Summary of Major WATCM Changes

The following is a "high level" summary of changes made to the 2024 WATCM. Users shall familiarize themselves with the contents of the new manual itself, rather than relying exclusively on this list.

- 1. Restructured existing WATCM content to improve the overall flow of the document.
- 2. Updated reference for minimum crash testing standards to reference MASH where appropriate.
- 3. Changed wording throughout the document to provide clearer/expanded guidance.
- 4. **Definitions:** Introduced new defined terms *Stationary Work* and *Non-Stationary Work*.
- 5. Section 2.2: Added new section on Risk Assessment.
- 6. Section 2.3: Changed previous terminology for Work Area Components as follows to better align with other jurisdictions and terminology referenced in the Motor Vehicle Act:
 - a. Work Area changed to Construction Zone.
 - b. Activity Area changed to Work Area.
 - c. Advance Warning Area and Approach Area combined.
- 7. Section 2.3: Eliminated minimum advance warning distance (A) to be consistent with MUTCDC, simplify field layout, and effectively shorten the average length of Construction Zones.
- 8. Section 2.3: Revised minimum taper lengths (Table 2-1) and minimum buffer area lengths (Table 2-2) to better align with MUTCDC and simplify taper installation.
- Section 2.4: Provided expanded guidance on Speed Management within Construction Zones to address
 where speed limit reductions are appropriate, maximum speed limit reductions, speed reduction
 strategies, and transitional speed zones.
- 10. Section 2.6: The definition for *Very Short Duration Work* (i.e., less than 30 minutes) no longer includes the time to set up and remove signs.
- 11. Section 2.6: Added common examples to better clarify different categories of Work Duration.
- 12. Section 2.7: Changed the 2 km and 4 km maximum lengths to reference the length of the Lane Closure, rather than the length of the Work Area.
- 13. **Section 2.8**: Added new section to differentiate between different types of tapers used within a Construction Zone (based on MUTCDC).
- 14. Section 2.10: Added new section containing guidance for traffic control at roundabouts.
- 15. Section 3.2: Expanded list of responsibilities for the Traffic Control Agent.
- 16. Section 3.3: Reduced distance between Traffic Control Person and Work Area from 40-50 m to 10 m.
- 17. Section 3.3: Increased size of Stop/Slow Paddle to 60 cm x 60 cm.
- 18. Section 4.2: Provided expanded guidance for use of Buffer Vehicles.
- 19. **Section 5.1**: Changed minimum retroreflectivity requirements for orange background signs to ASTM D4956 Type VIII standard, effective January 1, 2027.
- 20. Section 5.2: Provided guidance on the use of rollup signs.
- 21. Section 5.3: Provided guidance for the placement of flags on signs.
- 22. **Section 5.7**: Increased minimum sign spacing for 90 km/hr from 100 m to 150 m to better align with MUTCDC. All other spacing remain unchanged.
- 23. Section 5.9: Eliminated NBDTI Sign Catalogue Reference Numbers since signs are procured from a variety of suppliers.
- 24. Section 5.9: Added the following signs: Drive with Care, Lane Diversion, Lane Realignment, Detour Guidance, Temporary Remote Control Device Ahead, Speed Fines Double, Sidewalk Closed, Temporary Pedestrian Detour, Temporary Bicycle Detour, and Temporary Pedestrian/Bicycle Detour.
- 25. Section 5.9: Eliminated Construction Zone Begins sign.
- 26. **Section 5.9:** Changed the sheeting for the *Traffic Signals Ahead, Stop Ahead,* and Yield *Ahead* signs from yellow to orange to be consistent with MUTCDC (Effective January 1, 2027)

- 27. **Section 6.1:** Added new section with guidance on the use of Automated Flagger Assistance Devices (AFADs).
- 28. Section 6.2: Directional Barricades may now be used to direct to the left on two lane roads.
- 29. Section 6.3: Provided expanded guidance for use of Barriers.
- 30. Section 6.4: Adjusted maximum delineator spacings to better align with MUTCDC.
- 31. Section 6.4: Made maximum delineator spacings consistent for both tangents and tapers, with the ability to double the spacing on tangents when not adjacent to hazards.
- 32. Section 6.4: Added two retroreflective orange bands to minimum specifications for Flexible Drums.
- 33. Section 6.5: Simplified Flashing Arrow Board requirements. Increased minimum size to 150 cm x 75 cm (previous Type B).
- 34. Section 6.6: Changed terminology from Flashing Beacons to Flashing Warning Lights and eliminated minimum 30 cm size requirement. Increased flash rate to 55 75 flashes per minute to be consistent with other jurisdictions.
- 35. **Section 6.8**: Changed size and spacing requirements for Temporary Pavement Markings to be more consistent with other jurisdictions.
- 36. Section 6.9: Added new section with guidance on the use of Temporary Transverse Rumble Strips.
- 37. Section 6.10: Added new section with guidance on the use of Temporary Transverse Pavement Markings.
- 38. Section 6.11: Expanded list of pre-approved messages for VMS.
- 39. Section 7.3: Combined typical layouts for two lane roads and multilane roads into a single section.
- 40. Section 7.3: Created new index to assist with typical layout selection.
- 41. Section 7.3: Separated typical layouts for work on bridges.
- 42. Section 7.3: Added new typical layouts for Moving and Very Short Duration Work on two lane roads. Previous Cold Mix Patching layout (Figure 7-21a) now covered by these layouts.
- 43. **Section 7.3**: Added new typical layout for *Non-Stationary Short Duration Work* (Layout 7-8) to be used for milling, paving, patching, and chipsealing operations.
- 44. Section 7.3: Added two new typical layouts for work near intersections.
- 45. Section 7.3: Combined previous Shoulder Short Duration, Shoulder Long Duration, and Partial Lane Closure Short Duration figures into a single layout (Layout 7-4).
- 46. Section 7.3: Combined previous Shoulder Diversion figures into a single layout (Layout 7-30).
- 47. **Section 7.3**: Revised typical layouts as necessary to reflect other changes made throughout the document and to ensure a consistent application of traffic control amongst all layouts.
- 48. Section 7.3: Removed previous exemption for *No Passing* sign on roads with less than 300 vehicles per day.
- 49. Section 8.2: Added Planning & Implementation Checklist
- 50. Section 9: Revised Setup & Removal Procedures such that Sign Truck no longer travels in reverse during lane closure removal.
- 51. Section 10.1: Combined requirements for Initial and Routine Inspections.
- 52. **Section 10.1:** Provided an example WATCM Inspection Form that may be modified as appropriate to meet site specific needs.
- 53. Section 10.2: Added minimum Quality Guidelines for Barricades and Barriers.