Title: NYSDOT 2017 BRIDGE INSPECTION MANUAL (2017 BIM)

ADMINISTRATIVE INFORMATION:

- Effective Date: This Engineering Bulletin (EB) is effective upon signature.
- Superseded Issuances: The EB supersedes EB 16-009.

PURPOSE: The purpose of this EB is to announce availability of the New York State Department of Transportation 2017 Bridge Inspection Manual (2017 BIM).

TECHNICAL INFORMATION:

- This manual replaces the New York State Department of Transportation 2016 Bridge Inspection Manual (2016 BIM).
- The 2017 BIM contains Department policies and procedures related to the inspection of Bridges, Large Culverts, and Tunnels, including Diving Inspections and Fathometer Surveys. Major updates within the 2017 BIM include:
  - Addition of guidance regarding BIM use by structure owners other than NYSDOT.
  - Addition of inspection requirements for abandoned and permanently closed bridges.
  - Requirement that Bridge Inspectors use the diving/fathometer report to provide an assessment for non-visible, underwater elements.
  - Addition of guidance regarding element location prefix.
  - Revised guidance in NY Sections as follows:
    - 3.1 – Decks and Slabs
      - Adjacent box beams and slabs shall have a bridge deck element.
      - Wearing Surface guidance removed.
    - 3.4 – Bearings
      - 312-Enclosed/Concealed Bearing nested roller bearing example removed.
      - Revised guidance now requires bearings on pier to be assessed with that pier.
    - 3.5 – Substructures
      - Revised guidance to indicate backwalls and pedestals not be included in the stem portion of the National Bridge Element.
      - Revised guidance in relation to non-monolithic wingwalls requiring footings and piles to be assessed and quantified separately from that of the abutment.
    - 3.6 – Culverts
      - Updated guidance regarding applicability of the AASHTO Culvert Elements.
      - Added guidance regarding paved inverts.
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- 3.8 – Wearing Surfaces, Protective Coatings and Concrete Reinforcing Steel Protective Systems
  - Revised Wearing Surface guidance which makes it inclusive of all top surfaces of the deck, slab or top flange on which vehicles drive.

- 3.10 – Agency Defined Elements
  - Element 800 renamed as Erosion or Scour.
  - Elements 810-Sidewalk, 811-Curb, and 830-Secondary Members defects revised.
  - Guidance now requires that each pier bearing shall have its own individually assessed Element 852-Pier Pedestal.
  - Revised guidance that footings, piles and erosion or scour elements associated with 853-Wingwall be assessed and quantified separately from that of the abutment.
  - Element 860 renamed as Headed.
  - Deleted Element 870-Culvert Apron/Cut-off Wall.

- Removed restriction which excluded assessed element conditions from being reported as Non-Structural Condition Observations.

- Appendixes:
  - B – Revised flag definitions to be consistent with current available flag types.
  - O – contents moved to P and replaced with “Inspection of Highway Tunnels in the State of New York”
  - I – Supersedes TA 16-001 Inspection of Highway Tunnels in the State of New York
  - L – Added guidance regarding abandoned bridges.

IMPLEMENTATION: Effective immediately.

The 2016 BIM will no longer be supported but will remain available on the Department website as a reference document.

TRANSMITTED MATERIALS: None. The 2017 BIM is available electronically at:

https://www.dot.ny.gov/divisions/engineering/structures/manuals/bridge-inspection

BACKGROUND: The National and State practice for bridge inspection has continuously evolved since the Department’s issuance of the 2016 BIM. The 2017 BIM incorporates changes that reflect up-to-date inspection procedure and inspection documentation practices. Additionally, the revised manual updates will ensure a more comprehensive and responsive bridge inspection program that will be consistent with the Department’s comprehensive asset management plan.

CONTACT: Direct questions regarding this issuance to Bridge Inspection Unit, Office of Structures, at (518) 457-5498.