213vA040A

October 18, 2013

The Owners, Strata Plan LMS 712
c/o FirstService Residential
Suite 400 – 1281 West Georgia Street
Vancouver, BC V6E 3J7

Attn: Ms. Sylvia Brewer, Strata Manager E-mail: Sylvia.brewer@fsresidential.com

Dear Council,

Re: 888 Beach - 888 Beach Avenue, 1500 Hornby Street, and 1501 Howe Street, Vancouver
Final 2013 Depreciation Report

Please find enclosed a copy of our Depreciation Report for your Strata. New *Strata Property Act* Regulations came into effect on December 13, 2011, which govern requirements for depreciation reports.

HALSALL AND DEPRECIATION REPORTS

As per the *Strata Property Act* Regulations, we confirm our qualifications as follows:

- Halsall is a firm of engineers and consultants who has prepared depreciation-type reports across the country since the early '90s; our team is familiar with all building systems, their failure mechanisms and required maintenance, repair and replacement needs; and we have completed over 150 such reports in the Lower Mainland for Stratas since 2004. The authors of this report (Kevin Grasty and Ted Denniston) have collectively in excess of 25 years' experience in delivering such reports.
- Halsall carries $2,000,000 in errors and omissions insurance.
- At the time of writing this report, no employee of Halsall carries any ownership in this Strata, thereby solely providing independent 3rd party consulting services.

REPORT REVISIONS

This final report incorporates the changes requested by the Council and Building Manager during our meetings September 17 and 23, 2013.

NEAR TERM EXPENDITURES

Listed below are those projects included in the next three years of our report (2014-2016) with a value greater than $100,000 (present cost). The following commentary outlines the basis of the estimated project timing included in our report, and some of the factors to consider when planning for this work:

- **Replace Flat Roofing and Terraces - $441,098 in each of 2014, 2015 and 2016**
  The timing of this project is based on the recommendation by RDH to replace the remaining sections of older roofing within the next few years. This work can be deferred for a few years

by completing local roofing repairs to address leaks, but will likely result in increased localized water ingress.

Given the large number of roof areas this project includes, the work could be approached by replacing only the areas with a large number of leaks, and defer replacement of the roof areas which are performing well (effectively spreading out the work). However, spreading out work generally decreases economies of scale and may result in a greater total cost.

- Replace Townhouse Front Entrance Doors - $163,800 in 2015
  The timing of this item is based primarily on aesthetics. This work can likely be delayed for several years without seeing a significant negative impact on performance.

- Double Glazing Replacement Allowance - $107,100 in 2015
  This item allows for replacement of insulating glass units (IGUs) which are expected to fail each year, at a rate based on replacements in the last few years. This work can be deferred based on owners' tolerance for fogged window units.

- Full Lobby and Lounge Refurbishment - $210,000 in 2015
  The timing of this work is based primarily on aesthetics and can be adjusted based on owners' expectations.

- Replace Domestic Distribution Piping and Valves (Beach Tower) - $1,014,031 in 2015
  The timing of this project is based roughly on the reported rate of leaks. This work can be deferred by completing local pipe repairs as leaks develop. Deferring the work would be dependent on owners' tolerance for the associated periodic disruptions (e.g. noise, drywall repairs, water shut-downs). This work may also become more or less urgent based on the future performance (i.e. rate of leaks) of the piping.

- Replace Domestic Distribution Piping and Valves (Ocean Tower) - $502,913 in 2015
  Same as Beach Tower piping.

- Replace Domestic Distribution Piping and Valves (Garden Tower – Remaining Piping) - $140,909 in 2016
  Same as Beach Tower piping.

- Replace Domestic Distribution Piping and Valves (Townhouse Blocks) - $142,890 in 2016
  Same as Beach Tower piping.

- Refurbish Elevator Cab Interiors - $122,850 in 2016
  The timing of this work is primarily based on aesthetics and can be adjusted based on owners' expectations.

- Elevator System Modernization - $1,108,800 in 2016
  The timing of this work is as recommended by ThyssenKrupp, your elevator service contractor. Given the absence of any significant system issues to date, you may be able to defer system modernization by a few years, but increased service calls and downtime are likely to occur. The extent to which deferral is reasonable will depend on the ongoing performance of the elevator systems and owners' tolerance for disruptions in service.

FUNDING PLAN

Our analysis is summarized on the Contingency Reserve Fund Expenditure and Cash Flow tables within the Financial Analysis section of this report. Funding scenarios have been provided to give you the range of options available for funding future capital expenses. We have found that an increase over current contribution levels is required in order to reduce, or prevent, special levies. The Council could select from one of these options, or suggest an alternate cash flow plan that better suits their needs.

The funding analysis assumed the opening balance of the Contingency Reserve Fund (CRF) on January 1, 2013 to be $618,972 (by combining the CRF balance of $408,191 and the Structural Fund balance of $210,781), and that your combined Contingency Reserve / Structural Fund contribution will be $280,000 for the 2013 fiscal year.

Should there be any questions, please feel free to contact us at (604) 924-5575.

Yours very truly,
HALSALL ASSOCIATES
A Parsons Brinckerhoff Company

Ed Watson, B.Sc.(Eng.)
Project Associate

Kevin Grasty, P.Eng., LEED AP
Project Manager

Attachment: Final 2013 Depreciation Report

2013 DEPRECIATION REPORT FOR

888 Beach
888 Beach Avenue, 1500 Hornby Street,
and 1501 Howe Street
Vancouver, British Columbia

October 4, 2013

Prepared For:

The Owners, Strata Plan LMS 712
c/o FirstService Residential
400-1281 W. Georgia St., Vancouver, BC V7P 3N4
Contact: Ms. Syliva Brewer, Strata Manager

Prepared By:

Halsall Associates
Suite 112, 930 West 1st Street
North Vancouver, BC V7P 3N4
Contact: Mr. Kevin Grasty, P.Eng., LEED AP

Project Number: 213vA040A

Halsall

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General Description

The facilities at 888 Beach include three highrise towers (Beach Tower with 33 stories and 158 suites, Ocean Tower with 18 stories and 58 suites, Garden Tower with 9 stories and 13 suites) as well as 26 townhouse units and four commercial units. There is a four-storey underground parking garage. Amenities include the lobbies, corridors, various common rooms, a swimming pool, exercise room, sauna, and six elevators. The complex was constructed in about 1993.

We understand this Strata does not operate as separate sections, therefore we have provided one report and one set of financial analyses for the entire complex. We also understand there are no shared facilities or cost sharing agreements in place with any adjacent properties.

The Strata fiscal year end in December 31st.

Financial Analysis

A well planned Depreciation Report requires that contributions to the Contingency Reserve Fund be calculated on the basis of expected repair, or replacement costs and life expectancies of the common assets. The attached Projected Expenditure Table summarizes the timing and costs of the projects included in this report.

The *Strata Property Act* establishes regulations for minimum contributions into the Contingency Reserve Fund based on the operating fund. We have provided a range of funding options for your consideration and presume you will decide whether or not to adopt one of the scenarios presented, or set out another funding plan that better suits your needs.

We have included the following funding scenarios for consideration:

- Scenario 1 shows the special levies that would be required each year if you continue to contribute at your current contribution level.

- Scenario 2 shows the ideal contribution level that would be required so that all expenses are paid evenly by all owners regardless of whether they own a unit early or late in the life of the buildings. This scenario shows the contribution level required so that it increases annually at the rate of inflation, and no special levies are required.

- Scenario 3 shows another approach to reaching the “ideal,” inflation-matched contribution level shown in Scenario 2, but rather than achieving this level in one year, the necessary increase is phased-in over several years. This scenario also includes special levies required in the first few years to cover larger expenditures in those years. This gives current unit owners time to react to the increase, rather than taking the increase all in one year. Many find this disclosure more reasonable than imposing a sudden increase.

888 Beach, 888 Beach Avenue, 1500 Hornby Street, and 1501 Howe Street, Vancouver, British Columbia, Canada

Projected Expenditures

Item	Description	Class	Status	Present Cost	First Occur.	Cycle	No. Occur.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1	**STRUCTURE**																					
1.2.1	Balcony Condition Survey	3	Forecasted	$14,175	2016	10					$15,043										$18,337	
1.2.2	Repair Concrete Balconies (Ocean Tower)	3	Forecasted	$374,888	2017	99	1					$405,791										
1.2.3	Repair Concrete Balconies (Ocean Tower - Future Occurrence)	3	Forecasted	$155,684	2037	20																
1.2.4	Replace Balcony Guards and Rebuild Parapet Guard Walls (Ocean Tower)	3	Forecasted	$479,052	2017	40						$518,541										
1.2.5	Repair Concrete Balconies (Beach Tower)	3	Forecasted	$352,182	2033	20																
1.2.6	Replace Balcony Guards and Rebuild Parapet Guard Walls (Beach Tower)	3	Forecasted	$997,336	2053	40																
1.2.7	Repair Concrete Balconies (Garden Tower and California Walkways)	3	Forecasted	$119,902	2020	20	1								$137,730							
1.4.1	Repair Garage Suspended Slab Waterproofing (Drive Aisles)	3	Forecasted	$132,549	2020	24									$152,257							
1.4.2	Re-Waterproof Garage Suspended Slabs (Drive Aisles and Parking Stalls)	3	Forecasted	$565,000	2032	24																
1.4.3	Replace Entrance Ramp Toppings and Waterproofing	3	Forecasted	$253,190	2023	30												$308,637				
1.4.4	Garage Roof Deck Waterproofing Repair Allowance	3	Forecasted	$112,000	2023	40												$136,527				
1.4.5	Re-Waterproof Garage Roof Deck	3	Forecasted	$1,465,340	2033	40																
2	**BUILDING ENVELOPE**																					
2.1.1	Building Enclosure Maintenance and Renewal (Phase 3)	3	Forecasted	$1,988,000	2013			$1,988,000														
2.1.2	Repair Glass Block Wall at Beach and Garden Towers	3	Forecasted	$10,500	2014				$10,710													
2.1.3	Recoat Stucco Wall at Beach Tower Mechanical Penthouse	3	Forecasted	$5,250	2015					$5,462												
2.1.4	Wall Condition Evaluation	3	Forecasted	$18,900	2020	10									$21,710							
2.1.5	Repair Wall Leakage – Allowance	3	Forecasted	$23,625	2020	3									$27,138			$28,799			$30,561	
2.1.6	Repair Masonry Walls	3	Forecasted	$181,037	2022	20											$216,356					
2.1.7	Building Enclosure Renewal (phased, 33% per occurrence)	3	Forecasted	$2,752,869	2033	2	3															
2.2.1	Double Glazing Replacement Allowance	3	Forecasted	$107,100	2015	15				$111,427												
2.2.2	Repaint Entrance Canopies	3	Forecasted	$12,705	2023	20												$15,487				
2.3.1	Replace Main Commercial and Residential Entrance Doors	3	Forecasted	$48,300	2033	30																
2.3.2	Replace Townhouse Front Entrance Doors	3	Forecasted	$163,800	2015	30				$170,418												
2.3.3	Replace Townhouse Courtyard Doors	3	Forecasted	$52,500	2033	25																
2.3.4	Install Power Door Operators	3	Forecasted	$20,475	2014				$20,884													
2.4.1	Replace Flat Roofing and Terraces (2013 planned work)	3	Forecasted	$383,250	2013	99	1	$383,250														
2.4.2	Replace Flat Roofing and Terraces (remaining original roofing - 33% per cycle)	3	Forecasted	$441,099	2014	1	3		$449,921	$458,919	$468,098											
2.4.3	Repair Flat Roofing and Terraces (all areas)	3	Forecasted	$97,673	2030	25																
2.4.4	Replace Flat Roofing and Terraces (future replacement - all areas)	3	Forecasted	$1,953,452	2040	25																
2.4.5	Repair Active Leakage at Unit 403	3	Forecasted	$45,000	2013			$45,000														
2.4.6	Repair Active Leakage at Unit T4	3	Forecasted	$12,500	2013			$12,500														
3	**FIRE SAFETY**																					
3.1.1	Replace Pressurization Fans	3	Forecasted	$36,750	2023	30												$44,798				
3.2.1	Replace Fire Alarm Panel	3	Forecasted	$231,000	2020	20									$265,346							
3.2.2	Replace Fire Alarm System Wiring and Devices	3	Forecasted	$598,290	2040	40																
3.3.1	Suppression Systems Repair Allowance	3	Forecasted	$10,500	2038	10																
3.3.2	Replace Fire Pump	3	Forecasted	$46,200	2028	35																
3.4.1	Replace Generator and Transfer Switch	3	Forecasted	$340,200	2029	35																

888 Beach, 888 Beach Avenue, 1500 Hornby Street, and 1501 Howe Street, Vancouver, British Columbia, Canada

Projected Expenditures

Item	Description	Class	Status	Present Cost	First Occur.	Cycle	No. Occur.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
3	**FIRE SAFETY**																					
3.4.2	Replace Generator Fuel Storage Tank	3	Forecasted	$12,600	2019	25								$14,190								
4	**FINISHES, FURNITURE AND EQUIPMENT**																					
4.1.1	Repair Water-Damaged Lobby Finishes (Beach Tower)	3	Forecasted	$20,000	2014				$20,400													
4.1.2	Full Lobby and Lounge Renovation	3	Forecasted	$210,000	2015	20				$218,484												
4.2.1	Renovate Corridors (all towers)	3	Forecasted	$608,644	2019	12								$685,432								
4.2.2	Replace Suite Door Hardware	3	Forecasted	$105,798	2031	24																
4.2.3	Renovate Parking Level Elevator Lobbies	3	Forecasted	$69,797	2030	36																
4.2.4	Refurbish Elevator Cab Interiors (all cabs)	3	Forecasted	$122,850	2016	20					$130,369											
4.3.1	Refurbish Pool Room (excluding pool shell and furnishings)	3	Forecasted	$74,682	2018	20							$82,455									
4.3.2	Refinish Pool Shell	3	Forecasted	$9,009	2018	20							$9,947									
4.3.3	Refurbish Change Rooms	3	Forecasted	$30,744	2016	25					$32,626											
4.3.4	Refinish Sauna	3	Forecasted	$7,350	2021	7										$8,612						
4.3.5	Refurbish Exercise Room	3	Forecasted	$14,000	2028	15																
4.3.6	Exercise Equipment Replacement Allowance	3	Forecasted	$16,687	2018	5							$18,424					$20,341				
4.4.1	Refurbish Management Office	3	Forecasted	$15,435	2020	15									$17,730							
4.4.2	Refinish Stairwells/Service Areas	3	Forecasted	$93,702	2020	20									$107,634							
4.4.3	Refurbish Garbage Chute Rooms	3	Forecasted	$29,400	2025	30														$37,286		
5	**SITE**																					
6	**HVAC**																					
7	**PLUMBING**																					
7.1.1	Replace Domestic Hot Water Storage Tanks (2013 planned work - two tanks in Garden Tower)	3	Forecasted	$17,000	2013			$17,000														
7.1.2	Replace Domestic Hot Water Storage Tanks (phased, three tanks per occurrence)	3	Forecasted	$25,500	2014	2			$26,010		$27,061		$28,154		$29,291		$30,475		$31,706		$32,987	
7.2.1	Investigation - Domestic Water Treatment System	3	Forecasted	$5,250	2014				$5,355													
7.2.2	Install/Replace Back-flow Preventers	3	Forecasted	$16,800	2016	25					$17,828											
7.2.3	Replace Domestic Distribution Piping and Valves (Garden Tower - Remaining Piping)	3	Forecasted	$140,909	2016						$149,534											
7.2.4	Replace Domestic Distribution Piping and Valves (Beach Tower)	3	Forecasted	$1,014,031	2015	25				$1,054,998												
7.2.5	Replace Domestic Distribution Piping and Valves (Ocean Tower)	3	Forecasted	$502,913	2015	25				$523,231												
7.2.6	Replace Domestic Distribution Piping and Valves (Townhouse Blocks)	3	Forecasted	$142,890	2016	25					$151,636											
7.2.7	Replace Domestic Distribution Piping and Valves (Garden Tower - Future Replacement)	3	Forecasted	$154,196	2041	25																
8	**ELECTRICAL**																					
8.1.1	Replace Main Switchgear	3	Forecasted	$281,820	2035	40																
8.1.2	Replace Air-Cooled Transformers	3	Forecasted	$453,915	2035	40																
8.1.3	Replace Main Electrical Switchgear Units	3	Forecasted	$281,820	2035	40																
8.2.1	Replace Garage Lighting	3	Forecasted	$114,440	2020	25									$131,456							
8.2.2	Replace Exterior Lighting	3	Forecasted	$32,524	2020	25									$37,360							
8.2.3	Replace Stairwell and Service Room Lighting	3	Forecasted	$39,060	2020	25									$44,868							
9	**CONVEYANCE**																					
9.1.1	Install Elevator Machine Guards	3	Forecasted	$47,250	2015					$49,159												
9.1.2	Install Elevator Car Top Railings	3	Forecasted	$22,050	2015					$22,941												

888 Beach, 888 Beach Avenue, 1500 Hornby Street, and 1501 Howe Street, Vancouver, British Columbia, Canada

Projected Expenditures

Item	Description	Class	Status	Present Cost	First Occur.	Cycle	No. Occur.	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
9	**CONVEYANCE**																					
9.1.3	Elevator System Modernization	3	Forecasted	$1,108,800	2016	25					$1,176,667											
9.1.4	Replace Lift	3	Forecasted	$35,280	2020	25									$40,526							
10	**MISCELLANEOUS**																					
10.1.1	Replace Tractor	3	Forecasted	$15,750	2020	25									$18,092							
10.2.1	Upgrade CCTV System	3	Forecasted	$17,850	2014				$18,207													
10.2.2	Replace Closed Circuit Television System	3	Forecasted	$21,840	2020	15									$25,087							
10.2.3	Replace Enterphone System	3	Forecasted	$44,100	2023	15												$53,758				
10.2.4	Replace Card Access System	3	Forecasted	$84,000	2025	15														$106,532		
10.3.1	Interest Adjustment to 2016	3	Forecasted	$12,000	2013	1	4	$12,000	$12,240	$12,485	$12,734											
10.4.1	Depreciation Report Update	3	Forecasted	$13,178	2016	3					$13,985			$14,841			$15,749			$16,713		
Total Projected Expenditures								$2,457,750	$563,727	$2,627,523	$2,195,581	$924,332	$138,979	$714,462	$1,056,225	$8,612	$262,580	$608,348	$31,706	$160,532	$81,885	$0

888 Beach, 888 Beach Avenue, 1500 Hornby Street, and 1501 Howe Street, Vancouver, British Columbia, Canada

Projected Expenditures

Item	Description	Class	Status	Present Cost	First Occur.	Cycle	No. Occur.	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
1	**STRUCTURE**																					
1.2.1	Balcony Condition Survey	3	Forecasted	$14,175	2016	10										$22,353						
1.2.2	Repair Concrete Balconies (Ocean Tower)	3	Forecasted	$374,888	2017	99	1															
1.2.3	Repair Concrete Balconies (Ocean Tower - Future Occurrence)	3	Forecasted	$155,684	2037	20											$250,408					
1.2.4	Replace Balcony Guards and Rebuild Parapet Guard Walls (Ocean Tower)	3	Forecasted	$479,052	2017	40																
1.2.5	Repair Concrete Balconies (Beach Tower)	3	Forecasted	$352,182	2033	20							$523,324									
1.2.6	Replace Balcony Guards and Rebuild Parapet Guard Walls (Beach Tower)	3	Forecasted	$997,336	2053	40																
1.2.7	Repair Concrete Balconies (Garden Tower and California Walkways)	3	Forecasted	$119,902	2020	20	1															
1.4.1	Repair Garage Suspended Slab Waterproofing (Drive Aisles)	3	Forecasted	$132,549	2020	24																
1.4.2	Re-Waterproof Garage Suspended Slabs (Drive Aisles and Parking Stalls)	3	Forecasted	$565,000	2032	24						$823,098										
1.4.3	Replace Entrance Ramp Toppings and Waterproofing	3	Forecasted	$253,190	2023	30																
1.4.4	Garage Roof Deck Waterproofing Repair Allowance	3	Forecasted	$112,000	2023	40																
1.4.5	Re-Waterproof Garage Roof Deck	3	Forecasted	$1,465,340	2033	40							$2,177,418									
2	**BUILDING ENVELOPE**																					
2.1.1	Building Enclosure Maintenance and Renewal (Phase 3)	3	Forecasted	$1,988,000	2013																	
2.1.2	Repair Glass Block Wall at Beach and Garden Towers	3	Forecasted	$10,500	2014																	
2.1.3	Recoat Stucco Wall at Beach Tower Mechanical Penthouse	3	Forecasted	$5,250	2015																	
2.1.4	Wall Condition Evaluation	3	Forecasted	$18,900	2020	10				$26,465										$32,260		
2.1.5	Repair Wall Leakage – Allowance	3	Forecasted	$23,625	2020	3			$32,432			$34,417			$36,524			$38,759			$41,132	
2.1.6	Repair Masonry Walls	3	Forecasted	$181,037	2022	20																$321,494
2.1.7	Building Enclosure Renewal (phased, 33% per occurrence)	3	Forecasted	$2,752,869	2033	2	3						$4,090,619		$4,255,880		$4,427,817					
2.2.1	Double Glazing Replacement Allowance	3	Forecasted	$107,100	2015	15				$149,966												
2.2.2	Repaint Entrance Canopies	3	Forecasted	$12,705	2023	20																
2.3.1	Replace Main Commercial and Residential Entrance Doors	3	Forecasted	$48,300	2033	30							$71,771									
2.3.2	Replace Townhouse Front Entrance Doors	3	Forecasted	$163,800	2015	30																
2.3.3	Replace Townhouse Courtyard Doors	3	Forecasted	$52,500	2033	25							$78,012									
2.3.4	Install Power Door Operators	3	Forecasted	$20,475	2014																	
2.4.1	Replace Flat Roofing and Terraces (2013 planned work)	3	Forecasted	$383,250	2013	99	1															
2.4.2	Replace Flat Roofing and Terraces (remaining original roofing - 33% per cycle)	3	Forecasted	$441,099	2014	1	3															
2.4.3	Repair Flat Roofing and Terraces (all areas)	3	Forecasted	$97,673	2030	25				$136,766												
2.4.4	Replace Flat Roofing and Terraces (future replacement - all areas)	3	Forecasted	$1,953,452	2040	25														$3,334,321		
2.4.5	Repair Active Leakage at Unit 403	3	Forecasted	$45,000	2013																	
2.4.6	Repair Active Leakage at Unit T4	3	Forecasted	$12,500	2013																	
3	**FIRE SAFETY**																					
3.1.1	Replace Pressurization Fans	3	Forecasted	$36,750	2023	30																
3.2.1	Replace Fire Alarm Panel	3	Forecasted	$231,000	2020	20														$394,291		
3.2.2	Replace Fire Alarm System Wiring and Devices	3	Forecasted	$598,290	2040	40														$1,021,213		
3.3.1	Suppression Systems Repair Allowance	3	Forecasted	$10,500	2038	10												$17,226				
3.3.2	Replace Fire Pump	3	Forecasted	$46,200	2028	35		$62,179														
3.4.1	Replace Generator and Transfer Switch	3	Forecasted	$340,200	2029	35			$467,022													

888 Beach, 888 Beach Avenue, 1500 Hornby Street, and 1501 Howe Street, Vancouver, British Columbia, Canada — **Projected Expenditures**

Item	Description	Class	Status	Present Cost	First Occur.	Cycle	No. Occur.	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
3	**FIRE SAFETY**																					
3.4.2	Replace Generator Fuel Storage Tank	3	Forecasted	$12,600	2019	25																
4	**FINISHES, FURNITURE AND EQUIPMENT**																					
4.1.1	Repair Water-Damaged Lobby Finishes (Beach Tower)	3	Forecasted	$20,000	2014																	
4.1.2	Full Lobby and Lounge Renovation	3	Forecasted	$210,000	2015	20									$324,656							
4.2.1	Renovate Corridors (all towers)	3	Forecasted	$608,644	2019	12					$869,294											
4.2.2	Replace Suite Door Hardware	3	Forecasted	$105,798	2031	24					$151,105											
4.2.3	Renovate Parking Level Elevator Lobbies	3	Forecasted	$69,797	2030	36				$97,733												
4.2.4	Refurbish Elevator Cab Interiors (all cabs)	3	Forecasted	$122,850	2016	20										$193,722						
4.3.1	Refurbish Pool Room (excluding pool shell and furnishings)	3	Forecasted	$74,682	2018	20												$122,524				
4.3.2	Refinish Pool Shell	3	Forecasted	$9,009	2018	20												$14,780				
4.3.3	Refurbish Change Rooms	3	Forecasted	$30,744	2016	25															$53,526	
4.3.4	Refinish Sauna	3	Forecasted	$7,350	2021	7		$9,892							$11,363							$13,052
4.3.5	Refurbish Exercise Room	3	Forecasted	$14,000	2028	15		$18,842														
4.3.6	Exercise Equipment Replacement Allowance	3	Forecasted	$16,687	2018	5		$22,459					$24,796					$27,377				
4.4.1	Refurbish Management Office	3	Forecasted	$15,435	2020	15									$23,862							
4.4.2	Refinish Stairwells/Service Areas	3	Forecasted	$93,702	2020	20														$159,939		
4.4.3	Refurbish Garbage Chute Rooms	3	Forecasted	$29,400	2025	30																
5	**SITE**																					
6	**HVAC**																					
7	**PLUMBING**																					
7.1.1	Replace Domestic Hot Water Storage Tanks (2013 planned work - two tanks in Garden Tower)	3	Forecasted	$17,000	2013																	
7.1.2	Replace Domestic Hot Water Storage Tanks (phased, three tanks per occurrence)	3	Forecasted	$25,500	2014	2		$34,320		$35,706		$37,149		$38,649		$40,211		$41,835		$43,526		$45,284
7.2.1	Investigation - Domestic Water Treatment System	3	Forecasted	$5,250	2014																	
7.2.2	Install/Replace Back-flow Preventers	3	Forecasted	$16,800	2016	25															$29,249	
7.2.3	Replace Domestic Distribution Piping and Valves (Garden Tower - Remaining Piping)	3	Forecasted	$140,909	2016																	
7.2.4	Replace Domestic Distribution Piping and Valves (Beach Tower)	3	Forecasted	$1,014,031	2015	25														$1,730,836		
7.2.5	Replace Domestic Distribution Piping and Valves (Ocean Tower)	3	Forecasted	$502,913	2015	25														$858,415		
7.2.6	Replace Domestic Distribution Piping and Valves (Townhouse Blocks)	3	Forecasted	$142,890	2016	25															$248,775	
7.2.7	Replace Domestic Distribution Piping and Valves (Garden Tower - Future Replacement)	3	Forecasted	$154,196	2041	25															$268,459	
8	**ELECTRICAL**																					
8.1.1	Replace Main Switchgear	3	Forecasted	$281,820	2035	40									$435,688							
8.1.2	Replace Air-Cooled Transformers	3	Forecasted	$453,915	2035	40									$701,743							
8.1.3	Replace Main Electrical Switchgear Units	3	Forecasted	$281,820	2035	40									$435,688							
8.2.1	Replace Garage Lighting	3	Forecasted	$114,440	2020	25																
8.2.2	Replace Exterior Lighting	3	Forecasted	$32,524	2020	25																
8.2.3	Replace Stairwell and Service Room Lighting	3	Forecasted	$39,060	2020	25																
9	**CONVEYANCE**																					
9.1.1	Install Elevator Machine Guards	3	Forecasted	$47,250	2015																	
9.1.2	Install Elevator Car Top Railings	3	Forecasted	$22,050	2015																	

888 Beach, 888 Beach Avenue, 1500 Hornby Street, and 1501 Howe Street, Vancouver, British Columbia, Canada

Projected Expenditures

Item	Description	Class	Status	Present Cost	First Occur.	Cycle	No. Occur.	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
9	**CONVEYANCE**																					
9.1.3	Elevator System Modernization	3	Forecasted	$1,108,800	2016	25															$1,930,448	
9.1.4	Replace Lift	3	Forecasted	$35,280	2020	25																
10	**MISCELLANEOUS**																					
10.1.1	Replace Tractor	3	Forecasted	$15,750	2020	25																
10.2.1	Upgrade CCTV System	3	Forecasted	$17,850	2014																	
10.2.2	Replace Closed Circuit Television System	3	Forecasted	$21,840	2020	15									$33,764							
10.2.3	Replace Enterphone System	3	Forecasted	$44,100	2023	15												$72,351				
10.2.4	Replace Card Access System	3	Forecasted	$84,000	2025	15														$143,378		
10.3.1	Interest Adjustment to 2016	3	Forecasted	$12,000	2013	1	4															
10.4.1	Depreciation Report Update	3	Forecasted	$13,178	2016	3		$17,736			$18,821			$19,973			$21,196			$22,493		
Total Projected Expenditures								$165,427	$499,454	$446,635	$1,039,221	$894,664	$6,965,940	$58,623	$6,259,168	$256,286	$4,699,421	$334,853	$0	$7,740,672	$2,571,589	$379,830

Scenario 1 - Current Contribution and Special Levies

Assumptions:

Opening Balance of the Reserve Fund:	**$618,972**	Interest Rate Earned:	**3%**
Current Annual Contribution:	**$280,000**	Expenditure Inflation Rate:	**2%**
Minimum Reserve Fund Balance:	**$300,000**	Minimum Balance Inflation Rate:	**2%**
First Critical Year:	**N/A**	Number of Units:	**259**
Second Critical Year:	**N/A**	Fiscal Year End:	**Dec 31**

Results:

Year	Opening Balance	Recommended Annual Contributions		Estimated Inflation Adjusted Expenditure	Estimated Interest Earned	Recommended Annual Contribution Increase			Closing Balance
		Base	Other			Amount	Percentage (%)	per Unit per Month	
2013	$618,972	$280,000	$1,988,000	$2,457,750	$15,723				$444,945
2014	$444,945	$285,600	$130,006	$563,727	$9,176	$5,600	2	$1.80	$306,000
2015	$306,000	$291,312	$2,342,331	$2,627,523	$0	$5,712	2	$1.84	$312,120
2016	$312,120	$297,138	$1,904,685	$2,195,581	$0	$5,826	2	$1.87	$318,362
2017	$318,362	$303,081	$627,386	$924,332	$232	$5,943	2	$1.91	$324,730
2018	$324,730	$309,143		$138,979	$12,294	$6,062	2	$1.95	$507,188
2019	$507,188	$315,325	$220,569	$714,462	$9,229	$6,183	2	$1.99	$337,849
2020	$337,849	$321,632	$741,350	$1,056,225	$0	$6,307	2	$2.03	$344,606
2021	$344,606	$328,065		$8,612	$15,130	$6,433	2	$2.07	$679,188
2022	$679,188	$334,626		$262,580	$21,456	$6,561	2	$2.11	$772,691
2023	$772,691	$341,318		$608,348	$19,175	$6,693	2	$2.15	$524,836
2024	$524,836	$348,145		$31,706	$20,492	$6,826	2	$2.20	$861,767
2025	$861,767	$355,108		$160,532	$28,772	$6,963	2	$2.24	$1,085,114
2026	$1,085,114	$362,210		$81,885	$36,758	$7,102	2	$2.29	$1,402,197
2027	$1,402,197	$369,454		$0	$47,608	$7,244	2	$2.33	$1,819,259
2028	$1,819,259	$376,843		$165,427	$57,749	$7,389	2	$2.38	$2,088,424
2029	$2,088,424	$384,380		$499,454	$60,927	$7,537	2	$2.43	$2,034,277
2030	$2,034,277	$392,068		$446,635	$60,210	$7,688	2	$2.47	$2,039,919
2031	$2,039,919	$399,909		$1,039,221	$51,608	$7,841	2	$2.52	$1,452,215
2032	$1,452,215	$407,907		$894,664	$36,265	$7,998	2	$2.57	$1,001,723
2033	$1,001,723	$416,065	$5,993,936	$6,965,940	$0	$8,158	2	$2.62	$445,784
2034	$445,784	$424,387		$58,623	$18,860	$8,321	2	$2.68	$830,408
2035	$830,408	$432,874	$5,459,680	$6,259,168	$0	$8,488	2	$2.73	$463,794
2036	$463,794	$441,532		$256,286	$16,693	$8,657	2	$2.79	$665,732
2037	$665,732	$450,362	$4,065,858	$4,699,421	$0	$8,831	2	$2.84	$482,531
2038	$482,531	$459,370		$334,853	$16,344	$9,007	2	$2.90	$623,392
2039	$623,392	$468,557		$0	$25,730	$9,187	2	$2.96	$1,117,679
2040	$1,117,679	$477,928	$6,657,131	$7,740,672	$0	$9,371	2	$3.02	$512,066
2041	$512,066	$487,487	$2,094,344	$2,571,589	$0	$9,559	2	$3.08	$522,307
2042	$522,307	$497,237		$379,830	$17,430	$9,750	2	$3.14	$657,144

Description:
This scenario demonstrates the special levies that would be required each year if you continue to contribute at your current contribution level.

Scenario 2 - Inflation Matched, No Special Levies

Assumptions:

Opening Balance of the Reserve Fund:	**$618,972**	Interest Rate Earned:	**3%**
Current Annual Contribution:	**$280,000**	Expenditure Inflation Rate:	**2%**
Minimum Reserve Fund Balance:	**$300,000**	Minimum Balance Inflation Rate:	**2%**
First Critical Year:	**2016**	Number of Units:	**259**
Second Critical Year:	**2041**	Fiscal Year End:	**Dec 31**

Results:

Year	Opening Balance	Recommended Annual Contributions		Estimated Inflation Adjusted Expenditure	Estimated Interest Earned	Recommended Annual Contribution Increase			Closing Balance
		Base	Other			Amount	Percentage (%)	per Unit per Month	
2013	$618,972	$280,000	$1,988,000	$2,457,750	$15,723				$444,945
2014	$444,945	$1,692,512		$563,727	$30,280	$1,412,512	504.5	$454.48	$1,604,010
2015	$1,604,010	$1,726,362		$2,627,523	$34,603	$33,850	2	$10.89	$737,451
2016	$737,451	$1,760,889		$2,195,581	$15,603	$34,527	2	$11.11	$318,363
2017	$318,363	$977,517		$924,332	$10,349	-$783,372	-44.5	-$252.05	$381,897
2018	$381,897	$997,067		$138,979	$24,328	$19,550	2	$6.29	$1,264,313
2019	$1,264,313	$1,017,009		$714,462	$42,468	$19,941	2	$6.42	$1,609,328
2020	$1,609,328	$1,037,349		$1,056,225	$47,997	$20,340	2	$6.54	$1,638,448
2021	$1,638,448	$1,058,096		$8,612	$64,896	$20,747	2	$6.68	$2,752,828
2022	$2,752,828	$1,079,258		$262,580	$94,835	$21,162	2	$6.81	$3,664,341
2023	$3,664,341	$1,100,843		$608,348	$117,318	$21,585	2	$6.94	$4,274,154
2024	$4,274,154	$1,122,860		$31,706	$144,592	$22,017	2	$7.08	$5,509,900
2025	$5,509,900	$1,145,317		$160,532	$180,069	$22,457	2	$7.23	$6,674,754
2026	$6,674,754	$1,168,223		$81,885	$216,538	$22,906	2	$7.37	$7,977,630
2027	$7,977,630	$1,191,588		$0	$257,203	$23,364	2	$7.52	$9,426,420
2028	$9,426,420	$1,215,420		$165,427	$298,543	$23,832	2	$7.67	$10,774,956
2029	$10,774,956	$1,239,728		$499,454	$334,353	$24,308	2	$7.82	$11,849,582
2030	$11,849,582	$1,264,523		$446,635	$367,756	$24,795	2	$7.98	$13,035,226
2031	$13,035,226	$1,289,813		$1,039,221	$394,816	$25,290	2	$8.14	$13,680,634
2032	$13,680,634	$1,315,609		$894,664	$416,733	$25,796	2	$8.30	$14,518,312
2033	$14,518,312	$1,341,922		$6,965,940	$351,189	$26,312	2	$8.47	$9,245,483
2034	$9,245,483	$1,368,760		$58,623	$297,017	$26,838	2	$8.64	$10,852,636
2035	$10,852,636	$1,396,135		$6,259,168	$252,634	$27,375	2	$8.81	$6,242,237
2036	$6,242,237	$1,424,058		$256,286	$204,784	$27,923	2	$8.98	$7,614,793
2037	$7,614,793	$1,452,539		$4,699,421	$179,741	$28,481	2	$9.16	$4,547,651
2038	$4,547,651	$1,481,590		$334,853	$153,631	$29,051	2	$9.35	$5,848,019
2039	$5,848,019	$1,511,222		$0	$198,109	$29,632	2	$9.53	$7,557,349
2040	$7,557,349	$1,541,446		$7,740,672	$133,732	$30,224	2	$9.72	$1,491,855
2041	$1,491,855	$1,572,275		$2,571,589	$29,766	$30,829	2	$9.92	$522,307
2042	$522,307	$878,138		$379,830	$23,144	-$694,137	-44.2	-$223.34	$1,043,760

Description:
This scenario shows the one-time increase required so that future annual increases simply keep pace with inflation.

A special levy is included in 2013 to cover a portion of the expenses in this year (see "Other" contributions column).

Scenario 3 - Increase Phased-In over Several Years

Assumptions:

Opening Balance of the Reserve Fund:	**$618,972**	Interest Rate Earned:	**3%**
Current Annual Contribution:	**$280,000**	Expenditure Inflation Rate:	**2%**
Minimum Reserve Fund Balance:	**$300,000**	Minimum Balance Inflation Rate:	**2%**
First Critical Year:	**2041**	Number of Units:	**259**
Second Critical Year:	**2067**	Fiscal Year End:	**Dec 31**

Results:

Year	Opening Balance	Recommended Annual Contributions		Estimated Inflation Adjusted Expenditure	Estimated Interest Earned	Recommended Annual Contribution Increase			Closing Balance
		Base	Other			Amount	Percentage (%)	per Unit per Month	
2013	$618,972	$280,000	$1,988,000	$2,457,750	$15,723				$444,945
2014	$444,945	$480,000		$563,727	$12,092	$200,000	71.4	$64.35	$373,310
2015	$373,310	$680,000	$1,875,000	$2,627,523	$10,111	$200,000	41.7	$64.35	$310,899
2016	$310,899	$880,000	$1,350,000	$2,195,581	$9,843	$200,000	29.4	$64.35	$355,161
2017	$355,161	$975,842		$924,332	$11,427	$95,842	10.9	$30.84	$418,099
2018	$418,099	$995,359		$138,979	$25,389	$19,517	2	$6.28	$1,299,867
2019	$1,299,867	$1,015,266		$714,462	$43,508	$19,907	2	$6.41	$1,644,180
2020	$1,644,180	$1,035,572		$1,056,225	$49,016	$20,305	2	$6.53	$1,672,542
2021	$1,672,542	$1,056,283		$8,612	$65,891	$20,711	2	$6.66	$2,786,104
2022	$2,786,104	$1,077,409		$262,580	$95,806	$21,126	2	$6.80	$3,696,738
2023	$3,696,738	$1,098,957		$608,348	$118,261	$21,548	2	$6.93	$4,305,608
2024	$4,305,608	$1,120,936		$31,706	$145,507	$21,979	2	$7.07	$5,540,345
2025	$5,540,345	$1,143,355		$160,532	$180,953	$22,419	2	$7.21	$6,704,120
2026	$6,704,120	$1,166,222		$81,885	$217,389	$22,867	2	$7.36	$8,005,845
2027	$8,005,845	$1,189,546		$0	$258,019	$23,324	2	$7.50	$9,453,410
2028	$9,453,410	$1,213,337		$165,427	$299,321	$23,791	2	$7.65	$10,800,641
2029	$10,800,641	$1,237,604		$499,454	$335,091	$24,267	2	$7.81	$11,873,882
2030	$11,873,882	$1,262,356		$446,635	$368,452	$24,752	2	$7.96	$13,058,056
2031	$13,058,056	$1,287,603		$1,039,221	$395,467	$25,247	2	$8.12	$13,701,905
2032	$13,701,905	$1,313,355		$894,664	$417,338	$25,752	2	$8.29	$14,537,934
2033	$14,537,934	$1,339,622		$6,965,940	$351,743	$26,267	2	$8.45	$9,263,359
2034	$9,263,359	$1,366,415		$58,623	$297,518	$26,792	2	$8.62	$10,868,668
2035	$10,868,668	$1,393,743		$6,259,168	$253,079	$27,328	2	$8.79	$6,256,322
2036	$6,256,322	$1,421,618		$256,286	$205,170	$27,875	2	$8.97	$7,626,823
2037	$7,626,823	$1,450,050		$4,699,421	$180,064	$28,432	2	$9.15	$4,557,516
2038	$4,557,516	$1,479,051		$334,853	$153,888	$29,001	2	$9.33	$5,855,603
2039	$5,855,603	$1,508,632		$0	$198,298	$29,581	2	$9.52	$7,562,533
2040	$7,562,533	$1,538,805		$7,740,672	$133,848	$30,173	2	$9.71	$1,494,514
2041	$1,494,514	$1,569,581		$2,571,589	$29,805	$30,776	2	$9.90	$522,311
2042	$522,311	$878,138		$379,830	$23,144	-$691,443	-44	-$222.47	$1,043,763

Description:
This scenario shows the required contribution increase phased in by applying roughly equal increases for the first few years. In addition, special levies are required in some of the first few years to cover larger expenditures in those years (see "Other" contribution column).

Reserve Fund Items

The registered Strata Plan includes site and floor layouts, and schedules, which define the boundaries of units and common assets of the property. Patios, balconies, and terraces are indicated as limited common property. There is no description of Strata Lot boundaries with respect to floors, roofs, windows, cladding systems, mechanical or electrical systems, or chimneys.

The *Strata Property Act* states that unless otherwise shown on the Strata Plan, if a Strata lot is separated from another Strata lot, the common property, or another parcel of land by a wall, floor or ceiling, the boundary of the Strata lot is midway between the surface of the structural portion of the wall, floor or ceiling that faces the lot, and the surface of the structural portion of the wall, floor or ceiling that faces the other Strata lot, the common property or another parcel of land. The Act also has easement provisions, reciprocally in favour of each Strata lot and common Strata property, in relation to services such as mechanical and electrical equipment.

Legal interpretations of the repair and maintenance obligations of the Strata Corporation as noted in the Statutes *(Condominium Act, Strata Property Act)* have generally stated that any component, which plays an integral part in the performance, of say, the exterior wall, is generally the responsibility of the Strata Corporation (as opposed to an individual owner) to maintain, repair and replace.

The Strata may wish to have this reviewed by their solicitor for the appropriateness of our determinations, and our understanding of the unit boundaries and the responsibility thereof. These assumptions define the expenses included in the study.

Our interpretation of the Strata Plan and By-Laws and how we understand the Strata to be operating, is that the following building components are the common elements, which must be addressed as part of this study:

- Structural frame, including the parking garage;
- Roofs and terraces;
- Patios and balconies;
- Exterior cladding, windows and doors;
- Fireplace vents
- Interior finishes in common areas;
- Suite door hardware, excluding locks (according to Council)
- Amenities (pool, gym, etc.)
- Site finishes; and
- Common mechanical and electrical facilities.

We understand that components, which are not common elements and are the responsibility of the individual owners, include:

- Interior suite finishes;
- Suite-specific plumbing and electrical fixtures and associated piping and wiring;
- Suite-specific HVAC components (baseboard heaters, small exhaust fans, etc.);
- In-suite fireplaces;
- Suite door locks; and
- Private garage doors serving some suites and townhouse units.

The following sections summarize our opinion of budgets for Reserve Fund projects related to these components. Expenditures that are expected to be managed as part of normal operations are not shown. The budgets assume a prudent level of ongoing maintenance. Dollars shown are inflated and include contingencies (typically 5 to 15%) and allowances for design/project management (5 to 15%), where relevant. GST (5%) has been included.

The assumptions we have made about hidden conditions, predicting technical performance, and ongoing maintenance needs for the common elements are described in the "Repair and Replacement Rationale" document which can be found at www.halsall.com/rfs [password: RFSdocs]. Limitations, Halsall's Professional Liability Insurance Certificate, and the concepts and definitions that have been used in calculating the required contributions to the Contingency Reserve Fund can also be found here.

Section 92 of the *Strata Property Act* states that the operating fund is "for common expenses that usually occur either once a year or more often than once a year" and that the contingency reserve fund is "for common expense that usually occur less often than once a year or that do not usually occur". The Depreciation Report should not duplicate the operating budget expenditures. We typically use a threshold of $2,500 to decide which items have a dedicated line item in the study and include a contingency to cover the items, which cost less. The contingency is checked against actual spending patterns in the prior three years at each update.

Operating expenditures should be carefully monitored. Conditions that require increasing expenditure may indicate problems that should be dealt with differently than how we have assumed. Further evaluation may be appropriate to determine if a more comprehensive repair or replacement program should be added to the Depreciation Report, or if programs already planned should be advanced. These types of changes would be reflected in updates.

1. STRUCTURE

1.1 Structural Frame

Description:

The structures are concrete-framed with cast-in-place reinforced concrete slabs, supported by reinforced concrete columns and walls. The structural drawings were not available for review but, based on photos from construction, the reinforcing appears to be conventional rather than post-tensioned.

The structures are generally protected from weather. No capital projects are expected for sheltered structural components. The exposed balconies and parking garage structure are discussed in other sections of this report.

Condition:

We recommend the Strata confirm whether or not post-tensioning exists, and updating this report accordingly.

This buildings are located in an area with a relatively high risk of strong seismic activity. We have not completed a structural analysis to confirm whether the buildings meet current earthquake resistance requirements. Upgrading to meet current Code requirements is not mandatory, so we have not included a budget for any structural retrofits.

1.2 Balconies

Description:

There are balconies on each elevation of both the Beach and Ocean towers (about 6 drops per tower). The balconies are formed by cantilevered extensions of the concrete floor slabs. Some balconies have steel-framed, half-height parapet walls clad in prefinished metal panels.

Garden Tower has continuous balconies (called "California Walkways") on the north elevation at floors 5 and 6.

Most balconies on Ocean Tower and Garden Tower have tiled topsides (original) with painted metal slab edge covers. Some balconies on the north and west side of Beach Tower have tiled topsides. Balconies on Beach Tower have an elastomeric pedestrian traffic deck coating (installed 2011-2013). The undersides of the slabs are painted.

Balcony guards are typically aluminum-framed with glass infill panels.

Surfaces over living space are considered terraces and are discussed in the Flat Roofing section of this report.

Repair History:

2013: Balcony parapet wall repairs, re-waterproofing and guard replacement at Beach Tower north elevation (managed by RDH, cost not provided). Work is part of building enclosure maintenance and renewals project (see"Walls" section).

2012: Balcony re-waterproofing at Beach Tower south, east and west elevations, including removal of original tiles and balcony guard replacement at the south elevation (managed by RDH, cost about $750,000 according to a summary of planned Phase 2 work). Completed as part of Phase 2 of the building enclosure maintenance and renewals project.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
1.2.1 Balcony Condition Survey	$14,175	$15,043	2016	10 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic balcony condition evaluations to confirm the scope of work and budget for planned balcony structure repairs. The first occurrence is timed to align with the Ocean Tower balcony condition evaluation recommended by RDH in a notice to owners, dated October 3, 2012.							
1.2.2 Repair Concrete Balconies (Ocean Tower)	$374,888	$405,791	2017	N/A	One time	3	Forecasted
Project Notes: According to a notice to owners prepared by RDH, dated October 3, 2012, testing indicated that re-waterproofing of the Ocean Tower balconies was not a necessary component of the Phase 3 building enclosure work, so it was deferred with an evaluation recommended in about 3-5 years. This item allows for periodic repairs to the balcony slabs at Ocean Tower, with the timing as recommended above. The condition evaluation is budgeted separately.							
1.2.3 Repair Concrete Balconies (Ocean Tower - Future Occurrence)	$155,684	$250,408	2037	20 yrs	recurring	3	Forecasted
Project Notes: This item allows for future re-waterproofing of the balcony slabs. Future re-waterproofing is expected to be less expensive than the first occurrence as tile and slab edge cover removal will not be needed.							

1.2.4 Replace Balcony Guards and Rebuild Parapet Guard Walls (Ocean Tower)	**$479,052**	**$518,541**	**2017**	**40 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: This item allows for periodic replacement of the balcony guards and re-building of the metal-clad parapet walls.							
1.2.5 Repair Concrete Balconies (Beach Tower)	**$352,182**	**$523,324**	**2033**	**20 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: This item allows for future re-waterproofing of the balcony slabs. Future re-waterproofing is expected to be less expensive than the recent balcony work as tile and slab edge cover removal will not be needed.							
1.2.6 Replace Balcony Guards and Rebuild Parapet Guard Walls (Beach Tower)	**$997,336**	**$2,202,157**	**2053**	**40 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: This item allows for periodic replacement of the balcony guards and rebuilding the metal-clad parapet walls.							
1.2.7 Repair Concrete Balconies (Garden Tower and California Walkways)	**$119,902**	**$137,730**	**2020**	**20 yrs**	**One time**	**3**	**Forecasted**
Project Notes: This item allows for periodic repairs to the balcony slabs ("California Walkways") at Garden Tower. The condition evaluation is budgeted separately.							

1.3 Suspended Access Systems

Description:

The buildings have permanent tie-back anchors and a davit arm system to permit suspended access to the exterior walls. A roof anchor plan is posted at the Beach Tower roof access. It was created by ProBel and signed by T.H. O'Rourke, P.Eng., dated 1998.

Condition:

The system relies on cast-in-place and through-bolted anchors, which are required to be annually inspected, but not load-tested. Annual inspections are assumed to be an operating expense. Wholesale replacement of the system is not budgeted within the life of the buildings as it is not normally required.

1.4 Parking Garage

Description:

There is a four-level underground parking garage below the entire site. The garage is accessed from grade by two suspended ramps on the north and east sides. Both ramps have a concrete topping.

Levels P1-P3 are suspended, cast-in-place concrete slabs protected by an elastomeric waterproofing membrane and wear course. A heavy duty wear course is applied in the drive aisles. There are no expansion joints.

The lowest level (P4) is a concrete slab-on-grade.

The garage extends beyond the building footprints creating a buried roof deck, primarily in the central courtyard. The type of waterproofing membrane could not be confirmed.

Repair History:

2004-2008: Installed suspended slab (parkade floor) waterproofing (total cost about $565,000 according to the 2009 audited financial statements).

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
1.4.1 Repair Garage Suspended Slab Waterproofing (Drive Aisles)	**$132,549**	**$152,257**	**2020**	**24 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: Elastomeric traffic deck coatings require annual repairs to address isolated leakage and deterioration caused by wear-and-tear. These annual repairs are expected to be an operating expense, or paid for from the reserve contingency. Over time, the extent of wear-and- tear will warrant a more major refurbishment. This item allows to complete local membrane and concrete repairs. Given the heavy duty wear course in the drive aisles we have budgeted for more frequent resurfacing of these areas.							
1.4.2 Re-Waterproof Garage Suspended Slabs (Drive Aisles and Parking Stalls)	**$565,000**	**$823,098**	**2032**	**24 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: Eventually, the entire waterproofing system will require general replacement. This project allows to remove and replace the existing traffic deck coating, including an allowance for some concrete and drain repairs. Budgets assume that local membrane repairs will be completed in a timely manner, avoiding the need for major structural repairs to the concrete slab at the time of general re-waterproofing. The budgeted amount reflects the total expenditure to re-waterproof the suspended slabs in 2004-2008.							
1.4.3 Replace Entrance Ramp Toppings and Waterproofing	**$253,190**	**$308,637**	**2023**	**30 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: This item allows for periodic replacement of the entrance ramp toppings as well as some concrete repairs.							
1.4.4 Garage Roof Deck Waterproofing Repair Allowance	**$112,000**	**$136,527**	**2023**	**40 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: Some local repairs are expected to be completed and paid from the operating budget or reserve contingency. Occasionally, larger interim repairs to address leakage and deterioration will be required to maximize the service life of the buried waterproofing system. This budget allows for one larger repair to address leakage prior to the eventual re-waterproofing project.							
1.4.5 Re-Waterproof Garage Roof Deck	**$1,465,340**	**$2,177,418**	**2033**	**40 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: This item allows for replacement of the garage roof deck waterproofing, inlcuding all overburden (landscaping, paving, etc.).							

2. BUILDING ENVELOPE

2.1 Walls

Description:

The towers are clad primarily with a window wall system consisting of metal panels, windows and doors. According to a building enclosure condition assessment report prepared by RDH in 2010, the wall assembly typically consists (from the outside, in) of preformed metal panels, horizontal aluminum girts, glass-reinforced exterior sheathing, steel stud back-up wall with batt insulation, vapour retarder and interior gypsum board.

The townhouse units are clad in a combination of metal panels (as above) and brick masonry. According to the building enclosure report, the wall assembly typically consists (from the outside, in) of brick masonry, drainage cavity, glass-reinforced exterior sheathing, steel stud back-up wall with batt insulation, vapour retarder and interior gypsum board.

There is a small area of stucco at the Beach Tower roof level. Each tower also has a glass block wall at the south side of the mechanical penthouse.

Repair History:

2013: Phase 3 of the building enclosure maintenance and renewal program. Work included wall refurbishment (sealants, drainage, vents, IGUs) at Beach Tower (north elevation), Garden Tower (all elevation) and Ocean Tower (north and south elevations). Also included balcony re-waterproofing and guard replacement at Beach Tower (north elevation). Total cost of about $1,988,000 estimated by RDH.

2012: Phase 2 of the building enclosure maintenance and renewal program. Work included wall refurbishment (sealants, drainage, vents, IGUs) at Beach Tower (south elevation) and Ocean Tower (east and west elevations). Also included balcony re-waterproofing and guard replacement at Beach Tower (south elevation). (All according to a memo to unit owners dated December 2011 prepared by RDH). Cost about $1,972,000 according to the audited 2012 financial statements.

2011: Phase 1 of the building enclosure maintenance and renewal program at Beach Tower (east and west elevations). Work included sealant replacement, sealing metal and glass joints, installing retrofit drainage holes, upgrading the drainage detail above windows and doors, replacing fireplace exhaust vents, and replacing failed IGUs. (All according to a summary of Phase 1 work prepared by RDH). Cost about $974k according to the 2011 audited financial statements.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
2.1.1 Building Enclosure Maintenance and Renewal (Phase 3)	$1,988,000	$1,988,000	2013	N/A	One time	3	Forecasted
Project Notes: This item reflects the 2013 Phase 3 building envelope refurbishment work, including building sealants and balcony re-waterproofing at Beach, Ocean and Garden Towers. The budgeted amount is as estimated by RDH.							
2.1.2 Repair Glass Block Wall at Beach and Garden Towers	$10,500	$10,710	2014	N/A	One time	3	Forecasted
Project Notes: We noted corrosion and leakage at the glass block walls at the mechanical penthouses of Beach Tower and Garden Tower. This item allows for cleaning and coating the steel framing and re-sealing the walls.							
2.1.3 Recoat Stucco Wall at Beach Tower Mechanical Penthouse	$5,250	$5,462	2015	N/A	One time	3	Forecasted
Project Notes: We noted moss growth on the stucco wall at the Beach Tower mechanical penthouse. This item allows for cleaning and recoating the wall.							

2.1.4 Wall Condition Evaluation	**$18,900**	**$21,710**	**2020**	**10 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: This item allows for periodic wall condition evaluations to confirm an appropriate scope of work and budget for planned wall repairs. The budget includes for an engineering report, as well as an allowance for a contractor to provide suspended access and assistance conducting wall openings.							
2.1.5 Repair Wall Leakage – Allowance	**$23,625**	**$27,138**	**2020**	**3 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: This project allows for periodic wall leakage repairs that may be required in between larger repair projects.							
2.1.6 Repair Masonry Walls	**$181,037**	**$216,356**	**2022**	**20 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: This item allows for periodic repairs to the masonry walls. The budget includes for some repointing and some brick replacement, as well as replacement of window and door perimeter sealants. It should be considered a very preliminary budget pending the findings of the planned wall condition evaluation. Repairs to the backup steel framing system are not included in this budget, pending the evaluation, as they may or may not be needed. Some brick replacement is planned in conjunction with re-waterproofing the north terraces of the south townhouse block (units T5 to T11). This work is included in the terrace re-waterproofing project (see the Flat Roofing section).							
2.1.7 Building Enclosure Renewal (phased, 33% per occurrence)	**$2,752,869**	**$4,090,619**	**2033**	**2 yrs**	**3**	**3**	**Forecasted**
Project Notes: Window wall systems present a unique challenge from a renewal perspective. We can predict that today's double-glazed system will become thermally obsolete the way single-glazed windows have. We can also predict that leakage will eventually become unmanageable. Full replacement of the system is unlikely to be feasible due to the cost and disruption to residents. It is more likely that a major retrofit of the system will be completed. While it is not yet clear what the retrofit scope will entail, as the technologies will evolve over time, we presume it will be a combination of repair or partial replacement. A preliminary allowance is included for a major retrofit. This budget will need to be revisited over time as the methodology of renewal develops. Prior to your next major renewal, we recommend you solicit input from RDH on an appropriate long-term strategy for the building enclosure. This budget and timing can be adjusted if needed.							

2.2 Windows

Description:

Windows and balcony doors are double-glazed in prefinished aluminum frames, installed within the window wall system. Most windows are fixed, with some small awning-style operable windows located vertically between fixed windows. Balconies typically have sliding doors with two double-glazed, aluminum-framed sliding units.

There is sloped glazing at the south townhouse block (T5-T11) rooftop access stairways within each unit.

Commercial units have punched, fixed aluminum-framed windows with double-glazed inserts.

There are metal and glass canopies over the residential and commercial entrances.

Repair History:

2011-2013: IGU replacement as part of the building envelope refurbishment (about $100k per year, according to RDH)

Condition:

Replacement of the windows and balcony doors is included in the building enclosure renewal project (see the Walls section of this report).

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
2.2.1 Double Glazing Replacement Allowance	$107,100	$111,427	2015	15 yrs	recurring	3	Forecasted
Project Notes: This item allows for IGU replacement as the building ages. The budgeted amount is roughly in line with the expenditures on glass replacement in 2011 through 2013, as reported by RDH. This budget should be modified during future updates to reflect the ongoing rate of IGU failures.							
2.2.2 Repaint Entrance Canopies	$12,705	$15,487	2023	20 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic repainting of the metal canopy frames. The glass is assumed to be replaced on an as-needed basis from the operating fund or reserve contingency. If diligently maintained and painted, the canopies are expected to last the life of the building.							

2.3 Exterior Doors

Description:

Exterior doors include the following:

Main tower entrance doors: typically double swing doors in aluminum frames with full-height single-glazed inserts.

Townhouse front entrance doors: stained wood swing doors.
Townhouse courtyard doors: metal-skinned wood swing doors
Townhouse terrace doors: typically double sliding doors with double-glazed inserts.

Garage: four overhead sectional gates with chain-drive power operators (two exterior, two interior). Some suites and townhouses have a private overhead garage door.

Commercial Units: Double swing doors with aluminum frames and double-glazed inserts.

Tower balcony and terrace doors are covered in the Windows section.

Repair History:

2006-2009: Replaced wood-framed doors at courtyard townhouse units (according to 2010 Building Enclosure Condition Assessment Report by RDH).

Condition:

No major issues with the garage doors were noted and they operate well where checked. We assume they will be repaired and replaced as-needed from the operating fund, so no budgets are included for these doors.

Overhead doors at each private townhouse garage are assumed to be the unit owner's responsibility as they serve only one unit.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
2.3.1 Replace Main Commercial and Residential Entrance Doors	$48,300	$71,771	2033	30 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic replacement of the main entrance doors to each tower and the entrance doors to each commercial unit.							
2.3.2 Replace Townhouse Front Entrance Doors	$163,800	$170,418	2015	30 yrs	recurring	3	Forecasted
Project Notes: This item allows for replacement of the townhouse front entrance doors at all townhouse blocks.							
2.3.3 Replace Townhouse Courtyard Doors	$52,500	$78,012	2033	25 yrs	recurring	3	Forecasted
Project Notes: This item allows for replacement of the townhouse courtyard doors.							
2.3.4 Install Power Door Operators	$20,475	$20,885	2014	N/A	One time	3	Forecasted
Project Notes: Council reports that installation of power door operators at the residential entrances is being considered. This item allows for installation of power door operators at the three tower entrances.							

2.4 Flat Roofing

Description:

Each tower has a main roof level and central mechanical penthouse roof. Each tower also has several levels of terraces.

The south and west townhouse blocks (units T1 to T11) have terraces on the street-facing half (accessible from the townhouse units) and roofing on the courtyard-facing half. The east and north townhouse blocks (units T14 to T26) are primarily covered with terraces accessible by the adjacent tower units. The south townhouse block (units T5 to T11) has 2nd-floor terraces on the north side. Most townhouse rooftop terraces include large cast-in-place concrete planters, some with mature trees.

Terraces, where reviewed, have inverted roofing assemblies with patio stones. Roofs, where reviewed, have inverted roofing assemblies with large stone ballast. According to the 2010 RDH envelope report, the original roofing assembly consists of (from the top, down) ballast, filter fabric, rigid insulation and single-ply self-adhered membrane.

Drainage of most roof and terrace areas is via internal area drains. Some smaller terraces have perimeter drains.

Repair History:

Replaced roof and terrace membranes as follows. Unless specified otherwise, information is based on a summary of roofing membrane replacements prepared by RDH in 2010, and updated by the Building Manager. (BT = Beach Tower; OT = Ocean Tower; GT = Garden Tower; T = Townhouse)

2013: BT 701 terrace, BT 2602 (southeast terrace), OT 402 both terraces, OT 503 terrace, OT main roof (east and north portions, about 50% of main roof area), T19 terrace (level 5).
BT terraces (701 and 2602) cost about $67,000 according to Council's summary of 2013 Structural Fund expenditures.
OT main roof cost about $56,900, according to Council's summary of 2013 Structural Fund expenditures.
OT terraces (402 and 503) cost about $124,000 according to Council's summary of 2013 Structural Fund expenditures.

2012: T9 north terrace (level 3), including some masonry repairs. Cost about $35,000 according to Council's summary of 2013 Structural Fund expenditures.

2009: OT 1801 (northwest terrace).

2008: T11 roof, GT 711 terrace (partial replacement).

2007: T3 roof.

2006: GT main roof.

2005: OT 401 terrace.

2003: T5 roof.

2001: BT 411 terrace, BT 708 terrace.

2000: OT 1801 (southwest terrace), T6 terrace (level 3), T10 terrace (level 3).

1999: BT 505 terrace, T7 roof, T8 roof.

1998: T12 terraces (levels 2 and 3), OT main roof (west portion)

1997: T1 terrace (level 2), BT 3101 both terraces, BT 3102 both terraces, BT main roof, BT mechanical penthouse roof, OT 503 terrace, OT main roof (south portion), T16 roof, T17 roof, T18 roof, GT 811 (level 9 roofs), T2 terrace (level 2), T3 terrace (level 2), T4 terrace (level 2), T3 terraces (level 4, both), T2 roof, T4 roof.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
2.4.1 Replace Flat Roofing and Terraces (2013 planned work)	$383,250	$383,250	2013	N/A	One time	3	Forecasted
Project Notes: This budget includes the following work approved for completion in 2013, totalling $365,000 + tax (according to Council): - Replacement of the east half of the Ocean Tower main roof - Repair to active roof leak at T19 - Terrace re-waterproofing at Ocean Tower unit 402 (remaining portion) - Terrace re-waterproofing and associated wall work at T5-T11 (except T9) as done at T9 - Replacement of about 50 fireplace vents							
2.4.2 Replace Flat Roofing and Terraces (remaining original roofing - 33% per cycle)	$441,099	$449,921	2014	1 yrs	3	3	Forecasted
Project Notes: A building envelope report prepared by RDH in 2010 concludes that the original roof and terrace membranes are nearing the end of their service life and recommends replacement in the next few years. This item allows for a phased replacement of the remaining original roofs and terraces. This budget does not dictate the order in which the specific roofs will be replaced as we assume this will be driven by leakage and/or based on condition as determined by further investigation.							
2.4.3 Repair Flat Roofing and Terraces (all areas)	$97,673	$136,766	2030	25 yrs	recurring	3	Forecasted
Project Notes: This item allows for some repairs of greater consequence than routine maintenance, expected to be required toward the end of the expected service life of the roofs.							
2.4.4 Replace Flat Roofing and Terraces (future replacement - all areas)	$1,953,452	$3,334,321	2040	25 yrs	recurring	3	Forecasted
Project Notes: This item allows for future replacement of all roofs and terraces.							
2.4.5 Repair Active Leakage at Unit T4	$12,500	$12,500	2013	N/A	One time	3	Forecasted
Project Notes: This item allows for repairs to address active leakage at Townhouse 4 to be completed in the current year. The budgeted amount is an estimate provided by the Building Manager.							
2.4.6 Repair Active Leakage at Unit 403	$45,000	$45,000	2013	N/A	One time	3	Forecasted
Project Notes: This item allows for repairs to address active leakage at unit 403 to be completed in the current year. The budgeted amount is an estimate provided by the Building Manager.							

3. FIRE SAFETY

3.1 Egress

Description:

Two stairwells provide egress from each tower floor area.

According to the mechanical drawings, each tower has a below-grade stairwell pressurization fan with a capacity of 3000 or 4000 cfm. Also according to the drawings, Beach and Ocean towers have rooftop smoke exhaust fans rated at 6500 and 4500 cfm, respectively. The smoke exhaust fans are connected to smoke dampers on each floor.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
3.1.1 Replace Pressurization Fans	$36,750	$44,798	2023	30 yrs	recurring	3	Forecasted

Project Notes:
This project allows for periodic replacement of the pressurization and smoke exhaust fans. According to Trotter & Morton, these fans are not covered by the mechanical service contract.

3.2 Detection/Alarm

Description:

Four fire alarm panels provide detection, covering Ocean Tower, Beach Tower, Garden Tower and the underground garage. Each tower panel is located in the garage with an annunciator in the lobby. Townhouse blocks are covered by the panels in the attached tower. Where checked, the panels are manufactured by Simplex, model 4100, with firefighter handsets and voice communication modules.

The fire alarm panels monitor smoke detectors in corridors and suites, heat detectors in service rooms, supervised valves in the suppression system, and pull stations.

Repair History:

About 2010: Upgraded fire alarm panel interior components (all main panels), according to Effective Fire Protection.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
3.2.1 Replace Fire Alarm Panel	$231,000	$265,346	2020	20 yrs	recurring	3	Forecasted

Project Notes:
This item allows for periodic replacement of the fire alarm panels. Project timing is based on discussions with the fire service contractor. This project assumes that the new panels will be compatible with the existing devices and wiring; if this is not the case, the budget will need to be adjusted accordingly.

Annual testing, monitoring and minor repairs, including individual device replacement required by the testing, are expected to be part of normal maintenance.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
3.2.2 Replace Fire Alarm System Wiring and Devices	$598,290	$1,021,213	2040	40 yrs	recurring	3	Forecasted

Project Notes:
This item allows for replacement of the wiring and devices, as these components typically become obsolete or incompatible due to technology changes. The budget excludes the panel, which is budgeted in a separate project.

3.3 Suppression

Description:

Each tower is served by standpipe and sprinkler system. The sprinkler systems cover each residential unit (including adjacent townhouses) and the parking garage (dry system). Standpipes are typically located in tower stairwells with fire hose connections at each landing.

Ocean Tower has an 8"-diameter main incoming fire water line with a backflow preventer installed. According to the drawings, Beach Tower has a 6" incoming fire water line, also with a backflow preventer installed. Garden Tower is fed from the other towers.

Corridors have fire extinguishers in recessed cabinets.

There is a 60hp fire pump and 3hp jockey pump located in the P1 sprinkler room below Beach Tower. The pumps are manufactured by US Motors and appears to be original. According to the fire service contractor, this fire pump is the only one serving the complex.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
3.3.1 Suppression Systems Repair Allowance	$10,500	$17,226	2038	10 yrs	recurring	3	Forecasted
Project Notes: This item includes a periodic allowance for progressive repairs/replacement of suppression system components, including fire hose cabinets, hoses, extinguishers, sprinkler heads, valves, etc.							
3.3.2 Replace Fire Pump	$46,200	$62,179	2028	35 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic replacement of the fire pump and control panel.							

3.4 Emergency Power

Description:

Emergency power is supplied to the entire complex by a Kohler emergency generator with a capacity of 500kW / 625 kVA (according to the dataplate). Power is distributed to the emergency loads via an automatic transfer switch and switchgear unit both rated at 600A, 600V. According to labels on the distribution panels, emergency loads include lighting, exhaust fans, sump pumps, elevators, garage access gates, the fire pump and the fire alarm system.

Generator fuel is stored in a single-walled tank in a concrete containment dyke. Based on its dimensions, the tank has a storage capacity of about 720L.

The emergency power equipment is located in the P1 generator room below Beach Tower and appears to be original.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
3.4.1 Replace Generator and Transfer Switch	$340,200	$467,022	2029	35 yrs	recurring	3	Forecasted
Project Notes: This project includes for the eventual replacement of the emergency generator and transfer switch. Repairs and component replacements are assumed to be completed as-needed from the operating budget.							
3.4.2 Replace Generator Fuel Storage Tank	$12,600	$14,190	2019	25 yrs	recurring	3	Forecasted
Project Notes: This budget allows for periodic replacement of the fuel storage tanks. We assume that the transfer pumps will be repaired or replaced from operating funds or from the reserve contingency.							

4. FINISHES, FURNITURE AND EQUIPMENT

4.1 Entrance Lobby

Description:

Lobby finishes and furniture are as follows:

Beach Tower
The lobby has ceramic and marble tile floor. Walls and ceilings are finished with a combination of wood panels and painted drywall. There is a large central pendant fixture and a security desk with manufactured stone top and wood panel front.

The lounge has laminate wood flooring and wood panelled walls and ceiling with some painted drywall. Furniture includes one upholstered couch, two chairs, one table, two stools (all upholstered), two side tables, two large bookshelves and an area rug. There is also a gas fireplace.

Ocean Tower
The lobby is finished similarly to the Beach Tower lobby. Furniture consists of two upholstered chairs.

The lounge is finished similarly to the lobby. Furniture includes one couch, two stools, one table, one concierge desk and artwork.

The library has laminate wood flooring with inlaid carpet, and painted walls and ceiling. Furniture includes two chairs, a coffee table, two side tables and four built-in bookshelves. There is also a gas fireplace.

Garden Tower
The lobby has tile floor and carpet, and painted walls with wood panels at the elevator lobby. Furniture includes one chair, one side table, one plant and one artwork.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
4.1.1 Repair Water-Damaged Lobby Finishes (Beach Tower)	$20,000	$20,400	2014	N/A	One time	3	Forecasted
Project Notes: This item allows for replacement of the water-damaged finishes in the northwest corner of the Beach Tower lobby. The budgeted amount is an approximate amount provided by the Building Manager. The work is planned for 2014 pending confirmation over the winter that the leak has been addressed.							
4.1.2 Full Lobby and Lounge Renovation	$210,000	$218,484	2015	20 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic full renovation of the lobbies and lounges, including replacement of built-in furniture and re-finishing the marble floors. The budgeted amount is based on quotes received, according to Council.							

4.2 Corridors

Description:

Corridors typically have carpet, a combination of painted walls and textured wallpaper, and painted drywall ceilings.

Suite entrance doors are wood.

Elevator cabs have ceramic tile floors, stainless steel and wood panel walls, and wood panel ceilings with pot lights.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
4.2.1 Renovate Corridors (all towers)	$608,644	$685,432	2019	12 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic replacement of the corridor finishes including refinishing of the suite entrance doors. This is a preliminary estimate only, as costs can vary widely depending on the materials and products chosen. The budget will need to be revised once a design is established and actual cost estimates are developed.							
4.2.2 Replace Suite Door Hardware	$105,798	$151,106	2031	24 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic replacement of suite door hardware with every other corridor renovation. Council reports that suite door locks are the unit-owner's responsibility. This budget assumes the locks will be replaced with the handles and other hardware components with the full cost paid by the Strata (the lock cost will not be charged back to the owners).							
4.2.3 Renovate Parking Level Elevator Lobbies	$69,797	$97,733	2030	36 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic refurbishment of the parking level elevator lobbies.							
4.2.4 Refurbish Elevator Cab Interiors (all cabs)	$122,850	$130,369	2016	20 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic refurbishment of the elevator cabs. Timing is per Council.							

4.3 Recreation Facilities

Description:

Recreation facility finishes and equipment are as follows (all located in Beach Tower):

The pool room has tile flooring and painted walls and ceiling. The pool shell has a waterproof coating. Pool mechanical equipment is located in the pump room on the P1 level of the garage and includes one 1-1/2hp pump and one 24" sand filter.

Change rooms have tile floors and walls and painted drywall ceilings. Each change room has a sink, toilet and shower stall.

The sauna has wood finishes and a heater.

The exercise room has rubber flooring and painted walls and ceiling with mirrors on some walls. Exercise equipment includes 1 rowing machine, 1 large universal weights machine, 1 set of freeweights and bench, 2 treadmills, 2 ellipticals, 1 stairmaster and 1 upright stationary bike.

Repair History:

2012/13: Replaced exercise room flooring, painted walls and installed two new ellipticals and treadmill. Also renovated sauna, including the heater. Total cost about $30,000, according to the Building Manager.

2012: Acid washed pool and replaced underwater light fixtures, completed by West Coast Pools (according to the Building Manager).

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
4.3.1 Refurbish Pool Room (excluding pool shell and furnishings)	$74,682	$82,455	2018	20 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic refurbishment of the pool room. It includes lighting and all finishes, but excludes the pool shell itself and furnishings (see separate items). We assume the pool mechanical equipment will be replaced on an as-needed basis from the operating fund.							
4.3.2 Refinish Pool Shell	$9,009	$9,947	2018	20 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic refinishing of the pool shell.							
4.3.3 Refurbish Change Rooms	$30,744	$32,626	2016	25 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic refurbishment of the change rooms.							
4.3.4 Refinish Sauna	$7,350	$8,612	2021	7 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic replacement of the sauna finishes. We assume the sauna heater will be replaced as required using operating funds or the reserve contingency.							
4.3.5 Refurbish Exercise Room	$14,000	$18,842	2028	15 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic refurbishment of the exercise room. The exercise equipment is budgeted separately.							
4.3.6 Exercise Equipment Replacement Allowance	$16,687	$18,424	2018	5 yrs	recurring	3	Forecasted
Project Notes: This item allows for replacement of some exercise equipment every few years rather than for all equipment at once.							

4.4 Stairwells/Service/Administration Areas

Description:

Stairwells have painted concrete finishes.

Parking level elevator lobbies have painted finishes.

The management office has carpet and painted walls and ceiling. Furniture includes a work desk and meeting table.

About seven service rooms have an elastomeric floor waterproofing membrane.

Repair History:

2013: Re-waterproofed three service rooms (done by Columbia Seal, cost about $16,000 according to the Building Manager).

Condition:

The Building Manager expects that future service room re-waterproofing will be completed on an as-needed basis. We assume this will continue to be paid from the operating fund so we have excluded a service room floor re-waterproofing budget from this report.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
4.4.1 Refurbish Management Office	$15,435	$17,730	2020	15 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic refurbishment of the management office, including furniture but excluding office equipment which is assumed to be paid from the operating fund.							
4.4.2 Refinish Stairwells/Service Areas	$93,702	$107,634	2020	20 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic refinishing of the exit stairwells and some service areas. We assume that many service rooms, including locker rooms, will be repainted as required using operating funds or the reserve contingency.							
4.4.3 Refurbish Garbage Chute Rooms	$29,400	$37,286	2025	30 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic replacement of the garbage chute room finishes.							

5. SITE

5.1 Site Features

Description:

The site is covered primarily with soft landscaping including many mature trees and paved concrete sidewalks. There is a reflecting pool in the central courtyard. Mechanical equipment includes two pumps, a sand filter and a UV filter.

There are unit paved pathways through the courtyard connecting the towers and townhouses.

Condition:

The landscaping and site features will be replaced as part of the garage roof deck re-waterproofing project (costs are included in this project - see the “Parking Garage” section of this report). Annual maintenance of site features and landscaping is expected to be covered by either operating or reserve contingency funds.

6. HVAC

6.1 Make-up Air Unit(s)

Description:

Five make-up air units supply fresh air. Three units serving the towers are manufactured by Engineered Air, and one make-up air unit, manufactured by Zephyr, serves the pool room. The units are as follows:

Beach Tower is served by one unit on the P1 level and one unit in the mechanical penthouse. The lower unit has a heating coil supplied from the heating boilers. The upper unit has gas-fired heating with a capacity of 600 MBH and a rated airflow of 9,500 CFM.

Garden Tower is served by one gas-fired make-up air unit in the mechanical penthouse. The unit has a heating capacity of 125 MBH and airflow of 1,400 CFM.

Ocean Tower is served by one gas-fired make-up air unit in the mechanical penthouse. The unit has a heating capacity of 600 MBH and an airflow of 10,100 CFM.

The pool room unit has electric cooling with a nominal capacity of 1 ton. Heat from the pool room air is used to heat the pool water via a heat exchanger.

Condition:

According to an equipment list prepared by Trotter & Morton, this equipment is covered by a comprehensive service contract, which includes all major repairs and replacement. Budgets for this equipment are excluded from this report based on the assumption that this contract (or similar) will remain in place for the long term.

6.2 Exhaust Fan(s)

Description:

There are several exhaust fans throughout the facility:

The garage has about 16 exhaust fans (four per level). The fans are controlled by a CO detection system.

Suite bathrooms and kitchens are exhausted directly to the exterior via individual exhaust fans and in-slab ductwork.

Townhouses have individual bathroom and kitchen exhaust fans.

Condition:

In-suite exhaust fans are assumed to be unit-owned.

According to an equipment list prepared by Trotter & Morton, the garage exhaust fans and other service room exhaust fans are under a comprehensive service contract, which includes all major repairs and replacement. Budgets for this equipment are excluded from this report based on the assumption that this contract (or similar) will remain in place for the long term.

6.3 Terminal Units

Description:

The building contains the following terminal units:

- McQuay split A/C system in garage, serving electrical room, capacity 10 tons.
- McQuay split A/C system in P1 storage room, capacity 3 tons.
- McQuay heat pump P2 electrical room serving the Ocean Tower electrical room, capacity 1.5 tons.
- Gas fireplaces in each unit and in common areas.

Condition:

According to an equipment list prepared by Trotter & Morton, the air conditioning systems and heat pump are covered under a comprehensive service contract, which includes all major repairs and replacement. Budgets for this equipment are excluded from this report based on the assumption that this contract (or similar) will remain in place for the long term.

Our interpretation of the By-Laws is that the in-suite fireplaces are the unit owner's responsibility to repair and replace, so budgets are not included. Replacement of common area fireplaces is included in the refurbishment budgets (see the "Finishes, Furniture and Equipment" section of this report).

7. PLUMBING

7.1 Domestic Water Boilers

Description:

Domestic hot water is generated by a total of 11 gas-fired boilers, as follows:

- Two Laars Mighty Therm boilers in the Ocean Tower boiler room, both manufactured in 2011
- Two Laars Mighty Therm boilers in the Garden Tower boiler room, both manufactured in 2011
- Four Laars Mighty Therm boilers in the Beach Tower boiler room, all manufactured in 2011
- Three Lochinvar boilers in the Beach Tower P2 mechanical room, all manufactured in 2003

Domestic hot water is stored in a total of 15 glass-lined tanks, all manufactured by Lochinvar, each with a capacity of 200 gallons, as follows (according to a schedule provided):

- Two tanks in the Ocean Tower P3 mechanical room, manufactured in 2003
- Two tanks in the Ocean Tower mechanical penthouse, manufactured in 2008
- Two tanks in the Garden Tower mechanical penthouse, manufactured in 2008
- Four tanks in the Beach Tower P2 mechanical room, manufactured in 2002
- Five tanks in the Beach Tower mechanical penthouse, manufactured in 2008

There are two small plate-type heat exchangers in the Beach Tower P2 mechanical room serving the domestic hot water system.

Townhouses are served by the connected tower.

Condition:

According to an equipment list prepared by Trotter & Morton, the boilers are covered under a comprehensive service contract, which includes all major repairs and replacement. Budgets for this equipment are excluded from this report based on the assumption that this contract (or similar) will remain in place for the long term.

The heat exchangers are specifically excluded from the Trotter & Morton service contract. However, based on the size and small quantity of heat exchangers, we assume they will be replaced on an as-needed basis with the cost paid from the operating fund.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
7.1.1 Replace Domestic Hot Water Storage Tanks (2013 planned work - two tanks in Garden Tower)	$17,000	$17,000	2013	N/A	One time	3	Forecasted
Project Notes: This item allows for replacement of the two Garden Tower storage tanks. This work is planned for the current year, according to the Building Manager.							
7.1.2 Replace Domestic Hot Water Storage Tanks (phased, three tanks per occurrence)	$25,500	$26,010	2014	2 yrs	recurring	3	Forecasted
Project Notes: This item allows for ongoing phased replacement of the domestic hot water storage tanks.							

7.2 Domestic Water Piping, Valves and Pumps

Description:

According to the mechanical drawings, the domestic water distribution piping is laid out as follows. In-suite distribution piping appears to be a combination of copper (seen in Beach Tower and townhouse units) and plastic (seen in Ocean tower). Pipe sections provided by the plumber appear to be type K copper, a thicker-walled variety.

Beach Tower
The main supply line for Beach Tower enters the north foundation wall on the P2 level and is 4" in diameter, with no backflow preventer installed. Hot and cold domestic water is distributed to the suites through two main riser sets feeding headers in the corridor of each floor. Recirculation headers also run in each corridor. The domestic distribution is divided into a lower zone (floors 1-16) and an upper zone (floors 17-33). The upper zone cold water supply line has a booster pump set rated at 7.5hp and 10hp, located in the P1 sprinkler room.

Ocean Tower
The main supply line for Ocean Tower enters the south foundation wall on the P2 level and is 4" in diameter. A 2" irrigation line with a backflow preventer branches off of this line. No backflow preventer is installed on the domestic line. As at Beach Tower, hot and cold domestic water is distributed to headers in the corridor of each floor. The lower zone serves floors 1-8 and the upper zone serves floors 9-18. There is only one riser set per zone. The upper zone cold water supply line has a booster pump set rated at 1.5hp and 2hp, located in the P2 sprinkler room.

Garden Tower
The main suppy line for Garden Tower is fed from the other towers. Hot and cold domestic water is distributed to headers on each floor. There is one zone, one set of headers, and no booster pumps.

Townhouse Blocks
The townhouse blocks are served from below by hot and cold supply lines running through the parking garage. Each supply line has a recirc loop and is supplied by the connected tower.

Repair History:

2013: Replaced main hot supply riser in Garden Tower (as reported by the Building Manager).

2008: Replaced recirculation riser in Garden Tower (quoted cost about $17,000 according to the Building Manager).

Condition:

According to an equipment list prepared by Trotter & Morton, the booster pumps are covered by a comprehensive service contract, which includes all major repairs and replacement. Budgets for this equipment are excluded from this report based on the assumption that this contract (or similar) will remain in place for the long term.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
7.2.1 Investigation - Domestic Water Treatment System	$5,250	$5,355	2014	N/A	One time	3	Forecasted
Project Notes: Water treatment systems have recently proven effective in slowing pipe deterioration and extending the life of the distribution piping in several Vancouver area buildings. This item allows for an investigation to determine whether installation of a water treatment system would be cost-effective based on the current piping condition.							
7.2.2 Install/Replace Back-flow Preventers	$16,800	$17,828	2016	25 yrs	recurring	3	Forecasted
Project Notes: Many municipalities within the Greater Vancouver Area require the installation of a backflow preventer in larger complexes to prevent contamination of potable drinking water. Although the local officials may not be strictly enforcing the bylaw at the moment, we suggest budgeting for the installation of a backflow preventer on the incoming service line in the near future as municipalities are beginning to actively enforce the bylaw as part of the Greater Vancouver Water District's Drinking Water Management Plan. This item allows for installing a backflow preventer on each incoming domestic line.							
7.2.3 Replace Domestic Distribution Piping and Valves (Garden Tower - Remaining Piping)	$140,909	$149,534	2016	N/A	One time	3	Forecasted
Project Notes: This project allows for replacement of the hot, cold and recirculation piping. We have estimated the total length of riser piping based on typical floor plans. We recommend you ask your plumbing service contractor to provide a detailed quote as the project approaches, in order to confirm the scope and budget requirements. The timing of this project is based roughly on the reported rate of leaks (about six leaks in the last few years, in the hot and recirculation lines, not concentrated in one building), and the recent replacement of some lines in Garden Tower. Timing should be adjusted during future updates to reflect the ongoing performance of the piping. This budget is reduced to reflect the piping already replaced in 2008 and 2013.							
7.2.4 Replace Domestic Distribution Piping and Valves (Beach Tower)	$1,014,031	$1,054,998	2015	25 yrs	recurring	3	Forecasted
Project Notes: This project allows for replacement of the hot, cold and recirculation piping. We have estimated the total length of riser piping based on typical floor plans. We recommend you ask your plumbing service contractor to provide a detailed quote as the project approaches, in order to confirm the scope and budget requirements. The timing of this project is based roughly on the reported rate of leaks (about six leaks in the last few years, in the hot and recirculation lines, not concentrated in one building), and the recent replacement of some lines in Garden Tower. Timing should be adjusted during future updates to reflect the ongoing performance of the piping.							
7.2.5 Replace Domestic Distribution Piping and Valves (Ocean Tower)	$502,913	$523,231	2015	25 yrs	recurring	3	Forecasted
Project Notes: This project allows for replacement of the hot, cold and recirculation piping. We have estimated the total length of riser piping based on typical floor plans. We recommend you ask your plumbing service contractor to provide a detailed quote as the project approaches, in order to confirm the scope and budget requirements. The timing of this project is based roughly on the reported rate of leaks (about six leaks in the last few years, in the hot and recirculation lines, not concentrated in one building), and the recent replacement of some lines in Garden Tower. Timing should be adjusted during future updates to reflect the ongoing performance of the piping.							

7.2.6 Replace Domestic Distribution Piping and Valves (Townhouse Blocks)	**$142,890**	**$151,636**	**2016**	**25 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: This project allows for replacement of the hot, cold and recirculation piping for the townhouse blocks. We have estimated the total length of riser piping based on typical floor plans. We recommend you ask your plumbing service contractor to provide a detailed quote as the project approaches, in order to confirm the scope and budget requirements.							
7.2.7 Replace Domestic Distribution Piping and Valves (Garden Tower - Future Replacement)	**$154,196**	**$268,459**	**2041**	**25 yrs**	**recurring**	**3**	**Forecasted**
Project Notes: This project allows for future replacement of the hot, cold and recirculation piping. We have estimated the total length of riser piping based on typical floor plans. We recommend you ask your plumbing service contractor to provide a detailed quote as the project approaches, in order to confirm the scope and budget requirements.							

7.3 Drainage Systems

Description:

Drainage piping, where seen in the garage, is cast iron.

There are five sump pumps on the lowest level of the garage.

Roof drainage is described in the roofing section.

Condition:

No major drainage issues were reported by the Building Manager.

According to an equipment list prepared by Trotter & Morton, the sump pumps are covered by a comprehensive service contract, which includes repair and replacement. Budgets for this equipment are excluded, assuming the contract (or similar) will remain in place for the long term.

8. ELECTRICAL

8.1 Electric Supply and Distribution

Description:

Electricity is fed to the complex underground from BC Hydro at 12,470V to the main electrical room on the P1 level. One main transformer rated at 3500 kVA steps the power down to 347/600V.

Power for residential units is stepped down to 120/208V by transformers and distributed by switchgear units (typically 600-1200A) to meter centres on tower floors and below townhouse blocks.

Suite panels, where checked, are typically rated at between 125A and 225A, 240V.

Transformers are located throughout the building, ranging in size from 45 kVA to 600 kVA.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
8.1.1 Replace Main Switchgear	$281,820	$435,688	2035	40 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic replacement of the main switchgears.							
8.1.2 Replace Air-Cooled Transformers	$453,915	$701,743	2035	40 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic replacement of the transformers.							
8.1.3 Replace Main Electrical Switchgear Units	$281,820	$435,688	2035	40 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic replacement of the main switchgears.							

8.2 Lighting

Description:

Lighting systems include the following:

- Parking garage: 4ft fluorescent fixtures with T8 lamps
- Stairwells: 2-lamp, 4-ft fluorescent fixtures with T8 lamps, one per landing
- Balconies: soffit- or wall-mounted fixtures
- Corridors: included in finish budgets.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
8.2.1 Replace Garage Lighting	$114,440	$131,456	2020	25 yrs	recurring	3	Forecasted
Project Notes: This project allows for the periodic replacement of the parking garage light fixtures.							
8.2.2 Replace Exterior Lighting	$32,524	$37,360	2020	25 yrs	recurring	3	Forecasted
Project Notes: This project allows for the periodic replacement of the exterior light fixtures (mostly at balconies).							
8.2.3 Replace Stairwell and Service Room Lighting	$39,060	$44,868	2020	25 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic replacement of the stairwell and service room light fixtures.							

9. CONVEYANCE

9.1 Elevators

Description:

The complex is served by six overhead roped elevators (one in Garden Tower, two in Ocean Tower and three in Beach Tower) with relay-type controls manufactured by Dover.

An accessible stair lift serves the pool room from the main lobby corridor in Beach Tower.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
9.1.1 Install Elevator Machine Guards	$47,250	$49,159	2015	N/A	One time	3	Forecasted
Project Notes: This item allows for the installation of protective guards over any exposed moving/rotating parts that pose a risk of pinching or entrapment for workers. While the installation of these protective guards is not yet mandated in this province, it is likely that that this will occur in the next few years, as provinces follow the suit of Ontario and Alberta. We recommend budgeting for this upgrade.							
9.1.2 Install Elevator Car Top Railings	$22,050	$22,941	2015	N/A	One time	3	Forecasted
Project Notes: This item allows for guardrails to be installed on all elevator car tops. The Ontario TSSA has recently issued a Director's Order requiring the installation of elevator car top guardrails. While this requirement is not yet mandatory in British Columbia, it is likely that the province will follow suit within the next few years. We recommend budgeting for this upgrade. We did not access the hoistway, but we assume the car top rails are not currently present.							
9.1.3 Elevator System Modernization	$1,108,800	$1,176,667	2016	25 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic modernization of the elevator controls. Timing and costs are as recommended by ThyssenKrupp in their Elevator Depreciation Plan, dated April 2013, with allowances added for miscellaneous mechanical and electrical work, and for the preparation of specifications and tendering the work. The ThyssenKrupp plan also recommends some upgrades (new hall door operators, cab panels - totalling about $60,000 per cab). This work is included in this project. A separate budget for refurbishing the cab interiors is included in the "Finishes, Furniture and Equipment" sections of this report.							
9.1.4 Replace Lift	$35,280	$40,526	2020	25 yrs	recurring	3	Forecasted
Project Notes: This item allows for periodic replacement of the stair lift at the pool.							

10. MISCELLANEOUS

10.1 Waste Disposal/Collection

Description:

Each tower has a garbage chute which discharges directly into bins in garbage rooms on the P1 level (no compactors or sorters).

A tractor (John Deere x720) is used for moving garbage bins.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
10.1.1 Replace Tractor	$15,750	$18,092	2020	25 yrs	recurring	3	Forecasted

Project Notes:
This item allows for periodic replacement of the garbage tractor. We assume that maintenance and repair of the tractor will be carried out under the operating budget.

Garbage bins are expected to be replaced as-needed from the operating budget.

Garbage chutes typically last the life of a building, with maintenance completed, as needed, as an operating expense. There have been exceptions where the chute corrodes and eventually requires full replacement. However, at these buildings, the Building Manager indicates that there have been no unusual maintenance needs to date, so a replacement budget has not been included. The extent of repair required and the condition should be monitored over time so that a budget can be added to the plan if it becomes necessary.

10.2 Security Systems

Description:

The buildings have the following security/access control systems:

- Enterphone system (manufactured by Select Engineering Systems Inc.) with seven panels at locations, including at the main entrances and parking garage
- CCTV system, with 16 cameras
- Building access control system with about 50 card readers at the main doors, common areas, and garage

Repair History:

2012: Replaced enterphone panel at Beach Ave entrance ramp, (as reported by the Building Manager).

2010: Replaced card access system, (as reported by the Building Manager).

About 2008: Replaced enterphone panels, (as reported by the Building Manager).

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
10.2.1 Upgrade CCTV System	$17,850	$18,207	2014	N/A	One time	3	Forecasted
Project Notes: The Building Manager reports that upgrades to the CCTV system are planned, involving replacement of one camera and installation of a monitor and PC at the security desk. This item allows for these upgrades, with the approximate budget amount provided by the Building Manager.							
10.2.2 Replace Closed Circuit Television System	$21,840	$25,087	2020	15 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic replacement of the cameras and monitoring equipment.							
10.2.3 Replace Enterphone System	$44,100	$53,758	2023	15 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic replacement of the enterphone panels.							
10.2.4 Replace Card Access System	$84,000	$106,532	2025	15 yrs	recurring	3	Forecasted
Project Notes: This project allows for periodic replacement of the card access system (readers and central equipment).							

10.3 Contingencies

Description:

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
10.3.1 Interest Adjustment to 2016	$12,000	$12,000	2013	1 yrs	4	3	Forecasted
Project Notes: This project adjusts the interest earned by the Strata until the next Depreciation Report Update only, to reflect current trends (i.e. actual interest amount earned in the current year, as per the statements provided). Beyond 2016, the interest rate reflected on the Cash Flow table, which is based on historical long-term trends, governs the analysis.							

10.4 Consulting Services

Description:

Depreciation Reports are defined and mandated by the *Strata Property Act* and can be paid from the Contingency Reserve Fund.

Project Name	Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	CL	Status
10.4.1 Depreciation Report Update	$13,178	$13,985	2016	3 yrs	recurring	3	Forecasted

Project Notes:
This item allows for future Depreciation Report updates. According to Council, the current-year Depreciation Report is to be paid from the operating fund, so no budget for the current report is included.

Scope Of Work

Authorization

This Depreciation Report was commissioned by the Strata Council of Strata Plan No. LMS 712 in accordance with our proposal, dated January 23, 2013.

Mandate

A well planned Depreciation Report requires that contributions to the Reserve Fund be calculated on the basis of expected repair, or replacement costs and life expectancies of the common assets.

In preparing this comprehensive study for the corporation, we:

- Reviewed and visually evaluated the condition of the major common element components (without completing any destructive testing);

- Prepared an inventory of common elements we expect to deteriorate and require repairs or replacement based on our best interpretation of Corporation documentation; where documents were unclear to us, we have recommended review by your legal counsel;

- Estimated the scope of repairs or replacement which is likely to be required;

- Predicted the times when repairs or replacements will be necessary and the life expectancies following the repairs;

- Provided our opinion of the costs required to carry out the repairs or replacements; and

- Calculated various funding scenarios to determine options for contributions into the Contingency Reserve Fund to plan for future expenditures.

We include items which typically require replacement because their service life is shorter than the service life of the buildings (such as caulking, roofing, equipment, etc.). We also include items which would not have been anticipated to be required when the buildings were new, but which have become necessary due to building specific deterioration (concrete repair related to poor durability, window modifications due to loss of internal seals, etc.). There may be expenses which arise which we have not anticipated, related to concealed conditions or unexpected deterioration. As long as these relate to the repair or replacement of the common elements, they can often be paid out of the Contingency Reserve Fund provided the study is updated to account for the impact of these expenditures.

If you are in doubt about whether or not an expenditure can be paid for out of the Contingency Reserve Fund, we recommend you check with your legal counsel or chartered accountant.

Survey Method

Halsall reviewed the property on July 10, 2013.

The survey consisted of visual review of portions of the buildings, including:

- the exterior walls and balconies from grade and from balconies and terraces accessed;
- the windows from interior and exterior;
- the roofs;
- the parking garage;

- suites: 901, 1001, 1303, 1304 (Ocean Tower), 407, 809, 1505, 1509, 2701, 2703/04, 3102 (Beach Tower), 711 (Garden Tower) and townhouse units 8, 11, 13 and 26. No access to commercial units was provided.

- service rooms: main electrical room, generator room, garbage rooms, pool pump room, fountain pump room, sub-electrical rooms, sprinkler rooms, mechanical penthouses (boiler rooms), elevator machine rooms, and various small mechanical rooms in the parking garage; and
- the perimeter site.

There was no access to the elevator pits or hoistways.

Information Provided

We have reviewed the following documents:

- Standard Unit Bylaws;
- Financial statements (audited) for the fiscal years 2010, 2011 and 2012;
- Financial statements (monthly, unaudited) for the current fiscal year;
- Partial Architectural drawings (floorplans and elevations only);
- 2010 Building Enclosure Condition Assessment Report by RDH Building Engineering Ltd. and various update letters and summaries to residents;
- 2010 Roofing membrane replacement summary, prepared by RDH Building Engineering Ltd.; and
- 2013 Elevator Reports by ThyssenKrupp.

Jason Wrobleski (Building Manager), Sylvia Brewer (Property Manager) and representatives of the Strata answered questions about the history of performance of the various systems, described existing capital plans, etc.

A financial questionnaire was completed by the Corporation and the results were incorporated.

The following companies were contacted:
- Effective Fire Protection (fire alarm and suppression systems);
- RDH (building enclosure); and
- Trotter and Morten (mechanical systems).

Respectfully submitted,
HALSALL ASSOCIATES
A Parsons Brinckerhoff Company

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Draft Report Issued: August 30, 2013
Approved by Council: September 30, 2013
Final Report Issued: October 4, 2013

Photo No. 1: Beach tower - east elevation

Photo No. 2: Garden tower - east elevation

Photo No. 3: Garden Tower

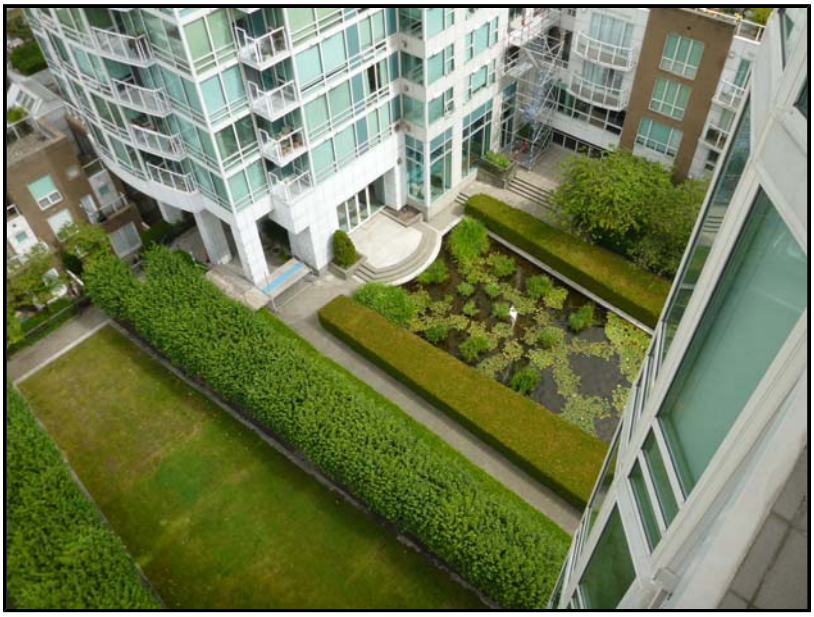


Photo No. 4: Interior courtyard

Photo No. 5: Ocean and Beach towers - east elevations

Photo No. 6: Ocean and Beach towers - south elevations

Photo No. 7: Ocean Tower

Photo No. 8: South and west townhouse blocks

Photo No. 9: Underground garage

Photo No. 10: California walkway at 5th and 6th floor (north townhouse block - units T20 to T26)

Photo No. 11: Balcony (Original tile at Ocean Tower. Others have elastomeric finish.)

Photo No. 12: Rooftop terrace (typical)

Photo No. 13: Main entrance (Ocean tower)

Photo No. 14: Fire alarm annunciator panel (Beach Tower lobby)

Photo No. 15: Emergency generator (P1 level generator room)

Photo No. 16: Entrance lobby (Beach tower)

Photo No. 17: Pool room

Photo No. 18: Lounge (Beach tower)

Photo No. 19: Tower corridor (typical)

Photo No. 20: Make-up air unit (Beach Tower mechanical penthouse)

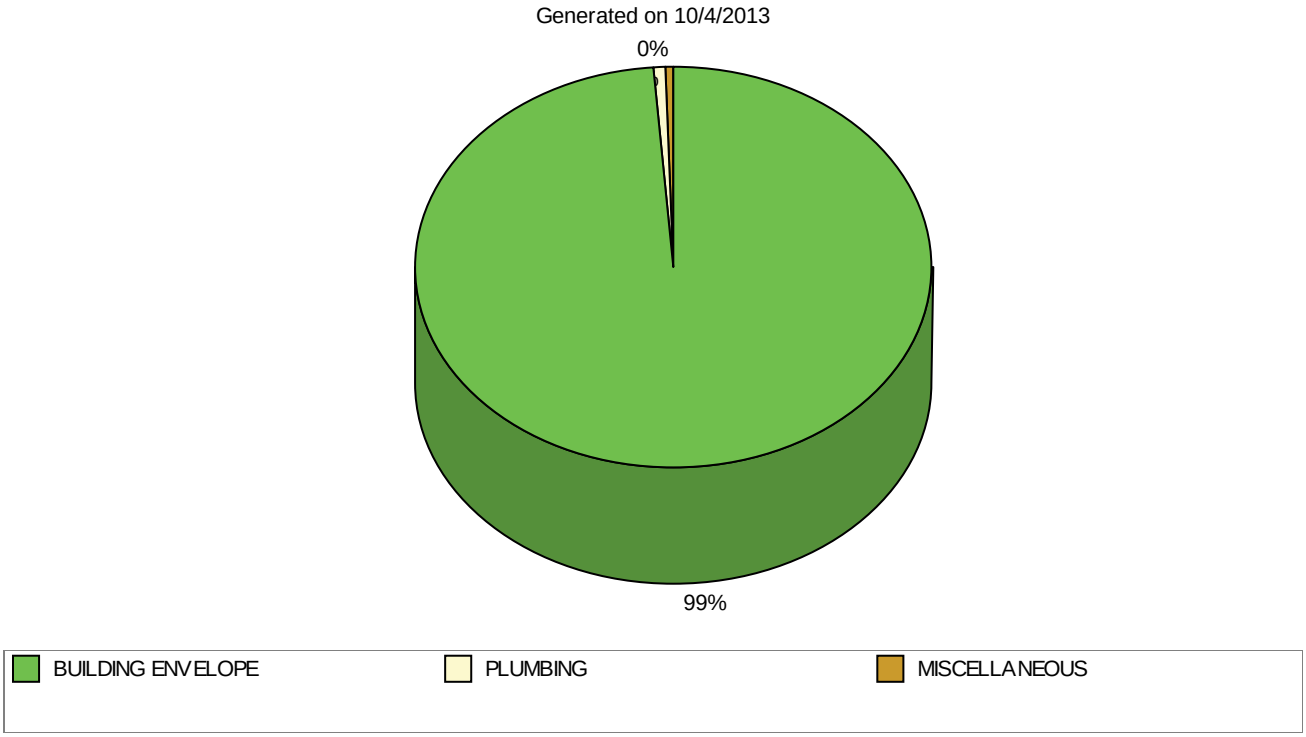
Photo No. 21: Domestic hot water storage tanks (typical)

Photo No. 22: Boilers (Typical)

Photo No. 23: Booster pumps (typical) and fire pump

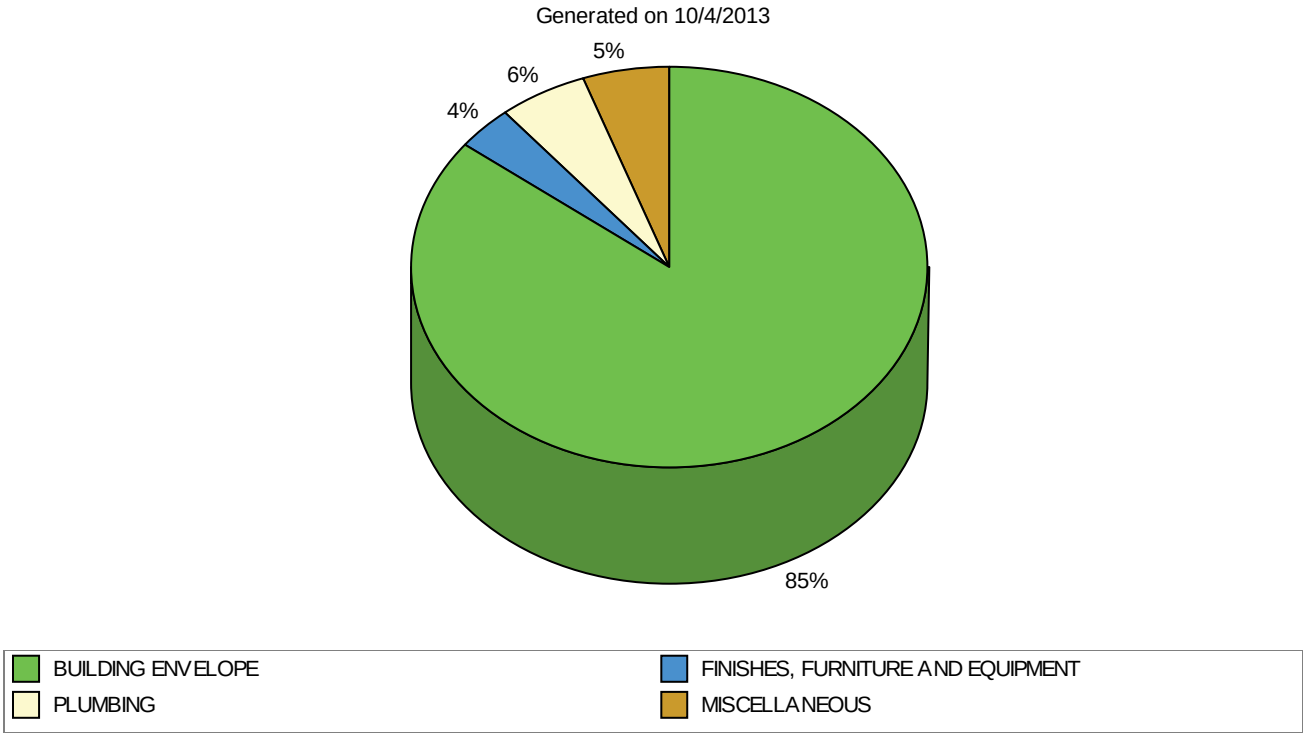
Photo No. 24: Elevator machines (typical)

2013 - Total Annual Expenditures by System



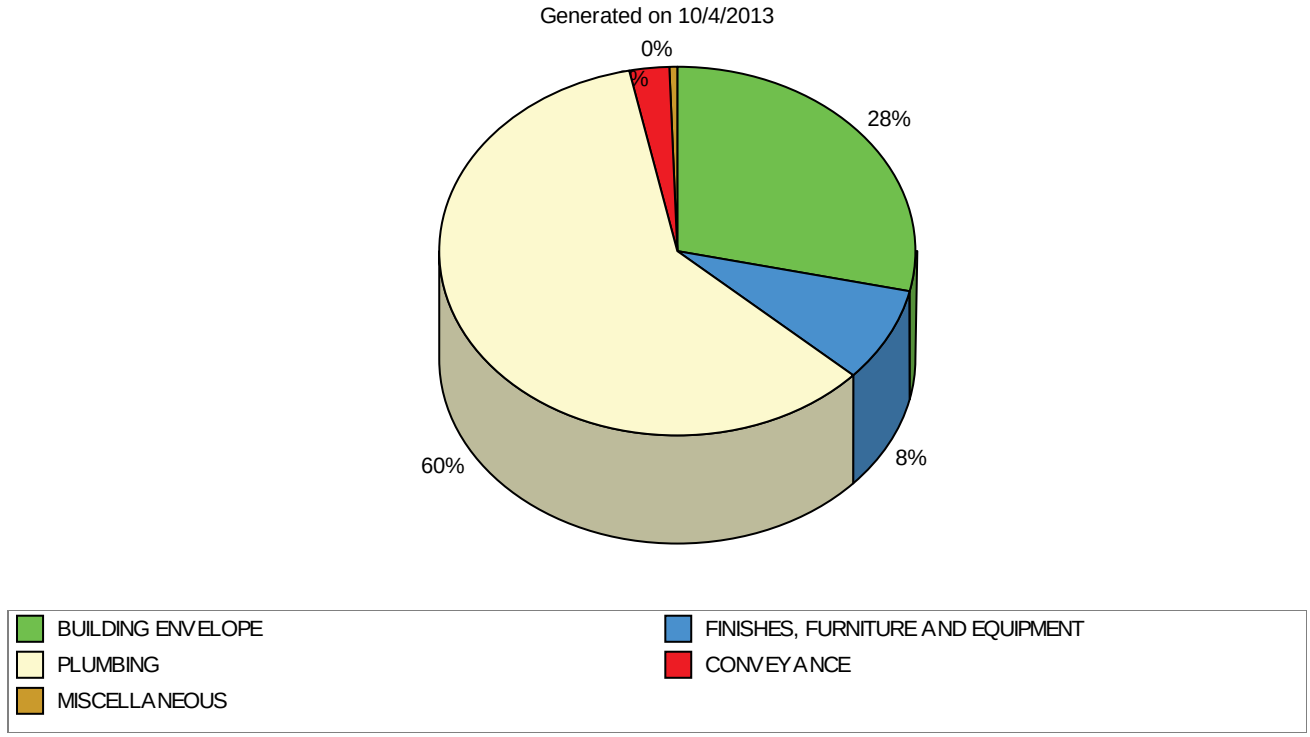
Projects for 2013 listed by System		
BUILDING ENVELOPE		
Building Enclosure Maintenance and Renewal (Phase 3)	Forecasted	$1,988,000
Replace Flat Roofing and Terraces (2013 planned work)	Forecasted	$383,250
Repair Active Leakage at Unit 403	Forecasted	$45,000
Repair Active Leakage at Unit T4	Forecasted	$12,500
PLUMBING		
Replace Domestic Hot Water Storage Tanks (2013 planned work - two tanks in Garden Tower)	Forecasted	$17,000
MISCELLANEOUS		
Interest Adjustment to 2016	Forecasted	$12,000
	TOTAL:	$2,457,750

2014 - Total Annual Expenditures by System



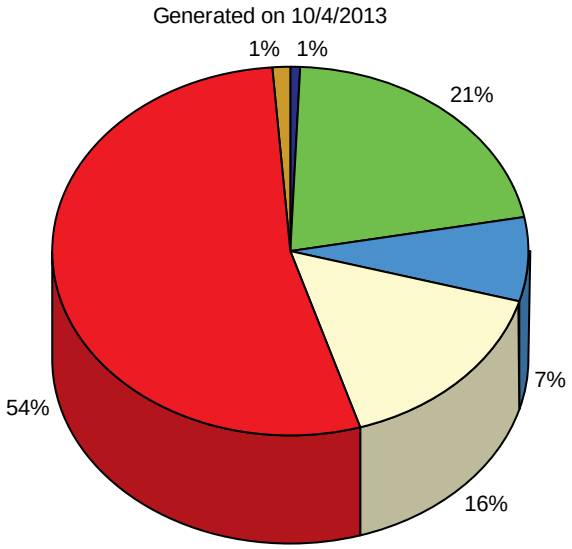
Projects for 2014 listed by System		
BUILDING ENVELOPE		
Install Power Door Operators	Forecasted	$20,884
Repair Glass Block Wall at Beach and Garden Towers	Forecasted	$10,710
Replace Flat Roofing and Terraces (remaining original roofing - 33% per cycle)	Forecasted	$449,921
FINISHES, FURNITURE AND EQUIPMENT		
Repair Water-Damaged Lobby Finishes (Beach Tower)	Forecasted	$20,400
PLUMBING		
Replace Domestic Hot Water Storage Tanks (phased, three tanks per occurrence)	Forecasted	$26,010
Investigation - Domestic Water Treatment System	Forecasted	$5,355
MISCELLANEOUS		
Upgrade CCTV System	Forecasted	$18,207
Interest Adjustment to 2016	Forecasted	$12,240
	TOTAL:	$563,727

2015 - Total Annual Expenditures by System



Projects for 2015 listed by System		
BUILDING ENVELOPE		
Replace Townhouse Front Entrance Doors	Forecasted	$170,418
Double Glazing Replacement Allowance	Forecasted	$111,427
Recoat Stucco Wall at Beach Tower Mechanical Penthouse	Forecasted	$5,462
Replace Flat Roofing and Terraces (remaining original roofing - 33% per cycle)	Forecasted	$458,919
FINISHES, FURNITURE AND EQUIPMENT		
Full Lobby and Lounge Renovation	Forecasted	$218,484
PLUMBING		
Replace Domestic Distribution Piping and Valves (Beach Tower)	Forecasted	$1,054,998
Replace Domestic Distribution Piping and Valves (Ocean Tower)	Forecasted	$523,231
CONVEYANCE		
Install Elevator Machine Guards	Forecasted	$49,159
Install Elevator Car Top Railings	Forecasted	$22,941
MISCELLANEOUS		
Interest Adjustment to 2016	Forecasted	$12,485
	TOTAL:	$2,627,524

2016 - Total Annual Expenditures by System



Projects for 2016 listed by System		
STRUCTURE		
Balcony Condition Survey	Forecasted	$15,043
BUILDING ENVELOPE		
Replace Flat Roofing and Terraces (remaining original roofing - 33% per cycle)	Forecasted	$468,098
FINISHES, FURNITURE AND EQUIPMENT		
Refurbish Change Rooms	Forecasted	$32,626
Refurbish Elevator Cab Interiors (all cabs)	Forecasted	$130,369
PLUMBING		
Replace Domestic Hot Water Storage Tanks (phased, three tanks per occurrence)	Forecasted	$27,061
Install/Replace Back-flow Preventers	Forecasted	$17,828
Replace Domestic Distribution Piping and Valves (Garden Tower - Remaining Piping)	Forecasted	$149,534
Replace Domestic Distribution Piping and Valves (Townhouse Blocks)	Forecasted	$151,636
CONVEYANCE		
Elevator System Modernization	Forecasted	$1,176,667
MISCELLANEOUS		
Interest Adjustment to 2016	Forecasted	$12,734
Depreciation Report Update	Forecasted	$13,985
	TOTAL:	$2,195,581

2017 - Total Annual Expenditures by System

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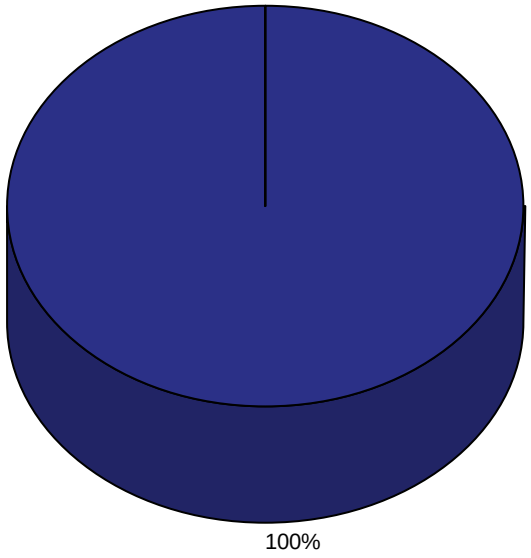

STRUCTURE

Projects for 2017 listed by System		
STRUCTURE		
Repair Concrete Balconies (Ocean Tower)	Forecasted	$405,791
Replace Balcony Guards and Rebuild Parapet Guard Walls (Ocean Tower)	Forecasted	$518,541
	TOTAL:	$924,332