Bridge Inspections and Being an ERC

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Objectives

- Purpose of Bridge Inspections
- LPA Guidance Document
- Role of ERC in Bridge Inspections
- Consultant & INDOT Contracts
- Inspection Reports
- BIAS (Bridge Inspection Application System)
- Bridge Inspection Resources
  - INBridgesHelp@indot.in.gov
Purpose of Bridge Inspections

1. Ensures Public Safety
2. Provide for the efficient use of resources in maintaining the serviceability of Indiana’s bridges and small structures
3. Items 1 and 2 are accomplished by complying with all federal and state laws, rules, and policies
Bridge Inspections

- Bridge inspections are required by FHWA and funded by the Federal Aid Program
- Reimbursable and matching program
- Maintaining the Bridge Inspection Program in compliance with FHWA And INDOT laws, regulations, and standards is Expected

Failure to comply may result in loss or repayment of county’s federal aid
Chapter 13: County Bridge Inspections

- Role of the ERC
- Consultant Selection and RFPs
- Contracts - Consultant and INDOT
  - 4-year Phased Contracts
  - 80/20 Federal Aid Program
- Bridge Inspection Schedule
- Technical Issues
Role of the ERC

- Manage Inspection Process-Documentation
  - Consultant Selection
  - Financial
- Manage the Bridge Inspection Schedule
  - Timely Inspections
  - Timely Reports
  - Quarterly Tracking
- Educate Yourself
  - National Bridge Inspection Standards (NBIS)
  - Bridge Inspection Manual (BIM)
  - Bridge Conference
Role of the ERC

- **Financial requirements**
  - Manage the timing and execution of bridge inspection contracts
  - Must ensure the work is included in the TIP & STIP
  - Request FMIS Approval– Any work that occurs prior to FMIS Authorization (NOA) will result in all costs being paid 100% by the LPA
  - Issue the Notice to Proceed (NTP)
  - Review and submit related invoices
    - This is a reimbursement program– proof of payment is required with your invoice
Consultant Selection and RFP

- Critical component in inspection process
  - Start one year before current contract expires
- Must be prequalified with INDOT
- No letting or contractor
  - All work on contract done by consultant
- ERC responsible for writing and submitting RFPs as outlined in Guidance Document
LPA-Consultant Contract

- Boilerplate contract found on the INDOT LPA Consultant Information website
- Lump sum based on a per bridge price
- *You have the right to negotiate your contract fees and activities.*
- Should be reviewed by INDOT before signing to ensure compliance and reasonable fees
- Currently working to improve this contract
  - Look for new contract for next cycle
Include with Consultant Contract

- Use LPA-Consultant Contract Review Checklist and include with contract
  - Ensures a complete contract package
- Consultant Prequalification Letter
- Must send list of all bridges to Project Manager and Program Coordinator
  - Must be in Excel or Word Document
  - Number of bridges per BIAS (put on contract)
APPENDIX “D”

COMPENSATION

A. Amount of Payment

1. The CONSULTANT shall be paid for the work under this Contract a fee not to exceed $________ unless a modification of the agreement is approved in writing by the LPA and INDOT.

2. For services rendered in connection with the work as set forth in Appendix “A” Phase I, the CONSULTANT shall receive a lump-sum fee, not to exceed, of $________.
   * (circle which applies) Includes 4a, 4b1, 4b2, 4b4

3. For services rendered in connection with the work as set forth in Appendix “A” Phase II, the CONSULTANT shall receive a lump-sum fee, not to exceed, of $________.
   * (circle which applies) Includes 4a, 4b1, 4b2, 4b4

4. Cost breakdown to be as follows:
   a. Routine Inspections
      | Phase I | Phase II |
      | Total Fee |       |       |
      | No. of Bridges |       |       |
      | Cost per Bridge (rounded) |       |       |
   b. Critical Features Inspection
      | Phase I | Phase II |
      | Total Fee |       |       |
      | No. of Bridges |       |       |
      | No. of Members |       |       |
      | No. of Joints |       |       |
      | Cost per Bridge (rounded) |       |       |

2. Underwater Inspections

   | Phase I | Phase II |
   | Total Fee |       |       |
   | No. of Bridges |       |       |
   | No. of Pier Underwater |       |       |
   | Cost per Bridge ( Rounded ) |       |       |

3. Special Features

   | Phase I | Phase II |
   | Total Fee |       |       |
   | No. of Bridges |       |       |
   | No. of Special Features |       |       |
   | Cost per Bridge ( Rounded ) |       |       |

4. Complex Structures

   | Phase I | Phase II |
   | Total Fee |       |       |
   | No. of Bridges |       |       |
   | Cost per Bridge ( Rounded ) |       |       |

TOTAL FEE

NOTE:

1. The total of Phase I and Phase II should be the same as the Not-to-Exceed on Page 1 of this Appendix.

2. Direct non-salary costs shall be the actual out-of-pocket expenses of the CONSULTANT directly attributable to this Contract, such as fines, subscriptions, mileage, long distance phone calls, equipment rental, reproductions, approved sub-consultant fees, etc. However, the direct non-salary costs for travel reimbursement shall not exceed the limitations on travel expenses set out in the current state policy on travel reimbursement. The direct non-salary costs are included in the Total Fee.

5. If additional inspections are needed in either Phase I or Phase II, the LPA may notify the CONSULTANT to perform the additional inspections. The INDOT may then inform INDOT that a Supplemental Contract will be needed to finish the work. INDOT will review the Supplemental Contract prior to execution by both PARTIES and no work should begin prior to INDOT’s written Notice to Proceed.
INDOT-LPA Contract

- Completed after INDOT has received signed LPA-Consultant Contract
- Shows federal cap
- Will need to be returned to INDOT with signatures and fully executed by the Attorney General’s office before FMIS can be requested
- INDOT will issue NTP, LPA will issue NTP to consultant and copy to INDOT
  - One PO per phase will be issued
Schedule

- Bridges with condition rating less than or equal to 4 on any part require yearly inspections
  - Items 58, 59, 60 and 62 on Report
  - Supplemental Contract
- All other bridges inspected every 2 years
- All inspections need to be maintained on schedule and completed by due date
- New bridges and non-scheduled inspections
  - Supplemental Contract
Schedule

Bridge inspections shall be maintained on schedule-completed no later than the end of the month of the scheduled due date (per bridge basis).

- Late inspections do not change the schedule of any future inspection

- Late inspections = NON-COMPLIANCE; penalties may include:
  - Losing part or all of the federal funds provided within the inspection contract
  - Losing part or all of federal funds for other projects, etc.

- For schedule questions contact consultant, look at BIAS or contact INBridgesHelp@indot.in.gov
Types of Inspections

- Routine Inspection
- Special Inspections
  - Fracture Critical
  - Element Level
  - Underwater
  - Confined Spaces
Technical Issues

- Most common issues:
  - Scour Monitoring
    - Scour Critical Bridges (SCB)
    - Plan of Action (POA)
  - Load Rating
    - Included on EVERY BRIDGE
  - Critical Findings
    - Acted on within 30 days
  - New bridges
    - Add to BIAS
Inspection Reports

- Reports prepared by consultant
- Bridge Inspection Application System (BIAS)
  - New version vs. old version
- Reports uploaded into BIAS by consultant
- Need to Request access as ERC
  - Contact Consultant for access

https://indot-it.bentley.com
FHWA Online Resources

http://www.fhwa.dot.gov/bridge/nbis.htm

National Bridge Inspection Standards (NBIS):

- 23 CFR 650C (NBIS) - regulation
- NBIS Q&A – guidance

National Bridge Inventory (NBI)

- National database of bridge inventory and inspection data
- NBI data is collected per the “FHWA Coding Guide”
INDOT Online Resources

INDOT Bridge Inspection Website:  
http://www.in.gov/dot/div/contracts/standards/bridge/bridgeinspect.htm

INDOT Bridge Inspection Manual:  

Indiana Bridge Inspection Application System (BIAS):  
https://indot-it.bentley.com (password protected)
Resources - People

INBridgesHelp@indot.in.gov

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Questions?

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