

# **NJDOT Standards for CoMBIS**

## **1. General NJDOT Policies:**

The County must plan on how to implement the CoMBIS Workflow as defined by the System into their current in-house process for report review and Priority Repair management.

Any direct communication between the Consultant and the Bridge Owner must be copied to the State Project Manager.

CoMBIS Local Bridge Owners are responsible for review and finishing the final report approval process of their bridges.

The County will be responsible for the report review and approval process for County-owned bridges as well as bridges with unknown owners.

The County is also responsible for finalizing the report approval process for Non-CoMBIS Local Bridge Owners.

The County is responsible for ensuring adequate communication process with the Local Bridge Owners, including both CoMBIS and Non-CoMBIS Local Bridge Owners.

## **2. Priority Repairs:**

All CoMBIS Bridge Owners will have Priority Repairs tracked within the System based on the Status of each Priority Repair. All Priority Repairs must be completed within CoMBIS and submitted to the Owner as per the timeframes defined in the Scope of Work.

CoMBIS Local Bridge Owners will be responsible for review and finishing the Priority Repairs within the System.

The County will be responsible for reviewing and the finishing of Priority Repairs for County-owned bridges as well as bridges with unknown owners.

It will be more difficult to track the Status of Priority Repairs sent to Non-CoMBIS Bridge Owners. Since the Non-CoMBIS Owner will not be moving the Priority Repair through the standard Priority workflow, we have developed a separate procedure applying specifically to Non-CoMBIS bridges. The procedure will help ensure that the Owner is aware of the problem and will utilize the capabilities of the System to track the progress of each Priority to the extent possible.

The procedure for Priority Repairs for Non-CoMBIS Owners will be as follows:

1. The Consultant must notify the Owner by phone for all Priority E **and** Priority 1 Repairs. This is the most practical means of ensuring that the Owner is aware of the situation. Phone calls will not be required for Priority 2 Repairs.
2. The Consultant will complete the Priority Repair section of CoMBIS for each required Priority E, 1, and 2 Repair. The input procedure, including the attachment of Photographs and other documents, will be the same as that used for CoMBIS Owners.

3. Upon completing their recommendations, the Consultant will click the “Send Notification E-Mail 1” button, which will lock the Priority Repair for Consultant users. The Priority Repair will be sent within CoMBIS to a queue visible to the appropriate County users. This queue will be specifically for Non-CoMBIS Owner Priority Repairs falling within that County. This means that although the County will have access when necessary, the Priority Repairs of Non-CoMBIS Local Owners will always remain separate from those pertaining to County-owned structures.
4. The Consultant will generate a PDF of the Priority Repair through the System, which will be attached to a letter mailed to the Bridge Owner with a copy sent to the County and State. The priority letter will then be scanned and attached to the Inspection Report within CoMBIS as a “File Attached to Report (PDF)” image type and “Priority Repair Letter” subtype.
5. If the Consultant has not heard from the Non-CoMBIS Owner within 90 days of the original notification date, they will send an additional letter to the Non-CoMBIS Owner with the System-generated Priority Repair attached. Again this priority letter will be scanned and attached to the Inspection Report within CoMBIS as a “File Attached to Report (PDF)” image type and “Priority Repair Letter” subtype\*.
6. If at any point the Owner informs the Consultant that the Priority Repair has been completed, the Consultant will request that the County update the Priority Repair Status within CoMBIS to Complete.
7. If the Consultant/County never receive notification that repairs have been performed, then the Priority Repair will remain in the queue until the next inspection cycle. The next inspector will then determine if the suggested repairs have been performed. Priority Repairs will be re-issued as necessary.

\* In order for the Consultant to have access to attach the 90-day notification letter, the report must still be “In-Progress”. This means that if the Consultant had already submitted the electronic report within CoMBIS to the County, they would no longer be able to attach the 90-day notification letter as required. Therefore, for Non-CoMBIS bridges, the Consultant shall not submit the electronic inspection report to the County until either they have received notification that the Priority recommendations have been addressed *or* they have attached the 90-day notification letter. The inspection report submission delay will not affect the Consultant CES rating. Note that the Consultant can send the printed hard-copy inspection report to the Non-CoMBIS Bridge Owner at any time the report is ready for submission.

### **3. Procedure for Load Rating of Minor Bridges:**

Structures that have plans available will be rated in first cycle using the latest version of LARS Bridge software in accordance with the NJDOT Highway Bridge Load Rating Manual posted online.

Structures that do not have plans available OR cannot be rated using LARS will be rated using Engineering Judgment.

If the Consultant thinks that a structure needs detailed load rating computations (where no plans exist and/or the bridge cannot be rated in LARS), they must first discuss with the State Project Manager and get appropriate approval to do so.

**4. Special/Emergency Inspections:**

The Bridge Owner is responsible for any Special and/or Emergency Inspection(s) that may be necessary or performed. Emergency inspections are not part of the contract between the State and the Consultant.

Note: This is not same as Priority E Repairs (Emergency) that are discovered by the Consultant during the routine inspection. Consultants are required to submit all Priority Repairs, especially Priority E recommendations, in accordance with State criteria as per the Scope of Work.

**5. Interim Inspections:**

Any Interim Inspection needed or performed is the responsibility of the Bridge Owner. Interim Inspections are not part of the contract between the State and the Consultant. Consultants must recommend interim inspections in the report as usual, where required as per the Scope of Work.

**6. Underwater Inspections:**

Underwater Inspections, if needed, can be performed as a part of the Regular (or Routine) Inspection within the contract between the State and the Consultant. Otherwise, any Underwater Inspection needed or performed, not under the contract, is the responsibility of the Bridge Owner.

**7. Scour and Coding Item 113:**

Consultants shall provide a coding for Item 113 – Scour Critical Bridges. No bridge should receive a code of 6 for this item. If there is no scour present, code Item 113 as 8. If there are scour countermeasures in place designed in accordance with HEC 23, code Item 113 as 7. If scour is present but no Priority Repair is warranted, code Item 113 as 5. If scour is present and a Priority Repair is warranted, code Item 113 as 4 or below.

**8. Request to Add, Edit or Delete User Accounts:**

The State will create new User Accounts for all Consultant users and each County Administrator. Appropriate forms should be filled out with all requested information to get the proper permissions. The County Administrator and Consultant Project Managers submit the requests through e-mail by attaching the filled out form. This form can also be used to Edit or Delete an existing user account.

The County Administrator will create new User Accounts for all County personnel and Township/Municipal/Local Bridge Owner personnel. Appropriate forms should be filled out with all requested information to ensure the proper permissions are granted. The request will be made through an e-mail by attaching the filled out form. This form can also be used to Edit or Delete an existing user account.

**9. Additional Information on User Accounts:**

All users are required to operate only within their assigned accounts at all times. Username and password data shall never be shared. If your account is lacking a permission that you feel is required, please contact the State Project Manager and copy [CountyCulvertInsp@dot.state.nj.us](mailto:CountyCulvertInsp@dot.state.nj.us).

**Note: We will treat infractions as serious issues.**

Consultant User Accounts will expire when not involved with any active project. Consultants shall notify the State Administrator and State Project Manager when an employee with a CoMBIS account will no longer be accessing the System (such as when an employee leaves the firm), so that the account can be deleted. Notification is required to be performed within 5 days from the date when an employee leaves the firm.

Administrator users and Consultant users will be required to change their passwords every 90 days.

All users' passwords should contain a minimum of 1 digit, 1 letter, and 1 special character (# \$ % ? etc.).

Contact the State Project Manager and copy [CountyCulvertInsp@dot.state.nj.us](mailto:CountyCulvertInsp@dot.state.nj.us) for any password resets.

#### **10. Request to Add, Edit or Delete Asset within CoMBIS:**

The State will create all new assets (structures) within CoMBIS. The Bridge Owner will submit the request to the State as an e-mail attachment of the completed *NJDOT CoMBIS Asset Creation/Deletion Request* form. This form can also be used to Edit or Delete an existing asset (structure).

#### **11. CES Ratings:**

The Bridge Owner will submit their feedback on Consultant Evaluations to the State Project Manager through an e-mail so their comments can be included in Consultant Evaluation System (CES) ratings.

#### **12. Laptop Module:**

All laptop computers used for CoMBIS must use Windows 7 Professional as the operating system and shall be encrypted as per the Scope of Work. Windows 7 Home version *does not* have encryption and is therefore *not* permitted for use with CoMBIS.

#### **13. Photographs:**

All photographs taken during the inspection shall be loaded into CoMBIS, including those that you do not intend to include in the report itself. All required report photos must contain the appropriate categories and descriptions. The photographs shall be ordered such that all report photos appear before non-report photos. The required report photos will include (in order):

1. South **or** West Elevation
2. North **or** East Elevation
3. Roadway looking South **or** West
4. Roadway looking North **or** East
5. Upstream channel, taken from centerline of waterway at upstream end of structure (if applicable)
6. Downstream channel, taken from centerline of waterway at downstream end of structure (if applicable)
7. Underside (at least one photo for each type of superstructure, culvert, etc.)
8. Inspector in action under portion of structure carried by roadway (only applicable when the structure meets requirements for full inspection, i.e. the structure meets the definition of enterable)
9. Defects requiring a Priority E, I, or II Repair
10. Typical defects of elements rated at 6 or below (if applicable). Follow general order of Field Notes (i.e. first Deck Items, then Approach, then Superstructure, and so on)
11. Any condition requiring monitoring from cycle to cycle (crack propagation, bearing rotation, settlement, etc.)
12. Posting signs (if applicable)
13. Work done since previous inspection (if applicable). Also include any work done on an emergency basis at time of inspection.
14. Special Equipment used for inspection (if applicable)

An elevation photo is to be used as the report cover photo whenever possible. If no elevation photo exists, a roadway photo is to be used for the report cover photo.

Both the Categories and Description will appear with the photo on the output report. Choose all appropriate categories for each photo, using common sense. If you are providing a roadway photograph as a “general view”, you should check off *00-General View* and *03-Roadway*, but there is no need to check off the categories for Deck Joints, Sidewalks, Parapets, Guiderail, Fence, Utilities, etc. just because those elements are visible in the photo.

The description must indicate the direction of the photograph, as well as any specific elements, defects, etc. that the photo is intended to point out. The description box should also be used to elaborate on the categories selected. For instance, if you select the category *61-Work Done*, the description will have to identify the type of specific work that was performed. If you select the category *63-Special Equipment*, the description will have to identify the type of special equipment being used. If you select the category *30-Abutments*, the description will have to identify which abutment is shown (north, south, etc.), as well as what abutment component you are showing (breastwall, backwall, etc.), and a description of any defect(s).

Photographs must be linked to report fields where required. This will apply for work done, special equipment, posting signs, elements rated 6 or below, etc. Photo linking is not required in SI&A forms. Photographs in the field note forms should be linked to the “Remarks” field.

#### **14. User Support:**

Questions pertaining to the System must be directed to your State Administrator with a copy to [CountyCulvertInsp@dot.state.nj.us](mailto:CountyCulvertInsp@dot.state.nj.us). The State Administrator may direct you to InspectTech’s technical support team when necessary.