



inspect^ttech

**County Minor Bridge Inspection
System (CoMBIS)
User Training - 2012**



<https://njdot.bridgeinspect.com>
<https://njdot.bridgemanage.com>



Preface - CoMBIS History

In the aftermath of the I-35W bridge failure over the Mississippi River in Minneapolis, Minnesota in August 2007, a review of the bridge inspection practice in New Jersey identified a currently unfulfilled need to develop a standardized inspection program for County/Municipally owned minor bridges (from 5' to 20' long) or what eventually became known as the CoMBIS Program. As this program would include a very large number of bridges and bridge owners, it was apparent that all possible means to streamline the inspection activities and provide improved access to the information by owners was critical for successful implementation of this new program.

Therefore, a Task Force, including staff from NJDOT and County Engineers of various counties, was convened. After looking at various options it became clear that the best way forward would be to take advantage of the increased efficiency provided by the new technologies of coming online and to build a system that would put all the information involving these bridges and their inspections online from day one.

While this new system was being developed it was determined that we would proceed with this overall effort on a dual path plan. Path 1 would involve the procurement and development of the new CoMBIS software, while Path 2 would involve the issuance of contracts for minor bridge inventory and inspection.

Path 1 has taken a lot longer than we thought it would. New Jersey's system for purchasing software and services is not the quickest process. However we finally made it through the labyrinth, and in March of 2010 we received approval to hire InspectTech and to begin work on building the new CoMBIS Program.

Since then we have been busy at work looking at all aspects of how we performed bridge inspections, and making decisions with regards to how this would best work in an automated online environment. We reconvened the County Working Committee and, with their assistance, made key decisions with regards to how the realities of bridge inspection need to function within an online workflow involving consultants, counties, municipalities and state personnel. Based on their input we continued development and eventually got to a point where we could bring several pilot consultants on board to assist us with beta testing of the new software.

With the dedicated work of many people, we are finally here. **Welcome to CoMBIS User Training.**

As we were developing and building CoMBIS, we were also issuing contracts for minor bridge inspection. To date, we have advertised and awarded 38 contracts for inspection, and 28 of these contracts have already completed the inventory effort. The information gathered during the inventory effort has all been loaded into the system and will be available to you once you finish training.

So what is CoMBIS? The County Minor Bridge Inspection System is an online environment for the recording of all information involving a structure. Although its focus is bridge inspection, in fact it is capable of storing all information involving a structure. This can include documentation on issues, contract plans, and working files associated with bridge inspection as well as anything else that might be required. All of this information is stored online in an easily accessible way. In addition, the system has the capability to provide data to the County bridge management systems and GIS systems. Both Counties and Municipalities will have easy access to information on the bridges and culverts in their span of control.



The big difference between CoMBIS and Pontis is that Pontis only stores key data involving a structure while, CoMBIS stores everything involving that structure. Every single data field that you would find in an inspection report is a separate data element in CoMBIS. This means that literally every word in the inspection report is accessible and able to be reported in any manner that might be required. In addition, the workflow involved in creating, finalizing, approving, and storing a bridge inspection report is totally implemented within CoMBIS. Also, any Priority Repairs or other work items will have their own associated workflow and will be contained completely within the system.

Furthermore, there is no reason to go to paper at any point in the process (except for in compliance with any legal requirements that require a paper document). However, if you do wish to create a hard copy of a report it is as simple as the push of one button.

It is our sincere hope that you will find the system to be both exceptionally user friendly and a pleasure to work with. Although, like any new way of doing things, it will take time to learn and to be as efficient with it as you are with your current way of working. We believe that in time you will find it to be much better than the old way of working. For one thing, help is available at the push of a button. In the past, when you had a question about a particular item and how it should be coded, you had to go grab a manual (if you happened to have the correct one with you) and look up what you needed to know. Now, you simply click the screen and help on that item appears. This holds promise for greatly reducing the number of coding errors that occur when people simply do not reach for those manuals (a problem that has been occurring more and more often in the last few years).

Also, once more than one inspection is in the system for a particular structure, it will be possible to reference the previous cycles of inspection information to see what has changed over time, and determine if a structure is stable or deteriorating. This can assist a Bridge Owner in making intelligent choices concerning maintenance work.

Although it has taken years to get where we are today, the journey has been worth it. We now have a system available that enables bridge owners to leverage the technologies of the 21st century to more effectively insure the safety of the traveling public and to better manage their assets. As time goes on, and additional new technologies become available, we will continue to enhance CoMBIS to ensure it remains the state-of-the-art tool that it is today.

Jack Evans, CoMBIS Project Manager



General Notes Regarding the Training Course and Manual

The training course will be instructor led, and will include presentations as well as step-by-step participant tutorials.

CoMBIS training courses have been scheduled based on the users' roles:

- Day 1 – State Users
- Days 2 & 3 – Consultant Project Managers and Team Leaders
- Days 4 & 5 – County Users
- Day 6 – Consultant Engineers

Township/Municipality/Local Bridge Owner's User Training will be held in the near future. We will need each County's assistance in determining which Township/Municipality/Local Owners are interested in utilizing CoMBIS so we can determine who will be included in this training.

Additionally, all County Administrators will participate in a 2-Day Administrative Training course to be scheduled at a later date. This course will focus on the behind-the-scenes tasks that County Administrators will be managing. Until this training is offered, NJDOT will be handling the majority of the administrative responsibilities for the counties.

While each training course will cover CoMBIS in its entirety, the instructors will gear the presentation for the particular audience. More time will be spent reinforcing the areas that apply directly to your role in the system. It is recommended that you go through this Manual shortly after User Training, while the material is fresh on your mind, and note the items that are most important to the role you will be playing within CoMBIS.

This Manual was designed primarily as a reference tool; we will not be going through all the material page-by-page during the training. It is our hope that this Manual will provide users with a good reference when they are back at the office and using CoMBIS for active projects.

Upon completing CoMBIS User Training, keep in mind that you will be using the system with *real bridges and real data*. If you do not have a sound understanding of a particular task you are performing, and you are unable to find the information within this Manual (or the comprehensive user manuals of the system), please contact your State Project Manager for assistance.

As you begin using the system, we ask that you take note of any bugs that you may come across, and any recommendations for improving the system. A form is available on the CoMBIS website and also at the end of this Manual for users to submit any problems or suggestions to NJDOT. Issues will be compiled and relayed to InspectTech, who will continue to fine-tune the system. If you are experiencing difficulties, it is likely that other users may be in a similar situation. Your comments are appreciated.



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SECTION I – USER ACCOUNTS AND SECURITY

CoMBIS contains various permissions based on the users and their associated roles. Bridge Owners, Consultants, and the State will all have their user accounts. Each user will have permissions that vary based on the role the user plays in his or her organization. Users will be granted access to specific assets (bridges) based on what profile the user falls in.

A. Overview of “My Account” Page

The *My Account* page for each user will initially display the information provided to NJDOT when requesting a User ID to be created. The user will be responsible for accessing the *My Account* page to update his or her password, address, phone number, e-mail address, etc. in this screen. The **Save** button must be clicked in order to save any changes.

The *My Accounts* page also allows the user to input required certifications. Highlighted areas below indicate what the user is able to edit and where certifications can be added.

My Account Page

The screenshot shows the 'My Account' page with a yellow background. At the top right is a 'Save' button. The form contains the following fields:

- Account Expiration Date: Never
- First Name: Nirav
- Last Name: Patel
- Time Zone: [Dropdown menu]
- User Name: npatel
- New Password: [Masked]
- Confirm New Password: [Masked]
- Email Address: Nirav.Patel@dot.state.nj.us
- Address 1: [Empty]
- Address 2: [Empty]
- Address 3: [Empty]
- City: [Empty]
- State: [Dropdown menu]
- Zip: [Empty]
- Phone Number 1: [Dropdown menu] [Empty]
- Phone Number 2: [Dropdown menu] [Empty]
- Organization: [Empty]
- Position: [Dropdown menu]
- Years Experience: [Empty]
- Years Experience Since: [Empty]

At the bottom right is another 'Save' button. Below the main form is a 'Certificates' section with the text 'No records found' and an 'Add New' button.

B. Uploading Certificates

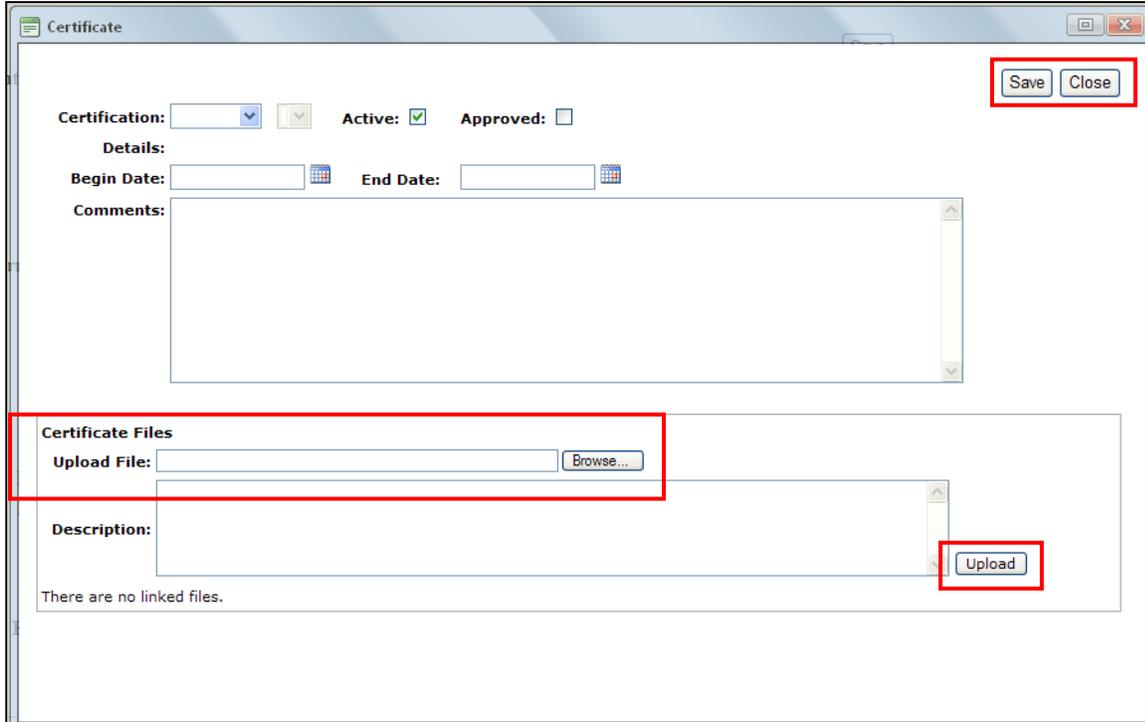
The user will see the screen on Page 2 once they click on the **Add New** button on the screen above.

Step-by-Step:

1. Click on **Add New** button to add a new Certificate (see screen above).
2. Choose a Certification type and add details (e.g. dates of training course, any additional comments).
3. Choose **Browse** to locate a certificate file (.PDF), add a description and click **Upload**.
4. Click **Save** at the top and the certificate will be added to the *My Account* page.

- **Note:** Provide as much information as possible.

Add New Certificates Page

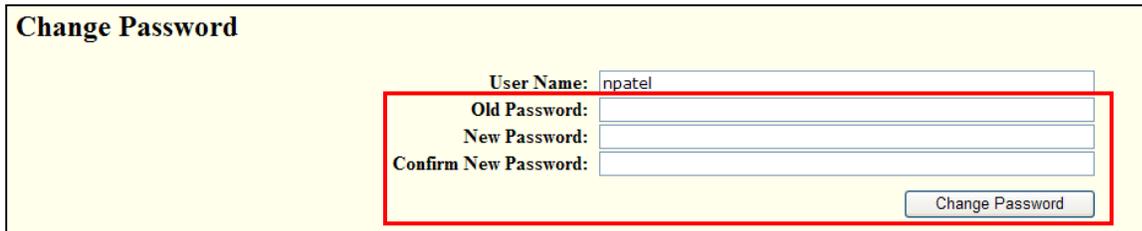


C. Changing Password

It is NJDOT policy that every user must change the default password as soon as a new User ID is issued. The Consultants and the County Administrators are required to change their password every 90 days for security reasons.

To change a password, the user can go to the *My Account* screen on Page 1, or use the screen shown below. NJDOT requires a unique password which contains at least 1 digit, 1 letter, and 1 special character for example (#,! @). To save the changes click on the **Change Password** button.

Main → Change Password Section



- **Note:** If Consultant or State users forget their password, please send an e-mail to CountyCulvertInsp@dot.state.nj.us and request that your password be reset.
- Other users will notify their County Administrator to reset their password.



D. Expiration of Accounts

It is NJDOT policy to have all Consultant user accounts expire at the end of each project (unless the Consultant is directly involved with other active projects that require their accounts to remain active).

If a Consultant user will no longer be working on an active project, it is the Consultant Project Manager's responsibility to notify the NJDOT Project Manager within 5 days to have that user account deleted from the system. A standard form is available online, and attached in Section VII-D at the end of this Manual.

E. User Integrity

All users are required to operate within their assigned accounts at all times.

If you do not have the permissions required to perform a task you feel is required, you must contact the NJDOT Project Manager to discuss. Users should never use a supervisor's login credentials to be able to function in the system with increased permission levels.

- **Note: Never provide your Username or Password information to anyone.**
- **The system purposely allows multiple users to access a single report simultaneously. Care must be taken to ensure that multiple users are not attempting to update the same data at the same time.**

F. New Accounts

1. Consultants

New User ID's for Consultant users will always be created by NJDOT. Consultant users will be able to request User ID's for the following three roles based on their project requirements:

<u>Role</u>	<u>Brief Description</u>
Certifying Engineer/ Project Manager	Users of this role are able to create, review and submit inspection reports and Priority Repairs for review to Bridge Owner.
Team Leader	Users of this role are able to create inspection reports and Priority Repairs and submit to the Consultant Project Manager for review.
Team Member	Users of this role can create reports.

A standard form for requesting new User ID's will be posted online at the Structural Evaluation webpage under the CoMBIS section. The Consultant Certifying Engineers/Project Managers will fill out the standard form for themselves and the inspectors and e-mail to CountyCulvertInsp@dot.state.nj.us.



2. County and other Bridge Owners

New User ID's for County Administrators will always be created by NJDOT. It will be the County Administrator's responsibility to create User ID's for his staff and other Township, Municipality, and Local Bridge Owners. The County Administrator will be able to create following roles for the County staff:

- **Note: NJDOT will be creating all users on behalf of the Counties until the County Administrator completes CoMBIS Administrative Training.**

<u>Role</u>	<u>Brief Description</u>
County Administrator	Users of this role have access to create User ID's and manage assets.
County Project Manager	Users of this role can approve inspection reports submitted by Consultants.
County Engineering Access/Support Access	Users of this role have read only access to the system. Note: This can be changed as per County needs.
County General Access	Users of this role have read only access to the system.
County Maintenance Access	Users of this role have access to Priority Repairs recommendations sent to maintenance and also read only access to inspection reports.

The following roles will be used to create User ID's for Local and Municipality Owners:

<u>Role</u>	<u>Brief Description</u>
Local Bridge Owner	Users of this role can approve inspection reports.
Municipality Manager	Users of this role can approve inspection reports.
Municipality General Access	Users of this role have read only access to the system.
Municipality Maintenance Access	Users of this role have access to Priority Repairs recommendations sent to maintenance and also read only access to inspection reports.

A standard form for requesting new User ID's is posted online at the Structural Evaluation webpage under the CoMBIS section. The County Administrators will fill out the standard form for themselves (and then be responsible for creating other County users) and e-mail to CountyCulvertInsp@dot.state.nj.us.

- **Note: Make sure you provide all required information on the form to avoid any delays.**

When creating User ID's, the County Administrator will have the right to assign any roles that are equal to or less than his current role. It is highly recommended to assign roles carefully based on the work that will be performed in the system by any particular user. Roles are listed in order of permission levels, with the highest permissions at the top.



3. State

New User ID's for NJDOT users will always be created by the NJDOT Administrator. The following roles will be used to create User ID's for State users:

<u>Role</u>	<u>Brief Description</u>
NJDOT Administrator	Users of this role have access to the entire system.
NJDOT IT Access	Future role to be created.
NJDOT Supervisor Access	Future role to be created.
NJDOT Project Manager	Users of this role have access to inspection reports submitted for Bridge Owner's review to perform Consultant CES rating.
NJDOT Engineering Access/Support Access	Users of this role have access to inspection reports submitted for Bridge Owner's review to perform Consultant CES rating.
NJDOT General Access	Users of this role have read only access to inspection reports in the system.

G. User Permissions

Each user has preset permission settings, which correspond to the user's respective role. The default permissions are given based on NJDOT's experience with the system thus far and the recommendations of InspectTech. NJDOT will adjust the permissions as necessary. Only NJDOT has the ability to change user-based security permissions. Permissions will not be changed for any individual user; it will always be implemented for the user role.

- **Note:** *If you believe there is a problem with the user permissions associated with your account, please notify your NJDOT Project Manager and copy CountyCulvertInsp@dot.state.nj.us.*

H. System Audit

Every action within the system is recorded and available through an audit report. State and County Administrators have the ability to audit any user or asset based on field changes, user logins, etc.



SECTION II – BridgeInspect COLLECTOR MODULE

The Collector Module is the main website where inspection reports will be generated.

A. How to Log into the BridgeInspect Collector Website

The Collector website is password protected and every user has a profile in the system.

Step-by-Step:

1. To log into the Collector website:
 - Open your internet browser and type <https://njdot.bridgeinspect.com>.
2. Once the login page has loaded, create an icon on your computer desktop (a shortcut to the Collector website) which will take you directly to the login page with one click.

To create a shortcut icon, follow these steps:

- Right-click anywhere on the login page.
 - Select **Create Shortcut** from the options listed and click **OK**.
3. To enter into the Collector site, enter Username and Password into the appropriate box and click **Login**. If successful, you will be taken to the Collector main page.
 - If there is an error with the username or password, a message will appear in red at the top-left-hand corner saying "Username/password failed!" If this happens, try again to see if it was a typing error; if not, contact your NJDOT Project Manager to see if you used the correct login credentials.
 - Contact your NJDOT Project Manager if you need to have your password reset and copy CountyCulvertInsp@dot.state.nj.us.

NJDOT will create all Consultant Accounts and all County Administrator accounts. County Administrators will then be responsible for creating accounts for other users within their County (upon completion of Administrative Training). Refer to Section I-F-2 of this Manual for additional details.

B. BridgeInspect Collector Main Page

Once you have successfully logged into the website, you will be greeted by the Collector Main page. The Main page is the central point of the website and is important for navigation. The Main page interacts with you to locate, begin, edit, and submit any inspection report within the system. Highlighted on Page 7 are several important areas of the Main page.



Collector Main Page

New Jersey Department of Transportation

County Minor Bridge Inspection System

inspecttech

Messages: 0 new ([view](#))

[View Asset group](#)

Main | Administration | Views | GIS | Query | Priority Repairs | Help

NJDOT: (Logout)

In Progress (82) | In Progress on a Laptop (7) | Consultant Review (5) | Bridge Owner Review (9) | State QA Review 1 (0) | State QA Review 2 (1) | State Comments (0) | County Final Approval (1)

Inspection Date	State Number	Asset Name	Crew Chief/Team Leader	Asset Type	Inspection Type	Group Number	Owner Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative	
05/01/2012	11C3101	11C3101 (331 1) Alexander Road over Tributary to Stony Brook	Weller, Tom	Bridge	Regular Inspection	11M9		Alexander Road	Tributary to Stony Brook	
05/01/2012	1100PT7	1100PT7 (1) Edgerstoune Road over Unnamed	Weller, Tom	Bridge	Regular Inspection	11M9		Edgerstoune Road	Unnamed	
05/01/2012	1100PT4	1100PT4 (1) Braeburn Drive over Unnamed	Weller, Tom	Bridge	Regular Inspection	11M9		Braeburn Drive	Unnamed	
04/27/2012	11HAM01	11HAM01 (1) Estates Boulevard/Pond Run	Aldea, Constantin	Bridge	Regular Inspection	11L8		Estates Boulevard	Pond Run	
04/19/2012	2011058	2011058 (Ne58) Madison Ave./Stream 3-51	Hettema, Doutsen	Bridge	Regular Inspection	20N0		Madison Ave.	Stream 3-51	
04/19/2012	2011074	2011074 (Ne74) CR 647 (Passaic Street)/Stream 3-50	Hettema, Doutsen	Bridge	Regular Inspection	20N0		CR 647 Passaic Str.	Stream 3-50	
04/19/2012	2011083	2011083 (1) Grant Ave./Stream 3-51-4	Hettema, Doutsen	Bridge	Regular Inspection	20N0		Grant Ave.	Stream 3-51-4	
04/19/2012	2001049	2001049 (Be49) Hamilton Boulevard over Stream 3-55	Hettema, Doutsen	Bridge	Regular Inspection	20N0		Hamilton Boulevard	Stream 3-55	
04/19/2012	2001069	2001069 (Be69) Windsor Way/Stream 3-51-1	Hettema, Doutsen	Bridge	Regular Inspection	20N0		Windsor Way	Stream 3-51-1	
04/18/2012	2011037	2011037 (Ne37) CR 647 (South Street)/Stream 3-51-2	Hettema, Doutsen	Bridge	Regular Inspection	20N0		CR 647 (South Str.)	Stream 3-51-2	
04/18/2012	2011038	2011038 (Ne38) Central Ave./Stream 3-51-2	Hettema, Doutsen	Bridge	Regular Inspection	20N0		Central Ave.	Stream 3-51-2	
04/18/2012	2011012	2011012 (Ne12) Maple Street/Stream 3-51-4	Hettema, Doutsen	Bridge	Regular Inspection	20N0		Maple Street	Stream 3-51-4	

Section	Information / Function
Yellow Highlight	NJDOT's logo, used as a navigation tool. Select the logo to transfer back to the Main page from any point within the software.
Red Highlight	<p>The navigation menu. Composed of seven tabs:</p> <ul style="list-style-type: none"> ➤ Main ➤ Administration ➤ Views ➤ GIS ➤ Query ➤ Priority Repairs ➤ Help
Green Highlight	<p>Progress tabs sort the inspection reports according to progress levels, making the entire inspection process more organized and efficient.</p> <p>Default progress tabs or status tabs:</p> <ul style="list-style-type: none"> ➤ In Progress ➤ In Progress on a Laptop ➤ Awaiting Approval ➤ Recently Approved <p>NJDOT's customized progress tabs or workflow tabs:</p> <ul style="list-style-type: none"> ➤ Consultant Review ➤ Bridge Owner Review ➤ State QA Review 1 ➤ State QA Review 2 ➤ State Comments ➤ County Final Approval



Purple Highlight	<p>Quick select and view asset role. Both tools assist in searching for specific assets or inspection reports.</p> <ul style="list-style-type: none"> ➤ Quick select retrieves any asset that exists in the software. ➤ View Asset Role performs quick searching via tree search.
Blue Highlight	<p>The inspection table view. This area displays all of the inspection reports and the asset data. The information is sorted based on which column header is selected. This is also called a user's Working Set.</p>

Inspection Table View:

Inspection Date	Last Revision	State Number	Asset Name	Crew Chief/Team Leader	Asset Type	Inspection Type	Group Number	Owner Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative	Submitted To	Status		
04/18/2012	04/27/2012	2011024	2011024 (No24) Marion Ave./Stream 3-51-2	Hetteema, Doutsen	Bridge	Regular Inspection	20N0		Marion Avenue	Stream 3-51-2	Mathan, Matt (comments)	Submitted for review on 04/27/2012. Pending Consultant Review		
12/28/2011	05/01/2012	1523024	1523024 (1523024) RT 528 (Main St)/Branch of Crosswicks Creek	Mitchell, William	Bridge	Regular Inspection	15L9		RT 528 (Main St.)	Crosswicks Creek Branch	Praski, Lukasz (comments)	Bridge Owner Review canceled on 05/01/2012. Pending Consultant Review		
12/28/2011	05/01/2012	1523028	1523028 (1523028) CR640(Colliers Mill Rd)/Branch of Crosswicks Creek	Mitchell, William	Bridge	Regular Inspection	15L9		CR640 (ColliersMill)	Crosswicks Creek Branch	Praski, Lukasz (comments)	Bridge Owner Review canceled on 05/01/2012. Pending Consultant Review		
12/15/2011	04/27/2012	2010030	2010030 (Mo30) Poplar Ave./Echo Brook	Hetteema, Doutsen	Bridge	Regular Inspection	20N0		Poplar Avenue	Echo Brook	Mathan, Matt (comments)	Submitted for review on 04/27/2012. Pending Consultant Review		
06/07/2011	04/30/2012	Test Bridge	Test Bridge	Evans, John	Bridge						Jagirdar, Dhalval (comments)	Moved from Bridge Owner Review on 04/30/2012. Pending Consultant Review		

Column Name	Information / Action Types Available
Inspection Date	<p>Displays the date on which the structure was inspected.</p> <ul style="list-style-type: none"> ➤ Note: this can be different from the NBI 90 inspection date, such as for interim inspections, underwater inspections, etc. This date is associated with the type of inspection being performed.
Last Revision	Displays the date in which the Asset was last opened and edited.
State Number	Displays the unique seven-digit code for each asset defined according to NJDOT's naming system. This determines the order in which the assets are shown in the summary tables.
Asset Name	Displays Asset Name, which is a combination of: "State Structure Number" ("County Structure Number") "Structure Name"
Crew Chief / Team Leader	Displays the crew chief/team leader for the inspection.
Asset Type	Displays the type of asset: bridge, culvert, sign, or a type to be added in the future.
Inspection Type	Displays the type of inspection (i.e. regular, interim etc.).

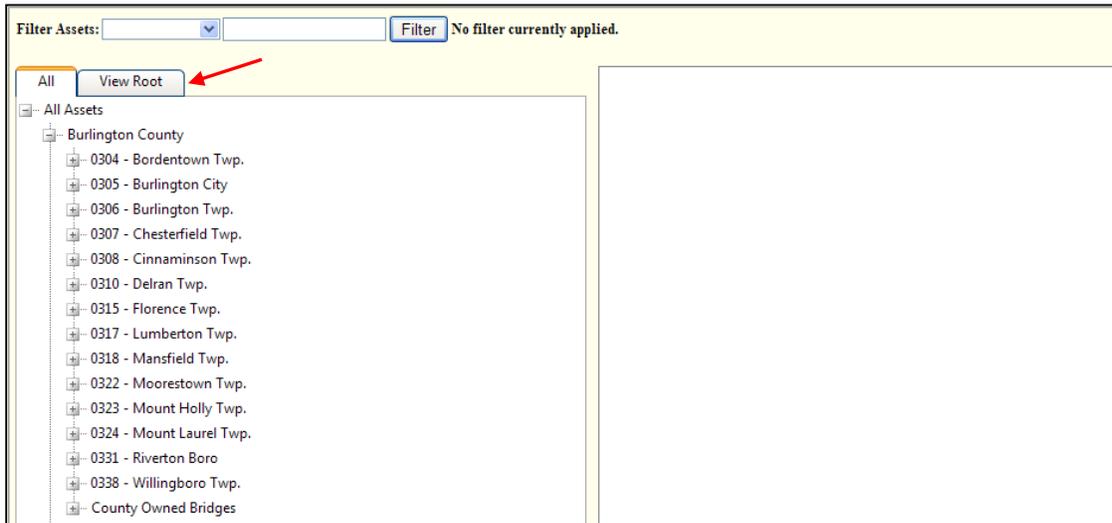


Column Name	Information / Action Types Available
Group Number	Displays the four-character group number assigned by NJDOT. Each project has a single group number.
Owner Type	Displays which CoMBIS Owner Type the Asset falls under. <ol style="list-style-type: none">1. County2. Unknown3. Non-CoMBIS Local4. CoMBIS Local
NBI 7: Facility Carried by Structure	Displays the name of the road carried by the asset. May be left blank depending on asset type.
NBI 6A: Feature Intersected: Narrative	Displays the name of the road intersected by the asset. May be left blank depending on asset type.
Submitted To	Displays the name of the person the Asset was submitted to in that workflow stage.
Status (Only under Awaiting Approval)	An inspection report can be in various states (see Section IV on workflow for full description). This column displays the different workflow stages the report is going through and when it was submitted to that workflow stage. This column is not visible for In Progress inspection reports until the report has been submitted into the workflow.
 - Edit	After an inspection report has been created, you may access your reports by clicking on this icon.
 - Action	The Action Tool opens a drop-down list that shows available options that can be done to the asset/inspection report. Like the edit column, the contents can vary based on the status of the latest inspection report (See “Status” information). You click on the option desired for the action to occur. See Section IV-C For complete list of Action items.

C. How to Create an Inspection Report

Located on the bottom of the Main page is a tree search section. The asset tree search is another way to locate assets in the software and is one way a user can start a new inspection report. The other methods include the Quick Select and the View Asset group link.

Asset Tree View



Step-by-Step:

1. Expand the Asset Tree by clicking on the plus symbol next to one of the parent assets (i.e. County). A listing of all the assets associated within that county will be displayed.
 - **Note: Consultants will only be able to access assets contained in their current project group number(s) under View Root (see below).**
2. Double-click on an asset.
 - Once selected, the asset will be highlighted in the tree search and its data (asset information and a **Report Details** section) will load on the right-hand side. The Approved Reports are the Central Database Values (currently Cycle 0 data) and stored information will be carried forward into the next report, if chosen.

Asset Details Screen

The screenshot shows the 'Asset Details Screen' with a list of assets on the left and detailed information on the right. The 'Create Report' button is highlighted with a red box, and a red arrow points to the 'Approved Reports' section.

Filter Assets: [Filter] No filter currently applied.

View Root

- 15L9
 - 1505007 (1505007) RT 530 (Pinewald Keswick Rd.) over Davenport Branc
 - 1505010 (1505010) CR617 (Chelsea Ave.) over Mill Creek
 - 1505011 (1505011) Point Pleasant Ave. over Jeffries Creek
 - 1505017 (1505017) CR 616(Mule Rd.) over Sunken Branch of Wrangle Bro
 - 1505019 (1505019) Mill Creek Rd. over Jeffries Creek
 - 1506009 (1506009) RT 549 (Brick Blvd.) over Long Causeway Branch of
 - 1506011 (1506011) RT 549 (Brick Blvd.) over Cedar Bridge Branch of M
 - 1506012 (1506012) CR631 (Hooper Av) over Kettle Creek
 - 1506014 (1506014) RT 549 Spur1(HerbertsvilleRoad)/Sawmill Creek
 - 1506015 (1506015) Beverly Beach Rd. over Sawmill Creek
 - 1506017 (1506017) RT 549 Spur1(Herbertsville Road)/Sawmill Creek
 - 1506021 (1506021) RT 549 (Lanes Mill Rd.) over Trib to Metedeconk Ri
 - 1506022 (1506022) CR632(Burnt Taven Rd.) over Trib to Metedeconk Riv
 - 1506023 (1506023) CR631 (Old Hooper Ave.) over Tunes Brook
 - 1506024 (1506024) RT 549 (Brick Blvd) over Tunes Brook
 - 1507006 (1507006) RT549 (Hooper Ave.) West Jughandle over Mosquito
 - 1507010 (1507010) Todd (Beaver Dam) Road over Polhemus Branch of K

1505011 (1505011) Point Pleasant Ave. over Jeffries Creek (15L9)

Parent Asset: County Owned Bridges
Asset Name: 1505011 (1505011) Point Pleasant Ave. over Jeffries Creek
State Number: 1505011
Asset Type: Bridge
(AB) - Name of Structure: Point Pleasant Ave. over Jeffries Creek
NBI 7: Facility Carried by Structure: Point Pleasant Ave
NBI 6A: Feature Intersected: Narrative: Jeffries Creek
Group Number: 15L9

Report Details Create Report

In Progress Reports:
No reports

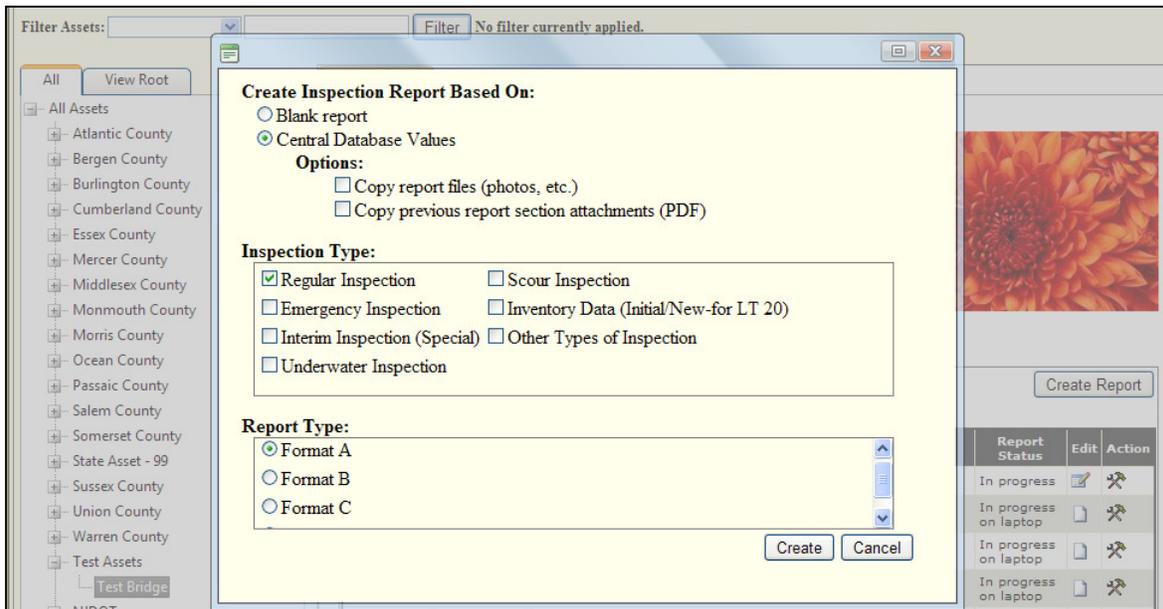
Reports Pending Approval:
No reports

Approved Reports ←

Creation Date	Inspection Date	Inspection Type	Report Status	Edit	Action
10/20/2009	10/20/2009	Regular Inspection	Approved		

3. Click the **Create Report** button to create a new report.
4. Choose the different options for the reports, including:
 - Whether to populate the report with Central Database Values.
 - Whether the report is associated with a summary report.
 - The Inspection Type.
 - The Report Type (Format A, B or C).
 - Cycle 0 Report
 - This option will be chosen for a new Inventory Level Data Collection effort.
 - It will be chosen to update any previous cycle 0 data that pertains to Part I Inventory effort for structures that did not meet CoMBIS standards.
5. Click **Create**.

Create Report Options



Report Creation Notes:

- For the initial CoMBIS effort, Format A (1st Cycle Reports) will be created from Central Database Values (Cycle 0 information). They should be treated as first cycle reports with current procedures followed (do not treat the inventory inspection as a “previous inspection” for report purposes).
- NJDOT will add all new assets (bridges) into the system as necessary. In order to create a report for a new structure that does not exist in the system, a standard form (attached in Section VII-D) will need to be submitted to NJDOT so that the structure will be created and placed within the appropriate Asset View based on group numbers or Asset tree.
- There are various options for Inspection Type for other standalone reports, such as Interim and Underwater Inspections. Some of these will be utilized and additional Report Types will be created.

D. Entering Data into a Report

When a new report is generated, central database values will automatically fill the report. The central database values are the most current and recorded information of the bridge, typically from the previous approved inspection report.

All fields containing central database values will initially be highlighted in yellow. The text box will change from yellow to white when any central database value in the report has been changed.

There are four major sections to each report:

- Primary tabs
- Sub-tabs
- Right-hand side bar
- Main entry window, where the data is entered into each form



Inspection Report Screen

The screenshot displays the 'Inspection Report Information' form. At the top, there are navigation tabs: 'Report Info' (highlighted in yellow), 'Summary', 'SI&A', 'Field Notes', and 'Priority Repairs'. Below these are sub-tabs: 'Inspection Info' (highlighted), 'Forms', 'Pictures/Files', 'Asset Files', and 'Report Sections'. The form contains the following fields and options:

- Create Date:** 02/06/2012
- Inspection Date:** 10/08/2009
- NBI (Item 90) Date:** 10/08/2009
- Inspection Type:** Regular Inspection, Emergency Inspection, Interim Inspection (Special), Underwater Inspection, Scour Inspection, Inventory Data (Initial/New-for LT 20), Other Types of Inspection
- Bridge Owner Symbol:** Monmouth County Logo
- Consultant Symbol:** GPI Logo
- Consultant Address:** (empty text field)
- User Assignment:**
 - Crew Chief/Team Leader:** Nyerges, Mark
 - Available Users:** Bogle, Martha
 - Assigned Users:** Hatcher, Keith, Nyerges, Mark

On the right side, there is a sidebar with sections: 'Consultant Symbol', 'Pictures / Files' (containing a 'Select New Picture/File' button and the text 'There are no pictures linked to this field.'), 'Central Database Value', and 'Field History'. The 'inspecttech' logo is visible in the bottom right corner of the form area.

Step-by-Step:

1. Activate fields by selecting the field with the computer mouse.
 - When a field is selected, the right-hand side bar will display information about that particular field. The right-hand side bar is discussed in Section II-G.
 - If the field has any options available, such as a drop-down select list, those options will be displayed.
2. Input data directly into the field on the entry screen, or select data from a drop-down menu.
3. Hit the **Tab** key or use the mouse to move on to the next field.
 - The software automatically saves the changes when you move on to the next field.
4. Use the primary tabs and sub-tabs across the top of the page to move to the next form.

E. How to Navigate Through the Report Forms

The primary tabs across the top of the page control the navigation through the report forms. Each primary tab has multiple sub-tabs. The selected primary tab will be highlighted in yellow to show that it is active. When a sub-tab is selected, it will highlight and open the corresponding form.



Primary and Sub-Tabs

The screenshot shows the 'Primary Tabs' interface for a report titled '130MT34 (MT34) Holland Road over Mahora's Creek'. The 'Primary Tabs' include: Primary Tabs, Report Info, Summary, SI&A, Field Notes, Priority Repairs, 13L9, and Main Menu. The 'Sub-tabs' include: Sub-tabs, Inspection Info, Forms, Pictures/Files, Asset Files, and Report Sections. The 'Inspection Report Information' section contains the following fields and options:

- Create Date: 02/06/2012
- Inspection Date: 10/08/2009. Description: Inspection Date associated with this report. Same as Item 90 for Routine Inspections, but may be different for Interim Inspection report, Underwater Inspection report, etc. when not performed in conjunction with the Routine Inspection.
- NBI (Item 90) Date: 10/08/2009. Description: Date of most recent Routine Inspection.
- Inspection Type: Regular Inspection, Emergency Inspection, Interim Inspection (Special), Underwater Inspection, Scour Inspection, Inventory Data (Initial/New-for LT 20), Other Types of Inspection.
- Bridge Owner Symbol: Monmouth County Logo
- Consultant Symbol: GPI Logo

Step-by-Step:

- To move through the fields and enter information:
 - Place your mouse on the field and click.
 - Hit the **Tab** key or use the computer mouse to select the next field.
- Once the current form is completely filled, move on to the next form in the report. Click the next sub-tab to move to another form.
- Click the next primary tab once all of the necessary sub-tabs have been completed.
 - **Note:** *There is no Save button when entering or editing information within a report. The information is saved as soon as you move to the next field.*

F. Detailed Tab Review

The primary and sub-tabs contain input forms containing all required inspection information. There are five primary tabs that will each be discussed:

- Report Info
- Summary
- SI&A
- Field Notes
- Priority Repairs

1. Report Info Tab

The Report Info tab has 5 sub-tabs:

- Inspection Info
- Forms
- Pictures/Files
- Asset Files
- Report Sections

Report Info Tab with Sub-Tabs



- **Inspection Info** – holds key inspection information including; Report Creation Date, Inspection Date, NBI (Item 90) Date, Inspection Type, Symbols, Consultant Address, Crew Chief, Assigned Users and Report History.

Inspection Info Tab

- The Bridge Owner and Consultant Symbols can be managed under the Navigation Menu, Main tab, Manage Logos.

Note: Suggestion: Each Bridge Owner and Consultant may want to develop a logo that contains both the symbol and address within a single image, and upload it into the system. Otherwise the Bridge Owner and the Consultant addresses will need to be typed as part of every inspection report.



User Assignment within the Inspection Info Tab

User Assignment:

Crew Chief/Team
Leader:

Available Users:

Assigned Users:

Report Review Progression:

	Date Submitted	Submitted By	Submitted To	Comments
Edit	03/16/2012	Rossi, Gina	Bal, Harjit	<input type="text"/>

Report History:

Inspection Date	Crew Chief/Team Leader	Inspectors	Inspection Type	Status
03/13/2012	Leader, Team	Leader, Team Member, Team	Regular Inspection	Approved on 03/13/2012

- The Available Users will be as follows:
 - For Consultant: employees who have User Accounts in CoMBIS (per asset view)
 - For County: employees who have User Accounts in CoMBIS that are assigned the asset
- The Assigned Users will be those responsible for creating that particular bridge inspection report. The Crew Chief/Team Leader will be defined from the list Assigned Users by clicking the **Set as Crew Chief/Team Leader** button.
- The Report Review Progression shows the workflow stages the report has been through.
- The Report History shows the Approved Reports (or any other approved data) in the Central Database for that structure.



- **Forms** – This lists all of the editable forms in the system. The user dictates the forms that are on or off, as necessary.
 - Under **Report Info**, both sections should always be checked.
 - Under **Summary**, the Historical Info/Bridge Description Form will only be checked for Format A & B report types.

Forms Tab

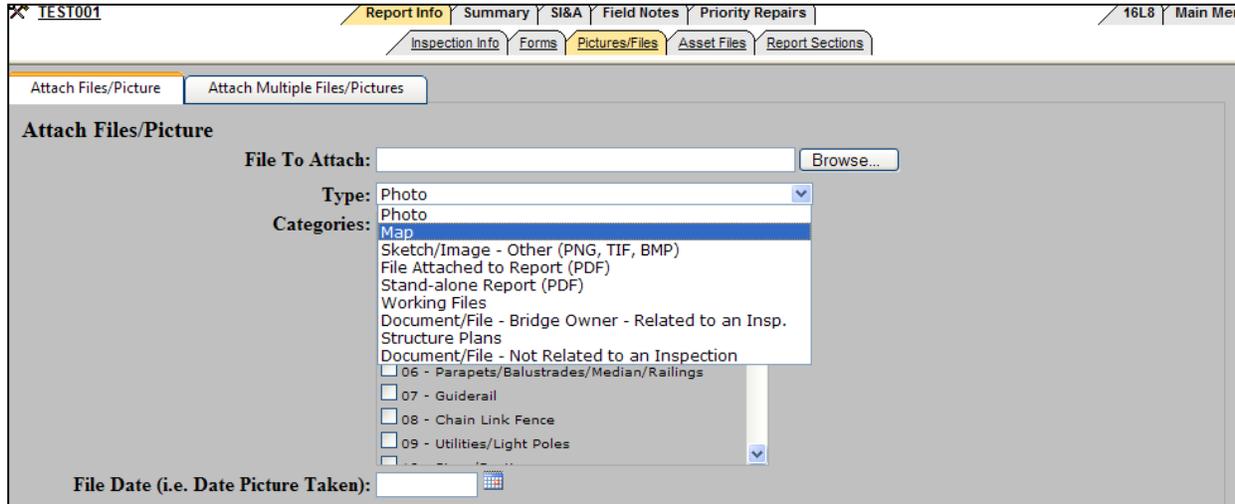
The screenshot shows the 'Forms' configuration window in BridgeInspect Collector. The window title is 'TEST001'. The top navigation bar includes 'Report Info', 'Summary', 'SI&A', 'Field Notes', and 'Priority Repairs'. Below this, there are sub-tabs for 'Inspection Info', 'Forms', 'Pictures/Files', 'Asset Files', and 'Report Sections'. The main content area is divided into several sections:

- Report Info:**
 - Pictures/Files
 - Report Sections
- Summary:**
 - Conclusions/Recommendations
 - Historical Info/Bridge Description
 - Load Rating Summary
 - Load Rating
- Field Notes:**
 - Cover
 - Deck
 - Roadway
 - Culvert
 - Approaches
 - Super
 - Rocker Bearings
 - Pin/Hanger
 - Super(ARCH)
 - Super(RIGID FRAME)
 - Paint
 - Fatigue
 - Abutment
 - Pier
 - Sub(Arch/Frame)
 - Sub(Abutment)
 - Bent
 - Sub/Scour
 - Waterway/Channel
 - Highway Safety
 - Deck Geometry
 - Clearances
 - Railroad Safety
 - Fencing
 - Historical Data
- SI&A:**
 - 1 - STRUCTURAL DATA
 - 2 - LOAD RATINGS
 - 3A - INSPECTION INFORMATION
 - 3B - INSPECTION INFORMATION
 - 4A - ROADWAY DATA
 - 4B - ROADWAY DATA
 - 5A - PONTIS DATA NBE
 - 5B - PONTIS DATA CORE ELEMENTS
 - 5B - PONTIS DATA CORE
 - 6 - CoMBIS DATA
 - 7 - ALL
 - NBI Cales
- Priority Repairs:**
 - Priority Repairs

- Under the **SI&A**, section 5A – Pontis Data NBE (National Bridge Elements) will not but utilized at the current time.
- Under the **Field Notes**, forms will be checked according to the type of structure and only those sub-tabs will appear under the Field Notes tab.
- The **Priority Repairs** will be included when needed.
- Once the first cycle bridges reports become approved, the same forms will regenerate for the following cycle.

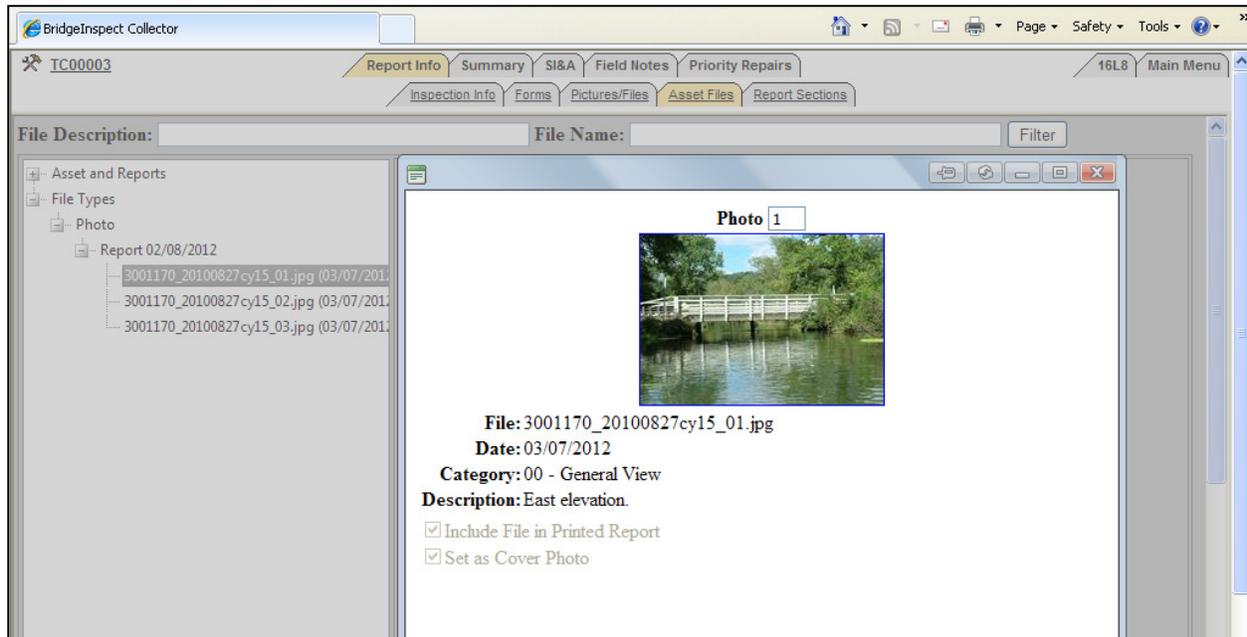
- **Pictures/Files** – This tab allows the user to attach any picture files associated with the current cycle inspection. This will be further discussed in Section II-H, II-I, II-J and II-K.

Pictures/Files Tab



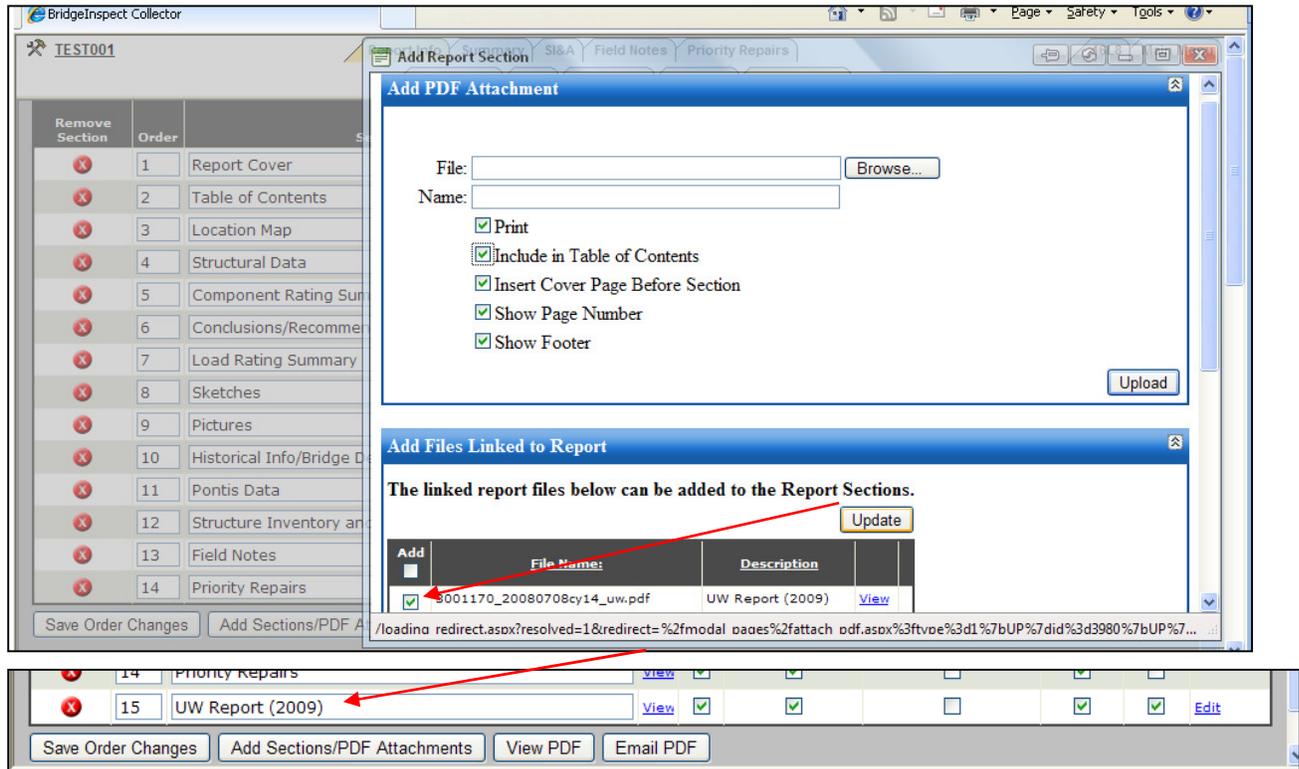
- **Asset Files** – This is a quick way to filter through all the files associated with that cycle bridge report, such as pictures, sketches, plans, drawings, maps and so on.

Asset Files Tab



- **Report Sections** – This tab contains all the different output report sections and is where you can view the complete report PDF (or each individual section separately). You can also add standalone PDF attachments here. Report sections are discussed further in Section II-L.

Report Sections Tab

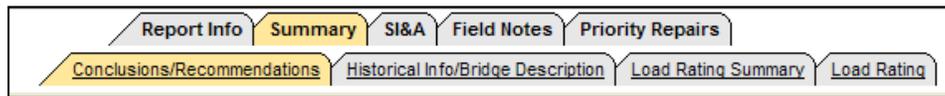


2. Summary Tab

The Summary tab has 4 sub-tabs:

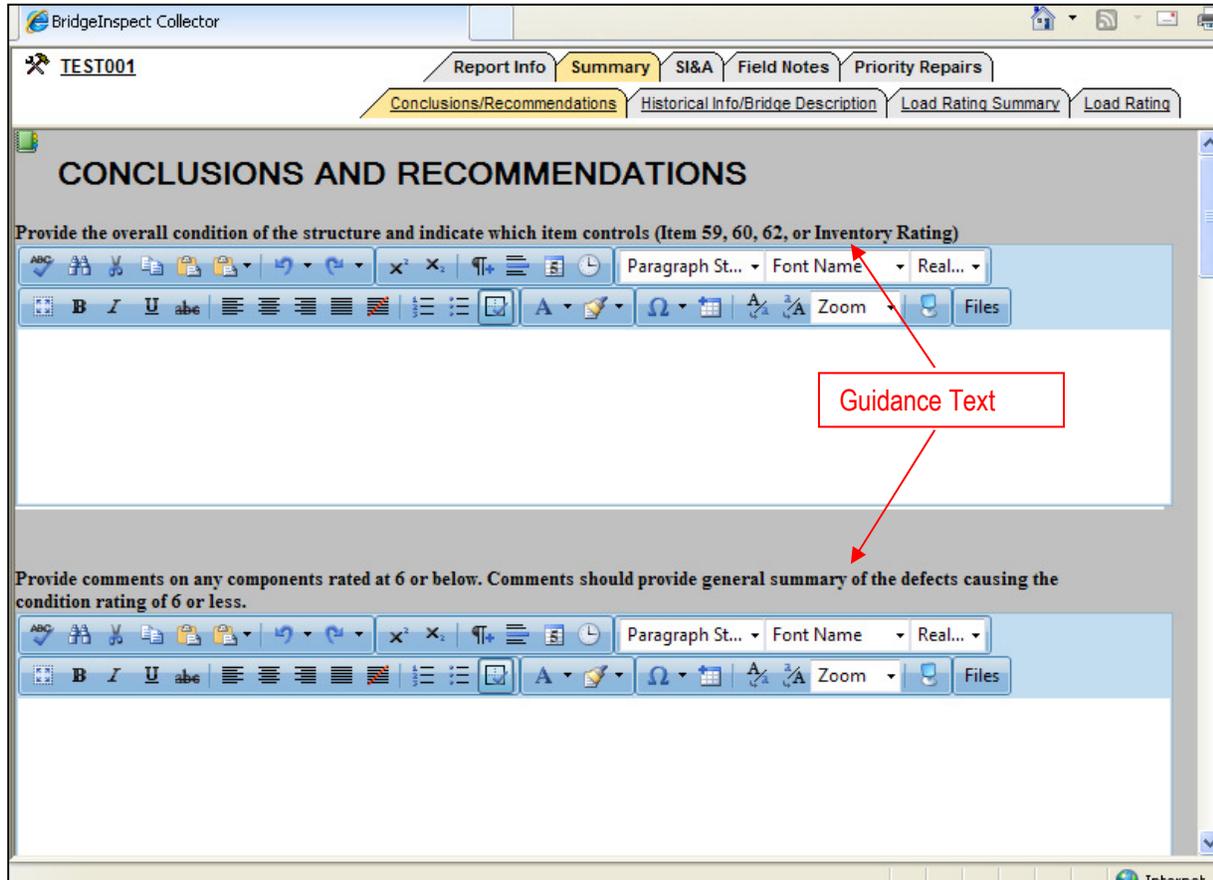
- Conclusions/Recommendations
- Historical Info/Bridge Description
- Load Rating Summary
- Load Rating

Summary Tab with Sub-Tabs



- **Conclusions/Recommendations** – This tab follows the outline of the current MS Word report template for the conclusions and recommendations section. Any section that is not applicable should be left blank. Specific guidance text is provided above each section (*Note: guidance text does not print on the output*).

Conclusions/Recommendations Tab



The Major Work Items section of the conclusions has a pull down to choose the number of major work items. Similar is for Interim Work Items and Other Recommendations (Inspections / Monitoring).



Conclusions/Recommendations Tab

BridgeInspect Collector

TEST001

Report Info Summary SI&A Field Notes Priority Repairs

Conclusions/Recommendations Historical Info/Bridge Description Load Rating Summary Load Rating

Indicate reasons why the structure is structurally deficient and/or functionally obsolete, if applicable. Provide a major work statement followed by major work details (including escalated costs). For scour critical structures, include improvement costs from NJDOT Memorandum dated May 2, 2008 titled "Bridge Scour Countermeasures Conceptual Design and Cost Estimates for Inspection Reports".

Number of Major Work Items: 1

MAJOR WORK 1

Description

Provide an interim work statement followed by interim work details.

- o Priority Repair information will automatically be pulled from the Priority Repairs tab into the output (the user does not need to manually type Priority Repairs information in this section).
- **Historical Info/Bridge Description** – This tab is still only required for Format A (1st Cycle) and Format B report types. It should be turned off for all Format C reports on the Forms sub-tab.
 - o The Component Remarks Summary has checkboxes to choose which fields are applicable, then describe the component material and enter remarks. The ratings of these components will be pulled into the output section from other areas of CoMBIS.

Historical Info/Bridge Description Tab – Component Remarks Summary

<u>COMPONENT</u>	<u>MATERIAL</u>	<u>REMARKS</u>
<input type="checkbox"/> DECK	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> APPROACHES	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> ROADWAY	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> CULVERT	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> SUPERSTRUCTURE	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> SUBSTRUCTURE	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> WATERWAY/CHANNEL	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> SAFETY FEATURES	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> DECK GEOMETRY	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> UTILITIES	<input type="text"/>	<input type="text"/>

*For waterways, include horizontal and vertical clearance of the main channel span ft. wide and ft. high

- o There is guidance text for the historical information and bridge description that follows our current template requirements (*Note: guidance text does not print on the output*).

Historical Info/Bridge Description Tab – Guidance Text

BRIDGE DESCRIPTION

Indicate the municipality and county of the structure.

Indicate the designer and design specification(s) used. Indicate the design live loads, as well as the allowable design stresses for each material.

Indicate the type of structure.

Indicate the span length, total length and NBIS length of the structure.

Indicate the features of the deck, including thickness, width(s), reinforcement, parapets, railings, median, sidewalks, lanes, shoulders, etc.

Indicate the features of the superstructure, including beams (quantity and type), span type (simply-supported, continuous), bearing type, etc.

Indicate the features of the substructure, including abutment types, pier types, etc. Provide width of waterway opening(s), if applicable.



- **Load Rating Summary** – Follows the current template format of the load rating summary as described in the NJDOT Highway Bridge Load Rating Manual (available on the Structural Evaluation website).

Load Rating Summary Tab

The screenshot shows a web-based form titled "LOAD RATING SUMMARY" for project "TEST001". The form is organized into several sections:

- Project Information:** Includes input fields for "Group:", "Contract ID:", "Agreement No.:", and "Agree/Mod No.:".
- Rating Information:** Includes a "Rating Date:" field.
- Method:** Includes dropdown menus for "LRFR:", "LFR:", "ASR:", and "Engineering Judgment:", along with an "Other:" text input field.
- Load Testing:** Includes dropdown menus for "Load Testing:" and "Computer Software Used:", and text input fields for "Version:", "Design Load:", and "Cycle Rating Performed:".
- Structure Information:** Includes dropdown menus for "Plans Available?", "Overlay?", "Section Losses?", and "Considered in Rating?" (two instances), along with text input fields for "Contract Designation:", "Type/Thickness:", and "Item 59:" (with a value of 7).

The interface includes a breadcrumb trail at the top: "Report Info" > "Summary" > "SI&A" > "Field Notes" > "Priority Repairs" > "Conclusions/Recommendations" > "Historical Info/Bridge Description" > "Load Rating Summary".



- **Load Rating** – This tab is also similar to the current report template where allowable stresses and rating values get input; the user must choose the “Number of Members Rated” and the tab will update accordingly.

Load Rating Tab

Member	Truck Type (Tons)	Rating (Tons) / Rating Factor								
		As-Built		As-Insp.		As-Built		As-Insp.		
		Inv.	Op.	Inv.	Op.	Inv.	Op.	Inv.	Op.	
MEMBER 1										
<input type="text"/>	HS-15 (15T)									
Cond. Rating: <input type="text"/>	HS-20 (36T)									
Sect. Loss Location: <input type="text"/>	3 (25T)									
<input type="text"/>	3S2 (40T)									
Sect. Loss Extent: <input type="text"/>	3-3 (40T)									
<input type="text"/>	HL-93									
MEMBER 2										
<input type="text"/>	HS-15 (15T)									
Cond. Rating: <input type="text"/>	HS-20 (36T)									
Sect. Loss Location: <input type="text"/>	3 (25T)									

3. SI&A Tab

The SI&A primary tab is broken up into 8 sub-tabs.

SI&A Tab with Sub-Tabs

- **Tabs 1 through 6** – The layout of the SI&A sub-tabs was carefully considered to improve user-friendliness. Sub-tabs 1-Structural Data and 2-Load Ratings contain more permanent structural information while sub-tabs 3A/B-Inspection Info and 4A/B Roadway Data focus on data that may change on a cycle-to-cycle basis. Sub-tab 5B contains the Pontis Data. Sub-tab 6 contains specific CoMBIS items.
- **Tab 7 - ALL** – lists Federal, State and CoMBIS data in three columns in numerical/alphabetical order. The user can decide which method of input/review they prefer (using Tabs 1 through 6 or the ALL tab).



SI&A Tab 7 - All

BridgeInspect Collector

TEST001

Report Info Summary SI&A Field Notes Priority Repairs

SPECTION INFORMATION 3B - INSPECTION INFORMATION 4A - ROADWAY DATA 4B - ROADWAY DATA 5B - PONTIS DATA CORE ELEMENTS 5B - PONTIS DATA CORE 7 - ALL NBI Calcs

1 State Code: 342 - New Jersey (A) Town: 1602 - Clifton City M82 County Bridge No: 1234-156

2 Highway Agency District: 01 (AA) Inventory Route: M83 Municipal Bridge No:

3 County Code: 031 - PASSAIC COUNTY (AB) Structure Name: Test Rd Over Waterway M84 Latitude (Degrees):

4 Place Code: 00000 - N/A (AC) Non-Inventory Feature: M85 Longitude (Degrees):

5A Inventory Route (On/Under): 1 (AD) Adm. Juris: M87 Contract State Agreement No: 2

5B Inventory Route Signing Prefix: 1 - INTERSTATE HIG Non-Inv Feature: M91 On/Off System Bridge: 1: On-Sy

5C Level of Service: 1 - MAINLINE (AE) Alternate Agency: M93 Owner:

5D Inventory Route Number: (AF) Alternate Structure Number: M94 Maintenance Responsibility:

5E Directional Suffix: % Resp.: (AG) Type of Bridge Rail: M95 Ownership Resolved:

6 Features Intersected: (AH) Height of Bridge Rail: M96 Comments Ownership:

7 Facility Carried by Structure: (AI) Speed Limit Posting (mph): M97 Structure Material Type Description:

8 Structure No.: 1234-156 (AJ) Type of Slope Protection: M98 Str. is Standalone or Connecte

9 Location: (AK) Type of Abutment: M99 Length of Portion Included (ft):

(AL) Type of Pier: M100 Width of Opening (ft):

(AM) Depth of Fill over Structure:

(AN) Plans Available:

(AO) Utilities:

Utilities 1: No utilities

Utilities 2: No utilities

- **NBI Calcs** – To view and recalculate the National Bridge Inventory calculations the user can click on the blue 'Re-calculate Ratings' link. This tab also shows the calculated NBI Fields; Item 67, Item 68 and Item 69 which are directly linked to the forms. To view calculation information, click and expand the blue tabs.

SI&A NBI Calcs Tab

Test Bridge

Report Info Summary SI&A Field Notes Priority Repairs

1 - STRUCTURAL DATA 2 - LOAD RATINGS 3A - INSPECTION INFORMATION 3B - INSPECTION INFORMATION 4A - ROADWAY DATA 4B - ROADWAY DATA 5 - PONTIS DATA 6 - CAMBIS DATA 7 - ALL NBI Calcs

NBI Field Calculated Value

Item 67 - Structural Evaluation 3

Item 68 - Deck Geometry 9

Item 69 - Underclearances 9

NOTE: Fields on this page are linked to the report.

SUFFICIENCY RATING = 23.30

STRUCTURAL & FUNCTIONAL CLASSIFICATION: FUNCTIONALLY OBSOLETE

To Re-calculate Ratings Click Here

Item 67 - Structural Evaluation

Item 68 - Deck Geometry

Item 69 - Underclearances

BridgeInspect Collector

inspecttech



Sufficiency Rating Calculation Tab

FIELDS USED TO CALCULATE SUFFICIENCY RATING					
Formatted values have been converted to metric and formatted as they would appear in the annual NBI Submittal with implied decimals.					
IDENTIFICATION	Entered Value	Formatted Value	CONDITION	Entered Value	Formatted Value
89. BRIDGE NUMBER:	8-12	8-12	58. DECK:	9	9
STRUCTURE DATA			59. SUPERSTRUCTURE:	8	8
43A. MAIN STRUCTURE TYPE:	3-09	309	60. SUBSTRUCTURE:	7	7
AGE AND SERVICE			62. CULVERT/RET WALL:	6	6
28A. LANES ON STRUCTURE:	06	06	LOAD RATING & POSTING		
29A. ABT. OVER:	6657	66657	66. INVENTORY RATING:	3	027
19. DETOUR LENGTH:	54	087	APPRAISAL		
GEOMETRIC DATA			67. STRUCTURAL:	3	3
61. BRIDGE RDWY. WIDTH:	65	6650	68. GEOMETRY:	9	9
32. APPR. RDWY. WIDTH:	678	2067	69. UNDERCLEARANCE:	9	9
53. VERT. CLEAR./DECK:	18	0549	71. WATERWAY ADEQUACY:	N	N
CLASSIFICATION			72. ROADWAY ALIGNMENT:	7	7
100. DEFENSE HWY. DES:	0	0	36. TRAF. SAFETY FEATURES:	1.0-0.1	1001

Output Calculations	
1) STRUCTURAL ADEQUACY AND SAFETY (MAX = 85%)	
STRUCTURAL RATING REDUCTION	
A (Item 59 is 8) (Item 60 is 7)	A = 0
B (2(A - 2.7)pow 1.5 + 0.325A) =	B = 52.67
$S_1 = 55 - (A + B)$	$S_1 = 2.33$
2) SERVICEABILITY AND FUNCTIONAL OBSOLESCENCE (MAX = 30%)	
SERVICEABILITY RATING REDUCTION (MAX = 13%)	
ITEM NO. 58 DECK CONDITION	A = 0
ITEM NO. 67 STRUCTURAL EVALUATION	B = 4
ITEM NO. 68 DECK GEOMETRY	C = 0
ITEM NO. 69 UNDERCLEARANCES	D = 0
ITEM NO. 71 WATERWAY ADEQUACY	E = 0
ITEM NO. 72 APPROACH ROAD ALIGNMENT	F = 0
J = (A+B+C+D+E+F)	J = 4

4. Field Notes Tab

There are 25 sub-tabs for Field Notes. Each sheet must be checked on or off under the Forms sub-tab as required.

Forms Tab – Field Notes

BridgeInspect Collector

TEST001

Report info Summary S&A Field

Inspection info Forms Pictures

Field Notes

- Cover
- Deck
- Roadway
- Culvert
- Approaches
- Super
- Rocker Bearings
- Pin/Hanger
- Super (ARCH)
- Super (RIGID FRAME)
- Paint
- Fatigue
- Abutment
- Pier
- Sub (Arch/Frame)
- Sub (Abutment)
- Bent
- Sub/Scour
- Waterway/Channel
- Highway Safety
- Deck Geometry
- Clearances
- Railroad Safety
- Fencing
- Historical Data



- **Cover** – This is where the ‘Number of Spans’ is chosen for the structure which controls the rest of the Field Notes sections that are established for number of Deck spans, Piers and so on.

Field Notes – Cover Tab

- The Cover sub-tab also incorporates how the spans are labeled (either from South or from West). The Structure Name, Type of Bridge, Inspectors, Weather, Temperature and Special Equipment Used can all be entered here. The Crew Chief is linked to the Report Info tab under Inspection Info sub-tab.



- **Deck** – All of the Field Notes tabs contain similar format to the current report templates. There are drop-down choices for the Rating code and different Component options. All of the duplicate SI&A Items are linked to their corresponding fields.

Field Notes – Deck Tab

RATING	COMPONENT	REMARKS
	Wearing Surface	
	Top of Deck	
	Median	
	Curbs	
	Deck Joints/Filler Material	
	Drains and Scuppers	

- **Sub/Scour** – Users must select the number of piers/abutments they want to describe on this tab. This is not controlled by the Cover sub-tab selection because the number of substructure units in contact with the waterway(s) will vary.

Field Notes – Sub/Scour Tab

RATING	COMPONENT	REMARKS
	COUNTERMEASURES	
	Description	
7	Condition	
	PROBING/SCOURING/SCOUR	
7	Findings	

- **Waterway/Channel** – This is similar to the Sub/Scour tab where the user must identify the number of waterways below the structure (typically 1).

Field Notes – Waterway/Channel Tab

- **Highway Safety** – this is where Item 36 is controlled (read only in the SI&A tabs). Notice the Help Manuals on the right hand side for each Item.

Field Notes – Highway Safety

RATING	COMPONENT	REMARKS
0	Bridge Railing	
0	Curb Terminations	
0	Approach Guide Rails	
1	Approach Guide Rail End Terminals	

- **Historical Data** – The user will only enter the current cycle work done history. The system will pull past history and incorporate it on the print out. This Sub-tab should not be included for first cycle reports (Format A).



5. Priority Repairs Tab

The Priority Repairs tab will be discussed in depth in Section V.

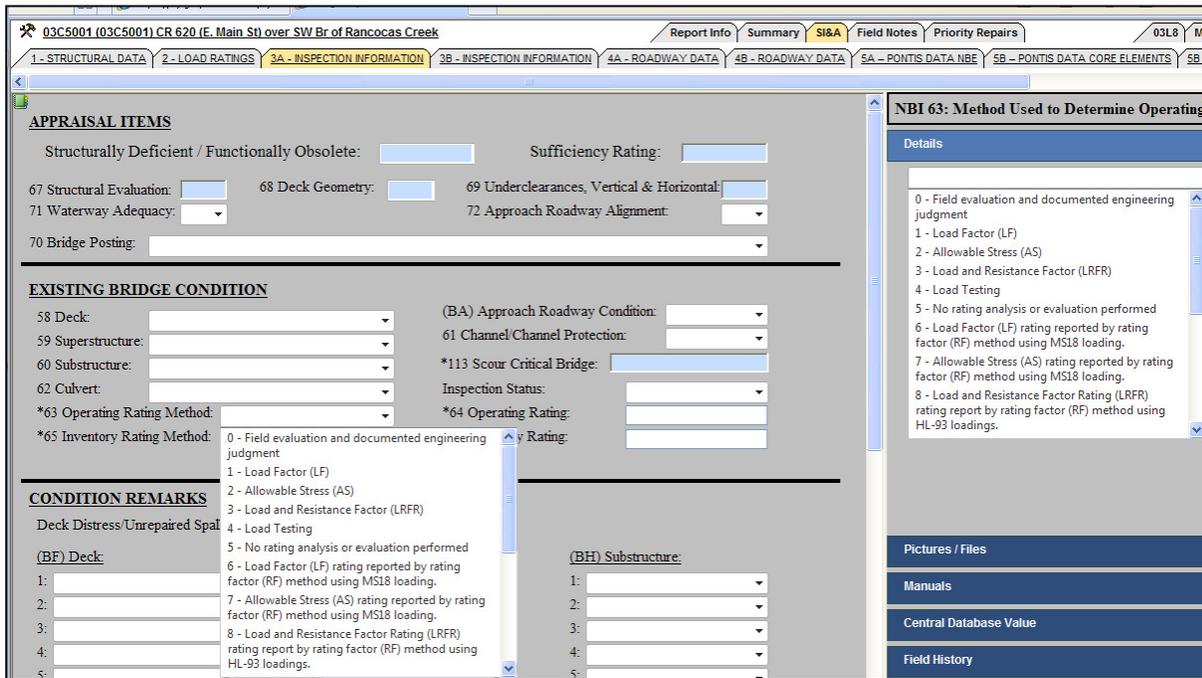
G. The Right-Hand Side Bar

The **Right-Hand Side bar** displays the details, history, and photos associated with a selected field. The side bar expands to show the details about the field, as well as:

- Pictures
- Manuals
- Central database values
- Field history/all field history, and/or
- Other forms where that field appears

To view one of these sections, click on a blue label in the side bar and the section will expand.

Right-Hand Side Bar



Section	Description
Field Name	The field name is typically shown on the top of the side bar and is surrounded by a black box.
Details	This is the first section of the side bar and will show any choices associated with the field (e.g. condition ratings). You may click on any of these choices and the field will automatically update with the selected choice. Also, the details section will display the textbox for text fields and allows you to type directly into the box.



Section	Description
Pictures/Files	The pictures/files section allows you to link pictures or other files directly to the field giving reviewers and managers a quick reference to identify relevant problems. There is no limit to the amount of pictures which can be linked to a single field; however, the picture/file must already be attached to the report before it can be linked to a specific field.
Manuals	The manuals tab will display appropriate manual pages that are related to the field (i.e. manual pages that explain how to rate certain conditions). You can double-click on the manual page and a new internet browser window will open and display. <i>Note: Not all fields will contain manual pages.</i>
Central Database Value	This tab contains the latest value for the selected field. Typically the value that is entered on the most recent <i>approved</i> inspection report is shown here.
Field History	This is a running log of all changes made from inspection to inspection.
Other Forms	This section shows all other forms in which the field is located.

Typical Linked Manual Page

The screenshot shows a web browser window displaying a manual page for 'ITEM 51 - BRIDGE ROADWAY WIDTH, CURB-TO-CURB (XXX.X feet) 4 DIGITS'. The page contains detailed instructions on how to measure and record this data. Below the text is a data entry form with various fields. A red arrow points to the '51 Bridge Roadway Width, Curb-to-Curb' field, which has a value of 18.4. The form also includes fields for '50A Left Curb/Sidewalk Width' (0.0), '50B Right Curb/Sidewalk Width' (0.0), '52 Deck Width, Out-to-Out' (20.8), 'Total Length (in ft.)' (33), and 'Deck Area (sq. ft.)' (686.4). A sidebar on the right contains navigation options like 'Central Database Value', 'Field History', and 'Other Forms'. The 'inspect^{tech}' logo is visible in the bottom right corner of the browser window.

H. How to Attach a Single Picture/File to a Report

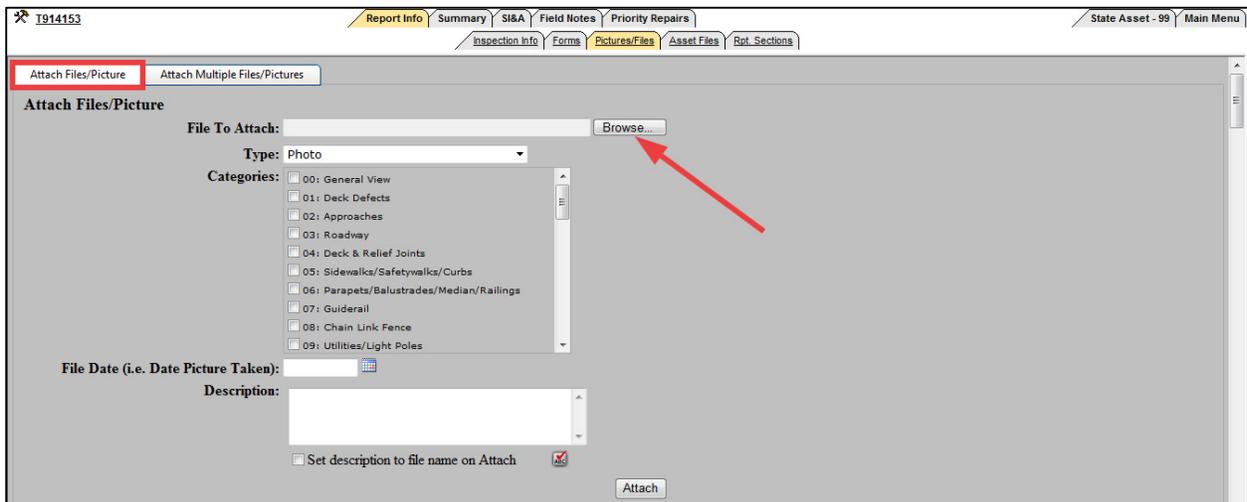
BridgeInspect Collector creates a more descriptive and accurate inspection report by uploading and organizing:

- Photos
 - Sketches
 - Drawings
 - Other files
- **Note:** In order to link a picture to a specific field the picture must already be attached to the report (for instructions to link a photograph to a field, please refer to Section II-J).

Step-by-Step:

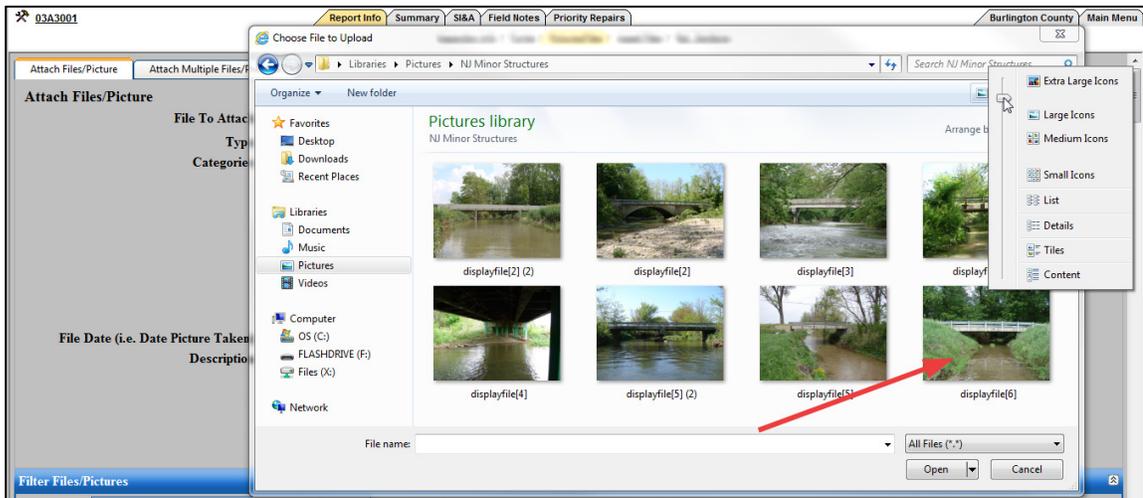
1. To attach a picture or another file type to an inspection report:
 - Open the desired report.
 - Navigate to the **Pictures/Files** sub-tab.
2. Select the sub-tab **Pictures/Files** under the **Report Info** tab. There are two sections available for attaching pictures:
 - Attach Files/Picture (the default setting for attaching photos), and
 - Attach Multiple Files/Pictures (enables you to upload numerous pictures at one time). Attaching multiple pictures and files will be covered in the next section of this Manual.

Attach File/Picture Screen



3. Select the **Browse** button to choose the photo or file. A window will appear, displaying the photos and files saved on your computer or memory card.
4. Locate the photo or file and click on it.
 - **Note:** To make it easier to find the picture to add, InspectTech recommends clicking on the **Views** button. Choose the large icon option so the pictures are more visible. Double-click on the photo or file to attach it to the report.

Browse Photo Screen



5. Move to the textbox labeled **Type** and select the type of file being added. The table below describes the different types of pictures/files and their allowable formats.

PICTURES/FILES - TYPE	
Photo (JPEG, GIF) Subtypes: Various Categories	Working Files Subtypes: Working File - MS Word Working File - Visio or CAD Drawing Working File - Video Working File - Other/Misc. Working Files - Misc. - ZIPPED File Set
Map (PNG,TIF,BMP) Subtypes: Statewide Map Local Map Other	Document/File - Bridge Owner - Related to an Insp. Subtypes: Concerns Priority Repair – Photo (JPG) Concerns Priority Repair – Other (PNG,TIF,BMP) Other – Photo (JPG) Other (PNG,TIF,BMP) Other (PDF)
Sketch/Image - Other (PNG,TIF,BMP) Subtypes: Underclearance Sketch Soundings Sketch Deck X-Section Sketch Sketch/Image - Other	File Attached to Report (PDF) Subtypes: Ratings Calculations Priority Repair Letter Priority Repair Transmittal Letters Other Attached PDF File
Stand-alone Report (PDF) Subtypes: UW Report Interim Inspection Other Special Inspection Report	Structure Plans Subtypes: Structure Plan sheet (PNG,TIF,BMP) Structure Plan Set (PDF)
	Document/ File - Not Related to an Inspection Subtypes: Other – Photo (JPG) Other (PNG,TIF,BMP) Other (PDF)



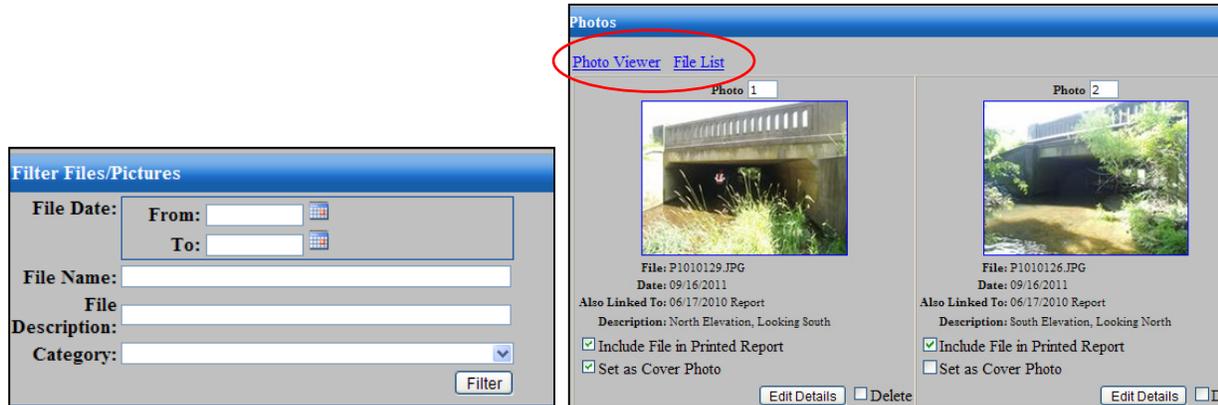
- Maps and sketches must be developed outside of the system. The standard maps for first cycle inspections should be formatted to include text, location arrow, etc. before being uploaded in the system. Sketches can be drawn in Microsoft Visio or CADD; but must be saved and uploaded as an image file to include in the report. All sketches, Underclearance, Soundings and Deck Cross Section will be uploaded under Sketch/Image and will be in the same area of the report (Note: Deck Cross Section sketch will not be in the Field Notes).
6. Choose the best **Category** for the photo or subtype for the file. Multiple categories can be selected for photos and category selection is important for running queries.
 - Example: A standard roadway photograph could potentially be categorized as *00-General View*, *03-Roadway*, *61-Work Done*, *63-Special Equipment*, and others.

Use common sense when choosing photo categories. A photograph may contain many of the photo categories, but only select the category(ies) that you are attempting to show in the photo. For instance, if a roadway photograph happens to contain a drainage inlet, there is no need to choose *11-Drains and Scuppers* as a category. You may, however, be using the photograph to document a drainage issue with the bridge, in which case you *would* want to include the *11-Drains and Scuppers* category.

7. Enter the date for the picture was taken or a file was finally modified.
8. Use the **Description** field to type details about the photo/file. For photos, the Category(ies) will appear on the output followed by the Description.
9. Click **Attach** to attach the photo/file to the report.
10. Scroll down to the **Photo** or **File Attached to Report** section to verify the photo or file uploaded successfully.

After attaching the Photos/Files to the bridge there are a few capabilities to filter through and examine them exclusively. You can use the Filter Files/Pictures tool or use the Photo Viewer link to open a separate window showing those files. The File List link is an alternative to the Photo Viewer without the image thumbnail.

Filter Photos, Photo View Selection Screens



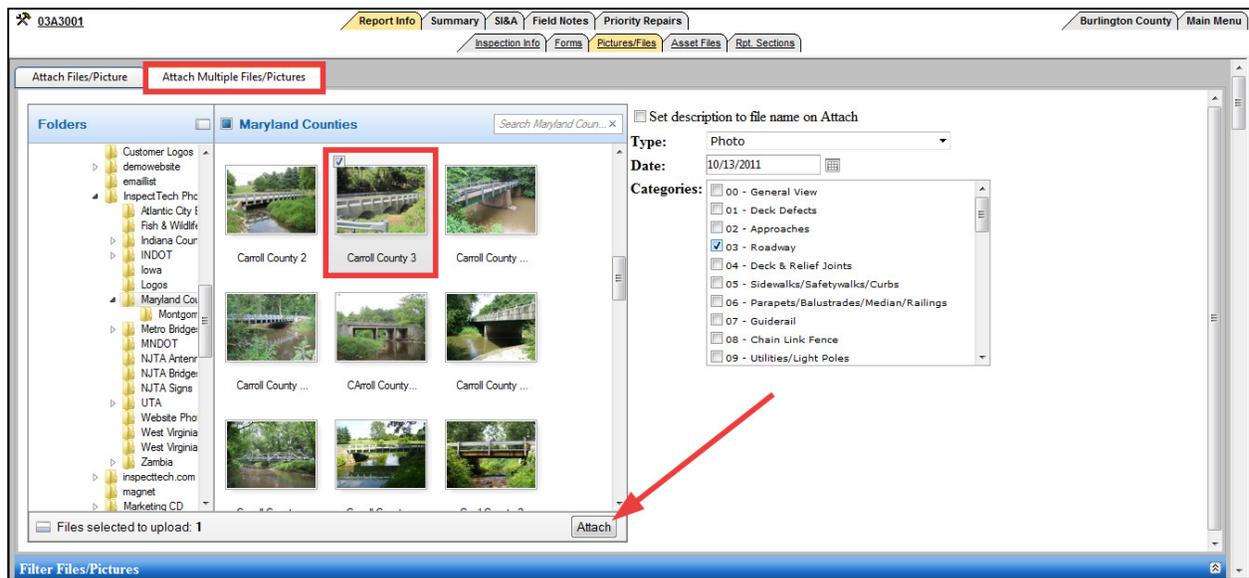
I. Attaching Multiple Files/Pictures to a Report

BridgeInspect Collector provides users with the ability to attach multiple pictures or files to a report at once. This function is the most efficient way to upload multiple pictures to an inspection report.

Step-by-Step:

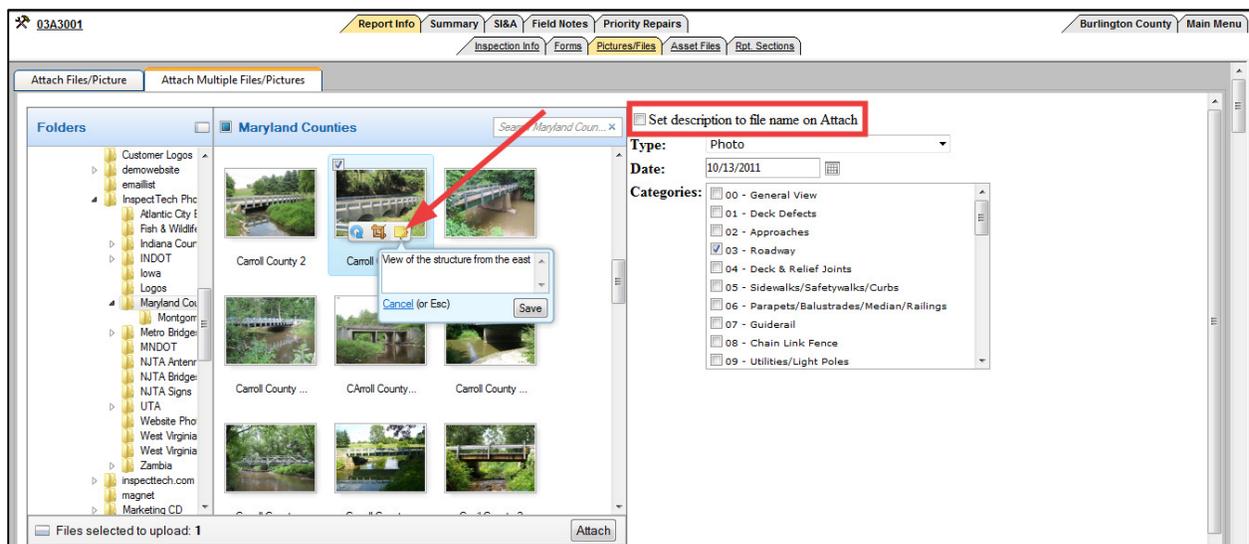
1. Click on the **Pictures/Files** sub-tab under the **Report Info** tab of an open inspection report.
2. Select the **Attach Multiple Files/Pictures** tab at the top of the form.
 - **Note:** *In order to attach multiple photos to a report you must have Image Uploader ActiveX installed on your computer. This application only needs to be installed once. The first time the software is used it may automatically prompt the use to install Image Uploader ActiveX. If not, simply go to the main "Help" menu and select "Help on Getting Multiple Photo Upload Working".*
3. On the far left side of the screen is a list similar to a tree search. This list contains all of the locations ("Desktop", "Computer", or "Libraries") and folders ("My Documents", "My Pictures", or "Downloads") on your computer.
 - To locate the pictures necessary for the report, find the location or folder that stores them.
 - Select all of the pictures by clicking the checkbox next to the folder/location name.
 - To select only a few, click the checkbox on each picture individually.

Attach Multiple Files/Pictures Screen



4. If necessary, rotate and preview each photo or add/edit a description of the photo before uploading it. Hover over the selected photos to view the rotate, preview, and edit icons.
 - **Rotate** the image by clicking the spinning arrow icon. This will turn the image clockwise.
 - **Preview** the image by clicking the frame icon. The rotate function is available here as well.
 - **Edit** the description by clicking on the pencil/paper icon. A text box will drop down. Enter the new description and click **OK**. The description will then be attached to the report.
 - To **rename** the photo or file as the new description, select the checkbox for **Set description to file name on Attach**.

Photo Edit Features



- Click the **Attach** button. Go back to the **Pictures/Files** sub-tab and verify all the photos and files have been attached properly to the report.

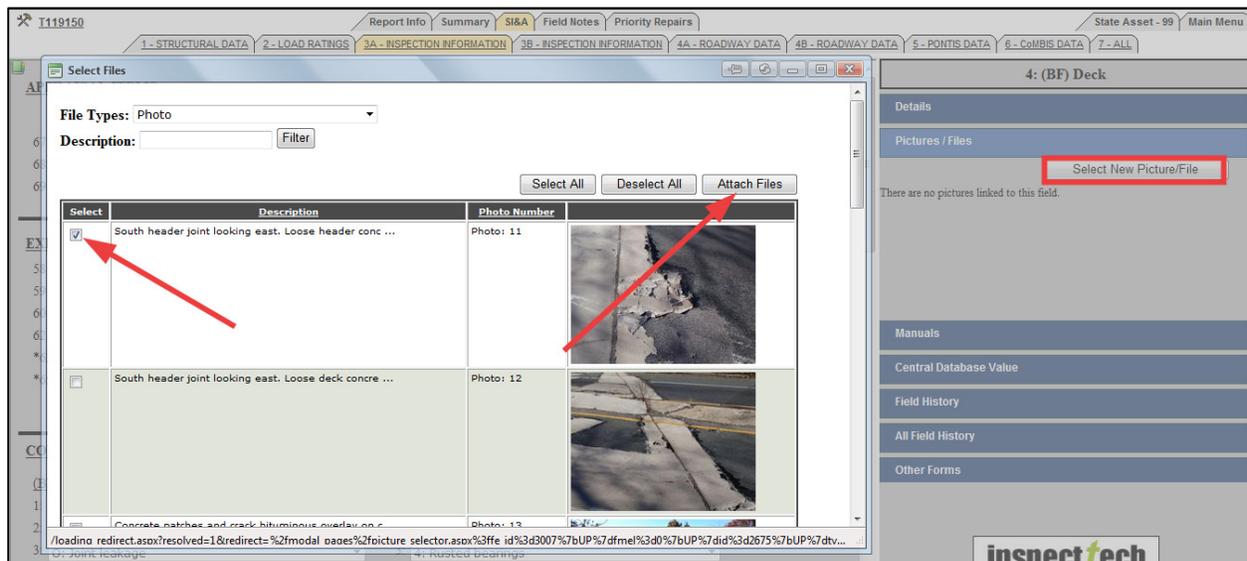
J. How to Link a Photograph to a Specific Field

To link a picture to a specific field the photo must already be attached to the report. To link a photo, refer to the right-hand side bar located within each inspection form, as displayed in the screenshot. There is no limit to the amount of photos that can be linked to one field.

Step-by-Step:

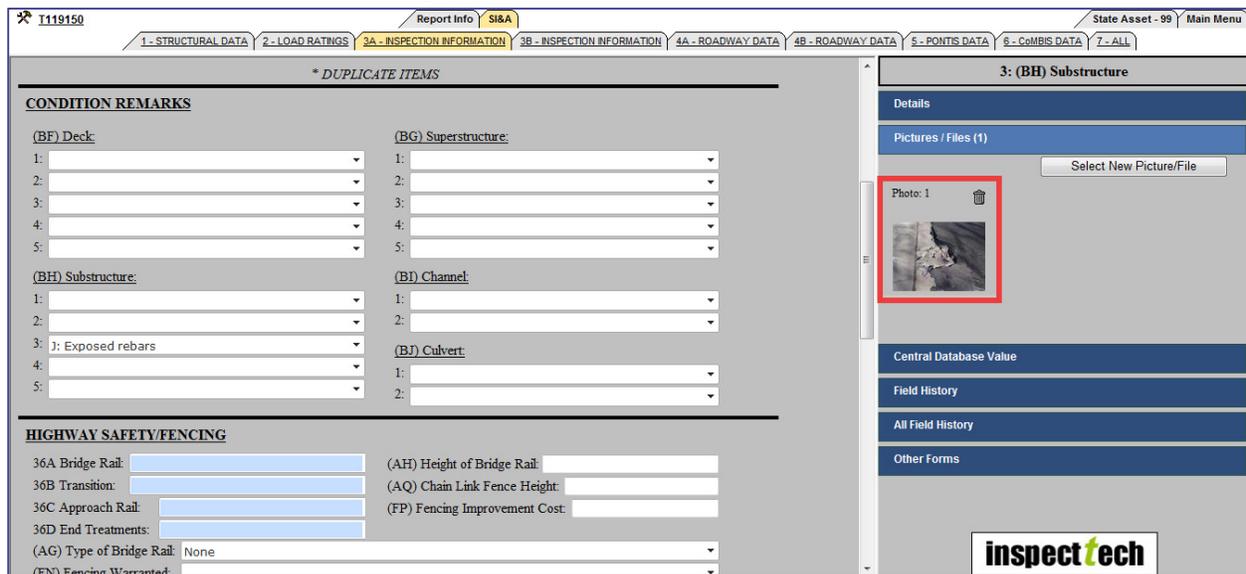
- Open the inspection form via the main tab, **SI&A**, and sub-tab, **3A – Inspection Information**.
 - Select the desired field on the report. The right-hand side bar will respond and open with that field's information.
 - Among the information in the right-hand side bar is a tab called **Pictures/Files**. Click on the **Pictures/Files** tab to expand the area. If there are no pictures previously linked to the field, there will be a message saying, "There are no pictures linked to this field".
 - Click on the **Select New Picture/File** button.
 - Pictures already attached to the report will load.

Select File Screen



- Click the checkbox next to the picture to attach.
- Click on the **Attach Files** button to link them to the field. From this point forward, whenever that field is selected, the picture(s) attached will appear in the right-hand side bar under **Pictures/Files**.

Right-Hand Side Bar with Linked Photograph



- To remove the photograph link, simply click on the trash can icon above the photo.
 - Photo links are required in following sections:
 - Structural Data
 - Conclusions and Recommendations
 - Field Notes
- Note: Photograph links are not required in the SI&A tabs.

K. How to Change the Photograph Ordering in a Report

The order in which the photographs appear on the system must be the same order in which they are to appear in the printed report. You can reorder in-progress report photographs at any time.

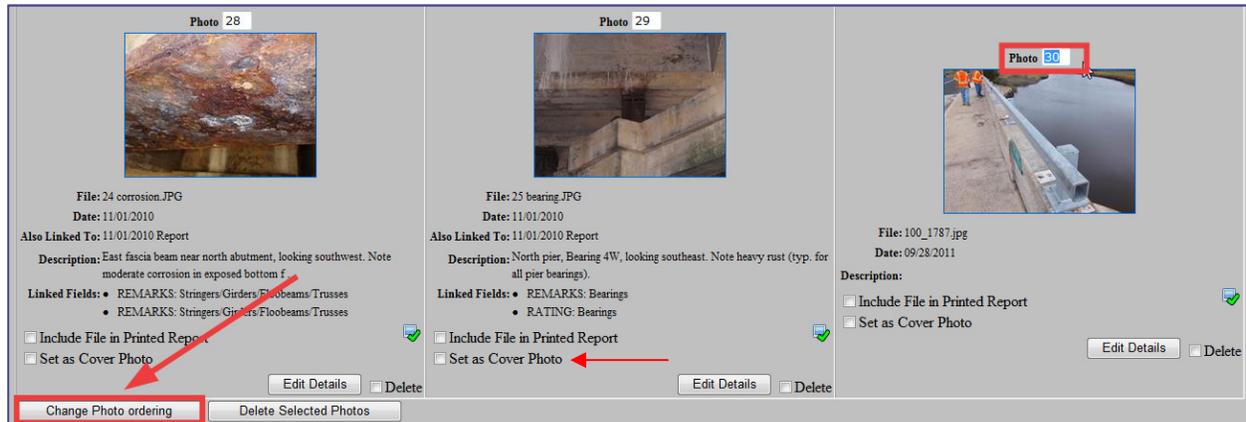
Step-by-Step:

1. Open the **Pictures/Files** sub-tab. Scroll down to the area displaying all the pictures associated with the report.
2. As shown in the screenshot on the next page, above each photo is a small white box with a number inside. The default order is the order in which the photos were uploaded to the report.
 - Change the order of the pictures by simply typing into the box the number which corresponds to the order you want the photo to appear.
 - Click the **Change Photo Ordering** button for the changes to take effect. The software will automatically adjust every picture and place them in the specified order.

Suppose you wanted photo 30 to be the first photo printed in the report. You would change the number 30 to a number 1 and click the **Change Photo Ordering** button. The software will immediately execute the command and picture 30 will move to the first position. Photo 1 will move to the 2nd position, photo 29 will now be photo 30, and so on.

- The user must reorder photographs the way they should appear in the output report.
- Include all photographs required by NJDOT for NBIS Bridges (e.g. both Elevation shots, both Roadway shots, etc.).
- Photographs that are stored in CoMBIS but *are not* used in the printed report must come at the end, after all report photos.
- An Elevation photograph shall be used for all covers when possible. When not possible, a roadway photograph shall be used (see 'Set as Cover Photo' checkbox).

Picture Ordering Options



L. How to Manage Report Sections

BridgeInspect provides tools that add, remove, or reorder the sections of a report. This is useful to control what parts of the report are printed, visible, or prioritized in the final draft.

Step-by-Step:

1. Click on the **Report Sections** sub-tab under the **Report Info** main tab. A list of all the sections associated with that report will appear.

The page will include several options such as:

- View: view each report section individually.
- View PDF: view the entire report in PDF format.
- Remove Section: remove the section entirely from the report.
- Order: rearrange the order of the sections in the report.
- Save Order Changes: save the changes.
- Section Name: change the name of the section.
- Print: include or exclude section from the printed version of the report.
- Include in Table of Contents: include or exclude from the table of contents.
- Insert Cover Page Before Section: insert cover page specific to the section.
- Show Page Number: show or hide page numbers.
- Show Footer: show or hide footers



Report Sections Form

Remove Section	Order	Section Name	Print	Include in Table of Contents	Insert Cover Page Before Section	Show Page Number	Show Footer
<input checked="" type="checkbox"/>	1	Report Cover	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	2	Table of Contents	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	3	Location Map	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	4	Structural Data	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	5	Component Rating Summary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	6	Conclusions/Recommendations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	7	Historical Info/Bridge Description	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	8	Structure Inventory and Appraisal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	9	Pontis Data	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	10	Load Rating Summary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	11	Sketches	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	12	Pictures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	13	Field Notes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	14	Priority Repairs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. To add a PDF attachment to the report:

- Click on the **Add Sections/PDF Attachments** button right above the section name.
- Find the PDF file by using the **Browse** button.
- Name the new attachment by using the **Name** textbox.
- Click **Upload** and the attachment will be added to the report.

Add Attachment/Report Section Screen

- **Note:** The default settings for the new attachment are **Print, Show Page Number, and Included in Table of Contents**. These settings can be changed once the file is uploaded.

3. If a standard report section has been previously excluded from the report, it can be added back easily.
 - Click on the **Add Sections/PDF Attachments** button.
 - Open the **Add Report Section** by clicking the expand button. This will display all standard sections which are not included in the report.
 - Select the sections to add again and click **Update**.

Add Report Sections Screen



The screenshot shows a window titled "Add Report Section" with a blue header. Below the header, it says "The report sections below can be added to the Report Sections." and there is an "Update" button. The main content is a table with columns for "Add" (checkboxes), "Section Name", and "View" (links).

Add	Section Name	View
<input type="checkbox"/>	Culvert	View
<input type="checkbox"/>	Railroad Safety	View
<input type="checkbox"/>	Roadway	View
<input type="checkbox"/>	Rocker Bearings	View
<input type="checkbox"/>	Substructure (Abutment)	View
<input type="checkbox"/>	Substructure (Arch/Frame)	View
<input type="checkbox"/>	Substructure (Bent)	View

- **Note:** When a section is added it will be at the bottom of the report, so you may have to reorder the report sections as necessary.



SECTION III – BridgeInspect COLLECTOR LAPTOP MODULE

The BridgeInspect laptop version *does not* require Internet connection to run. It is designed for use on site to reduce the overall time required to inspect a bridge and develop the inspection report.

Via the laptop version, an inspector can start and even complete the entire inspection report directly from the inspection site. After the inspection, the inspector synchronizes the report to the server (with Internet connection) where it can be edited, submitted, and approved.

A. Requirements

For the laptop version, you will need 10 Gigabytes of free disk space. Since the system will be storing all of the pictures and attachments related to the assets, additional space may be required depending on the number of inspections and the amount of pictures.

- **Note: NJDOT requires all users of the laptop version to use the software on Windows 7 Professional Operating System with encryption turned on. The Home version does not offer encryption and is therefore not to be used. Refer to Scope of Work for additional requirements.**

B. Installation

Refer to the complete BridgeInspect Collector Laptop Version manual for installation instructions.

C. How to Log into Collector Laptop Version

Step-by-Step:

1. Double-click the **BridgeInspect Collector icon** on the user's desktop.

BridgeInspect Collector Icon



2. Type in the user's login credentials (same for internet-based system) and click the **Login** button.

Login Screen



D. Collector Main Page Laptop Version

The Laptop Version's **Main** page is nearly identical to the online version, with the exception of the tabs across the top of the screen. The laptop version only has three main menus:

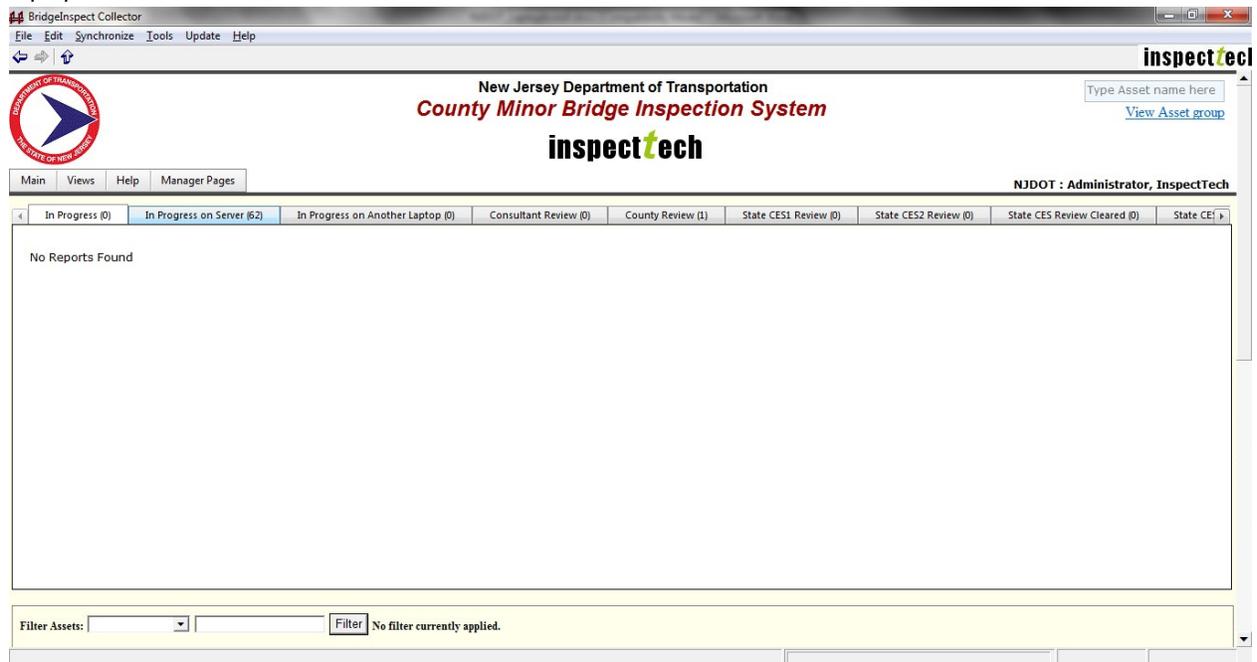
- **Main** is different from the Main tab on online version of the software. Several of the tasks listed in the online version are not present in the laptop version (i.e. change password and navigate to Manager).
- **GIS** and **Help** are the same as the online version.
- **Manager Pages** allows only qualified users of the laptop version to run some functions from the Manager side of the software. This includes queries and system reports. This tab is useful for users who venture out into the field and need to be ready for any type of question or immediate response pertaining to their bridges.

The progress tabs are also a little different.

- **In Progress** shows all of the inspection reports that are in progress on this laptop.
- **In Progress on Server** shows all inspection reports that are in progress on the online version.
- **In Progress on Another Laptop** shows inspection reports that are in progress on a different laptop.



Laptop Main Screen



E. How to Download a Report from the Server

If the user wants to continue or edit an inspection report that is currently in progress on the server, they can easily bring it back to the laptop version.

Step-by-Step:

1. Click the **In Progress on Server** tab on the laptop main page.
2. Locate the desired report.

Download Report





3. Click the **Action Tools** icon in the far right column. A dropdown will display two options:
 - Download Report
 - Delete Local Report.
4. Click the button next to **Download Report**. The download may take a few seconds.

The report will transfer to the **In Progress** tab for the user to edit.

Downloaded Report

Inspection Date	State Number	Asset Name	Crew Chief/Team Leader	Asset Type	Inspection Type	Group Number	Owner Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative	Status	
03/22/2012	Test Bridge	Test Bridge	Administrator, InspectTech	Bridge	Regular Inspection					In progress	

F. How to Synchronize a Laptop

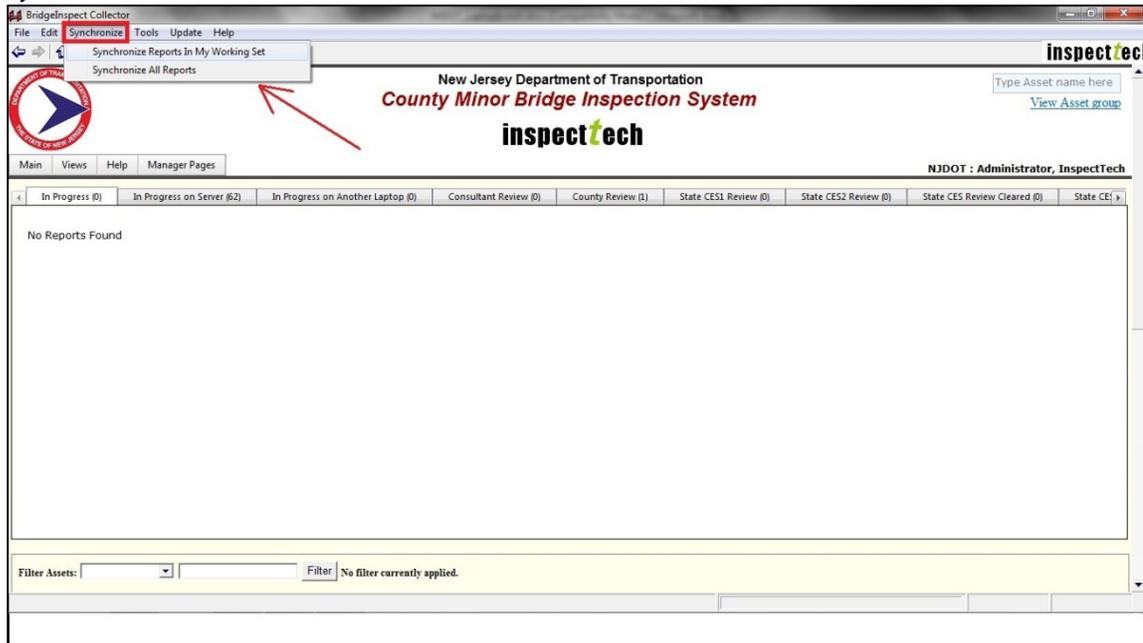
Synchronizing is the process of transferring data entered on the laptop to the server. Once it is synchronized to the server, the information in the inspection report is updated on the online version of the software. This process provides a means of backing up the user's computer.

- **Note: InspectTech recommends synchronizing the user's laptop twice a day: once in the morning and once in the evening. This ensures that the server and laptop are updated with information for all users.**

Step-by-Step:

1. Click **Synchronize** from the menu bar at the top of the screen.

Synchronize Menu



2. From the **Synchronize** menu, select the action the user would like to take:
 - **Synchronize Reports in My Working Set** limits the information that is retrieved by only synchronizing to assets that are part of the user's assigned working set.
 - **Synchronize all Reports** retrieves and updates data for all assets downloaded on laptop.
 - **Note:** *The synchronization process can take a few minutes.*
3. Click **Done** when the synchronizing process is complete.



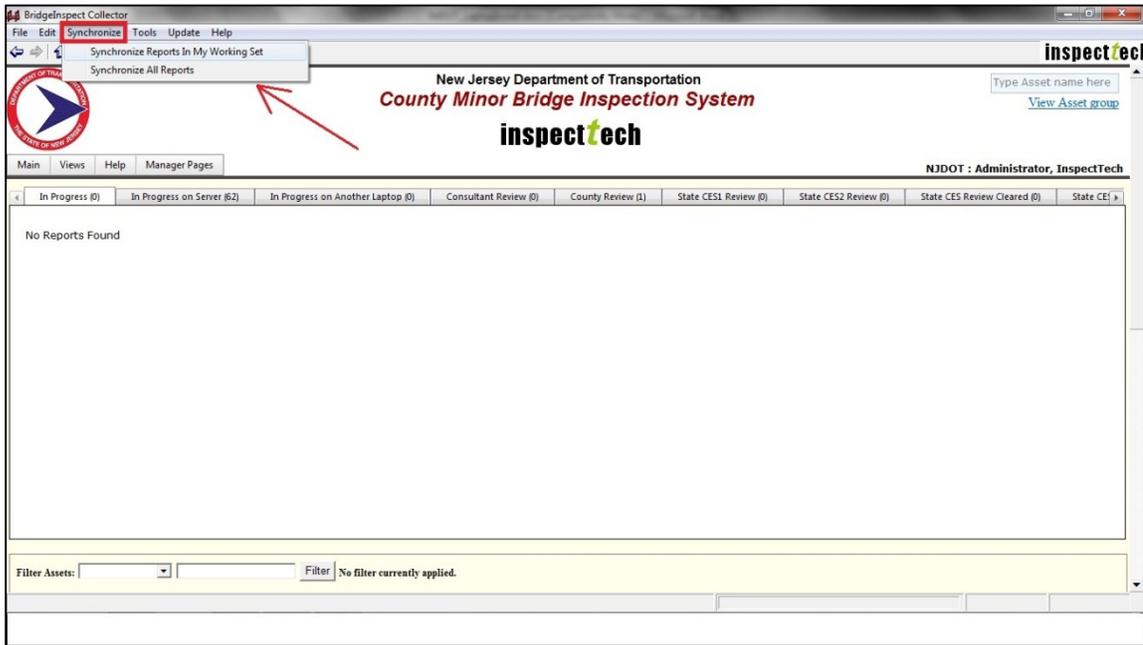
G. How to Update a Laptop

Updating the laptop provides the most current of the core changes to BridgeInspect Collector software. The laptop software automatically detects updates upon Internet connection and software launch. The user can also manually update the software.

Step-by-Step:

1. Click **Update** from the menu bar at the top of the screen.

Update Menu



2. From the Update menu, select **Update BridgeInspect Collector**. When the update process begins, a progress window will appear.
 - **Note:** *The update process can take a few minutes depending on the amount of updates that need to be made.*



H. How to Reset Program Data on a Laptop

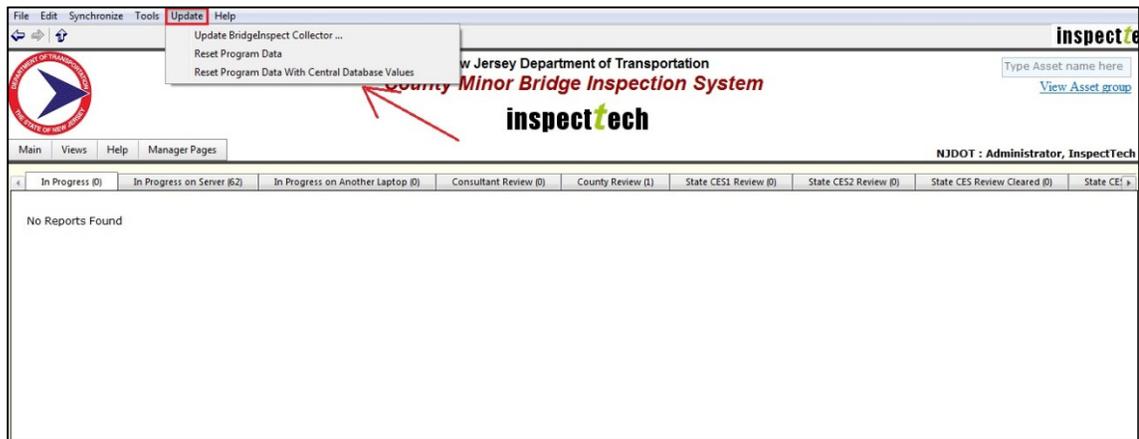
Reset Program Data is used to reboot the software when the software is not working as expected. This process takes five to ten minutes and does not affect any inspection reports and/or data collected using the laptop.

InspectTech support personnel may ask the user to Reset Program Data if the user reports have issues with the software.

Step-by-Step:

1. Click **Update** from the menu bar at the top of the screen.

Update Menu



2. From the Update menu, select **Reset Program Data**.
 - **Note: The Reset Program Data with Central Database Values should only be used when working with InspectTech support personnel.**



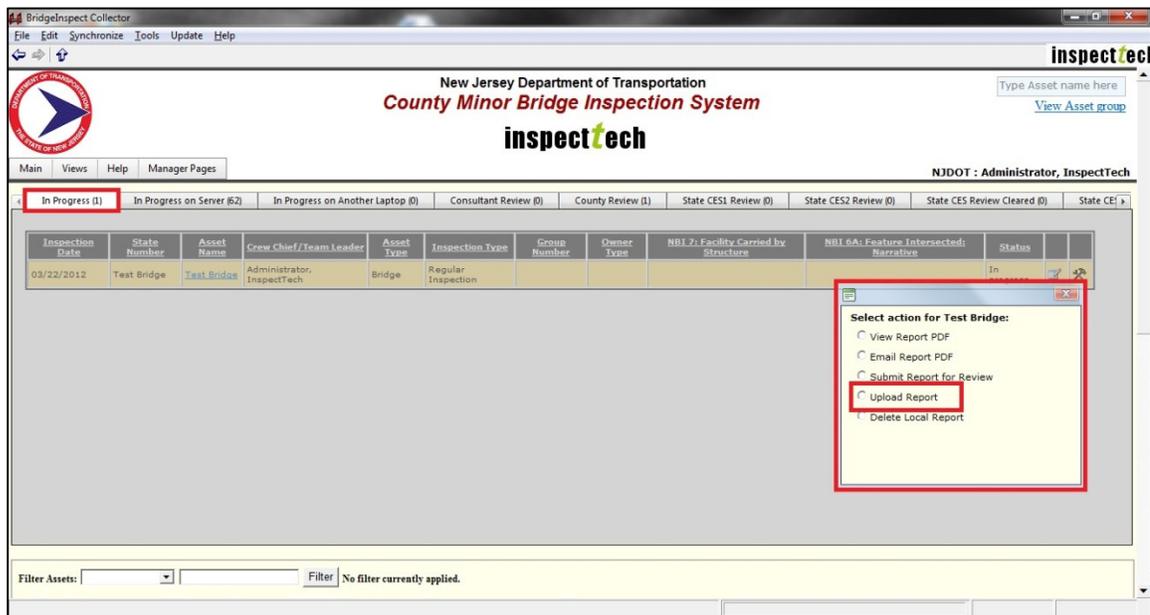
I. How to Upload a Report to the Server

After the report has been created using the laptop software, it needs to be uploaded to the server so it can be accessed in the **Collector online** version. Once uploaded, the report can be progress through the normal workflow.

Step-by-Step:

1. On the Main screen, click the **Action icon** () next to the desired report.
2. The **Action** menu will appear.

Action Menu



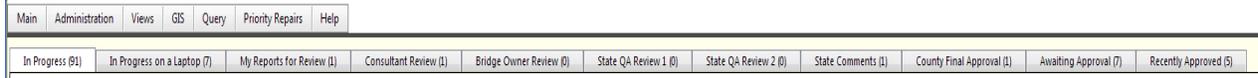
3. Select **Upload Report** to upload to the server



SECTION IV – INSPECTION REPORT WORKFLOW

The purpose of CoMBIS Workflow is to enhance communications between Bridge Owners, Consultants, and State QA Reviewers. The workflow is entirely controlled by the following tabs and associated action items set according to the user’s role and permissions.

WorkflowTabs (All)



A. Overview of Main Workflow Tabs

The tabs – *In Progress*, *In Progress on a Laptop*, *My Reports for Review*, *Awaiting Approval*, and *Recently Approved* are NOT considered as part of the formal workflow, although they are essential part of the flow. These are called report statuses. They are defined below:

Workflow Status Tabs (not part of formal workflow)



In Progress: An inspection report has been started and is in progress but not completed.

In Progress on a Laptop: Inspection reports which have been started and/or are being worked on, but have not been uploaded to the BridgeInspect program.

My Reports for Review: This tab opens up whenever there are reports submitted to user, pending review.

Workflow Status Tabs (not part of formal workflow)



Awaiting Approval: This status represents a collection of all reports that are currently in the workflow process. Reports in any workflow stage will appear on this tab and that stage can be identified under headings ‘Submitted to’ and ‘Status’.

- **Note: Depending on the workflow stage, certain users will have ‘Read only’ permission rights under this TAB.**

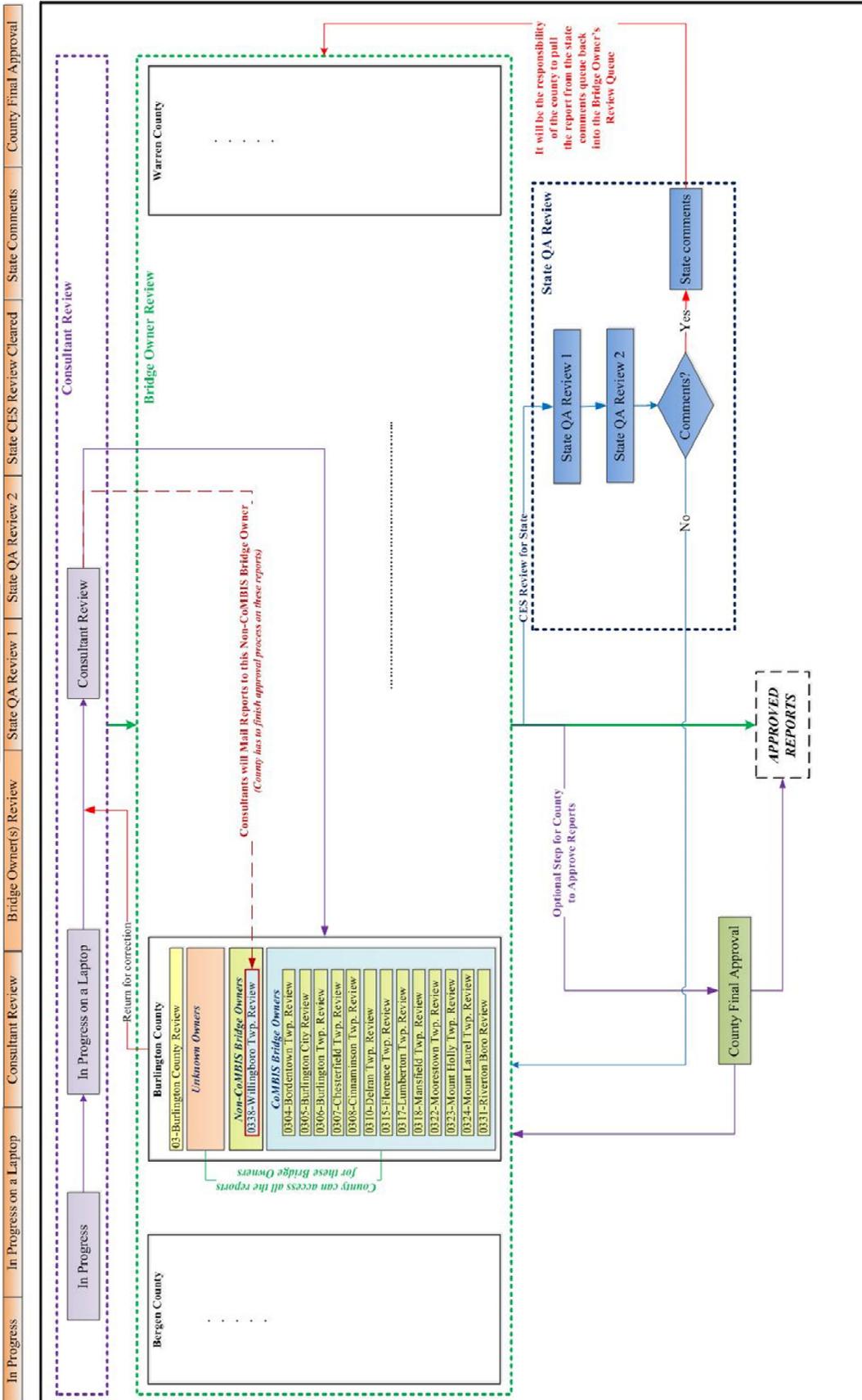
Recently Approved: Both the inspector and reviewer have deemed the report to be completed. At this point, no additional changes can be made to the report. Once the status has been placed in “Approved” no edits/changes are allowed.

B. Workflow Diagram

The complete CoMBIS workflow is shown in the flowchart below and attached at the end of this Manual in Section VII-D.



CoMBIS Workflow





This flowchart represents an overall view of the complete workflow for CoMBIS. The three major parts are *Consultant Review*, *Bridge Owner Review*, and *State QA review*. Bridge Owners can be classified as one of the following types of owner:

- County Owned Bridges,
- Unknown Owners,
- Non-CoMBIS Bridge Owners – Township / Municipal / Local Bridge owners who are NOT part of the system.
- CoMBIS Bridge Owners – Township / Municipal / Local Bridge owners who are part of the system.

C. Action Tools

The Action tools icon, , will contain different actions depending on a user's permissions and what stage of the workflow the inspection report is currently in. The following list defines various Actions that exist within the workflow:

Action Tool Standard Definitions:

- View Report PDF:* Allows the inspector to see the most recent version of the inspection report in PDF format. If the report is in progress the current editable report is shown.
- E-mail Report PDF:* If selected, you may e-mail a PDF version of the report to an e-mail address.
- Delete Server Report:* Allows the inspector to delete a report that has yet to be approved. All information entered in the report will be deleted and the inspector will be able to start a new report if desired.
- View Change Report:* Displays a list of all fields that were updated with a new value along with who made the change and what the new value is.
- View Audit Report:* Displays the audit log for the inspection report which includes all changes to the report not just final values as the change report does.
- Submit for Review:* The inspector has deemed the report to be complete but it has yet to be approved by the appropriate reviewer.
- Assign Report to Me:* Keeps the report in the current workflow stage and assigns it to you.
- Assign Report to Other User:* Keeps the report in the current workflow stage and assigns it to another user.

Other Action Tools Found In Various Workflow Stages:

Stop Consultant Review	Stop Bridge Owner Review	Stop State QA Review 1	Stop State QA Review 2	Stop State Comments
Consultant Review Completed	Bridge Owner Review Completed	State QA Review 1 Completed	State QA Review 2 Completed	State Comments Completed

Stop or Completed Explanations:

Stop [Current Workflow Stage]: This always means that you are sending the report back to the previous workflow stage. This can potentially have different results if the previous workflow stage is not the same. For example, if a report is in *Bridge Owner Review* this action will usually move it back to consultant review but it could move it to *State Comments* if it was there last.

Complete [Current Workflow Stage]: This action is used to move the report into the next workflow stage. The options are based on the workflow flow chart and are available by dropdown to the user. The option to return the report to the previous stage is also an option.



Here are the possible places for each action to potentially send a report based on the workflow flow chart:

- Stop Consultant Review: In Progress, Bridge Owner Review
- Consultant Review Completed: Bridge Owner Review
- Stop Bridge Owner Review: Consultant Review, State Comments, County Final Approval
- Bridge Owner Review Completed: Approve Final Report, County Final Approval, State QA Review 1, Consultant Review
- Stop State QA Review 1: Bridge Owner Review
- State QA Review 1 Completed: State QA Review 2, Approve Final Report
- Stop State QA Review 2: State QA Review 1
- State QA Review 2 Completed: Bridge Owner Review, State Comments, Approve Final Report
- Stop State Comments: State QA Review 2
- State Comments Completed: Bridge Owner Review, Approve Final Report

Undo Submit for Approval: Administrator users can select this option to bring report back to previous workflow stage.

Approve Final Report: Both the inspector and reviewer have deemed the report to be completed. At this point no additional changes can be made to the report (must be performed when preparing Final report to Bridge Owner). Once the status has been placed in “Approved” no edit changes are allowed.

The following tabs are part of the CoMBIS Workflow and are discussed in detail:

Workflow Tabs

Consultant Review (1)	Bridge Owner Review (0)	State QA Review 1 (0)	State QA Review 2 (0)	State Comments (1)	County Final Approval (1)
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D. Workflow Stages

1. Consultant Review

The Consultant Team Member (TM), Consultant Team Leader (TL), and Consultant Project Manager (PM) can create a new report from the existing asset in the central database. The Consultant TM cannot submit that report to anyone (A TM informing a TL that a report is ready for his review will be an informal process outside the system). The Consultant TL can submit report to the PM for Consultant Review. Note that the TL also has option to submit report to the Bridge Owner, **but this should not be used (PM or Certifying Engineer is always responsible for submitting the report to the Bridge Owner)**. The Consultant PM can reject or approve the report. After Consultant Review, the PM is required to submit report to the Bridge Owner for Bridge Owner Review.

The workflow is initiated when the Consultant TM creates a new report of an asset, and the new report is visible to Consultant’s *In Progress* tab. The TM will have following Action items:

- View Report PDF
- E-mail Report PDF
- Delete Server Report
- View Change Report

The Consultant TL will review the report while it is in the *In Progress* tab, and then submits the report to Consultant PM for review and submission to Bridge Owner. To do this step, the TL can click on **Submit Report for Review** from the following Action items:

- *View Report PDF*
- *E-mail Report PDF*
- **Submit Report for Review**
- *Delete Server Report*
- *View Change Report*

At this step, the report will be visible in the *Consultant Review*. During Consultant Review process, the Consultant PM will have appropriate role and permission to select one of the following Action items:

- *View Report PDF*
- *E-mail Report PDF*
- **Stop Consultant Review**
- **Consultant Review Completed**
- *Assign Report to Me*
- *Assign Report to Other User*
- *View Change Report*

The PM can reject the report for further corrections by selecting **Stop Consultant Review**. If there are no comments and the report is acceptable, the PM can submit report to next stage of the workflow (which is *Bridge Owner Review*) by simply clicking on **Consultant Review Completed** and selecting the appropriate “Next Workflow Stage” and “Assign To” options below:

Consultant Review Completed Screen

The screenshot shows a window titled 'TEST001' with the following elements:

- Next Workflow Stage:** A dropdown menu with 'Bridge Owner Review' selected.
- Assign To:** A dropdown menu with 'Bridge Owner Review' selected.
- Comments:** A text area with 'Stop Review Process' entered.
- Buttons: 'Consultant Review Completed' and 'Close'.
- Report Review Progression:** A table with the following data:

	Date Submitted	Submitted By	Submitted To	Action	Action Completed?	Comments
Edit	03/22/2012	Grajeda, Efrain	Amato, Cory	Moved to consultant review	Yes	

- **Note:** The report can be sent back to the previous workflow stage by selecting the “Stop Review Process” in the Next Workflow Stage drop-down.



If the report comes back from *Bridge Owner Review* for correction or comments, it will automatically go to *Consultant Review* tab of the Consultant PM.

For the Priority Repair process workflow, see Priority Repair Workflow in Section V.

2. Bridge Owner(s) Review

Bridge Owner(s) can be defined as

- County – County Owned Bridges,
- Unknown Owners,
- Non-CoMBIS Local Bridge Owners who are NOT part of the system.
- CoMBIS Local Bridge Owners who are part of the system.

The Consultant will submit report for review to County for County Owned Bridges, Unknown Bridges, and Non-CoMBIS Local Bridge Owners. Consultant will submit report directly to Local Owners, who are part of CoMBIS system.

CoMBIS Local Bridge Owners are responsible for review and finishing 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.

In the *Bridge Owner Review* tab, the following Action items are available for the County Project Manager:

- *View Report PDF*
- *E-mail Report PDF*
- **Stop Bridge Owner Review**
- **Bridge Owner Review Completed**
- *Assign Report to Me*
- *Assign Report to Other User*
- **Approve Final Report**
- *View Audit Report*
- *View Change Report*

The County Project Manager (or assigned County personnel) will review the submitted reports. The reports can be either rejected by selecting *Stop Bridge Owner Review* and it will go back into *Consultant Review* for correction, or approved by clicking on **Approve Final Report**.

- **Note: Before you click on Approve Final Report, make sure you don't have any pending comments or required documents. There is no warning issued by the program and it will finalize the report.**



The Municipal Project Manager and Local Bridge Manager have similar Action tools as the County PM, and therefore follow the same steps for their review, rejection, and approval process.

3. State QA Review

State QA Review 1:

The Consultants are required to follow the current Consultant Evaluation Criteria for CoMBIS bridges. This document is provided by NJDOT and is available for download on the website at

<http://www.state.nj.us/transportation/eng/structeval/countyculvertinsp.shtm>

As per the criteria, NJDOT will perform evaluation on a minimum of 10% of the total bridges in the contract. These bridges are randomly selected by NJDOT personnel.

NJDOT Support Access, usually an Engineer, will assign any report from the *Bridge Owner Review* tab to himself/herself by clicking *Bridge Owner Review Completed* from the following available Action items:

- *View Report PDF*
- *E-mail Report PDF*
- ***Stop Bridge Owner Review***
- ***Bridge Owner Review Completed***
- *Assign Report to Me*
- *Assign Report to Other User*
- *Approve Final Report*
- *View Audit Report*
- *View Change Report*

The selected report will be shifted over to *State QA Review1* tab for the engineer to review and process. Once the review is complete, the report can be submitted to NJDOT Project Manager (PM) for *State QA Review 2*. The following is the list of Action items for NJDOT Support Access:

- *View Report PDF*
- *E-mail Report PDF*
- ***Stop State QA Review 1***
- ***State QA Review 1 Completed***
- *Assign Report to Me*
- *Assign Report to Other User*
- *Approve Final Report*
- *View Audit Report*
- *View Change Report*

The Engineer will select *State QA Review 1 Completed* to process report to next workflow step.



State QA Review 2:

For *State QA Review 2*, the NJDOT PM will comment on the evaluation done by the Engineer. The report will either have no comments or will have State comments from either reviewer. If there are no comments, then the NJDOT PM will simply select *State QA Review 2 Completed* and the report will go back to *Bridge Owner Review* tab. The following Action items are available to the NJDOT PM:

- *View Report PDF*
- *E-mail Report PDF*
- **Stop State QA Review 2**
- **State QA Review 2 Completed**
- *Assign Report to Me*
- *Assign Report to Other User*
- *Approve Final Report*
- *View Audit Report*
- *View Change Report*

The NJDOT PM can also reject the report if he/she does not agree with the Engineer's evaluation of the Consultant and send it back to Engineer by selecting *Stop State QA Review 2 to send it back to State QA Review 1*.

- **Note: NJDOT personnel should never select option *Approve Final Report* although it is available to them.**

If the NJDOT PM agrees to the evaluation performed by Engineer, and wants to process comments, then he/she can submit the report to next workflow level, which is *State Comments*. This can be achieved by simply selecting *State QA Review 2 Completed*.

State Comments:

It is the responsibility of the County to pull the report from *State Comments* tab and put it back into the *Bridge Owner Review* tab. If the County PM does not agree with State Comments, they can either approve report without sending back to the State or Bridge Owner, or simply return to the State or Bridge Owner with County's feedback. The following Action items are shown in *State Comments*:

- *View Report PDF*
- *E-mail Report PDF*
- **Stop State Comments**
- **State Comments Completed**
- *Assign Report to Me*
- *Assign Report to Other User*
- *Approve Final Report*
- *View Audit Report*
- *View Change Report*

To send the report back to the State, select *Stop State Comments*. To approve the report without incorporating the State's comments, select *Approve Final Report*. To accept the comments and get it corrected by the Consultant, click



on *State Comments Completed* and the report will go to *Bridge Owner Review* tab. The user will then select *Bridge Owner Review Completed* in order to send the report back to *Consultant Review* (this step is not backward oriented, rather it is forward oriented).

E. County Final Approval

This is an optional step before the reports are approved. It can be used by the counties to finalize the reports by Unknown owners and Non-CoMBIS Local Owner.

F. Providing Comments

Bridge Owners (and County in case of Unknown Owner and Non-CoMBIS Local) will provide comments back to consultants within Workflow or reject the reports, if needed. If there are too many comments, the best practice is to create a separate PDF file and attach in the report as Comments to Report.

SECTION V – PRIORITY REPAIR PROCESS AND WORKFLOW

The Priority Repair workflow is one of the most important aspects of the system. Inspectors are able to create priority recommendations that are immediately available to the Bridge Owner. The Priority Repairs tab is broken down into several major sections that are specific to certain users, including the Inspector, the Bridge Owner Engineering Section, and the Bridge Owner Maintenance Section.

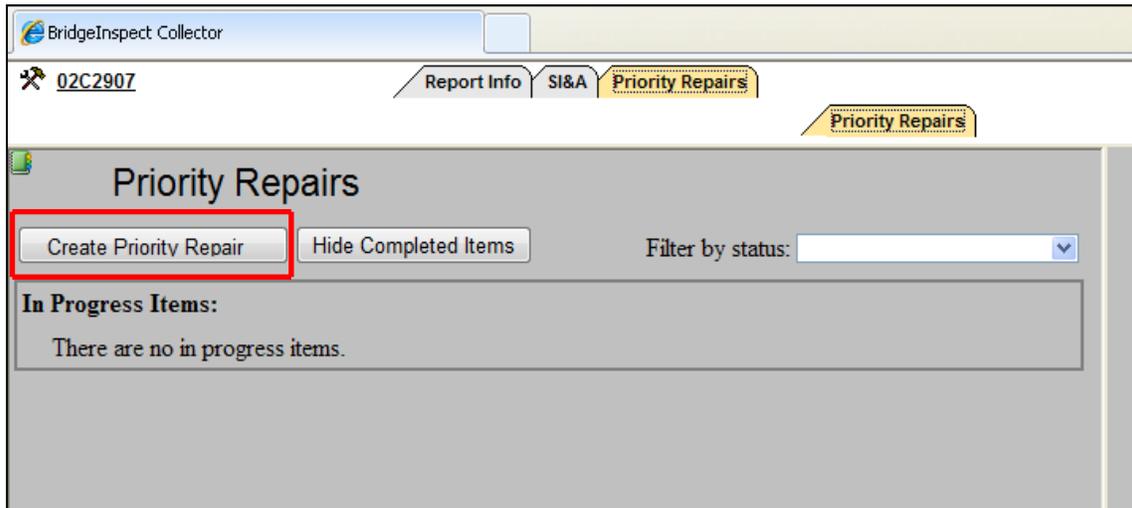
A. To Display the Priority Repairs Tab

If the Priority Repairs tab is not displayed, go to the *Report Info* tab, then go to sub-tab *Forms* and scroll all the way down to the bottom of the screen. Check the box marked Priority Repairs to activate the tab.

B. To Create a New Priority Repair

On the Priority Repairs Tab in the top row, click on “**Create Priority Repair**” button to generate a new Priority record. When multiple Priority Repairs are needed within the same report, you may click the button again to create additional Priority records that will be added below any existing records.

Priority Repairs Tab – Create Priority Repair



The screenshot displays the BridgeInspect Collector web application interface. At the top, the browser title is "BridgeInspect Collector". Below the title bar, the report ID "02C2907" is visible. The navigation tabs include "Report Info", "SI&A", and "Priority Repairs", with "Priority Repairs" being the active tab. A secondary "Priority Repairs" button is located in the top right corner. The main content area is titled "Priority Repairs" and contains a "Create Priority Repair" button, which is highlighted with a red rectangular box. Other controls include a "Hide Completed Items" button and a "Filter by status:" dropdown menu. Below these controls, a section titled "In Progress Items:" contains the text "There are no in progress items."



C. Different Sections of Priority Repair Form

Below are the main sections of the Priority Repair screen.

Priority Repairs Tab – Sections

The screenshot shows the 'Priority Repair' form interface. The form is divided into several sections, each highlighted with a red bracket and a corresponding number in a red oval on the right side of the page:

- 1. General Area:** Includes the 'Priority Repair' title, 'Create Priority Repair' and 'Show Completed Items' buttons, a 'Filter by status' dropdown, and the 'In Progress Items' section with a 'Delete' and 'View PDF' button.
- 2. Inspector Area:** Contains the 'Inspector' section with fields for 'Date Reported Entered', 'Originally Reported By', 'Describe Deficiency', 'Description of Proposed Work', and 'Description of Interim Work Required to Maintain Structure Until Proposed Work can be Accomplished'. It also includes 'Send Notification E-Mail 1' and 'Also include these E-Mail Addresses' fields, and 'Date E-Mail Sent', 'E-Mail Sent By', and 'E-Mail Sent To' fields.
- 3. Owner's Engineering Area:** Features the 'Bridge Owner - Engineering Section' with a 'Reject/Return to Inspector' button, 'Last Updated Date', 'Last Updated By', 'Date Returned to Inspector', 'Date Completed', 'Final Work Description', and 'Interim Work Description' fields. It also includes 'Send Notification E-Mail 2' and 'Also include these E-Mail Addresses' fields, and 'Date E-Mail Sent', 'E-Mail Sent By', and 'E-Mail Sent To' fields.
- 4. Work Items Area:** Contains the 'Work Items Required to Complete the Described Work' section with three 'Item Description' text areas.
- 5. Owner's Maintenance Area:** Includes the 'Bridge Owner - Maintenance Section' with a 'Beyond Capacity of Maintenance Dept - Recommend Contractor Be Hired' dropdown, 'Personnel Assigned', 'What Was Done/Materials Used', and 'Maintenance Comments' fields. It also has 'Was Interim Work Completed', 'Date Interim Work Flagged as Complete', 'Date Final Work Completed', and 'Flagged as Complete By' fields.
- 6. Photo Area:** Located at the bottom, it includes a 'Select New Picture/File' button and the text 'There are no pictures linked to this record'.



D. Priority Repairs Workflow

The Priority Repair will move through the following different status categories in the workflow process.

- New (*When created by Inspector*)
- Awaiting Review (*When submitted through Send Notification E-mail 1 to owner*)
- Returned to Consultant (*Owner sends back to inspector for correction*)
- Review Complete (*Owner sends to maintenance through Send Notification E-mail 2*)
- Interim Repairs Performed (*Maintenance will update “**Was Interim Work Completed**”*)
- Final Repairs Performed (*Maintenance will update “**Date Final Work Completed**”*)
- Completed (*Bridge Owner will update “**Date Final Work Verified as Completed**”*)

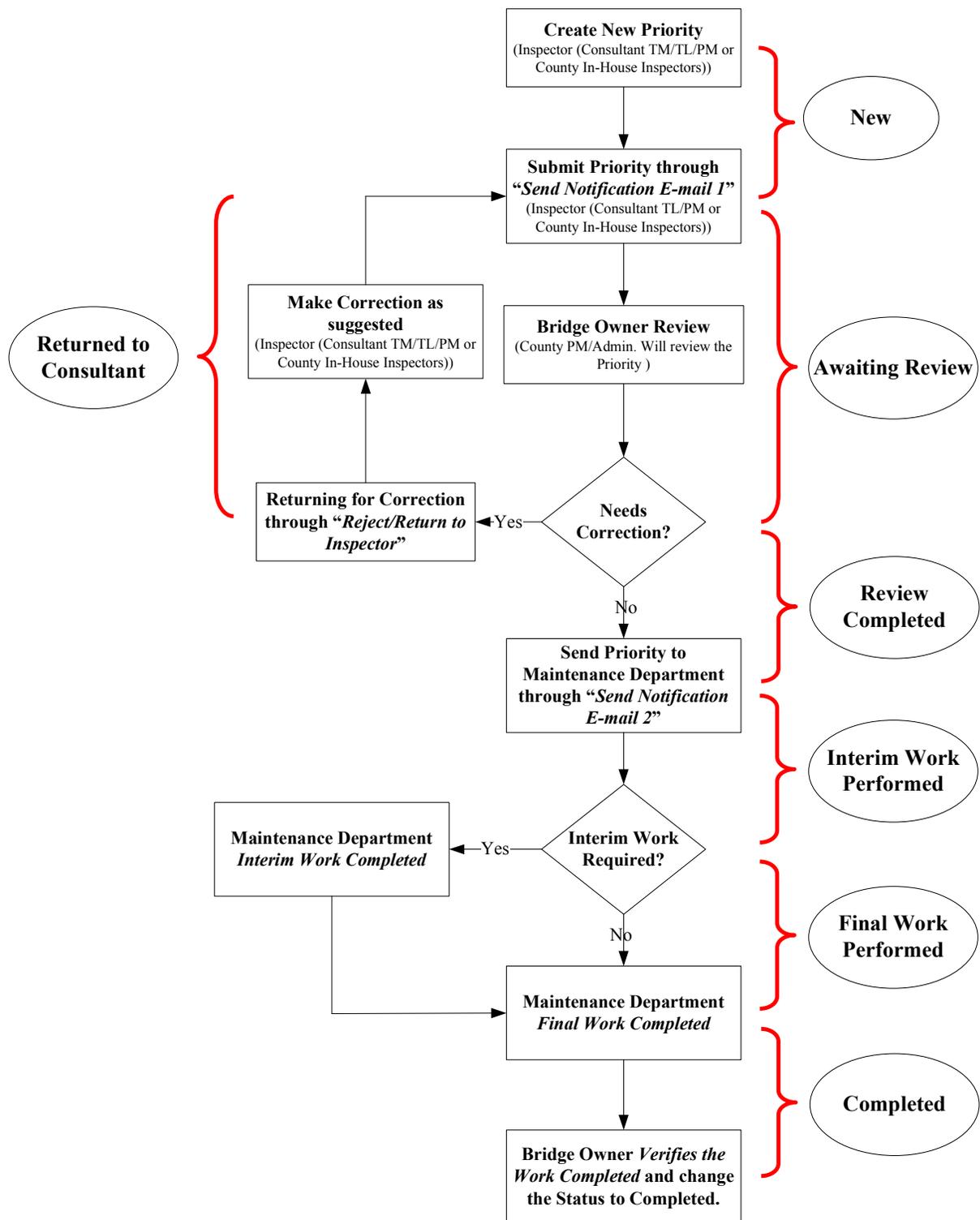
Priority Repairs Tab – Status

The screenshot shows a web form titled "Priority Repair". At the top, there are two buttons: "Create Priority Repair" and "Show Completed Items". Below these is a section labeled "In Progress Items:". A "Status" dropdown menu is open, showing a list of options: "New", "Awaiting Review", "Returned to Consultant", "Review Complete", "Interim Repairs Performed", "Final Repairs Performed", and "Completed". The "New" option is currently selected. Other form fields visible include "Item Number:", "Is Interim Work N", and "Inspector".

A flowchart representing the workflow of Priority Repairs is shown on the next page.

- **Note: Consultants should not access or change the status dropdown but only submit by sending notification e-mails.**

Priority Repair Process Work Flow (Flow Chart)





E. Sections of Priority Repair Form

1. General Area

The top section of the screen controls what will be displayed on the rest of the screen.

An Inspector (from Consultant, County, or State) can create a new Priority Repair by clicking **Create Priority Repair**. The message “New Item Added” will display. If one or more Priority Repairs have already been created, the new record will appear at the top. The Item Number is automatically system-generated as an indexing number.

Priority Repairs Tab – New Priority Repair

- **Priority** - Set the Priority level here. The options are E (Emergency), 1, and 2.
- **Category of Work** - Describe the category of work that this priority repair falls under.

Priority Repairs Tab – Priority Levels

- **Is Interim Work Needed** - If a Priority Repair will need to be completed in stages, with a temporary action required before the permanent one, select “Yes” here. For example, the deck has a hole in it. The Bridge Owner does not have forces that can perform a through-repair so the work will have to be contracted out. In order to get the bridge back in service quickly, a steel plate needs to be placed over the hole as an interim measure.



Priority Repairs Tab – Interim Work

Is Interim Work Needed:	Yes
	Yes
Inspector	No

2. Inspector Area

This area is for the Inspector (usually Consultant, but may also be Bridge Owner personnel) to fully document a Priority Repair. Once they have completely documented the repair, the inspector sends a notification e-mail (through the system) to formally notify the Bridge Owner that the system contains a Priority Repair for their review.

- **Date Originally Entered** - The date you created this Priority Repair entry.
- **Originally Reported By** - Type in the name of the person who is documenting this issue or deficiency.
- **Describe Deficiency** - A complete description of the problem.
- **Description of Proposed Work** - A complete description of the proposed work.
- **Description of Interim Work...** - If the situation requires some interim work, with the remaining work occurring later, then document the required interim items here. When no interim work is required, leave blank.

Priority Repairs Tab – Inspector Section

Inspector

Date Reported Entered: 03/05/2012 **Originally Reported By:** _____

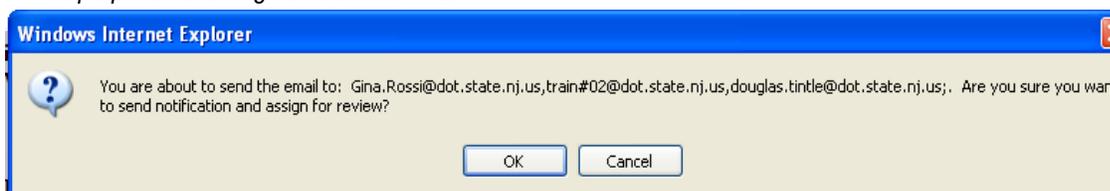
Describe Deficiency: THIS IS A TEST ONLY - County Comments. - Please revise text to reflect this is a test and add 1 additional pictures (can be of anything) including roadway views and then

Description of Proposed Work: REVISE -- Repair the timber deck and replace the asphalt overlay.

Description of Interim Work Required to Maintain Structure Until Proposed Work can be Accomplished: REVISE - Place a steel plate over the hole until the repairs are made.

- **Send Notification E-Mail 1** - Clicking this button sends the Priority Repair to the Bridge Owner (places it in their “to be reviewed” queue), and then locks the screen for the Inspector. You will not be able to make changes to this Priority Repair once you click this button – UNLESS the Bridge Owner sends it back to you. This action also sends an e-mail to all those on the default e-mail list for the Bridge Owner. Message box with default e-mail list will pop up once you click Send Notification E-mail 1. You also have the option to add additional e-mail addresses PRIOR to sending the e-mail.

Pop up Box showing default E-mail list.



- **Also include these E-Mail Addresses** - Enter any additional e-mail address(es) you wish to have the notification sent to (Separate e-mail addresses with semi-colon).
- **Date E-Mail Sent** (Read only) - Date will appear only after **Send Notification E-Mail 1** was clicked.
- **E-Mail Sent By** (Read only) - A record of who sent the notification.
- **E-Mail Sent To** (Read only) - A record of the list of e-mail addresses the notification was sent to.



Priority Repairs Tab – Inspector Section to Send Priority

Send Notification E-Mail 1 Also include these E-Mail Addresses: teagleson@co.burlington.nj.us; eklawunn@co.bur

Date E-Mail Sent: 03/05/2012 E-Mail Sent By: Ari, Albert E-Mail Sent To: teagleson@co.burlington.nj.us

- Once the e-mail notification has been sent to the default list of e-mail addresses, the inspector will not have access to “In Progress Items.”

Priority Repairs Tab – Locked View

In Progress Items:

Delete View PDF

Status: Review Complete

In Progress Items

Item Number: 2012_00008 Priority: E Category of Work: TEST

Is Interim Work Needed: Yes

Inspector

Date Reported Entered: 03/08/2012 Originally Reported By: Harjit Bal

Describe Deficiency: THIS IS A TEST!!!! IGNORE.... EMERGENCY

Description of Proposed Work: THIS IS A TEST!!!! IGNORE.... EMERGENCY

Description of Interim Work Required to Maintain Structure Until Proposed Work can be Accomplished: THIS IS A TEST!!!! IGNORE....

Send Notification E-Mail 1 Also include these E-Mail Addresses: harjit.bal@dot.state.nj.us, gina.rossi@dot.state.n

Date E-Mail Sent: 03/08/2012 E-Mail Sent By: Kuperus, Jonathan E-Mail Sent To: jonathanp@passaiccounty.nj.or

- **Owner sending back to Inspector for correction**
In cases where corrections are required from the Inspector for a submitted Priority, the Bridge Owner can Reject/Return to Inspector for the necessary corrections. The Inspector portion of the Priority Repair will then be unlocked for the Inspector, and the Status will show “Returned to Consultant”. The Inspector then has to make necessary corrections as suggested and re-send the Notification e-mail again as discussed above in previous steps.
- **Note: Owner allowed to change Priority Level**

Priority Repairs Tab – Returned to Consultant by Bridge Owner (Rejected)

Maintenance Needs and Recommendations

Create Maintenance Need Show Completed Items Filter by status:

In Progress Items:

Delete View PDF

Status: Returned to Consultant

In Progress Items



3. Bridge Owner - Engineering Section

A Priority Repair record will pass through the Bridge Owner area more than once. The Bridge Owner Engineer reviews the Priority Repair after receiving it from the Inspector. They revise the required work (as described below) if necessary, and can submit the Priority Record to Bridge Owner Maintenance. Also, control will return to the Bridge Owner Engineer once the Bridge Owner's Maintenance Area has completed the work. The Bridge Owner Engineer is also the one responsible for ultimately designating a Priority Repair as complete.

Priority Repairs Tab – Bridge Owner - Engineering Section

- **Last Updated Date** - The last time this section was updated.
- **Last Updated By** - Select via pull-down the name of the person who is working on this issue or deficiency.
- **Reject/Return to Inspector** - Pressing this button sends the Priority Repair back to the Inspector (shifts control to them – and places it in their “to be reviewed” queue).
- **Date Unlocked** (Read only) - Date will appear only after the **Reject/Return to Inspector** was pressed.
- **Describe Deficiency** - A complete description of the problem.
- **Final Work Description** - If you want to adjust or give different instructions to your maintenance forces, enter your guidance on what work your maintenance forces will actually do (a complete description of the proposed work). Leave totally blank if you are NOT modifying the work recommended by the inspector.
- **Description of Interim Work** - If you want to adjust or give different instructions to your maintenance forces, enter your guidance on what work your maintenance forces will actually do (a complete description of the proposed work). Leave totally blank if you are NOT modifying the work recommended by the inspector.
- **Send Notification E-Mail 2** - Pressing this button sends the Priority Repair to the Bridge Owner's Maintenance Section. This action also sends an E-Mail to all those on the default E-Mail list. You have the option to add additional E-Mail addresses PRIOR to your sending the E-Mail.
- **Also include these E-Mail Addresses** - Enter any additional E-Mail addresses you wish to have the notification sent to.
- **Date E-Mail Sent** (Read only) - Date will appear only after the **Send Notification E-Mail 2** was pressed.
- **E-Mail Sent By** (Read only) - A record of who sent the E-Mail notification.
- **E-Mail Sent To** (Read only) - A record of the list of E-Mail addresses the notification was sent to.
- **Print PDF Copy of Priority Doc** - You can print the document for your records.
- **Date Final Work Verified as Completed** - After Maintenance has completed any repairs, they will flag the work as **Final Work Performed**. This will drop the Priority Repair back into Bridge Owner Engineer's Queue for verification. Once you are satisfied that the work has been completed, you enter the date here, and then manually change the Status to **Completed**. This tells CoMBIS that all work has been satisfactorily completed. CoMBIS then removes the item from the “In Progress” workflow.
- **Comments** - Any comments you may have.



4. Work Items Area

This area is for the use of Bridge Owners that want to go into further detail on the specific items of work to be accomplished. Currently, the area only allows for manual input of the items of work. This input can be added by the consultant or Bridge Owner.

- **Item Description** - Describe each item of work.

Priority Repairs Tab – Work Items

Work Items Required to Complete the Described Work	
Item Description:	<input type="text"/>
Item Description:	<input type="text"/>
Item Description:	<input type="text"/>

5. Bridge Owner - Maintenance Section

This section is accessible only to the Maintenance Section of the Bridge Owner.

This area is responsible for performing any work indicated in the Priority Repair record, and/or notifying the Engineering Office if the work is beyond their capability. In some organizations, this unit will be separate, whereas in other organizations they may report to the engineering office.

Priority Repairs Tab – Bridge Owner - Maintenance Section

Bridge Owner - Maintenance Section	
Beyond Capacity of Maintenance Dept - Recommend Contractor Be Hired:	<input type="text"/>
Personnel Assigned:	<input type="text"/>
What Was Done/Materials Used:	<input type="text"/>
Maintenance Comments:	<input type="text"/>
Was Interim Work Completed:	<input type="text"/> Date Interim Work Flagged as Complete: <input type="text"/>
Date Final Work Completed:	<input type="text"/> Flagged as Complete By: <input type="text"/>
<input type="button" value="Select New Picture/File"/>	

- **Beyond Capacity of Maintenance Dept. - Recommend Contractor Be Hired**
If the final work necessary to fully complete the Priority Repair is beyond the capacity of the maintenance forces, flag this item as Yes.
- **Personnel Assigned** - List the person(s) assigned to complete the work.
- **What Was Done/Materials Used** - Described the work actually performed. If you wish, or as required by your procedures, you can also list materials used.
- **Maintenance Comments** - Any additional comments about the work can be made here. This could include anything from a description of how the actual situation varied from what was described in the initial Priority Repair, to any other information you wish to record with regards to this priority repair or feedback you may wish to give it to the engineering office.

- **Was Interim Work Completed**- Select yes, when interim work is complete, otherwise leaves blank. This informs the engineering office that the interim work called for in the initial priority repair documentation was completed. This sets the status of this Priority Repair to **Interim Repairs Completed**.
- **Date Interim Work Flagged As Completed** - This field is populated automatically when the “**Was Interim Work Completed**” flag was set to Yes.
- **Date Final Work Completed** - Input the date the final work was completed. This sets the status of this Priority Repair to **Final Repairs Performed**. Filling in this date returns the Priority Repair to the **Bridge Owner - Engineering Section** queue.
- **Flagged As Complete By** - This field auto-fill with the name of the person who completed the field “**Date Final Work Completed**”.

6. Photo Area

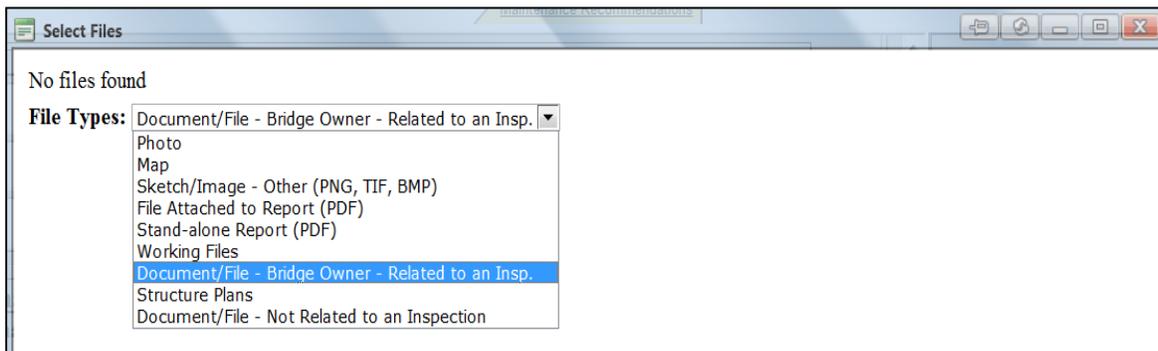
This section of the screen is where you can add any photographs or other images to the record for this Priority Repair. Pictures can include photographs taken during the inspection, photographs by the bridge owner following receipt of the Priority Repair, photographs taken by Maintenance after work has been completed, etc. The same is true of any sketches or other files.

Priority Repairs Tab – Picture/File



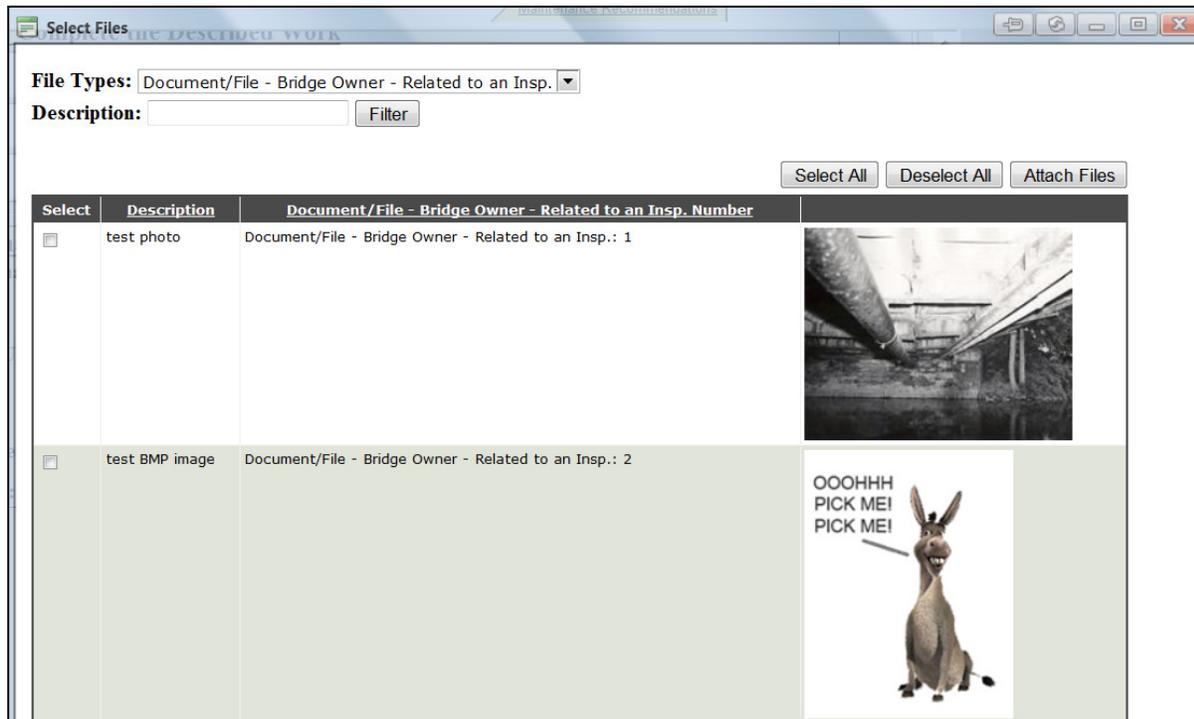
- **Select New Picture/File** - Pressing this button brings up the following screen:

Priority Repairs Tab – Attach Files



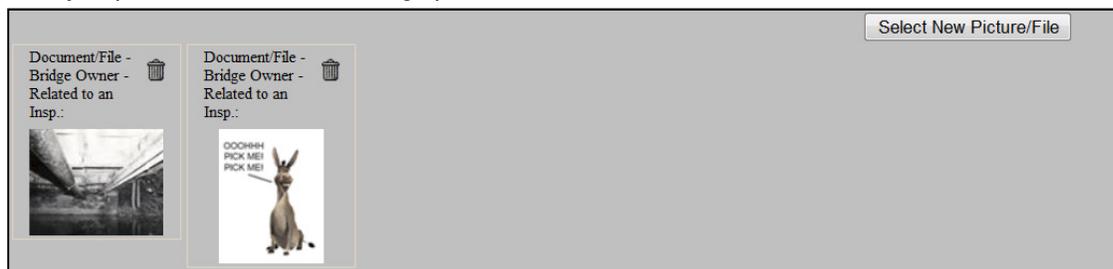
- **Note:** *In order for images to appear here, they must be attached using the Attach Files/Picture area. See Section II-H for details. Once photos have been properly added to the inspection report they are available to be selected for addition to the Priority Repair.*

Priority Repairs Tab – Selecting Photographs



- Select the photos and images you want and then push the button **Attach Files**.

Priority Repairs Tab - Attached Photographs



- Photos are now attached to the record for this Priority Repair.

F. Processing Priorities Outside of CoMBIS (Offline)

For Assets belonging to a Bridge Owner that is not a part of CoMBIS, the Consultant must notify the Owner by phone for all Priority E **and** Priority 1 Repairs. The Consultant will complete the Priority Repair section of CoMBIS for all Priority E, 1 and 2 Repairs, send the notification, print the PDF and send to the Owner by mail/e-mail (copy the County and State on the Transmittal Letter). If there is no response from the Owner within 90 days of the dated letter the Consultant will send an additional letter to the Non-CoMBIS Owner (these letters should be scanned and attached to the Assets in CoMBIS). County will act on behalf of the Non-CoMBIS Bridge Owner for Priorities to complete the Priority Process in CoMBIS (if/when the Owner notifies the County that repairs have been performed). For more detailed procedure information, go to the *NJDOT Standards for CoMBIS* document on the NJDOT Structural Evaluation website.

SECTION VI – BridgeInspect MANAGER MODULE

The Manager website is only available to Bridge Owners. **The GIS and Query sections described below, however, can also be accessed within the Collector website, providing access to all users.**

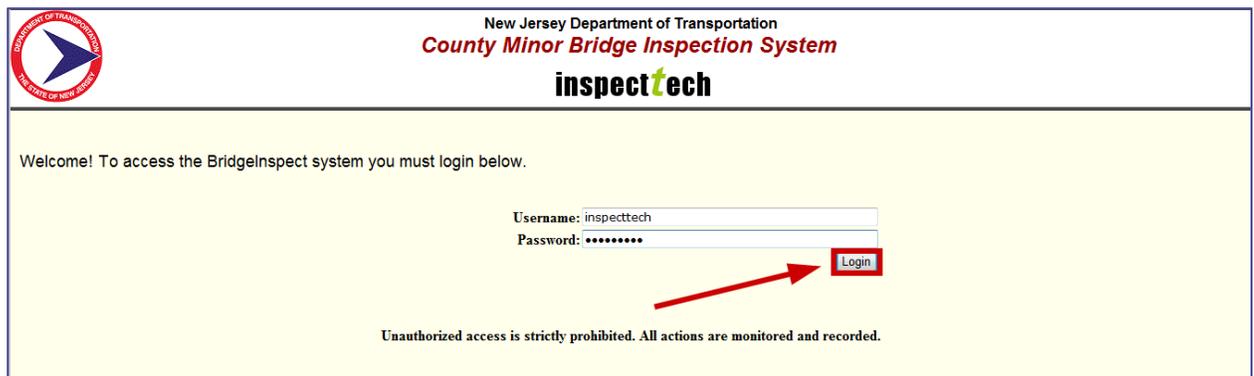
A. How to Log into the BridgeInspect Manager Website

The Manager website is password protected.

Step-by-Step:

1. To log into the Manager website:
 - Open the internet browser and type <https://njdot.bridgemanage.com/>.

Manager Login Page



The screenshot shows the login page for the New Jersey Department of Transportation County Minor Bridge Inspection System. The page features the NJDOT logo in the top left, the system name in the top center, and the 'inspect^ttech' logo. Below the header, a yellow box contains the text: 'Welcome! To access the Bridgeinspect system you must login below.' There are two input fields: 'Username: inspecttech' and 'Password: *****'. A red arrow points to the 'Login' button. At the bottom of the yellow box, it says: 'Unauthorized access is strictly prohibited. All actions are monitored and recorded.'

2. Once the login page has loaded, create an icon on the computer desktop (a shortcut to the Manager website) which will take you directly to the login page with one click.

To create a shortcut icon, follow these steps:

- Right-click anywhere on the login page.
 - Select **Create Shortcut** from the options listed and click **OK**.
3. To enter into the Manager site, enter **Username** and **Password** into the appropriate box and click **Login**. If successful, this will take you to the Priority main page.
 - If there is an error with the username or password, a message will appear in red at the top-left-hand corner saying "Username/password failed!" If this happens, try again to see if it was a typing error; if not, contact your NJDOT Project Manager to see if you used the correct login credentials.
 - Contact the system administrator if you need to have a password reset.

Usernames and Passwords are the same for the Collector Module and Manager Module.

B. BridgeInspect Manager Main Page

Once successfully logged into the Manager site, you will be greeted by the Main page. The Main page is particularly important for navigation purposes and is the central point of the Manager site. The Main page has several interactive features which provide you with abilities to quickly find any asset, report, or specific page throughout the site. Highlighted below are several important features available on the Main page.



Manager Main Page

Section	Information / Function
Red Highlight	NJDOT's logo and navigation tool. With one click, you can reroute to the Main Manager page.
Light Blue Highlight	The navigation menu's 6 tabs: <ul style="list-style-type: none"> ➤ Main ➤ GIS ➤ Query ➤ Reports ➤ Administration ➤ Help Each tab consists of multiple sub-tabs which will direct you to specific pages/functions within the software.
Green Highlight	Lists the most recent bridges accessed.
Navy Highlight	Lists the most recent inspection reports approved.
Orange Highlight	Date and Message Alert section.
Pink Highlight	The Quick Select feature, a quick and effortless search feature.
Yellow Highlight	Random picture selection with a hyperlink to the inspection report to which it is linked.

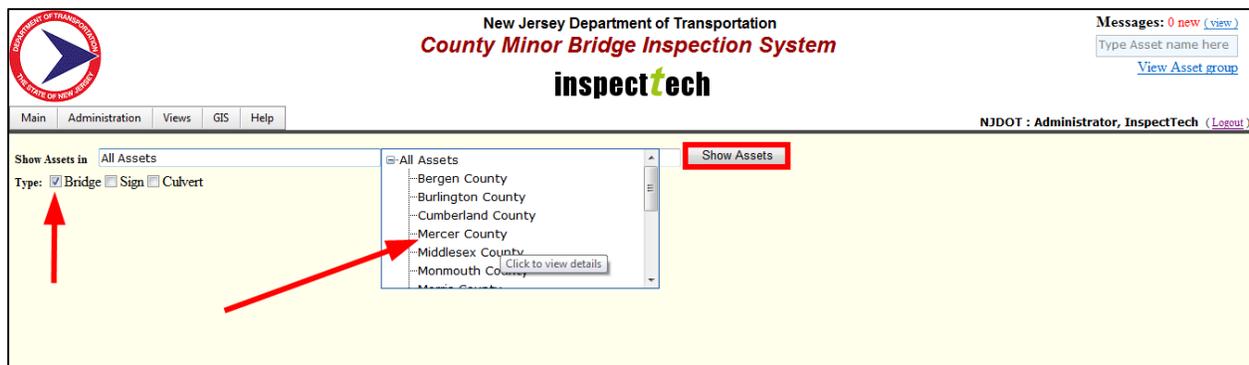
C. How to Use the GIS Map

BridgeInspect Manager (and Collector) has an interactive GIS mapping feature which allows you to locate any asset in the entire system with just the click of a button.

Step-by-Step:

1. Click the **Main Map** option under the **GIS** tab on the Main page navigation bar.
 - This will open a blank page with filter search options.
2. To view the assets in a particular roles:
 - Click inside the **Show Assets In** box.
 - Use the tree search to drill down to the correct role (i.e. Mercer County).
 - Click inside the textbox (the default is to include all asset types – bridge, sign and culvert).
3. Click the **Show Assets** button to generate the interactive map. This will return all assets in that role.
4. To narrow the results:
 - Select the textbox labeled **by**.
 - Select **Asset Type**, **County Number**, or **State Number**.
 - Type the criteria into the third and last textbox. This will only return assets on the map which meets the criteria entered.
5. Click **Show Assets** to generate the map displaying limited assets.
 - **Note: Entering criteria into the GIS is not a necessary step; however, it may be helpful to locate specific structures.**

GIS Search Screen



Every asset in the map is marked with a red pin. Since the map is zoomed out, you cannot see each individual asset. The GIS map roles some assets into relative areas/zones and marks them with blue and yellow circles. The center of these circles displays a number representing the amount of assets in that area/zone. Each circle is interactive and will zoom in the map to display all the red pins (marked assets) in that area. The total number of assets returned is presented in the top left-hand corner of the map.

GIS Map

Count: 119

Map | Satellite | Hybrid | Terrain (130)

Zoom in / Zoom Out

Different ways to view the map

Information | Street View

5333

Parent Asset: Mercer County
 County Number: 5333
 State Number: 11E3303
 Asset Type: Bridge
 (AB) - Name of Structure: Princeton Pike /Tributary to Stony Brook
 NBI 7: Facility Carried by Structure: Princeton Pike
 NBI 6A: Feature Intersected: Narrative: Tributary to Stony Brook

Go to [Report Detail Page](#)

Zoom Map to Bridge

GIS Map Zoomed In

Count: 119

Map | Satellite | Hybrid | Terrain

Name: 5444
 Asset ID: 163193
 Asset Type: 1

Information | Street View

5444

Toggle Street Overlay
 Toggle Street View Marker

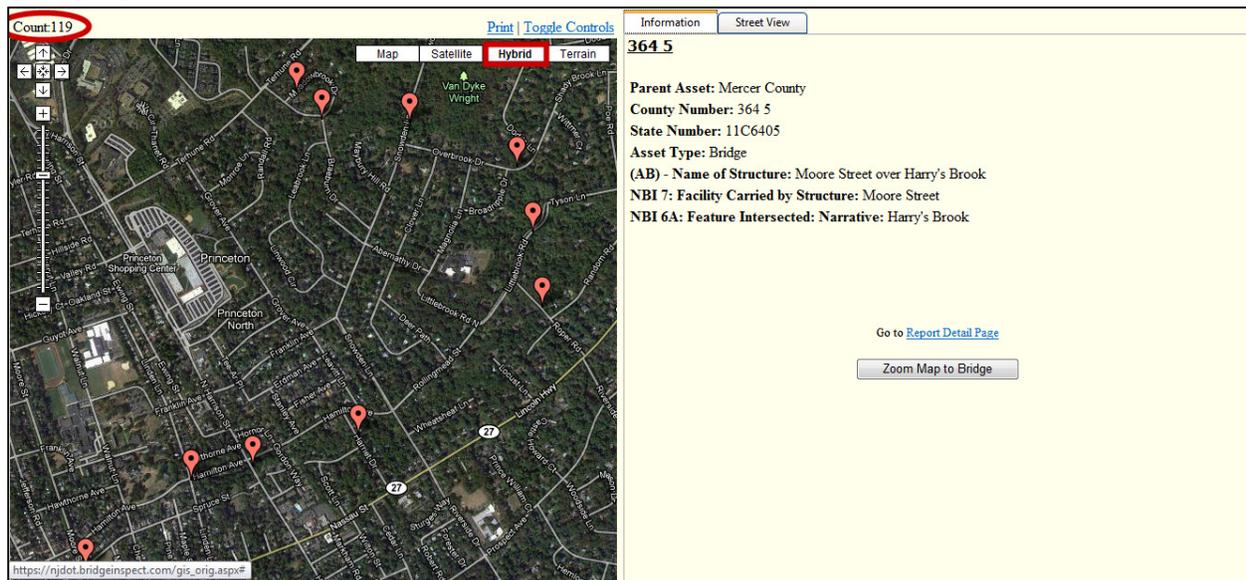
- To zoom into and out of the map:
 - Use the scale on the left-hand side of the page, or
 - Double-click inside the map.

There are four distinct ways to view the map:

- Map view
- Satellite view
- Hybrid view
- Terrain view.

7. To display an asset's information:
 - Place the mouse over a single pin (asset) and click.
 - The asset's information will display on the right-hand side of the page and will be broken down into two tabs:
 - The first tab automatically opens when an asset is selected. This tab contains general information about the asset, a link to its detail page, and a button to focus the map on the asset (**Zoom Map to Bridge**).
 - The second tab is labeled **Street View** and simulates the perspective of standing on or near the asset. Not all assets will have street view enabled.

GIS Map Hybrid View



8. To print the map:
 - Click the **Print** link on the right-hand side above the map views. A new page will open and expand the picture.
 - Choose the correct printer and click print.
9. To narrow the results even more:
 - Select **All Assets** in the drop-down box labeled **Show Assets in**.
 - Choose **County Number** in the **by** textbox.
 - Type the number or name in the third and last textbox.
 - Click the **Show Assets** button.

Now the map will only show those assets in the county which meet the criteria entered.

- Here is a screenshot only showing assets which contain a county bridge number containing "413." Notice the count now displays 5, instead of the original total bridges in the state. You can zoom in closer to view surrounding features, in-depth.

Filtered GIS Map

Show Assets in by Show Assets
 Type: Bridge Sign Culvert
Repositioning Marker: 4136

 [Print](#) [Toggle Controls](#)
 Map Satellite Hybrid Terrain **4136**
 Parent Asset: Salem County
County Number: 4136
 State Number: 111111
 Asset Type: Bridge
 (AB) - Name of Structure: Renter Road over Stream (Basset Bridge)
 NBI 7: Facility Carried by Structure: Renter Road
 NBI 6A: Feature Intersected: Narrative: Stream (Basset Bridge)
[Go to Report Detail Page](#)

- **Note:** If an asset coordinate is incorrect in the map (i.e. the pin is located to the left / right of the true location), qualified users may correct the error in the GIS map and automatically update the database. Grab the pin, move it to the correct spot, and drop it into place. Upon verification, the new GPS coordinates are changed and recorded throughout the software.

Overall, the GIS map is an effective and useful tool to locate any asset with coordinates. The ability to view and print customized maps using search criteria is a powerful feature which can serve many purposes.

Zoom to Map/Hybrid View

Count: 8 [Print](#) [Toggle Controls](#)
 Map Satellite Hybrid Terrain **07569**



D. Using the Query Tool

The query function is a useful tool in the Manager (and Collector) software. In just seconds, you design complex queries and scan the entire system.

The purposes of the report query are to:

- Design specific queries for your needs.
- Create a generic query that can be run for all users.
- Quickly search for information using any inspection or inventory field.
- Provide a platform for you to perform summary reporting.

For example, you need to know all the bridges in your county which have a deck rating less than 4. You would be able to build a query and quickly find all of those bridges.

1. How to Construct a Basic Query Report

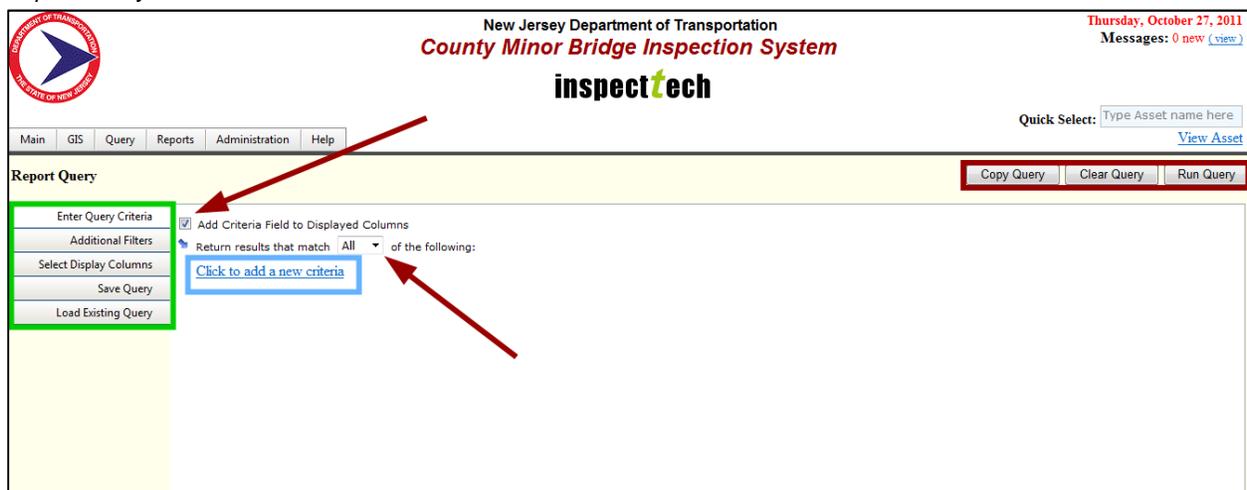
Step-by-Step:

1. To access the **Report Query** page:
 - Click the **Query** tab on the Main Page navigation menu.
 - Select **Construct Query Report**.

The **Report Query** page will hold the following options:

- A checkbox at the very top labeled **Add Criteria Field to Displayed Columns**.
- Drop-down menu clarifying whether to return **Any** or **All** of the results.
- **Click to add new criteria** hyperlink.
- The sub-tabs along the left side of the screen representing steps in creating the query. The default tab is **Enter Query Criteria**.

Report Query Screen

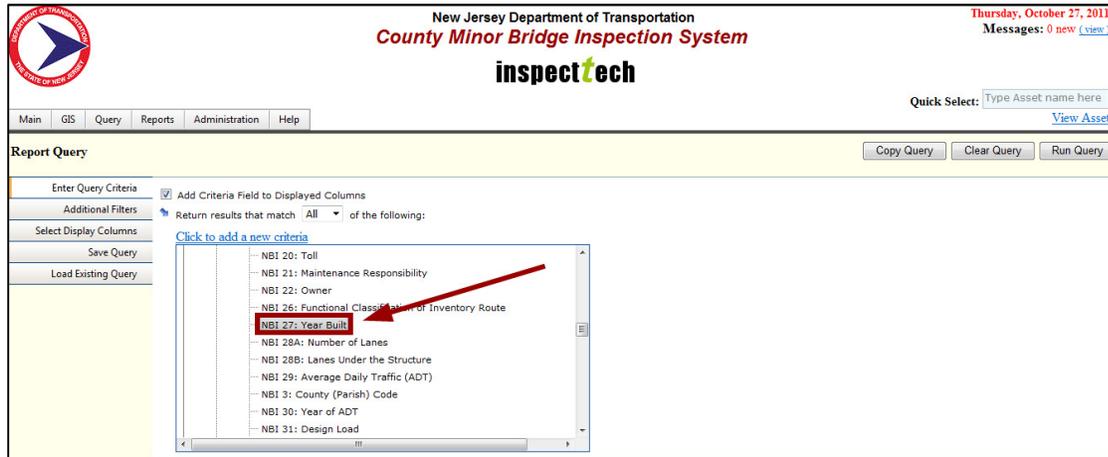




2. To start building the query:

- Select the **Click to add new criteria** link.
- Use the tree search to locate the field for the query.
- Click **Search for a Field** to type the name of the field into a search bar.

Query Tree Search



3. Enter the parameters for the filter.

- In the drop-down menu, choose either:
 - <
 - <=
 - >
 - >=
 - =
 - contains
 - does not contain

The first five parameters are useful for data in numeric format. **Contain** and **does not contain** are primarily used on text fields.

4. Enter the value parameter.

- Click the **List Values** icon () to the right for help in choosing what values may be entered for the field selected.



Enter Query Values

5. Click the **Run Query** button at the top right-hand corner of the page.

The query will generate the results and place them at the bottom of the page to be analyzed. You have several options in terms of the results:

- Directly edit the results in the generated table (**Note: Do it with Caution**).
- View the returned assets on a map, just like the GIS Map demonstrated earlier.
- Export the results directly to Excel, KML, or to CSV.

Query Results Screen

Asset Name	NBI 27: Year Built
0000000C1102	1900
0000000C1201	1931
0000000C1203	1933
0000000C1304	1930
0000000D1008*	1930
0000000D1103	1920
0000000D1106	1929
0000000D1111	1900
0000000D1203	1924
0000000D1205	1930
0000000D1206	1930
0000000D1301	1920
0000000D1302	1930
0000000D1307	1921
0000000E1102	1926
0000000E1201	1929
0000000E1204	1920

The query results are delivered in a table. You can:

- Scroll through the results.
- Open any detail page by selecting the link.
- Sort the data by selecting one of the column headers.

6. To **Save** the query results, see Section VI-D-6 of this Manual.



2. How to Construct a Multiple Criteria Report Query

Step-by-Step:

1. Navigate to the **Report Query** page.
2. To start building the query:
 - Select the **Click to add new criteria** link.
 - Use the tree search to locate the field for the query.
 - Click **Search for a Field** to type the name of the field into a search bar.
3. Enter the first parameter.
4. Click the **Click to add new criteria** link to add more criteria to the query.
 - Repeat as many times as necessary to add more criteria.

Multiple Criteria Report Query

The results will generate at the bottom of the page and provide you with the same options as a single criteria query report.

3. How to Delete Criteria from a Query

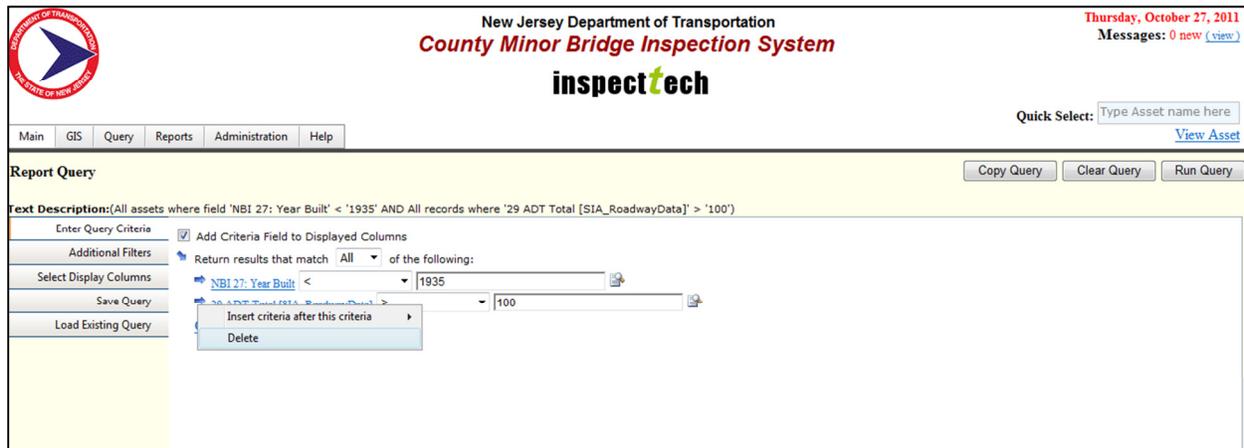
The query feature allows you to delete added criteria without having to start the query over again. This process is very simple and can be completed in just seconds.

Step-by-Step:

1. Click on the blue arrow next to the criteria.
2. Choose the **Delete** option.



Delete Criteria Screen



4. Adding Additional Filters to the Report Query

The query feature not only allows you to enter specific criteria, but it also allows for filters which narrow the results (i.e. you may limit the results to specific parent assets such as a county, instead of pulling all the information from the state's entire inventory).

Step-by-Step:

1. Navigate to the **Report Query** page.
2. To add a filter to the report query:
 - Scroll down the left-hand side of the page.
 - Click the **Additional Filters** tab.

This will open up another screen and display a list of filters to add to the query and its results.

3. Three filters can be applied to a query:
 - **Values Returned:** Whether to return the assets with their central database values (the most recent values) or their historical report values. Check the checkbox labeled **Use in progress report values where available** to pull values from **In Progress** reports. *The default setting is central database values with that additional checkbox selected.*
 - **Filter by parent asset:** Choose a parent asset using a basic tree structure (i.e. Bergen County).
 - **Records displayed on each result page:** Determines the number of records displayed on each result page. *The default setting is 200 records per page*, but you may change this number accordingly.



Additional Filters Screen

5. Select Display Columns for the Query Report

You also choose which fields are displayed as columns in the generated report. You may add as many columns as necessary to enhance the report and display relevant and supportive information.

- **Note:** The fields used as part of the query are automatically added as displayed columns.

Step-by-Step:

1. Navigate to the **Report Query** page.
2. To edit or include additional fields in a query report:
 - Click the **Select Display Columns** tab on the left side of the main query page.

This will generate a new page called **Available Report Fields**
3. Locate the desired fields via the tree search.
4. Include the field by checking the checkbox next to it. Continue navigating the tree search if necessary.
5. Click on the **small black arrow** in between the two sections to transfer the fields to the **displayed column** in the report generated.

On the right side of the page is a section called **Displayed Columns**. These fields are predefined or have already been added as columns of the generated query report. You can:

- Rearrange these fields by clicking the **Up/Down** buttons.
- Change the display of the field to either **Show Value** or **Show Comment**.
- Remove the field from the report by clicking the **Delete** button.



Select Display Columns Tab

New Jersey Department of Transportation
County Minor Bridge Inspection System
inspect^{tech}

Quick Select: [View Asset](#)

Main | GIS | Query | Reports | Administration | Help

Report Query Copy Query Clear Query Run Query

Enter Query Criteria
Additional Filters
Select Display Columns
Save Query
Load Existing Query

Available Report Fields

- NBI 12: Base Highway Network
- NBI 13A: Linear Reference System (LRS) - Inventory Route
- NBI 13B: Linear Reference System (LRS) - Subroute Number
- NBI 16: Latitude
- NBI 17: Longitude
- NBI 19: Bypass Detour Length
- NBI 2: District
- NBI 20: Toll
- NBI 21: Maintenance Responsibility
- NBI 22: Owner
- NBI 26: Functional Classification of Inventory Route

Displayed Columns

Field	Display Type	Display Linked Files?	Yrs
Down State Number			Delete

Add to displayed columns

6. How to Save a Query

Most generated queries can be used more than once. Thus, you can save a query to eliminate the hassle of repeatedly setting up a new query. The saved query can be shared with any qualified user throughout the system.

The **Save Query** function also comes in handy when you want to **Load an Existing Query** later.

Step-by-Step:

- Jumpstart to **Save Query**:
 - Enter the query criteria using the tree search and parameter textboxes provided.
 - Use any additional filters if necessary.
 - Select display columns to desired fields.
- Click the **Save Query** tab along the left side of the page.

Save Query Screen

New Jersey Department of Transportation
County Minor Bridge Inspection System
inspect^{tech}

Quick Select: [View Asset](#)

Main | GIS | Query | Reports | Administration | Help

Report Query Copy Query Clear Query Run Query

Enter Query Criteria
Additional Filters
Select Display Columns
Save Query
Load Existing Query

Save Query

Query Title: Test Query

Description: This query is a test for the manual

Category: Test

[Save Query as a New Query](#)

Choose a category from the dropdown list or create your own, new category.



6. Give the query a title.
 - Optional: Add a category from the drop-down menu or create a unique category name.
 - Optional: Enter a description of the query.
7. To save a query which has been uploaded and edited:
 - Click the **Save Query** tab.
 - Choose to save it either as a new query or to save the changes made to the existing query.

7. How to Load an Existing/Saved Query

If you wish to load an existing query, the **Report Query** page provides the **Load Existing Query** function. This section of the Manual will demonstrate how to load the existing (saved) query in order to run, edit, or delete it.

Step-by-Step:

1. Navigate to the **Report Query** page.
2. Click the **Load Existing Query** tab on the left-hand side of the page.
3. Filter the list of queries by selecting options from the drop-down menu.
 - **User:** Select which user's queries to view. The default selection is you. For example, if Ryan Miller loads a query, the default user setting would be "Miller, Ryan". To see all queries from all users, select **All Users**.
 - **Category:** Select which category of queries to view. The default setting is **All Categories**.

Load Existing Query Screen

New Jersey Department of Transportation
County Minor Bridge Inspection System
inspecttech

Tuesday, November 01, 2011
Messages: 0 new (view)

Quick Select: [View Asset](#)

Main | GIS | Query | Reports | Administration | Help

Report Query Copy Query Clear Query Run Query

Enter Query Criteria **Load a Saved Query**

Additional Filters

Select Display Columns

Save Query

Load Existing Query

User: Evans, John

Category: All Users
Administrator, InspectTech
Bal, Harjit
Bhattacharya, Anirban
Jagirdar, Dhaval
Khan, Mujahid
Lertch, Tim
Nadie, Yves
Oshilaja, Ayodele
Patel, Mahesh
Patel, Guarang
Patel, Nirav
Patel, Rejesh
Reddy, Mula
Renman, Greg
Ringwala, Harshad
Rossi, Gina
Shah, Chandrahas
Shu, Vincent
Strizko, James



4. To save a changed query:
 - Click the **Save Query** tab on the left-hand side.
 - Click **Save Query Changes** next to the query title.

E. How to Run a System Report

NJDOT has a list of predefined system reports. These reports can be uploaded, run, and printed with the click of a button. The system reports contain important information which New Jersey users may need to use quite often.

For example, you may have to submit a report detailing all assets past their due inspection date. You run the system report. The software will automatically pull the information and place it in a predesigned report. You choose the output for the report (PDF, HTML, or spreadsheet) and pass it along to the next level of management.

Step-by-Step:

1. To access the **System Reports** page:
 - Click the **Reports** tab in the Main page navigation bar.
 - Click **System Reports**.
 - To run a summary report, begin by going to the “Reports” tab along the main navigation menu. Then choose “System Reports” from the drop down.
2. Filter the results by **Parent Asset**.
 - Click the textbox labeled **Parent Asset**.
 - Choose the desired parent asset (i.e.: County or District).
3. Choose the **Output Type**.
 - Select **HTML**, **PDF**, or **Spreadsheet** from the drop-down menu.
 - The default output type is PDF.
4. Click **Run Report** next to the desired system report.

System Reports Screen

Report	Description	
Next 2 Months	Shows all bridges due in the next 2 months	run report
Past Due	Shows all bridges past their inspection due date	run report
Special Inspections (w/ FC)	Shows all bridges that require special and FC inspections	run report
Special Inspections	Shows all bridges that require need special inspections	run report
Underwater	Shows all bridges that require underwater inspection	run report
Fracture Critical	Shows a list of all fracture critical bridges	run report
Overall Condition Rating	Summary of all Structures Condition	run report
Overall Condition Rating by Deck Area	Summary of all Structures Condition by Deck Area	run report
Overall Condition Rating - No Deck	Summary of all Structures Condition except Decks	run report
Condition Rating: Good	List of all Structures in Good Condition	run report
Condition Rating: Fair	List of all Structures in Fair Condition	run report
Condition Rating: Poor	List of all Structures in Poor Condition	run report
Condition Rating - No Deck: Good	List of all Structures except Decks in Good Condition	run report
Condition Rating - No Deck: Fair	List of all Structures except Decks in Fair Condition	run report



F. Executive Dashboard

Via the **Executive Dashboard**, you obtain summary information in visual graphs and charts concerning your asset inventory (i.e. percentage of assets considered “structurally deficient”). This feature more easily and efficiently analyzes summary data.

The Executive Dashboard provides managers with:

- Percentages.
- Averages and other statistical analysis.
- Visual presentations of the condition state of your assets.

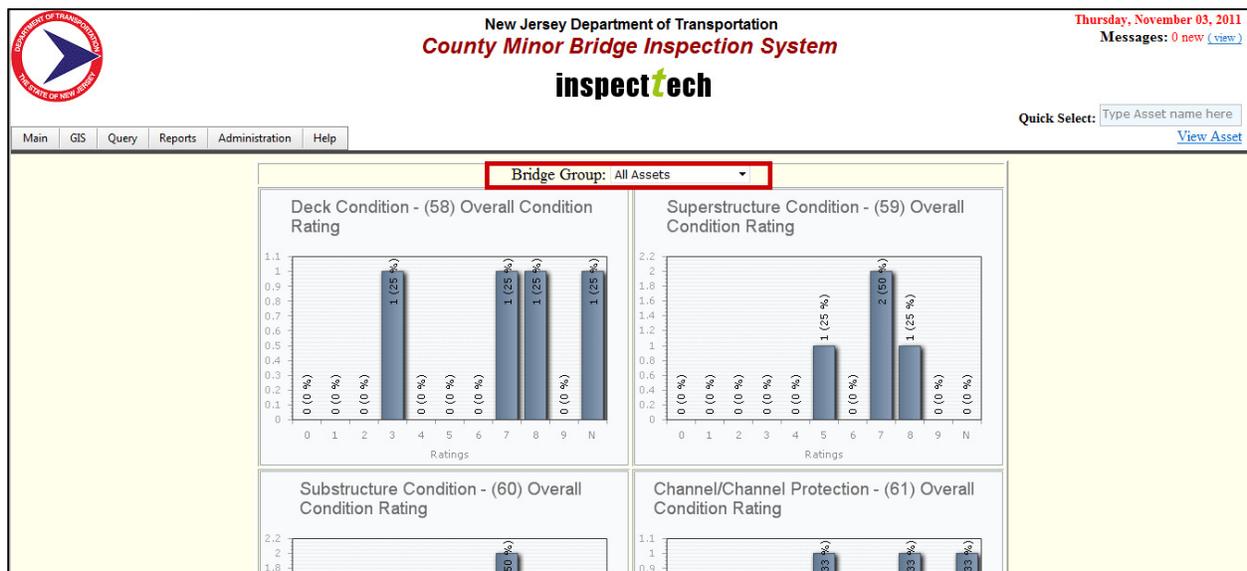
Step-by-Step:

1. To open the **Executive Dashboard**:
 - Click the **Reports** tab on the Main page.
 - Select **Dashboard**.

The Executive Dashboard page will upload and initially show statistical information for the entire state.

2. To change the default settings:
 - Select the preferred settings from the drop-down list labeled **Bridge Group**.
 - The dashboard will automatically update.

Executive Dashboard



G. How to Run an Audit Report

Audit reporting provides a means to see all actions and changes made via the software. The two types of audit reports account for any changes made in the software or by users' access (login/outs).

- The **asset and reports changes** track any changes made to the assets and inspection reports.
- The **user access** tracks each user's access to the system.



Step-by-Step:

1. To locate the **Audit Report** page:
 - Click the **Administration** tab under the Main menu.
 - Select **Audit Report**.

 2. Select the type of audit report to generate from the drop-down menu:
 - **Asset and Report Changes**
 - Enter information into the **Asset Name Contains**, **Changed Object Contains**, or **Inspector Name** text boxes to narrow the results.
 - Select the date ranges relevant to the report.
 - **User Access**
 - Enter information into the textbox labeled **Inspector Name**.
 - Select the date range relevant to the report.
- **Note:** *These categories are optional and do not need to be filled out to run the report.*
3. Click the **Run Report** button. The results will generate at the bottom of the page.

Audit Report Screen



Audit Results Screen

Inspector Name	Change Location	Change Type	Changed Object	Changed Date	Old Value	New Value	County Number	State Number	Report Create Date	Inspection Date
Administrator, InspectTech	online	NBI Values Calculated	NBI Values Calculated	10/31/2011 11:55:58 AM			Test Bridge	Test Bridge	10/25/2011	10/25/2011
Administrator, InspectTech	online	NBI Values Calculated	NBI Values Calculated	10/31/2011 11:39:51 AM			Test Bridge	Test Bridge	10/25/2011	10/25/2011
Administrator, InspectTech	online	NBI Values Calculated	NBI Values Calculated	10/31/2011 11:31:42 AM			Test Bridge	Test Bridge	10/25/2011	10/25/2011
Administrator, InspectTech	online	NBI Values Calculated	NBI Values Calculated	10/31/2011 11:29:42 AM			Test Bridge	Test Bridge	10/25/2011	10/25/2011
Administrator, InspectTech	online	NBI Values Calculated	NBI Values Calculated	10/31/2011 11:25:08 AM			2122015	2102215	10/28/2011	10/28/2011
Administrator, InspectTech	online	NBI Values Calculated	NBI Values Calculated	10/31/2011 11:24:17 AM			2122015	2102215	10/28/2011	10/28/2011
Administrator, InspectTech	online	NBI Values Calculated	NBI Values Calculated	10/31/2011 11:23:22 AM			2122015	2102215	10/28/2011	10/28/2011
Evans, John	online	Value Changed	NBI 91: Designated Inspection Frequency	10/28/2011 4:21:14 PM			2122015	2102215	10/28/2011	10/28/2011
Evans, John	online	Value Changed	NBI 90: Date of Inspection	10/28/2011 4:21:14 PM	9/15/2010	09/15/2010	2122015	2102215	10/28/2011	10/28/2011
Evans, John	online	Value Changed	Primary Type of Inspection	10/28/2011 4:21:11 PM		Routine	2122015	2102215	10/28/2011	10/28/2011
Administrator, InspectTech	online	Value Changed	Bridge Owner Symbol	10/28/2011 4:13:20 PM			2122015	2102215	10/28/2011	10/28/2011
Administrator, InspectTech	online	Value Changed	NBI 448: Structure Type - Type of Design/Construction	10/28/2011 2:39:22 PM	(BLANK)		Test Bridge	Test Bridge	10/25/2011	10/25/2011
Administrator, InspectTech	online	Value Changed	Load Ratings 3 Load Rating: HL93 AsBuilt Op 2	10/28/2011 2:38:41 PM			Test Bridge	Test Bridge	10/25/2011	10/25/2011
Administrator, InspectTech	online	Value Changed	Load Ratings 3 Load Rating: HL93 AsInsp Inv 2	10/28/2011 2:38:41 PM			Test Bridge	Test Bridge	10/25/2011	10/25/2011
Administrator, InspectTech	online	Value Changed	Load Ratings 3 Load Rating: HL93 AsInsp Op 2	10/28/2011 2:38:41 PM			Test Bridge	Test Bridge	10/25/2011	10/25/2011
Administrator, InspectTech	online	Value Changed	Load Ratings 3 Load Rating: HL93 AsBuilt Inv 2	10/28/2011 2:38:41 PM			Test Bridge	Test Bridge	10/25/2011	10/25/2011
Administrator, InspectTech	online	Value Changed	Load Ratings 1 Load Rating: HL93 AsInsp Op 2	10/28/2011 2:38:41 PM			Test Bridge	Test Bridge	10/25/2011	10/25/2011

Audit Results Screen Limited By Date

New Jersey Department of Transportation
County Minor Bridge Inspection System
inspecttech

Thursday, November 03, 2011
 Messages: 0 new [view](#)

Main | GIS | Query | Reports | Administration | Help

Quick Select: [View Asset](#)

Audit Report

Report Type:

Changed Date:

Inspector Name:

Inspector Name	Change Location	Login Date
Evans, John	online	10/28/2011 4:20:49 PM
Bal. Harjit	online	10/28/2011 2:30:07 PM
Bal. Harjit	online	10/28/2011 2:21:50 PM
Administrator, InspectTech	online	10/28/2011 2:02:11 PM
Administrator, InspectTech	online	10/28/2011 9:55:17 AM
Administrator, InspectTech	online	10/28/2011 9:00:37 AM
Administrator, InspectTech	online	10/27/2011 4:14:14 PM
Administrator, InspectTech	online	10/27/2011 3:09:59 PM
Bal. Harjit	online	10/27/2011 2:20:12 PM
Bal. Harjit	online	10/27/2011 2:19:46 PM



SECTION VII – HELP, TECH SUPPORT, NJDOT POLICIES AND FORMS

A. Help Menu and Technical Support - Contact Information

Located on the main page along the main task bar is a **Help** option. This has two drop-downs at the moment (About and Help with Multiple Picture Upload), but will be expanded to include other information such as PDF versions of System Manual and release notes when the software is upgraded.

B. Technical Support

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

- To request technical support, please send all e-mails to help@inspecttech.com. Numerous InspectTech employees subscribe to this e-mail address and therefore it is the fastest and most efficient way of getting your issue resolved or question answered. Please be as descriptive as possible when sending an e-mail for support. You may also contact InspectTech customer support at (412) 681-1521.

C. NJDOT Policies and Procedures

It is very possible that NJDOT standard policies and procedures will evolve as CoMBIS goes live and is put into widespread use by Consultants, Owners, and other users. The NJDOT CoMBIS website will contain all updated policy information, helpful tips, frequently asked questions, and other useful documentation. Please check back regularly.

- <http://www.state.nj.us/transportation/eng/structeval/countyculvertinsp.shtm>

D. Standard Forms and Attachments

The following standard forms are attached as references only. The most recent forms available online.

- CoMBIS User Account Information Sheet for **County Administrator**
- CoMBIS User Account Information Sheet for **Consultant**
- CoMBIS User Account Information Sheet for **County** and **Township/Municipal/Local Users**
- CoMBIS User Account Information Sheet for **County** and **Township/Municipal/Local Pilot Users**
- CoMBIS Software Bugs, Issues, and Suggestions
- CoMBIS Asset Creation/Deletion Request

The following Attachments are included for reference:

- CoMBIS Workflow Diagram (11x17)

CoMBIS User Account Information Sheet (For *County Administrator* ONLY)

This Information Sheet is to be completed by the County Administrator and submitted to **NJDOT** at CountyCulvertInsp@dot.state.nj.us as an e-mail attachment with the subject **CoMBIS - County Admin User Account**.

County Name*: _____

Person Requesting – Name*: _____ – Title: _____

Organization*: _____

CREATE New CoMBIS User Account for County Administrator:

User Info:

First Name*: _____ Last Name*: _____

E-mail*: _____

Current Job Title: _____

Role*: **County Administrator**

Address 1: _____

Address 2: _____

Address 3: _____

City: _____ State: _____ Zip: _____

Office Phone: _____ Mobile Phone: _____

Reason for Creating New Account (Specify):

DELETE **EDIT**

Existing CoMBIS User Account:

First Name*: _____ Last Name*: _____

Existing Role*: _____ E-mail *: _____

New Role*: _____

In case of Edit only _____

Reason for Deleting/Editing Existing Account (Specify):

Comments:

CoMBIS User Account Information Sheet (For *Consultant* ONLY)

This Information Sheet is to be completed by Consultant Project Manager/Certifying Engineer and submitted to **NJDOT** at CountyCulvertInsp@dot.state.nj.us as an e-mail attachment with the subject **CoMBIS - Consultant User Account**.

This information is for (*check ONE*): Consultant hired by NJDOT
 Consultant hired directly by County/Twp./Mun./Lcl. Owner

Consultant*: _____ Person Requesting: _____

Project Name*: _____

Group No.*: _____ State Project Manager*: _____

CREATE New CoMBIS User Account for Consultant:

User Info:

First Name*: _____ Last Name*: _____

E-mail*: _____

Role*: Team Member Team Leader Project Manager/Certifying Engineer Other
(Check One ONLY)

Address 1: _____

Address 2: _____

Address 3: _____

City: _____ State: _____ Zip: _____

Office Phone: _____ Mobile Phone: _____

Reason for Creating New Account (Specify):

DELETE **EDIT**

Existing CoMBIS User Account:

First Name*: _____ Last Name*: _____

Existing Role*: _____ E-mail*: _____

New Role*: _____
In case of Edit only

Reason for Deleting/Editing Existing Account (Specify):

Comments:

CoMBIS User Account Information Sheet

(For *County and Township/Municipal/Local Users*)

This Information Sheet is to be completed by County Administrator for the County, Township/Municipality and/or Local Bridge Owner(s) and submitted to **NJDOT** at the e-mail address CountyCulvertInsp@dot.state.nj.us as an e-mail attachment with the subject **CoMBIS –Owner User Account**.

County*: _____ Twp./Mun./Lcl. Owner*: _____

Person Requesting – Name*: _____ – Title: _____

Consultant Name (for Consultants acting as Twp./Mun./Lcl. Owner): _____

CREATE New CoMBIS User Account for County and Township/Municipal/Local Pilot Users (Chk. ONE):

County Township/Municipality Local Bridge Owner Other Unknown

If “Other”, indicate name: _____

User Info:

First Name*: _____ Last Name*: _____

E-mail*: _____

Role*: County Administrator County General Access County Maintenance Access
 County Project Manager County Support Access Local Bridge Owner
 Twp./Mun. Gen. Access Twp./Mun. Maint. Access Twp./Mun. Manager

Address 1*: _____

Address 2: _____

Address 3: _____

City*: _____ State*: _____ Zip*: _____

Office Phone*: _____ Mobile Phone: _____

Reason for Creating New Account (Specify):

Comments:

**Required Fields*

CoMBIS Bugs, Issues and Suggestions

This Information Sheet may be completed by any user and submitted to NJDOT at CountyCulvertInsp@dot.state.nj.us as an e-mail attachment with the subject *CoMBIS –Bugs, Issues and Suggestions*.

Please be as thorough as possible. Attach any screenshots that will clarify the issue(s) you are experiencing. Describe the severity of the issue (are you completely unable to perform a required function, or is the issue a minor inconvenience, etc.).

First and Last Name*: _____ Phone Number*: _____

Firm/Organization Name*: _____

Project Name: _____

State Project Manager: _____ Group Number: _____

Date of Submission*: _____

Specific Bugs/Glitches Discovered:

General System Issues:

Suggestions for System Enhancement:

**Required Fields*

NJDOT CoMBIS Asset Creation/Deletion Request

This Information Sheet is to be completed by Bridge Owners (County Administrator or Township/Municipal/Local Manager) and submitted to **NJDOT** at the e-mail address CountyCulvertInsp@dot.state.nj.us as an e-mail attachment with the subject **CoMBIS – Add/Delete Asset**.

County*: _____ Township/Munip./Local: _____

Information of Person Requesting Asset:

First Name*: _____ Last Name*: _____

E-mail*: _____

Office Phone: _____ Mobile Phone: _____

Name of Consultant: _____ Group No.: _____

Add/Delete Asset:

This information is for (*check ONE*): Add New Asset Delete Existing Asset

Structure Name*: _____

(State Item AB)

County Code *: _____ Place Code *: _____

(NBI Item 3)

(NBI Item 4)

County Str. No.*: _____ State Str. No.*: (NBI Item 8)

(CoMBIS M82)

(In case of Deleting only)

Width of Opening*: _____ Effective CoMBIS Width*: _____

(CoMBIS M100):

Str. Owned By*: _____ Owner Type** _____

(NBI Item 22)

Multiple Owners?*: _____ Other Owner(s): _____

(Yes or No)

(If any)

Type of Structure*: _____

(CoMBIS M97)

Latitude: _____ Longitude: _____

(CoMBIS M84)

degrees

(CoMBIS M85)

degrees

Reason for Creating/Deleting Asset (Specify):

Comments:

**Required Fields*

*** 1-County*

2-Unknown

3-Non-CoMBIS Local

4-CoMBIS Local

CoMBIS Workflow

In Progress	In Progress on a Laptop	Consultant Review	Bridge Owner(s) Review	State QA Review 1	State QA Review 2	State Comments	County Final Approval
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