

## CHANGE LOG

### PROJECT DEVELOPMENT AND DESIGN GUIDE



CHAPTER NO./TITLE 9. Pavement Design

EFFECTIVE DATE October 4, 2023

SECTION	CHANGE
General	Updated agency name to MassDOT throughout.
General	Various minor grammatical changes and nomenclature changes for consistency and readability.
General	Added hyperlinks to external resources.
General	Removed references to the MassHighway Pavement Preservation Guidelines as use of these guidelines has been superseded by the procedure to coordinate with the Districts and Pavement Management Office.
General	Added hyperlinks to the Pavement Design Checklist (9-A-1), Pavement Design Form - New or Reconstructed Pavements (9-A-2), Pavement Design Form - Resurfacing (9-A-3), and sample problems and completed forms (9-A-4).
9.1 Introduction to Pavement Design Process	Noted that MassDOT is engaged in Phase II implementation of the AASHTO M-E Design Guide.
9.2 Pavement Types, Definitions, and Abbreviations	Replaced Exhibit 9-1 with Figure 9-1. Added "Other Pavement Concepts" to describe the use of colored aggregate for bike lanes, bus lanes, or other types of exclusive lanes. Renumbered Exhibit 9-2 to Table 9-1.
9.3 Typical Pavement Design Procedures for Design Submittals	Consolidated "Typical Pavement Design Procedures for 25 Percent Submittal" and "Typical Pavement Design Procedures for 75 Percent Submittal" sections into this single section. As a part of this, replaced Exhibits 9-3 and 9-6 with a bullet summary of typical procedures for submittals through 75 Percent Design at the start of this section.  Step 1 - Determine Scope of Work: Added guidance about pavement reclamation requirements. Step 2 - Collect Basic Project Data: Added hyperlink to "PDDG Checklist and Submission Distribution Workbook (PDDG 9-A-1, Pavement Checklist)." Step 3 - Determine Design Bearing Ratio (DBR): Renumbered Exhibits 9-4 and 9-5 to Tables 9-2 and 9-3 respectively. Step 4 - Assemble and Submit Pavement Design Information to PDE during 25 Percent Design: Consolidated Requirements for 25 Percent Design under this section. Step 5 - PDE Reviews Scope of Work and DBR Determination: Clarified typical procedures for Design Bearing Ratio determination and guidance for subsurface exploration for new pavements.

EFFECTIVE DATE October 4, 2023

9.4 Detailed Pavement Design Guidance by Scope of Work	<p>Organized six subsections ("New and Reconstructed Pavements," "Reclamation," "Pavement Resurfacing," "Limited Access Highway Pavement Resurfacing Design," "Typical Pavement Design for Low Volume Roads," and "Pavement Preservation") under this section.</p> <p>New or Reconstructed Pavements: Added a hyperlink to the Pavement Design Form, a sample problem and a completed form, and removed the appendix that originally contained this form. Added a hyperlink to a sample problem and completed form.</p> <p>Renumbered Exhibits 9-7 and 9-8 to Figures 9-2 and 9-3, respectively.</p> <p>Replaced Exhibit 9-9 with Table 9-4, which has updated mix types and mix designations.</p> <p>Renumbered Exhibit 9-10 to Table 9-5.</p> <p>Replaced Exhibit 9-11 with Table 9-6. Changed "HMA Base - Collector &amp; Local" thickness from 3.25 to 3.50 inches and SN from 1.10 to 1.19. Changed "Total Structural Number - Collector &amp; Local" from 3.85 to 3.94.</p> <p>Reclamation: Added guidance on test pits, documentation requirements and hyperlink to the Pavement Design Form.</p> <p>Pavement Resurfacing: Added a hyperlink to the Pavement Design Form, a sample problem and a completed form.</p> <p>Renumbered exhibits 9-12 and 9-13 to Tables 9-7 and 9-8, respectively.</p> <p>Pavement Preservation: Moved subsection to the end of 9.4.</p>
--	---