

Coos Bay Rail Link - Railroad Bridge Repair List

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MP	Highlighted Work (HDR)	Crouch Engineering - Findings	Quantity	Material Size	Crouch Engineering - Observations
652.21	No Highlighted work	Bridge adequate for 10 MPH			8 stringer spans, stringer 8 listed rate 0, unable to determine stringer #1 condition as listed
652.56	No Highlighted work	Bridge adequate for 10 MPH			Low ballast on bridge, could use some ballast and surfacing across.
656.12	No Highlighted work	Bridge adequate for 10 MPH			Could not determine fault listed
657.12	No Highlighted work	Bridge adequate for 10 MPH	1	13" T X 16" W X 12' L	Bent 3 cap rated 2, replace within 1 year.
657.96	No Highlighted work	Bridge adequate for 10 MPH			12 stringer spans, no access
658.17	60% tie spacers need replacement	Curbs are poor but ties are not shifted	246 LF	4" X 8"	Ties are 50% Poor along with curbs, recommend replacing deck
	Timber Ties need replacement	7.5" X 7.5" spaced 15" OC	97	7.5" X 7.5" X 8' (Use Larger size)	97 ties on bridge. 50% are poor. Gage is holding and ties are not shifted
		Bridge adequate for 10 MPH			
660.89	No Highlighted work	Bridge adequate for 10 MPH			Additional to listed findings, Bent 3 Pile 3 is rated 3 and span 3, Stringer 5 is rated 3
661.28	Pile 2 & 5, Bent 4 have decay	P2 rated 1 to 2, P5 - 3	2	12 - 14" Dia X 10' post	B3 - P2 is rated the same as B4 -P2 and should be scheduled for replacement. Additional work will be needed in 3 -5 years
	14 ties need replacement	Only 4 ties are needed		12" T x 10" W X 10' L	Not critical to operate but 1 tie has deteriorated in the center creating a walking hazard.
		Bridge adequate for 10 MPH			
661.73	No Highlighted work	Bridge adequate for 10 MPH			4 Bents have 1 piling each rated 2 to 3, Not critical for operating at 10 MPH
662.59	Bents 9 - 13 are framed and may need bracing	Bridge adequate for 10 MPH	15	4" x 8" x 24' curb timber	Some curb timbers extreme deterioration, some ties shifting. Nothing extreme.
664.00	20% section loss on Stringers	Bridge adequate for 10 MPH			Steel span, No repairs required at this time.
664.62	Bent 7, Piles 2 & 3 have interior decay	Bridge adequate for 10 MPH		(I would shim this now)	These pile were sounded with no detectable problems. Rate 85% good
		B14 (last Bent) post 3 needs 2" Shim			Center pile of last bent has settled at least 2"

664.85	TRT needs timber ties	Ties have been epoxied and are holding	88	12" T X 10" W X 10' L	Spikes are in place and gauge is good, heavily weathered ties but no rot
	Panels 2 & 3, Stringers 7 & 9 have decay	Bridge adequate for 10 MPH		17" T X 8" W X 30' L	All spans on the north trestle have 4 stringers per rail
		Stringers 1 & 10 have visible decay			All spans on the south trestle have 5 stringers per rail.
665.49	Replace rotted longitudinal girts	2 rotted girts need replacing	2	6" X 8" X 30' L	Not necessary for operating at 10MPH or less but repair is suggested.
		Bridge adequate for 10 MPH	1	2" X 12" X 14'	For walkway repair
666.21	No Highlighted work	Bridge adequate for 10 MPH	2	4" X 8" X 19'	Cross brace for bents 2 and 4, 1 each bent
667.28	Bent 2, pile 4 & 5 have internal decay	Pile 4 - 60%, pile 5 - 85%			Piles should be monitored, not recommended for immediate change
	Replace all cross & sash bracing	Bracing rotted and missing in areas	4	4" X 8" X 15'	2 ea cross brace for bents 2 and 5
		Bridge adequate for 10 MPH	4	6" X 8" X 17' L	2 ea sash brace, Bents 3 and 4
			4	4" X 8" X 19'	2 ea cross brace for Bents 3 & 4
667.40	DPG has significant corrosion	Bridge adequate for 10 MPH			Continue to monitor for future repair
	Replace corroded laterals	Repair as soon as possible			Maintain 10 MPH until repair, continue to monitor
		B2 shim crushed on north trestle			Walkway flooring missing. Replace flooring material
					Handrail damaged by falling tree. Repair Handrail
668.50	No Highlighted work	Low approach			
		curb timber needed to prevent tie movement	15	4" X 8" X 16'	Timber trestle
		ties are in bad condition	30	7.5" x 8" X 9'	On timber trestles
		Bridge adequate for 10 MPH	26	16" X 10" X 10'	On DPG spans
671.89	No Highlighted work	All spans have 4 stringers per rail		22" X 8" X 15'	Only span 4 has all 8 stringers in excellent shape,
		Bridge adequate for 10 MPH		17.5" X 8" X 15' per span	all others have only 3 per rail
674.03	Replace ties on west end	12 ties needed and 2 curb timbers	12	7.5" x 8" X 9'	32 ties on bridge
		Bridge adequate for 10 MPH	2	4" X 8" X 16'	curb timbers
676.23	No Highlighted work	Bridge adequate for 10 MPH			
677.05	Left & Right Cord - Replace panel 1,2, & 3	Bridge adequate for 10 MPH	3	4" X 8" X 16'	Curb timbers could be used but were not called out in inspection
					Need to place fill stone behind north west headwall to prevent wash
677.80	No Highlighted work	Bridge adequate for 10 MPH			Low approaches
678.43	Numerous Stringers with internal decay	high stringer count per span		17.75" X 8" x 15' per span	Spans 1,2,3 have 9 stringer/span, 4, 5, 9 have 8 stringer/span, 7, 8 have 10 stringer per span
		Bridge adequate for 10 MPH			Detailed sheet provided

680.17	Ties are wheel cut for 1/2 of truss length	71 are cut severely but are heavy ties	71	10"T X 9.5"W X 10'L	Ties are 14"OC with 4" blocking between and timber curbing.
	Scour at Pier 2 on left side	Does not appear serious	3	4" X 8" X 16' curbing	Monitor scour, no settlement or tilting evident.
		Bridge adequate for 10 MPH			
680.46	Bottom Lateral Bracing severe section loss	Continue to monitor			Continue to monitor
	Bottom Flange has 10% corrosion	Bridge adequate for 10 MPH			Continue to monitor
	Bottom flange may have section loss, top	Continue to monitor			Continue to monitor
680.77	No Highlighted work	Bridge adequate for 10 MPH			Ties listed as wheel cut are only on west end of bridge
681.05	No Highlighted work	Bridge adequate for 10 MPH			Ties listed as wheel cut are not severe, 3 guard timbers needed on the north side only
681.45	No Highlighted work	Bridge adequate for 10 MPH			Walkway needs repair (safety hazard), selected guard timbers on the north side need replacing
682.18	No highlighted work	Bridge adequate for 10 MPH			Could use some guard timber on the north side.
683.36	No highlighted work	Bridge adequate for 10 MPH			No serious defects noted
687.03	Stringers 1,8 at panels 1,2,3,4,5 need replaced	Rate as 1. 8 stringer spans		17.5" X 8" X 30' stringers	3 good stringers per rail remain for all spans listed
	Bent 1 Pile 5 needs replacement	Rate as 2, behve inside			This is a headwall bent with 5' exposed posts, other piles sounded good as well as the cap.
		Bridge adequate for 10 MPH			
687.88	Bents3,4 framed such that piles are off concrete	Bridge adequate for 10 MPH			Long 14" X 14" timber sill atop a shorter concrete foundation resulting in 18" of overhang.
	Replace all handrail (not highlighted)	safety concern		(Is switching done over this bridge?)	Cable handrails have been removed and need to be replaced for safety.
	need 20% new ties	No ties required at this time			
689.23	Rail on left side approach east end not support	good gauge and spikes are holding			low approach, needs tamping
		Bridge adequate for 10 MPH			
690.47	Pitting visible in floor beam webs	Bridge adequate for 10 MPH			Condition is similar to almost all other bridges observed.
690.85	30-40% new ties on TPG span, 10% on thru truss	Bridge adequate for 10 MPH	115	11.5" X 10.5" X 10'	15" OC, 6" Blocking between ties with 4X8 curb retainers on spans 1 and 2
			84	11"T X 9.5"W 10'L	13" OC on Thru Truss span
			6	4" X 8" X 24'	Curb timber
	Steel is generally fair, corrosion at connections	Steel structure			condition was not found to be any worse than other structures, no stess cracks or new rust
691.05	Bottom girder lateral brace loss 50-100%	Restrict to 10 MPH and continue to monitor			Severe section loss but observed elsewhere also
	Panel 1 has broken lateral girder brace	Replace as soon as possible			Hanging at one end. No fresh rust observed. Appears to be old defect

	Severe pitting (40%) on top flange	Restrict to 10 MPH and continue to monitor			No stress cracks or fresh rust evident
	Stringer lateral braces panel 1 have holes	Restrict to 10 MPH and continue to monitor			No stress cracks or fresh rust evident
	Panel 4 stringer lateral brace broken	Replace as soon as possible			No stress cracks or fresh rust evident
	Stringer 1 - P7 needs replacement, vehicle dam	Stringer rated 1, hollow			This span is over roadway and stringer has been hit but was already in poor condition
	Stringers 6,8 at Panel 3 needs replacement	9 stringer span, 1 added to middle			Not sure how this was determined, stringers are high (inaccessible)
691.38	Need 10% new ties	Bridge adequate for 10 MPH			12 ties total, could use 3 curb timbers
692.06	No Highlighted work	Bridge adequate for 10 MPH			
693.27	No Highlighted work	Bridge adequate for 10 MPH			Last note indicated raising curb 6 ". Not suggested,
694.32	Panel 1 stringer lateral brace brken	Replace as soon as possible			Restict all movement to 10MPH or less until repaired
	Section loss on low chord lateral braces	Continue to monitor			Maintain 10 MPH or less until appropriate repairs are made
	Panels 3,4,5 stringer braces broken	Replace as soon as possible			Maintain 10 MPH or less until appropriate repairs are made
	Floor beams 4,5,7 right side curved con broken	Replace as soon as possible			Maintain 10 MPH or less until appropriate repairs are made
	Top and bottom flanges have 20% loss	Continue to monitor			No restriction provided other repairs are made
	Floor beam 2 left and right gussets major loss	Continue to monitor			No restriction provided other repairs are made
	Floor beam 3 diagonal tweaked, missing shoe	Replace as soon as possible			Maintain 10 MPH or less until appropriate repairs are made
	Floor beam 4 holes in web	Continue to monitor			No restriction provided other repairs are made
	Low chord pins require closer inspection	Continue to monitor			Maintain 10 MPH or less until appropriate repairs are made
	Panel 1 right side low chord advanced pitting	Continue to monitor			Maintain 10 MPH or less until appropriate repairs are made
	Floor beam 1 left chord bottom gusset loss	Continue to monitor			Maintain 10 MPH or less until appropriate repairs are made
	No Highlighted work on timber structures	No immediate work recommended			Schedule future repair work
694.78	Usual low chord section loss	Bridge adequate for 10 MPH			Severe corrosion, no new rust or stress cracks evident
	Usual stringer lateral pitting	Continue to monitor			Maintain 10 MPH or less until appropriate repairs are made
	Stringer flanges had 10-20% loss	Continue to monitor			Maintain 10 MPH or less until appropriate repairs are made
	Same loss issues for lateral braces	Continue to monitor			Severe corrosion, no new rust or stress cracks evident
	Rockers of bearings are lying on their sides	Return to position			
	Stiffeners of right stringer severe loss	Continue to monitor			Maintain 10 MPH or less until appropriate repairs are made
	Same girder flange loss issues	Continue to monitor			Maintain 10 MPH or less until appropriate repairs are made
	Bad corrosion on left web stiffeners	Continue to monitor			Severe corrosion, no new rust or stress cracks evident
694.96	No Highlighted work	Bridge adequate for 10 MPH			No work recommended
696.66	Need 30% ties	129 ties, 14"OC with spacer blocks and curbs	38	11.5" X 10.5" X 10'	Curb timber was good, spike holding poor but spikes were in place, no immediate need for replacements
	Last tie on left has walked off end of steel	Reposition tie and secure	2	6" x 10" x 12" spacer block	Tie needs to be moved back into place and spacer blocks installed to stabilize placement.
		Bridge adequate for 10 MPH			
700.37	No Highlighted work	Bridge adequate for 10 MPH			No emergency work required.

702.65	No highlighted work	Bridge adequate for 10 MPH	1	16" x 16" X 12' Cap	Bent 8 cap is fabricated from 2 - 8" x 16" timbers bolted together and placed on edge with 6"x16" timber sub cap on top
702.95	No Highlighted work	Bridge adequate for 10 MPH			No work recommended
710.20	Bent 2 - P3 needs replaced, P2,P5 - 3 to 5 yrs	B2 sounded and rated 4,3,2,4,4	1	14" x 14" x 14'	Post could be replaced at this time or scheduled for 1 year replacement
	Bent 8 -P2 needs replacement & shim decayed	Bridge adequate for 10 MPH	1	14" x 14" x 4'	Shim as required unless post is replace at correct length
711.37	No highlighted work	Bridge adequate for 10 MPH			Ballast deck bridge. Good deck
711.67	Bent 1 - P1 monitor, P2 replace, P5 replace	Bent 1 (headwall bent) rated 1,1,4,4,1	3	14" post 5'	4' exposed timber, longer posts may be needed
		Replace as soon as possible. Restrict speed			
		Bridge adequate for 10 MPH			
712.18	Bent 1 - P1 replace, P4 monitor, P5 replace 3-5 yr	Bent 1 (headwall bent) rated 3,4,4,4,3			Continue to monitor
	Bent 5 - P1 replace, P3,4 spliced, P5 - "V"	Bent 5 rated 2,4,4,4,2	2	14" post 8'	Schedule to repair posts 1 & 5, continue to monitor
		Bridge adequate for 10 MPH			
712.80	No highlighted work	Bridge adequate for 10 MPH			No emergency work required
716.40	Steel truss inspections to be completed	Work will depend upon official load rating			Some severe rust through observed. Main structural members appear adequate to operate at 10 MPH or less.
	Bent 12 - P1,3 replace	Hollow, repair as soon as possible	2	14" x 14" x 18'	10 MPH speed restriction until repaired
	Bent 13 - P2 replace, P3 replace 3-5 yrs	P2 Hollow, repair as soon as possible	1	14" x 14" x 18'	10 MPH speed restriction until repaired, continue to monitor P3
	Bent 15 - P5 replace, P3 replace 3-5 yrs	P5 hollow, repair as soon as possible	1	14" x 14" x 18'	10 MPH speed restriction until repaired, continue to monitor P3
	Bent 28 - P1,P5 - replace	P1 & P5 Hollow, repair as soon as possible	2	14" x 14" x 18'	10 MPH speed restriction until repaired
	Bent 116 - P1,2,5 replace	Inaccessible, Schedule for repair	3	14" x 14" x 18'	Unable to determine decay, 10 MPH speed restriction until repaired, continue to monitor
	Bent 139 - P2,4,5 - suspect	Inaccessible, Monitor or provide access			10 MPH speed restriction until determined
718.12	No Highlighted work	Bridge adequate for 10 MPH			Approaches low
719.07	No highlighted work	Bridge adequate for 10 MPH			No emergency work required
719.21	Need 15 to 20% ties	joint ties need to be replaced	24	7.5" x 7.5" x 9'	Ties are 12" OC, 4 x 8 x 24'L guard timbers could also be installed but are not required.
	Stringers 5,7 at Bent 14 internal decay	Stringer 7 bad both sides of bent 14			Stringer 1 @ spans 6&7 also bad. As there are several stringers identified on this bridge, at least 3 stringers are needed
	Stringers 7,8 at Panel 14 needs replacement	Bridge adequate for 10 MPH	3	17.5" x 8" x 30'	Repair as soon as possible, continue to monitor
724.22	No Highlighted work	Steel trestle / concrete tub / ballast deck			Bridge adequate for 10 MPH

725.96	No Highlighted work	Bridge adequate for 10 MPH			Bridge adequate for 10 MPH
726.31	Stringers 3,5 at panels 20/21 need replaced	Stringers 4 and 6 are needed	24	17" x 8" x 30' stringers	5 stringers per rail on this bridge, 17" x 8",
	Stringers 5,8 at panels 28/29 need replaced	Could not determine this need			24 identified stringers for replacement
	Stringers 5,7 at panel 30 need replaced	opposite rail supports			
	Stringers 5,7 at Panel 51 need replaced	opposite rail supports			Bridge adequate for 10 MPH
	Stringers 3,5 at panel 53 need replaced	3 stringer support provided			
	Stringers 5,6 at panel 54 need replaced	Stringer 7 identified only			
	Stringers 4,6 at panel 55 needs replaced	S 6,8 - panels 55/56 and S 6,7 panel 57			
	Stringers 1,3 at panel 60 needs replaced	3 stringer support provided			
727.33	No highlighted work	Bridge adequate for 10 MPH			Tub joint filler plates needed where missing
728.51	Could use 20% new ties	Ties are scarred down center but functional		7.5 x 7.5 x 9'	No major work needed, ties are in fair condition.
		Bridge adequate for 10 MPH			
729.04	Stringers 1,2,8 at panel 20 needs replaced	Stringer 1 & 10 at panel 20 in poor condition			10 stringer spans, 5 per rail. Work not required for opening
		Bridge adequate for 10 MPH			
730.17	No highlighted work	Steel trestle / concrete tub / ballast deck			Bridge adequate for 10 MPH
730.56	Bent 2 pile 1,3,4 replace 3-5 yrs, P2,5 - Monitor	Pile 1 identified as needing replaced			1 of 6 piles, no emergency repair required
	Backwall almost burned through, total replace	Backwall still in place, one board broken			Not losing ballast yet, may hold another couple of years
	All top lateral girder braces 60-100% loss	Bridge adequate for 10 MPH			Maintain 10 MPH or less until appropriate repairs are made
	Some lower laterals, 50% loss				Continue to monitor
	Girder top flanges 30% section loss				Continue to monitor
	Bottom flange angles 10% loss				Continue to monitor
	Track has profile dip across DPG span	appears to have 1/2" settlement			Shim turn bridge ends as necessary
731.68	Stringer 3 panels 34/35 - monitor	Bridge adequate for 10 MPH			Monitoring a stringer does not warrant emergency repair comment
	Stringer 4 panels 34/35 replace	10 stringers per span			10 stringer spans, 5 per rail. Work not required for operation
	Top Later braces better than previous bridge	Swing span comment			Steel member bracing
	Bottom lateral braces have up to 20% loss	Swing span comment			Does not warrant emergency repair
	Panel 72, S1,4 replace, S3 replace 3 - 5 yrs	S1 rated at 1			10 stringer spans, 5 per rail. Work not required for operation
	need 20% new ties	ties found to be in generally good condition		7.75 x 7.75 x 9'	12" OC on west trestle. Tie curbs needed if ties are replaced. Not required for operation.
	Panels 81/82 right helper kicked out	no comment			no repair required for operation
	Panel 107, S3 - replace, S2,4 replace 3-5 yrs	10 stringers per span			not required for immediate operations, continue to monitor
	Panel 108, S6,7 needs replaced	10 stringers per span			not required for immediate operations, continue to monitor
	Panel 119/120, S2,4 needs replaced	10 stringers per span			not required for immediate operations, continue to monitor
	Panel 121, S2,3 needs replaced	10 stringers per span			not required for immediate operations, continue to monitor
	Panel 127, S4 replace, S2 replace in 3-5 yrs	10 stringers per span			not required for immediate operations, continue to monitor
	Panel 141, S4 replace, S2,7 replace 3-5 yrs, S6 m	10 stringers per span			not required for immediate operations, continue to monitor
	Panel 143, S 6,7 replace	10 stringers per span			not required for immediate operations, continue to monitor

	Original caps - about 50% have varied decay	Heavily weathered but no structural defects			No structural defects noted in caps.
732.84	Lateral braces have 20% to 50% localized loss	No stress or strain defects noted			deterioration not detrimental to operating at 10MPH until maintenance repairs can take place
	Original piles 1,6 of framed bents all thin shells	4 good load bearing piles under sill center			Bridge adequate for 10 MPH
733.68	No highlighted work	Bridge adequate for 10 MPH			No work required for immediate operations
733.99	No highlighted work	Bridge adequate for 10 MPH			approaches low, losing some ballast at joints
735.86	Bent 6 - P5 Monitor, P3,4 replace in 3-5 years	Bent 6 -P3 only pile with noticable decay			No work required for immediate operations
		Bridge adequate for 10 MPH			
736.03	No highlighted work	Span 3 uses heavier stringers with 7 pile bents			No work required for immediate operations
		Bridge adequate for 10 MPH			
736.51	No highlighted work	Bent 1 cap is crushing - Replace	1	12" x 14" x 12'	Bent 1 (headwall) cap is crushing and should be replaced. While cap is out, P1 should also be replaced. And Stringers 1 and 8 in span 1
737.33	No highlighted work	Bridge adequate for 10 MPH			No work required for immediate operations
738.70	Need 40% new ties on siding deck	Although needed, this is on a siding.			Restrict access until repaired. Not required for main line operatios
	Stringer 4,5 spans 1,2 need replacement	Although needed, this is on a siding.			Restrict access until repaired. Not required for main line operatios
	Bent 1 - P5 needs replacement	Although needed, this is on a siding.			Restrict access until repaired. Not required for main line operatios
738.94	No highlighted work	Bridge adequate for 10 MPH			No work required for immediate operations
739.14	Need 10% new ties	Bridge adequate for 10 MPH		7.5" x 7.5" x 9'	12" OC, 7.5" x 7.5" ties, poor ties not grouped
	Floor Beam right side blown gusset plate	Repair as needed		not measured	Schedule repair
	Girgers and Flanges are fair	Description provided, no serious defect			No work needed for immediate operations
	Stringer lateral braces fair / one has 50% loss	No stress cracks or fresh rust evident			No work needed for immediate operations
739.43	Bent 5 - P 1,2,3 have holes & P4 not supporting	Consider repair, Bridge should be adequate			No visual problems noted
739.63	Steel truss inspections to be completed				
	Need 50% new ties				
	Bent 3 - P3,4 minor internal decay, P2 decay				
	Bent 1 - P2,5 internal decay				
740.26	There are no girts between framed bents	Did not appear to have ever been installed			No shift of bents, leaning, or out of plumb observed. No work required to begin operations.

		Bridge adequate for 10 MPH			Siding bent 2 - P1,3,5 Replace before using and Bent 5 cap and P5
740.84	No highlighted work	Bridge adequate for 10 MPH			Approach low
741.36	Bent 5 has three piles with internal decay	B5 - P1,2, 5 need to be repaired or replaced	3	14" x 4'	This size post is what has previously been used. These should be repaired
741.74	Bridge needs a deck replacement	24 of 46 ties bad		not measured	50% of ties are bad, would recommend replacement
	Bent 1 piles 3,4 have internal decay	P4 was only pile identified by sounding			Replace within 2 years
		Bridge adequate for 10 MPH			
742.05	Bent 4 piles 2,3 have internal decay	Bridge adequate for 10 MPH			Monitor, no repair needed to begin operation
	Bent 3 piles 1,3,5 have horizontal splits	regular weathering, P5 rated 3			Schedule repair of pile 5 in 3-5 years, continue to monitor. No repair needed prior to operations.
	Bent 1 piles 2,3 have internal decay	P2 identified rating 3			Schedule repair of pile 2 in 3-5 years, continue to monitor. No repair needed prior to operations.
	Need 25% new ties	36 ties on bridge			not needed for immediate operations. Monitor and schedule repairs to meet FRA standards
742.24	Internal decay at Bent 9 pile 1,2	Bridge adequate for 10 MPH			No required repair to begin operations. Continue to monitor
	Need 25% new ties	102 ties total, rated 3			No required repair to begin operations. Continue to monitor
742.72	Internal decay in almost all exterior stringers	Bridge adequate for 10 MPH			Some spans were inaccessible but no identifiable defects were noted in any but outside stringers. No immediate repair required but continued monitoring and scheduling for maintenance suggested.
	Bents 4,5,6,7 have piles 2,3,4 framed	Seven pile bents			No repair needed
	Joint defect left side at bent 9, joint unsupported	Ties and spikes in place, ties - 3			Plug and respike ties at joint or replace 2 ties
	Bent 10 piles 3,4 have internal decay	Not identified as poor			No repair suggested at this time. Continue to monitor.
	Bent 1 piles 2,3,4 have internal decay	Not identified as poor			No repair suggested at this time. Continue to monitor.
742.95	Panel 2 stringers 4,5 moderate internal decay	Bridge adequate for 10 MPH			3 good stringers per rail, no repair suggested at this time. Continue to monitor.
	Trains probably effectively running on 3 stringers	Not identified, 8 stringer span			Span 3 was inaccessible, span 4 had 2 outside stringers bad but all other spans had 4 good. No repair suggested at this time. Continue to monitor
	Need 50% new guard timber	Ties have not shifted			No repair required, continue to monitor
	Need 25% new ties	61 ties, 11" OC			No repair required, continue to monitor
743.20	Bent 3 pile 4,5 internal decay	Bent 2 - P3 (1), P1,2,5 (3) and cap on B3 (3)	1	12" x 14" x 12'	Bent 2 is in worse condition than Bent 3 - suggest closely monitoring, along with cap on bent 3
		Bridge adequate for 10 MPH			
743.73	Fire damage on bents 6,7,8,9,10, new sway braces	Bents piles are solid, braces charred			No repair needed, continue to monitor
	Need 15% new ties	Bridge adequate for 10 MPH			No repair needed, continue to monitor

743.86	Panel 5 stringer 6 severe internal decay	3 good Stringers under rail on this span			No repair needed for immediate operations, schedule repair within 1 year
	Bent 1 piles 1,2,3,5 internal decay	P1 (0), P3,4 (1), P5 (3) Cap 3	4	14" x 14" x 48" post, 12' cap	Repair immediately and replace cap with posts.
	Bent 2 pile 3 internal decay, P1 internal decay	Not identified as poor			No repair required for immediate operation, continue to monitor
	Panel 1 stringers 4,8 internal decay	Could not identify, 8 stringers per span		18" x 8" stringers - 30' long	3 stringers per rail, banded chords, Inaccessible for testing
	Need 25% ties	Bridge adequate for 10 MPH		7.5 x 7.5 x 9' ties	No repair necessary for immediate operation
743.97	Need 40% new ties	Bridge adequate for 10 MPH		7.5 x 7.5 x 9' ties	No repair necessary for immediate operation, 106 ties on 105' bridge
	Panel 7 stringers 3,8 internal decay	8 stringers per span			3 stringers per rail, no immediate repair required for operations, continue to monitor
	Bent 1 piles 2,3,4 internal decay at top	Pile 3 identified and rated 3			Schedule replacement in 2-3 years, continue to monitor
	Bent 2 piles 1,5 internal decay at top	P1 identified and rated 2			Schedule replacement in 1-2 years, continue to monitor
744.25	No highlighted work	Bridge adequate for 10 MPH			No repairs identified or required for immediate operation
744.44	No highlighted work	Bridge adequate for 10 MPH			No immediate repair required. Would suggest cutting vegetation
744.70	Bent 1 piles 2,5 internal decay at top	Bridge adequate for 10 MPH			Continue to monitor
	Bent 6 piles 4,5 internal decay	Not identified as poor			Continue to monitor
744.85	No highlighted work	Bridge adequate for 10 MPH			No repairs identified or required for immediate operations
748.06	No highlighted work	Bridge adequate for 10 MPH			No repairs identified or required for immediate operations. Cut vegetation
748.44	No highlighted work	Bridge adequate for 10 MPH			No repairs identified or required for immediate operations
748.68	Need 15% new ties	Bridge adequate for 10 MPH			No immediate repair required. Continue to monitor
	Bent 6 piles 3,4 have internal decay	P3 identified and rated 3			No immediate repair required. Schedule for repair in 3-5 years. Continue to monitor
749.89	No highlighted work	Bridge adequate for 10 MPH			No repairs identified for immediate operation.
750.46	No highlighted work	Bridge adequate for 10 MPH			Approaches low, monitor old piles at B69, 70
751.02	Panel 1 stringers 2,5,7,8 severe internal decay	Double bents (every 8'), added stringers			With the number of bents, close spacing, and added stringers, there are still 3 good stringers per rail with high levels of support
	Panel 4 stringers 2,4,5,6,7 internal decay	Could not determine this			With the number of bents, close spacing, and added stringers, there are still 3 good stringers per rail with high levels of support

	Panel 8 stringers 6,8 internal decay	Could not determine this			With the number of bents, close spacing, and added stringers, there are still 3 good stringers per rail with high levels of support
	Panel 11 stringers 1,2,3 internal decay	Could not determine this			With the number of bents, close spacing, and added stringers, there are still 3 good stringers per rail with high levels of support
	Panel 11/12 stringers 5,6 internal decay	Could not determine this			With the number of bents, close spacing, and added stringers, there are still 3 good stringers per rail with high levels of support
	Needs 10% ties	17" OC ties, 7.5 x 9.5 x 9' ties			No tie placement required to operate trains immediately
	Panel 16 stringers 1,5,6 internal decay	Could not determine this			With the number of bents, close spacing, and added stringers, there are still 3 good stringers per rail with high levels of support
	Panel 18 stringers 1,3,7	Could not determine this			With the number of bents, close spacing, and added stringers, there are still 3 good stringers per rail with high levels of support
	Panel 19 stringers 1,3,4,5,6,8 internal decay	Could not determine this			With the number of bents, close spacing, and added stringers, there are still 3 good stringers per rail with high levels of support
		Bridge adequate for 10 MPH			
752.99	Bent 13 piles 1,4,5 internal decay	P1 - (3), P 2,3,4 - (4), P5 - (2)			Headwall bent. Repair at this time is not necessary. Monitor.
	Bent 12 piles 2,5 internal decay at ground	P2 - (3)			No immediate repair required. Continue to monitor.
		Bridge adequate for 10 MPH			
753.48	Bent 1 pile 4,5 internal decay at ground	Decay not confirmed, all piles in B1 - (4)			No immediate repair required. Continue to monitor.
	Need 10% new ties	Bridge adequate for 10 MPH		7.5 x 7.5 x 9'	106 ties 12' OC
753.97	Bottom flange has 20% section loss	Bridge adequate for 10 MPH			No immediate repair suggested. Continue to monitor.
	Bottom flange angles corroded 20%	Substantial material in place			No immediate repair suggested. Continue to monitor.
	Multiply floor beams spaced 2'OC w/corrosion	Substantial material in place			No immediate repair suggested. Continue to monitor.
	Timber deck hole visible from below	Visible hole is in walkway area		2" x 12" x 16'	Clean ballast off walkway, replace board
755.63	No highlighted repairs	Bridge adequate for 10 MPH			No immediate repair required. Continue to monitor
756.19	No highlighted repairs	Bridge adequate for 10 MPH			No immediate repair required. Continue to monitor

756.55	Stringer 8 of panel 2/3 is crushing - replace	Hollow outside stringer	1	8" x 14" x 30'	Schedule to replace stringer 8 or add additional supplemental stringer
	Stringer 6 of panel 2/3 replace in 3-5 years	Bridge adequate for 10 MPH			No immediate repair required, continue to monitor
757.37	Stringer 1 of panels 3/4 crushing at bent 4	Hollow stringer	1	8" x 14" x 30'	Schedule to replace stringer 1 or add supplemental stringer
	Stringer 8 of panel 4/5 needs replacing	Bridge adequate for 10 MPH			No immediate repair recommended, continue to monitor
	Stringer 2 of panels 2/4 needs replacing	Fair, similar to stringer 8			No immediate repair recommended, continue to monitor
761.13	Piles 1,2,& 3 has 40% section loss Bents 2 & 3	Heavy rust corrosion, .3" section good			No immediate repair recommended, Continue to monitor
		Bridge adequate for 10 MPH			
761.53	Bents 2&3 have 40% section loss, all piles	Heavy rust corrosion			No immediate repair recommended, continue to monitor
	Stringer 1/8 of panel 1/2 has internal decay	S1 span 2 has void, 3 good stringers remain			No immediate repair recommended, continue to monitor
	Stringer 8 of panel 3 has internal decay	Bridge adequate for 10 MPH			No immediate repair recommended, continue to monitor
	Stringer 2 of panel 2 has internal decay	No void discovered			No immediate repair recommended, continue to monitor
		Bridge adequate for 10 MPH			
763.55	No highlighted repairs on North approach	Some ties are bad			No immediate repair required, continue to monitor
	Turnspan - waiting for official load rating report	Ties and trackwork are in excellent condition			Depnding on the official load rating report, no outstanding defects were noted that would no allow 10MPH operation
	South approach, Bent 34 - P1,5 internal decay	P1 - schedule 3-4 yrs, P5 - schedule 1-2 yrs.			No immediate repair recommended, continue to monitor and schedule for continuing maintenance
	Bent 29 P2,3 internal decay, Cap internal decay	Schedule for replacement	3	14" x 14" x 16'	Cap appears to be crushing with added stress of bad pilings.
	Not listed	Additionally, B28 appears to be in similar cond.	3	14" x 14" x 16'	Cap appears to be crushing with added stress of bad pilings.