

FAST Act Emergency Vehicle (Ev2/Ev3) Posting

Jennifer Hart
INDOT Bridge Evaluation

FHWA Load Rating for the FAST Act's EVs



QUESTIONS AND ANSWERS

Load Rating for the FAST Act's Emergency Vehicles

REVISION R01

March 16, 2018

Office of Bridges and Structures
Federal Highway Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Question 52

52. (Revision R01, March 16, 2018) A State has historically posted gross vehicle weight and not axle weight. In lieu of utilizing the recommended posting sign R12-7 or R12-7aP for emergency vehicles, can the State use the regular posting signs (such as R12-1, R12-5) to restrict all vehicles that exceed those posted weights?

Yes, it is acceptable to use a weight posting sign in lieu of R12-7 and R12-7aP with the following two conditions: 1) the posting limits on the sign are justified to be appropriate (generally conservative) in restricting the passage of the EVs; and 2) State law does not exempt the EVs from obeying the weight posting signs. However, for consistency and uniformity, it is strongly recommended that R12-7 or R12-7aP be utilized for bridges on the Interstate or within reasonable access.

Indiana Code 9-20 Size and Weight Regulation

IC 9-20

ARTICLE 20. SIZE AND WEIGHT REGULATION



Indiana Code Defines Size and Weight Limitations

IC 9-20-1-1 Operation of vehicles exceeding size and weight limitations; prohibition

Sec. 1. Except as otherwise provided in this article, a person, including a transport operator, may not operate or move upon a highway a vehicle or combination of vehicles of a size or weight exceeding the limitations provided in this article.

[Pre-1991 Recodification Citations: 9-1-4-18 part; 9-8-1-1 part.]

As added by P.L.2-1991, SEC.8. Amended by P.L.198-2016, SEC.336.

Indiana Code Allows for Exceptions

IC 9-20-2-2 "Farm vehicle loaded with a farm product" defined; application of article

Sec. 2. (a) As used in this section, "farm vehicle loaded with a farm product" includes a truck hauling unprocessed leaf tobacco.

(b) Except for interstate highway travel, this article does not apply to the following:

(1) Machinery or equipment used in highway construction or maintenance by the Indiana department of transportation, counties, or municipalities.

(2) Implements of agriculture when used during farming operations or when constructed so that the implements can be moved without material damage to the highways.

(3) Farm drainage machinery.

(c) This article does not apply to firefighting apparatus owned or operated by a political subdivision or volunteer fire department (as defined in IC 36-8-12-2).

(d) Except for interstate highway travel, this article does not limit the width or height of a farm vehicle loaded with a farm product.

[Pre-1991 Recodification Citation: 9-8-1-19.9(a) part.]

As added by P.L.2-1991, SEC.8. Amended by P.L.81-1991, SEC.8; P.L.64-1994, SEC.1; P.L.1-1999, SEC.30; P.L.210-2005, SEC.32; P.L.25-2007, SEC.1.

FHWA Load Rating for the FAST Act's EVs



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REVISION R01

March 16, 2018


Office of Bridges and Structures
Federal Highway Administration
1200 New Jersey Avenue, SE
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Question: Does INDOT's current Bridge Inspection Manual guidance (*IDM 3-6.04*), allowing for the posting of a single tonnage GVW sign in lieu of the Emergency Vehicle sign, meet the requirements of FAST Act Q & A document?

Compare to Q & A Guidance

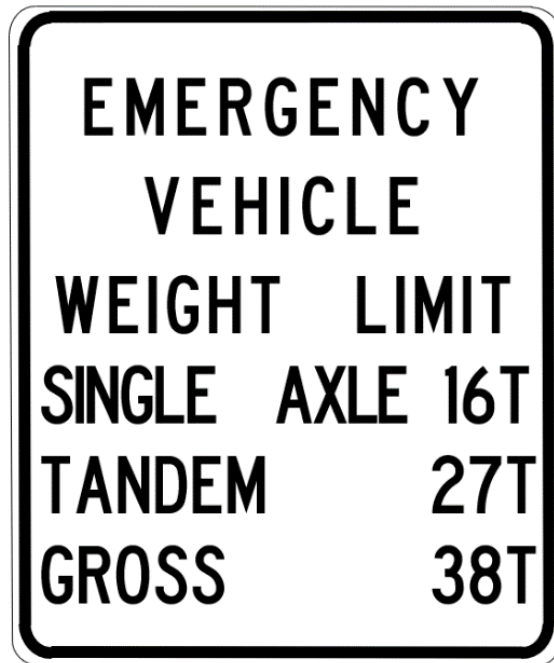
1. Is the posting limit on the sign justified to be appropriate (generally conservative) in restricting passage of the EVs? 

And

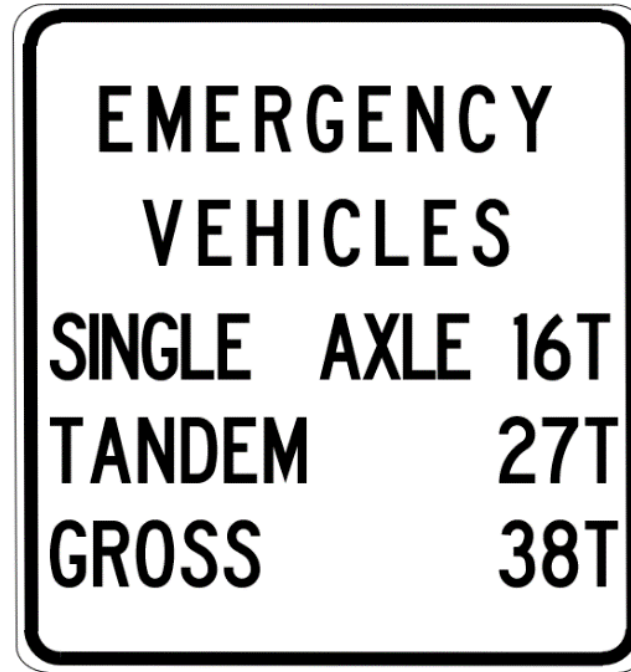
2. Does State law **NOT** exempt EVs from obeying the weight posting signs? 

Indiana FAST Act Vehicle Posting

Answer: Since the response is **NOT yes** for **BOTH** question 1 **AND** question 2, R12-7 or R12-7aP signs are to be utilized for bridges requiring posting for FAST Act Emergency Vehicles .



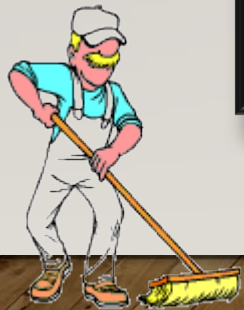
R12-7



R12-7aP

Questions?





It's Intermission Time... We'll be right back!

2022 Bridge Inspection Workshop: INDOT update of various Items

Presented: by Bill Dittrich

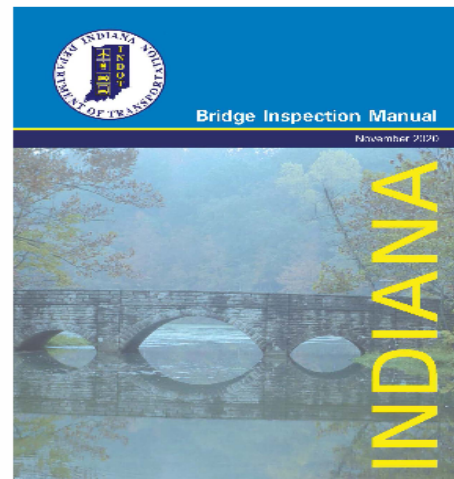
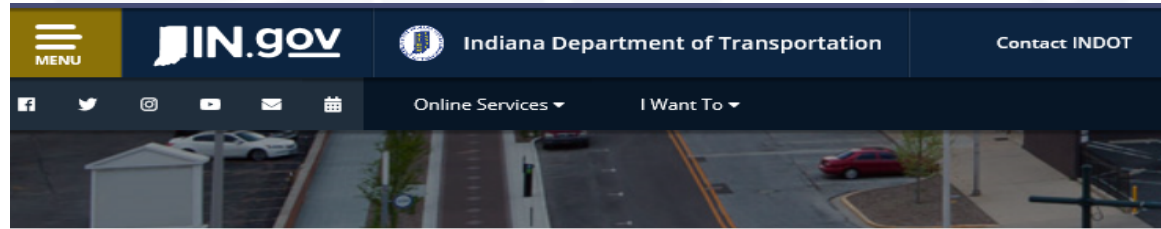
Assistant Bridge Inspection Program Manager

April 14, 2022

INDOT update

1. Discuss several Memos that are about to be released that will update the Bridge Inspection Manual
2. Review Delinquent Bridge Inspection Forms
3. Present the New QA Section can be seen in open BIAS reports (for INDOT only)
4. Present the New Collision Damage Report created in BIAS (for INDOT only)

INDOT update – New Inspection Memos



- Part 1: [Administration](#)
- Part 2: [Types of Inspections](#)
- Part 3: [Load Rating](#)
- Part 4: [QA/QC](#)
- Part 5: [Fatigue and Fracture Critical Inspections](#)
- Part 6: [Scour](#)
- Part 7: [Wearing Surfaces](#)
- Part 8: [Asbestos](#)
- Part 9: [Environmental Concerns](#)
- Part : [APPENDICES](#)

2020 Bridge Inspection Manual: [2020 Bridge Inspection Manual](#)

INDOT update – New Inspection Memos




The screenshot displays the top navigation bar of the Indiana Department of Transportation website. The header includes the IN.gov logo, the text 'Indiana Department of Transportation', and a 'Contact INDOT' link. Below the header is a secondary navigation bar with social media icons (Facebook, Twitter, Instagram, YouTube, Email, Calendar) and dropdown menus for 'Online Services', 'I Want To', and 'FAQs'. The main content area features the heading 'Memorandums & Other Documents' followed by a list of links: 'Active Memos', 'Archived Memos', 'Bridge Inspection Documents', and 'LPA Bridges'.

Memorandums & Other Documents

- [Active Memos](#)
- [Archived Memos](#)
- [Bridge Inspection Documents](#)
- [LPA Bridges](#)

INDOT update – New Inspection Memos

 Indiana Department of Transportation

Districts Public Meetings & Hearings Subscribe to Alerts Careers

Bridge Inspection Memos

INDOT < Doing Business with INDOT < Consultants/Pre-Construction <

Bridge Inspection Memos

All revisions to the *Bridge Inspection Manual* described in these memos have been incorporated into the current [Indiana Bridge Inspection Manual \(BIM\)](#) as of 11/24/2020.

Memos appear on this page for a period of 1 year following the date of the memo. After 1 year, they are moved to the [Archived Bridge Inspection Memos](#) page.

Subscribe to the County Bridges - Bridge Inspections Announcements GOVDelivery to receive automatic notification of changes concerning bridge inspection and updates to the Indiana Bridge Inspection Application System (BIAS). Please note that all BIAS users are automatically subscribed to the County Bridges - Bridge Inspection Announcements GOVDelivery. [Subscribe to the GOVDelivery here](#)

Last Updated: 03/10/2022

Number	Memo Date	Effective Date	Subject	Attachments
22-01	03/10/2022	Immediately	Revised Indiana Bridge Inspection Manual	
21-02	05/12/2021	Immediately	Revised Indiana Bridge Inspection Manual	
21-01	05/12/2021	Immediately	Revised Indiana Bridge Inspection Manual	
20-02	11/24/2020	Immediately	Revised Indiana Bridge Inspection Manual	
20-01	03/02/2020	Immediately	Updated LPA Consultant Bridge Inspection Boilerplate Contract	
19-07	12/30/2019	Immediately	Compliance Month Update	
19-06	12/17/2019	Immediately	LPA Bridge Inspection Advance Notice to Proceed	

INDOT update – New Inspection Memos

- Three old Memos

1. Updates to Wearing Surface – Part #7 of Manual (entire section)
2. Extended Inspection Frequency has been suspended – probably until new NBIS Regulations/Specifications are implemented – Part #2 of the Manual, see: **2-2.06(04)**
3. The condition rating value to trigger a reduced inspection frequency will be changed for a rating value of a “4” to a “3”. A reduced inspection frequency of a “4” will be at the discretion of the Team Leader on the inspection – Part #2 of the Manual, see: **2-2.06(03)**

INDOT update – New Inspection Memos

- Three new Memos
 1. Changes to posting signs for Emergency Vehicles – Part #3 of Manual
 - Start by compiling a list of bridges that will require this signage
 2. Quality Inspections – Changes in QA requirements for firms conducting LPA Bridge Inspections
 3. Updates to various item in the INDOT Tunnel Manual

INDOT update – Delinquent Inspection Forms

DELINQUENT INSPECTION DOCUMENTATION

- Field Inspections **MUST** be done during their currently identified compliance month.
- Field Inspections may be done earlier if approved by either the SPM, Assistant Inspection Manager, or LPA Program Manager.

INDOT update – Delinquent Inspection Forms

DELINQUENT INSPECTION DOCUMENTATION

- If an Inspection is late – the inspection must be done as a “delinquent” inspection type.
- If an Inspection is late – the Firm’s BIAS Administrator or other Lead Bridge Inspector must notify INDOT Bridge Inspection Leadership immediately.

INDOT update – Delinquent Inspection Forms

DELINQUENT INSPECTION DOCUMENTATION

- Delinquent inspection occurrences and circumstances shall be fully documented in a memo or email document and saved to the “Delinquent Inspections” section in the BIAS “Files” Section.

INDOT update – Delinquent Inspection Forms

2-2.01(02) Delinquent Inspections:

- An inspection is considered delinquent when the inspection interval exceeds the required interval. If an inspection cannot be completed on time, the inspection team leader must notify the INDOT Bridge Inspection Manager prior to exceeding the inspection interval. That notice will include the Delinquent Inspection form located in BIAS under the Help tab in the documentation folder. The document is labeled “How to complete a Delinquent Inspection Form” The form is attached to the bottom of the instructions.

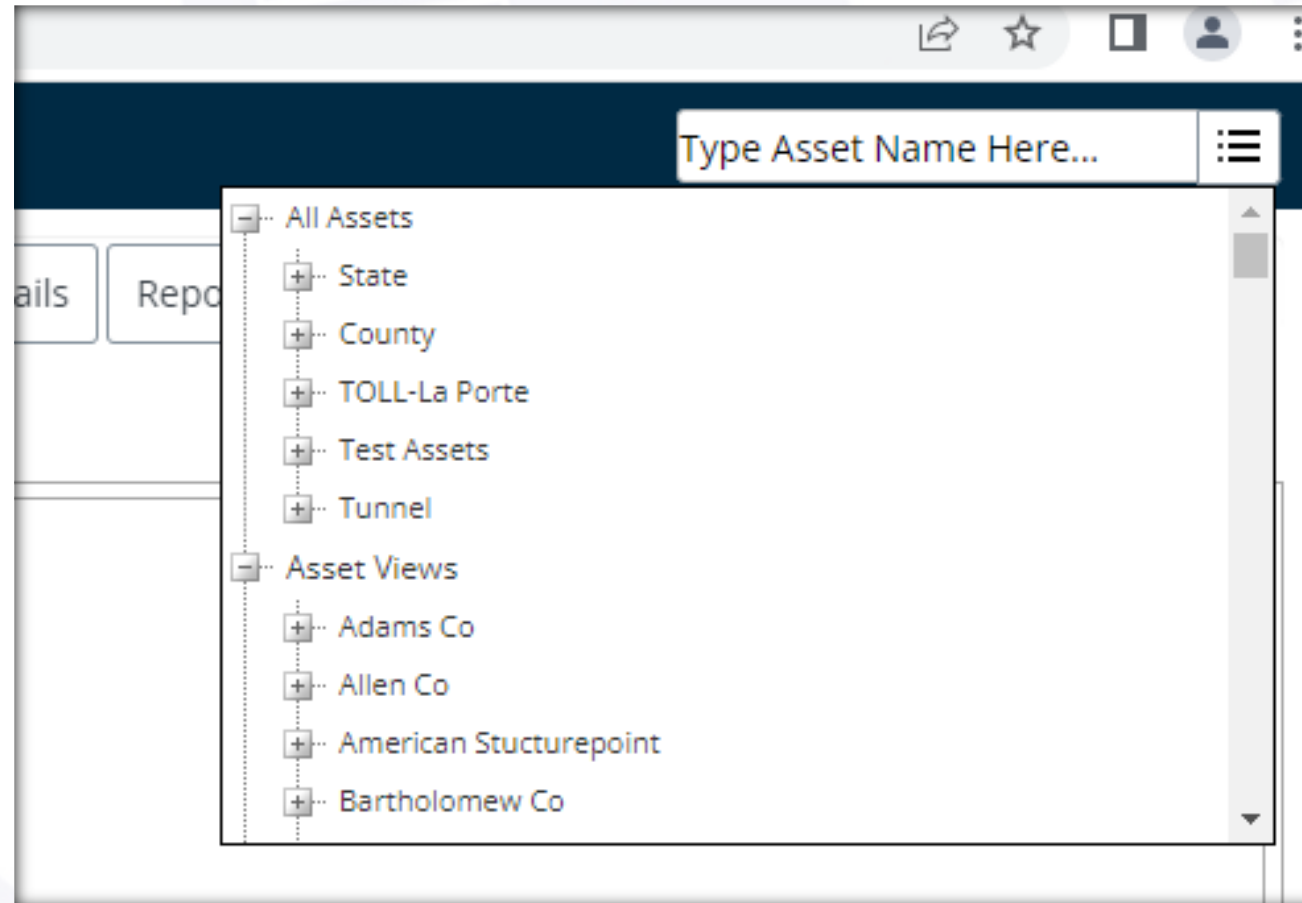
INDOT update – Delinquent Inspection Forms

- Two Scenarios to be reviewed:
 1. Entire (or most of) County is delinquent
 2. One or a few bridges are delinquent, **but also as each bridge of #1 is inspected.**

INDOT update – Delinquent Inspection Forms

- Entire (or most of) County is delinquent

At upper right corner in BIAS – find county name:

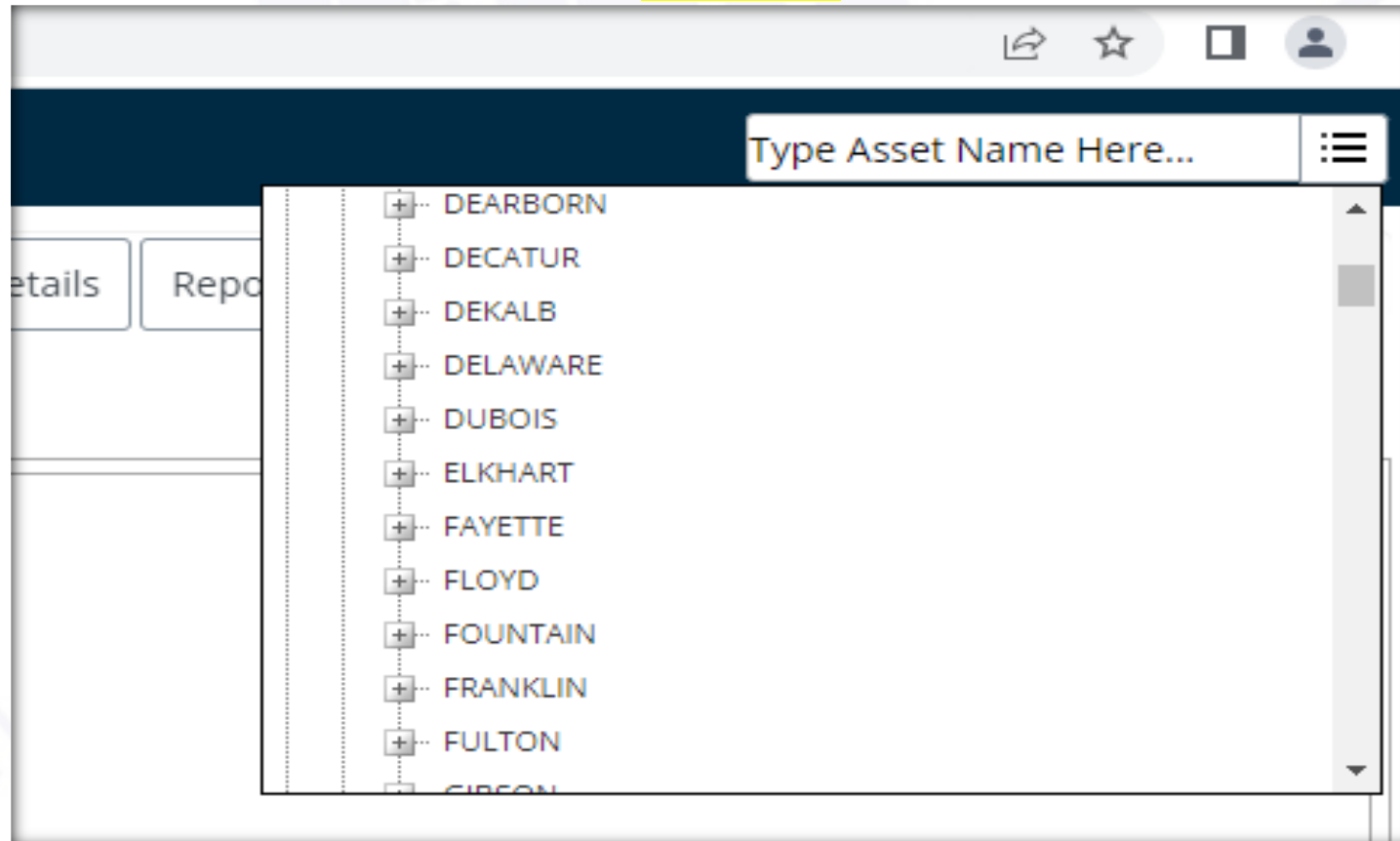


INDOT update – Delinquent Inspection Forms

- Entire (or most of) County is delinquent

At upper right corner in BIAS – find county name --- **Dubois County**

Click on the Name of the County -- **Dubois**



INDOT update – Delinquent Inspection Forms

- Entire (or most of) County is delinquent

This will take you to the County Summary Report Page --- Go to **Files**

Asset Details: DUBOIS

Quick View Asset Info **Files** Maintenance Scheduling


Attach Picture/File

File Type: **Photo**

- Bats
- Birds
- CF Closeout
- Condition

File Date (i.e. Date Picture Taken):

Set description to file name on Attach



INDOT update – Delinquent Inspection Forms

- Entire (or most of) County is delinquent

Go to **Help** – located in top black ribbon, in BIAS

← → ↻ 🔒 indot-it.bentley.com/bridgedetail.aspx?type=0&as_id=2800

AssetWise Inspections Main Collector Maintenance Manager Administration **Help**

Asset Details: DUBOIS

Quick View Asset Info **Files** Maintenance Scheduling

Attach Picture/File

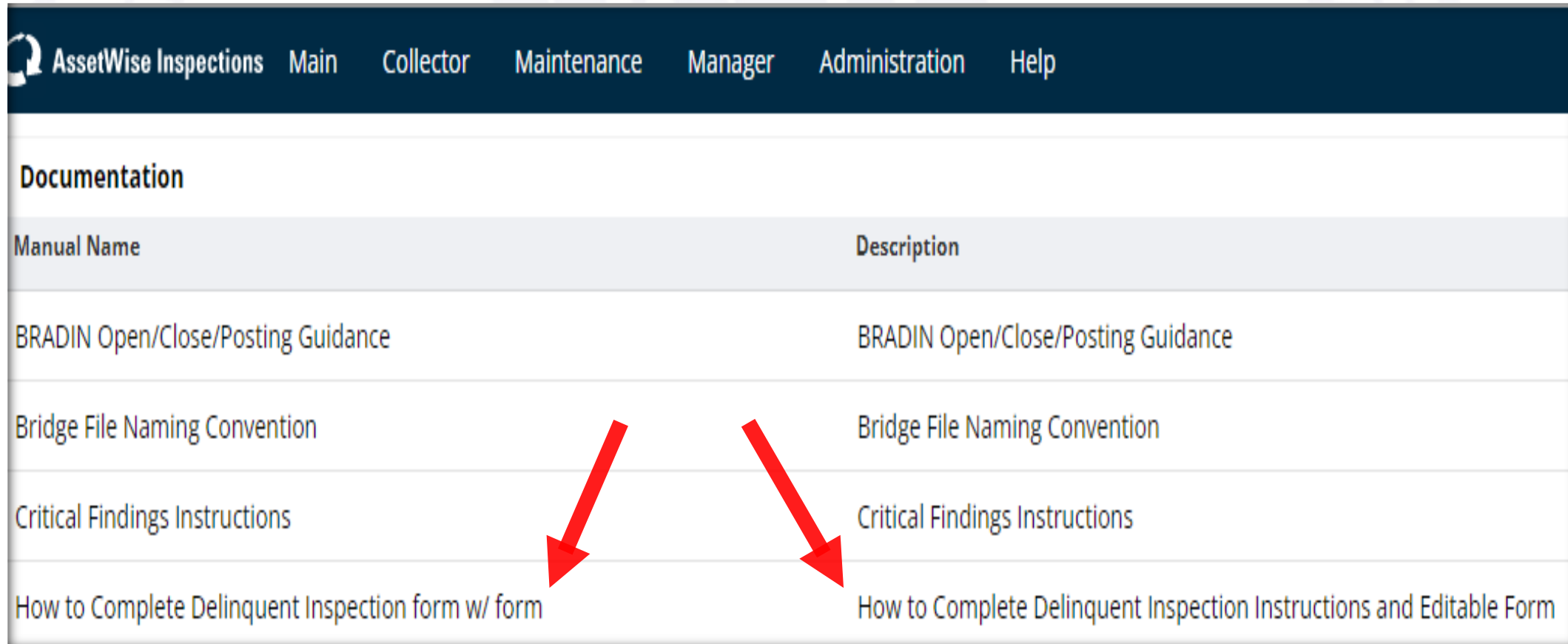
Select

NextLevel INDIANA

INDOT update – Delinquent Inspection Forms

- Entire (or most of) County is delinquent

Go to **Help** – Select “Documentation” – then **How to Complete Delinquent Inspection Form**



Manual Name	Description
BRADIN Open/Close/Posting Guidance	BRADIN Open/Close/Posting Guidance
Bridge File Naming Convention	Bridge File Naming Convention
Critical Findings Instructions	Critical Findings Instructions
How to Complete Delinquent Inspection form w/ form	How to Complete Delinquent Inspection Instructions and Editable Form

INDOT update – Delinquent Inspection Forms

- Entire (or most of) County is delinquent

Go to **Help** – Select “Documentation” – then **How to Complete Delinquent Inspection Form**

How to complete a Delinquent Inspection Form

1. Download this document and open on local format (download is located on far right of this page)
2. Once document is open proceed to editable pdf Delinquent Inspection form and fill in the blanks required for your situation and save document.
3. Open BIAS and bring up the asset that is going to be late
4. Click on the FILES tab

Asset Details: Test Asset 4



A screenshot of the BIAS system interface. At the top, it says 'Asset Details: Test Asset 4'. Below this is a horizontal navigation bar with four tabs: 'Quick View', 'Asset Info', 'Files', and 'Maintenance'. The 'Files' tab is currently selected and highlighted with a blue underline. A blue arrow points from the text 'Click on the FILES tab' in the list above to the 'Files' tab. Below the navigation bar is a section titled 'Attach Picture/File' with a horizontal line underneath.

5. Select Delinquent Inspection from the drop-down box
6. Select the reason for the delinquency

INDOT update – Delinquent Inspection Forms

- Entire (or most of) County is delinquent

Go to **Help** – Select “Documentation” – then copy out **Delinquent Inspection Worksheet** from Instructions

Delinquent Inspections Worksheet

County

NBI:

Inspection Due Date

Description of the unusual circumstance causing the delay

Any know safety concern?

Estimated inspection date

INDOT update – Delinquent Inspection Forms

- Entire (or most of) County is delinquent

Fill out **Delinquent Inspection Worksheet**, with County specific data

Delinquent Inspections Worksheet	
County	Dubois
NBI:	All Dubois County Bridges
Inspection Due Date	February 2022
Description of the unusual circumstance causing the delay	Notice to Proceed provided late on 3/18/2022.
Any know safety concern?	No
Estimated inspection date	3/31/2022

INDOT update – Delinquent Inspection Forms

- Entire (or most of) County is delinquent

Add list of all **Delinquent** Bridges in the County

Dubois Co. 2022 Delinquent Inspection List

All 166 Dubois County Inspections performed after February Compliance month due to late notice to proceed.

No.	Asset Name	NBI 008: Structure Number
1	19-00001	1900001
2	19-00002	1900002
3	19-00003	1900003
4	19-00004	1900004
5	19-00005	1900005
6	19-00006	1900006
7	19-00008	1900007
8	19-00010	1900177
9	19-00011	1900008
10	19-00013	1900010
11	19-00014	1900011
12	19-00016	1900012
13	19-00017	1900013
14	19-00019	1900015

INDOT update – Delinquent Inspection Forms

- Entire (or most of) County is delinquent

Attach **Delinquent Form** and **list of bridges** that are delinquent to **Files**

Asset Details: DUBOIS

No files to upload Attach

Filter By

File Date:
From:
To:

File Name:

File Description:

Asset and Reports
└─ Manager Files
 └─ Other File
 └─ Delinquent Inspections
└─ File Types

▼ Photos (0)
No Photos found

▼ Postings (0)
No Postings found

▼ Map (0)
No Map found

▼ Delinquent Inspections (1)


Category:

File Name: Dubois Cty Del Summary.pdf
File Date: 03/28/2022
Description:
Categories: Notice to Proceed Late
Linked Fields:

Delete


INDOT update – Delinquent Inspection Forms

- One or a few bridges are delinquent – or as you inspect each bridge in an entire county that is delinquent --- Bridge due to be inspected in March 2022

Parent Asset: Test Assets
Asset Name: Test Asset 1 
Asset Code: TA1
Asset Type: Bridge
Structure Status: Archived
NBI 098A: Border Bridge: Neighboring State Code:
NBI 099: Border Bridge Structure Number:
NBI 098B: Border Bridge: Percent Responsibility:
Border Bridge: No
Lead State: N/A
Add'l Structure Details:
NBI 007: Facility Carried by Structure: MIGHTY HIGHWAY
NBI 006: Feature Intersected: MIGHTY RIVER
NBI 009: Location: 0.31 E LOWLY ROAD
NBI 011: Milepoint: 0000.000
NBI 016: Latitude: 37.81490
NBI 017: Longitude: -88.04961
NBI 058: Deck: 6 - Satisfactory Condition (minor deterioration)
NBI 059: Superstructure: 7 - Good Condition (some minor problems)
NBI 060: Substructure: 4 - Poor Condition (advanced deterioration)
NBI 061: Channel and Channel Protection: 4 - Protect. severely undermined. sev. damage
NBI 062: Culverts: N - Not Applicable
NBI 041: Structure Open, Posted, or Closed to Traffic: A - Open
MAD-RP:
MAD-Offset:

✓ Open Reports
No open reports found for this asset

✓ Scheduling

Schedule Type	Activity Types	Frequency	Last Activity Date	Due Date	Schedule Date
 Inspection Type	Routine	24 Months	03/20/2020	March 2022	03/20/2022

INDOT update – Delinquent Inspection Forms

- Create a new Routine Inspection Report --- Add **Delinquent**

Create Inspection Report Based On:

Blank report
 Asset Values

Options:

Copy report files (photos, etc.)
 Copy previous report section attachments (PDF)

Part of Summary Report:
Not associated with a summary report

Report Type:
Routine

Inspection Type:

<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Add'l Structure Details
<input type="checkbox"/> Fracture Critical	<input type="checkbox"/> Scour Analysis
<input type="checkbox"/> Underwater	<input type="checkbox"/> Tunnel
<input type="checkbox"/> Special	<input checked="" type="checkbox"/> Delinquent
<input type="checkbox"/> Scour	<input type="checkbox"/> In-Depth
<input type="checkbox"/> Damage/Deterioration	<input type="checkbox"/> Post-Rehabilitation
<input type="checkbox"/> Other	<input type="checkbox"/> Collision Damage

INDOT update – Delinquent Inspection Forms

- You will see today's date in the Create and Inspection Date and Routine/Delinquent Inspection Types and a Delinquent Form was added

indot-it.bentley.com/forms/inspection_info.aspx?fm_id=5&id=380476&type=1&fg_id=2&rptro=False&view_as_id=-1

Inspection Report Information

Create Date: 04/06/2022
Inspection Date: 04/06/2022
NBI (Item 90) Date: 03/20/2020

Inspection Type:

<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Fracture Critical	<input type="checkbox"/> Underwater
<input type="checkbox"/> Special	<input type="checkbox"/> Scour	<input type="checkbox"/> Damage/Deterioration
<input type="checkbox"/> Other	<input type="checkbox"/> Add'l Structure Details	<input type="checkbox"/> Scour Analysis
<input type="checkbox"/> Tunnel	<input checked="" type="checkbox"/> Delinquent	<input type="checkbox"/> In-Depth
<input type="checkbox"/> Post-Rehabilitation	<input type="checkbox"/> Collision Damage	

User Assignment:

Owner: Dittrich, William

Show Inspectors for: AssetWise Inspections

INACTIVE Users Viewers	Available Users: Gonzales, Maricar Mitchell, Nicole Street, Shari Test, Test	Assigned Users: Dittrich, William
------------------------	--	-----------------------------------

Forms

- Report Info
 - Inspection Info
 - Report Sections
 - Pictures/Files
 - Location Map
 - Asset Files
 - NBI Error Check
 - Forms
- Field Notes
 - National Bridge Inventory
 - Under Records
 - NBI Calculations
 - Element Inspection
 - Executive Summary
 - Scour Plan of Action-W
 - Delinquent Inspection Reporting
- Misc Asset Data

INDOT update – Delinquent Inspection Forms

- Make sure that you change the Item 90 Inspection Date

Inspection Report Information

Create Date: 04/06/2022

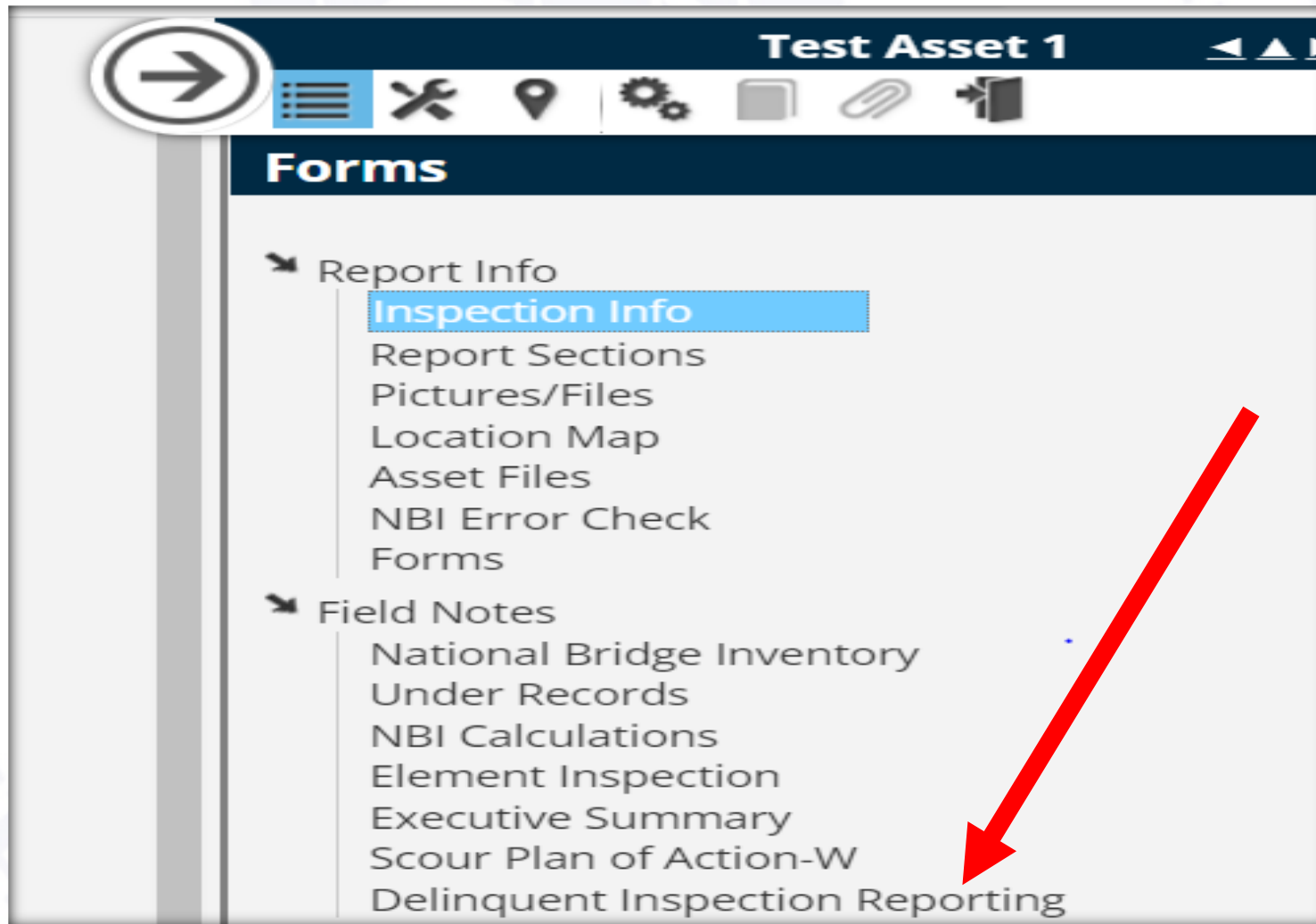
Inspection Date: 04/06/2022

NBI (Item 90) Date: 04/06/2022

- Inspection Type:
- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Fracture Critical | <input type="checkbox"/> Underwater |
| <input type="checkbox"/> Special | <input type="checkbox"/> Scour | <input type="checkbox"/> Damage/Deterioration |
| <input type="checkbox"/> Other | <input type="checkbox"/> Add'l Structure Details | <input type="checkbox"/> Scour Analysis |
| <input type="checkbox"/> Tunnel | <input checked="" type="checkbox"/> Delinquent | <input type="checkbox"/> In-Depth |
| <input type="checkbox"/> Post-Rehabilitation | <input type="checkbox"/> Collision Damage | |

INDOT update – Delinquent Inspection Forms

- Click on the [Delinquent Inspection Reporting](#) Form and fill out



INDOT update – Delinquent Inspection Forms

- Some data is pre-populated in form – see yellow items

Delinquent Inspection Form

Asset Name Inspector Name Asset Code

NBI 008: Structure Number Team Leader For Reports

NBI 002: District NBI 003: County Code NBI 091: Designated Inspection Frequency

NBI 090: Inspection Date Delinquent Inspection Type

Actual Month Due Actual Year Due Delinquent Reason

Did you Reset Scheduler to next Correct Inspection Date?

Additional Comments

INDOT update – Delinquent Inspection Forms

- Fill in blank data fields --- Make sure that you change the Item 90 Date

Delinquent Inspection Form

Asset Name Inspector Name Asset Code

NBI 008: Structure Number Team Leader For Reports


NBI 002: District NBI 003: County Code NBI 091: Designated Inspection Frequency

NBI 090: Inspection Date Delinquent Inspection Type

Actual Month Due Actual Year Due Delinquent Reason





Did you Reset Scheduler to next Correct Inspection Date?

Additional Comments



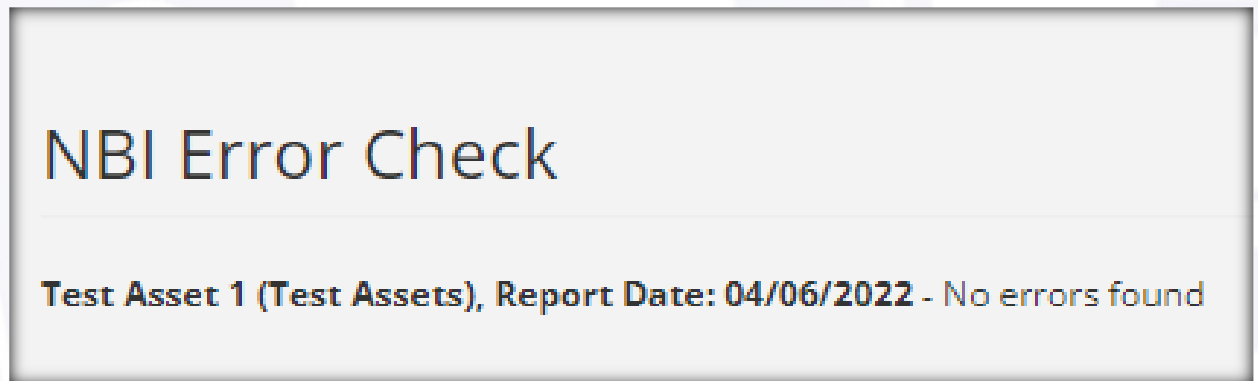
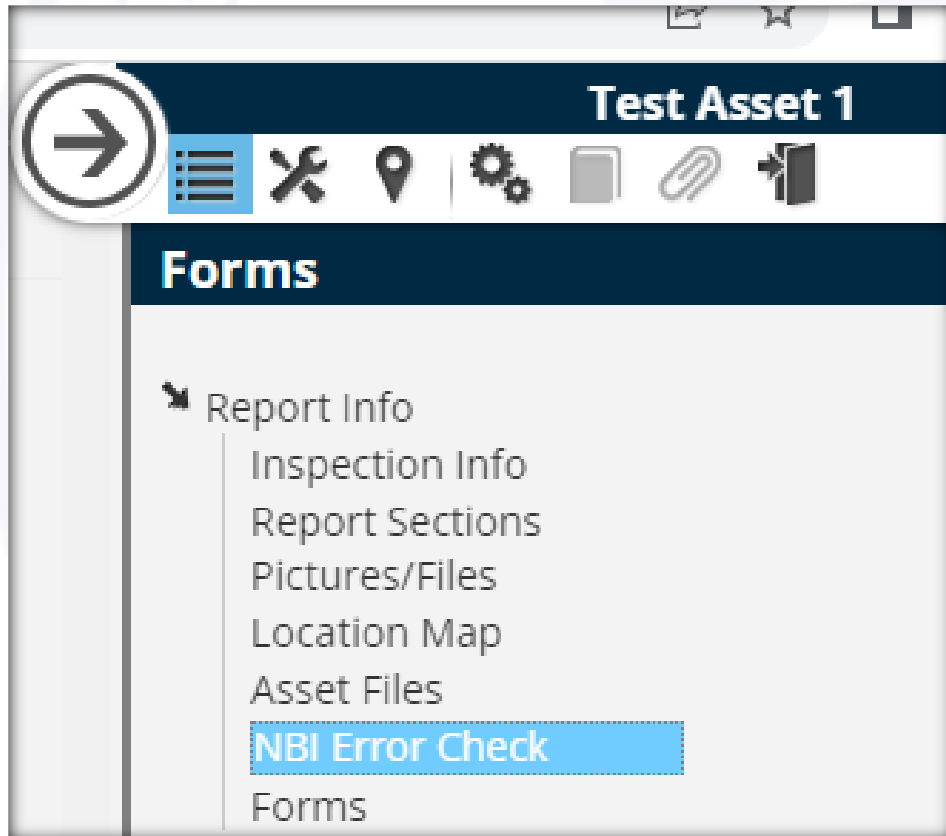
INDOT update – Delinquent Inspection Forms

- Make sure that NBI Item 90 Date, in the [National Bridge Inventory](#) Form, has correct inspection date

Inspections			
(90) INSPECTION DATE		04/06/2022	
(91) DESIGNATED INSPECTION FREQUENCY		24	
(92) CRITICAL FEATURE INSPECTION			(93) CFI DATE
A. FRACTURE CRITICAL DETAIL	N		
B. UNDERWATER INSPECTION	N		
C. OTHER SPECIAL INSPECTION	N		

INDOT update – Delinquent Inspection Forms

- Make sure that you always run the **NBI Error Check** before submitting a report to be approved.



INDOT update – Delinquent Inspection Forms

- After Approving your report, check [Asset Info](#) – you will see the inspection Type as: [Routine and Delinquent](#) – This what INDOT and FHWA are looking for

Asset Details: Test Asset 1

Quick View **Asset Info** Files Maintenance Scheduling

Completed Reports

Inspection Date	Last Revision	Asset Code	Owner	Asset Type	Inspection Type	NBI 007: Facility Carri
4/6/2022	4/7/2022	TA1	Dittrich, William	Bridge	Routine and Delinquent	MIGHTY HIGHWAY
4/4/2022	4/5/2022	TA1	Street, Shari	Bridge	Collision Damage	AAA HWY
4/4/2022	4/6/2022	TA1	Street, Shari	Bridge	Collision Damage	MIGHTY HIGHWAY
1/18/2022	1/18/2022	TA1	Trana, Pedro A.	Bridge	Scour Assessment	AAA HWY
1/18/2022	1/18/2022	TA1	Trana, Pedro A.	Bridge	Scour Screening	AAA HWY
3/20/2020	4/6/2022	TA1	Dittrich, William	Bridge	Routine	MIGHTY HIGHWAY

Level NA

INDOT update – Delinquent Inspection Forms

- Return to the [Quick View](#) Tab and update the [Inspection Schedule](#) to get back to the [COMPLIANCE MONTH OF March](#)

Asset Details: Test Asset 1

Quick View | Asset Info | Files | Maintenance | Scheduling

Parent Asset: Test Assets
Asset Name: Test Asset 1
Asset Code: TA1
Asset Type: Bridge
Structure Status: Archived
NBI 098A: Border Bridge: Neighboring State Code:
NBI 099: Border Bridge Structure Number:
NBI 098B: Border Bridge: Percent Responsibility:
Border Bridge: No
Lead State: N/A
Add'l Structure Details:
NBI 007: Facility Carried by Structure: MIGHTY HIGHWAY
NBI 006: Feature Intersected: MIGHTY RIVER
NBI 009: Location: 0.31 E LOWLY ROAD
NBI 011: Milepoint: 0000.000
NBI 016: Latitude: 37.81490
NBI 017: Longitude: -88.04961
NBI 058: Deck: 6 - Satisfactory Condition (minor deterioration)
NBI 059: Superstructure: 7 - Good Condition (some minor problems)
NBI 060: Substructure: 4 - Poor Condition (advanced deterioration)
NBI 061: Channel and Channel Protection: 4 - Protect. severely undermined. sev. damage
NBI 062: Culverts: N - Not Applicable
NBI 041: Structure Open, Posted, or Closed to Traffic: A - Open
MAD-RP:
MAD-Offset:

Open Reports
No open reports found for this asset

Scheduling

Schedule Type	Activity Types	Frequency	Last Activity Date	Due Date	Schedule Date
✓ Inspection Type	Routine	24 Months	04/06/2022	April 2024	04/06/2024

Wrong Due Date

INDOT update – Delinquent Inspection Forms



- Go to Scheduling and change the [Routine Inspection Schedule](#)

Asset Details: Test Asset 1

Sent Emails Show More Details Edit Asset Values Show on Map Create Report

Quick View Asset Info Files Maintenance **Scheduling**

✓ Scheduled Activities

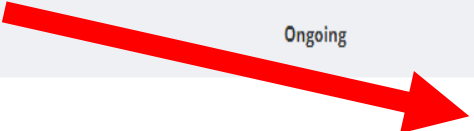
Schedule Type	Activity Types	Frequency	Last Activity Date	Due Date	Schedule Date	User Assigned	Comments	Ongoing
Inspection Type	Routine	24 Months	04/06/2022	April 2024	04/06/2024			 

< 1 > Page 1 of 1

✓ Asset's Recurring Activity Types

Schedule Type	Activity Types	Frequency
Inspection Type	Routine	Every 24 Months, in the Month

< 1 > Page 1 of 1



INDOT update – Delinquent Inspection Forms

- Go to Scheduling and change the [Routine Inspection Schedule](#)

Add/Edit Non-Recurring Inspection

Inspection Type: Routine

Activity/Schedule: Routine (Recurring)

*Due Date: April 2024

Schedule Date: 04/06/2024

User Assigned to Inspection: Select...

Comments:

Save Cancel

Add/Edit Non-Recurring Inspection

Inspection Type: Routine

Activity/Schedule: Routine (Recurring)

*Due Date: March 2024

Schedule Date: 03/06/2024

User Assigned to Inspection: Select...

Comments:

Save Cancel



INDOT update – Delinquent Inspection Forms

- The [Routine Inspection Schedule](#) should be updated

Asset Details: Test Asset 1					
Quick View	Asset Info	Files	Maintenance	Scheduling	
✓ Scheduled Activities					
Schedule Type	Activity Types	Frequency	Last Activity Date	Due Date	Schedule Date
Inspection Type	Routine	24 Months	04/06/2022	March 2024	03/06/2024

INDOT update – Delinquent Inspection Forms

- Return to the Quick View and verify that the [Routine Inspection Schedule](#) has been updated

Quick View | Asset Info | Files | Maintenance | Scheduling

Parent Asset: Test Assets
Asset Name: Test Asset 1
Asset Code: TA1
Asset Type: Bridge
Structure Status: Archived
NBI 098A: Border Bridge: Neighboring State Code:
NBI 099: Border Bridge Structure Number:
NBI 098B: Border Bridge: Percent Responsibility:
Border Bridge: No
Lead State: N/A
Add'l Structure Details:
NBI 007: Facility Carried by Structure: MIGHTY HIGHWAY
NBI 006: Feature Intersected: MIGHTY RIVER
NBI 009: Location: 0.31 E LOWLY ROAD
NBI 011: Milepoint: 0000.000
NBI 016: Latitude: 37.81490
NBI 017: Longitude: -88.04961
NBI 058: Deck: 6 - Satisfactory Condition (minor deterioration)
NBI 059: Superstructure: 7 - Good Condition (some minor problems)
NBI 060: Substructure: 4 - Poor Condition (advanced deterioration)
NBI 061: Channel and Channel Protection: 4 - Protect. severely undermined. sev. damage
NBI 062: Culverts: N - Not Applicable
NBI 041: Structure Open, Posted, or Closed to Traffic: A - Open
MAD-RP:
MAD-Offset:

✓ Open Reports
No open reports found for this asset

✓ Scheduling

Schedule Type	Activity Types	Frequency	Last Activity Date	Due Date	Schedule Date
✓ Inspection Type	Routine	24 Months	04/06/2022	March 2024	03/06/2024

INDOT update – Delinquent Inspection Forms

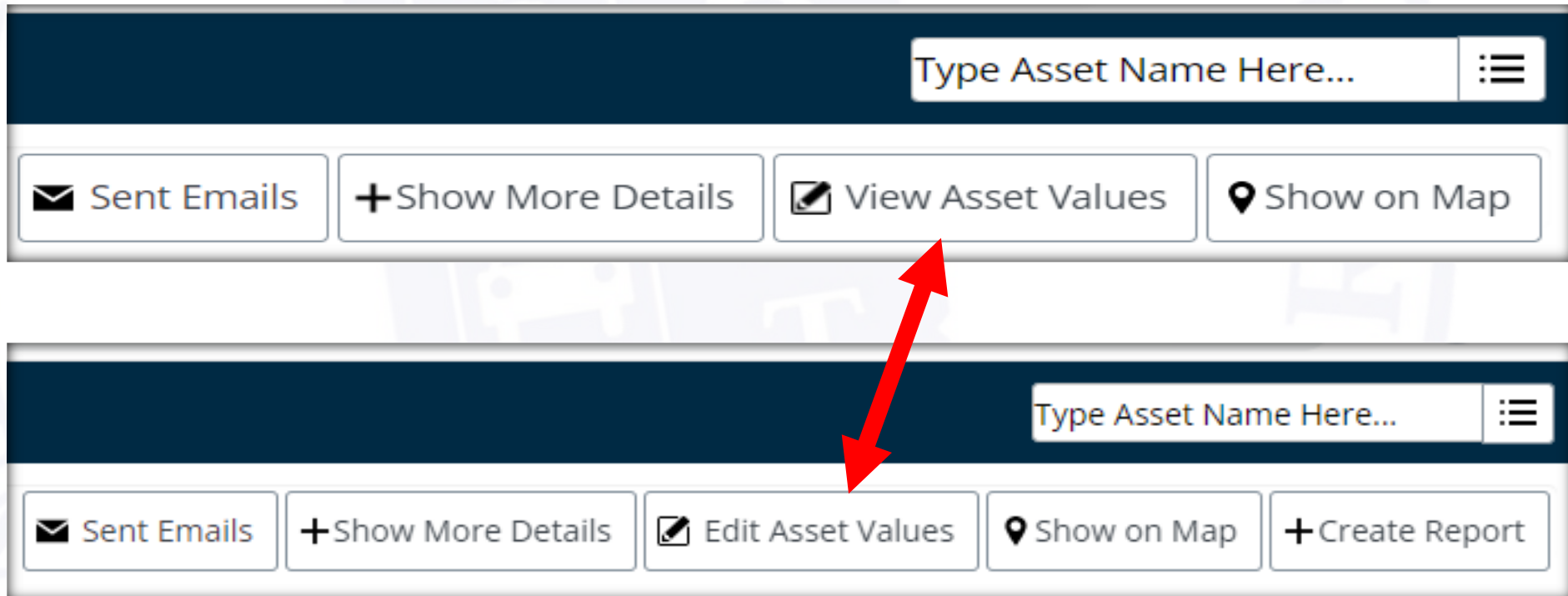
- Good Job!!
- This is what is needed in BIAS, to stay in Compliance with NBIS Regulations, when we have delinquent inspections.

INDOT update – New QA section in BIAS reports

- INDOT performs Quality Assurance (QA) on all Bridge Inspections conducted by INDOT Bridge Inspectors.
- This can be checked, by reviewing how an Inspection Report in BIAS has workflowed from in-progress to approved.
- INDOT wants to more easily show that we performed QA and to provide better feedback to our inspectors from the QA.

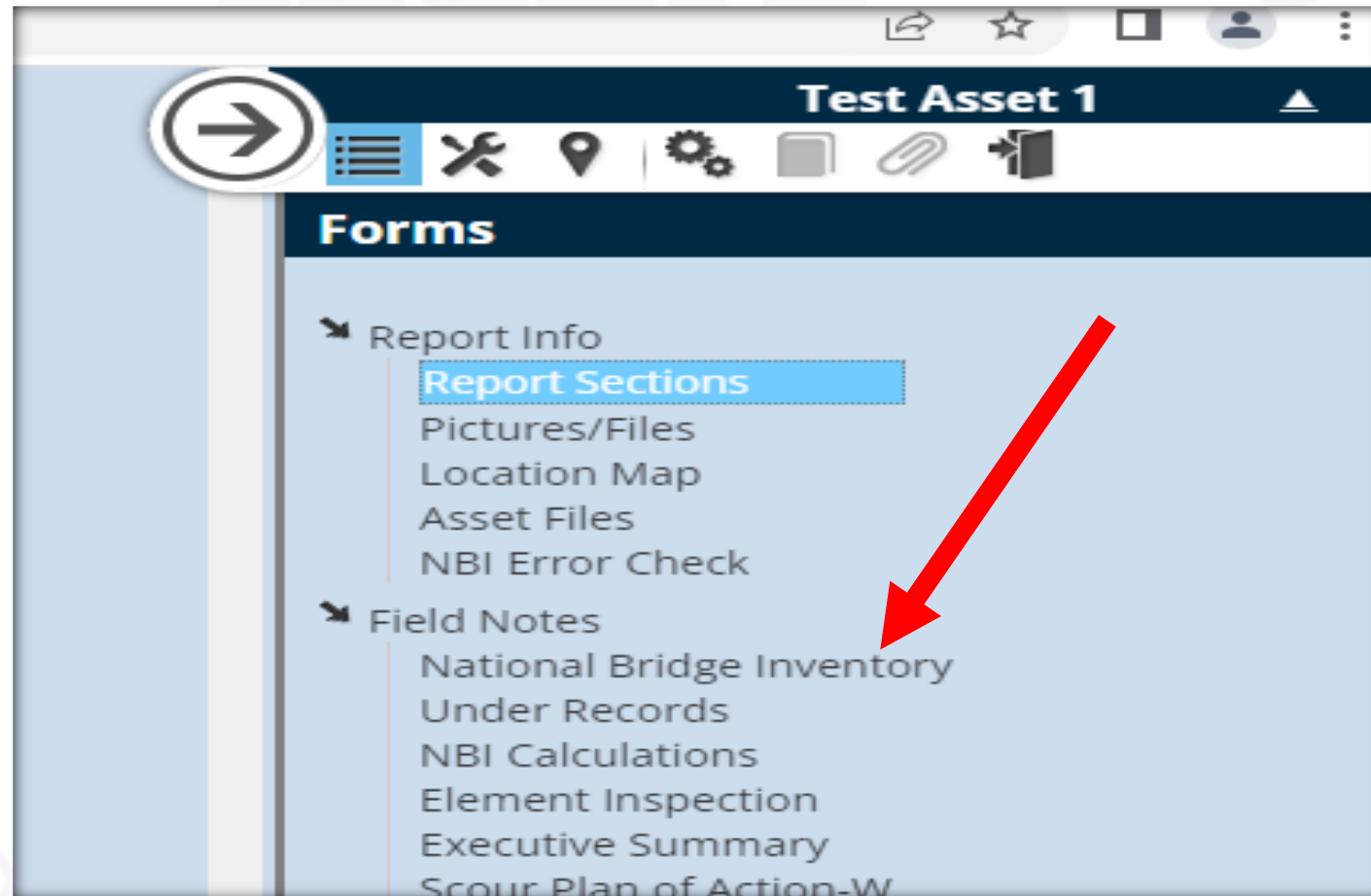
INDOT update – New QA section in BIAS reports

- New QA Section can be seen by either Read Only or Edit Asset Views in BIAS



INDOT update – New QA section in BIAS reports

- The new QA Section is in the National Bridge Inventory Form



INDOT update – New QA section in BIAS reports

- The new QA Section (right of middle) will show as blank until edited

The screenshot displays the National Bridge Inventory (NBI) software interface, divided into three main sections: Identification, Condition, and Quality Control Review. The interface is titled "National Bridge Inventory" and "Test Asset 1".

Identification Section: This section contains various input fields for asset details. The status is set to "1". The structure number is "test asset 1". The location is "0.31 E LOWLY ROAD". Other fields include State Code (185), County Code (065), and Milepoint (0000.000).

Condition Section: This section is divided into several sub-sections, each with a rating and a comments field:

- (58) DECK: Rating 6, Comments field.
- (58.01) WEARING SURFACE: Rating 6, Comments field.
- (59) SUPERSTRUCTURE: Rating 7, Comments field.
- PAINT CONDITION: Rating 5 - F, Comments field.
- (60) SUBSTRUCTURE: Rating 4, Comments field.

Quality Control Review Section: This section is titled "Quality Control Review" and includes:

- REVIEWER: Ditrich, William
- DATE OF REVIEW: (empty)
- (58) DECK: (empty)
- (58.01) WEARING SURFACES: (empty)
- (59.0) SUPERSTRUCTURE: (empty)
- (60.0) SUBSTRUCTURE: (empty)

Structure Type and Material Section: This section is at the bottom and includes:

- (43) STRUCTURE TYPE, MAIN: 3

Forms Panel: On the right side, there is a "Forms" panel with a navigation menu. The "National Bridge Inventory" form is currently selected. Other forms listed include Report Info, Field Notes, Misc Asset Data, Scour Analysis, Maintenance, Critical Finding, Load Rating - Bradin, History, and Consultant.


INDOT update – New QA section in BIAS reports

- The new QA Section only covers a few key items
- Item 58 – Deck
- Item 58.01 – Wearing Surface
- Item 59 – Superstructure
- Item 60 – Substructure
- Item 61 – Channel
- Item 41 – Posting
- Item 41A – Signs in place
- Item 41B – Photos of posting signs
- Item 113 – Scour Critical

INDOT update – New QA section in BIAS reports

Brief Example of how this will work.

Below shows a report that has been completed and has been submitted for review.



The screenshot shows a table with the following columns: NBI 007: Facility Carried by Structure, NBI 006: Feature Intersected, Submitted To, Workflow Stage, Status, and an edit icon. The data row shows 'MIGHTY HIGHWAY' for NBI 007, 'MIGHTY RIVER' for NBI 006, 'Ditrich, William (comments)' for Submitted To, 'Data Entry Complete' for Workflow Stage, and 'Moved ...' for Status. A red arrow points from the top of the 'Submitted To' and 'Workflow Stage' columns down to their respective data cells.

NBI 007: Facility Carried by Structure	NBI 006: Feature Intersected	Submitted To	Workflow Stage	Status	
MIGHTY HIGHWAY	MIGHTY RIVER	Ditrich, William (comments)	Data Entry Complete	Moved ...	

< 1 >

INDOT update – New QA section in BIAS reports

Typical QA positions, (in dropdown menu).

DATE OF REVIEW	
(58) DECK	(58) COMMENTS
AGREE	Need comments
AGREE	
AGREE + ONE	
AGREE - ONE	
DISAGREE	

INDOT update – New QA section in BIAS reports

Example – shot #1 of 4

Bridge Inventory		Quality Control Review	
SUFFICIENCY RATING	62.5	REVIEWER	Dittrich, William
Condition		DATE OF REVIEW	04/07/2022
(58) DECK		(58) DECK	(58) COMMENTS
Rating	Comments	AGREE	Need comments
6			
(58.01) WEARING SURFACE		(58.01) WEARING SURFACES	(58.01) COMMENTS
Rating	Comments	AGREE	Need comments
6			
(59) SUPERSTRUCTURE		(59.0) SUPERSTRUCTURE	(59.0) COMMENTS
Rating	Comments	AGREE	
7			

INDOT update – New QA section in BIAS reports

Example – shot #2 of 4

<p>(60) SUBSTRUCTURE</p> <p>Rating 4</p> <p>Comments</p> <div style="border: 1px solid black; height: 100px;"></div>	<p>(60.0) SUBSTRUCTURE</p> <p>DISAGREE</p>	<p>(60.0) COMMENTS</p> <p>Need comments on why this rates a "4".</p> <div style="border: 1px solid black; height: 60px;"></div>
<p>(61) CHANNEL & CHANNEL PROTECTION</p> <p>Rating 4</p> <p>Comments</p> <div style="border: 1px solid black; height: 100px;"></div>	<p>(61.0) CHANNEL & CHANNEL PROTECTION</p> <p>DISAGREE</p>	<p>(61.0) COMMENTS</p> <p>Need comments on why this rates a "4".</p> <div style="border: 1px solid black; height: 60px;"></div>
<p>(62) CULVERT</p> <p>Rating N</p> <p>Comments</p> <div style="border: 1px solid black; height: 100px;"></div>	<p>(62.0) CULVERT</p> <p>N/A</p>	<p>(62) COMMENTS</p> <div style="border: 1px solid black; height: 60px;"></div>

INDOT update – New QA section in BIAS reports

Example – shot #3 of 4

(66C) TONS POSTED	<input type="text"/>		
(66D) DATE POSTED/CLOSED	<input type="text"/>		
(70) BRIDGE POSTING	<input type="text" value="5"/>		
(41) STRUCTURE OPEN/POSTED/CLOSED	<input type="text" value="A"/>		
Appraisal			
(67) STRUCTURAL EVALUATION	<input type="text" value="4"/>		
(68) DECK GEOMETRY	<input type="text" value="5"/>		
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	<input type="text" value="N"/>		
(71) WATERWAY ADEQUACY			
Rating	Comments	(41) POSTING REQUIRED ?	(41) COMMENTS
<input type="text" value="4"/>	<input type="text"/>	<input type="text" value="NO"/>	<input type="text" value="OK"/>
		(41A)IF POSTING REQUIRED, ARE SIGNS IN PLACE ?	(41A) COMMENTS
		<input type="text" value="N/A"/>	<input type="text"/>
		(41B) PHOTO DOCUMENTATION ?	(41B) COMMENTS
		<input type="text" value="N/A"/>	<input type="text"/>
(72) APPROACH ROADWAY ALIGNMENT			

INDOT update – New QA section in BIAS reports

Example – shot #4 of 4

36C) APPROACH GUARDRAIL		0	
36D) APPROACH GUARDRAIL ENDS		0	
(113) SCOUR CRITICAL BRIDGES		(113) SCOUR CRITICAL BRIDGES	(113) COMMENTS
Status	Comments		
5	Spread Footings, No Piles.	AGREE w/ number code	
Classification			

INDOT update – New QA section in BIAS reports

Example – With two disagrees, this report would be sent back to the Inspector to address the issues and then re-submitted for a second QA review. See below for Second QA review.

Bridge Inventory		Quality Control Review	
SUFFICIENCY RATING	62.5	REVIEWER	Dittrich, William
Condition		DATE OF REVIEW	04/08/2022
(58) DECK		(58) DECK	(58) COMMENTS
Rating	Comments	AGREE	Need comments
6	Transverse cracks with salt leaching at +/- 6-foot spacing under entire deck		
(58.01) WEARING SURFACE		(58.01) WEARING SURFACES	(58.01) COMMENTS
Rating	Comments	AGREE	Need comments
6	One 6-inch diameter spall, (4" deep) at centerline, at mid span. 0.04" wide transverse cracks, spaced at +/- 6-feet, entire length of deck.		
(59) SUPERSTRUCTURE		(59.0) SUPERSTRUCTURE	(59.0) COMMENTS
Rating	Comments	AGREE	
7	Five Steel Beams in Cross-section 30WF-180.		

INDOT update – New QA section in BIAS reports

Example – With two disagrees, this report would be sent back to the Inspector to address the issues and then re-submitted for a second QA review. See below for Second QA review.

PAINT CONDITION		PAINT YEAR <input type="text" value="1988"/>	
Rating	Comments		
<input type="text" value="5 - F"/>	Good at mid-span, corroded with minor section loss within 3-feet of each end of the deck		
(60) SUBSTRUCTURE		(60.0) SUBSTRUCTURE	(60.0) COMMENTS
Rating	Comments	<input type="text" value="AGREE"/>	<input type="text" value="Good"/>
<input type="text" value="4"/>	Two wide (0.15") cracks underneath all four bearings, with deep red rust staining. Deep scour underneath the East Abutment footing. Footing undermined about 15%, (4-feet wide and back underneath 2-feet). Critical Finding submitted.		
(61) CHANNEL & CHANNEL PROTECTION		(61.0) CHANNEL & CHANNEL PROTECTION	(61.0) COMMENTS
Rating	Comments	<input type="text" value="AGREE"/>	<input type="text" value="Good"/>
<input type="text" value="4"/>	Channel has been re-directed by an abandoned car that is now in the channel upstream of the bridge. This is re-directing the channel flow right at the east abutment, causing scour. (Owner of bridge has been notified and asked to remove vehicle and repair scour).		

INDOT update – New QA section in BIAS reports

Example – Report was approved. [Edit Asset Data](#) and [View Asset Data](#) will show QA data.

National Bridge Inventory		Quality Control Review	
Status	1	SUFFICIENCY RATING	62.5
Identification		Condition	
(1) STATE CODE	185	(58) DECK	
(8) STRUCTURE NUMBER	test asset 1	Rating	6
(5) INV. ROUTE (ON/UNDER)	1 4 1 00000 0	Comments	Transverse cracks with salt leaching at +- 6-foot spacing under entire deck
(2) HIGHWAY AGENCY DISTRICT	01	(58.01) WEARING SURFACE	
(3) COUNTY CODE	065	Rating	6
(4) PLACE CODE	00000	Comments	One 6-inch diameter spall, (4" deep) at centerline, at mid span. 0.04" wide transverse cracks, spaced at +- 6-feet, entire length of deck.
(6) FEATURES INTERSECTED	MIGHTY RIVER	(59) SUPERSTRUCTURE	
(7) FACILITY CARRIED	MIGHTY HIGHWAY	Rating	7
(9) LOCATION	0.31 E LOWLY ROAD	Comments	Five Steel Beams in Cross-section 30WF-180.
(11) MILEPOINT	0000.000	PAINT CONDITION	PAINT YEAR 1988
INV TYPE	M	Rating	5 - F
REF POST		Comments	Good at mid-span, corroded with minor section loss within 3-feet of each end of the deck
(12) BASE HIGHWAY NETWORK	0		
(13A) LRS INVENTORY ROUTE			
(13B) SUBROUTE NUMBER			
(16) LATITUDE	37.81490		
(17) LONGITUDE	-88.04961		
(98A) BORDER BRIDGE CODE			
REVIEWER	Dittrich, William	(58) DECK	AGREE
DATE OF REVIEW	04/08/2022	(58) COMMENTS	Good
(58.01) WEARING SURFACES	AGREE	(58.01) COMMENTS	Good
(59.0) SUPERSTRUCTURE	AGREE	(59.0) COMMENTS	OK

INDOT update – New QA section in BIAS reports

Example – Printed Reports do NOT show QA data.

CONDITION COMMENTS	
(58) DECK:	6 - Satisfactory Condition (minor deterioration)
Comments: Transverse cracks with salt leaching at +- 6-foot spacing under entire deck	
(58.01) WEARING SURFACE:	6 - Satisfactory Condition
Comments: One 6-inch diameter spall, (4" deep) at centerline, at mid span. 0.04" wide transverse cracks, spaced at +- 6-feet, entire length of deck.	
(59) SUPERSTRUCTURE:	7 - Good Condition (some minor problems)
Comments: Five Steel Beams in Cross-section 30WF-180.	
Page 2 of 4	
<hr/>	
Inspector: William Dittrich	Asset Name: Test Asset 1
Inspection Date: 04/06/2022	Facility Carried: MIGHTY HIGHWAY
Bridge Inspection Report	
(60) SUBSTRUCTURE:	4 - Poor Condition (advanced deterioration)
Comments: Two wide (0.15") cracks underneath all four bearings, with deep red rust staining. Deep scour underneath the East Abutment footing. Footing undermined about 15%, (4-feet wide and back underneath 2-feet). Critical Finding submitted.	
(61) CHANNEL/CHANNEL PROTECTION	4 - Protect. severely undermined. sev. damage
Comments: Channel has been re-directed by an abandoned car that is now in the channel upstream of the bridge. This is re-directing the channel flow right at the east abutment, causing scour. (Owner of bridge has been notified and asked to remove vehicle and repair scour).	
(62) CULVERTS:	N - Not Applicable
Comments:	
LOAD RATING AND POSTING	

INDOT update – New QA section in BIAS reports

Example – When you create a new Inspection Report, the QA from is blank.

National Bridge Inventory		Quality Control Review	
Status	1	SUFFICIENCY RATING	62.5
Identification		Condition	
(1) STATE CODE	185	(58) DECK	
(8) STRUCTURE NUMBER	test asset 1	Rating	
(5) INV. ROUTE (ON/UNDER)	1 4 1 00000 0	6	Comments
(2) HIGHWAY AGENCY DISTRICT	01		Transverse cracks with salt leaching at +- 6-foot spacing under entire deck
(3) COUNTY CODE	065	(58.01) WEARING SURFACE	
(4) PLACE CODE	00000	Rating	
(6) FEATURES INTERSECTED	MIGHTY RIVER	6	Comments
(7) FACILITY CARRIED	MIGHTY HIGHWAY		One 6-inch diameter spall, (4" deep) at centerline, at mid span. 0.04" wide transverse cracks, spaced at +- 6-feet, entire length of deck.
(9) LOCATION	0.31 E LOWLY ROAD	(59) SUPERSTRUCTURE	
(11) MILEPOINT	0000.000	Rating	
INV TYPE	M	7	Comments
REF POST			Five Steel Beams in Cross-section 30WF-180.
(12) BASE HIGHWAY NETWORK	0		
		REVIEWER	
		DATE OF REVIEW	
		(58) DECK	(58) COMMENTS
		(58.01) WEARING SURFACES	(58.01) COMMENTS
		(59.0) SUPERSTRUCTURE	(59.0) COMMENTS

INDOT update – New QA section in BIAS reports

- Again, the new QA form is only for INDOT Bridge Inspectors to use right now.
- This is new and will begin to be used later this month, so there will probably be a lot of questions and bugs to work out.
- Consultants can use this if they want – there are no permissions, etc. to turn on in BIAS for this to work.

INDOT update – New Collision Damage Report

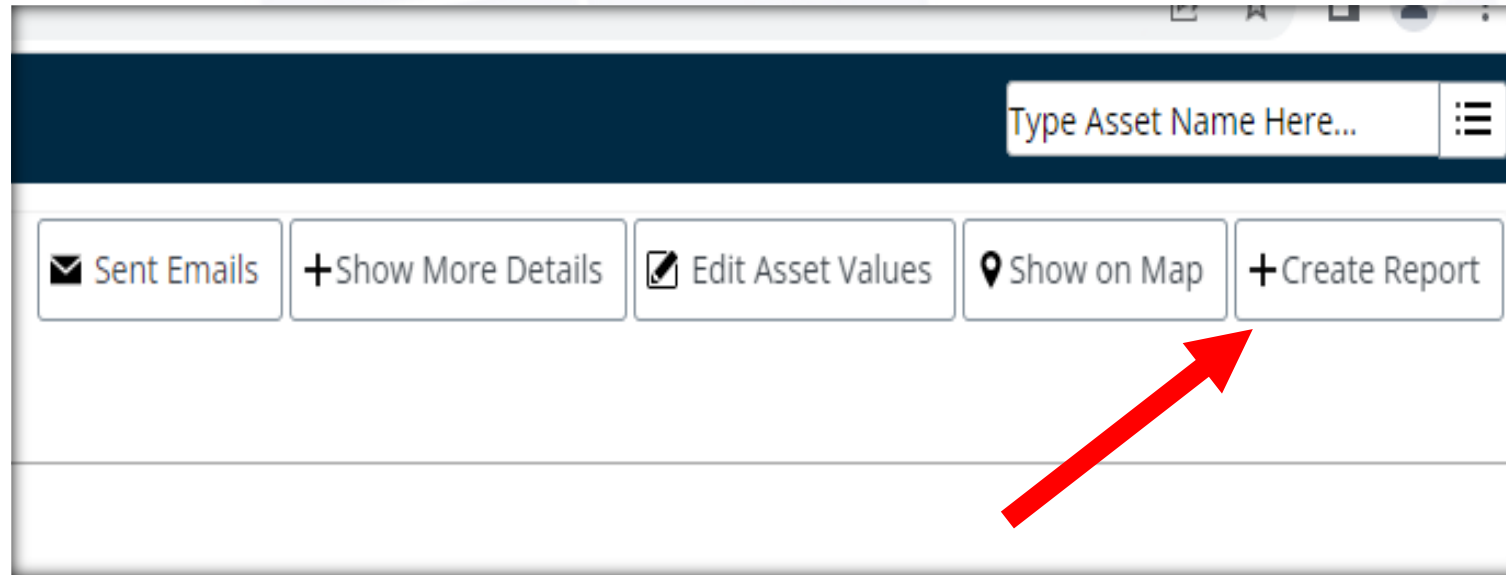
- A new Collision Damage Report has been created in BIAS.
- This is for reporting collision to bridges and approach railing.
- This is primarily for INDOT, but Consultants can use this if they want – there are no permissions, etc. to turn on in BIAS for this to work.
- The old Damage Report name has been changed to Damage/Deterioration Report, to better distinguish what it is to be used for.

INDOT update – New Collision Damage Report

- The new Collision Damage Report and the Damage/Deterioration Report are created slightly different.
- The Damage/Deterioration Report is created like before, by checking this as an Inspection Type.
- The Collision Damage Report is created by selecting it as a Report Type.

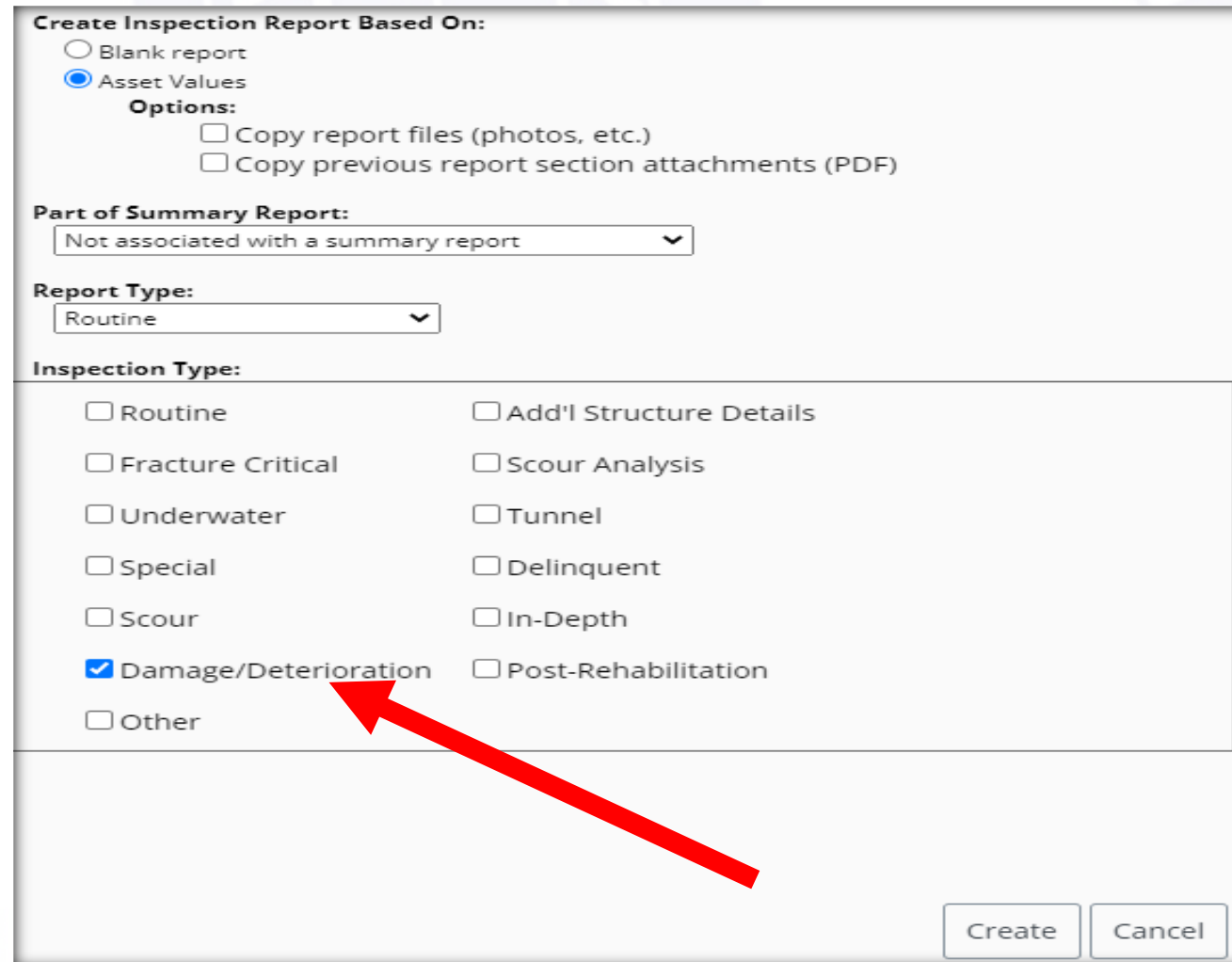
INDOT update – New Collision Damage Report

- The Damage/Deterioration Report is created like before, by checking this as an Inspection Type.



INDOT update – New Collision Damage Report

- The Damage/Deterioration Report is created like before, by checking this as an Inspection Type.



Create Inspection Report Based On:

Blank report
 Asset Values

Options:

Copy report files (photos, etc.)
 Copy previous report section attachments (PDF)

Part of Summary Report:
Not associated with a summary report

Report Type:
Routine

Inspection Type:

<input type="checkbox"/> Routine	<input type="checkbox"/> Add'l Structure Details
<input type="checkbox"/> Fracture Critical	<input type="checkbox"/> Scour Analysis
<input type="checkbox"/> Underwater	<input type="checkbox"/> Tunnel
<input type="checkbox"/> Special	<input type="checkbox"/> Delinquent
<input type="checkbox"/> Scour	<input type="checkbox"/> In-Depth
<input checked="" type="checkbox"/> Damage/Deterioration	<input type="checkbox"/> Post-Rehabilitation
<input type="checkbox"/> Other	

Create Cancel

INDOT update – New Collision Damage Report

- The Collision Damage Report is created by selecting it as a Report Type.

Create Inspection Report Based On:

Blank report
 Asset Values

Options:

Copy report files (photos, etc.)
 Copy previous report section attachments (PDF)

Part of Summary Report:

Not associated with a summary report ▼

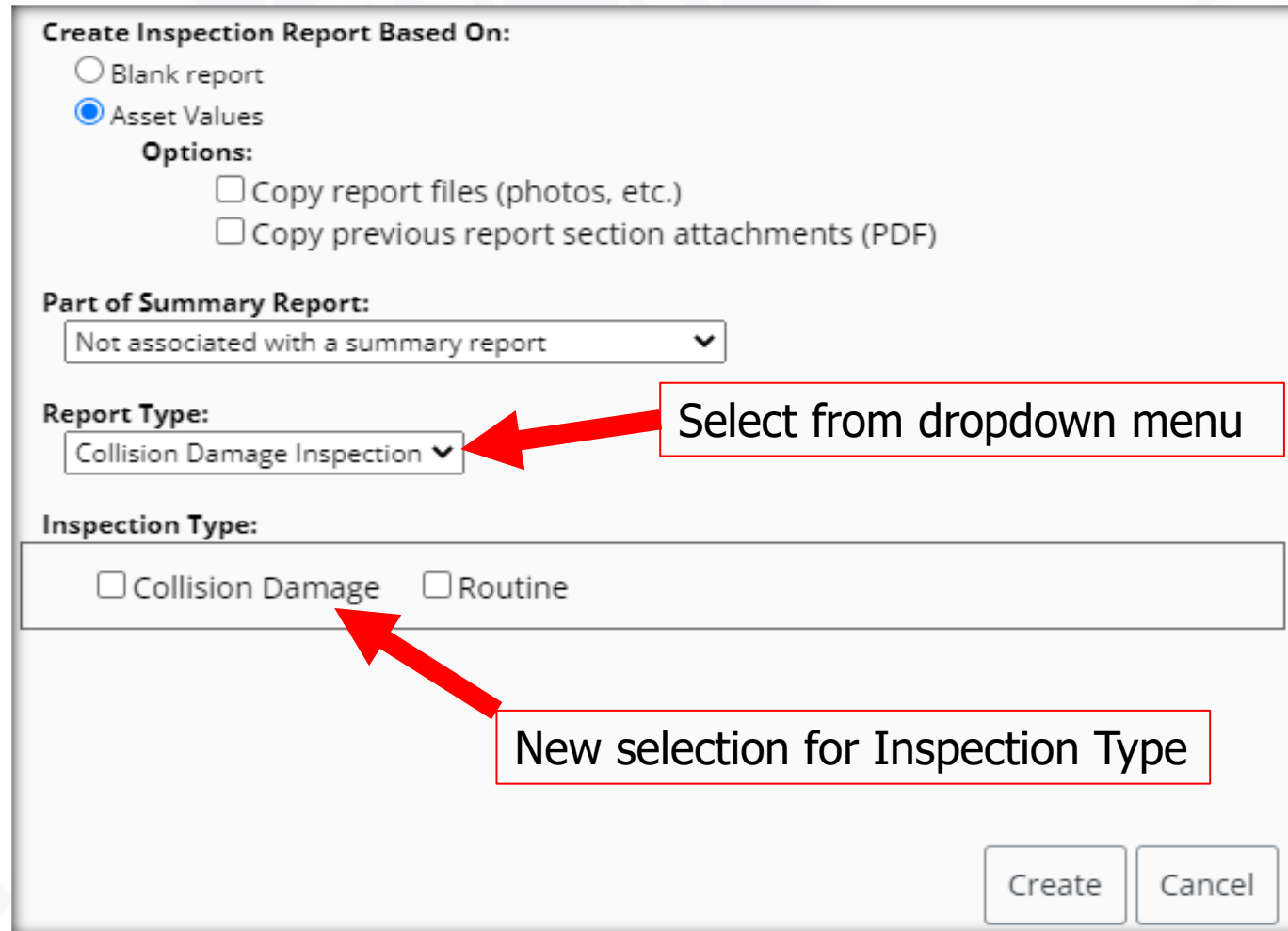
Report Type:

Collision Damage Inspection ▼

Inspection Type:

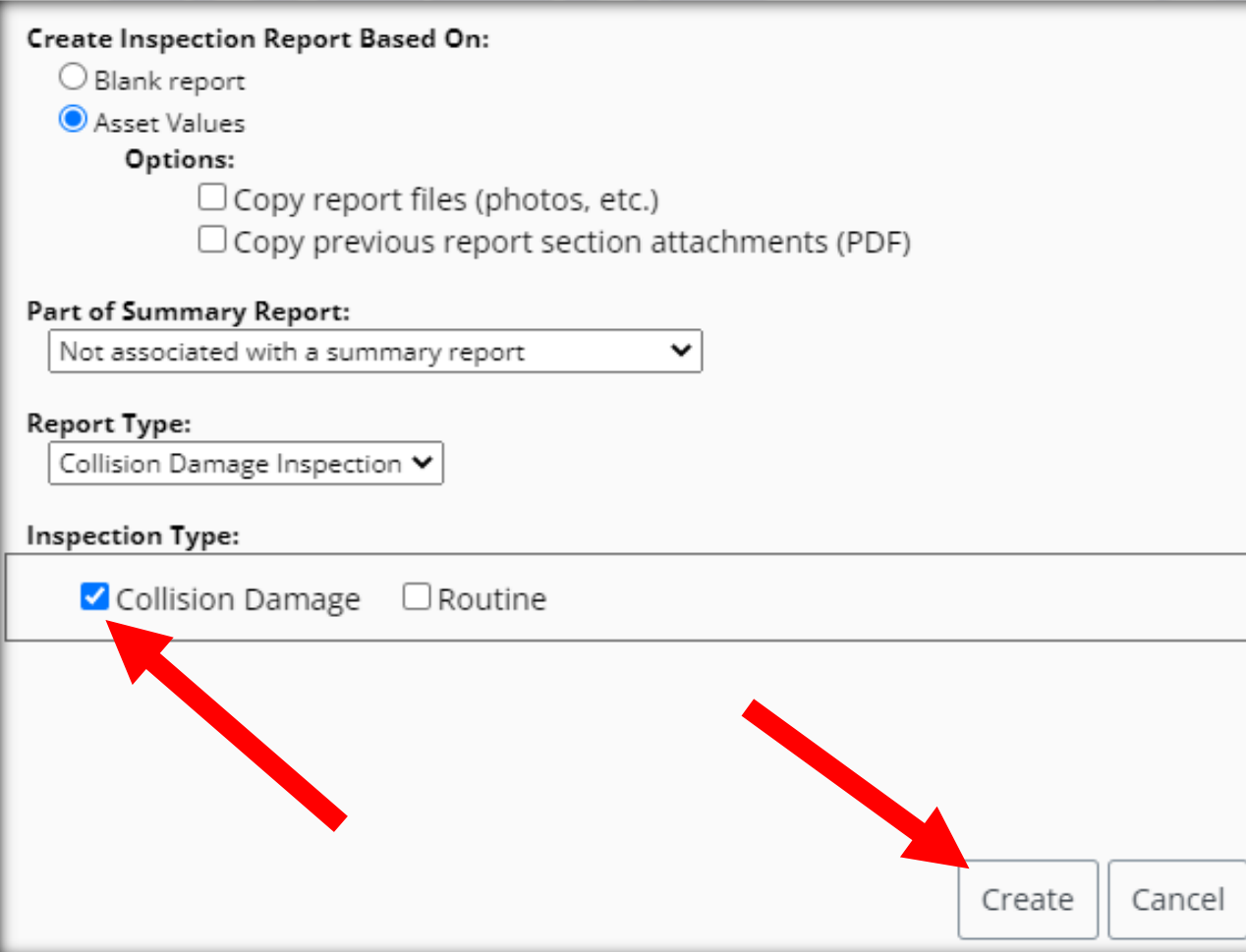
Collision Damage Routine

Create Cancel



INDOT update – New Collision Damage Report

- The Collision Damage Report is created by selecting it as a Report Type.



Create Inspection Report Based On:

Blank report
 Asset Values

Options:

Copy report files (photos, etc.)
 Copy previous report section attachments (PDF)

Part of Summary Report:
Not associated with a summary report ▼

Report Type:
Collision Damage Inspection ▼

Inspection Type:

Collision Damage Routine

Create Cancel

INDOT update – New Collision Damage Report

- Fill in Inspection Info like normal. Notice fewer Forms, if just a Collision Report.

Inspection Report Information

Create Date: 04/08/2022

Inspection Date: 04/08/2022

NBI (Item 90) Date: 04/06/2022

Inspection Type: Collision Damage Routine

User Assignment:

Owner: Ditrich, William

Show Inspectors for:

- AssetWise Inspections
- INACTIVE
- Users
- Viewers

Available Users:

- Gonzales, Maricar
- Mitchell, Nicole
- Test, Test
- WSG API, WSG API

Assigned Users:

- Ditrich, William
- Street, Shari

Set as Owner

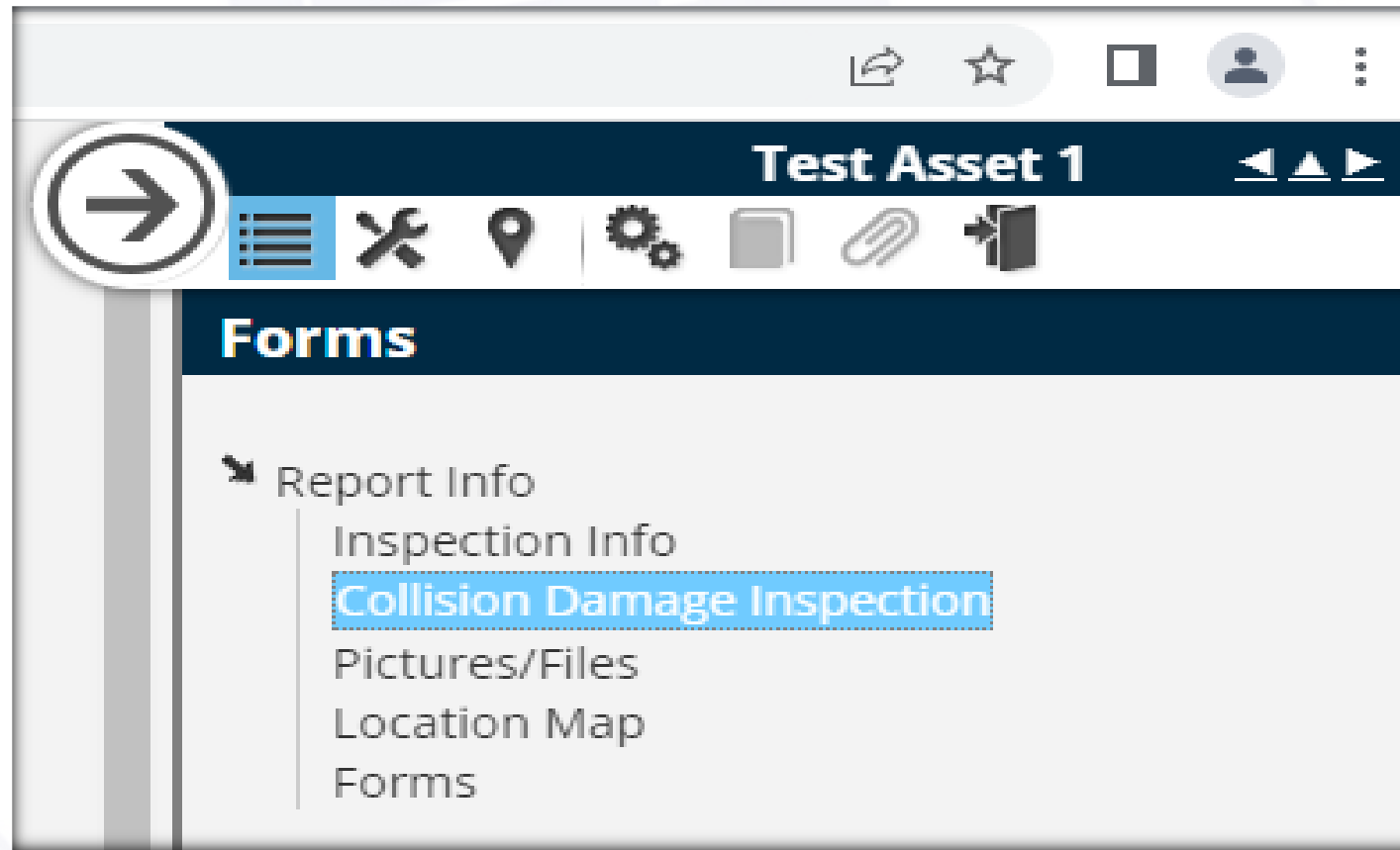
Test Asset 1

Forms

- Report Info
 - Inspection Info
 - Collision Damage Inspection
 - Pictures/Files
 - Location Map
 - Forms

INDOT update – New Collision Damage Report

- Select [Collision Damage Inspection Form](#) on right.



INDOT update – New Collision Damage Report

- Some NBI Data remains on left – Collision Data on right.

Collision Damage Inspection

Asset Identification

(1) STATE CODE: 185

(8) STRUCTURE NUMBER: test asset 1

(5) INV. ROUTE (ON/UNDER): 1 4 1 00000 0

(2) HIGHWAY AGENCY DISTRICT: 01

(3) COUNTY CODE: 065

(4) PLACE CODE: 00000

(6) FEATURES INTERSECTED: MIGHTY RIVER

(7) FACILITY CARRIED: MIGHTY HIGHWAY

(9) LOCATION: 0.31 E LOWLY ROAD

(11) MILEPOINT: 0000.000

INV TYPE: M INV RT#:

REF POST: OFFSET:

(12) BASE HIGHWAY NETWORK: 0

(13A) LRS INVENTORY ROUTE:

(13B) SUBROUTE NUMBER:

(16) LATITUDE: 37.81490

(17) LONGITUDE: -88.04961

(98A) BORDER BRIDGE CODE:

IF THIS IS A CRITICAL FINDING, A CRITICAL FINDING REPORT WILL ALSO NEED TO BE CREATED

Initial Inspection

INSPECTED BY:

REPORT INSPECTION DATE:

INSPECTION TIME (HOURS):

INCIDENT REPORT DATE:

INITIAL INSPECTION DESCRIPTION:


CRASH NUMBER:

PERMIT NUMBER:

Where Impacted

SUPERSTRUCTURE (OVERHEIGHT LOAD):

OTHER LOCATIONS (I.E. BARRIER RAILS, PIERS, ETC.):



INDOT update – New Collision Damage Report

- Condition Rating Items are available to update if needed.

(98B) PERCENT RESPONSIBILITY	<input type="text"/>	ARE PHOTOS ATTACHED ?	<input type="text"/>
(99) BORDER BRIDGE STRUCT NO	<input type="text"/>		
Structure Type and Material		Condition Rating Data	
(43) STRUCTURE TYPE, MAIN	<input type="text" value="3"/>	(58) DECK	<input type="text" value="6"/>
	<input type="text" value="02"/>	Comments	Transverse cracks with salt leaching at +/- 6-foot spacing under entire deck
(44) STRUCTURE TYPE, APPROACH SPANS	<input type="text" value="0"/>	(59) SUPERSTRUCTURE	<input type="text" value="7"/>
	<input type="text" value="00"/>	Comments	Five Steel Beams in Cross-section 30WF-180.
(45) NUMBER OF SPANS IN MAIN UNIT	<input type="text" value="001"/>	(60) SUBSTRUCTURE	<input type="text" value="4"/>
(46) NUMBER OF APPROACH SPANS	<input type="text" value="0"/>	Comments	Two wide (0.15") cracks underneath all four bearings, with deep red rust staining. Deep scour underneath the East Abutment footing. Footing undermined about 15%, (4-feet
(107) DECK STRUCTURE TYPE	<input type="text" value="1"/>		
(108A) WEARING SURFACE	<input type="text" value="1"/>		
(108B) DECK MEMBRANE	<input type="text" value="N"/>		
(108C) DECK PROTECTION	<input type="text" value="1"/>		
Age and Service		Follow Up Inspection	
(27) YEAR BUILT	<input type="text" value="1988"/>	FOLLOW UP REQUIRED ?	<input type="text"/>
(106) YEAR RECONSTRUCTED	<input type="text" value="0000"/>	FOLLOW UP DATE	<input type="text"/>
(42) TYPE OF SERVICE	On <input type="text" value="1"/> Under <input type="text" value="5"/>	INSPECTOR NAME	<input type="text"/>
(28) LANES	On <input type="text" value="02"/> Under <input type="text" value="00"/>	INSPECTOR NAME 1	<input type="text"/>
(29) AVERAGE DAILY TRAFFIC	<input type="text" value="000200"/>	INSPECTOR NAME 2	<input type="text"/>
(30) YEAR OF AVERAGE DAILY TRAFFIC	<input type="text" value="2015"/>	FOLLOW UP INSPECTION TIME (TOTAL HOURS)	<input type="text"/>
(109) AVERAGE DAILY TRUCK TRAFFIC	<input type="text" value="05"/> %	FOLLOW UP NOTES	<input type="text"/>
(19) BYPASS DETOUR LENGTH	<input type="text" value="002"/> MI.		
Geometric Data			
(48) LENGTH OF MAXIMUM SPAN	<input type="text" value="00035.0"/> FT.		

INDOT update – New Collision Damage Report

- Normal workflow as other reports.

Inspection Type	NBI 007: Facility Carried by Structure	NBI 006: Feature Intersected	Submitted To	Workflow Stage	Status
Collision Damage	MIGHTY HIGHWAY	MIGHTY RIVER		In Progress	Report ...
< 1 >					

Inspection Type	NBI 007: Facility Carried by Structure	NBI 006: Feature Intersected	Submitted To	Workflow Stage	Status
Collision Damage	MIGHTY HIGHWAY	MIGHTY RIVER	Dittrich, William (comments)	Data Entry Complete	Moved ...
< 1 >					



INDOT update – New Collision Damage Report

- Will be able to see, open, and print report like others in [Asset Info](#) Tab.

Asset Details: Test Asset 1

Quick View **Asset Info** Files Maintenance Scheduling

∨ Completed Reports

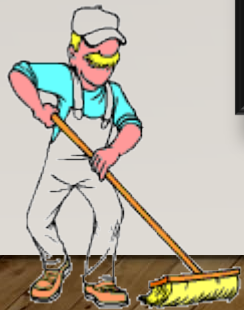
Inspection Date	Last Revision	Asset Code	Owner	Asset Type	Inspection Type	NBI 007: Facility Carri
4/8/2022	4/8/2022	TA1	Dittrich, William	Bridge	Collision Damage	MIGHTY HIGHWAY
4/6/2022	4/7/2022	TA1	Dittrich, William	Bridge	Routine and Delinquent	MIGHTY HIGHWAY
4/4/2022	4/5/2022	TA1	Street, Shari	Bridge	Collision Damage	AAA HWY
4/4/2022	4/6/2022	TA1	Street, Shari	Bridge	Collision Damage	MIGHTY HIGHWAY
1/18/2022	1/18/2022	TA1	Trana, Pedro A.	Bridge	Scour Assessment	AAA HWY
1/18/2022	1/18/2022	TA1	Trana, Pedro A.	Bridge	Scour Screening	AAA HWY
3/20/2020	4/6/2022	TA1	Dittrich, William	Bridge	Routine	MIGHTY HIGHWAY

INDOT update – New Collision Damage Report

- Will be able to see, open, and print report like others in Asset Info Tab.

<u>Collision Damage Inspection</u>		IF THIS IS A CRITICAL FINDING, A CRITICAL FINDING REPORT WILL ALSO NEED TO BE CREATED	
(1) STATE CODE	185	Initial Inspection	
(8) STRUCTURE NUMBER	test asset 1	INSPECTED BY:	Burlage, Cristin
(5) INV. ROUTE (ON/UNDER)	1 4 1 0000 0	REPORT INSPECTION DATE	04/06/2022
(2) HIGHWAY AGENCY DISTRICT	01	INSPECTION TIME (HOURS)	1.0
(3) COUNTY CODE	065	INCIDENT REPORT DATE	04/04/2022
(4) PLACE CODE	0000	INITIAL INSPECTION DESCRIPTION	
(6) FEATURES INTERSECTED	MIGHTY RIVER		truck hit bridge
(7) FACILITY CARRIED	MIGHTY HIGHWAY	CRASH NUMBER	
(9) LOCATION	0.31 E LOWLY ROAD	PERMIT NUMBER	
(11) MILEPOINT	0000.000	Where Impacted	
INV TYPE	M	INV RT#	
REF POST		OFFSET	
(12) BASE HIGHWAY NETWORK	0	SUPERSTRUCTURE (OVERHEIGHT LOAD)	
(13A) LRS INVENTORY ROUTE		OTHER LOCATIONS (I.E. BARRIER RAILS, PIERS, ETC.)	
(13B) SUBROUTE NUMBER			hit pier #1
(16) LATITUDE	37.81490	ARE PHOTOS ATTACHED ?	Yes
(17) LONGITUDE	-88.04961	Condition Rating Data	
(96A) BORDER BRIDGE CODE		(58) DECK	6
(96B) PERCENT RESPONSIBILITY		Comments	
(99) BORDER BRIDGE STRUCT NO.			
(43) STRUCTURE TYPE, MAIN	3		

Any Questions...



It's Intermission Time... We'll be right back!



Quality Inspections

2022 Bridge Inspection Workshop
Presented: Cristy Burlage and Jake Gould
INDOT Bridge Inspection Area Engineers
April 14, 2022

Metric 12 Results

- CPR 650.313 (a)&(b) – Quality of Reports
 - Found to be in Substantial Compliance
- Finding:
 - “The review noted instances in which inspectors either did not provide sufficient documentation for the deficiencies found or the condition rating did not reflect the actual bridge condition.”
- Actions & Recommendations:
 - “INDOT is to submit an Improvement Plan to FHWA for review and approval that addresses these deficiencies. FHWA recommend that INDOT establishes a formal procedure to provide constructive feedback to inspectors that don't provide bridge inspection documentation in accordance with National Bridge Inspection Standard (NBIS), the AASTHO Manual for Bridge Evaluation (MBE) and INDOT's bridge inspection policies.”

INDOT's Response to Metric 12

- Action Item #1 (Completed)
 - Meet with bridge inspection team leaders to review failed inspections.
- Action Item #2
 - Based on Action Item #1, State Program Manager (SPM) may issue probation
 - Two bridge quality assurance inspections will be conducted by Bridge Inspection Area Engineers
 - If inspections are of acceptable quality, probation will be lifted
 - If inspections are not of quality, disqualification of Team Leader status may occur

INDOT's Response to Metric 12

- Action Item #3
 - Number of quality assurance inspections completed by Bridge Inspection Area Engineers increases from 24 to 30.
 - Inspectors will be notified of feedback as completed
- Action Item #4 & #5
 - For each county a consulting firm is responsible, the following will be completed for each Phase 1 & 2 cycle.
 - Two (2) quality control office reviews
 - One (1) quality control field review

QA Review Expectations

- Consultants
 - 1 QA Field Review & 2 QA Office Reviews per County Responsible for
 - Reviews will be done in the Phase 1 and 2 cycles
- INDOT
 - Area Engineers
 - 1 QA Field and Office Review per District Bridge Inspection Supervisor per year
 - 30 QA Field and Office Reviews per year
 - District Bridge Inspection Supervisors
 - 2 QA Field and Office Reviews per District Inspector per year
- FHWA
 - 19 QA Field and Office Reviews per year

QA Review Expectations

- Completed reviews are to be uploaded onto BIAS
 - Counties to be uploaded to County file
 - State will be uploaded to individual structure
- It is expected to go over the review with the other person.
 - Create follow-up action if required



QA Review Forms - FHWA

Field Review Checklist

NBIP Review

Str.No.:

BIG BEND RD over CROOKED CREEK

Rev.Date:

State(1):	InspDate(90):	Lat(16)/Long(17):	
Deck(107):	Main(43):	Span(48)/Len(49):	
Owner(22):	Built(27)/Recon(106):	ScourCrit(113):	
ORMeth(63):	OR(64):	IR(66):	ADT(29)Yr(30):
Review Team:			

Review most recent inspection reports for all applicable inspection types. Bridge is in the population (P) and being assessed at the Int-AL (shaded) for the following metrics:

M13	M14	M16	M17	M18	M19	M21
1	-	-	-	-	-	-

Metric 12 – Quality Inspections (Circle all appropriate responses)

Condition Codes	Item	Recorded Ratings		Review Team Rating	Notes	Meets Criteria?
		NBI SI&A	Insp Report			
	58 - Deck					Y / N (±1 rating)
	59 – Super					Y / N (±1 rating)
	60 – Sub					Y / N (±1 rating)
	62 - Culvert					Y / N (±1 rating)

QA Review Forms - FHWA

	Criteria	Review Team Insp Report Assessment	Notes/Explanation	Meets Criteria?
Other Metric 12 Criteria	All notable deficiencies identified?	Yes/No/NA (no notable deficiencies)		Y / N NA
	Narrative justifies cond. ratings?	Yes/No/NA (narrative not needed)		Y / N NA
	FC/UW/Complex required & properly done	Yes/No/NA		Y / N NA
	FC/UW/Complex Report results reflected in condition ratings	Yes/No/NA		Y / N NA
	Followed MBE procedures?	Yes/No		Y / N
	Qualified TL present during inspection(s)?	Indicated by identification on report, field observation, or other indicators	TL: _____	Y / N
	UW - Qualified Diver(s)		Diver(s): _____	Y / N NA
	Overall Field Assessment of Adequacy of this Inspection Only circle Y (Yes) if all the dark shaded boxes above are Yes or NA.			

QA Review Forms - FHWA

Metric 22 – Minimum Level Review Items (Circle all appropriate responses)

SI&A Item / Tolerance (* whichever is greater)	NBI SI&A (English units)	Review Team Code (Explain differences; use Notes section if needed)	Meets Accuracy?
70 - BRIDGE POSTING			Y/N
41 - STRUCTURE OPEN, POSTED OR CLOSED			Y/N
113 - SCOUR CRITICAL BRIDGES			Y/N
112 - NBIS BRIDGE LENGTH			Y/N
104 - HIGHWAY SYSTEM			Y/N
26 - FUNCTIONAL CLASS			Y/N
100 - DEFENSE HIGHWAY			Y/N
101 - PARALLEL STRUCTURE			Y/N
102 - DIRECTION OF TRAFFIC			Y/N
103 - TEMPORARY STRUCTURE			Y/N
105 - FEDERAL LANDS HIGHWAYS			Y/N
110 - DESIGNATED NATIONAL NETWORK			Y/N
20 - TOLL			Y/N
21 - MAINTENANCE RESPONSIBILITY			Y/N
22 - OWNER			Y/N
37 - HISTORICAL SIGNIFICANCE			Y/N
Metric 13/14 Int-AL - Extra Review Items			
31 - DESIGN LOAD			Y/N
63 - OPERATING RATING METHOD			Y/N
64 - OPERATING RATING			Y/N
65 - INVENTORY RATING METHOD			Y/N
66 - INVENTORY RATING			Y/N

Field Review and Report Creation

- Picture Taking
- Picture Captions
- Component Note Taking
- Executive Summary
- Maintenance Items





Required Pictures (BIM 2-2.06(01))

- Alignment Pictures in Both Directions
 - Postings & Restriction signs should be visible
- Elevation Pictures
 - Both if possible
- Deck, Superstructure, & Substructure
- Upstream and Downstream Channel
- Overall Condition or Deficiencies
- All Components Rated 4 or Less
 - This includes all Fracture Critical Members
- Fracture Critical / Special Members & Connections
 - Each Fracture Critical member should have a picture every 10 years or less
 - Must be an Arms Length Inspection

Elevation Pictures





Fracture Critical Pictures





Condition Pictures



South End Bent and Span A Superstructure



Exposed Steel with Heavy Corrosion along the West Coping of Span A Superstructure

Right Side Up or Upside Down?



PHOTO 13

Description Pier 2, east face, facing west.

Thumb Picture



Picture Captions

- Tell the story with your captions
- Avoid abbreviations or overly technical jargon when possible
- Details to include
 - Severity
 - Location
 - Orientation



Picture Captions – Individual Report



PHOTO 18 Condition

Description Severe deterioration at open longitudinal centerline joint at median, Span B shown, similar in other spans, heavy spalling with fully exposed reinforcement and section loss. Also large amount of debris buildup under Span A shown.

Picture Captions – County Summary Report



Alignment Looking East (15 Ton, One Lane)

Example Picture Captions



Cracks in Beam 2A

Example Picture Captions



Crack at Northwest Corner

Example Picture Captions



PHOTO 47

Description North column bent 7

Example Picture Captions



PHOTO 30

Description Bent 2 cap at median

Example Picture Captions



Spalls in Top of Beam (Centerline of Structure)

Component Note Taking

- Make sure that pictures & comments back up rating
- Notes should use same detail as with picture captions, if not more
- Comments should be a summary of that component





Executive Summary

- Tell the story of the bridge
- Tell about components that don't have a field
 - Bridge and approach railing
 - Signage
 - Safety hazards or other difficulties
- Include the deficiencies that drive the overall rating
- Rehab or work history
- Future work planned



Executive Summary Example

Overall Condition Summary

Bridge is posted 5 Tons and One Lane Bridge

Overall bridge is in poor condition. Pier 2 has heavy spalling with exposed steel that has complete rust through in places. Beam 4A has two severed strands with all other beams having a single hairline longitudinal crack. The bridge is scour critical due to the west end bent having heavy undermining which has exposed all four piles.

It is recommended to replace the structure.

Until replacement, it is recommended to underpin the west end bent. It is also recommended to splice in new steel and patch the spall on Pier 2.

History

- 01/01/1947: New Bridge under unknown Des #, Contract # 2889
- 01/01/1997: Rehab A, Bridge Deck Overlay under Des # 9303190, Contract # 22876

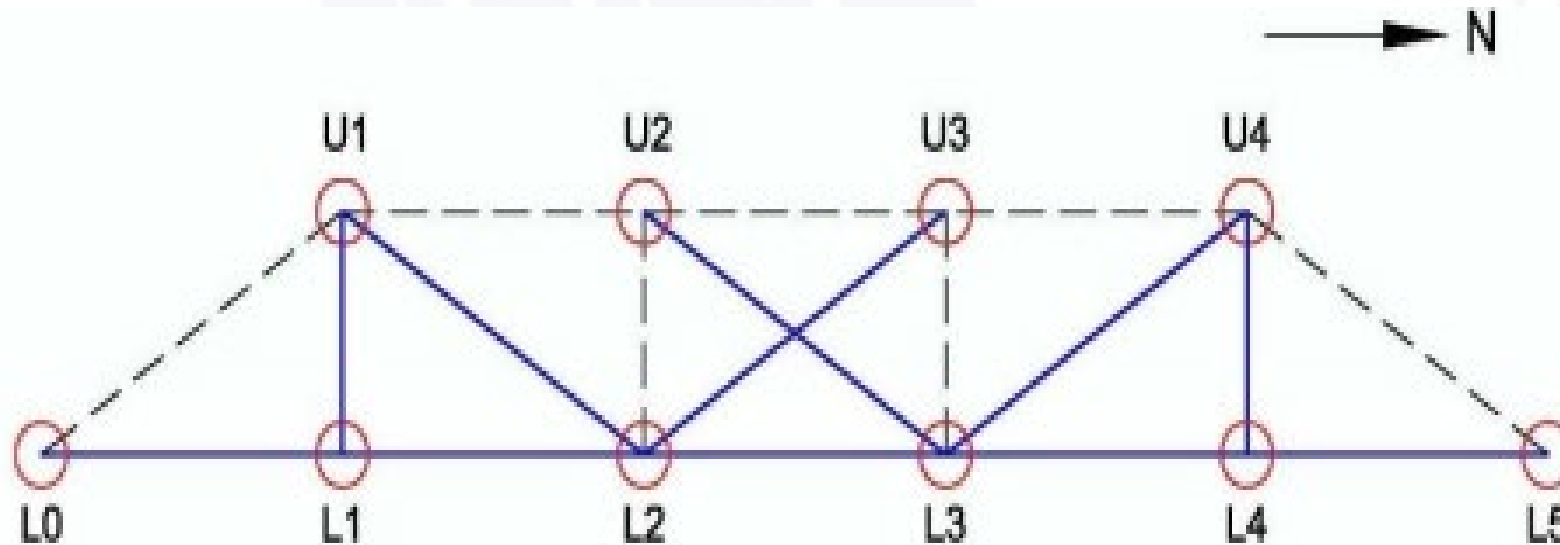
Maintenance Items

- Maintenance items should only be created to help maintain or improve the structural integrity of the bridge
- INDOT Standard for Priority Guide
 - Red – 1 Month
 - Yellow – 3 Months
 - Green – 6 Months
 - Gray – 12 Months



Fracture Critical Required Fields (BIM 5-5.01(06))

- Framing Plan Identifying all Fracture Critical Components
- Notes and Report
- Work Plan & Hazard Analysis
- Location Map
- National Bridge Inspection Data and Item Codes
- Element Quantities (if applicable)
- Pictures



Fracture Critical Required Fields (BIM 5-5.01(06))

- Required Fields for Each Fracture Critical Component
 - Individual Member Rating
 - AASHTO Fatigue Category
 - Brief Condition Statement
 - Noted Areas of Section Loss
 - Documentation of Fatigue Damage
 - Picture Note (Optional)





Additional Inspection Types

- Special
 - If removal of a special detail inspection is requested, this can be done through the State Program Manager, Tony Marino.
- In-Depth
 - Used as a follow-up inspection based on conditions found during routine inspection
 - High-water
 - Deterioration requiring additional equipment/testing
 - Explain the reasoning for In-Depth inspection in Executive Summary
 - Does not change Item 90 date
- Post-Rehabilitation
 - Used as initial inspection once construction has been completed
 - Does not change Item 90 date

Additional Inspection Types

- Collision Damage Inspection
 - New report type used to better document collision damage
- Delinquent
 - Used to document and explain late inspections
 - Must be done for each individual bridge file
- Other

Office Reviews

- Required files for each bridge
 - Load rating summary and model (if applicable)
 - Values should be reflected in BRADIN and BIAS
 - Values should reflect most recent bridge inspection report
 - Files should be re-uploaded if an updated has been completed
 - Scour Screening and/or Scour Assessment
 - Files should be completed again if the Scour Rating has been updated (Item 113)
 - Bridge plans and files should be uploaded to ERMS & BIAS
 - Other important files

Miscellaneous Items

- Bridge Report Ownership
 - Include all personnel who participated in the inspection in the “Inspection Info” tab
 - Non-Team Leaders can “own” an inspection report if accompanied by certified Team Leader
- Approve reports within the month of compliance plus 60 days window
- Bridge Inspection Photography Class coming soon

I'm an
~~Engineere~~
~~Engenere~~
~~Engeneer~~
I'm good
with math.

Questions?



THANKS FOR
ATTENDING
OUR 2022
INDOT
WORKSHOP...

