

CAPITAL REPLACEMENT RESERVE FUND STUDY

April 2017

Prepared for

Condominium Corporation 8820814

Operating as: Birchwood County Condo

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1.0 PERSON RESPONSIBLE FOR PERFORMANCE OF THE STUDY

Keystone Field Engineering Inc. was commissioned to update the existing Reserve Fund Study for Birchwood Country Condo (Condominium Corporation No. 8820814). This development is located at NE19-49-05 W5M.

This property is a BARE LAND CONDOMINIUM complex consisting of approximately 171 lots of neighbourhood single-family homes. All lots within the property lines vary in size (see Figure 1).

Karrie Jones of Keystone Field Engineering is an Architectural Technologist, registered with The Association of Science and Engineering Professionals of Alberta (ASET). She is not an employee, agent, or associate with the Corporation, its manager or maintenance provider.



Figure 1: Overview of Condo Lots

2.0 ITEMS CONSIDERED IN THE RESERVE FUND STUDY

2.1 The Bridge

There are some minor repairs anticipated in 2017. Some of the repairs include:

1. The guard rail metal sleeve has been damaged and needs repairing to keep the guard rail from falling into the creek (see Figure 2).



Figure 2: Sleeve needing repairs

2. Surface deck boards are in need of replacement on the North and South ends. Repeated vehicle impact on the deck surface should be monitored yearly and allow for a depreciation of approximately $\frac{3}{4}$ ". If the deck boards become brittle and flake off, they should be changed earlier than scheduled.
3. Bumper Pads are generally in decent shape but are starting to show wear. In particular, the bumper pad at the North end is in poor shape (see Figure 3) and requires replacement in the upcoming year. The remainder of the bumper pads need to be monitored yearly.



Figure 3: Bumper Pad to be replaced

4. Drainage at each end of the bridge shall be directed away from the deck surface. Avoid any water runoff from accessing the bridge deck. This will help with the longevity of the bridge deck. The redirection of native soil swales can be gravel or seeded with grass to help with erosion, etc.

5. Vegetation around the bridge needs to be removed. This can be a safety issue for vehicles entering/exiting the bridge, as well as it can undermine the structure if the trees/shrubs get larger.

In general, the bridge including the piers, girders, abutments and bolting are in good shape. Routine maintenance and minor repairs have been carried out over the years and are recommended to continue.

Routine work like painting, snow removal, maintenance, etc. is covered by the maintenance budget.

2.2 The Water Wells and Distribution Systems

At the present time, the Condominium Corporation has four water wells; one located in Cedar Glen, two in Willow Ridge near the new Office/Muster Station, and one in Aspen Grove. There are three separate, independent water supply systems with chlorination for each well and water meters. The water wells and the distribution systems are maintained every day, and are in good working order.

Cedar Glen has a water distribution system with only one well, which supplies all of Oak Place, and Cedar Glen residences (approximately 25 lots). At the time of field review, there was comment from the Board that they have been using an extremely large amount of water. Investigation of the water leak is a priority at this time. Water mains in this area were installed back in approximately 1988-1992. These lines will most likely need to be replaced over the years if there are more leaks, water demand becomes larger, etc.

Repairs recommended for Cedar Glen are:

1. Hire a third party company to find the water leak (this has been started and completed in September/October 2016).
2. Increase the water distribution building to accommodate more space for the existing equipment. The water tank is spanning over a large hole and the only support under the tank is plywood. An addition of approximately 6' x 12' would be recommended.
3. Ventilate the building with two metal gable vents as shown in Figure 4 (or equivalent).



Figure 4: Metal gable vent

4. Maintenance is required on the eaves of the building to keep rodents, birds and other animals out of the insulation. Screens could be used on the eaves or soffit installed.

5. For costs savings and less time replacing the heaters, it is recommended that an electric panel heater that is suitable for wet locations be installed in replacement of the portable space heaters.
6. Due to the age of this particular water system, it may need replacement over the next five years.

It was recommended by Alberta Environment that the holding tank be increased. No documentation was supplied by Alberta Environment, therefore the upgrade to the system has not been sourced or priced.

Willow Ridge has two water wells with its own distribution system and it services approximately 121 lots. The well house was built in 2005 and new pumps installed for the well. There is a natural gas heater that has been installed in the building to replace the electric space heaters. The shingles on the well house are approximately 11 years old and appear to have some wear starting on the bottom edges.

Repairs recommended for Willow Ridge are:

1. Monitoring system for the interior as the methane smell is very strong. Existing ventilation of the building may not be doing the proper job needed. A mechanical contractor may need to be consulted on the existing ventilation.
2. Shingles may need to be replaced in the next five years.
3. For costs savings and less time replacing the heaters, it is recommended that an electric panel heater that is suitable for wet locations be installed in replacement of the portable space heaters.

Aspen Grove distribution system has one well with its own distribution system that services approximately 25 lots. The well house was built in 2005, and new pumps were installed for the well and degassing system. Well house appears to be in good shape.

Repairs recommended for Aspen Grove are:

1. For costs savings and less time replacing the heaters, it is recommended that an electric panel heater that is suitable for wet locations be installed in replacement of the portable space heaters.
2. Ventilate the building with two metal gable vents as shown in Figure 4 (or equivalent).

Repairs are budgeted and carried out as part of the regular maintenance program, and no reserve fund has to be provided (see 3.2 – Cost Estimate for Maintenance Budget). It is the responsibility of the Board to make the executive decision to include all or partial repairs in the reserve fund.

The individual that is in charge of maintaining the water distribution and chlorination systems according to Alberta Environment guidelines is Rod Yakubow, Box 119, Lindale, Alberta, T0C 1W0, (780)542-1223.

2.3 Common Property

The Condominium Corporation is responsible for maintaining any recreational facilities (office/muster station), roadways, and equipment used in connection with the common property, common facilities or other assets of the Corporation. There is a laundry/washroom facility, which in the past was provided on a seasonal basis, but has now been removed as a functioning facility. Maintenance was covered by the annual budget, and no provisions for the Reserve Fund were made. Since this is a “BARE LAND CONDOMINIUM”, the Condominium Corporation has no commitments for the privately owned parcels and structures.

The Board shall create and maintain by Common Expense levy for the purpose of repair, replacement and refurbishment of the Common Property and any real or personal property owned by the Corporation (By-Laws: 11(3)). The Common Property and any real or personal property owned by the Corporation has been captured under the annual maintenance budget. It is the responsibility of the Board and Corporation to amend such by-laws if necessary.

2.4 The Sewage Lagoon

Brazeau County has taken full responsibility of the sewage lagoon as of the summer of 2010. The Condominium Corporation has no responsibilities for the lagoon.

2.5 Power Distribution Systems

The subdivisions within; Willow Ridge, Poplar Point, and Aspen Grove each have one main distribution panel containing a 400 Amp main breaker, and a number of secondary 225 Amp breakers which supply power to several pedestals. As these breakers age, they will need to be replaced. Recommendation would be to have a replacement 400 Amp main breaker and a 225 Amp secondary breaker on hand in case of failure to the existing equipment. The wood pedestal replacement to metal boxes will be ongoing over the years. The repairs are carried out as part of the regular maintenance program, and no Reserve Fund has to be provided.

A map has been received from Fortis showing the electrical servicing to the area (see Appendix ‘A’). Fortis is responsible for:

- Underground secondary services from the pedestal to the property line on each individual lot,
- The meter, and
- Overhead service drops to the mast on the structure or customer owned pole.

Lot Owners are responsible for (see Figure 5 & 6):

- Splice underground connection to the secondary line on each private property,
- To the meter socket that is installed on the structure, and
- Everything after the meter to the structure.

Birchwood Condo is responsible for:

- Wire down from the mast and then to the meter socket,
- Customer owned metering facilities (wood pedestals),
- Everything after the meter is the customer's responsibility (ex: Common Property, water well houses, etc.), and
- Underground services not noted on the attached map (Appendix 'A').

Note: it is only Birchwood Condo's responsibility if they are the "customer" for that particular service. There are also other electrical services that are not noted on the attached map. Birchwood is to take caution when locating these lines in the near future. Further clarification maybe required from Fortis on electrical responsibilities.

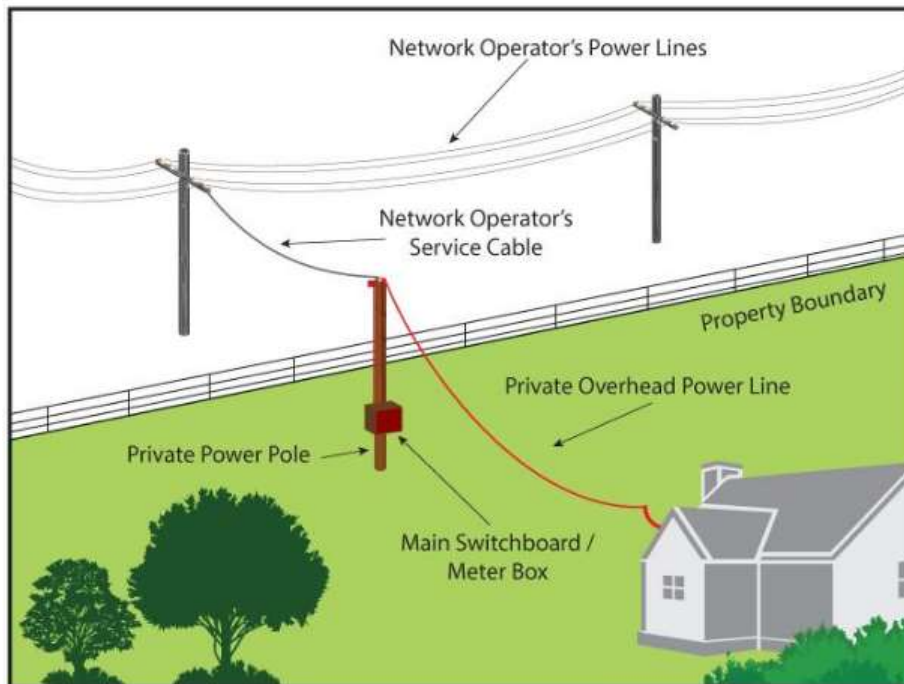


Figure 5: Power Distribution Responsibility Example 1

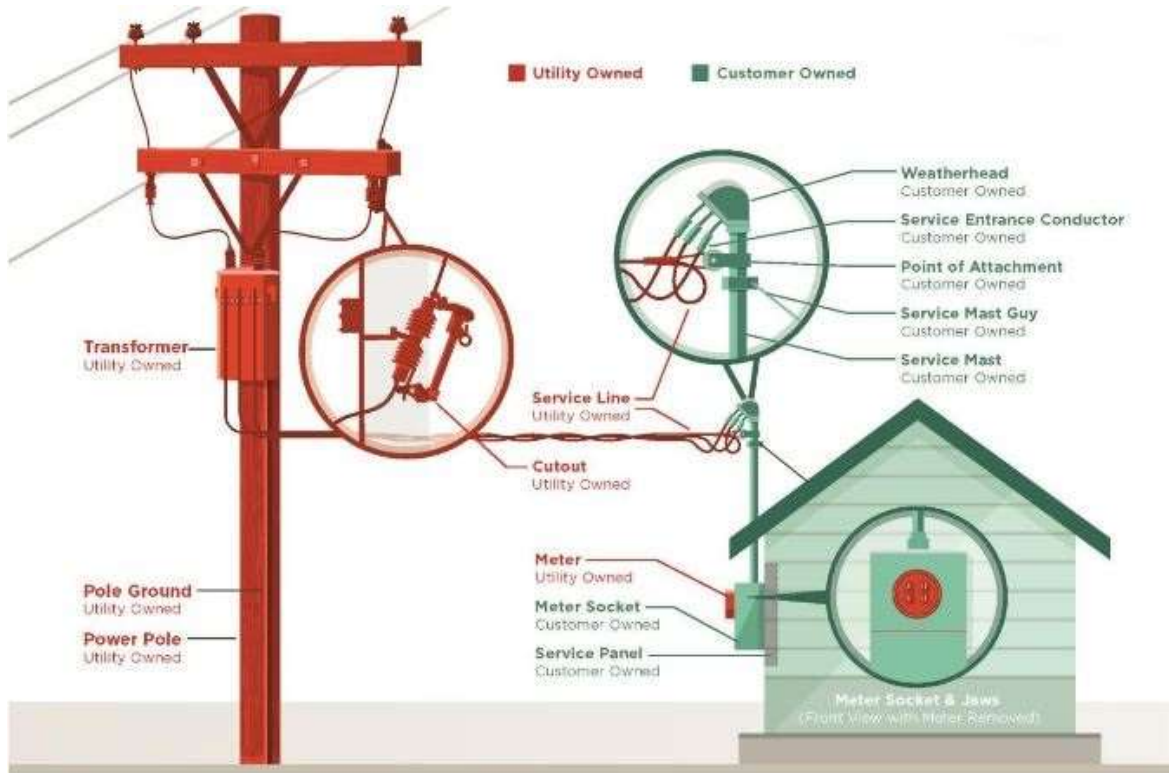


Figure 6: Power Distribution Responsibility Example 2

3.0 COST ESTIMATES AND LIFE EXPECTANCY

3.1 Cost Estimate for Reserve Fund

Item		Cost Estimate
Bridge		
	Bridge Replacement w/ Abutment Repairs	\$150,000.00
Water Distribution Systems		
	Replace Water Mains	\$100,000.00
	New well (per subdivision)	\$28,000.00
	New Pump (per subdivision)	\$8,000.00
Cedar Glen		
	Existing Bldg Expansion (6'x12') w/ Labor	\$2,280.00
Power Distribution System		
	400 Amp Main Breaker w/ Enclosure & Labor	\$4,500.00
	225 Amp Secondary Breaker w/ Enclosure & Labor	\$2,800.00
TOTAL RESERVE FUND CONTRIBUTION		\$295,580.00

Note: The above noted cost estimate is based on our knowledge of standard cost per labour and material. Due to the evolving market, costs have varied up to 30% of the standard market cost. Therefore, Keystone cannot be responsible for the cost variation in this market.

3.2 Cost Estimate for Maintenance Budget

Item		Cost Estimate
Bridge Repairs		
	Deck Board replacement w/ Labor	\$1,480.00
	Grading around Access/Exit w/ Labor	\$1,050.00
	Sleeve Repairs w/ Labor	\$740.00
	Bumper Pad Repairs w/ Labor	\$345.00
	Removal of Vegetation w/ Labor	\$650.00
Water Distribution Systems		
	Water Leak Detection - Estimate	\$4,000.00
Cedar Glen		
	Metal Vents w/ Labor	\$150.00
	Development/Building Permits	\$500.00
	Soffit & All Trims w/ Labor	\$288.00
	Electric Panel Heater w/ Labor	\$500.00
Aspen Grove		
	Metal Vents w/ Labor	\$150.00
	Electric Panel Heater w/ Labor	\$500.00
Willow Ridge		
	Methane Monitor w/ Labor	\$250.00
	Shingles (30 yr) w/ Labor	\$1,018.00
	Electric Panel Heater w/ Labor	\$500.00
TOTAL MAINTENANCE BUDGET CONTRIBUTION		\$12,121.00

Note: The above noted cost estimate is based on our knowledge of standard cost per labour and material. Due to the evolving market, costs have varied up to 30% of the standard market cost. Therefore, Keystone cannot be responsible for the cost variation in this market.

3.3 Estimated Life Expectancy

Unless substantial damage is caused to the bridge by severe flood or excessive weight, its life expectancy could be assumed to be approximately twenty-five years. Repairs of the bridge deck, railing, abutments and approaches should be considered as an annual maintenance item.

The average life time of a well pump amounts to about twelve years in this project. As the pumps increase in age, they should be included in the reserve fund. The lifetime of a well installation depends on the formations tapped, the quality of the finishing, and on its productivity. The life expectancy may vary from ten to thirty years or longer.

The Office/Muster Station has a life time of fifty years or more. With continual maintenance and upkeep of the building and its services, this life expectancy can be exceeded.

The Power Distribution Systems life expectancy is unknown. The electrical system should be monitored occasionally for maintenance purposes.

4.0 RECOMMENDATIONS AND SOURCE OF FUNDS

It is recommended to provide a total of **\$295,580.00** for the **RESERVE FUND**. It is important to keep written records of the performance of the equipment, major repairs, and the water analysis results.

The capital needed to maintain the Condominium Corporation shall be contributed from all the registered lot owners as noted in the By-Laws of The Owners: Condominium Corporation No. 8820814. Once the budget is approved and adopted by all parties, a copy of the budget, together with a statement or notice setting forth each owner's assessment, on a site-by-site basis, with respect therefore, shall be delivered or mailed to each registered lot owner (By-Law: 18). Should the Board be unable to provide the Corporation with an approved budget for the ensuing fiscal year, owners will be required to maintain monthly payments at the same rate as for the preceding fiscal year until such budget, and current assessments have been established (refer to all By-Laws for proper procedures).

The corporation must provide to the owners for the owners' information copies of that approved reserve fund plan prior to the collection of any funds for the purposes of those matters dealt with in the reserve fund report on which the approved reserve plan was based and that are to be carried out pursuant that report.

5.0 CLOSURE

This report uses the Condominium Property Act, June 13, 2016 to determine the current requirements. Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Yours truly,

Keystone Field Engineering Inc.



Karrie Jones, C. Tech.

Architectural Technologist

/kj

APPENDIX 'A'

