

BUILDING SCIENCES INC.

CONSULTING ENGINEERS

RESERVE FUND STUDY

FOR

**METROPOLITAN TORONTO CONDOMINIUM
CORPORATION No. 600**

LOCATED

AT

**256 JARVIS STREET
TORONTO, ONTARIO**

**PREPARED
FOR**

THE BOARD OF DIRECTORS

APRIL 2003

**PREPARED
BY**

BUILDING SCIENCES INC.

PROJECT No: 02459

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Table 2 (Con't) - Annual Outlay (Period 2022-2031)

Item No.	Description of Common Element Items	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1	Concrete and Precast Wall Panels	\$34,000									
2	Exterior Caulking										
3	Exterior Architectural Coating										
4	Window System Repairs	\$0					\$0				
5	Window System Replacement										
6	Window Weatherstripping				\$0						
7	Lobby and Vestibule Glazing/Doors										
8	Metal Grilles										
9	Inverted Roofing System-Phase 1			\$135,000							
10	Inverted Roofing System-Phase 2			\$20,000							
11	Inverted Roofing System-Phase 3	\$30,000									
12	Inverted Roofing System-Phase 4			\$10,000							
13	Inverted Roofing System Repairs		\$5,000					\$5,000			
14	Metal Soffit Finishes										
15	Roof Anchors									\$15,000	
16	Suspended Slab Concrete Repairs										
17	Suspended Slab Waterproofing System										
18	Roof Slab Concrete Repairs					\$10,000					
19	Roof Slab Waterproofing System					\$55,000					
20	Parking Garage Repairs				\$20,000						
21	Parking Garage Painting							\$20,000			
22	Parking Garage Overhead Door									\$8,000	
23	Parking Garage Ramp Heating Cables										
24	Corridor Carpeting and Wall Finishes			\$100,000							
25	Decorative Mouldings/Finishes-Suite Doors										
26	Flooring/Wall/Ceiling Finishes-Phase 1										
27	Flooring/Wall/Ceiling Finishes-Phase 2										
28	Interior Painting	\$15,000									
29	Suspended Ceiling Tiles										
30	Interior Elevator Finishes				\$20,000						
31	Miscellaneous Furnishings and Appliances										
32	Superintendent's Suite	\$0					\$0				
33	Saunas										
34	Hot Tub										
35	Suite Entrance Doors										
36	Common Area Doors										
37	Roof Top Deck and Planters										
38	Asphalt Pavement Repairs		\$0					\$0			
39	Asphalt Pavement Replacement(Grade)					\$20,000					
40	Asphalt Pavement Replacement(Roof Slab)					\$8,000					
41	Concrete Pavement										
42	Irrigation System										
43	Metal Fencing										
44	Concrete Curbs and Sidewalk										
45	Interlocking Pavement										
46	Landscaping and Miscellaneous Items							\$0			
47	Sanitary and Storm Sewer System										
48	Domestic Water Heating Boilers									\$25,000	
49	Heating Boilers										
50	Building System Pumps						\$15,000				
51	Domestic Hot Water Recirculation System				\$12,000						
52	Domestic Hot Water Storage Tank										
53	HVAC Unit										
54	Domestic Water Pipes and Risers-Phase 1										
55	Domestic Water Pipes and Risers-Phase 2										
56	Fire Protection System										
57	Make-Up Air, Vent. & Exhaust Sys.-Phase 1										\$30,000
58	Make-Up Air, Vent. & Exhaust Sys.-Phase 2										
59	Plumbing Systems										
60	Heating/Cooling Units-Common Areas									\$5,000	
61	Garbage Chute										
62	Garbage Compactor										
63	Hot Tub Equipment				\$7,000						
64	Elevator Upgrades										
65	Mechanical Controls										
66	Power Supply and Switch Gear										
67	Electrical Distribution										
68	Panels and Sub-Circuits										
69	Interior Lighting-Building Tower										
70	Interior Lighting-Parking Garage	\$10,000									
71	Exterior Lighting										
72	Fire Alarm System-Phase 1										
73	Fire Alarm System-Phase 2										\$70,000
74	Emergency Generator										
75	Common Area Camera System							\$20,000			
76	Common Area Security System										
77	Enterphone System										
78	Pipe Tracing System						\$5,000				
79	Building Structure	\$15,000					\$15,000				
80	Contingency			\$15,000					\$15,000		
Total Outlay Per Year, Present Value		\$104,000	\$5,000	\$280,000	\$47,000	\$105,000	\$35,000	\$45,000	\$15,000	\$53,000	\$100,000
Total Outlay Per Year, Future Value		\$154,539	\$7,578	\$432,874	\$74,114	\$168,886	\$57,421	\$75,304	\$25,603	\$92,274	\$177,584

Table 2 (Con't) - Annual Outlay (Period 2012-2021)

Item No.	Description of Common Element Items	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1	Concrete and Precast Wall Panels										
2	Exterior Caulking						\$80,000				
3	Exterior Architectural Coating						\$112,000				
4	Window System Repairs	\$0					\$0				
5	Window System Replacement									\$280,000	
6	Window Weatherstripping										
7	Lobby and Vestibule Glazing/Doors				\$10,000						
8	Metal Grilles						\$4,000				
9	Inverted Roofing System-Phase 1										
10	Inverted Roofing System-Phase 2										
11	Inverted Roofing System-Phase 3										
12	Inverted Roofing System-Phase 4										
13	Inverted Roofing System Repairs		\$5,000					\$5,000			
14	Metal Soffit Finishes				\$18,000						
15	Roof Anchors										
16	Suspended Slab Concrete Repairs								\$30,000		
17	Suspended Slab Waterproofing System								\$75,000		
18	Roof Slab Concrete Repairs										
19	Roof Slab Waterproofing System										
20	Parking Garage Repairs							\$20,000			
21	Parking Garage Painting							\$20,000			
22	Parking Garage Overhead Door									\$8,000	
23	Parking Garage Ramp Heating Cables						\$35,000				
24	Corridor Carpeting and Wall Finishes	\$100,000									\$20,000
25	Decorative Mouldings/Finishes-Suite Doors										
26	Flooring/Wall/Ceiling Finishes-Phase 1						\$30,000				
27	Flooring/Wall/Ceiling Finishes-Phase 2				\$30,000						
28	Interior Painting	\$15,000									
29	Suspended Ceiling Tiles			\$6,000							
30	Interior Elevator Finishes										
31	Miscellaneous Furnishings and Appliances	\$20,000									
32	Superintendent's Suite	\$0					\$0				
33	Saunas	\$14,000									
34	Hot Tub										
35	Suite Entrance Doors						\$15,000				
36	Common Area Doors					\$15,000					
37	Roof Top Deck and Planters				\$20,000						
38	Asphalt Pavement Repairs		\$0					\$0			
39	Asphalt Pavement Replacement(Grade)										
40	Asphalt Pavement Replacement(Roof Slab)										
41	Concrete Pavement										
42	Irrigation System					\$6,000					
43	Metal Fencing				\$3,000						
44	Concrete Curbs and Sidewalk										
45	Interlocking Pavement										
46	Landscaping and Miscellaneous Items		\$0								
47	Sanitary and Storm Sewer System					\$25,000					
48	Domestic Water Heating Boilers										
49	Heating Boilers										
50	Building System Pumps						\$15,000				
51	Domestic Hot Water Recirculation System										
52	Domestic Hot Water Storage Tank										
53	HVAC Unit										
54	Domestic Water Pipes and Risers-Phase 1										
55	Domestic Water Pipes and Risers-Phase 2										
56	Fire Protection System										
57	Make-Up Air, Vent. & Exhaust Sys.-Phase 1										
58	Make-Up Air, Vent. & Exhaust Sys.-Phase 2										
59	Plumbing Systems	\$10,000									
60	Heating/Cooling Units-Common Areas									\$5,000	
61	Garbage Chute				\$10,000						
62	Garbage Compactor										
63	Hot Tub Equipment										
64	Elevator Upgrades				\$120,000						
65	Mechanical Controls			\$28,000							
66	Power Supply and Switch Gear				\$50,000						
67	Electrical Distribution	\$25,000									
68	Panels and Sub-Circuits	\$35,000									
69	Interior Lighting-Building Tower				\$15,000						
70	Interior Lighting-Parking Garage										
71	Exterior Lighting										
72	Fire Alarm System-Phase 1							\$25,000			
73	Fire Alarm System-Phase 2										
74	Emergency Generator									\$25,000	
75	Common Area Camera System		\$20,000								
76	Common Area Security System				\$40,000						
77	Enterphone System										
78	Pipe Tracing System						\$5,000				
79	Building Structure	\$15,000					\$15,000				
80	Contingency			\$15,000					\$15,000		
Total Outlay Per Year, Present Value		\$234,000	\$25,000	\$49,000	\$316,000	\$46,000	\$311,000	\$70,000	\$120,000	\$318,000	\$20,000
Total Outlay Per Year, Future Value		\$285,245	\$31,084	\$62,144	\$408,780	\$60,696	\$418,565	\$96,095	\$168,029	\$454,182	\$29,136

Table 2 - Annual Outlay (Period 2002-2011)

Item No.	Description of Common Element Items	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1	Concrete and Precast Wall Panels										
2	Exterior Caulking										
3	Exterior Architectural Coating										
4	Window System Repairs						\$0				
5	Window System Replacement										
6	Window Weatherstripping				\$0						
7	Lobby and Vestibule Glazing/Doors										
8	Metal Grilles										
9	Inverted Roofing System-Phase 1			\$135,000							
10	Inverted Roofing System-Phase 2			\$20,000							
11	Inverted Roofing System-Phase 3	\$30,000									
12	Inverted Roofing System-Phase 4			\$10,000							
13	Inverted Roofing System Repairs		\$5,000					\$5,000			
14	Metal Soffit Finishes										
15	Roof Anchors									\$15,000	
16	Suspended Slab Concrete Repairs			\$30,000							
17	Suspended Slab Waterproofing System			\$75,000							
18	Roof Slab Concrete Repairs					\$10,000					
19	Roof Slab Waterproofing System					\$55,000					
20	Parking Garage Repairs			\$20,000							\$20,000
21	Parking Garage Painting							\$20,000			
22	Parking Garage Overhead Door									\$8,000	
23	Parking Garage Ramp Heating Cables	\$35,000									
24	Corridor Carpeting and Wall Finishes										
25	Decorative Mouldings/Finishes-Suite Doors										
26	Flooring/Wall/Ceiling Finishes-Phase 1										
27	Flooring/Wall/Ceiling Finishes-Phase 2										
28	Interior Painting										
29	Interior Elevator Finishes									\$20,000	
30	Interior Elevator Finishes									\$20,000	
31	Miscellaneous Furnishings and Appliances										
32	Superintendent's Suite						\$0				
33	Saunas										
34	Hot Tub						\$15,000				
35	Suite Entrance Doors										
36	Common Area Doors										
37	Roof Top Deck and Planters		\$0					\$0			
38	Asphalt Pavement Repairs										
39	Asphalt Pavement Replacement(Grade)					\$20,000					
40	Asphalt Pavement Replacement(Roof Slab)					\$8,000					
41	Concrete Pavement	\$5,000									
42	Irrigation System										
43	Metal Fencing										
44	Concrete Curbs and Sidewalk					\$5,000					
45	Interlocking Pavement									\$30,000	
46	Landscaping and Miscellaneous Items										
47	Sanitary and Storm Sewer System				\$25,000						
48	Domestic Water Heating Boilers							\$35,000			
49	Heating Boilers										
50	Building System Pumps						\$15,000				
51	Domestic Hot Water Recirculation System									\$12,000	
52	Domestic Hot Water Storage Tank									\$25,000	
53	HVAC Unit							\$95,000			
54	Domestic Water Pipes and Risers-Phase 1						\$50,000				
55	Domestic Water Pipes and Risers-Phase 2								\$50,000		
56	Fire Protection System									\$30,000	
57	Make-Up Air, Vent. & Exhaust Sys.-Phase 1					\$30,000					
58	Make-Up Air, Vent. & Exhaust Sys.-Phase 2								\$30,000		
59	Plumbing Systems										
60	Heating/Cooling Units-Common Areas									\$5,000	
61	Garbage Chute										
62	Garbage Compactor									\$15,000	
63	Hot Tub Equipment									\$7,000	
64	Elevator Upgrades										
65	Mechanical Controls										
66	Power Supply and Switch Gear										
67	Electrical Distribution										
68	Panels and Sub-Circuits										
69	Interior Lighting-Building Tower										
70	Interior Lighting-Parking Garage										
71	Exterior Lighting									\$18,000	
72	Fire Alarm System-Phase 1										
73	Fire Alarm System-Phase 2					\$70,000					
74	Emergency Generator										
75	Common Area Camera System										
76	Common Area Security System										
77	Enterphone System									\$18,000	
78	Pipe Tracing System										
79	Building Structure						\$15,000				
80	Contingency			\$15,000					\$15,000		
Total Outlay Per Year, Present Value		\$70,000	\$5,000	\$305,000	\$25,000	\$198,000	\$100,000	\$155,000	\$95,000	\$211,000	\$32,000
Total Outlay Per Year, Future Value		\$70,000	\$5,100	\$317,322	\$26,530	\$214,322	\$110,408	\$174,555	\$109,125	\$247,220	\$38,243

Table 4

Financial Analysis-Cash Flow 2 (Based on Proposed Level of Funding)

Assumed Interest Rate: 4.0%

Assumed Inflation Rate: 2.0%

Recommended Annual Contribution for 2004: \$90,000Reserve Fund Balance at December 31, 2001: \$148,354

Year	Opening Balance	Annual Contribution	Expenses Future Value	Interest Earned	Closing Balance	
					Future Value	Present Value
2002	\$148,354	\$45,000	\$70,000	\$5,434	\$128,788	\$128,788
2003	\$175,802	\$76,430	\$5,100	\$8,459	\$255,591	\$250,579
2004	\$255,591	\$90,000	\$317,322	\$5,677	\$33,946	\$32,628
2005	\$33,946	\$108,000	\$26,530	\$2,987	\$118,403	\$111,574
2006	\$118,403	\$129,000	\$214,322	\$3,030	\$36,111	\$33,361
2007	\$36,111	\$153,000	\$110,408	\$2,296	\$80,999	\$73,363
2008	\$80,999	\$172,000	\$174,555	\$3,189	\$81,633	\$72,488
2009	\$81,633	\$177,160	\$109,125	\$4,626	\$154,294	\$134,322
2010	\$154,294	\$182,475	\$247,220	\$4,877	\$94,425	\$80,591
2011	\$94,425	\$187,949	\$38,243	\$6,771	\$250,903	\$209,944
2012	\$250,903	\$193,588	\$285,245	\$8,203	\$167,448	\$137,366
2013	\$167,448	\$199,395	\$31,084	\$10,064	\$345,823	\$278,133
2014	\$345,823	\$205,377	\$62,144	\$16,698	\$505,754	\$398,784
2015	\$505,754	\$211,538	\$408,780	\$16,285	\$324,798	\$251,079
2016	\$324,798	\$217,884	\$60,696	\$16,136	\$498,122	\$377,514
2017	\$498,122	\$224,421	\$418,565	\$16,042	\$320,020	\$237,780
2018	\$320,020	\$231,154	\$96,095	\$15,502	\$470,581	\$342,792
2019	\$470,581	\$238,088	\$168,029	\$20,224	\$560,864	\$400,548
2020	\$560,864	\$245,231	\$454,182	\$18,256	\$370,168	\$259,177
2021	\$370,168	\$252,588	\$29,136	\$19,276	\$612,896	\$420,710
2022	\$612,896	\$260,165	\$154,539	\$26,628	\$745,151	\$501,465
2023	\$745,151	\$267,970	\$7,578	\$35,014	\$1,040,557	\$686,534
2024	\$1,040,557	\$276,010	\$432,874	\$38,485	\$922,177	\$596,500
2025	\$922,177	\$284,290	\$74,114	\$41,091	\$1,173,443	\$744,146
2026	\$1,173,443	\$292,818	\$168,886	\$49,416	\$1,346,792	\$837,330
2027	\$1,346,792	\$301,603	\$57,421	\$58,755	\$1,649,729	\$1,005,561
2028	\$1,649,729	\$310,651	\$75,304	\$70,696	\$1,955,773	\$1,168,729
2029	\$1,955,773	\$319,971	\$25,603	\$84,118	\$2,334,258	\$1,367,553
2030	\$2,334,258	\$329,570	\$92,274	\$98,116	\$2,669,670	\$1,533,391
2031	\$2,669,670	\$339,457	\$177,584	\$110,024	\$2,941,567	\$1,656,432