**MOVABLE BRIDGE STRUCTURAL INSPECTION REPORT – VERTICAL LIFT BRIDGES**

Wisconsin Department of Transportation

DT2030 6/2017 s.84.17 Wis. Stats.

|  |  |
| --- | --- |
| Bridge Number | Overall Rating of Structural System |
| Bridge Name | Date Inspected |
| Lead Structural Inspector | Weather |
| Inspection Team Leader |  |

Notes:

* This form provides specific inspection detail in conjunction with the items provided in the HSI Movable Inspection Tab. While there may be some overlap with the routine inspection, updates to the Elements and Assessments Inspections Tabs are not necessarily required.
* Place comments in each box next to the component inspected.
* For each component rating, enter “(1)” for Good, “(2)” for Fair, “(3)” for Poor, or “(4)” for Severe.
* If the component does not apply to this bridge enter “NA”.
* Include a comment and photo reference documenting any components rated (3) or (4).

**Counterweights** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| Check counterweight surfaces for cracks or spalls. |  |
| Condition of exposed portions of supporting embedded counterweight structural members |  |
| Check for any issues with interference of counterweight during bridge operation with adjacent fixed surfaces of substructure. |  |
| Check pockets for debris. Confirm counterweight blocks are neatly stacked in pockets |  |
| Other issues with counterweights |  |

**Counterweight Sheave Supports** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| Check for condition of concrete bases and/or structural members supporting counterweight sheave bearings. |  |

**Lifting Legs** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| Check condition of lift legs. Confirm lifting legs are properly aligned. Confirm all connections are intact and tight. Confirm whether any corrosion exists on lifting legs. |  |

**Lifting Girders (Jacking Beams)** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| Check condition of lifting girders. Confirm all connections with lifting legs and hydraulic cylinders are intact and tight. Confirm whether any corrosion exists on lifting girders. |  |

**Transformers** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| **Roadway Joints** – Check for any uneven surface across roadway deck joints with bridge closed. Observe breaks during bridge opening and closing and check for any visible or audible signs of binding |  |
| **Sidewalk Joints** – Check for any tripping hazard from uneven surface across sidewalk breaks with bridge closed. Observe breaks during bridge opening and closing and check for any visible or audible signs of binding |  |
| **Traffic Railing** – Check joints between fixed and moving portions of traffic railing for potential interference during bridge opening and closing |  |
| **Pedestrian Railing** – Check joints between fixed and moving portions of pedestrian railing for potential interference during bridge opening and closing |  |

**Machinery Supporting Structural Systems** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| Check structural elements supporting HPU system or other machinery. |  |

**Substructures** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| Check for deteriorated, spalled or cracked concrete.  Check for water infiltration through leaking cracks.  Check for water accumulating in bottom of pits |  |

**Navigation Protection Systems** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| Fenders – Check for impact damage or deterioration of rub rail elements and attaching bolts/anchor hardware. |  |
| Protection Cells/Dolphins – Check for impact damage or deterioration of system. |  |

**Lift Span Seating** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| Confirm span is fully seated and supported on all beam seat bearings when bridge is closed. |  |

**Service and Maintenance Access Systems** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| **Service Ladders, Stairs, Platforms and Handrail** – Check for corrosion or deterioration of these elements in the house, piers, and pits and their attaching hardware. |  |

**Operator House** Component Rating:

|  |  |
| --- | --- |
| **Component** | **Finding/Comment** |
| **House Structural Support System** – Check for deterioration of supporting members. |  |
| **House Roof** – Visually check for signs of deterioration or leakage of roof. |  |
| **Weather Resistance** – Visually check for signs of water leakage through windows or doors |  |
| **HVAC** – Check for proper functioning of heating and air conditioning systems |  |

**Recommended Short Term Actions & Repairs for Structural System:**

|  |
| --- |
|  |

**Recommended Long Term Rehabilitation Needs for Structural System:**

|  |
| --- |
|  |

**General Remarks – Structural System** Overall Rating *(Also enter on page 1)*:

(Overall Rating is lowest of all of the component ratings above.)

|  |
| --- |
|  |