Index 102-613
Multilane, Work Within the Travel Way – Median or Outside Lane

ORIGINATION

Date: May 26, 2020
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COMMENTARY

Sheet 1: Revised Detail; Deleted 'Distance Between Signs', 'Table I Device Spacing', and 'Table II Buffer Space and Taper Length' Tables (Moved to 102-600); Deleted Duration Notes and Conditions; Revised 'General Notes'; Changed Index Title.

Sheet 2: Deleted Current Details and Added Index 102-623 as Sheet 2; Revised Detail; Deleted 'Distance Between Signs', 'Table I Device Spacing', and 'Table II Buffer Space and Taper Length' Tables (Moved to 102-600); Deleted Duration Notes and Conditions; Consolidated 'General Notes' and Moved to Sheet 1; Changed Index Title.

Sheet 3: Added New Sheet 3 with 'Triple Lane Closure' Detail.

Sheet 4: Added Index 102-614, Sheet 2 as New Sheet 4; Revised Detail; Deleted 'Table I Device Spacing', and 'Table II Buffer Space and Taper Length' Tables (Moved to 102-600); Deleted Duration Notes, Proposed Work Zone Speeds Table, Conditions, and Condition Notes; Changed Index Title.

Sheet 5: Added Index 102-670 as New Sheet 5; Revised Detail and Notes; Deleted 'Table I Device Spacing', and 'Table II Buffer Space and Taper Length' Tables (Moved to 102-600); Changed Index Title.

COMMENTS AND RESPONSES

BLACK = Internal Review Comments **RED** = Standard Plans Response

Name: Edgar Munoz
Date: August 17, 2020

COMMENT:

1. 102-613 (4/5): Why is the taper used to bring back traffic to the original alignment only 1/2L? This is a shift in the alignment and the normal taper should be used.

   RESPONSE: *In accordance with the MUTCD, Merging Tapers use the full "L" value, shifting tapers use "1/2 L", and Shoulder Tapers "1/3 L".*
   No Change

2. 102-63 (4/5): Why is there no channelizing devices on the right side edge at the end taper (Right end)?

   RESPONSE: *Channelizing devices should be used to direct traffic into an altered condition or to delineate areas traffic should not enter (i.e., the work area). Additionally, the*

MUTCD does not use channelizing devices on the outside of lane shifts. Within a diversion temporary striping delineates lane location/width.
No Change

3. 102-613 (4/5): At the center of the shift, a distance "L" is used on the left side edge, but a length "B" is used on the right side edge. This is a taper in both sides and the length should be the same. If you use different lengths, we end with and unbalanced road and or wider lanes. Example, at 40 MPH, L would be 640' and B will be 305'. The lanes will not be parallel.

   RESPONSE: *Agreed. The dimension "B" should not be included, as length "L" shown on the left-side edge would control the overall length of the taper.*
   Change Made: *Deleted dimension "B" from right-side shifting taper.*

4. 102-613 (5/5, MAS): A note on the right side indicates that the reminder of work zone signs and devices will be in accordance with the plans and standard plans. It's unclear from what point we pick up the signing from the other index or plans. Do we duplicate the "Work Ahead" sign? What will be the distance between this index signs and the other index?

   RESPONSE: *Agreed, additional clarification of sign placement will be added.*
   Change Made: *Signs were reorganized to match the preceding sheets to make it clearer where the MAS components fit into the advance signing.*

Date: 8/20/2020

Name: Saud Khan
Date: August 18, 2020

COMMENT: Index 102-613. Sheet 4/5 – Include a note or label that …… Applies to full width shoulders…… - Roadways with sub-standard shoulder widths will require an additional thru lane closure upstream to compensate or if right of way exist temporary shoulder widening may be required for diversion.

RESPONSE: *Along with the requirements of Specification 102, the "Lane Width" requirements included on Index 102-600 would control the availability of the shoulder for use a lane during TTC operations, as well as control the usage of "Lane Closure With Lane Shift" detail. Additional notes may be confused, or conflict, with other requirements.*
No Change

Date: 8/20/2020

Name: Sharon Harris
Date: 8/21/2020

COMMENT: The duration provision has been deleted-this has been used by maintenance.

RESPONSE: *As with other Indexes in the 102 Series, the "Duration" notes have been revised and included in the General Notes of the new Index (See Notes #5 & #7). While it is recognized that short-duration work may not warrant an extensive advanced warning area, signage, and devices of a long-term closure; the Department no longer supports the omitting channelizing devices for a lane-closure. However, after additional consideration an allowance for omitting the "Arrow Board" and "Buffer" will be included for work operations of 60 minutes or less on roadways with a speed limit of 45 MPH or less.*

The Department will continue to monitor national research and best practices for short-duration work operations for possible future inclusion in the Standard Plans or Specifications.

Change Made: *Note #5 revised to allow for omitting arrow board and buffer space for work operations of 60 minutes or less on roadways with a speed limit of 45 MPH or less.*

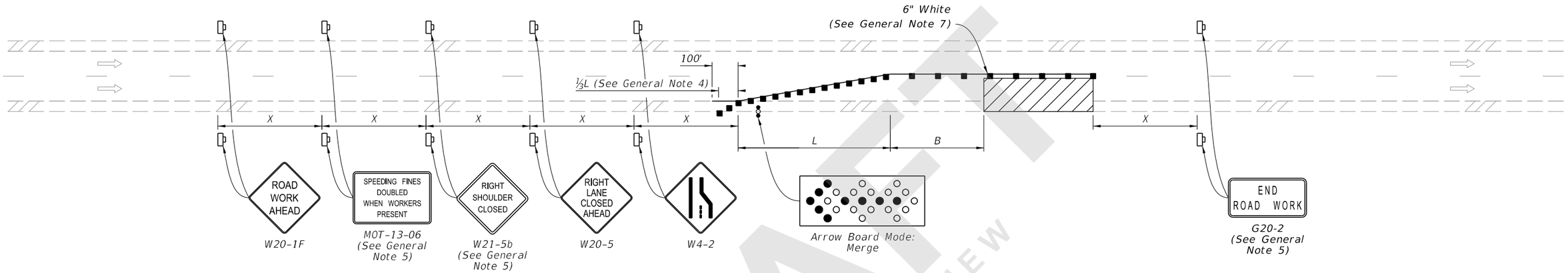
Date: 8/22/2020

Name: D5
Date: 8/21/2020

COMMENT: Sheet 1, General Note 3: Reason to omit shoulder closure signage only on limited access facilities? Seems counter-intuitive for long-term conditions (> 24 hrs, per Note 5) and does not agree with MUTCD Typical Application TA-6. If the intent for the Standard Plans is to better align with MUTCD, considerations for note to be modified to retain signage.

RESPONSE: *Index 102-613 includes adaptations of MUTCD TA-33 and TA-37. 'Shoulder Closed' signs are not included in these typically applications because once a lane is closed there should be no expectation that the shoulder is open.*
Commentary: *In recent standards, the Department has not required the use of "Shoulder Closed" signs and for the most part they are "optional" per the MUTCD (with the exception of freeway shoulder closures and for these Index 102-602 would apply). Where used in the MUTCD they are used to communicate to drivers that the shoulder is not available for disabled vehicles. However, in an effort to better communicate information to non-motorist that use the shoulder (e.g., bicyclist), the shoulder closed signs have been more broadly applied in proposed new Indexes. Additionally, because Limited Access roadway shoulders are not considered a bicycle facility, the allowance to omit the sign was provided.*
No Change

Date: 8/23/2020



SINGLE LANE CLOSURE

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic
- Arrow Board

GENERAL NOTES:

1. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", and channelizing device spacing values.

2. On undivided highways the median signs as shown are to be omitted.

3. On limited access facilities, omit "Shoulder Closed Ahead" signs (W21-5b) and associated work zone sign spacing distances.

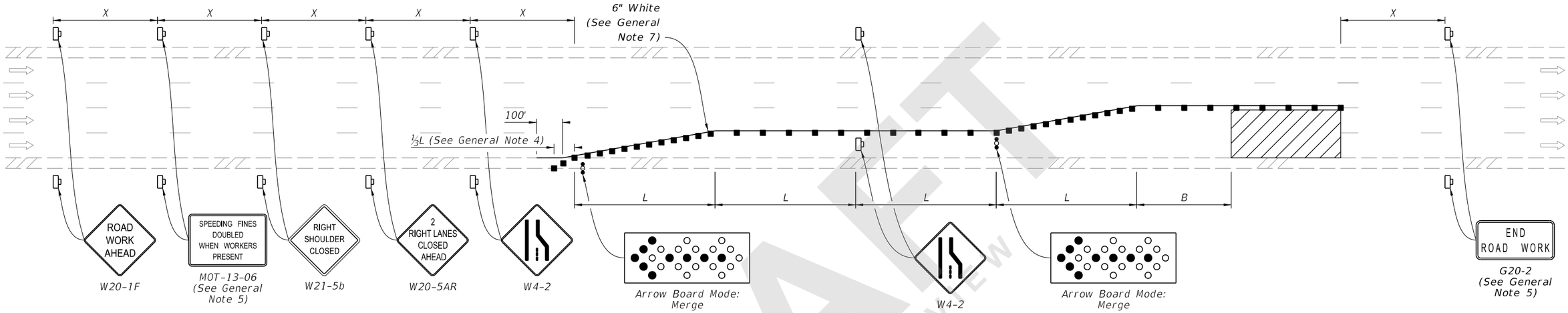
4. If the paved shoulder is less than 4' in width, omit the taper and channelizing devices from the paved shoulder.

5. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2) and "Shoulder Closed Ahead" (W21-5b), along with associated work zone sign distances, may be omitted when the work zone will be in place for 24 hours or less. For Single Lane Closures, arrow boards and buffer (B) may also be omitted when the work zone will be in place for 60 minutes or less and the speed limit is 45 mph or less.

6. Use inverted plan of the illustrations for work on left side of roadways.

7. Temporary pavement markings may be omitted when the work zone is in place for 3 days or less.

8. If the work encroaches on a marked bicycle lane or ridable shoulder, close the lane or shoulder in accordance with the Plans.



DOUBLE LANE CLOSURE

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic
- Arrow Board

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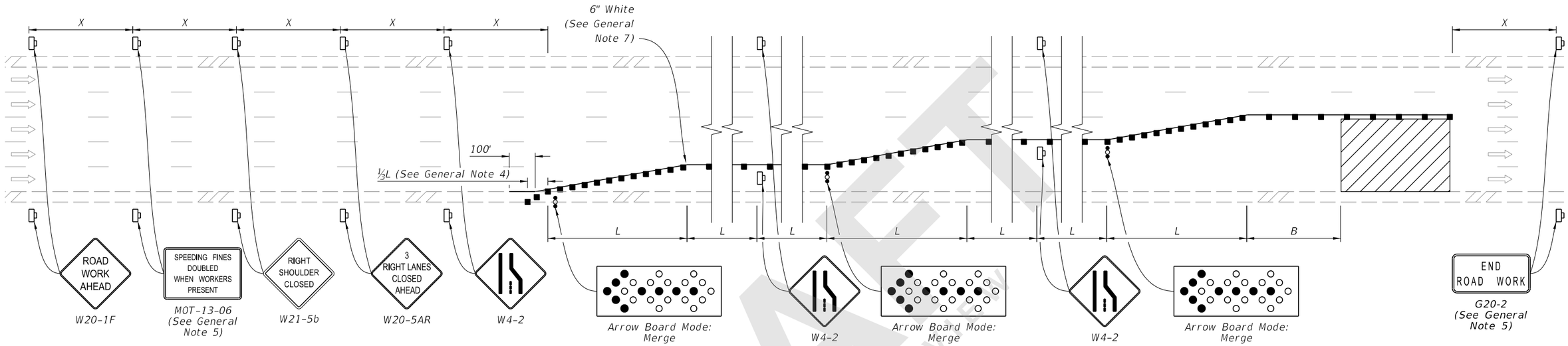

TRIPLE LANE CLOSURE

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic
- Arrow Board

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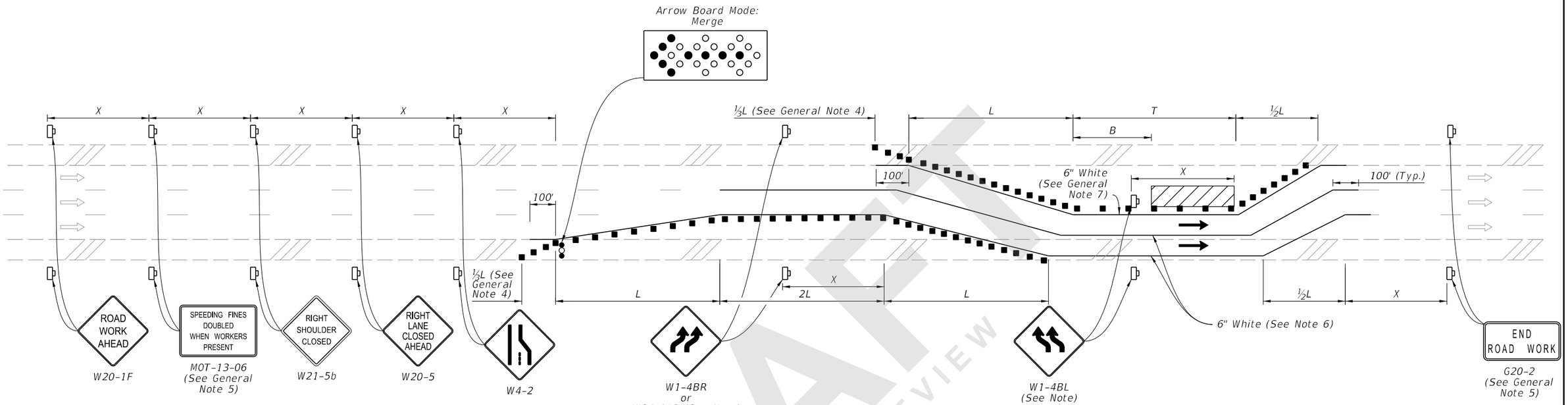

LANE CLOSURE WITH LANE SHIFT

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic
- Arrow Board

NOTE:

If the tangent distance "T" is less than 600', then use "Double Reverse Curve" signs (W24-1A) instead of the first pair of "Reverse Curve" signs (W1-4B) and omit the second pair of "Reverse Curve" signs.

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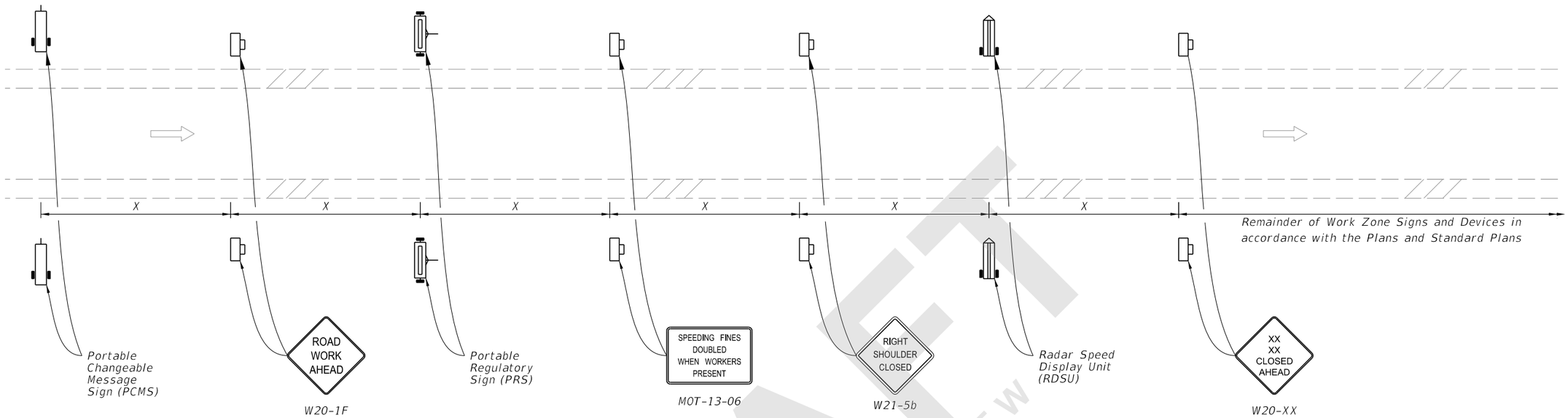
11/01/20			FDOT FY 2021-22 STANDARD PLANS	MULTILANE ROADWAY, LANE CLOSURES	INDEX 102-613	SHEET 4 of 5



MOTORIST AWARENESS SYSTEM

SYMBOLS:

Work Zone Sign

Lane Identification and Direction of Traffic

(1) PCMS= Portable Changeable (Variable) Message Sign

(2) PRS= Portable Regulatory Sign-Speed Limit When Flashing

(2) RSDU= Radar Speed Display Unit

NOTES:

1. When called for in the Plans, use the Motorist Awareness System (MAS) in accordance with the Plans and this Index. When using this detail, place the MAS devices (i.e., PCMS, PRS, and RDSU) in advance of the "Road Work Ahead" sign (W20-1F) as shown.
2. For a posted speed of 65 mph or greater, display speed with a ten mph reduction. For a posted speed of 60 mph, display a reduced speed of 55 mph. Use posted speed as the work zone speed.
3. Omit the PCMS in the median for roadways with three lanes or less in the same direction of traffic.

TYPICAL PCMS DISPLAY:

With speed reduction:
Message 1: WORKERS PRESENT AHEAD
Message 2: SPEED REDUCED NEXT XXMI

Without speed reduction:
Message 1: WORKERS PRESENT AHEAD
Message 2: NEXT XX MILES

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