ADMINISTRATIVE INFORMATION:

- Effective Date: The guidance in this Engineering Bulletin (EB) is effective beginning with projects receiving design approval on or after May 1, 2020.
- Superseded Issuances: This EB does not supersede any other issuances, but it modifies EB 18-042 and EB 19-006.
- Disposition of Issued Materials: Chapters 2, 5, 7, 10, 19, 20 and 21 of the Highway Design Manual (HDM) have been revised to incorporate the guidance contained in this EB.

PURPOSE: The purpose of this EB is to announce limited revisions to HDM Chapters 2, 5, and 10, and the permanent incorporation of previous errata corrections to Chapters 2, 5, 7, 19, 20 and 21.

TECHNICAL INFORMATION:

- A detailed list of changes is provided in each chapter, immediately after the title page.
- Chapters 2, 5 and 10 have been reformatted for improved legibility and functionality.
- Errata corrections to Chapters 2, 5, 7, 19, 20 and 21, announced in EB 18-042, have been permanently incorporated into the chapters.

Changes to Chapter 2 - Design Criteria include:

- Section 2.2 - Project Types was revised to incorporate updated project work type definitions from Project Development Manual Appendix 5, and a new subsection on pedestrian and bicycle facilities was added.
- Multiple sections were updated to incorporate three new context classes introduced in the 7th Edition of AASHTO’s A Policy on the Geometric Design of Highways and Streets, (i.e., Rural Town, Suburban, and Urban Core contexts)
- Design volumes are now shown as Annual Average Daily Traffic (AADT) rather than Average Daily Traffic (ADT).
- The Design Criteria Table example (Exhibit 20-16) in the chapter and the Nonstandard Justification Form on the HDM Chapter 2 webpage have been revised to incorporate the new context classes and the change from ADT to AADT.

Changes to Chapter 5 - Basic Design include:

- Sections 5.2.1 - Traffic Data and 5.2.2 - Traffic Flow Diagrams, Growth Rates and Diversion Analysis were revised to clarify the traffic analysis study area and discuss the use of crowdsourced data, e.g., cell phone or fleet GPS data.
• Section 5.2.2.3 - Design Year Projections for Future Traffic was revised and Exhibit 5-1b - Design Year Based on Project Type was introduced.

• A standardized format for turning movement counts is referenced in the chapter, and is now available on HDM Chapter 5 webpage.

Changes to Chapter 10 - *Roadside Design, Guide Rail and Appurtenances* include:

• Guidance regarding security bollards, issued with EB 19-006, has been incorporated into the chapter.

IMPLEMENTATION: Exceptions to use design criteria from the previous revision of HDM Chapter 2 may be granted by the Deputy Chief Engineer (Design) for projects that were scheduled for Design Approval prior to May 1, 2020, but have experienced schedule delays.


BACKGROUND:

Chapters 2, 5 and 10 have been reformatted. These and future chapter revisions will include page footers identifying the issuing document (EB, EI or ED) and the effective date of the guidance. In the past, HDM chapter revisions were dated page-by-page so individual pages could be replaced in a hard copy of the manual when they were revised. These page dates did not necessarily reflect the effective date of the guidance, which caused confusion. Since HDM hard copies are no longer produced, and the manual is entirely electronic, it is now unnecessary to issue or replace individual pages. Additionally, the chapter itself included no direct reference to the issuing document, which often has relevant implementation and background information.

EB 18-042 announced errata corrections to Chapters 2,5,7,19,20 & 21. The corrected chapters were posted on the Department's website at the time the EB was issued, with the stated intention of fully incorporating the changes into the chapters with this Highway Design Manual revision (Revision 92).

Chapter 2: Project work type definitions have been updated and relocated into HDM Chapter 2. They were previously found in *Project Development Manual* Appendix 5, but it was determined that consolidating this information in the “Project Types” section of the Chapter 2 would be more convenient for designers. *Project Development Manual* Appendix 5 will be permanently deleted.

The 7th Edition of AASHTO's *A Policy on the Geometric Design of Highways and Streets* introduced 3 new classes to better define the context for geometric design. In addition to the “Urban” and “Rural” context classes that have traditionally been used, there are now “Rural Town”, Suburban” and “Urban Core” classes. HDM Chapter 2 has been revised to incorporate these new context classes throughout.
The NYSDOT Traffic Count Hourly Report uses Average Annual Daily Traffic (AADT) for traffic volume measurement, but Chapter 2’s Design Criteria tables used Average Daily Traffic (ADT). For consistency, design volumes in the chapter are now shown as AADT.

Chapter 10: Refer to the “Background” section of EB 19-006.

CONTACT: Direct questions regarding Chapters 2 or 5 to Rick Wilder, P.E., Director of the Office of Design, at (518) 457-5922, or via e-mail at Rick.Wilder@dot.ny.gov. Questions regarding Chapter 10 should be directed to Terry Hale, P.E., of the Design Quality Assurance Bureau, at 518-485-7009, or via e-mail at Terry.Hale@dot.ny.gov.