

Defects	CS 1	CS 2	CS 3	CS 4
	GOOD	FAIR	POOR	SEVERE
Damage (7000)	Not applicable.	The element has impact damage. The specific damage caused by the impact has been captured in Condition State 2 under the appropriate material defect entry.	The element has impact damage. The specific damage caused by the impact has been captured in Condition State 3 under the appropriate material defect entry.	The element has impact damage. The specific damage caused by the impact has been captured in Condition State 4 under the appropriate material defect entry.

## 3.7—MASONRY ELEMENTS

Element No.	Element Name	Classification	Units of Measurement	Element No.	Element Name	Classification	Units of Measurement
<b>Superstructure</b>				<b>Culvert</b>			
145	Masonry Arch	NBE	ft	244	Masonry Culvert	NBE	ft
<b>Substructure</b>				<b>Other</b>			
213	Masonry Pier Wall	NBE	ft	334	Masonry Bridge Railing	NBE	ft
217	Masonry Abutment	NBE	ft				

### Defects for Masonry Elements

Defects	CS 1	CS 2	CS 3	CS 4
	GOOD	FAIR	POOR	SEVERE
Delamination/Spall/ Patched Area (1080)	None.	Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter. Patched area that is sound.	Spall greater than 1 in. deep or greater than 6 in. diameter. Patched area that is unsound or showing distress. Does not warrant structural review.	The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge; OR a structural review has been completed and the defects impact strength or serviceability of the element or bridge.
Efflorescence/Rust Staining (1120)	None.	Surface white without build-up or leaching without rust staining.	Heavy build-up with rust staining.	
Mortar Breakdown (Masonry) (1610)	None.	Cracking or voids in less than 10% of joints.	Cracking or voids in 10% or more of the joints.	
Split/Spall (Masonry) (1620)	None.	Block or stone has split or spalled with no shifting.	Block or stone has split or spalled with shifting but does not warrant a structural review.	
Patched Area (Masonry) (1630)	None.	Sound patch.	Unsound patch.	
Masonry Displacement (1640)	None.	Block or stone has shifted slightly out of alignment.	Block or stone has shifted significantly out of alignment or is missing but does not warrant structural review.	
Distortion (1900)	None.	Distortion not requiring mitigation or mitigated distortion.	Distortion that requires mitigation that has not been addressed but does not warrant structural review.	
Settlement (4000)	None.	Exists within tolerable limits or arrested with no observed structural distress.	Exceeds tolerable limits but does not warrant structural review.	
Scour (6000)	None.	Exists within tolerable limits or has been arrested with effective countermeasures.	Exceeds tolerable limits, but is less than the critical limits determined by scour evaluation and does not warrant structural review.	

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	<b>GOOD</b>	<b>FAIR</b>	<b>POOR</b>	<b>SEVERE</b>
Damage (7000)	Not applicable.	The element has impact damage. The specific damage caused by the impact has been captured in Condition State 2 under the appropriate material defect entry.	The element has impact damage. The specific damage caused by the impact has been captured in Condition State 3 under the appropriate material defect entry.	The element has impact damage. The specific damage caused by the impact has been captured in Condition State 4 under the appropriate material defect entry.

**3.8—OTHER MATERIAL ELEMENTS**

Element No.	Element Name	Classification	Units of Measurement	Element No.	Element Name	Classification	Units of Measurement
<b>Deck</b>				<b>Substructure</b>			
60	Other Deck	NBE	ft <sup>2</sup>	203	Other Column	NBE	ea
65	Other Slab	NBE	ft <sup>2</sup>	211	Other Pier Wall	NBE	ft
<b>Superstructure</b>				218	Other Abutment	NBE	ft
106	Other Closed Web/Box Girder	NBE	ft	229	Other Pile	NBE	ea
112	Other Open Girder/Beam	NBE	ft	236	Other Pier Cap	NBE	ft
118	Other Stringer	NBE	ft				
136	Other Truss	NBE	ft	<b>Culvert</b>			
142	Other Arch	NBE	ft	244	Other Culvert	NBE	ft
149	Other Secondary Cable	NBE	ea	<b>Other</b>			
157	Other Floor Beam	NBE	ft	332	Other Bridge Railing	NBE	ft

### Defects for Other Material Elements

Defects	CS 1	CS 2	CS 3	CS 4
	GOOD	FAIR	POOR	SEVERE
Corrosion (1000)	None.	Freckled rust. Corrosion of the steel has initiated.	Section loss is evident or pack rust is present but does not warrant structural review.	The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge; OR a structural review has been completed and the defects impact strength or serviceability of the element or bridge.
Cracking (1010)	None.	Crack that has self-arrested or has been arrested with effective arrest holes, doubling plates, or similar.	Identified crack that is not arrested but does not warrant structural review.	
Connection (1020)	Connection is in place and functioning as intended.	Loose fasteners or pack rust without distortion is present but the connection is in place and functioning as intended.	Missing bolts, rivets, or fasteners; broken welds; or pack rust with distortion but does not warrant a structural review.	
Delamination/Spall/Patched Area (1080)	None.	Delaminated. Spall 1 in. or less deep or 6 in. or less in diameter. Patched area that is sound.	Spall greater than 1 in. deep or greater than 6 in. diameter. Patched area that is unsound or showing distress. Does not warrant structural review.	
Efflorescence/Rust Staining (1120)	None.	Surface white without build-up or leaching without rust staining.	Heavy build-up with rust staining.	
Cracking (RC and Other) (1130)	Insignificant cracks or moderate-width cracks that have been sealed.	Unsealed moderate-width cracks or unsealed moderate pattern (map) cracking.	Wide cracks or heavy pattern (map) cracking.	
Deterioration (Other) (1220)	None.	Initiated breakdown or deterioration.	Significant deterioration or breakdown but does not warrant structural review.	
Distortion (1900)	None.	Distortion not requiring mitigation or mitigated distortion.	Distortion that requires mitigation that has not been addressed but does not warrant structural review.	
Settlement (4000)	None.	Exists within tolerable limits or arrested with no observed structural distress.	Exceeds tolerable limits but does not warrant structural review.	

Defects	CS 1	CS 2	CS 3	CS 4
	GOOD	FAIR	POOR	SEVERE
Scour (6000)	None.	Exists within tolerable limits or has been arrested with effective countermeasures.	Exceeds tolerable limits but is less than the critical limits determined by scour evaluation and does not warrant structural review.	
Damage (7000)	Not applicable.	The element has impact damage. The specific damage caused by the impact has been captured in Condition State 2 under the appropriate material defect entry.	The element has impact damage. The specific damage caused by the impact has been captured in Condition State 3 under the appropriate material defect entry.	The element has impact damage. The specific damage caused by the impact has been captured in Condition State 4 under the appropriate material defect entry.

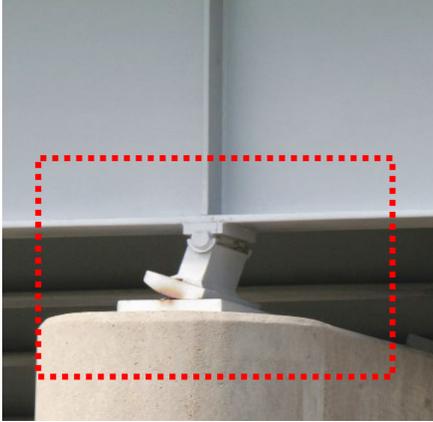
**3.9—BEARINGS**

Element No.	Element Name	Classification	Units of Measurement	Element No.	Element Name	Classification	Units of Measurement
310	Elastomeric Bearing	NBE	ea	314	Pot Bearing	NBE	ea
311	Movable Bearing	NBE	ea	315	Disk Bearing	NBE	ea
312	Enclosed/Concealed Bearing	NBE	ea	316	Other Bearing	NBE	ea
313	Fixed Bearing	NBE	ea				

## Defects for Bearings

Defect	CS 1	CS 2	CS 3	CS 4
	GOOD	FAIR	POOR	SEVERE
Corrosion (1000)	None.	Freckled rust. Corrosion of the steel has initiated.	Section loss is evident or pack rust is present but does not warrant structural review.	The condition warrants a structural review to determine the effect on strength or serviceability of the element or bridge; OR a structural review has been completed and the defects impact strength or serviceability of the element or bridge.
Connection (1020)	Connection is in place and functioning as intended.	Loose fasteners or pack rust without distortion is present but the connection is in place and functioning as intended.	Missing bolts, rivets, or fasteners; broken welds; or pack rust with distortion but does not warrant a structural review.	
Movement (2210)	Free to move.	Minor restriction.	Restricted, but not warranting structural review.	
Alignment (2220)	Lateral and vertical alignment is as expected for the temperature conditions.	Tolerable lateral or vertical alignment that is inconsistent with the temperature conditions.	Approaching the limits of lateral or vertical alignment for the bearing but does not warrant a structural review.	
Bulging, Splitting, or Tearing (2230)	None.	Bulging less than 15% of the thickness.	Bulging 15% or more of the thickness. Splitting or tearing. Bearing's surfaces are not parallel. Does not warrant structural review.	
Loss of Bearing Area (2240)	None.	Less than 10%.	10% or more but does not warrant structural review.	
Damage (7000)	Not applicable.	The element has impact damage. The specific damage caused by the impact has been captured in CS 2 under the appropriate material defect entry.	The element has impact damage. The specific damage caused by the impact has been captured in CS 3 under the appropriate material defect entry.	

## Defect 2220—Alignment

Condition State 1	Condition State 2	Condition State 3
Lateral and vertical alignment is as expected for the temperature conditions.	Tolerable lateral or vertical alignment that is inconsistent with the temperature conditions.	Approaching the limits of lateral or vertical alignment for the bearing but does not warrant a structural review.
		
Boundary Image CS 1–2	Boundary Image CS 2–3	Boundary Image CS 3–4
		

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## Defect 2240—Loss of Bearing Area

Condition State 1	Condition State 2	Condition State 3
None.	Less than 10%.	10% or more, but does not warrant structural review.
		
Boundary Image CS 1–2		Boundary Image CS 2–3
		