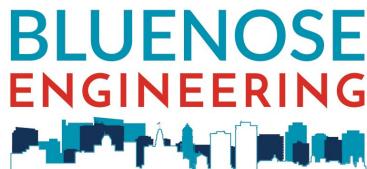


RESERVE FUND STUDY

**174-178 Rutledge Street
Bedford, NS.**

Halifax County Condominium Corporation No. 147



SITE ASSESSMENT ON:
March 28th, 2017

DATE:
April 19th, 2017

BY:

Bluenose Engineering
Unit 14 Box 374, 3650 Hammonds Plains Road, Upper Tantallon, NS. B3Z 4R3

FOR:
HCCC#147
c/o Leigh Nickerson, Property Manager,
Condo 51 Management Ltd.
5842 Bilby St.
Halifax, NS.
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EXECUTIVE SUMMARY

A reserve fund study of Halifax County Condominium Corporation No. 147 ("the Condominium") was conducted by Bluenose Engineering in March, 2017, at the request of Condo 51 Management Ltd. or Condominium ("the Property Manager").

The Condominium includes 36 residential apartment units and below-grade parking in a three-storey building, constructed in 1988. Common elements include the site improvements, structure, exterior walls and roofs, common areas, equipment and services, and mechanical and electrical services within each unit. Unit owners are responsible for interior finishes and fixtures within each unit.

The financial year of the Condominium is January 1st to December 31st. The referenced financial statements indicate a reserve fund balance of \$59,460.57 at the start of the current financial year. Contributions to the reserve fund in the current financial year are budgeted to be \$64,800.

The site and building are in good condition overall.

The reserve fund study makes projections for future repairs or replacements: these are summarized by component in **Appendix Table A**. The projected expenditures are presented by year in **Table B** for each year of the evaluation period.

As shown in **Table A**, the most significant costs over the evaluation period are long-term costs for balcony refurbishment and replacement, window and door replacements, and replacement of roofing and asphalt pavement.

Appendix Table C presents the projected annual expenditures, contributions and year-end balances over the evaluation period.

As shown in **Table C**, the recommended contribution in 2017 is \$64,800, as budgeted. Contributions are unchanged in future years.

The contributions are anticipated to provide a stable level of funding for the long-term upkeep of the condominium's common elements, subject to the recommendations of future updates to the study.

(**Appendix Tables D to F** provide alternative cash flows and a master reserve fund spread sheet, as currently required by Condominium Regulations.)

LIMITING CONDITIONS

The information and opinions expressed in this report are solely for the benefit of the named client(s). The report may not be relied upon by any party other than that indicated without written consent of the named client(s) and the engineer.

This report summarizes the condition of the various items of the condominium's common elements, and provides an opinion of long-term recapitalization costs. The quality of this information is limited by the extent of the property observed and information provided, as identified in the report. The information is provided specifically for decisions to be made by the condominium on its contributions to the reserve fund.

Any opinions presented herein are solely for the purposes stated in the report. In particular, the reader is cautioned not to read the opinions related to any condominium component or element of the report in isolation, or to base decisions or actions related to any condominium component on this report without carrying out appropriate investigations, project management and design.

No responsibility is assumed for legal surveys, soil tests, environmental assessments, detailed engineering calculations, quantity surveying or other activities unless required for the purpose of the report and specifically identified as being a part of the report. Unless specifically identified otherwise, the report does not include an assessment of fire safety or barrier-free access. Bluenose Engineering and its sub-contractors liability for any claim whatsoever arising in connection with this report shall be strictly limited to the fees received for service provided.

This report, and any additions or amendments thereto, is confidential and privileged and contains information intended only for the client(s) named herein and Bluenose Engineering. Any copying, disclosure, distribution or transmission of this reserve fund study is strictly prohibited at law and shall constitute an infringement of copyright.



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INTRODUCTION

A reserve fund study of Halifax County Condominium Corporation No. 147 was conducted by Bluenose Engineering in 2017, at the request of the Condo 51 Management Ltd. The report was prepared by Jim Fletcher, P.Eng.

The report summarizes the condition of the various items or components of the common elements of the building, and provides an opinion of long-term recapitalization costs. The information is provided specifically for decisions to be made on managing the reserve fund and recommending contributions to the fund.

The study provides a budget for future expenditures; it does not, however, commit the Condominium to these expenditures, or prevent other capital work from being carried out. It is recommended that the Condominium conduct the appropriate project management, investigations and design prior to committing to the expenditures budgeted in this study.

SCOPE, METHODS, REFERENCES

1. Regulations and Definitions

CONDOMINIUM ACT

The Condominium Act. R.S., c. 85, last revised 2011 by NS Bill No. 38, provides requirements for the declaration and registration of Condominiums in Nova Scotia, and provides the framework for Condominium Corporations to manage the 'common elements', 'common expenses' and 'common interest' of condominium 'owners' - all as defined in the Act.

Section 31 of the Act defines financial provisions for 'common expenses and the Reserve Fund established by the corporation pursuant to subsection (1A)'. The Reserve Fund is described as follows:

(1A) The corporation shall establish and maintain a reserve fund for major repair and replacement of the common elements and assets of the corporation including, where applicable and without limiting the generality of the foregoing, roofs, exteriors of condominiums, roads, sidewalks, sewers, heating, electrical and plumbing systems, elevators, laundry, recreational and parking facilities.



Section 46 provides the framework for Regulations under the Act.

CONDOMINIUM REGULATIONS

The Condominium Regulations, last amended April, 2015, include regulations regarding Reserve Fund Studies in Part K (Sections 77 to 81). The Regulations include the following definitions:

- a) "*component*" means an individual item that is included in the physical analysis portion of a reserve-fund study as described in subsection 79(2), and shall include an item
 - i. that is the responsibility of the corporation,
 - ii. for which major repair or replacement costs are anticipated to be incurred during its useful life,
 - iii. for which the costs of repair or replacement will not be covered as part of the annual operating or maintenance budget;
- b) "*master reserve-fund spread sheet*" means a spread sheet with calculations of the annual funding requirements for each component based on its remaining useful life, the basic annual contribution and the shortfall contribution options, but without an allowance for inflation or interest earned;
- c) "*projected cash flow tables*" means tables that demonstrate the effect of interest earned on investments and inflation of expenses and validate that a shortfall option will not jeopardize the funding plan;
- d) "*reserve-fund study*" means a study undertaken to determine a funding plan that adequately offsets expenditures for major repair or replacement of components;
- e) "*remaining useful life*" means the estimated time, in years, that a component can be expected to continue to serve its intended function.

For existing condominiums with ten units or more, the Regulations require a comprehensive reserve fund study be carried out every ten years, and updates at five-year intervals or at any time that there is significant change to the assets of the corporation.

Comprehensive reserve fund studies include:

- ❖ An inventory of the Components of the Condominium's Common Elements. The inventory is based on an on-site review; a review of the corporation's architectural, electrical and mechanical plans; a review of the declaration and by-laws; a review of the corporation's history with respect to the maintenance, replacement and repair of its components; and any planned changes to its components;
- ❖ An assessment of the remaining useful life, replacement cost, and the major maintenance and repairs related to each Component;
- ❖ A financial analysis of the Condominium's reserve fund income and projected expenses, indicating the annual contribution required to be paid into the reserve fund to adequately offset expenditures for the major repair or replacement of the components.



Updates of reserve fund studies include:

- ❖ A site visit to update the component inventory and assessment of remaining useful life, replacement costs and major maintenance or repairs; and
- ❖ An update of the financial analysis.

In either case, the physical assessment is based on an on-site review of the major common area components, a review of drawings, previous inspection reports, complaints from occupants and maintenance records, and interviews with the property manager.

The complete Act and Regulations are available on-line at

<http://nslegislature.ca/legc/statutes/condo.htm> and

https://www.novascotia.ca/just/regulations/regs/conregs.htm#TOC2_10, respectively.

2. Scope and Methods

The study was carried out in accordance with the Nova Scotia Condominium Act and Regulations.

The scope and methods for physical assessment are consistent with the American Society for Testing and Materials (ASTM) Standard E2018-15, Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process. The Guide sets standards for a walk-through survey by an observer, document reviews and interviews, and report preparation.

The quality of the assessment is limited by the extent of the property observed and the information gathered. The scope of the assessment and data received are outlined in the section **Reference Information** below.

Assumptions regarding the life expectancy of the Condominium's components and replacement costs are based on information provided by manufacturers, cost survey literature, and observations and experience with similar materials and systems.

A valuation period of 25 years was used for the purpose of this study. Where replacement is anticipated beyond the 25-year window, the report includes an assessment of potential repairs, partial replacement, and/or partial funding for the eventual complete replacement of the component. Some components of the Condominium (e.g., storm water piping) may be assessed as having an "indefinite" life expectancy as compared to the expected useful life of other components. Localized repairs may be required to these components; accordingly, contingency amounts or cyclical repair costs are recommended for these items.

Where budgets are provided for contingencies, allowances or cyclical repairs, the contingency amount is based on the probable cost of work which may occur at a given time, and the frequency reflects the estimated total long-term cost. The actual costs and timing may vary from those assessed in this study.

Generally, the costs presented in the physical assessment section of this report are current



costs, regardless of when the activity may be required. Allowances for inflation are included in the financial analysis.

Costs presented in this report include taxes payable by the Condominium for the component and all indirect costs of project management, design, etc..

Recapitalization cost items less than \$1,000 are generally not included.

The financial assessment identifies assumptions regarding inflation, interest, maintenance and affordability that were made in making the report; and details possible fund accumulation scenarios. The Regulations identify that the following optional scenarios for applying the interest earned on the fund be presented: interest is to be applied (i) into the fund, or (ii) to operations, or (iii) as a portion of the contributions to the fund.

Consultant qualifications are summarized at www.bluenoseengineering.com

3. Reference Information

SITE ASSESSMENT

A site assessment was conducted by Jim Fletcher on March 28th, 2017 accompanied by Leigh Nickerson, Property Manager, Condo 51 Management Ltd., and unaccompanied on March 31st.

The assessment included a visual examination of the site and the building exterior and interior common element areas. Exterior common elements include the roof, the exterior walls, doors, windows and balconies. Interior common elements assessed included the interior parking area, common areas, service rooms, equipment and services, and a portion of the attic space.

In general, the upper balconies were not accessed for assessment of these elements or the adjacent exterior doors and windows: budgets for these components are based on previous study reports and on information provided by the Property Manager and Condominium. One unit was accessed for assessment of the balcony, doors and windows.

DOCUMENTS REVIEWED

The following documents and/or information were made available by the Property Manager:

- Reserve fund balance and budget data; Condo 51 correspondence; March 30, 2017
- HCCC#147 Reserve Fund Study Update; CBCL Limited; Draft - June, 2011

DECLARATION AND BY-LAWS, HCCC#147

It is understood the Common Elements are all property except the Units. The Units are defined in the Declaration and Survey. Provisions in the By Laws for managing a reserve fund may be superseded by the Condominium Regulations, which require funds to be as recommended by the current reserve fund study. The Declaration and By-Laws were not reviewed in this study.



PROPERTY DESCRIPTION

The Condominium includes 36 residential apartment units and below-grade parking in a three-storey building, constructed in 1988.

The building includes concrete foundations, wood framing, pre-engineered wood truss roof framing, asphalt shingle roofing, and vinyl board exterior wall finishes. Interior common areas include a below-grade parking garage, lobbies, stairwells and corridors, and storage and service rooms. Interior equipment includes plumbing, sprinkler and electrical services. Site improvements include site parking, landscaped areas and buried utility services.

Common elements include the site improvements, structure, exterior walls and roofs, common areas, equipment and services, and mechanical and electrical services within each unit. Unit owners are responsible for interior finishes and fixtures within each unit.

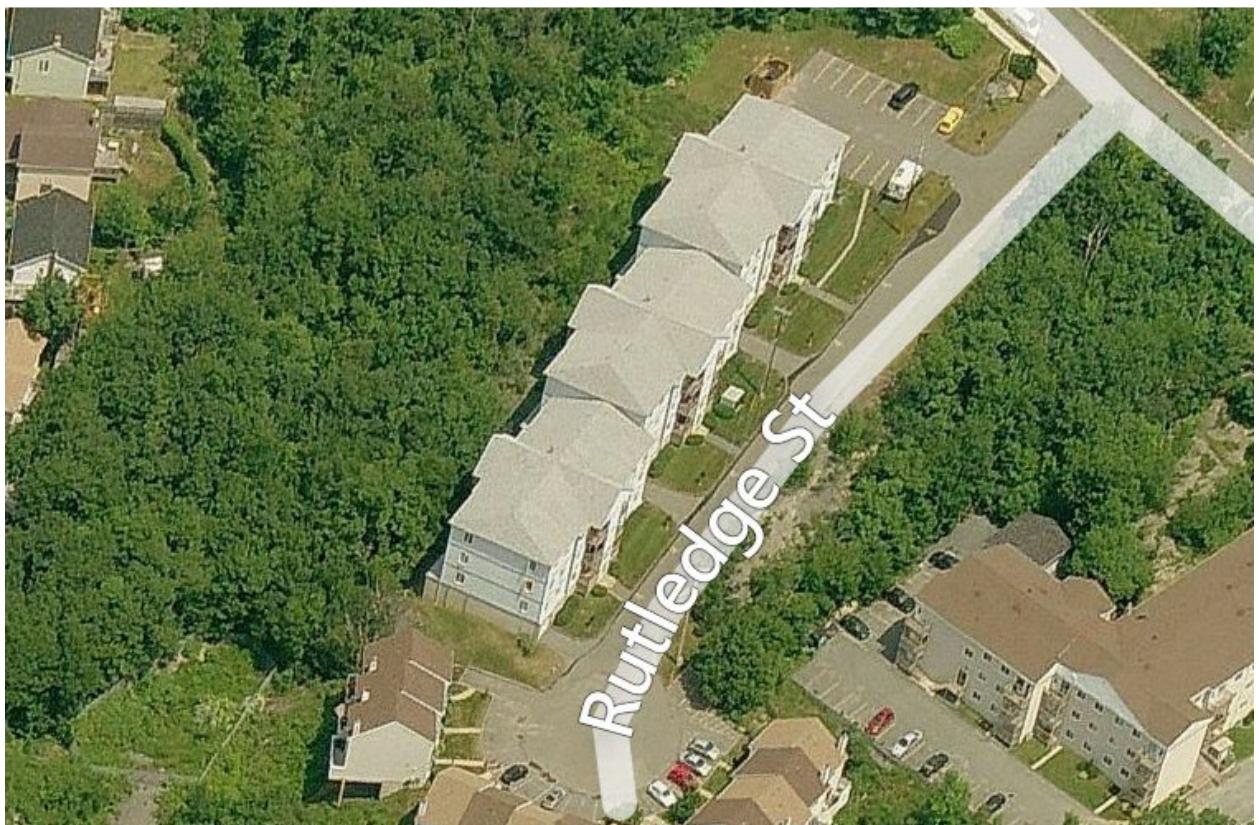


Figure 1 – ‘Birds-Eye’ view from south: 174-178 Rutledge Street and surrounding buildings
Courtesy Bing Maps



PHYSICAL ASSESSMENT

1. Site

SITE DRAINAGE

Surface drainage of the site and adjoining properties is from the north downward to the south and east. The site drains by infiltration and surface runoff to catch basins in the site road and to natural areas in the adjacent properties. Roof drainage is internal to an underground to an underground drainage system.

There is positive drainage away from the building on all sides.

No issues with surface drainage were observed or reported.

BURIED SERVICES

Buried services include a water supply line and municipal drains systems at the street, and underground electrical supply via a padmount transformer to the west of the building.

In general the buried services are considered to have an indefinite useful life; any major repairs are budgeted in the **Site Contingency Allowance** below. The clean out of catch basins is considered a maintenance item.

ASPHALT PAVED AREAS

Paved areas include exterior at-grade parking area for 18 vehicles, and a road to the east of the property which provides access to the condominium's parking garages and part of the adjacent condominium, HCCC#165. Walkways to the building are also asphalt-paved.

The parking area and access to the garages and exterior parking area are in good condition overall. There are a number of transverse cracks but limited settlement Asphalt curbs are in fair condition, with damage in several places. The paving is assessed to have a remaining useful life of 15-25 years. An allowance is included for replacement of the parking area in 2036. The replacement paving is expected to have a useful life of 30 years or more. Interim repairs, including replacement of walkways, are included in the **Site Contingency Allowance** below.

Table A at the end of this report presents the quantities, unit costs and timing for replacements. The table also includes the expected frequency of the activity. The estimated cost (before inflation), timing and expected useful life of the action are summarized below.

(asphalt parking - replacement: \$35,000; 2036; 30 year cycle)

The road is in good condition overall. There are longitudinal and transverse cracks in the asphalt surfaces (photo), and areas of minor settlement.



With continued maintenance, the paving is assessed to have a remaining useful life of 15 years. An allowance is included for replacement of the road and garage driveways in 2032, based on HCCC#165 being responsible for approximately 1/3 of the cost of paving replacement.

(asphalt road - replacement: \$45,000; 2032; 30 year cycle)

EXTERIOR STRUCTURES

The pad-mounted transformer supplying electricity to the condominium is partially enclosed by a structure which has a concrete base and painted concrete masonry walls and concrete cover slab. The walls are in fair condition with deteriorated masonry mortar on all sides.

The current electrical code is consistent with the code at the time of construction in requiring an enclosure for the existing transformer. An allowance is included to replace the structure in the long-term. With adequate drainage at the base of the structure, the replacement enclosure is expected to have a useful life of 50 years or more.

(electrical enclosure walls – replacement: \$8,000; 2030; 50 year cycle)

The site includes a wood-framed garbage enclosure adjacent to the parking area. The enclosure is in good condition and considered to have an indefinite useful life with maintenance and repairs. Any major repairs are budgeted in the **Site Contingency Allowance** below.

SOFT LANDSCAPING

Soft landscaping includes grass areas on all sides and shrubs at the front of the building.

The landscaping was not assessed because of snow cover, but is understood to be budgeted as a maintenance item.

SITE CONTINGENCY ALLOWANCE

A site contingency allowance is recommended for less predictable major repair costs or smaller items not covered above. The contingencies include repairs to buried services, asphalt finishes, asphalt curbs and walkways, and soft landscaping.

(site – contingency allowance: \$3,000; 2019; four year cycle)



2. Structures

The building has reinforced concrete foundations, retaining walls and first floor, and wood-framed walls, floors and roof framing. Balconies are wood framed, supported by the building and by exterior wood posts which bear on the first floor concrete slab and concrete post foundations.

The building is in three similar components, each stepped one floor level relative to its neighbour, and each with its own entrance and access to interior parking.

CONCRETE FOUNDATIONS AND FIRST FLOOR

The foundations include concrete footings, retaining walls, columns and slabs on grade. The first floor slab is an integral part of the concrete framing. The underside of the first floor, the slab on grade surface and exterior elements above grade were visible for assessment; in general, the retaining walls are concealed by storage units.

Where exposed, the structural concrete is in good condition overall. No evidence of excessive settlement or deflection of foundations was observed or reported. Retaining walls have evidence of water intrusion and/or condensation locally but no active cracks were observed.

The slabs on grade has moderate wear after 29 years of service, and have a few shrinkage cracks visible. A coating has been applied adjacent to the rear stairwell and columns in each parking area: these areas may have been damaged by water intrusion and/or local settlement. No further restoration is anticipated over the evaluation period.

Any repairs that may be required are included in the **Structure – Contingency Allowance** below.

BUILDING FRAMING

Exterior walls are typically 2x6 wood frame construction with sheathing and wood rim boards at each floor level. Interior bearing walls are typically 2x4 framing. The roof has pre-engineered wood trusses and plywood sheathing, with insulation supported on ceilings.

In general the structure is in good condition overall with no evidence of excessive settlement, deflection or vibration observed or reported. No cracks were observed in interior surface finishes. There are minor deformations in all rim boards where there is no lateral support at the exterior wall of stairwells: this appears to be a stable



condition. Some roof sheathing has been replaced locally (photo above), consistent with deterioration from prior leaks in the roofing.

Properly maintained, the framing is assessed to have an indefinite useful life. Any repairs are included in the **Structure – Contingency Allowance** below.

BALCONIES

The building has 36 separate balconies. The balcony framing includes wood joists connected via ledgers to the building rim boards, and to wood spandrel beams at the exterior. The lintels are supported by pressure-treated wood posts. Railings are wood.

It is reported that all balconies were rebuilt in 2007. Where visible, the construction details conform to new requirements for post dimensions and fastening details.



Where accessed, the railings, framing and deck boards were in good condition and paint-coated recently. With local repairs and continued painting, the balcony framing and railings are assessed to have a remaining useful life of 25 years. An allowance is included for repairs and painting all balconies on an eight-year cycle.

*(balconies – replacement allowance: \$216,000; 2040; 25 year cycle)
(balcony structures – refurbishment allowance: \$36,000; 2024; eight year cycle)*

STRUCTURE – CONTINGENCY ALLOWANCE

A contingency allowance is recommended for repairs to wood framing due to deterioration caused by water or insect damage, and for potential leak- or surface- repairs to concrete.

(structure – contingency allowance: \$5,000; 2020; five year cycle)

3. Roof

ASPHALT SHINGLE ROOFING

The roof membrane is standard asphalt shingle, laid on un-insulated wood roof sheathing with a slope of 4: or 5:12. Roof insulation is provided above the ceiling in the attic spaces and between roof joists.



The roof of 174 Rutledge was replaced in 2015; 176 and 178 roofing was replaced in 2014. The roofing is in good condition overall, with no leaks reported. The reserve fund study update indicates roof shingles were previously replaced in 2005, and this is confirmed by historical imagery.

The roof shingles are assessed to have an expected useful life of 25 years.

This report recommends routine inspections of the roof every 2-3 years to confirm there is no premature damage related to design, e.g., lack of ventilation. A contingency budget is recommended for inspections and repairs in the **Contingency Allowance** below.

The roofing is assessed to have a remaining useful life of 22 years, based on an expected life of 25 years. Minor repairs to roof sheathing, gutters and downspouts are included with the budget for roofing replacement.

(roof – replacement allowance: \$105,000; 2039; 25 year cycle)



Figure 2 - satellite image, Sept. 7, 2005 courtesy Google Earth

PARKING GARAGE ROOFS

A small area of each parking area is exposed at the respective first floor level, and is protected by sheets of rolled roofing (photo).

The roofing is in good condition overall. Flashing at the adjacent wall above is incomplete; the lack of slope results in ponding on the roofing surface, and the outer edge is unprotected. With repair to flashing, the assembly is assessed to have a remaining life of five years. It is recommended the roofing be replaced with an adhered two-ply modified bitumen system over tapered insulation to provide an expected life of 30 years.



(parking garage roof areas – replace: \$22,500; 2022; 30 year cycle)



ROOFING – CONTINGENCY ALLOWANCE

A contingency allowance is recommended for inspections and repairs, including the repair of low roof flashing in the short-term.

(roofing – contingency allowance: \$2,000; 2017; three year cycle)

4. Exterior Walls

VINYL SIDING

The siding includes vinyl horizontal lap boards, freeze boards and corner boards on all sides of the building, and sheet aluminum soffits over concrete framing at the first floor.

The siding was installed in the last five years to replace original wood siding: it is in good condition overall and is assessed to have an indefinite remaining life. Minor repairs are anticipated and were noted as being required: these are managed as maintenance items.

5. Exterior Doors and Windows

Exterior doors and windows were assessed visually from the exterior and common areas. Windows and doors of one unit were assessed from the interior.

BUILDING ENTRY, EXIT AND SERVICE DOORS

There are three main entries with lobbies. The exterior doors are replacement residential-style single-leaf insulated metal doors in wood frames with large glazed units and side lites, installed in 2011. The doors and frames are light for the required service and are worn after six years of service. Replacement is recommended in the short-term. Lobby doors are similar to the exterior doors but are original and are severely worn at locksets, hinges and seals. A budget is included for replacing lobby doors with aluminum units this year..

Three doors at the rear of the building are equipped for exit only and are grouped with fire exit doors in this report.

There are three single-width multi-leaf insulated metal garage doors with automated operators, last replaced in 2008. The doors are in fair condition due to wear and deterioration at ventilation grilles added to the door panels. Replacement is budgeted in 2023.

(entry doors – replace with aluminum: \$27,000; 2017; 40 year cycle)

(lobby doors – replace with aluminum: \$24,000; 2017; 40 year cycle)

(garage doors – replacement allowance: \$10,800; 2023; 20 year cycle)



UNIT BALCONY DOORS

There are 36 bi-pass sliding doors accessing the balconies. Sliding doors have vinyl-framed glazing units and vinyl-coated wood frames. It is understood the doors were all replaced, starting in 2010, and are reported to be in good condition.

The doors are assessed to have a remaining useful life of 20-30 years; replacement doors are expected to have a useful life of 30 years. A budget is included for the replacement of half of the doors in 2041. The actual scheduling of replacements may be spread over a number of years, to be determined closer to the time of replacement.

(unit balcony doors – replacement allowance: \$46,800; 2041; 30 year cycle)

UNIT WINDOWS

There are approximately 120 window units: all are single units with horizontal sliders, with 'solid vinyl' framed insulated glazing units in vinyl frames, reported to have been installed at some time between 2004 and 2010.

The windows are reported to be, in general, in good operating condition. At the condominium unit entered, the interior finishes around windows were in poor condition overall, with damage and gaps in finishes due to poor workmanship.

The windows are assessed to have a remaining useful life of 20-30 years based on an expected useful life of 35 years.

As with balcony doors, a budget is included for the replacement of half of the windows in 2041. The actual scheduling of replacements may be spread over a number of years, to be determined closer to the time of replacement.

(unit windows – replacement allowance: \$72,000; 2041; 35 year cycle)

An allowance is also included in the **Door and Window – Contingency Allowance** below to refurbish interiors and for window replacements where damaged or unserviceable.

DOOR AND WINDOW – CONTINGENCY ALLOWANCE

A budgetary allowance is included for unforeseen replacements of exterior doors and windows where individual units are damaged or become unserviceable. The allowance is based on the replacement of 1% of the replacement cost of the total asset annually.

(door and window - contingency allowance: \$2,400; annually)



6. Building Interiors

UNIT ENTRANCE DOORS

Entrance doors are wood doors in metal frames, with locksets and closers. The doors are generally original to the development. Doors are in good condition overall except where damaged at locksets.

A budgetary allowance is included for unforeseen replacements of doors and hardware. The allowance is based on the replacement of 1.0% of the replacement cost of the doors and hardware annually.

(unit doors - contingency allowance: \$2,100; 2018; three year cycle)

STAIRWELL FIRE DOORS AND SERVICE DOORS

There are 35 stairwell, passageway, service room and fire exit doors: all are steel doors with wired glazing in metal frames. The doors and hardware are original to the development, and are in serviceable condition.

The doors are assessed to have a remaining useful life varying from 5 to 30 years; replacement doors are expected to have a useful life of 30-40 years. A budgetary allowance is included for the replacement of three doors every three years over the evaluation period. Replacements are to include lever handles.

Rear fire exit doors are recommended for replacement in 2020.

Also, it is recommended a review be made for conformance to requirements for door handles and panic hardware. An allowance is included for the replacement of knobs with lever hardware.

(common area doors – replacement allowance: \$9,000; 2020; three year cycle)

COMMON AREA FINISHES, GARAGE – 3rd FLOORS

Interior common areas include corridors at all levels, lobbies and two stairwells. Floor finishes include carpet in corridors and stairs, and ceramic tile at entrance lobbies. Walls and ceilings are painted gypsum board.

The interior finishes are in good condition overall. All carpet was replaced in 2016.

Budgets are provided to replace carpets on a 16 year cycle and painting every 8 years; however the actual timing is at the condominium's discretion.

*(interior finishes – replace carpet: \$28,000; 2032; 16 year cycle)
(interior finishes – walls and ceilings: \$13,500; 2024; 8 year cycle)*

COMMON AREA FINISHES – SERVICE ROOMS

Common areas include storage and service rooms. Finishes include minimal paintwork of concrete, concrete masonry and gypsum board walls, ceilings and floors.

All service rooms entered were in good condition. No issues are reported. In general, the finishes are serviceable and durable, and their upkeep is considered a maintenance item.

7. Interior Fixtures and Equipment

FIXTURES AND FURNISHING

Entrance fixtures include mail boxes, which are reported to have been replaced in 2010 and are in good condition. An allowance is included for replacement in 2040 based on expected life of 30 years. (Fire protection and communications are included in Electrical below.)

(mail boxes – replace: \$4,200; 2040; 30 year cycle)

8. Mechanical Systems

WATER AND SPRINKLER SUPPLY CONNECTIONS

The domestic water and sprinkler service connections do not include cross connection controls to prevent back-flow of water into the municipal supply. Retrofits are now mandated by the utility (<http://www.halifax.ca/hrwc/CrossConnectControl.html>). A budgetary allowance is included to reconfigure plumbing and install cross connection controls.

(cross-connection control - installation: \$7,200; 2017; 50 year cycle)

PLUMBING

Plumbing systems include the water service entrance, hot and cold water piping to and within the units, drains and plumbing ventilation. Domestic hot water is provided by electric hot water tanks in each unit, which are the unit owners' responsibility.

No issue was identified with these systems. Sanitary sewer lift pumps have been overhauled recently, and a spare pump is stored on site.

With an expected useful life of more than 50 years, some refurbishment is anticipated to the plumbing service, distribution and venting piping systems or roof drainage system over the evaluation period. A contingency is recommended for refurbishments, and is included in the **Mechanical Contingency Allowance** below. Plumbing equipment and fixtures in the units are the unit owners' responsibility.

VENTILATION

Common area ventilation includes a fan unit in each parking garage controlled by a carbon monoxide sensor. The systems are inspected routinely and are in serviceable condition.

Garage vestibules are vented by small in-line exhaust fans reported to have been installed in 2010. Occasional refurbishment of fans and motors is anticipated and included in the **Mechanical Contingency Allowance** below.

SPRINKLER SYSTEM

The building fire protection includes a dry sprinkler system. The attics, units, corridors, stairs and garages are protected by sprinkler heads.

The system is inspected regularly and is reported to be in good condition overall. No repairs were reported.

Dry sprinkler systems are susceptible to corrosion locally where condensation lies in empty pipes. An allowance is recommended for the replacement of sections of the dry sprinkler piping, and refurbishment of the air compressor and valves, over the evaluation period. Other refurbishments are included in the **Mechanical Contingency** below.

(dry sprinkler system – refurbishment allowance: \$12,000; 2023; ten year cycle)

MECHANICAL CONTINGENCY

A contingency allowance is recommended for less predictable major repairs to plumbing, heating, ventilation and sprinkler systems.

(mechanical – contingency allowance: \$5,000; 2019; five year cycle)

9. Electrical Systems

POWER SUPPLY AND DISTRIBUTION

Power supply is underground to the padmount transformer on the property, then as 120/208V 3-phase 4-wire underground to a Commander® 600A switch in the electrical room.

The unit and house meters are located in the electrical room. Distribution wiring to and within each unit is the condominium's responsibility.

No issue was reported or observed. The system is assessed to have a remaining useful life beyond the evaluation period. It is recommended that an infra-red scan be carried out as a maintenance inspection item before the next update to the reserve fund study .Any repairs



required over the evaluation period may be included in the **Electrical Allowance** below.

Electrical equipment in each unit, including the unit switch and circuit breaker panel, and heating, lighting and other electrical fixtures, are the responsibility of each unit owner.

LIGHTING

Corridors and lobbies have ceiling-mounted sconces. The garages have fluorescent tube fixtures.

The interior lighting is in good condition overall. LED replacements may be considered for fluorescent tubes in garages as an economic maintenance item.

A budget is included for the replacement of corridor and stairwell lighting with common area finishes, based on an expected useful life of 20-30 years and timing to match other corridor refurbishments, at the discretion of the condominium.

(interior lighting – replacements: \$10,000; 2032; 24 year cycle)

Emergency lighting and exit lights are in fair or good condition and are replaced as maintenance when required; upkeep may be included in the **Electrical Allowance** below.

Exterior Lighting includes entrance lighting and wall-mounted high-intensity devices (HID) for the parking area and garage entrances. The exterior lighting was not assessed in detail. An allowance for replacements included in the **Electrical Allowance** below.

HEATING

Entrance lobbies have fan heaters which are reported to have been replaced in 2010 and are in good condition. Their replacement is budgeted based on an expected life of 25 years.

(lobby heaters – replacement: \$4,500; 2035; 25 year cycle)

ELECTRICAL/ELECTRONIC EQUIPMENT

The entrance is equipped with a Siemens fire panel in 176 Rutledge Street, and intercom system in each building. The fire panel was replaced in 2016 and is in good condition. Intercoms appear to be original and serviceable – may be replaced for access by unit owners' phones in the short- or medium-term.

In general, the expected useful life of the electrical and electronic fire protection control equipment is approximately 30 years. An allowance is included for replacing the intercoms. Smoke detectors and other sensors throughout the building are budgeted to be replaced as

an annual maintenance item or as part of the **Electrical Allowance** below.

(intercoms – replacement allowance: \$6,000; 2020; 30 year cycle)

ELECTRICAL ALLOWANCE

An allowance is recommended for refurbishments to distribution wiring, exterior and emergency lighting and fire alarm systems, and for unforeseen major repairs.

(electrical – allowance: \$3,000; 2021; five year cycle)

10. General

EXPENSES – YEAR TO DATE

(Not applicable)

PROFESSIONAL FEES

Reserve fund study and update costs, engineering and project management are budgeted as general costs.

(engineering – reports: \$3,000; 2017; five year cycle)



PROJECTED EXPENDITURES

TABLE A – SCHEDULE OF COMPONENTS AND CAPITAL REQUIREMENTS (PRESENT COST)

Appendix Table A presents a summary of components their capital requirements over the 25-year evaluation period.

Work item quantities are estimated by:

- LS lump sum
- Unit number of condominium units affected
- Item number of items included
- LF linear feet
- SF square foot

The table indicates the estimated present cost and year for the action, and the expected useful life or frequency of the cost.

The table also indicates the estimated total cost for each item over the evaluation period. This column provides an indication of the relative significance of each item in the long-term.

As shown in **Table A**, the most significant costs over the evaluation period are long-term costs for balcony refurbishment and replacement, window and door replacements, and replacement of roofing and asphalt pavement.

Cost Estimates

Unless otherwise noted, the costs are estimated as the current value regardless of when the activity is to be required.

All amounts include 15% Harmonized Sales Tax.

Estimate of Timing

The estimated timing of items of work are based on the assessed remaining useful life of the item. Remaining useful life is determined by visual assessment of the physical condition of the item, an assessment of the rate of deterioration, and assessment of the condition at which the item will require replacement or refurbishment. Estimates for the frequency of repetition of the item are based on published standards for expected useful life, industry experience, an assessment of the service condition at the site, and consultation with condominium and property managers.



TABLE B – PROJECTED EXPENDITURES

Appendix Table B presents the assessed cost for each item for each year of the evaluation period.

The table includes the effect of inflation.

Inflation

Future costs are calculated as the current cost factored by the inflation rate, compounded over the associated number of years.

An inflation rate of 1.72% is estimated from a review of the average yearly inflation rate (Consumer Price Index – All Items) for Nova Scotia over the past ten years, as tabulated below.

Year	Change in Consumer Price Index ¹
2007	1.90
2008	3.00
2009	-0.20
2010	2.16
2011	3.81
2012	1.96
2013	1.28
2014	1.66
2015	0.39
2016	1.24
average	1.72

An inflation rate of 2.0% is used for the financial analysis.

¹ Source: NS Finance <http://www.novascotia.ca/finance/statistics/topic.asp?fto=21u>

RESERVE FUND

RESERVE FUND STATUS

The financial year of the Condominium is January 1st to December 31st.

The referenced financial statements indicate a reserve fund balance of \$59,460.57 at the start of the current financial year. Contributions to the reserve fund in the current financial year are budgeted to be \$64,800.

RESERVE FUND INTEREST RATE

Capital held in the reserve fund will earn interest.

An average rate of interest of 1.41% may be derived using the ten year average of the bank rate and treasury bills issued by the Bank of Canada, as tabulated below.

Year	Bank rate (last Wed. of the month) ²	Treasury bill auction (av. yields – 3 month) ³
2007	4.60	4.60
2008	3.21	2.30
2009	0.65	0.32
2010	0.58	0.58
2011	1.25	0.91
2012	1.25	0.95
2013	1.25	0.97
2014	1.25	0.91
2015	0.88	0.50
2016	0.75	0.50
average	1.57	1.25

An interest rate of 1.0% is used in the analysis.

The interest on money held in the reserve fund is estimated as interest on the starting balance over the full year plus interest for six months on the contributions less the expenditures in the year.

² Source: Bank of Canada <http://www.bankofcanada.ca/rates/interest-rates/canadian-interest-rates/>

³ Source: Bank of Canada <http://www.bankofcanada.ca/rates/interest-rates/t-bill-yields/>



TABLE C – PROJECTED CASH FLOW

Appendix Table C presents the recommended budget for expenditures and contributions.

The total projected expenditures for each year are as detailed in **Table B – Forecast Expenditures**, and include the effects of inflation.

In the scenario presented in **Table C**, interest earned stays in the reserve fund.

The projected balance at year-end is the sum of the starting balance, contributions and interest, less expenses. The balance at the start of the year is the balance at the end of the preceding year. The table includes interest on funds at the rate noted above.

As shown in **Table C**, the recommended contribution in 2017 is \$64,800, as budgeted. Contributions are unchanged in future years.

The contributions are anticipated to provide a stable level of funding for the long-term upkeep of the condominium's common elements, subject to the recommendations of future updates to the study.

TABLES D AND E – OPTIONAL PROJECTED CASH FLOW

The Regulations require alternative cash flow options be presented. **Tables D** and **E**, respectively, present scenarios in which interest is removed for operations, and contributions are reduced by the interest reported in the previous year. In both cases, the fund is reduced significantly relative to **Table C**.

The funding described in **Table C** is recommended as the simplest means of financial planning for the Condominium and its Unit Owners.

TABLE F: MASTER RESERVE FUND SPREAD SHEET

As required by the Regulations, the Master Reserve Fund Spread Sheet indicates the contribution that would be required to fund reserves for each component's future work individually. The table calculates a total funding requirement for all components in each year, and may be used for comparison with the recommended annual contribution.

(The costs, funding requirements, contributions and calculated balances shown in this table do not include effects of inflation, interest or escalation.)

RESERVE FUND STATUS CERTIFICATE

SUMMARY REPORT

A reserve fund study of Halifax County Condominium Corporation No. 147 "174-178 Rutledge Street Bedford", was conducted by Bluenose Engineering in 2017, at the request of Condo 51 Management Ltd. or Condominium.

The Condominium includes 36 residential apartment units and below-grade parking in a three-storey building, constructed in 1988. Common elements include the site improvements, structure, exterior walls and roofs, common areas, equipment and services, and mechanical and electrical services within each unit. Unit owners are responsible for interior finishes and fixtures within each unit.

The site and building are in good condition overall.

The reserve fund study makes projections for future repairs or replacements: these are summarized by component in **Appendix Table A**. The projected expenditures are presented by year in **Table B** for each year of the evaluation period.

The financial year of the Condominium is January 1st to December 31st. The referenced financial statements indicate a reserve fund balance of \$59,460.57 at the start of the current financial year. Contributions to the reserve fund in the current financial year are budgeted to be \$64,800.

RECOMMENDATIONS

A schedule of recommended refurbishments is provided in **Table A**.

As shown in **Table C**, the recommended contribution in 2017 is \$64,800, as budgeted. Contributions are unchanged in future years.

Alternative scenarios are presented in **Tables D** and **E**.

OPINION

Based on the observations and analysis made in the preparation of this Reserve Fund Study, it is expected the funding recommended in **Table C**, or included in optional **Tables D** or **E** of this report, will be adequate to offset the expenditures for the major repair or replacement of the components included in the condominium's common elements.

Signed: **Jim Fletcher, P.Eng.**
Date: **April 19th, 2017**

BLUENOSE ENGINEERING

Unit 14 Box 374, 3650 Hammonds Plains Road,
Upper Tantallon, NS. B3Z 4R3



APPENDIX – COST TABLES

TABLE A: SCHEDULE OF COMPONENTS AND CAPITAL REQUIREMENTS

TABLE B: FORECAST EXPENDITURES

TABLE C: PROJECTED CASH FLOW (INTEREST STAYS IN FUND)

TABLE D: OPTIONAL PROJECTED CASH FLOW (interest removed for operations)

TABLE E: OPTIONAL PROJECTED CASH FLOW (contributions are reduced by interest)

TABLE F: MASTER RESERVE FUND SPREAD SHEET



TABLE A

Schedule of Components and Capital Requirements

No.	Item	Cost				Year Required	Timing		Cost -25 years (\$)	
		Description	-	Action	unit	number	unit cost	item cost		
1	Site									
1.1	asphalt parking - replacement	SF	5,000		7.00	35,000	2036	1	30	35,000
1.2	asphalt road - replacement	SF	9,000		5.00	45,000	2032	2	30	45,000
1.3	electrical enclosure walls – replacement	LS	1		8,000	8,000	2030	3	50	8,000
1.4	site – contingency allowance	LS	1		3,000	3,000	2019	4	4	18,000
2	Building Structures									
2.1	balconies – replacement allowance	unit	36		6,000	216,000	2040	1	25	216,000
2.2	balcony structures – refurbishment	LS	1		36,000	36,000	2024	1	8	108,000
2.3	structure – contingency allowance	LS	1		5,000	5,000	2020	2	5	25,000
3	Roof									
3.1	roof - replacement allowance	SF	14,000		7.50	105,000	2039	1	25	105,000
3.2	parking garage roof areas – replace	SF	1,500		15.00	22,500	2022	2	30	22,500
3.3	roofing – contingency allowance	LS	1		2,000	2,000	2017	3	3	18,000
4	Exterior Walls	not applicable								
5	Exterior Doors and Windows									
5.1	entry doors – replace with aluminum	item	3		9,000	27,000	2017	1	40	27,000
5.2	lobby doors – replace with aluminum	item	3		8,000	24,000	2017	2	40	24,000
5.3	garage doors – replacement allowance	item	3		3,600	10,800	2023	3	20	10,800
5.4	unit balcony doors – replacement	Item	18		2,600	46,800	2041	4	30	46,800
5.5	unit windows - replacement allowance	Item	60		1,200	72,000	2041	5	35	72,000
5.6	door and window - contingency allowance	LS	1		2,400	2,400	2017	6	1	60,000
6	Building Interiors									
6.1	unit doors - contingency allowance	LS	1		2,100	2,100	2018	1	3	16,800
6.2	common area doors - replacement allowance	item	3		3,000	9,000	2020	2	3	81,000
6.3	interior finishes - replace carpet	SF	3,500		8.00	28,000	2032	3	16	28,000
6.4	interior finishes - walls and ceilings	SF	15,000		0.90	13,500	2024	4	8	40,500
7	Interior Fixtures and Equipment									
7.1	mail boxes – replace	item	3		1,400	4,200	2040	1	30	4,200
8	Mechanical									
8.1	cross-connection control - installation	LS	1		7,200	7,200	2017	1	50	7,200
8.2	dry sprinkler system – allowance	LS	1		12,000	12,000	2023	2	10	24,000
8.3	mechanical – contingency allowance	LS	1		5,000	5,000	2019	3	5	25,000
9	Electrical									
9.1	interior lighting – replacements	LS	1		10,000	10,000	2032	1	24	10,000
9.2	lobby heaters – replacement	item	3		1,500	4,500	2035	2	25	4,500
9.3	intercoms – replacement allowance	item	3		2,000	6,000	2020	3	30	6,000
9.4	electrical – contingency allowance	LS	1		3,000	3,000	2021	4	5	15,000
10	General									
10.1	reserve fund – reports	LS	1		3,000	3,000	2017	1	5	15,000
TOTAL:									1,118,300	

Notes:

1 'Remaining Useful Life' (RUL) is time remaining before the action is anticipated to be required

2 'Expected Useful Life' (EUL) is the duration for which the action is considered effective, i.e., life cycle

TABLE B

Forecast Expenditures

sheet 1

No.	Item Description - Action	Cost Total	Capital Cost (\$; inflated)				
			2017	2018	2019	2020	2021
1	Site						
1.1	asphalt parking - replacement	50,988	-	-	-	-	-
1.2	asphalt road - replacement	60,564	-	-	-	-	-
1.3	electrical enclosure walls – replacement	10,349	-	-	-	-	-
1.4	site – contingency allowance	23,038	-	-	3,121	-	-
2	Building Structures						
2.1	balconies – replacement allowance	340,610	-	-	-	-	-
2.2	balcony structures – refurbishment	146,572	-	-	-	-	-
2.3	structure – contingency allowance	32,658	-	-	-	5,306	-
3	Roof						
3.1	roof - replacement allowance	162,328	-	-	-	-	-
3.2	parking garage roof areas – replace	24,842	-	-	-	-	-
3.3	roofing – contingency allowance	23,098	2,000	-	-	2,122	-
4	Exterior Walls	not applicable					
5	Exterior Doors and Windows						
5.1	entry doors – replace with aluminum	27,000	27,000	-	-	-	-
5.2	lobby doors – replace with aluminum	24,000	24,000	-	-	-	-
5.3	garage doors – replacement allowance	12,163	-	-	-	-	-
5.4	unit balcony doors – replacement	75,275	-	-	-	-	-
5.5	unit windows - replacement allowance	115,807	-	-	-	-	-
5.6	door and window - contingency allowance	76,873	2,400	2,448	2,497	2,547	2,598
6	Building Interiors						
6.1	unit doors - contingency allowance	21,293	-	2,142	-	-	2,273
6.2	common area doors - replacement allowan	103,940	9,000	-	-	9,551	-
6.3	interior finishes - replace carpet	37,684	-	-	-	-	-
6.4	interior finishes - walls and ceilings	54,965	-	-	-	-	-
7	Interior Fixtures and Equipment						
7.1	mail boxes – replace	6,623	-	-	-	-	-
8	Mechanical						
8.1	cross-connection control - installation	7,200	7,200	-	-	-	-
8.2	dry sprinkler system – allowance	29,987	-	-	-	-	-
8.3	mechanical – contingency allowance	32,018	-	-	5,202	-	-
9	Electrical						
9.1	interior lighting – replacements	13,459	-	-	-	-	-
9.2	lobby heaters – replacement	6,427	-	-	-	-	-
9.3	intercoms – replacement allowance	6,367	-	-	-	6,367	-
9.4	electrical – contingency allowance	19,987	-	-	-	-	3,247
10	General						
10.1	reserve fund – reports	18,465	3,000	-	-	-	-
Total Annual Expenditure:		1,564,579	74,600	4,590	10,820	25,893	8,118

TABLE B

Forecast Expenditures

sheet 2

No.	Item Description - Action	Cost Total	Capital Cost (\$; inflated)				
			2022	2023	2024	2025	2026
1	Site						
1.1	asphalt parking - replacement	50,988	-	-	-	-	-
1.2	asphalt road - replacement	60,564	-	-	-	-	-
1.3	electrical enclosure walls – replacement	10,349	-	-	-	-	-
1.4	site – contingency allowance	23,038	-	3,378	-	-	-
2	Building Structures						
2.1	balconies – replacement allowance	340,610	-	-	-	-	-
2.2	balcony structures – refurbishment	146,572	-	-	41,353	-	-
2.3	structure – contingency allowance	32,658	-	-	-	5,858	-
3	Roof						
3.1	roof - replacement allowance	162,328	-	-	-	-	-
3.2	parking garage roof areas – replace	24,842	24,842	-	-	-	-
3.3	roofing – contingency allowance	23,098	-	2,252	-	-	2,390
4	Exterior Walls	not applicable					
5	Exterior Doors and Windows						
5.1	entry doors – replace with aluminum	27,000	-	-	-	-	-
5.2	lobby doors – replace with aluminum	24,000	-	-	-	-	-
5.3	garage doors – replacement allowance	12,163	-	12,163	-	-	-
5.4	unit balcony doors – replacement	75,275	-	-	-	-	-
5.5	unit windows - replacement allowance	115,807	-	-	-	-	-
5.6	door and window - contingency allowance	76,873	2,650	2,703	2,757	2,812	2,868
6	Building Interiors						
6.1	unit doors - contingency allowance	21,293	-	-	2,412	-	-
6.2	common area doors - replacement allowan	103,940	-	10,135	-	-	10,756
6.3	interior finishes - replace carpet	37,684	-	-	-	-	-
6.4	interior finishes - walls and ceilings	54,965	-	-	15,507	-	-
7	Interior Fixtures and Equipment						
7.1	mail boxes – replace	6,623	-	-	-	-	-
8	Mechanical						
8.1	cross-connection control - installation	7,200	-	-	-	-	-
8.2	dry sprinkler system – allowance	29,987	-	13,514	-	-	-
8.3	mechanical – contingency allowance	32,018	-	-	5,743	-	-
9	Electrical						
9.1	interior lighting – replacements	13,459	-	-	-	-	-
9.2	lobby heaters – replacement	6,427	-	-	-	-	-
9.3	intercoms – replacement allowance	6,367	-	-	-	-	-
9.4	electrical – contingency allowance	19,987	-	-	-	-	3,585
10	General						
10.1	reserve fund – reports	18,465	3,312	-	-	-	-
Total Annual Expenditure:		1,564,579	30,804	44,146	67,772	8,670	19,600

TABLE B

Forecast Expenditures

sheet 3

No.	Item Description - Action	Cost Total	Capital Cost (\$; inflated)				
			2027	2028	2029	2030	2031
1	Site						
1.1	asphalt parking - replacement	50,988	-	-	-	-	-
1.2	asphalt road - replacement	60,564	-	-	-	-	-
1.3	electrical enclosure walls – replacement	10,349	-	-	-	10,349	-
1.4	site – contingency allowance	23,038	3,657	-	-	-	3,958
2	Building Structures						
2.1	balconies – replacement allowance	340,610	-	-	-	-	-
2.2	balcony structures – refurbishment	146,572	-	-	-	-	-
2.3	structure – contingency allowance	32,658	-	-	-	6,468	-
3	Roof						
3.1	roof - replacement allowance	162,328	-	-	-	-	-
3.2	parking garage roof areas – replace	24,842	-	-	-	-	-
3.3	roofing – contingency allowance	23,098	-	-	2,536	-	-
4	Exterior Walls	not applicable					
5	Exterior Doors and Windows						
5.1	entry doors – replace with aluminum	27,000	-	-	-	-	-
5.2	lobby doors – replace with aluminum	24,000	-	-	-	-	-
5.3	garage doors – replacement allowance	12,163	-	-	-	-	-
5.4	unit balcony doors – replacement	75,275	-	-	-	-	-
5.5	unit windows - replacement allowance	115,807	-	-	-	-	-
5.6	door and window - contingency allowance	76,873	2,926	2,984	3,044	3,105	3,167
6	Building Interiors						
6.1	unit doors - contingency allowance	21,293	2,560	-	-	2,717	-
6.2	common area doors - replacement allowan	103,940	-	-	11,414	-	-
6.3	interior finishes - replace carpet	37,684	-	-	-	-	-
6.4	interior finishes - walls and ceilings	54,965	-	-	-	-	-
7	Interior Fixtures and Equipment						
7.1	mail boxes – replace	6,623	-	-	-	-	-
8	Mechanical						
8.1	cross-connection control - installation	7,200	-	-	-	-	-
8.2	dry sprinkler system – allowance	29,987	-	-	-	-	-
8.3	mechanical – contingency allowance	32,018	-	-	6,341	-	-
9	Electrical						
9.1	interior lighting – replacements	13,459	-	-	-	-	-
9.2	lobby heaters – replacement	6,427	-	-	-	-	-
9.3	intercoms – replacement allowance	6,367	-	-	-	-	-
9.4	electrical – contingency allowance	19,987	-	-	-	-	3,958
10	General						
10.1	reserve fund – reports	18,465	3,657	-	-	-	-
Total Annual Expenditure:		1,564,579	12,799	2,984	23,336	22,638	11,084

TABLE B

Forecast Expenditures

sheet 4

No.	Item Description - Action	Cost Total	Capital Cost (\$; inflated)				
			2032	2033	2034	2035	2036
1	Site						
1.1	asphalt parking - replacement	50,988	-	-	-	-	50,988
1.2	asphalt road - replacement	60,564	60,564	-	-	-	-
1.3	electrical enclosure walls – replacement	10,349	-	-	-	-	-
1.4	site – contingency allowance	23,038	-	-	-	4,285	-
2	Building Structures						
2.1	balconies – replacement allowance	340,610	-	-	-	-	-
2.2	balcony structures – refurbishment	146,572	48,451	-	-	-	-
2.3	structure – contingency allowance	32,658	-	-	-	7,141	-
3	Roof						
3.1	roof - replacement allowance	162,328	-	-	-	-	-
3.2	parking garage roof areas – replace	24,842	-	-	-	-	-
3.3	roofing – contingency allowance	23,098	2,692	-	-	2,856	-
4	Exterior Walls	not applicable					
5	Exterior Doors and Windows						
5.1	entry doors – replace with aluminum	27,000	-	-	-	-	-
5.2	lobby doors – replace with aluminum	24,000	-	-	-	-	-
5.3	garage doors – replacement allowance	12,163	-	-	-	-	-
5.4	unit balcony doors – replacement	75,275	-	-	-	-	-
5.5	unit windows - replacement allowance	115,807	-	-	-	-	-
5.6	door and window - contingency allowance	76,873	3,230	3,295	3,361	3,428	3,496
6	Building Interiors						
6.1	unit doors - contingency allowance	21,293	-	2,883	-	-	3,059
6.2	common area doors - replacement allowan	103,940	12,113	-	-	12,854	-
6.3	interior finishes - replace carpet	37,684	37,684	-	-	-	-
6.4	interior finishes - walls and ceilings	54,965	18,169	-	-	-	-
7	Interior Fixtures and Equipment						
7.1	mail boxes – replace	6,623	-	-	-	-	-
8	Mechanical						
8.1	cross-connection control - installation	7,200	-	-	-	-	-
8.2	dry sprinkler system – allowance	29,987	-	16,473	-	-	-
8.3	mechanical – contingency allowance	32,018	-	-	7,001	-	-
9	Electrical						
9.1	interior lighting – replacements	13,459	13,459	-	-	-	-
9.2	lobby heaters – replacement	6,427	-	-	-	6,427	-
9.3	intercoms – replacement allowance	6,367	-	-	-	-	-
9.4	electrical – contingency allowance	19,987	-	-	-	-	4,370
10	General						
10.1	reserve fund – reports	18,465	4,038	-	-	-	-
Total Annual Expenditure:		1,564,579	200,400	22,651	10,362	36,992	61,914

TABLE B

Forecast Expenditures

sheet 5

No.	Item Description - Action	Cost Total	Capital Cost (\$; inflated)				
			2037	2038	2039	2040	2041
1	Site						
1.1	asphalt parking - replacement	50,988	-	-	-	-	-
1.2	asphalt road - replacement	60,564	-	-	-	-	-
1.3	electrical enclosure walls – replacement	10,349	-	-	-	-	-
1.4	site – contingency allowance	23,038	-	-	4,638	-	-
2	Building Structures						
2.1	balconies – replacement allowance	340,610	-	-	-	340,610	-
2.2	balcony structures – refurbishment	146,572	-	-	-	56,768	-
2.3	structure – contingency allowance	32,658	-	-	-	7,884	-
3	Roof						
3.1	roof - replacement allowance	162,328	-	-	162,328	-	-
3.2	parking garage roof areas – replace	24,842	-	-	-	-	-
3.3	roofing – contingency allowance	23,098	-	3,031	-	-	3,217
4	Exterior Walls	not applicable					
5	Exterior Doors and Windows						
5.1	entry doors – replace with aluminum	27,000	-	-	-	-	-
5.2	lobby doors – replace with aluminum	24,000	-	-	-	-	-
5.3	garage doors – replacement allowance	12,163	-	-	-	-	-
5.4	unit balcony doors – replacement	75,275	-	-	-	-	75,275
5.5	unit windows - replacement allowance	115,807	-	-	-	-	115,807
5.6	door and window - contingency allowance	76,873	3,566	3,638	3,710	3,785	3,860
6	Building Interiors						
6.1	unit doors - contingency allowance	21,293	-	-	3,247	-	-
6.2	common area doors - replacement allowan	103,940	-	13,641	-	-	14,476
6.3	interior finishes - replace carpet	37,684	-	-	-	-	-
6.4	interior finishes - walls and ceilings	54,965	-	-	-	21,288	-
7	Interior Fixtures and Equipment						
7.1	mail boxes – replace	6,623	-	-	-	6,623	-
8	Mechanical						
8.1	cross-connection control - installation	7,200	-	-	-	-	-
8.2	dry sprinkler system – allowance	29,987	-	-	-	-	-
8.3	mechanical – contingency allowance	32,018	-	-	7,730	-	-
9	Electrical						
9.1	interior lighting – replacements	13,459	-	-	-	-	-
9.2	lobby heaters – replacement	6,427	-	-	-	-	-
9.3	intercoms – replacement allowance	6,367	-	-	-	-	-
9.4	electrical – contingency allowance	19,987	-	-	-	-	4,825
10	General						
10.1	reserve fund – reports	18,465	4,458	-	-	-	-
Total Annual Expenditure:		1,564,579	8,024	20,310	181,653	436,959	217,461

TABLE C

Projected Cash Flow

inflation rate:	2.00%
interest rate:	1.00%
escalation of contributions:	0.00%

- interest stays in Reserve Fund

Year	Expenses (inflated)	Contributions		Interest	Balance	
		amount	% change		year start	year end
1 2017	\$74,600	\$64,800		\$546	\$59,461	\$50,206
2 2018	\$4,590	\$64,800	0.00%	\$803	\$50,206	\$111,219
3 2019	\$10,820	\$64,800	0.00%	\$1,382	\$111,219	\$166,581
4 2020	\$25,893	\$64,800	0.00%	\$1,860	\$166,581	\$207,348
5 2021	\$8,118	\$64,800	0.00%	\$2,357	\$207,348	\$266,387
6 2022	\$30,804	\$64,800	0.00%	\$2,834	\$266,387	\$303,217
7 2023	\$44,146	\$64,800	0.00%	\$3,135	\$303,217	\$327,007
8 2024	\$67,772	\$64,800	0.00%	\$3,255	\$327,007	\$327,289
9 2025	\$8,670	\$64,800	0.00%	\$3,554	\$327,289	\$386,973
10 2026	\$19,600	\$64,800	0.00%	\$4,096	\$386,973	\$436,269
11 2027	\$12,799	\$64,800	0.00%	\$4,623	\$436,269	\$492,892
12 2028	\$2,984	\$64,800	0.00%	\$5,238	\$492,892	\$559,946
13 2029	\$23,336	\$64,800	0.00%	\$5,807	\$559,946	\$607,217
14 2030	\$22,638	\$64,800	0.00%	\$6,283	\$607,217	\$655,662
15 2031	\$11,084	\$64,800	0.00%	\$6,825	\$655,662	\$716,204
16 2032	\$200,400	\$64,800	0.00%	\$6,484	\$716,204	\$587,088
17 2033	\$22,651	\$64,800	0.00%	\$6,082	\$587,088	\$635,318
18 2034	\$10,362	\$64,800	0.00%	\$6,625	\$635,318	\$696,382
19 2035	\$36,992	\$64,800	0.00%	\$7,103	\$696,382	\$731,293
20 2036	\$61,914	\$64,800	0.00%	\$7,327	\$731,293	\$741,506
21 2037	\$8,024	\$64,800	0.00%	\$7,699	\$741,506	\$805,981
22 2038	\$20,310	\$64,800	0.00%	\$8,282	\$805,981	\$858,753
23 2039	\$181,653	\$64,800	0.00%	\$8,003	\$858,753	\$749,904
24 2040	\$436,959	\$64,800	0.00%	\$5,638	\$749,904	\$383,383
25 2041	\$217,461	\$64,800	0.00%	\$3,071	\$383,383	\$233,793
Total:	\$1,564,579	\$1,620,000		\$118,912		

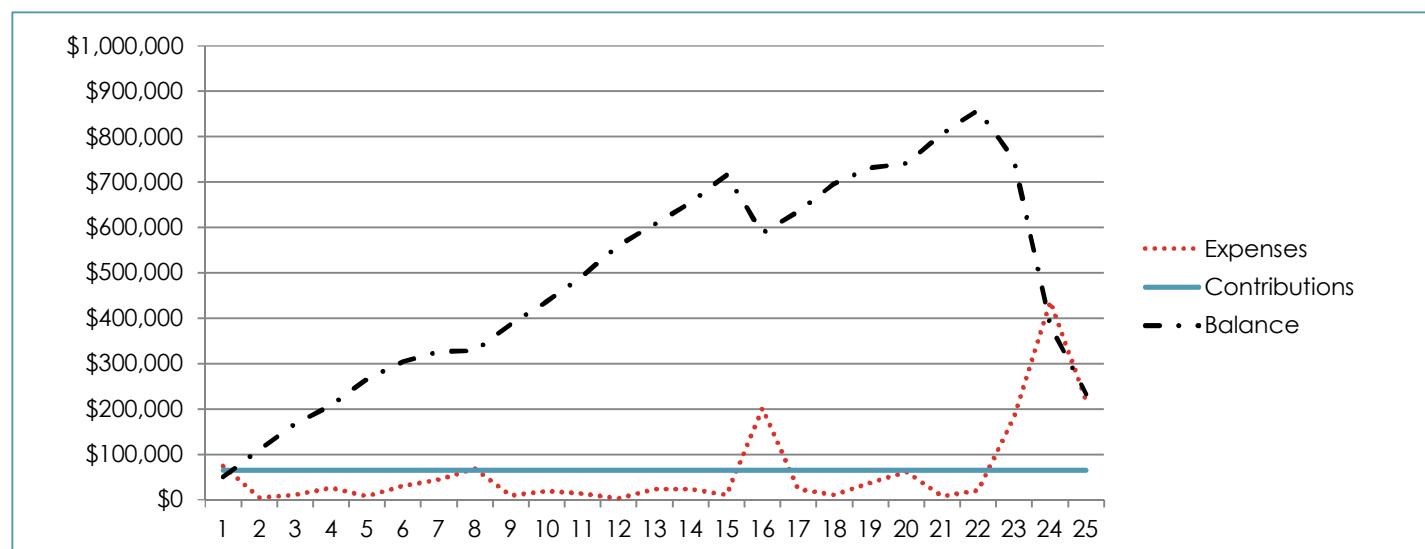


TABLE D

Projected Cash Flow

inflation rate:	2.00%
interest rate:	1.00%
escalation of contributions:	0.00%

Year	Expenses (inflated)	Contributions		Interest	Balance	
		amount	% change		year start	year end
1 2017	\$74,600	\$64,800		\$546	\$59,461	\$49,661
2 2018	\$4,590	\$64,800	0.00%	\$798	\$49,661	\$109,871
3 2019	\$10,820	\$64,800	0.00%	\$1,369	\$109,871	\$163,850
4 2020	\$25,893	\$64,800	0.00%	\$1,833	\$163,850	\$202,757
5 2021	\$8,118	\$64,800	0.00%	\$2,311	\$202,757	\$259,439
6 2022	\$30,804	\$64,800	0.00%	\$2,764	\$259,439	\$293,435
7 2023	\$44,146	\$64,800	0.00%	\$3,038	\$293,435	\$314,089
8 2024	\$67,772	\$64,800	0.00%	\$3,126	\$314,089	\$311,117
9 2025	\$8,670	\$64,800	0.00%	\$3,392	\$311,117	\$367,247
10 2026	\$19,600	\$64,800	0.00%	\$3,898	\$367,247	\$412,447
11 2027	\$12,799	\$64,800	0.00%	\$4,384	\$412,447	\$464,448
12 2028	\$2,984	\$64,800	0.00%	\$4,954	\$464,448	\$526,263
13 2029	\$23,336	\$64,800	0.00%	\$5,470	\$526,263	\$567,728
14 2030	\$22,638	\$64,800	0.00%	\$5,888	\$567,728	\$609,890
15 2031	\$11,084	\$64,800	0.00%	\$6,367	\$609,890	\$663,606
16 2032	\$200,400	\$64,800	0.00%	\$5,958	\$663,606	\$528,006
17 2033	\$22,651	\$64,800	0.00%	\$5,491	\$528,006	\$570,155
18 2034	\$10,362	\$64,800	0.00%	\$5,974	\$570,155	\$624,594
19 2035	\$36,992	\$64,800	0.00%	\$6,385	\$624,594	\$652,402
20 2036	\$61,914	\$64,800	0.00%	\$6,538	\$652,402	\$655,287
21 2037	\$8,024	\$64,800	0.00%	\$6,837	\$655,287	\$712,063
22 2038	\$20,310	\$64,800	0.00%	\$7,343	\$712,063	\$756,553
23 2039	\$181,653	\$64,800	0.00%	\$6,981	\$756,553	\$639,701
24 2040	\$436,959	\$64,800	0.00%	\$4,536	\$639,701	\$267,542
25 2041	\$217,461	\$64,800	0.00%	\$1,912	\$267,542	\$114,881
Total:	\$1,564,579	\$1,620,000		\$108,093		

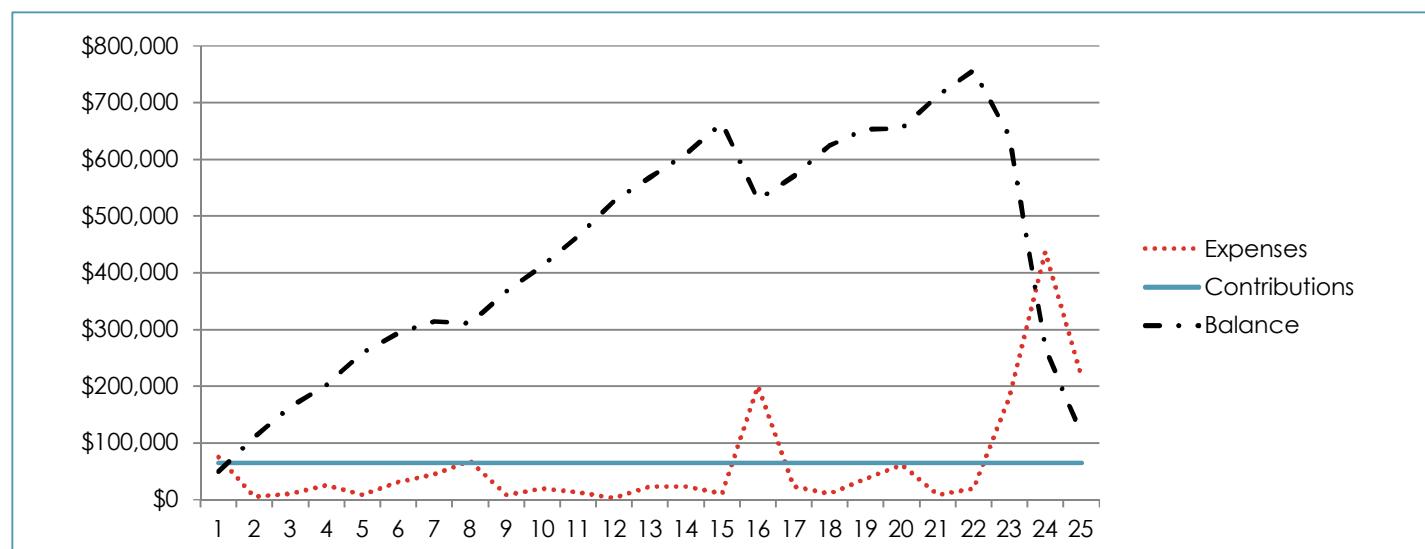


TABLE E

Projected Cash Flow

inflation rate: 2.00%
interest rate: 1.00%
escalation of contributions: 0.00%

Year	Expenses (inflated)	Contributions		Interest	Balance	
		amount	% change		year start	year end
1 2017	\$74,600	\$64,800		\$546	\$59,461	\$50,206
2 2018	\$4,590	\$64,254	-0.84%	\$800	\$50,206	\$110,671
3 2019	\$10,820	\$64,000	-0.40%	\$1,373	\$110,671	\$165,223
4 2020	\$25,893	\$63,427	-0.89%	\$1,840	\$165,223	\$204,597
5 2021	\$8,118	\$62,960	-0.74%	\$2,320	\$204,597	\$261,759
6 2022	\$30,804	\$62,480	-0.76%	\$2,776	\$261,759	\$296,211
7 2023	\$44,146	\$62,024	-0.73%	\$3,052	\$296,211	\$317,141
8 2024	\$67,772	\$61,748	-0.44%	\$3,141	\$317,141	\$314,258
9 2025	\$8,670	\$61,659	-0.15%	\$3,408	\$314,258	\$370,654
10 2026	\$19,600	\$61,392	-0.43%	\$3,916	\$370,654	\$416,363
11 2027	\$12,799	\$60,884	-0.83%	\$4,404	\$416,363	\$468,852
12 2028	\$2,984	\$60,396	-0.80%	\$4,976	\$468,852	\$531,239
13 2029	\$23,336	\$59,824	-0.95%	\$5,495	\$531,239	\$573,223
14 2030	\$22,638	\$59,305	-0.87%	\$5,916	\$573,223	\$615,805
15 2031	\$11,084	\$58,884	-0.71%	\$6,397	\$615,805	\$670,003
16 2032	\$200,400	\$58,403	-0.82%	\$5,990	\$670,003	\$533,996
17 2033	\$22,651	\$58,810	0.70%	\$5,521	\$533,996	\$575,676
18 2034	\$10,362	\$59,279	0.80%	\$6,001	\$575,676	\$630,595
19 2035	\$36,992	\$58,799	-0.81%	\$6,415	\$630,595	\$658,817
20 2036	\$61,914	\$58,385	-0.70%	\$6,571	\$658,817	\$661,858
21 2037	\$8,024	\$58,229	-0.27%	\$6,870	\$661,858	\$718,933
22 2038	\$20,310	\$57,930	-0.51%	\$7,377	\$718,933	\$763,931
23 2039	\$181,653	\$57,423	-0.88%	\$7,018	\$763,931	\$646,719
24 2040	\$436,959	\$57,782	0.63%	\$4,571	\$646,719	\$272,113
25 2041	\$217,461	\$60,229	4.23%	\$1,935	\$272,113	\$116,816
Total:		\$1,564,579		\$1,513,308		\$108,627

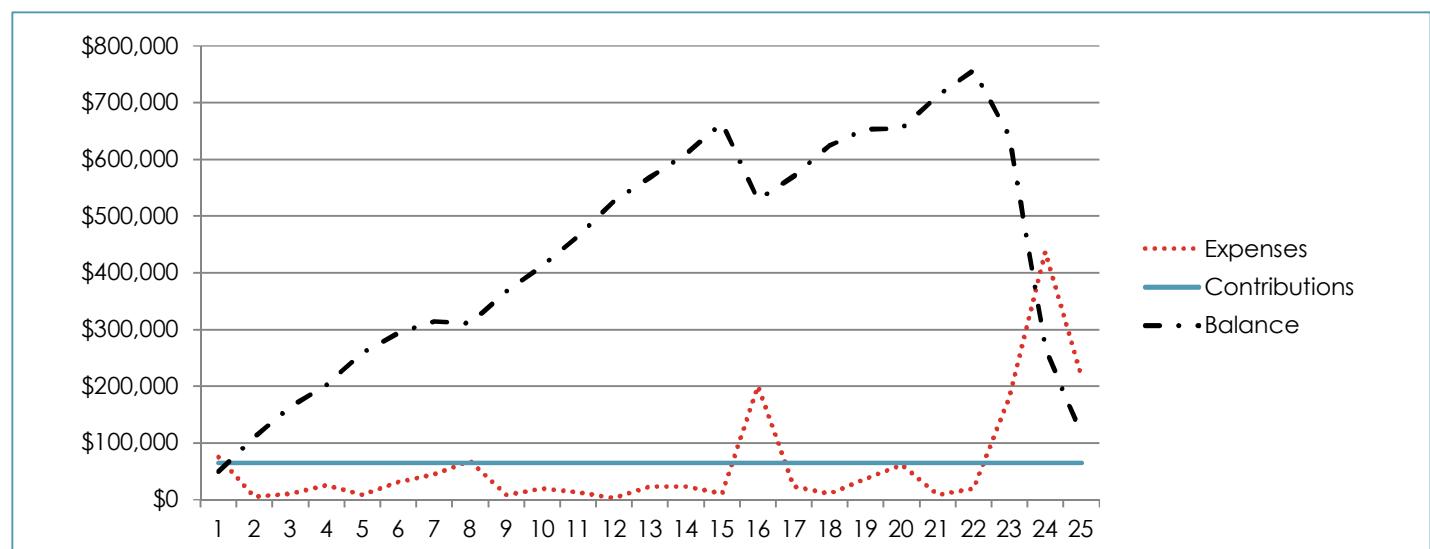


TABLE F

Master Reserve Fund Spreadsheet

sheet 1

No.	Item	Description - Action	2017	2018	2019	2020	2021	2022	2023
1	Site								
1.1	asphalt parking - replacement	- funding:	1,750	1,750	1,750	1,750	1,750	1,750	1,750
1.2	asphalt road - replacement	- funding:	2,813	2,813	2,813	2,813	2,813	2,813	2,813
1.3	electrical enclosure walls – replacement	- funding:	-	-	-	-	-	-	-
1.4	site – contingency allowance	- funding:	571	571	571	571	571	571	571
			-	-	3,000	-	-	-	3,000
			1,000	1,000	1,000	750	750	750	750
2	Building Structures								
2.1	balconies – replacement allowance	- funding:	-	-	-	-	-	-	-
			9,000	9,000	9,000	9,000	9,000	9,000	9,000
2.2	balcony structures – refurbishment	- funding:	-	-	-	-	-	-	-
2.3	structure – contingency allowance	- funding:	4,500	4,500	4,500	4,500	4,500	4,500	4,500
			-	-	5,000	-	-	-	-
			1,250	1,250	1,250	1,250	1,000	1,000	1,000
3	Roof								
3.1	roof – replacement allowance	- funding:	-	-	-	-	-	-	-
			4,565	4,565	4,565	4,565	4,565	4,565	4,565
3.2	parking garage roof areas – replace	- funding:	-	-	-	-	-	22,500	-
3.3	roofing – contingency allowance	- funding:	3,750	3,750	3,750	3,750	3,750	3,750	750
			2,000	-	2,000	-	-	-	2,000
			2,000	667	667	667	667	667	667
4	Exterior Walls								
5	Exterior Doors and Windows								
5.1	entry doors – replace with aluminum	- funding:	27,000	-	-	-	-	-	-
			27,000	675	675	675	675	675	675
5.2	lobby doors – replace with aluminum	- funding:	24,000	-	-	-	-	-	-
			24,000	600	600	600	600	600	600
5.3	garage doors – replacement allowance	- funding:	-	-	-	-	-	-	10,800
5.4	unit balcony doors – replacement	- funding:	1,543	1,543	1,543	1,543	1,543	1,543	1,543
			-	-	-	-	-	-	-
5.5	unit windows - replacement allowance	- funding:	1,872	1,872	1,872	1,872	1,872	1,872	1,872
5.6	door and window - contingency allowance	- funding:	2,880	2,880	2,880	2,880	2,880	2,880	2,880
			2,400	2,400	2,400	2,400	2,400	2,400	2,400
			2,400	2,400	2,400	2,400	2,400	2,400	2,400
6	Building Interiors								
6.1	unit doors - contingency allowance	- funding:	-	2,100	-	-	2,100	-	-
			1,050	1,050	700	700	700	700	700
6.2	common area doors - replacement allowance	- funding:	9,000	-	-	9,000	-	-	9,000
			9,000	3,000	3,000	3,000	3,000	3,000	3,000
6.3	interior finishes - replace carpet	- funding:	-	-	-	-	-	-	-
6.4	interior finishes - walls and ceilings	- funding:	1,750	1,750	1,750	1,750	1,750	1,750	1,750
			-	-	-	-	-	-	-
			1,688	1,688	1,688	1,688	1,688	1,688	1,688
7	Interior Fixtures and Equipment								
7.1	mail boxes – replace	- funding:	-	175	175	175	175	175	175
8	Mechanical								
8.1	cross-connection control - installation	- funding:	7,200	-	-	-	-	-	-
			7,200	144	144	144	144	144	144
8.2	dry sprinkler system – allowance	- funding:	-	-	-	-	-	-	12,000
8.3	mechanical – contingency allowance	- funding:	1,714	1,714	1,714	1,714	1,714	1,714	1,714
			-	-	5,000	-	-	-	-
			1,667	1,667	1,667	1,000	1,000	1,000	1,000
9	Electrical								
9.1	interior lighting – replacements	- funding:	-	-	-	-	-	-	-
9.2	lobby heaters – replacement	- funding:	625	625	625	625	625	625	625
9.3	intercoms – replacement allowance	- funding:	237	237	237	237	237	237	237
9.4	electrical – contingency allowance	- funding:	1,500	1,500	1,500	1,500	200	200	200
			-	-	-	-	3,000	-	-
			600	600	600	600	600	600	600
10	General								
10.1	reserve fund – reports	- funding:	3,000	-	-	-	-	3,000	-
			3,000	600	600	600	600	600	600
Total Annual Expenditure:			74,600	4,500	10,400	24,400	7,500	27,900	39,200
<i>Calculated Total Funding Requirement:</i>			121,099	54,585	52,935	53,318	#REF!	51,768	48,768
Basic Annual Contribution (Table C):			64,800	64,800	64,800	64,800	64,800	64,800	64,800
Balance, Start of Year:			-	-	9,800	50,500	104,900	145,300	202,600
Balance, End of Year:			-	9,800	50,500	104,900	145,300	202,600	239,500
			-	9,800	50,500	104,900	145,300	202,600	265,100

TABLE F

Master Reserve Fund Spreadsheet

sheet 2

No.	Item	Description - Action	2024	2025	2026	2027	2028	2029	2030
1	Site								
1.1	asphalt parking - replacement	- funding:	1,750	1,750	1,750	1,750	1,750	1,750	1,750
1.2	asphalt road - replacement	- funding:	2,813	2,813	2,813	2,813	2,813	2,813	2,813
1.3	electrical enclosure walls – replacement	- funding:	571	571	571	571	571	571	571
1.4	site – contingency allowance	- funding:	750	750	750	750	750	750	750
2	Building Structures								
2.1	balconies – replacement allowance	- funding:	9,000	9,000	9,000	9,000	9,000	9,000	9,000
2.2	balcony structures – refurbishment	- funding:	36,000	-	-	-	-	-	-
2.3	structure – contingency allowance	- funding:	4,500	4,500	4,500	4,500	4,500	4,500	4,500
		-	5,000	-	-	-	-	5,000	-
		- funding:	1,000	1,000	1,000	1,000	1,000	1,000	1,000
3	Roof								
3.1	roof – replacement allowance	- funding:	4,565	4,565	4,565	4,565	4,565	4,565	4,565
3.2	parking garage roof areas – replace	- funding:	750	750	750	750	750	750	750
3.3	roofing – contingency allowance	- funding:	-	-	2,000	-	-	2,000	-
		- funding:	667	667	667	667	667	667	667
4	Exterior Walls								
5	Exterior Doors and Windows								
5.1	entry doors – replace with aluminum	- funding:	-	-	-	-	-	-	-
5.2	lobby doors – replace with aluminum	- funding:	675	675	675	675	675	675	675
5.3	garage doors – replacement allowance	- funding:	600	600	600	600	600	600	600
5.4	unit balcony doors – replacement	- funding:	-	-	-	-	-	-	-
5.5	unit windows - replacement allowance	- funding:	540	540	540	540	540	540	540
5.6	door and window - contingency allowance	- funding:	1,872	1,872	1,872	1,872	1,872	1,872	1,872
		-	-	-	-	-	-	-	-
		- funding:	2,880	2,880	2,880	2,880	2,880	2,880	2,880
		-	2,400	2,400	2,400	2,400	2,400	2,400	2,400
		- funding:	2,400	2,400	2,400	2,400	2,400	2,400	2,400
6	Building Interiors								
6.1	unit doors - contingency allowance	- funding:	2,100	-	-	2,100	-	-	2,100
		-	700	700	700	700	700	700	700
6.2	common area doors - replacement allowance	- funding:	-	-	9,000	-	-	9,000	-
6.3	interior finishes - replace carpet	- funding:	3,000	3,000	3,000	3,000	3,000	3,000	3,000
6.4	interior finishes - walls and ceilings	- funding:	1,750	1,750	1,750	1,750	1,750	1,750	1,750
		-	13,500	-	-	-	-	-	-
		- funding:	1,688	1,688	1,688	1,688	1,688	1,688	1,688
7	Interior Fixtures and Equipment								
7.1	mail boxes – replace	- funding:	-	-	-	-	-	-	-
		-	175	175	175	175	175	175	175
8	Mechanical								
8.1	cross-connection control - installation	- funding:	-	-	-	-	-	-	-
8.2	dry sprinkler system – allowance	- funding:	144	144	144	144	144	144	144
8.3	mechanical – contingency allowance	- funding:	1,200	1,200	1,200	1,200	1,200	1,200	1,200
		5,000	-	-	-	-	-	5,000	-
		- funding:	1,000	1,000	1,000	1,000	1,000	1,000	1,000
9	Electrical								
9.1	interior lighting – replacements	- funding:	-	-	-	-	-	-	-
9.2	lobby heaters – replacement	- funding:	625	625	625	625	625	625	625
9.3	intercoms – replacement allowance	- funding:	237	237	237	237	237	237	237
9.4	electrical – contingency allowance	- funding:	200	200	200	200	200	200	200
		-	-	3,000	-	-	-	-	-
		- funding:	600	600	600	600	600	600	600
10	General								
10.1	reserve fund – reports	- funding:	-	-	-	3,000	-	-	-
		-	600	600	600	600	600	600	600
Total Annual Expenditure:			59,000	7,400	16,400	10,500	2,400	18,400	17,500
<i>Calculated Total Funding Requirement:</i>			47,251	47,251	47,251	47,251	47,251	47,251	47,251
Basic Annual Contribution (Table C):			64,800	64,800	64,800	64,800	64,800	64,800	64,800
Balance, Start of Year:			265,100	270,900	328,300	376,700	431,000	493,400	539,800
Balance, End of Year:			270,900	328,300	376,700	431,000	493,400	539,800	587,100

TABLE F

Master Reserve Fund Spreadsheet

sheet 3

No.	Item											
		Description	-	Action	2031	2032	2033	2034	2035	2036	2037	
1	Site											
1.1	asphalt parking - replacement	- funding:			-	1,750	1,750	1,750	1,750	1,750	35,000	-
1.2	asphalt road - replacement	- funding:			-	2,813	2,813	1,500	1,500	1,500	1,500	1,167
1.3	electrical enclosure walls – replacement	- funding:			-	-	-	-	-	-	-	-
1.4	site – contingency allowance	- funding:			3,000	-	-	-	3,000	-	-	-
					750	750	750	750	750	750	750	750
2	Building Structures											
2.1	balconies – replacement allowance	- funding:			-	9,000	9,000	9,000	9,000	9,000	9,000	9,000
2.2	balcony structures – refurbishment	- funding:			-	36,000	-	-	-	-	-	-
2.3	structure – contingency allowance	- funding:			4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500
					1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
3	Roof											
3.1	roof – replacement allowance	- funding:			-	4,565	4,565	4,565	4,565	4,565	4,565	4,565
3.2	parking garage roof areas – replace	- funding:			-	750	750	750	750	750	750	750
3.3	roofing – contingency allowance	- funding:			-	2,000	-	-	2,000	-	-	-
					667	667	667	667	667	667	667	667
4	Exterior Walls											
5	Exterior Doors and Windows											
5.1	entry doors – replace with aluminum	- funding:			-	675	675	675	675	675	675	675
5.2	lobby doors – replace with aluminum	- funding:			-	600	600	600	600	600	600	600
5.3	garage doors – replacement allowance	- funding:			-	-	-	-	-	-	-	-
5.4	unit balcony doors – replacement	- funding:			-	540	540	540	540	540	540	540
5.5	unit windows - replacement allowance	- funding:			-	1,872	1,872	1,872	1,872	1,872	1,872	1,872
5.6	door and window - contingency allowance	- funding:			-	2,880	2,880	2,880	2,880	2,880	2,880	2,880
					2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
6	Building Interiors											
6.1	unit doors - contingency allowance	- funding:			-	-	2,100	-	-	2,100	-	-
					700	700	700	700	700	700	700	700
6.2	common area doors - replacement allowance	- funding:			-	9,000	-	-	9,000	-	-	-
6.3	interior finishes - replace carpet	- funding:			-	3,000	3,000	3,000	3,000	3,000	3,000	3,000
6.4	interior finishes - walls and ceilings	- funding:			-	-	28,000	-	-	-	-	-
					1,750	1,750	1,750	1,750	1,750	1,750	1,750	1,750
					-	13,500	-	-	-	-	-	-
					1,688	1,688	1,688	1,688	1,688	1,688	1,688	1,688
7	Interior Fixtures and Equipment											
7.1	mail boxes – replace	- funding:			-	175	175	175	175	175	175	175
8	Mechanical											
8.1	cross-connection control - installation	- funding:			-	144	144	144	144	144	144	144
8.2	dry sprinkler system - allowance	- funding:			-	-	12,000	-	-	-	-	-
8.3	mechanical – contingency allowance	- funding:			-	1,200	1,200	1,200	1,200	1,200	1,200	1,200
					-	-	-	5,000	-	-	-	-
					1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
9	Electrical											
9.1	interior lighting – replacements	- funding:			-	-	10,000	-	-	-	-	-
9.2	lobby heaters – replacement	- funding:			-	625	625	417	417	417	417	417
9.3	intercoms – replacement allowance	- funding:			-	237	237	237	237	237	180	180
9.4	electrical – contingency allowance	- funding:			-	200	200	200	200	200	200	200
					3,000	-	-	-	-	3,000	-	-
					600	600	600	600	600	600	600	600
10	General											
10.1	reserve fund – reports	- funding:			-	3,000	-	-	-	-	3,000	-
					600	600	600	600	600	600	600	600
Total Annual Expenditure:					8,400	148,900	16,500	7,400	25,900	42,500	5,400	
<i>Calculated Total Funding Requirement:</i>					46,840	46,840	45,319	45,319	45,319	45,262	44,679	
Basic Annual Contribution (Table C):					64,800	64,800	64,800	64,800	64,800	64,800	64,800	
Balance, Start of Year:					587,100	643,500	559,400	607,700	665,100	704,000	726,300	
Balance, End of Year:					643,500	559,400	607,700	665,100	704,000	726,300	785,700	

TABLE F

Master Reserve Fund Spreadsheet

sheet 4

No.	Item					totals:					
		Description	-	Action	2038	2039	2040	2041	expenses	funding	
1	Site										
1.1	asphalt parking - replacement	- funding:			-	1,167	1,167	1,167	1,167	35,000	40,833
1.2	asphalt road - replacement	- funding:			-	1,500	1,500	1,500	1,500	45,000	58,500
1.3	electrical enclosure walls – replacement	- funding:			-	160	160	160	160	8,000	9,760
1.4	site – contingency allowance	- funding:			-	750	750	750	750	18,000	19,500
2	Building Structures										
2.1	balconies – replacement allowance	- funding:			-	9,000	9,000	9,000	8,640	216,000	224,640
2.2	balcony structures – refurbishment	- funding:			-	4,500	4,500	4,500	4,500	36,000	108,000
2.3	structure – contingency allowance	- funding:			-	1,000	1,000	1,000	1,000	5,000	112,500
3	Roof										
3.1	roof – replacement allowance	- funding:			-	4,565	105,000	4,200	4,200	4,200	105,000
3.2	parking garage roof areas – replace	- funding:			-	750	750	750	750	2,000	113,400
3.3	roofing – contingency allowance	- funding:			-	667	667	667	667	667	36,750
4	Exterior Walls										
5	Exterior Doors and Windows										
5.1	entry doors – replace with aluminum	- funding:			-	675	675	675	675	675	27,000
5.2	lobby doors – replace with aluminum	- funding:			-	600	600	600	600	600	43,200
5.3	garage doors – replacement allowance	- funding:			-	540	540	540	540	540	38,400
5.4	unit balcony doors – replacement	- funding:			-	1,872	1,872	1,872	1,872	1,872	10,800
5.5	unit windows - replacement allowance	- funding:			-	2,880	2,880	2,880	2,880	2,880	46,800
5.6	door and window - contingency allowance	- funding:			-	2,400	2,400	2,400	2,400	2,400	60,000
6	Building Interiors										
6.1	unit doors - contingency allowance	- funding:			-	700	2,100	700	700	700	16,800
6.2	common area doors - replacement allowance	- funding:			-	9,000	3,000	9,000	9,000	9,000	18,200
6.3	interior finishes - replace carpet	- funding:			-	1,750	1,750	1,750	1,750	1,750	81,000
6.4	interior finishes - walls and ceilings	- funding:			-	1,688	1,688	1,688	1,688	1,688	40,500
7	Interior Fixtures and Equipment										
7.1	mail boxes – replace	- funding:			-	175	175	175	140	140	4,200
8	Mechanical										
8.1	cross-connection control - installation	- funding:			-	144	144	144	144	144	7,200
8.2	dry sprinkler system – allowance	- funding:			-	1,200	1,200	1,200	1,200	1,200	24,000
8.3	mechanical – contingency allowance	- funding:			-	1,000	5,000	1,000	1,000	1,000	33,600
9	Electrical										
9.1	interior lighting – replacements	- funding:			-	417	417	417	417	417	10,000
9.2	lobby heaters – replacement	- funding:			-	180	180	180	180	180	13,750
9.3	intercoms – replacement allowance	- funding:			-	200	200	200	200	200	4,500
9.4	electrical – contingency allowance	- funding:			-	600	600	600	600	600	6,000
10	General										
10.1	reserve fund – reports	- funding:			-	600	600	600	600	600	15,000
Total Annual Expenditure:					13,400	117,500	277,100	135,200	1,118,300		
<i>Calculated Total Funding Requirement:</i>					44,679	44,679	44,314	43,919		1,263,467	
Basic Annual Contribution (Table C):					64,800	64,800	64,800	64,800		1,620,000	
Balance, Start of Year:					785,700	837,100	784,400	572,100			
Balance, End of Year:					837,100	784,400	572,100	501,700			