

Collapse Investigation

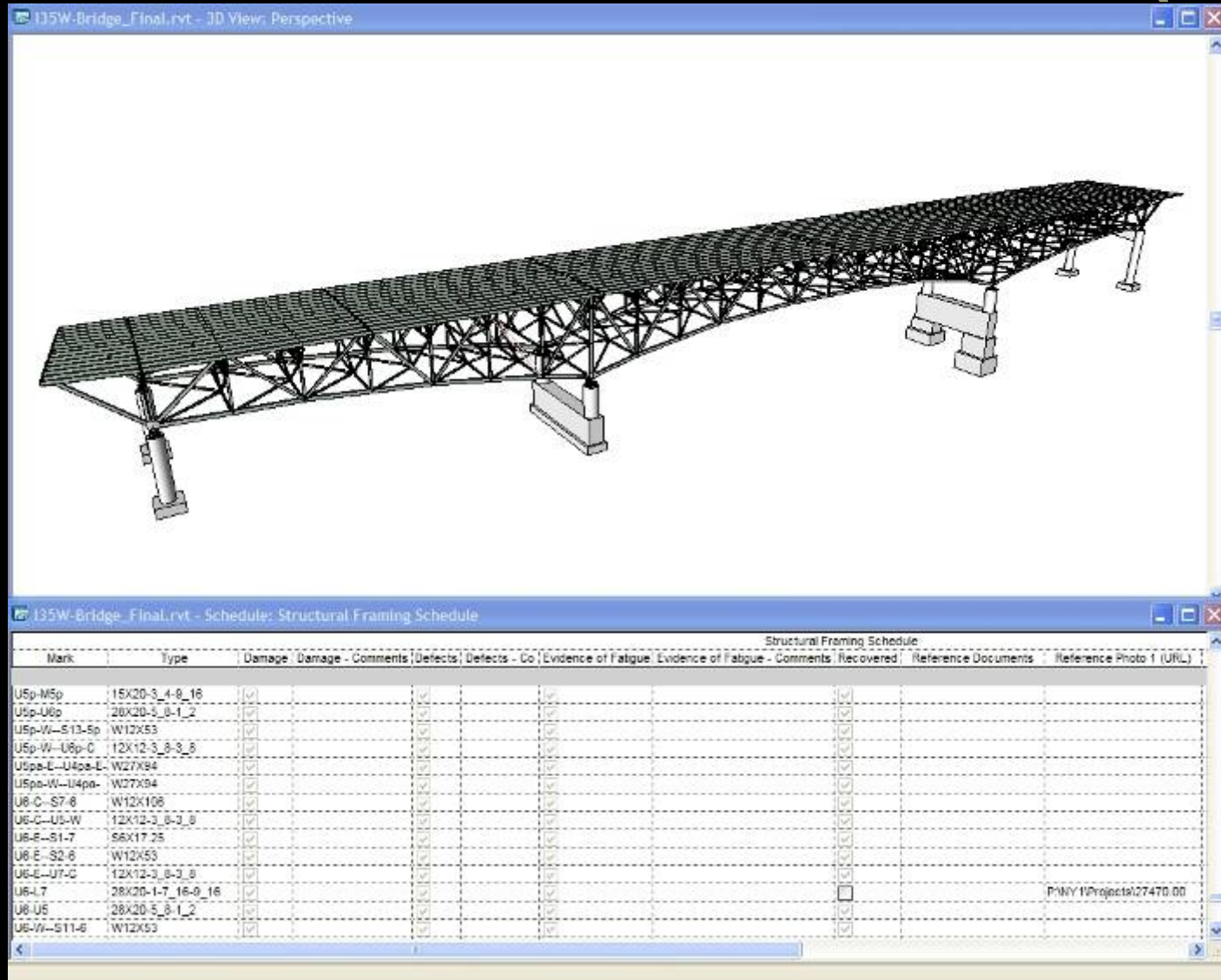
I-35 West Mississippi River Bridge

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Thornton Tomasetti

Forensic Information Model (FIM)



The screenshot displays a software interface with two main windows. The top window, titled "I35W-Bridge_Final.rvt - 3D View: Perspective", shows a detailed 3D wireframe model of a long bridge structure with multiple spans and supports. The bottom window, titled "I35W-Bridge_Final.rvt - Schedule: Structural Framing Schedule", contains a table with the following columns: Mark, Type, Damage, Damage - Comments, Defects, Defects - Co, Evidence of Fatigue, Evidence of Fatigue - Comments, Recovered, Reference Documents, and Reference Photo 1 (URL). The table lists various structural members and their associated data.

Mark	Type	Damage	Damage - Comments	Defects	Defects - Co	Evidence of Fatigue	Evidence of Fatigue - Comments	Recovered	Reference Documents	Reference Photo 1 (URL)
U5p-M5p	15X20-3_4-0_16	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U5p-U6p	28X20-3_8-1_2	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U5p-W-S13-5p	W12X53	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U5p-W-U6p-C	12X12-3_8-3_8	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U5pe-E-U4pe-L	W27X94	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U5pe-W-U4pe-	W27X94	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U6-C-S7-6	W12X106	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U6-C-U5-W	12X12-3_8-3_8	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U6-E-S1-7	S6X17.25	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U6-E-S2-6	W12X53	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U6-E-U7-C	12X12-3_8-3_8	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U6-L7	28X20-1-7_16-0_16	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U6-U5	28X20-3_8-1_2	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
U6-W-S11-6	W12X53	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		PWNY1\Projects\27470.00

Forensic Information Model (FIM)

The screenshot displays a software interface with two main windows. The top window, titled "I35W-Bridge_Final.rvt - 3D View: Perspective", shows a detailed 3D wireframe model of a long bridge structure supported by several piers. A red arrow points to a specific joint in the truss structure. The bottom window, titled "I35W-Bridge_Final.rvt - Schedule: Structural Framing Schedule", contains a table with the following data:

Mark	Type	Damage	Damage - Comments	Defects	Defects - Co	Evidence of Fatigue	Evidence of Fatigue - Comments	Recovered	Reference Documents	Reference Photo 1 (URL)
USp-W5p	15X20-3_4-0_16	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
USp-U6p	28X20-3_0-1_2	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
USp-W-S13-5p	W12X53	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
USp-W-U8p-C	12X12-3_0-3_0	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
USpa-L-U4pa-L	W27X94	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
USpa-W-U4pa	W27X94	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
U6-C-S7-8	W12X108	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
U6-C-U5-W	12X12-3_0-3_0	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
U6-E-S1-7	96X17_25	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
U6-E-S2-6	W12X53	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
U6-E-U7-C	12X12-3_0-3_0	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
U6-L7	28X20-1-7_16-9_16	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
U6-U5	28X20-5_0-1_2	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		P:\NY 1\Projects\27470_00
U6-W-S11-6	W12X53	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		

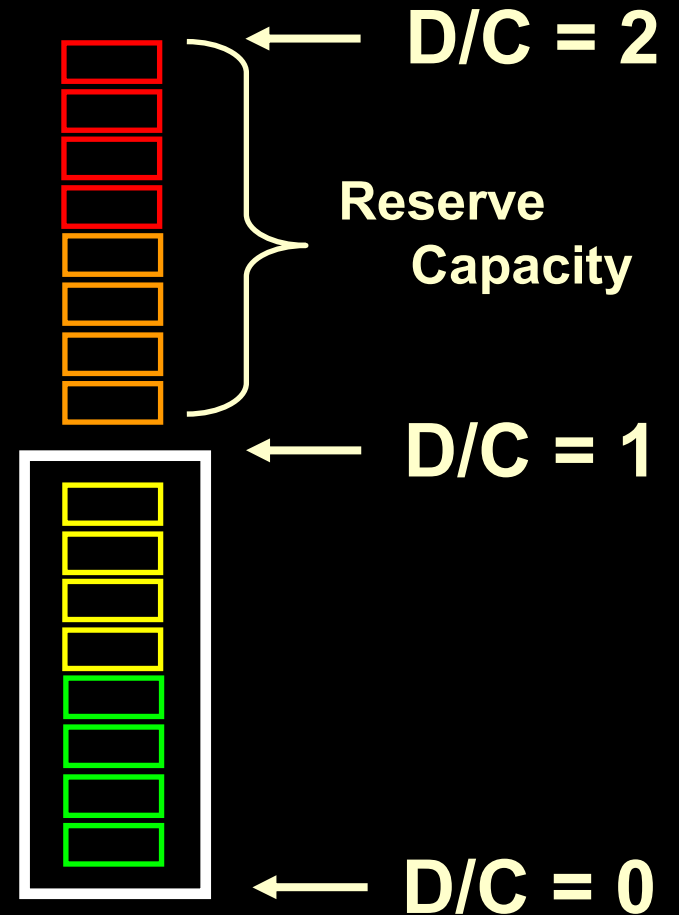
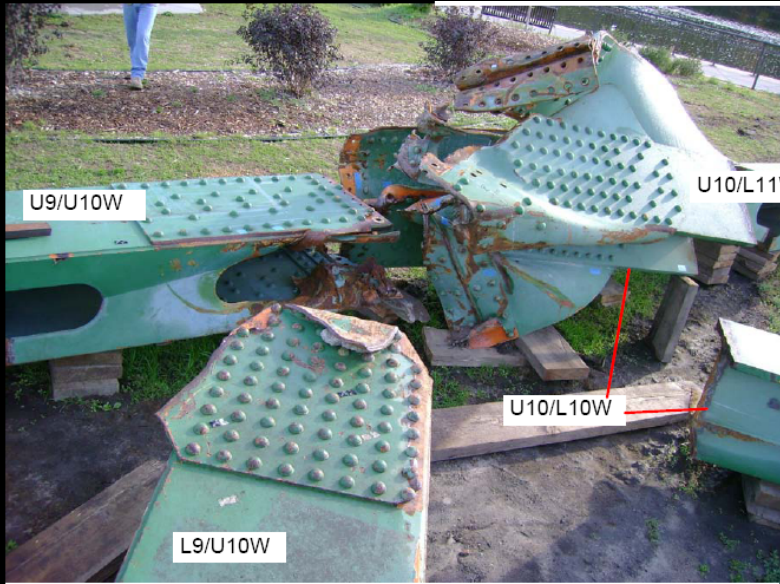
Forensic Information Model (FIM)

The screenshot displays three windows from a forensic information model (FIM) application:

- 135W-Bridge_Final.rvt - 3D View: Perspective:** Shows a 3D wireframe model of a bridge structure.
- IMG_0577.jpg - Windows Picture and Fax Viewer:** Shows a photograph of the bridge's interior structure, dated JUN 12 2003.
- 135W-Bridge_Final.rvt - Schedule: Structural Framing Schedule:** Shows a table with the following columns: Mark, Type, Damage, Damage - Comments, Defects, Defects - Co, Evidence of Fatigue, Evidence of Fatigue - Comments, Recovered, Reference Documents, and Reference Photo 1 (URL).

Mark	Type	Damage	Damage - Comments	Defects	Defects - Co	Evidence of Fatigue	Evidence of Fatigue - Comments	Recovered	Reference Documents	Reference Photo 1 (URL)
U5p-M5p	15X20-3_4-0_16									
U5p-U6p	28X20-5_8-1_2									
U5p-W-S13-5p	W12X53									
U5p-W-U6p-C	12X12-3_8-3_8									
U5pa-L-U4pa-L	W27X94									
U5pa-W-U4pa-	W27X94									
U6-C-S7-8	W12X108									
U6-C-U5-W	12X12-3_8-3_8									
U6-E-S1-7	S6X17.25									
U6-E-S2-8	W12X53									
U6-E-U7-C	12X12-3_8-3_8									
U6-L7	28X20-1-7_16-0_16									
U6-U5	28X20-5_8-1_2									
U6-W-S11-6	W12X53									P:\NY1\Projects\27470.00

Demand Exceeds Capacity

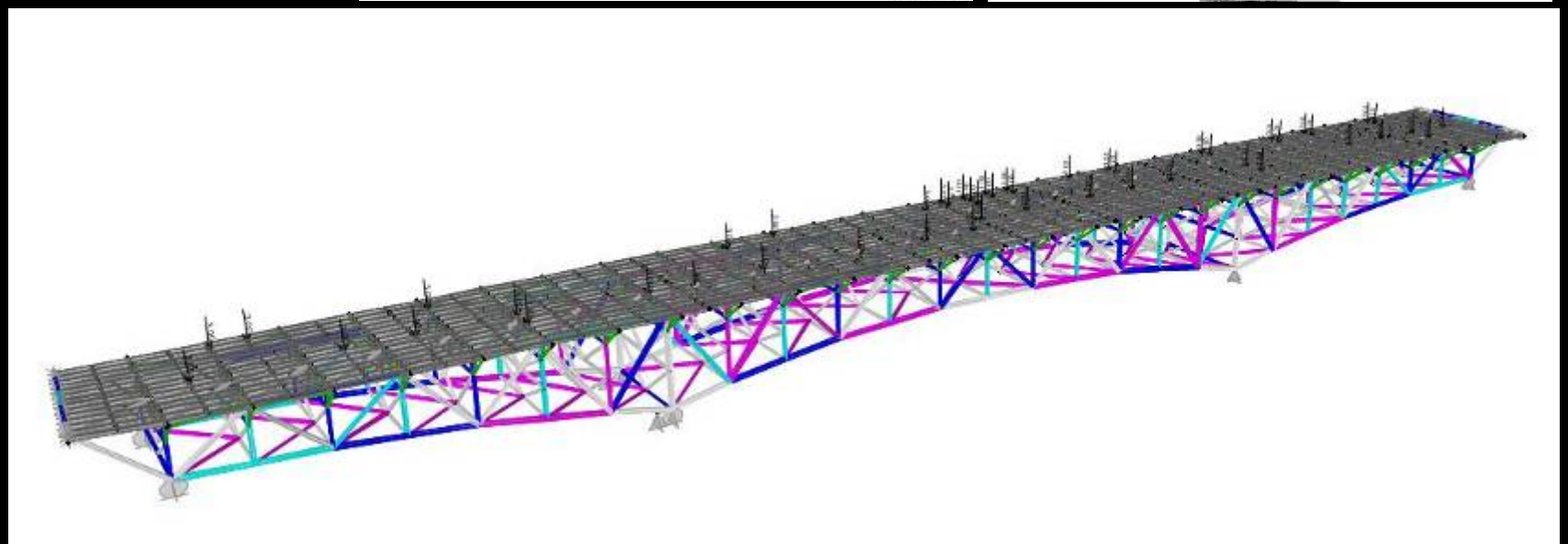
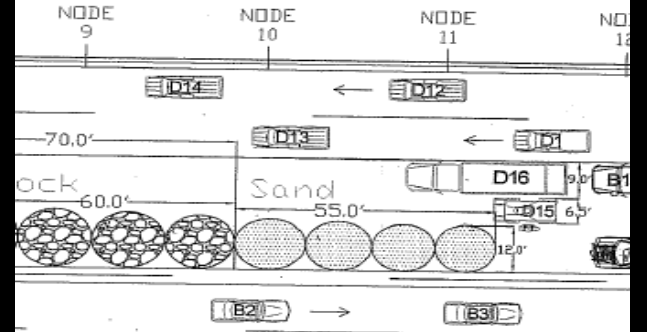


Demand

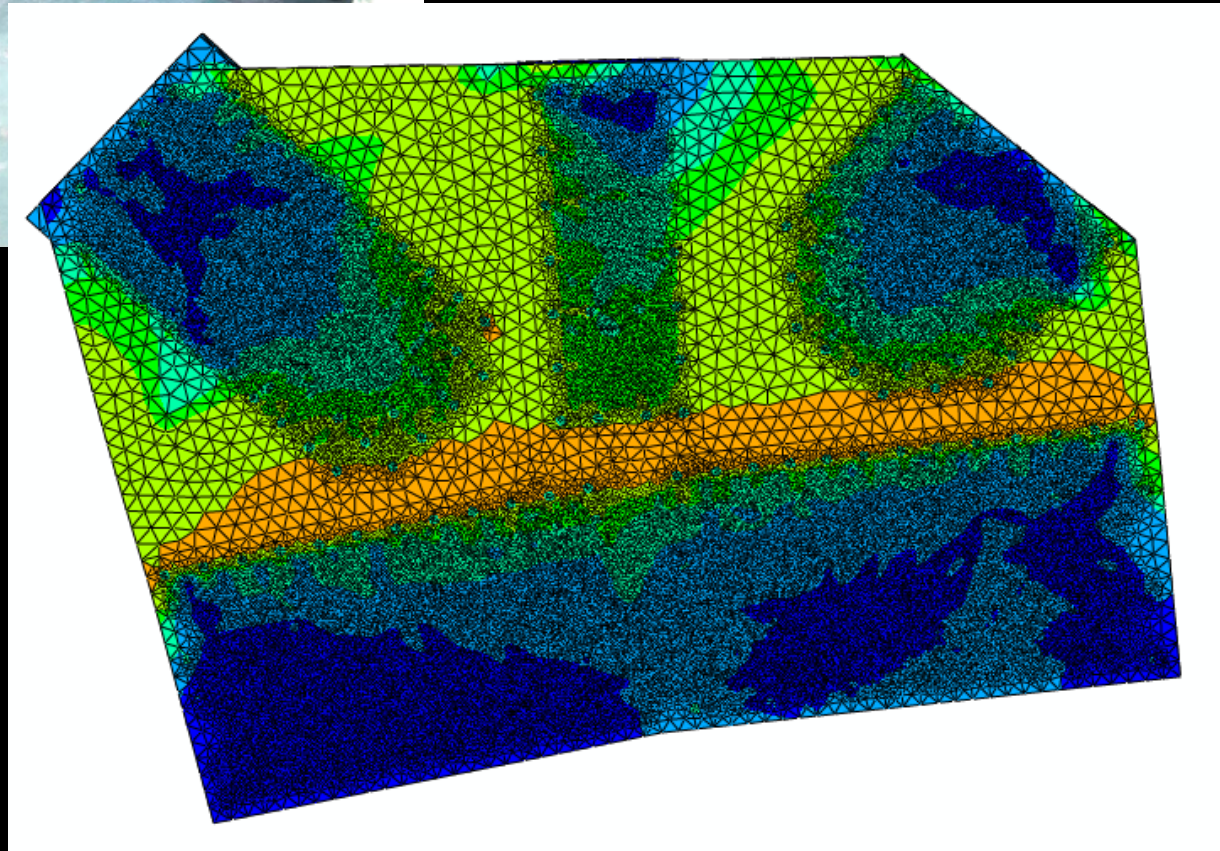
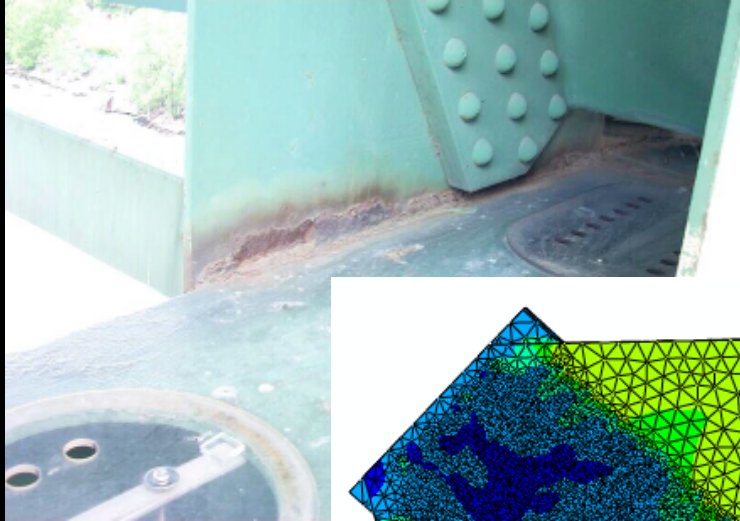


Construction Material Staging on Cent

4 Loads of Rock (184,380 lbs) 4 Loads of Sand (198,820 lbs)
3 Loaded Commercial Construction Vehicles, Water Truck D16 (48,200 lbs),
(72,780 lbs), and Concrete Mixer B15 (51,400 lbs) = 1
1 Skidsteer and 5 Scootcretes with associated material and workers =
Total Load = 577,235 lbs



Capacity



Collapsed Shape

