Wisconsin Manual on Uniform Traffic Control Devices

11th Edition Overview

Part 8 – Traffic Control for Railroad and Light Rail Transit Grade Crossings

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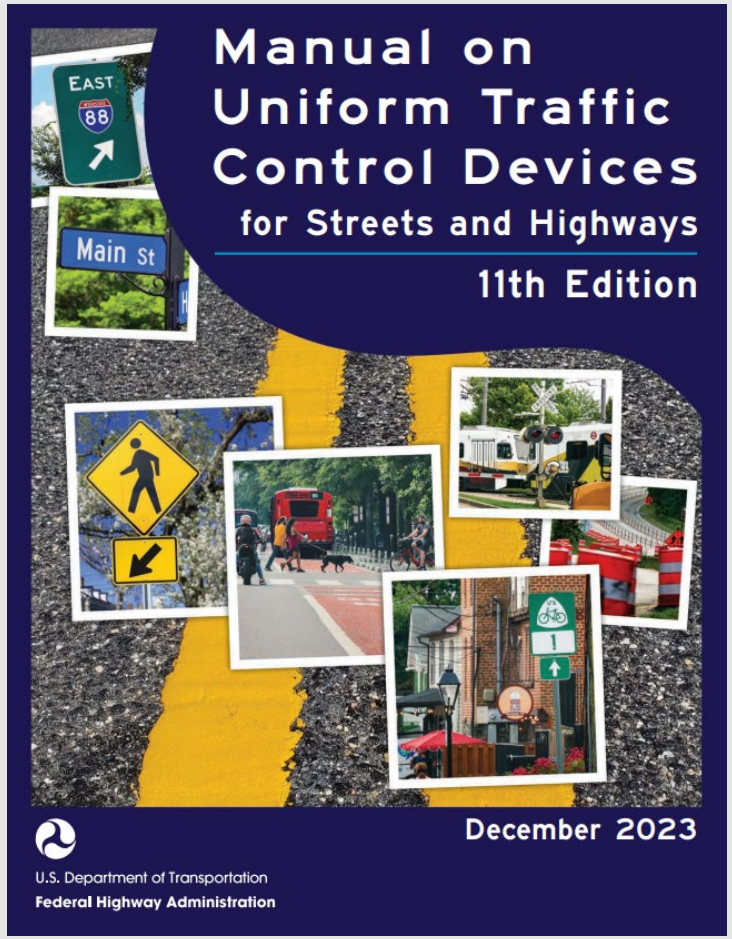
May 13th, 2026

Manual on Uniform Traffic Control Devices

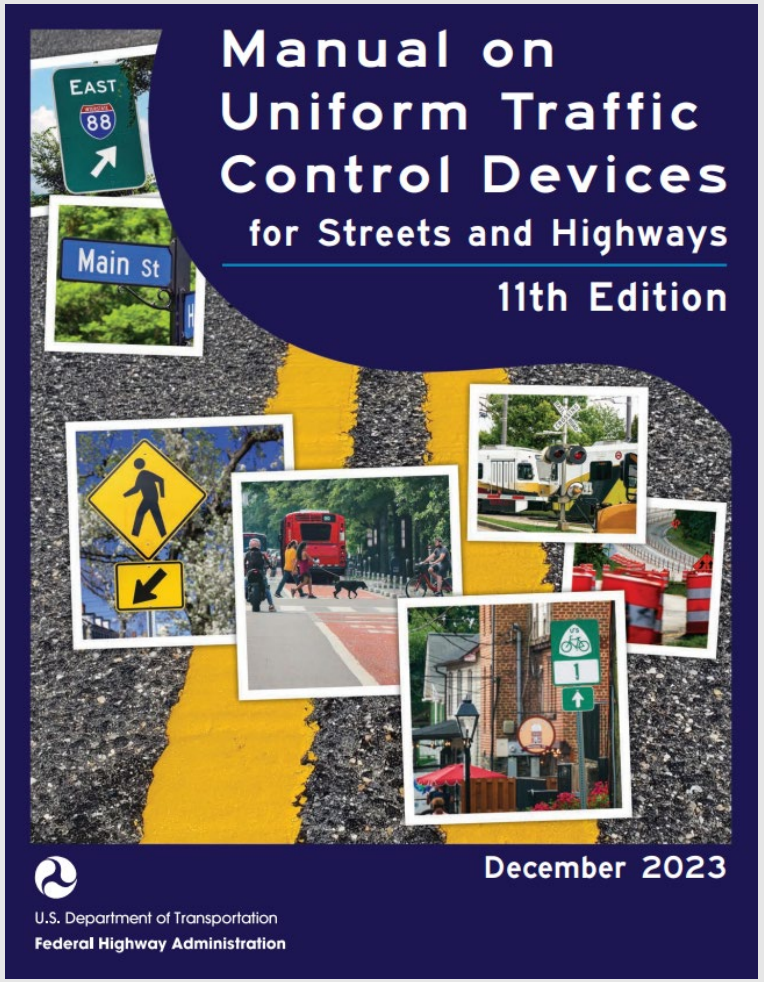
MUTCD \'em-yü-ˌtē-sē-dē\[1] *n* (ca. 1935): the national standard for traffic control devices on all roads open to public travel in the United States.



- Contains Standards and Guidelines for Traffic Control Devices
- Required for all Roadways Open to Public Travel – U.S. Code of Federal Regulations
- Essential to have nationwide consistency in traffic control standards

11th Edition of the MUTCD and WMUTCD

- 11th Edition released **December 2023**
- Became effective on **January 18, 2024**
- State Statute 84.02(4): Wisconsin shall adopt a state manual
- State Statute 349.065: Local Units of Government must follow the manual
- 23 CFR 655: states have 2 years from effective date
- WisDOT chooses to publish the WMUTCD
- WMUTCD approved/published **February 24, 2026**



Development of the WMUTCD

Why Wisconsin Develops a State MUTCD

* State Supplements and State MUTCDs must be in **Substantial Conformance** w/ the National MUTCD

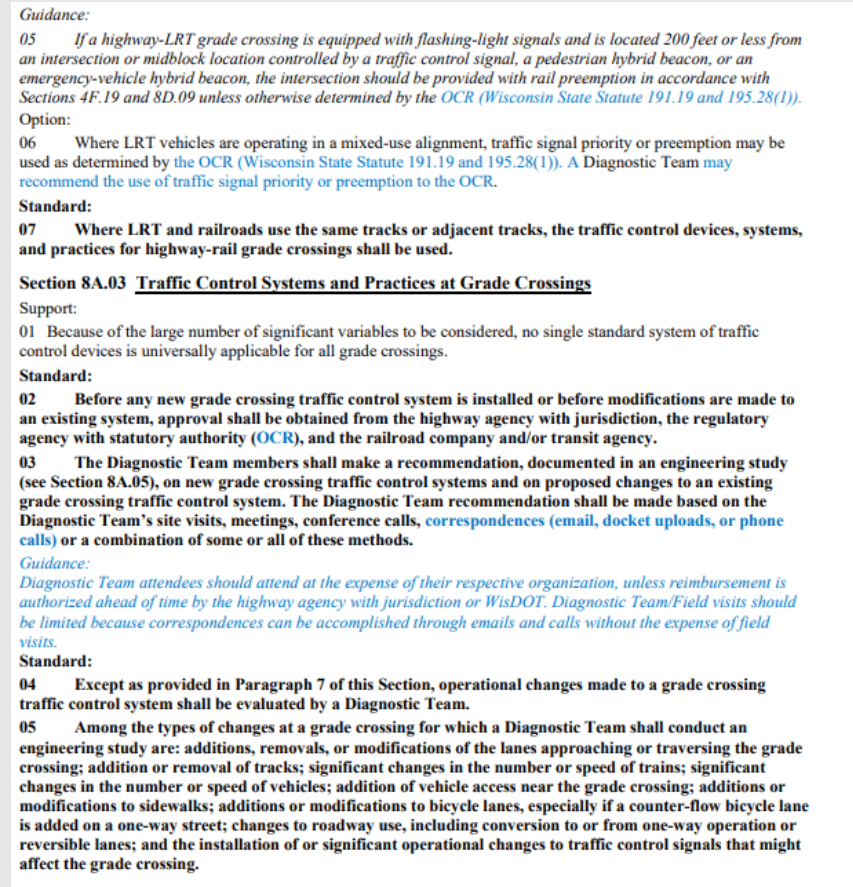
- Combines State Specific Standards, Guidelines and Statutory references with the Federal MUTCD language.
- Provide additional supporting information.
- Utilizing two separate documents (MUTCD and Supplement) is cumbersome for the practitioner.
- WisDOT officially combined the supplement and 2009 MUTCD in 2017.

Manual on Uniform Traffic Control Devices

Definitions of Headings

- **Standard:** required, mandatory, or specifically prohibited practice; “shall”; **bold text**
- **Guidance:** recommended practice, deviations allowed; “should”; *italicized*
- **Option:** statement of practice with no requirement or recommendation; “may”
- **Support:** informational statement, no degree of mandate

*WMUTCD-specific text is in blue



Guidance:

05 If a highway-LRT grade crossing is equipped with flashing-light signals and is located 200 feet or less from an intersection or midblock location controlled by a traffic control signal, a pedestrian hybrid beacon, or an emergency-vehicle hybrid beacon, the intersection should be provided with rail preemption in accordance with Sections 4F.19 and 8D.09 unless otherwise determined by the OCR (Wisconsin State Statute 191.19 and 195.28(1)).

Option:

06 Where LRT vehicles are operating in a mixed-use alignment, traffic signal priority or preemption may be used as determined by the OCR (Wisconsin State Statute 191.19 and 195.28(1)). A Diagnostic Team may recommend the use of traffic signal priority or preemption to the OCR.

Standard:

07 Where LRT and railroads use the same tracks or adjacent tracks, the traffic control devices, systems, and practices for highway-rail grade crossings shall be used.

Section 8A.03 Traffic Control Systems and Practices at Grade Crossings

Support:

01 Because of the large number of significant variables to be considered, no single standard system of traffic control devices is universally applicable for all grade crossings.

Standard:

02 Before any new grade crossing traffic control system is installed or before modifications are made to an existing system, approval shall be obtained from the highway agency with jurisdiction, the regulatory agency with statutory authority (OCR), and the railroad company and/or transit agency.

03 The Diagnostic Team members shall make a recommendation, documented in an engineering study (see Section 8A.05), on new grade crossing traffic control systems and on proposed changes to an existing grade crossing traffic control system. The Diagnostic Team recommendation shall be made based on the Diagnostic Team’s site visits, meetings, conference calls, correspondences (email, docket uploads, or phone calls) or a combination of some or all of these methods.

Guidance:

Diagnostic Team attendees should attend at the expense of their respective organization, unless reimbursement is authorized ahead of time by the highway agency with jurisdiction or WisDOT. Diagnostic Team/Field visits should be limited because correspondences can be accomplished through emails and calls without the expense of field visits.

Standard:

04 Except as provided in Paragraph 7 of this Section, operational changes made to a grade crossing traffic control system shall be evaluated by a Diagnostic Team.

05 Among the types of changes at a grade crossing for which a Diagnostic Team shall conduct an engineering study are: additions, removals, or modifications of the lanes approaching or traversing the grade crossing; addition or removal of tracks; significant changes in the number or speed of trains; significant changes in the number or speed of vehicles; addition of vehicle access near the grade crossing; additions or modifications to sidewalks; additions or modifications to bicycle lanes, especially if a counter-flow bicycle lane is added on a one-way street; changes to roadway use, including conversion to or from one-way operation or reversible lanes; and the installation of or significant operational changes to traffic control signals that might affect the grade crossing.

Part 8: Traffic Control for Railroad and Light Rail Transit Grade Crossings

Five Chapters

- Chapter 8A: General
- Chapter 8B: Signs
- Chapter 8C: Markings
- Chapter 8D: Flashing-Light Signals, Automatic Gates, and Traffic Control Signals
- Chapter 8E: Pathway and Sidewalk Grade Crossings

- This presentation contains summaries of changes, some examples of changes, some reasons for changes
- In WMUTCD Wisconsin-specific text is blue; in this presentation red

8A.01 Introduction

- New support: grade crossings, traffic control devices, and grade crossing warning systems are unique.
  - Highway authority, regulatory agency (OCR), and railroad company jointly involved in development of engineering judgment or performance of engineering study.
  - Joint process is accomplished through the efforts of the Diagnostic Team.
  - Meant to encourage coordination, cooperation between appropriate knowledgeable parties of interest.

8A.02 Highway-LRT Grade Crossings

- Many changes in new WMUTCD regarding Light Rail Transit grade crossings in 8A.02 and other places
- This presentation will not highlight those

8A.03 Traffic Control Systems and Practices at Grade Crossings

- New standard paragraphs to require that Diagnostic team shall reach a determination through consensus, documented in an engineering study on new grade crossing traffic control systems and on proposed changes to existing systems. OCR is the regulatory agency with statutory authority.
  - There are a large number of variables to be considered
  - No single system of traffic control devices is universally applicable for all grade crossings
  - Diagnostic team's recommendation shall be made based on site visits, meetings, conference calls, correspondences (e-mail, docket uploads, or phone calls) or a combination of the above

Guidance: Attendees should attend at the expense of their respective organization unless reimbursement is authorized ahead of time by highway agency or WisDOT

8A.05 Engineering Studies at Grade Crossings

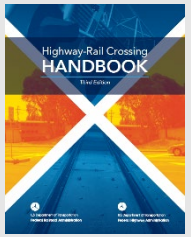
- New section
- Standard: Regulatory agency with statutory authority (OCR) shall approve the grade crossing traffic control system
- Support elaborating on OCR's jurisdiction
- Guidance statement recommending factors to be considered in the determining which traffic control devices are appropriate to install at a grade crossing

8A.06 Uniform Provisions

- New Guidance regarding raised median islands installed supplemental to an automatic gate to discourage road users from driving around a lowered gate
  - When determining how far to extend the island, consider length of vehicle queues
- New Guidance discouraging use of two-way center left turn lanes in immediate vicinity of grade crossings and recommending other treatments.
  - Should discontinue TWLTL in immediate vicinity of grade crossing
  - Install median islands, designate one direction only, or install yellow diagonal markings,

8A.07 Minimum Track Clearance Distance and Clear Storage Distance

- New Section, all Support, to more fully describe the applications of the MTCD
- All uses of the term within other sections of Part 8 include cross-reference to 8A.07
- Reference to illustration in Highway-Rail Crossing Handbook



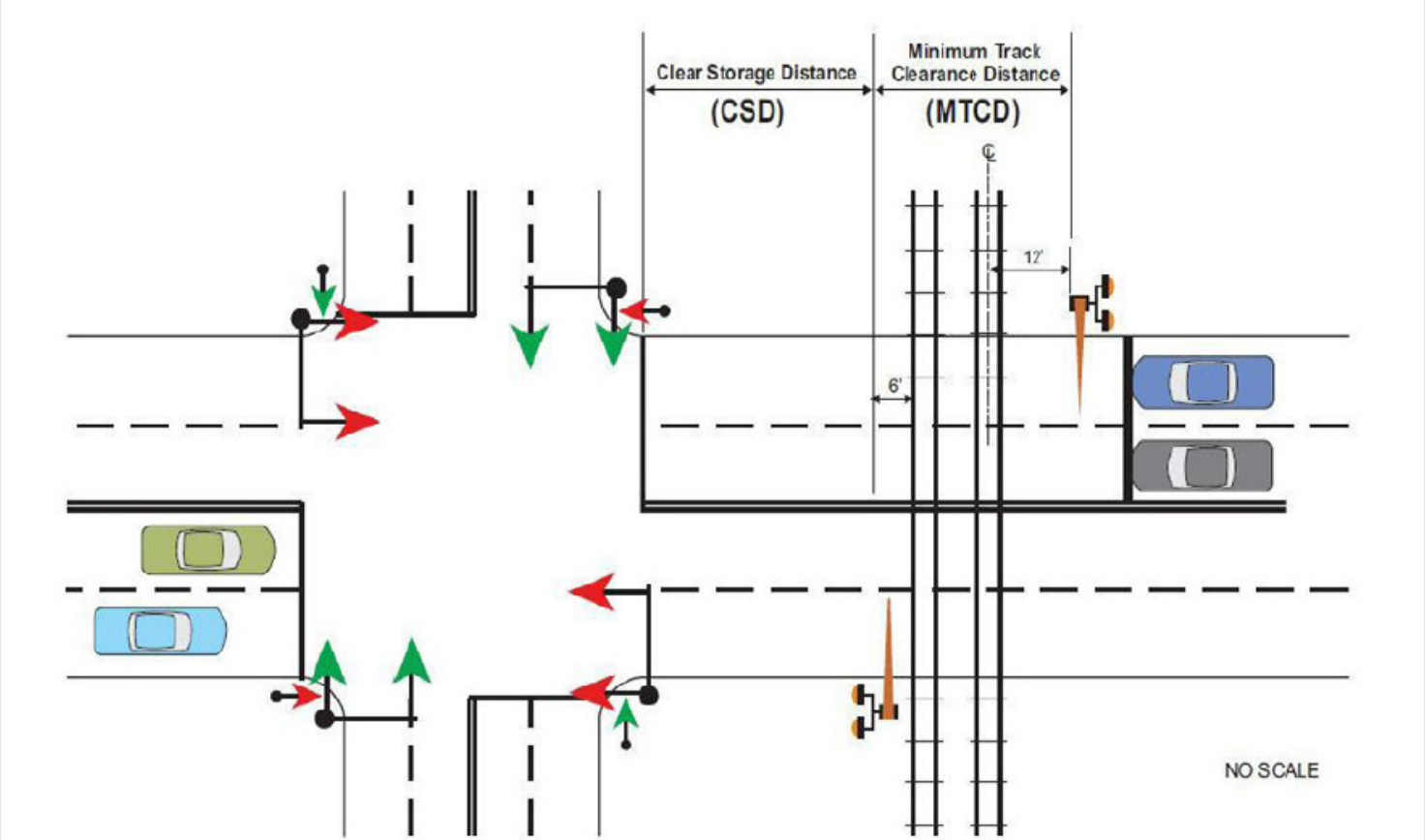


Figure 38. Clear Storage and Minimum Track Clearance Distance

8A.08 Adjacent Grade Crossings

- New section including Support and Guidance
- Emphasizes importance of treating closely spaced grade crossings properly, which sometimes result from separate railroads or a railroad and LRT alignment
  - Crossings within 200', consider possibility of rail traffic arriving while rail traffic is already occupying crossing
  - <100' apart, treat as one individual grade crossing
  - 100'-200', consider additional signage for long distance to cross the tracks
  - 100'-200' and active crossings: provide additional time to clear
  - >200' apart, treat as individual grade crossings

8A.09 Grade Crossing Elimination

- New Option: if a crossing appears to be redundant or unnecessary, may conduct an engineering study to determine costs and benefits of eliminating a crossing
- New Guidance recommending the study and subsequent steps for eliminating the grade crossing if determined appropriate
- Deleted Guidance about eliminating grade crossings that cannot be justified
- Also deleted Guidance that seemed to recommend that engineering studies regarding potential grade crossing elimination should be conducted for every grade crossing
- Guidance: TRACKS OUT OF SERVICE sign should be temporarily installed until the tracks are removed or covered.

R8-9

8A.13 Temporary Traffic Control Zones

- New Guidance paragraph recommending preparation of a traffic control plan when traffic is detoured over an existing grade crossing with passive warning devices.

8B.02 Size of Grade Crossing Signs

Table 8B-1. Grade Crossing Sign and Plaque Minimum Sizes (Sheet 1 of 2)

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Minimum	Oversized
			Single Lane	Multi-Lane			
Stop	R1-1	8B.04, 8B.05	30 x 30	36 x 36	36 x 36	–	48 x 48
Yield	R1-2	8B.04, 8B.05	30 x 30 x 30	36 x 36 x 36	36 x 36 x 36	–	48 x 48 x 48
No Right Turn - Train (symbol)	R3-1a	8D.10	24 x 30	30 x 36	–	–	–
No Left Turn - Train (symbol)	R3-2a	8D.10	24 x 30	30 x 36	–	–	–
Do Not Stop on Tracks	R8-8	8B.07	24 x 30	24 x 30	36 x 48	–	36 x 48

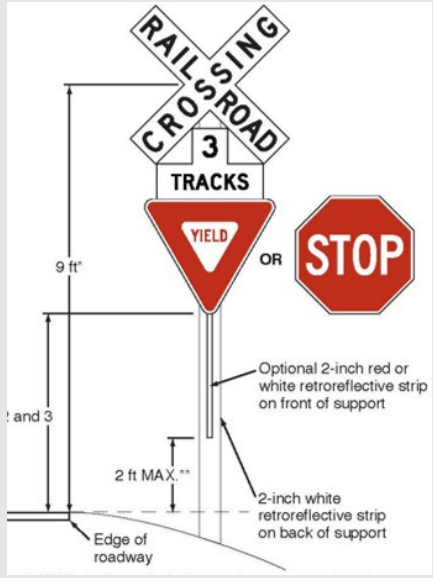
- Standard: added “minimum” to clarify that sign sizes in Table 8B-1 are minimum sizes

8B.03 Grade Crossing (Crossbuck) Sign (R15-1) and Number of Tracks Plaque (R15-2P) at Active and Passive Grade Crossings

- Option upgraded to Standard: Require the Number of Tracks Plaque below the Crossbucks sign where there are 2 or more tracks at a crossing (used to apply only to active)
  - Increased safety because of complexity of multi-track crossings
- Standard revised: retroreflective white material required on back of blades of the back of Crossbuck sign **only at passive crossings:**
- New option: can still use the material at active crossings
- Guidance: crossbuck sign should be located 15’ from nearest rail measured parallel to road and 10’ min from near rail measured perpendicular to rail (consistent w/Grade Crossing Handbook)
- Guidance: recommended mounting height to center of crossbuck is 9’

8B.04 Crossbuck Assemblies with YIELD or STOP Signs at Passive Grade Crossings

- Guidance recommending use of STOP sign at X-buck assembly instead of at hwy-hwy intersection when clear storage distance not adequate
- Standard: when traffic signal but no interconnect, shall not install STOP sign
- Standard: YIELD and STOP sign mounting heights at least 5 feet rural, 7 feet when parking or pedestrians
- Support: STOP sign requires authorization (OCR or local authority) before being installed at a crossing, including Wis Stat references
- Guidance: if STOP sign used, should be on same support as crossbuck sign
- Standard: If YIELD sign is installed, it shall be on same support as crossbuck sign per Wis Stat 192.29 5(b)
- Support: STOP signs furnished, installed, maintained by road authority. YIELD signs furnished, installed, maintained by railroad



8B.07 DO NOT STOP ON TRACKS Sign (R8-8)

- Guidance and support simplified
- Guidance: DO NOT STOP ON TRACKS sign should be used at any locations where vehicle queues are likely to extend onto the tracks.
- Support added to list the types of conditions that could result in vehicles queuing onto the tracks. (a pre-signal; a downstream stop/yield sign or roundabout)

8B.08 TRACKS OUT OF SERVICE Sign (R8-9)

- Standard: Advance warning signs, low ground clearance, skewed crossing signs **shall** be left in place after tracks are taken out of service, until physical condition is no longer present
- All new Standard: TRACKS OUT OF SERVICE plaque shall be used below the Advance Warning Sign when the TRACKS OUT OF SERVICE SIGN IS USED
- New Standard: Both TRACKS OUT OF SERVICE and Emergency Notification System sign shall be removed when tracks have been removed or paved over.

R8-9

W10-52P

8B.11 EXEMPT Grade Crossing Plaques (R15-3P and W10-1aP)

- Option upgraded to Standard: Where authorized by OCR, white EXEMPT plaque required below Crossbuck sign and yellow EXEMPT plaque required below Advance Warning Sign
- Support: reference to Wis Stat 346.45(3)(b) for vehicles exempt from stopping requirement at traffic signals
- Wis Stat 195.285: OCR has authority over the use of EXEMPT plaques

8B.16 Low Ground Clearance Grade Crossing Sign (W10-5)

- New Option and Support statements to address warning, selective exclusion, and detour signing for additional vehicle types and combinations that may encounter hang-up situations at low ground clearance crossings
  - Auxiliary plaques such as AHEAD, NEXT CROSSING, or USE NEXT CROSSING should be placed in advance at the nearest intersecting highway to permit a U-Turn
- Federal Register requirement: an inventory of crossings with low ground clearance concerns can be useful in tracking locations. Specific conditions, known incidents, or anecdotal evidence of vehicle hangups can be used to identify crossings with concerns

Table 1B-1. Target Compliance Dates Established by the FHWA

TMUTCD Section(s)	Subject Area	Specific Provision	Compliance Date
8B.16	High-Profile Grade Crossings	Paragraphs 3 and 7 – Recommended installation of Low Ground Clearance and/or Vehicle Exclusion signs and detour signs for vehicles with low ground clearances that might hang up on high-profile grade crossings at locations with a known history	January 18, 2029

8B.18 Another Train Coming Sign (W10-16)

- New section containing Support, Guidance, and Option to inform of the possibility of another train coming
- Option: Train-activated blank-out sign may be used at multi-track crossings

W10-16
Activated
Blank-Out

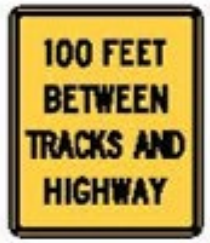
8B.20 NO TRAIN HORN Sign or Plaque (W10-9 and W10-9P)

- New Standard: If W10-9 sign is used, it shall be mounted on a separate post from the Advance Warning Sign
  - Added to provide clarity where to mount W10-9
  - (Wisconsin has 92 FRA-designated quiet zones)

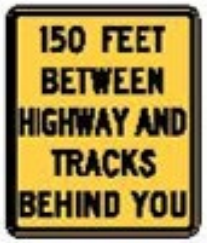
8B.21 Storage Space Signs (W10-11, W10-11a, and W10-11b)

- New Standard paragraph that clarifies that the Storage Space sign shall not be used as a replacement for the Advanced Warning sign and that the signs shall be mounted on separate posts.
- Why? Because AWS should have priority over the Storage Space Sign.

W10-11



W10-11a



W10-11b

8B.22 Skewed Crossing Sign (W10-12)

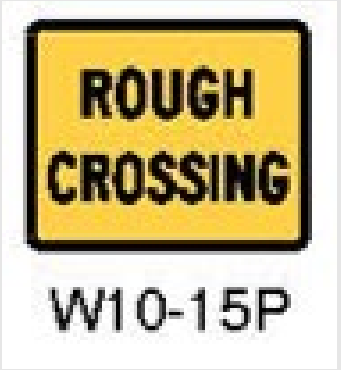
- New Guidance: Skewed Crossing sign should be used if the smallest angle between the crossing and the roadway is 45 degrees or less.

8B.23 NO GATES OR LIGHTS Plaque (W10-13P)

- Removed from WMUTCD as an Option
  - For consistency; not going to install at all passive crossings.

8B.25 ROUGH CROSSING Plaque (W10-15P)

- Already existed as an option under a different section
- Just has new, dedicated section
- May be mounted below Advance Warning sign



8B.27 Emergency Notification System Sign (I13-1)

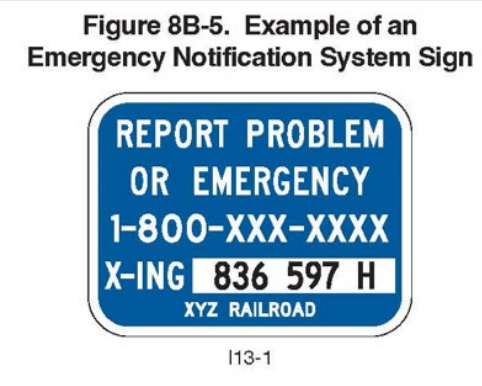


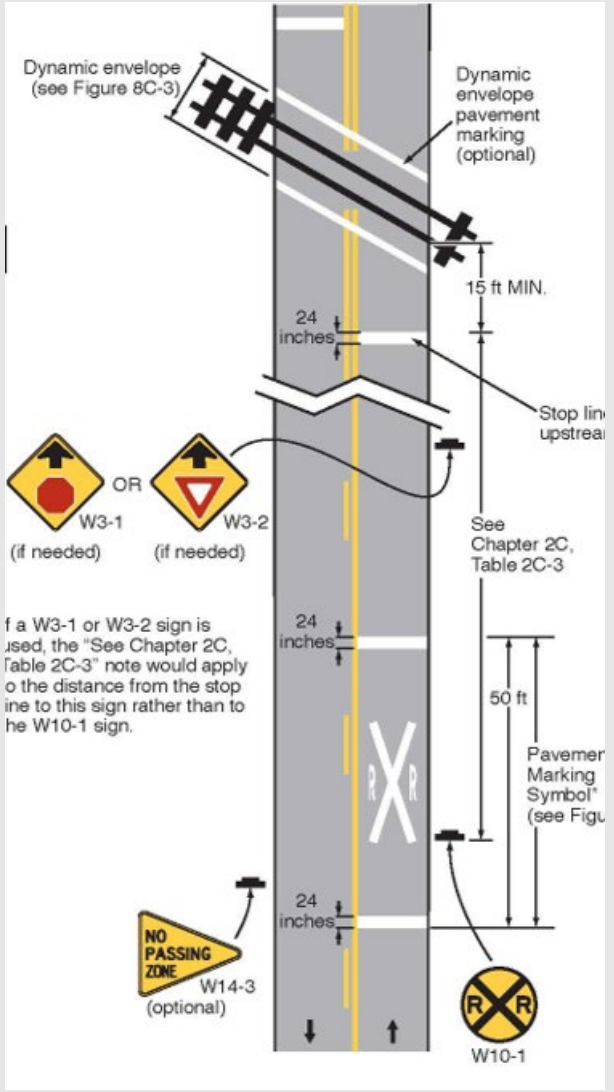
Figure 8B-5. Example of an Emergency Notification System Sign

I13-1

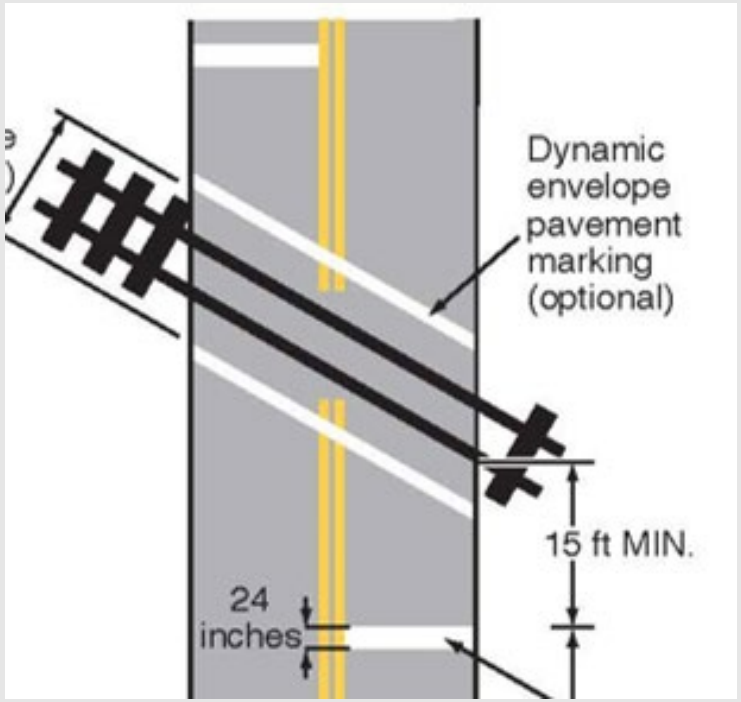
- Standard paragraph with minimum width and height requirements (9”x12”), as well as number and letter heights (1”)
- Retroreflective requirement upgraded from Guidance to Standard
- Option: inventory number may be black text on white
- Guidance recommending ENS signs be attached to Crossbuck Assemblies or grade crossing signal masts on the right-hand side of each roadway approach
- Option to allow mounting on a separate post. Where this is done, size may be increased
- Option to allow additional ENS signs to be installed
- Option to allow “NOTICE” as a header panel (black on yellow)

8C.02 Grade Crossing Pavement Markings

- New MUTCD now provides separate chapters for signs (8B) and pavement markings (8C)
- Already required grade crossing pavement markings in each approach to a crossing where signals or automatic gates and where speed is 40 mph or greater
- New Standard: if grade crossing pavement markings are used on multi-lane approach, identical markings shall be placed in each approach lane
  - If traffic is stopped in an adjacent lane, road users will be able to see the full message
- New support: if supplemental pavement marking symbols placed between the Advance Warning sign and the grade crossing, downstream transverse line should be at least 50 feet upstream of the stop or yield line at the grade crossing



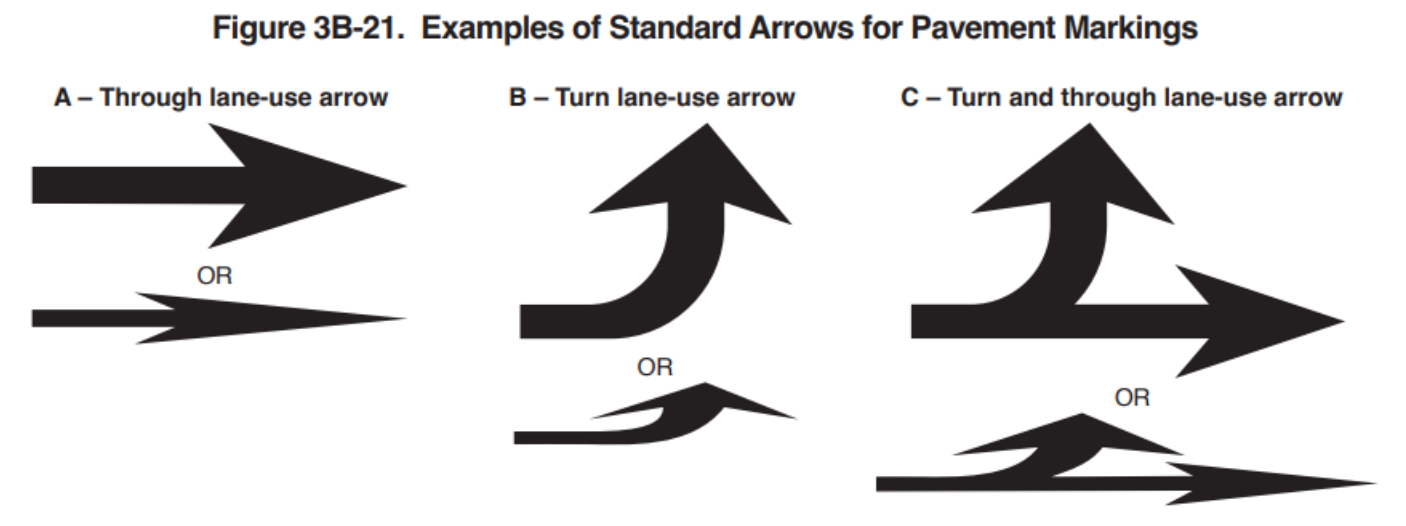
8C.03 Stop and Yield Lines



- Upgrade to Standard: on passive, where a Stop sign is installed, shall install a stop line
- Modified Guidance and Standard statements to clarify the location of stop lines where active traffic control devices are used.
- At passive crossing, regarding stop or yield line: added "…and no closer than… 10 feet perpendicular to the rail and no closer than the crossbuck assembly."
  - (to ensure railroad clearance requirements are met)

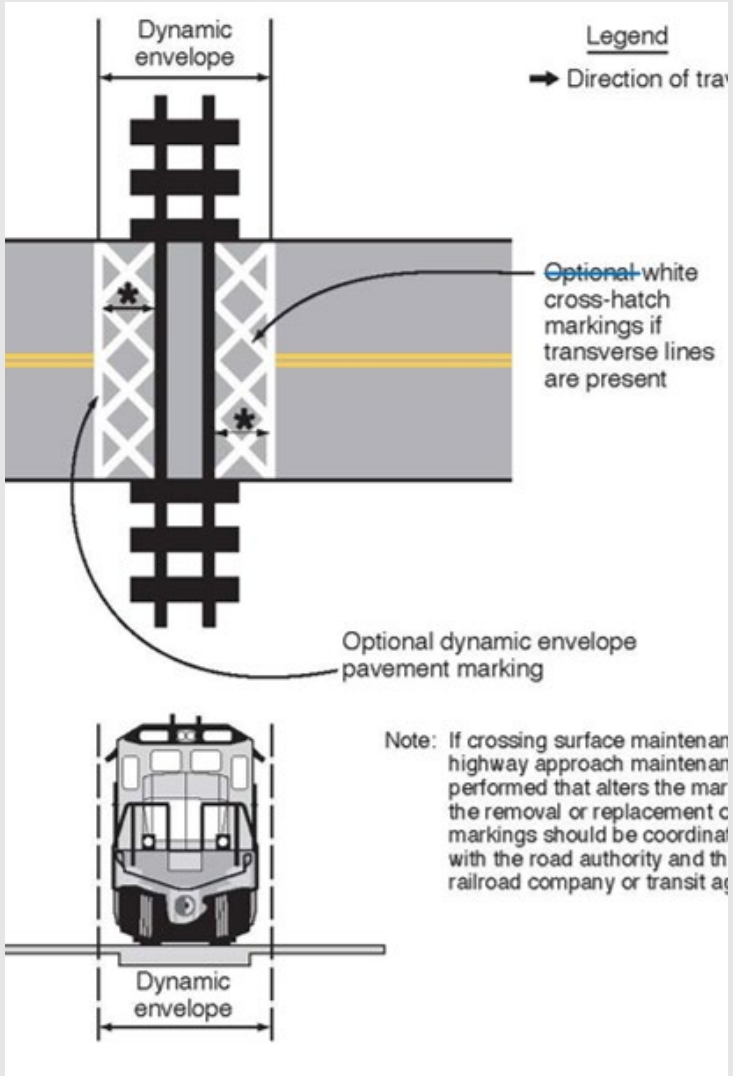
8C.04 Lane-Use Arrow Markings

- New Section to address crashes where roadway user made improper turn onto tracks
- Standard: lane use arrow markings shall not be placed between the stop line and the track(s).



8C.06 Dynamic Envelope and Do Not Block Pavement Markings

- Title added “and Do Not Block” for consistency
- Standard: if used, pavement markings to indicate the dynamic envelope shall comply with Part 3 and be a solid white line, 4-6 inches in width
- Standard: if used, white cross-hatching lines shall be placed within the dynamic envelope as supplement to the solid white lines
- Option: contrasting pavement color and/or contrasting pavement texture may be used alone and/or in combination with pavement markings



8D.02 Flashing-Light Signals

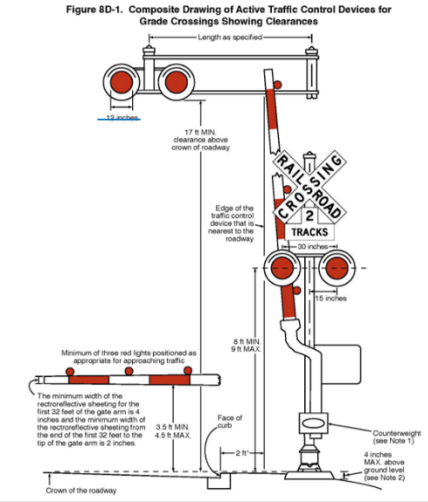
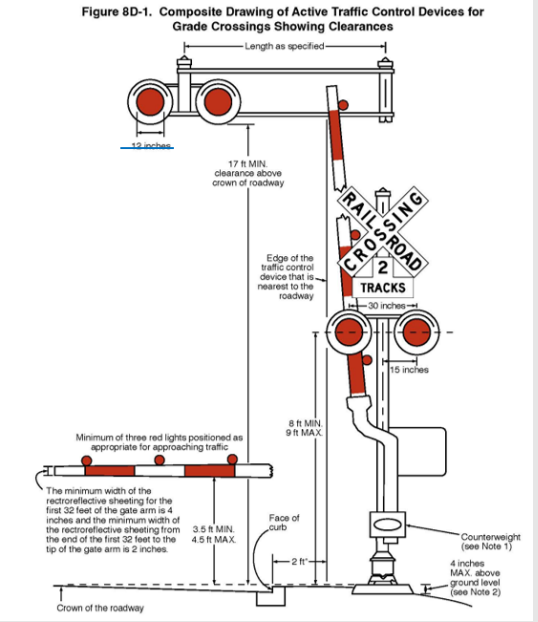


Figure 8D-1

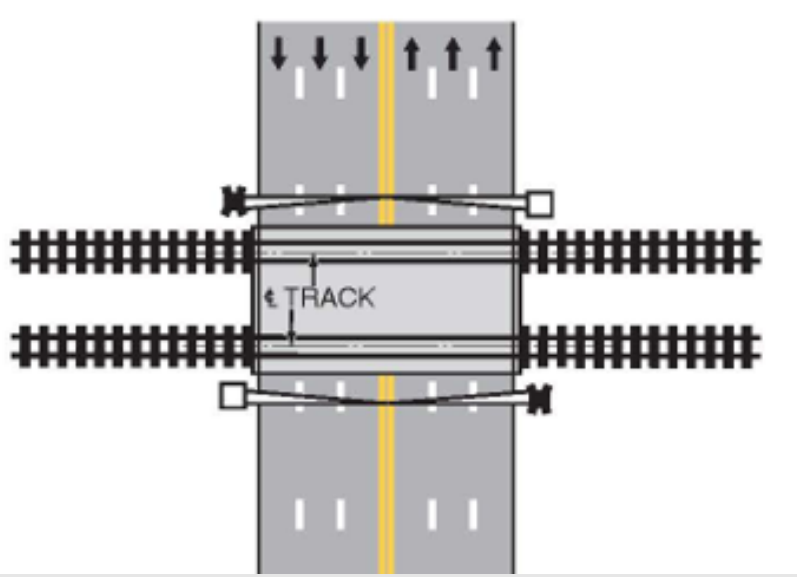
- Guidance: when active warning devices have been installed, operative parts should remain covered or turned until the device is placed in regular and continuous service
- Upgrade Option to Standard: when flashing lights, bells shall be used
- Standard: Only 12-inch diameter lenses allowed (deleted 8-inch)
- Guidance: placement locations of Number of Tracks and Crossbucks signs
- Guidance: at least one pair of flashing-light signals per approach lane
- Guidance: supporting dimensions for placement and mounting in Figure 8D-1
- Guidance: where storage is less than design vehicle length, provide additional signal; provide additional signal for supplemental warning for peds
- New Option: additional crossbuck signs may be used on overhead structures or cantilevered supports to supplement signs on the side of the roadway

8D.03 Automatic Gates

- Standard: added specificity on how the gate lights and signal lights flash in unision, to provide uniformity
- Guidance recommending location of the tip of the gate arm in the down position
  - 3.5’ to 4.5’ above crown of roadway
  - No portion of counterweight should extend into traveled way, sidewalk, or pathway
- Guidance: median islands should be at least 60’ in length



8D.05 Exit Gate and Four-Quadrant Gate Systems



- Support paragraphs added to distinguish Exit Gate System from Four-Quadrant Gate system
  - Exit gate system has exit gates on some, but not all of the exiting lanes
  - Four-Quadrant system: all entrances and exits have gates; nothing to do with number of gates installed
- Standard requiring queue clearance time to be long enough for max length design vehicle
- Guidance: exit gates independently controlled for each direction of roadway traffic

8D.08 Use of Traffic Control Signals at Grade Crossings

- Option revised….Traffic control signals may be used instead of flashing-light signals at industrial highway-rail grade crossings and other places where the maximum speed of trains is 10 mph or less
- Used to say “where train movements are very slow, such as in switching operations”
- Improves clarity and is consistent with FRA track classifications

8D.09 Preemption of Highway Traffic Signals at or Near Grade Crossings

- New Standard, Guidance, Options, Support to provide consistency with industry changes
- Additional measures where traffic signal farther than 200’ from grade crossing
- Support: annual inspection requirement; reference to TEOpS Ch. 4 for more info
- Standard: preemption required when traffic signal faces within 50’ of active grade crossing
- Double-break and supervised circuits; simultaneous and advance preemption
- End of track clearance interval
- Recommend advance preemption when exit gates are used
- Considerations when rail traffic stops and starts near a grade crossing
- Standard: prohibit flashing mode
- Standard: evaluate priority of preemption calls when boats and trains operate near grade crossing

8D.10 Movements Prohibited During Preemption

- New Guidance, Options for more detailed recommendations of permissive-only turn movements, protected-only turn movements, and straight-thru movements toward a grade crossing.
  - Intent is to address issue of right-turn vehicles stopped in a through lane when a signal is green, and address undesirable behaviors when this happens.
  - Consistent with NTSB recommendation H-13-041
- Revised Standard requiring blank-out signs used in preemption be activated only when the preemption is active.

8D.11 Pre-Signals at or Near Grade Crossings

- Revised and new Standards that require red signal indications during preemption; to prevent conflicting indications between the pre-signal and the flashing-light signal system.
- New Guidance to recommend measures at downstream traffic signals, to reduce vehicles queuing from a downstream signal through a crossing.
- New Options for green interval to provide flexibility in operation of pre-signal
- Standard: define queue clearance time
- Guidance: indications over turn lanes to avoid confusion
- Standard and Support requiring specific indications at a pre-signal
- Options for location of pre-signal indications and additional signing; install where most visually effective

8D.12 Queue Cutter Signals at or Near Grade Crossings

- New Support and Option statements about application and operation of queue cutter signals
- New Standard paragraph requiring specific indications at a queue cutter signal
- New Options for locations; where most visible and effective
- Guidance and Options for signing to discourage vehicles from stopping in the grade crossing
- Standards requiring interconnection and preemption; prevent confusing displays
- Guidance and support providing recommendations for indications over turn lanes
- Standards and support statements to avoid user confusion when different indications are displayed in adjacent lanes at queue cutter signals

FWHA Target Compliance Dates: Sections 8D.09 – 8D.12

Highway Traffic Signals at or Near Grade Crossings

- **Specific Provision:** Assessment and determination of appropriate treatment (preemption, movement prohibition, pre-signals, queue cutter signals).
- **Compliance date:** 10 years from federal publication; January 18, 2034

Categories of grade crossings subject to this….

- Interconnected crossings (109): state hwy (31) and local roads (78)
- Non-interconnected crossings within 200’ of signalized intersection
- Non-interconnected crossings >200’ that create queues over crossing

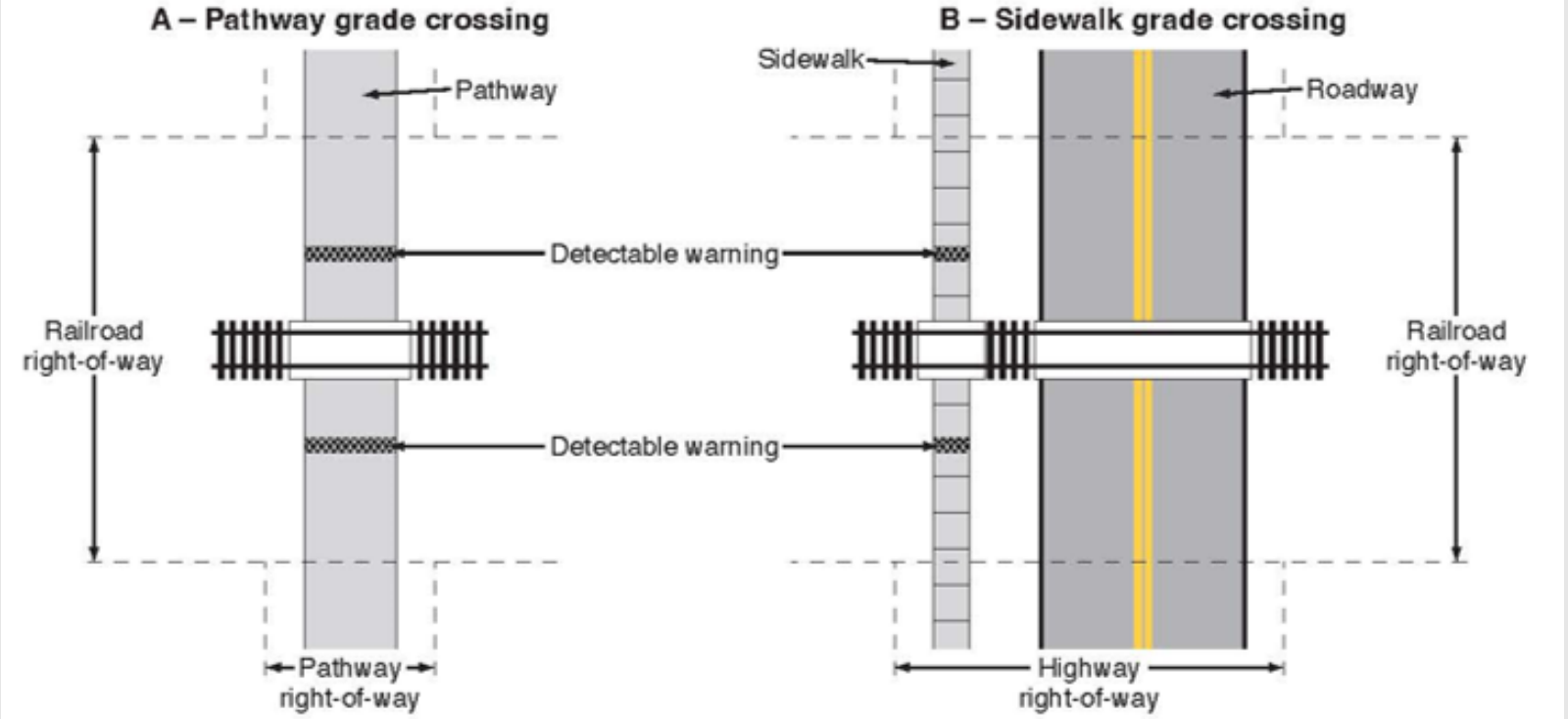
8D.13 Warning Beacons or LED-Enhanced Warning Signs at Grade Crossings

- New Option and Support paragraphs for considerations and application of warning beacons and enhanced signs.
- Standard and Support to require preemption interconnection to control the activation of warning beacons and enhanced signs
- Option and Guidance with timing and activation
- Guidance to use back-up power for warning beacons and enhanced signs

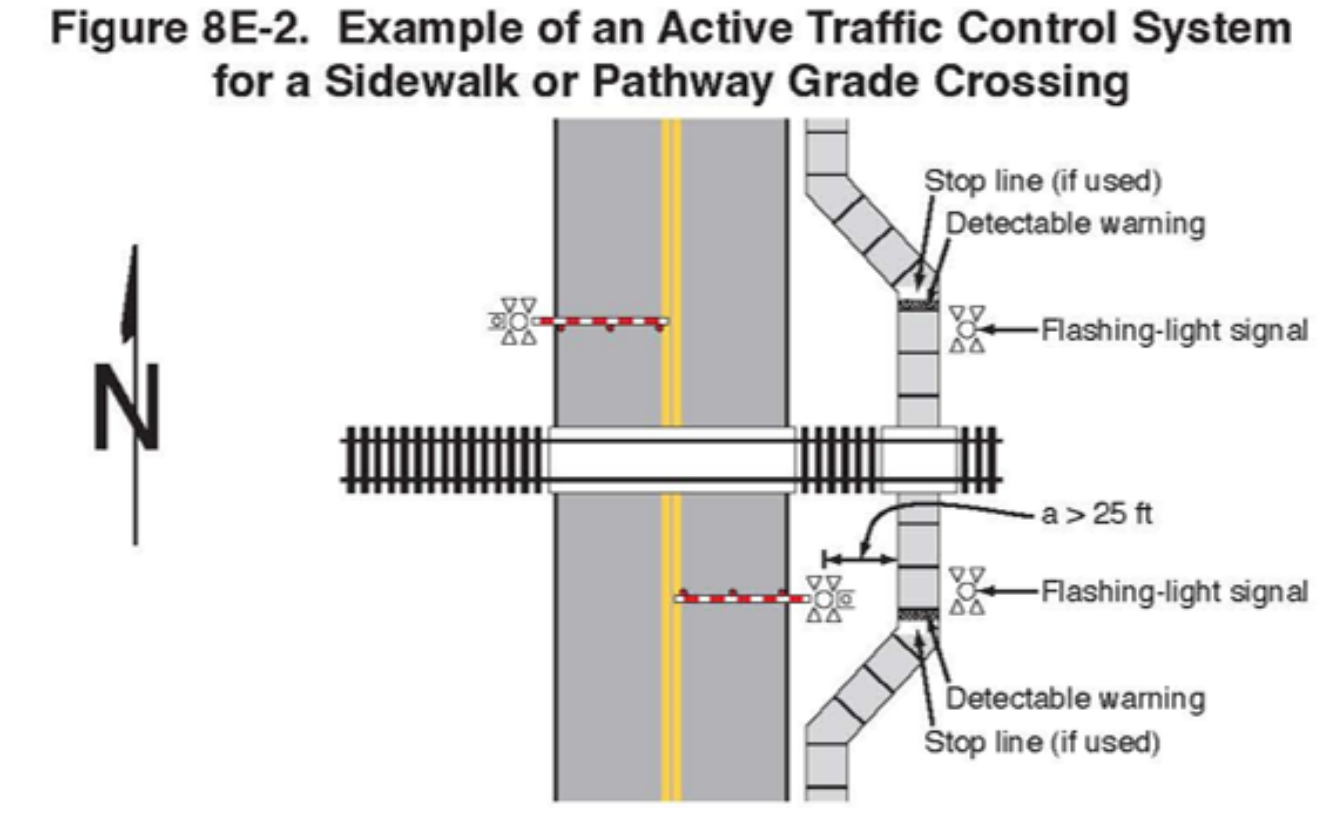
8E.01 Pathway and Sidewalk Grade Crossings - Purpose

- New Figure 8E-1 and accompanying text to illustrate and describe difference between pathway grade crossing and sidewalk grade crossing.

Figure 8E-1. Illustration of the Difference between a Pathway Grade Crossing and a Sidewalk Grade Crossing



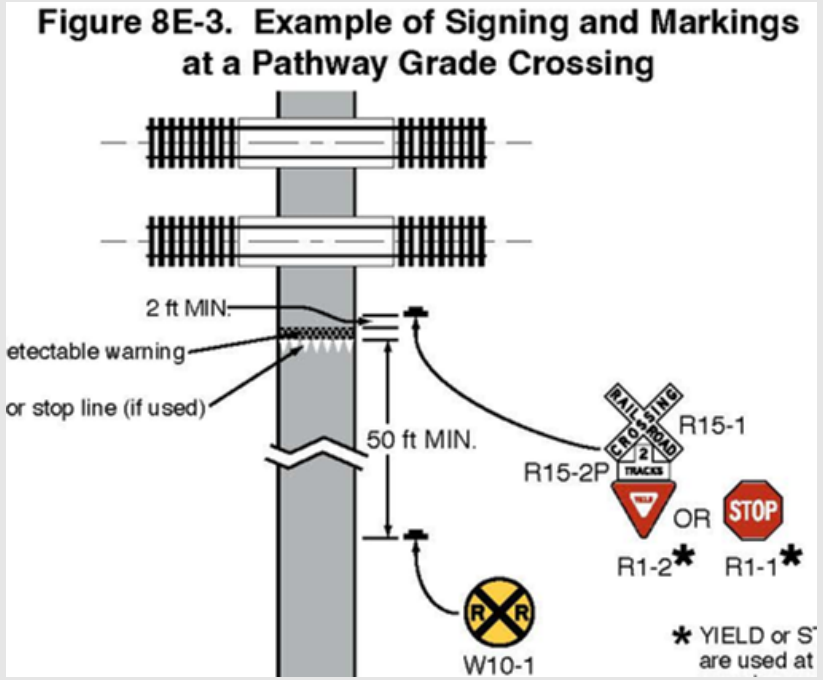
8E.02 Use of Standard Devices, Systems, and Practices



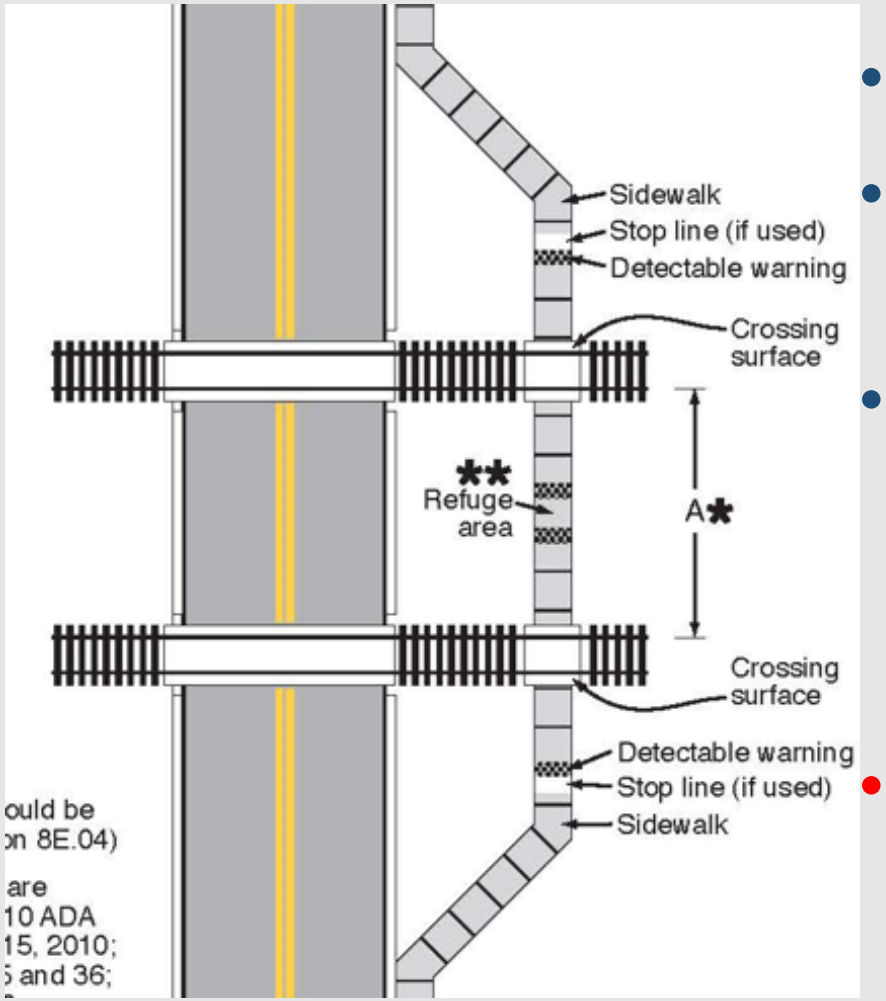
- New Guidance statement recommending that the pathway or sidewalk user's ability to detect the presence of approaching rail traffic should be considered in determining warning devices at grade crossings.
- New Figure and accompanying Support statement

8E.03 Pathway and Sidewalk Grade Crossing Signs and Markings

- Support: some railroad companies have clearance requirements beyond WMUTCD standards. Work with RR to minimize impacts to right-of-way, threshold of requiring cantilevers, or approaching maximum gate lengths
- New Standard requiring minimum clearance of 7 feet from bottom edge of device to the sidewalk
- Look sign removed from WMUTCD
- New figure and accompanying Guidance



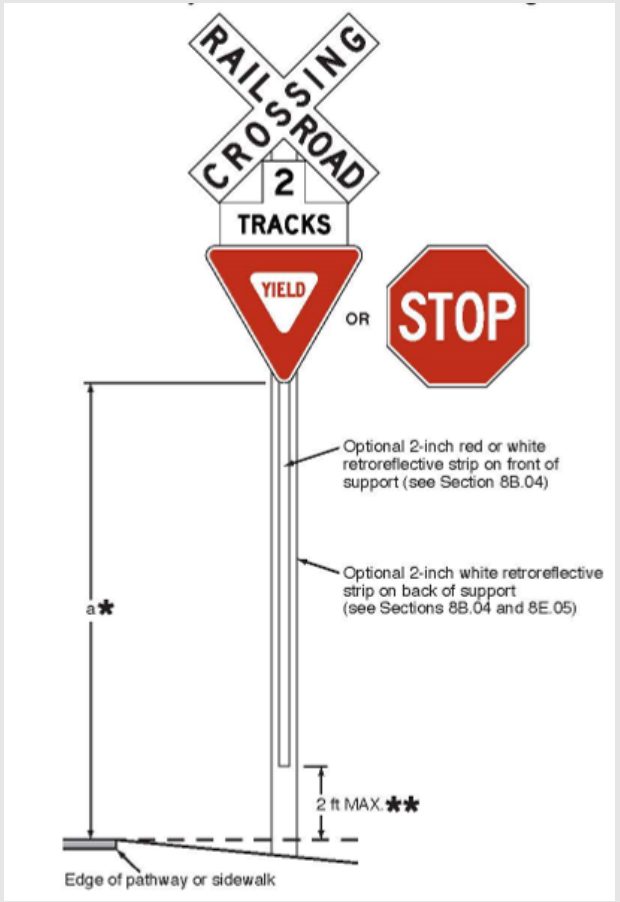
8E.04 Stop Lines, Edge Lines, and Detectable Warnings



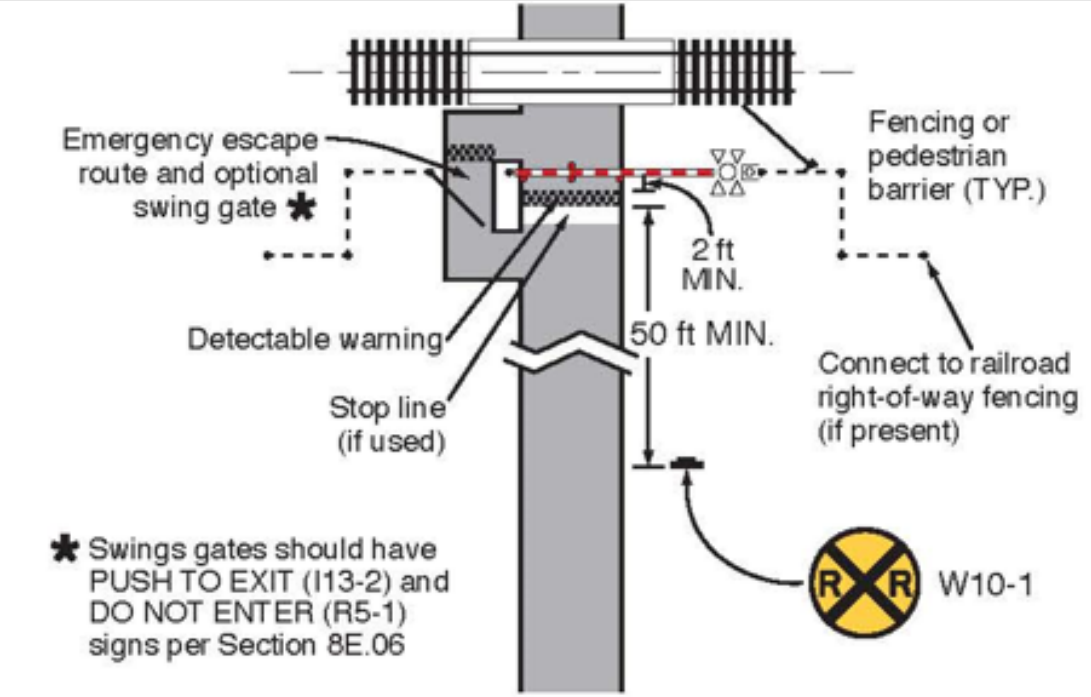
- New Guidance statement and accompanying figure
- Guidance: Stop line should be applied if surface is capable of retaining the marking
- Standard and Guidance about utilization of detectable warnings
  - Consistent with Part 3
  - Based on ADAAG (ADA Accessibility Standards) criteria
- Support reference to SDD 8D5-E for additional detail

8E.05 Passive Traffic Control Devices – Crossbuck Assemblies

- Changes to Standard paragraph, requiring a Crossbuck Assembly to be installed on each approach to the pathway or sidewalk grade crossing when the nearest edge of the pathway/sidewalk grade crossing is located more than 25’ from the center of the nearest traffic control warning device.
- Option allowing retroreflective strip on the back of Crossbuck support to be omitted at a pathway or sidewalk crossing
- New Standard statement and accompanying figure requiring minimum height of Crossbuck Assemblies to be 4’ where there is 2’ lateral clearance and 7’ where lateral offset to nearest edge of sign is less than 2’.
- New Standard: minimum lateral offset 0’ for sidewalks and 2’ for pathways.



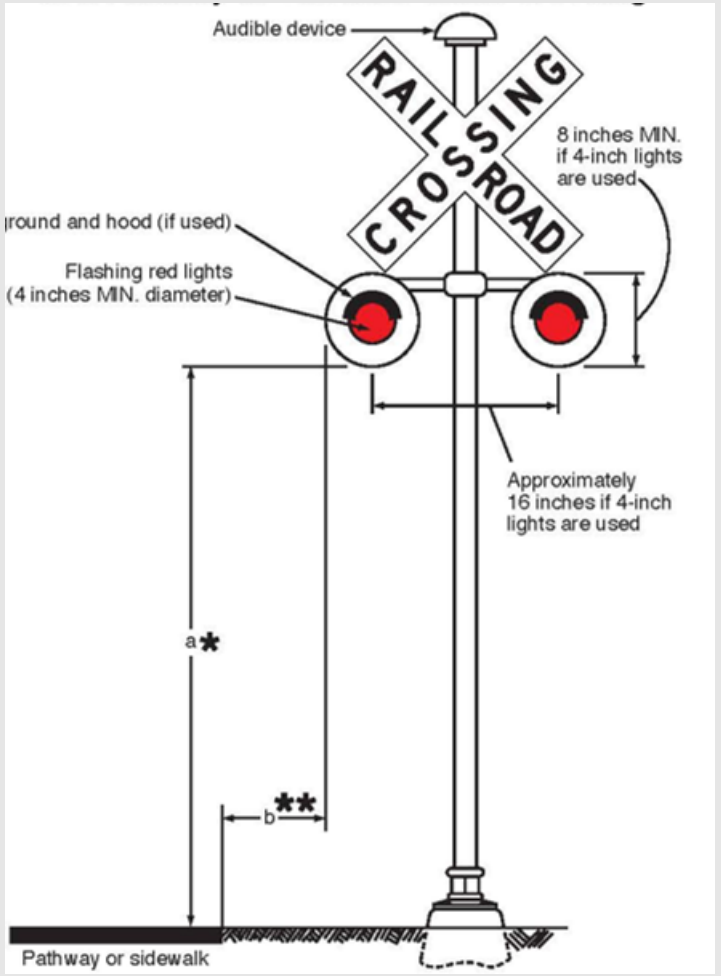
8E.06 Channelizing Devices used with Sidewalk and Pathway Traffic Control Devices



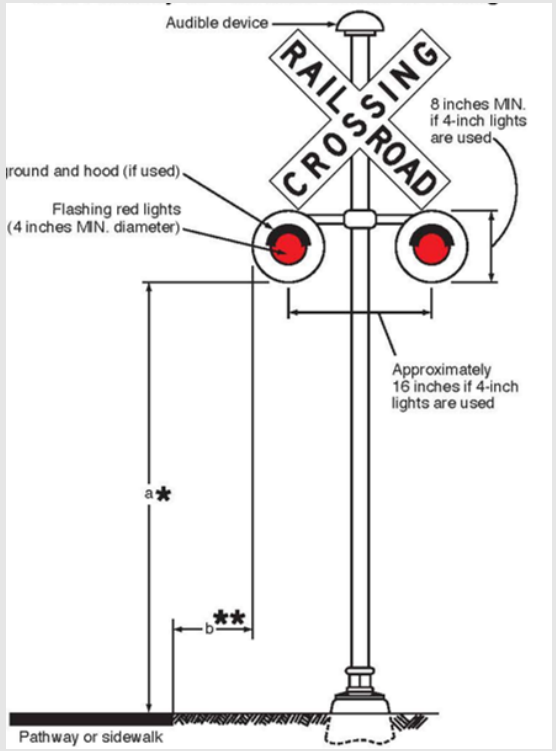
- New Section for designing and implementing swing gates, fencing, and pedestrian barriers
- Support and Option statements for application of automatic gates and swing gates
- New Guidance statement for signing recommended on swing gates
  - PUSH TO EXIT on track side
  - DO NOT ENTER on side facing away from tracks
- New Support paragraph and accompanying revised figure for application of fencing. Provides information about measures that improve effectiveness of automatic and swing gates

8E.07 Active Traffic Control Systems

- Standard: if used, an active traffic control system shall include flashing-light signals on each approach to the crossing.
- Option: may omit flashing-light signals, bells, and other audible warning devices when pathway or sidewalk grade crossing is located within 25’ of an active warning device equipped with those devices,
- Option: may use additional pairs of flashing-light signals, bells, or other audible warning devices to be installed on the active control devices for users approaching the crossing from the back side.



8E.08 Active Traffic Control Devices - Signals



- New section
- Standard and Support paragraphs that prohibit the use of pedestrian signal heads at pathway and sidewalk grade crossings. To prevent user confusion at grade crossings.
  - Pedestrian signal heads are typically used where pedestrians have an expectation other roadway users will yield the right-of-way. Trains don't do that.
- New Standards for flashing-light signals at pathway and sidewalk crossings
- Guidance statement for use of pedestrian gates in situations where flashing-light signals have not been effective

8E.09 Active Traffic Control Devices – Automatic Pedestrian Gates

- New section with some relocated material
- Support: Consider effects of snow and ice, need for expeditious removal, as part of the maintenance of the emergency escape route
- Standard: ped gates, swing gates, and fencing required where trains are 80 mph and higher
- Guidance: emergency escape route recommended
- Standards on the flashing light on the gate
  - Option to omit if crossing within 25’ is equipped with active devices