QUALIFICATIONS AND RESPONSIBILITIES OF BRIDGE INSPECTION PERSONNEL

- **PURPOSE:** To outline the qualifying requirements and responsibilities for bridge inspection team leaders and program managers.
- **SCOPE:** This directive applies to all bridge inspection personnel.
- POLICY: Refer to 23 CFR 650.309 for personnel requirements for program manager and team leader status. Refer to 23 CFR 650.305 for FHWA approved training course for comprehensive bridge inspection. Refer to 23 CFR 313 (g) for FHWA approved refresher training course.

Current FHWA approved Training courses include NHI Course 130055 (Safety Inspection of In-Service Bridges), Pennsylvania Department of Transportation's Basic Bridge Safety Inspection Training Course, NHI Course 130053 (Bridge Inspection Refresher Training, NHI Course 130078 (Fracture Critical Inspection Techniques for Steel Bridges), and NHI Course 130091 Underwater Bridge Inspection. All other inspection training courses must be reviewed by the Program Manager and receive written approval from the local FHWA office.

PROCEDURE:

The National Bridge Inspection Standards (NBIS) requires that certain personnel having responsibilities for the performance of bridge inspection, approval, and load ratings meet certain training and experience requirements. EDSM IV.4.1.2 establishes the position and minimum qualifications for the Program Manager and Bridge Load Rating Engineer. Further it provides that delegation of duties from the Program Manager may be done through the issuance of Maintenance Directives. For this reason, the ADA of Operations, District Bridge Engineer and the Inspection Supervisor must meet the same qualifications of the Program Manager.

Program Managers Qualifications:

- 1) A registered professional engineer AND successfully completed an FHWA approved comprehensive training course; **OR**
- 2) Have 10 years of in-service bridge inspection experience **AND** successfully completed an FHWA approved comprehensive training course.

Team Leader Qualifications:

- 1) A registered professional engineer **AND** successfully completed an FHWA approved comprehensive training course; **OR**
- 2) A certified NICET level III or IV Bridge Safety Inspector AND successfully completed an FHWA approved comprehensive training course; **OR**

- Five years of bridge inspection experience AND successfully completed an FHWA approved comprehensive training course; OR
- 4) Have **ALL** the following:
 - Bachelors Degree in engineering from an Accreditation Board for Engineering and Technology (ABET) accredited college or university and successfully pass the Fundamentals of Engineering Exam; AND
 - Two years in-service bridge inspection experience; AND
 - Successfully completed FHWA approved comprehensive training course.
 OR
- 5) Have **ALL** the following:
 - Associates Degree in engineering or engineering technology from an ABET accredited college or university; AND
 - 4 years of in-service bridge inspection experience; AND
 - Successfully completed an FHWA approved comprehensive training course.

Underwater Inspector Qualifications:

• An underwater bridge inspection diver must complete an FHWA approved comprehensive bridge inspection training course or other FHWA approved underwater diver bridge inspection training course.

Bridge Inspection Experience

- Active participation in bridge inspections in accordance with the NBIS, in either a field inspection, supervisory, or management role.
- A combination of bridge design, bridge maintenance, bridge construction, and bridge inspection experience, with the predominant amount in bridge inspection, may be acceptable. Determination of total qualifying experience shall be determined by the Program Manager upon review and verification of an applicant's experience record.

Refresher Training

All program managers and team leaders are required to successfully complete an FHWA approved comprehensive refresher training course every five years.

Responsibilities of Personnel

While there are many duties and responsibilities of the Program Manager, ADA of Operations, Inspection Supervisor, Team Leaders, and Inspectors that must be diligently performed, the following list will outline some of the required responsibilities of personnel involved in maintaining the Bridge Inspection program.

Program Managers

- Set, monitor and revise policies and procedures to insure attainment and retention of compliance with the NBIS
- Develop and implement QC processes
- Establish and maintain QA methods and oversee their effective use to maintain a high level of quality in the inspection program
- Assess and monitor NBIS compliance of the local owners
- Prepare and mange consultant contracts for the performance of specialized inspects such as underwater diving and in-depth for major/complex bridges
- Report and Track all Critical findings on bridges to FHWA

ADA of Operations (and/or District Bridge Engineer)

- Set Inspection Schedule
- Organize Inspection Teams
- Conduct Final Review of all inspection reports from District Inspectors
- Review monthly and quarterly QC reports and see that corrections are addressed
- Oversee Annual Off-System Compliance Reviews
- Assign maintenance and repair work for bridges
- Report and Track all Critical findings on bridges through the Bridge Inspection Work Request Database

District 02 ADA of Operations is responsible for the oversight of the **CCCD** and LA 1 Toll bridge inspection reviews in addition to the above.

Inspection Supervisor

- Supervise inspection cycles and verify that inspections completed when due
- Supervise and instruct inspectors on proper completion of inspection duties

- Conduct Preliminary Review of all inspection reports from District Inspectors
- Review monthly and quarterly QC reports and see that corrections are addressed including Off-System Owner's remarks on these forms
- Coordinate Annual Off-System Compliance Reviews
- Report and Track all Critical findings on bridges through the Bridge Inspection Work Request Database

Inspection Team Leader

- Organize tools and equipment to meet Inspection Schedule
- Provide inspection training to subordinate inspector through hands on instruction
- Prepare and review all inspection reports for which you are the responsible party
- Review monthly and quarterly QC reports and see that corrections are addressed
- Conduct Annual Off-System Compliance Reviews
- Provide Local Owners with copies of completed inspections
- Report all Critical findings on bridges through the Bridge Inspection Work Request Database and record Work Request number for all finings in the Inspection Report

Inspector

- Receive instruction and guidance from Team Leader and Inspection Supervisor
- Actively participate in conducting field inspections and preparing reports
- Complete all required training courses successfully

QA/QC Inspectors

- Conduct field review of bridge inspection teams, their fieldwork
- Conduct field review of inspection reports and inventory
- Monitor and track personnel qualifications, training, etc
- Review all data submitted by districts for accuracy and address any discrepancies
- Review policies and procedures
- Provide the district with any assistance they may need

- Review and make corrections as needed to the NBIS data for annual submittal to FHWA
- Provide monthly and quarterly QC reports to the Districts
- Prepare and manage the underwater inspection and specialty inspection contracts
- **RESPONSIBILITY:** The DOTD District ADA of Operations shall be responsible for the implementation of this policy.
- EFFECTIVE DATE: This policy shall become effective immediately upon receipt.

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Recommend Approval Bridge Inspection Engineer (SEC. 51)

DRM

Recommend Approval Structures and Facilities Administrator (SEC. 51)

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Approved Vincent C. Latino Jr., P.E. Chief Maintenance Engineer