

MEMORANDUM

April 24, 2018

TO: ACEC-INDOT Bridge Inspection Committee Members

FROM: John Lukac, Beam, Longest & Neff, LLC

RE: ACEC-INDOT Bridge Inspection Committee Meeting Minutes
(Meeting held February 16, 2018)

The following were in attendance:

Andrew Fitzgerald, INDOT
Bill Dittrich, INDOT
Randy Strain, INDOT
A.J. Wortkoetter, INDOT
Sean Hankins, INDOT
Craig Parks, Boone County/IACHES

Scott Minnich, United Consulting
John Lukac, BLN
Mark Riehle, Lochmueller Group
Brett Longenecker, USI Consultants
Jonathan Olson, BF&S

Item #1

Metrics Compliance.

- INDOT currently has developed improvement plans for Metrics 6, 7, 8, 12, and 23. INDOT would like to get from substantial compliance to compliance on these metrics. Metric 23, Timely Update of Data, Bill stated will be addressed if data is updated in BIAS within the required 60-day time frame as stated in the bridge inspection manual. Randy stated that some of the late inspections were due to a small number of outstanding special inspection reports still in BIAS for covered bridges. Randy stated that, based on INDOT policy, timber covered bridges do not require special inspections.
- Bill stated that to help with Metric 23, INDOT now runs queries on bridge data at the beginning of each month looking for reports that have been in progress for over 2 months and sends correspondence to the consultant responsible for the county inspections.
- Bill also stated that there are errors when bridge data is updated when the bridge is under construction. Bill stated that bridge data should not be updated if a bridge is under construction, instead the data should be updated when the new bridge or rehabbed bridge is opened to traffic.
- AJ stated that there have been situations in which a county was not updated on time because the inspections were not able to start in the compliance month due to delays in the contract schedule. AJ mentioned that INDOT is working with the counties through the quarterly report meetings to help keep them on schedule with getting the new contracts approved on time.
- Bill stated that bridge inspection reports need to be approved in the 60-day requirement because the asset values will not update until the report has been approved. To make sure the asset values are updated in time to be reported to FHWA, the reports cannot be left in "In progress" status.
- It was discussed that if a bridge has been closed for many years, an inspection of the bridge and updated photos will not be required.

Item #2

Load Rating Policy.

- Status of Updated Load Rating Chapter
 - o INDOT has released the updated load rating chapter.

- BRADIN
 - o Implementation of BRADIN will be June 1, 2018, per Memo 18-01.
 - o INDOT currently has the ability to mass upload data into BRADIN. If a consultant would like data mass uploaded to BRADIN, INDOT would like that data to be sent to them before the June 1st implementation date.
 - o Jon Olson asked if data could be mass uploaded after the June 1st date if there were updates to a large number of the load ratings in a county. Sean stated that mass uploads would be done for the initial data in BRADIN up to November 2019 and would be considered on a case by case basis after November 2019.
- Timeframe for completing BrR load ratings
 - o Per INDOT policy this information needs to be completed prior to November 2019 to stay in compliance with FHWA. AJ reminded everyone that if load rating is included in "Office Work" in the contract, it has to be done within the same timeframe as the bridge inspection office work, so if a county contract ends before November 2019 the BrR updated ratings would need to be done before the end of the contract.
- Software
 - o CANDE
 - In most cases, Sean stated that CANDE would be better used as a design software and is not as helpful as a load rating software. Per the INDOT bridge Inspection manual, other software and tools can be used to load rating bridges instead of using CANDE.

Item #3

Inspection Team Leader Renewals and Requirements.

- Randy stated that INDOT has revised the team leader qualification requirements in the bridge inspection manual. Fracture critical qualification requirements now include the NHI course and the S-Brite training one time. A NHI refresher class will no longer be required to remain qualified for fracture critical inspections. Refresher training will only require the S-BRITE training if significant updates are made to the training.
- Randy also stated that updates have been made in the bridge inspection manual for a Team Leader to remain certified for routine inspections. As listed in the manual, the Team Leader will be required to take the NHI refresher training every 10 years and will also need to take the S-Brite training.
- All Team Leader, Team Member, and Load Rating Engineer information must be uploaded to a user profile in BIAS. INDOT will use the data in BIAS to determine qualifications for inspection team leaders and load rating engineers for consultants. Mark asked about current team leader numbers with the expiration year based on the 5-year requirement for fracture critical refresher training. Bill said INDOT will have to review the team leader numbers in BIAS and revise the expiration years since the NHI refresher class is no longer required to remain certified to inspect fracture critical bridges.

Item #4

County Summary Reports.

- Bill stated that INDOT is currently working with Bentley on the county summary reports and tables that are generated in BIAS. INDOT understands there are continuous revisions required to keep the county summary reports working and Bentley has not always been able to make those revision in a timely manner.

- INDOT will now allow consultants to generate county summary reports in other means necessary if the county summary reports generated in BIAS are not functioning properly. Errors with the county summary reports should still be sent to INbridgeshelp.
- AJ reminded the group that the county summary reports are required to be on file at the county to satisfy the "Open Door Law."
- AJ also reminded the group that a copy of the county summary report and the transmittal letter must be uploaded to ERMS and the county summary report must be stamped by a PE. The county also needs to be given a summary of recommended bridge maintenance and bridge replacements with the summary report. The list of maintenance and replacements must be realistic based on funding available for the county.
- AJ also stated that he checks the inspection dates in the reports and a common error he finds in the tables at the front of the report is that the "current inspection dates" and the "last inspection dates" are sometimes wrong or the dates in each column of the table have been switched. Consultants should remember to check this data after generating the county summary report.
- AJ also mentioned that he sometimes notices that Item 90 is not updated when the report is created in BIAS. Team leaders are reminded to check that Item 90 was updated properly when the new inspection report is created in BIAS.

Item #5

Identifying Critical Findings for existing conditions on a structure.

- Bill started the discussion on identifying critical findings by asking the group for feedback on the presentation given at the INDOT bridge inspection conference. Based on the committee feedback, the committee concluded that additional training and clarification of critical findings will be necessary for team leaders.
- Randy stated that a critical finding could be a deficiency that triggers a new load rating to be performed or a deficiency that triggers an update to an existing load rating. Randy also stated that if the current load rating or posting includes the bridge deterioration, a critical finding is not necessary however it would be helpful to add a note in the inspection report that a critical finding was not identified because the bridge deterioration was already noted and also included in the bridge load rating and posting. Randy and Bill also stated that a critical finding can also be a safety related item such as damaged bridge rail.
- Andrew stated that the committee will review examples of critical findings at the next meeting to discuss and determine common deficiencies of bridge conditions that could be considered as a critical finding. Committee members were asked to provide examples prior to the next meeting that they would like to discuss.

Item #6

LPA contract status and discussion.

- AJ stressed that the LPA must get county contracts started early to make sure the inspection consultant can be given notice to proceed in the compliance month. The LPA is encouraged to start the advertising for the next inspection contract at least 1 year before the compliance month for Phase I inspections. Jon Olson asked if it would be helpful for INDOT to set up intermediate dates for the completion of tasks for the development of RFP's and inspection contracts for LPA's. AJ stated that this information is already available to the LPA in the County Inventory Quarterly Reports, so he did not feel it was necessary to develop further documentation.

- AJ also stressed that it is hard to get contracts approved and returned to the LPA if INDOT does not receive the contracts in advance of the compliance month. AJ recommended the INDOT/LPA agreement be submitted to INDOT a minimum of 90 days prior to the compliance month to assure adequate time for the contract completion so the consultant can get notice to proceed on the first day of the compliance month.
- AJ stated that LPA inspection contracts submitted to INDOT are currently being reviewed based on the compliance month.
- Andrew asked that if it appears that a consultant will not get notice to proceed in time to perform inspections in the compliance month that the LPA or consultant contact INDOT to inform them of the situation.

Item #7

Scour Assessments.

- John Lukac asked for clarification on determining the need to perform scour modeling and scour Plan of Action reports when following the scour assessment criteria in the bridge inspection manual.
- Randy stated that the manual should be followed for scour assessments and screening, but engineering judgement can also be used to determine if a bridge requires modeling or a scour plan of action. Randy and Bill stated that if engineering judgement determines that the scour rating for Item 113 is different than the scour screening or assessment forms, that reasoning be included in the comment box on the forms for justification of the scour rating.
- Bill also stated that the final determination on the bottom of the scour assessment or screening form must match the rating for Item 113 in BIAS.
- AJ stated that if a scour plan of action is being recommended for a bridge, the scour screening or assessment forms and Item 113 in BIAS should be coded as a "3" or lower to justify a scour plan of action being developed for the bridge.

Item #8

Extended Frequency Review and Inspections.

- Randy stated that the list of bridges that are considered as good candidates for extended frequency inspections was released by INDOT in Memo 18-02 and is on the INDOT Bridge Inspection homepage. As of now, no other bridges will be considered for extended frequency inspections and culverts will not be considered for extended frequency inspections.
- Consultants are responsible for submitting the required extended frequency screening information to INDOT for review.
- If an LPA bridge is going to be put on an extended frequency, INDOT would like for the 48-month inspection to be done in Phase I of the bridge inspection contract.
- Scott stated that the criteria mentioned a bridge could not have leaking bridge joints and this could rule out a lot of good condition county bridges because a lot of them have some leaking at the joints or don't have bridge joints. Randy and Bill stated that leaking joints should be reviewed based on if the leaking at the joint is causing damage to the bridge bearings or superstructure. Randy stated that leaking at the ends of the bridge that is not negatively affecting the bridge does not rule a bridge out of the consideration for extended frequency inspections.
- Scott asked for clarification on the requirement of equipment to document the bridge condition for the extended frequency review. Randy stated that equipment will not be required for most bridges, but adequate inspection notes and photos are required for the bridge inspection file.

- Jon Olson asked if bridge data will be reported as being late if it is not approved within 60 days because a bridge is currently being reviewed by INDOT for extended frequency inspection qualification. Randy and Bill stated that a bridge being reviewed for extended frequency will not be reported as late if the inspection data approval is awaiting INDOT's review.
- Scott asked that when considering overtopping of a bridge, should the consultant review Item 113 for scour or Item 71 for waterway adequacy. Randy and Bill stated that engineering judgement should be used when reviewing a bridge for the severity of potential scour and rating of Item 113 and the possible overtopping of the bridge for the waterway adequacy rating items. A bridge may still be a good candidate for an extended frequency inspection even if there is a potential for water to overtop the bridge during a large rain event.
- Scott also asked if a PE is required to perform the field inspection and the extended frequency screening. Bill and Randy stated that the field inspection must be done by a PE and a PE must sign off on the extended frequency screening documentation.

Item #9

BIAS Updates.

- INDOT currently working on BIAS update and complications for IPAD users. Bill also stated that they have had instances where IPAD users have lost BIAS data so INDOT is working with Bentley.
- Jon Olson mentioned that they have not lost BIAS data if they were working on a Wi-Fi signal when uploaded data to BIAS.
- Bill recommended that any problems with BIAS be reported to Mona.

Item #10

Training Update.

- NHI Courses:
 - o 130055 - 2 Week Bridge Inspection class to be held by INDOT: Scheduled 7/23/2018 – 8/8/2018. Location: INDOT Seymour District Office.
 - o 130053 - 3 Day Refresher Course: Scheduled 8/13/2018 – 8/17/2018.
- S-BRITE Training to be held by Purdue University: 4/19/2018 – 4/20/2018.

Item #11

Next Meeting Date. The next committee meeting will be held on Friday, May 11, 2018 at 9:00am in INDOT N642 conference room.

Action Items

1. Committee members to bring examples of potential critical findings to May 11 meeting for open discussion.
2. INDOT/ACEC Bridge Inspection Committee meeting minutes to start being uploaded to INDOT Bridge Inspection Homepage for future reference.