

APPENDIX D-2

Bridges & Culverts

Site No.	Name	Bridge/Culvert	Type	Road Class	Posted Speed	Year Constructed/Rehabilitated	# of Spans	Total Length (m)	Width (m)	Existing Surface Area (m2)	Historical Cost (\$)	Replacement Cost (\$000)	BCI	Health & Safety Risk	% Useful Life Remaining (based on age)	Condition/Probability of Failure (1 = good/not likely, 5 = poor/likely)	Consequence of Failure (1 = low, 5 = high)	Inst Year	Useful Life	Risk	Timing of First Replacement- Based on Risk	Timing of First Replacement (based on life cycle)	Timing of First Replacement (based on risk)	Timing of Second Replacement (life cycle)
63350	Long Swamp Road Bridge	Bridge	I-beam or Girders	Local	80	1940	1	11.9	4.6	55	16655	273.7	10.9		0%	5	4	1940	75	20	2015 to 2018	2015	2020	2095
63560	Petworth Road Culvert	Bridge	Rigid Frame, Vertical Legs	Local	80	1965	1	3.8	7.3	28	24037	138.7	26.5		32%	5	4	1965	75	20	2015 to 2018	2040	2023	2098
63250	Buck Bay Road Bridge	Bridge	Rigid Frame, Vertical Legs	Local	80	2008	1	4.2	5.6	24	38840	117.6	34.1		89%	5	4	2008	75	20	2015 to 2018	2083	2083	
63280	Fish Creek Bridge	Bridge	T-Beam	Local	80	1927	1	6.7	5.2	35	7357	174.2	37.2		0%	4	4	1927	75	16	2015 to 2018	2002	2018	2093
63290	Eagle Creek Culvert	Culvert	Rigid Frame, Vertical Legs	Local	80	1945	1	3.9	5.4	21	11080	105.3	29.8		0%	5	3	1945	50	15	2019 to 2023	1995	2018	2068
63360	Shales Road Culvert	Culvert	Frame, Inclined Legs	Local	80	1955	1	3.0	5.5	17	7563	82.5	33.8		0%	5	3	1955	50	15	2019 to 2023	2005	2030	2080
64005	Culvert #5	Culvert	Hybrid	Local	60	1960	1	1.2	16.6	20		99.6	17.6		0%	5	3	1960	50	15	2019 to 2023	2010	2022	2072
63420	Boss Marsh Culvert	Culvert	Round Culvert	Local	80	1981	1	31.6	3.1	98	233361	489.8	28.5		30%	5	3	1981	50	15	2019 to 2023	2031	2018	2068
63230	Bunker Hill Road North culvert	Culvert	Rectangle Culvert	Local	80	1960	1	6.1	6.1	37	22160	186.1	16.0		25%	5	3	1960	75	15	2019 to 2023	2035	2019	2094
64009	Culvert #9 (North Shore)	Culvert	Hybrid	Local	60	1960	1	0.9	8.2	8		37.9	35.1		0%	4	3	1960	50	12	2019 to 2023	2010	2020	2070
63040	Buck Lake Culvert	Culvert	Round Culvert	Arterial	80	1970	1	3.1	17.2	52	43572	262.3	59.1		8%	3	4	1970	50	12	2019 to 2023	2020	2020	2070
64008	Hinchenbrooke Road Culvert	Culvert	Rectangle Culvert	Local	80	1970	1	2.8	13.1	37	13542	183.4	41.2		8%	4	3	1970	50	12	2019 to 2023	2020	2023	2073
64006	Culvert #6	Culvert	Rectangle Culvert	Arterial	80	1982	1	1.5	1.3	19	18662	93.8	49.1		32%	3	4	1982	50	12	2019 to 2023	2032	2020	2070
63510	Clair Road Culvert	Bridge	Rigid Frame, Vertical Legs	Local	80	1965	1	3.7	4.8	18	11195	88.8	45.0		32%	3	4	1965	75	12	2019 to 2023	2040	2022	2097
63060	Burago Lane Culvert	Culvert	Round Culvert	Local	80	1993	2	9.3	3.8	35	69678	176.7	36.0		54%	3	3	1993	50	12	2019 to 2023	2043	2018	2068
63170	Road 38 Bridge #19	Bridge	Rigid Frame, Vertical Legs	Arterial	80	1996	1	28.1	4.2	118	60609	590.1	68.9		73%	2	5	1996	75	10	2019 to 2023	2071	2022	2097
63210	Bedford Mills Road Culvert	Culvert	Rigid Frame, Vertical Legs	Local	80	1940	1	3.6	8.0	29	16857	144.0	56.6		0%	3	3	1940	50	9	based on life cycle	1990	2020	2070
63180	Devil Lake Culvert	Culvert	Round Culvert	Collector	60	1965	1	3.6	24.8	89	63754	446.4	51.1		0%	3	3	1965	50	9	based on life cycle	2015	2023	2073
64011	Colebrooke Rd. East Culvert	Culvert	Rigid Frame, Vertical Legs	Local	50	1965	1	7.5	1.7	13		63.8	50.3		0%	3	3	1965	50	9	based on life cycle	2015	2019	2069
63430	Stafford Lane Culvert	Culvert	Arch Culvert	Local	80	1967	1	3.1	6.9	21	19542	105.2	53.9		2%	3	3	1967	50	9	based on life cycle	2017	2019	2069
63090	Little Long Lake Culvert	Culvert	Rigid Frame, Vertical Legs	Local	60	1992	1	4.8	15.4	74	44904	369.6	51.7		52%	3	3	1992	50	9	based on life cycle	2042	2021	2071
63130	Culvert Under Road 38	Culvert	Rectangular Culvert	Arterial	80	1965	1	22.2	4.8	107	71606	532.8	70.6		0%	2	4	1965	50	8	based on life cycle	2015	2023	2073
63120	Bracken Culvert	Culvert	Arch Culvert	Arterial	80	1966	1	21.0	4.4	92	81215	462.0	69.8		33%	2	4	1966	75	8	based on life cycle	2041	2019	2094
64002	Morland-Dixon Culvert	Culvert	Round Culvert	Arterial	80	1970	1	33.0	1.2	40	14621	198.0	65.0		8%	2	4	1970	50	8	based on life cycle	2048	2045	2095
63330	First Lake Road Bridge	Bridge	Rigid Frame, Vertical Legs	Local	80	1995	1	8.3	10.0	83	279066	415.0	75.0		72%	2	4	1995	75	8	based on life cycle	2070	2070	
63370	Railton Road Bridge	Bridge	Rigid Frame, Vertical Legs	Local	50	1928	1	4.9	6.1	30	7370	149.5	72.0		0%	2	4	1928	75	8	based on life cycle	2070	2067	
63270	Buck Bay Bridge	Bridge	Rigid Frame, Vertical Legs	Local	80	1965	1	6.7	9.1	61	21164	304.9	73.0		32%	2	4	1965	75	8	based on life cycle	2071	2068	
63460	Buck Bay Road Bridge	Bridge	Rigid Frame, Vertical Legs	Local	80	1960	1	3.8	5.1	19	10103	96.9	73.8		25%	2	4	1960	75	8	based on life cycle	2071	2068	
63080	Sydenham Lake Bridge and Dam	Bridge	Rectangle Culvert	Collector	50	1978	2	6.4	12.2	78	157069	390.4	74.5		49%	2	4	1978	75	8	based on life cycle	2072	2053	
63070	Rutledge Road Bridge	Bridge	Rigid Frame, Vertical Legs	Collector	50	2008	1	6.3	14.2	89	251377	444.7	73.7		89%	2	4	2008	75	8	based on life cycle	2083	2083	
63380	Church Street Culve	Bridge	Rigid Frame, Vertical Legs	Local	50	2013	1	6.1	7.9	48	11130	241.0	66.0		96%	2	4	2013	75	8	based on life cycle	2088	2088	
64003	Culvert #3	Culvert	Rigid Frame, Vertical Legs	Local	80	1962	1	3.0	6.0	18	11661	90.0	64.9		0%	2	3	1962	50	6	based on life cycle	2048	2062	2112
63140	Depot Creek Culvert	Culvert	Collector	80	1980	1	27.5	6.7	184	295812	921.3	74.7		28%	2	3	1980	50	6	based on life cycle	2053	2055	2105	
63320	Watson Road Culvert	Culvert	Local	80	1981	1	11.2	3.6	40	99885	201.6	74.2		30%	2	3	1981	50	6	based on life cycle	2053	2056	2106	
63010	Battersea Bridge	Bridge	Rigid Frame, Vertical Legs	Arterial	50	1979	1	8.2	11.2	92	148430	459.2	75.0		51%	1	5	1979	75	5	based on life cycle	2054	2054	
63190	Bedford Mills Bridge	Bridge	T-Beam	Arterial	80	1997	1	19.1	9.9	189	117766	945.5	76.0		75%	1	5	1997	75	5	based on life cycle	2072	2072	
63200	Sunbury Road Canal Overpass	Bridge	I-beam or Girders	Arterial	80	2005	3	73.5	11.7	859	1132096	4297.4	75.0		85%	1	5	2005	75	5	based on life cycle	2080	2080	
63020	Loughborough Lake Bridge	Bridge	I-beam or Girders	Arterial	80	2010	3	43.6	12.5	545	1500000	2725.0	75.0		92%	1	5	2010	75	5	based on life cycle	2085	2085	
63540	Hardwood Creek (Verona Bridge)	Bridge	I-beam or Girders	Arterial	60	2013	1	12.3	15.5	191	103487	953.3	96.0		96%	1	5	2013	75	5	based on life cycle	2088	2088	
63561	Petworth Bridge	Bridge	Through Truss	Arterial	80	2013	1	23.3	4.2	98	21482	489.3	96.0		96%	1	5	2013	75	5	based on life cycle	2088	2088	
63110	Murvale Creek Culvert	Culvert	Arch Culvert	Arterial	80	1993	1	29.6	3.7	108	139100	541.7	75.0		54%	1	4	1993	50	4	based on life cycle	2043	2068	
63030	Bear Creek Culvert	Culvert	Rectangular Culvert	Arterial	80	2009	1	2.8	37.4	105	609168	523.6	86.0		86%	1	4	2009	50	4	based on life cycle	2059	2059	2109
63440	Opinion Lake Bridge	Bridge	I-beam or Girders	Local	80	2001	1	12.0	5.7	68	8578	342.0	80.0		80%	1	4	2001	75	4	based on life cycle	2076	2076	
63400	Mitchell Creek Bridge	Bridge	Earth Filled Arch	Local	10	2007	1	9.8	7.5	74	526798	367.5	85.7		88%	1	4	2007	75	4	based on life cycle	2082	2082	
63300	12th Concession Bridge	Bridge	Rigid Frame, Vertical Legs	Local	80	2009	1	4.0	6.4	26	115000	128.6	89.8		91%	1	4	2009	75	4	based on life cycle	2084	2084	
63550	Maynard Structure	Bridge	I-beam or Girders	Local	80	2012	1	27.0	9.3	251	354213	1255.5	75.0		95%	1	4	2012	75	4	based on life cycle	2087	2087	
63260	Green Bay Road Culvert	Bridge	Rigid Frame, Vertical Legs	Local	80	2013	1	4.6	5.5	25	23683	125.7	85.0		96%	1	4	2013	75	4	based on life cycle	2088	2088	
63160	High Falls Bridge (Rock Lake Bridge)	Bridge	Rectangular Culvert	Collector	80	2014	2	11.0	7.9	87	876000	434.5	92.0		97%	1	4	2014	75	4	based on life cycle	2089	2089	
64001	Perth Road Culvert	Culvert	Arch Culvert	Arterial	80	2014	1	23.0	1.7	38	14011	189.8	97.0		97%	1	4	2014	75	4	based on life cycle	2089	2089	
64007	Culvert #7	Culvert	Rectangle Culvert	Arterial	60	2016	1	2.4	18.0	43	290000	216.0	100.0		100%	1	4	2016	100	4	based on life cycle	2116	2116	
63340	Craig Creek Culvert	Culvert	Arch Culvert	Local	80	1998	1	22.0	3.1	68	191194	337.7	75.0		64%	1	3	1998	50	3	based on life cycle	2048	2073	
63050	Sydenham Road Culvert Bridge	Culvert	Rigid Frame, Vertical Legs	Local	80	1980	1	22.3	4.9	109	192631	546.4	75.0		34%	3	3	1980	50	3	based on life cycle	2054	2055	2105
63150	Bellrock Rd. Culvert	Culvert	Rectangular Culvert	Collector	80	1980	1	20.3	3.0	61	107360	304.5	75.0		28%	1	3	1980	50	3	based on life cycle	2054	2055	2105
63310	Colebrook Road Culvert	Culvert	Arch Culvert	Local	50	1980	1	11.6	3.7	43	94579	214.6	75.0		28%	1	3	1980	50	3	based on life cycle	2054	2055	2105
63410	Milburn Creek Culvert	Culvert	Local	80	1980	1	19.5	5.5	107	236337	536.3	75.0		28%	1	3	1980	50	3	based on life cycle	2054	2055	2105	
64004	Latimer Road Culvert	Culvert	Rectangle Culvert	Local	80	1960	1	9.6	3.0	28	16870	141.6	81.6		0%	1	3	1960	50	3	based on life cycle	2057	2054	2104
63240	Bunker Hill Road	Culvert	CSP	Local	80	2012	1	2.1	2.1	4	26366	21.0	95.0		92%	1	3	2012	50	3	based on life cycle	2062	2087	
64010	Culvert #10 (James Wilson)	Culvert	Rigid Frame, Vertical Legs	Local	80	2013	1	3.0	4.1	12	233000	61.5	90.0		94%	1	3	2013	50	3	based on life cycle	2063	2088	
63220	Massasuga Road Culvert	Culvert	Rigid Frame, Vertical Legs	Local	80	2015	1	12.0	2.4	29	239000	144.0	99.0		98%	1	3	2015	50	3	based on life cycle	2065	2090	
63100	Otter Lake Culvert	Culvert	Arch Culvert	Collector	80	2016	1																	