



# Reserve Study Update.com, LLC

Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Northwest Laidlaw Road & Northwest 174th Avenue  
Bethany, Oregon 97006  
Account 1215b - Version 1.01

**Fiscal Year: January 1, 2020 to December 31, 2020**



## OFF-SITE RESERVE STUDY & MAINTENANCE PLAN

**ReserveStudyUpdate.com, LLC**

P.O. Box 66778

Portland, Oregon 97290

Phone: 503-862-9349

Fax: 503-928-8753

*Prepared By*

*Brian A. Owens*

# TABLE OF CONTENTS

## Arbor Ridge P.U.D. Homeowners Association - Cottage Collection

### PART I • INFORMATION ABOUT YOUR RESERVE STUDY

Important Information .....	1-1
Introduction .....	1-2
Funding Options .....	1-2
Types of Reserve Studies .....	1-3
Developing a Component List .....	1-3
Operational Expenses .....	1-4
Reserve Expenses .....	1-4
Funding Methods .....	1-5
Funding Strategies .....	1-6
Distribution of Reserves .....	1-7
User's Guide to Your Reserve Study .....	1-9
Definitions .....	1-9
Your Reserve Study is a Multi-Purpose Tool .....	1-12

### PART II • RESERVE STUDY

Level III Update Off-Site: Six Minute Full Report Summary .....	2-1
Annual Expenditure Detail .....	2-3
Current Assessment Funding Model: Executive Summary .....	2-8
Current Assessment Funding Model: Summary .....	2-11
Current Assessment Funding Model: Projection .....	2-12
Current Funding Model: Component Summary by Category .....	2-13
Current Funding Model: Distribution of Accumulated Reserves .....	2-14
Threshold Funding Model - Dollar Defined Minimum: Executive Summary .....	2-15
Threshold Funding Model - Dollar Defined Minimum: Summary .....	2-18
Threshold Funding Model - Dollar Defined Minimum: Projection .....	2-19
Threshold Funding Model - Dollar Defined Minimum: Component Summary by Category .....	2-20
Threshold Funding Model - Dollar Defined Minimum: Distribution of Accumulated Reserves ..	2-21
Threshold Funding Model - 70% Minimum: Executive Summary .....	2-22
Threshold Funding Model - 70% Minimum: Summary .....	2-25
Threshold Funding Model - 70% Minimum: Projection .....	2-26
Threshold Funding Model - 70% Minimum: Component Summary by Category .....	2-27

**TABLE OF CONTENTS**  
**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**

Threshold Funding Model - 70% Minimum: Distribution of Accumulated Reserves .....	2-28
Threshold Funding Model - 85% Minimum: Executive Summary .....	2-29
Threshold Funding Model - 85% Minimum: Summary .....	2-32
Threshold Funding Model - 85% Minimum: Projection .....	2-33
Threshold Funding Model - 85% Minimum: Component Summary by Category .....	2-34
Threshold Funding Model - 85% Minimum: Distribution of Accumulated Reserves .....	2-35
Component Funding Model: Executive Summary .....	2-36
Component Funding Model: Summary .....	2-39
Component Funding Model: Projection .....	2-40
Component Funding Model: Assessment & Category Summary .....	2-41
Component Funding Model: Component Summary by Category .....	2-42
Component Funding Model: Distribution of Accumulated Reserves .....	2-43
Detail Report by Category (Dollar Defined Threshold Funding Model) .....	2-44
Category Detail Index .....	2-70
Spread Sheet .....	2-71
Asset Current Cost by Category .....	2-75
Appendix - Contribution Scenario without Inflation: Executive Summary .....	2-76
Appendix - Contribution Scenario without Inflation: Projection .....	2-77

**PART III • MAINTENANCE PLAN**

Maintenance Plan Detail .....	3-1
-------------------------------	-----

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Part One**

## **Important Information**

This document has been provided pursuant to an agreement containing restrictions on its use. The client shall have the right to reproduce and distribute copies of this report, or the information contained within, as may be required for compliance with all applicable regulations.

This reserve analysis study and the parameters under which it has been completed are based upon information provided to us in part by representatives of the association, its contractors, assorted vendors, specialist and independent contractors, the Community Association Institute, and various construction pricing and scheduling manuals including, but not limited to: Marshall & Swift Valuation Service, RS Means Facilities Maintenance & Repair Cost Data, RS Means Repair & Remodeling Cost Data, National Construction Estimator, National Repair & Remodel Estimator, Dodge Cost Manual and McGraw-Hill Professional. Additionally, costs are obtained from numerous vendor catalogues, actual quotations or historical costs, and our own experience in the field of property management and reserve study preparation.

It has been assumed, unless otherwise noted in this report, that all assets have been designed and constructed properly and that each estimated useful life will approximate that of the norm per industry standards and/or manufacturer's specifications. In some cases, estimates may have been used on assets, which have an indeterminable but potential liability to the association. The decision for the inclusion of these as well as all assets considered is left to the client.

We recommend that your reserve analysis study be updated on an annual basis due to fluctuating interest rates, inflationary changes, and the unpredictable nature of the lives of many of the assets under consideration. All of the information collected during our inspection of the association and computations made subsequently in preparing this reserve analysis study are retained in our computer files. Therefore, annual updates may be completed quickly and inexpensively each year.

ReserveStudyUpdate.com, LLC would like to thank you for using our services. We invite you to call us at any time, should you have questions, comments or need assistance. In addition, any of the parameters and estimates used in this study may be changed at your request, after which we will provide a revised study.

This reserve analysis study is provided as an aid for planning purposes and not as an accounting tool. Since it deals with events yet to take place, there is no assurance that the results enumerated within it will, in fact, occur as described. Conditions reported by the reserve study are applicable to the immediate time frame of the report and these conditions, over time, may change. Is impossible to envisage thirty years into the future to establish the cost of repair or replacement of any of the components, let alone the value of money, fluctuation in the cost of fuel, delivery/installation costs, changing building code requirements and other potential unknowns. The probability that it may project in its reserve study, or that the Board could project in its disclosures, future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning a national sweepstake; while it may happen in atypical instances by chance, one may not reasonably expect it to happen. The reserve study shall not be used as health and safety concerns, evidence of construction defects, damage, potential damage, water intrusion inspection, or as a construction-quality inspection. This reserve study specifically exclude issues having to do with unpredictable natural events and environmental hazards; including but not limited to lead paint, asbestos, mold, mildew, radon, etc.

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Part One**

## **Part I**

### **Introduction**

Preparing the annual budget and overseeing the association's finances are perhaps the most important responsibilities of board members. The annual operating and reserve budgets reflect the planning and goals of the association and set the level and quality of service for all of the association's activities.

### **Funding Options**

When a major repair or replacement is required in a community, an association has essentially four options available to address the expenditure:

The first, and only logical means that the Board of Directors has to ensure its ability to maintain the assets for which it is obligated, is by **assessing an adequate level of reserves** as part of the regular membership assessment, thereby distributing the cost of the replacements uniformly over the entire membership. The community is not only comprised of present members, but also future members. Any decision by the Board of Directors to adopt a calculation method or funding plan which would disproportionately burden future members in order to make up for past reserve deficits, would be a breach of its fiduciary responsibility to those future members. Unlike individuals determining their own course of action, the board is responsible to the "community" as a whole.

Whereas, if the association was setting aside reserves for this purpose, using the vehicle of the regularly assessed membership dues, it would have had the full term of the life of the roof, for example, to accumulate the necessary moneys. Additionally, those contributions would have been evenly distributed over the entire membership and would have earned interest as part of that contribution.

The second option is for the association to **acquire a loan** from a lending institution in order to effect the required repairs. In many cases, banks will lend to an association using "future homeowner assessments" as collateral for the loan. With this method, the current board is pledging the future assets of an association. They are also incurring the additional expense of interest fees along with the original principal amount. In the case of a \$150,000 roofing replacement, the association may be required to pay back the loan over a three to five year period, with interest.

The third option, too often used, is simply to **defer the required repair or replacement**. This option, which is not recommended, can create an environment of declining property values due to expanding lists of deferred maintenance items and the association's financial inability to keep pace with the normal aging process of the common area components. This, in turn, can have a seriously negative impact on sellers in the association by making it difficult, or even impossible, for potential buyers to obtain financing from lenders. Increasingly, lending institutions are requesting copies of the association's most recent reserve study before granting loans, either for the association itself, a prospective purchaser, or for an individual within such an association.

The fourth option is to pass a "**special assessment**" to the membership in an amount required to cover the expenditure. When a special assessment is passed, the association has the authority and responsibility to collect the assessments, even by means of foreclosure, if necessary. However, an association considering a special assessment cannot guarantee that an assessment, when needed, will be passed. Consequently, the association cannot guarantee its ability to perform the required repairs or replacements to those major components for which it is obligated when the need arises. Additionally, while relatively new communities require very little in the way of major "reserve" expenditures, associations reaching 12 to 15 years of age and older, find many components reaching the end of their effective useful lives. These required expenditures, all accruing at the same time, could be devastating to an association's overall budget.

# **Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**

## **Part One**

### **Types of Reserve Studies**

Most reserve studies fit into one of three categories:

Full Reserve Study;

Update with site inspection; and

Update without site inspection.

In a **Full Reserve Study**, the reserve provider conducts a component inventory, a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both a “fund status” and “funding plan”.

In an **Update with site inspection**, the reserve provider conducts a component inventory (verification only, not quantification unless new components have been added to the inventory), a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both the “fund status and “funding plan.”

In an **Update without site inspection**, the reserve provider conducts life and valuation estimates to determine the “fund status” and “funding plan.”

### **The Reserve Study: A Physical and a Financial Analysis**

There are two components of a reserve study: a physical analysis and a financial analysis.

#### **Physical Analysis**

During the physical analysis, a reserve study provider evaluates information regarding the physical status and repair/replacement cost of the association’s major common area components. To do so, the provider conducts a component inventory, a condition assessment, and life and valuation estimates.

#### **Developing a Component List**

The budget process begins with full inventory of all the major components for which the association is responsible. The determination of whether an expense should be labeled as operational, reserve, or excluded altogether is sometimes subjective. Since this labeling may have a major impact on the financial plans of the association, subjective determinations should be minimized. We suggest the following considerations when labeling an expense.

## Arbor Ridge P.U.D. Homeowners Association - Cottage Collection

### Part One

#### Operational Expenses

Occur at least annually, no matter how large the expense, and can be budgeted for effectively each year. They are characterized as being reasonably predictable, both in terms of frequency and cost. Operational expenses include all minor expenses, which would not otherwise adversely affect an operational budget from one year to the next. Examples of *operational expenses* include:

<b>Utilities:</b>	Bank Service Charges	Accounting
Electricity	Dues & Publications	Reserve Study
Gas	Licenses, Permits & Fees	<b>Repair Expenses:</b>
Water	Insurance(s)	Tile Roof Repairs
Telephone	<b>Services:</b>	Equipment Repairs
Cable TV	Landscaping	Minor Concrete Repairs
<b>Administrative:</b>	Pool Maintenance	Operating Contingency
Supplies	Street Sweeping	

#### Reserve Expenses

These are major expenses that occur other than annually, and which must be budgeted for in advance in order to ensure the availability of the necessary funds in time for their use. Reserve expenses are reasonably predictable both in terms of frequency and cost. However, they may include significant assets that have an indeterminable but potential liability that may be demonstrated as a likely occurrence. They are expenses that, when incurred, would have a significant effect on the smooth operation of the budgetary process from one year to the next, if they were not reserved for in advance. Examples of reserve expenses include:

Roof Replacements	Park/Play Equipment
Painting	Pool/Spa Re-plastering
Deck Resurfacing	Pool Equipment Replacement
Fencing Replacement	Pool Furniture Replacement
Asphalt Seal Coating	Tennis Court Resurfacing
Asphalt Repairs	Lighting Replacement
Asphalt Overlays	Insurance(s)
Equipment Replacement	Reserve Study
Interior Furnishings	

#### Budgeting is Normally Excluded for:

Repairs or replacements of assets which are deemed to have an estimated useful life equal to or exceeding the estimated useful life of the facility or community itself, or exceeding the legal life of the community as defined in an association's governing documents. Examples include the complete replacement of elevators, tile roofs, wiring and plumbing. Also excluded are insignificant expenses that may be covered either by an operating or reserve contingency, or otherwise in a general maintenance fund. Expenses that are necessitated by acts of nature, accidents or other occurrences that are more properly insured for, rather than reserved for, are also excluded.

# **Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**

## **Part One**

### **Financial Analysis**

The financial analysis assesses the association's reserve balance or "fund status" (measured in cash or as percent fully funded) to determine a recommendation for the appropriate reserve contribution rate in the future, known as the "funding plan".

### **Preparing the Reserve Study**

Once the reserve assets have been identified and quantified, their respective replacement costs, useful lives and remaining lives must be assigned so that a funding schedule can be constructed. Replacement costs and useful lives can be found in published manuals such as construction estimators, appraisal handbooks, and valuation guides. Remaining lives are calculated from the useful lives and ages of assets and adjusted according to conditions such as design, manufactured quality, usage, exposure to the elements and maintenance history.

By following the recommendations of an effective reserve study, the association should avoid any major shortfalls. However, to remain accurate, the report should be updated on an annual basis to reflect such changes as shifts in economic parameters, additions of phases or assets, or expenditures of reserve funds. The association can assist in simplifying the reserve analysis update process by keeping accurate records of these changes throughout the year.

### **Funding Methods**

From the simplest to the most complex, reserve analysis providers use many different computational processes to calculate reserve requirements. However, there are two basic processes identified as industry standards: the cash flow method and the component method.

The cash flow method develops a reserve-funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the actual anticipated schedule of reserve expenses until the desired funding goal is achieved. This method sets up a "window" in which all future anticipated replacement costs are computed, based upon the individual lives of the components under consideration. The ReserveStudyUpdate.com, LLC Threshold and the ReserveStudyUpdate.com, LLC Current Assessment funding models are based upon the cash flow method.

The component method develops a reserve-funding plan where the total contribution is based upon the sum of contributions for individual components. The component method is the more conservative of the two funding options, and assures that the association will achieve and maintain an ideal level of reserve over time. This method also allows for computations on individual components in the analysis. The ReserveStudyUpdate.com, LLC Component Funding model is based upon the component methodology.



# Arbor Ridge P.U.D. Homeowners Association - Cottage Collection

## Part One

### Funding Strategies

Once an association has established its funding goals, the association can select an appropriate funding plan. There are four basic strategies from which most associations select. It is recommended that associations consult professionals to determine the best strategy or combination of plans that best suit the association's need. Additionally, associations should consult with their financial advisor to determine the tax implications of selecting a particular plan. Further, consultation with the American Institute of Certified Public Accountants (AICPA) for their reporting requirements is advisable. The four funding plans and descriptions of each are detailed below. Associations will have to update their reserve studies more or less frequently depending on the funding strategy they select.

**Full Funding---**Given that the basis of funding for reserves is to distribute the costs of the replacements over the lives of the components in question, it follows that the ideal level of reserves would be proportionately related to those lives and costs. If an association has a component with an expected estimated useful life of ten years, it would set aside approximately one-tenth of the replacement cost each year. At the end of three years, one would expect three-tenths of the replacement cost to have accumulated, and if so, that component would be "fully-funded." This model is important in that it is a measure of the adequacy of an association's reserves at any one point of time, and is independent of any particular method which may have been used for past funding or may be under consideration for future funding. This formula represents a snapshot in time and is based upon current replacement cost, independent of future inflationary or investment factors:

Fully Funded Reserves = **Age divided by Useful Life the results multiplied by Current Replacement Cost**

When an association's total accumulated reserves for all components meet this criterion, its reserves are considered "fully-funded."

The ReserveStudyUpdate.com, LLC **Baseline Funding Model (Minimum Funding)**. The goal of this funding method is to keep the reserve cash balance above zero. This method describes the objective to have sufficient reserves on hand to never completely run out of money. This means that while each individual component may not be fully funded, the reserve balance overall does not drop below zero during the projected period. An association using this funding method must understand that even a minor reduction in a component's remaining useful life can result in a deficit in the reserve cash balance. This is sometimes described as a "cash-positive" plan. With less cash in reserves on-deposit, associations with a baseline funding objective have higher instances of special assessments and/or deferred maintenance. This funding approach is the most riskiest out of all of the funding models and is never recommended.

The ReserveStudyUpdate.com, LLC **Threshold Funding Model**. This method is based upon the cash flow funding concept. The minimum reserve cash balance in threshold funding, however, is set at a predetermined dollar amount (other than \$0). Threshold funding describes an objective chosen by the board other than the 100% (full funding) level or just staying cash-positive (baseline funding). This may be a specific percent funded target or a cash balance target. Threshold funding is often a value chosen in between full funding and baseline funding. ReserveStudyUpdate.com, LLC recommends the Threshold Funding Model.

The ReserveStudyUpdate.com, LLC **Current Assessment Funding Model**. This method is also based upon the cash flow funding concept. The initial reserve assessment is set at the association's current fiscal year funding level and a 30-year projection is calculated to illustrate the adequacy of the current funding over time. The "Current Funding Model" is often used as a user defined model. This model allows the Board of Directors to experiment and contemplate alternative funding approaches and scrutinize and consider the ramifications of these funding approaches.

The ReserveStudyUpdate.com, LLC **Percentage Distribution Funding Model**. This funding method is based loosely upon the PRA System™ software objectives of reserve funding. Some property management firms which have legacy accounting software systems continue to utilize this funding approach. One of the key reasons why this funding approach has been since superseded by more modern funding approaches is due to the GAAP and ECHO reporting requirements in most states.

## Arbor Ridge P.U.D. Homeowners Association - Cottage Collection

### Part One

The ReserveStudyUpdate.com, LLC **Component Funding Model**. This is a straight-line funding model. It distributes the cash reserves to individual reserve components and then calculates what the reserve assessment and interest contribution (minus taxes) should be, again by each reserve component. The current annual assessment is then determined by summing all the individual component assessments, hence the name “Component Funding Model”. This is the most conservative funding model. It leads to or maintains the fully funded reserve position. The following details this calculation process.

#### Component Funding Model Distribution of Accumulated Reserves


The “Distribution of Accumulated Reserves Report” is a “Component Funding Model” calculation. This distribution **does not** apply to the cash flow funding models.

When calculating reserves based upon the component methodology, a beginning reserve balance must be allocated for each of the individual components considered in the analysis, before the individual calculations can be completed. When this distribution is not available, or of sufficient detail, the following method is suggested for allocating reserves:

The first step the program performs in this process is subtracting, from the total accumulated reserves, any amounts for assets that have predetermined (fixed) reserve balances. The user can “fix” the accumulated reserve balance within the program on the individual asset’s detail page. If, by error, these amounts total more than the amount of funds available, then the remaining assets are adjusted accordingly. A provision for a contingency reserve is then deducted by the determined percentage used, and if there are sufficient remaining funds available.

The second step is to identify the ideal level of reserves for each asset. As indicated in the prior section, this is accomplished by evaluating the component’s age proportionate to its estimated useful life and current replacement cost. Again, the equation used is as follows:

$$\text{Fully Funded Reserves} = (\text{Age/Useful Life}) \times \text{Current Replacement Cost}$$

The  Reserve Analyst® software program performs the above calculations to the actual month the component was placed-in-service. The program projects that the accumulation of necessary reserves for repairs or replacements will be available on the first day of the fiscal year in which they are scheduled to occur.

The next step the program performs is to arrange all of the assets used in the study in ascending order by remaining life, and alphabetically within each grouping of remaining life items. These assets are then assigned their respective ideal level of reserves until the amount of funds available is depleted, or until all assets are appropriately funded. If any assets are assigned a zero remaining life (scheduled for replacement in the current fiscal year), then the amount assigned equals the current replacement cost and funding begins for the next cycle of replacement. If there are insufficient funds available to accomplish this, then the software automatically adjusts the zero remaining life items to one year, and that asset assumes its new grouping position alphabetically in the final printed report. If, at the completion of this task, there are additional moneys that have not been distributed, the remaining reserves are then assigned, in ascending order, to a level equal to, but not exceeding, the current replacement cost for each component. If there are sufficient moneys available to fund all assets at their current replacement cost levels, then any excess funds are designated as such and are not factored into any of the report computations. If, at the end of this assignment process there are designated excess funds, they can be used to offset the monthly contribution requirements recommended, or used in any other manner the client may desire.

Assigning the reserves in this manner defers the make-up period for any under-funding over the longest remaining life of all assets under consideration, thereby minimizing the impact of any deficiency. For example, if the report indicates an under funding of \$50,000, this under-funding will be assigned to components with the longest remaining lives in order to give more time to “replenish” the account. If the \$50,000 under-funding were to be assigned to short remaining life items, the impact would be felt immediately.

## **Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**

### **Part One**

If the reserves are under-funded, the monthly contribution requirements, as outlined in this report, can be expected to be higher than normal. In future years, as individual assets are replaced, the funding requirements will return to their normal levels. In the case of a large deficiency, a special assessment may be considered. The program can easily generate revised reports outlining how the monthly contributions would be affected by such an adjustment, or by any other changes that may be under consideration.

#### **Funding Reserves**

Three assessment and contribution figures are provided in the report, the “Monthly Reserve Assessment Required”, the “Average Net Monthly Interest Earned” contribution and the “Total Monthly Allocation to Reserves.” The association should allocate the “Monthly Reserve Assessment Required” amount to reserves each month when the interest earned on the reserves is left in the reserve accounts as part of the contribution. Any interest earned on reserve deposits, must be left in reserves and only amounts set aside for taxes should be removed.

The second alternative is to allocate the “Total Monthly Allocation” to reserves (this is the member assessment plus the anticipated interest earned for the fiscal year). This method assumes that all interest earned will be assigned directly as operating income. This allocation takes into consideration the anticipated interest earned on accumulated reserves regardless of whether or not it is actually earned. When taxes are paid, the amount due will be taken directly from the association’s operating accounts as the reserve accounts are allocated only those moneys net of taxes.

#### **Users’ Guide to your Reserve Analysis Study**

Part II of your ReserveStudyUpdate.com, LLC Report contains the reserve analysis study for your association. There are seven types of reports in the study as described below.

#### **Report Summaries**

The Report Summary for all funding models lists all of the parameters that were used in calculating the report as well as the summary of your reserve analysis study.

#### **Index Reports**

The **Distribution of Accumulated Reserves** report lists all assets in remaining life order. It also identifies the ideal level of reserves that should have accumulated for the association as well as the actual reserves available. This information is valid only for the “Component Funding Model” calculation.

## **Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**

### **Part One**

The **Component Listing/Summary** lists all assets by category (i.e. roofing, painting, lighting, etc.) together with their remaining life, current cost, monthly reserve contribution, and net monthly allocation.

#### **Detail Reports**

The Detail Report itemizes each asset and lists all measurements, current and future costs, and calculations for that asset. Provisions for percentage replacements, salvage values, and one-time replacements can also be utilized. These reports can be sorted by category or group.

The numerical listings for each asset are enhanced by extensive narrative detailing factors such as design, manufactured quality, usage, exposure to elements and maintenance history.

The ReserveStudyUpdate.com, LLC Detail Index is an alphabetical listing of all assets, together with the page number of the asset's detail report, the projected replacement year, and the asset number.

#### **Projections**

Thirty-year projections add to the usefulness of your reserve analysis study.

#### **Definitions**

##### **Report I.D.**

Includes the Report Date (example: November 15, 1992), Account Number (example: 9773), and Version (example: 1.0). Please use this information (displayed on the summary page) when referencing your report.

##### **Budget Year Beginning/Ending**

The budgetary year for which the report is prepared. For associations with fiscal years ending December 31<sup>st</sup>, the monthly contribution figures indicated are for the 12-month period beginning 1/1/20xx and ending 12/31/20xx.

##### **Number of Units and/or Phases**

If applicable, the number of units and/or phases included in this version of the report.

##### **Inflation**

This figure is used to approximate the future cost to repair or replace each component in the report. The current cost for each component is compounded on an annual basis by the number of remaining years to replacement, and the total is used in calculating the monthly reserve contribution that will be necessary to accumulate the required funds in time for replacement.

##### **Annual Assessment Increase**

This represents the percentage rate at which the association will increase its assessment to reserves at the end of each year. For example, in order to accumulate \$10,000 in 10 years, you could set aside \$1,000 per year. As an alternative, you could set aside \$795 the first year and increase that amount by 5% each year until the year of replacement. In either case you arrive at the same amount. The idea is that you start setting aside a lower amount and increase that number each year in accordance with the planned percentage. Ideally this figure should be equal to the rate of inflation. It can, however, be used to aide those associations that have not set aside appropriate reserves in the past, by making the initial year's allocation less formidable.

# **Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**

## **Part One**

### **Investment Yield Before Taxes**

The average interest rate anticipated by the association based upon its current investment practices.

### **Taxes on Interest Yield**

The estimated percentage of interest income that will be set aside to pay income taxes on the interest earned.

### **Projected Reserve Balance**

The anticipated reserve balance on the first day of the fiscal year for which this report has been prepared. This is based upon information provided and not audited.

### **Percent Fully Funded**

The ratio, at the beginning of the fiscal year, of the actual (or projected) reserve balance to the calculated fully funded balance, expressed as a percentage.

### **Phase Increment Detail and/or Age**

Comments regarding aging of the components on the basis of construction date or date of acceptance by the association.

### **Monthly Assessment**

The assessment to reserves required by the association each month.

### **Interest Contribution (After Taxes)**

The interest that should be earned on the reserves, net of taxes, based upon their beginning reserve balance and monthly contributions for one year. This figure is averaged for budgeting purposes.

### **Total Monthly Allocation**

The sum of the monthly assessment and interest contribution figures.

### **Group and Category**

The report may be prepared and sorted either by group (location, building, phase, etc.) or by category (roofing, painting, etc.). The standard report printing format is by category.

### **Percentage of Replacement or Repairs**

In some cases, an asset may not be replaced in its entirety or the cost may be shared with a second party. Examples are budgeting for a percentage of replacement of streets over a period of time, or sharing the expense to replace a common wall with a neighboring party.

### **Placed-In-Service Date**

The month and year that the asset was placed-in-service. This may be the construction date, the first escrow closure date in a given phase, or the date of the last servicing or replacement.

### **Estimated Useful Life**

The estimated useful life of an asset based upon industry standards, manufacturer specifications, visual inspection, location, usage, association standards and prior history. All of these factors are taken into consideration when tailoring the estimated useful life to the particular asset. For example, the carpeting in a hallway or elevator (a heavy traffic area) will not have the same life as the identical carpeting in a seldom-used meeting room or office.

### **Adjustment to Useful Life**

Once the useful life is determined, it may be adjusted, up or down, by this separate figure for the current cycle of replacement. This will allow for a current period adjustment without affecting the estimated replacement cycles for future replacements.

### **Estimated Remaining Life**

This calculation is completed internally based upon the report's fiscal year date and the date the asset was placed-in-service.

## **Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**

### **Part One**

#### **Replacement Year**

The year that the asset is scheduled to be replaced. The appropriate funds will be available by the first day of the fiscal year for which replacement is anticipated.

#### **Annual Fixed Reserves**

An optional figure which, if used, will override the normal process of allocating reserves to each asset.

#### **Fixed Assessment**

An optional figure which, if used, will override all calculations and set the assessment at this amount. This assessment can be set for monthly, quarterly or annually as necessary.

#### **Salvage Value**

The salvage value of the asset at the time of replacement, if applicable.

#### **One-Time Replacement**

Notation if the asset is to be replaced on a one-time basis.

#### **Current Replacement Cost**

The estimated replacement cost effective at the beginning of the fiscal year for which the report is being prepared

#### **Future Replacement Cost**

The estimated cost to repair or replace the asset at the end of its estimated useful life based upon the current replacement cost and inflation.

#### **Component Inventory**

The task of selecting and qualifying reserve components. This task can be accomplished through on-site visual, review of association design and organizational documents, a review of established association precedents, and discussion with appropriate association representative(s).

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Part One**

## **A Multi-Purpose Tool**

- Your ReserveStudyUpdate.com, LLC Report is an important part of your association's budgetary process. Following its recommendations should ensure the association's smooth budgetary transitions from one fiscal year to the next, and either decrease or eliminate the need for "special assessments".
- In addition, your ReserveStudyUpdate.com, LLC reserve study serves a variety of useful purposes:
- Following the recommendations of a reserve study performed by a professional consultant can protect the Board of Directors in a community from personal liability concerning reserve components and reserve funding.
- A reserve analysis study is required by your accountant during the preparation of the association's annual audit.
- The ReserveStudyUpdate.com, LLC reserve study is often requested by lending institutions during the process of loan applications, both for the community and, in many cases, the individual owners.
- Your ReserveStudyUpdate.com, LLC Report is also a detailed inventory of the association's major assets and serves as a management tool for scheduling, coordinating and planning future repairs and replacements.
- Your ReserveStudyUpdate.com, LLC Report is a tool that can assist the Board in fulfilling its legal and fiduciary obligations for maintaining the community in a state of good repair. If a community is operating on a special assessment basis, it cannot guarantee that an assessment, when needed, will be passed. Therefore, it cannot guarantee its ability to perform the required repairs or replacements to those major components for which the association is obligated.
- The ReserveStudyUpdate.com, LLC reserve study is an annual disclosure to the membership concerning the financial condition of the association, and may be used as a "consumers' guide" by prospective purchasers.
- The ReserveStudyUpdate.com, LLC Owners' Summary meets the disclosure requirements of the California Civil Code and also the recently adopted ECHO standards.
- Your ReserveStudyUpdate.com, LLC Report provides a record of the time, cost, and quantities of past reserve replacements. At times the association's management company and board of directors are transitory which may result in the loss of these important records.

Sincerely,

*Brian A. Owens*

Brian A. Owens, RSS, PRA, RS  
Reserve Analyst  
ReserveStudyUpdate.com, LLC  
PO Box 66778  
Portland, Oregon 97290-6778  
[www.ReserveStudyUpdate.com](http://www.ReserveStudyUpdate.com)  
Phone: 503-862-9349  
Fax: 503-928-8753



*RSS (Reserve Study Specialist - State of Nevada - Licensed Reserve Analyst #RSS.0000160)*  
*PRA (Professional Reserve Analyst #2299 - Association of Professional Reserve Analysts)*  
*RS (Reserve Specialist #279 - Community Associations Institute)*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Level III Update Off-Site: Six Minute Full Report Summary**

**LEVEL THREE UPDATE OFF-SITE: 6 MINUTE FULL REPORT SUMMARY**

- A reserve component list: Please see refer to "Detail Report by Category" section of the reserve study.
- Date of reserve study: Prepared on June 22, 2019 for fiscal year starting January, 1 2020.
- This is a Level III: Off-Site Reserve Study Update.
- Reserve account balance as of January, 1 2020: \$67,376
- Estimated percent funded as of January, 1 2020: 68.18%
- Estimated "Fully Funded Reserves" as of the beginning of fiscal year 2020: \$98,821\*  
*\*Please note, this figure represents the estimated "Fully Funded Reserves" in order to be considered 100% funded as of January, 1 2020 and does not represent the amount of money on-hand.*
- Projected percent funded as of the end of 2020: (contingent on which funding model is implemented)  
Component Funding Model: 73.99% (does not include contingency of 3.00%)  
"Current" Funding Model: 69.14%  
Threshold Funding Model - Dollar Defined (\$55,672) Minimum: 70.15%  
Threshold Funding Model - 70% Minimum (70% Floor): 70.00%  
Threshold Funding Model - 85% Minimum (85% Floor): 85.00%  
Baseline Funding Model: 59.40%
- Special assessments implemented or planned: Please refer to the following sections in the report:  
  
See Appendix section of this report.
- Interest rate: 0.70%, Inflation rate: 1.56%.
- 2020 reserve account contribution rate:  
Component Funding Model: \$38,115  
"Current" Funding Model: \$32,424  
Threshold Funding Model - Dollar Defined (\$55,672) Minimum: \$33,224  
Threshold Funding Model - 70% Minimum: \$33,108  
Threshold Funding Model - 85% Minimum: \$45,061  
Baseline Funding Model: \$24,659
- 2020 Component Funding Model (Fully Funded Plan) contribution: \$38,115  
2020 "Current" Funding Model reserve contribution: \$32,424  
2020 Threshold Funding Model - (Dollar Defined Funding Floor) contribution: \$33,224 (recommended model)  
2020 Threshold Funding Model - (70% Minimum Funding Floor) contribution: \$33,108  
2020 Threshold Funding Model - (85% Minimum Funding Floor) contribution: \$45,061  
2020 Baseline Funding Model contribution: \$24,659
- Projected account balance for thirty years: Please see refer to the following sections in the report as these fluctuate according to which funding model is implemented:



**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Level III Update Off-Site: Six Minute Full Report Summary**

**"Component Funding Model Projection"**  
**"Current Funding Model Projection"**  
**"Threshold Funding Model - Dollar Defined Minimum Projection"**  
**"Threshold Funding Model - 70% Defined Minimum Projection"**  
**"Threshold Funding Model - 85% Defined Minimum Projection"**  
**"Baseline Funding Model Projection"**

- **This reserve study was prepared by a reserve study professional.**
  
- **This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.**

**Report Version 1.01.**

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Annual Expenditure Detail**

Report Date                      June 22, 2019  
Beginning Fiscal Year        January 01, 2020  
Account Number                1215b

Version Number 1.01

---

Description	Expenditures
<b>Replacement Year 2020</b>	
Arborist / Tree Work: Tree Removal - Trimming "D"	11,207
Arborist / Tree Work: Tree Removal - Trimming "E"	10,948
Bark Dust: Replenish - Common Area	15,307
Irrigation Controllers & Valves: Phase 3	7,241
<b>Total for 2020</b>	<b>\$44,703</b>
<b>Replacement Year 2021</b>	
Irrigation Controllers & Valves: Phase 2	7,354
<b>Total for 2021</b>	<b>\$7,354</b>
<b>Replacement Year 2022</b>	
Arborist / Tree Work: Tree Pruning - "Newer"	4,314
Arborist / Tree Work: Tree Pruning - "Older"	7,191
Arborist / Tree Work: Tree Removal - Trimming "A"	19,975
Bark Dust: Replenish - Common Area	15,788
Irrigation Controllers & Valves: Phase 1	7,469
<b>Total for 2022</b>	<b>\$54,737</b>
<b>Replacement Year 2023</b>	
Arborist / Tree Work: Tree Removal - Trimming "B"	16,413
<b>Total for 2023</b>	<b>\$16,413</b>
<b>Replacement Year 2024</b>	
Arborist / Tree Work: Tree Removal - Trimming "C"	12,472
Bark Dust: Replenish - Common Area	16,285
Irrigation Controllers & Valves: Phase 3	7,704
Landscape Renovation / Enhancement	12,263
<b>Total for 2024</b>	<b>\$48,724</b>
<b>Replacement Year 2025</b>	
Arborist / Tree Work: Tree Pruning - "Newer"	4,519

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2025 continued...</i></b>	
Arborist / Tree Work: Tree Pruning - "Older"	7,533
Irrigation Controllers & Valves: Phase 2	7,824
<b>Total for 2025</b>	<b>\$19,876</b>
<b>Replacement Year 2026</b>	
Bark Dust: Replenish - Common Area	16,797
Irrigation Controllers & Valves: Phase 1	7,946
<b>Total for 2026</b>	<b>\$24,743</b>
<i>No Replacement in 2027</i>	
<b>Replacement Year 2028</b>	
Arborist / Tree Work: Tree Pruning - "Newer"	4,733
Arborist / Tree Work: Tree Pruning - "Older"	7,891
Bark Dust: Replenish - Common Area	17,325
Irrigation Controllers & Valves: Phase 3	8,196
<b>Total for 2028</b>	<b>\$38,145</b>
<b>Replacement Year 2029</b>	
Irrigation Controllers & Valves: Phase 2	8,324
<b>Total for 2029</b>	<b>\$8,324</b>
<b>Replacement Year 2030</b>	
Arborist / Tree Work: Tree Removal - Trimming "D"	13,083
Arborist / Tree Work: Tree Removal - Trimming "E"	12,781
Backflow Device: Common Area - Replacement	1,126
Bark Dust: Replenish - Common Area	17,870
Irrigation Controllers & Valves: Phase 1	8,454
<b>Total for 2030</b>	<b>\$53,314</b>
<b>Replacement Year 2031</b>	
Arborist / Tree Work: Tree Pruning - "Newer"	4,958
Arborist / Tree Work: Tree Pruning - "Older"	8,266
Landscaping: Power Box - Cottages - Replace	551
<b>Total for 2031</b>	<b>\$13,776</b>

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2032</b>	
Arborist / Tree Work: Tree Removal - Trimming "A"	23,319
Bark Dust: Replenish - Common Area	18,432
Irrigation Controllers & Valves: Phase 3	8,719
<b>Total for 2032</b>	<b>\$50,470</b>
<b>Replacement Year 2033</b>	
Arborist / Tree Work: Tree Removal - Trimming "B"	19,161
Irrigation Controllers & Valves: Phase 2	8,855
<b>Total for 2033</b>	<b>\$28,017</b>
<b>Replacement Year 2034</b>	
Arborist / Tree Work: Tree Pruning - "Newer"	5,194
Arborist / Tree Work: Tree Pruning - "Older"	8,659
Arborist / Tree Work: Tree Removal - Trimming "C"	14,560
Bark Dust: Replenish - Common Area	19,011
Irrigation Controllers & Valves: Phase 1	8,994
Landscape Renovation / Enhancement	14,316
<b>Total for 2034</b>	<b>\$70,734</b>
<i>No Replacement in 2035</i>	
<b>Replacement Year 2036</b>	
Bark Dust: Replenish - Common Area	19,609
Irrigation Controllers & Valves: Phase 3	9,276
<b>Total for 2036</b>	<b>\$28,885</b>
<b>Replacement Year 2037</b>	
Arborist / Tree Work: Tree Pruning - "Newer"	5,441
Arborist / Tree Work: Tree Pruning - "Older"	9,071
Irrigation Controllers & Valves: Phase 2	9,421
<b>Total for 2037</b>	<b>\$23,933</b>
<b>Replacement Year 2038</b>	
Bark Dust: Replenish - Common Area	20,225
Irrigation Controllers & Valves: Phase 1	9,568
<b>Total for 2038</b>	<b>\$29,794</b>

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Annual Expenditure Detail**

Description	Expenditures
<i>No Replacement in 2039</i>	
<b>Replacement Year 2040</b>	
Arborist / Tree Work: Tree Pruning - "Newer"	5,700
Arborist / Tree Work: Tree Pruning - "Older"	9,502
Arborist / Tree Work: Tree Removal - Trimming "D"	15,273
Arborist / Tree Work: Tree Removal - Trimming "E"	14,921
Bark Dust: Replenish - Common Area	20,861
Irrigation Controllers & Valves: Phase 3	9,869
<b>Total for 2040</b>	<b>\$76,126</b>
<b>Replacement Year 2041</b>	
Irrigation Controllers & Valves: Phase 2	10,023
<b>Total for 2041</b>	<b>\$10,023</b>
<b>Replacement Year 2042</b>	
Arborist / Tree Work: Tree Removal - Trimming "A"	27,224
Bark Dust: Replenish - Common Area	21,517
Irrigation Controllers & Valves: Phase 1	10,179
<b>Total for 2042</b>	<b>\$58,920</b>
<b>Replacement Year 2043</b>	
Arborist / Tree Work: Tree Pruning - "Newer"	5,971
Arborist / Tree Work: Tree Pruning - "Older"	9,954
Arborist / Tree Work: Tree Removal - Trimming "B"	22,369
<b>Total for 2043</b>	<b>\$38,293</b>
<b>Replacement Year 2044</b>	
Arborist / Tree Work: Tree Removal - Trimming "C"	16,997
Bark Dust: Replenish - Common Area	22,194
Irrigation Controllers & Valves: Phase 3	10,499
Landscape Renovation / Enhancement	16,713
<b>Total for 2044</b>	<b>\$66,404</b>
<b>Replacement Year 2045</b>	
Irrigation Controllers & Valves: Phase 2	10,663
<b>Total for 2045</b>	<b>\$10,663</b>

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2046</b>	
Arborist / Tree Work: Tree Pruning - "Newer"	6,254
Arborist / Tree Work: Tree Pruning - "Older"	10,427
Bark Dust: Replenish - Common Area	22,892
Irrigation Controllers & Valves: Phase 1	10,829
<b>Total for 2046</b>	<b>\$50,402</b>
<i>No Replacement in 2047</i>	
<b>Replacement Year 2048</b>	
Bark Dust: Replenish - Common Area	23,612
Irrigation Controllers & Valves: Phase 3	11,170
<b>Total for 2048</b>	<b>\$34,782</b>
<b>Replacement Year 2049</b>	
Arborist / Tree Work: Tree Pruning - "Newer"	6,552
Arborist / Tree Work: Tree Pruning - "Older"	10,922
Irrigation Controllers & Valves: Phase 2	11,344
<b>Total for 2049</b>	<b>\$28,818</b>

## **EXECUTIVE SUMMARY - CURRENT FUNDING MODEL**

### **CURRENT FUNDING MODEL OVERVIEW**

The "Current Funding Model" is also based upon the cash flow funding concept. The initial reserve assessment is set at the association's current fiscal year funding level and a 30-year projection is calculated to illustrate the adequacy of the current funding over time.

### **PROPERTY INFORMATION**

**ORIGINAL STARTING DATE OF RESERVE STUDY:** This reserve study was prepared for the fiscal year January 1, 2020 and ending December 31, 2020. Unless otherwise indicated, we have used January 25, 2000 to begin aging the original components in this reserve study.

**NUMBER OF UNITS/LOTS & LOCATION:** This reserve study is a total of 316 units located in Bethany, Oregon.

**DATE OF LAST ON-SITE RESERVE STUDY:** (if applicable) The last on-site physical analysis done by ReserveStudyUpdate.com, LLC was completed on August 18, 2018.

**NOTE:** All interest accrued from reserve savings account(s) must remain in the reserve savings account(s) and not used as an off-set for operating expenses. Income tax factors were not considered due to variables effecting net taxable income and the election of tax form to be filed.

**RESERVE FUNDS ON HAND:** For the purpose of this reserve study, it is anticipated that the association will have a projected beginning reserve balance of \$67,376 as of January 1, 2020. The actual or projected (estimated) total presented in this reserve study is based upon information provided to ReserveStudyUpdate.com, LLC and was not audited.

**FUNDING REQUIRED:** The reserve study has an annual contribution increase of 0.50% per year.

**INFLATION RATE:** An inflation rate of 1.56% was used for all thirty years of the reserve study report. This is based on an equally weighted ten-year historical inflation rate average.

**THE NATIONAL PERCENT FUNDED RATING IN THE RESERVE STUDY INDUSTRY IS:**

0% to 29.99% - Poor

30% to 69.99% - Fair

70% to 100% - Good

This association is estimated to be 69.14% funded the end of the first fiscal year contingent that the funding model described in this section is implemented.

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Current Assessment Funding Model: Executive Summary**

**DISCLOSURES**

**GENERAL:** Arbor Ridge P.U.D. Homeowners Association - Cottage Collection and ReserveStudyUpdate.com, LLC have no professional or personal involvements with each other, other than the scope of work identified in the reserve study contract. This relationship cannot be perceived as a conflict of interest.

This reserve study is for budget and planning purposes and identifies the status of the reserve fund and schedules the anticipated major commonly owned item replacements in accordance with Oregon State Law(s). This reserve study will estimate the expected useful life and remaining useful life of the building and site components or systems, and will provide an estimate replacement or refurbishment cost for those components or systems.

**PHYSICAL ANALYSIS:** If an on-site reserve study was performed observations were limited to visual observations only. Destructive testing (invasive testing) was not performed. Any items that were not clearly visible at the time of the site observation were not viewed, and therefore were not included in the drafting of this reserve study.

A grand total of 51 assets were included in this reserve study report; of these considered, 14 were funded and 37 components were unfunded. Often times components not funded are estimated to be outside the scope of the thirty year scope of the reserve study; while other components are sometimes omitted by property management, association representative, and/or Declarant.

**MEASUREMENTS:** Measuring and inventory (+/- 10%) were identified via a combination of onsite physical measurements (if a Level 1 reserve study was contracted by client), previous reserve study and/or drawing take-offs. Drawing sets (if used) were provided by the property manager, Board of Directors or Declarant for our use relating only to the reserve study scope of work.

**RELIANCE ON CLIENT DATA:** Data received from property management including previous reserve study report(s) Fiscal Year 2017 On-Site Reserve Study by Reserve Studies by Reserve Funding published June 29, 2016, information from Association Representatives and/or Declarant is deemed reliable by ReserveStudyUpdate.com, LLC unless explicitly noted otherwise. Such data may include financial information, physical deficiencies or physical conditions, quantity of physical assets, or historical issues. Financial information received from property management, Association Representative, Declarant was not audited for accuracy.

The Association needs to carefully review each line item in the reports to be certain corrections are made from information you may possess that we are not aware of. It is assumed in our reserve study, no work, or expenditures from the reserve funds will occurred for the balance of the fiscal year. If this is not correct, you need to let ReserveStudyUpdate.com, LLC know what extra work was done and how much money will be spent.

**SCOPE OF RESERVE STUDY:** The Reserve Study is a reflection of information provided to the Consultant and assembled for the Association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records. Continued use of this reserve study beyond December 31, 2020 is misuse of the product and potentially a violation of applicable law(s).

The author(s) of this reserve study have absolutely no control over whether a special assessment will occur at any time during the thirty year horizon of this reserve study. The writer further submits that it is impossible to envision thirty years into the future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning the lottery, while it may happen in extraordinary instances by chance, one may not reasonably expect it to happen. As a result,



**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Current Assessment Funding Model: Executive Summary**

**ReserveStudyUpdate.com, LLC makes absolutely no guarantee, express or implied, that a special assessment will not occur during the time period covered by this reserve study. Assumptions on future costs and life expectancy's should be reviewed and adjusted on an annualized basis, as current and future cost projections, building code requirements, and life expectancy's become more uncertain.**

**Report Version 1.01.**

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**

Bethany, Oregon

**Current Assessment Funding Model: Summary**

Report Date	June 22, 2019
Account Number	1215b
Version	1.01
Budget Year Beginning	January 1, 2020
Budget Year Ending	December 31, 2020
Total Units	316

<i>Report Parameters</i>	
Inflation	1.56%
Annual Assessment Increase	0.50%
Interest Rate on Reserve Deposit	0.70%
2020 Beginning Balance	\$67,376

***Current Assessment Funding Model Summary of Calculations***

Required Annual Contribution	\$32,424.00
<i>\$102.61 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$385.68</u>
Total Annual Allocation to Reserves	\$32,809.68
<i>\$103.83 per unit annually</i>	

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Current Assessment Funding Model: Projection**

Report Date June 22, 2019  
Beginning Fiscal Year January 01, 2020  
Account Number 1215b

Version Number 1.01

Beginning Balance: \$67,376

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2020	130,054	32,424	386	44,703	55,482	80,245	69%
2021	132,083	32,586	565	7,354	81,279	99,705	82%
2022	134,144	32,749	415	54,737	59,706	71,746	83%
2023	136,236	32,913	533	16,413	76,739	82,680	93%
2024	138,362	33,077	428	48,724	61,520	61,384	100%
2025	140,520	33,243	524	19,876	75,412	69,473	109%
2026	142,712	33,409	589	24,743	84,666	73,171	116%
2027	144,938	33,576	828		119,070	102,488	116%
2028	147,199	33,744	803	38,145	115,471	93,962	123%
2029	149,496	33,913	987	8,324	142,048	116,036	122%
2030	151,828	34,082	860	53,314	123,676	93,216	133%
2031	154,196	34,253	1,009	13,776	145,162	110,655	131%
2032	156,602	34,424	904	50,470	130,019	91,567	142%
2033	159,045	34,596	956	28,017	137,554	95,460	144%
2034	161,526	34,769	711	70,734	102,300	56,512	181%
2035	164,046	34,943	961		138,204	89,284	155%
2036	166,605	35,117	1,011	28,885	145,447	93,729	155%
2037	169,204	35,293	1,098	23,933	157,905	103,778	152%
2038	171,844	35,470	1,145	29,794	164,726	108,545	152%
2039	174,524	35,647	1,403		201,776	144,165	140%
2040	177,247	35,825	1,130	76,126	162,605	103,557	157%
2041	180,012	36,004	1,320	10,023	189,906	129,988	146%
2042	182,820	36,184	1,170	58,920	168,341	107,717	156%
2043	185,672	36,365	1,165	38,293	167,578	106,601	157%
2044	188,569	36,547	964	66,404	138,685	77,481	179%
2045	191,510	36,730	1,153	10,663	165,905	105,090	158%
2046	194,498	36,913	1,067	50,402	153,483	93,351	164%
2047	197,532	37,098	1,334		191,915	133,208	144%
2048	200,613	37,283	1,361	34,782	195,778	138,961	141%
2049	203,743	37,470	1,431	28,818	205,860	151,468	136%

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Current Funding Model: Component Summary by Category**

Report Date June 22, 2019  
 Beginning Fiscal Year January 01, 2020  
 Account Number 1215b

Version Number 1.01

Description	Future Cost	Useful Life	Remaining Life	Adjustment	Distribution	Required Contribution	Ideally Funded
<b>Cottages</b>							
Arborist / Tree Work: Tree Pruning - "Newer"	4,314	3	2		1,394	1,281.16	1,394
Arborist / Tree Work: Tree Pruning - "Older"	7,191	3	2		2,324	2,135.84	2,324
Arborist / Tree Work: Tree Removal - Trimming "A"	19,975	10	2		9,903	4,388.21	15,493
Arborist / Tree Work: Tree Removal - Trimming "B"	16,413	10	3		0	4,817.25	10,968
Arborist / Tree Work: Tree Removal - Trimming "C"	12,472	10	4		0	2,735.73	7,034
Arborist / Tree Work: Tree Removal - Trimming "D"	11,207	10	0		11,207	1,123.93	11,207
Arborist / Tree Work: Tree Removal - Trimming "E"	10,948	10	0		10,948	1,098.04	10,948
Backflow Device: Common Area - Replacement	1,126	30	10		0	96.76	643
Bark Dust: Replenish - Common Area	15,307	2	0		15,307	6,975.07	15,307
Irrigation Controllers & Valves: Phase 1	7,469	4	2		3,621	1,677.67	3,621
Irrigation Controllers & Valves: Phase 2	7,354	4	1		5,431	1,671.60	5,431
Irrigation Controllers & Valves: Phase 3	7,241	4	0		7,241	1,689.85	7,241
Landscape Renovation / Enhancement	12,263	10	4		0	2,690.00	6,916
Landscaping: Power Box - Cottages - Replace	551	30	11		0	42.89	294
Cottages - Total	\$133,832				\$67,376	\$32,424	\$98,821
Grand Total:	\$133,832				\$67,376	\$32,424	\$98,821

Percent Fully Funded	68%
Current Average Liability per Unit (Total Units: 316)	-\$100

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Current Funding Model: Distribution of Accumulated Reserves**

Report Date                      June 22, 2019  
Beginning Fiscal Year        January 01, 2020  
Account Number                1215b

Version Number 1.01

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Irrigation Controllers & Valves: Phase 3	0	2020	7,241	7,241
Arborist / Tree Work: Tree Removal - Trimming "E"	0	2020	10,948	10,948
Arborist / Tree Work: Tree Removal - Trimming "D"	0	2020	11,207	11,207
Bark Dust: Replenish - Common Area	0	2020	15,307	15,307
Irrigation Controllers & Valves: Phase 2	1	2021	5,431	5,431
Arborist / Tree Work: Tree Pruning - "Newer"	2	2022	1,394	1,394
Arborist / Tree Work: Tree Pruning - "Older"	2	2022	2,324	2,324
Irrigation Controllers & Valves: Phase 1	2	2022	3,621	3,621
Arborist / Tree Work: Tree Removal - Trimming "A"	2	2022	* 9,903	15,493
Arborist / Tree Work: Tree Removal - Trimming "B"	3	2023		10,968
Landscape Renovation / Enhancement	4	2024		6,916
Arborist / Tree Work: Tree Removal - Trimming "C"	4	2024		7,034
Backflow Device: Common Area - Replacement	10	2030		643
Landscaping: Power Box - Cottages - Replace	11	2031		294
Total Asset Summary			<u>\$67,376</u>	<u>\$98,821</u>

Percent Fully Funded	68%
Current Average Liability per Unit (Total Units: 316)	-\$100

*'\*' Indicates Partially Funded*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Threshold Funding Model - Dollar Defined Minimum: Executive Summary**

**EXECUTIVE SUMMARY - DOLLAR DEFINED THRESHOLD FUNDING MODEL**

**THRESHOLD FUNDING MODEL OVERVIEW**

The "Threshold Funding Model" method is based upon the cash flow funding concept. The minimum reserve cash balance in threshold funding, however, is set at a predetermined dollar amount (other than \$0). Threshold funding describes an objective chosen by the board other than the 100% (full funding) level or just staying cash-positive (baseline funding). This may be a specific percent funded target or a cash balance target. Threshold funding is often a value chosen in between full funding and baseline funding.

**PROPERTY INFORMATION**

**ORIGINAL STARTING DATE OF RESERVE STUDY:** This reserve study was prepared for the fiscal year January 1, 2020 and ending December 31, 2020. Unless otherwise indicated, we have used January 25, 2000 to begin aging the original components in this reserve study.

**NUMBER OF UNITS/LOTS & LOCATION:** This reserve study is a total of 316 units located in Bethany, Oregon.

**DATE OF LAST ON-SITE RESERVE STUDY:** (if applicable) The last on-site physical analysis done was completed on August 18, 2018.

**NOTE:** All interest accrued from reserve savings account(s) must remain in the reserve savings account(s) and not used as an off-set for operating expenses. Income tax factors were not considered due to variables effecting net taxable income and the election of tax form to be filed.

**RESERVE FUNDS ON HAND:** For the purpose of this reserve study, it is anticipated that the association will have a projected beginning reserve balance of \$67,376 as of January, 1 2020. The actual or projected (estimated) total presented in this reserve study is based upon information provided to ReserveStudyUpdate.com, LLC and was not audited.

**FUNDING REQUIRED:** A minimum balance threshold of \$55,672 has been used over the thirty years of this reserve study. The reserve study has an annual contribution increase of 3.00% per year.

**INFLATION RATE:** An inflation rate of 1.56% was used for all thirty years of the reserve study report. This is based on an equally weighted ten-year historical inflation rate average.

**THE NATIONAL PERCENT FUNDED RATING IN THE RESERVE STUDY INDUSTRY IS:**

0% to 29.99% - Poor

30% to 69.99% - Fair

70% to 100% - Good

This association is estimated to be 70.15% funded the end of the first fiscal year contingent that the funding model described in this section is implemented.

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Threshold Funding Model - Dollar Defined Minimum: Executive Summary**

**DISCLOSURES**

**GENERAL:** Arbor Ridge P.U.D. Homeowners Association - Cottage Collection and ReserveStudyUpdate.com, LLC have no professional or personal involvements with each other, other than the scope of work identified in the reserve study contract. This relationship cannot be perceived as a conflict of interest.

This reserve study is for budget and planning purposes and identifies the status of the reserve fund and schedules the anticipated major commonly owned item replacements in accordance with Oregon State Law(s). This reserve study will estimate the expected useful life and remaining useful life of the building and site components or systems, and will provide an estimate replacement or refurbishment cost for those components or systems.

**PHYSICAL ANALYSIS:** If an on-site reserve study was performed observations were limited to visual observations only. Destructive testing (invasive testing) was not performed. Any items that were not clearly visible at the time of the site observation were not viewed, and therefore were not included in the drafting of this reserve study.

A grand total of 51 assets were included in this reserve study report; of these considered, 14 were funded and 37 components were unfunded. Often times components not funded are estimated to be outside the scope of the thirty year scope of the reserve study; while other components are sometimes omitted by property management, Association Representative, and/or Declarant.

**MEASUREMENTS:** Measuring and inventory (+/- 10%) were identified via a combination of onsite physical measurements, previous reserve study and/or drawing take-offs. Drawing sets (if used) were provided by the property manager, Board of Directors or Declarant for our use relating only to the reserve study scope of work.

**RELIANCE ON CLIENT DATA:** Data received from property management including previous reserve study report(s) Fiscal Year 2017 On-Site Reserve Study by Reserve Studies by Reserve Funding published June 29, 2016, information from Association Representatives and/or Declarant is deemed reliable by ReserveStudyUpdate.com, LLC unless explicitly noted otherwise. Such data may include financial information, physical deficiencies or physical conditions, quantity of physical assets, or historical issues. Financial information received from property management, Association Representative, Declarant was not audited for accuracy.

The Association needs to carefully review each line item in the reports to be certain corrections are made from information you may possess that we are not aware of. It is assumed in our reserve study, no work, or expenditures from the reserve funds will occurred for the balance of the fiscal year. If this is not correct, you need to let ReserveStudyUpdate.com, LLC know what extra work will be done and how much money will be spent.

**SCOPE OF RESERVE STUDY:** The Reserve Study is a reflection of information provided to the Consultant and assembled for the Association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records. Continued use of this reserve study beyond December 31, 2020 is misuse of the product and potentially a violation of applicable law(s).

The author(s) of this reserve study have absolutely no control over whether a special assessment will occur at any time during the thirty year horizon of this reserve study. The writer further submits that it is impossible to envision thirty years into the future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning the lottery, while it may happen in extraordinary instances by chance, one may not reasonably expect it to happen. As a result,

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Threshold Funding Model - Dollar Defined Minimum: Executive Summary**

**ReserveStudyUpdate.com, LLC makes absolutely no guarantee, express or implied, that a special assessment will not occur during the time period covered by this reserve study. Assumptions on future costs and life expectancy's should be reviewed and adjusted on an annualized basis, as current and future cost projections, building code requirements, and life expectancy's become more uncertain.**

**Report Version 1.01.**



**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Threshold Funding Model - Dollar Defined Minimum: Summary**

Report Date	June 22, 2019
Account Number	1215b
Version	1.01
Budget Year Beginning	January 1, 2020
Budget Year Ending	December 31, 2020
 Total Units	 316

<i>Report Parameters</i>	
Inflation	1.56%
Annual Assessment Increase	3.00%
Interest Rate on Reserve Deposit	0.70%
 2020 Beginning Balance	 \$67,376

<i>Threshold Funding Model Summary of Calculations</i>	
Required Annual Contribution	\$33,224.30
<i>\$105.14 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$391.28</u>
Total Annual Allocation to Reserves	\$33,615.58
<i>\$106.38 per unit annually</i>	

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Threshold Funding Model - Dollar Defined Minimum: Projection**

Report Date June 22, 2019  
Beginning Fiscal Year January 01, 2020  
Account Number 1215b

Version Number 1.01

Beginning Balance: \$67,376

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2020	130,054	33,224	391	44,703	56,288	80,245	70%
2021	132,083	34,221	582	7,354	83,737	99,705	84%
2022	134,144	31,612	424	54,737	61,036	71,746	85%
2023	136,236	32,560	540	16,413	77,724	82,680	94%
2024	138,362	26,285	387	48,724	55,672	61,384	91%
2025	140,520	27,073	440	19,876	63,310	69,473	91%
2026	142,712	27,886	465	24,743	66,917	73,171	91%
2027	144,938	28,722	669		96,309	102,488	94%
2028	147,199	29,584	614	38,145	88,362	93,962	94%
2029	149,496	30,471	774	8,324	111,283	116,036	96%
2030	151,828	31,385	625	53,314	89,980	93,216	97%
2031	154,196	32,327	760	13,776	109,291	110,655	99%
2032	156,602	33,297	645	50,470	92,762	91,567	101%
2033	159,045	34,296	693	28,017	99,734	95,460	104%
2034	161,526	28,406	402	70,734	57,808	56,512	102%
2035	164,046	29,258	609		87,676	89,284	98%
2036	166,605	30,136	622	28,885	89,549	93,729	96%
2037	169,204	31,040	677	23,933	97,333	103,778	94%
2038	171,844	31,971	697	29,794	100,207	108,545	92%
2039	174,524	32,930	932		134,070	144,165	93%
2040	177,247	33,918	643	76,126	92,505	103,557	89%
2041	180,012	34,936	822	10,023	118,240	129,988	91%
2042	182,820	35,984	667	58,920	95,971	107,717	89%
2043	185,672	37,064	663	38,293	95,404	106,601	89%
2044	188,569	29,607	410	66,404	59,018	77,481	76%
2045	191,510	30,495	552	10,663	79,402	105,090	76%
2046	194,498	31,410	423	50,402	60,833	93,351	65%
2047	197,532	32,353	652		93,838	133,208	70%
2048	200,613	33,323	647	34,782	93,027	138,961	67%
2049	203,743	34,323	690	28,818	99,221	151,468	66%

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Threshold Funding Model - Dollar Defined Minimum: Component Summary by Category**

Description	Future Cost	Useful Life	Remaining Life	Adjustment	Distribution	Required Contribution	Ideally Funded
<b>Cottages</b>							
Arborist / Tree Work: Tree Pruning - "Newer"	4,314	3	2		1,394	1,312.79	1,394
Arborist / Tree Work: Tree Pruning - "Older"	7,191	3	2		2,324	2,188.56	2,324
Arborist / Tree Work: Tree Removal - Trimming "A"	19,975	10	2		9,903	4,496.52	15,493
Arborist / Tree Work: Tree Removal - Trimming "B"	16,413	10	3		0	4,936.15	10,968
Arborist / Tree Work: Tree Removal - Trimming "C"	12,472	10	4		0	2,803.25	7,034
Arborist / Tree Work: Tree Removal - Trimming "D"	11,207	10	0		11,207	1,151.67	11,207
Arborist / Tree Work: Tree Removal - Trimming "E"	10,948	10	0		10,948	1,125.14	10,948
Backflow Device: Common Area - Replacement	1,126	30	10		0	99.15	643
Bark Dust: Replenish - Common Area	15,307	2	0		15,307	7,147.23	15,307
Irrigation Controllers & Valves: Phase 1	7,469	4	2		3,621	1,719.08	3,621
Irrigation Controllers & Valves: Phase 2	7,354	4	1		5,431	1,712.86	5,431
Irrigation Controllers & Valves: Phase 3	7,241	4	0		7,241	1,731.56	7,241
Landscape Renovation / Enhancement	12,263	10	4		0	2,756.39	6,916
Landscaping: Power Box - Cottages - Replace	551	30	11		0	43.94	294
Cottages - Total	\$133,832				\$67,376	\$33,224	\$98,821
Grand Total:	\$133,832				\$67,376	\$33,224	\$98,821

Percent Fully Funded	68%
Current Average Liability per Unit (Total Units: 316)	-\$100

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Threshold Funding Model - Dollar Defined Minimum: Distribution of Accumulated Reserves**

Report Date June 22, 2019  
 Beginning Fiscal Year January 01, 2020  
 Account Number 1215b

Version Number 1.01

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Irrigation Controllers & Valves: Phase 3	0	2020	7,241	7,241
Arborist / Tree Work: Tree Removal - Trimming "E"	0	2020	10,948	10,948
Arborist / Tree Work: Tree Removal - Trimming "D"	0	2020	11,207	11,207
Bark Dust: Replenish - Common Area	0	2020	15,307	15,307
Irrigation Controllers & Valves: Phase 2	1	2021	5,431	5,431
Arborist / Tree Work: Tree Pruning - "Newer"	2	2022	1,394	1,394
Arborist / Tree Work: Tree Pruning - "Older"	2	2022	2,324	2,324
Irrigation Controllers & Valves: Phase 1	2	2022	3,621	3,621
Arborist / Tree Work: Tree Removal - Trimming "A"	2	2022	* 9,903	15,493
Arborist / Tree Work: Tree Removal - Trimming "B"	3	2023		10,968
Landscape Renovation / Enhancement	4	2024		6,916
Arborist / Tree Work: Tree Removal - Trimming "C"	4	2024		7,034
Backflow Device: Common Area - Replacement	10	2030		643
Landscaping: Power Box - Cottages - Replace	11	2031		294
Total Asset Summary			<u>\$67,376</u>	<u>\$98,821</u>

Percent Fully Funded	68%
Current Average Liability per Unit (Total Units: 316)	-\$100

'\*' Indicates Partially Funded

## **EXECUTIVE SUMMARY - 70% THRESHOLD FUNDING MODEL**

### **THRESHOLD FUNDING MODEL OVERVIEW**

The "Threshold Funding Model" method is based upon the cash flow funding concept. The minimum reserve cash balance in threshold funding, however, is set at a predetermined funding percentage. Threshold funding describes an objective chosen by the board other than the 100% (full funding) level or just staying cash-positive (baseline funding). We have calculated this funding model to remain at or above 70% funded over the 30-year horizon of the reserve study report. Threshold funding is often a value chosen in between full funding and baseline funding. While we recommend that all community associations strive for a funding threshold percentage of 70% or above, this 70% funding approach is absolutely no guarantee (expressed or implied) that the community will not require a special assessment at some time in the future.

### **PROPERTY INFORMATION**

**ORIGINAL STARTING DATE OF RESERVE STUDY:** This reserve study was prepared for the fiscal year January 1, 2020 and ending December 31, 2020. Unless otherwise indicated, we have used January 25, 2000 to begin aging the original components in this reserve study.

**NUMBER OF UNITS/LOTS & LOCATION:** This reserve study is a total of 316 units located in Bethany, Oregon.

**DATE OF LAST ON-SITE RESERVE STUDY:** (if applicable) The last on-site physical analysis done was completed on August 18, 2018.

**NOTE:** All interest accrued from reserve savings account(s) must remain in the reserve savings account(s) and not used as an off-set for operating expenses. Income tax factors were not considered due to variables effecting net taxable income and the election of tax form to be filed.

**RESERVE FUNDS ON HAND:** For the purpose of this reserve study, it is anticipated that the association will have a projected beginning reserve balance of \$67,376 as of January, 1 2020. The actual or projected (estimated) total presented in this reserve study is based upon information provided to ReserveStudyUpdate.com, LLC and was not audited.

**FUNDING REQUIRED:** A minimum threshold funding percentage of 70% has been used over the thirty years of this reserve study. The reserve study has an annual contribution increase of 3.00% per year.

**INFLATION RATE:** An inflation rate of 1.56% was used for all thirty years of the reserve study report. This is based on an equally weighted ten-year historical inflation rate average.

**THE NATIONAL PERCENT FUNDED RATING IN THE RESERVE STUDY INDUSTRY IS:**

0% to 29.99% - Poor

30% to 69.99% - Fair

70% to 100% - Good

This association is estimated to be 70.00% funded the end of the first fiscal year contingent that the funding model described in this section is implemented.

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Threshold Funding Model - 70% Minimum: Executive Summary**

**DISCLOSURES**

**GENERAL:** Arbor Ridge P.U.D. Homeowners Association - Cottage Collection and ReserveStudyUpdate.com, LLC have no professional or personal involvements with each other, other than the scope of work identified in the reserve study contract. This relationship cannot be perceived as a conflict of interest.

This reserve study is for budget and planning purposes and identifies the status of the reserve fund and schedules the anticipated major commonly owned item replacements in accordance with Oregon State Law(s). This reserve study will estimate the expected useful life and remaining useful life of the building and site components or systems, and will provide an estimate replacement or refurbishment cost for those components or systems.

**PHYSICAL ANALYSIS:** If an on-site reserve study was performed observations were limited to visual observations only. Destructive testing (invasive testing) was not performed. Any items that were not clearly visible at the time of the site observation were not viewed, and therefore were not included in the drafting of this reserve study.

A grand total of 51 assets were included in this reserve study report; of these considered, 14 were funded and 37 components were unfunded. Often times components not funded are estimated to be outside the scope of the thirty year scope of the reserve study; while other components are sometimes omitted by property management, Association Representative, and/or Declarant.

**MEASUREMENTS:** Measuring and inventory (+/- 10%) were identified via a combination of onsite physical measurements, previous reserve study and/or drawing take-offs. Drawing sets (if used) were provided by the property manager, Board of Directors or Declarant for our use relating only to the reserve study scope of work.

**RELIANCE ON CLIENT DATA:** Data received from property management including previous reserve study report(s) Fiscal Year 2017 On-Site Reserve Study by Reserve Studies by Reserve Funding published June 29, 2016, information from Association Representatives and/or Declarant is deemed reliable by ReserveStudyUpdate.com, LLC unless explicitly noted otherwise. Such data may include financial information, physical deficiencies or physical conditions, quantity of physical assets, or historical issues. Financial information received from property management, Association Representative, Declarant was not audited for accuracy.

The Association needs to carefully review each line item in the reports to be certain corrections are made from information you may possess that we are not aware of. It is assumed in our reserve study, no work, or expenditures from the reserve funds will occurred for the balance of the fiscal year. If this is not correct, you need to let ReserveStudyUpdate.com, LLC know what extra work will be done and how much money will be spent.

**SCOPE OF RESERVE STUDY:** The Reserve Study is a reflection of information provided to the Consultant and assembled for the Association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records. Continued use of this reserve study beyond December 31, 2020 is misuse of the product and potentially a violation of applicable law(s).

The author(s) of this reserve study have absolutely no control over whether a special assessment will occur at any time during the thirty year horizon of this reserve study. The writer further submits that it is impossible to envision thirty years into the future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning the lottery, while it may happen in extraordinary instances by chance, one may not reasonably expect it to happen. As a result, ReserveStudyUpdate.com, LLC makes absolutely no guarantee, express or implied, that a special assessment will not

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Threshold Funding Model - 70% Minimum: Executive Summary**

occur during the time period covered by this reserve study. Assumptions on future costs and life expectancy's should be reviewed and adjusted on an annualized basis, as current and future cost projections, building code requirements, and life expectancy's become more uncertain.

**Report Version 1.01.**

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Threshold Funding Model - 70% Minimum: Summary**

Report Date	June 22, 2019
Account Number	1215b
Version	1.01
Budget Year Beginning	January 1, 2020
Budget Year Ending	December 31, 2020
Total Units	316

<i>Report Parameters</i>	
Inflation	1.56%
Annual Assessment Increase	3.00%
Interest Rate on Reserve Deposit	0.70%
2020 Beginning Balance	\$67,376

<i>Threshold 70% Funding Model Summary of Calculations</i>	
Required Annual Contribution	\$33,108.21
<i>\$104.77 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$390.47</u>
Total Annual Allocation to Reserves	\$33,498.68
<i>\$106.01 per unit annually</i>	



**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Threshold Funding Model - 70% Minimum: Projection**

Report Date June 22, 2019  
 Beginning Fiscal Year January 01, 2020  
 Account Number 1215b

Version Number 1.01

Beginning Balance: \$67,376

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2020	130,054	33,108	390	44,703	56,171	80,245	70%
2021	132,083	27,222	532	7,354	76,572	99,705	77%
2022	134,144	28,039	349	54,737	50,222	71,746	70%
2023	136,236	28,153	434	16,413	62,396	82,680	75%
2024	138,362	28,998	299	48,724	42,969	61,384	70%
2025	140,520	26,098	344	19,876	49,536	69,473	71%
2026	142,712	26,881	362	24,743	52,036	73,171	71%
2027	144,938	27,688	558		80,282	102,488	78%
2028	147,199	28,518	495	38,145	71,150	93,962	76%
2029	149,496	29,374	645	8,324	92,845	116,036	80%
2030	151,828	30,255	489	53,314	70,275	93,216	75%
2031	154,196	31,163	614	13,776	88,276	110,655	80%
2032	156,602	32,098	489	50,470	70,393	91,567	77%
2033	159,045	33,061	528	28,017	75,965	95,460	80%
2034	161,526	34,053	275	70,734	39,558	56,512	70%
2035	164,046	29,776	485		69,820	89,284	78%
2036	166,605	30,669	501	28,885	72,105	93,729	77%
2037	169,204	31,589	558	23,933	80,320	103,778	77%
2038	171,844	32,537	581	29,794	83,645	108,545	77%
2039	174,524	33,513	820		117,979	144,165	82%
2040	177,247	34,519	535	76,126	76,906	103,557	74%
2041	180,012	35,554	717	10,023	103,154	129,988	79%
2042	182,820	36,621	566	58,920	81,421	107,717	76%
2043	185,672	37,719	566	38,293	81,413	106,601	76%
2044	188,569	38,851	377	66,404	54,237	77,481	70%
2045	191,510	35,059	550	10,663	79,183	105,090	75%
2046	194,498	36,111	454	50,402	65,346	93,351	70%
2047	197,532	37,181	718		103,245	133,208	78%
2048	200,613	38,297	747	34,782	107,507	138,961	77%
2049	203,743	39,446	827	28,818	118,962	151,468	79%

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Threshold Funding Model - 70% Minimum: Component Summary by Category**

Description	Future Cost	Useful Life	Remaining Life	Adjustment	Distribution	Required Contribution	Ideally Funded
<b>Cottages</b>							
Arborist / Tree Work: Tree Pruning - "Newer"	4,314	3	2		1,394	1,308.20	1,394
Arborist / Tree Work: Tree Pruning - "Older"	7,191	3	2		2,324	2,180.91	2,324
Arborist / Tree Work: Tree Removal - Trimming "A"	19,975	10	2		9,903	4,480.81	15,493
Arborist / Tree Work: Tree Removal - Trimming "B"	16,413	10	3		0	4,918.91	10,968
Arborist / Tree Work: Tree Removal - Trimming "C"	12,472	10	4		0	2,793.46	7,034
Arborist / Tree Work: Tree Removal - Trimming "D"	11,207	10	0		11,207	1,147.65	11,207
Arborist / Tree Work: Tree Removal - Trimming "E"	10,948	10	0		10,948	1,121.21	10,948
Backflow Device: Common Area - Replacement	1,126	30	10		0	98.81	643
Bark Dust: Replenish - Common Area	15,307	2	0		15,307	7,122.25	15,307
Irrigation Controllers & Valves: Phase 1	7,469	4	2		3,621	1,713.07	3,621
Irrigation Controllers & Valves: Phase 2	7,354	4	1		5,431	1,706.87	5,431
Irrigation Controllers & Valves: Phase 3	7,241	4	0		7,241	1,725.51	7,241
Landscape Renovation / Enhancement	12,263	10	4		0	2,746.76	6,916
Landscaping: Power Box - Cottages - Replace	551	30	11		0	43.79	294
Cottages - Total	\$133,832				\$67,376	\$33,108	\$98,821
Grand Total:	\$133,832				\$67,376	\$33,108	\$98,821

Percent Fully Funded	68%
Current Average Liability per Unit (Total Units: 316)	-\$100

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Threshold Funding Model - 70% Minimum: Distribution of Accumulated Reserves**

Report Date                      June 22, 2019  
Beginning Fiscal Year        January 01, 2020  
Account Number                1215b

Version Number 1.01

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Irrigation Controllers & Valves: Phase 3	0	2020	7,241	7,241
Arborist / Tree Work: Tree Removal - Trimming "E"	0	2020	10,948	10,948
Arborist / Tree Work: Tree Removal - Trimming "D"	0	2020	11,207	11,207
Bark Dust: Replenish - Common Area	0	2020	15,307	15,307
Irrigation Controllers & Valves: Phase 2	1	2021	5,431	5,431
Arborist / Tree Work: Tree Pruning - "Newer"	2	2022	1,394	1,394
Arborist / Tree Work: Tree Pruning - "Older"	2	2022	2,324	2,324
Irrigation Controllers & Valves: Phase 1	2	2022	3,621	3,621
Arborist / Tree Work: Tree Removal - Trimming "A"	2	2022	* 9,903	15,493
Arborist / Tree Work: Tree Removal - Trimming "B"	3	2023		10,968
Landscape Renovation / Enhancement	4	2024		6,916
Arborist / Tree Work: Tree Removal - Trimming "C"	4	2024		7,034
Backflow Device: Common Area - Replacement	10	2030		643
Landscaping: Power Box - Cottages - Replace	11	2031		294
Total Asset Summary			<u>\$67,376</u>	<u>\$98,821</u>

Percent Fully Funded	68%
Current Average Liability per Unit (Total Units: 316)	-\$100

*'\*' Indicates Partially Funded*

## **EXECUTIVE SUMMARY - 85% THRESHOLD FUNDING MODEL**

### **THRESHOLD FUNDING MODEL OVERVIEW**

The "Threshold Funding Model" method is based upon the cash flow funding concept. The minimum reserve cash balance in threshold funding, however, is set at a predetermined funding percentage. Threshold funding describes an objective chosen by the board other than the 100% (full funding) level or just staying cash-positive (baseline funding). We have calculated this funding model with the aim of remaining at or above 85% funded over the 30-year horizon of is reserve study report. Threshold funding is often a value chosen in between full funding and baseline funding. While we recommend that all community associations strive for a funding threshold percentage of 70% or above, this 85% funding approach is absolutely no guarantee (expressed or implied) that the community will not require a special assessment at some time in the future.

### **PROPERTY INFORMATION**

**ORIGINAL STARTING DATE OF RESERVE STUDY:** This reserve study was prepared for the fiscal year January 1, 2020 and ending December 31, 2020. Unless otherwise indicated, we have used January 25, 2000 to begin aging the original components in this reserve study.

**NUMBER OF UNITS/LOTS & LOCATION:** This reserve study is a total of 316 units located in Bethany, Oregon.

**DATE OF LAST ON-SITE RESERVE STUDY:** (if applicable) The last on-site physical analysis done was completed on August 18, 2018.

**NOTE:** All interest accrued from reserve savings account(s) must remain in the reserve savings account(s) and not used as an off-set for operating expenses. Income tax factors were not considered due to variables effecting net taxable income and the election of tax form to be filed.

**RESERVE FUNDS ON HAND:** For the purpose of this reserve study, it is anticipated that the association will have a projected beginning reserve balance of \$67,376 as of January, 1 2020. The actual or projected (estimated) total presented in this reserve study is based upon information provided to ReserveStudyUpdate.com, LLC and was not audited.

**FUNDING REQUIRED:** A minimum threshold percentage of 85% has been used over the thirty years of this reserve study. The reserve study has an annual contribution increase of 3.00% per year.

**INFLATION RATE:** An inflation rate of 1.56% was used for all thirty years of the reserve study report. This is based on an equally weighted ten-year historical inflation rate average.

**THE NATIONAL PERCENT FUNDED RATING IN THE RESERVE STUDY INDUSTRY IS:**

0% to 29.99% - Poor

30% to 69.99% - Fair

70% to 100% - Good

This association is estimated to be 85.00% funded the end of the first fiscal year contingent that the funding model described in this section is implemented.

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Threshold Funding Model - 85% Minimum: Executive Summary**

**DISCLOSURES**

**GENERAL:** Arbor Ridge P.U.D. Homeowners Association - Cottage Collection and ReserveStudyUpdate.com, LLC have no professional or personal involvements with each other, other than the scope of work identified in the reserve study contract. This relationship cannot be perceived as a conflict of interest.

This reserve study is for budget and planning purposes and identifies the status of the reserve fund and schedules the anticipated major commonly owned item replacements in accordance with Oregon State Law(s). This reserve study will estimate the expected useful life and remaining useful life of the building and site components or systems, and will provide an estimate replacement or refurbishment cost for those components or systems.

**PHYSICAL ANALYSIS:** If an on-site reserve study was performed observations were limited to visual observations only. Destructive testing (invasive testing) was not performed. Any items that were not clearly visible at the time of the site observation were not viewed, and therefore were not included in the drafting of this reserve study.

A grand total of 51 assets were included in this reserve study report; of these considered, 14 were funded and 37 components were unfunded. Often times components not funded are estimated to be outside the scope of the thirty year scope of the reserve study; while other components are sometimes omitted by property management, Association Representative, and/or Declarant.

**MEASUREMENTS:** Measuring and inventory (+/- 10%) were identified via a combination of onsite physical measurements, previous reserve study and/or drawing take-offs. Drawing sets (if used) were provided by the property manager, Board of Directors or Declarant for our use relating only to the reserve study scope of work.

**RELIANCE ON CLIENT DATA:** Data received from property management including previous reserve study report(s) Fiscal Year 2017 On-Site Reserve Study by Reserve Studies by Reserve Funding published June 29, 2016, information from Association Representatives and/or Declarant is deemed reliable by ReserveStudyUpdate.com, LLC unless explicitly noted otherwise. Such data may include financial information, physical deficiencies or physical conditions, quantity of physical assets, or historical issues. Financial information received from property management, Association Representative, Declarant was not audited for accuracy.

The Association needs to carefully review each line item in the reports to be certain corrections are made from information you may possess that we are not aware of. It is assumed in our reserve study, no work, or expenditures from the reserve funds will occurred for the balance of the fiscal year. If this is not correct, you need to let ReserveStudyUpdate.com, LLC know what extra work will be done and how much money will be spent.

**SCOPE OF RESERVE STUDY:** The Reserve Study is a reflection of information provided to the Consultant and assembled for the Association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records. Continued use of this reserve study beyond December 31, 2020 is misuse of the product and potentially a violation of applicable law(s).

The author(s) of this reserve study have absolutely no control over whether a special assessment will occur at any time during the thirty year horizon of this reserve study. The writer further submits that it is impossible to envision thirty years into the future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning the lottery, while it may happen in extraordinary instances by chance, one may not reasonably expect it to happen. As a result, ReserveStudyUpdate.com, LLC makes absolutely no guarantee, express or implied, that a special assessment will not

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Threshold Funding Model - 85% Minimum: Executive Summary**

occur during the time period covered by this reserve study. Assumptions on future costs and life expectancy's should be reviewed and adjusted on an annualized basis, as current and future cost projections, building code requirements, and life expectancy's become more uncertain.

**Report Version 1.01.**

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Threshold Funding Model - 85% Minimum: Summary**

<i>Report Parameters</i>	
Report Date	June 22, 2019
Account Number	1215b
Version	1.01
Budget Year Beginning	January 1, 2020
Budget Year Ending	December 31, 2020
Total Units	316
Inflation	1.56%
Annual Assessment Increase	3.00%
Interest Rate on Reserve Deposit	0.70%
2020 Beginning Balance	\$67,376

<i>Threshold 85% Funding Model Summary of Calculations</i>	
Required Annual Contribution	\$45,061.28
<i>\$142.60 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$474.14</u>
Total Annual Allocation to Reserves	\$45,535.42
<i>\$144.10 per unit annually</i>	

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Threshold Funding Model - 85% Minimum: Projection**

Report Date June 22, 2019  
Beginning Fiscal Year January 01, 2020  
Account Number 1215b

Version Number 1.01

Beginning Balance: \$67,376

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2020	130,054	45,061	474	44,703	68,208	80,245	85%
2021	132,083	26,518	612	7,354	87,984	99,705	88%
2022	134,144	27,314	424	54,737	60,984	71,746	85%
2023	136,236	27,322	503	16,413	72,396	82,680	88%
2024	138,362	28,141	363	48,724	52,176	61,384	85%
2025	140,520	26,499	412	19,876	59,211	69,473	85%
2026	142,712	27,294	432	24,743	62,195	73,171	85%
2027	144,938	27,441	627		90,263	102,488	88%
2028	147,199	28,264	563	38,145	80,945	93,962	86%
2029	149,496	29,112	712	8,324	102,445	116,036	88%
2030	151,828	29,985	554	53,314	79,670	93,216	85%
2031	154,196	30,885	677	13,776	97,457	110,655	88%
2032	156,602	31,811	552	50,470	79,349	91,567	87%
2033	159,045	32,766	589	28,017	84,687	95,460	89%
2034	161,526	33,749	334	70,734	48,035	56,512	85%
2035	164,046	30,120	547		78,702	89,284	88%
2036	166,605	31,024	566	28,885	81,407	93,729	87%
2037	169,204	31,954	626	23,933	90,054	103,778	87%
2038	171,844	32,913	652	29,794	93,826	108,545	86%
2039	174,524	33,900	894		128,621	144,165	89%
2040	177,247	34,917	612	76,126	88,024	103,557	85%
2041	180,012	35,599	795	10,023	114,395	129,988	88%
2042	182,820	36,667	645	58,920	92,787	107,717	86%
2043	185,672	37,767	646	38,293	92,906	106,601	87%
2044	188,569	38,900	458	66,404	65,859	77,481	85%
2045	191,510	36,140	639	10,663	91,975	105,090	88%
2046	194,498	37,224	552	50,402	79,349	93,351	85%
2047	197,532	37,196	816		117,361	133,208	88%
2048	200,613	38,312	846	34,782	121,738	138,961	88%
2049	203,743	39,462	927	28,818	133,308	151,468	88%



**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Threshold Funding Model - 85% Minimum: Component Summary by Category**

Description	Future Cost	Useful Life	Remaining Life	Adjustment	Distribution	Required Contribution	Ideally Funded
<b>Cottages</b>							
Arborist / Tree Work: Tree Pruning - "Newer"	4,314	3	2		1,394	1,780.50	1,394
Arborist / Tree Work: Tree Pruning - "Older"	7,191	3	2		2,324	2,968.29	2,324
Arborist / Tree Work: Tree Removal - Trimming "A"	19,975	10	2		9,903	6,098.52	15,493
Arborist / Tree Work: Tree Removal - Trimming "B"	16,413	10	3		0	6,694.78	10,968
Arborist / Tree Work: Tree Removal - Trimming "C"	12,472	10	4		0	3,801.98	7,034
Arborist / Tree Work: Tree Removal - Trimming "D"	11,207	10	0		11,207	1,561.99	11,207
Arborist / Tree Work: Tree Removal - Trimming "E"	10,948	10	0		10,948	1,526.00	10,948
Backflow Device: Common Area - Replacement	1,126	30	10		0	134.48	643
Bark Dust: Replenish - Common Area	15,307	2	0		15,307	9,693.60	15,307
Irrigation Controllers & Valves: Phase 1	7,469	4	2		3,621	2,331.54	3,621
Irrigation Controllers & Valves: Phase 2	7,354	4	1		5,431	2,323.11	5,431
Irrigation Controllers & Valves: Phase 3	7,241	4	0		7,241	2,348.47	7,241
Landscape Renovation / Enhancement	12,263	10	4		0	3,738.43	6,916
Landscaping: Power Box - Cottages - Replace	551	30	11		0	59.60	294
Cottages - Total	\$133,832				\$67,376	\$45,061	\$98,821
Grand Total:	\$133,832				\$67,376	\$45,061	\$98,821

Percent Fully Funded	68%
Current Average Liability per Unit (Total Units: 316)	-\$100

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Threshold Funding Model - 85% Minimum: Distribution of Accumulated Reserves**

Report Date June 22, 2019  
 Beginning Fiscal Year January 01, 2020  
 Account Number 1215b

Version Number 1.01

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Irrigation Controllers & Valves: Phase 3	0	2020	7,241	7,241
Arborist / Tree Work: Tree Removal - Trimming "E"	0	2020	10,948	10,948
Arborist / Tree Work: Tree Removal - Trimming "D"	0	2020	11,207	11,207
Bark Dust: Replenish - Common Area	0	2020	15,307	15,307
Irrigation Controllers & Valves: Phase 2	1	2021	5,431	5,431
Arborist / Tree Work: Tree Pruning - "Newer"	2	2022	1,394	1,394
Arborist / Tree Work: Tree Pruning - "Older"	2	2022	2,324	2,324
Irrigation Controllers & Valves: Phase 1	2	2022	3,621	3,621
Arborist / Tree Work: Tree Removal - Trimming "A"	2	2022	* 9,903	15,493
Arborist / Tree Work: Tree Removal - Trimming "B"	3	2023		10,968
Landscape Renovation / Enhancement	4	2024		6,916
Arborist / Tree Work: Tree Removal - Trimming "C"	4	2024		7,034
Backflow Device: Common Area - Replacement	10	2030		643
Landscaping: Power Box - Cottages - Replace	11	2031		294
Total Asset Summary			<u>\$67,376</u>	<u>\$98,821</u>

Percent Fully Funded	68%
Current Average Liability per Unit (Total Units: 316)	-\$100

'\*' Indicates Partially Funded

## **EXECUTIVE SUMMARY- COMPONENT FUNDING MODEL**

### **COMPONENT FUNDING MODEL OVERVIEW**

The "Component Funding Model" is a straight-line funding model, also known by the "Full Funding Model". The objective of the model is to have on hand an amount of cash in the reserve account equal to the amount of depreciation that has occurred for each of the assets. It distributes the cash reserves to individual reserve components and then calculates what the reserve assessment and interest contribution (minus taxes) should be, again by each reserve component. The current annual assessment is then determined by summing all the individual component assessments, hence the name "Component Funding Model". This is the most conservative funding model. It leads to or maintains the fully funded reserve position.

"Full funding" describes the objective to have reserves on hand equivalent to the value of the deterioration of the each component in the reserve study. For example, for a \$10,000 (current cost) pool resurface project with a useful life of ten years, after three years, when the pool's surface has deteriorated 3/10 of \$10,000, to be fully funded the association should have \$3000 set aside for this component (and on and on again for each component). "Full funding" describes an objective where ongoing deterioration is offset by the proportional accumulation of cash.

One of the selling points that may be beneficial to Arbor Ridge P.U.D. Homeowners Association - Cottage Collection is that the "Component Funding Model" compared to the other funding models is that the objective is to have an equal amount of cash on hand compared to the amount of depreciation that has occurred for each funded asset in the report. Funding models lacking a "Full Funding" criterion often result in funding strategies that shifts the burden of funding assets to future homeowners. Although the Association may be able to fund reserves perpetually employing such strategies, the Board of Directors should carefully consider the degree of risk that is acceptable to everyone. Multiple components which experience premature failure rates will likely result in special assessments which will ultimately burden current owners who have the misfortune of having a current ownership interest; while previous owners have avoided their financial responsibility. The "Component Funding Model" is recommended for Board of Directors who wish to mitigate this type of risk.

### **PROPERTY INFORMATION**

**ORIGINAL STARTING DATE OF RESERVE STUDY:** This reserve study was prepared for the fiscal year January 1, 2020 and ending December 31, 2020. Unless otherwise indicated, we have used January 25, 2000 to begin aging the original components in this reserve study.

**NUMBER OF UNITS/LOTS & LOCATION:** This reserve study is a total of 316 units located in Bethany, Oregon.

**DATE OF LAST ON-SITE RESERVE STUDY:** (if applicable) The last on-site physical analysis done by ReserveStudyUpdate.com, LLC was completed on August 18, 2018.

**NOTE:** All interest accrued from reserve savings account(s) must remain in the reserve savings account(s) and not used as an off-set for operating expenses. Income tax factors were not considered due to variables effecting net taxable income and the election of tax form to be filed.

**RESERVE FUNDS ON HAND:** For the purpose of this reserve study, it is anticipated that the association will have

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Component Funding Model: Executive Summary**

a projected beginning reserve balance of \$67,376 as of January 1, 2020. The actual or projected (estimated) total presented in this reserve study is based upon information provided to ReserveStudyUpdate.com, LLC and was not audited.

**FUNDING REQUIRED:** The reserve study has an annual contribution increase of 0.50% per year.

**INFLATION RATE:** An inflation rate of 1.56% was used for all thirty years of the reserve study report. This is based on an equally weighted ten-year historical inflation rate average.

**THE NATIONAL PERCENT FUNDED RATING IN THE RESERVE STUDY INDUSTRY IS:**

0% to 29.99% - Poor

30% to 69.99% - Fair

70% to 100% - Good

This association is estimated to be 73.99% funded the end of the first fiscal year contingent that the funding model described in this section is implemented.

**DISCLOSURES**

**GENERAL:** Arbor Ridge P.U.D. Homeowners Association - Cottage Collection and ReserveStudyUpdate.com, LLC have no professional or personal involvements with each other, other than the scope of work identified in the reserve study contract. This relationship cannot be perceived as a conflict of interest.

This reserve study is for budget and planning purposes and identifies the status of the reserve fund and schedules the anticipated major commonly owned item replacements in accordance with Oregon State Law(s). This reserve study will estimate the expected useful life and remaining useful life of the building and site components or systems, and will provide an estimate replacement or refurbishment cost for those components or systems.

**PHYSICAL ANALYSIS:** If an on-site reserve study was performed observations were limited to visual observations only. Destructive testing (invasive testing) was not performed. Any items that were not clearly visible at the time of the site observation were not viewed, and therefore were not included in the drafting of this reserve study.

A grand total of 51 assets were included in this reserve study report; of these considered, 14 were funded and 37 components were unfunded. Often times components not funded are estimated to be outside the scope of the thirty year scope of the reserve study; while other components are sometimes omitted by property management, association representative, and/or Declarant.

**MEASUREMENTS:** Measuring and inventory (+/- 10%) were identified via a combination of onsite physical measurements (if a Level 1 reserve study was contracted by client), previous reserve study and/or drawing take-offs. Drawing sets (if used) were provided by the property manager, Board of Directors or Declarant for our use relating only to the reserve study scope of work.

**RELIANCE ON CLIENT DATA:** Data received from property management including previous reserve study report(s) Fiscal Year 2017 On-Site Reserve Study by Reserve Studies by Reserve Funding published June 29, 2016, information from Association Representatives and/or Declarant is deemed reliable by ReserveStudyUpdate.com, LLC unless explicitly noted otherwise. Such data may include financial information, physical deficiencies or physical conditions, quantity of physical assets, or historical issues. Financial information received from property

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Component Funding Model: Executive Summary**

management, Association Representative, Declarant was not audited for accuracy.

The Association needs to carefully review each line item in the reports to be certain corrections are made from information you may possess that we are not aware of. It is assumed in our reserve study, no work, or expenditures from the reserve funds will occurred for the balance of the fiscal year. If this is not correct, you need to let ReserveStudyUpdate.com, LLC know what extra work was done and how much money will be spent.

**SCOPE OF RESERVE STUDY:** The Reserve Study is a reflection of information provided to the Consultant and assembled for the Association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records. Continued use of this reserve study beyond December 31, 2020 is misuse of the product and potentially a violation of applicable law(s).

The author(s) of this reserve study have absolutely no control over whether a special assessment will occur at any time during the thirty year horizon of this reserve study. The writer further submits that it is impossible to envision thirty years into the future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning the lottery, while it may happen in extraordinary instances by chance, one may not reasonably expect it to happen. As a result, ReserveStudyUpdate.com, LLC makes absolutely no guarantee, express or implied, that a special assessment will not occur during the time period covered by this reserve study. Assumptions on future costs and life expectancy's should be reviewed and adjusted on an annualized basis, as current and future cost projections, building code requirements, and life expectancy's become more uncertain.

**Report Version 1.01.**

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Component Funding Model: Summary**

Report Date	June 22, 2019
Account Number	1215b
Version	1.01
Budget Year Beginning	January 1, 2020
Budget Year Ending	December 31, 2020
Total Units	316

<i>Report Parameters</i>	
Inflation	1.56%
Interest Rate on Reserve Deposit	0.70%
Contingency	3.00%
2020 Beginning Balance	\$67,376

***Component Funding Model Summary of Calculations***

Required Annual Contribution	\$38,114.51
<i>\$120.62 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$425.51</u>
Total Annual Allocation to Reserves	\$38,540.02
<i>\$121.96 per unit annually</i>	

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Component Funding Model: Projection**

Report Date June 22, 2019  
 Beginning Fiscal Year January 01, 2020  
 Account Number 1215b

Version Number 1.01

Beginning Balance: \$67,376

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2020	130,054	38,115	426	44,703	61,213	82,727	74%
2021	132,083	32,960	608	7,354	87,427	102,788	85%
2022	134,144	31,376	448	54,737	64,514	73,965	87%
2023	136,236	29,050	540	16,413	77,691	85,238	91%
2024	138,362	29,115	407	48,724	58,489	63,282	92%
2025	140,520	29,277	475	19,876	68,366	71,621	95%
2026	142,712	29,475	512	24,743	73,610	75,434	98%
2027	144,938	29,373	721		103,703	105,658	98%
2028	147,199	28,955	662	38,145	95,174	96,868	98%
2029	149,496	29,459	814	8,324	117,124	119,625	98%
2030	151,828	30,075	657	53,314	94,542	96,099	98%
2031	154,196	30,326	778	13,776	111,870	114,078	98%
2032	156,602	30,928	646	50,470	92,975	94,399	98%
2033	159,045	31,312	674	28,017	96,944	98,412	99%
2034	161,526	32,481	411	70,734	59,102	58,260	101%
2035	164,046	31,375	633		91,110	92,045	99%
2036	166,605	32,388	662	28,885	95,276	96,628	99%
2037	169,204	33,210	732	23,933	105,285	106,988	98%
2038	171,844	34,502	770	29,794	110,763	111,902	99%
2039	174,524	33,897	1,013		145,673	148,624	98%
2040	177,247	34,845	731	76,126	105,123	106,760	98%
2041	180,012	35,390	913	10,023	131,403	134,008	98%
2042	182,820	36,116	760	58,920	109,359	111,048	98%
2043	185,672	36,530	753	38,293	108,349	109,898	99%
2044	188,569	37,024	553	66,404	79,522	79,878	100%
2045	191,510	37,371	744	10,663	106,973	108,340	99%
2046	194,498	39,000	669	50,402	96,240	96,238	100%
2047	197,532	37,717	938		134,894	137,327	98%
2048	200,613	39,461	977	34,782	140,551	143,258	98%
2049	203,743	40,204	1,064	28,818	153,000	156,153	98%

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Component Funding Model: Assessment & Category Summary**

Description	Replacement Year	Useful Life	Adjustment	Remaining Life	Current Cost	Assigned Reserves	Fully Funded
<b>Cottages</b>							
Arborist / Tree Work: Tree Pruning - "Newer"	2022	3	0	2	4,182	1,394	1,394
Arborist / Tree Work: Tree Pruning - "Older"	2022	3	0	2	6,972	2,324	2,324
Arborist / Tree Work: Tree Removal - Trimming "A"	2022	10	0	2	19,366	7,882	15,493
Arborist / Tree Work: Tree Removal - Trimming "B"	2023	10	0	3	15,669	0	10,968
Arborist / Tree Work: Tree Removal - Trimming "C"	2024	10	0	4	11,723	0	7,034
Arborist / Tree Work: Tree Removal - Trimming "D"	2020	10	0	0	11,207	11,207	11,207
Arborist / Tree Work: Tree Removal - Trimming "E"	2020	10	0	0	10,948	10,948	10,948
Backflow Device: Common Area - Replacement	2030	30	0	10	965	0	643
Bark Dust: Replenish - Common Area	2020	2	0	0	15,307	15,307	15,307
Irrigation Controllers & Valves: Phase 1	2022	4	0	2	7,241	3,621	3,621
Irrigation Controllers & Valves: Phase 2	2021	4	0	1	7,241	5,431	5,431
Irrigation Controllers & Valves: Phase 3	2020	4	0	0	7,241	7,241	7,241
Landscape Renovation / Enhancement	2024	10	0	4	11,527	0	6,916
Landscaping: Power Box - Cottages - Replace	2031	30	0	11	465	0	294
Cottages - Total					\$130,054	\$65,355	\$98,821
Total Asset Summary					\$130,054	\$65,355	\$98,821
Contingency at 3.00%						\$2,021	\$3,056
Summary Total						\$67,376	\$101,878

Percent Fully Funded	66%
Current Average Liability per Unit (Total Units: 316)	-\$109



**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Component Funding Model: Component Summary by Category**

Report Date June 22, 2019  
 Beginning Fiscal Year January 01, 2020  
 Account Number 1215b

Version Number 1.01

Description	Future Cost	Useful Life	Remaining Life	Adjustment	Distribution	Required Contribution	Ideally Funded
<b>Cottages</b>							
Arborist / Tree Work: Tree Pruning - "Newer"	4,314	3	2		1,394	1,418.94	1,394
Arborist / Tree Work: Tree Pruning - "Older"	7,191	3	2		2,324	2,365.52	2,324
Arborist / Tree Work: Tree Removal - Trimming "A"	19,975	10	2		7,882	5,909.11	15,493
Arborist / Tree Work: Tree Removal - Trimming "B"	16,413	10	3		0	5,368.26	10,968
Arborist / Tree Work: Tree Removal - Trimming "C"	12,472	10	4		0	3,043.54	7,034
Arborist / Tree Work: Tree Removal - Trimming "D"	11,207	10	0		11,207	1,237.80	11,207
Arborist / Tree Work: Tree Removal - Trimming "E"	10,948	10	0		10,948	1,209.28	10,948
Backflow Device: Common Area - Replacement	1,126	30	10		0	107.77	643
Bark Dust: Replenish - Common Area	15,307	2	0		15,307	7,681.74	15,307
Irrigation Controllers & Valves: Phase 1	7,469	4	2		3,621	1,863.30	3,621
Irrigation Controllers & Valves: Phase 2	7,354	4	1		5,431	1,864.36	5,431
Irrigation Controllers & Valves: Phase 3	7,241	4	0		7,241	1,861.06	7,241
Landscape Renovation / Enhancement	12,263	10	4		0	2,992.66	6,916
Landscaping: Power Box - Cottages - Replace	551	30	11		0	47.74	294
Cottages - Total	\$133,832				\$65,355	\$36,971	\$98,821
Asset Summary Total:	\$133,832				\$65,355	\$36,971	\$98,821
Contingency at 3.00%					\$2,021	\$1,143	\$3,056
Grand Total:					\$67,376	\$38,115	\$101,878

Percent Fully Funded	66%
Current Average Liability per Unit (Total Units: 316)	-\$109

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Component Funding Model: Distribution of Accumulated Reserves**

Report Date                      June 22, 2019  
Beginning Fiscal Year        January 01, 2020  
Account Number                1215b

Version Number 1.01

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Irrigation Controllers & Valves: Phase 1	2	2022	3,621	3,621
Arborist / Tree Work: Tree Removal - Trimming "E"	0	2020	10,948	10,948
Arborist / Tree Work: Tree Removal - Trimming "D"	0	2020	11,207	11,207
Bark Dust: Replenish - Common Area	0	2020	15,307	15,307
Arborist / Tree Work: Tree Pruning - "Newer"	2	2022	1,394	1,394
Arborist / Tree Work: Tree Pruning - "Older"	2	2022	2,324	2,324
Irrigation Controllers & Valves: Phase 3	0	2020	7,241	7,241
Arborist / Tree Work: Tree Removal - Trimming "A"	2	2022	* 7,882	15,493
Irrigation Controllers & Valves: Phase 2	1	2021	5,431	5,431
Arborist / Tree Work: Tree Removal - Trimming "B"	3	2023		10,968
Landscape Renovation / Enhancement	4	2024		6,916
Arborist / Tree Work: Tree Removal - Trimming "C"	4	2024		7,034
Backflow Device: Common Area - Replacement	10	2030		643
Landscaping: Power Box - Cottages - Replace	11	2031		294
Total Asset Summary			<u>\$65,355</u>	<u>\$98,821</u>
Contingency at 3.00%			<u>\$2,021</u>	<u>\$3,056</u>
Summary Total			<u>\$67,376</u>	<u>\$101,878</u>

Percent Fully Funded	66%
Current Average Liability per Unit (Total Units: 316)	-\$109

*'\*' Indicates Partially Funded*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

Report Date June 22, 2019  
 Beginning Fiscal Year January 01, 2020  
 Account Number 1215b

Version Number 1.01

**Arborist / Tree Work: Tree Pruning - "Newer"**

Asset ID	1036	1 Total	@ \$4,182.07
	Non-Capital	Asset Cost	\$4,182.07
	Cottages	Percent Replacement	100%
Placed in Service	June 2019	Future Cost	\$4,313.57
Useful Life	3	Assigned Reserves	\$1,394.02
Replacement Year	2022	Annual Assessment	\$1,312.79
Remaining Life	2	Interest Contribution	\$18.95
		Reserve Allocation	\$1,331.73



**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

Arbor work and tree removal occurred in June 2019 at a total cost of \$8155 and a tree (or trees) was replaced in September 2019 for \$4000. There is multiple tree line items identified in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016 which were carried over into our reserve study for 2019. There is some confusion in our office of which trees correspond with the labels and how they correspond with the scope of work listed above. We have made our best effort based on the service cost and replacement timetable to reset the appropriate line items in order to properly reflect this expense.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016. A Tree Inventory Management Plan by Davey Resource Group has described the scope of work for this line item as described in the 2017 reserve study. We have not received a copy of this document. The prior reserve study indicated that this line item was for 179 newer homes in the Cottage Collection. The line item was defined as "Tree Pruning: Newer" in the previous reserve study. We have adjusted this number for inflation.

Typically this line item is for any major tree work that is beyond the scope of the landscaping contract. Labor associated with the removal and replacement of diseased and/or falling trees which may require the services of a

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

*Arborist / Tree Work: Tree Pruning - "Newer" continued...*

certified arborist and necessary permits & approval by the City of Beaverton. Cost include but not limited to; tree replacements, stump grinding, tree replacements, and major pruning. Scope of work will likely increase along with the cost as trees mature. Tree work appears in good to fair condition. Care should be exercised in order to maintain a safe perimeter with the trees, plants, and shrubs from the buildings. For an accurate condition assessment, the Association may wish to consult with the arborist.

Recent expenditure history: Unknown.

The Association should obtain a bid from a local certified, licensed, and bonded arborist in order to determine if this estimate and timing is sufficient to meet the needs of the Association. Cost presented herein assume that the full quantity specified will be addressed simultaneously in order to avoid possible overlap in mobilization charges and fees.

It has been reported to us that the costs to obtain permits and elaborate tree studies often involve costs which may approach (if not exceed) the cost for the removal labor itself. The Board is hereby encouraged to review this cost carefully to determine if this amount is sufficient for the community. Reported in this line item are the median costs that have been reported to us based on the approximate number of trees under jurisdiction of the association. This cost may vary greatly according to vendor, time of year, previous maintenance, and the scope of work involved.

ReserveStudyUpdate.com, LLC strongly recommends that the Board obtain at least two or three estimates and/or competitive bids to affirm this estimate. As with any component listed in any of our reserve studies, should the Board and/or management find that these cost projections need to be revised, ReserveStudyUpdate.com, LLC is more than happy to make these changes to the electronic file (PDF) and provide the updated report completely free of charge prior to or during the fiscal year that the study is prepared for. This measure will aid in maintaining proper reserve funding equilibrium and aid in proper contribution to reserves.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

**Arborist / Tree Work: Tree Pruning - "Older"**

Asset ID	1045	55 Each	@ \$126.76
	Non-Capital	Asset Cost	\$6,971.97
	Cottages	Percent Replacement	100%
Placed in Service	June 2019	Future Cost	\$7,191.19
Useful Life	3	Assigned Reserves	\$2,323.99
Replacement Year	2022	Annual Assessment	\$2,188.56
Remaining Life	2	Interest Contribution	<u>\$31.59</u>
		Reserve Allocation	\$2,220.15

**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

Arbor work and tree removal occurred in June 2019 at a total cost of \$8155 and a tree (or trees) was replaced in September 2019 for \$4000. There is multiple tree line items identified in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016 which were carried over into our reserve study for 2019. There is some confusion in our office of which trees correspond with the labels and how they correspond with the scope of work listed above. We have made our best effort based on the service cost and replacement timetable to reset the appropriate line items in order to properly reflect this expense.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016. A Tree Inventory Management Plan by Davey Resource Group has described the scope of work for this line item as described in the 2017 reserve study. We have not received a copy of this document. The prior reserve study indicated that this line item was for older homes in the Cottage Collection. The line item was defined as "Tree Pruning: Older" in the previous reserve study. We have adjusted this number for inflation.

Typically this line item is for any major tree work that is beyond the scope of the landscaping contract. Labor associated with the removal and replacement of diseased and/or falling trees which may require the services of a certified arborist and necessary permits & approval by the City of Beaverton. Cost include but not limited to; tree replacements, stump grinding, tree replacements, and major pruning. Scope of work will likely increase along with the cost as trees mature. Tree work appears in good to fair condition. Care should be exercised in order to maintain a safe perimeter with the trees, plants, and shrubs from the buildings. For an accurate condition assessment, the Association may wish to consult with the arborist.

Recent expenditure history: Unknown.

The Association should obtain a bid from a local certified, licensed, and bonded arborist in order to determine if this estimate and timing is sufficient to meet the needs of the Association. Cost presented herein assume that the full quantity specified will be addressed simultaneously in order to avoid possible overlap in mobilization charges and fees.

It has been reported to us that the costs to obtain permits and elaborate tree studies often involve costs which

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

*Arborist / Tree Work: Tree Pruning - "Older" continued...*

may approach (if not exceed) the cost for the removal labor itself. The Board is hereby encouraged to review this cost carefully to determine if this amount is sufficient for the community. Reported in this line item are the median costs that have been reported to us based on the approximate number of trees under jurisdiction of the association. This cost may vary greatly according to vendor, time of year, previous maintenance, and the scope of work involved.

ReserveStudyUpdate.com, LLC strongly recommends that the Board obtain at least two or three estimates and/or competitive bids to affirm this estimate. As with any component listed in any of our reserve studies, should the Board and/or management find that these cost projections need to be revised, ReserveStudyUpdate.com, LLC is more than happy to make these changes to the electronic file (PDF) and provide the updated report completely free of charge prior to or during the fiscal year that the study is prepared for. This measure will aid in maintaining proper reserve funding equilibrium and aid in proper contribution to reserves.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

Arborist / Tree Work: Tree Removal - Trimming "A"

		1 Total	@ \$19,366.22
Asset ID	1046	Asset Cost	\$19,366.22
	Non-Capital	Percent Replacement	100%
	Cottages	Future Cost	\$19,975.16
Placed in Service	January 2012	Assigned Reserves	\$9,903.16
Useful Life	10		
Replacement Year	2022	Annual Assessment	\$4,496.52
Remaining Life	2	Interest Contribution	<u>\$100.80</u>
		Reserve Allocation	\$4,597.32

**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016. A Tree Inventory Management Plan by Davey Resource Group has described the scope of work for this line item as described in the 2017 reserve study. We have not received a copy of this document. The prior reserve study indicated that this line item was for trees the Cottage Collection. The line item was defined as "Trees: Removal-Trimming-A" in the previous reserve study. We have adjusted this number for inflation.

Typically this line item is for any major tree work that is beyond the scope of the landscaping contract. Labor associated with the removal and replacement of diseased and/or falling trees which may require the services of a certified arborist and necessary permits & approval by the City of Beaverton. Cost include but not limited to; tree replacements, stump grinding, tree replacements, and major pruning. Scope of work will likely increase along with the cost as trees mature. Tree work appears in good to fair condition. Care should be exercised in order to maintain a safe perimeter with the trees, plants, and shrubs from the buildings. For an accurate condition assessment, the Association may wish to consult with the arborist.

Recent expenditure history: Unknown.

The Association should obtain a bid from a local certified, licensed, and bonded arborist in order to determine if this estimate and timing is sufficient to meet the needs of the Association. Cost presented herein assume that the full quantity specified will be addressed simultaneously in order to avoid possible overlap in mobilization charges and fees.

It has been reported to us that the costs to obtain permits and elaborate tree studies often involve costs which may approach (if not exceed) the cost for the removal labor itself. The Board is hereby encouraged to review this cost carefully to determine if this amount is sufficient for the community. Reported in this line item are the median costs that have been reported to us based on the approximate number of trees under jurisdiction of the association. This cost may vary greatly according to vendor, time of year, previous maintenance, and the scope

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

*Arborist / Tree Work: Tree Removal - Trimming "A" continued...*

of work involved.

ReserveStudyUpdate.com, LLC strongly recommends that the Board obtain at least two or three estimates and/or competitive bids to affirm this estimate. As with any component listed in any of our reserve studies, should the Board and/or management find that these cost projections need to be revised, ReserveStudyUpdate.com, LLC is more than happy to make these changes to the electronic file (PDF) and provide the updated report completely free of charge prior to or during the fiscal year that the study is prepared for. This measure will aid in maintaining proper reserve funding equilibrium and aid in proper contribution to reserves.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*



**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

Arborist / Tree Work: Tree Removal - Trimming "B"

Asset ID	1047	1 Total	@ \$15,668.56
	Non-Capital	Asset Cost	\$15,668.56
	Cottages	Percent Replacement	100%
Placed in Service	January 2013	Future Cost	\$16,413.35
Useful Life	10	Assigned Reserves	<i>none</i>
Replacement Year	2023	Annual Assessment	\$4,936.15
Remaining Life	3	Interest Contribution	<u>\$34.55</u>
		Reserve Allocation	\$4,970.71

**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016. A Tree Inventory Management Plan by Davey Resource Group has described the scope of work for this line item as described in the 2017 reserve study. We have not received a copy of this document. The prior reserve study indicated that this line item was for trees the Cottage Collection. The line item was defined as "Trees: Removal-Trimming-B" in the previous reserve study. We have adjusted this number for inflation.

Typically this line item is for any major tree work that is beyond the scope of the landscaping contract. Labor associated with the removal and replacement of diseased and/or falling trees which may require the services of a certified arborist and necessary permits & approval by the City of Beaverton. Cost include but not limited to; tree replacements, stump grinding, tree replacements, and major pruning. Scope of work will likely increase along with the cost as trees mature. Tree work appears in good to fair condition. Care should be exercised in order to maintain a safe perimeter with the trees, plants, and shrubs from the buildings. For an accurate condition assessment, the Association may wish to consult with the arborist.

Recent expenditure history: Unknown.

The Association should obtain a bid from a local certified, licensed, and bonded arborist in order to determine if this estimate and timing is sufficient to meet the needs of the Association. Cost presented herein assume that the full quantity specified will be addressed simultaneously in order to avoid possible overlap in mobilization charges and fees.

It has been reported to us that the costs to obtain permits and elaborate tree studies often involve costs which may approach (if not exceed) the cost for the removal labor itself. The Board is hereby encouraged to review this cost carefully to determine if this amount is sufficient for the community. Reported in this line item are the median costs that have been reported to us based on the approximate number of trees under jurisdiction of the association. This cost may vary greatly according to vendor, time of year, previous maintenance, and the scope

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

*Arborist / Tree Work: Tree Removal - Trimming "B" continued...*

of work involved.

ReserveStudyUpdate.com, LLC strongly recommends that the Board obtain at least two or three estimates and/or competitive bids to affirm this estimate. As with any component listed in any of our reserve studies, should the Board and/or management find that these cost projections need to be revised, ReserveStudyUpdate.com, LLC is more than happy to make these changes to the electronic file (PDF) and provide the updated report completely free of charge prior to or during the fiscal year that the study is prepared for. This measure will aid in maintaining proper reserve funding equilibrium and aid in proper contribution to reserves.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

Arborist / Tree Work: Tree Removal - Trimming "C"

Asset ID	1048	1 Total	@ \$11,723.02
	Non-Capital	Asset Cost	\$11,723.02
	Cottages	Percent Replacement	100%
Placed in Service	January 2014	Future Cost	\$12,471.83
Useful Life	10	Assigned Reserves	<i>none</i>
Replacement Year	2024	Annual Assessment	\$2,803.25
Remaining Life	4	Interest Contribution	<u>\$19.62</u>
		Reserve Allocation	\$2,822.87

**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016. A Tree Inventory Management Plan by Davey Resource Group has described the scope of work for this line item as described in the 2017 reserve study. We have not received a copy of this document. The prior reserve study indicated that this line item was for trees the Cottage Collection. The line item was defined as "Trees: Removal-Trimming-C" in the previous reserve study. We have adjusted this number for inflation.

Typically this line item is for any major tree work that is beyond the scope of the landscaping contract. Labor associated with the removal and replacement of diseased and/or falling trees which may require the services of a certified arborist and necessary permits & approval by the City of Beaverton. Cost include but not limited to; tree replacements, stump grinding, tree replacements, and major pruning. Scope of work will likely increase along with the cost as trees mature. Tree work appears in good to fair condition. Care should be exercised in order to maintain a safe perimeter with the trees, plants, and shrubs from the buildings. For an accurate condition assessment, the Association may wish to consult with the arborist.

Recent expenditure history: 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016, ^6,010 was spent in 2014 for tree enhancements.

The Association should obtain a bid from a local certified, licensed, and bonded arborist in order to determine if this estimate and timing is sufficient to meet the needs of the Association. Cost presented herein assume that the full quantity specified will be addressed simultaneously in order to avoid possible overlap in mobilization charges and fees.

It has been reported to us that the costs to obtain permits and elaborate tree studies often involve costs which may approach (if not exceed) the cost for the removal labor itself. The Board is hereby encouraged to review this cost carefully to determine if this amount is sufficient for the community. Reported in this line item are the median costs that have been reported to us based on the approximate number of trees under jurisdiction of the

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

*Arborist / Tree Work: Tree Removal - Trimming "C" continued...*

association. This cost may vary greatly according to vendor, time of year, previous maintenance, and the scope of work involved.

ReserveStudyUpdate.com, LLC strongly recommends that the Board obtain at least two or three estimates and/or competitive bids to affirm this estimate. As with any component listed in any of our reserve studies, should the Board and/or management find that these cost projections need to be revised, ReserveStudyUpdate.com, LLC is more than happy to make these changes to the electronic file (PDF) and provide the updated report completely free of charge prior to or during the fiscal year that the study is prepared for. This measure will aid in maintaining proper reserve funding equilibrium and aid in proper contribution to reserves.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

**Arborist / Tree Work: Tree Removal - Trimming "D"**

Asset ID	1049	1 Total	@ \$11,206.59
	Non-Capital	Asset Cost	\$11,206.59
	Cottages	Percent Replacement	100%
Placed in Service	January 2001	Future Cost	\$11,206.59
Useful Life	10	Assigned Reserves	\$11,206.59
Replacement Year	2020	Annual Assessment	\$1,151.67
Remaining Life	0	Interest Contribution	\$8.06
		Reserve Allocation	\$1,159.74

**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

Analyst notes that the condition of this asset may or may not be in an acceptable enough condition not to require a replacement, rebuild, and/or repair at this time. The Board is also encouraged to reach out and seek an properly qualified vendor proficient in this specific service and/or craft for a more detailed analysis.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016. A Tree Inventory Management Plan by Davey Resource Group has described the scope of work for this line item as described in the 2017 reserve study. We have not received a copy of this document. The prior reserve study indicated that this line item was for trees the Cottage Collection. The line item was defined as "Trees: Removal-Trimming-D" in the previous reserve study. We have adjusted this number for inflation.

Typically this line item is for any major tree work that is beyond the scope of the landscaping contract. Labor associated with the removal and replacement of diseased and/or falling trees which may require the services of a certified arborist and necessary permits & approval by the City of Beaverton. Cost include but not limited to; tree replacements, stump grinding, tree replacements, and major pruning. Scope of work will likely increase along with the cost as trees mature. Tree work appears in good to fair condition. Care should be exercised in order to maintain a safe perimeter with the trees, plants, and shrubs from the buildings. For an accurate condition assessment, the Association may wish to consult with the arborist.

Recent expenditure history: Unknown.

The Association should obtain a bid from a local certified, licensed, and bonded arborist in order to determine if this estimate and timing is sufficient to meet the needs of the Association. Cost presented herein assume that the full quantity specified will be addressed simultaneously in order to avoid possible overlap in mobilization charges and fees.

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

*Arborist / Tree Work: Tree Removal - Trimming "D" continued...*

It has been reported to us that the costs to obtain permits and elaborate tree studies often involve costs which may approach (if not exceed) the cost for the removal labor itself. The Board is hereby encouraged to review this cost carefully to determine if this amount is sufficient for the community. Reported in this line item are the median costs that have been reported to us based on the approximate number of trees under jurisdiction of the association. This cost may vary greatly according to vendor, time of year, previous maintenance, and the scope of work involved.

ReserveStudyUpdate.com, LLC strongly recommends that the Board obtain at least two or three estimates and/or competitive bids to affirm this estimate. As with any component listed in any of our reserve studies, should the Board and/or management find that these cost projections need to be revised, ReserveStudyUpdate.com, LLC is more than happy to make these changes to the electronic file (PDF) and provide the updated report completely free of charge prior to or during the fiscal year that the study is prepared for. This measure will aid in maintaining proper reserve funding equilibrium and aid in proper contribution to reserves.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

**Arborist / Tree Work: Tree Removal - Trimming "E"**

Asset ID	1050	1 Total	@ \$10,948.37
	Non-Capital	Asset Cost	\$10,948.37
	Cottages	Percent Replacement	100%
Placed in Service	January 2001	Future Cost	\$10,948.37
Useful Life	10	Assigned Reserves	\$10,948.37
Replacement Year	2020	Annual Assessment	\$1,125.14
Remaining Life	0	Interest Contribution	\$7.88
		Reserve Allocation	\$1,133.01

**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

Analyst notes that the condition of this asset may or may not be in an acceptable enough condition not to require a replacement, rebuild, and/or repair at this time. The Board is also encouraged to reach out and seek an properly qualified vendor proficient in this specific service and/or craft for a more detailed analysis.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016. A Tree Inventory Management Plan by Davey Resource Group has described the scope of work for this line item as described in the 2017 reserve study. We have not received a copy of this document. The prior reserve study indicated that this line item was for trees the Cottage Collection. The line item was defined as "Trees: Removal-Trimming-E" in the previous reserve study. We have adjusted this number for inflation.

Typically this line item is for any major tree work that is beyond the scope of the landscaping contract. Labor associated with the removal and replacement of diseased and/or falling trees which may require the services of a certified arborist and necessary permits & approval by the City of Beaverton. Cost include but not limited to; tree replacements, stump grinding, tree replacements, and major pruning. Scope of work will likely increase along with the cost as trees mature. Tree work appears in good to fair condition. Care should be exercised in order to maintain a safe perimeter with the trees, plants, and shrubs from the buildings. For an accurate condition assessment, the Association may wish to consult with the arborist.

Recent expenditure history: Unknown.

The Association should obtain a bid from a local certified, licensed, and bonded arborist in order to determine if this estimate and timing is sufficient to meet the needs of the Association. Cost presented herein assume that the full quantity specified will be addressed simultaneously in order to avoid possible overlap in mobilization charges and fees.

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

*Arborist / Tree Work: Tree Removal - Trimming "E" continued...*

It has been reported to us that the costs to obtain permits and elaborate tree studies often involve costs which may approach (if not exceed) the cost for the removal labor itself. The Board is hereby encouraged to review this cost carefully to determine if this amount is sufficient for the community. Reported in this line item are the median costs that have been reported to us based on the approximate number of trees under jurisdiction of the association. This cost may vary greatly according to vendor, time of year, previous maintenance, and the scope of work involved.

ReserveStudyUpdate.com, LLC strongly recommends that the Board obtain at least two or three estimates and/or competitive bids to affirm this estimate. As with any component listed in any of our reserve studies, should the Board and/or management find that these cost projections need to be revised, ReserveStudyUpdate.com, LLC is more than happy to make these changes to the electronic file (PDF) and provide the updated report completely free of charge prior to or during the fiscal year that the study is prepared for. This measure will aid in maintaining proper reserve funding equilibrium and aid in proper contribution to reserves.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*



**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

**Backflow Device: Common Area - Replacement**

Asset ID	1051	1 Each	@ \$964.82
	Capital	Asset Cost	\$964.82
	Cottages	Percent Replacement	100%
Placed in Service	January 2000	Future Cost	\$1,126.35
Useful Life	30	Assigned Reserves	<i>none</i>
Replacement Year	2030	Annual Assessment	\$99.15
Remaining Life	10	Interest Contribution	<u>\$0.69</u>
		Reserve Allocation	\$99.85

**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

This line item is for the replacement of the backflow device in the common area. Base price is per recent information (not site specific) from BWE Backflow. State statutes require an annual test of the backflow device. Therefore, the asset is assumed to be in good condition.

*Note: ReserveStudyUpdate.com, LLC strongly recommends that the Board obtain at least two or three estimates and/or competitive bids to affirm this estimate. As with any component listed in any of our reserve studies, should the Board and/or management find that these cost projection(s) need to be revised, ReserveStudyUpdate.com, LLC is more than happy to make these changes to the electronic file (PDF) and provide the updated report completely free of charge prior to or during the fiscal year that the study is prepared for. This measure will aid in maintaining proper reserve funding equilibrium and aid in proper contribution to reserves.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

**Bark Dust: Replenish - Common Area**

		52 Units	@ \$294.37
Asset ID	1013	Asset Cost	\$15,307.01
	Non-Capital	Percent Replacement	100%
	Cottages	Future Cost	\$15,307.01
Placed in Service	May 2015	Assigned Reserves	\$15,307.01
Useful Life	2		
Replacement Year	2020	Annual Assessment	\$7,147.23
Remaining Life	0	Interest Contribution	<u>\$50.03</u>
		Reserve Allocation	\$7,197.26



**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

Analyst notes that the condition of this asset may or may not be in an acceptable enough condition not to require a replacement, rebuild, and/or repair at this time. The Board is also encouraged to reach out and seek an properly qualified vendor proficient in this specific service and/or craft for a more detailed analysis.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016. Quantity presented in the 2017 reserve study by Reserve Studies by Reserve Funding appears to be accurate +/- 10% based on our visual observation. Our analyst estimates approximately 46 to 54 units of bark dust in the Cottage Collection portions areas of the community.

No deficiencies have been reported to our office about this component. Proper ongoing maintenance will likely extend the lifespan of this component in accordance with manufacturer's specifications.

Recent expenditure history: Unknown, appears to be original.

Asset condition: Fair to Inferior, should be re-applied in the next 12 months.

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

*Bark Dust: Replenish - Common Area continued...*

Costs projected assume that maintenance is performed on a periodic basis, which will significantly aid in components reaching the estimated life expectancy. These costs do not take into consideration any possible future increase in permit costs and fees that may be required.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

**Irrigation Controllers & Valves: Phase 1**

Asset ID	1041	1 Provision	@ \$7,241.27
	Capital	Asset Cost	\$7,241.27
	Cottages	Percent Replacement	100%
Placed in Service	May 2018	Future Cost	\$7,468.96
Useful Life	4	Assigned Reserves	\$3,620.64
Replacement Year	2022	Annual Assessment	\$1,719.08
Remaining Life	2	Interest Contribution	\$37.38
		Reserve Allocation	\$1,756.45



**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

This line item is for the ongoing replacement of irrigation controllers and associated valves on Phase One Lots. Irrigation controllers should be replaced upon failure. Battery operated controllers typically have a life expectancy between 2-5 years. Electric operated controllers typically have a life expectancy between 5-8 years or longer. Component appears to be in fair condition, however should be tested by the contracted landscape company for an accurate assessment.

The 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016 disbursed \$24,538 every ten years. We have taken a similar approach, however have structured a smaller disbursement on a more frequent basis. This is because the nature of these replacements require than monies are spent on an as-needed basis due to the sporadic nature of these components.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

**Irrigation Controllers & Valves: Phase 2**

Asset ID	1042	1 Provision	@ \$7,241.27
	Capital	Asset Cost	\$7,241.27
	Cottages	Percent Replacement	100%
Placed in Service	May 2017	Future Cost	\$7,354.24
Useful Life	4	Assigned Reserves	\$5,430.95
Replacement Year	2021	Annual Assessment	\$1,712.86
Remaining Life	1	Interest Contribution	<u>\$50.01</u>
		Reserve Allocation	\$1,762.87



**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

This line item is for the ongoing replacement of irrigation controllers and associated valves on Phase Two Lots. Irrigation controllers should be replaced upon failure. Battery operated controllers typically have a life expectancy between 2-5 years. Electric operated controllers typically have a life expectancy between 5-8 years or longer. Component appears to be in fair condition, however should be tested by the contracted landscape company for an accurate assessment.

The 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016 disbursed \$24,538 every ten years. We have taken a similar approach, however have structured a smaller disbursement on a more frequent basis. This is because the nature of these replacements require than monies are spent on an as-needed basis due to the sporadic nature of these components.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

**Irrigation Controllers & Valves: Phase 3**

Asset ID	1043	1 Provision	@ \$7,241.27
	Capital	Asset Cost	\$7,241.27
	Cottages	Percent Replacement	100%
Placed in Service	May 2016	Future Cost	\$7,241.27
Useful Life	4	Assigned Reserves	\$7,241.27
Replacement Year	2020	Annual Assessment	\$1,731.56
Remaining Life	0	Interest Contribution	<u>\$12.12</u>
		Reserve Allocation	\$1,743.68



**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

Analyst notes that the condition of this asset may or may not be in an acceptable enough condition not to require a replacement, rebuild, and/or repair at this time. The Board is also encouraged to reach out and seek an properly qualified vendor proficient in this specific service and/or craft for a more detailed analysis.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

This line item is for the ongoing replacement of irrigation controllers and associated valves on Phase Three Lots. Irrigation controllers should be replaced upon failure. Battery operated controllers typically have a life expectancy between 2-5 years. Electric operated controllers typically have a life expectancy between 5-8 years or longer. Component appears to be in fair condition, however should be tested by the contracted landscape company for an accurate assessment.

The 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016 disbursed \$24,538 every ten years. We have taken a similar approach, however have structured a smaller disbursement on a more frequent basis. This is because the nature of these replacements require than monies are spent on an as-needed basis due to the sporadic nature of these components.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

*Irrigation Controllers & Valves: Phase 3 continued...*

*reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Detail Report by Category (Dollar Defined Threshold Funding Model)**

Landscape Renovation / Enhancement			
Asset ID	1040	1 Project	@ \$11,527.06
	Non-Capital	Asset Cost	\$11,527.06
	Cottages	Percent Replacement	100%
Placed in Service	September 2014	Future Cost	\$12,263.36
Useful Life	10	Assigned Reserves	<i>none</i>
Replacement Year	2024	Annual Assessment	\$2,756.39
Remaining Life	4	Interest Contribution	<u>\$19.29</u>
		Reserve Allocation	\$2,775.69



**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

This line item is a provision for the possible re-work of the landscaping in the community including the replacement of bushes & shrubs, and alleviating any drainage issues. Depending on how close the trees and shrubs were originally spaced, and what varieties of plants were used, overcrowding can become an issue, sometimes as early as 7 to 10 years after initial planting, especially if pruning has been minimal. Current landscaping appears to be in good to fair condition. Commencement of life cycle could not be established by analyst; however the analyst based the in-service date based on the current visual appearance. Emphasis should be placed on identifying and correcting any possible drainage problems as they occur which can be mitigated by regrading the surface.

The Board should monitor this situation carefully and adjust the timing and report to the reserve analyst as necessary. Analyst encourages the Board of Directors to review this information with the current landscape contractor and provide us with any revisions or additional information as warranted in order to insure proper funding.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*



**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

**Landscaping: Power Box - Cottages - Replace**

Asset ID	1044	1 Total	@ \$464.79
	Capital	Asset Cost	\$464.79
	Cottages	Percent Replacement	100%
Placed in Service	January 2001	Future Cost	\$551.07
Useful Life	30	Assigned Reserves	<i>none</i>
Replacement Year	2031	Annual Assessment	\$43.94
Remaining Life	11	Interest Contribution	<u>\$0.31</u>
		Reserve Allocation	\$44.25



**Fiscal Year 2020 Off-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented 2019 on-site reserve study.

**Fiscal Year 2019 On-Site Reserve Study Notes by ReserveStudyUpdate.com, LLC:**

We have increased the component base cost for inflation. We have subtracted one year from the remaining useful life as presented in the 2017 on-site reserve study by Reserve Studies by Reserve Funding published June 29, 2016. Quantity presented in the 2017 reserve study by Reserve Studies by Reserve Funding appears to be accurate +/- 10% based on our visual observation. Component appears to be wearing as expected based on the assets chronological age.

No deficiencies have been reported to our office about this component. Proper ongoing maintenance will likely extend the lifespan of this component in accordance with manufacturer's specifications.

Recent expenditure history: Unknown, appears to be original.

Asset condition: Good to fair.

Costs projected assume that maintenance is performed on a periodic basis, which will significantly aid in components reaching the estimated life expectancy. These costs do not take into consideration any possible future increase in permit costs and fees that may be required.

*Note: This line item is a provision for an anticipated expense. Should the Association determine that the cost of this item is less than or greater than the amount provided for herein, this reserve study should be updated to*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

*Landscaping: Power Box - Cottages - Replace continued...*

*reflect the actual component cost. This cost is an estimate and will be updated when the full scope of work is known.*

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

<b>Cottages - Total Current Cost</b>	<b>\$130,054</b>
<b>Assigned Reserves</b>	<b>\$67,376</b>
<b>Fully Funded Reserves</b>	<b>\$98,821</b>

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Detail Report by Category (Dollar Defined Threshold Funding Model)**

**Detail Report Summary**

**Grand Total**

Assigned Reserves	\$67,376.00
Annual Contribution	\$33,224.30
Annual Interest	\$391.28
Annual Allocation	\$33,615.57

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Category Detail Index**

Asset ID	Description	Replacement	Page
1036	Arborist / Tree Work: Tree Pruning - "Newer"	2022	2-44
1045	Arborist / Tree Work: Tree Pruning - "Older"	2022	2-46
1046	Arborist / Tree Work: Tree Removal - Trimming "A"	2022	2-48
1047	Arborist / Tree Work: Tree Removal - Trimming "B"	2023	2-50
1048	Arborist / Tree Work: Tree Removal - Trimming "C"	2024	2-52
1049	Arborist / Tree Work: Tree Removal - Trimming "D"	2020	2-54
1050	Arborist / Tree Work: Tree Removal - Trimming "E"	2020	2-56
1051	Backflow Device: Common Area - Replacement	2030	2-58
1013	Bark Dust: Replenish - Common Area	2020	2-59
1041	Irrigation Controllers & Valves: Phase 1	2022	2-61
1042	Irrigation Controllers & Valves: Phase 2	2021	2-62
1043	Irrigation Controllers & Valves: Phase 3	2020	2-63
1040	Landscape Renovation / Enhancement	2024	2-65
1044	Landscaping: Power Box - Cottages - Replace	2031	2-66
	Total Funded Assets	14	
	Total Unfunded Assets	<u>0</u>	
	Total Assets	14	

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Spread Sheet**

<b>Description</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
Arborist / Tree Work: Tree Pruning - "Newer"			4,314			4,519			4,733
Arborist / Tree Work: Tree Pruning - "Older"			7,191			7,533			7,891
Arborist / Tree Work: Tree Removal - Trimming "A"			19,975						
Arborist / Tree Work: Tree Removal - Trimming "B"				16,413					
Arborist / Tree Work: Tree Removal - Trimming "C"					12,472				
Arborist / Tree Work: Tree Removal - Trimming "D"	11,207								
Arborist / Tree Work: Tree Removal - Trimming "E"	10,948								
Backflow Device: Common Area - Replacement									
Bark Dust: Replenish - Common Area	15,307		15,788		16,285		16,797		17,325
Irrigation Controllers & Valves: Phase 1			7,469				7,946		
Irrigation Controllers & Valves: Phase 2		7,354				7,824			
Irrigation Controllers & Valves: Phase 3	7,241				7,704				8,196
Landscape Renovation / Enhancement					12,263				
Landscaping: Power Box - Cottages - Replace									
<b>Year Total:</b>	<b>44,703</b>	<b>7,354</b>	<b>54,737</b>	<b>16,413</b>	<b>48,724</b>	<b>19,876</b>	<b>24,743</b>		<b>38,145</b>

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Spread Sheet**

<b>Description</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>
Arborist / Tree Work: Tree Pruning - "Newer"			4,958			5,194			5,441
Arborist / Tree Work: Tree Pruning - "Older"			8,266			8,659			9,071
Arborist / Tree Work: Tree Removal - Trimming "A"				23,319					
Arborist / Tree Work: Tree Removal - Trimming "B"					19,161				
Arborist / Tree Work: Tree Removal - Trimming "C"						14,560			
Arborist / Tree Work: Tree Removal - Trimming "D"									
		13,083							
Arborist / Tree Work: Tree Removal - Trimming "E"		12,781							
Backflow Device: Common Area - Replacement		1,126							
Bark Dust: Replenish - Common Area		17,870		18,432		19,011		19,609	
Irrigation Controllers & Valves: Phase 1		8,454				8,994			
Irrigation Controllers & Valves: Phase 2	8,324				8,855				9,421
Irrigation Controllers & Valves: Phase 3				8,719				9,276	
Landscape Renovation / Enhancement						14,316			
Landscaping: Power Box - Cottages - Replace			551						
<b>Year Total:</b>	<b>8,324</b>	<b>53,314</b>	<b>13,776</b>	<b>50,470</b>	<b>28,017</b>	<b>70,734</b>		<b>28,885</b>	<b>23,933</b>

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection  
Spread Sheet**

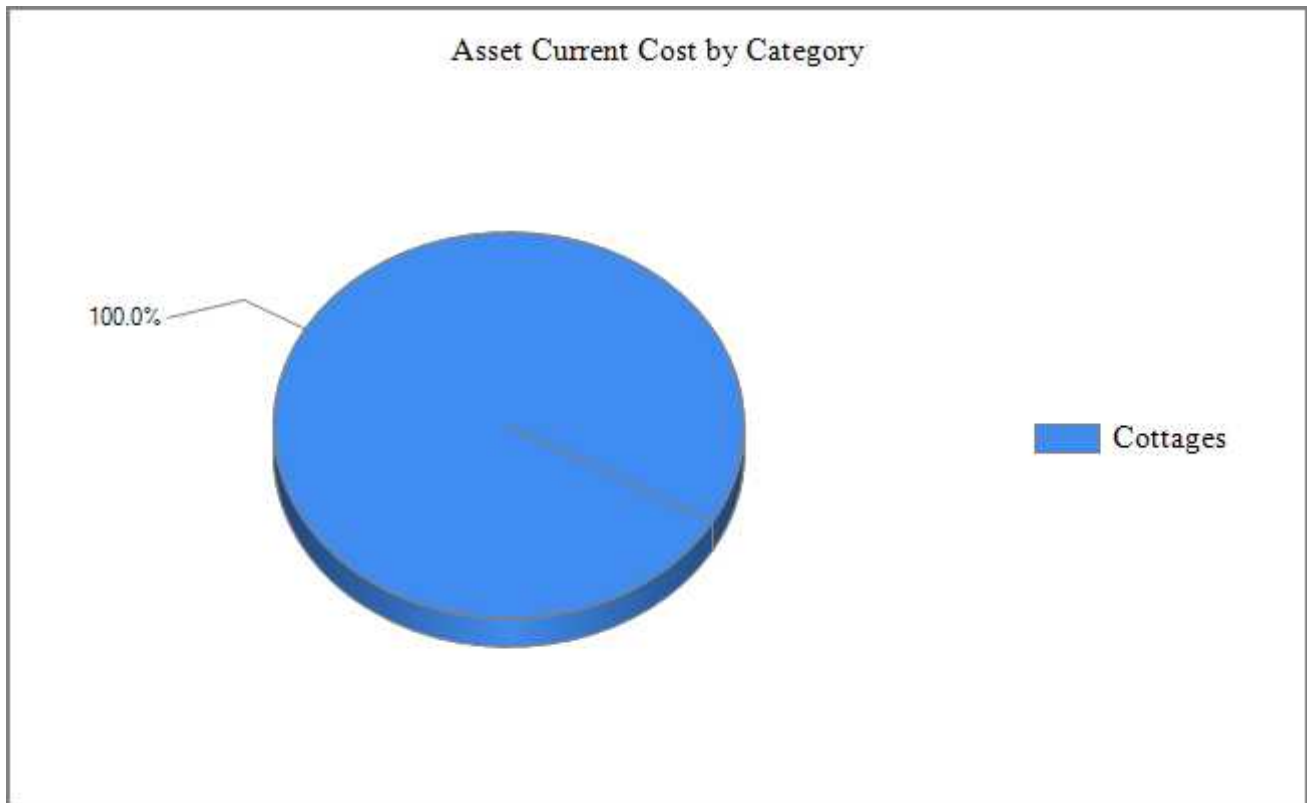
<b>Description</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>	<b>2046</b>
Arborist / Tree Work: Tree Pruning - "Newer"			5,700			5,971			6,254
Arborist / Tree Work: Tree Pruning - "Older"			9,502			9,954			10,427
Arborist / Tree Work: Tree Removal - Trimming "A"					27,224				
Arborist / Tree Work: Tree Removal - Trimming "B"						22,369			
Arborist / Tree Work: Tree Removal - Trimming "C"							16,997		
Arborist / Tree Work: Tree Removal - Trimming "D"			15,273						
Arborist / Tree Work: Tree Removal - Trimming "E"			14,921						
Backflow Device: Common Area - Replacement									
Bark Dust: Replenish - Common Area	20,225		20,861		21,517		22,194		22,892
Irrigation Controllers & Valves: Phase 1	9,568				10,179				10,829
Irrigation Controllers & Valves: Phase 2				10,023				10,663	
Irrigation Controllers & Valves: Phase 3			9,869				10,499		
Landscape Renovation / Enhancement							16,713		
Landscaping: Power Box - Cottages - Replace									
<b>Year Total:</b>	<b>29,794</b>		<b>76,126</b>	<b>10,023</b>	<b>58,920</b>	<b>38,293</b>	<b>66,404</b>	<b>10,663</b>	<b>50,402</b>



# **Arbor Ridge P.U.D. Homeowners Association - Cottage Collection Spread Sheet**

	2047	2048	2049
<b>Description</b>			
Arborist / Tree Work: Tree Pruning - "Newer"			6,552
Arborist / Tree Work: Tree Pruning - "Older"			10,922
Arborist / Tree Work: Tree Removal - Trimming "A"			
Arborist / Tree Work: Tree Removal - Trimming "B"			
Arborist / Tree Work: Tree Removal - Trimming "C"			
Arborist / Tree Work: Tree Removal - Trimming "D"			
Arborist / Tree Work: Tree Removal - Trimming "E"			
Backflow Device: Common Area - Replacement			
Bark Dust: Replenish - Common Area		23,612	
Irrigation Controllers & Valves: Phase 1			
Irrigation Controllers & Valves: Phase 2			11,344
Irrigation Controllers & Valves: Phase 3		11,170	
Landscape Renovation / Enhancement			
Landscaping: Power Box - Cottages - Replace			
<b>Year Total:</b>		<b>34,782</b>	<b>28,818</b>

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Asset Current Cost by Category**



**This is the distribution of reserves by category**

## **APPENDIX - PRESENT DAY CONTRIBUTION SCENARIO WITHOUT ANNUAL INFLATION ADJUSTMENT: EXECUTIVE SUMMARY**

### **SCENARIO OVERVIEW**

The following page presents an exploratory scenario where the reported present-day annual contribution is simply applied without inflation over the course of thirty (30) years and no other variables are explored. This approach utilizes the same expenditure timetable as presented in the earlier sections of the body of this reserve study.

This scenario is not considered to be a bonafide funding model and is simply presented here for comparison purposes with the actual funding models (e.g. Threshold Funding Model, Component Funding Model) in order to aid in developing an alternate and effective funding strategy.

The scenario presented here may or may not result in a negative ending balance which trigger a special assessment and/or deferring of preventive or required replacements and repairs. It is assumed that all interest accrued from reserve savings account is assumed remain in the reserve savings account(s) and not used as an off-set for operating expenses. Income tax factors were not considered in this funding scenario due to variables effecting net taxable income and the election of tax form to be filed.

This report is a reflection of information provided to the Consultant and assembled for the Association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records. Continued use of this reserve study beyond December 31, 2020 is misuse of the product and potentially a violation of applicable law(s).

The author(s) of this report has absolutely no control over whether a special assessment will occur at any time during the thirty year horizon of this reserve study. However, it should be noted that any scenario where the association theoretically operates with a negative bank balance, the situation would have to be cured by implementing a special assessment, or other strategy. The writer further submits that it is impossible to envision thirty years into the future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning the lottery, while it may happen in extraordinary instances by chance, one may not reasonably expect it to happen. As a result, ReserveStudyUpdate.com, LLC makes absolutely no guarantee, express or implied, that a special assessment will not occur during the time period covered by this reserve study. Assumptions on future costs and life expectancy's should be reviewed and adjusted on an annualized basis, as current and future cost projections, building code requirements, and life expectancy's become more uncertain.

Report Version 1.01.

**Arbor Ridge P.U.D. Homeowners Association - Cottage Collection**  
**Appendix - Contribution Scenario without Inflation: Projection**

Report Date June 22, 2019  
Beginning Fiscal Year January 01, 2020  
Account Number 1215b

Version Number 1.01

Beginning Balance: \$67,376

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2020	130,054	32,424	386	44,703	55,482	80,245	69%
2021	132,083	32,424	564	7,354	81,116	99,705	81%
2022	134,144	32,424	412	54,737	59,214	71,746	83%
2023	136,236	32,424	527	16,413	75,752	82,680	92%
2024	138,362	32,424	416	48,724	59,868	61,384	98%
2025	140,520	32,424	507	19,876	72,923	69,473	105%
2026	142,712	32,424	564	24,743	81,169	73,171	111%
2027	144,938	32,424	795		114,388	102,488	112%
2028	147,199	32,424	761	38,145	109,427	93,962	116%
2029	149,496	32,424	935	8,324	134,462	116,036	116%
2030	151,828	32,424	795	53,314	114,367	93,216	123%
2031	154,196	32,424	931	13,776	133,947	110,655	121%
2032	156,602	32,424	811	50,470	116,712	91,567	127%
2033	159,045	32,424	848	28,017	121,967	95,460	128%
2034	161,526	32,424	586	70,734	84,242	56,512	149%
2035	164,046	32,424	817		117,483	89,284	132%
2036	166,605	32,424	847	28,885	121,869	93,729	130%
2037	169,204	32,424	913	23,933	131,273	103,778	126%
2038	171,844	32,424	937	29,794	134,840	108,545	124%
2039	174,524	32,424	1,171		168,435	144,165	117%
2040	177,247	32,424	873	76,126	125,606	103,557	121%
2041	180,012	32,424	1,036	10,023	149,044	129,988	115%
2042	182,820	32,424	858	58,920	123,405	107,717	115%
2043	185,672	32,424	823	38,293	118,359	106,601	111%
2044	188,569	32,424	591	66,404	84,969	77,481	110%
2045	191,510	32,424	747	10,663	107,477	105,090	102%
2046	194,498	32,424	626	50,402	90,126	93,351	97%
2047	197,532	32,424	858		123,408	133,208	93%
2048	200,613	32,424	847	34,782	121,897	138,961	88%
2049	203,743	32,424	879	28,818	126,382	151,468	83%

## **Part III - Maintenance Plan Item Inventory - Arbor Ridge P.U.D. Homeowners Association**

### **#1 - Asphalt - Overlay**

*Frequency: 30-40 Months*

Upon replacing the asphalt surface, the surface preparation, materials, and thickness of the overlay should be designed for the climate and traffic anticipated. The surface preparation should be dictated by the distresses that are prevalent in the existing pavement, the degree of roughness, or considerations for curb reveal or surface drainage. A tack coat should always be applied in preparation of a thin overlay on an un-milled surface, although it may not be essential on a milled surface. It may be either modified or unmodified, and the rate of application will be dictated by existing surface requirements. Materials for the overlay should be selected carefully the mixture should be dictated by the planned thickness. Planned seal coat per the manufactures specification may result in an overlay which is viable for thirty years or longer.



### **#2 - Asphalt Repairs - Walkways**

*Frequency: 3-5 Years*

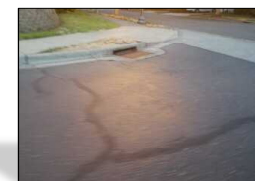
Upon repairing the asphalt surface, the surface preparation, materials, and thickness of the overlay should be designed for the climate and traffic anticipated. The surface preparation should be dictated by the distresses that are prevalent in the existing pavement, the degree of roughness, or considerations for curb reveal or surface drainage. A tack coat should always be applied in preparation of a thin overlay on an un-milled surface, although it may not be essential on a milled surface. It may be either modified or unmodified, and the rate of application will be dictated by existing surface requirements. Materials for the overlay should be selected carefully the mixture should be dictated by the planned thickness. Planned seal coat per the manufactures specification may result in an overlay which is viable for thirty years or longer.



### **#3 - Asphalt Seal Coat & Repairs**

*Frequency: 4-6 Years*

Maintenance of asphalt paving includes the periodic application of an asphalt emulsion sealer or seal coat. Seal coating typically maximizes the life expectancy of the underlying overlay. This process is characteristically performed every 4 to 7 years depending on a variety of factors that can affect the useful life of the sealer. Vehicle traffic is one such variable that carries considerable vehicle traffic should consider a maintenance program that calls for seal coating of asphalt driving surfaces as frequently as every 4 years. This maintenance procedure involves thoroughly cleaning all pavements, filling of any surface cracks, and patching of any locally damaged pavement surfaces. The emulsion sealer is then applied. Parking area demarcation lines will need to be renewed each time a seal coat is applied. The component expense includes the cost of this work as well as the seal coating cost. This work should be performed by a licensed and bonded paving contractor.



## #4 - Backflow Device - Irrigation

*Frequency: 30-45 Months*

The backflow preventer is the single most expensive part of your irrigation system. It is also the first item to be damaged if a system is not properly winterized. A certified professional backflow inspector should examine and provide necessary documentation of the test results as required by many municipal jurisdictions. Typically a properly inspected and maintained backflow device has a life expectancy exceeding 30 years.

## #5 - Backflow Device - Testing

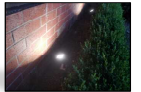
*Frequency: 12 Months*

The law requires that the community association notify the local water provider before removing a backflow assembly. A water provider inspector will need to inspect the plumbing to verify the cross connection has been eliminated. A plumbing permit may be required to perform this type of work. All backflow assembly testing should be performed annually and by a certified contractor.

## #6 - Bark Dust

*Frequency: 2-3 Years*

For weed control and aesthetic purposes, it is recommended to refresh the bark dust beds in the common areas every 2 years or so. Immediately adjacent homeowners should be notified in advance because some people may have an adverse reaction to any bark particles which may fly in the air.



## #7 - Bollards - Common Area

*Frequency: 25-35 Years*

Expect replacement of the various bollards in the common areas every 12-18 years or as needed. Illuminated bollards should have light bulbs replaced as needed by a representative from the community. This individual should be empowered to report and/or replace light bulbs as a safety measure. Upon bollard replacement, a style should be selected that does not allow people to use these assets as t-ball stands as this is a common cause of premature failure/damage to these items.



## #8 - Brick Masonry – Clean & Tuck Repoint

*Frequency: 10 Years*

Repointing is the process of removing deteriorated mortar from the joints of a masonry wall and replacing it with new mortar. Repointing restores the visual and physical integrity of the masonry. Disintegrating mortar, cracks in mortar joints, loose bricks or stones, damp walls, and/or damaged plasterwork may prompt the decision to repoint. Facing these obvious signs of deterioration it is important not to assume that repointing alone will solve. The source cause of the deterioration such as leaking roofs or gutters, differential settlement of the building, capillary action causing rising damp, or extreme weather exposure should always be dealt with prior to the commencement work.

It is essential to ensure that the proposed repointing work is both physically and visually appropriate to the building. Analysis of un-weathered sections of the historic mortar to which the new mortar will be matched can suggest appropriate mixes for the repointing mortar. This measure is critical as to avoid damage to the building because it is excessively strong or vapor impermeable.

The relationship of repointing to other labors proposed on the building must be recognized. For example, if paint removal or cleaning is anticipated, and if the mortar joints are basically sound and need only selective repointing, it is generally better to postpone repointing until after completion of these projects. However, if the mortar has eroded significantly, allowing moisture to penetrate deeply into the wall, repointing should be accomplished before cleaning. Anticipated work, such as roof repairs or structural, should be scheduled so that they do not interfere with repointing. It is important to optimize projects planning in order take maximum advantage of erected scaffolding.

All brickwork and other repairs and maintenance to the brick surface should be performed by a licensed and certified professional.



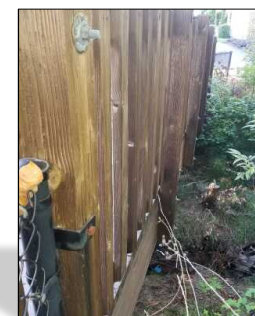
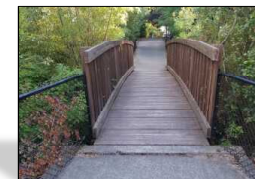
## #9 - Bridge - Wood - Pressure Treated

*Frequency: 25-30 Years*

A wood bridge provides a warm connection with the outdoors, adding to natural area beauty and providing a pathway for transit. But wooden bridges take a lot of abuse, from ongoing use, through continued exposure to weather and possible vandalism. After a few years, without proper care, they become weathered and uninviting.

Fortunately, most wooden bridge surface problems are cosmetic in nature; not structural, because decking is built of durable woods; usually cedar, redwood, or pressure-treated pine. Redwood and cedar heartwoods have a natural resistance to decay and termites; pine is pressure-treated with a pesticide to give it a resilient barrier. Ultraviolet radiation from the sun breaks down surface fibers and lignin, causing surface erosion and graying. Moisture encourages surface mildew and causes stains, particularly in damp or humid climates where surfaces never completely dry. And natural extractives in redwood and cedar can discolor the surface.

The initial steps of restoring a bridge involve cleaning the bridge followed by a diagnostic and treating the discoloration, and then you diagnose and treat any discoloration. Examine the bolts and fastening components carefully and tighten and secure as needed for safety. Finally treat the bridge with a durable finish. If the bridge is crossing a creek or other depression in the earth's surface, beginning be sure to protect the area below it with plastic sheeting or drop cloths.



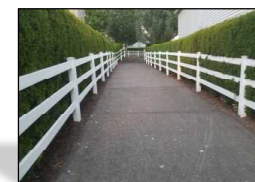
## #10 - Concrete Maintenance

*Frequency: TBD Years*

Concrete is used as a building material in several areas throughout the association including but not limited to; driveway aprons, sidewalks, entry walks, and trash enclosures. Concrete is very durable and is usually very low maintenance as long as it is protected from misuse including but not limited to repeated hosing, radiator overflow, fertilizers or pesticides, and ice-melting agents.

Only use products designed to be used with concrete to melt snow and ice. Avoid using salt or other chemicals not approved for this purpose to melt ice on concrete surfaces. Salt or other chemicals may damage the concrete and shorten its useful life. If the association elects to use such products, the association needs to plan accordingly for possible earlier repairs or replacement.

Schedule and perform concrete surface inspections every season to determine if cracking, fissures, or settlement have occurred. Check for lifting and tripping hazards. Cordon off safety hazards until appropriate repairs have been made. Correct sources of cracking problems such as tree roots and drainage situations. A certified contractor should grind down and replace sections as needed.





## #11 - Fence & Gates-Chain Link

*Frequency: 40-60 Years*

Unlike other types of fencing, chain link fencing requires very little maintenance and upkeep. No staining, painting, or sealing is required to keep a chain link fence looking great. With chain link, a little hosing down or a simple soap and water mix is all you'll need to clean the fence. In addition to requiring little funds and minimal maintenance, chain link fences are very durable. Not only can they withstand blows from flying baseballs and Frisbees, but they are also highly weather-resistant, ensuring that your fencing investment will return many years of increased security and protection.



## #12 - Irrigation Controllers & Valves

*Frequency: 5-10 Years*

When an electrical impulse is transmitted to the solenoid, an electromagnetic field causes a small metal plunger in the solenoid to move upward. When the plunger moves upward, a small hole in the valve is uncovered which allows the water in the chamber above the closing mechanism to flow through the port and out of the valve, relieving water pressure needed to hold the valve closed. The pressure of the incoming flow of water is greater than the pressure in the chamber above the piston, and the force of the water pushing up underneath the piston opens the valve. When the solenoid is de-energized, the plunger moves down, closing the small port. Water flowing through a small hole in the closing mechanism refills the chamber above the piston and builds up pressure. The increased pressure forces the piston downward, thus closing the valve. All valves have a range of pressure and water flow that must be maintained in order to work properly.



## #13 - Irrigation System Startup & Testing

*Frequency: 12 Months*

It is always best to hire a qualified professional contractor when performing tasks like spring start-up. Irrigation contractors are experts in hydraulics, proper sprinkler system layout, plant watering requirements and soil types. Their skills will ensure a water-efficient system and years of trouble-free operation. During spring startup cycle the batteries should be replaced in battery operated controllers.



## #14 - Lights-Entry

*Frequency: 10-20 Years*

Outdoor lighting maintenance involves much more than simply replacing burnt out light bulbs. Lighting maintenance involves optimizing existing equipment configurations so that homeowners can receive the best return on their financial investment possible and maintain the highest value that outdoor lighting brings to their property.

Start by replacing bulbs that have burned out. An easy, fairly low-cost solution is to replace any medium-base incandescent lamps with screw-base CFLs. However, in cold climates CFLs may be less effective as these bulbs require a higher operating temperature.

Consider replacing the fixture with long-lasting HID or LED lamps as their long lifetimes mean they require less frequent replacement, and the ensuing labor savings and lower energy consumption justify the slightly higher initial investment.



## #15 - Lights-Street-Acorn Style

*Frequency: 25-35 Years*

Outdoor lighting maintenance involves much more than simply replacing burnt out light bulbs. Lighting maintenance involves optimizing existing equipment configurations so that homeowners can receive the best return on their financial investment possible and maintain the highest value that outdoor lighting brings to their property.

Start by replacing bulbs that have burned out. An easy, fairly low-cost solution is to replace any medium-base incandescent lamps with screw-base CFLs. However, in cold climates CFLs may be less effective as these bulbs require a higher operating temperature.

Consider replacing the fixture with long-lasting HID or LED lamps as their long lifetimes mean they require less frequent replacement, and the ensuing labor savings and lower energy consumption justify the slightly higher initial investment.



## #16 - Mailbox - Maintenance

*Frequency: 4-6 Years*

Assess overall condition and function of locks, proper lubrication of moving components, cleanliness and appearance of face plates, security of housing, in compliance with current postal regulations, accuracy and visibility of signage/accessibility of lettering, where required, and condition and proper function of slots and depositories for outgoing mail and packages. Evaluate paint on the gang-style cluster mailbox along with the supporting pedestal. Many times the paint is removed on one quadrant of cluster style mailbox pedestals because of dogs urinating on these specific sections.



If replacement is necessary, check with postmaster for proper placement as many times older mailboxes are grandfathered in terms of sidewalk placement but may have stipulations which require movement upon mailbox replacement. All replacements should be coordinated with residents and the postmaster.

## #17 - Mailbox - Replace

*Frequency: 30-50 Years*

Properly maintained mailboxes typically have a life expectancy exceeding thirty years, however if replacement is necessary check with postmaster for proper placement as many times older mailboxes are grandfathered in terms of sidewalk placement but may have stipulations which require movement upon mailbox replacement. All replacements should be coordinated with residents and the postmaster. A clear plan should be in place for key replacement and/or locksmith services in the event that keys are not interchangeable with the new mailbox units. Homeowners should be notified in writing far in advance in order to avoid any confusion.



## #18 - Monument Maintenance

*Frequency: 8-12 Years*

Even though one of the chief advantages of masonry construction is durability; intermittent inspections and maintenance can extend the life of mason work in structures. Generally, if masonry is properly designed, detailed and constructed, it is extremely durable and requires little maintenance. However, many of the other components incorporated in the mason work such as caps, copings, sills, lintels and sealant joints may require periodic examination and repair. Neglecting maintenance of these components may lead to deterioration of other elements in the wall. Maintenance of buildings may be broken into two general categories; general inspection to identify potential problems with the performance of exterior walls; and maintenance to correct problems which may develop.



Timely inspections should be conducted to determine the condition of the various materials used on a structure.. Yearly inspection periods are recommended so that the behavior of building materials in various weather conditions can be noted. Inspection records, including conditions and comments, should be kept to identify changes in materials, potential problems and needed repair. If the structure is painted, the mason work should be examined carefully prior to the paint cycle. It is not all- inclusive; however, it may establish a guideline for use during inspections. Conditions that may necessitate maintenance or repair actions include; efflorescence, spalling, deteriorating mortar joints, interior moisture damage and mold. Once one more of these conditions becomes evident, the origin of the problem should be determined and action taken to correct both the cause and visible effect of the condition. All labor should be performed by licensed and certified contractors. Replace monument lettering and remove graffiti as needed.



## #19 - Retaining Wall Maintenance

*Frequency: TBD Years*

Bricks typically have a life expectancy exceeding thirty years. However bricks tend to "move" over time and require periodic work and cleaning. Bricks may be pushed up by tree roots or just shifted thanks to water runoff and erosion. Bricks should ideally be cleaned carefully with a power washer or a cleaning agent such as 30 Second Cleaner to avoid buildup of moss and algae.



## #20 - Signs - Various

*Frequency: 10-20 Years*

Most of the outdoor street signs will require replacement within 12 – 18 years depending on a variety of factors including but not limited to; theft, graffiti, sun fade, and other considerations. Signs and support poles may become bent by moving vehicles and trash haulers and should be addressed in a timely manner. Replacements should be of a comparable sign and meet DOT specifications and local codes.



## #21 - String Trimming - Pathway

*Frequency: 6-8 Months*

Carefully string trimming in and around the water quality pond should be done as needed to maintain a consistent appearance with the surrounding turf. Debris from such trimming will be removed from pathways and any parking lots and roadways immediately. String trimming shall be completed with adequate care, so as to not damage trees, fencing or other objects.

This line item is for any major work required in maintaining the open spaces in the community.



## #22 - Tree-Maintenance

*Frequency: 6-10 Years*

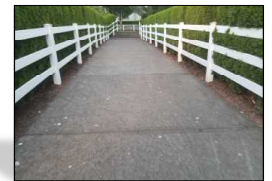
The first pruning of young trees and shrubs always consists of removing broken, crossing, and weak-structured branches. The recommendation to remove one-third of the top to compensate for root loss of balled and bur lapped material at transplanting has been revised. Prune these plants for structural integrity and cosmetic reasons only. Plenty of water during establishment will take care of the root loss problem. Trees with a central leader, such as cedar, sweet gum, or pin oak, may need little or no pruning except to eliminate branches competing with the central leader; these should be shortened. Some pruning may be necessary to maintain desired shape and shorten extra-vigorous shoots on trees that spread. Depending on the species and the desired impact, the height of the lowest branch can be a few inches above the ground.



## #23 - Vinyl Fence

*Frequency: 30-40 Years*

As an alternative to wood, vinyl fence requires no painting or staining. Vinyl fence will keep its superior look for years longer than wood fence with minimal maintenance required. The prices generally are higher than wood fences, however, the concept that it does not need stained, painted or treated in any way will reduce the maintenance and replacement costs over the long term. Vinyl fence is increasingly becoming the preferred choice for homeowners looking for a maintenance-free fence solution. A long-lasting, easy-care alternative to wood, vinyl fence won't rot, warp, peel or splinter. In addition, time won't be wasted or money on sanding, staining or painting every few years. Vinyl also offers excellent weather-ability and is impervious to termites and wood-boring insects that can wreak havoc on a wood fence. Simply spray it with a hose from time to time to maintain its original beauty.



## #24 - Winterize Irrigation System

*Frequency: 12 Months*

As winter approaches it is important to take care to prepare your irrigation system for the coming of cold weather. Water left in an irrigation system can freeze and damage pipes. Compressed air to remove all water from the irrigation system will eliminate risk of damaged pipes. Leave backflow valve in place for the upcoming year.

