



BrR TO BrM INTEGRATIONS

User Group Meeting September 15, 2021



MACKINAW BRIDGE | MDOT

Photo by Riley Crawford

CONTACT



ZACHARY BOYLE
zac.boyle@mayvue.com
Text | Voicemail | (801) 450-9716

BrM@mayvue.com
Support | 1-888-44-SUPPORT
1-888-447-8776
General | 1-877-462-9883

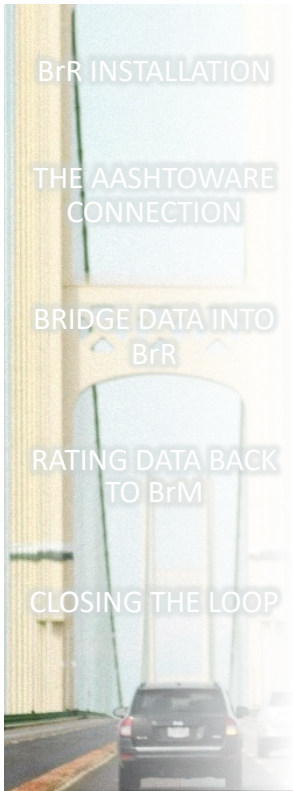


 Jira Service Desk
<http://support.mayvue.com>

MACKINAW BRIDGE | MDOT
Photo by Riley Crawford



API REVIEW

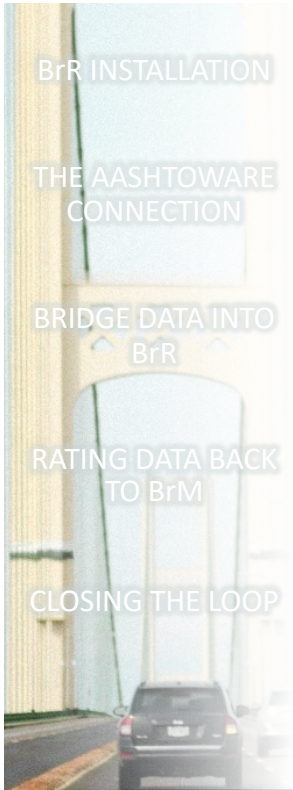


API REVIEW

API REVIEW

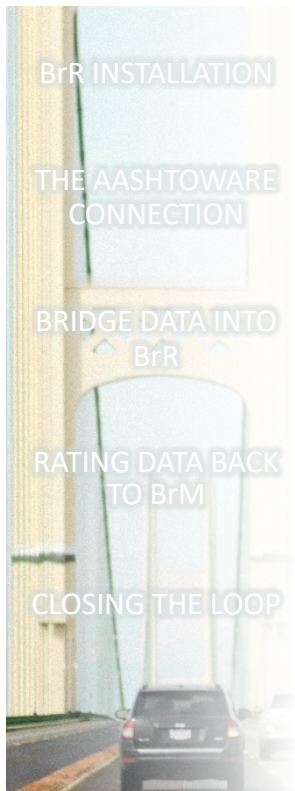


API REVIEW



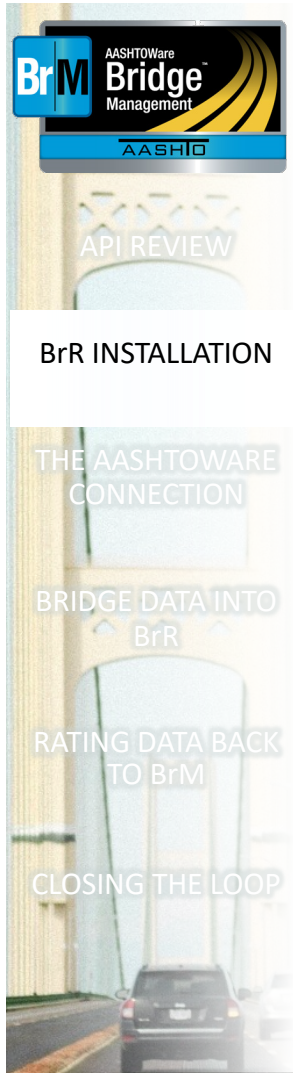


API REVIEW



API REVIEW

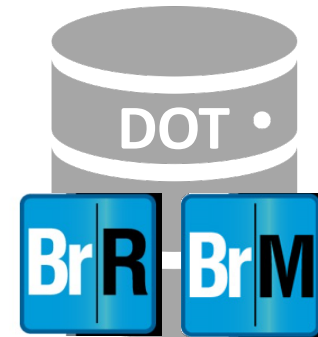
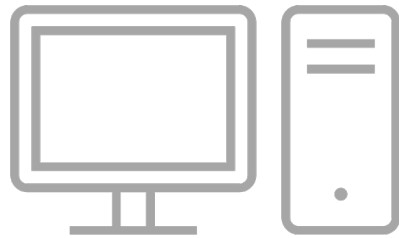
	<p><i>GET https://BrMWebsite.gov/BrM6/rest/bridge?l=brr</i> HTTP/1.1</p>	
	<pre>{<u>"TotalRows"</u>: 1120, <u>"Items"</u>: [{<u>BRIDGE_GD</u>: "BFB20F07802040FB912558045D8D8FE1 ", <u>BRIDGE_ID</u>: "00100", <u>STRUCT_NUM</u>: "000000000000010", <u>STRUCNAME</u>: "Mystery Bridge", <u>BRIDGE_STATUS</u>: "3"}, {...}, ...]}</pre>	
	<p><i>GET https://BrMWebsite.gov/BrM6/api/Bridge/GetBrRBridgeDetail/BFB20F07802040FB912558045D8D8FE1</i> HTTP/1.1</p>	
	<pre>{<u>BRIDGE_GD</u>: "BFB20F07802040FB912558045D8D8FE1 ", <u>BRIDGE_ID</u>: "00100", <u>LENGTH</u>: 1000, <u>STRUCNAME</u>: "Mystery Bridge", <u>DISTRICT</u>: "04", ... <etc>}</pre>	
	<p><i>GET https://BrMWebsite.gov/BrM6/rest/LrVehicleDefs</i> HTTP/1.1</p>	
	<pre>{<u>"TotalRows"</u>: 15, <u>"Items"</u>: [{<u>LR_VEHICLE_DEFS_GD</u>: "BFB20F07802040FB912558045D8D8FE1 ", <u>VEHICLE_NAME</u>: "SHV 1", ...}, ...]}</pre>	

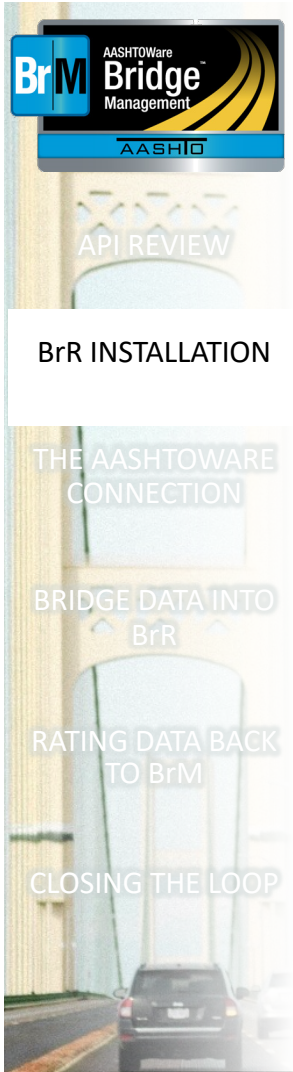


BrR INSTALLATION

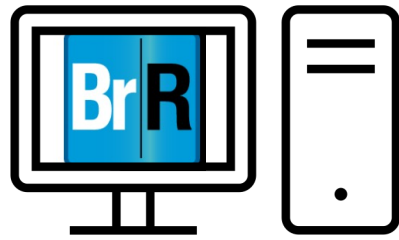


BrR INSTALLATION

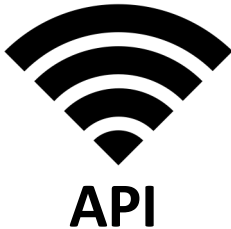
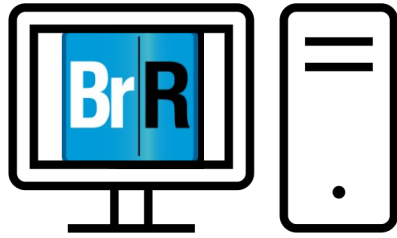




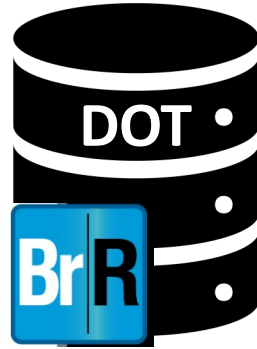
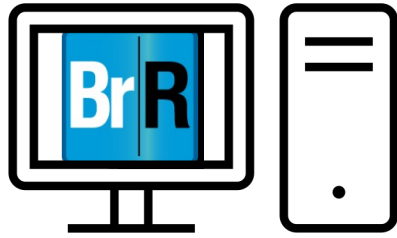
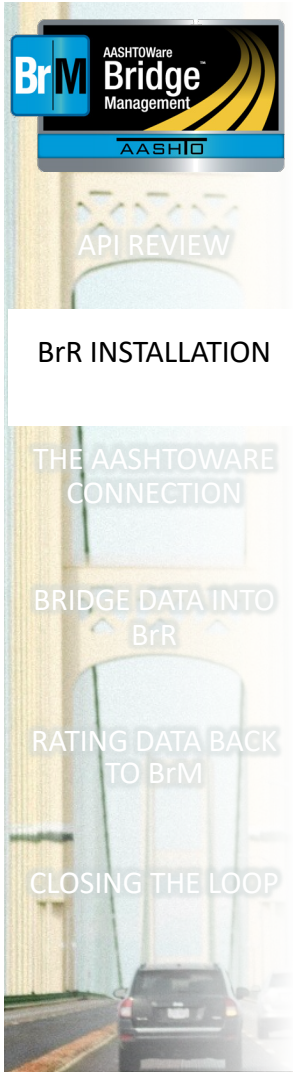
BrR INSTALLATION



BrR INSTALLATION



BrR INSTALLATION





API REVIEW

BrR INSTALLATION

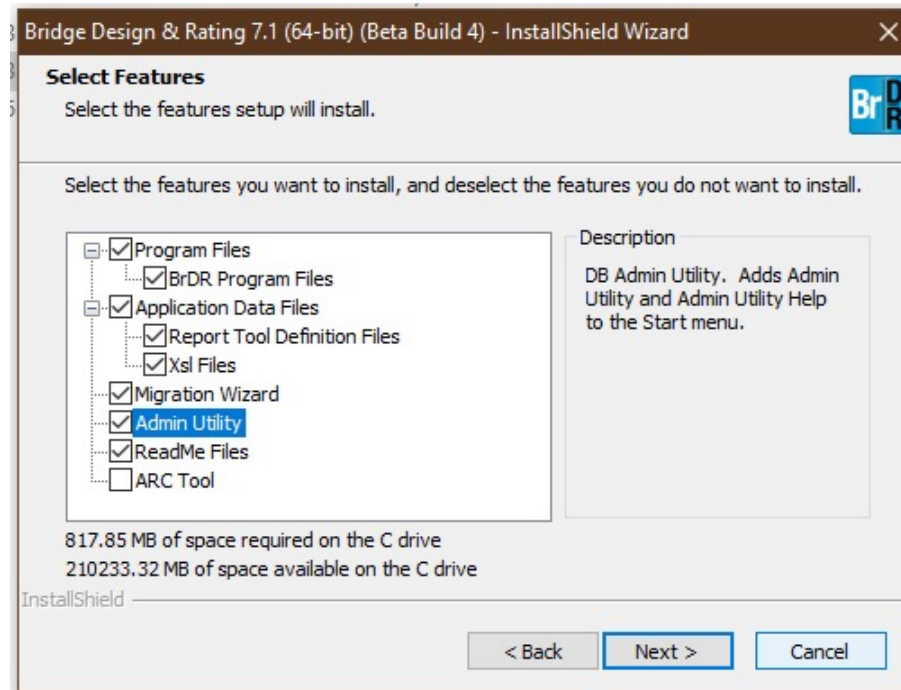
THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP

BrR INSTALLATION





API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP

BrR INSTALLATION

AASHTOWare Bridge Admin

Database properties

Enable Check-In/Check-Out Bridge Repository Bridge Exchange

Enable Bridge Protection Enable Load Rating Tool Enable Bridge Management

Database access role settings

	Role name	Password	Confirm password
Read only role:	VIRTIS_USER_READ_ONLY_ROLE		
Read/write role:	VIRTIS_USER_READ_WRITE_ROLE	••••••••	••••••••

Show password

Database cleanup

Modification event cleanup

Clean events older than 0 days

Keep at least 0 events in the event chain

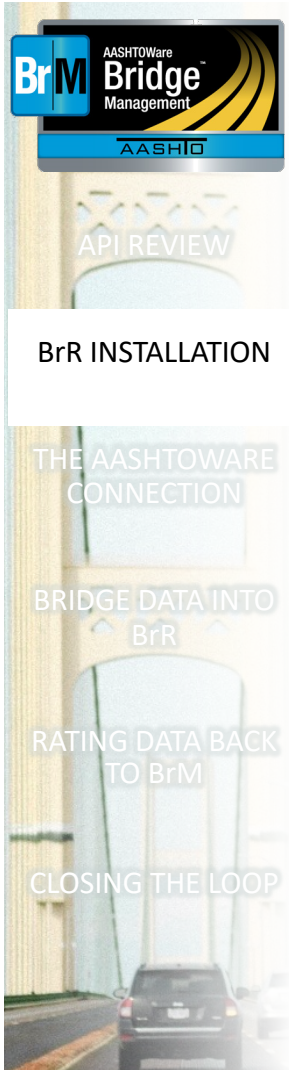
Clean now

Transfer events

From: [] To: []

Transfer now

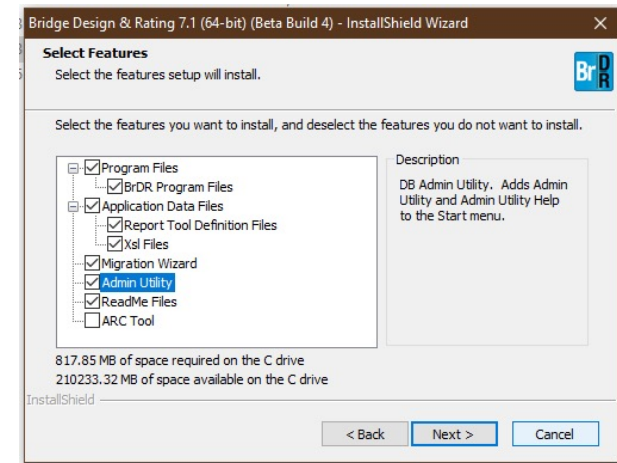
Save Close

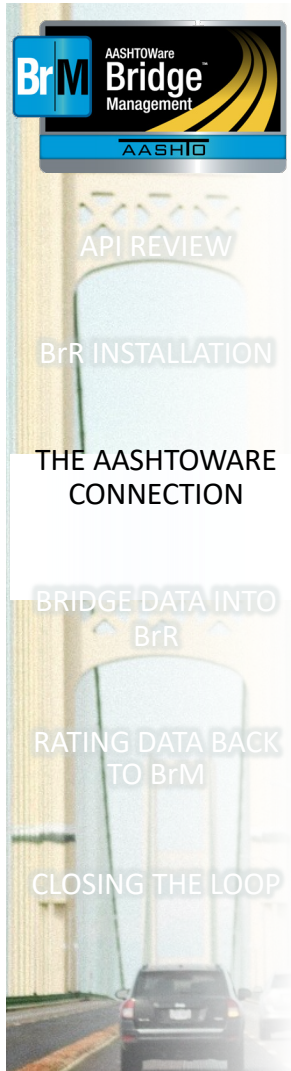


BrR INSTALLATION

A USER WILL NEED:

1. An internet connection
2. A BrM Login
3. BrR installed (including Admin Utility)





THE AASHTOWARE CONNECTION



THE AASHTOWARE CONNECTION

BRIDGE EXPLORER										
BRIDGE FOLDER RATE TOOLS VIEW										
New Open Import Batch Find Copy Paste Copy To Remove Delete										
Bridge Manage										
Favorites Folder Recent Bridges All Bridges Sample Bridges Deleted Bridges										
Bridge ID	Bridge Name	District	County	Facility	Location	Route	Feature Intersected	Mil		
1	TrainingBridge1	Training Bridge 1(LRFD)	District 11	01 Abbeville	SR 0051	Pittsburgh	0051	SR 6060		
2	TrainingBridge2	Training Bridge 2(LRFD)	Unknown	Unknown (P)	N/A	N/A	-1	N/A		
3	TrainingBridge3	Training Bridge 3(LRFD)	District 11	01 Abbeville	I-79	Pittsburgh	0079	Ohio River		
4	PCITrainingBridge1	PCI TrainingBridge1(LFD)					-1			
5	PCITrainingBridge2	PCITrainingBridge2(LRFD)					-1			
6	PCITrainingBridge3	PCI TrainingBridge3(LFD)					-1			
7	PCITrainingBridge4	PCITrainingBridge4(LRFD)					-1			
8	PCITrainingBridge5	PCI TrainingBridge5(LFD)					-1			
9	PCITrainingBridge6	PCITrainingBridge6(LRFD)					-1			
10	Example7	Example 7 PS (LFD)					-1			
11	RCTrainingBridge1	RC Training Bridge1(LFD)					-1			
12	TimberTrainingBridge1	Timber Tr. Bridge1 (ASD)					-1			
13	FSys GFS TrainingBridge1	FloorSystem GFS Training Bridge 1	District 6	15 Colleton	NJ-Turnpike	NJCity	-1			
14	FSys FS TrainingBridge2	FloorSystem FS Training Bridge 2	District 11	333 Norfolk	I-95	NYC	-1			
15	FSys GF TrainingBridge3	FloorSystem GF Training Bridge 3	District 7	06 Barnwell	I-95	ATL	-1			
16	FLine GFS TrainingBridge1	FloorLine GFS Training Bridge 1	District 1	01 Abbeville	I-75	JAX	-1			
17	FLine FS TrainingBridge2	FloorLine FS Training Bridge 2	District 2	02 Aiken	I-75	GNV	-1			
18	FLine GF TrainingBridge3	FloorLine GF Training Bridge 3	District 1	01 Abbeville	I-95	NY	15			
19	TrussTrainingExample	Truss Training Example					5			
20	LRFD Substructure Example 1	LRFD Substructure Example 1								
21	LRFD Substructure Example 2	LRFD Substructure Example 2			SR 4034	ERIE COUNTY	4034	FOUR MILE CREEK		
22	LRFD Substructure Example 3	LRFD Substructure Example 3								
23	LRFD Substructure Example 4	LRFD Substructure Example 4 (NHI Hammer Head)					-1			
24	Visual Reference 1	Visual Reference 1	District 1	12 Chester	I-76	WAITSFIELD	I-76	MAD RIVER		
25	Culvert Example 1	Culvert Example 1								
26	LFD Curved Guide Spec	LFD Curved Guide Spec Example					1			
27	MultiCell Box Examples	Multi Cell Box Examples					100			
28	Gusset Plate Example	Gusset Plate Example	District 1			Some Highway				
29	Splice Example	Splice Example					-1			

API REVIEW

BrM INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrM

RATING DATA BACK TO BrM

CLOSING THE LOOP



THE AASHTOWARE CONNECTION

BRIDGE EXPLORER										
BRIDGE FOLDER RATE TOOLS VIEW										
New Open Import Batch Find Copy Paste Copy To Remove Delete From										
Bridge Manage										
Favorites Folder Recent Bridges All Bridges Sample Bridges Deleted Bridges										
Bridge ID	Bridge Name	District	County	Facility	Location	Route	Feature Intersected	Mil		
1	TrainingBridge1	Training Bridge 1(LRFD)	District 11	01 Abbeville	SR 0051	Pittsburgh	0051	SR 6060		
2	TrainingBridge2	Training Bridge 2(LRFD)	Unknown	Unknown (P)	N/A	N/A	-1	N/A		
3	TrainingBridge3	Training Bridge 3(LRFD)	District 11	01 Abbeville	I-79	Pittsburgh	0079	Ohio River		
4	PCITrainingBridge1	PCI TrainingBridge1(LFD)					-1			
5	PCITrainingBridge2	PCITrainingBridge2(LRFD)					-1			
6	PCITrainingBridge3	PCI TrainingBridge3(LFD)					-1			
7	PCITrainingBridge4	PCITrainingBridge4(LRFD)					-1			
8	PCITrainingBridge5	PCI TrainingBridge5(LFD)					-1			
9	PCITrainingBridge6	PCITrainingBridge6(LRFD)					-1			
10	Example7	Example 7 PS (LFD)					-1			
11	RCTrainingBridge1	RC Training Bridge1(LFD)					-1			
12	TimberTrainingBridge1	Timber Tr. Bridge1 (ASD)					-1			
13	FSys GFS TrainingBridge1	FloorSystem GFS Training Bridge 1	District 6	15 Colleton	NJ-Turnpike	NJCity	-1			
14	FSys FS TrainingBridge2	FloorSystem FS Training Bridge 2	District 11	333 Norfolk	I-95	NYC	-1			
15	FSys GF TrainingBridge3	FloorSystem GF Training Bridge 3	District 7	06 Barnwell	I-95	ATL	-1			
16	FLine GFS TrainingBridge1	FloorLine GFS Training Bridge 1	District 1	01 Abbeville	I-75	JAX	-1			
17	FLine FS TrainingBridge2	FloorLine FS Training Bridge 2	District 2	02 Aiken	I-75	GNV	-1			
18	FLine GF TrainingBridge3	FloorLine GF Training Bridge 3	District 1	01 Abbeville	I-95	NY	15			
19	TrussTrainingExample	Truss Training Example					5			
20	LRFD Substructure Example 1	LRFD Substructure Example 1								
21	LRFD Substructure Example 2	LRFD Substructure Example 2			SR 4034	ERIE COUNTY	4034	FOUR MILE CREEK		
22	LRFD Substructure Example 3	LRFD Substructure Example 3								
23	LRFD Substructure Example 4	LRFD Substructure Example 4 (NHI Hammer Head)					-1			
24	Visual Reference 1	Visual Reference 1	District 1	12 Chester	I-76	WAITSFIELD	I-76	MAD RIVER		
25	Culvert Example 1	Culvert Example 1								
26	LFD Curved Guide Spec	LFD Curved Guide Spec Example					1			
27	MultiCell Box Examples	Multi Cell Box Examples					100			
28	Gusset Plate Example	Gusset Plate Example	District 1			Some Highway				
29	Splice Example	Splice Example					-1			

API REVIEW

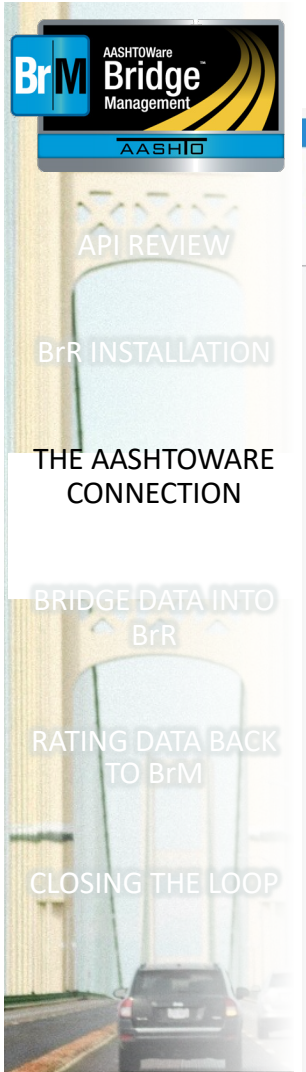
BrM INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrM

RATING DATA BACK TO BrM

CLOSING THE LOOP





THE AASHTOWARE CONNECTION

BRIDGE EXPLORER BRIDGE FOLDER RATE TOOLS VIEW

Refresh Retrieve All Select All Retrieve Next Select None US Customary Library Configuration

Sort By Select Columns

Bridge Explorer View

- ★ Favorites Folder
- 📁 Recent Bridges
- 📁 All Bridges
- 📁 Sample Bridges
- 🗑 Deleted Bridges

	Bridge ID	Bridge Name	District	County	Facility	Location	Route	Feature Intersected	Mile/Km Post (m)	Stat
1	TrainingBridge1	Training Bridge 1(LRFD)	District 11	01 Abbeville	SR 0051	Pittsburgh	0051	SR 6060	17.00	Stat
2	TrainingBridge2	Training Bridge 2(LRFD)	Unknown	Unknown (P)	N/A	N/A	-1	N/A		Unk
3	TrainingBridge3	Training Bridge 3(LRFD)	District 11	01 Abbeville	I-79	Pittsburgh	0079	Ohio River	125.00	Stat
4	PCITrainingBridge1	PCI TrainingBridge1(LRFD)					-1			
5	PCITrainingBridge2	PCI TrainingBridge2(LRFD)					-1			
6	PCITrainingBridge3	PCI TrainingBridge3(LRFD)					-1			
7	PCITrainingBridge4	PCI TrainingBridge4(LRFD)					-1			
8	PCITrainingBridge5	PCI TrainingBridge5(LRFD)					-1			
9	PCITrainingBridge6	PCI TrainingBridge6(LRFD)					-1			
10	Example7	Example 7 PS (LFD)					-1			
11	RCTrainingBridge1	RC Training Bridge1(LRFD)					-1			
12	TimberTrainingBridge1	Timber Tr. Bridge1 (ASD)					-1			
13	FSys GFS TrainingBridge1	FloorSystem GFS Training Bridge 1	District 6	15 Colleton	NJ-Turnpike	NJCity	-1			
14	FSys FS TrainingBridge2	FloorSystem FS Training Bridge 2	District 11	333 Norfolk	I-95	NYC	-1			Stat
15	FSys GF TrainingBridge3	FloorSystem GF Training Bridge 3	District 7	06 Barnwell	I-95	ATL	-1			Cou
16	FLine GFS TrainingBridge1	FloorLine GFS Training Bridge 1	District 1	01 Abbeville	I-75	JAX	-1			Stat
17	FLine FS TrainingBridge2	FloorLine FS Training Bridge 2	District 2	02 Aiken	I-75	GNV	-1			Stat
18	FLine GF TrainingBridge3	FloorLine GF Training Bridge 3	District 1	01 Abbeville	I-95	NY	15		2200.00	Cou
19	TrussTrainingExample	Truss Training Example					5			
20	LRFD Substructure Example 1	LRFD Substructure Example 1								
21	LRFD Substructure Example 2	LRFD Substructure Example 2			SR 4034	ERIE COUNTY	4034	FOUR MILE CREEK	8.12	
22	LRFD Substructure Example 3	LRFD Substructure Example 3								
23	LRFD Substructure Example 4	LRFD Substructure Example 4 (NHI Hammer Head)					-1			
24	Visual Reference 1	Visual Reference 1	District 1	12 Chester	I-76	WAITSFIELD	I-76	MAD RIVER	1199.25	Stat
25	Culvert Example 1	Culvert Example 1					STH60			
26	LFD Curved Guide Spec	LFD Curved Guide Spec Example					1			
27	MultiCell Box Examples	Multi Cell Box Examples					100			
28	Gusset Plate Example	Gusset Plate Example	District 1			Some Highway				Stat
29	Splice Example	Splice Example					-1			
30	Simple DL-Cont LL-Splice	Simple DL Splice	Unknown	Unknown (P)	N/A	N/A	-1	N/A		Unk

API REVIEW

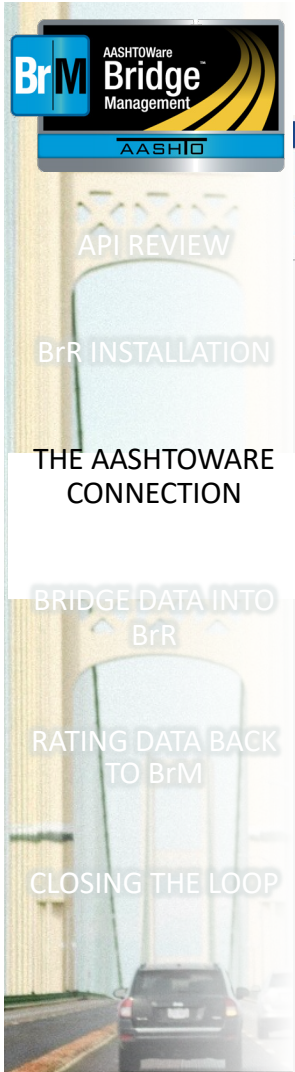
BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP





THE AASHTOWARE CONNECTION

API REVIEW
BrR INSTALLATION
THE AASHTOWARE CONNECTION
BRIDGE DATA INTO BrR
RATING DATA BACK TO BrM
CLOSING THE LOOP

BRIDGE EXPLORER CONFIGURATION

New Group Rename Delete Group New User Open Delete User Close

Manage

- Users
 - All Users
 - Administrators
 - Design Engineers
 - Managers
 - Rating Engineers
 - Routing Engineers
- Access Privileges
- BrM Vehicles
- Parameters
- System Defaults

System Defaults ×

General Bridge workspace Superstructure analysis Specifications Substructure analysis Tolerance Custom agency fields

Agency name:

Default preference setting: ▼

Multimedia server folder:

Include multimedia links in bridge export/import

BrM Endpoint URL:

BrM allow self-signed certificates

BrM Database ID:



THE AASHTOWARE CONNECTION



BRIDGE EXPLORER CONFIGURATION

New Group Rename Delete Group New User Open Delete User Close

Manage

- Users
 - All Users
 - Administrators
 - Design Engineers
 - Managers
 - Rating Engineers
 - Routing Engineers
- Access Privileges
- BrM Vehicles
- Parameters
- System Defaults

System Defaults x

General Bridge workspace Superstructure analysis Specifications Substructure analysis Tolerance Custom agency fields

Agency name:

Default preference setting:

Multimedia server folder:

Include multimedia links in bridge export/import

BrM Endpoint URL:

BrM allow self-signed certificates

BrM Database ID:



THE AASHTOWARE CONNECTION

API REVIEW
BrR INSTALLATION
THE AASHTOWARE CONNECTION
BRIDGE DATA INTO BrR
RATING DATA BACK TO BrM
CLOSING THE LOOP

BRIDGE EXPLORER CONFIGURATION

New Group Rename Delete Group New User Open Delete User Close

Manage

- Users
 - All Users
 - Administrators
 - Design Engineers
 - Managers
 - Rating Engineers
 - Routing Engineers
- Access Privileges
- BrM Vehicles
- Parameters
- System Defaults

System Defaults x

General Bridge workspace Superstructure analysis Specifications Substructure analysis Tolerance Custom agency fields

Agency name:

Default preference setting:

Multimedia server folder:

Include multimedia links in bridge export/import

BrM Endpoint URL:

BrM allow self-signed certificates

BrM Database ID:

Admin - Databases Page x +

https://demo.mayvue.com/BrM65/admin/AdminDataba

USER: PONTIS Admin > Security



THE AASHTOWARE CONNECTION

The screenshot displays the AASHTO BrM Bridge Management software interface. The main window is titled "BRIDGE EXPLORER" and "CONFIGURATION". The left sidebar shows a tree view of the system structure, including "Users" (All Users, Administrators, Design Engineers, Managers, Rating Engineers, Routing Engineers), "Access Privileges", "BrM Vehicles", "Parameters", and "System Defaults". The "System Defaults" folder is selected, and the "System Defaults" configuration page is open. The "System Defaults" page has tabs for "General", "Bridge workspace", "Superstructure analysis", "Specifications", "Substructure analysis", "Tolerance", and "Custom agency fields". The "General" tab is active, showing fields for "Agency name" (AASHTO), "Default preference setting" (None), "Multimedia server folder" (C:\), "BrM Endpoint URL" (https://demo.mayvue.com/BrM), and "BrM Database ID" (21). A yellow highlight is placed around the "BrM Database ID" field. An inset window titled "Admin > Security > Databases" is overlaid on the right side of the screenshot, showing the "Database Administration" section. It includes a "Select existing database" dropdown menu with "BrM65s" selected, and a "Databases ID:" field with "21" entered. Below this, the "Configure Database Connection" section shows "Vendor:" (Microsoft SQL Serv), "ODBC Data Source:" (BrM65s), "Description:" (BrM65s), and "Authentication Method:" (Specify Proxy U).

API REVIEW

BrM INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP



THE AASHTOWARE CONNECTION

API REVIEW
BrR INSTALLATION
THE AASHTOWARE CONNECTION
BRIDGE DATA INTO BrR
RATING DATA BACK TO BrM
CLOSING THE LOOP

BRIDGE EXPLORER CONFIGURATION

New Group Rename Delete Group New User Open Delete User Close

Manage

- Users
 - All Users
 - Administrators
 - Design Engineers
 - Managers
 - Rating Engineers
 - Routing Engineers
- Access Privileges
- BrM Vehicles
- Parameters
- System Defaults

System Defaults x

General Bridge workspace Superstructure analysis Specifications Substructure analysis Tolerance Custom agency fields

Agency name:

Default preference setting:

Multimedia server folder:

Include multimedia links in bridge export/import

BrM Endpoint URL:

BrM allow self-signed certificates

BrM Database ID:

Save Close



THE AASHTOWARE CONNECTION



BRIDGE EXPLORER BRIDGE FOLDER RATE TOOLS VIEW

Simple Bridge Layout Wizard Multimedia Attachments General Preferences Report Tool Manage Bridges Sync Parameters Logout

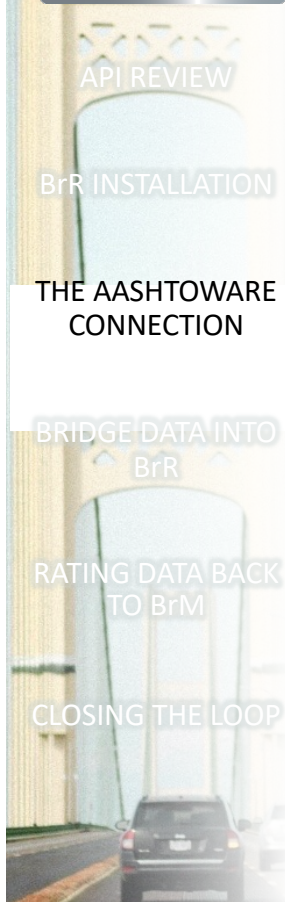
Bridge BrM

- ★ Favorites Folder
- 📁 Recent Bridges
- 📁 All Bridges
- 📁 Sample Bridges
- 🗑 Deleted Bridges

E ▲	Bridge ID	Bridge Name	District	County	Facility	Locat	
▶	1	TrainingBridge1	Training Bridge 1(LRFD)	District 11	01 Abbeville	SR 0051	Pittsburg
	2	TrainingBridge2	Training Bridge 2(LRFD)	Unknown	Unknown (P)	N/A	N/A
	3	TrainingBridge3	Training Bridge 3(LRFD)	District 11	01 Abbeville	I-79	Pittsburg
	4	PCITrainingBridge1	PCI TrainingBridge1(LRFD)				
	5	PCITrainingBridge2	PCITrainingBridge2(LRFD)				
	6	PCITrainingBridge3	PCI TrainingBridge3(LRFD)				
	7	PCITrainingBridge4	PCITrainingBridge4(LRFD)				
	8	PCITrainingBridge5	PCI TrainingBridge5(LRFD)				
	9	PCITrainingBridge6	PCITrainingBridge6(LRFD)				
	10	Example7	Example 7 PS (LFD)				
	11	RCTrainingBridge1	RC Training Bridge1(LRFD)				
	12	TimberTrainingBridge1	Timber Tr. Bridge1 (ASD)				
	13	FSys GFS TrainingBridge1	FloorSystem GFS Training Bridge 1	District 6	15 Colleton	NJ-Turnpike	NJCity
	14	FSys FS TrainingBridge2	FloorSystem FS Training Bridge 2	District 11	333 Norfolk	I-95	NYC
	15	FSys GF TrainingBridge3	FloorSystem GF Training Bridge 3	District 7	06 Barnwell	I-95	ATL
	16	FLine GFS TrainingBridge1	FloorLine GFS Training Bridge 1	District 1	01 Abbeville	I-75	JAX
	17	FLine FS TrainingBridge2	FloorLine FS Training Bridge 2	District 2	02 Aiken	I-75	GNV
	18	FLine GF TrainingBridge3	FloorLine GF Training Bridge 3	District 1	01 Abbeville	I-95	NY
	19	TrussTrainingExample	Truss Training Example				
	20	LRFD Substructure Example 1	LRFD Substructure Example 1				
	21	LRFD Substructure Example 2	LRFD Substructure Example 2			SR 4034	ERIE COL
	22	LRFD Substructure Example 3	LRFD Substructure Example 3				



THE AASHTOWARE CONNECTION



BRIDGE EXPLORER BRIDGE FOLDER RATE TOOLS VIEW

Simple Bridge Layout Wizard Multimedia Attachments General Preferences Report Tool Manage Bridges Sync Parameters Logout

Bridge BrM

- Favorites Folder
- Recent Bridges
- All Bridges
- Sample Bridges
- Deleted Bridges

E	Bridge ID
1	TrainingBridge1
2	TrainingBridge2
3	TrainingBridge3
4	PCITrainingBridge1
5	PCITrainingBridge2
6	PCITrainingBridge3
7	PCITrainingBridge4
8	PCITrainingBridge5
9	PCITrainingBridge6
10	Example7
11	RCTrainingBridge1
12	TimberTrainingBridge1
13	FSys GFS TrainingBridge1
14	FSys FS TrainingBridge2
15	FSys GF TrainingBridge3
16	FLine GFS TrainingBridge1
17	FLine FS TrainingBridge2
18	FLine GF TrainingBridge3
19	TrussTrainingExample
20	LRFD Substructure Example 1
21	LRFD Substructure Example 2
22	LRFD Substructure Example 3

Bridge Design & Rating 7.1 (64-bit) (Beta Build 4) - InstallShield Wizard

Select Features
Select the features setup will install.

Select the features you want to install, and deselect the features you do not want to install.

Feature	Description
<input checked="" type="checkbox"/> Program Files	
<input checked="" type="checkbox"/> BrDR Program Files	
<input checked="" type="checkbox"/> Application Data Files	
<input checked="" type="checkbox"/> Report Tool Definition Files	
<input checked="" type="checkbox"/> Xsl Files	
<input checked="" type="checkbox"/> Migration Wizard	
<input checked="" type="checkbox"/> Admin Utility	DB Admin Utility. Adds Admin Utility and Admin Utility Help to the Start menu.
<input checked="" type="checkbox"/> ReadMe Files	
<input type="checkbox"/> ARC Tool	

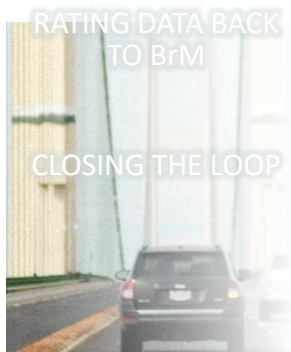
817.85 MB of space required on the C drive
210233.32 MB of space available on the C drive

InstallShield

< Back Next > Cancel

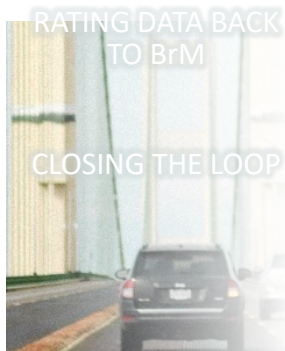


BRIDGE DATA INTO BrR





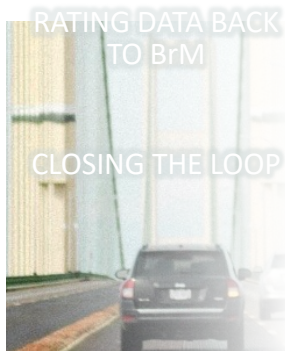
BRIDGE DATA INTO BrR



BRIDGE EXPLORER							BRIDGE	FOLDER	RATE	TOOLS	VIEW		
Simple Bridge Layout Wizard Multimedia Attachments General Preferences Report Tool Manage Bridges Sync Parameters Logout							Bridge					BrM	
<ul style="list-style-type: none"> ★ Favorites Folder Recent Bridges All Bridges Sample Bridges Deleted Bridges 							E ▲	Bridge ID	Bridge Name	District	County	Facility	Locat
	1	TrainingBridge1	Training Bridge 1(LRFD)	District 11	01 Abbeville	SR 0051	Pittsburg						
	2	TrainingBridge2	Training Bridge 2(LRFD)	Unknown	Unknown (P)	N/A	N/A						
	3	TrainingBridge3	Training Bridge 3(LRFD)	District 11	01 Abbeville	I-79	Pittsburg						
	4	PCITrainingBridge1	PCI TrainingBridge1(LFD)										
	5	PCITrainingBridge2	PCITrainingBridge2(LRFD)										
	6	PCITrainingBridge3	PCI TrainingBridge3(LFD)										
	7	PCITrainingBridge4	PCITrainingBridge4(LRFD)										
	8	PCITrainingBridge5	PCI TrainingBridge5(LFD)										
	9	PCITrainingBridge6	PCITrainingBridge6(LRFD)										
	10	Example7	Example 7 PS (LFD)										
	11	RCTrainingBridge1	RC Training Bridge1(LFD)										
	12	TimberTrainingBridge1	Timber Tr. Bridge1 (ASD)										
	13	FSys GFS TrainingBridge1	FloorSystem GFS Training Bridge 1	District 6	15 Colleton	NJ-Turnpike	NJCity						
	14	FSys FS TrainingBridge2	FloorSystem FS Training Bridge 2	District 11	333 Norfolk	I-95	NYC						
	15	FSys GF TrainingBridge3	FloorSystem GF Training Bridge 3	District 7	06 Barnwell	I-95	ATL						
	16	FLine GFS TrainingBridge1	FloorLine GFS Training Bridge 1	District 1	01 Abbeville	I-75	JAX						
	17	FLine FS TrainingBridge2	FloorLine FS Training Bridge 2	District 2	02 Aiken	I-75	GNV						
	18	FLine GF TrainingBridge3	FloorLine GF Training Bridge 3	District 1	01 Abbeville	I-95	NY						
	19	TrussTrainingExample	Truss Training Example										
	20	LRFD Substructure Example 1	LRFD Substructure Example 1										
	21	LRFD Substructure Example 2	LRFD Substructure Example 2			SR 4034	ERIE COL						
	22	LRFD Substructure Example 3	LRFD Substructure Example 3										



BRIDGE DATA INTO BrR



BRIDGE EXPLORER BRIDGE FOLDER RATE **TOOLS** VIEW

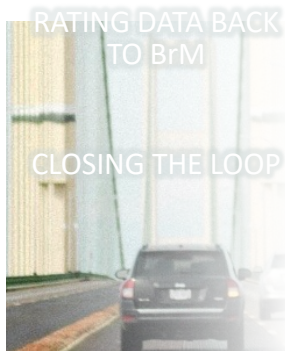
Simple Bridge Layout Wizard Multimedia Attachments General Preferences Report Tool Manage Bridges **Sync Parameters BrM** Logout

- ★ Favorites Folder
- Recent Bridges
- All Bridges
- Sample Bridges
- Deleted Bridges

E ▲	Bridge ID	Bridge Name	District	County	Facility	Locat
▶ 1	TrainingBridge1	Training Bridge 1(LRFD)	District 11	01 Abbeville	SR 0051	Pittsburg
▶ 2	TrainingBridge2	Training Bridge 2(LRFD)	Unknown	Unknown (P)	N/A	N/A
▶ 3	TrainingBridge3	Training Bridge 3(LRFD)	District 11	01 Abbeville	I-79	Pittsburg
▶ 4	PCITrainingBridge1	PCI TrainingBridge1(LRFD)				
▶ 5	PCITrainingBridge2	PCITrainingBridge2(LRFD)				
▶ 6	PCITrainingBridge3	PCI TrainingBridge3(LRFD)				
▶ 7	PCITrainingBridge4	PCITrainingBridge4(LRFD)				
▶ 8	PCITrainingBridge5	PCI TrainingBridge5(LRFD)				
▶ 9	PCITrainingBridge6	PCITrainingBridge6(LRFD)				
▶ 10	Example7	Example 7 PS (LFD)				
▶ 11	RCTrainingBridge1	RC Training Bridge1(LRFD)				
▶ 12	TimberTrainingBridge1	Timber Tr. Bridge1 (ASD)				
▶ 13	FSys GFS TrainingBridge1	FloorSystem GFS Training Bridge 1	District 6	15 Colleton	NJ-Turnpike	NJCity
▶ 14	FSys FS TrainingBridge2	FloorSystem FS Training Bridge 2	District 11	333 Norfolk	I-95	NYC
▶ 15	FSys GF TrainingBridge3	FloorSystem GF Training Bridge 3	District 7	06 Barnwell	I-95	ATL
▶ 16	FLine GFS TrainingBridge1	FloorLine GFS Training Bridge 1	District 1	01 Abbeville	I-75	JAX
▶ 17	FLine FS TrainingBridge2	FloorLine FS Training Bridge 2	District 2	02 Aiken	I-75	GNV
▶ 18	FLine GF TrainingBridge3	FloorLine GF Training Bridge 3	District 1	01 Abbeville	I-95	NY
▶ 19	TrussTrainingExample	Truss Training Example				
▶ 20	LRFD Substructure Example 1	LRFD Substructure Example 1				
▶ 21	LRFD Substructure Example 2	LRFD Substructure Example 2			SR 4034	ERIE COL
▶ 22	LRFD Substructure Example 3	LRFD Substructure Example 3				



BRIDGE DATA INTO BrR



BRIDGE EXPLORER BRIDGE FOLDER RATE TOOLS VIEW

Simple Bridge Multimedia General Report Manage Sync Logout
Layout Wizard Attachments Preferences Tool Bridges Parameters BrM

Bridge

- ★ Favorites Folder
- Recent Bridges
- All Bridges
- Sample Bridges
- Deleted Bridges

E ▲	Bridge ID	Bridge Name	District	County	Facility	Locat
1	TrainingBridge1	Training Bridge 1(LRFD)	District 11	01 Abbeville	SR 0051	Pittsburg
2	TrainingBridge2	Training Bridge 2(LRFD)	Unknown	Unknown (P)	N/A	N/A
3	Training Bridge 3	Training Bridge 3(LRFD)	District 11	01 Abbeville	I-79	Pittsburg
		Bridge1(LRFD)				
		Bridge2(LRFD)				
		Bridge3(LRFD)				
		Bridge4(LRFD)				
		Bridge5(LRFD)				
		Bridge6(LRFD)				
		LRFD)				
		Bridge1(LRFD)				
		Bridge1 (ASD)				
		Training Bridge 1	District 6	15 Colleton	NJ-Turnpike	NJCity
		Training Bridge 2	District 11	333 Norfolk	I-95	NYC
		Training Bridge 3	District 7	06 Barnwell	I-95	ATL
		Training Bridge 1	District 1	01 Abbeville	I-75	JAX
		Training Bridge 2	District 2	02 Aiken	I-75	GNV
		Training Bridge 3	District 1	01 Abbeville	I-95	NY
		example				
		LRFD Substructure Example 1				
21	LRFD Substructure Example 2	LRFD Substructure Example 2			SR 4034	ERIE COL
22	LRFD Substructure Example 3	LRFD Substructure Example 3				
23	LRFD Substructure Example 4	LRFD Substructure Example 4				

BrM Authentication Required

Please enter a username and password.

Username:

Password:

OK Cancel



BRIDGE DATA INTO BrR

BRIDGE EXPLORER BRIDGE FOLDER RATE TOOLS VIEW

Simple Bridge Multimedia General Report Manage Sync Logout
Layout Wizard Attachments Preferences Tool Bridges Parameters BrM

Bridge

- ★ Favorites Folder
- Recent Bridges
- All Bridges
- Sample Bridges
- Deleted Bridges

E	Bridge ID	Bridge Name	District	County	Facility	Locat
▶	1 TrainingBridge1	Training Bridge 1(LRFD)	District 11	01 Abbeville	SR 0051	Pittsburg
	2 TrainingBridge2	Training Bri				
	3 TrainingBridge3	Training Bri				

BrM Authentication Required

Please enter a username and password.

Username:

Password:

OK Cancel

BrM Bridge Management

Login.

User ID:

Password:

Database: BrM65s

Login

BrM Version 6.5.0.e132c013bf [Build Date: Th...]

© Copyright 2006-2014 by the American Association of State Highway and Transportation Officials, Inc. A Proprietary Computer Software Product.

20	LRFD Substructure Example 1	LRFD Subst				
21	LRFD Substructure Example 2	LRFD Subst				
22	LRFD Substructure Example 3	LRFD Substructure Example 3				
23	LRFD Substructure Example 4	LRFD Substructure Example 4				

API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

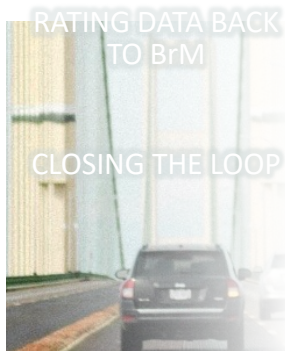
BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP



BRIDGE DATA INTO BrR



BRIDGE EXPLORER BRIDGE FOLDER RATE TOOLS VIEW

Simple Bridge Multimedia General Report Manage Sync Logout
Layout Wizard Attachments Preferences Tool Bridges Parameters BrM

Bridge

- ★ Favorites Folder
- Recent Bridges
- All Bridges
- Sample Bridges
- Deleted Bridges

E ▲	Bridge ID	Bridge Name	District	County	Facility	Locat
▶ 1	TrainingBridge1	Training Bridge 1(LRFD)	District 11	01 Abbeville	SR 0051	Pittsburg
2	TrainingBridge2	Training Bridge 2(LRFD)	Unknown	Unknown (P)	N/A	N/A
3	TrainingBridge3	Training Bridge 3(LRFD)	District 11	01 Abbeville	I-79	Pittsburg
4	PCITrainingBridge1	PCI TrainingBridge1(LRFD)				
5	PCITrainingBridge2					
6	PCITrainingBridge3					
7	PCITrainingBridge4					
8	PCITrainingBridge5					
9	PCITrainingBridge6					
10	Example7					
11	RCTrainingBridge1					
12	TimberTrainingBridg					
13	FSys GFS TrainingBri		istrict 6	15 Colleton	NJ-Turnpike	NJCity
14	FSys FS TrainingBrid		istrict 11	333 Norfolk	I-95	NYC
15	FSys GF TrainingBrid		istrict 7	06 Barnwell	I-95	ATL
16	FLine GFS TrainingBr		istrict 1	01 Abbeville	I-75	JAX
17	FLine FS TrainingBrid		istrict 2	02 Aiken	I-75	GNV
18	FLine GF TrainingBrid		istrict 1	01 Abbeville	I-95	NY
19	TrussTrainingExempl					
20	LRFD Substructure Example 1	LRFD Substructure Example 1				
21	LRFD Substructure Example 2	LRFD Substructure Example 2			SR 4034	ERIE COL
22	LRFD Substructure Example 3	LRFD Substructure Example 3				

BrM Parameters Sync

Select parameter syncing options:

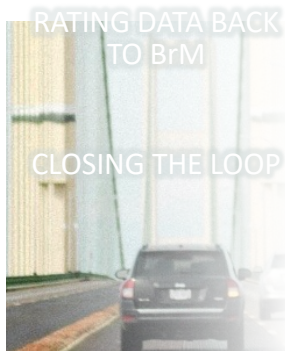
Sync Options

- Append missing parameters from BrM
- Remove parameters not found in BrM

OK Cancel



BRIDGE DATA INTO BrR



BRIDGE EXPLORER **CONFIGURATION**

New Group Rename Delete Group New User Open Delete User Close

Manage

- Users
 - All Users
 - Administrators
 - Design Engineers
 - Managers
 - Rating Engineers
 - Routing Engineers
- Access Privileges
- BrM Vehicles
- Parameters
- System Defaults

System Defaults × Parameters ×

Selection criteria: County Sync

ID	Agency type
-2	Not
-1	Unkr District
001	Beav Functional class
003	Box I National highway system
005	Cach Owner / Maintainer
007	Carbon
009	Daggett
011	Davis
013	Duchesne
015	Emery
017	Garfield
019	Grand
021	Iron
023	Juab
025	Kane
027	Millard
029	Morgan
031	Piute
033	Rich
035	Salt Lake
037	San Juan
039	Sanpete
041	Sevier
043	Summit
045	Tooele
047	Uintah
049	Utah



BRIDGE DATA INTO BrR

API REVIEW
BrR INSTALLATION
THE AASHTOWARE CONNECTION
BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM
CLOSING THE LOOP

The screenshot shows the 'CONFIGURATION' window of the AASHTOWare Bridge Design and Rating software. The window title is 'AASHTOWare Bridge Design and Rating'. The interface includes a 'BRIDGE EXPLORER' pane on the left with a tree view containing 'Users' (All Users, Administrators, Design Engineers, Managers, Rating Engineers, Routing Engineers), 'Access Privileges', 'BrM Vehicles', 'Parameters', and 'System Defaults'. A toolbar above the tree view contains icons for 'New Group', 'Rename', 'Delete Group', 'New User', 'Open', 'Delete User', and 'Close'. The main area shows a 'System Defaults' tab with a 'BrM vehicles' sub-tab. A 'Sync' button is visible, and a table below it has columns for 'BrM vehicle', 'Enabled', 'BrDR vehicle', and 'Default vehicle category'.

BrM vehicle	Enabled	BrDR vehicle	Default vehicle category
-------------	---------	--------------	--------------------------



BRIDGE DATA INTO BrR

AASHTOWare Bridge Design and Rating

BRIDGE EXPLORER **CONFIGURATION**

New Group Rename Group Delete Group New User Open Delete User Close

Manage

- Users
 - All Users
 - Administrators
 - Design Engineers
 - Managers
 - Rating Engineers
 - Routing Engineers
- Access Privileges
- BrM Vehicles
- Parameters
- System Defaults

System Defaults x BrM vehicles x

Sync

BrM vehicle	Enabled	BrDR vehicle	Default vehicle category
HS-20 Operating	<input type="checkbox"/>		None
HS-20 Inventory	<input type="checkbox"/>		None
HL-93 Operating	<input type="checkbox"/>		None
HL-93 Inventory	<input type="checkbox"/>		None
Type 3	<input type="checkbox"/>		None
Type 3S2	<input type="checkbox"/>		None
Type 3-3	<input type="checkbox"/>		None
Notational SHV	<input type="checkbox"/>		None
SHV 4	<input type="checkbox"/>		None
SHV 5	<input type="checkbox"/>		None
SHV 6	<input type="checkbox"/>		None
SHV 7	<input type="checkbox"/>		None
EV2	<input type="checkbox"/>		None
EV3	<input type="checkbox"/>		None

API REVIEW

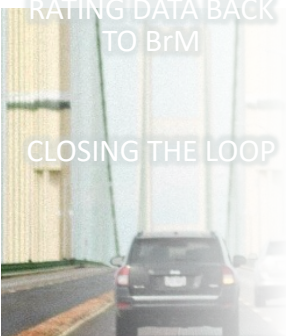
BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP





BRIDGE DATA INTO BrR

API REVIEW
 BrR INSTALLATION
 THE AASHTOWARE CONNECTION
 BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM
 CLOSING THE LOOP

AASHTOWare Bridge Design and Rating

BRIDGE EXPLORER **CONFIGURATION**

New Group Rename Group Delete Group New User Open Delete User Close

Manage

- Users
 - All Users
 - Administrators
 - Design Engineers
 - Managers
 - Rating Engineers
 - Routing Engineers
- Access Privileges
- BrM Vehicles
- Parameters
- System Defaults

System Defaults x BrM vehicles x

Sync

BrM vehicle	Enabled	BrDR vehicle	D
HS-20 Operating	<input type="checkbox"/>		Na
HS-20 Inventory	<input type="checkbox"/>		Na
HL-93 Operating	<input type="checkbox"/>		Na
HL-93 Inventory	<input type="checkbox"/>		Na
Type 3	<input type="checkbox"/>		Na
Type 3S2	<input type="checkbox"/>		Na
Type 3-3	<input type="checkbox"/>		Na
Notational SHV	<input type="checkbox"/>		Na
SHV 4	<input type="checkbox"/>		Na
SHV 5	<input type="checkbox"/>		Na
SHV 6	<input type="checkbox"/>		Na
SHV 7	<input type="checkbox"/>		Na
EV2	<input type="checkbox"/>		Na
EV3	<input type="checkbox"/>		Na

Admin > General Config > Vehicle Definitions

Vehicle	Default Rating Method	Default Analysis Type	Standard
HS-20 Operating	6 Load Factor (MS18)	Design	Yes
HS-20 Inventory	6 Load Factor (MS18)	Design	Yes
HL-93 Operating	8 LRFR (HL93)	Design	Yes
HL-93 Inventory	8 LRFR (HL93)	Design	Yes
Type 3	8 LRFR (HL93)	Legal	Yes
Type 3S2	8 LRFR (HL93)	Legal	Yes
Type 3-3	8 LRFR (HL93)	Legal	Yes
Notational SHV	8 LRFR (HL93)	Permit	Yes
SHV 4	8 LRFR (HL93)	Permit	Yes
SHV 5	8 LRFR (HL93)	Permit	Yes
SHV 6	8 LRFR (HL93)	Permit	Yes
SHV 7	8 LRFR (HL93)	Permit	Yes
EV2	8 LRFR (HL93)	Permit	Yes
EV3	8 LRFR (HL93)	Permit	Yes



BRIDGE DATA INTO BrR

AASHTOWare Bridge Design and Rating

BRIDGE EXPLORER | **CONFIGURATION**

Manage

- Users
 - All Users
 - Administrators
 - Design Engineers
 - Managers
 - Rating Engineers
 - Routing Engineers
- Access Privileges
- BrM Vehicles
- Parameters
- System Defaults

System Defaults x BrM vehicles x

Sync

BrM vehicle	Enabled	BrDR vehicle	Default vehicle category
HS-20 Operating	<input checked="" type="checkbox"/>	HS 20-44	Operating
HS-20 Inventory	<input checked="" type="checkbox"/>	HS 20-44	Inventory
HL-93 Operating	<input checked="" type="checkbox"/>	HL-93 (US)	Operating
HL-93 Inventory	<input checked="" type="checkbox"/>	HL-93 (US)	Inventory
Type 3	<input checked="" type="checkbox"/>	Type 3	Operating
Type 3S2	<input checked="" type="checkbox"/>	Type 3S2	Operating
Type 3-3	<input checked="" type="checkbox"/>	HL-93 (SI)	perating
Notational SHV	<input type="checkbox"/>	HL-93 (US)	one
SHV 4	<input checked="" type="checkbox"/>	HS 20-44	perating
SHV 5	<input checked="" type="checkbox"/>	HS 15-44	perating
SHV 6	<input checked="" type="checkbox"/>	H 20-44	perating
SHV 7	<input checked="" type="checkbox"/>	H 15-44	perating
EV2	<input checked="" type="checkbox"/>	Type 3	perating
EV3	<input checked="" type="checkbox"/>	Type 3S2	perating
		Type 3-3	
		Alternate Military Loading	
		LRFD Fatigue Truck (US)	
		LRFD Fatigue Truck (SI)	
		HS 20 (SI)	
		Lane-Type Legal Load	

API REVIEW

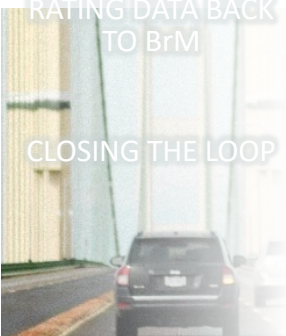
BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

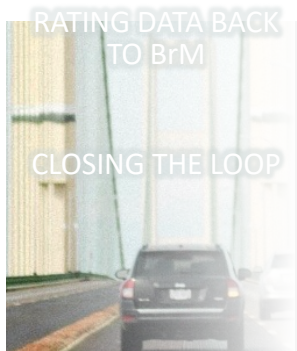
RATING DATA BACK TO BrM

CLOSING THE LOOP





BRIDGE DATA INTO BrR



The screenshot shows the AASHTO BrM software interface. The main window is titled 'Example7' and has a menu bar with 'BRIDGE WORKSPACE', 'WORKSPACE', 'TOOLS', 'VIEW', and 'DESIGN/RATE'. Below the menu bar is a toolbar with icons for 'Check Out', 'Check In', 'Validate', 'Save', 'Restore', 'Revert', 'Close', and 'Example7'. The 'Workspace' pane on the left shows a tree view for 'Bridge' with sub-items: 'Components', 'Diaphragm Definitions', 'Lateral Bracing Definitions', 'SUPERSTRUCTURE DEFINITIONS', '6-girder system', 'BRIDGE ALTERNATIVES', and 'Bridge Alternative #1 (E) (C)'. The main area displays a 'Bridge' dialog box with the following fields and options:

- Bridge ID: Example7
- NBI structure ID (8): Example7
- Template:
- Superstructures:
- Bridge completely defined:
- Culverts:
- Substructures:

The dialog box has several tabs: 'Description', 'Description (cont'd)', 'Alternatives', 'Global reference point', 'Traffic', and 'Custom agency fields'. The 'Description' tab is active, showing:

- Name: Example 7 PS (LFD)
- Year built: []
- Description: This is PCI design example 9.9.3, which uses the Load Factor Design (LFD) rating method. This bridge is described as a girder system.
- Location: []
- Length: [] ft
- Facility carried (7): []
- Route number: -1
- Feat. intersected (6): []
- Mi. post: []
- Default units: US Customary

At the bottom of the dialog box, there is a 'Bridge association...' section with checkboxes for BrR (checked), BrD (checked), and BrM (unchecked), along with a 'Sync with BrM' button. The dialog box has 'OK', 'Apply', and 'Cancel' buttons at the bottom right.



API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP

BRIDGE DATA INTO BrR

The screenshot displays the AASHTO BrM software interface. The main window is titled "BRIDGE WORKSPACE" and shows a tree view of bridge components for "Example7". The "Workspace" pane lists components such as "Components", "Diaphragm Definitions", "Lateral Bracing Definitions", "SUPERSTRUCTURE DEFINITIONS", "6-girder system", "BRIDGE ALTERNATIVES", and "Bridge Alternative #1 (E) (C)".

The "DESIGN/RATE" tab is active, showing a form for entering bridge data. The form includes fields for "Bridge ID" (Example7), "NBI structure ID (8)" (Example7), "Name" (Example 7 PS (LFD)), "Year built", "Description" (This is PCI design example 9.9.3, which uses the Load Factor Design (LFD) rating method. This bridge is described as a girder system.), "Location", "Length" (ft), "Facility carried (7)", "Route number" (-1), "Feat. intersected (6)", "Mi. post", and "Default units" (US Customary). Checkboxes for "Template", "Superstructures", "Bridge completely defined", "Culverts", and "Substructures" are also present.

A "Bridge Association" dialog box is open, showing options for "Bridge Design and Rating" (BrR and BrD checked) and "Bridge Management" (Yes selected for "Is this bridge associated with a corresponding BrM bridge?", with a "Select Bridge" button and a "BrM Bridge ID" field). "OK" and "Cancel" buttons are at the bottom.

At the bottom of the main window, there is a "Bridge association..." button and checkboxes for "BrR", "BrD", and "BrM", along with a "Sync with BrM" button. "OK", "Apply", and "Cancel" buttons are also visible at the bottom right.



BRIDGE DATA INTO BrR

The screenshot shows the AASHTO BrM software interface. The main window displays the 'Bridge' workspace with a tree view on the left containing 'Example7' and its components. The 'Bridge Association' dialog box is open, showing fields for 'Name' (Example 7 PS (LFD)), 'Description', 'Location', 'Facility carried (7)', 'Feat. intersected (6)', and 'Default units' (US Customary). Below these fields is a 'Bridge Association' section with checkboxes for 'BrR' and 'BrD', and a 'Bridge Management' section with a radio button for 'Yes' and a 'Select Bridge' button. A 'Bridge Association BrM Select' dialog box is also open, displaying a table of bridge data for selection.

Bridge ID	NBI structure ID	Bridge name	Location	Fe
4 Culv 2barrel	017035E	2 Barrel Continuous Concrete Culvert, Poor Cond	SOUTH SIDE OF HENRIEVILLE	CI
4-4-6 Cont Conc 3span	1D 615	3 Span Continuous Conc Poor Condition	500 SO.INTCHG.,BOUNTIFUL	I-
4-5-5 Truss 1span	0C 72	Single Span Steel Thru Truss Poor Condition	1.5 MI.NORTH OF DUCHESNE	SF
4-6-6 Steel 5span	0C 434	5 Span Steel Poor Condition	6.6 MI.NORTH-EAST WANSHIP	CI
4-6-7 Steel 3span	3C 341	3 Span Steel Poor Condition	NORTH LEHI	I-
5-5-4 Conc Slab 1span	0D 820	Single Span RC Slab Poor Condition	0.47 MI SOUTH OF THATCHER	SF
5-5-6 Steel Cont 3span	1C 302	3 Span Continuous Steel Fair Condition	500 W. INTCHG.,BOUNTIFUL	I-
6 Conc Culvert	0E2474	Concrete Culvert Fair Condition	175 E.MAIN,AMERICAN FORK	U:
6-3-6 PS T-Beam	035014F	Prestressed T-Beam 1 Span Poor Condition	690 EAST 6755 SO.,MIDVALE	LA
6-5-6 Steel Arch	0C 274	Single Span Steel Thru Arch Fair Condition	AT MEXICAN HAT	SF
6-6-4 Cont Conc 3span	1D 672	3 Span Continuous Conc Poor Condition	BECKS STREET INTERCHANGE	RI
6-6-5 Cont Conc 3span	0D 710	3 Span Continuous Conc T-Beam	WEST OF ANETH	SF
6-6-5 PS Conc 1span	0F 263	Single Span Prestressed Concrete Fair Condition	4TH SO.ST.in SPANISH FORK	U:
6-6-6 Concrete 1span	0D 590	Single Span Concrete Fair Condition	IN CITY OF MOAB	U:
6-6-6 Steel 1span	049066C	Single span steel fair condition	2.5 MI.NW.OF THISTLE	CI
6-6-6 Steel 3span	0C 734	3 Span Continuous Steel Fair Condition	AT DEWEY-30 MI.NO.OF MOAB	SF
7-4-6 Steel Arch	0C 293	Single Span Steel Arch Poor Condition	0.4 MILES SOUTH OF VEYO	SF
7-7-6 Cont Conc 3span	049062D	3 Span Continuous Conc Slab	3.5 MILES SW. OF LEHI	SJ
7-7-6 PS Conc 4span	0F 10	4 Span Prestressed Concrete Fair Condition	IN LEHI	SF
7-7-7 Steel 1span	049064C	Steel 1 Span Good Condition	750 WEST MEADOW LANE	M
7-9-9 Steel 2span	4C1023	2 Span Steel Good Condition	5.5 MILE S.IVVER CRFFK INT	I-

API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP

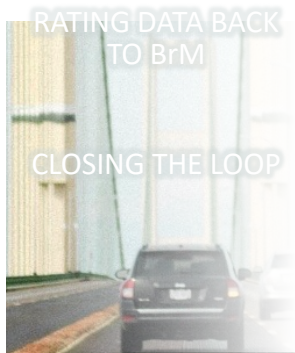
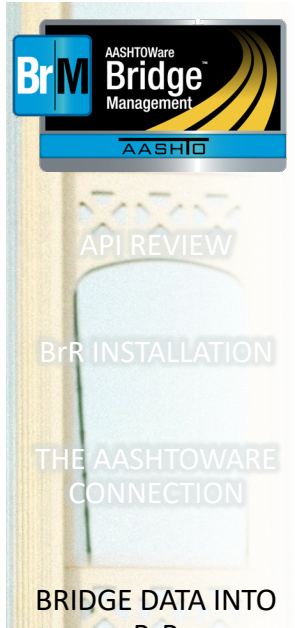


BRIDGE DATA INTO BrR

Bridge ID: NBI structure ID (8):

Template Superstructures
 Bridge completely defined Culverts
 Substructures

Description	Description (cont'd)	Alternatives	Global reference point	Traffic	Custom agency fields
Name:	<input type="text" value="Single Span Prestressed Concrete Fair Condition"/>			Year built:	<input type="text" value="1971"/>
Description:	<input type="text" value="This is PCI design example 9.9.3, which uses the Load Factor Design (LFD) rating method. This bridge is described as a girder system."/>				
Location:	<input type="text" value="4TH SO.ST.in SPANISH FOF"/>			Length:	<input type="text" value="103.82"/> ft
Facility carried (7):	<input type="text" value="US-6 (SR-6)"/>			Route number:	<input type="text" value="00006"/>
Feat. intersected (6):	<input type="text" value="SR-147"/>			Mi. post:	<input type="text" value="174.41"/>
Default units:	<input type="text" value="US Customary"/> ▼				





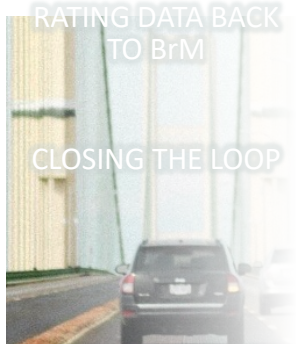
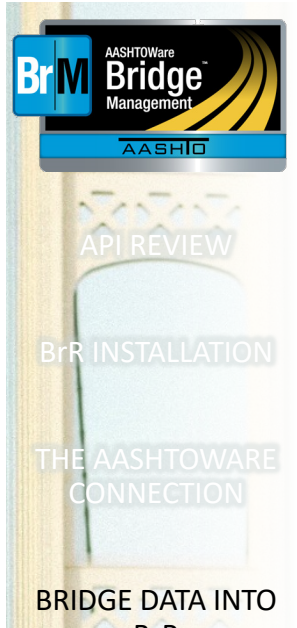
BRIDGE DATA INTO BrR

Example7

Bridge ID: NBI structure ID (8):

Template Superstructures
 Bridge completely defined Culverts
 Substructures

Description	Description (cont'd)	Alternatives	Global reference point	Traffic	Custom agency fields
District (2):	<input type="text" value="District 3"/>				
County:	<input type="text" value="Utah"/>				
Owner (22):	<input type="text" value="State Highway Agency"/>				
Maintainer:	<input type="text" value="State Highway Agency"/>				
Admin area:	<input type="text" value="3426"/>				
NHS Indicator:	<input type="text" value="1 On the NHS"/>				
Functional class:	<input type="text" value="14 Urban Other Princ"/>				





API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP

BRIDGE DATA INTO BrR

Example7

Bridge ID: NBI structure ID (8):

Template Superstructures
 Bridge completely defined Culverts
 Substructures

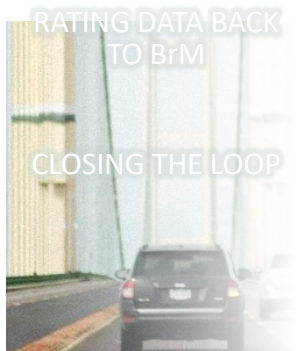
Description Description (cont'd) Alternatives Global reference point Traffic Custom agency fields

X: ft
Y: ft
Elevation: ft
Longitude: Degrees
Latitude: Degrees

Bridge association... BrR BrD BrM



BRIDGE DATA INTO BrR



6-6-5 PS Conc 1span

Bridge ID: NBI structure ID (8):

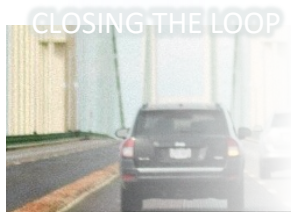
Template Superstructures
 Bridge completely defined Culverts
 Substructures

Description	Description (cont'd)	Alternatives	Global reference point	Traffic	Custom agency fields
Truck PCT:	<input type="text" value="31"/>	%			
ADT:	<input type="text" value="21941"/>				
Directional PCT:	<input type="text"/>	%			
Recent ADTT:	<input type="text"/>	<input type="button" value="Compute"/>			
Design ADTT:	<input type="text"/>				
Exp. annual ADTT _{SL} growth rate:	<input type="text"/>				
Fatigue importance factor:	<input type="text" value="Main Arterial, Interstate, Other"/>				
	<input type="checkbox"/> Importance factor override <input type="text"/>				
(ADTT _{SL}) ₀ :	<input type="text"/>				
(ADTT _{SL}) _{PRESENT} :	<input type="text"/>				
(ADTT _{SL}) _{LIMIT} :	<input type="text"/>				

BrR BrD BrM



RATING DATA BACK TO BrM





RATING DATA BACK TO BrM

BRIDGE EXPLORER									
BRIDGE		FOLDER		RATE		TOOLS		VIEW	
Rate	Update Ratings	Rating Results	Recent Rating Results	Manage Analysis Events	Open	Precomputed Data	Load Rating Tool		
Rate	BrM	Results			Routing	Rating Tool			
<ul style="list-style-type: none"> ★ Favorites Folder Recent Bridges All Bridges Sample Bridges Deleted Bridges 									
E	Bridge ID	Bridge Name	District	County	Facility	Location	Route	Feature Intersect	
1	TrainingBridge1	Training Bridge 1(LRFD)	District 11	01 Abbeville	SR 0051	Pittsburgh	0051	SR 6060	
2	TrainingBridge2	Training Bridge 2(LRFD)	Unknown	Unknown (P)	N/A	N/A	-1	N/A	
3	TrainingBridge3	Training Bridge 3(LRFD)	District 11	01 Abbeville	I-79	Pittsburgh	0079	Ohio River	
4	PCITrainingBridge1	PCI TrainingBridge1(LFD)					-1		
5	PCITrainingBridge2	PCITrainingBridge2(LRFD)					-1		
6	PCITrainingBridge3	PCI TrainingBridge3(LFD)					-1		
7	PCITrainingBridge4	PCITrainingBridge4(LRFD)					-1		
8	PCITrainingBridge5	PCI TrainingBridge5(LFD)					-1		
9	PCITrainingBridge6	PCITrainingBridge6(LRFD)					-1		
▶ 10	6-6-6 Concrete 1span	Signge Span Concrete Fair Condition	Region 4	Grand	US-191 (SR-1	IN CITY OF MOA	00191	MILL CREEK	
11	RCTrainingBridge1	RC Training Bridge1(LFD)					-1		
12	TimberTrainingBridge1	Timber Tr. Bridge1 (ASD)					-1		
13	FSys GFS TrainingBridge1	FloorSystem GFS Training Bridge 1	District 6	15 Colleton	NJ-Turnpike	NJCity	-1		
14	FSys FS TrainingBridge2	FloorSystem FS Training Bridge 2	District 11	333 Norfolk	I-95	NYC	-1		
15	FSys GF TrainingBridge3	FloorSystem GF Training Bridge 3	District 7	06 Barnwell	I-95	ATL	-1		
16	FLine GFS TrainingBridge1	FloorLine GFS Training Bridge 1	District 1	01 Abbeville	I-75	JAX	-1		
17	FLine FS TrainingBridge2	FloorLine FS Training Bridge 2	District 2	02 Aiken	I-75	GNV	-1		
18	FLine GF TrainingBridge3	FloorLine GF Training Bridge 3	District 1	01 Abbeville	I-95	NY	15		
19	TrussTrainingExample	Truss Training Example					5		
20	LRFD Substructure Example 1	LRFD Substructure Example 1							
21	LRFD Substructure Example 2	LRFD Substructure Example 2			SR 4034	ERIE COUNTY	4034	FOUR MILE CREEK	
22	LRFD Substructure Example 3	LRFD Substructure Example 3							
23	LRFD Substructure Example 4	LRFD Substructure Example 4 (NHI Hammer Head)					-1		
24	Visual Reference 1	Visual Reference 1	District 1	12 Chester	I-76	WAITSFIELD	I-76	MAD RIVER	
25	Culvert Example 1	Culvert Example 1						STH60	
26	LFD Curved Guide Spec	LFD Curved Guide Spec Example					1		
27	MultiCell Box Examples	Multi Cell Box Examples					100		
28	Gusset Plate Example	Gusset Plate Example	District 1			Some Highway			

API REVIEW

BrM INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrM

RATING DATA BACK TO BrM

CLOSING THE LOOP





RATING DATA BACK TO BrM

API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP

BRIDGE EXPLORER BRIDGE FOLDER RATE TOOLS VIEW

Rate Update Ratings BrM

Analysis Settings

Rating method: LFD

Analysis type: Line Girder

Lane / Impact loading type: As Requested

Apply preference setting: None

Traffic direction: Both directions

Vehicle selection

- Vehicles
 - Standard
 - Alternate Military Loading
 - EV2
 - EV3
 - H 15-44
 - H 20-44
 - HS 15-44
 - HS 20 (SI)
 - HS 20-44
 - NRL
 - SU4
 - SU5
 - SU6
 - SU7
 - Type 3
 - Type 3-3
 - Type 3S2
 - Agency
 - User defined
 - Temporary

Vehicle summary

- Rating vehicles
 - Inventory
 - HS 20-44
 - Operating
 - HS 20-44
 - Type 3
 - Type 3-3
 - Type 3S2
 - Legal operating
 - Permit inventory
 - Permit operating

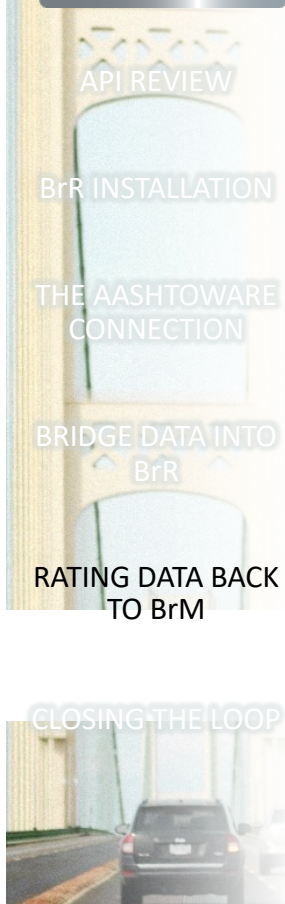
Buttons: Refresh, Temporary vehicles, Advanced, Add to (>>), Remove from (<<)

Location	Route	Feature Intersected	Mile/Km Post (mi)	Owner
Pittsburgh	0051	SR 6060	17.00	State Highway Ager
N/A	-1	N/A		Unknown (P)
Pittsburgh	0079	Ohio River	125.00	State Highway Ager
	-1			
	-1			
	-1			
	-1			
	-1			
IN CITY OF MOA	00191	MILL CREEK		State Highway Ager
	-1			
	-1			
NJCity	-1			
NYC	-1			State Highway Ager
ATL	-1			County Hwy Agenc
JAX	-1			State Highway Ager
GNV	-1			State Highway Ager
NY	15		2200.00	County Hwy Agenc
	5			
ERIE COUNTY	4034	FOUR MILE CREEK	8.12	
	-1			
WAITSFIELD	I-76	MAD RIVER	1199.25	State Highway Ager
	1			
	100			
Some Highway				State Highway Ager
	-1			
N/A	-1	N/A		Unknown (P)

Buttons: Recat, Clear, Open template, Save template, OK, Cancel



RATING DATA BACK TO BrM



Analysis Progress

- Analysis Event
 - 6-6-6 Concrete 1span
 - STRUCTURES
 - Structure #1 [6-girder system]
 - GIRDER-SYSTEM MEMBERS
 - G1 [Exterior Member]
 - G2 [Interior Member]
 - G3 [Interior Member]
 - G4 [Interior Member]
 - G5 [Interior Member]
 - G6 [Exterior Member]

- Location - 1.5800 (ft)
- Location - 3.3300 (ft)
- Location - 12.0000 (ft)
- Location - 24.0000 (ft)
- Location - 36.0000 (ft)
- Location - 48.0000 (ft)
- Location - 60.0000 (ft)
- Location - 72.0000 (ft)
- Location - 84.0000 (ft)
- Location - 96.0000 (ft)
- Location - 108.0000 (ft)
- Location - 120.0000 (ft)
- STAGE 2
- Location - 0.0000 (ft)
- Location - 0.8200 (ft)
- Location - 1.5800 (ft)
- Location - 3.3300 (ft)
- Location - 12.0000 (ft)
- Location - 24.0000 (ft)
- Location - 36.0000 (ft)
- Location - 48.0000 (ft)
- Location - 60.0000 (ft)
- Location - 72.0000 (ft)
- Location - 84.0000 (ft)
- Location - 96.0000 (ft)
- Location - 108.0000 (ft)
- Location - 120.0000 (ft)
- STAGE 3
- Location - 0.0000 (ft)
- Location - 0.8200 (ft)
- Location - 1.5800 (ft)
- Location - 3.3300 (ft)
- Location - 12.0000 (ft)
- Location - 24.0000 (ft)
- Location - 36.0000 (ft)
- Location - 48.0000 (ft)
- Location - 60.0000 (ft)
- Location - 72.0000 (ft)
- Location - 84.0000 (ft)
- Location - 96.0000 (ft)
- Location - 108.0000 (ft)
- Location - 120.0000 (ft)

Completed Specification Check.
Info - LFR analysis successfully completed!
Info - Populating dead load results for non-composite (stage 1)..
Info - Populating dead load results for composite (long term) (stage 2)..
Info - Populating live load results for composite (short term) (stage 3)..
Info - Populating standard rating summary..

Finished processing 0 of 1 bridges:

OK Cancel



RATING DATA BACK TO BrM

BrM Rating Summary

Analysis method: Rating date: BrM rater initials:

Bridge ID	Bridge completely defined	Accept new rating	BrM vehicle	BrDR vehicle	Analysis type	Rating	Capacity (tons)	Notes
6-6-6 Concrete 1span	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HS-20 Operating	HS 20-44	Design	1.04	37.42	
6-6-6 Concrete 1span	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HS-20 Inventory	HS 20-44	Design	0.62	22.41	
6-6-6 Concrete 1span	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Type 3	Type 3	Design	1.47	36.77	
6-6-6 Concrete 1span	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Type 3-3	Type 3-3	Design	1.08	43.30	
6-6-6 Concrete 1span	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Type 3S2	Type 3S2	Design	1.14	40.96	

Accept all Accept bridge Accept vehicle Clear accepted

View rating results... View bridges not rated... Push to BrM

API REVIEW

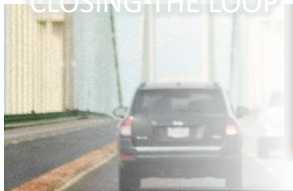
BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP





RATING DATA BACK TO BrM

BrM Rating Summary

Analysis method: D LFD (MS18) Rating date: 9/10/2021 BrM rater initials: BrR

Bridge ID	Bridge completely defined	Accept new rating	BrM vehicle	BrDR vehicle	Analysis type	Rating	Capacity (tons)	Notes
6-6-6 Concrete 1span	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HS-20 Operating	HS 20-44	Design	1.04	37.42	
6-6-6 Concrete 1span	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HS-20 Inventory	HS 20-44	Design	0.62	22.41	
6-6-6 Concrete 1span	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Type 3	Type 3	Design	1.47	36.77	
6-6-6 Concrete 1span	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Type 3-3	Type 3-3	Design	1.08	43.30	
6-6-6 Concrete 1span	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Type 3S2	Type 3S2	Design	1.14	40.96	

Bridge Rating
Successfully pushed BrM Rating(s)!
OK

Accept all Accept bridge Accept vehicle Clear accepted

View rating results... View bridges not rated...

Push to BrM Close





RATING DATA BACK TO BrM



USER, PONTIS

- INSPECTION ^
- CONDITION
- APPRAISAL
- INVENTORY v
- SCHEDULE
- WORK v
- MULTIMEDIA
- ASSESSMENTS
- LOAD RATINGS
- ELEMENT CONDITION RATINGS
- CROSS SECTIONS
- GATEWAY v
- ANALYSIS v
- PROJECTS v
- PROGRAMS v

Bridges > View List

<input type="checkbox"/>	5span	EBL & WBL	Region 2	Summit	Unknown	299.902	1967	4	6	6
<input type="checkbox"/>	4-6-7 Steel 3span	UNION PACIFIC RAILROAD	Region 3	Utah	Lehi city	389.99	1964	4	6	7
<input type="checkbox"/>	5-5-4 Conc Slab 1span	WEST CANAL	Region 1	Box Elder	Unknown	389.99	1935	5	5	4
<input type="checkbox"/>	5-5-6 Steel Cont 3span	RAMP, I-15SB to US-89SB	Region 1	Davis	West Bountiful city	231.875	1960	5	5	6
<input type="checkbox"/>	6 Conc Culvert	AMERICAN FORK CREEK	Region 3	Utah	American Fork city	23	2001	N	N	N
<input type="checkbox"/>	6-3-6 PS T-Beam	JORDAN & SALT LAKE C	Region 2	Salt Lake	Midvale city	24	1982	6	3	6
<input type="checkbox"/>	6-5-6 Steel Arch	SAN JUAN RIVER	Region 4	San Juan	Mexican Hat CDP	228.53	1953	6	5	6
<input type="checkbox"/>	6-6-4 Cont Conc 3span	RAMP, I-15NB to US-89NB	Region 2	Salt Lake	Salt Lake City city	270.013	1961	6	6	4
<input type="checkbox"/>	6-6-5 Cont Conc 3span	McELMO CREEK	Region 4	San Juan	Unknown	153.999	1963	6	6	5
<input type="checkbox"/>	6-6-5 PS Conc 1span	SR-147	Region 3	Utah	Spanish Fork city	103.822	1971	6	6	5
<input checked="" type="checkbox"/>	6-6-6 Concrete 1span	MILL CREEK	Region 4	Grand	Moab city	74.291	1956	6	6	6
<input type="checkbox"/>	6-6-6 Steel 1span	DIAMOND FORK CREEK	Region 3	Utah	Unknown	77.333	1955	6	6	6
<input type="checkbox"/>	6-6-6 Steel 3span	COLORADO RIVER	Region 4	Grand	Unknown	593.36	1986	6	6	6
<input type="checkbox"/>	7-4-6 Steel	SANTA CLARA	Region 4	Washington	Unknown	295	1957	7	4	6



USER, PONTIS



RATING DATA BACK TO BrM

Bridge: 6-6-6 Concrete 1spat

Facility Carried (007): US-191 (SR-191) (FIX PARA)

Met

Inspection > Load Ratings

Rating Event: 09/10/2021 [Create New Load Rating Event](#)

Current & Reported Ratings

Load Rating Review Recommended:

Reported Rating

Open / Posted / Closed (041): A Open, no restriction

Design Load (031): 5 MS 18 (HS 20)

Posting (070): 5 A/Above Legal Loads

Vehicle	Item 64	Item 66	Rating	Tons	Event	Method 63/65
---------	---------	---------	--------	------	-------	--------------

No Current Ratings have been selected for this bridge.

Load Rating Reports

Event Name: 09/10/2021 Load Rating Date: 9/10/2021

Load Rater: BrR Reviewer:

Software used: null (FIX PARAM VALUE) Secondary Software: null (FIX PARAM VALUE)

Wearing Surface / Fill Depth: inches Category: null (FIX PARAM)

Vehicle	Current	Rating	Tons	Method
HS-20 Operating	<input type="checkbox"/>	1.04	37.42	D LFD (MS18)
HS-20 Inventory	<input type="checkbox"/>	0.62	22.41	D LFD (MS18)
Type 3	<input type="checkbox"/>	1.47	36.77	D LFD (MS18)
Type 3S2	<input checked="" type="checkbox"/>	1.14	40.96	D LFD (MS18)
Type 3-3	<input type="checkbox"/>	1.08	43.3	D LFD (MS18)

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP

- BRIDGES
- TUNNELS
- REPORTS
- ADMIN
- INSPECTION
 - CONDITION
 - APPRAISAL
 - INVENTORY
 - SCHEDULE
 - WORK
 - MULTIMEDIA
 - ASSESSMENTS
 - LOAD RATINGS
 - ELEMENT CONDITION RATINGS
 - CROSS SECTIONS
- GATEWAY
- ANALYSIS





CLOSING THE LOOP





CLOSING THE LOOP

Bridge: 6-6-6 Concrete 1spal

Facility Carried (007): US-191 (SR-191) (FIX PARA)

Metric English

Inspection > Load Ratings

Rating Event: 09/10/2021 [Create New Load Rating Event](#)

Current & Reported Ratings

Load Rating Review Recommended:

Reported Rating

Open / Posted / Closed (041): A Open, no restriction
 Design Load (031): 5 MS 18 (HS 20)
 Posting (070): 5 At/Above Legal Loads

Vehicle	Item 64	Item 66	Rating	Tons	Event	Method 63/65
No Current Ratings have been selected for this bridge.						

Load Rating Reports

Event Name: 09/10/2021 Load Rating Date: 9/10/2021
 Load Rater: BrR Reviewer:
 Software used: null (FIX PARAM VALUE) Secondary Software: null (FIX PARAM VALUE)

Wearing Surface: inches Category: null (FIX PARAM VALUE) [Add New Vehicle](#)

Vehicle	Rating	Tons	Method	Analysis Type	Limit State	Location
HS-20	1.04	37.42	D LFD (MS18)	Design		
HS-20 Inventory	0.62	22.41	D LFD (MS18)	Design		
Type 3	1.47	36.77	D LFD (MS18)	Design		
Type 3S2	1.14	40.96	D LFD (MS18)	Design		
Type 3-3	1.08	43.3	D LFD (MS18)	Design		

API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP





CLOSING THE LOOP

Bridge: 6-6-6 Concrete 1spa1

Facility Carried (007): US-191 (SR-191) (FIX PARA

Metric English

Inspection > Load Ratings

Rating Event: 09/10/2021 [Create New Load Rating Event](#)

Current & Reported Ratings

Load Rating Review Recommended:

Reported Rating

Open / Posted / Closed (041): A Open, no restriction
 Design Load (031): 5 MS 18 (HS 20)
 Posting (070): 5 At/Above Legal Loads

Vehicle	Item 64	Item 66	Rating	Tons	Event	Method 63/65
HS-20 Operating	<input type="checkbox"/>	<input type="checkbox"/>	1.04	0	09/10/2021	D LFD (MS18)
HS-20 Inventory	<input type="checkbox"/>	<input type="checkbox"/>	0.62	0	09/10/2021	D LFD (MS18)
Type 3	<input type="checkbox"/>	<input type="checkbox"/>	1.47	0	09/10/2021	D LFD (MS18)
Type 3S2	<input type="checkbox"/>	<input type="checkbox"/>	1.14	0	09/10/2021	D LFD (MS18)
Type 3-3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.08	0	09/10/2021	D LFD (MS18)

Load Rating Reports

Event Name: 09/10/2021 Load Rating Date: 9/10/2021
 Load Rater: BrR Reviewer:
 Software used: AASHTOWare BrR Secondary Software: null (FIX PARAM VALUE)

Wearing Surface / Fill Depth: inches Category: null (FIX PARAM VALUE)

Vehicle	Current	Rating	Tons	Method	Analy Type
HS-20 Operating	<input checked="" type="checkbox"/>	1.04	37.42	D LFD (MS18)	Design
HS-20 Inventory	<input checked="" type="checkbox"/>	0.62	22.41	D LFD (MS18)	Design
Type 3	<input checked="" type="checkbox"/>	1.47	36.77	D LFD (MS18)	Design
Type 3S2	<input checked="" type="checkbox"/>	1.14	40.96	D LFD (MS18)	Design
Type 3-3	<input checked="" type="checkbox"/>	1.08	43.3	D LFD (MS18)	Design

API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP





CLOSING THE LOOP

Bridge: 6-6-6 Concrete 1spa1

Facility Carried (007): US-191 (SR-191) (FIX PARA)

Metric English

Inspection > Load Ratings

Rating Event: 09/10/2021 [Create New Load Rating Event](#)

Current & Reported Ratings

Load Rating Review Recommended:

Reported Rating

Open / Posted / Closed (041): A Open, no restriction
 Design Load (031): 5 MS 18 (HS 20)
 Posting (070): 5 At/Above Legal Loads

Load Rating Reports

Event Name: 09/10/2021 Load Rating Date: 9/10/2021
 Load Rater: BrR Reviewer:
 Software used: AASHTOWare BrR Secondary Software: null (FIX PARAM VALUE)

Wearing Surface / Fill Depth: inches Category: null (FIX PARAM VALUE)

Vehicle	Item 64	Item 66	Rating	Tons	Event	Method 63/65	
HS-20 Operating	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.04	0	09/10/2021	D LFD (MS18)	
HS-20 Inventory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.62	0	09/10/2021	D LFD (MS18)	
Type 3	<input type="checkbox"/>	<input type="checkbox"/>	1.47	0	09/10/2021	D LFD (MS18)	
Type 3S2	<input type="checkbox"/>	<input type="checkbox"/>	1.14	0	09/10/2021	D LFD (MS18)	
Type 3-3	<input type="checkbox"/>	<input type="checkbox"/>	1.08	0	09/10/2021	D LFD (MS18)	

Vehicle	Current	Rating	Tons	Method	Al Ty
HS-20 Operating	<input checked="" type="checkbox"/>	1.04	37.42	D LFD (MS18)	Desi
HS-20 Inventory	<input checked="" type="checkbox"/>	0.62	22.41	D LFD (MS18)	Desi
Type 3	<input checked="" type="checkbox"/>	1.47	36.77	D LFD (MS18)	Desi
Type 3S2	<input checked="" type="checkbox"/>	1.14	40.96	D LFD (MS18)	Desi
Type 3-3	<input checked="" type="checkbox"/>	1.08	43.3	D LFD (MS18)	Desi

API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP





CLOSING THE LOOP

Inspection > Appraisal

Structural Appraisal

Open/Posted/Closed (041):	A Open, no restriction
Approach Alignment (072):	8 Equal Desirable Crit
Bridge Railings (036A):	1 Meets Standards
Transitions (036B):	0 Substandard
Approach Guardrail (036C):	N N/A or not required
Approach Guardrail Ends (036D):	N N/A or not required
Pier Protection (111):	Not Applicable (P)
Scour Critical (113):	4 Stable, needs action
Fracture Critical Details:	No FC Details

Calculated Appraisal Ratings

Structural Evaluation (067):	6 Equal Min Criteria
Deck Geometry (068):	9 Above Desirable Crit
Underclearances (069):	N Not applicable (NBI)
SD Status:	Not Deficient
Sufficiency Rating (SRB):	88.0
Sufficiency Rating Calculate Status:	SAVED / 0
Health Index:	97.24%
Bridge Condition:	Fair

Clearances

Minimum Vertical Clearances

Over Structure (053):	99.990	ft
Under (Reference) (054A):	N Feature not hwy or RR	
Under Clearance (054B):	0.000	ft

Minimum Lateral Clearances

Reference Feature (055A):	N Feature not hwy or RR	
Right Side (055B):	0.000	ft
Left Side (056):	0.000	ft

Navigation Data

Navigation Control Exists (038):	NA-no waterway	
Navigation Vertical Clearances (039):	0.000	ft
Navigation Horizontal Clearances (040):	0.000	ft
Minimum Vertical Lift Clearances (116):	0.000	ft

NBI Load Ratings

Load Rating Review Recommended:

Rating Date: 6/18/2010

Initials: RNP

Design Load (031): 5 MS 18 (HS 20)

Posting (070): 5 At/Above Legal Loads

Operating Type (063): D LFD (MS18)

OR Factor (064): 1.04 rf

Inventory type (065): D LFD (MS18)

IR Factor (066): 0.62 rf

Alternate Operating Rating Type: null (FIX PARAM VALUE)

Alternate Operating Rating: ton

Alternate Inventory Rating Type: (FIX PARAM VALUES)

Alternate Inventory Rating: ton

Posting Loads

Inventory

Type 1:	26.3	ton
Type 2:	40.0	ton
Type 3:	53.1	ton

Operating

Type 1:	43.9	ton
Type 2:	66.8	ton
Type 3:	88.7	ton

SHVs

SU4:	ton
SU5:	ton
SU6:	ton
SU7:	ton
NRL:	ton

API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP





CLOSING THE LOOP

Inspection > Appraisal

Structural Appraisal

Open/Posted/Closed (041):	A Open, no restriction
Approach Alignment (072):	8 Equal Desirable Crit
Bridge Railings (036A):	1 Meets Standards
Transitions (036B):	0 Substandard
Approach Guardrail (036C):	N N/A or not required
Approach Guardrail Ends (036D):	N N/A or not required
Pier Protection (111):	Not Applicable (P)
Scour Critical (113):	4 Stable, needs action
Fracture Critical Details:	No FC Details

Calculated Appraisal Ratings

Structural Evaluation (067):	6 Equal Min Criteria
Deck Geometry (068):	9 Above Desirable Crit
Underclearances (069):	N Not applicable (NBI)
SD Status:	Not Deficient
Sufficiency Rating (SRB):	88.0
Sufficiency Rating Calculate Status:	SAVED / 0
Health Index:	97.24%
Bridge Condition:	Fair

Clearances

Minimum Vertical Clearances

Over Structure (053):	99.990	ft
Under (Reference) (054A):	N Feature not hwy or RR	
Under Clearance (054B):	0.000	ft

Minimum Lateral Clearances

Reference Feature (055A):	N Feature not hwy or RR	
Right Side (055B):	0.000	ft
Left Side (056):	0.000	ft

Navigation Data

Navigation Control Exists (038):	NA-no waterway	
Navigation Vertical Clearances (039):	0.000	ft
Navigation Horizontal Clearances (040):	0.000	ft
Minimum Vertical Lift Clearances (116):	0.000	ft

NBI Load Ratings

Load Rating Review Recommended:

Rating Date:	6/18/2010	
Initials:	RNP	
Design Load (031):	5 MS 18 (HS 20)	
Posting (070):	5 At/Above Legal Loads	
Operating Type (063):	D LFD (MS18)	
OR Factor (064):	1.04	rf
Inventory type (065):	D LFD (MS18)	
IR Factor (066):	0.62	rf

Alternate Operating Rating Type:	null (FIX PARAM VALUE)	
Alternate Operating Rating:		ton
Alternate Inventory Rating Type:	_(FIX PARAM VALUES)	
Alternate Inventory Rating:		ton

Posting Loads

Inventory

Type 1:	26.3	ton
Type 2:	40.0	ton
Type 3:	53.1	ton

Operating

Type 1:	43.9	ton
Type 2:	66.8	ton
Type 3:	88.7	ton

SHVs

SU4:		ton
SU5:		ton
SU6:		ton
SU7:		ton
NRL:		ton

API REVIEW

BrR INSTALLATION

THE AASHTOWARE CONNECTION

BRIDGE DATA INTO BrR

RATING DATA BACK TO BrM

CLOSING THE LOOP




CONTACT



ZACHARY BOYLE
zac.boyle@mayvue.com
Text | Voicemail | (801) 450-9716

BrM@mayvue.com
Support | 1-888-44-SUPPORT
1-888-447-8776
General | 1-877-462-9883



 Jira Service Desk

<http://support.mayvue.com>

Promiles

BrDR@promiles.com

LINDSEY A OLMSTEAD
lolmstead@promiles.com
Cell | (330) 383-9261

MACKINAW BRIDGE | MDOT

Photo by Riley Crawford

