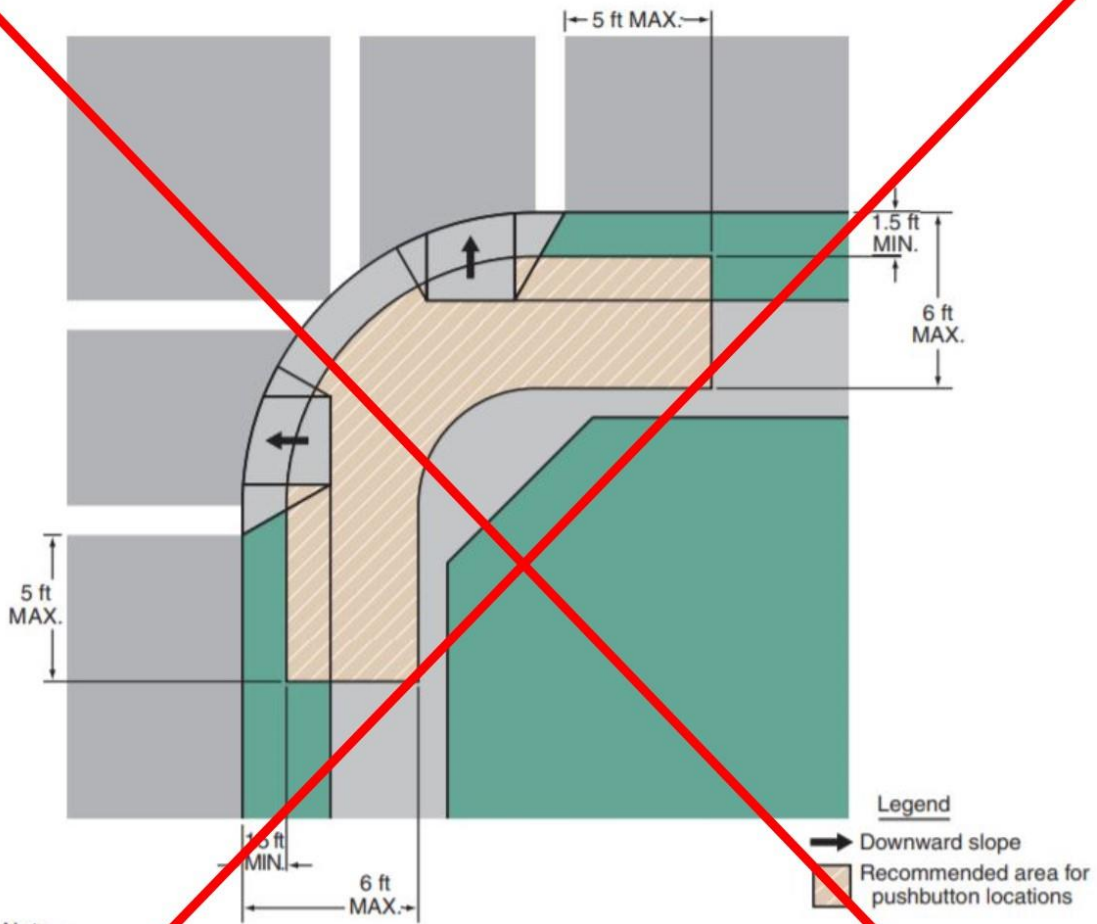
149 **Standard:**

150 ~~18~~ 19 **If additional crossing time is provided by means of an extended pushbutton press, a PUSH**
151 **BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME (R10-32P) plaque (see Figure 2B-**
152 **26) shall be mounted adjacent to or integral with the pedestrian pushbutton.**

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[Figure 4E-3 to be replaced with Figure 4I-X]

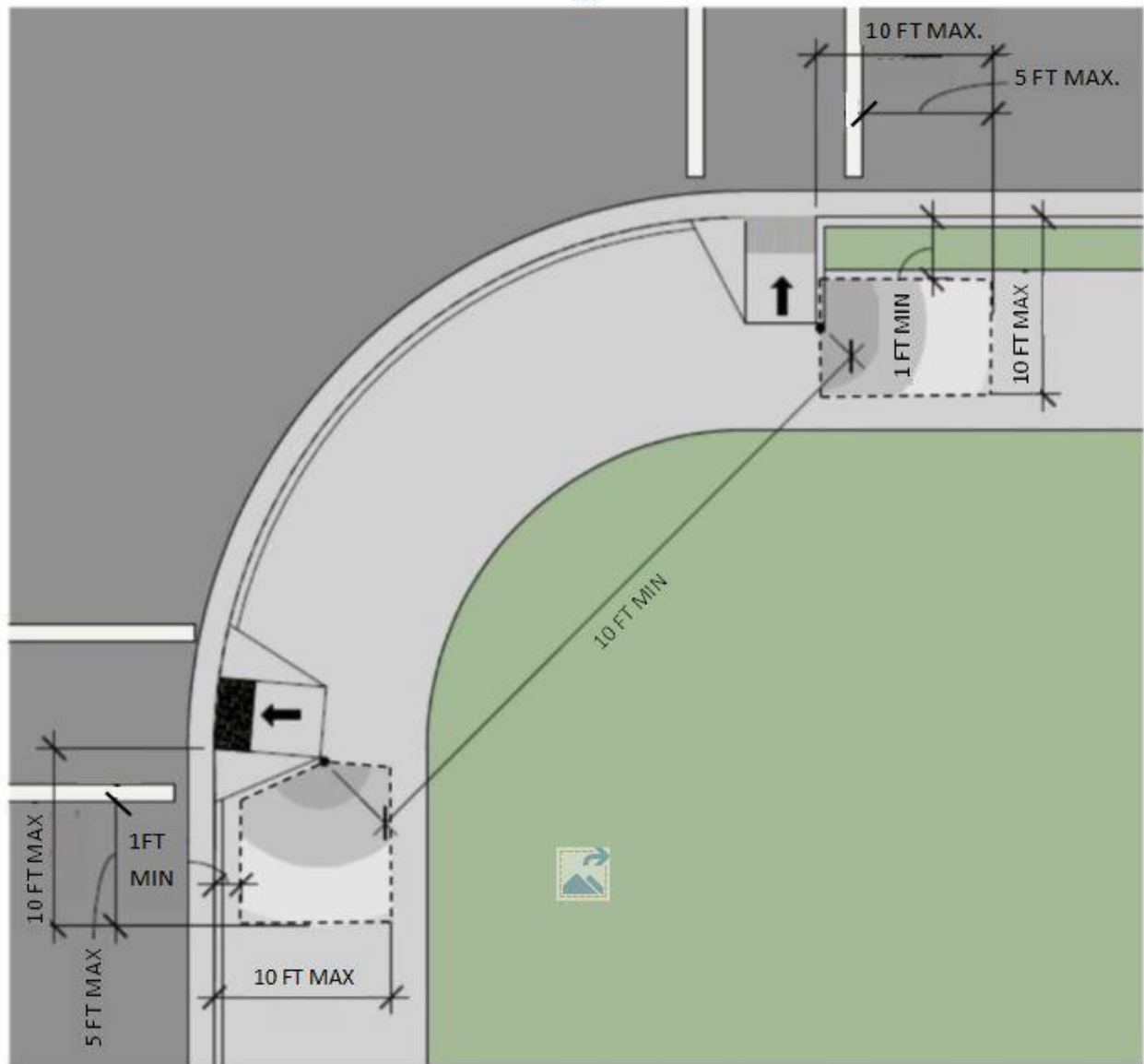
Figure 4E-3. Pushbutton Location Area



Notes:

1. Where there are constraints that make it impractical to place the pedestrian pushbutton between 1.5 feet and 6 feet from the edge of the curb, shoulder, or pavement, it should not be further than 1.5 feet from the edge of curb, shoulder, or pavement.
2. Two pedestrian pushbuttons on a corner should be separated by 10 feet.
3. This figure is not drawn to scale.
4. Figure 4E-4 shows typical pushbutton locations.

Figure 4I-X. Pushbutton Location Area



NOTES:

1. [No greater than 5 feet from the outside edge of the marked crosswalk farthest from the intersection.](#)
2. [Not farther from the crosswalk than the stop line, if present.](#)
3. Any maximum (MAX) or minimum (MIN) dimensions shown are based on Guidance Statements.
4. Two pedestrian pushbuttons on a corner should be separated by [a minimum of 10 feet](#). The 10-foot dimension shown in this figure is in reference to the [placement of the pushbuttons within their respective](#) areas.
5. Figure [4I-4](#) ~~4E-4~~ shows typical pushbutton locations.

