

Table 2 – Overall Priority Ranking for Works on Structure Inventory

Overall Priority Ranking	Structure No	Structure Name	Major Action Required
1	1	Waterhouse Culvert	Install barrier over the structure and the approaches
2	37	Forbes Culvert	Install barrier over the structure and the approaches
3	51	Dowling Bridge	Install barrier along the structure
4	33	Storring Bridge	Remove and replace barrier over the deck and install approach guiderail
5	13	Clements Bridge	Remove and replace barrier along the deck
6	49	Joe Trudeau Bridge	Complete localized deck repair. Replace after Kinlin Bridge and provide continuous monitoring
7	45	Horrigan Bridge	Correct connection between barrier posts and deck
8	47	Otter Creek Bridge	Reinstate blockade barrier on approaches
9	52	Rapids Bridge	Tighten cable barrier over the structure
10	38	Reynolds Culvert	Tighten cable barrier over the structure
11	50	Kinlin Bridge	Replace the structure and provide continuous monitoring
12	12	Rocky Alter Bridge	Replace the structure and provide continuous monitoring
13	40	Ross Bridge	Replace the structure and provide continuous monitoring. Install missing maximum tonnes sign
14	43	Lingham Lake Bridge	Replace corroding floor beam and provide joints at deck ends
15	42	Queensborough Bridge	Complete major rehabilitation and repair barrier system
16	6	Lost Channel Bridge	Remove and replace superstructure and patch and reface substructure
17	30	East Red Bridge	Complete major rehabilitation, reconstruct retaining walls, and remove and install new deck barrier and approach barrier
18	31	West Red Bridge	Complete major rehabilitation, reconstruct retaining walls, and remove and install new deck barrier and approach barrier
19	7	Catons Bridge South Structure	Complete major rehabilitation, reconstruct retaining walls, and provide approach barrier
20	8	Catons Bridge North Structure	Complete major rehabilitation, reconstruct retaining walls, and provide approach barrier
21	27	Downey Rapids North Structure	Complete major rehabilitation to structure and provide approach guiderail
22	15	Maurice Rivers Bridge	Raise deck barrier, replace damaged barrier sections, monitor movement of abutment extensions, rehabilitate moving abutments, and provide approach barrier
23	10	West Branch Bridge	Complete semi-integral conversion, replace strip seals, and patch, waterproof, and pave deck
24	22	Hawkins Bridge	Complete patch repairs, blast clean and paint girders, replace deck barrier, and provide approach barrier
25	23	Sulphide Creek Bridge	Complete patch repairs, blast clean and paint girders, replace deck barrier, and provide approach barrier
26	36	Bradshaw Bridge	Complete major rehabilitation and install approach barrier
27	34	Marrison Bridge	Complete patch repairs to deck, curbs, barrier wall and abutments, and install approach barrier
28	39	Scotchwoman Bridge	Complete major rehabilitation and install approach barrier
29	28	Downey Rapids South Structure	Provide approach barrier and reconstruct retaining walls
30	25	Graham's Bridge	Patch and seal cracks on wearing surface, install approach barrier, replace deck barrier, reinstate embankments, and provide slope protection
31	19	Morton Memorial Bridge	Repoint Mortar in Abutments and Piers and replace perforated truss members

Overall Priority Ranking	Structure No	Structure Name	Major Action Required
32	3	Kerr's Bridge	Seal cracks and parch potholes on deck, clean joints, replace damaged handrail and joint armouring, and reinstate slope protection
33	21	Black Creek Bridge	Provide hazard signs, remove beaver dam, patch potholes and seal asphalt cracks, complete patch repairs, blast clean and paint girders, reinstate embankments, and provide slope protection
34	20	Tweed Bridge	Complete patch repairs to abutment walls, sidewalks, and piers
35	44	Marlbank Bridge	Reinstate embankments, provide slope protection, rehabilitate retaining walls, and provide guiderail end treatment
36	18	Sagonaska Bridge	Reinstate slope protection on embankments and install end treatments
37	2	Marlbank Bridge	Install hazard signs, install barrier over the structure, and complete patch repairs to deck and curbs
38	4	Kennedy's Bridge	Install hazard sign, Reinstate slope protection on embankments, and seal cracks on concrete deck
39	32	Robinson Bridge	Clean deck and joints and seal cracks on concrete deck
40	46	Marlbank Culvert	Reinstate slope protection on embankments
41	9	Maines Bridge	Clean deck, bury end treatment, and replace deteriorated guiderail posts
42	26	Marshe Bridge	Reinstate slope protection on embankments
43	11	Stoco Bridge	Clean deck and replace deteriorated guiderail posts
44	24	Crookston Culvert	Replace damaged hazard signs
45	29	Boundary Bridge	Replace damaged hazard signs, clean bridge deck, and clean abutments at bearing seats
46	41	Gordon Bridge	Correct erosion at approach ends
47	5	Sherry's Bridge	Clean deck as part of regular maintenance
48	17	Bogart Road Bridge	Clean deck as part of regular maintenance
49	14	Doran's Bridge	Clean deck as part of regular maintenance
50	16	Paul Clement Bridge	No actions
51	48	Joe Allore Bridge	Provide continuous monitoring until structure is replaced
52	35	Greatrix Bridge	Provide continuous monitoring until structure is replaced

Table 3 – Structure Rehabilitation Capital Plan

Structure No.	Name	Rehabilitation Item	Rehab. Timeline (Years) and Cost (\$1000)		
			NOW	1 to 5	6 to 10
1	Waterhouse Culvert	Install barrier over the structure	15.00		
		Install structure over the approaches	36.00		
		Install rip-rap on embankments		9.60	
		Install approach rail end treatments	20.00		
2	Marlbank Bridge	Patch repairs to curbs, soffit, and deck top			99.63
		Install barrier over the structure	5.00		
3	Kerr's Bridge	Repair damaged sections of handrail		4.13	
		Joint armoring replacement		5.00	
		Install rip-rap on embankments		14.40	
4	Kennedy's Bridge	Install rip-rap on embankments	9.60		
5	Sherry's Bridge	Install missing end treatment	5.00		
6	Lost Channel Bridge	Install barrier along the approaches	24.00		
		Install approach rail end treatments	20.00		
		Remove and replace deck and beams and Patch/Reface substructure			
				3311.93	
		Install barrier along the deck		147.95	
7	Catons Bridge South Structure	Patch Repairs to abutments, piers, deck top, t-beams, and footings and retaining wall reconstruction			1591.92
		Install barrier along the approaches	24.00		
		Replace deck barrier		88.44	
		Install approach rail end treatments	20.00		
8	Catons Bridge North Structure	Install barrier along the approaches	24.00		
		Patch repairs to abutments, piers, deck top, t-beams and footings, and retaining wall reconstruction			1326.60
		Replace deck barrier		88.00	
		Install approach rail end treatments	20.00		
10	West Branch Bridge	Replace leaking strip seals and armoring	60.00		
		Complete patch repairs to barrier walls			35.00
		Semi-Integral Conversion and associated patch repairs			1026.3
		Patch, waterproof, and pave deck			205.26
		Complete patch repairs to deck soffit			307.89
		Reinstate eroded embankments		2.00	
13	Clements Bridge	Install rip-rap on embankments		9.60	
		Reconstruct wood curbs	0.86		
		Install barrier along the deck	66.00		
		Install barrier along the approaches	24.00		
15	Maurice Rivers Bridge	Install approach rail end treatments	20.00		
		Complete rehabilitation to address movement in abutment extensions			392.00
		Install rip-rap on embankments	2.40		

Structure No.	Name	Rehabilitation Item	Rehab. Timeline (Years) and Cost (\$1000)		
			NOW	1 to 5	6 to 10
18	Sagonaska Bridge	Replace Damaged barrier along the deck	1.50		
		Install rip-rap on embankments	2.40		
		Install approach rail end treatments	15.00		
19	Morton Memorial Bridge	Repoint Mortar in Substructure			399.60
		Replace perforated truss elements		499.50	
20	Tweed Bridge	Patch repairs to sidewalk, piers, and abutment walls			779.33
		Install rip-rap on embankments			14.40
		Replace damaged guiderail posts	1.50		
21	Black Creek Bridge	Patch repairs to abutment walls, wingwalls, soffit, deck top, and footings			623.35
		Install barrier along the approaches	30.00		
		Install approach rail end treatments	20.00		
		Blast Clean and Paint Girders			23.84
		Reinstate Eroded Embankments			2.00
		Install rip-rap on embankments			9.60
22	Hawkins Bridge	Patch repairs to abutment walls, soffit, t-beams, and deck top		646.85	
		Blast Clean and Paint Girders		17.85	
		Replace barrier along the deck		51.48	
		Install barrier along the approaches	36.00		
		Install approach rail end treatments	2.00		
		Reinstate Eroded Embankments		2.00	
23	Sulphide Creek Bridge	Install rip-rap on embankments		9.60	
		Patch repairs to abutment walls, soffit, curbs, t-beams, and deck top		595.80	
		Blast Clean and Paint Girders		27.13	
		Replace Install barrier along the deck		33.44	
		Install barrier along the approaches	36.00		
		Install approach rail end treatments	20.00		
		Reinstate Eroded Embankments		2.00	
		Install rip-rap on embankments		9.60	
24	Crookston Culvert	Replace Deck Drains		3.00	
		Replace End Treatment	5.00		
25	Graham's Bridge	Install barrier along the approaches	42.00		
		Replace deck barrier due to low height	50.00		
		Install approach rail end treatments	20.00		
		Reinstate Eroded Embankments		1.00	
		Install rip-rap on embankments		9.60	
26	Marshe Bridge	Install rip-rap on embankments		9.60	
		Install rip-rap on embankments		9.60	
27	Downey Rapids North Structure	Rehabilitate Retaining Walls	30.00		
		Install rip-rap on embankments		9.60	
		Reinstate Eroded Embankments		2.00	
		Patch repairs to abutment walls, deck soffit, piers, barrier walls, t-beams, and wingwall reconstruction		921.25	

Structure No.	Name	Rehabilitation Item	Rehab. Timeline (Years) and Cost (\$1000)		
			NOW	1 to 5	6 to 10
28	Downey Rapids South Structure	Install barrier along the approaches	24.00		
		Install approach rail end treatments	20.00		
		Reconstruct retaining walls	25.00		
		Install barrier along the approaches	24.00		
		Install approach rail end treatments	20.00		
30	East Red Bridge	Patch repairs to deck top, soffit, t-beams, abutment walls, and retaining wall reconstruction		385.56	
		Install barrier along the approaches	12.00		
		Install approach rail end treatments	10.00		
		Replace deck barrier		37.40	
31	West Red Bridge	Patch repairs to abutments, deck top, soffit, t-beams, and retaining wall reconstruction		638.64	
		Install barrier along the approaches	12.00		
		Install approach rail end treatments	10.00		
		Replace deck barrier		64.24	
33	Storring Bridge	Replace deck barrier	50.60		
		Rehabilitate Retaining Walls		25.00	
		Install barrier along the approaches	24.00		
		Install approach rail end treatments	20.00		
		Patch repairs to abutments, t-beams, deck, and wingwalls		514.65	
34	Marrison Bridge	Install barrier along the approaches	24.00		
		Install approach rail end treatments	20.00		
		Reinstate Eroded Embankments	1.50		
		Patch Repairs to deck top, curbs, barrier walls, and abutments		263.42	
36	Bradshaw Bridge	Install barrier along the approaches	30.00		
		Install approach rail end treatments	20.00		
		Replace barrier along the deck		88.44	
		Patch repairs to piers, soffit, deck top, abutments, and footings		429.64	
37	Forbes Culvert	Install barrier along the approaches	30.00		
		Install approach rail end treatments	20.00		
		Install barrier over culverts	33.00		
		Install rip-rap on embankments		14.40	
		Resurface deck		11.41	
38	Reynolds Culvert	Install rip-rap on embankments		14.40	
		Replace Install barrier along the deck		22.11	
39	Scotchwoman Bridge	Install barrier along the approaches		30.00	
		Install approach rail end treatments		20.00	
		Patch repairs to footings, abutment walls, piers, soffit, curbs, t-beams, and deck top		644.45	
		New Deck, Bearings, repoint & rehab abutments, repoint and reface footings, blast clean and paint beams, and retaining wall reconstruction		894.24	
42	Queensborough Bridge	Reinstate Eroded Embankments		2.00	
		Install rip-rap on embankments		9.60	
		Repair barrier along the approaches		7.20	
		Repair deck barrier		15.40	

Structure No.	Name	Rehabilitation Item	Rehab. Timeline (Years) and Cost (\$1000)		
			NOW	1 to 5	6 to 10
43	Lingham Lake Bridge	Install barrier along the approaches	24.00		
		Install approach rail end treatments	20.00		
		Deck Joint Assembly	12.00		
		Replace Floor Beam	25.00		
44	Marlbank Bridge	Reinstate Eroded Embankments		2.00	
		Install rip-rap on embankments		9.60	
		Rehabilitate Retaining Walls		30.00	
		Install approach rail end treatment		5.00	
45	Horrigan Bridge	Reinstate Eroded Embankments		1.00	
		Install rip-rap on embankments		7.20	
		Blast Clean and Paint Girders			30.00
46	Marlbank Culvert	Install rip-rap on embankments		9.60	
47	Otter Creek Bridge	Approach Blockade Barrier	4.00		
		Remove and replace deck		100.00	
		Replace damaged sections of approach barrier		8.00	
		Install approach rail end treatments		20.00	
		Reface and patch abutments		295.31	
49	Joe Trudeau Bridge	Localized Deck Replacement	3.83		
51	Dowling Bridge	Remove underlying structure		191.36	
		Install barrier along the deck	9.20		
		Reinstate Eroded Embankments		2.00	
		Install rip-rap on embankments		6.00	
		Patch repairs to abutment walls		70.00	

Table 4 – Structure Replacement Capital Plan

Structure No.	Structure Name	Replacement Timeline (Years) and Cost (\$)		
		NOW	1 to 5	6 to 10
12	Rocky Alter Bridge		1,370,375.00	
13	Clements Bridge			1,013,400.00
38	Reynolds Culvert			921,365.00
40	Ross Bridge		1,098,630.00	
49	Joe Trudeau Bridge		1,562,700.00	
50	Kinlin Bridge	1,448,200.00		



Table 5 – Structure Maintenance Needs

Structure No.	Name	Maintenance Need	Cost (\$)
2	Marlbank Bridge	Deck Cleaning	500.00
		Install Hazard Signs	800.00
3	Kerr's Bridge	Crack Sealing	1,200.00
		Asphalt Patching	150.00
		Joint Cleaning	250.00
4	Kennedy's Bridge	Deck Cleaning	500.00
		Crack Sealing (Concrete)	6,000.00
		Install Hazard Signs	200.00
5	Sherry's Bridge	Deck Cleaning	500.00
6	Lost Channel Bridge	Unclog deck drains	200.00
		Deck Cleaning	500.00
		Install correct load posting signs	600.00
9	Maines Bridge	Deck Cleaning	500.00
		Bury End Treatment	150.00
		Replace Barrier Posts	4,500.00
10	West Branch Bridge	Deck Cleaning	500.00
11	Stoco Bridge	Deck Cleaning	500.00
		Post Replacement	1,000.00
12	Rocky Alter Bridge	Continuous Monitoring	
13	Clements Bridge	Hazard Signs	400.00
14	Doran's Bridge	Deck Cleaning	500.00
15	Maurice Rivers Bridge	Continuous Monitoring	
		Deck Cleaning	500.00
		Raise Deck Barrier	2,500.00
17	Bogart Road Bridge	Deck Cleaning	500.00
18	Sagonaska Bridge	Deck Cleaning	500.00
20	Tweed Bridge	Graffiti Cleaning	1,000.00
		Crack Sealing (Asphalt)	750.00
		Pothole Patching	300.00
		Clean deck Drains	200.00
		Hazard Signs	400.00
21	Black Creek Bridge	Hazard Sign	200.00
		Beaver Dam Removal	3,000.00
		Crack Sealing (Asphalt)	750.00
		Pothole Patching	300.00
23	Sulphide Creek Bridge	Tighten Loose Hazard signs	
24	Crookston Culvert	Hazard Signs	400.00
25	Graham's Bridge	Beaver Dam Removal	3,000.00
		Pothole Patching (Asphalt)	750.00
		Crack Sealing (Asphalt)	300.00
27	Downey Rapids North Structure	Pothole Patching (Gravel)	100.00
28	Downey Rapids South Structure	Deck Cleaning	500.00
		Pothole Patching	100.00
		Hazard Signs	400.00
29	Boundary Bridge	Clean abutments at bearing seats	500.00
		Deck Cleaning	250.00
		Hazard signs	400.00
32	Robinson Bridge	Deck Cleaning	500.00
		Joint Cleaning	250.00
		Crack Sealing (Concrete)	8,500.00
33	Storing Bridge	Hazard Signs	600.00
		Pothole Patching	150.00
34	Marrison Bridge	Deck Cleaning	500.00
35	Greatrix Bridge	Continuous Monitoring	
36	Bradshaw Bridge	Load Posting Signs	600.00
		Remove tree	400.00
37	Forbes Culvert	Raise Hazard Signs	
		Remove Beaver Dam	3,000.00
		Patch Approach Depressions	300.00
38	Reynolds Culvert	Tighten Cable Guiderail	2,000.00
		Hazard Signs	800.00
		Beaver Dam Removal	3,000.00
39	Scotchwoman Bridge	Clean deck drains	200.00
		Tree Removal	400.00
		Resurface Approaches	5,400.00
40	Ross Bridge	Install hazard sign and Load posting sign	500.00
41	Gordon Bridge	Continuous Monitoring	
		Erosion Control (Approaches)	100.00
42	Queensborough Bridge	Resurface Approaches	6,900.00
		Bridge Deck Cleaning	350.00
43	Lingham Lake Bridge	Erosion Control (Approaches)	200.00

Structure No.	Name	Maintenance Need	Cost (\$)
		Hazard Signs	800.00
		Deck Cleaning	500.00
45	Horrigan Bridge	Deck Cleaning	500.00
		Connect Deck Barrier to Fascia	3,500.00
		Hazard Signs	600.00
48	Joe Allore Bridge	Continuous Monitoring	
49	Joe Trudeau Bridge	Remove shrubbery	500.00
50	Kinlin Bridge	Continuous Monitoring	
		Deck Cleaning	500.00
51	Dowling Bridge	Remove Beaver Dams	6,000.00
		Hazard Signs	400.00
		Correct Guiderail tilt and Height	5,200.00
52	Rapids Bridge	Tighten Cable Guiderail	1,600.00

Table 6 – Structure Investigation Needs

Structure no.	Name	Investigation	Timeline (Years) and Cost (\$)		
			NOW	1 to 5	6 to 10
1	Waterhouse Culvert	Underwater Investigation		6,000.00	
13	Clements Bridge	Underwater Investigation		6,000.00	
37	Forbes Culvert	Underwater Investigation		6,000.00	
47	Otter Creek Bridge	Structural Evaluation		15,000.00	
6	Lost Channel Bridge	Structural Evaluation		8,000	
7	Catons Bridge South Structure	Structural Evaluation		5,000	
8	Catons Bridge North Structure	Structural Evaluation		5,000	
12	Rocky Alter Bridge	Structural Evaluation		5,000	
27	Downey Rapids Bridge South Structure	Structural Evaluation		5,000	
28	Downey Rapids Bridge North Structure	Structural Evaluation		5,000	
30	East Red Bridge	Structural Evaluation		5,000	
31	West Red Bridge	Structural Evaluation		5,000	
33	Storring Bridge	Structural Evaluation		5,000	
35	Greatrix Bridge	Structural Evaluation		5,000	
36	Bradshaw Bridge	Structural Evaluation		5,000	
39	Scotchwoman Bridge	Structural Evaluation		5,000	
40	Ross Bridge	Structural Evaluation		5,000	
42	Queensborough Bridge	Structural Evaluation		5,000	
48	Joe Allore Bridge	Structural Evaluation		5,000	
49	Joe Trudeau bridge	Structural Evaluation		5,000	
50	Kinlin Bridge	Structural Evaluation		5,000	
51	Dowling Bridge	Structural Evaluation		5,000	