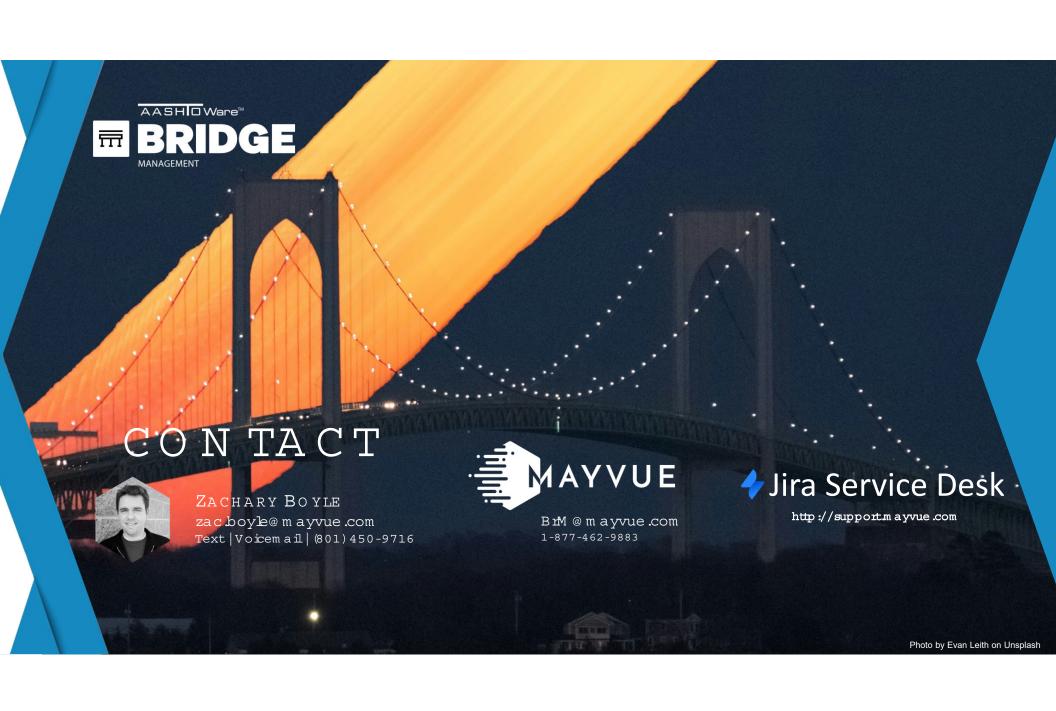


# BrM Inspection 102

The Un-Abridged Version



BrMUG 2025 | Providence, RI | September 17-18





## **Course Overview**



## **Course Overview**

#### **TODAY**

#### **Before Break (Insp 101)**

- Login
- Roles & Groups
- Bridge List
- Inspection List
- Scheduling
- Inspection Plans
- Inventory
- Design
- Features

#### After Break (Insp 102)

- Condition & Elements
- Load Posting
- Multimedia
- Sketches
- Cross Sections

#### **TOMORROW**

#### **Before Break (Insp 201)**

- Work Candidates
- Certifications
- Inspection Assignment
- Validation
- Inspection Review
- Future Planning

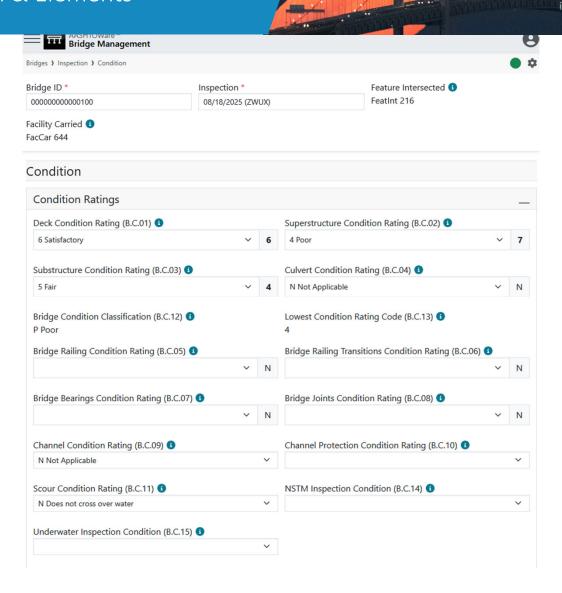
#### After Break (Insp 202)

- Submittal
- Critical Findings
- Reports
- Dashboards
- API Calls



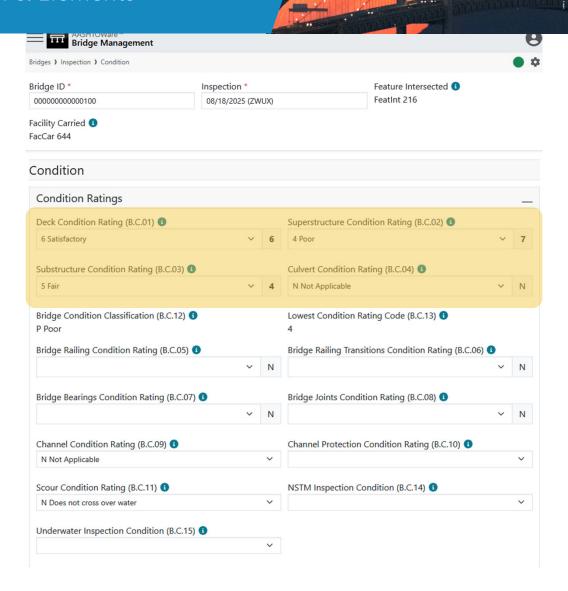










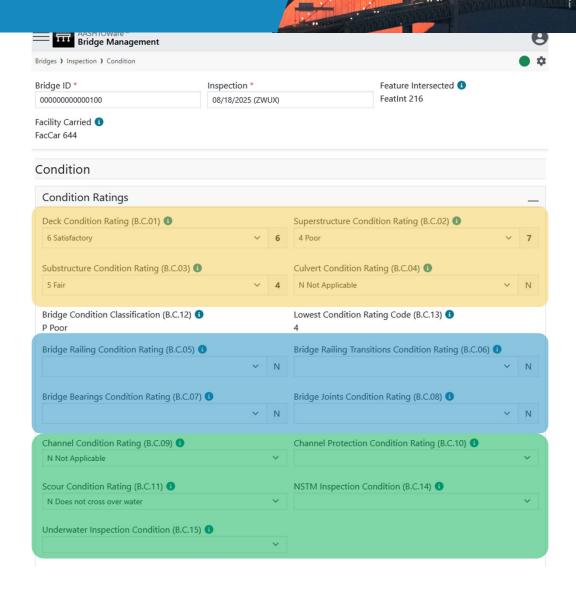




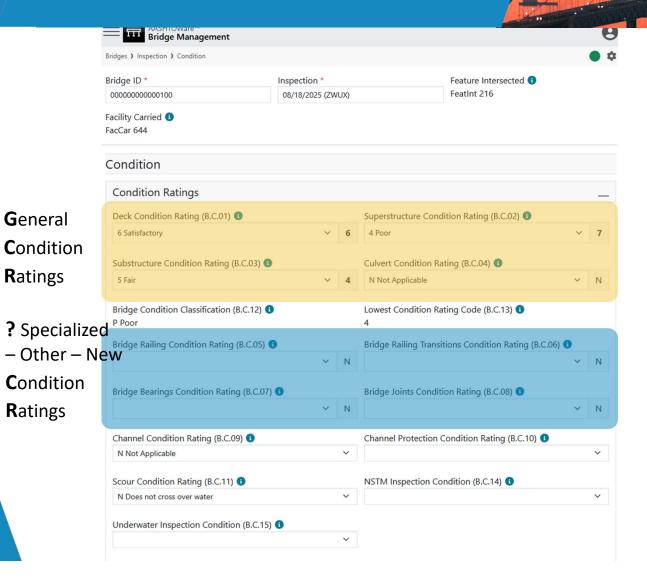
General Condition Ratings

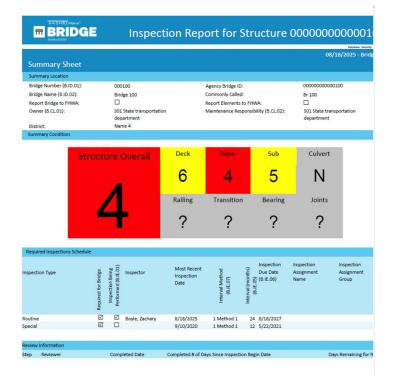
? Specialized– Other – NewConditionRatings

Other Condition Ratings

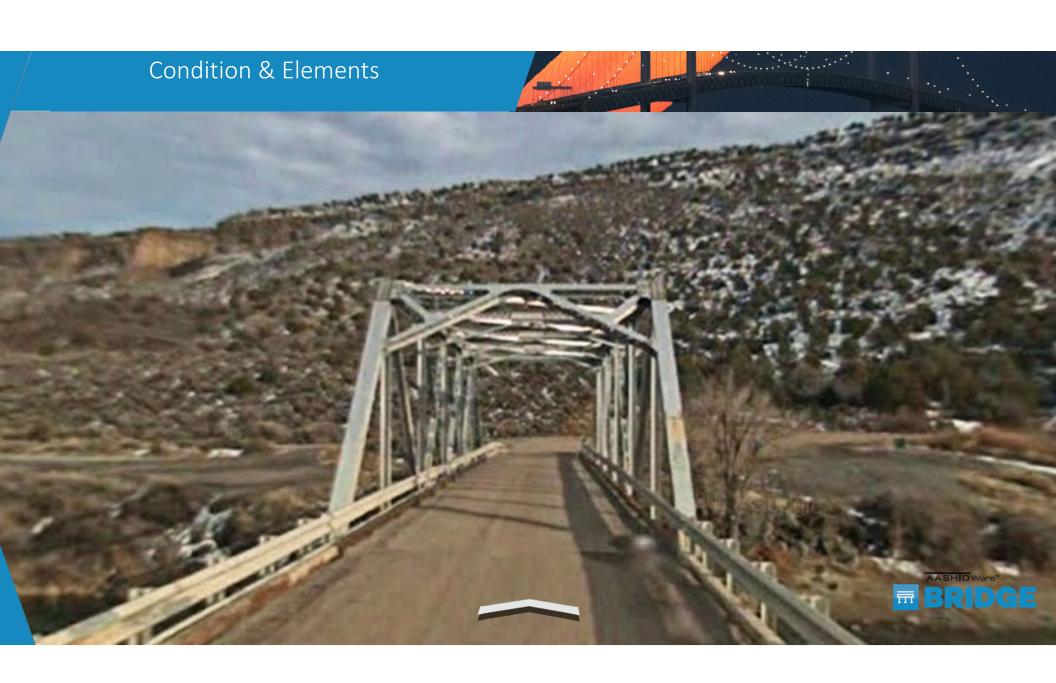


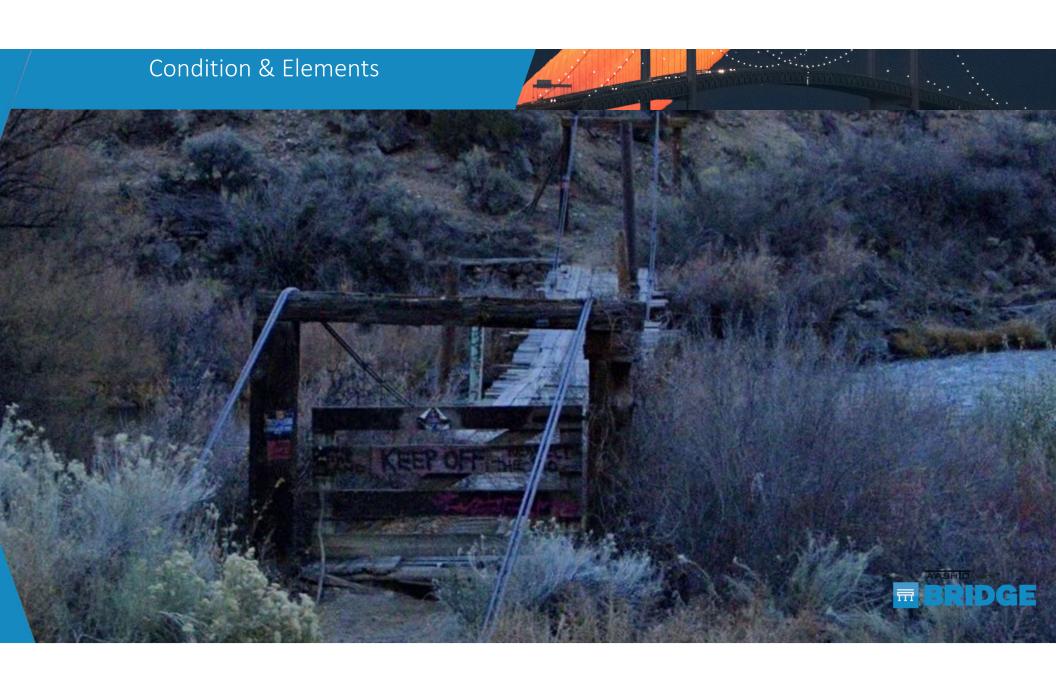


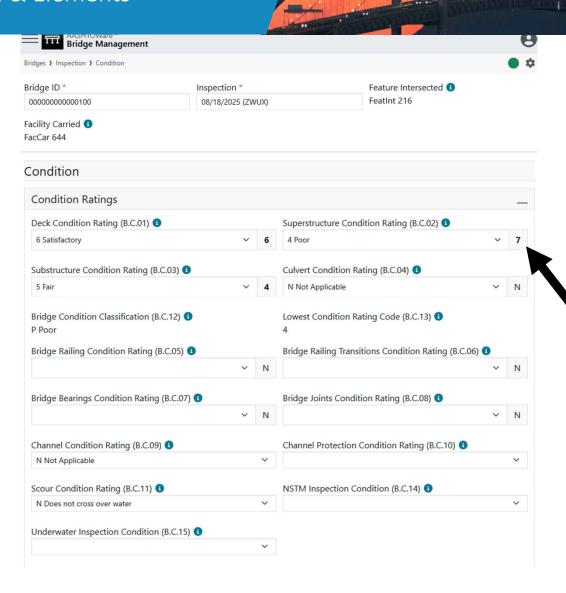




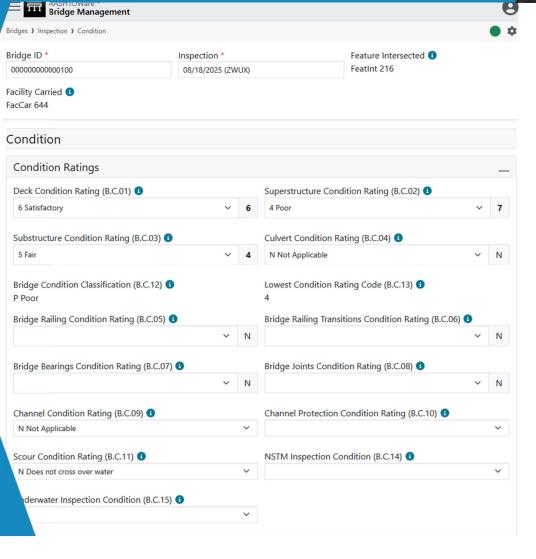


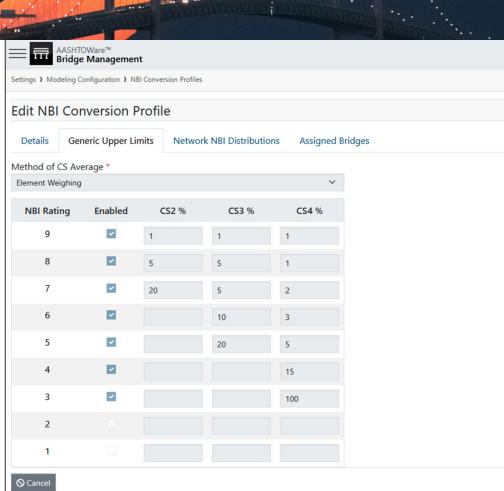




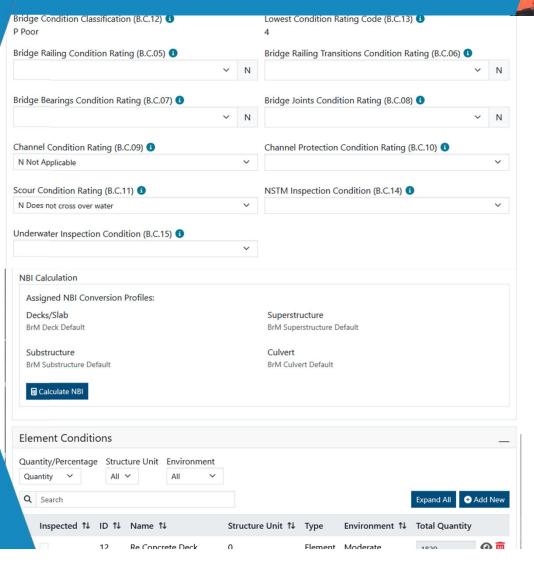


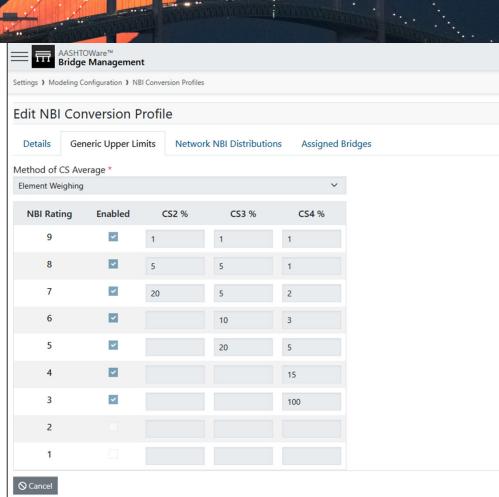




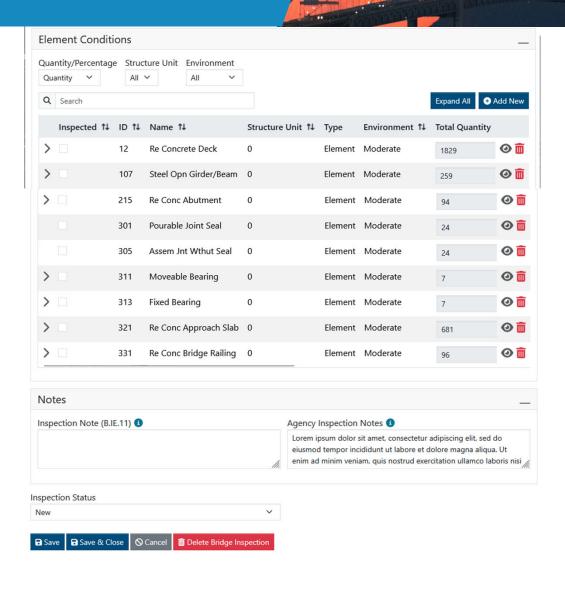




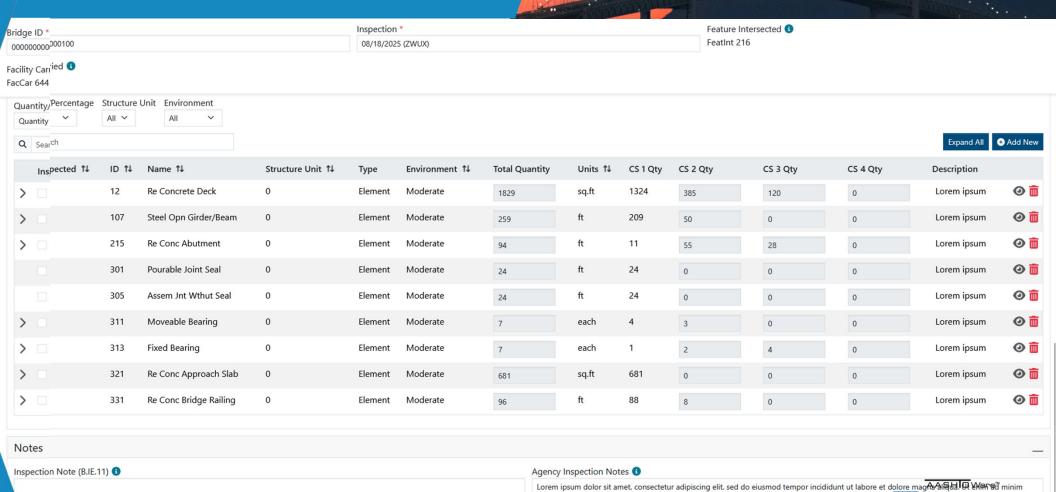












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MANAGEMENT

Notes

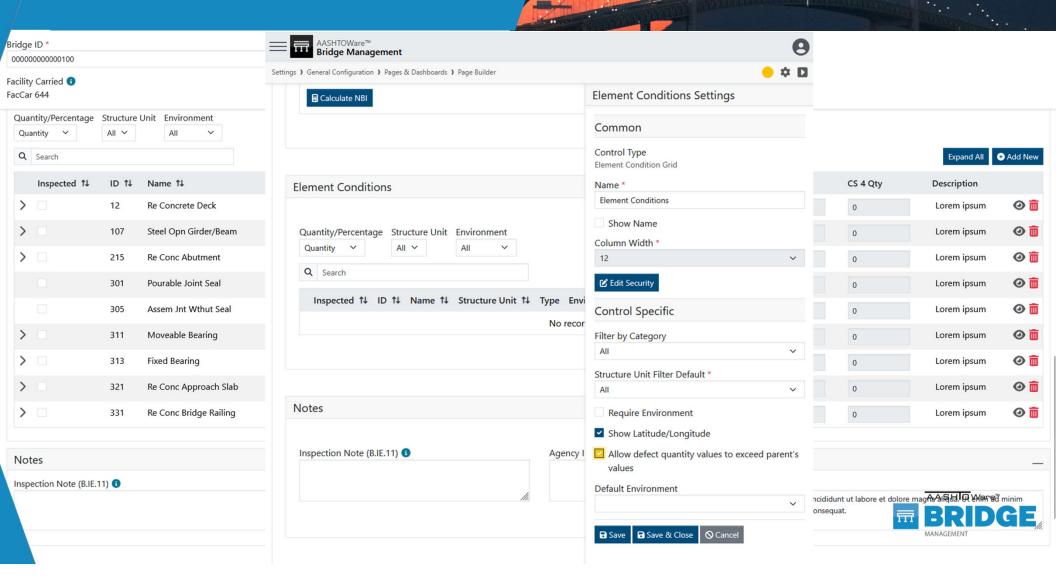
Inspection Note (B.IE.11) (3

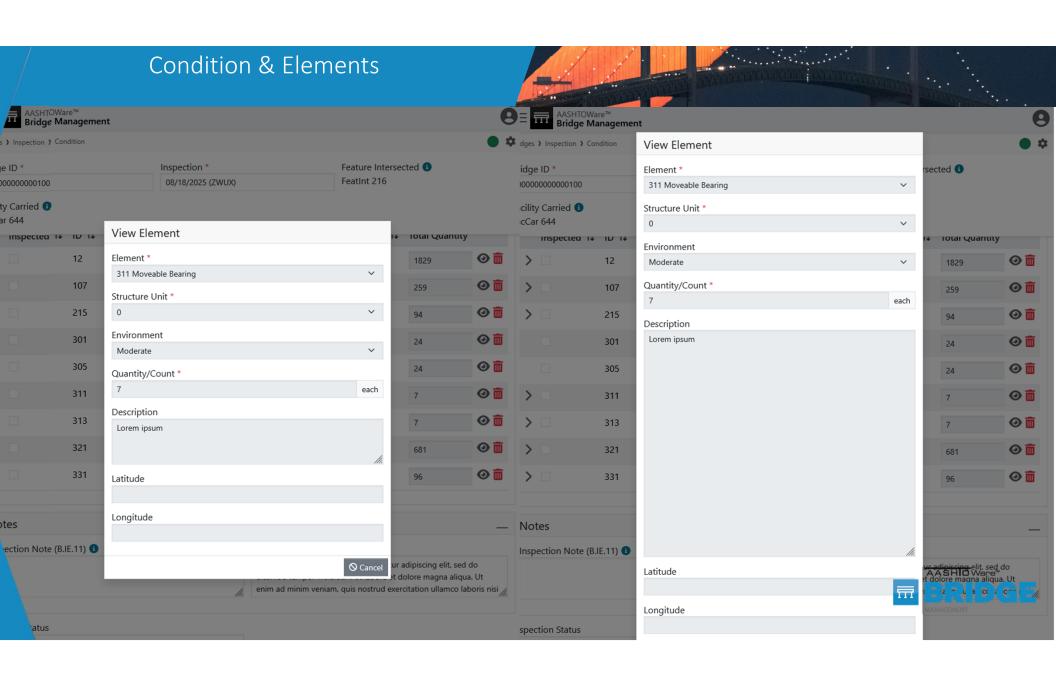
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	ity Cari <sup>ied</sup> 🚯 Car 644													
The same of	uantity/Percentage ercentage	Struct	ure Unit Environment											
C	<b>S</b> ear <sup>ch</sup>												Expand All •	Add New
	Inspected ↑↓	ID †↓	Name ↑↓	Structure Unit ↑↓	Туре	Environment ↑↓	Total Quantity	Units ↑↓	CS 1 Pct	CS 2 Pct	CS 3 Pct	CS 4 Pct	Description	
)		12	Re Concrete Deck	0	Element	Moderate	1829	sq.ft	72.389	21.05	6.561	0	Lorem ipsum	<b>Ø</b> 🛅
>	· 🗆	107	Steel Opn Girder/Beam	0	Element	Moderate	259	ft	80.695	19.305	0	0	Lorem ipsum	<b>@</b>
)	· 🗆	215	Re Conc Abutment	0	Element	Moderate	94	ft	11.702	58.511	29.787	0	Lorem ipsum	<b>@</b> 🛅
		301	Pourable Joint Seal	0	Element	Moderate	24	ft	100	0	0	0	Lorem ipsum	<b>Ø</b> 🛅
		305	Assem Jnt Wthut Seal	0	Element	Moderate	24	ft	100	0	0	0	Lorem ipsum	<b>Ø</b> 🛅
>		311	Moveable Bearing	0	Element	Moderate	7	each	57.143	42.857	0	0	Lorem ipsum	<b>Ø</b> 🛅
>	<b>\</b>	313	Fixed Bearing	0	Element	Moderate	7	each	14.286	28.571	57.143	0	Lorem ipsum	<b>@</b> 🛅
>	<b>-</b>	321	Re Conc Approach Slab	0	Element	Moderate	681	sq.ft	100	0	0	0	Lorem ipsum	<b>@</b>
>	<b>\</b>	331	Re Conc Bridge Railing	0	Element	Moderate	96	ft	91.667	8.333	0	0	Lorem ipsum	<b>@</b> 🛅

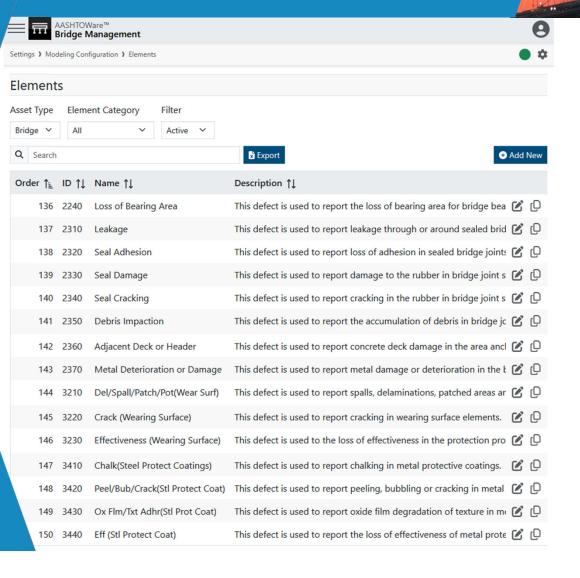
Agency Inspection Notes 1

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veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.







#### **Agency Defined Elements (ADE's)**

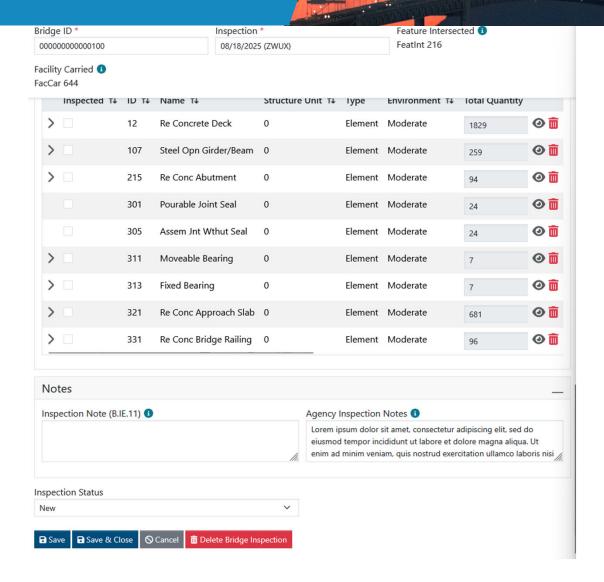
Elements tracked internal to the agency. They can be set to roll up to FHWA elements or excluded from reporting. Used for tracking:

- Particular repair types
- Particular material types
- The old "flags" elements
- Controlled conversions

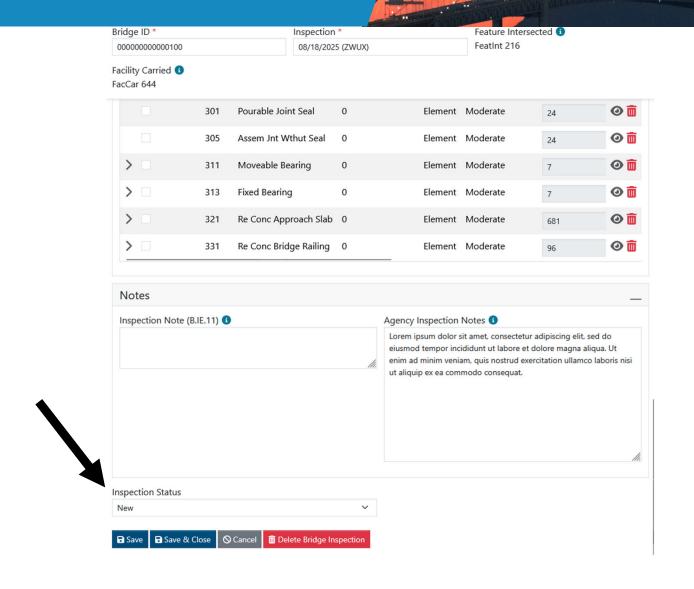
#### **Use Case Examples:**

- Beam ends
- Bearing Pedistals
- Joint Seal & Joint Headers
- Lead paint vs. Non-lead paint
- Endangered Plants / Animals present
- Wingwall (Culv) vs Wingwall (Sub)









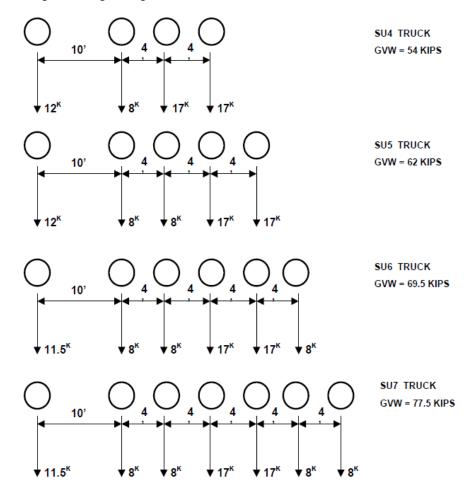
AASHIO Ware™





e. Single-Unit Bridge Posting Loads

**Step 1**: Know your vehicles



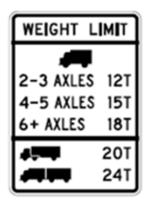




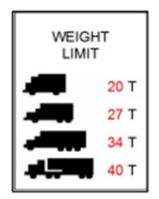
**Step 1**: Know your vehicles

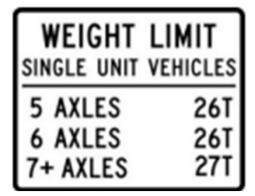
Step 2: Know your signs











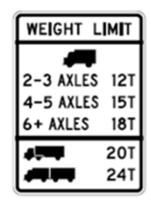


**Step 1**: Know your vehicles

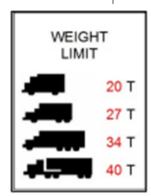
Step 2: Know your signs

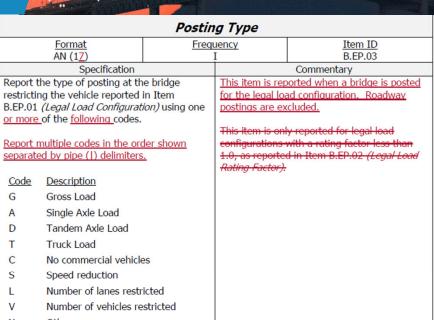
**Step 3**: Know the codes

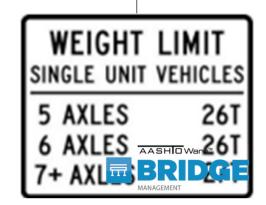
WEIGHT
LIMIT
WEIGHT LIMIT 10 TONS
TONS











Step 1: Know your vehicle	es	Fed Code	ive	Default	Vehicles affected	HL_93_Inv	HL_93_0p	50	TYPE_3	TYPE_3S2	TYPE_3_3	LTLLM	4	Z,	9	7	01	_	3	4	2	5B	60	RI_OP1	RI_OP2	RI_OP3	RI_OP4	RI_OP5	Fatigue	
Step 2: Know your signs	Sign Name	Fed	Active	Def	Veh	Ħ	Ħ	H_20	Τ¥	Ι¥	Σ	Ę	SU_4	SU_5	SU_6	SU_7	EV2	EV3	RI_3	RI_4	RI_5	RI_5B	RI_6	B.	R_	B.	R	R_	Fati	J.
. , ,	No Commercial Vehicles	С	Off	TRUE																										
	Number of lanes restricted	L	TRUE	TRUE																										
<b>Step 3</b> : Know the codes	Tandem Axle Load	D	Off	TRUE																										
Step 5. Kilow the codes	Single Axle Load	Α	Off	TRUE																										
	Gross Load	G	Off	TRUE		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	x	X	X	X	x	X	X	X	X
<b>Step 4</b> : Make this grid	Number of vehicles restricted	٧	Off	TRUE																										
Step 4. Wake this gira	Other	X	TRUE	TRUE																										
	Speed reduction	S	Off	TRUE																										
	Truck Load	T	Off	TRUE																										Ē
	Straight	G	TRUE	RIDOT		X	X	X	x	X	X	x	X	X	X	X	X	X	X	X	X	x	X	x	x	x	X	x	x	X
	EV Single Axle	Α	TRUE	RIDOT													X	X												
	EV Tandem Axle	D	TRUE	RIDOT														X												
	3 Axle	T	TRUE	RIDOT									X						X											Ē
	3+ Axle	T	TRUE	RIDOT									X	X	X	X			X	X	X	x	X	X	X	x	x	X		
	4 Axle	T	TRUE	RIDOT										X						X										
	4+ Axle	T	TRUE	RIDOT										X	X	X				X	X	X	X	x	x	x	X	x		
	5 Axle	T	TRUE	RIDOT											X						X									
	5+ Axle	T	TRUE	RIDOT											X	X					X	x	X	x	X	x	X	x		
	6 Axle	T	TRUE	RIDOT												X						X								
	6+ Axle	T	TRUE	RIDOT												X						X	X	x	x	x	X	x		
	7 Axle	T	TRUE	RIDOT																										
																								$\overline{\Delta}$	ASF	<del>IIo</del> w	Vare™	м		

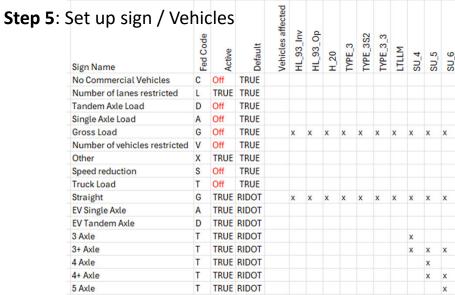


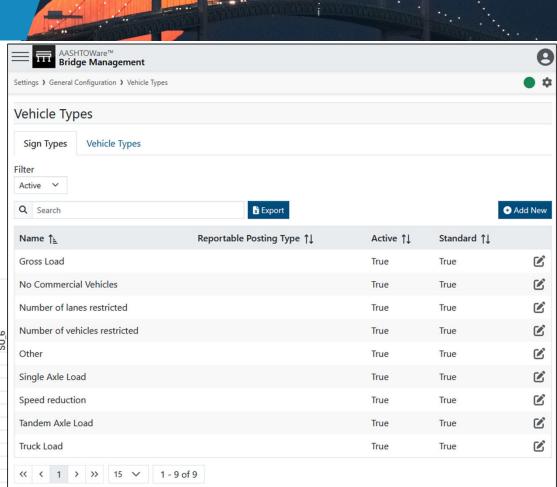
**Step 1**: Know your vehicles

Step 2: Know your signs

**Step 3**: Know the codes

Step 4: Make this grid







Step 1: Know your vehicles

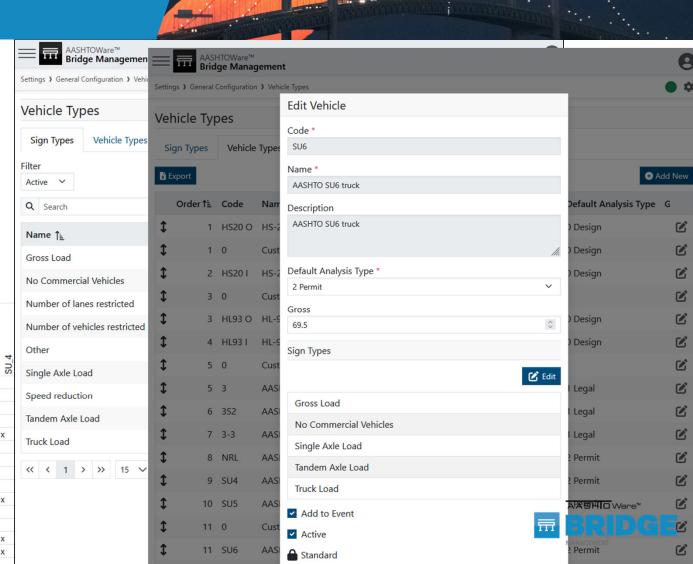
Step 2: Know your signs

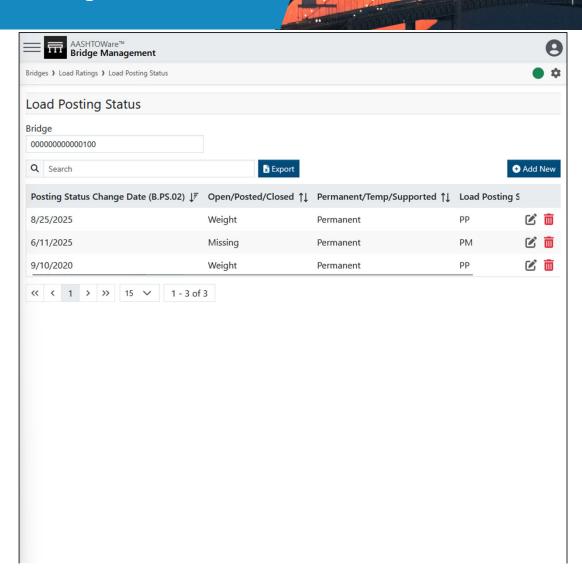
**Step 3**: Know the codes

Step 4: Make this grid

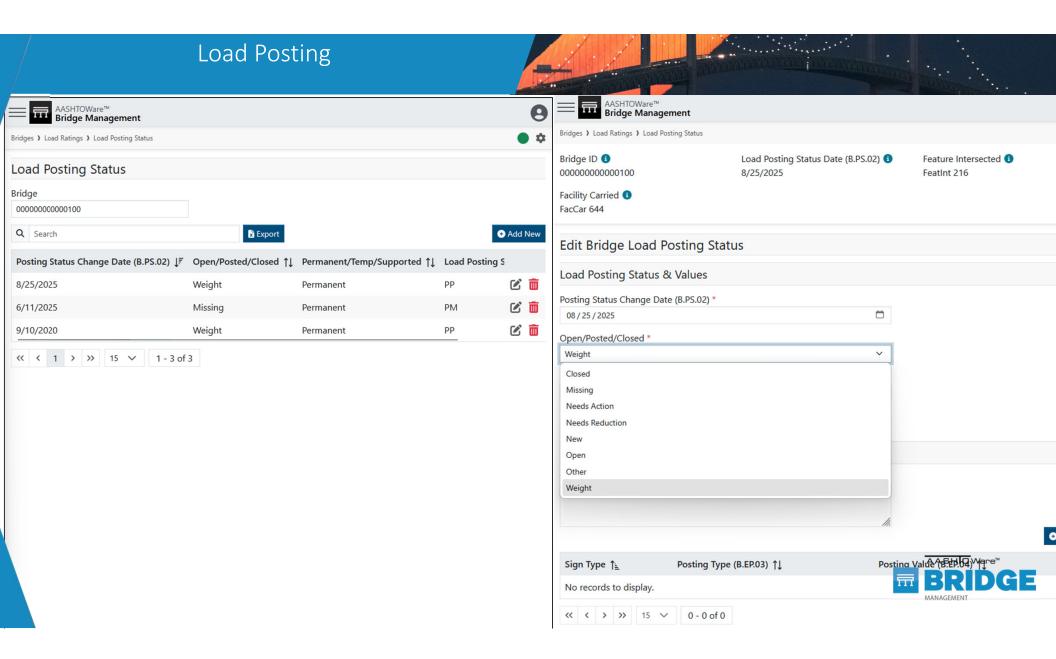
Step 5: Set up sign / Vehicles

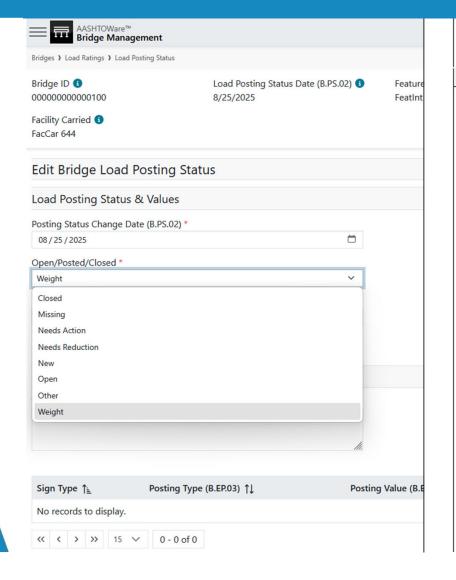
Sign Name	Fed Code	Active	Default	Vehicles affected	HL_93_Inv	HL_93_0p	H_20	TYPE_3	TYPE_3S2	TYPE_3_3	LTLLM	SU_4
No Commercial Vehicles	C	Off	TRUE									
Number of lanes restricted	L	TRUE	TRUE									
Tandem Axle Load	D	Off	TRUE									
Single Axle Load	Α	Off	TRUE									
Gross Load	G	Off	TRUE		X	X	X	X	X	X	X	x
Number of vehicles restricted	٧	Off	TRUE									
Other	X	TRUE	TRUE									
Speed reduction	S	Off	TRUE									
Truck Load	T	Off	TRUE									
Straight	G	TRUE	RIDOT		X	X	X	X	X	X	X	X
EV Single Axle	Α	TRUE	RIDOT									
EV Tandem Axle	D	TRUE	RIDOT									
3 Axle	T	TRUE	RIDOT									x
+ Axle	T	TRUE	RIDOT									x
xle	T	TRUE	RIDOT									











When both a weight and other load restriction exist at the bridge, use the code for the weight restriction (code PP, TP, or SP).

#### Specification Continued

Table 15. Load Posting Status Codes.

	No re	striction	ı e	Posted o	Closed			
	New	Open	Needs Action	Weight	Other	Needs Reduction	Missing	Closed
Permanent	N	PO	PA	PP	PR	PD	PM	С
Temporary		TO	TA	TP	TR	TD	TM	C
Supported		SO	SA	SP	SR	SD	SM	С

#### Terms:

Permanent (P) - Permanent bridge in place with no temporary supports.

Temporary (T) – Temporary bridge in place to carry traffic while the permanent bridge is closed and awaiting repair, rehabilitation, or replacement.

Supported (S) – Bridge with temporary shoring, supports, repairs, or supplemental members in place to keep the bridge open pending the completion of active or imminent repair, or replacement projects.

New (N) – Bridge is newly constructed and not yet open to traffic, but is expected to be open within 12 months.

Open (O) - Bridge is open with no restrictions.

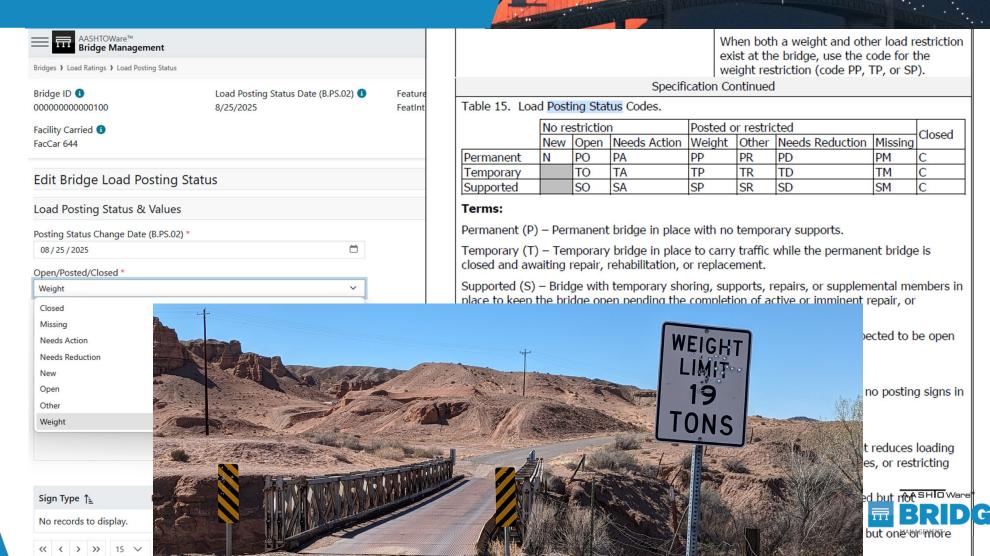
Needs Action (A) – Bridge that is open with load posting recommended, but no posting signs in place, or a posting sign that is not legally enforceable.

Weight (P) – Bridge is posted with a weight limit sign or signs.

Other (R) – A posting sign or other traffic control device(s) at the bridge that reduces loading by reducing speed (to reduce impact), limiting the number of lanes or vehicles, or restricting commercial vehicles in general.

Needs Reduction (D) – Bridge is posted, with posting reduction recommended but recommended but recommended by implemented.

Missing (M) – Bridge has a legally enforceable load posting and was posted, but one but one required signs are missing or illegible.



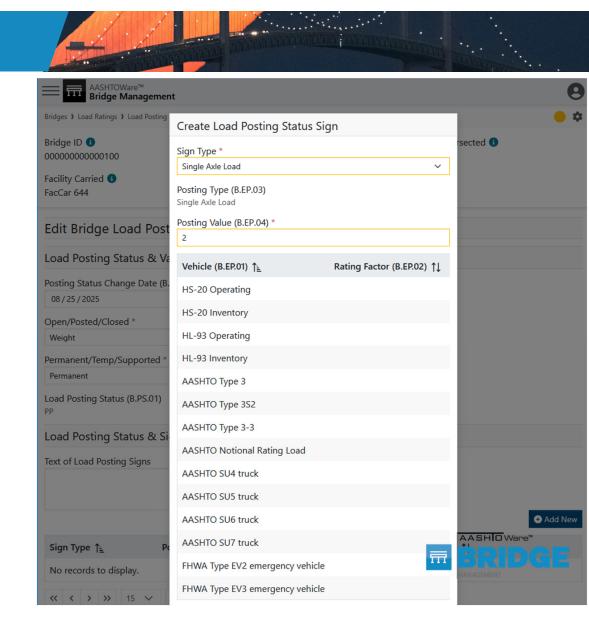
# WEIGHT LIMIT 2 TONS PER AXLE 10 TONS GROSS



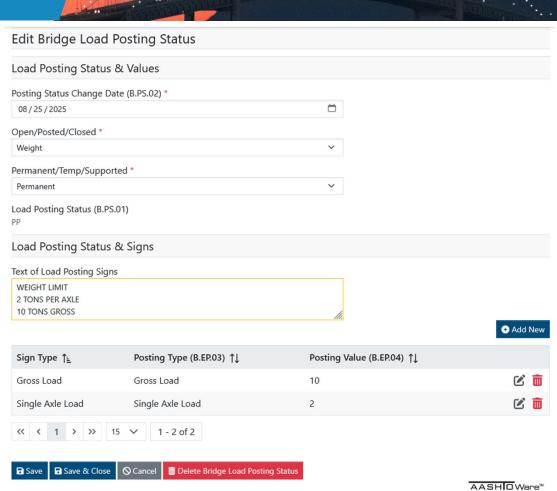




WEIGHT LIMIT
2 TONS PER AXLE
10 TONS GROSS



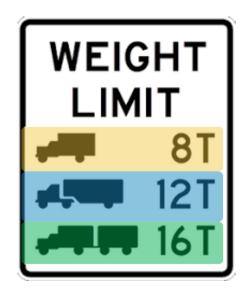














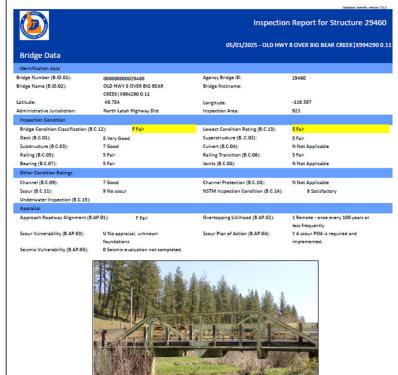


#### Note:

- Truck Type 1
- Truck Type 2
- Truck Type 3

Are not default Sign types and will need to be added to your site.





DIRECTION OF ROADWAY IS WEST TO EAST GLOBALLY AND SOUTH TO NORTH LOCALLY AT THE BRIDGE.

SUPERSTRUCTURE IS LABELED LEFT TO RIGHT (SOUTH TO NORTH AND WEST TO EAST).

Page 1 of 20

BRIDGE STATIONING IS SOUTH TO NORTH

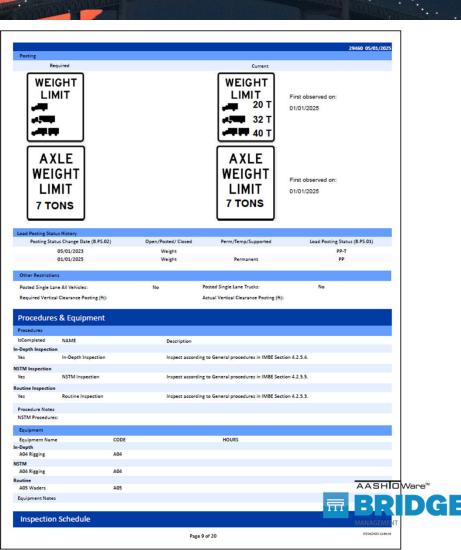
WATERWAY RUNS LEFT TO RIGHT (WEST TO EAST).

STRUCTURE IS LABELED P1, S1, AB1, S2, AB2, S3, P3.



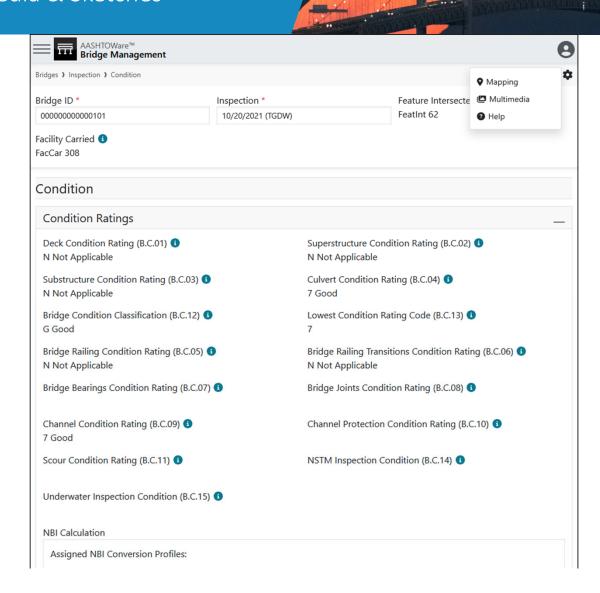
Bridge notes:

ars or	
00/14/0005 13:44:14	
	ı

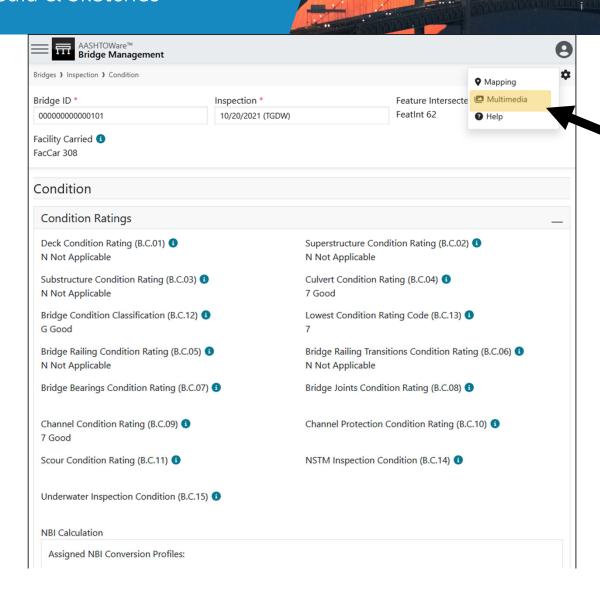




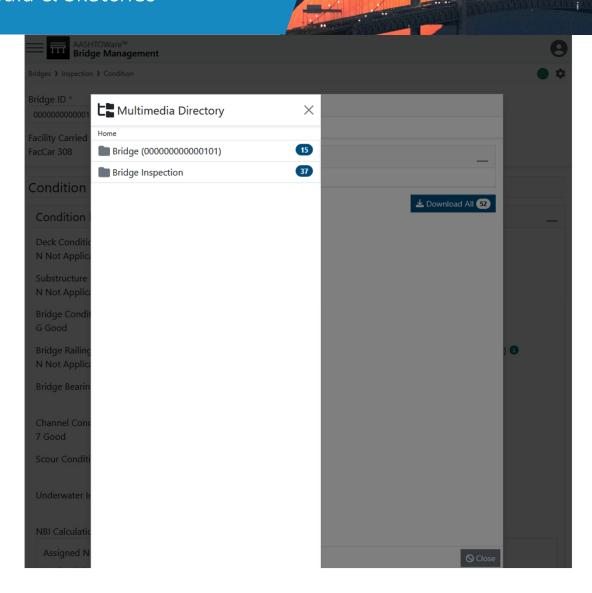




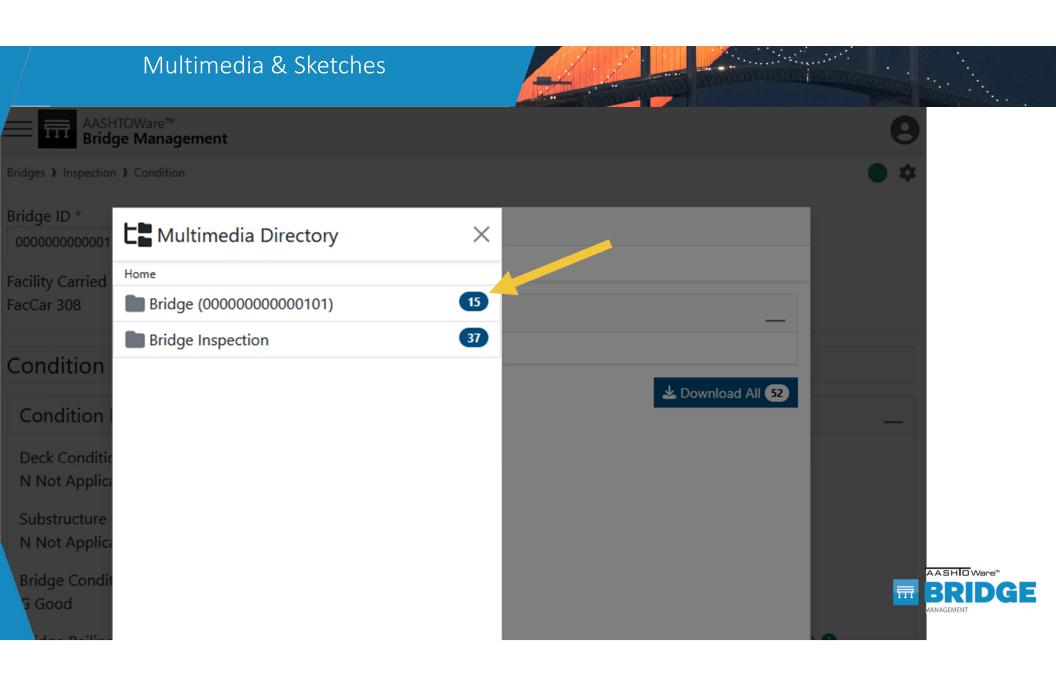


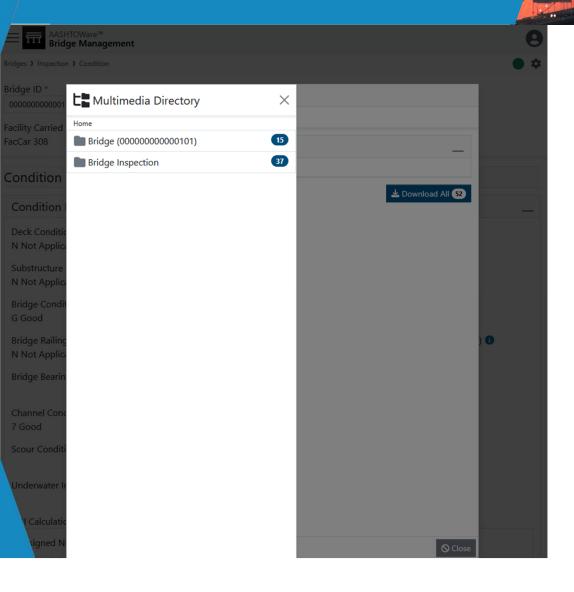








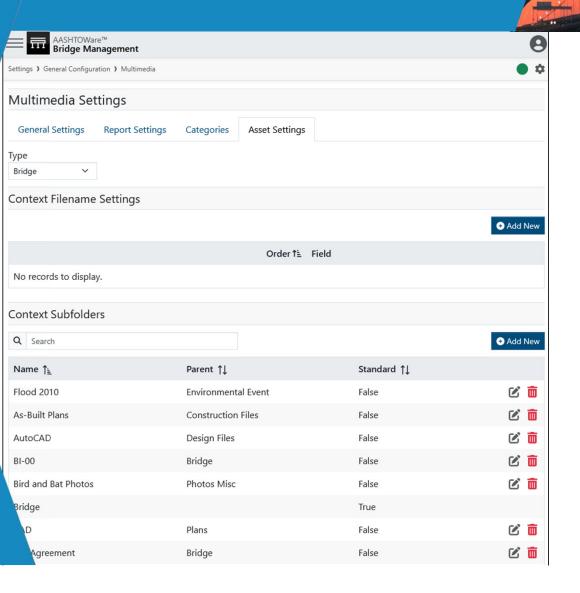




#### **Use case examples for folders:**

- Bridge
  - Plans
  - Load Rating Docs
  - Scour Plans
  - Contract Docs
- Bridge Inspection
  - Final Report
  - Sketches





#### **Use case examples for folders:**

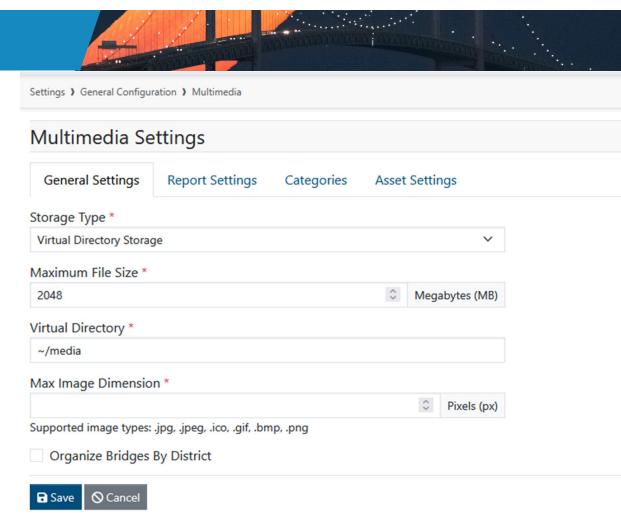
- Bridge
  - Plans
  - Load Rating Docs
  - Scour Plans
  - Contract Docs
- Bridge Inspection
  - Final Report
  - Sketches



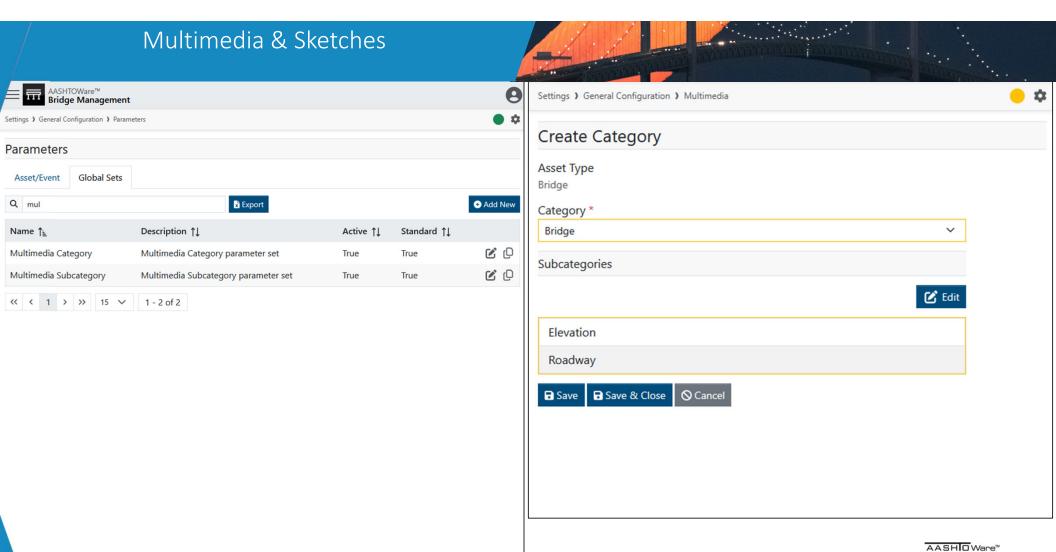
#### Remember you can downscale

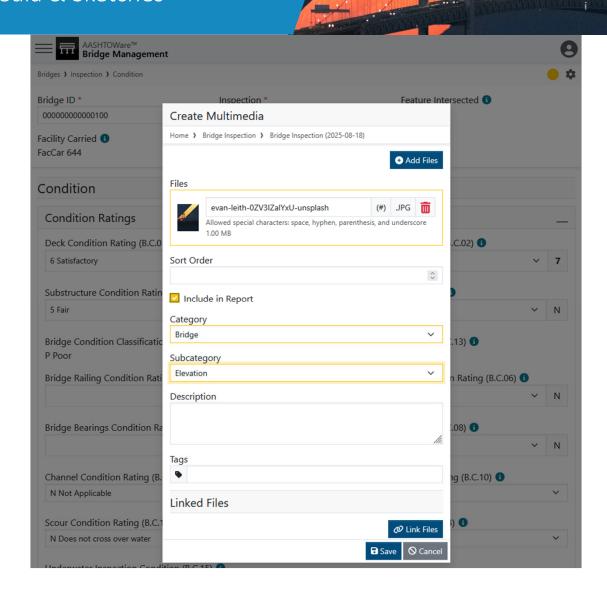
Phones have amazing levels of pixels. Maybe you don't need a 1.5 GB pdf of an inspection report. You can set a max dimension to downscale images.

You can also block uploads of files above a certain size. No more 2hr drone videos jamming up your multimedia.

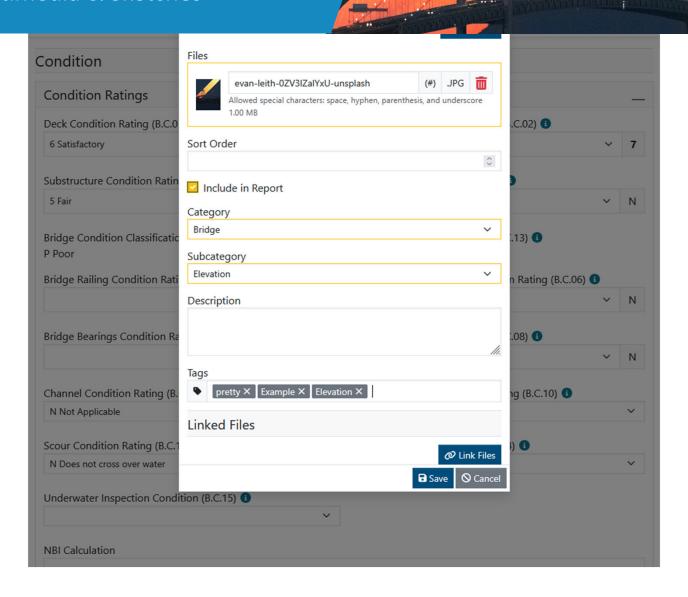




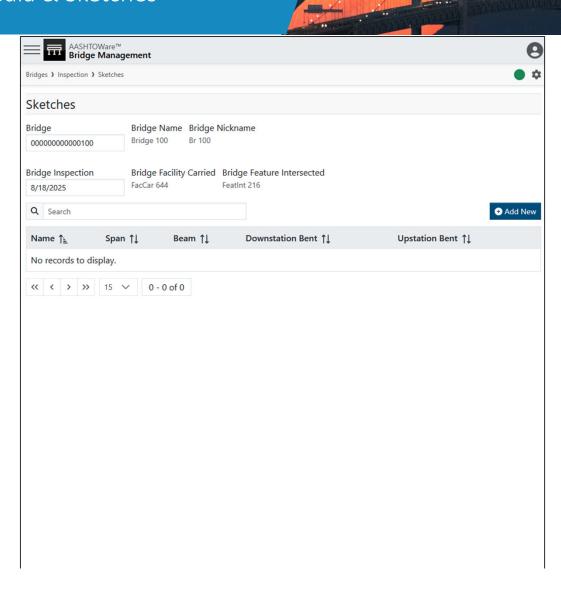




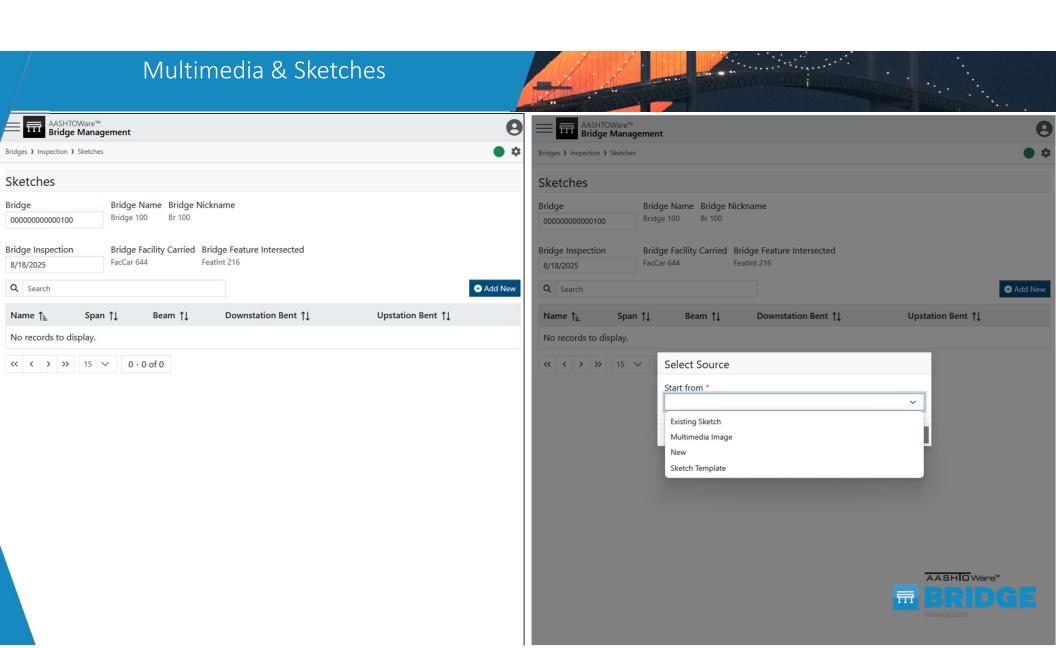


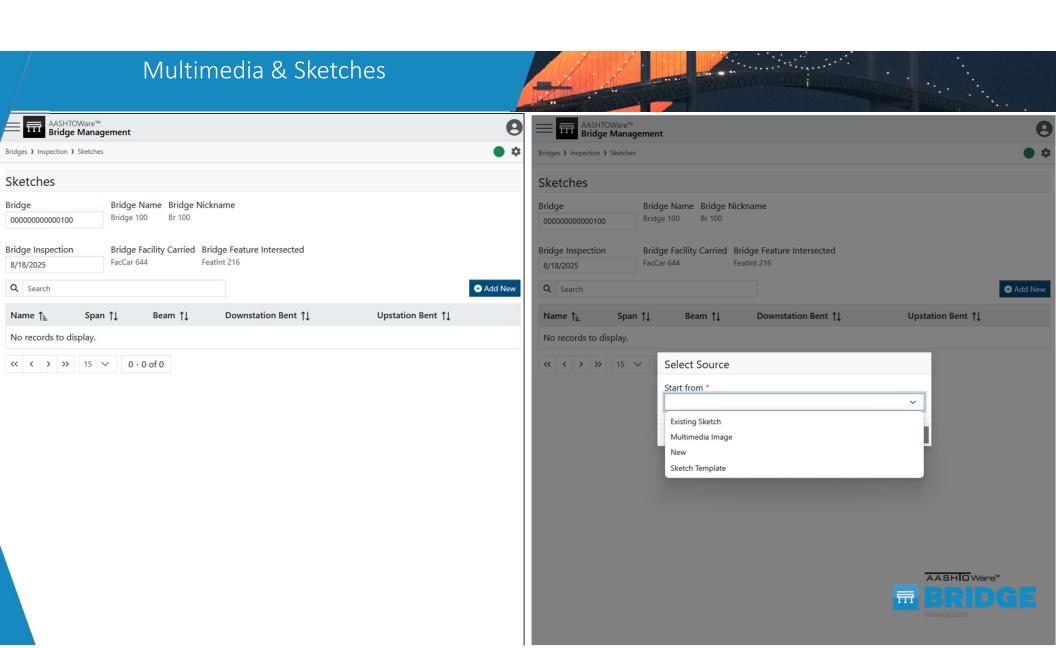


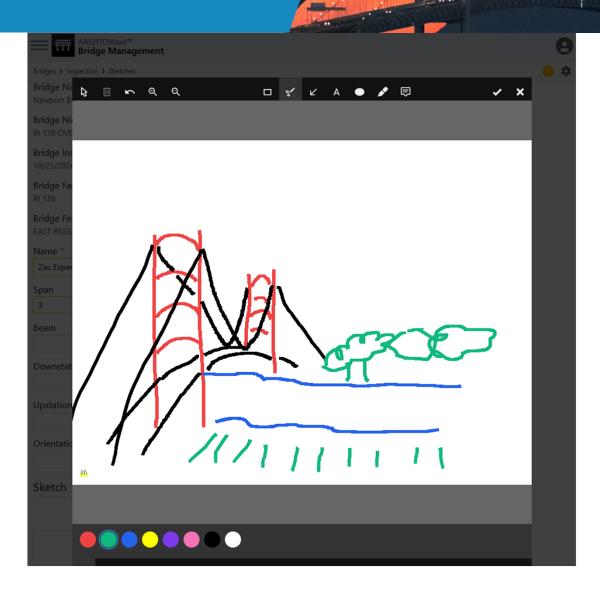




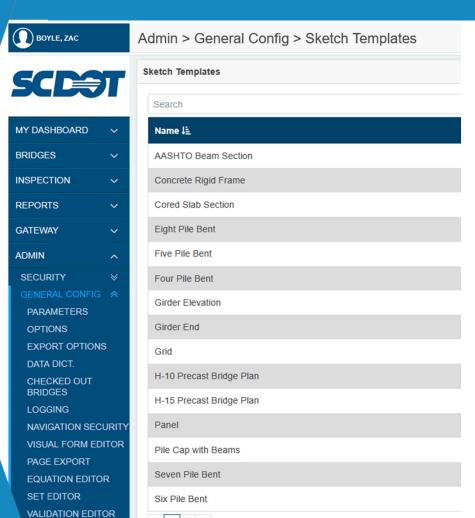






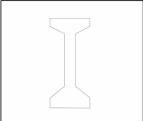




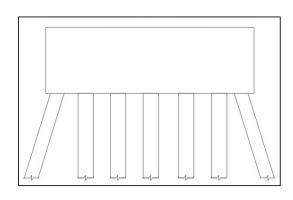


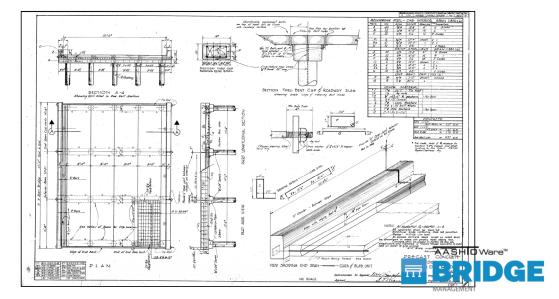
« 1 2 »

MANAGE ASSET



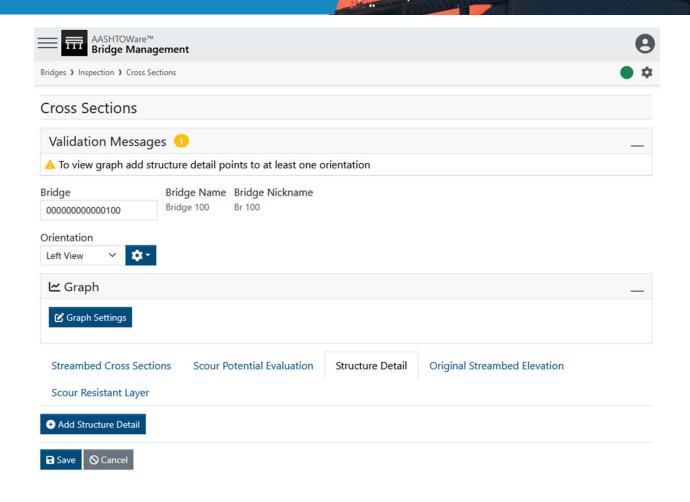




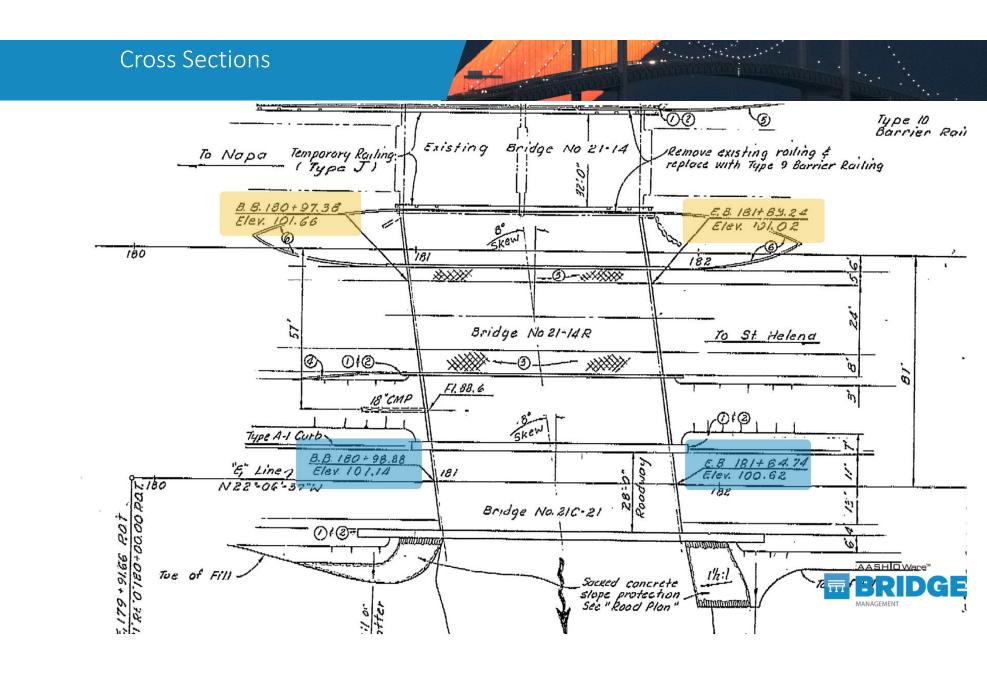


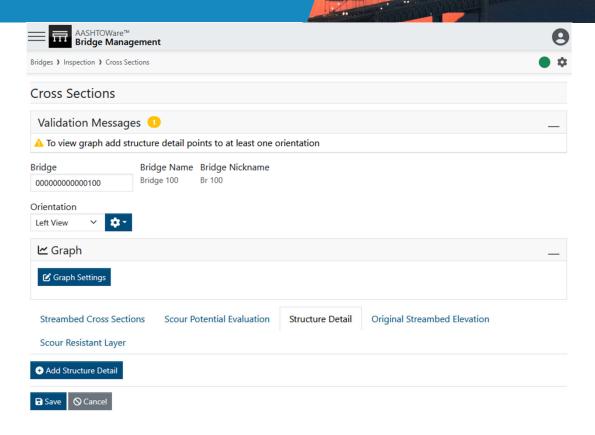




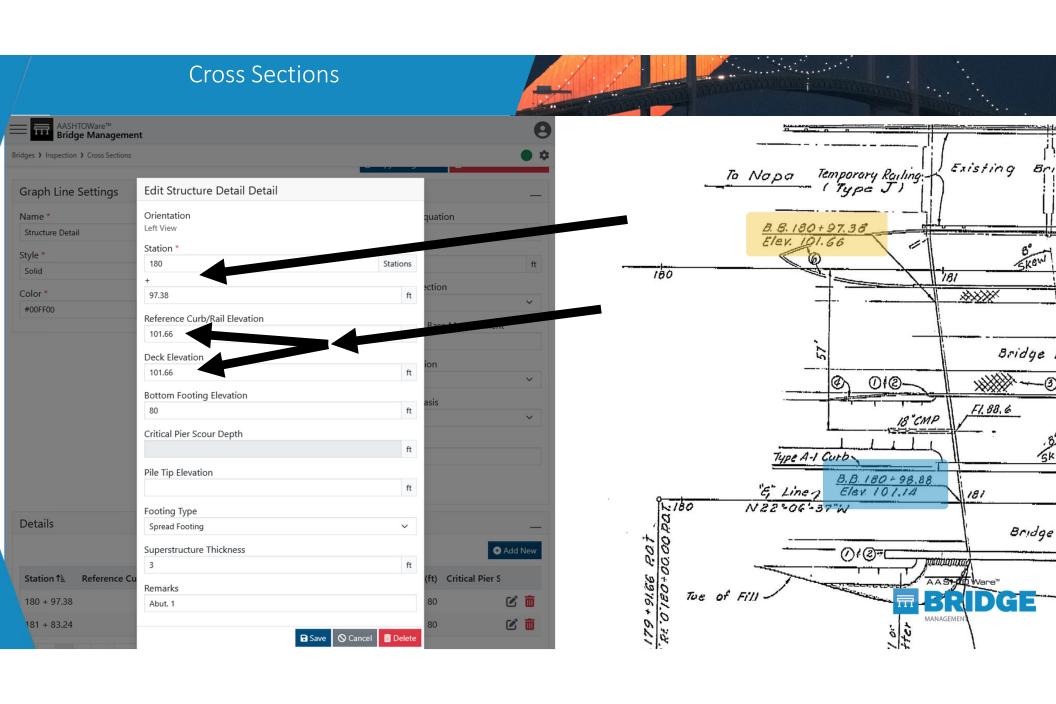


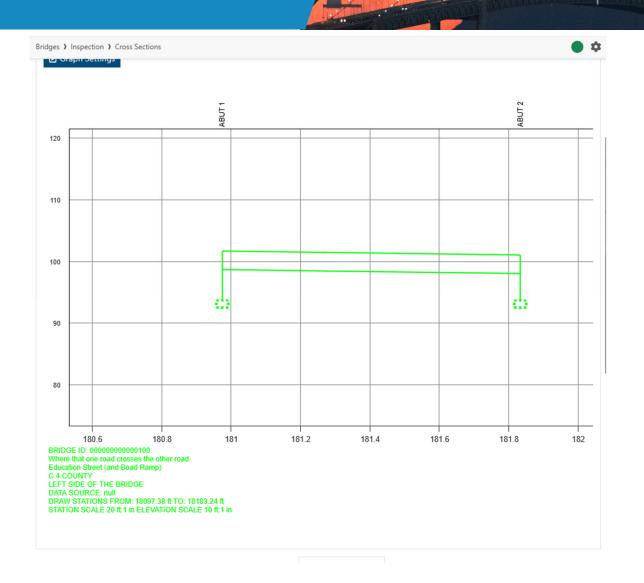




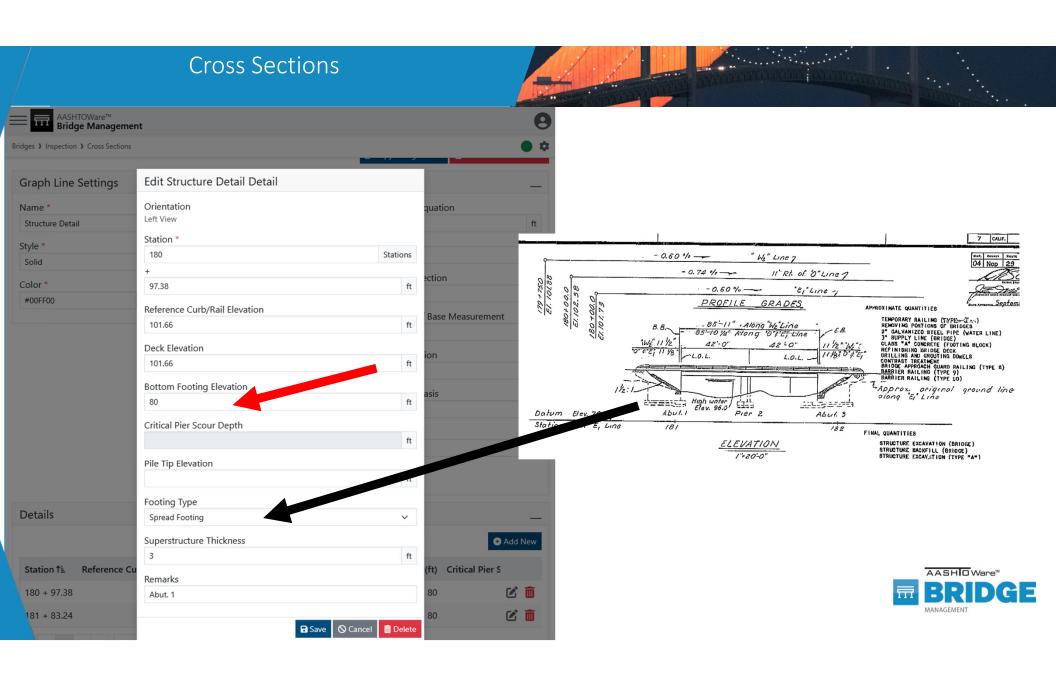


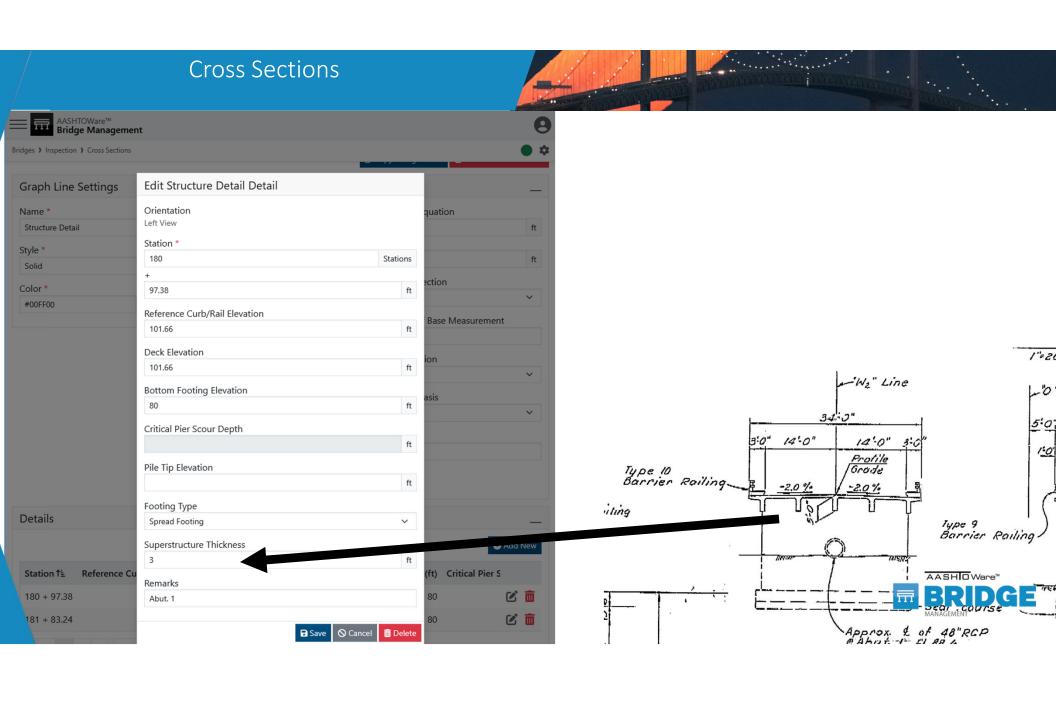


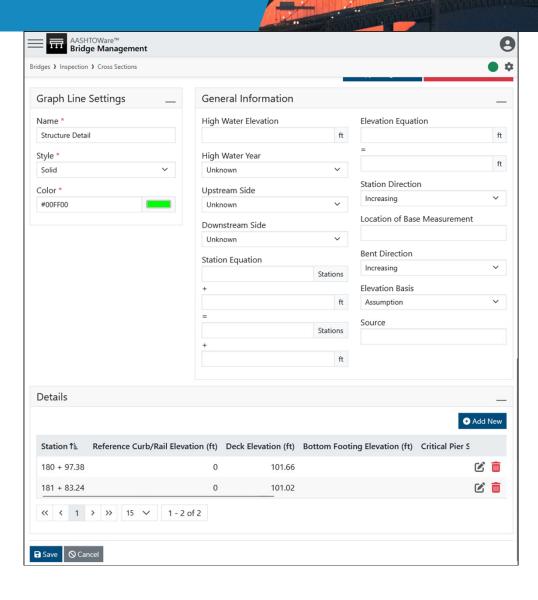




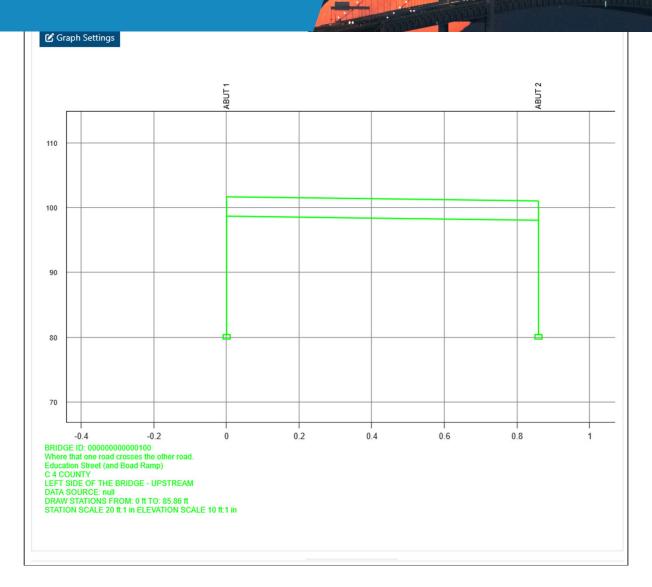




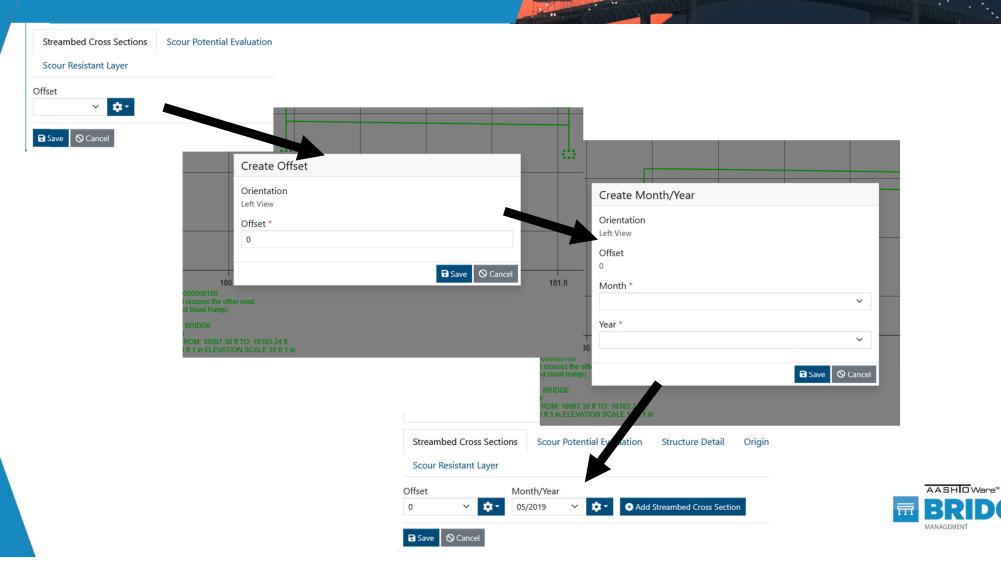




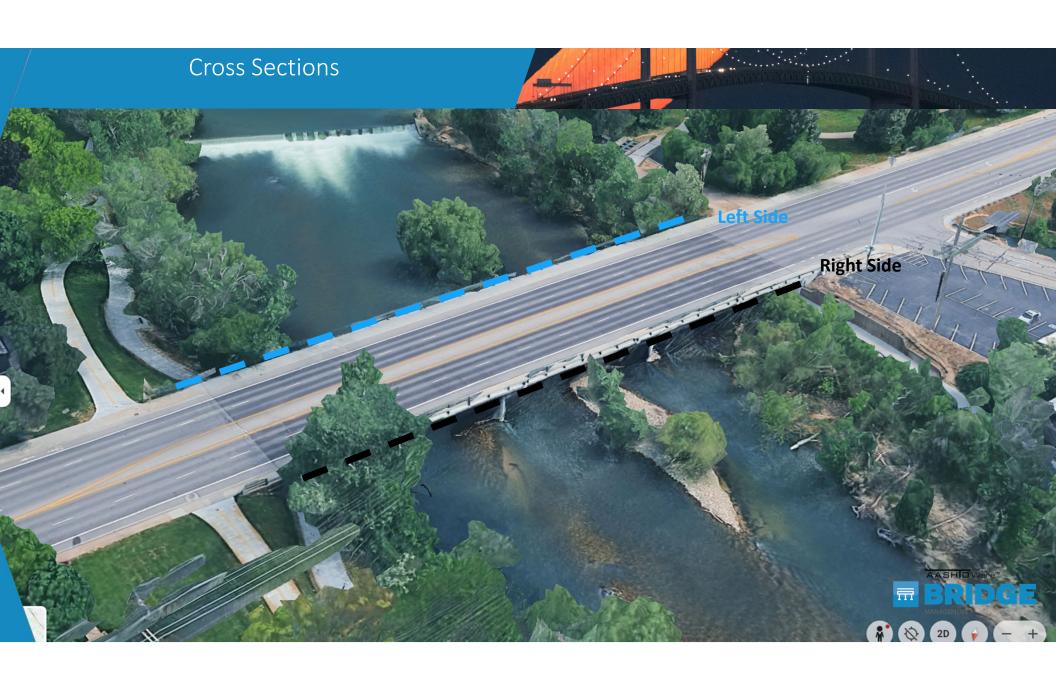


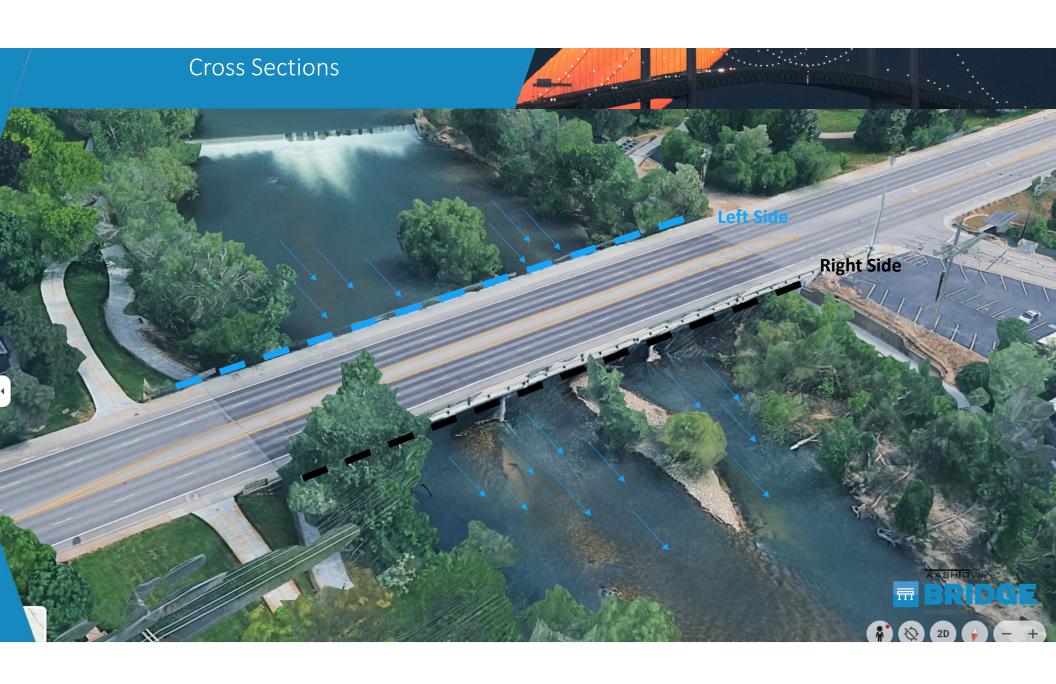




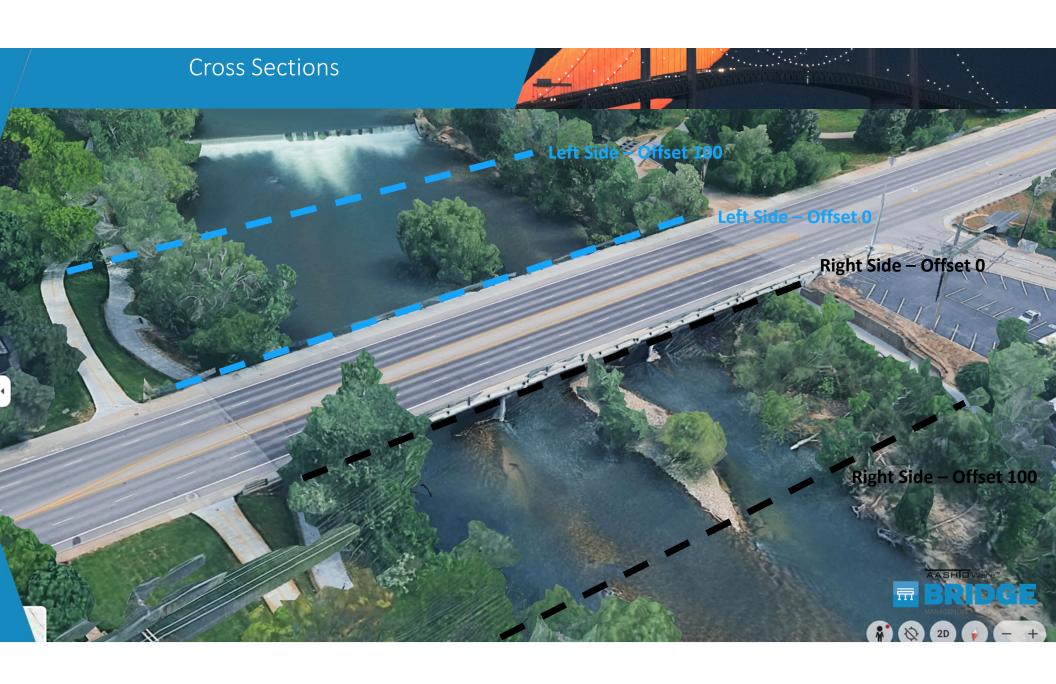


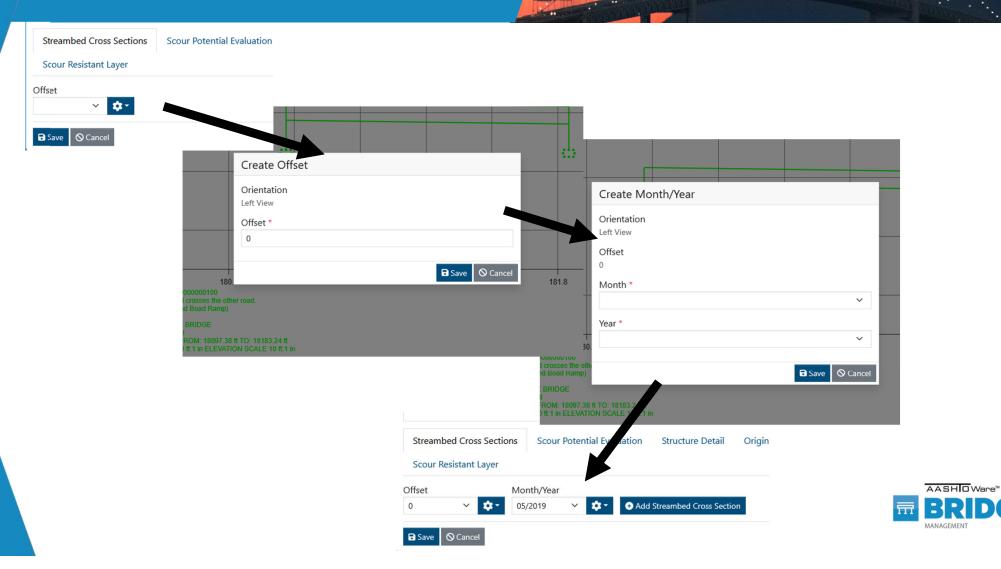


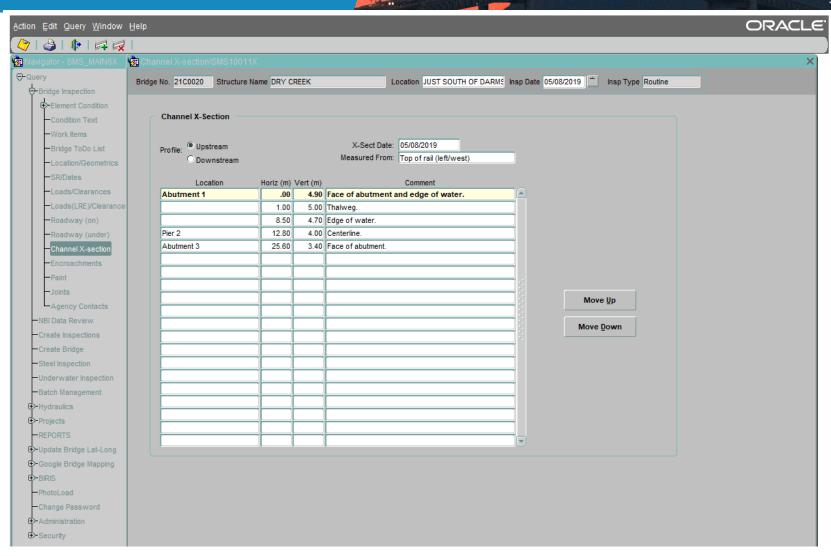




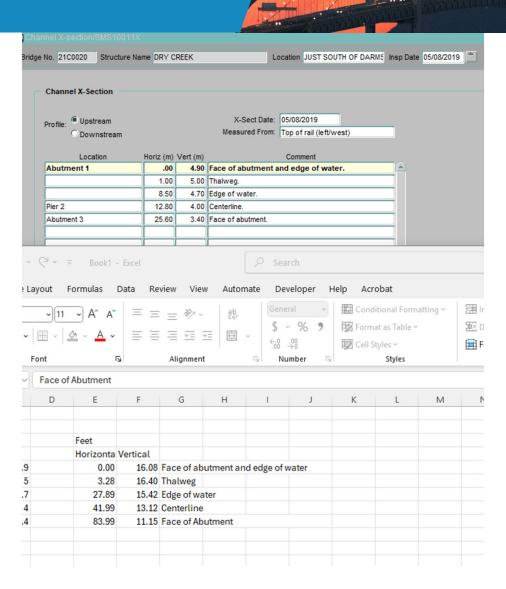




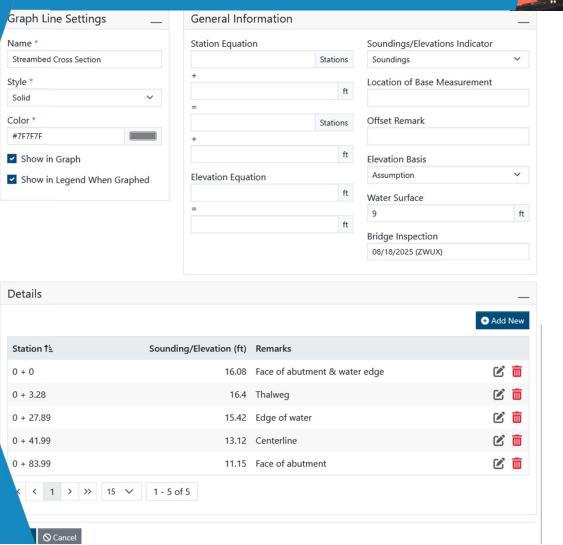


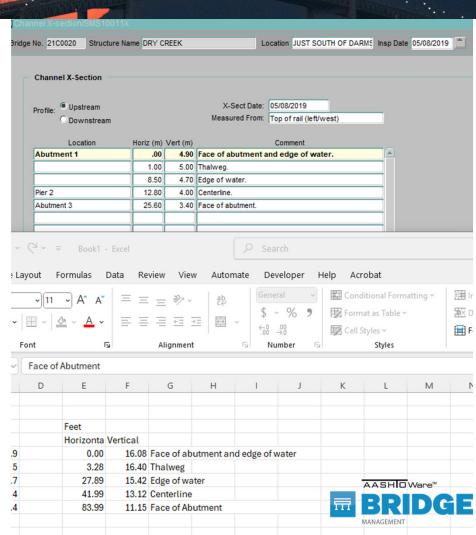






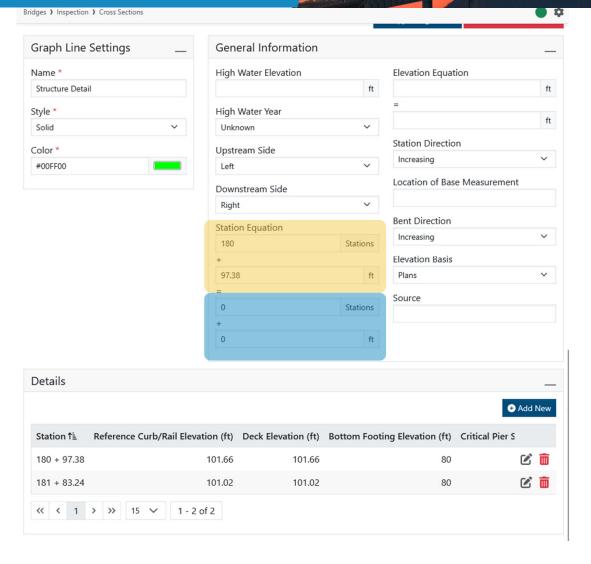








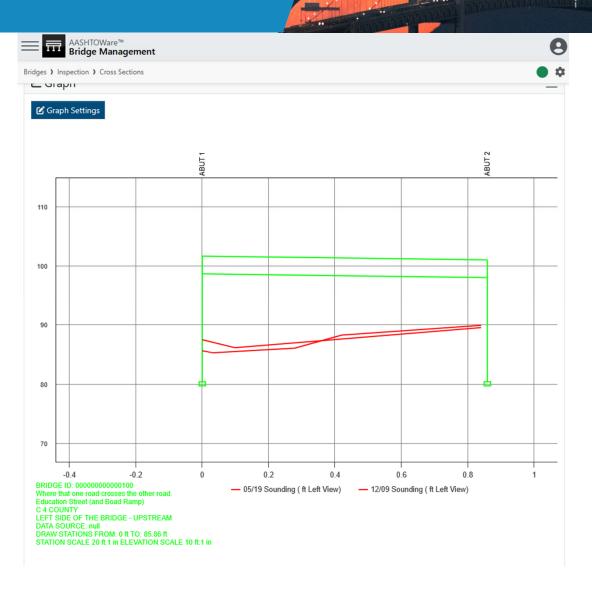




This session

The global base measure







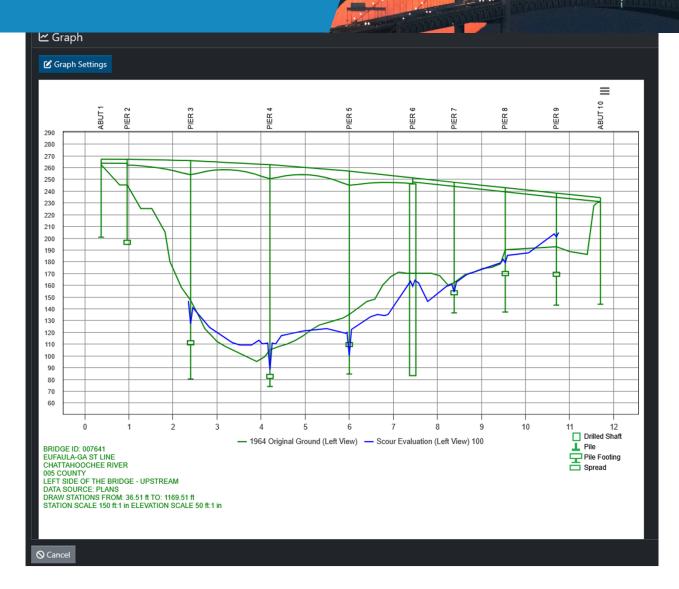
### The Required Minimum to Graph

To get a graph to display, you need a beginning and ending point with curb and deck points. These can all be zeroes except the end-stationing.

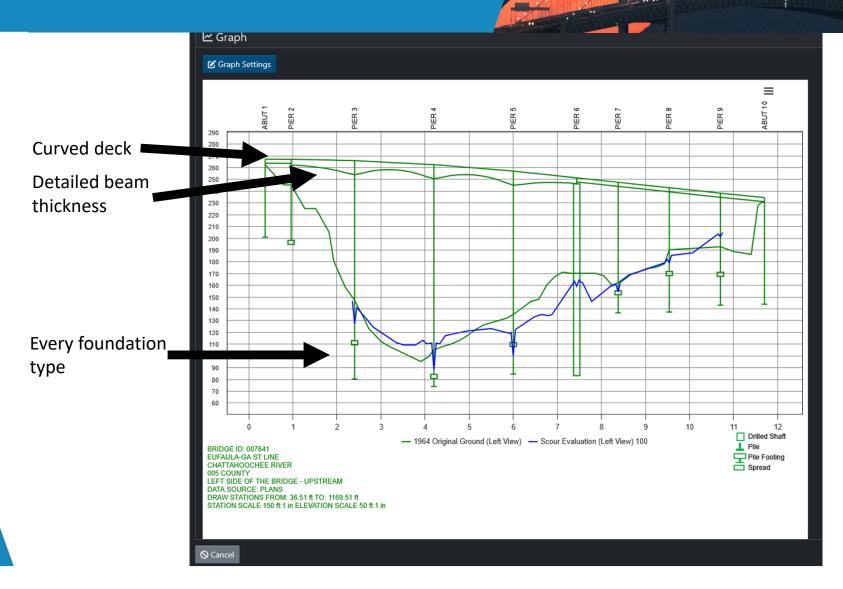






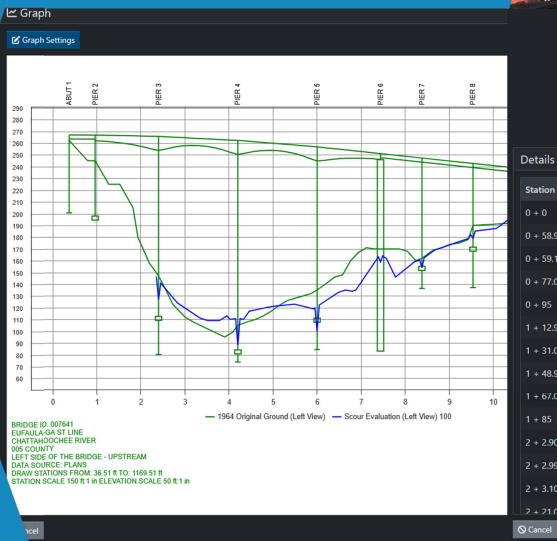


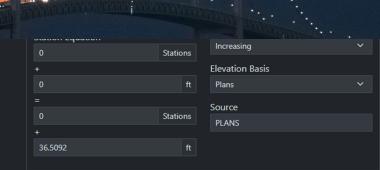






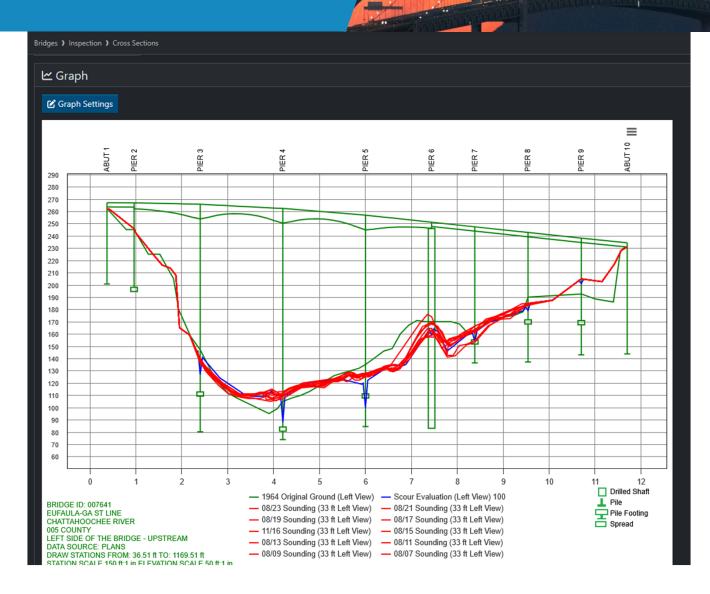






Station 1 ±	Reference Curb/Rail Elevation (ft)	Deck Elevation (ft)	Bottom Footing Elevation (ft)	Critical Pier Scour D€
0 + 0	267.0013	267.0013		
0 + 58.9993	266.9193	266.9193	196.2795	
0 + 59.101	266.9193	266.9193	196.2795	
0 + 77.0013	266.7815	266.7815		
0 + 95	266.6404	266.6404		
1 + 12.9987	266.4993	266.4993	Note lot	s of no-
1 + 31.0007	266.3615	266.3615	footing p	ooints
1 + 48.9993	266.2106	266.2106	to curve	deck
1 + 67.0013	266.0597	266.0597	and bea	ms
1 + 85	265.9088	265.9088		
2 + 2.9003	265.7612	265.7612		
2 + 2.9987	265.7612	265.7612	110.9514	
2 + 3.1004	265.7612	265.7612	110.9514	
2 + 21 0007	265 4199	265 4199		

Details



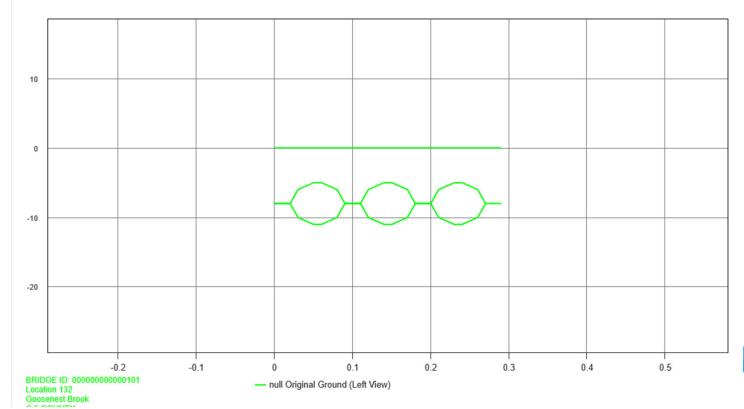


Bridges ) Inspection ) Cross Sections

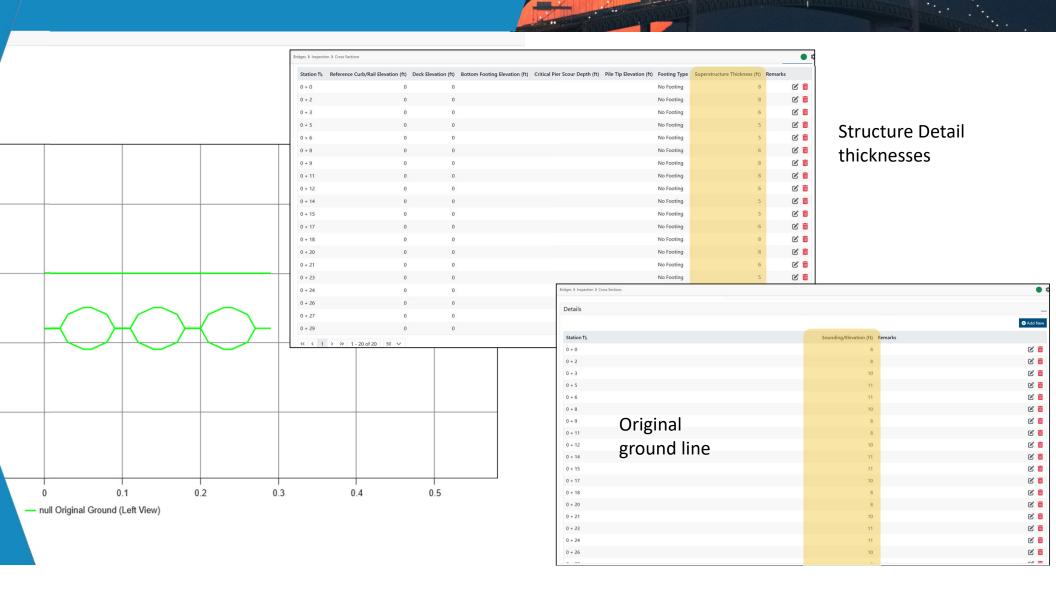
#### 

☑ Graph Settings

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### **Course Overview**

#### **TODAY**

### **Before Break (Insp 101)**

- Login
- Roles & Groups
- Bridge List
- Inspection List
- Scheduling
- Inspection Plans
- Inventory
- Design
- Features

### After Break (Insp 102)

- Condition & Elements
- Load Posting
- Multimedia
- Sketches
- Cross Sections

#### **TOMORROW**

### **Before Break (Insp 201)**

- Work Candidates
- Certifications
- Inspection Assignment
- Validation
- Inspection Review
- Future Planning

### After Break (Insp 202)

- Submittal
- Critical Findings
- Reports
- Dashboards
- API Calls



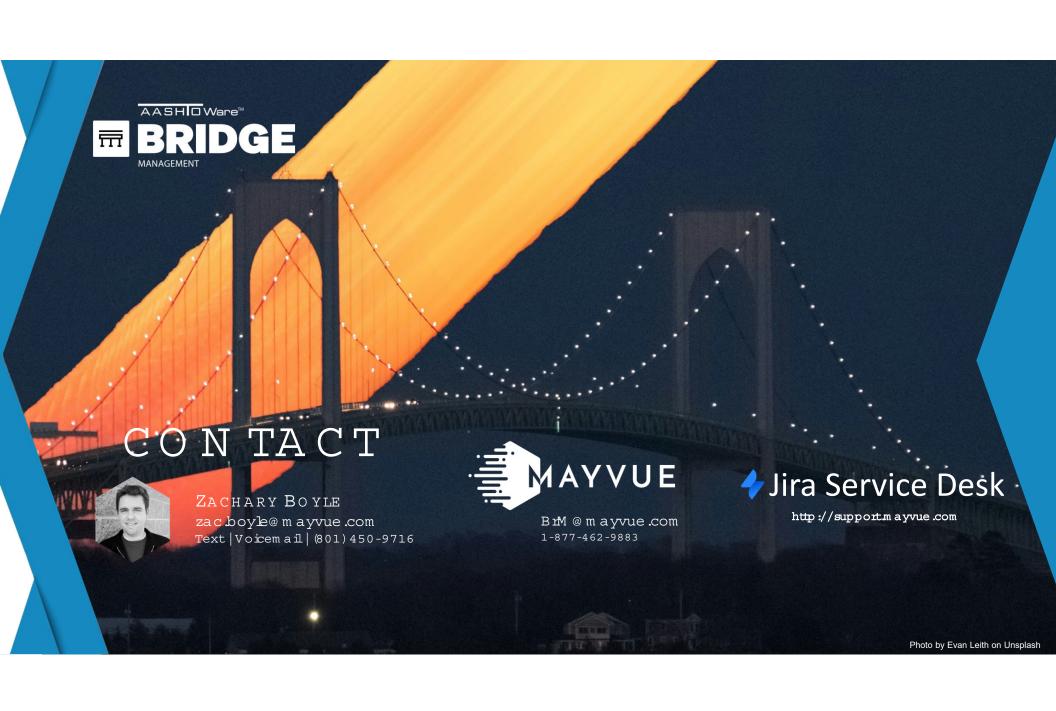






Photo by Evan Leith on Unspla

BrMUG 2025 | Providence, RI | September 17-18