



Wisconsin Department of Transportation

Scott Walker
Governor

Mark Gottlieb, P.E.
Secretary

Division of Transportation System Development
Bureau of Structures
4802 Sheboygan Ave, Rm 601
Madison, WI 53707-7916
Phone: 608-266-8195

DATE: 12/14/2015

TO: Ancillary Structure Inspectors and Program Managers

FROM: Richard Marz, P.E.
Chief Structures Maintenance Engineer
Bureau of Structures

SUBJECT: Technical Memorandum
Definition and Inventory Management of state owned/maintained Small Bridge Structures (C-Structures)

IMPLEMENTATION: This memorandum applies to all state owned/maintained structures in Wisconsin that carry vehicular traffic, excluding bridges as defined by the National Bridge Inspection Standards (NBIS), and is effective as of 1/1/2016.

GUIDELINES:

This memorandum defines a small bridge structure and should be used as a guideline for inspection and documentation of these types of structures in Wisconsin. The definition is as follows:

Small Bridge Structures (C-xx-xxxx)

Small Bridge Structures require a unique structural design and have a clear opening of 20 ft or less measured along the centerline of roadway. This includes:

- Bridge like structures (i.e. Deck Girders, Flat slabs, etc.)
- Single and multi-cell box culverts (with opening 20 ft² or greater)
- Rigid frames
- Arches
- Structures without a floor slab (including arches on footings)
- Metal bolted plate structures

Structures meeting this definition will be inventoried in the Highway Structures Information System (HSI), managed by the Bureau of Structures (BOS), and inventoried / inspected under the direction of the Regional Ancillary Inspection Engineers.

Culverts

The Bureau of Highway Maintenance (BHM) will manage the inventory and inspection of culvert assets. These include all standard bid item pipe culverts and any pre-engineered products not meeting any of the above requirement including, but not limited to, the following:

- Culvert Pipe Corrugated (Aluminum, Polyethylene, Polypropylene, Steel, Steel Aluminum Coated, Steel Polymer Coated)
- Culvert Pipe Reinforced Concrete
- Culvert Pipe Reinforced Concrete Horizontal Elliptical
- Storm Sewer Pipe Composite
- Storm Sewer Pipe Non Reinforced Concrete
- Storm Sewer Pipe Reinforced Concrete
- Storm Sewer Pipe Reinforced Concrete Elliptical
- Storm Sewer Pipe Corrugated Polyethylene & polypropylene
- Concrete Box Culverts (with openings of less than 20 ft²)

QUESTIONS:

For information on the technical contents of this memorandum, or questions about assets that do not seem to fit any of the above categories, please contact Travis McDaniel at (608)-266-5097 or Rick Marz at (608)-266-8195.