



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

Design Memorandum No. 21-19

September 9, 2021

TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/Mary Kennedy
Mary Kennedy
Historic Bridge Specialist
Environmental Services – Cultural Resources

/s/Stephanie Wagner
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Director, Bridge Engineering

SUBJECT: Historic Bridge Review Submittals

REVISES: *Indiana Design Manual (IDM) Chapter 14-2.01(09), 14-2.05, and 14-2.05(03) thru 14-2.05(07)*
Indiana Design Manual (IDM) Chapter 412-5.01(02) and 412-5.02

EFFECTIVE: Immediately

Updates have been made to Chapter 14 and 412 to clarify the requirements of Bridge Preservation Projects on historic bridges. These updates apply to both rehabilitation and preventive maintenance work types, when they are processed through the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*.

It should be noted that the updates may not apply to some preventive maintenance projects, which may be processed under the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program in the State of Indiana (Minor Projects PA)*. INDOT's Historic Bridge Specialist should be contacted with any questions about which PA is applicable for a project. The current Historic Bridge Specialist can be found within the organizational chart of the Environmental Division and related inquiries can be sent to INDOTHistoricBridges@indot.IN.gov.

All projects involving a historic bridge processed under the *Historic Bridges PA* are required to have a Historic Bridge Alternatives Analysis (HBAA).

The HBAA serves as the Bridge Rehabilitation Report or the Bridge Preventive Maintenance Meeting Minutes depending on the work type in the Stage 1 Submittal. If preservation is the selected alternative through the HBAA review process, the bridge owner will provide copies of the following plans to Indiana State Historic Preservation Officer (SHPO) in accordance with the *Historic Bridges PA*.

- Stage 2 (30%)
- Hearing Plans (60%)¹
- Stage 3 (100%)

¹ A public hearing is required for all historic bridge projects processed through the *Historic Bridges PA*.

All three plan review submittals are required and any outstanding plan submittals must be listed as commitments in the environmental document and the Project Commitments Database. All three submittals should be completed prior to the submittal of the Environmental Consultation Form (ECF). The ECF cannot be approved until all three plan submittals have been completed.

Designers are encouraged to contact the Cultural Resources Office in the Division of Environmental Services as early as possible in the development process to ensure adequate time has been scheduled for the required review and coordination.

The following additional resources are currently also available:

- [Historic Bridge PDP](#)
- [HBAA Layout guide document](#)
- [Other Historic Bridge PDP-related Documents](#)
- [Cultural Resources Manual](#) (Part IV covers Historic Bridges)

For questions related to this design memo, please contact the Bridge Engineering Division at bridgedesignoffice@indot.in.gov.

IDM Revision Overview

IDM Section	Revision
14-2.01(09)	Updated to reflect current information for INDOT public involvement procedures. New content regarding historic bridge projects and public involvement.
14-2.05	New content regarding historic bridge plan reviews.
14-2.05(03)	New content regarding historic bridge plan review.
14-2.05(04)	New section regarding historic bridge plan review.
14-2.05(05)	Section number revised. New content regarding historic bridge plan review.
14-2.05(06)	Only section number revised.
14-2.05(07)	Only section number revised.
412-5.01(02)	Minor edits for clarification.
412-5.02	New content regarding historic bridge plan reviews.

Chapter 14 Revisions

14-2.01(09) Public Hearing Plans Preparation, if required [Rev. Mar. 2018, Mar. 2021, Sep. 2021]

See [Chapter 8, Public Involvement Procedures](#), for the minimum thresholds that trigger public involvement for a project. If a public information meeting or hearing is required, coordinate with the INDOT project manager regarding the public information process. Public involvement activities are contained in the INDOT *Project Development Public Involvement Procedures Manual*. The manual and additional public involvement information is available from the [INDOT Public Involvement website](#).

A public hearing is required for all historic bridge projects processed through the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*. Procedures for public hearings under the *Historic Bridges PA* can be found in the [INDOT Cultural Resources Manual](#), Part IV, Chapter 3.

It should be noted that some historic bridge projects may be processed under the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program in the State of Indiana (Minor Projects PA)*. Projects processed under the *Minor Projects PA* typically do not require public involvement. INDOT's Historic Bridge Specialist should be contacted with any questions about which *PA* is applicable for a project. The current Historic Bridge Specialist can be found within the organizational chart of the Environmental Division and related inquiries can be sent to INDOTHistoricBridges@indot.IN.gov.

Where public involvement is required, and the environmental document has been released for public involvement, the designer should submit the following to the INDOT District Capital Program Management staff. Coordinate with the INDOT Project manager regarding the public information process.

1. Stage 2 Plans. Plans must be suitable for public viewing, i.e. no markups or comments. Upload plans to ERMS with the “PHRG” Submittal prefix.
2. Public Involvement Summary. Templates for the public information summary and notification cover letter as well as an example are available from the [Department’s Editable Documents webpage](#), under Public Involvement. Attach the summary and cover letter to the ERMS upload notification email.
3. Traffic-Maintenance Plan (as required). In preparation for a public information meeting, the designer may be asked to perform the activities as follows.
 - a. Displays. Prepare displays that can be used in a coordination meeting or a public information meeting. These include, but are not necessarily be limited to, sketches of the typical cross section for each phase of the construction, and composite drawings showing all ramp closures with traffic-flow arrows indicating the number of lanes to be open during each construction phase.
 - b. Transportation Management Plan (TMP). Address the requirements of a TMP that has been developed for the project and items listed in Section 503-3.01(03).
 - c. Traffic Impacts/Queue Analysis. Address constraints due to lane closures, including anticipated traffic impacts/queues, seeSection 503-2.07.

14-2.05 Bridge Plans, Preservation Project [Rev. Jan. 2013, Mar. 2016, Apr. 2017, Nov. 2017, May 2020, Mar. 2021, Sep. 2021]

A Bridge Preservation project can include work activities classified as either preventive maintenance or rehabilitation. See Chapter 412 for types of preservation treatments considered preventive maintenance and treatments considered rehabilitation. The following may not be applicable to all Bridge Preservation projects and should be evaluated for each project individually.

Historic Bridges

Historic bridges require additional coordination and plan reviews in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*. The *Historic Bridges PA* and a listing of Select and Non-Select bridges (inventory summary & results) are available on the [Indiana Historic Bridges Inventory website](#).

In accordance with the *Historic Bridges PA*, when any preservation option is selected as the preferred alternative for a historic bridge, the bridge owner is required to provide plans to the Indiana State Historic Preservation Officer (SHPO) when the design is approximately 30% complete (Stage 2 previously Preliminary Plans), approximately 60% complete (Hearing Plans), and when plans are 100% complete (Stage 3). If the project involves a bypass of the historic bridge, then the plan reviews will include a site plan and design of the new bridge and the historic bridge. The designer shall copy the Historic Bridge Specialist on all STAGE and PHRG submittals for Historic Bridges. The current Historic Bridge Specialist can be found within the organizational chart of the Environmental Division and related inquiries can be sent to INDOTHistoricBridges@indot.IN.gov.

The SHPO staff is allotted a 30-day comment period on each plan review. Additionally, each of these submittals are reviewed by Cultural Resources Office staff in the Division of Environmental Service before the plans are submitted to the SHPO staff and consulting parties. See 412-5.02 and the [INDOT Cultural Resources Manual](#), Part IV, Chapter 2 for more information.

Scour Analysis

See Section 412-2.0 for more information concerning scour analysis.

***Revisions are associated with Design Memo 21-18.**

Load Rating

For a Preventive Maintenance project, the need for a load rating should be determined at the field inspection. Utilizing an LMC or other rigid overlay requires a load rating, but a polymeric or thin overlay does not. Other treatments that add significant deadload, e.g. replacing an aluminum railing with a concrete railing also require a load rating. For a Rehabilitation project a load rating is required regardless of the preservation treatment proposed.

For bridge preservation work included as part of a design-build or other alternate procurement method, bridge load rating must be included as a hold point in the technical provisions. The bridge load rating should be requested through the Load Rating Request Application (LRRA) upon completion of the design plans. The load rating must be completed prior to the approval of structural member working drawings. Where working drawings are not required, the load rating must be complete prior to work being performed on bridge elements.

Asbestos Report

An Asbestos Report is required for all Bridge Preservation projects. The designer should contact the project manager early in the development of the project to determine if the report is on file or must be completed. It is the responsibility of the District Bridge Inspection Engineer to complete the Asbestos Report for each of the INDOT-maintained bridges within their district. For LPA projects the designer is responsible for coordinating the obtaining of the report with the LPA.

Environmental, Utilities & Railroads, and Right of Way

Each Bridge Preservation project is subject to NEPA and permitting requirements, utility and railroad coordination, and right-of-way acquisition requirements.

14-2.05(03) Stage 2 Review Submission (Preliminary Plans) [Rev. Mar. 2016, Apr. 2020, Feb. 2021, Mar. 2021, Jun. 2021, Sep. 2021]

A Stage 2 submission is required for all Rehabilitation projects. For Preventive Maintenance projects, the designer may make a Stage 3 level submission at the time of Stage 2 and skip Stage 3 at the discretion of the Bridge Engineering Division reviewer. The designer should note on the transmittal letter and on the title sheet of the plans the desire to have the submission checked as a Stage 3. If the designer does not have all the necessary information included, a Stage 3 submittal may still be required

Plans for multiple bridge rehabilitations which are complementary to plans for road work may be combined into one set of bridge plans. Multiple bridge preventive maintenance projects may be combined into one set of bridge plans. The structure numbers and Des numbers for all bridge structures should be shown on the title sheet.

If the project includes traffic signal(s), signing, or lighting details a separate set of plans should be submitted into ERMS for traffic review in accordance with Section 14-1.02(09).

The following should be reviewed in accordance with quality assurance procedures and included in this submission.

1. Transmittal Letter. Identify any unique circumstances for the submittal, e.g. omitted items, the Responsible Person to receive the evaluation scores, as well as any subconsultants and their work responsibilities.
2. Plan Set, Rehabilitation project. Rehabilitation projects should be developed on full size sheets. See item 3 for a Preventive Maintenance project.
 - a. Title Sheet.
 - b. Index Sheet. Include the information as follows:
 - 1) an index of plan sheets (at this stage); and
 - 2) a revision table.
 - 3) a list of utility owners, addresses, contact names, and phone numbers or e-mail addresses.
 - c. Traffic Maintenance Details. Finalize all maintenance of traffic details including pedestrian and bicycle maintenance of traffic where required in accordance with Section 503-3.01. Detail Sheets. These preliminary details should include, but not be limited to, typical cross sections, asphalt wedge details, guardrail details, and approach work details as appropriate.
 - d. Layout Sheet. A Layout Sheet should be included when the rehabilitation work is significant enough to warrant a full survey or is part of a larger 4R project.

e. General Plan Sheet. This sheet should include the following:

- 1) plan view;
- 2) elevation view;
- 3) typical bridge cross section;
- 4) design data relative to original design structural elements. The following note should be included:

Originally designed for ____ loading, in accordance with the AASHTO ____ Specifications, ____ Edition, and subsequent interims through ____ [year].

Design data for new elements, such as a new bridge deck, should be indicated separately;

- 5) design loadings;
- 6) suggested substructure type;
- 7) minimum vertical and horizontal clearances;
- 8) minimum low structure, Q100, flowline, low water and ordinary high water mark elevations, as available;
- 9) related general notes;
- 10) general rehabilitation recommendations including, but not limited to, legend, material notes, and required stormwater- pollution-prevention retrofits; and
- 11) all recommendations outlined in the Bridge Rehabilitation Report.

3. Plan Set, Preventive Maintenance project. Preventive Maintenance projects may be developed on letter-sized plan sheets. If a Preventive Maintenance project utilizes full size plans, the plan sheet development should be in accordance with item 2 above.
 - a. Title Sheet.
 - 1) Project Description. The project description should include the work type, e.g., Polymeric Overlay and Joint Repair.
 - 2) Project Location Maps. Include a State map, hatching the various counties included in the project and note the INDOT district. A separate project location map or enlarged detail should identify general locations of the various structures within the counties.
 - 3) Bridge Index Table. The table should summarize the list of structures, including des. number, bridge file number, and county.
 - 4) Contract number. The contract number should appear in the upper right hand corner of the sheet. This allows the number to be visible when the contract book is printed and bound.
 - 5) Standard Specifications Reference. Indicate which version of the Department's *Standard Specifications* apply to the project. The *Standard Specifications* are published every two years.
 - 6) Signature Block and Professional Engineer's Seal. The engineer's seal, signature of the engineer, and date signed is required on each sheet for consultant-developed plans and on the title sheet and detail sheets for in-house-developed plans. The seal may vary within the plan set depending on which engineer prepared the sheet. For the title sheet, "Indiana Department of Transportation", should be shown under the Approved for Letting signature line.
 - b. Project Location Sheet. This sheet is a tabled summary of structures, including des number, structure number, route and facility crossed, and location (referenced from the nearest State route, US route, or interstate), latitude and longitude, reference post and county.
 - c. Traffic Maintenance Details. Finalize all maintenance of traffic details including pedestrian and bicycle maintenance of traffic where required in accordance with Section 503-3.01.

- d. Detail Sheets. Include preventive maintenance treatment details and other details not covered by the *Standard Drawings*.
 - e. Summary tables should be provided for MOT items, pavement markings, and bridge quantities. MOT summary tables may be included on the MOT Details sheets.
4. All Project Commitments Report. The All Project Commitments Report is generated from the Commitments Database. Information on accessing the Commitments Database and other project commitments documents are available at <http://www.in.gov/indot/2731.htm>.
 5. Level One Controlling Criteria Checklist and Design Computations. For a Preventive Maintenance project, a Level One controlling criteria checklist is required only for MOT. ADA and Bridge Railing Test Level should be addressed in accordance with Section 412-3.01. For a Rehabilitation project, the checklist is required for both the permanent condition and MOT.
 6. If there are no changes to the plans which affect Level One controlling criteria since the prior submission, it is acceptable to submit the previous checklist and initial and date next to the statement that no changes have been made to the plans that affect Level One controlling criteria. See Section 40-8.02. A checklist should be prepared for each phase of the proposed MOT.
 7. Draft TMP Report for Significant Projects. The following documents should be included in the draft TMP Report unless not it is not required. Where a document is not required, reasoning should be noted.
 - a. TMP Team. The designer should provide a list of the TMP Team members and contact information, including all stakeholders, see Section 503-2.04.
 - b. TMP meeting minutes or other correspondence.
 - c. Determination of Significant Work Zone Impacts, see Section 503-2.02.
 - d. Approved Traffic Control Strategy memo, see Section 503-2.05(02),
 - e. Draft IHCP exception request, where required, see Section 503-3.02,
 - f. Detour Worksheet (Non-Interstate or Interstate), Design Manual Editable Documents Webpage, under Traffic Maintenance (MOT),
 - g. Crossover and Runaround Viability Worksheet, Design Manual Editable Documents Webpage, under Traffic Maintenance (MOT),
 - h. Contract Provision Strategies, see Section 503-2.06,
 - i. Temporary Signal Type Determination, Design Manual Editable Documents Webpage, under Traffic Maintenance (MOT),

- j. Draft Programming Information for Portable Changeable Message Sign, Design Manual Editable Documents Webpage, under Traffic Maintenance (MOT)
 - k. Final design exception request,
 - l. Final mitigation measures, see Section 503-4.0.
8. Traffic Control Plan Checklist. See [Section 14-1.02\(03\)](#) for Traffic Control Plan Checklist information.
9. Scour Analysis Memo. Include the approval letter from the Office of Hydraulics, where applicable.
10. Unique Special Provisions. Begin coordination for unique special provisions and unique pay items. See Chapter 19 for information on developing and submitting unique special provisions.
11. Proprietary Materials. Submit justification for the use of proprietary materials. See Chapter 17.
12. Cost Estimate.
13. Permits Determination Request. For both Rehabilitation and Preventive Maintenance projects, the designer should coordinate with the Waterway Permitting Office to establish the need for a permits determination and items to be submitted.
14. Initiate Stormwater Quality Manager Determination. If possible, the designer should provide initial Stormwater Quality Manager level recommendation. Otherwise submit with Final Plans. See section [14-2.04\(06\)](#).

Additional Stage 2 (Preliminary Plans) Information

For historic bridges, the designer should coordinate with the project manager to have Stage 2 plans reviewed by the Cultural Resources Office staff in the Division of Environmental Service before they are submitted to the Indiana State Historic Preservation Officer (SHPO) staff to fulfill the 30% complete plan review requirement under the *Historic Bridges PA*. See 412-5.02 and the INDOT Cultural Resources Manual, Part IV, Chapter 2 for more information.

Upon approval of the Stage 2 submittal a geotechnical investigation request should be submitted. If a geotechnical investigation is not required a Geotechnical Waiver should be obtained. If the

project includes MSE walls, the Preliminary Plans are required to be submitted to the Geotechnical Services Division for the initial feasibility review of MSE walls at MSEWallShopDrawings@indot.IN.gov.

Upon completion of the Stage 2 review and NEPA approval, required permit applications should be completed and submitted to the Environment Services Division for review. Information on permit application requirements and permitting time frames are included in the [Waterway Permitting Manual](#).

If possible the designer should provide initial Stormwater Quality Manager Level recommendation as early as possible on Transmittal Letter with brief explanation. The SWQM level starts at Level 1 and will be elevated to Level 2 based on meeting either the primary or secondary categories. SWQM Level determination guidance is available from the Department's [Editable Documents webpage](#), under Environmental.

14-2.05(04) Hearing Plans Preparation [Rev. Mar. 2016, Apr. 2017, Nov. 2017, May 2020, Feb. 2021, Mar. 2021, Jun. 2021, Sep. 2021]

A public hearing is required for all historic bridge projects processed through the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*. See the requirements listed in Section 14-2.01(09).

For historic bridges, the designer should coordinate with the project manager to have hearing plans reviewed by the Cultural Resources Office staff in the Division of Environmental Service before they are submitted to the Indiana State Historic Preservation Officer (SHPO) staff to fulfill the 60% complete plan review requirement under the *Historic Bridges PA*. See 412-5.02 and the [INDOT Cultural Resources Manual](#), Part IC, Chapter 2 for more information.

14-2.05(05) Stage 3 Review Submission (Final Plans) [Rev. Mar. 2016, Sep. 2021]

The following should be reviewed in accordance with quality assurance procedures and included in this submission. Information required for the Stage 2 (Preliminary Plans) Submission should be included in this submission, if not previously submitted. If the project includes traffic signal(s),

signing, or lighting details a separate set of plans should be submitted into ERMS for traffic review in accordance with Section 14-1.02(09).

1. Transmittal Letter. Identify any unique circumstances for the submittal, e.g. omitted items or items that are not applicable, the Responsible Person to receive the evaluation scores as well as any subconsultants and their work responsibilities.
2. Response to Comments. Include the Stage 2 comment letter and marked up plans with responses to all comments. These items should be combined into a single document.
3. Plan Sheets. Ensure plan sheets required in previous submittals are included as applicable. The plans should include specific measures proposed by the Railroads, Utilities, Environmental, Geotechnical, or Hydraulics offices. The following additional sheets should be included as applicable.
 - a. Soil Borings Sheets.
 - b. Traffic Maintenance Details. Finalized MOT details.
 - c. Detail Sheets. All necessary plans details required to adequately define the required repairs. Details could include, but not be limited to, floor details, superstructure details, substructure details, railing details, reinforced-concrete bridge approach details, and temporary erosion- and sediment-control measure details.
 - d. Tables. Include a bridge summary, guardrail summary and other tables as applicable.
4. Quantity Calculations. Finalize all quantities. Designer and checker initials and date should be shown on each sheet.
5. Design Computations. Finalize design computations. Designer and checker initials and date should be shown on each sheet. Include the Hydraulics Approval and Scour memos from the Office of Hydraulics, where applicable.
6. Cost Estimate. Conduct a detailed review to ensure that all necessary pay items have been included.
7. Special Provisions and Special Provision Menus. Compile all USPs submitted via SharePoint into a single Word document and submit via ERMS. This is to aid the Design Reviewer in viewing a comprehensive Stage 3 submission and does not replace the

SharePoint process. See Chapter 19 for additional information on the USP submittal and review process.

Compile all completed contract-specific recurring special provisions into a single Word document.

Complete the unique and recurring special provision menus.

8. Geotechnical Report. Include the report or indicate its location within ERMS in the transmittal letter.
9. MSE Wall Design Review Checklist. If the project included MSE walls, the relevant plan sheets and the completed MSE Wall Design Review checklist are required to be submitted to the Geotechnical Services Division for review at MSEWallShopDrawings@indot.IN.gov. The checklist is available for download from the Department's [Editable Documents webpage](#), under Geotechnical, and needs to be signed by the EOR and Geotechnical EOR prior to submission.
10. Geotechnical Review of Final Check Prints Form. This form is available for download from the Department's [Editable Documents webpage](#), under Geotechnical. For projects for which the geotechnical investigation was performed by a consultant, note on the Transmittal Letter that the plans and the form have been transmitted to the geotechnical consultant. For projects for which the geotechnical investigation has been performed by the Department, the form, with plans, should be uploaded into ERMS for review by the Office of Geotechnical Services.
11. Foundation Review Form. This form is available for download from the Department's [Editable Documents webpage](#), under Bridges.
12. Environmental Document. Indicate the status or the location within ERMS in the transmittal letter.
13. Environmental Consultation Form. This form is available for download from the Department's [Editable Documents webpage](#), under Environmental.
14. Permits. Approved permits do not need to be submitted for review, but all necessary permits should be applied for. The status of permits should be indicated on the Environmental Consultation Form.
15. All Project Commitments Report. The All Project Commitments Report is generated from the Commitments Database. Information on accessing the Commitments Database and

other project commitments documents are available at <http://www.in.gov/indot/2731.htm>. All know resolutions should be included.

16. Initiate Stormwater Quality Manager Determination. The designer should Provide initial Stormwater Quality Manager level recommendation on Transmittal Letter with brief explanation. The SWQM level starts at Level 1 and will be elevated to Level 2 based on meeting either the primary or secondary categories. SWQM Level determination guidance is available from the Department's [Editable Documents webpage](#), under Environmental.
17. Level One Controlling Criteria Checklist and Design Computations. For a Preventive Maintenance project, a Level One controlling criteria checklist is only required for MOT. ADA and Bridge Railing Test Level should be addressed in accordance with Section 412-3.01. For Rehabilitation projects, the checklist is required for both the proposed condition and the MOT. If there are no changes to the plans which affect Level One controlling criteria since the prior submission, it is acceptable to submit the previous checklist and initial and date next to the statement that no changes have been made to the plans that affect Level One controlling criteria. See Section 40-8.02. A checklist should be prepared for each phase of the proposed MOT.
18. Load Rating. See Section 14-2.04(09)
19. Proprietary Materials. Include approved request for the use of proprietary materials. See Chapter 17. Approved proprietary material justification is required for proprietary materials that have federal participation.
20. Asbestos Report.
21. Traffic Control Plan Checklist. See [Section 14-1.02\(03\)](#) for Traffic Control Plan Checklist information.
22. Final Approved IHCP Request, if required. See Section 503-3.02.
23. Final TMP Report for Significant Projects. See Section 503-2.0

Additional Stage 3 (Final Plans) Information

For historic bridges, the designer should coordinate with the project manager to have final plans reviewed by the Cultural Resources Office staff in the Division of Environmental Service staff before they are submitted to the Indiana State Historic Preservation Officer (SHPO) staff to fulfill the final plan review requirement under the *Historic Bridges PA*. See 412-5.02 and the [INDOT Cultural Resources Manual](#), Part IV, Chapter 2 for more information.

14-2.05(06) Final Field Check [Rev. Sep. 2021]

A final field check is at the discretion of the project manager in consultation with the Bridge Engineering Division upon completion of the final plan review. The purpose of the field check should be as follows:

1. to confirm the condition of the structure and appropriateness of the plans; and
2. to allow the district representative to review the MOT scheme and construction procedures.

The attendees from the initial field investigation should be invited to the final field check.

All corrections noted at the final field check should be included in the Final Tracings Submission.

The Constructability Review at this stage is at the discretion of the the project manager. See the *Constructability Guide Book* at <http://www.in.gov/indot/2697.htm>. At the discretion of the project manager, constructability and utility items may be discussed at the final field check and documented the Final Field Check Minutes.

14-2.05(07) Final Tracings Submission [New Sep. 2021]

All revisions resulting from the Final Field Check and Stage 3 review will be completed for this submission. See the requirements listed in Section 14-1.02(04). Any significant changes to the project between Stage 3 and Final Tracings should be reviewed by the Bridge Engineering Division. The designer should coordinate with the INDOT Reviewer of the Stage 1 submittal and the Project Manager to coordinate the additional review.

Chapter 412 Revisions

412-5.01(02) Non-Select Bridge [Rev. Sep. 2021]

A Non-Select bridge has been identified as a historic bridge that is not an excellent example of its structure type or is not a suitable candidate for preservation. If the rehabilitation alternatives are not in accordance with Section 412-5.02, and the owner is not granted a design exception or does not request one, the Non-Select bridge must be marketed for re-use. In accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*, if no party steps forward to assume ownership of the bridge before the end of the public hearing comment period, the bridge may be demolished. See the *Historic Bridges PA* for further guidance on marketing or demolishing the bridge.

412-5.02 Historic Bridge Alternatives Analysis [Rev. Feb. 2018, Sep. 2021]

Where a project involves a historic bridge, the bridge owner must complete a Historic Bridge Alternatives Analysis. The Historic Bridge Alternative Analysis will serve as the Bridge Rehabilitation Report or Bridge Preventive Maintenance Meeting Minutes in the Stage 1 submittal. The required contents of the analysis, including explanations and tips for discussion of alternatives, is available from the Department's Historic Bridge Inventory Summary & Results webpage, under Historic Bridge Project Development Process Documents. The HBAA requires concurrence from Cultural Resources Office staff in the Division of Environmental Service and the Bridges Division Office of Bridge Design prior to proceeding to the Stage 2 (Preliminary Plans) submittal.

The evaluation of alternatives must address the following alternatives for both Select and Non-Select Bridges. The list is a hierarchy, meaning that the analysis must prove an alternative is either not feasible or prudent prior to proceeding to the next alternative. Note that Select bridges must be preserved as part of the project.

1. No Build/Do Nothing
2. Rehabilitation for continued vehicular use (two-lane or one-lane option), meeting the Secretary of Interiors Standards for Rehabilitation.
3. Rehabilitation for continued vehicular use (two-lane or one-lane option), not meeting the Secretary of Interiors Standards for Rehabilitation
4. Rehabilitation for continued vehicular use (one-way pair option), meeting the Secretary of Interiors Standards for Rehabilitation.

5. Rehabilitation for continued vehicular use (one-way pair option), not meeting the Secretary of Interiors Standards for Rehabilitation.
6. Bypass (non-vehicular use)/Build New Structure
7. Relocation of Historic Bridge and New Bridge Construction
8. Replacement – Demolition of Historic Bridge and New Bridge Construction

In accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding the Management and Preservation of Indiana's Historic Bridges (Historic Bridges PA)*, when any of the rehabilitation options are selected as the preferred alternative, the bridge owner is required to provide rehabilitation plans to the Indiana State Historic Preservation Officer (SHPO) when the design is approximately 30% complete (Stage 2 formerly Preliminary Plans), approximately 60% complete (Hearing Plans), and when plans are 100% complete (Stage 3 formerly Final Plans). If the project involves a bypass of the historic bridge, then the plan reviews will include a site plan and design of the new bridge and the historic bridge.

The Historic Bridge Alternatives Analysis document should clearly indicate that three plan reviews will be forthcoming.

Additionally, each of these submittals are reviewed by Cultural Resources Office staff in the Division of Environmental Service before the plans are submitted to the SHPO staff and consulting parties.

The SHPO staff is allotted a 30-day comment period on each plan review. Additionally, each of these submittals are reviewed by Cultural Resources Office staff in the Division of Environmental Service before the plans are submitted to the SHPO staff and consulting parties. See the [INDOT Cultural Resources Manual](#), Part IV, Chapter 2 for more information.

All three plan review submittals are required for all projects for which the preferred alternative is rehabilitation of the historic bridge. Any outstanding plan submittals must be listed as commitments in the environmental document and the Project Commitments Database. These submittals should be completed prior to the submittal of the Environmental Consultation Form (ECF). The ECF cannot be approved until all three plan submittals have been completed.