

## D04 Underwater & Fracture Critical Bridge Inspection

### Scope of Services

#### 1. Bridge Identification --- Underwater Bridge Inspections:

County: Ashtabula Route: 531 Section (SLM): 9.17 District: 4 SFN: 0406635 Municipality: City of Ashtabula Street Name or Other Designation: Bridge St. Features Intersected: Ashtabula River

County: Ashtabula Route: 534 Section (SLM): 18.32 District: 4 SFN: 0407089 Municipality: Harpersfield Township Street Name or Other Designation: State Route 534 Features Intersected: Grand River

County: Mahoning Route: 76 Section (SLM): 0.91 District: 4 SFN: 5002702 Municipality: Milton Township Street Name or Other Designation: Interstate Route 76 WB Features Intersected: Lake Milton

County: Mahoning Route: 76 Section (SLM): 0.91 District: 4 SFN: 5002737 Municipality: Milton Township Street Name or Other Designation: Interstate Route 76 EB Features Intersected: Lake Milton

County: Mahoning Route: 80 Section (SLM): 1.25 District: 4 SFN: 5002265 Municipality: Austintown Township Street Name or Other Designation: Interstate Route 80 WB Features Intersected: Meander Reservoir

County: Mahoning Route: 80 Section (SLM): 1.25 District: 4 SFN: 5002303 Municipality: Austintown Township Street Name or Other Designation: Interstate Route 80 EB Features Intersected: Meander Reservoir

County: Mahoning Route: 224 Section (SLM): 0.10 District: 4 SFN: 5004535 Municipality: Berlin Township Street Name or Other Designation: W Akron Canfield Rd. Features Intersected: Berlin Reservoir

County: Portage Route: 14 Section (SLM): 6.24 District: 4 SFN: 6700586 Municipality: City of Streetsboro Street Name or Other Designation: State Route 14 Features Intersected: Cuyahoga River

County: Portage Route: 43 Section (SLM): 4.90 District: 4 SFN: 6701051 Municipality: Suffield Township Street Name or Other Designation: State Route 43 Features Intersected: Mogadore Dam

County: Portage Route: 303 Section (SLM): 00.70 District: 4 SFN: 6704353 Municipality: City of Streetsboro Street Name or Other Designation: State Route 303 Features Intersected: Tinkers Creek

County: Portage Route: 303 Section (SLM): 10.51 District: 4 SFN: 6704484 Municipality: Shalersville Township Street Name or Other Designation: State Route 303 Features Intersected: Branch of Mahoning River

County: Stark Route: 172 Section (SLM): 6.27 District: 4 SFN: 7600682 Municipality: City of Massillon Street Name or Other Designation: Lincoln Way NW Features Intersected: W&LE NS RR, SR 21 & Tuscarawas River

County: Summit Route: 8 Section (SLM): 5.97 District: 4 SFN: 7700644 Municipality: City of Cuyahoga Falls Street Name or Other Designation: State Route 8 Features Intersected: Cuyahoga River

County: Trumbull Route: 5 Section (SLM): 7.65 District: 4 SFN: 7800339 Municipality: Warren Township Street Name or Other Designation: State Route 5 WB Features Intersected: Mahoning River

County: Trumbull Route: 5 Section (SLM): 7.65 District: 4 SFN: 7800363 Municipality: Warren Township Street Name or Other Designation: State Route EB Features Intersected: Mahoning River

County: Trumbull Route: 88 Section (SLM): 13.32 District: 4 SFN: 7805918 Municipality: Mecca Township Street Name or Other Designation: Greenville Rd. Features Intersected: Mosquito Creek Reservoir

## **2. Bridge Identification --- Non-Redundant Steel Tension Member (Fracture Critical Inspections):**

County: Ashtabula Route: 531 Section (SLM): 9.17 District: 4 SFN: 0406635 Municipality: City of Ashtabula Street Name or Other Designation: Bridge St. Features Intersected: Ashtabula River

County: Mahoning Route: 422 Section (SLM): 3.51 District: 4 SFN: 5005345 Municipality: City of Youngstown Street Name or Other Designation: U.S. Route 422 Features Intersected: Crab Creek & Norfolk Southern RR

County: Mahoning Route: 422 Section (SLM): 4.96 District: 4 SFN: 5005493 Municipality: City of Youngstown Street Name or Other Designation: Oak St. Features Intersected: Lincoln Park

County: Mahoning Route: 62 Section (SLM): 18.52 District: 4 SFN: 5008662 Municipality: City of Youngstown Street Name or Other Designation: U.S. Route 62 Features Intersected: SR 289, Mahoning River, Division St., RR

County: Mahoning Route: 711 Section (SLM): 0.67 District: 4 SFN: 5008255 Municipality: City of Youngstown Street Name or Other Designation: State Route 711 Features Intersected: Mahoning River, Division St., RR

County: Stark Route: 77 Section (SLM): 9.12 District: 4 SFN: 7603576 Municipality: City of Canton Street Name or Other Designation: Interstate Route 77 Features Intersected: Market Ave. S, 15th St. SW, & Cleveland Ave. SW

County: Stark Route: 30 Section (SLM): 13.37 District: 4 SFN: 7607709 Municipality: City of Canton Street Name or Other Designation: U.S. Route 30 Features Intersected: 17th St. & Conrail

County: Stark Route: 30 Section (SLM): 15.00 District: 4 SFN: 7600860 Municipality: City of Canton Street Name or Other Designation: U.S. Route 30 Features Intersected: Cleveland Ave. SW

County: Stark Route: 30 Section (SLM): 15.90 District: 4 SFN: 7600984 Municipality: City of Canton Street Name or Other Designation: U.S. Route 30 Features Intersected: 11th St. SE & Nimishillen Creek

County: Summit Route: 8 Section (SLM): 1.99 District: 4 SFN: 7700369 Municipality: City of Akron Street Name or Other Designation: State Route 8 Features Intersected: North St., Cuyahoga River & RR

County: Summit Route: 8 Section (SLM): 17.09A District: 4 SFN: 7700768 Municipality: City of Macedonia Street Name or Other Designation: State Route 8 Features Intersected: SR 8 & Brandywine Creek

County: Summit Route: 8 Section (SLM): 17.72B District: 4 SFN: 7700792 Municipality: City of Macedonia Street Name or Other Designation: State Route 8 Features Intersected: SR 8 & Brandywine Creek

County: Summit Route: 76 Section (SLM): 12.73 District: 4 SFN: 7706332 Municipality: City of Akron Street Name or Other Designation: Interstate Route 76 Features Intersected: Kelly Ave., RR & Little Cuyahoga River

County: Summit Route: 76 Section (SLM): 13.65 District: 4 SFN: 7706456 Municipality: City of Akron Street Name or Other Designation: Interstate Route 76 Features Intersected: Little Cuyahoga River, ABC RR & Massillon Rd.

County: Trumbull Route: 82 Section (SLM): 16.90L District: 4 SFN: 7804695 Municipality: Howland  
Township Street Name or Other Designation: State Route 82 Features Intersected: E Market St. & Mosquito Creek

**3. Attendance (See Attached Sheet):**

Consultant: Click or tap here to enter text.

Consultant Contracting Officer: Click or tap here to enter text.

Consultant Project Manager: Click or tap here to enter text.

ODOT Project Manager: Nicholas Chaney

**4. Available Plans & Inspection Reports:**

The existing bridge plans for structures included within the scope of services can be found on the district 4 ftp Site:

Prior inspection reports, inspection procedures and bridge inventory are on file in the district office or in AssetWise. Access to AssetWise is recommended and will require a username and password. This can be achieved through the following steps:

- Go to ODOTs main web site → Click on “Doing Business” located at top right of page → Click on Engineering → Structural Engineering → AssetWise under “Bridge Inspection & Inventory”.
- Open and fill out the following forms under the “User Change Requests.”
- AssetWise login page: [AssetWise Inspections™ \(bentley.com\)](http://AssetWiseInspections™(bentley.com))
- All the request for support and questions about AssetWise should be sent to the AssetWise Support Email: [assetwise.support@dot.ohio.gov](mailto:assetwise.support@dot.ohio.gov).
- **\*\* Access to AssetWise may be made available at the discretion of ODOT\*\***

**5. Inspection Intent:**

Activity	Yes	No	Where noted
In-depth Element Level Inspection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
In-depth Inspection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Routine Element Level Inspection	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Routine Inspection	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Update Bridge Inventory	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scour Appraisal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fracture Critical Inspection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fracture Critical Inspection Procedure (checklist)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Underwater Inspection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Underwater Dive Inspection Procedure (checklist)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Immediate Action Recommendations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance Recommendations & Repairs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Structural Measurements where plans are not available	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Benchmarking/Surveying	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**6. Inspection Intent Requirement Details for NSTM Inspection:**

- All NSTM inspections shall include routine inspections only in years NSTM inspections are required.

**7. Inspection Intent Requirement Details for UW Dive Inspections:**

- All underwater dive inspections shall include routine inspections only in years dive inspection is required except for ATB-531-0917, as this will be completed with the NSTM inspection.
- Scour appraisals are to be completed by the consultant in accordance with the instructions outlined under the SNBI Scour Appraisal form in AssetWise.
  - Scour critical locations shall include a scour plan of action.

**8. Inspection Services --- NSTM Inspections:**

Item	Description
Target Date(s) for Inspection:	7/13/2024 Through 12/31/2027
Traffic Control by	TBD in Procedure Checklist
Lane Closure Requirements	TBD in Procedure Checklist
Restrictions to Lane Closure	Note the Department's Permitted Lane Closure (PLC)
Property Owners Involved	TBD in Procedure Checklist
Right of Entry by	TBD in Procedure Checklist
RR Flaggers	TBD in Procedure Checklist
Other (ex. Coast Guard)	N/A
Special Equipment Anticipated for Access to remote areas <ul style="list-style-type: none"> <li>• Snooper Rental</li> <li>• Rope Climbing</li> <li>• Bucket Truck</li> <li>• Man Lift</li> </ul>	TBD in Procedure Checklist
Other:	Formal schedule will be provided at time of selection

**9. Inspection Services --- Underwater Dive Inspections:**

Item	Description
Target Date(s) for Inspection:	7/1/2025 Through 10/11/2028
Traffic Control by	TBD in Procedure Checklist
Lane Closure Requirements	TBD in Procedure Checklist
Restrictions to Lane Closure	Note the Department's Permitted Lane Closure (PLC)
Property Owners Involved	TBD in Procedure Checklist
Right of Entry by	TBD in Procedure Checklist
RR Flaggers	TBD in Procedure Checklist
Other (ex. Coast Guard)	TBD in Procedure Checklist
Special Equipment Anticipated for Access to remote areas <ul style="list-style-type: none"> <li>• Snooper Rental</li> <li>• Rope Climbing</li> <li>• Bucket Truck</li> <li>• Man Lift</li> </ul>	TBD in Procedure Checklist
Other:	Formal schedule will be provided at time of selection

**10. Consultant Bridge Inspection Requirements:**

1. The intent of this contract is for a Professional Engineer (Consultant) to make an in-depth (unless routine, Element Level, and/or fracture critical is specified) condition inspection of the noted bridge(s) and to report such findings in a formal report. The Consultant will complete the inspection in accordance with the latest Ohio Department of Transportation (ODOT) Manual of Bridge Inspection including more recent Addendums and FHWA's Bridge Inspector's Reference Manual (FHWA). Note when the previous inspection report contains Element Level data then an Element Level inspection shall be performed and values updated.
2. The State of Ohio may delete or postpone the inspection of a bridge from the contract up until the time that the physical inspection begins.
3. The Consultant shall be responsible to provide all necessary traffic control, including traffic control plans (unless otherwise specified), personnel, equipment, tools, and incidentals including ladders and scaffolding to access to all portions of the site. (The Consultant is only required to provide traffic control plans as necessary to obtain a permit. These bridges are inspected every year, and existing traffic control plans from prior years' permits are available and are allowed to be resubmitted for the permit for this inspection.)
4. All subconsultants used in the inspection shall be named in the proposal so that they can be approved as a sub-consultant at the time of the agreement.
5. The Consultant will not be responsible for structural conditions which occur after the date of the last site visit, providing the condition was not visibly evident at the time of the last visit and the

Consultant used usual and customary procedures to inspect the bridge.

6. Any steel structure with lower lateral bracing, pins and hangers, fatigue prone connections, steel pier caps (either of box section or I section), bridges with transverse floor beams and stringers, or any other unusual connection details, shall be carefully inspected for cracks, poorly designed details, or poorly fabricated details. A recommendation shall be made, if necessary, whether a retrofit program or corrective modification should be taken with a description of the proposed solution, and if any traffic limitations should be initiated. Adequate access shall be provided so that all such details can be visually inspected within arm's reach (even for routine inspections).
7. Any observed section loss on members which are normally analyzed to determine safe load capacity of the bridge, shall be measured and documented quantitatively (ultrasonic thickness gauge, calipers etc.) to allow for subsequent re-analysis of the structure. Analysis of the structure will not be required of the Consultant unless specifically stated in the S.O.S. minutes.
8. The Consultant will not be responsible for conditions which are not obvious through usual and customary visual inspection or through standard state-of-the-art testing. The Consultant will not be responsible for identifying and evaluating portions of the bridge which comprise of poor quality materials and/or inadequate structural design unless obviously visible to a trained and experienced bridge inspector/engineer performing the inspection services in accordance with the customary standards of the profession.
9. Underwater inspection, requiring the use of divers, shall not be required unless specifically stated in the S.O.S. minutes. The Consultant will be required to probe around all substructure units located in water, unless the stream velocity or depth is such that probing is not feasible. All such findings shall be reported. The consultant will be required to complete or revise the Underwater Dive Inspection Procedure Checklist on file such that all UW inspection elements are identified, the inspection frequency is identified, inspection procedures are identified and all underwater elements are inspected according to those procedures.
10. If a Fracture Critical Inspection is specified, the Consultant must perform a hands-on inspection of all FCM's on both sides of the steel member. This inspection cannot be replaced with a drone.
11. In Depth Inspection
  - a. If an in-depth inspection is specified, the Consultant will be required to visually inspect all main structural members of the bridge within an arm's reach distance. On welded girder type bridges, this will require access to both sides of each girder so that all fatigue prone connections can be inspected within arm's reach. Any cracks discovered and or suspected as a result of this hands-on visual inspection shall be documented and shall be further defined with the use of dye penetrant, magnetic particle or ultrasonic devices.
  - b. If an in-depth inspection is being performed, all unsound concrete shall be delineated by sounding unless stated otherwise. All unsound areas shall be measured and reported in square feet of surface area. Coring or other means of testing shall not be done unless specifically stated in the S.O.S. meeting.
12. Destructive Testing
  - a. Any additional destructive testing, other than that previously mentioned, shall not be done unless specifically stated in the S.O.S. meeting.
  - b. Where, in the judgment of the Consultant, it is necessary to remove some portion of the structure to achieve complete and adequate inspection, no action shall be taken without

prior approval of the District Bridge Engineer.

13. Gusset Plate Inspection, measurements, and data presentation-

- a. The consultant's inspection report shall include a schematic elevation view for each bridge showing all truss elements and gusset plates. This can be derived from original plans. On the schematic elevation the "as designed" and "as measured" net cross sectional area shall be displayed.
- b. Where there has been no observed section loss, one measurement for each element component or gusset plate shall suffice to verify "as-built" dimensions. Where corrosion has reduced the section of an element or gusset plate, measurements shall be taken at the areas of the least cross-sectional area. Photos and measurements using ultrasonic thickness gauge shall be provided for each area measured.
- c. For the case of gusset plates with corroded areas, measurements shall be taken across a vertical, horizontal, and block shear plane for all possible failure planes that have loss of section. A minimum of 10 spot measurements shall be taken across each plane. Each measurement location shall be marked with a black "" permanent marker/paint stick on the member and a photo taken of that gusset plate with the marks. The measurement locations shall be spaced such that at least 6 measurements are taken in the corroded areas.
- d. The report shall include a photo and an elevation of any corroded gusset. The elevation shall include an outline of the corroded area, the location of each measurement, and the value of each measurement (either on the elevation or in a table).
- e. The inspection team shall examine each gusset plate from the side or profile. If it appears any gusset plates or member are "out of plane", measurements shall be taken using a 4' straight edge to quantify the severity of "out of plane".
- f. UT Equipment: Consultant shall use a UT gauge to acquire section properties. The Department may supply ultrasonic thickness gauge equipment and data collection software for use by the consultant to collect, download and process thickness data as specified by the Department.

14. Report Deliverables:

- a. The Consultant shall be responsible for identifying and noting all visible defects in the bridge whether as a result of deterioration, original construction, or original design. The Consultant shall also be responsible for identifying and noting areas of potential failure as a result of anticipated deterioration, past construction, or maintenance practice and/or inadequate original design. AssetWise is the Departments preferred method for consultants to directly update inspection and inventory data. This however is at the discretion of each ODOT project manager and consultants may instead provide a written PDF report for ODOT to enter inspection dates and data. Specific report structure, drawings and inspection findings must be discussed and agreed upon during the SOS meeting.
- b. AssetWise
  - i. When ASSETWISE Access is required the consultant must obtain usernames, passwords, bridge-access for all team leaders. All data, commentary and files



relevant to the bridge(s) inspected must be input in accordance with the Manual of Bridge Inspection including more recent Addendums. AssetWise Access requests are made through the AssetWise Landing Page: [AssetWise | Ohio Department of Transportation](#)

- ii. The consultant shall incorporate the photographs within the report (not at the Asset Level) assigned within the bridge sub-units (ex. Deck Photos, Superstructure Photos). All photographs shall be dated and labeled to indicate the precise day, location and view in which they were taken.
- iii. The ODOT Bridge Inspection Report shall be filled out for each bridge inspected in ODOT's AssetWise unless specified otherwise. Photos, notes and sketches shall be updated on elements within the scope of the inspection and added to ASSETWISE. The notes and numbers in all other sections of the inspection filled out in the previous schedule inspection not within the scope of the consultant's inspection shall not be deleted and shall remain unchanged unless specifically permitted by the District Bridge Engineer on a case-by-case basis. Final report approval shall be made by the Consultant P.E. The District Bridge Engineer must be permitted time to review any changes prior to final approval. The report shall be in accordance with the Manual of Bridge Inspection (ODOT). The consultant shall insert inspection data, photographs, maintenance recommendations and condition narrative into ASSETWISE for the District Bridge Engineer to review prior to final approval.
- iv. The consultant shall notify the District Bridge Engineer, as soon as practical after the physical field inspection of the structure is complete. The Consultant shall approve the final report in ASSETWISE after the District Bridge Engineer has reviewed any changes. The approval shall occur whichever happens first:
  1. within 90 days of the field inspection or
  2. February 14<sup>th</sup> the following year.

15. Notification:

- a. The Consultant shall notify the District Bridge Engineer at least two weeks in advance of the start of the actual inspection to allow scheduling of the required traffic control operations at the periods mutually agreed upon by the Consultant and the District; to inform the local authorities involved of the dates of the inspection; and to obtain any necessary right of entry for the Consultant. In some cases, as noted in the special provisions, the Consultant may be required to provide traffic control, notify involved local authorities, and obtain necessary right of entry. In all cases, the consultant must notify the District Bridge Department when the Consultant intends to begin the inspection, **each day** the Consultant is on the job, and when the Consultant is finished.
- b. The Consultant shall notify the District Bridge Engineer of any and all serious deficiencies immediately upon disclosure, in order that they may be observed by the Department from available scaffolding or access equipment. A phone call with follow up email with photographs is preferred. A communication plan should be discussed during the SOS. After completion of the inspection, the Consultant's Professional Engineer must review areas of special concern with field personnel and District Bridge personnel at the site. Serious deficiencies include but are not limited to loose concrete over traffic, reduction in

safe load capacity, advanced scour or undermining and rapid changes in expected condition.

- c. The consultant will inform the District Bridge Engineer of the work location, number of personnel, any lane closures, the type of equipment, start time and finish times, as well as the number of anticipated working hours the consultant will have at the site that day.
  - d. The consultant will update the Department as to any changes from the previous days call if the consultant left early or stayed later than originally intended.
  - e. At the completion of physical inspection, the consultant shall provide a spread sheet with all the above information for each day out at the bridge. (The consultant will be given a number to call to leave a message with the information prior to the first day of inspection). This information will be used to keep local law enforcement apprised of who is out at the bridge, and to help us estimate inspection costs for future inspection contract. (It will not affect the cost of the agreed to lump sum payment for this contract)
16. At the completion of the physical inspection, the consultant shall provide a spread sheet with a log of the work location, number of personnel, and any lane closures, and type of equipment used each day.
17. All invoices for inspection services shall be submitted to the District Contract Manager for processing.
- a. The State and Consultant agree that the Work to be performed for the bridge inspection, including the field work for each specific bridge included in the Agreement, shall commence and be completed within the same calendar year (March 1 to December 1). It is not the intent of the State to require the Consultant to perform field work for the bridge inspection during the months of December, January, and February. However, if unusual circumstances arise, the Consultant agree to perform the required field work during this period upon verbal authorization by the District Bridge Engineer, for a bridge inspection which has been previously authorized by the Director.
18. The State and the Consultant agree that inclement weather conditions will not be cause for an adjustment to the completion time established in the Agreement.

### **11. Physical Condition Report:**

A formal report describing the physical condition of the bridge, using photographs, sketches and drawings, and including evaluations and recommendations is required. The report shall follow the ODOT Manual of Bridge Inspection including more recent addendums. Consultants should update existing deficiency maps and CADD drawings unless previous drawings cannot be made available.

Items	Yes *	No *
Field Report with Element Level Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Construction and Maintenance History	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Specialized Inspection Procedures (required for complex, underwater dive, and fracture critical bridge inspections)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Plan view of bridge with mapped out deficiencies	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Updated deficiency map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Damage and/or Deterioration Evaluation (Include narratives describing the physical conditions, digital photographs, drawings, tables, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Updated damage and/or deterioration evaluation	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance/Rehabilitation Recommendations (Include a maintenance schedule and any rehabilitation recommendations)	<input type="checkbox"/>	<input type="checkbox"/>
Updated recommendations	<input type="checkbox"/>	<input type="checkbox"/>
Testing Report(s) if authorized	<input type="checkbox"/>	<input type="checkbox"/>

**Sub reports:**

Underwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mechanical, Electrical	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Scour/Hydraulic/Stream Evaluation (cross channel profile etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Structural Analysis	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pin/Hanger/Hinges Detailed Inspection	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

\* Ratings, values, narrative, and information shall be typed directly into ASSETWISE unless stated otherwise in SOS meeting. Indicate if AssetWise input will be performed by consultant or ODOT.

**12. Final Report & Completion Time:**

A PDF copy of the approved report should be submitted to the District Bridge Engineer within 60 days of the time of inspection.

The consultant shall complete each year's inspection, including submitting the final report, within the time frame established above in Section 8 & 9. The following dates are targets for report submittals:

- Draft due date for the entire report is due in ASSETWISE 30 days after field inspection.

- The Formal report is due 60 days after the field inspection (not to exceed 90 days from the field report or February 28th of the following year).

A report shall not be considered complete until approved by the District Bridge Engineer.

### **13. Type of Agreement:**

- Lump sum compensations
- Actual costs plus fixed fee for testing items.
- Snooper or equipment Rental is if authorized.
- **Traffic Control is included in lump sum fee.**

### **14. Price Proposal:**

The consultant's price proposal shall conform to the current Requirements for Consultant Proposals found on Consultant Services website :

<http://www.dot.state.oh.us/Divisions/Engineering/Consultant/Pages/Manuals-and-Contract-Documents-.aspx>

### **15. Remarks / Special Instructions (Permits, Walkthroughs, etc.)**

Coordination with ODOT CO Snooper if available and on the schedule by December 15 for the following year.

### **16. Information Handouts Required by Consultant and Available within ODOT**

It is the consultant's responsibility to obtain the information handouts necessary to complete their file. This is not an inclusive listing.

- 1) Audit Requirements, Definitions and Guidelines.
- 2) Office of Accounting and Auditing Supplemental Information for Consulting Engineering Firms.
- 3) Ohio Manual of Uniform Traffic Control Devices.
- 4) Guidelines for Proposals for Consulting Services.
- 5) ODOT DBE/EDGE Requirements for Consultant Agreements.

### **17. Reference Materials Required by Consultant**

It is the consultant's responsibility to obtain the bridge inspection manuals necessary to complete their file. This is not an exhaustive listing.

- National Bridge Inspection Program Metrics
- ODOT Manual for Bridge inspection, 2014 and more recent addendums.
- Hydraulic Engineering Circular No. 18 "Evaluating Scour At Bridges" Fourth Edition Publication No. FHWA NHI 01-001, Date April 2012
- Hydraulic Engineering Circular No. 20 "Stream Stability at Highway Structures"
- Underwater Bridge Inspection, FHWA NHI 10-027, 2010
- The Manual for Bridge Evaluation, 2011, with 2016 Revisions, AASHTO Publication
- Bridge Inspector's Reference Manual, FHWA NHI 12-049, 2012
- ODOT AssetWise Coding Guide
- Other (ex. Bridge-Specific Maintenance Manual or Inspection Procedure):