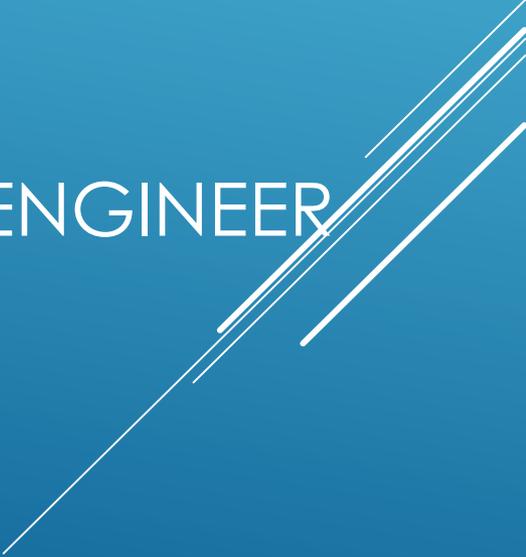


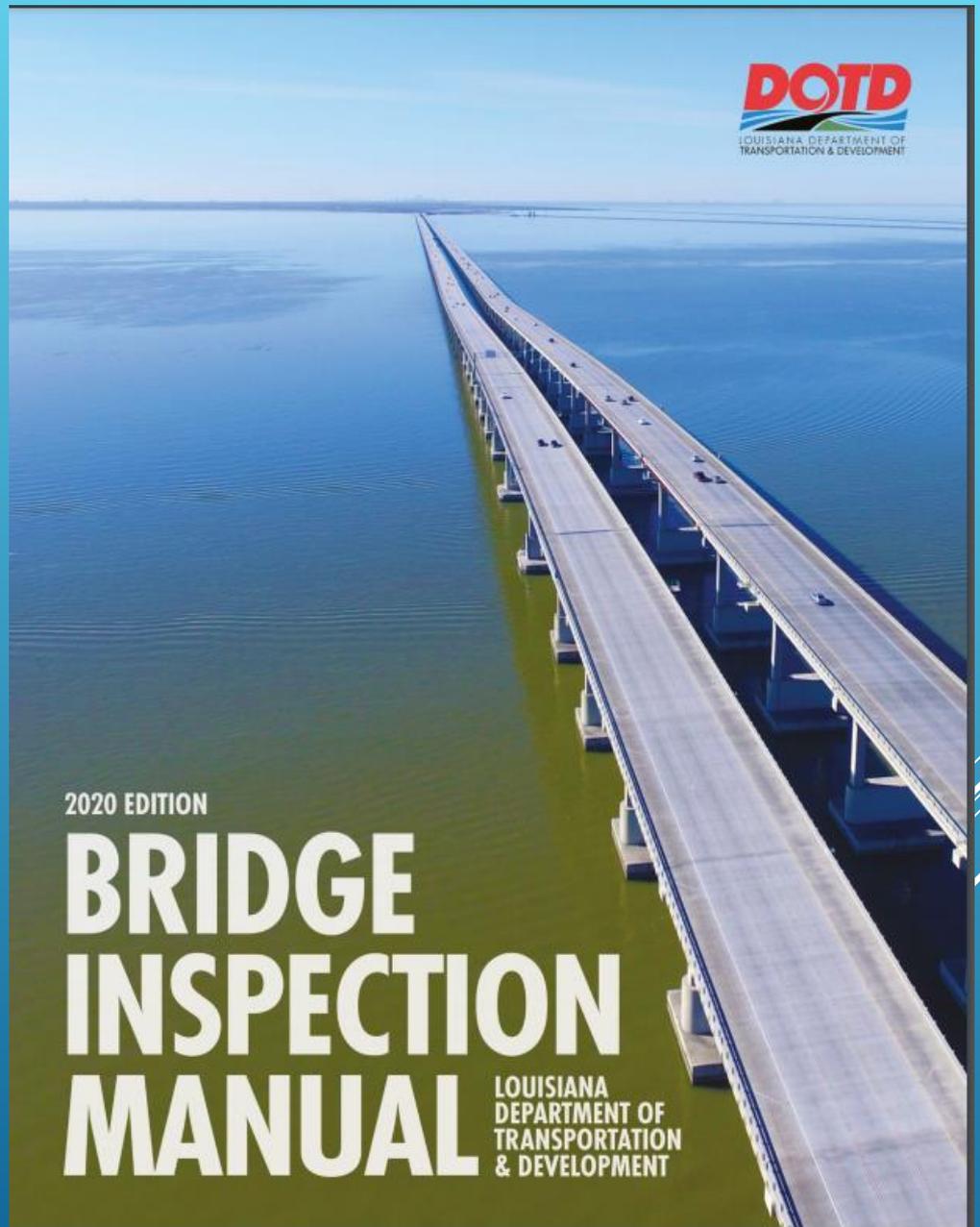
LOUISIANA PARISH ENGINEERS
AND SUPERVISORS ASSOCIATION
SPRING CONFERENCE
APRIL 2022

OFF-SYSTEM COMPLIANCE

STEPHANIE DOOLITTLE, P.E.
LADOTD BRIDGE INSPECTION ENGINEER



NEW MANUAL



2020 EDITION

BRIDGE INSPECTION MANUAL

LOUISIANA
DEPARTMENT OF
TRANSPORTATION
& DEVELOPMENT

LOCAL BRIDGE OWNER BRIDGE FILE RESPONSIBILITIES

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FILE COMPONENT	DOTD RESPONSIBILITY	OFF-SYSTEM BRIDGE OWNER RESPONSIBILITY
Inspection Reports	Document inspections for any initial, routine, fracture critical, and underwater inspection and maintain records of those inspections.	<ul style="list-style-type: none"> • Maintain records of special/interim and damage inspection types. • Notify DOTD if responsible parties for inspection management change.
Channel Cross-Sections/Stream Profiles	Maintain profiles (preferably within the same Plot) with initial inspection data and at each routine, fracture critical, and underwater inspection	Plot at each special/interim inspection and after a high water event/flood for every scour critical bridge or bridge with a scour POA.
Special Inspection Procedures/ Requirements	Document unique procedures and requirements such as access and equipment needs, notification requirements or specialized technicians needed for routine, fracture critical, and underwater inspections	Ensure special procedures are followed as necessary at special/interim inspections.
Load Rating Documentation – Load Posting/Restrictions	<ul style="list-style-type: none"> • Maintain load rating records for all bridge files: any posting/closure documentation, including plans, sketches, and calculations. • Load rate locally owned timber bridges and notify owners of results. 	<ul style="list-style-type: none"> • Maintain and provide load ratings per the procedures in Sections 7.10 and EDSM I.1.1.15. • Ensure that all new bridges being added to the DOTD inventory have an updated and valid load rating. • Apply load posting/restriction within 30 days from uploading load rating to AssetWise.

RESPONSIBILITIES FOR OFF-SYSTEM

FILE COMPONENT	DOTD RESPONSIBILITY	OFF-SYSTEM BRIDGE OWNER RESPONSIBILITY
Critical Findings	<ul style="list-style-type: none"> • Maintain report of critical findings monthly and ensure that local owners address critical findings properly. • DOTD HQ will report to FHWA critical finding status. 	Document and notify DOTD of any critical finding status per the procedures in Sections 5.17 and 7.4 .
Scour Assessment	Maintain records of scour assessments in the individual bridge file for all bridges over waterways.	Perform and maintain a scour assessment on all bridges over water and provide DOTD with a copy.
Scour POA	DOTD HQ will develop and maintain scour POAs for scour critical bridges and unknown foundations.	<ul style="list-style-type: none"> • Maintain current POAs for scour critical bridges and unknown foundations. • Perform High Water Event Inspection after a flood for all Scour Critical
Inventory and Evaluation Data and Collection Forms	<ul style="list-style-type: none"> • Maintain and update records for bridge inventory and evaluation data. • Provide local bridge owners with copy of current bridge data on a semiannual basis. 	Document and provide DOTD with all changes to bridge inventory data according to Section 3.3 .
Significant Correspondence	Maintain as part of the bridge file.	<ul style="list-style-type: none"> • Maintain as part of the bridge file. • Provide copy to DOTD, if not <u>generated</u> by DOTD and is structure related.
Maintenance Records	Maintain a document of any QC/QA review to ensure that local bridge owners are maintaining maintenance records.	<ul style="list-style-type: none"> • Maintain maintenance records for all bridges. • Notify DOTD of changes to persons responsible for maintenance management.

LOCAL BRIDGE OWNER FEDERAL COMPLIANCE



COMPLIANCE CONDITIONS & LEVELS

CONDITION	LEVEL
1. Closed Bridges	
All bridges properly closed	Compliance
Any bridge open that should be closed with the owner's jurisdiction	Non-Compliance
2. Posted Bridges	
All bridges requiring posting are properly posted	Compliance
Not all bridges requiring posting are properly posted	Conditional Compliance
3. Interim Inspections	
All inspections performed on time	Compliance
All inspections performed, majority on time	Substantial Compliance
All inspections performed, majority late	Conditional Compliance
Inspections not performed	Non-Compliance
4. Load Ratings	
All bridges load rated	Compliance
Plan of corrective action submitted to rate bridges missing ratings	Substantial Compliance
No plan of corrective action submitted for missing ratings	Non-Compliance
5. Bridge Data Corrections	
Corrections performed by deadlines	Compliance
Corrections submitted late	Substantial Compliance
No corrections submitted for one period	Conditional Compliance
No corrections submitted for either period	Non-Compliance
6. Annual Certification and Contact Information	
Submitted	Compliance

COMPLIANCE CONDITIONS & LEVELS

CONDITION	LEVEL
Not submitted	Conditional Compliance
7. New Bridge Documentation	
Submitted on time	Compliance
Bridge opened to traffic without notification and/or proper documents	Non-Compliance
8. Failure to Respond to Critical Findings	
Acceptable response	Compliance
No response upon any critical finding	Non-Compliance
9. Falsification of Inspection Reports or Bridge Data	
Non-falsified records	Compliance
Falsified records	Non-Compliance
10. Failure to Submit or Follow Plan of Corrective Action	
Plan Submitted	Conditional Compliance
Plan not submitted or No Improvement in Year 2	Non-Compliance

Loss of Bridge Replacement Funding

If the local bridge owner is found to be in non-compliance, the Off-System Bridge Program Manager and the FHWA will be officially notified with the recommendation that federal funding for the parish be revoked for one year. Evaluation for re-entry into the Off-System Bridge Replacement Program will be completed at the subsequent annual compliance review. |

COMPLIANCE LEVELS

- ▶ Compliance
 - ▶ All conditions met
 - ▶ Substantial Compliance
 - ▶ Improvement must be made within the next review year or Conditional Comp.
 - ▶ Conditional Compliance
 - ▶ Improvement needed in the next review year or non compliance
 - ▶ Plan of corrective action needed to address deficiencies
 - ▶ Non-Compliance
 - ▶ Critical conditions not addressed, no improvement made
 - ▶ Loss of inclusion in the OS Bridge Replacement Program
- 

COMPLIANCE ITEMS –

1. CLOSED BRIDGES



Local Bridge Owners are responsible for closing any bridge under their jurisdiction that has been recommended for closure by DOTD or rated for a load-carrying capacity of less than 3 tons.

Bridge Inspection Procedures

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NOTE: Closure will include locked gates, deep beam barriers, and other similar devices capable of preventing traffic from using the bridge. Closure does not include piles of dirt, saw horse barricades, timbers across the roadway, or signs alone. It must be a physical positive barrier.

- ▶ **Any bridge not properly closed = NON COMPLIANCE**

COMPLIANCE ITEMS –

2. POSTED BRIDGES



For locally owned bridges, load limit regulations should be established by an official act of the local governmental body to be legally enforceable.

Local bridge owners are expected to have a system in place to maintain and replace signs if necessary.

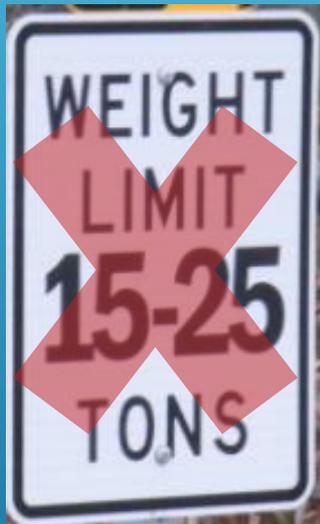
For compliance purposes, a properly posted or restricted bridge is defined as follows:

1. The required weight limit posting as determined by a load rating analysis is reflected at the bridge structure by installation of load posting signs.
 - a. If the owner desires, a lower load limit may be selected and posted. DOTD must be notified and the bridge inventory data updated.
 - b. A bridge will not be posted at a higher load limit than the maximum required weight limit; if encountered, this should be categorized as a deficiency.
2. Weight limit posting signs must comply with the Manual for Uniform Traffic Control Devices.

In accordance with the FHWA Memo *Timeframe for Installing Load Posting Signs at Bridges*, dated April 17, 2019, and it's the bridge inspection program policy that "bridge load postings are to be made as soon as possible but no later than 30 days after a load rating determines a need for such posting."

- ▶ Any bridge not properly posted =
Conditional Compliance
- ▶ PCA will be required to address the posting
deficiency

COMPLIANCE ITEMS – 2. POSTED BRIDGES



PROPERLY POSTED =
MUTCD SIGN WITHIN 30
DAYS OF NOTIFICATION



B. WEIGHT LIMIT SIGN (R12-1)

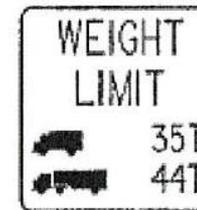
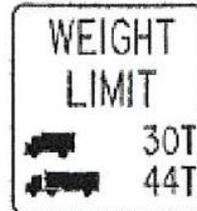
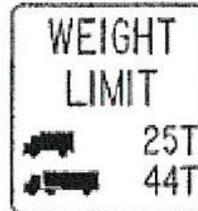
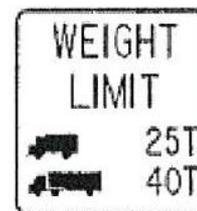
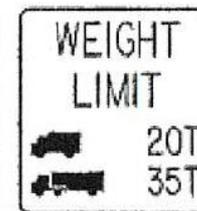
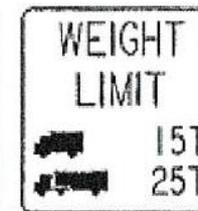
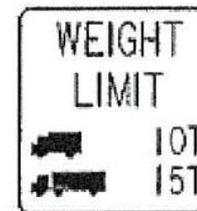


FIGURE 2 – BRIDGE WEIGHT LIMIT SIGNS R12-5

OPENING AND POSTING A BRIDGE

- ▶ “Prior to re-opening or increasing/removing the posted load limit of any such bridge, the bridge shall be inspected and load rated by the Owner’s Engineer, and a new Bridge Inspection Report and new calculated and stamped load capacity ratings shall be submitted by the Bridge Owner or Owner’s Engineer to the LA DOTD District ADA of Operations for review and approval.”
- 

COMPLIANCE ITEMS –

3. INTERIM INSPECTIONS

- ▶ LADOTD performs all 24 month routine inspections
 - ▶ Bridges w/deficiencies require 6 or 12 month interims performed by owners
 - ▶ Inspections must be performed in the calendar month they are due

LOAD CARRYING CAPACITY (TONS)	LOWEST <u>CONDITION</u> RATING (DECK, SUPER, SUB, OR CULVERT)	MAXIMUM INTERVAL OF SPECIAL INSPECTIONS
N/A	0-2	6 months
5 or Less*	3-4	6 months
Any Required Posting Over 5 Tons or No Posting Required	3-4	12 months
10-15, 5 or less*	5-9	12 months

**If a bridge will not carry a minimum of 3 tons of live load, the bridge should be physically closed.*

- ▶ **All Inspected & On Time = Compliance**
- ▶ **All Inspected, Majority On Time = Substantial**
- ▶ **All Inspected, Majority Late = Conditional**
- ▶ **Missing Inspections = Non-Compliance**

COMPLIANCE ITEMS – 3. INTERIM INSPECTIONS

Create Inspection Report Based On:

Blank report

Asset Values **DO NOT CHANGE**

Options:

Copy report files (photos, etc.)

Copy previous report section attachments (PDF)

Report Type:

PARISH INTERIM INSPECTION

Inspection Type:

Interim 6 Month **Interim 12 Month** **SELECT ONE**

Create Cancel

If you think the NBI condition rating needs to be changed. Please note this in the inspection notes and the comments field for submission for preliminary review.

Inspection Date	R
4/28/2021	4/
4/26/2021	4/26/2021 Test_Br... D

PARISH INTERIM INSPECTION

PARISH LOAD RATING

COMPLIANCE ITEMS –

3. INTERIM INSPECTIONS

District 61

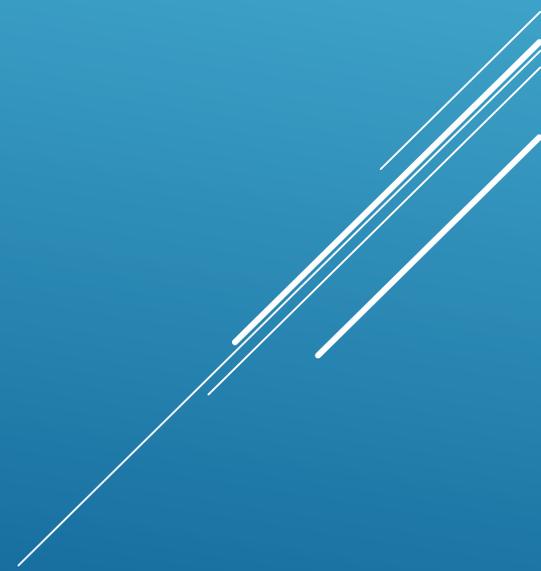
East Baton Rouge Off System
Parish Interim Inspections 2022

January	February	March	April	May	June
800546	800481	610060		610063	610134
		800443		610136	800454
				800428	800488
				800429	800489
				800447	800497
				800467	800498
				800482	800514
				800483	800517
				800485	800543
				800499	800585
				800502	800603
				800503	
				800505	
				800516	
				800520	
July	August	September	October	November	December
610112	800446	610031	800583	800475	610095
610132	800466	800424		800519	610103
800440	800470	800425		800541	610105
800458	800476	800442		800571	610106
800459	800525	800445		800659	610124
800513	800560	800449		610136	800504
800518	800611	800473		800485	800508
800522	800481	800484			800509
800553		800494			800510
800561		800495			800540
800575		800506			800602
800600		800580			800498
800546		800613			
		610060			

If red, structure is on 6 month inspection schedule and will need 2 parish inspections in the calendar year

COMPLIANCE ITEMS –

3. INTERIM INSPECTIONS

- ▶ New Policy effective May 1, 2022
 - ▶ All inspection reports shall be approved within 90 days.
 - ▶ Please submit reports for approval in a timely manner.
- 

COMPLIANCE ITEMS –

4. LOAD RATINGS

Each local bridge owner is responsible for determining the load-carrying capacity of bridges under its jurisdiction in accordance with the AASHTO Manual for Bridge Evaluation, Chapter 6 – Load Rating, 23 CFR 650.313 (c) and the DOTD EDSM I.1.1.8. DOTD provides assistance to the local bridge owner by load rating timber structures with timber super structure and timber substructure elements.

Reporting Procedures

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If a subsequent routine or interim inspection shows that the bridge condition has changed and invalidates the original load rating, the Bridge Owner is responsible for load rating the bridge to reflect the current condition. DOTD bridge inspectors must ensure that load ratings and load postings in the bridge inventory data for each off-system bridge agree with the observed/reported condition of the bridge.

- ▶ **PCA Submitted for missing ratings= Substantial Compliance**
- ▶ **Missing Ratings with no PCA = Non-Comp.**

COMPLIANCE ITEMS –

LOAD RATINGS STATUS

- ▶ Spreadsheets were sent out to each district with the status of ratings- Majority of bridges have been rated.
- ▶ New spreadsheets will be sent out with ratings required per EDSM I.1.1.15

Structural Conditions		Rating/Review Frequency
Lowest NBI Structural Condition Rating	Rating 0, 1	After corrective action is taken and before opening to traffic, and upon notification from Bridge Maintenance Section or District Bridge Engineers.
	Rating 2, 3, 4	<ol style="list-style-type: none"> 1. Upon notification of structural condition rating drop from Bridge Maintenance Section or District Bridge Engineers, 2. Or every four (4) years
	Rating 5, 6	<ol style="list-style-type: none"> 1. Upon notification of structural condition rating drop from Bridge Maintenance Section or District Bridge Engineers, 2. Or every eight (8) years
	Rating 7, 8, 9	Upon request from Bridge Maintenance Section or District Bridge Engineers

COMPLIANCE ITEMS –

5. BRIDGE DATA CORRECTIONS

- ▶ Bridge inventory data sent out in January and July
 - ▶ Bridge owners must review, correct and certify the data by March 1 and September 1
- ▶ **Corrections Submitted by Deadline = Compliance**
- ▶ **Corrections Late = Substantial Comp.**
- ▶ **No Corrections Submitted for 1 Cycle = Conditional Comp**
- ▶ **No Corrections for Both Cycles = Non-Comp.**

Important Off-System Compliance Due Dates

Table 8-1: Off-System Compliance Due Dates

January 31	Bi-annual reports are sent out for corrections
	Final compliance determination and notification to owners
March 1	Submittal of January bi-annual report corrections
	Deadline to submit plan of corrective action for conditional compliance level
July 31	Bi-annual reports are sent out for corrections
September 1	Submittal of July bi-annual report corrections
November 15	Annual resolution
	Contact information for bridge files, inspection, and maintenance

IMPORTANT COMPLIANCE DEADLINES

COMPLIANCE ITEMS –

6. ANNUAL CERT. & CONTACT INFO

- ▶ Annual resolution certifying:
 - ▶ Owner has and will continue to comply with all requirements for interim inspections, load ratings, load posting/closure
- ▶ Contact info must be submitted for the following:
 - ▶ Individuals/firms performing inspections, load ratings, maintenance, scour evaluations
 - ▶ Must have name, phone number, physical/mailling address, email
- ▶ **Not Submitted = Conditional Compliance**

COMPLIANCE ITEMS –

7. NEW BRIDGE DOCUMENTATION



For off-system bridges, under no circumstances will a newly constructed bridge be added to the inventory without a valid load rating, scour analysis (if over a waterway), or plans. For existing bridges recently added or acquired by the off-system bridge owner, the owner must provide a load rating and a scour analysis (if over a waterway) performed by a Louisiana licensed professional engineer.

If a local bridge owner opens a bridge to traffic without previously notifying and providing the required documentation to the DOTD, the parish will be placed in non-compliance.

Bridge Records

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DOTD will not conduct the initial inspection until the required paperwork is received.

- ▶ **Opening a bridge to traffic without providing proper documents or notifying DOTD = Non-Compliance**

S.P. No:

FAP. No:

Date:

**PHASE 1
SCOUR ASSESSMENT OF
BRIDGES OVER WATERWAYS**

DISTRICT:

PARISH:

STRUCT. No.:

Stream Name:

Route:

Func. Class:

SIA Item 113 Worksheet

___ Unknown Foundation (U)

___ Bridge Not Over Water (N)

___ Scour Stable (8)

___ Min. pile penetration of 50%, 20-ft minimum (drainage area < 10-sq mi)

___ Min. pile penetration of 50%, 25-ft minimum (10-sq mi < drainage area < 25-sq mi)

___ Min. pile penetration of 50%, 25-ft min; if Q lies in shaded area (25-sq mi < drainage area < 100-sq mi)

___ Engineering Judgment (See Notes/Report) Drainage area <= 2-sq mi No history of scour (from available records)
 Bridge service life >= 20-yrs Not on Interstate/NHS Route
 No significant signs of lateral/vertical instability

___ Scour Susceptible (6), scour evaluation (Phase 2) required

___ Pile penetration less than 50%

___ Pile penetration less than 20-ft (drainage area < 10-sq mi)

___ Pile penetration less than 25-ft (drainage area > 10-sq mi)

___ Q lies outside Discharge/Drainage Area diagram, (25-sq mi < drainage area < 100-sq mi)

___ Drainage area greater than 100-sq mi

___ Scour Critical (3 or less) NBIS Item 113 Rating: _____

Phase I NBIS Item 113 Rating

Notes:

COMPLIANCE ITEMS –

7. NEW BRIDGE DOCUMENTATION

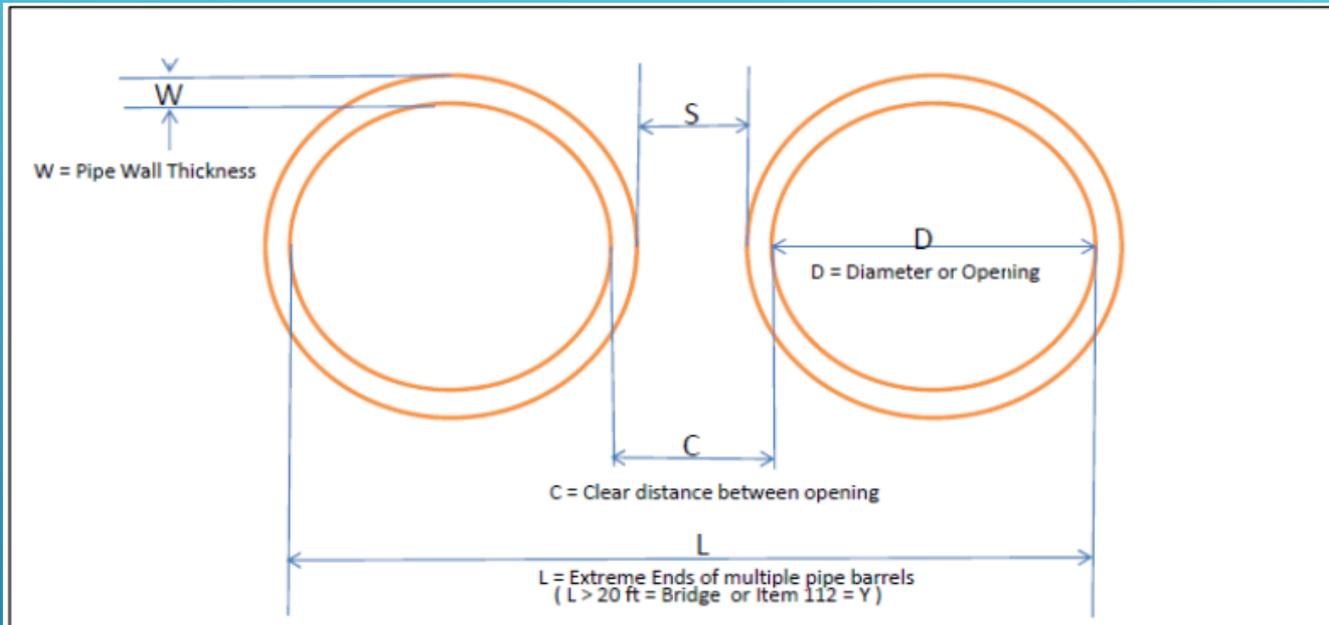


Figure 5-2: Guidelines for Measuring Culverts

A culvert is defined as a bridge

- ▶ If $L > 20$ ft and $C < 0.5D$.

COMPLIANCE ITEMS –

8. CRITICAL FINDINGS



The Owner must respond with an acceptable response to remain compliant with the NBIS.

The procedures to be followed are defined as:

- Off-System bridge recommended for closure
- Off-System bridge recommended for load posting
- Owner review of rating, posting, and closing data and requirements
- Monitoring Off-System Bridge Owner compliance with the NBIS by DOTD

Any response other than one of the appropriate responses, non-action, or no-response within the first seven calendar days after the original notification will place the Owner on formal notice of pending non-compliance with the NBIS. Upon expiration of the initial seven calendar day time period, the DOTD District ADA of Operations will give the Owner final notification via a certified letter and in person that a formal, irrevocable notice of non-compliance with the NBIS will be issued unless an acceptable response is received by the DOTD District ADA of Operations within seven additional calendar days. If an acceptable response has not been received after the first 14 days, the Parish will be in non-compliance with the NBIS and barred from participating in the joint FHWA/DOTD Bridge Replacement & Rehabilitation Program for at least one calendar year. The DOTD District ADA of Operations will notify the Parish of non-compliance with the NBIS by certified letter.

► Failure to Respond to Critical Findings/Provide Acceptable Response= Non- Compliance

COMPLIANCE ITEMS –

9. FALSIFYING REPORT DATA

- ▶ Inspection dates and report data must be accurate and true
 - ▶ No back dating reports, or re-using a previous report and changing dates

▶ **Falsified Records= Non- Compliance**

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COMPLIANCE ITEMS –

10. PLAN OF CORRECTIVE ACTION

- ▶ If placed in Conditional Compliance or Non-Compliance, PCA must be submitted and followed through
 - ▶ Two years of Conditional Compliance with no measurable improvement will result in Non-Compliance
 - ▶ **Failure to Submit PCA or make improvements = Non-Compliance**
- 

QUESTIONS?

