

REHABILITATION STRUCTURE SURVEY REPORT

DT1696 6/2012

Wisconsin Department of Transportation

- ☒ **Grade Separation**
☐ **Stream Crossing**
☐ **Culvert**
☐ **Railroad**
☐ **Retaining Wall**
☐ **Noise Barrier**
☐ **Sign Structure**
☐ **Other:** _____

RECEIVED
 8/30/2019
 BUREAU OF STRUCTURES

For guidance see: <http://dotnet/dtd/bos/extranet/structures/reports-checklists.htm>

Design Project ID 1090-35-00	Construction Project ID 1090-35-70	Highway (Project Name) IH 43 SB OVER MARTIN RD		
Final Plan Due Date DECEMBER 1, 2019	Preliminary Plan Due Date SEPTEMBER 1, 2019	<input type="checkbox"/> Town <input type="checkbox"/> Village <input checked="" type="checkbox"/> City NEW BERLIN		
PS&E Date FEBRUARY 1, 2020	Letting Date MAY 12, 2020	County WAUKESHA		
Structure Number B-67-111		Section 33	Town 06N	Range 20E
Station 670+13.97 IH 43 SB	Latitude: 425613.26 Longitude: 880849.94	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Structure Located on National Highway System		
For Survey and CADD Files Horizontal Coordinate System: Vertical Datum:		Traffic Forecast Data		
Feature On IH 43 SB		Design Year 2032	Average Daily Traffic (ADT) 58400	Roadway Design Speed 70 mph
Feature Under MARTIN RD		Feature Under 2032	2500	35 mph
Region Contact: LANCE PARVE (Area Code) Telephone Number(s): (414) 731-5375 Email: LANCE.PARVE@DOT.WI.GOV		Consultant Contact: HEATHER ANDERS (Area Code) Telephone Number(s): (414) 410-6899 Email: HANDERS@hntb.com		

Work To Be Performed

Field Information Required Item Number (see Pages 2-4)

- ☐ A. Structural Repair 1-3, 22
☒ B. Overlay 1-3, 10-22, 26-28, 32, 34
 ☐ Concrete Overlay ☐ Asphalt Overlay
 ☐ Polymer Modified Asphalt Overlay ☒ Thin Bonded Polymer Overlay
 ☐ Other: _____
☐ C. New Bearings 3, 8, 9, 22
☐ D. New Railings 15-17, 20-23
☐ E. Curb and Sidewalk Repair 2, 3, 16, 22, 23
☐ F. Abutment Repair 2, 3, 12, 16
☐ G. Pier Repair 2, 3, 12, 16
☐ H. New Deck 1-6, 9, 10, 13-28, 32-34
☐ I. Widening 1-28, 30, 32-35
☐ J. Joint Repair 2, 3, 8, 16, 19, 22
☐ K. Surface Repair 2, 3, 22
☐ L. Raising Bridge 3, 6, 9, 16, 20-24
☐ M. Slope Stabilization 1-3, 30
☐ N. Scour Repair 1, 2 or 3, 16, 19, 21, 27, 29, 31-35
☐ O. Painting 16, 22, 24
☐ P. Other: _____

Field Information Required

If no structure number exists provide the following: Small County Map on which the location of proposed structure is shown in red and any highway relocation in green. In addition, provide Location Map of scale not less than 1" = 2000' showing the structure location and number.

- ☒ 1. Most recent inspection report, brief history of bridge construction date, and description of repairs with dates.
- ☒ 2. Outline deficient areas on existing structure plan or drawing.
- ☒ 3. Photographs of details requiring repairs or modifications, such as: bearings, x-frames, joints, etc. Photograph all deficient areas. Clearly label all photographs.
- ☐ 4. Provide proposed typical section for roadway and structure showing dimensions and cross slopes.
- ☐ 5. Survey beam seat or girder elevations at both sides of bridge at all substructure units.
- ☐ 6. Provide cross-section elevations at 10 foot intervals extending across the structure and a minimum of 100 feet beyond each end. Sections should be normal to centerline and show elevations at centerline roadway and gutter line. Take elevations along joints and at floor drains.
- ☐ 7. Show and identify starting stationing on bridge.
- ☐ 8. Record measurement, temperature of the structure, and date taken for each of the following:
 - (a) Joint opening measured normal to joint at centerline of roadway and both curb lines.
 - (b) Clearance between girder ends at piers.
 - (c) Distance from front face of abutment backwall to closest point of girder end measured parallel to girder.
 - (d) Temperature of structure determined by averaging top and under deck (if accessible) readings.
- ☐ 9. Fixed and expansion bearings - condition and orientation.
- ☒ 10. Number and width of proposed pours including construction staging sequence.
- ☒ 11. Location of existing construction joints in the deck.
- ☒ 12. Estimated Quantities:

Preparation, Decks, Type 1	Sq. Yd. <u>TBD</u>	
Preparation, Decks, Type 2	Sq. Yd. <u>TBD</u>	
Full Depth Deck Repair	Sq. Yd. <u>TBD</u>	Galvanic Anodes? <u>NA</u>
Concrete Surface Repair Superstructure	Sq. Ft. <u>NA</u>	Galvanic Anodes? <u>NA</u>
Concrete Surface Repair Substructure	Sq. Ft. <u>NA</u>	Galvanic Anodes? <u>NA</u>
Curb Repair	LF. <u>NA</u>	Galvanic Anodes? <u>NA</u>

☒ 13. Sufficiency number: 96.5 (obtain from HSI Bridge Inventory System)

☒ 14. Appraisal and Condition Rating

	Deck Condition	Superstructure Condition	Substructure Condition	Load Capacity Appraisal	Structural EVAL Appraisal
Current	8	8	7	5	7

☒ 15. Load Ratings

	Inventory	Operational
Current Calculated Date: 2/09/2016	HS20	HS33
After Completed by Bridge Designer		

- ☒ 16. Utilities on/near Structure. (WisDOT policy is to avoid placing utilities on the structure.)

☐ Yes ☒ No

Type	Owner and Contact Information	Size	Opening at Abutment	Weight	Pressure

- ☒ 17. Is existing bridge railing deficient?

☐ Yes ☒ No If Yes – Replacement Rail Type:

- ☒ 18. Drains to be:

☐ Raised ☐ Closed ☐ Downspouted ☐ New

- ☒ 19. Traffic maintained on bridge during work?

☒ Yes ☐ No If Yes – Include sketches

- ☒ 20. Will guard rail be attached?

☐ Yes ☒ No If Yes – Which corners?

- ☒ 21. Will work to be performed eliminate all deficiencies?

☒ Yes ☐ No If No – Explain:

- ☒ 22. Hazardous waste (asbestos) to be removed?

☐ Yes ☒ No If Yes – Explain:

- ☐ 23. Wing location(s) for surface drain anchors: None

- ☐ 24. Painting?

☐ Yes ☐ No If Yes – Explain on Page 4

(all, part, railing, color system, containment, bid items)

- ☐ 25. Desired roadway width: (new deck / widening) _____ Ft.

Desired sidewalk clear width: Left: _____ Ft. Right: _____ Ft.

- ☒ 26. Maximum increase in grade line elevation 1/4 In.

- ☒ 27. Benchmark description to be shown

- ☒ 28. Desired final cross slopes on bridge VARIES Ft./Ft.

- ☐ 29. Underwater Inspection Report including:

- Streambed Cross Section With Pier, Footing and Seal Elevations
- Pier Elevation Drawings
- Pier Layout
- Hydrographic Survey

- ☐ 30. Slope stabilization, provide:

Type: _____ Quantity: _____ CY.

Slope: _____ Ft./Ft. Fill: _____ CY.

- ☐ 31. Preliminary layout of grout bags or proposed scour repair.

C.I.P. Articulated Mats (for Scour) _____ CY.

Grout Bags (for Scour) _____ CY.

Heavy Riprap _____ CY.

Extra Heavy Riprap _____ CY.

- ☒ 32. Report submitted with Preliminary Plan requires **no** CADD file submittal (See ESubmittal instructions).

- ☐ 33. Report submitted for development of Preliminary Plan to structure design engineer requires CADD file (if available) submittal and Report submittal to Soils Engineer if project involves foundation modifications.
- ☒ 34. Coordinate with structure design engineer **before** going into the field if existing structure has no available plans, if staged construction is planned, or if there are adjoining/adjacent structures that will remain in place.
- ☐ 35. If project involves substructure widening coordinate with structure and/or hydraulic design engineer to determine if information on the separation and/or stream crossing SSR will be required.

Additional Information

Elaborate on other concerns such as: DNR, Local, Utility Conflicts, Aesthetics, Railing Type and Staged Construction.
Please be as detailed and specific as possible.

Work to be Performed:

Thin Polymer Overlay
Deck Prep Types 1 and 2
Full-depth deck patching

- 10. Staging for deck work will be determined in final design. If staging requires, deck repair areas to be filled with "Rapid Set Deck Repair". To be determined in final design.
- 11. See preliminary plans for location of existing longitudinal construction joint in the deck.
- 13. 14. 15. Data for these items taken from HSI system on 8/28/2019.
- 16. Exact utility locations still being determined, but no utility conflicts anticipated. To be verified during final design.
- 17. Existing bridge railing is Type HF.
- 18. No existing drains on bridge.
- 19. To be determined in final design.