

Temporary Traffic Control for Pedestrians An Outsider's Perspective

DELDOT WINTER WORKSHOP 2013



PRESENTED BY:



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Agenda

- Why Pedestrian Accommodations in Work Zones?
- Introduction of Guest Speaker
- Pedestrian TTC Rules
 - ADAAG, PROWAG, MUTCD
 - State regulations
- Consequences of Non-Compliance
- How to Spec and Build a Compliant Work Zone
- Pedestrian TTC in Action

Pedestrian Work Zone Accommodations

- Pedestrian access should be maintained within highway work zones
 - Especially important for pedestrians with physical or visual disabilities
- Equipment, workers and work operations sometimes present a danger to pedestrians
 - Sidewalk closures or diversions
 - Equipment in close proximity to open sidewalks
 - Open excavations, if unprotected, can create fall hazards for pedestrians
 - Tripping hazards due to uneven surfaces

Guest Speaker

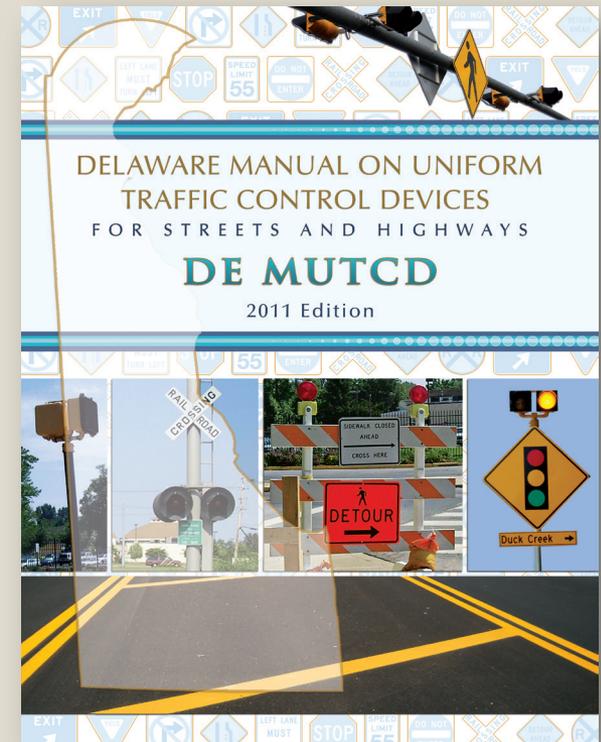
- **Tim Cox**

- National Sales Manager, Plastic Safety Systems
- National Committee on Uniform Traffic Control Devices
 - ✦ Secretary of TTC Technical Committee
- Transportation Research Board
 - ✦ AHB55 – Work Zone Traffic Control
 - ✦ AHB50 – Traffic Control Devices
- American Traffic Safety Services Association
 - ✦ Committee Member
- American Traffic Safety Services Foundation
 - ✦ Board Member
- American Public Works Association
- International Road Federation



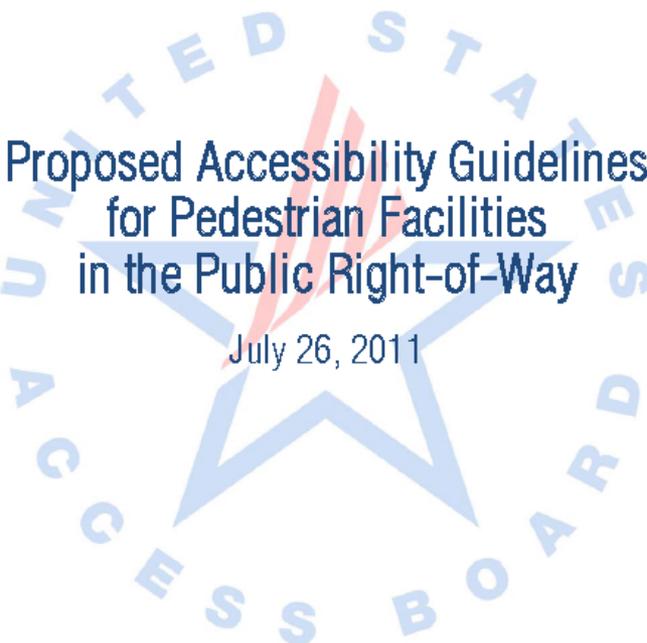
What are the rules

- **ADAAG – Americans with Disabilities Act Accessibility Guidelines**
 - N/A – governs buildings out to the building steps
- **PROWAG – Public Rights of Way Guideline**
 - From the steps out to the street
 - Defines accessibility for sidewalks and ramps
 - Defers to MUTCD for how to build
- **MUTCD – Manual on Uniform Traffic Control Devices**
 - Defines minimum of accessibility
 - Defines accessible devices



PROWAG

MUTCD



Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way

July 26, 2011

UNITED STATES ACCESS BOARD
A FEDERAL AGENCY COMMITTED TO ACCESSIBLE DESIGN

Manual on Uniform Traffic Control Devices

for Streets and Highways

2009 Edition



U.S. Department of Transportation
Federal Highway Administration

MUTCD – Chapter 6D

Pedestrian and Worker Safety

- 6D.01 Pedestrian Considerations
 - Line 04 – “If the TTC zone affect the movement of pedestrians, adequate pedestrian access **SHALL** be provided ... the accessibility and detectability **SHALL** be provided along the alternate pedestrian route.”
- 6D.02 Accessibility Considerations
 - Line 03 – “When existing pedestrian facilities are disrupted, closed or relocated in a TTC zone, the temporary facilities **SHALL**... include accessibility features consistent with ... the existing facility. ... a barrier that is detectable by a person with a visual disability traveling with the aid of a long cane **SHALL** be placed **across the full width** of the closed sidewalk.”

MUTCD – Chapter 6F

Temporary Traffic Control Devices

- 6F.63

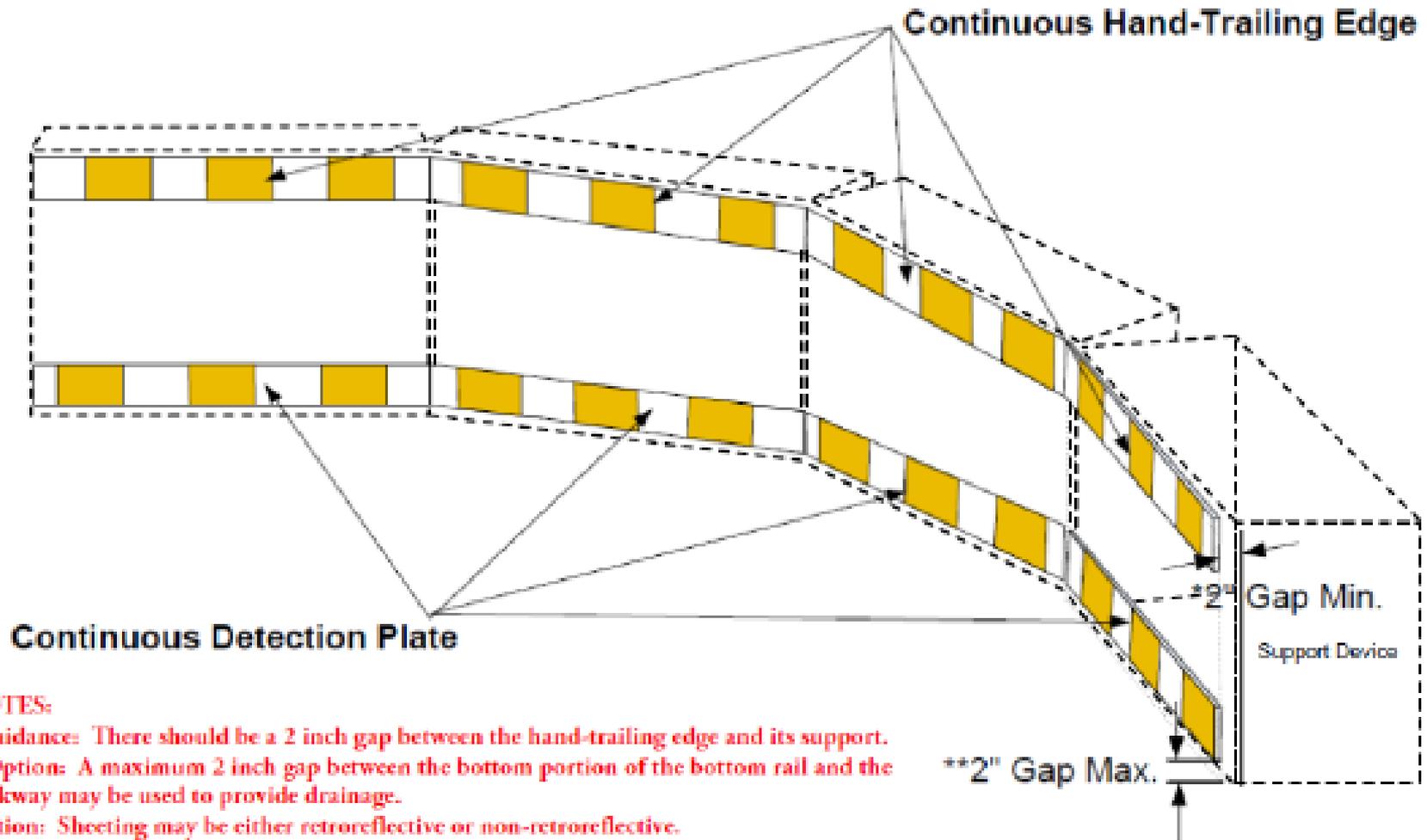
- Line 04 “Devices used to channelize pedestrians **SHALL** be detectable to users of long canes and visible to persons having low vision.”
- Line 05 “... there **SHALL** be **continuous** detectable bottom an to surfaces ...”

- 6F.74

- Individual channelizing devices, tape or rope used to connect individual devices ... are **NOT** detectable by persons with vision difficulties and are **INCAPABLE** of providing detectable path guidance on temporary or realigned sidewalks ...”

Figure 6F.XX

Pedestrian Channelizing Device

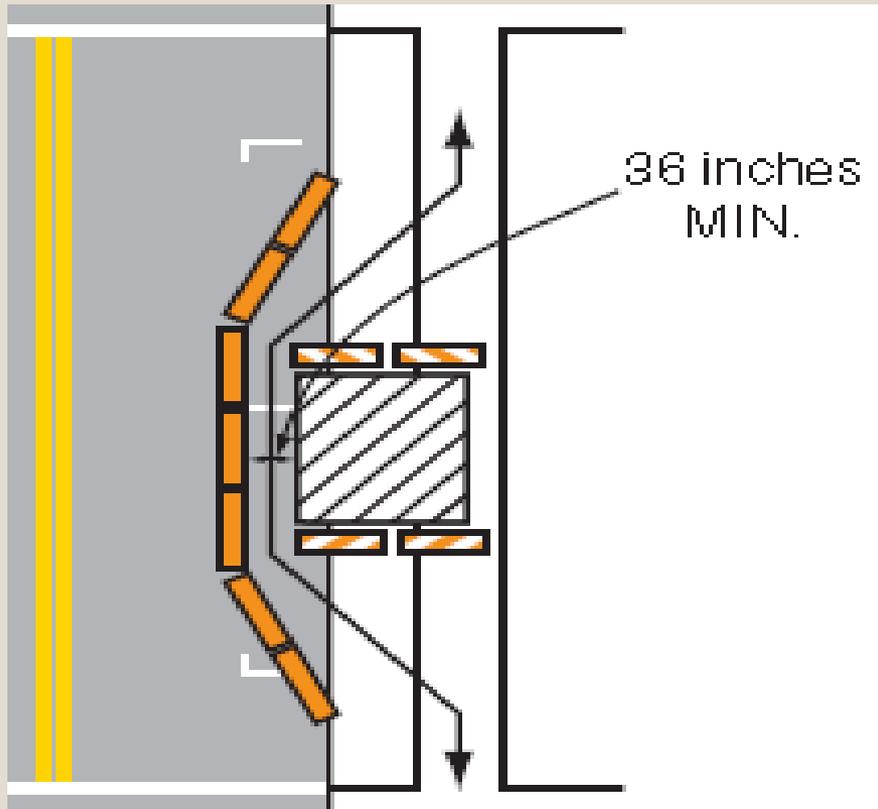


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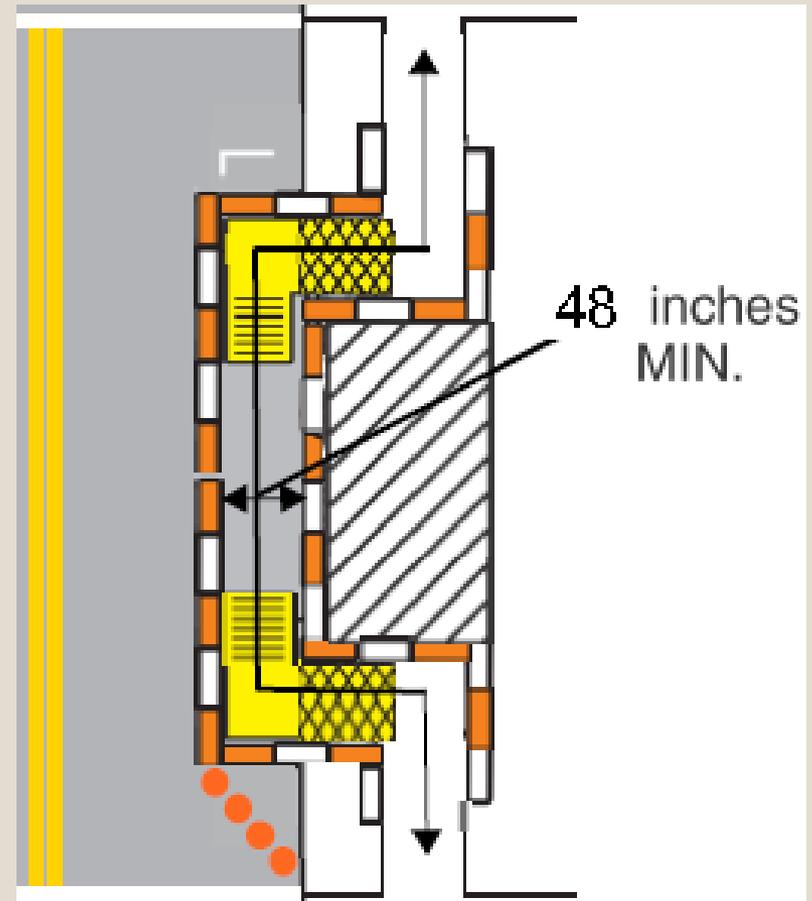
- *Guidance: There should be a 2 inch gap between the hand-trailing edge and its support.
- **Option: A maximum 2 inch gap between the bottom portion of the bottom rail and the walkway may be used to provide drainage.
- Option: Sheeting may be either retroreflective or non-retroreflective.
- Option: Sheeting panels may be either vertical or at a 45 degree angle.
- Option: Hand-Trailing Edges and/or Detection Plates are optional for continuous walls.

MUTCD – a word to the wise

- TA28 – 2009 Edition



- TA28 – Proposed Jan 2013



Non-compliance has consequences

- **Barden V City of Sacramento**
 - City is responsible to maintain accessibility of sidewalks
 - City agreed to 20% of Transportation budget per year for 20 years
- **California DOT**
 - 77,000 plus curb ramps
 - Must spend \$1.1 Billion over 30 years to upgrade sidewalks & curbs

The Process

- **Preconstruction**

- Update specs for compliance with current MUTCD
- Develop device specs and QPL
- Review site
- Site specific Pedestrian Traffic Control Plan

- **During construction**

- Devices – from QPL, proper placement
- Pathway – meets accessibility & detectability
- Closures – completely close sidewalk?
- Inspection schedule

Pedestrian TTC in Action

- **New specifications for Pedestrian TTC products**
 - Pedestrian Channelizing Barricade
 - Pedestrian Flaggers
 - Identification of appropriate material for alternate pedestrian paths
- **Construction Methods**
 - Use of high-early concrete to minimize disruption of pedestrian facilities
 - Temporary pedestrian bridges during construction
- **Still to come**
 - Audible information at closure and diversion points
 - Standard detail on temporary boardwalk
 - Portable, temporary curb ramps

Pedestrian TTC in Action



Pedestrian TTC in Action



Pedestrian TTC in Action



Pedestrian TTC in Action



Pedestrian TTC in Action



Pedestrians



Pedestrians



Pedestrian TTC in Action



Thank you!

Questions???