



**inspect***tech*

## **SIMS Collector 5.4**





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## Introduction to SIMS Collector 5.4:

SIMS Collector 5.4 is an easy to use software package designed to assist bridge inspectors with completing and submitting inspection reports. Inspectors are able to generate complete, standard reports which are concise and readily available on command. With countless tools and enhancements available through the software, such as multiple picture uploads, the inspection reports will be more accurate, thorough, reliable, and readily available. This software allows inspectors to start and even complete inspection reports while in the field using a laptop/tablet computer or on the other hand, use the application at their desk to review, revise, or submit the report for approval. Overall, the inspection process is streamlined, more efficient and very effective for all personnel responsible for inspecting and managing bridges.

SIMS is composed of two primary parts. The first of these is an inspection module, commonly referred to as "Collector". The second part is the Management module, which is referred to as the "Manager".

## Requirements for SIMS Collector 5.4:

- Screen resolution of at least 1024 x 768 (1280 x 960 is preferred).
- A computer system with at least a 1 GHz processor with 1 GB of RAM for optimal performance.
- Internet Explorer 7.0.
- Adobe Acrobat Reader 6.0 or higher.
- For the Laptop version you will need 10 Gigabytes of free disk space. This is required for the application and basic data associated with the bridges. Since the system will be storing all of the pictures and attachments related to the bridges, additional space may be required depending on the number of inspections and amount of pictures.

## SIMS Frequently Asked Questions:

The Minnesota Department of Transportation has created a frequently asked question site to assist users with questions pertaining to the SIMS software. This site provides valuable information on everything from computer requirements to approval processes to training questions. Users can find these FAQ's using the link below. Additionally, any questions pertaining to SIMS can be directed to [David Hedeem](#) at 651-366-4528 or [Jennifer Zink](#) at 651-366-4573.

FAQs : <http://www.dot.state.mn.us/bridge/sims/faq.html>

## How to Login to the SIMS Collector Website:

1. To login to the SIMS Collector website open your internet browser and type <https://mn.bridgeinspect.com/>.



The screenshot shows the SIMS Collector login page. At the top left is the Minnesota Department of Transportation logo. In the center is the SIMS logo, which stands for Structure Information Management System. Below the logo, a yellow banner contains the text: "Welcome! To access the Bridgeinspect system you must login below." Underneath this banner are two input fields: "Username:" and "Password:". To the right of the password field is a "Login" button. Below the input fields, a warning message states: "Unauthorized access is strictly prohibited. All actions are monitored and recorded." Further down, there is contact information for SIMS Support, including an email address: [simshelp.dot@state.mn.us](mailto:simshelp.dot@state.mn.us). At the bottom, there is a link for "Frequently Asked Questions and Other SIMS Information" pointing to <http://www.dot.state.mn.us/bridge/sims>.

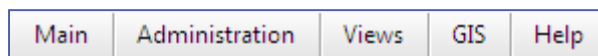
2. Once the login page has uploaded you may create an icon on your desktop (a shortcut to the Collector website) which will take you directly to the login page with one click. To create a shortcut icon follow these steps.
  - Right click anywhere on the login page.
  - From the options listed, select "Create Shortcut" and then click "OK".
3. To enter into the SIMS Collector site, enter your "Username" and "Password" into the appropriate box and click "Login". If successful, this will take you to the Collector main page.
  - If for some reason there is an error with the entered username or password, a message will appear in red at the top-left hand corner saying "Username/password failed!" If this happens, try it again to see if it was a typing error. If not, contact [Lisa Hartfiel](#) at the MnDOT Bridge Office to see if the appropriate login credentials are being used.
  - Please note that if a user forgets their login information they must contact [Lisa Hartfiel](#) at the MnDOT Bridge Office to get the password reset.

## SIMS Collector Main Page:

Once you successfully login to the website the user will be greeted by the Collector Main page. The Main page is the central point for the website and is particularly important for navigating and searching purposes. The Main page has several interactive features which allow a user to locate any inspection report within the system as well as begin, edit, and submit inspection reports. Highlighted below are several important areas of the Main page.

Inspection Date	Asset Code	Asset Name	Primary Inspector	Asset Type	Report Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	Evans, Eric	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	62090	<a href="#">62090</a>	Halvorson, Eric	Bridge	Routine	TH 149 (SMITH AVE)	Mississippi R & Railroad		
04/28/2011	27632	<a href="#">27632</a>	Zink, Jennifer	Bridge	Routine	CSAH 44	CHAN-HALSTED & PRIEST BA		
04/28/2011	97941	<a href="#">97941</a>	Zink, Jennifer	Bridge	Routine	US 75	CANBY CREEK		
04/28/2011	9030	<a href="#">9030</a>	Collins, Perry	Bridge	Routine	I 535	ST LOUIS R: RR, STREET		
04/28/2011	27055	<a href="#">27055</a>	Wilson, Holly	Bridge	Routine	St Anthony Pkwy	TH 47 (University Ave)		
04/27/2011	27632	<a href="#">27632</a>	Administrator, InspectTech	Bridge	Routine	CSAH 44	CHAN-HALSTED & PRIEST BA		
04/27/2011	7180	<a href="#">7180</a>	Administrator, InspectTech	Bridge	Routine	CSAH 19	CRYSTAL BAY CHANNEL		

- The upper left hand corner contains the Minnesota DOT logo. This is a navigation tool that will transfer the user back to the Main Page from any point in the software.
- Directly below the seal is the navigation menu, which is comprised of 5 tabs; "Main", "Administration", "Views", "GIS" and "Help". Each tab contains a list of sub tabs which will direct the user to a specific page within the software.



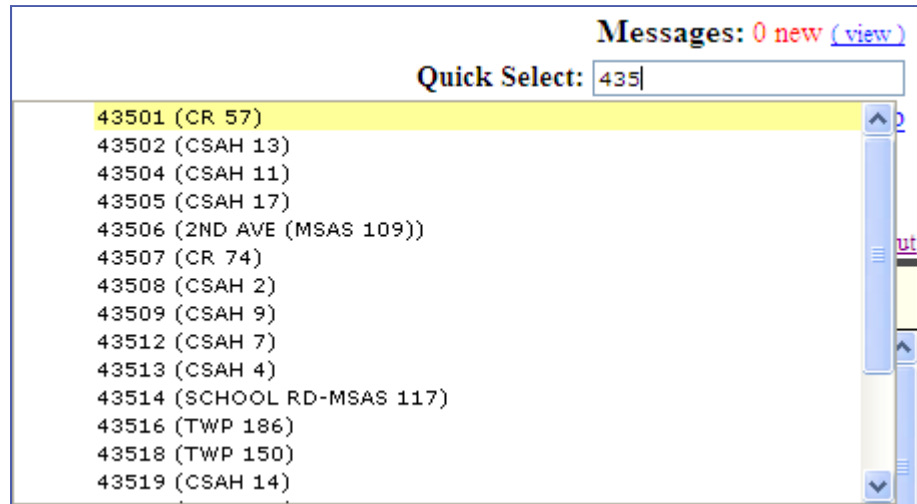
- Below the navigation menu are the progress tabs. These tabs are used to sort the inspection reports in the system by progress level and have been found to make the entire inspection process function in a more organized and efficient manner. SIMS has four levels of progress; "In Progress", "In Progress on a Laptop", "Awaiting Approval" and "Recently Approved".



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- The upper right hand corner contains the quick select and view asset group. Both of these tools are used to assist in searching for specific assets or inspection reports. The quick select allows you to search and retrieve any asset that exists in the software. For this feature the user does not need to know the asset's full name, rather any part of the name will suffice. Begin typing the asset name or code into the box and a list of 20 assets will appear using alphanumeric matching. The view assets group also allows for quick searching done through a tree search. Each section will be discussed more thoroughly in throughout this manual.



- The blue highlighted section is the inspection table view. This area will display the inspection reports and the asset's data for the progress tab which is opened.

### Inspection Table View:

Inspection Date	Asset Code	Asset Name	Primary Inspector	Asset Type	Report Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	Evans, Eric	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	62090	<a href="#">62090</a>	Halvorson, Eric	Bridge	Routine	TH 149 (SMITH AVE)	Mississippi R & Railroad		
04/28/2011	27632	<a href="#">27632</a>	Zink, Jennifer	Bridge	Routine	CSAH 44	CHAN-HALSTED & PRIEST BA		
04/28/2011	97941	<a href="#">97941</a>	Zink, Jennifer	Bridge	Routine	US 75	CANBY CREEK		
04/28/2011	9030	<a href="#">9030</a>	Collins, Perry	Bridge	Routine	I 535	ST LOUIS R: RR, STREET		
04/28/2011	27055	<a href="#">27055</a>	Wilson, Holly	Bridge	Routine	St Anthony Pkwy	TH 47 (University Ave)		
04/27/2011	27632	<a href="#">27632</a>	Administrator, InspectTech	Bridge	Routine	CSAH 44	CHAN-HALSTED & PRIEST BA		
04/27/2011	7180	<a href="#">7180</a>	Administrator, InspectTech	Bridge	Routine	CSAH 19	CRYSTAL BAY CHANNEL		

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# SIMS Collector 5.4




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Column Name	Information / Action Types Available
Inspection Date	This date is the date that the report was created. (Note this can be different from the NBI 90 inspection date)
Asset Code	Unique code for each bridge. This determines the order in which the bridges are shown in the summary tables as part of the district wide summary report. If you notice that a structure has a code that is out of order request it be changed by the system administrator. This code is typically the SI&A number for bridges.
Asset Name	This is the common name of the bridge. By clicking on the name the user can view details about the bridge, view reports for it or create a new report for the bridge.
Primary Inspector	Displays the name of the user who created the particular report.
Asset Type	This column describes the type of structure that the asset is: bridge, culvert, sign, or future type to be added.
Report Type	This column describes the report type for the specific asset whether it is routine, fracture critical, pinned assembly, etc.
NBI 7: Facility Carried by Structure	Displays the name of the road carried by the bridge. May be left blank depending on asset type.
NBI 6A: Featured Intersected: Narrative	This displays the name of the road intersected by the bridge. May be left blank depending on asset type.
Status	<p>An inspection report can be in various states (see separate section for full description). The reports shown in this window will reflect the tab that was selected, In Progress, Submitted for Approval or Recently Approved:</p> <p><b>In Progress:</b> An inspection report has been started and is in progress but not completed.</p> <p><b>In Progress on a Laptop:</b> Inspection reports which have been started and/or are being worked on, but have not</p>

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	<p>been synchronized.</p> <p><b>Submitted for Approval:</b> The inspector has deemed the report to be complete but it has yet to be approved by the appropriate reviewer (this can be done by Sub-consultants who are working with a prime and submitting each individual reports to the prime and/or when prime is submitting the Preliminary Report)</p> <p><b>Recently Approved:</b> 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.</p>
 - Edit Icon	<p><b>Edit Icon:</b> After an inspection report has been created, users may access their reports by clicking on this icon.</p>

 - Action Icon	<p>The Action Column is a drop-down list that shows available options that can be done to the bridge inspection report. Like the edit column the contents can vary based on the status of the latest inspection report. The user clicks on the option desired for the action to occur. The following are the common actions:</p> <p><b>View Report PDF:</b> 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.</p> <p><b>Submit Report for Review:</b> The inspector has deemed the report to be done but has yet to be approved by the appropriate reviewer.</p> <p><b>Delete Server Report:</b> 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.</p> <p><b><i>Undo Submit for Approval: The inspector can select this option to set the status back to In Progress.</i></b></p>
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	<p><b>Approve Report:</b> 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 edit changes are allowed.</p> <p><b>Delete Server Report:</b> 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.</p> <p><b>View Change Report:</b> Allows the inspector or reviewer to view an output showing all changes made in the inspection report from the central database values.</p>
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## Classic View:

Users have the option of viewing assets in the software in a variety of ways. One of the ways is the Classic View option, which allows users to filter and view a list of inspection reports on a single page. This is useful because the filter will limit and list all sub-assets of the criteria entered. This can make it easier for a user searching for a particular report.

1. To open the classic view go to the 'Views' tab on the main navigation menu and select 'Classic View' from the drop down.
2. This will open a classic view page and will allow the person to use the filter to find a report. Choose a parent asset (i.e. Benton County) as well as a criterion from the two drop down boxes. Proceed to type in the value into the open text box. Then click the filter button.

➤ Here is a screenshot of the Classic View main page with a filter entered:

**Benton Components:**

Displayed Inspection Type:  Show Assets in  by

In Progress: 0 Submitted for Review: 0 Approved: 79 Not Started: 0

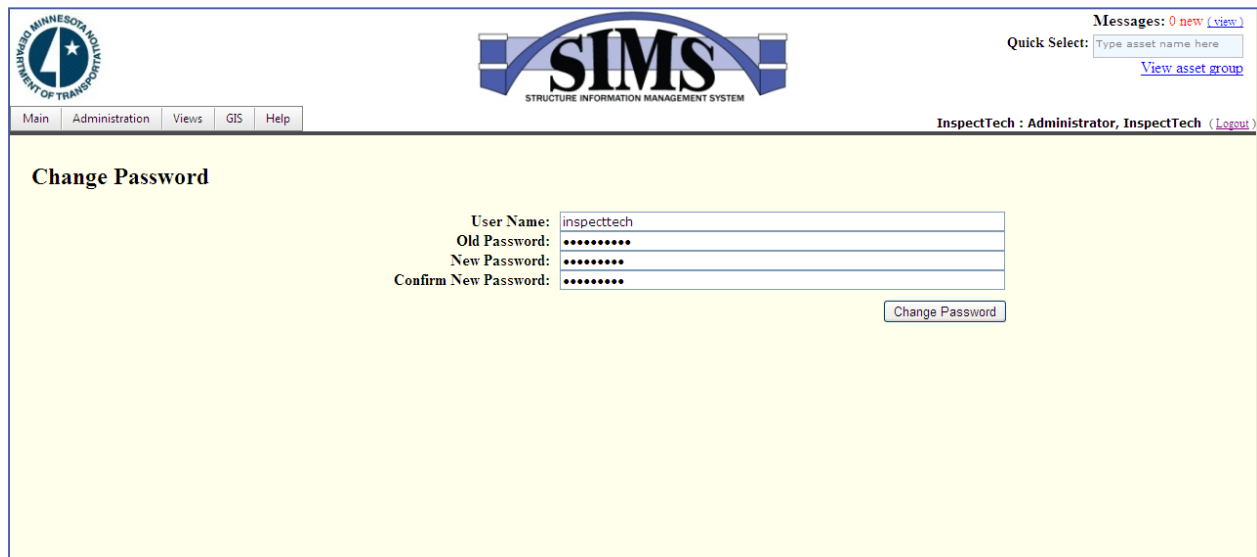
Inspection Date	Asset Code	Asset Name	Sub-Assets	Primary Inspector	Asset Type	Inspection Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative	Submitted To	Status	
12/29/2010	05501	<a href="#">05501</a>	None	Administrator, InspectTech	Bridge	Routine	CSAH 12	MAYHEW CREEK	Approved on 12/29/2010	Approved and submitted to manager	
12/17/2010	05502	<a href="#">05502</a>	None	Administrator, InspectTech	Bridge	Routine	CSAH 12	ELK RIVER	Approved on 12/17/2010	Approved and submitted to manager	
12/16/2010	05503	<a href="#">05503</a>	None	Administrator, InspectTech	Bridge	Routine	CSAH 6	LITTLE ST FRANCIS RIVER	Approved on 12/16/2010	Approved and submitted to manager	
12/17/2010	05504	<a href="#">05504</a>	None	Administrator, InspectTech	Bridge	Routine	CSAH 7	W BR RUM RIVER	Approved on 12/17/2010	Approved and submitted to manager	
12/17/2010	05505	<a href="#">05505</a>	None	Administrator, InspectTech	Bridge	Routine	CSAH 22	W BR RUM RIVER	Approved on 12/17/2010	Approved and submitted to manager	
01/03/2011	05507	<a href="#">05507</a>	None	Administrator, InspectTech	Bridge	Routine	CSAH 12	LITTLE ROCK CREEK	Approved on 1/3/2011	Approved and submitted to manager	

## How to Change Your Password:

Each user will be assigned a username and password to log into the software. Upon their initial login users may change their password by following the instructions below. Additionally, users may change their password as they please following the same instructions.

1. Login to the software and select the “Main” tab at the top-left corner of the main page. Choose the option “Change Password” from the drop-down list.

➤ Here is a screenshot displaying the change password page:



The screenshot shows the SIMS Collector web interface. At the top left is the Minnesota Department of Transportation logo. In the center is the SIMS logo with the text 'STRUCTURE INFORMATION MANAGEMENT SYSTEM'. On the right, there are messages and a quick select dropdown. Below the navigation bar, the 'Change Password' page is displayed. It contains four input fields: 'User Name' (with 'inspecttech' entered), 'Old Password' (masked with dots), 'New Password' (masked with dots), and 'Confirm New Password' (masked with dots). A 'Change Password' button is located at the bottom right of the form area.

2. The page will upload displaying the username. Type the old password into the appropriate box and then type the new password and confirm it. Then select “Change Password”. The next time the user logs in they will use the new password to enter the Collector website.

➤ **Note:** *Once the user has changed their password in the SIMS Collector, their password will automatically change for the Manager component as well. Also the password will be updated on the laptop version upon synchronization.*

## How to Logout Securely:

The software does have an auto logout feature after two hours; however, the user can manually logout of the system. There are two places in the software where users can logout securely. The first is an option located under the "Main" tab and the second option is a logout link located on the right side of the page next to the username.

- Here is a screenshot showing where the logout links are located on the Main Page:

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

Quick Select:  [View asset group](#)

InspectTech : Administrator, InspectTech ([Logout](#))

Asset ID	Asset Name	Primary Inspector	Asset Type	Report Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative		
5900	aTest. TL	aTest. TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
5900	aTest. TL	aTest. TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
5900	aTest. TL	aTest. TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	5900	5900	aTest. TL	Bridge	Routine	TH 43		
04/28/2011	5900	5900	Evans, Eric	Bridge	Routine	TH 43		
04/28/2011	5900	5900	aTest. TL	Bridge	Routine	TH 43		
04/28/2011	5900	5900	aTest. TL	Bridge	Routine	TH 43		
04/28/2011	5900	5900	aTest. TL	Bridge	Routine	TH 43		
04/28/2011	62090	62090	Halvorson, Eric	Bridge	Routine	TH 149 (SMITH AVE)		
04/28/2011	27632	27632	Zink, Jennifer	Bridge	Routine	CSAH 44		
04/28/2011	97941	97941	Zink, Jennifer	Bridge	Routine	US 75		
04/28/2011	9030	9030	Collins, Perry	Bridge	Routine	I 535		
04/28/2011	27055	27055	Wilson, Pete	Bridge	Routine	St Anthony Pkwy		
04/27/2011	27632	27632	Administrator, InspectTech	Bridge	Routine	CSAH 44		
04/27/2011	7180	7180	Administrator, InspectTech	Bridge	Routine	CSAH 19		

## How to Navigate Back to the Main Page:

There are three ways to return to the main page at any given point in the software:

1. The simplest way is by clicking on the Minnesota DOT logo in the top left hand corner.
2. The second way to return to the main page is by using the navigation menu. Go to the 'Main' tab and then click on the option called 'Main Page'.
3. In order to return to the 'Main' page from an open inspection report click on the 'Main Menu' tab located on the right hand side.

The screenshot shows the main interface of SIMS Collector 5.4. Callout 1 points to the Minnesota DOT logo in the top left corner. Callout 2 points to the 'Main Page' option in the 'Main' navigation menu. The main content area displays a table of inspection records.

Asset ID	Asset Name	Primary Inspector	Asset Type	Report Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative
5900	aTest. TL	aTest. TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS
5900	aTest. TL	aTest. TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS
5900	aTest. TL	aTest. TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS
5900	aTest. TL	aTest. TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS
5900	aTest. TL	aTest. TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS
5900	aTest. TL	aTest. TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS
62090	62090	Halvorson, Eric	Bridge	Routine	TH 149 (SMITH AVE)	Mississippi R & Railroad
27632	27632	Zink, Jennifer	Bridge	Routine	CSAH 44	CHAN-HALSTED & PRIEST BA
97941	97941	Zink, Jennifer	Bridge	Routine	US 75	CANBY CREEK
9030	9030	Collins, Perry	Bridge	Routine	I 535	ST LOUIS R: RR, STREET
27055	27055	Wilson, Pete	Bridge	Routine	St Anthony Pkwy	TH 47 (University Ave)
27632	27632	Administrator, InspectTech	Bridge	Routine	CSAH 44	CHAN-HALSTED & PRIEST BA
7180	7180	Administrator, InspectTech	Bridge	Routine	CSAH 19	CRYSTAL BAY CHANNEL

The screenshot shows an inspection report for 'NBI 59: Superstructure'. Callout 3 points to the 'Main Menu' button in the top right corner of the report view. The main content area displays a table of Superstructure Elements with inspection details.

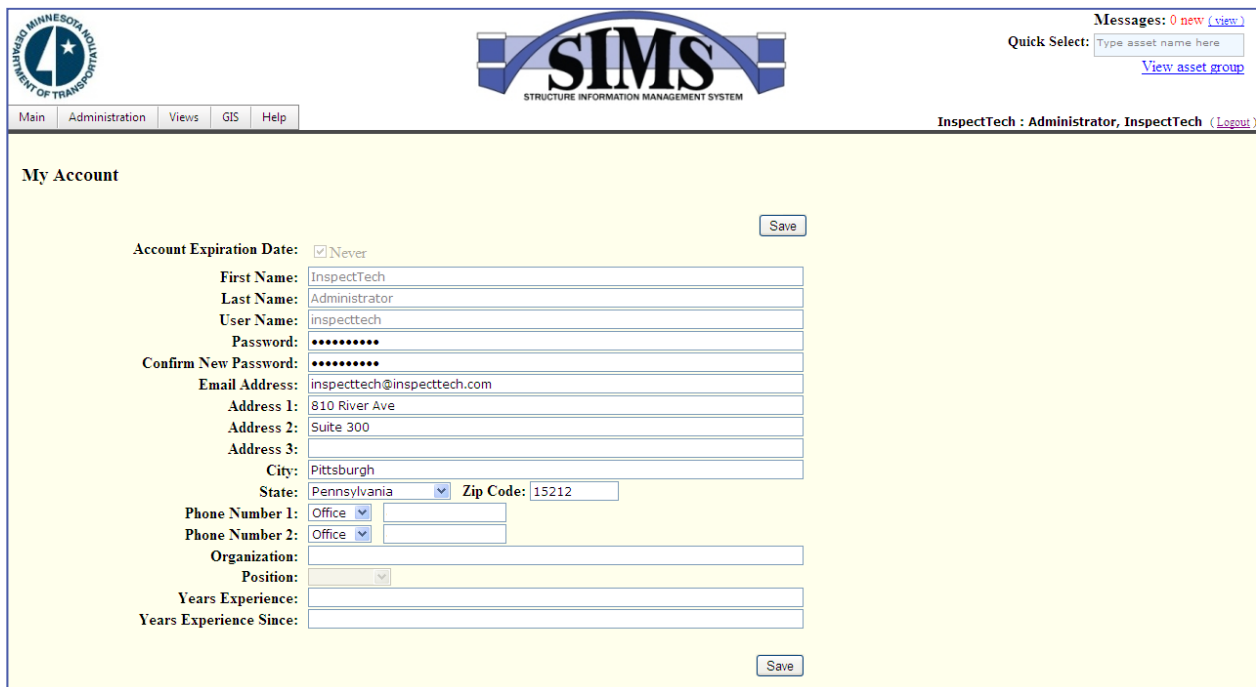
Environment	Total Quantity	State 1	State 2	State 3	State 4	State 5
107/2 Painted Steel Girder or Beam (Feet)	367	0	0	276	92	0
313/2 Fixed Bearing (Each)	12	0	12	0	0	0
363/2 Section Loss Smart Flag (Each)	1	1	0	0	0	0

## Managing 'My Account':

SIMS Collector 5.4 has a feature which tracks users of the system and allows them to make changes to their account information when needed. The 'My Account' option located under the Main tab displays a variety of information pertaining to a user including; name, address, email address, phone numbers, organization, position, and years experienced. This provides detailed profiles for every user of the software and helps manage certificates for each user in a common location.

1. To make changes or to add new certifications to your account, go to the Main tab on the navigation bar.
2. Select 'My Account' from the list of options and edit where needed.
3. Remember to click 'Save'.

➤ Below is a screenshot of the popup that will appear when adding a certificate to an account.



**My Account**

Account Expiration Date:  Never Save

First Name:

Last Name:

User Name:

Password:

Confirm New Password:

Email Address:

Address 1:

Address 2:

Address 3:

City:

State:  Zip Code:

Phone Number 1:

Phone Number 2:

Organization:

Position:

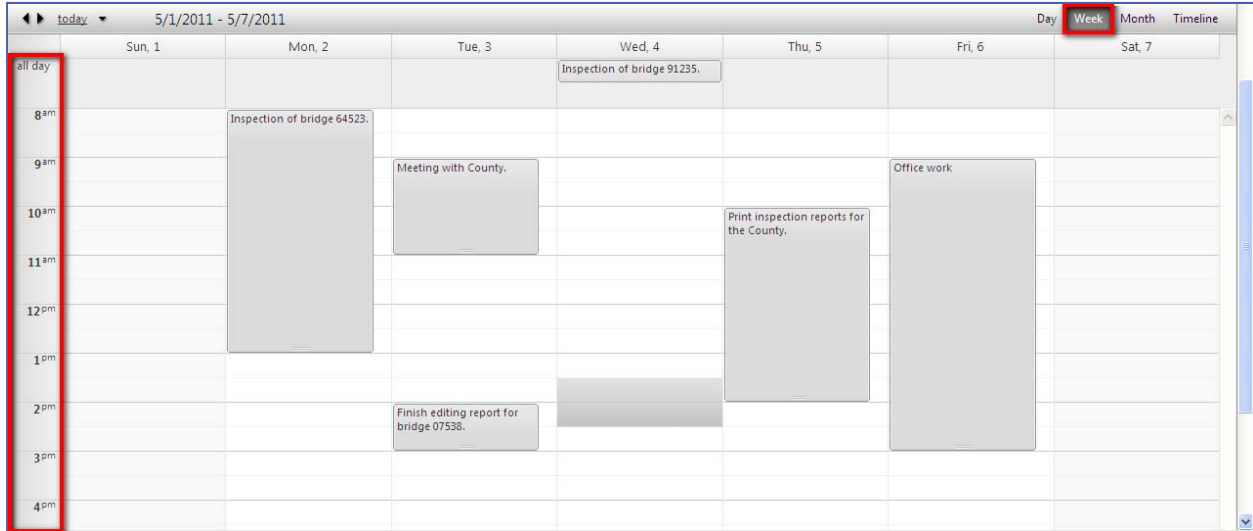
Years Experience:

Years Experience Since:

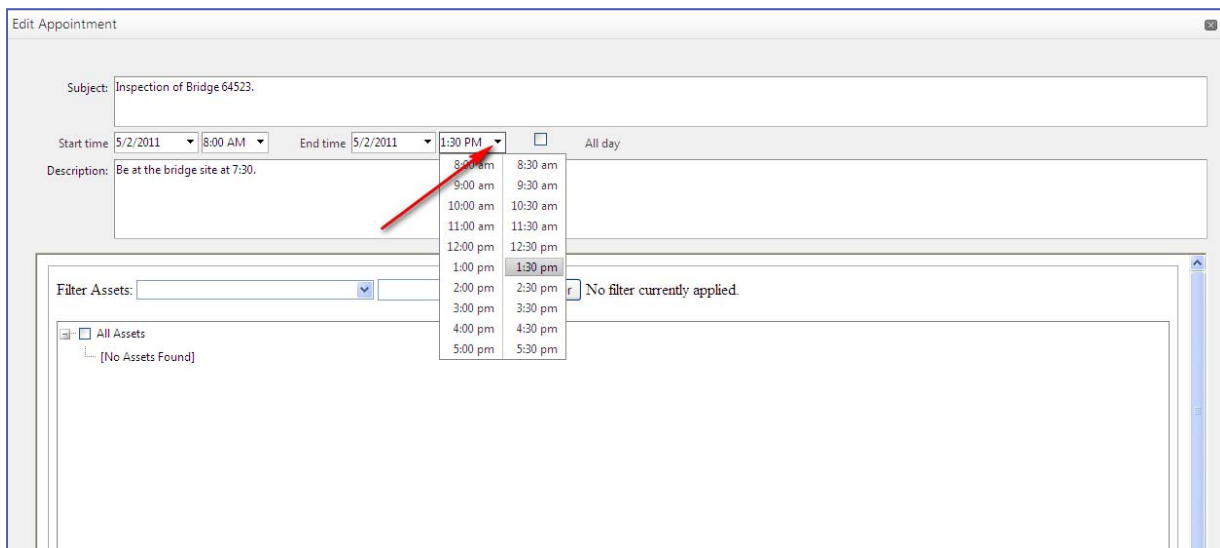
Save

## Inspection Schedule:

InspectTech has integrated a fully functional calendar into the software with the purpose of promoting organization and efficiency among users. The Inspection Schedule is found under the Main tab drop down list on the Main Page. This feature allows users to develop a calendar around the inspection cycle and even break down specific inspections, deadlines, and other tasks down to the hour. The calendar may be viewed by day, week, month or timeline to give the user maximum control and visibility of their schedule. To toggle between day, week, month or timeline use the buttons at the top left of the calendar. Below is an example of a basic inspection schedule:



1. To add an event to the inspection schedule double click inside the calendar on the correct date. A new page will appear and you will be able to add a subject, description, and even choose a bridge from the filter at the bottom. In order for the appointment to be added to the calendar you must select 'Save'. Below is a screenshot of the input page for the calendar where users will edit/add all information about the appointment.





## How to Use the Quick Select:

The Quick Select textbox is located at the top right hand corner of the main page. Quick Select is designed to find any bridge in the software without filtering or drilling down. This is a time saving tool which is meant to be used when the users knows some piece of information about the bridge (i.e. name/code). Quick Select uses alphanumeric text to return up to twenty bridges that match what has been entered into the Quick Select box. The user doesn't have to know the entire asset name; only part of the name will suffice. Type in the information known and allow the Quick Select to return the assets that meet the criteria.

1. Begin typing a portion of the asset's name. For this example suppose a user is searching for a bridge which has '123' somewhere its name. Type '123' into the textbox and the first 20 assets which has that combination in their name will appear as shown. Use the returned results to find the correct bridge.

➤ This is what the "Quick Select" should look like:

The screenshot shows the SIMS Collector 5.4 interface. At the top right, there is a 'Quick Select' dropdown menu with the text '123' entered. A red arrow points to this dropdown. Below the dropdown, a list of search results is displayed, with the entry '91236 (US 61)' highlighted in yellow. The main part of the interface is a table with columns: Inspection Date, Asset Code, Asset Name, Primary Inspector, Asset Type, Report Type, and NBI 7: Facility Carried by. The table contains multiple rows of inspection data.

Inspection Date	Asset Code	Asset Name	Primary Inspector	Asset Type	Report Type	NBI 7: Facility Carried by
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	Evans, Eric	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	62090	<a href="#">62090</a>	Halvorson, Eric	Bridge	Routine	TH 149 (SMITH AVE)
04/28/2011	27632	<a href="#">27632</a>	Zink, Jennifer	Bridge	Routine	CSAH 44
04/28/2011	97941	<a href="#">97941</a>	Zink, Jennifer	Bridge	Routine	US 75
04/28/2011	9030	<a href="#">9030</a>	Collins, Perry	Bridge	Routine	I 535
04/28/2011	27055	<a href="#">27055</a>	Wilson, Pete	Bridge	Routine	St Anthony Pkwy
04/27/2011	27632	<a href="#">27632</a>	Administrator, InspectTech	Bridge	Routine	CSAH 44
04/27/2011	7180	<a href="#">7180</a>	Administrator, InspectTech	Bridge	Routine	CSAH 19

- The drop down box can be navigated by placing the mouse in the textbox and scrolling or using the arrows on your keyboard. Users can add more information into the quick select at any time and it will automatically recalculate the query and return the results.
- When the user locates the bridge from the returned results, they can click on it or hit the enter key to open the bridge detail page. From here users may generate a new report or find a variety of information pertaining to the asset. Notice the bridge selected in the drop down is highlighted in yellow.

## How to Check Your Messages:

Located on the top right hand side of the main page you will find a 'Message' section. This will tell you how many messages are new and will have the word (view) in parenthesis which enables the user to view their messages. In order to view your messages click on the "view" link. This will direct you to a page that has your "read" and "unread" messages. Here is what the message section on the main page looks like.

**Messages: 0 new (view)**

**Unread Messages**

There are no unread messages.

---

**Read Messages**

There are no accepted messages.

## How to Navigate to BridgeInspect Manager:

1. There is a link that directly connects the Manager site and the Collector site. Go to the navigation bar on the main page and click on the "Main" tab.
2. Choose "Main Manager" from the list of options and this will direct the user to the Manager Login page.

Date	Asset Name	Primary Inspector	Asset Type	Report Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative		
	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	<a href="#">5900</a>	Evans, Eric	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS		
04/28/2011	<a href="#">62090</a>	Halvorson, Eric	Bridge	Routine	TH 149 (SMITH AVE)	Mississippi R & Railroad		
04/28/2011	<a href="#">27632</a>	Zink, Jennifer	Bridge	Routine	CSAH 44	CHAN-HALSTED & PRIEST BA		
04/28/2011	<a href="#">97941</a>	Zink, Jennifer	Bridge	Routine	US 75	CANBY CREEK		
04/28/2011	<a href="#">9030</a>	Collins, Perry	Bridge	Routine	I 535	ST LOUIS R: RR, STREET		
04/28/2011	<a href="#">27055</a>	Wilson, Pete	Bridge	Routine	St Anthony Pkwy	TH 47 (University Ave)		
04/27/2011	<a href="#">27632</a>	Administrator, InspectTech	Bridge	Routine	CSAH 44	CHAN-HALSTED & PRIEST BA		
04/27/2011	<a href="#">7180</a>	Administrator, InspectTech	Bridge	Routine	CSAH 19	CRYSTAL BAY CHANNEL		

➤ **Note:** Users may be prompted to login to the Manager site as well.

## View Asset Group:

1. Directly below the 'Quick Select' is the 'View Asset Group' link. The View Asset Group is used to view and locate any/all assets within a specific District, County, City, Township or other agency. When selected this link will open a window which displays a list of all parent assets within the entire system. When the user chooses a parent asset, a page will open containing a sorted list of assets found in that group. From here the user may navigate through the page to see each asset and the status of its most recent report.

➤ This is an example of the 'View Asset Group' link:

The screenshot shows the SIMS Collector 5.4 interface. At the top, there is a navigation menu with 'Main', 'Administration', 'Views', 'GIS', and 'Help'. Below this is a status bar with 'In Progress (48)', 'In Progress on a Laptop (0)', 'Awaiting Approval (2)', and 'Recently Approved (0)'. The main content area features a table of assets with columns for 'Inspection Date', 'Asset Code', 'Asset Name', 'Primary Inspector', 'Asset Type', 'Report Type', and 'NBI 7: Facility Carried by Structure'. A sidebar on the right contains a 'Quick Select' dropdown menu with a search box and a tree view of asset categories: 'All Assets', 'Test Assets', 'State Bridges', and 'Districts 1-4'. The 'View asset group' link is highlighted in red in the sidebar.

Inspection Date	Asset Code	Asset Name	Primary Inspector	Asset Type	Report Type	NBI 7: Facility Carried by Structure
04/29/2011	01007	<a href="#">01007</a>	Pierce, Jim	Bridge	Routine	TH 210
04/29/2011	82013	<a href="#">82013</a>	Pierce, Jim	Bridge	Routine	WC LIMITED RR
04/29/2011	08003	<a href="#">08003</a>	Pierce, Jim	Bridge	Routine	TH 4
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	Evans, Eric	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43
04/28/2011	62090	<a href="#">62090</a>	Halvorson, Eric	Bridge	Routine	TH 149 (SMITH AVE)
04/28/2011	27632	<a href="#">27632</a>	Zink, Jennifer	Bridge	Routine	CSAH 44
04/28/2011	97941	<a href="#">97941</a>	Zink, Jennifer	Bridge	Routine	US 75
04/28/2011	9030	<a href="#">9030</a>	Collins, Perry	Bridge	Routine	I 535

2. Once the Asset Group page has loaded the user will be able to see the list of all the sub assets under that parent. The user may scroll through the list to find a particular asset or use a filter to narrow the results. It's important to understand that there may be a large number of assets under some parent assets; therefore, the user may need to use the filter option to narrow the search to make finding a specific asset more efficiently.

➤ The below screenshot is an example of the sub-assets page for District 3. Notice how the page displays how many assets the district contains as well as divides them into the appropriate progress level.

*Continued on Next Page*

Continued

**District 3 Components:**

Displayed Inspection Type:  Show Assets in  by

In Progress: 0 Submitted for Review: 0 Approved: 412 Not Started: 0

Inspection Date	Asset Code	Asset Name	Sub-Assets	Primary Inspector	Asset Type	Inspection Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative	Submitted To	Status
09/08/2009	01001	<a href="#">01001</a>	None	Administrator, InspectTech	Bridge	Routine	TH 47	Ditch		Approved on 9/8/2009 Approved and submitted to manager
08/23/2010	01004	<a href="#">01004</a>	None	Administrator, InspectTech	Bridge	Routine	US 169	MISSISSIPPI RIVER		Approved on 8/23/2010 Approved and submitted to manager
09/23/2010	01005	<a href="#">01005</a>	None	Administrator, InspectTech	Bridge	Routine	TH 210	RIPPLE RIVER		Approved on 9/23/2010 Approved and submitted to manager
08/23/2010	01006	<a href="#">01006</a>	None	Administrator, InspectTech	Bridge	Routine	TH 210	RICE RIVER		Approved on 8/23/2010 Approved and submitted to manager
08/10/2010	01X01	<a href="#">01X01</a>	None	Administrator, InspectTech	Bridge	Routine	TH 47	SISSABAGAMAH CREEK		Approved on 8/10/2010 Approved and submitted to manager
09/22/2010	01X03	<a href="#">01X03</a>	None	Administrator, InspectTech	Bridge	Routine	TH 47	SEVENTEEN CREEK		Approved on 9/22/2010 Approved and submitted to manager
09/20/2010	01X05	<a href="#">01X05</a>	None	Administrator, InspectTech	Bridge	Routine	US 169	RIPPLE RIVER		Approved on 9/20/2010 Approved and submitted to manager
09/20/2010	01X06	<a href="#">01X06</a>	None	Administrator, InspectTech	Bridge	Routine	US 169	RIPPLE RIVER		Approved on 9/20/2010 Approved and submitted to manager

- The next screenshot shows how the filter can narrow these results. Suppose the user wanted to find all bridges in District 3 which intersect a river. The user would choose the field in the first drop down then type in river. Notice the results now display 135 total bridges. From this point the user may sort the bridges, review past inspection reports, and/or open in progress inspection reports.

**District 3 Components:**

Displayed Inspection Type:  Show Assets in  by

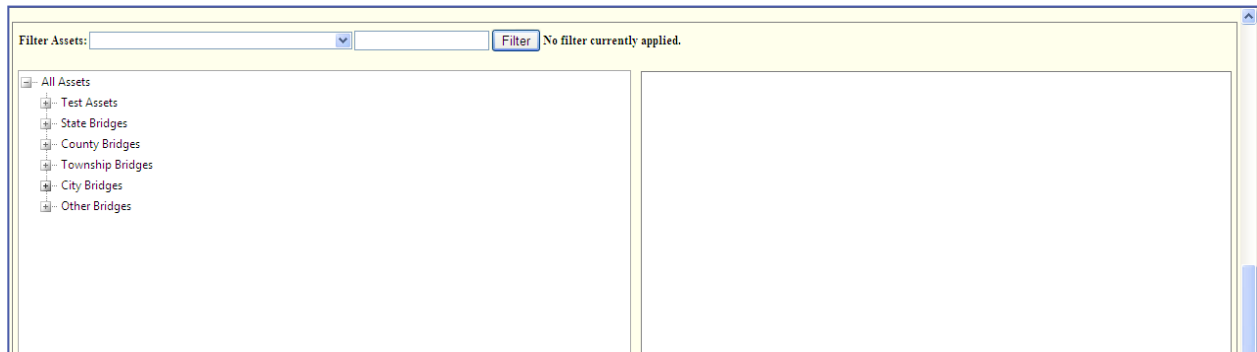
In Progress: 0 Submitted for Review: 0 Approved: 135 Not Started: 0

Inspection Date	Asset Code	Asset Name	Sub-Assets	Primary Inspector	Asset Type	Inspection Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative	Submitted To	Status
08/23/2010	01004	<a href="#">01004</a>	None	Administrator, InspectTech	Bridge	Routine	US 169	MISSISSIPPI RIVER		Approved on 8/23/2010 Approved and submitted to manager
09/23/2010	01005	<a href="#">01005</a>	None	Administrator, InspectTech	Bridge	Routine	TH 210	RIPPLE RIVER		Approved on 9/23/2010 Approved and submitted to manager
08/23/2010	01006	<a href="#">01006</a>	None	Administrator, InspectTech	Bridge	Routine	TH 210	RICE RIVER		Approved on 8/23/2010 Approved and submitted to manager
09/20/2010	01X05	<a href="#">01X05</a>	None	Administrator, InspectTech	Bridge	Routine	US 169	RIPPLE RIVER		Approved on 9/20/2010 Approved and submitted to manager
09/20/2010	01X06	<a href="#">01X06</a>	None	Administrator, InspectTech	Bridge	Routine	US 169	RIPPLE RIVER		Approved on 9/20/2010 Approved and submitted to manager
09/29/2010	05014	<a href="#">05014</a>	None	Administrator, InspectTech	Bridge	Routine	TH 95	ST. FRANCIS RIVER		Approved on 9/29/2010 Approved and submitted to manager

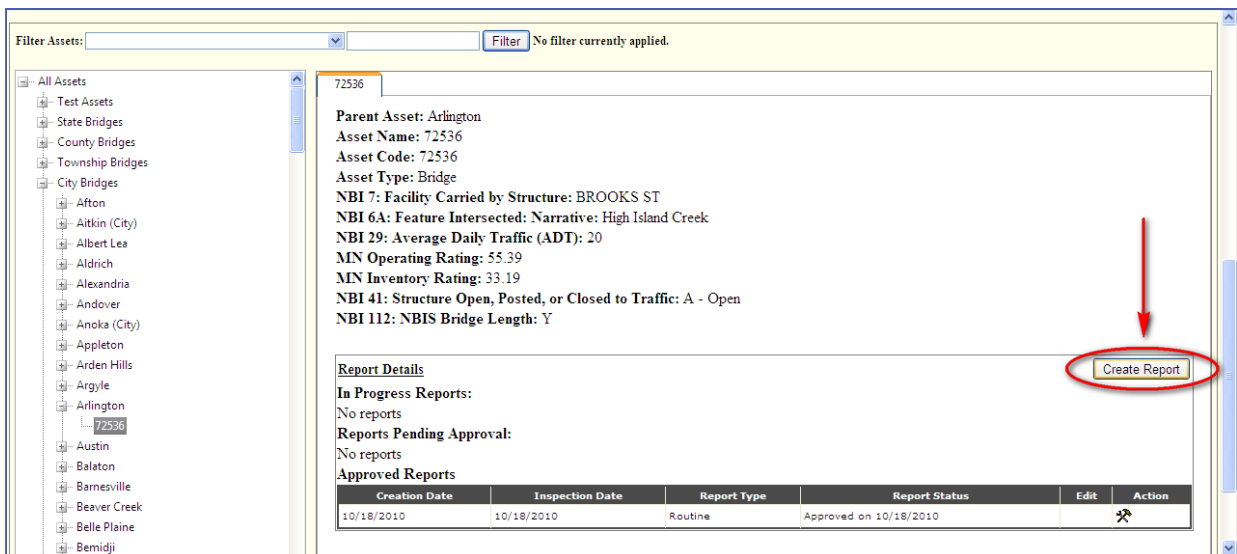
## How to Create an Inspection Report:

Located on the bottom of the Main page is a tree search section. The tree search is one way to locate a bridge in the software and is important because it is also one way a user can start a new inspection report. The other methods include quick select and the view asset group link.

- Below is a screenshot of the tree search section.




1. Expand the searching options by clicking on the plus symbol next to one of the parent types (i.e. State Bridges). The tree search will then expand to list all parents which fall under the parent type (i.e. District 4).
2. After the tree search is fully expanded double click on a bridge to upload its information and to create a new inspection report. Once selected, the asset will become highlighted in the tree search and its data will appear in the blank area in the previous screen shot. The data will contain the bridge's information as well as a 'Report Details' section showing all past and in progress reports.
3. Click the "Create Report:" button on the right hand side of the screen to begin a new report for that bridge. Choose the report type. The report will generate and take the user to the inspection input forms.



## How to Edit a Report:

The Collector main page contains every report that a user has the authority to access. This includes reports that are in progress, reports awaiting approval and reports recently approved. The user has the ability to go back into a report and edit the information at any point in time before the report gets approved. Once the report is approved, it is a final, legal document for that point in time.

1. To edit a report start by selecting the status tab of the report, for example the 'Awaiting Approval' tab. This will display all reports which are waiting to be reviewed and approved.
2. Next, locate the report that needs editing from the list and click on the "report/pencil" icon on the right hand side of the screen. This will open the report and allow the user to make the necessary changes. Here is what the icon looks like: 

The screenshot shows the SIMS Collector 5.4 interface. At the top, there is a navigation menu with 'Main', 'Administration', 'Views', 'GIS', and 'Help'. Below this is a status bar showing 'InspectTech: Administrator, InspectTech (Logout)'. The main content area has several tabs: 'In Progress (48)', 'In Progress on a Laptop (0)', 'Awaiting Approval (2)', and 'Recently Approved (0)'. The 'Awaiting Approval (2)' tab is selected and circled in red. Below the tabs is a table with the following columns: Inspection Date, Last Revision, Asset Code, Asset Name, Priority Inspector, Asset Type, Report Type, NBI 7: Facility Carried by Structure, NBI 6A: Feature Intersected: Narrative, Submitted To, and Status. Two rows of data are visible, both with a pencil icon in the Status column. A red arrow points from a yellow box labeled 'Edit Report Icon' to the pencil icon in the second row.

Inspection Date	Last Revision	Asset Code	Asset Name	Priority Inspector	Asset Type	Report Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative	Submitted To	Status
04/28/2011	04/28/2011	5900	5900	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS	Falkum, Craig [comments]	Report submitted for review on 4/28/2011
04/28/2011	04/28/2011	5900	5900	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS	Falkum, Craig [comments]	Report submitted for review on 4/28/2011

- **Note:** The user can sort through all the reports quickly by selecting one of the column headers. This orders all the reports based on that column's data. Clicking the header again will resort the column in the opposite direction (ascending vs. descending). When the tab is opened the reports are automatically ordered by inspection date.

## Entering Data into a Report:

When a new report is generated the central database values will automatically fill the report. The central database values are the most current information on the bridge. Usually this data comes from the previous inspection report. All of the data which is generated via the central database values is highlighted in yellow. When you change any central database values in the report, the text box will change from yellow to white showing that a change has been made. This clearly shows where changes occurred on the asset from the last inspection and helps identify any existing trends.

There are four major sections to each report: (1) primary tabs, (2) sub-tabs, (3) right hand sidebar and (4) the main entry window. The main entry window is where the data will be entered into each form. The main entry window is highlighted in the below screenshot.

Environment	Total Quantity	State 1	State 2	State 3	State 4	State 5
205/2 Reinforced Concrete Column (Each)	49	22	20	7	0	
210/2 Reinforced Concrete Pier Wall (Feet)	211	111	89	11	0	
215/2 Reinforced Concrete Abutment (Feet)	79	58	21	0	0	

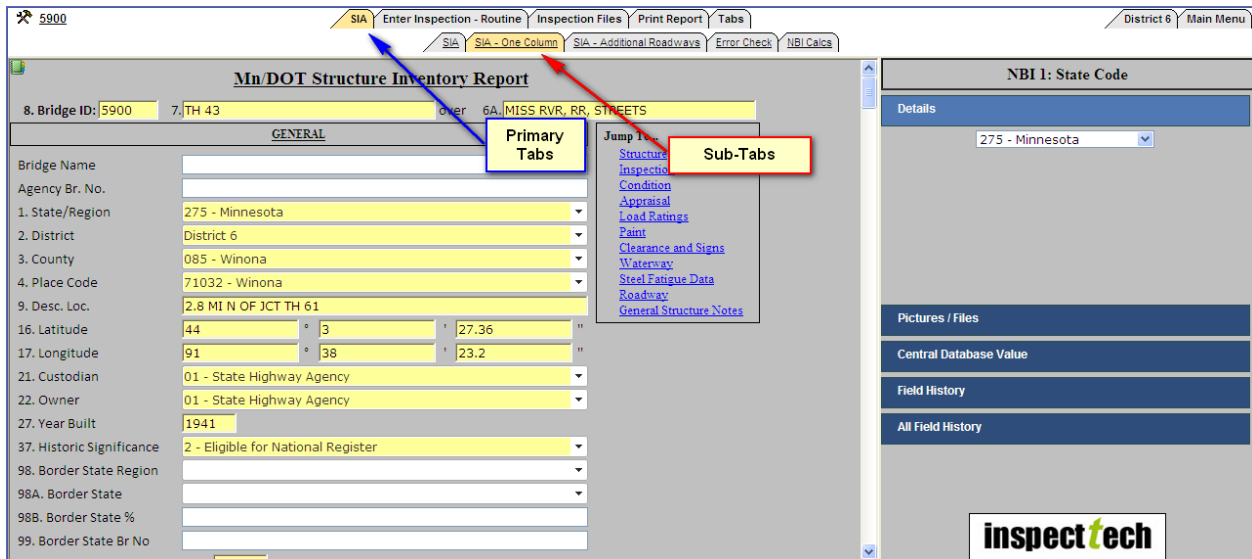
### Basic Usage

Each field on a form can be activated and edited, (or checked if a check box is available), by selecting the field with your mouse. Whenever a field is selected, the right-hand side bar will display information about that particular field (refer to page 22 for more info). If the field has any options available, such as a drop-down select list, it will also be displayed when the field is selected. Data can be typed directly into the field on the entry screen OR if a drop down list is available, an option can be selected and the field will automatically be updated with the selected choices. To move to the next field the user can use the 'Tab' button on the keyboard or the mouse. The software automatically saves the changes when the user moves on to the next field. To move to the next form use the primary and sub-tabs across the top of the page.

## How to Navigate Through the Report Forms:

To navigate through the report forms use the primary tabs across the top of the page. Each primary tab has numerous sub-tabs which become visible when the primary tab is selected. The opened tab will be highlighted in yellow to show that it is active. When a sub tab is selected it will also become highlighted and will open that form in the report. Once the form is opened the user will be able to add or edit the necessary data into the textboxes in the form.

- Here is a screenshot displaying the primary tabs and sub-tabs for a bridge inspection report. Notice the tabs are highlighted in yellow, showing they are activated.



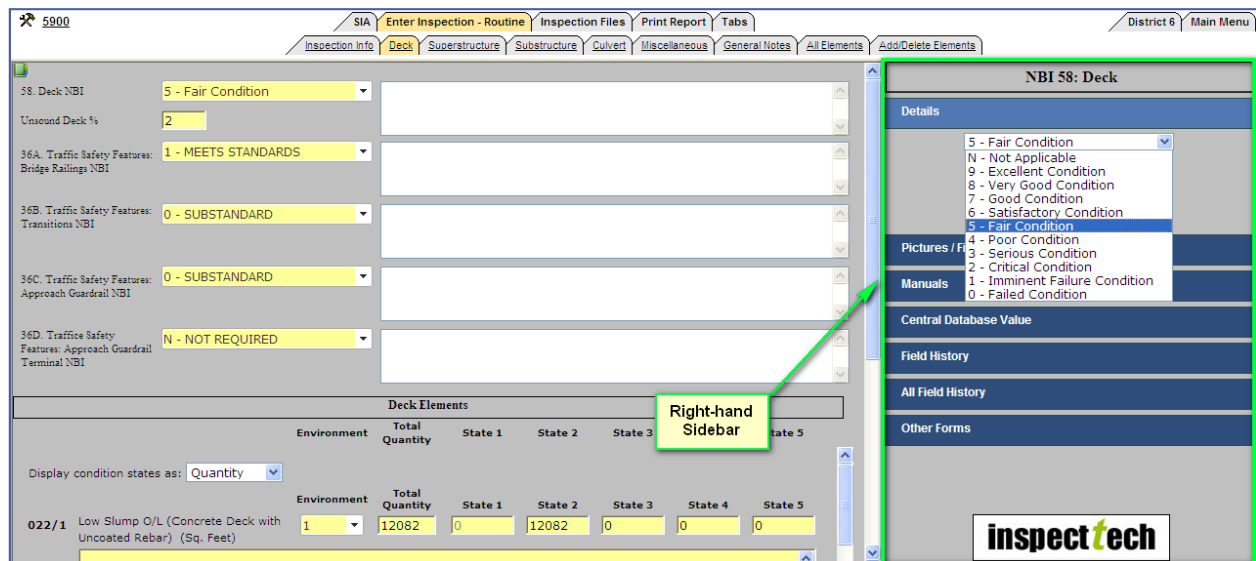
1. To begin navigating through each form, place your mouse on the field and click. In order to move to the next field simply hit the "Tab" key on your keyboard or use your mouse to click inside the next field. You may use the tab key to navigate through the entire form.
2. Use the mouse to click the next sub-tab and move to another form. If there are no more sub-tabs move onto the next primary tab.

- **Note:** There is no "Save" button when entering or editing information within a report. The information is saved immediately when the user moves to the next field.



## The Right-Hand Side Bar:

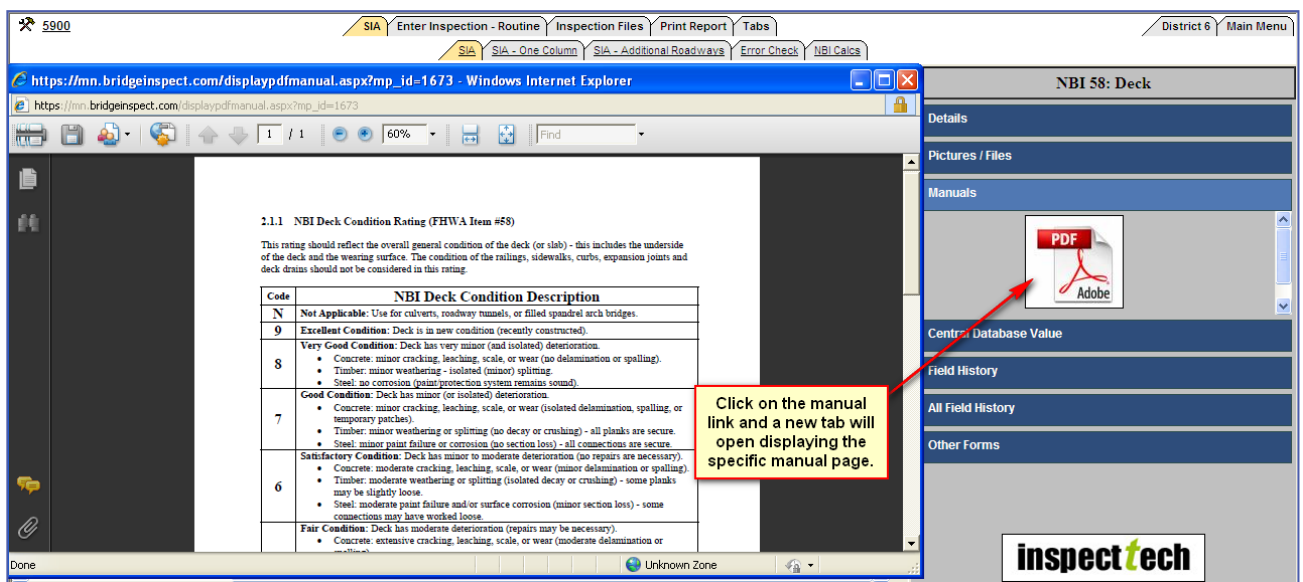
The "Right-Hand Side Bar" is a designated area on each form which displays information that is associated with the selected field. When a field is selected in a report the right hand side bar becomes occupied. The sidebar opens to show the details about the field, as well as provides the user with the ability to view any pictures, manuals, central database values, field history, all field history, and/or other forms where that field appears on. To view or to add information to one of these sections click on the blue labeled area in the sidebar and the section will expand. The screenshot is displaying the right-hand side bar within the software and the table describes what each side bar tab entails.



<i>Field Name</i>	The field name is typically shown on the top of the sidebar and is surrounded by a black box.
<i>Details</i>	This is the first section of the sidebar and this will show any/all choices associated with the field (i.e. condition ratings). The user 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 the user to type directly into the box.
<i>Pictures/Files</i>	The pictures/files tab allows the user to attach 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.
<i>Manuals</i>	The manuals tab is very useful to inspectors as it will display appropriate manual pages that are related to the field (i.e. manual pages that explain how to rate certain conditions). This tab eliminates

	the need for inspectors to carry along with them the manual books which can get quite heavy and be a pain to search through. The user can double click on the manual page and a new internet browser will open and display to the user.
<i>Field History</i>	This is a running log of all changes made from inspection to inspection.
<i>Other Forms</i>	This section shows all other forms in which the field is located.

➤ Here is a screenshot of a typical manual page generated from the right hand sidebar.



## How to View Report PDF, Submit Report for Review, Delete Server Report and/or View Change Report:

In order to view, submit or delete a report you must first select the status of the report. All of these actions are associated with the "In Progress" reports. The user will also be able to view a PDF report in all other stages as well.

1. Find the correct report and click on the "Hammer/Wrench" icon that is on the right hand side. When selected the entire row will become highlighted in the inspection table and a small window will appear which allows the user to select the appropriate action. (See screenshot below).

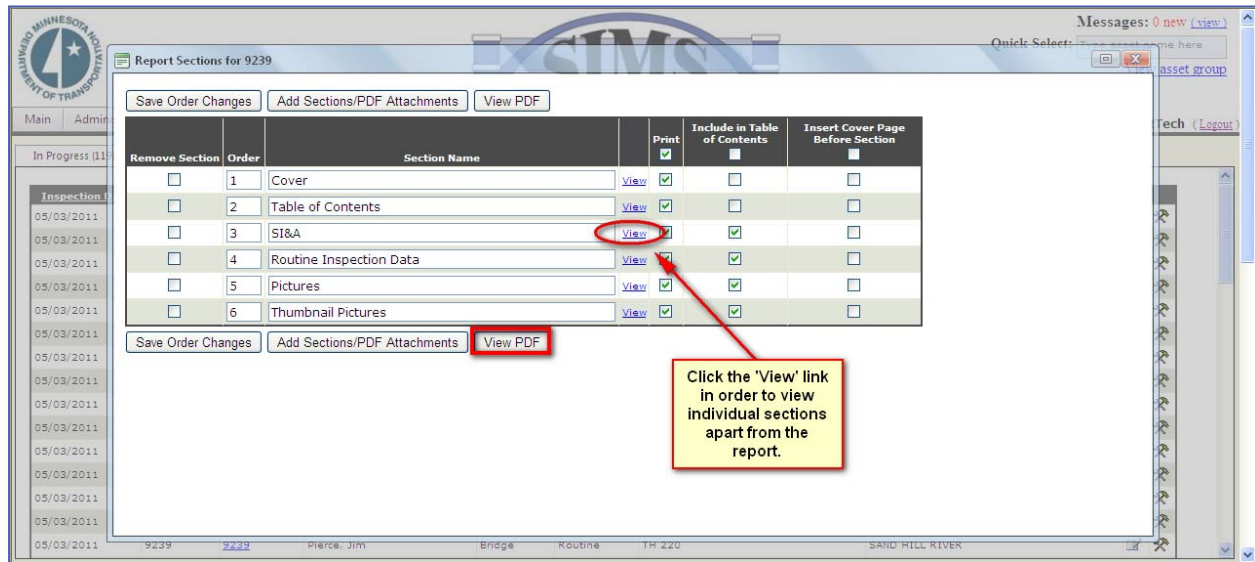
Inspection Date	Asset Code	Asset Name	Primary Inspector	Asset Type	Report Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected; Narrative
05/03/2011	9030	Administrator, InspectTech	Administrator, InspectTech	Bridge	Routine	I 535	ST LOUIS R; RR, STREET
05/03/2011	02003	Administrator, InspectTech	Administrator, InspectTech	Bridge	Routine	US 10 WB	BNSF Railroad
05/03/2011	27V76	Pierce, Jim	Pierce, Jim	Bridge	Routine	TH 62 WB	I 94W & NICOLLET AVE S
05/03/2011	9239	Aamodt, Randy	Aamodt, Randy	Bridge	Routine	TH 220	SAND HILL RIVER
05/03/2011	5718	Hartfiel, Lisa hartillis	Hartfiel, Lisa hartillis	Bridge	Routine	MNTH 123	K... RIVER ST
05/03/2011	5718	Pierce, Jim	Pierce, Jim	Bridge	Routine	MNTH 123	K...
05/03/2011	6803	Pierce, Jim	Pierce, Jim	Bridge	Routine	US 169	UP...
05/03/2011	6802	Pierce, Jim	Pierce, Jim	Bridge	Routine	US 169	SI...
05/03/2011	9213	Pierce, Jim	Pierce, Jim	Bridge	Routine	W 82nd St	I...
05/03/2011	6778	Pierce, Jim	Pierce, Jim	Bridge	Routine	TH 65	SI...
05/03/2011	9264	Pierce, Jim	Pierce, Jim	Bridge	Routine	CSAH 10 EB	T...
05/03/2011	86814	Pierce, Jim	Pierce, Jim	Bridge	Routine	I 94 EB	CI...
05/03/2011	02047	Pierce, Jim	Pierce, Jim	Bridge	Routine	Airport Road	UP...
05/03/2011	9391	Pierce, Jim	Pierce, Jim	Bridge	Routine	TH 95	UP...
05/03/2011	9239	Pierce, Jim	Pierce, Jim	Bridge	Routine	TH 220	SAND HILL RIVER

2. Now choose one of the actions by clicking the bullet next to it. Once it's selected the software will immediately execute the command or ask the user if they are sure this is the action they want to perform.
3. If the user selects the "View Report PDF" option, a pop-up will appear allowing them to generate the entire output report or choose which individual sections to view. This page also permits the user to set the specifics about how the report will be viewed. For example, users may put the pages in any order they want, exclude certain sections, view individual sections apart from the entire report, select a cover page, add sections/attachments or view the entire PDF.

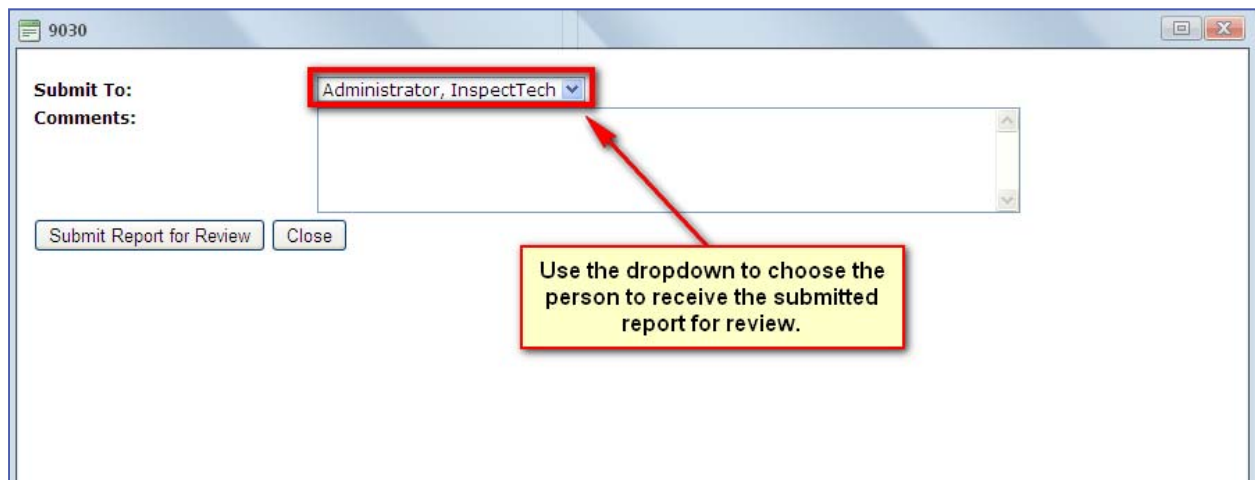
➤ The next page contains an example of what the "View Report PDF" action will look like.

*Continued on Next Page*

Continued



4. "Submit Report for Review" will move the current report in progress to the "Awaiting Approval" tab, where it will stay until it gets approved by the reviewer or sent back for further inspection/review. Upon submitting the report, users will choose the person from a dropdown to whom the report will go. Additionally, they will be able to enter comments in order to provide any details that may be important. Users must either select 'Submit Report for Review' or 'Close' to continue.



5. Clicking on the "Delete Sever Report" action will delete the report from the server. It will not delete the asset entirely or previous reports for that asset, only that specific report. When a user selects this option a pop up will appear: "The inspection report will be deleted. Click OK to continue". This will ensure only the reports that are meant to be deleted are the ones actually get deleted.

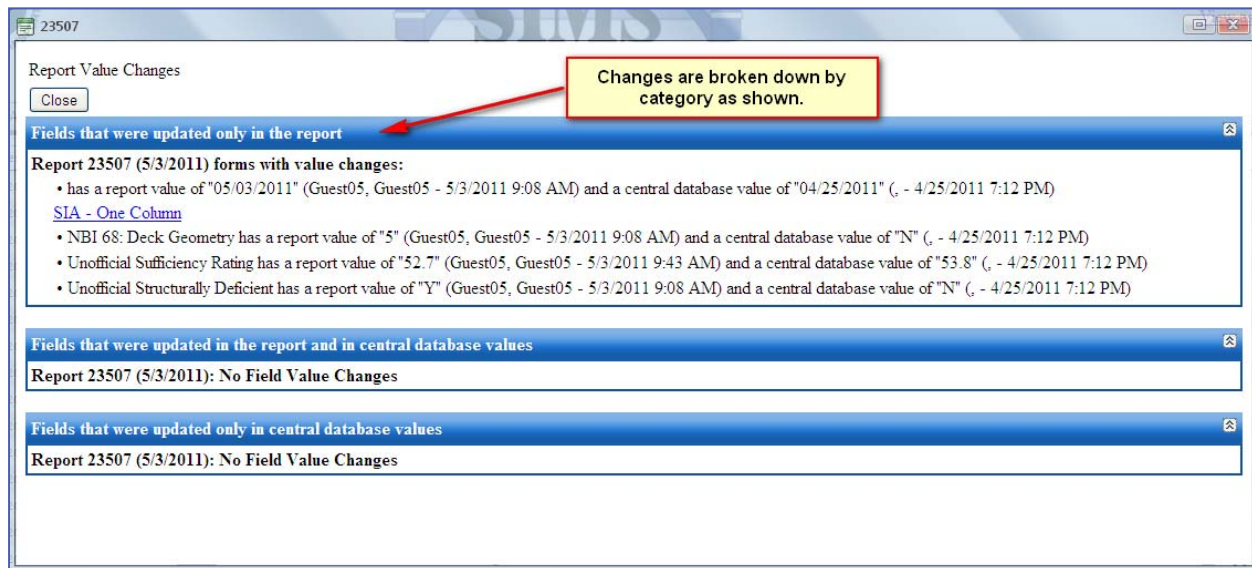
➤ **Note:** If a user deletes a server report by mistake they can have the report restored by contacting [simshelp.dot@state.mn.us](mailto:simshelp.dot@state.mn.us).

Continued on Next Page

Continued

6. The 'View Change Report' will generate an output showing the user all changes made in the inspection report. This identifies all the changes from three categories:
  - a. Fields that were updated only in the report
  - b. Fields that were updated in the report and in central database values
  - c. Fields that were updated only in central database values

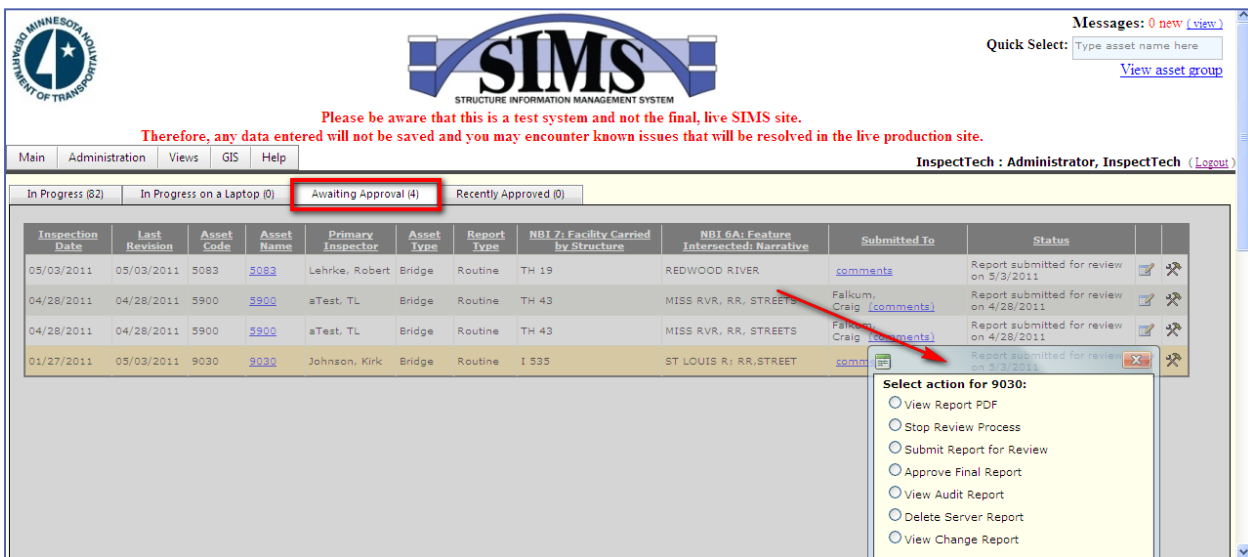
➤ Here is a screenshot of a 'View Change Report':



## How to Approve a Final Report, Stop the Review Process, Submit Report for Review, View the Audit Report and/or View Change Report:

1. In order to “Approve a Final Report”, “Submit Report for Review”, “Stop the Review Process”, “View the Audit Report” or to “View the Change Report”, begin by selecting the “Awaiting Approval” tab at the top of the main page. Note: There are also other options given such as “Delete Server Report” and “View Report PDF”.
2. Then locate the correct report and click on the “Hammer/Wrench” icon to the right of the report. The list of options will be made available in a pop-up and the asset will become highlighted.

➤ Here is a screenshot showing the options available under the “Awaiting Approval” tab.



Therefore, any data entered will not be saved and you may encounter known issues that will be resolved in the live production site.

InspectTech : Administrator, InspectTech (Logout)

Inspection Date	Last Revision	Asset Code	Asset Name	Primary Inspector	Asset Type	Report Type	NBI 7: Facility Carried by Structure	NBI 6A: Feature Intersected: Narrative	Submitted To	Status
05/03/2011	05/03/2011	5083	<a href="#">5083</a>	Lehrke, Robert	Bridge	Routine	TH 19	REDWOOD RIVER	<a href="#">comments</a>	Report submitted for review on 5/3/2011
04/28/2011	04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS	Falkum, Craig ( <a href="#">comments</a> )	Report submitted for review on 4/28/2011
04/28/2011	04/28/2011	5900	<a href="#">5900</a>	aTest, TL	Bridge	Routine	TH 43	MISS RVR, RR, STREETS	Falkum, Craig ( <a href="#">comments</a> )	Report submitted for review on 4/28/2011
01/27/2011	05/03/2011	9030	<a href="#">9030</a>	Johnson, Kirk	Bridge	Routine	I 535	ST LOUIS R; RR, STREET	<a href="#">comments</a>	Report submitted for review on 5/3/2011

Select action for 9030:

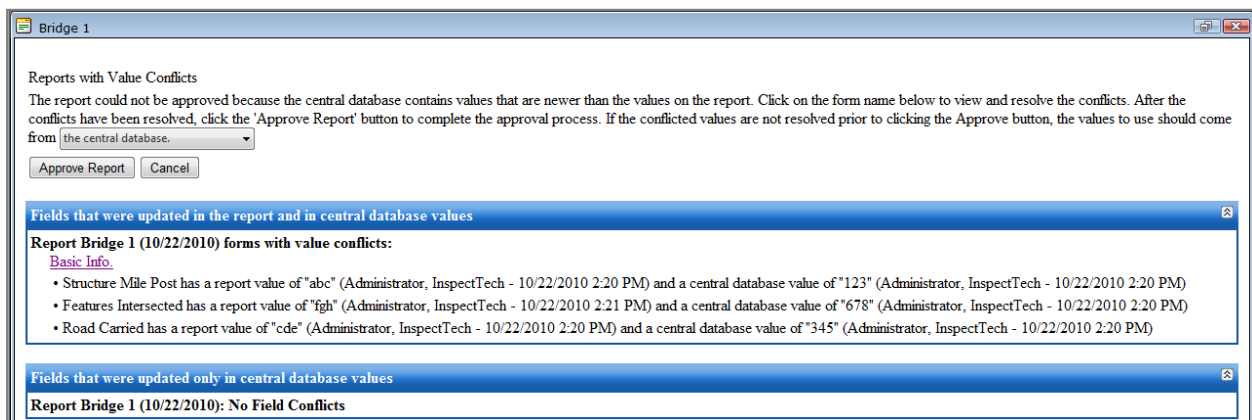
- View Report PDF
- Stop Review Process
- Submit Report for Review
- Approve Final Report
- View Audit Report
- Delete Server Report
- View Change Report

3. The “Stop Review Process” moves the report out of the approval process and places it back into the “In Progress” tab. This is executed immediately after the command is selected; it will not ask the user for a confirmation. It is very easy to resubmit a report for approval, just follow the steps from the previous section.
4. When a user selects “Approve Final Report” the report becomes finalized and cannot be edited unless a manager selects an “Undo Approval” at a later time. This will instantly move the report into the “Recently Approved” tab.
5. If a user selects “Submit Report for Review” they are passing the report along to another person before the report can be approved. This is used in cases where the report has to be reviewed by multiple parties before a finalized report is generated and stored.
6. Finally, the “View Audit Report” will show the user all the changes that were made to the report and the “Change Report” will show changes to that specific report since the last report was approved.

## Conflict Resolution between Report Values and Central Database Values:

When there is a conflict between values in a report and a bridge's central database values (i.e. different deck ratings), the software will automatically transfer users to a conflict resolution screen before the report can be approved. This feature is to ensure the right values are used in the report as well as stored in the database. The conflict resolution screen will highlight the conflicts as well as allow the user to choose the correct value. Once solved the user may approve the report by clicking the "Approve Report" button at the top of the page.

- Below is a screenshot of the conflict resolution screen. Notice how the conflicts are separated into two categories: "Fields that were updated in the report and in the central database values" and "Fields that were updated only in the central database values". *Note: This is an example created for the purpose of this manual...the actual screen may be a little different.*



From this point, users can adjust the values all at once or by going through each individual conflict. For example, users may choose to either use "the central database" or "the report" in the drop down box at the top of the page. This will automatically solve all the conflicts by pulling the correct value from either the report or the central database values. Going through each conflict individually will allow the user to choose different values in different conflicts (i.e. in one conflict they may use the report value and in another conflict the user may use the central database value).

- Here is another screenshot showing how a user may solve the conflict one at a time:

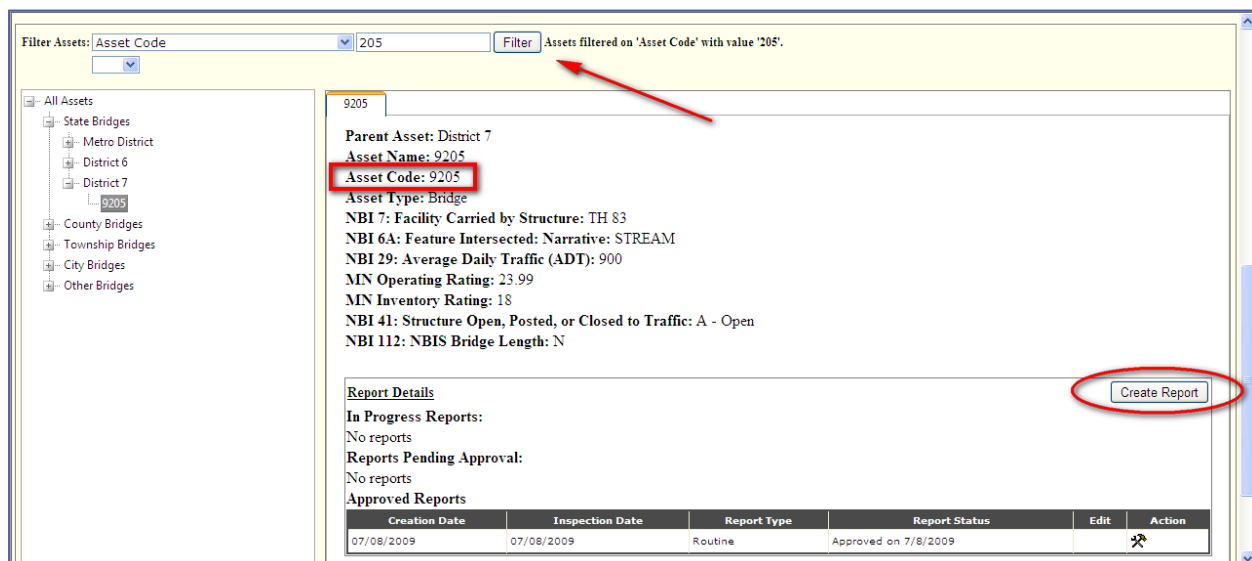


## How to Use the Filter Function:

The “Filter” is a very common method for locating an asset in the software. Filtering is ideal for users who know only certain pieces of information about an asset (i.e. part of a bridge’s name). Users can type what they know into the filter and go through the narrowed results to find the correct asset. The filter function is located on the bottom of the main page and is shown in a screenshot below.

1. Begin by selecting the drop down arrow next to the “Filter Assets” button. There will be five filtering options which the user may choose; asset code, asset name, asset type, NBI 6A: Feature Intersected, and NBI 7: Facility Carried by Structure. Users may filter using any one of these options.
2. After the filter criteria is selected, move to the next text box and type in the information about the asset which relates to the criteria (i.e. asset name = 205). The user only has to know some of the information for this box. For example, suppose part of the bridge number contains the “205” in it. The user may type that into the textbox and the filter will only return bridges with “205” in their name. After entering in the parameters click on the box labeled “Filter” to execute the command. The tree search on the left will then condense to show “All Assets”. Click on the plus sign next to it and the tree search will expand to show any state districts, counties, townships, cities, and others which contain bridges which meet the criteria. Next click on the plus symbol next to the correct parent asset (i.e. State Bridges and District 7).
3. Finally, the tree will expand to show all bridges in the selected district which have an asset code containing “205”. Click on the bridge name to open its Detail Page. The bridge will become highlighted in the tree and its information will appear in the open area to the right of the searching area.

➤ **Note:** *This is another way to create an inspection report in the software.*



The screenshot shows the SIMS Collector 5.4 interface. At the top, there is a filter bar with a dropdown menu set to "Asset Code", a text input field containing "205", and a "Filter" button. Below the filter bar, a tree view on the left shows a hierarchy of assets: All Assets, State Bridges, Metro District, District 6, District 7, County Bridges, Township Bridges, City Bridges, and Other Bridges. The "District 7" folder is expanded, showing a sub-folder "9205". The main content area displays the details for the selected asset "9205". The details include: Parent Asset: District 7, Asset Name: 9205, Asset Code: 9205, Asset Type: Bridge, NBI 7: Facility Carried by Structure: TH 83, NBI 6A: Feature Intersected: Narrative: STREAM, NBI 29: Average Daily Traffic (ADT): 900, MN Operating Rating: 23.99, MN Inventory Rating: 18, NBI 41: Structure Open, Posted, or Closed to Traffic: A - Open, and NBI 112: NBIS Bridge Length: N. Below the details, there is a "Report Details" section with "In Progress Reports" and "Reports Pending Approval" both showing "No reports". At the bottom, there is a table of "Approved Reports" with columns for Creation Date, Inspection Date, Report Type, Report Status, Edit, and Action. A "Create Report" button is circled in red in the bottom right corner of the main content area.

Creation Date	Inspection Date	Report Type	Report Status	Edit	Action
07/08/2009	07/08/2009	Routine	Approved on 7/8/2009		



## How to do an AND/OR Filter:

Users may construct even more detailed filters in the software. Begin the same way as if doing a basic filter, but after the user has entered the information for the first parameter click on the small box directly below to add another parameter. This will provide two options, "And" or "Or". The "And" filter will look for the asset that contains both the first and second parameters. If the "Or" option is chosen, the filter will bring back the assets which contain either the first or the second parameters entered. The "And" option conducts a narrower search because the asset has to meet both of the criteria in order to pass through the filter.

1. Type in the other parameter after you select either the "And" or "Or" option.

➤ **Note:** The user does not have to stop after entering the second parameter (this will be covered in the next section of this manual). The filter can have up to three parameters entered.

2. Once all the parameters are set click the "Filter" button to execute the filter and return the results.

➤ Here is a screenshot displaying this process. For this example we are searching for a bridge which contains "300" OR "301" in its asset name. We know that the asset name contains one of these two numbers. The filter in this case narrowed our search and saved much useful time of scrolling through each name until we found the correct asset.

The screenshot shows the SIMS Collector 5.4 interface. At the top, the 'Filter Assets' section is set to 'Asset Name' with a dropdown menu showing 'Or' selected. Two input fields contain the numbers '300' and '301'. A 'Filter' button is visible, and the filter text below it reads 'Filter: Asset Name('300') or Asset Name('301')'. A red box highlights the 'Or' dropdown, and a red arrow points to the filter text with a callout box that says 'Shows what has been entered into the filter.' Below the filter section, a tree view on the left shows a hierarchy of assets, with '43001' selected under 'Glencoe Twp'. The main panel displays details for asset 43001, including its parent asset, name, code, type, and various technical specifications. At the bottom, there is a 'Report Details' section with a 'Create Report' button and a table of reports.

Creation Date	Inspection Date	Report Type	Report Status	Edit	Action
11/04/2010	11/04/2010	Routine	Approved on 11/4/2010		

## How to do a Multiple AND/OR Filter:

The multiple “And/or” filter allows users to conduct a search with three criteria entered. This provides an even more in depth search of the asset set. For instance, suppose a user needed to find all state bridges in the system which have a bridge number containing “300” or “301” and intersects a feature containing “creek”. The user could run a multiple and/or filter to find those bridges.

1. Enter the criteria just like in the previous step. Click the “Filter” button to execute the command. Notice the filter’s criterion is displayed so users may review the filter in one statement.

➤ The below screenshot is an example of a multiple criteria filter:

The screenshot displays the SIMS Collector 5.4 interface. At the top, a filter configuration is shown with the following criteria:
 

- Filter Assets: Asset Name (dropdown) 300
- Or (dropdown)
- Asset Name (dropdown) 301
- And (dropdown)
- NBI 6A: Feature Intersected: Narrative (dropdown) Creek

 The filter criteria are summarized as: Filter: Asset Name('300') or Asset Name('301') and NBI 6A: Feature Intersected: Narrative('Creek').

On the left, a tree view shows the hierarchy of assets, with 'State Bridges' expanded to show District 7, where asset 53006 is selected.

The main panel displays details for asset 53006:
 

- Parent Asset: District 7
- Asset Name: 53006
- Asset Code: 53006
- Asset Type: Bridge
- NBI 7: Facility Carried by Structure: TH 60 WB
- NBI 6A: Feature Intersected: Narrative: ELK CREEK
- NBI 29: Average Daily Traffic (ADT): 3796
- MN Operating Rating: 56.39
- MN Inventory Rating: 33.79
- NBI 41: Structure Open, Posted, or Closed to Traffic: A - Open
- NBI 112: NBIS Bridge Length: Y

 Below the details, there is a 'Report Details' section with a 'Create Report' button. At the bottom, a table header is visible with columns: Creation Date, Inspection Date, Report Type, Report Status, Edit, and Action.

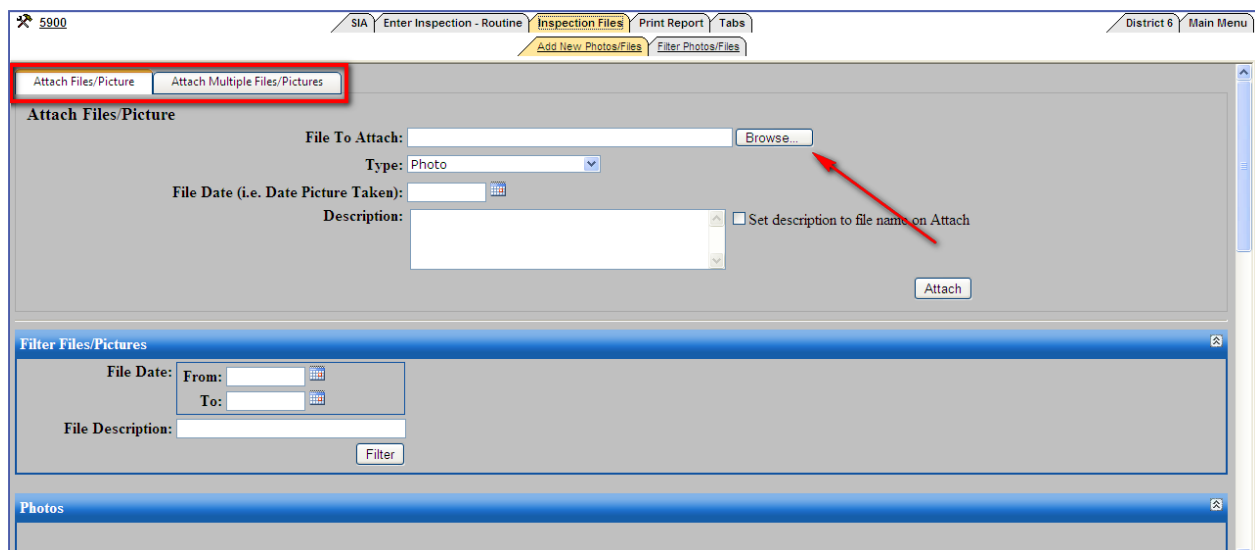
➤ **Note:** There is no defined way to enter criteria into the filter. Users may use any combination of “And/Or” filters when searching for a particular asset.

## How to Attach a Single Picture/File to a Report:

SIMS Collector allows users to upload and organize photos, sketches, videos, and other files in order to create a more descriptive and accurate report. In order to attach a picture/file to an inspection report the user must open the report for that asset.

➤ **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 photo to a field please refer to page 36).*

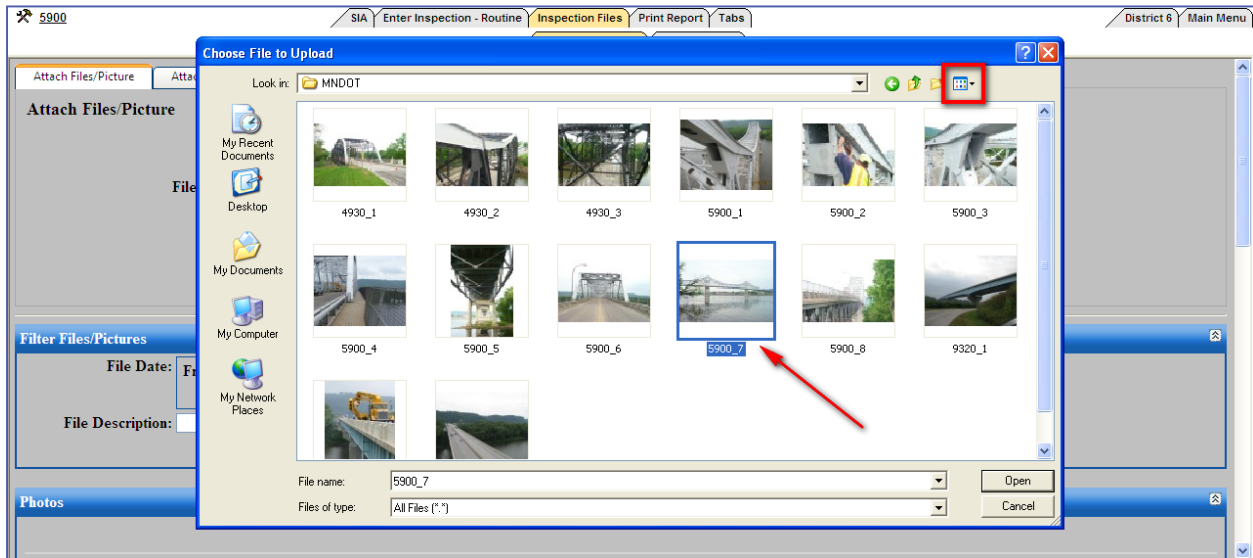
1. Once the report is open, click on the "Inspection Files" tab and choose the sub-tab labeled "Add New Photos/Files". There are two choices available for attaching pictures; "Attach File/Picture" which is the default setting for attaching photos and "Attach Multiple Files/Pictures" which enables the user to upload numerous pictures at one time. Attaching multiple pictures/files will be covered in the next section of this manual. Here is a screenshot of this page.



2. Select the button labeled "Browse" to choose the photo/file to add to the report. This will open a window to locate the photos/files which are saved on your computer or memory card. Find the location of the file and click on it. To make it easier to find the pictures you want to add, InspectTech recommends clicking on the "Views" button.. Choose the thumbnail icon option so the pictures are visible and you can attach the proper photo. Click on the photo to select and choose open.
3. Next, move to the textbox labeled "Type" and select the type of file you are adding. If you are attaching a photo, the picture must be in either .jpg or .gif format. Then type in the date of the picture/file (optional). Users may also type in a description of the photo/file or click on the checkbox that says "Set description to file name on Attach". This will enable the software to change the picture's file name to the description already designated in your computer upon attachment. Click "Attach" to attach the picture/file to the report.

*Continued on Next Page*

Continued



- The above screenshot is of the picture window where the user can change the view to see the picture more clearly to ensure the correct photo is attached.

4. Finally, scroll down to the photo/file section to verify if the photo/file has uploaded successfully.



## Attaching Multiple Files/Pictures to a Report:

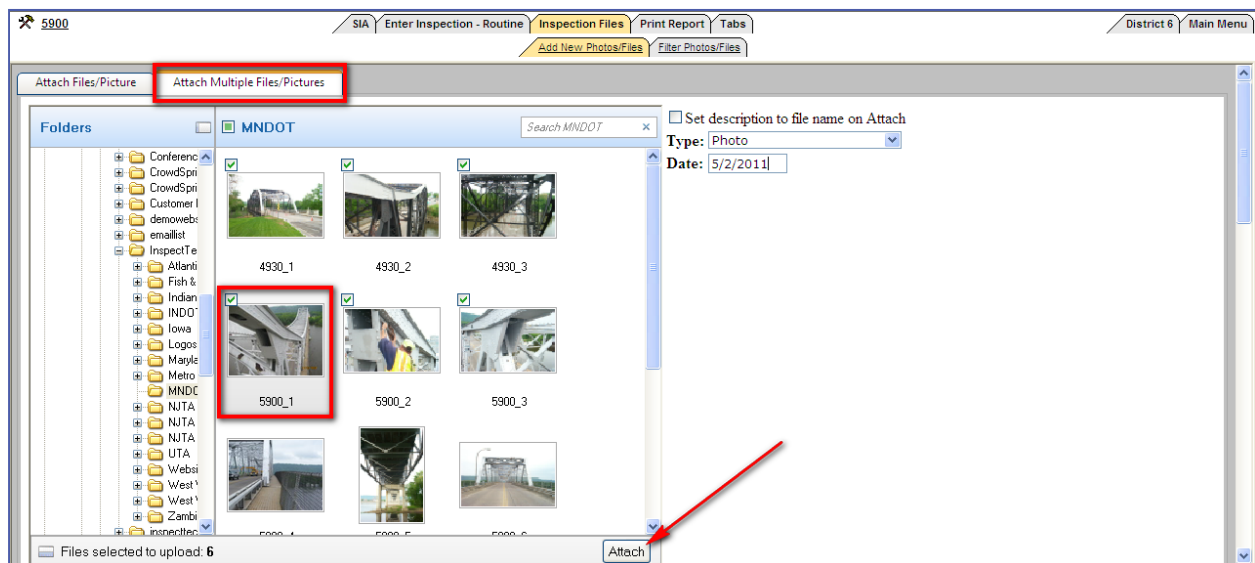
SIMS Collector provides users with the ability to attach multiple pictures/files to a report at one time. This is the fastest and most efficient way to attach all needed pictures to a report. Instead of attaching each picture one by one, the user can select all the pictures from the inspection needed and attach them all at once.

1. Begin by going to the "Inspection Files" sub tab of an open inspection report. Select the white tab at the top called "Attach Multiple Files/Pictures".

➤ **Note:** *In order to attach multiple photos to a report the user must have Image Uploader ActiveX installed on their computer. This application only needs to be installed once. The first time the software is used it may automatically prompt the user to install Image Uploader ActiveX. If not, simply go to the main "Help" menu and select "Help with Multiple Photo Upload Install".*

2. The user may go through and select the pictures one by one or they can click the "Select All" button at the top of the page. When the photo is selected there will be a checkmark in the upper left hand corner of the picture to show that it has been selected and will be attached to the report.

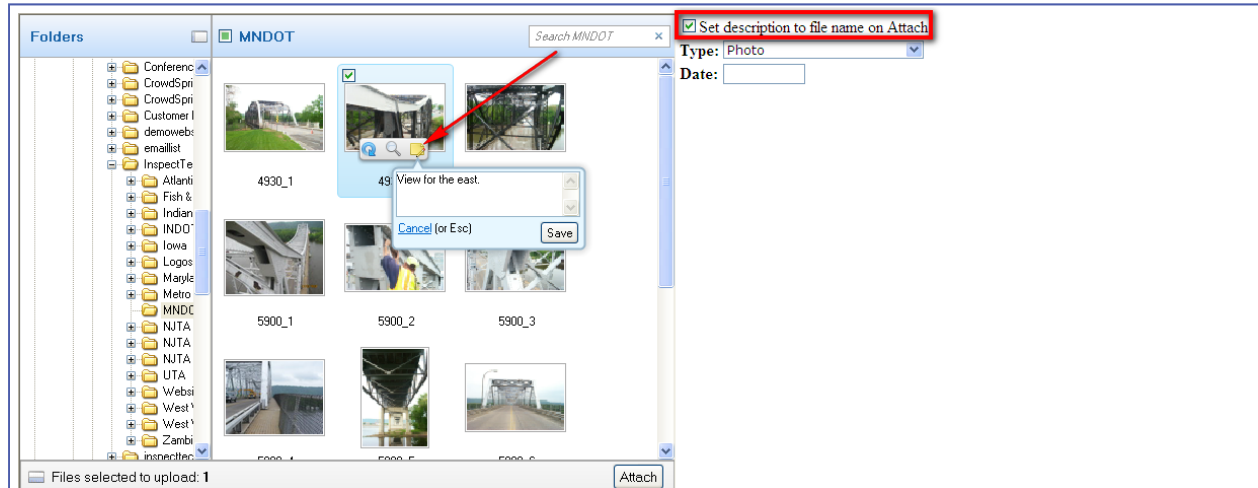
➤ Here is a screenshot of how to perform the multiple picture upload.



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- Users are able to rotate the picture, preview it, or add descriptions/captions to each photo before uploading it. Clicking on any of the three icons when selected will allow the user to perform these tasks. To edit the description of the photo, click on the identified icon and a textbox will open allowing the user can enter the description or click on the checkbox that says "Set description to file name on Attach". This will enable the software to change the picture's file name to the description already designated in your computer upon attachment. Once the description is added, click on the "Save" button to continue. This will create a description of the photo when it is attached to the report. Here is a screenshot showing how to edit/add a description.



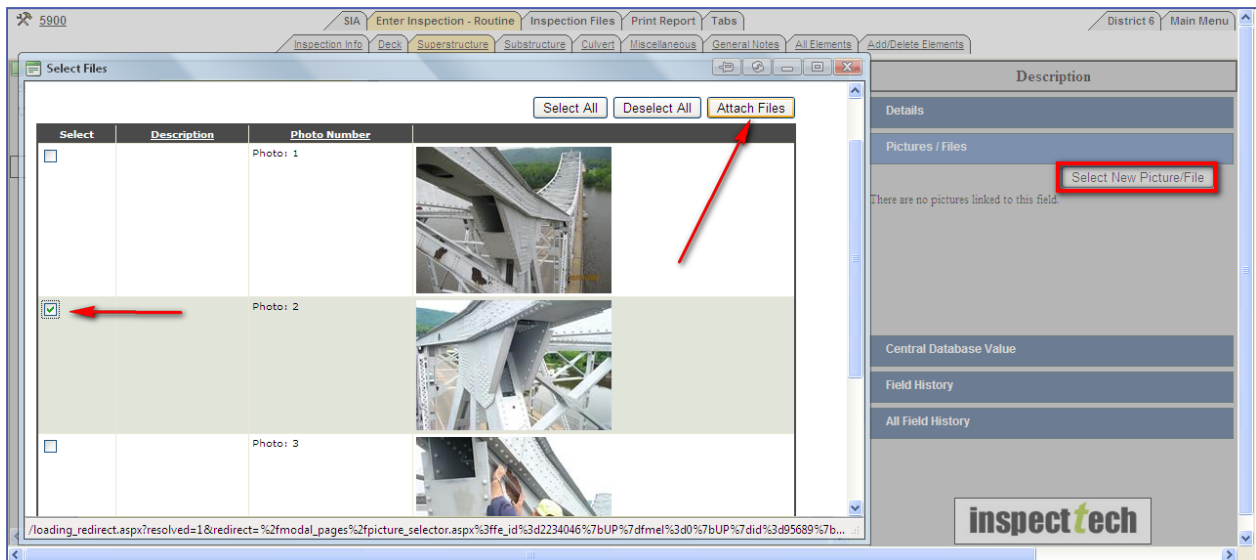
- **Note:** The checkbox to the right of the pictures (in the open white area) will enable the software to change the picture's file name to the description already designated in your computer upon attachment.
- After the user chooses the photos/files they want to attach to the report and have added the descriptions, click on the "Attach" button. Then go back to the "Pictures/Files" sub tab and verify all the photos/files have been attached properly to the report.

## How to Link a Photo to a Specific Field:

To link a picture to a specific field, the photo must already be attached to the report. This process is described in the previous section. The process of linking a photo to a field is done by using the right hand sidebar located on each inspection form and is displayed in the screenshot. A user may link an unlimited amount of photos to one field.

1. Start by opening a particular form and selecting the field. This will cause the right hand side bar to open and populate with that field's information. Included in the right hand side bar is a tab called "Pictures/Files". Click on it and the area will expand. There will be a message saying, "There are no pictures linked to this field" or there will be pictures visible which were previously linked. Click on the "Select New Picture/File" button and choose a picture (from the ones that were attached to the report) to be linked to the field.

➤ Here is a screenshot showing how to attach a photo to a specific field:



2. A window will appear displaying all pictures which were attached to the report. Go through and select the picture/pictures you want to attach to the field by clicking in the checkbox next to the picture. If there are many photos/files, type a word in the description text box that describes the photo (i.e. bearing) and click the filter button. This will only show those photos/files with the description word in it. After the picture/pictures are selected, click on the "Attach Files" button to link them to the field. From this point forward whenever that field is selected, the picture or pictures attached will appear in the right hand sidebar.

➤ The next page contains an example of the right hand side bar for the same field whenever there is a picture attached.

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The screenshot displays the SIMS Collector 5.4 interface. At the top, there are navigation tabs for 'SIA', 'Enter Inspection - Routine', 'Inspection Files', 'Print Report', and 'Tabs'. Below these are sub-tabs for 'Inspection Info', 'Deck', 'Superstructure', 'Substructure', 'Culvert', 'Miscellaneous', 'General Notes', 'All Elements', and 'Add/Delete Elements'. The main window shows a 'Superstructure Elements' table with columns for Environment, Total Quantity, and five State categories (State 1 to State 5). Below the table, there are text descriptions for each element, such as 'The paint system is mostly sound with some scattered areas of active corrosion and minor loss of section.' On the right side, there is a 'Description' panel with sections for 'Details', 'Pictures / Files (1)', 'Central Database Value', 'Field History', and 'All Field History'. A photo titled 'Photo: 2' is displayed in the 'Pictures / Files' section, with a trash can icon above it. The 'inspecttech' logo is visible in the bottom right corner of the interface.

Element ID	Environment	Total Quantity	State 1	State 2	State 3	State 4	State 5
107/2	2	785	324	361	100	0	0
109/2	2	421	417	4	0	0	
110/2	2	1686	1429	240	17	0	

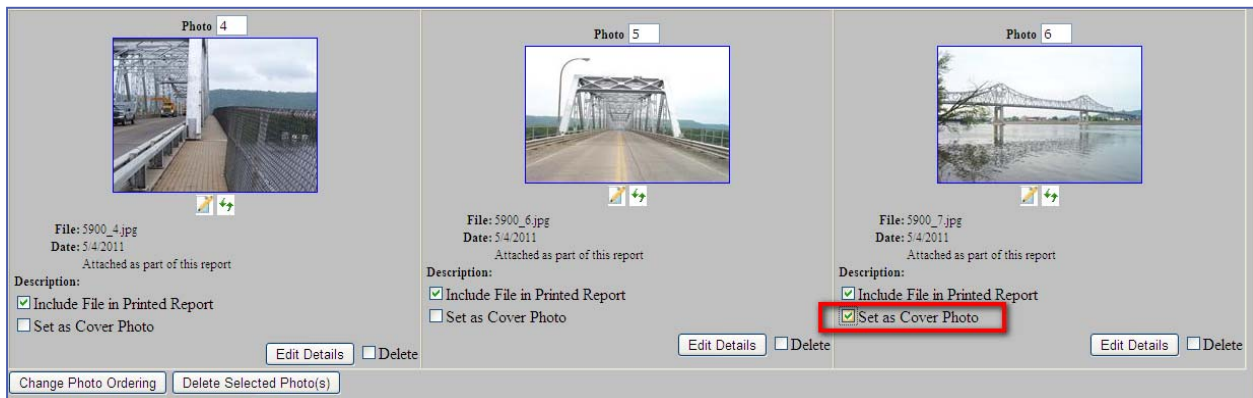
- In order to remove the photo simply click on the trash can icon right above the photo.



## How to Set a Picture as a Cover Photo and/or Include a File in the Printed Report:

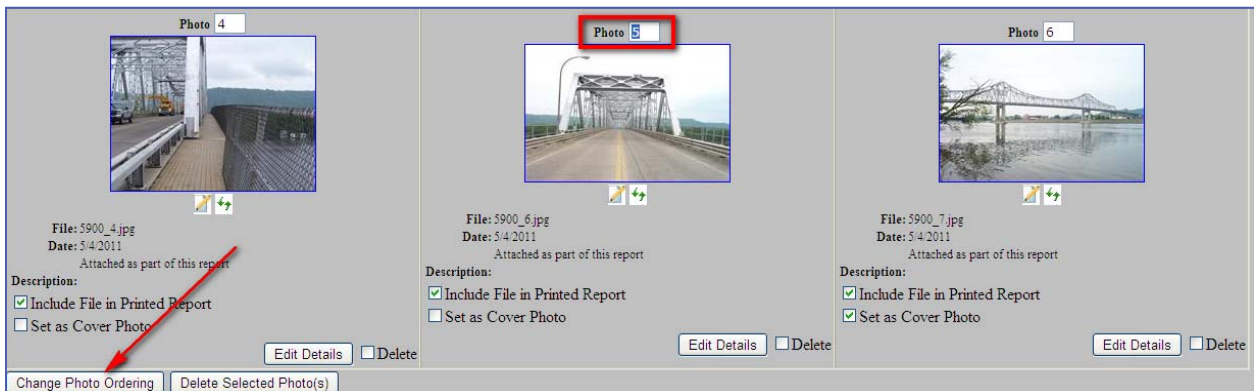
1. To set a picture as the cover photo and to include it in the printed report, begin by clicking on the "Inspection Files" tab and then the "Add New Photos/Files" sub-tab. This will open the page containing all the photos/files that are attached to the report.
2. Each photo attached to the report will have two choices. One is to include it in the printed report and the second choice is set it as cover photo. Neither options is required, but can be used to enhance the quality of the report and provide more information about the asset. The user can select and deselect the options by using the checkboxes which are located underneath each picture.

➤ **Note:** *Only one photo can be set as the cover photo at a time, while every photo can be include in the printed report. The default setting automatically includes every file attached in the printed report.*



## How to Change the Photo Ordering in a Report:

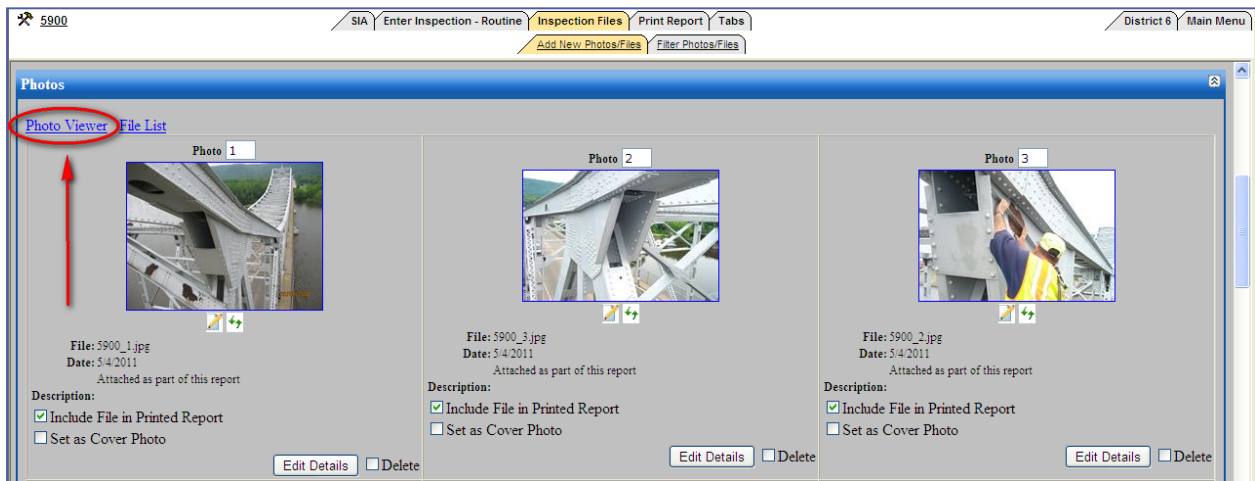
1. When editing an inspection report, the user has the ability to change the ordering of the attached photos. To do so, start by opening the "Inspection Files" tab and the "Add New Photos/Files" sub-tab. This will open the page containing all the pictures attached to the report. Photo ordering is relevant because the order the photos are in the software will be the order in which they appear in the generated report.
2. As shown in the screenshot, above each photo there is a small white box with a number inside. This is the order in which the photos were attached to the report. The user can change the order of the pictures by simply typing into the box the number which they want the photo to appear. After entering the number the user must click the "Change Photo Ordering" button for the changes to take effect. The software will automatically adjust every picture and place them in the correct order.
  - Suppose a user wanted Photo 5 to be the first photo in the report. They would change the number 5 to a number 1 and click the "Change Photo Ordering" button. The software will immediately execute the command and picture 5 will move to the first position, and Photo1 will have moved to the 2nd position, and so on and so forth.



## Photo Viewer:

InspectTech's Photo Viewer provides users with a new method to examine inspection photos and pictures attached to bridges more thoroughly. The Photo Viewer is a link which opens a window containing all pictures enlarged for viewing purposes. This link can be found in the pictures/files tab in an inspection report as well as the Pictures/Files section of the Asset Detail Page of the Manager component of the software.

1. The user must have an inspection report open to open the Photo Viewer page. Go to the "Inspection Files" tab and then the "Add New Photos/Files" sub-tab. Scroll down to the photos attached to the report and click on the link labeled "Photo Viewer". Shown in the screenshot below.

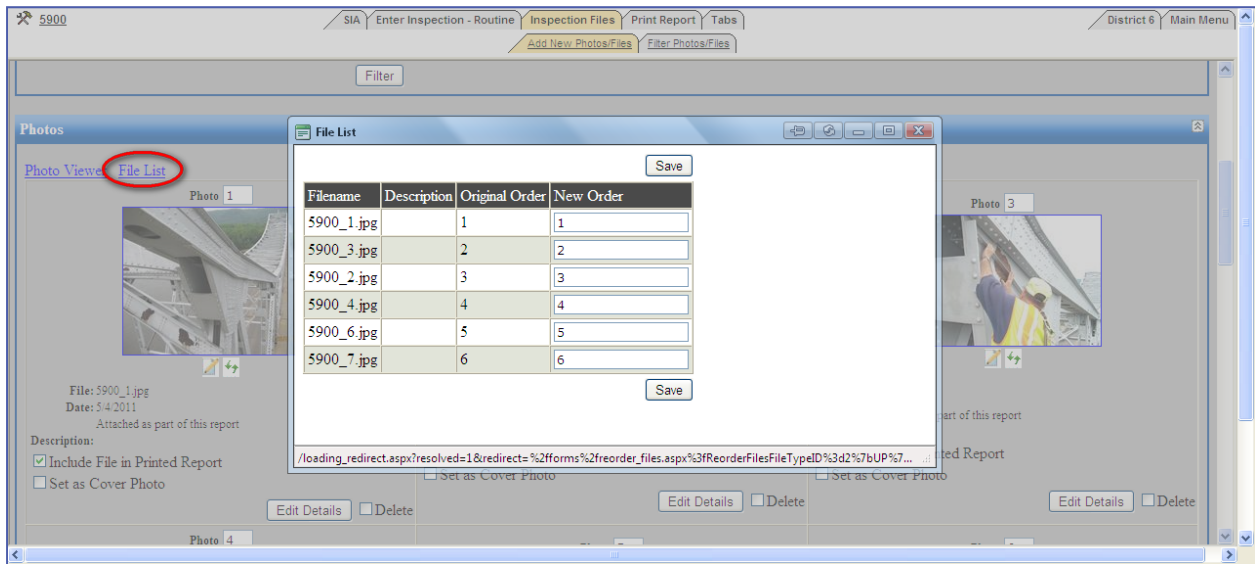


2. This link will open a window which displays all pictures attached to the report or to the bridge (Manager Component). From here the user can scroll through the list of photos to get a closer look using their mouse or the "Previous / Next" buttons at the bottom of the window. The selected picture is highlighted in blue on the left hand side. Each picture contains a description, date and file name. Below is a screenshot of the window displaying the "Photo Viewer".



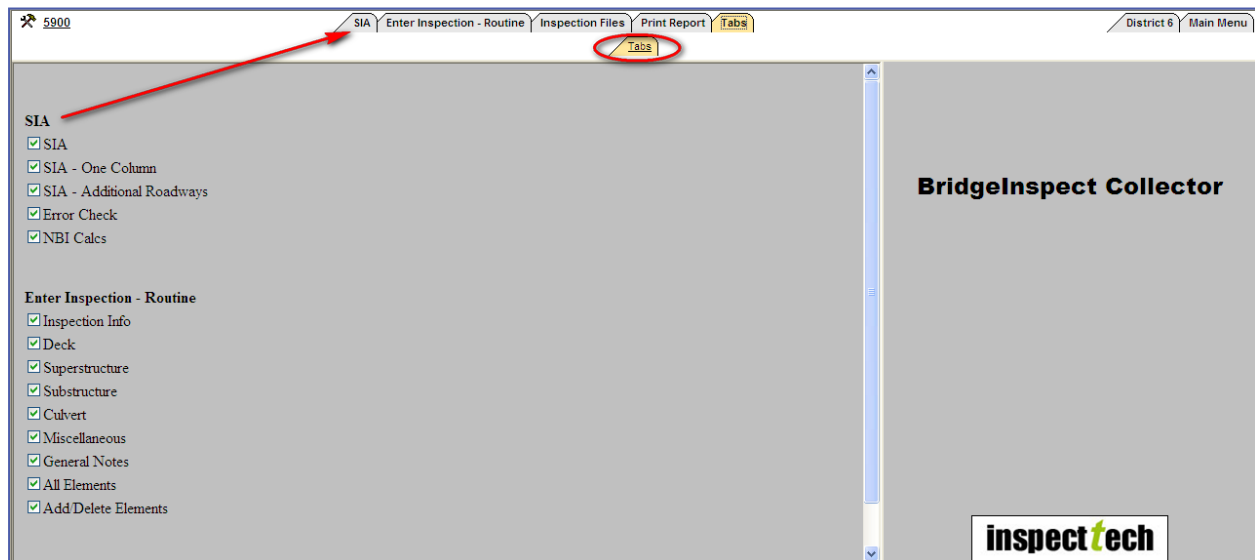
## File List:

The file list link can be found right next to the "Photo Viewer" link on the pictures page. The file list is another way to identify all files attached to a report without having to look through each picture/file. Instead, the user can select this link and a list of all files will appear with their name, any descriptions and the original order in which they were uploaded. Additionally, this link allows users to re-order the files and save the new list. Below is a screenshot of the File List window which appears after selecting the link.



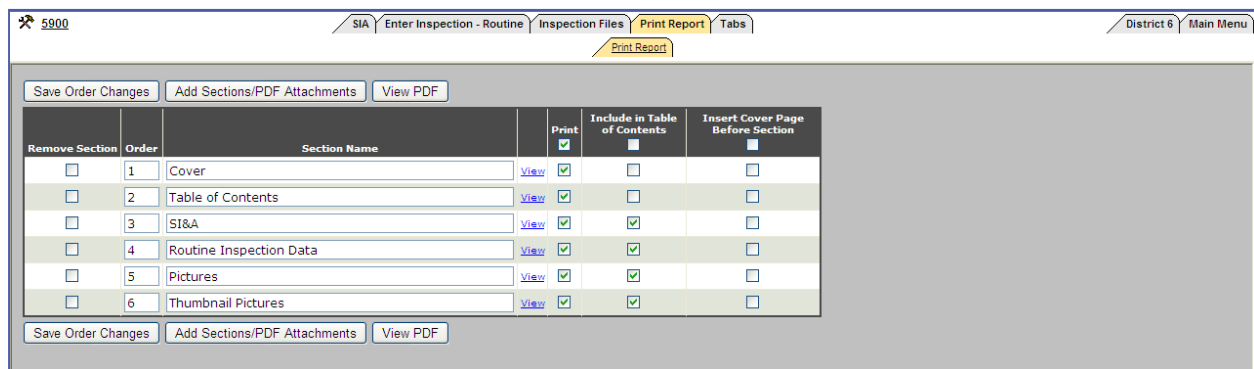
## How to Edit which Tabs Appear in a Report:

1. First select and open the inspection report. Then click on the “Tabs” tab. This will open a page containing all available tabs associated with the particular asset’s inspection report. The sub-tabs are grouped according to the main tabs they fall under. If the sub-tab is included in the report, then there will be a checkmark next to that sub-tab’s name.
  - **Note:** *The default setting is to include every sub-tab in the report. Different asset types and inspection types will have different sub-tabs included.*
2. To exclude a particular sub-tab from a report just uncheck the box next to the sub-tab’s name.
  - Here is an example what the “Tabs” tab should look like for. The screenshot is displaying only a few of the many sub-tabs. Notice how the sub-tabs are grouped according to the main tab they fall under.
3. Once a sub-tab is unchecked, it will remain “hidden” the next time a new report is created. Sub-tabs can be unhidden at any time by re-checking the checkbox under the Tabs tab.



## How to Manage the Report Sections of a Report:

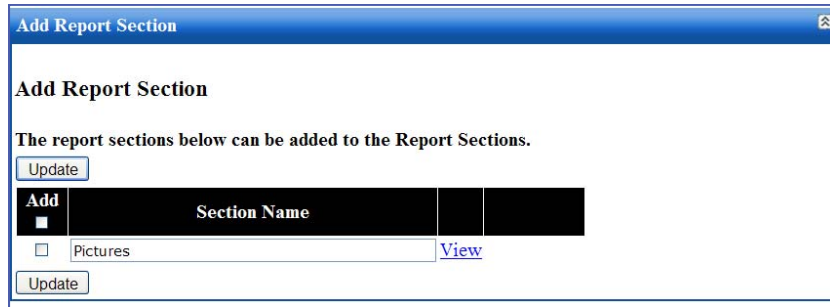
1. Before a user can edit the sections of the report they must first choose which report these changes will affect. To begin, click the "Edit Report" icon for the correct inspection report.
2. Click on the "Print Report" tab. This will open a page containing all report sections associated with that report and will allow the user to manage what the report will look like when it's printed and what sections will be included / excluded in the final report.
3. This page will show all the report sections along with many options; such as "Add Sections/PDF Attachments", "View PDF", "Remove Section", "Order", "Section Name", "View", "Print", "Include in Table of Contents", "Insert Cover Page Before Section", and "Save Order Changes". Here is an example of what the "Print Report" sub-tab should look like.



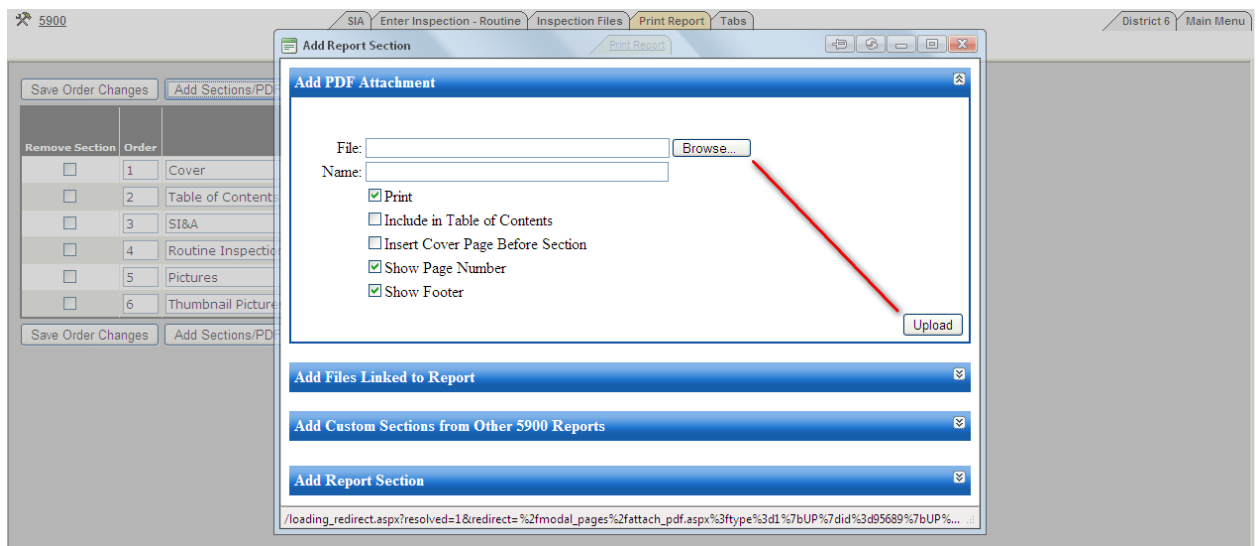
4. From this point there are several options available. One, the user can view each report section individually by selecting the "View" link next to each section's name. The user can view the entire report in PDF format by clicking on the "View PDF" button. By checking a box, the user can include or exclude a section from the entire report, from printing, and/or from the table of contents. Also, the users are able to re-order the sections. Just change the section number to a different order by clicking in the box and typing in the number, the rest will adjust accordingly. Remember to click "Save Order Changes" for the change to take effect.
5. If the user wishes to exclude a particular report section click on the checkbox next to the section under the "Remove Section" column. This will exclude this section from the report.
  - **Note:** To add the section back into the report follow step number 7.
6. If a standard report section has been previously excluded from the report it can be added back quite easily. Click on the "Add Sections/PDF Attachment" button and 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 ones to add again and click "Update". Now close out of the window and the sections will be added back into the report.
  - **Note:** When the section is included again it will be at the bottom of the report, so you may want to reorder the sections to the correct order. Below is a screenshot of this process.

Continued on Next Page

Continued



- To add a PDF attachment, or custom sections added to any of the previous asset reports, to the report click on the "Add Sections/PDF Attachment" button and find the PDF file by using the "Browse" button. Click "Upload" and the attachment will be added to the report.



- **Note:** Name the new attachment by using the name textbox. Also the default settings for the new attachment are (Print, Show Page Number, and Included in TOC). However, these settings can be changed using the checkboxes when the file is uploaded.

## How to View the Inspection Report Information:

Located under the “Enter Inspection” main tab is the “Inspection Info” sub tab which provides users with all necessary and pertinent information pertaining to the inspection and generation of the report. The information included on this form contains items such as the creation date, inspection date, the type of inspection, the owner of the asset, available users, assigned users, supplementary inspection information, and report history. This tab provides an easy, convenient way for all levels of management to view the inspection information.

- Here are two screenshots displaying different sections of the “Inspection Info” sub-tab.

**Inspection Report Information**

**Dates:**  
 Create Date: 04/28/2011  
 Inspection Date: 04/28/2011

**Inspection Type:**

Routine  
 Fracture Critical  
 Underwater  
 Pinned Assembly  
 Special

Inspection Frequency	Last Inspection Date
12	5/20/2010

**Inspector Assignment:**

**User Assignment:**  
 Primary Inspector: aTest, TL

**Show Inspectors for:** Available Users: Assigned Users:  
 DNR  
 IBM  
 InspectTech  
 Metro  
 Metro Transit (LRT)  
 Metropolitan Airport Commis  
 Minnesota Dakota and Wes  
 Minnesota Dept of Administ  
 Three Rivers Park District

Administrator, InspectTech  
 Hartfel, Lisa

aTest, TL

Set as Primary Inspector

**Supplementary Inspection Information:**

Traffic Control Required: [ ] Comments: [ ]

**Equipment Requirements:**

Life Jacket  Full Body Harness  Ladder  Boat  Confined Space Entry  
 Probing Rod  Chain Drag  Manlift  Moog  Bucket Van

Snooper 1: (Blank) Snooper 2: (Blank) Snooper 3: (Blank) Snooper 4: (Blank)

Non-destructive Testing Equipment [ ]  
 Other [ ]

Crew Hours: [ ] Flagger Hours: [ ] Helper Hours: [ ]  
 Snooper Hours: [ ] Special Crew Hours: [ ] Special Equipment Hours: [ ]

Notes to Inspectors: [ ]



## Inspection General Notes:

SIMS Collector has a general notes tab in which users may take any general notes about the inspection, the condition of the bridge, or any other relevant information which may help in future inspections. When the tab is selected the user will be met with a rich text document, which functions just like a Word document. There is no limit to the amount of the text which can be entered. Here is an example of the general notes section for a report.

The screenshot displays the SIMS Collector software interface for Bridge 5900. The 'General Notes' tab is selected and highlighted in red. The main content area shows a rich text editor with the following text:

**GENERAL INSPECTION NOTES**

Bridge 5900 This report was updated by Eric Evens on July 27, 2010. NOTE: All spans, piers and floorbeam's are numbered from the south (Minnesota end) and all beams, girders, bearings and columns are numbered from the west. NOTE: Bridge was inspected using the snooper in 2010. NOTE: This structure has a scour code rating of "R" CRITICAL MONITOR. There are no scour monitoring signs mounted on the bridge. NOTE: Underwater inspection was completed by Collins Engineering in 2008. NOTE: All steel members were painted in 1986. The high truss spans 18 through 20 were painted in 1992 and 1993. NOTE: In 2008, a contract was let to replace the concrete sidewalk with timber, selected gusset plates were reinforced and selected panel points were painted. NOTE: Fracture critical inspection was completed by the Bridge Office in June of 2010. Pin assemblies were U T inspected in June of 2010. As an outcome of this inspection, the Bridge Office will analyze numerous areas and advise the District on repair actions that will be required. NOTE: Refer to the attached Snooper Inspection Report for further details. NOTE: Bridge was inspected in 2010 by Eric Evens, Robert Pyfferoen, Brian Haugen, Steve Miller and the Bridge Office Fracture Critical Section. NOTE: The Winona and Rochester Bridge Crews reinforced all of the L0 and L8 gusset plates on the approach deck truss on both ends of the bridge. Several additional gusset plates and lower chord sections were also reinforced. All of this work was completed per Bridge Office instructions. Channel - NBI 6 Refer to the underwater inspection report from Collins Engineering for this rating. NOTE: On 9/28/2010 Brian Haugen per the request of Craig Falkum the District 6 structures engineer changed the NBI rating of the Superstructure from a three (3) to a four (4). The change was due to the repairs made after the 2010 in-depth fracture critical inspection was completed.

The right sidebar shows 'General Notes - Elements' with options for 'Pictures / Files', 'Central Database Value', 'Field History', 'All Field History', and 'Other Forms'. The 'inspecttech' logo is visible in the bottom right corner of the interface.

## How to View the NBI Calculations from an Inspection Report:

1. To view the National Bridge Inventory calculations start by clicking on the edit report icon for the correct asset. Then open the "SI&A" tab and choose the "NBI Calcs" sub-tab.
2. A new page will generate and all the NBI calculations are given. Notice that there are three NBI fields along with their values at the top of the page. These are fields that are directly linked from the forms and are used to calculate the sufficiency ratings and determine the classification of the asset.
  - The screenshot below makes up only a portion of the "NBI Calcs" sub-tab. It displays the calculations portions which calculate the Sufficiency Rating and the Structural and Functional Classification as well as part of how the ratings were calculated. There are other sections part of the NBI Calcs tab which are not displayed in this manual.

The screenshot shows the BridgeInspect Collector software interface. The 'NBI Calcs' sub-tab is selected. The main content area displays the following information:

NBI Field	Calculated Value
Item 67 - Structural Evaluation	4
Item 68 - Deck Geometry	4
Item 69 - Underclearances	3

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

**SUFFICIENCY RATING = 24.14**

**STRUCTURAL & FUNCTIONAL CLASSIFICATION: STRUCTURALLY DEFICIENT**

**FIELDS USED TO CALCULATE SUFFICIENCY RATING**

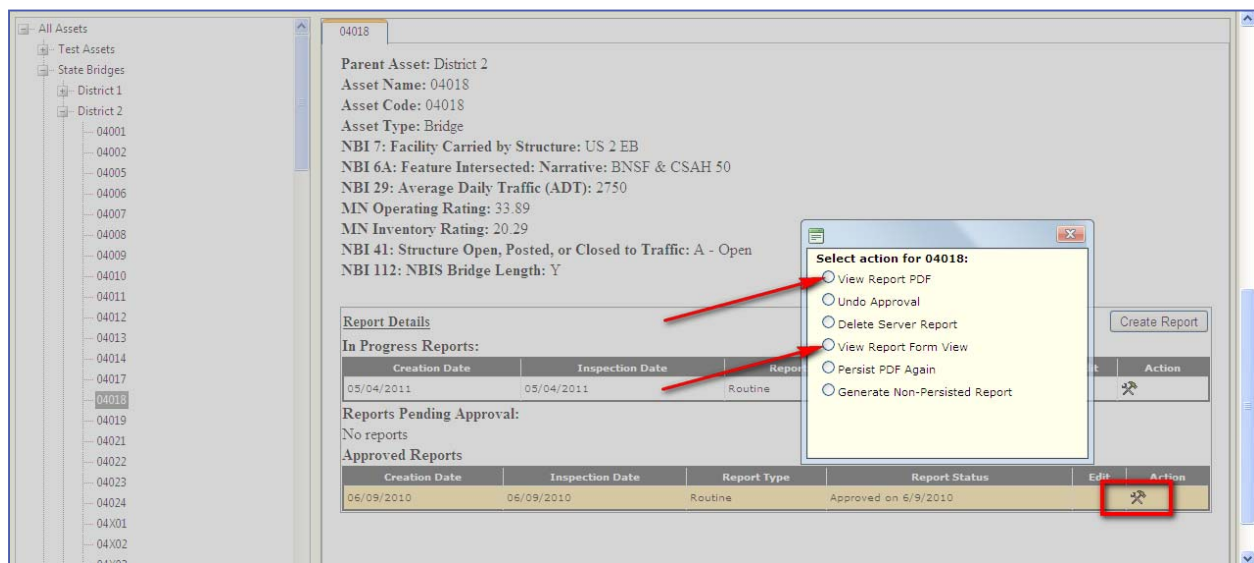
IDENTIFICATION		CONDITION	
8B. BRIDGE NUMBER:	5900	58. DECK:	5
<b>STRUCTURE DATA</b>		59. SUPERSTRUCTURE:	4
43A. MAIN STRUCTURE TYPE:	4-10	60. SUBSTRUCTURE:	6
<b>AGE AND SERVICE</b>		62. CULVERT RET WALL:	N
28A. LANES ON STRUCTURE:	2	<b>LOAD RATING &amp; POSTING</b>	
29A. ADT-OVER:	011900	66. INVENTORY RATING:	185
19. DETOUR LENGTH:	105	<b>APPRAISAL</b>	
<b>GEOMETRIC DATA</b>		67. STRUCTURAL:	4
51. BRIDGE RDWY. WIDTH:	0094	68. GEOMETRY:	3
		69. UNDERCLEARANCE:	4

➤ **Important Note: Official values are only obtained via FHWA from the annual submission.**

## How to View Past Inspection Reports:

The SIMS Collector software keeps all historical reports and data within its database as far back as permitting. These past reports are useful in multiple ways and are a valuable source of information to asset owners. The software allows the inspector to use the last inspection report data to pre-populate many of the reporting fields when starting a new inspection report. Where applicable, all fields are filled in and highlighted yellow. When the field is edited the color changes to white, providing a visual representation that something has changed from the last inspection. This not only saves time by not having to type in repetitive data from year to year, but it also points out the changes from the previous inspection report and helps spot any trends occurring.

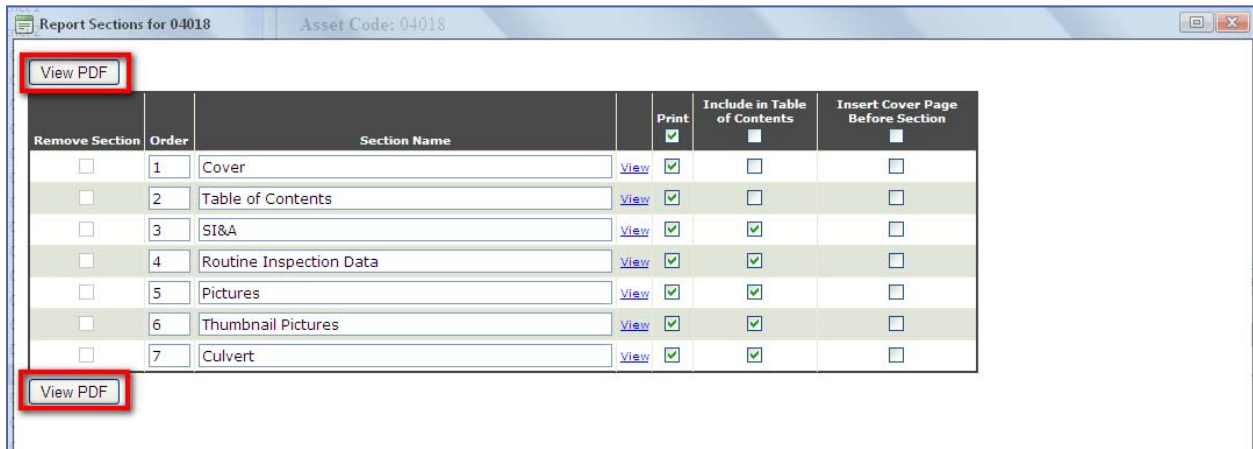
1. To view a past inspection report begin by going to the Main page of the software and use one of the search functions (quick select, tree search, or filter) to locate the desired asset.
2. Once located, open the bridge detail page by clicking on the asset's name. Scroll down to the "Report Details" section and find the "Approved Reports" heading. Under the "Approved Reports" you will see a hammer/wrench symbol (tools icon), click on it and select the "View Report PDF" or "View Report Form View" action to view that particular report.
  - This is an example of what the screen should look like. Click the radio button next to one of the options and a window will open which allows the user to choose how to view the PDF report. The "View Report PDF" option will open a PDF of the approved report, whereas the "View Report Form View" option will open the report as if it were an in progress inspection report, but it's not editable.



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3. If a user selects the "Report PDF" option they will be met with a window such as the one below which allows the user to control how to view the report. For instance, suppose a user wanted to view only the SI&A data for the report in 2010, they can choose the report section that has that data in it and view/ print that particular section. As shown in the screenshot, there are numerous ways to manipulate the PDF to get the information desired including; exclude sections, re-order the sections, edit section name, view one section at a time, print, manage what sections are in the table of contents, and insert cover page before section.



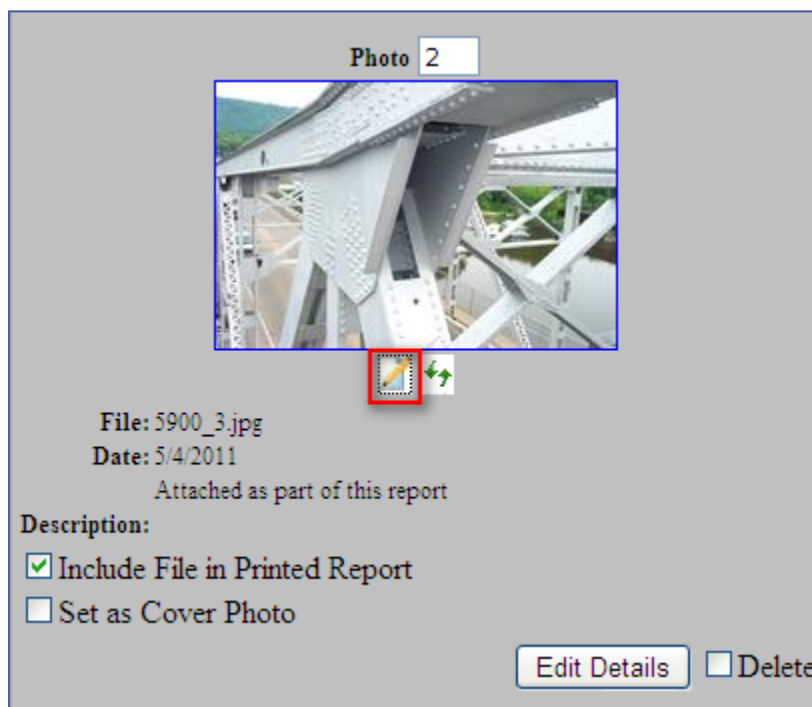
4. After the PDF viewing preferences are selected, click on the "View PDF" button at the top and find the information being sought.

➤ **Note:** Past inspection reports prior to the SIMS software implementation can be scanned in and uploaded to the Manager site. These past reports are accessible via the Manager component.

## How to Edit a Photo Using InspectTech's Image Editor:

The image editor is a creative tool that allows inspection photos to be enhanced and more beneficial to the inspection report. Inspectors have the ability to edit the photos attached to their inspection reports right in the software. Users can crop images, add lines/circles/boxes around important details, write descriptions directly on the picture, and many more capabilities which adds to the usefulness and visibility of the photo.

1. To begin, locate the desired bridge and its inspection report then click on the "Edit Report" icon. When the report is generated, click on the "Inspection Files" sub tab.
2. Now, the user will be able to see all the photos attached to the inspection report. Find the picture to be edited or attach a new photo. Click on the "Edit Image" icon located underneath the picture. It is highlighted in the screenshot below.

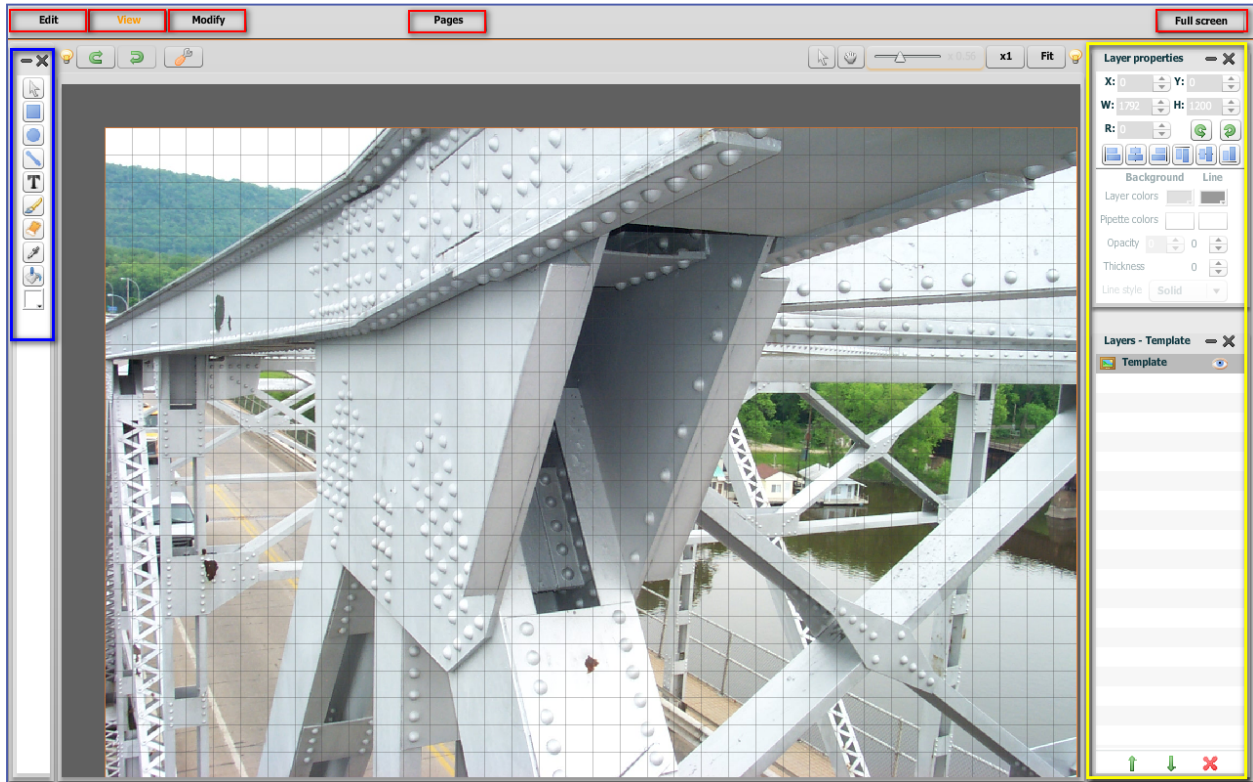


3. Clicking on the highlighted icon in the screenshot will take you directly to the "Image Editor". The picture will automatically upload into the editor and be placed on a canvas. From this point, the user can begin editing or adding graphics to the photo.
  - Here is a screenshot of the "Image Editor" when it is first opened. There are five main buttons across the top which are outlined in red in the screenshot. These options are "Edit", "View", "Modify", "Pages" and "Full Screen". The "Edit" option allows users to perform basic functions such as; Undo, Redo, Cut, Paste, Copy, and Delete. The "View" option allows users to add a grid to the canvas or gives them access to an additional toolbox. "Modifying" an image permits the user to change specific characteristics of the picture, such as; its contrast and brightness. The "Modify" button also enables the user to crop the image to the appropriate size or to eliminate unwanted

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objects/background in the photo. Finally, the “Modify” button has a reset modifications button in case you make changes to the modifications that are unwanted. The “Full Screen” button takes the user to an enlarged version of the screen. This is so the user can see the picture better and make provisions with greater accuracy.



4. To begin editing select one of the tool options on the left hand side of the screen (section highlighted in blue) or select “Edit”, “View”, or “Modify”. To see which tools are which, the user can place the mouse over the icon and the name will appear. The tools allow users to add boxes, circles, lines, text, and hand drawings to the picture in the form of layers. These layers are controlled on by the two sections on the right hand side of the screen (highlighted in yellow): “Layer Properties” and “Layer Templates”.
5. Suppose a user wanted to add a box around an important portion of a bridge and also add some text describing what the box was displaying. When the user adds these two features to the photo, they become their own layer and are shown in the “Layers” section. When a layer is selected its properties are visible in the “Layer Properties” section. A user can edit those properties in this section which will change the way the object is viewed in the photo.

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- Here is a screenshot showing the layers and their properties. Notice how the text layer is highlighted and how the text layer properties are shown in the “Layer Properties” section. If you wanted to see the layer properties for the box all you would have to do is click on the “Rectangle” layer in the “Layers” section.
6. Suppose the user wanted to move the text closer to the rectangle, they could go into the “properties” section and adjust the “X”; “Y” coordinates by using the up and down arrows. If they did not want the text in the photo anymore all they would have to do is select the text layer and click the delete button. Users can also hide a layer by clicking on the little “eye” icon in the “Layers” section. This will toggle the layer on and off, giving the user the ability to focus on one layer at a time.
    - There is another way to move a text layer. The “arrow” icon, right above the picture, will allow you to grab a layer and move it anywhere on the canvas. This is quicker than using the “X”, “Y” coordinates.
  7. Once a user is done making modifications and editing the photo, they have 2 options, “Save Image” or “Exit without saving”. If the user saves the image it will take them back to the “Pics/Files” page. The new image will not be visible until the user clicks on the green refresh button underneath the image. If the user selects “Exit without saving” it will also take them back to the “Pics/Files” page, but the photo will remain unmodified.
    - **Note:** *The best way to learn how to use the image editor is to practice. The more you use it the easier it becomes to operate.*

## 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 when each user accessed the system. To run an audit report, follow the steps below.

1. Start by selecting the "Administrative" tab and select "Audit Reports". This will direct the user to a new page where he or she can build the audit report.
2. Choose which type of audit report to generate using the drop down, "Asset and Report Changes" or "User Access". Also, select the date range relevant to the report and choose the "Name of the Inspector". If you are running an asset and report changes report then you may want to enter the "Asset Name Contains" or "Changed Object Contains" to narrow the results.

➤ **Note:** *These three categories are optional and do not need to be filled out to run the report.*

3. When all the information is entered click the "Run Report" button. The results will generate at the bottom of the page.

➤ Here is a screenshot displaying this process:

The screenshot shows the SIMS web application interface. At the top, there is a navigation menu with "Main", "Administration", "Views", "GIS", and "Help". The "Administration" tab is selected. The main content area is titled "Audit Report" and contains a form with the following fields:

- Report Type:** A dropdown menu set to "User Access".
- Changed Date:** Two date pickers for "From" (05/02/2011) and "To" (05/05/2011).
- Inspector Name:** A dropdown menu set to "Administrator, InspectTech".
- Run Report:** A button to execute the report.

A red arrow points from a text box to the "Report Type" dropdown. The text box contains the text: "Section which allows the user to choose what type of report to run, the date range and the specific user."

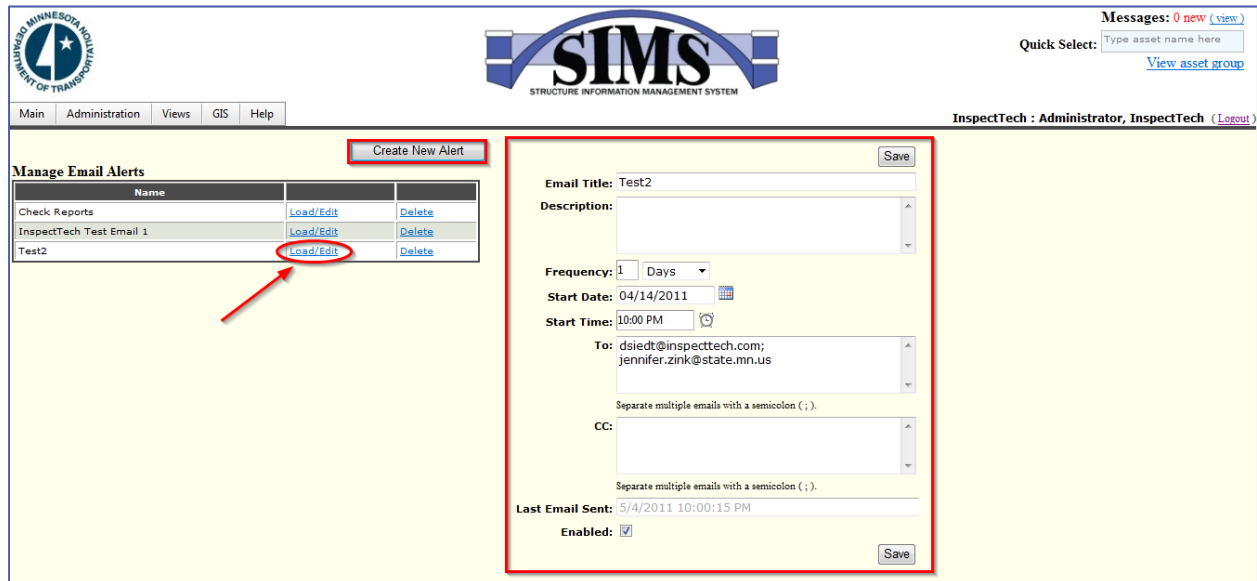
Below the form is a table with the following data:

Inspector Name	Change Location	Login Date
Administrator, InspectTech	online	5/5/2011 8:14:35 AM
Administrator, InspectTech	online	5/5/2011 7:38:23 AM
Administrator, InspectTech	online	5/5/2011 7:37:38 AM
Administrator, InspectTech	online	5/4/2011 8:40:58 PM
Administrator, InspectTech	online	5/4/2011 4:49:12 PM
Administrator, InspectTech	online	5/4/2011 3:34:38 PM
Administrator, InspectTech	online	5/4/2011 3:30:18 PM
Administrator, InspectTech	online	5/4/2011 1:40:15 PM
Administrator, InspectTech	online	5/4/2011 1:25:51 PM



## Manage Email Alerts:

The Manage Email Alerts page in SIMS allows users to upload and edit saved email notifications as well as create new notifications via the software. The purpose of this feature is to set up reoccurring notifications to particular users on a set schedule (i.e. once a week at 10:00 PM). You will choose which users receive the notification as well as the frequency and start time. Below is a screenshot of this feature.



The screenshot displays the SIMS web interface for managing email alerts. At the top, there are navigation tabs for 'Main', 'Administration', 'Views', 'GIS', and 'Help'. The main content area is titled 'Manage Email Alerts' and features a table of existing alerts and a form for editing or creating a new alert.

Name	Load/Edit	Delete
Check Reports	<a href="#">Load/Edit</a>	<a href="#">Delete</a>
InspectTech Test Email 1	<a href="#">Load/Edit</a>	<a href="#">Delete</a>
Test2	<a href="#">Load/Edit</a>	<a href="#">Delete</a>

The form on the right is titled 'Create New Alert' and contains the following fields:

- Email Title:** Test2
- Description:** (Text area)
- Frequency:** 1 Days
- Start Date:** 04/14/2011
- Start Time:** 10:00 PM
- To:** dsiedt@inspecttech.com; jennifer.zink@state.mn.us
- CC:** (Text area)
- Last Email Sent:** 5/4/2011 10:00:15 PM
- Enabled:**

1. To open/edit an existing alert click on the link labeled "load/edit". The information will generate to the right and you will be able to edit information or "disable"/"enable" the notification using the checkbox at the bottom. Remember to click "Save".
2. To create a new alert click on the button located above the existing alerts labeled "Create New Assets". Fill in the information accordingly. Click "Save".

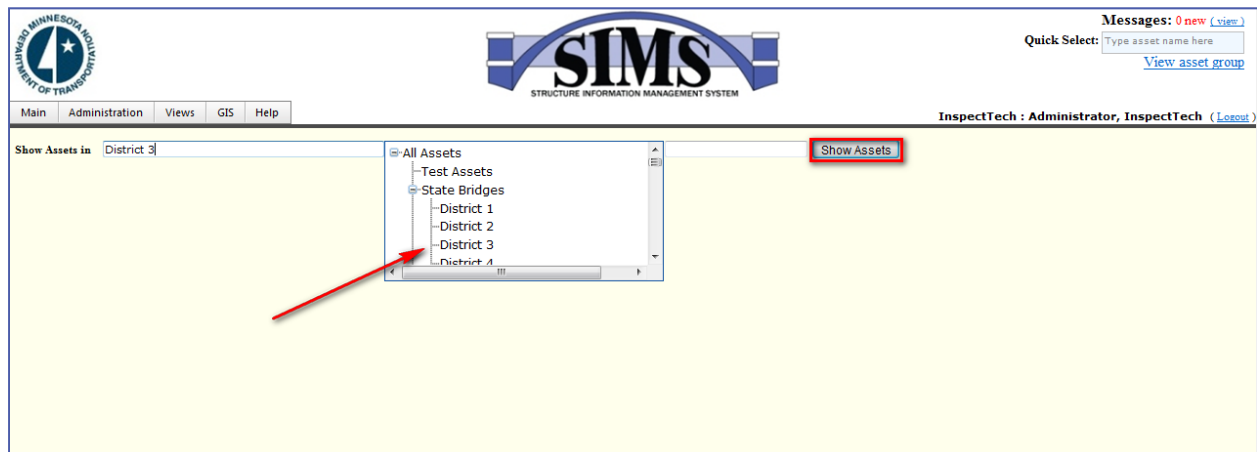
## How to Use the GIS Map:

SIMS Collector has an interactive GIS mapping feature which allows users to locate any bridge in the entire system or look up groups of bridges with just a click of a button.

1. Begin by clicking on the "GIS" tab on the Main page navigation bar. Then, click on the "Main Map" option. This will open a new page where the user can use the filter to view assets in a particular district, county, city, or township on the interactive map.
2. To view the bridges in a particular District, click inside the "Show Assets In" box and use the tree search to drill down to the correct District. Click the "Show Assets" button to generate the interactive map. This will return all bridges in that District; however, the user is able to narrow their search down further using the filter function and the checkboxes located underneath the search bar.
3. To narrow the results start by selecting the textbox labeled "by". This will provide a list of criteria which you can use to limit the bridges returned. Inside the last textbox type in the criteria to limit the search. This will only return bridges on the map which meets the criteria entered. Click "Show Assets" to generate the map when you are finished.

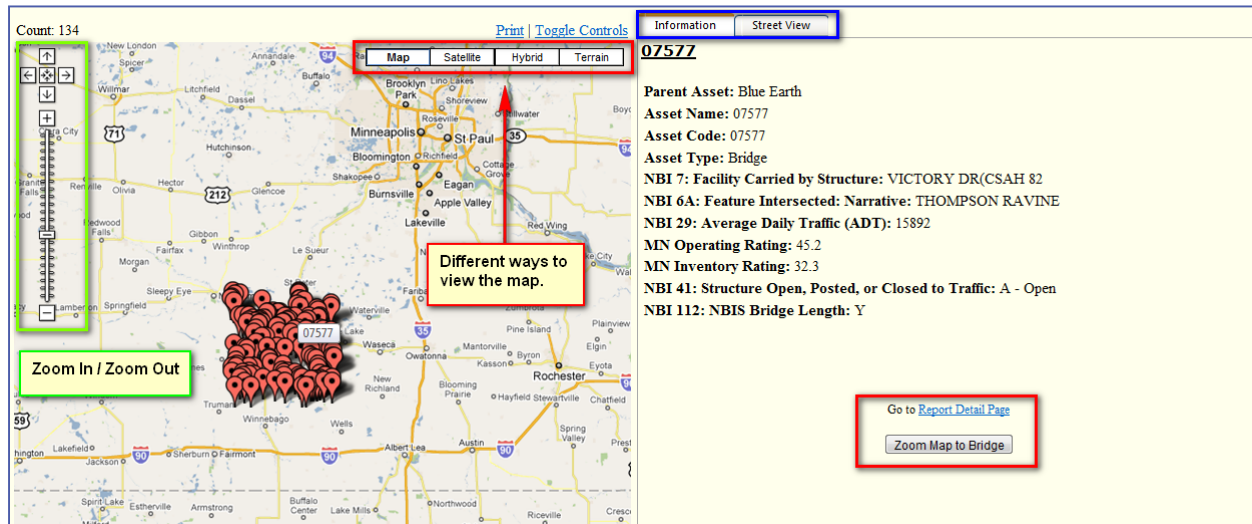
➤ **Note:** *Entering criteria into the GIS is not a necessary step; however, there is a limit to the number of assets the GIS Map will return so in some instances you will have to narrow your search.*

➤ Here is a screenshot of the GIS search screen. Suppose a user wanted to view only bridges located in District 3. Use the drop down box to choose the parent asset (shown in screenshot) and click "Show Assets". The second screenshot is of the interactive map that was generated by the searching criteria entered.

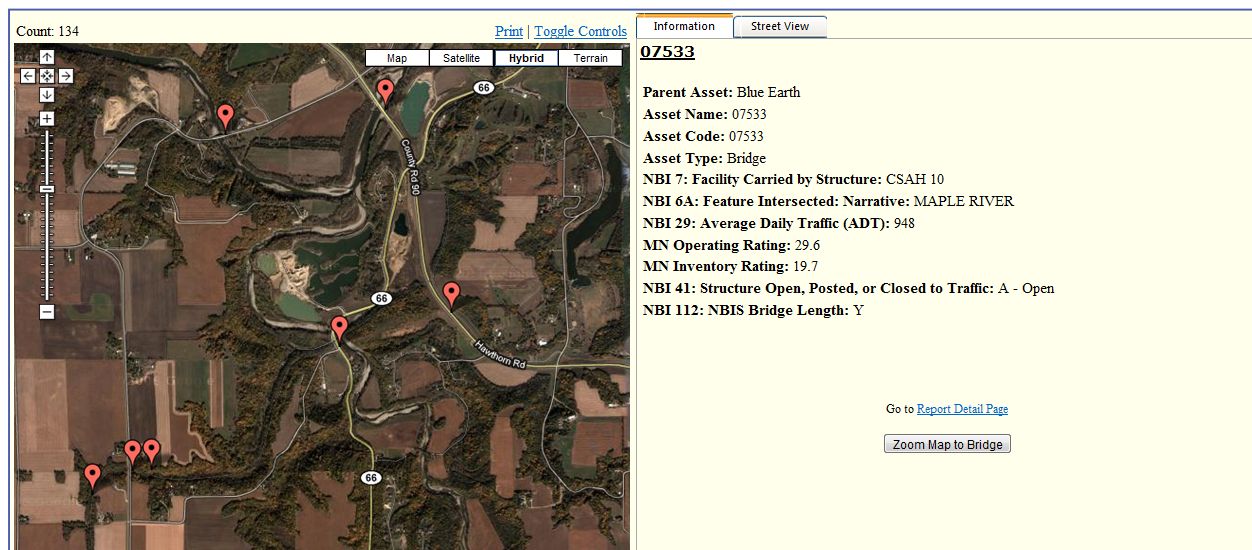


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- Notice that every bridge in the County is marked with a red pin and the total number of bridges returned is given in the top left hand corner. Users are able to zoom into and out of the map to get the best view using the scale on the left hand side of the page or by double clicking inside the map. Users also have the ability to view the map in four distinct ways: map view, satellite view, hybrid view or terrain view. When a user places their mouse over a single pin (bridge) and clicks, the bridge's information will generate on the right hand side of the page. This information section is broken down into two tabs. The first tab automatically opens when a bridge is selected and it contains general information about the bridge as well as a link to the bridge's detail page and also a button which will focus the map solely on that bridge. The second tab is labeled "Street View" and allows the user to view the bridge as if they were driving across/under the bridge in a vehicle. This "Street View" feature allows viewing from other streets as well, such as the ones that intersect and pass underneath the bridge. Not all bridges will have street view enabled.

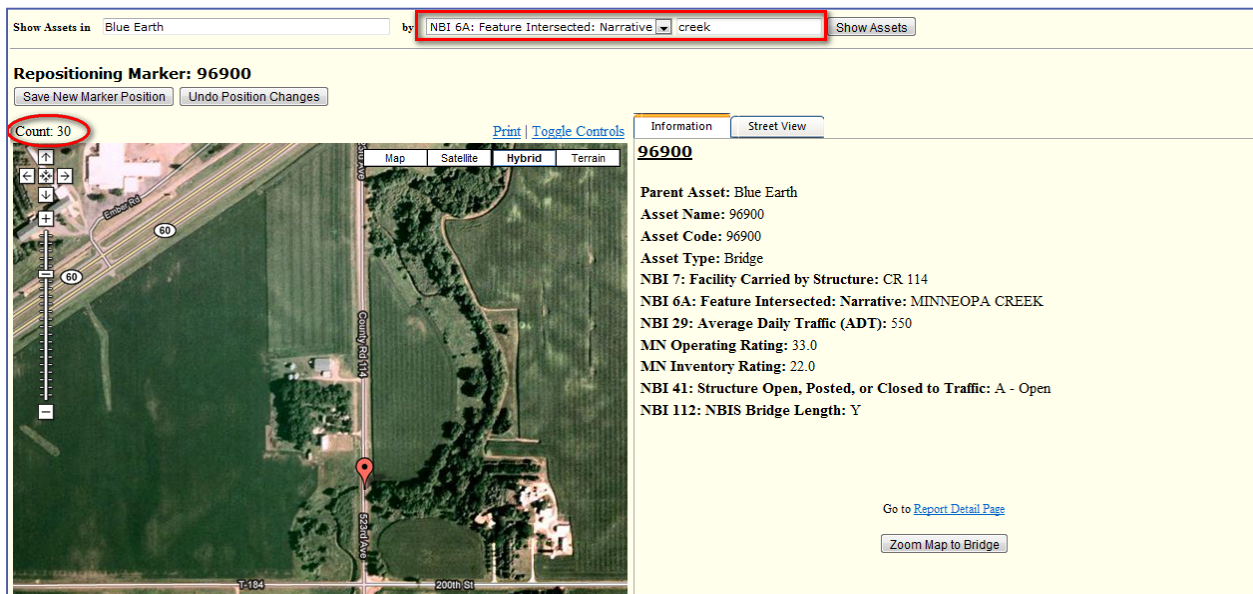


- Screenshot of the same map above. Its zoomed in and in hybridview to provide a different look.

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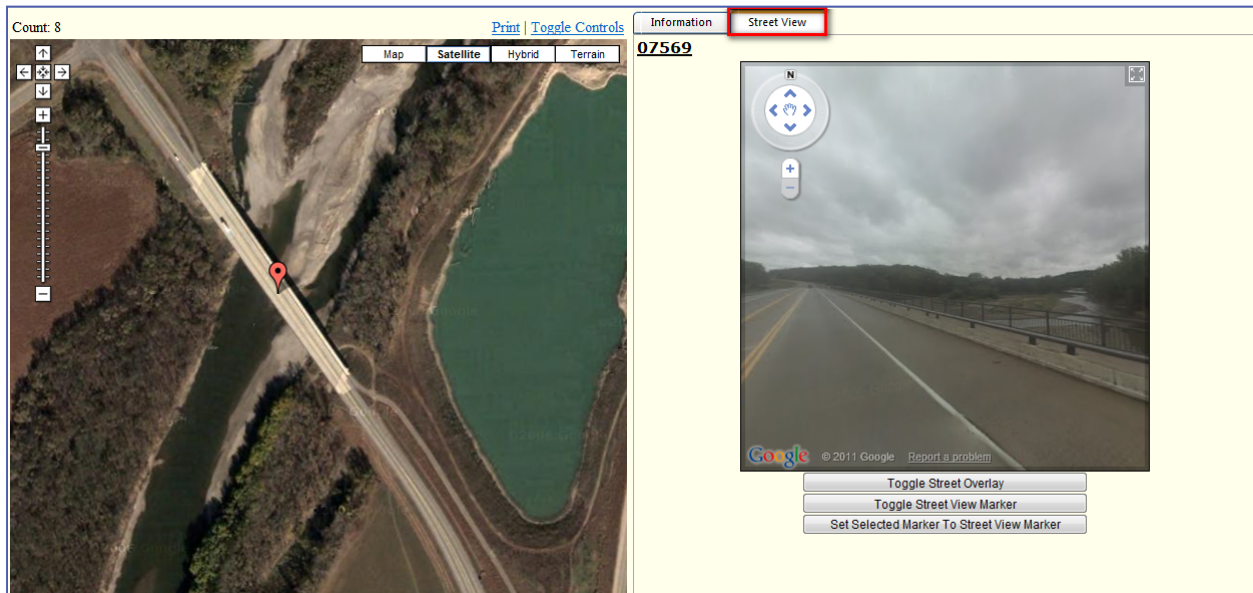
5. A user is able to print the map. To do so click on the "Print" link at the top of the page right above the different views. This will generate a new page and will expand the picture. Choose the correct printer then click print.
6. When necessary the user is able to narrow the results even more by using the search bars at the top of the page. Suppose a user needed a map of the county, but it will only display the bridges which intersect a "creek". To do so, click the drop down box for "by" and choose "Feature Intersected". Then, in the box next to it type the word "creek" and click on "Show Assets". Now the map will only show those assets in the county which meet the criteria.
  - Here is a screenshot only showing bridges in Blue Earth County which have "creek" in their name. Notice the count now displays 30, instead of the original 134. Also, the map has been increased enough to see specific roads and creeks. This will allow inspectors to pinpoint the exact location of any asset. Again, the user can zoom the map closer to view every road and surrounding features more in-depth.
  - *Note: If a bridge coordinate is incorrect in the map (i.e. the pin is located to the left / right of the actual bridge), the user may correct the error in the GIS map as well. The user can grab the pin and move it to the correct spot and drop it into place. The software will prompt the user with an acknowledgement warning. If the user selects yes, the position change is accepted and the new GPS coordinates are changed and recorded throughout the software. THIS IS NOT AVAILABLE TO ALL USERS.*



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- Overall the GIS map is a very effective and useful tool to locate any bridge. The ability to view and print customized maps using searching criteria is a powerful feature which can serve many purposes. Here is a screenshot of what happens when you click the "Zoom to Bridge" button on the bottom right hand corner. It focuses the map directly over the bridge to give the user a clear look at the surroundings and exact location of the bridge. Notice the "Street View" tab is opened on the right and shows unparallel views from all angles of the bridge.





## Help and Technical Support - Contact Information:

Multiple outlets are provided to reach us with technical difficulties or issues concerning the software.

- ❖ To report software issues or to request additional technical support, please contact [David Hedeem](#) at 651-366-4528 or [Jennifer Zink](#) at 651-366-4573.

SIMS Support e-mail:  
[simshelp.dot@state.mn.us](mailto:simshelp.dot@state.mn.us)

Frequently Asked Questions and Other SIMS Information:  
<http://www.dot.state.mn.us/bridge/sims>