



# PROFESSIONAL RESERVE STUDY



## The Summit at Autumn Hills

31312 NE 94<sup>th</sup> Circle, Camas, WA 98607

For:

**The Summit at Autumn Hills  
Homeowners Association**  
c/o Salvatore Fanale  
Road Committee Chair  
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## TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
1.0 EXECUTIVE SUMMARY .....	4
1.1 Disclosures Required by State of WA RCW 64.90.550 .....	4
1.2 General Description of Property .....	4
1.3 Immediate Necessary Capital Expenditures .....	4
Table 1.3: Summary of Immediate Necessary Capital Expenditures .....	4
1.4 Current Status of Capital Reserve Fund .....	5
Table 1.4: Current Status of the Reserve Fund.....	5
1.5 Recommendations and Assumptions for Future Reserve Contributions .....	6
Table 1.5: Recommendations and Assumptions for Future Reserve Contributions.....	6
2.0 RESERVE STUDY BACKGROUND .....	7
2.1 Purpose of This Level 2 Reserve Study .....	7
2.2 Washington State RCW 64.90.550 .....	7
2.3 Scope and Methodology .....	8
2.4 Sources of Information .....	9
2.5 Definitions .....	9
2.6 Frequently Asked Questions About Reserve Studies .....	10
3.0 PHYSICAL ANALYSIS .....	12
3.1 Component Assessment and Valuation .....	12
Table 3.1A: Component Assessment and Valuation .....	13
3.2 Site .....	15
3.3 Structure.....	24
3.4 Roofing .....	24
3.5 Exterior .....	24
3.6 Electrical Systems.....	24
3.7 Plumbing Systems.....	24
3.8 HVAC Systems.....	24
3.9 Elevators .....	24
3.10 Fire Detection and Suppression .....	24
3.11 Common Interior Finishes .....	24
3.12 Miscellaneous Mechanical.....	24
3.13 Amenities .....	24
3.20 Summary of Annual Anticipated Expenses .....	24

4.0 FINANCIAL ANALYSIS .....31

    4.1 Current Financial Information and Current Funding Plan.....31

    4.2 Recommended Reserve Funding Plan .....31

    4.3 Other Required Funding Plan Options.....33

    4.4 Assumptions for Future Interest Rate and Inflation.....34

    4.5 Annual Fund Balances; Annual Funding Table and Figures .....34

        Figure 4.5A-1 Comparison of Funding Plans – Reserve Fund Balances Through 2049..... 41

        Figure 4.5A-2 Comparison of Funding Plans – Reserve Fund Balances Through 2029..... 41

        Figure 4.5B Comparison of Funding Plans -- Association Contributions to Reserve Fund by  
        Year..... 42

        Figure 4.5C Comparison of Funding Plans – Percentage of Full Funding by Year ..... 42

    4.6 Other Common Funding Methods .....43

5.0 LIMITATIONS.....44

APPENDIX.....45

## 1.0 EXECUTIVE SUMMARY

### 1.1 DISCLOSURES REQUIRED BY STATE OF WA RCW 64.90.550

The undersigned makes the following disclosures required by RCW 64.90.550 to establish that this Reserve Study meets all requirements of the Washington Uniform Common Interest Ownership Act, Chapter 64.90 RCW:

- a. This Reserve Study was prepared with the assistance of a reserve study professional and that professional was independent;
- b. This Reserve Study includes all information required by RCW 64.90.550 Reserve Study – Contents; and
- c. 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 the association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement.

### 1.2 GENERAL DESCRIPTION OF PROPERTY

The Summit at Autumn Hills is a neighborhood that consists of 95 single family lots on approximately 500 acres in rural Clark County. This community is north of the City of Camas. There are 3 secured gates at 3 separate entrances to the property and approximately 5 miles of private roads in this community.

Like all properties, the common assets of this neighborhood will require capital maintenance. We have itemized areas of capital maintenance that we anticipate over the next thirty (30) years along with estimated costs and estimated schedule of repair/replacement.

### 1.3 IMMEDIATE NECESSARY CAPITAL EXPENDITURES

Table 1.3 below shows the items that are in need of action immediately or within the near future. This is a summary; all tasks are explained in greater detail in Section 3.0 Physical Analysis.

**Table 1.3: Summary of Immediate Necessary Capital Expenditures**

Component	Cost	Urgency	Section
XXXX			

### 1.4 CURRENT STATUS OF CAPITAL RESERVE FUND

Table 1.4 below shows the current status of the Capital Reserve Fund and how it relates to Full Funding. The current Reserve Fund data was provided to us by Salvatore Fanale.

**Table 1.4: Current Status of the Reserve Fund**

Current Reserve Balance	\$421,491 as of August 31, 2019
Current Annual Reserve Fund Contribution	\$19,000
Average Per Unit Per Month	\$19.67
Planned Special Assessment(s)	N/A
Balance Required for Full Funding	\$944,360
Current Percentage of Full Funding	44.6%

### 1.5 RECOMMENDATIONS AND ASSUMPTIONS FOR FUTURE RESERVE CONTRIBUTIONS

The following table is a summary of our assumptions and several options that we have provided for funding contributions to the Reserve Fund. This is only a summary table; for a detailed view of our recommended funding plans, please see section 4 of this report.

**Table 1.5: Recommendations and Assumptions for Future Reserve Contributions**

Assumed Average Future Inflation Rate over 30 Years	3%
Assumed Average Future Interest Rate over 30 Years	3%
<b>Option 1 – Immediate Full Funding</b>	
Immediate Special Assessment Required <u>IF</u> the Association is to be Fully Funded Immediately	\$522,869
Average Initial Special Assessment per Unit	\$5,504
Annual Reserve Fund Contribution Required for the Reserve Fund to remain Fully Funded	\$99,662
Average Contribution per Unit per Month	\$87.42
<b>Option 2 – Path to Full Funding in 5 Years</b>	
Annual Reserve Fund Contribution Required for the Reserve Fund to be Fully Funded in <u>5 years</u>	\$210,507 of which \$110,845 will be “make-up” funding
Average Contribution per Unit per Month	\$184.66
<b>Option 3 - Path to Full Funding in 10 Years</b>	
Annual Reserve Fund Contribution Required for the Reserve Fund to be Fully Funded in <u>10 years</u>	\$159,172 of which \$59,511 will be “make-up” funding
Average Contribution per Unit per Month	\$139.62
<b>Option 4 - Path to Full Funding in 30 Years*</b>	
Annual Reserve Fund Contribution Required for the Reserve Fund to be Fully Funded in <u>30 years</u>	\$125,561 of which \$25,899 will be “make-up” funding
Average Contribution per Unit per Month	\$110.14
<b>Option 5 – Baseline Funding*</b>	
Annual Reserve Fund Contribution Required for Baseline Funding (Keeping the Reserve Fund above Zero over the 30 Year Period)	\$115,000
Average Contribution per Unit per Month	\$100.88

*\*These funding levels are required by WA State RCW 64.90.550. They are “bare minimum” funding plans and therefore carry a higher level of risk. Because of this, they are not recommended by Jeff Samdal & Associates.*

## 2.0 RESERVE STUDY BACKGROUND

### 2.1 PURPOSE OF THIS LEVEL 2 RESERVE STUDY

The primary purpose of this Level 2 Reserve Study is to provide the Association with a planning and budgeting tool to adequately maintain the property 30 years into the future without unexpected special assessments. This study is intended to provide the Association with an understanding of their property and to bring to light necessary immediate expenditures and reasonably anticipated future capital expenses that should be addressed.

Associations have a responsibility to their members to adequately maintain their properties and our Reserve Studies provide our clients with the tools to implement capital maintenance. When small issues and maintenance items are addressed prior to becoming larger problems, there is typically a significant overall savings for a property owner. Properly maintained properties maintain higher property values than those with an abundance of deferred maintenance.

An additional benefit of this Reserve Study is that it is one of the qualifications required for Associations to obtain FHA approval (which is very helpful in selling or refinancing individual lots). Many other sources of funding are also beginning to require them as well.

### 2.2 WASHINGTON STATE RCW 64.90.550

As of July 1, 2018, WA State RCW 64.90.550 defined a Reserve Study in WA State as the following:

- (1) Any reserve study is supplemental to the association's operating and maintenance budget.
- (2) A reserve study must include:
  - (a) A reserve component list, including any reserve component, the replacement cost of which exceeds one percent of the annual budget of the association, excluding contributions to the reserves for that reserve component. If one of these reserve components is not included in the reserve study, the study must explain the basis for its exclusion. The study must also include quantities and estimates for the useful life of each reserve component, the remaining useful life of each reserve component, and current major replacement costs for each reserve component;
  - (b) The date of the study and a disclosure as to whether the study meets the requirements of this section;
  - (c) The following level of reserve study performed:
    - (i) Level I: Full reserve study funding analysis and plan;
    - (ii) Level II: Update with visual site inspection; or
    - (iii) Level III: Update with no visual site inspection;
  - (d) The association's reserve account balance;
  - (e) The percentage of the fully funded balance to which the reserve account is funded;
  - (f) Special assessments already implemented or planned;
  - (g) Interest and inflation assumptions;
  - (h) Current reserve account contribution rates for a full funding plan and a baseline funding plan;
  - (i) A recommended reserve account contribution rate for a full funding plan to achieve one hundred percent fully funded reserves by the end of the thirty-year study period, a recommended reserve account contribution rate for a baseline funding plan to maintain the reserve account balance above zero throughout the thirty-year study period without special assessments, and a reserve account contribution rate recommended by the reserve study professional;
  - (j) A projected reserve account balance for thirty years based on each funding plan presented in the reserve study;

This reserve study meets the qualifications of WA State RCW 64.90.550

(k) A disclosure on whether the reserve study was prepared with the assistance of a reserve study professional, and whether the reserve study professional was independent; and

(l) A statement of the amount of any current deficit or surplus in reserve funding expressed on a dollars per unit basis. The amount is calculated by subtracting the association's reserve account balance as of the date of the study from the fully funded balance, and then multiplying the result by the fraction or percentage of the common expenses of the association allocable to each unit; except that if the fraction or percentage of the common expenses of the association allocable vary by unit, the association must calculate any current deficit or surplus in a manner that reflects the variation.

(3) A reserve study must also include the following disclosure:

"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 the association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement."

## 2.3 SCOPE AND METHODOLOGY

This Level 2 Reserve Study has been prepared based on Community Associations Institute (CAI) standards and our proposal to the Association dated March 29, 2019, which was based on our correspondence with Salvatore Fanale and the previous Reserve Studies that we have prepared for this Association.

### Information Gathering

Our initial task was to gather information regarding the property such as financials, drawings, maintenance records, and historical background. This Reserve Study is a reflection of the information provided to us.

### Physical Analysis

Following the initial correspondence regarding the property, we performed an inspection of the property on November 14, 2019 so that we may provide an opinion of the current condition of the common building components. This is also the basis for our opinion of the anticipated capital needs that the Association will be responsible for over the next 30 years. This was a visual inspection and no invasive or destructive testing was performed. This visual inspection focused on the common assets of the Association, particularly the roads. This inspection was limited to accessible and visible areas.

The physical analysis included the following tasks:

**1. Identification of Anticipated Capital Expenses:** We consider anticipated capital expenses to be major expenses that can be reasonably predicted. Anticipated capital expenses are not considered routine maintenance such as routine landscaping or touch-up paint; routine maintenance should be taken care of through an operating budget. Nor do we consider anticipated capital needs to be expenditures that result from an accident or an unpredictable event, such as flood damage or earthquake damage; these items should be paid for by insurance.

The general criteria that we used to define an anticipated capital expense that warranted inclusion on our Itemized capital expenses is the following:

- The component must be a common component that is the responsibility of the Association.
- Repair or replacement of the component is significant and not budgeted for in the operating budget.
- The component repair or replacement occurs within the period of this study.

**2. Estimated Replacement Schedule:** Our opinions of the various life expectancy estimates that we prepared are based on a combination of the following:

- National Association of Home Builders (NAHB) averages



- Building Owners and Managers (BOMA) averages
- Product vendors and suppliers
- Our company database

**3. Estimated Replacement Cost:** Our opinions of the various costs for repair or replacement are based on a combination of the following:

- R.S. Means
- Product vendors and suppliers
- Our company database

**4. Financial Analysis:** We performed an analysis on the financial needs and current status at the property. The financial analysis provides the following:

- Forecasts the anticipated Capital Reserves necessary at the property over the next 30 years.
- Projects future Capital Reserve balances and determines the appropriate funding levels necessary.
- Reviews the current funding plan and current financial position.
- Provides our recommended annual contribution to the Reserve Fund to maintain Full Funding.

## 2.4 SOURCES OF INFORMATION

The following people provided us information for this study:

- Salvatore Fanale, Road Committee Chairperson

The following documents were viewed as part of this study

- Summit at Autumn Hills Map
- 2019 SAHA Financials, dated August 31, 2019
- List of Historical Asphalt Repair Costs, from Salvatore Fanale

The physical inspection of the property occurred on the following date:

- November 14, 2019

## 2.5 DEFINITIONS

**Assumed Inflation** - Our assumed inflation rate is our best guess of the long term average of the inflation rate over the next thirty years; it is not based on the current Consumer Price Index (CPI). Our number is much closer to the historical average of the CPI over the previous 25 years.

**Capital Reserves Balance** - Actual or projected funds as of a particular point in time that the Association has identified for use to defray the future repair or replacement of those major components which the Association is obligated to maintain. Also known as reserves, reserve accounts, cash reserves.

**Component** - An individual line item in the Reserve Study developed or updated in the physical analysis. These elements form the building blocks of the Reserve Study. Components typically are: 1) Association responsibility, 2) with limited useful life expectancies, 3) predictable remaining useful life expectancies, 4) above a minimum threshold cost, and 5) as required by local codes.

**Component Inventory** - The task of selecting and quantifying reserve components. This task is accomplished through onsite visual observations, review of Association design and organizational documents, and a review of established Association precedents.

**Deficit** - An actual (or projected) reserve balance less than the fully funded balance. The opposite would be a surplus.

**Effective Age** - The difference between useful life and remaining useful life. Not always equivalent to chronological age, since some components age irregularly. Used primarily in computation.

**Financial Analysis** - The portion of a Reserve Study where current status of the reserves measured as cash or percent funded) and a recommended reserve contribution rate (reserve funding plan) are derived. The financial analysis is one of the two parts of a Reserve Study.

**Fully Funded** - 100% funded. When the actual (or projected) reserve balance is equal to the fully funded balance.

**Fully Funded Balance (FFB)** - Total accrued depreciation. An indicator against which actual (or projected) reserve balance can be compared. In essence, it is the reserve balance that is proportional to the current Repair/replacement cost and the fraction of life "used up". This number is calculated for each component, then summed together for an Association total.

**Percent Funded** - The ratio, at a particular point of time (typically the beginning of the fiscal year), of the actual (or projected) reserve balance to the fully funded balance, expressed as a percentage.

**Special Assessment** - An assessment levied on the members of an Association in addition to regular assessments. Special assessments are often regulated by governing documents or local statutes.

## 2.6 FREQUENTLY ASKED QUESTIONS ABOUT RESERVE STUDIES

### What is a reserve study?

Reserve studies are comprehensive reports that are used as budget planning tools that will assess the current financial health of the reserve fund as well as create a plan for future funding to offset anticipated major future common area expenditures.

According to *Community Association Institute's Best Practices, Reserve Studies/Management*: "There are two components of a reserve study—a physical analysis and a financial analysis. During the physical analysis, a reserve 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. A financial analysis assesses only the association's reserve balance or fund status (measured in cash or as percent funded) to determine a recommendation for an appropriate reserve contribution rate (funding plan)."

### What are the different types of reserve studies?

Reserve studies fit into one of three categories: Full; Update with Site Visit; and Update with No Site Visit. They are frequently called Level 1, Level 2, and Level 3 respectively (as defined by Washington State RCW 64.90.550).

**Level 1: 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 a funding plan. They typically extend 30-years. A full reserve study must be in place before a Level 2 or Level 3 can take place.

**Level 2: An update with site visit (on-site review)** -- the reserve study provider conducts a component inventory (verification only, not quantification), a condition assessment (based on on-site visual observations), and life and valuation estimates to determine both a fund status and a funding plan. A Level 2 update is performed every third year, with the first one scheduled 3 years after the Level 1 was completed.

**Level 3: An update with no site visit (off-site review)** -- the reserve study provider conducts life and valuation estimates to determine a fund status and a funding plan. A Level 3 update is performed annually, except in years when a Level 1 or Level 2 has been conducted.

## When should associations obtain reserve studies?

Most association experts would agree that an initial full 30-year reserve study should be conducted sooner rather than later if one is not already in place. They are typically updated annually after that to account for things such as inflation and any adjustments in funding levels, budgets, repairs or replacements.

If you follow Washington State RCW 64.90.555 (which we recommend), your reserve study schedule would look like this:

- Year 1: Level 1 full 30-year study
- Years 2, 3: Level 3 annual updates
- Year 4: Level 2 update with site visit
- Years 5, 6: Level 3 annual updates
- Year 7: Level 2 update with site visit

The cycle of Level 2 and Level 3 updates continues indefinitely. A Level 1 full study is not necessary after year 1.

## What are the benefits of a Reserve Study?

Benefits of reserve studies, in short, include improved property maintenance (and therefore value) as well as complying with the law. In more detail:

### Complying with Washington State law

View the rules regarding Reserve Studies and Reserve Accounts here:

<http://app.leg.wa.gov/RCW/default.aspx?cite=64.90> - Sections 535, 540, 545, 550, 555, and 560

### Fulfilling lender requirements (such as FHA)

Many lenders are requiring up-to-date reserve studies that indicate adequate financial health before they lend. Having a reserve study in place that shows a healthy funding plan before a homeowner finds a buyer could save significant time in the closing process.

### Help maintain the property's value and appearance

A reserve study helps maintain the property's value and the property owner's investment. By identifying and budgeting for future repairs or replacement (anticipated capital expenditures), the property's common elements continue to look attractive and well-kept, adding to the community's overall quality of life. Many features, when properly maintained, can also benefit from an extended lifespan resulting in overall cost savings to the owners. Well maintained properties almost always have higher resale values than those that have been neglected.

### Establishing sound financial planning and budget direction

A comprehensive reserve study lays out a schedule of anticipated major repairs or replacements to common property elements and applies cost estimates to them. It typically spans a 30-year period, and will serve as a financial planning tool for the association to use when determining homeowners dues and contributions to the reserve fund.

### Reducing the need for special assessments

An association that has properly implemented their reserve study will strategically collect fees over time from homeowners (via monthly dues) rather than need large sums of cash unexpectedly (special assessments). Therefore, the need for special assessments should be minimized because expenses have already been planned for and the funds exist when needed.

### Fulfilling the board of directors' fiduciary responsibility

Board members of community associations have a fiduciary responsibility to their members. Directors are legally bound to use sound business judgment in guiding the association and cannot ignore major capital expenditures or eliminate them from the budget.

### 3.0 PHYSICAL ANALYSIS

#### 3.1 COMPONENT ASSESSMENT AND VALUATION

The component assessment and valuation of the itemized capital expenses on this property was done by providing our opinion of Useful Life, Remaining Useful Life, and Repair or Replacement Costs for the Reserve components. Table 3.1A lists this component inventory, and is based on the information that we were provided and on onsite visual observations.

The remainder of “Section 3.0 Physical Analysis” details each of the items in Table 3.1A using narratives and photos. They are meant to be read together.

Table 3.1B is a summary of expenses, grouped according to their expense category. Chart 3.1B is a pie chart illustrating the same.

#### Table 3.1A Key:

**Quantity** - The total quantity of each component.

**Units** - SF = Square Feet                      SY = Square Yards                      LF = Lineal Feet  
EA = Each                      LS = Lump Sum

**Cost/Unit** - The cost of a component. The unit cost is multiplied by the component’s quantity to obtain the total estimated replacement cost for the component.

**Remaining Life** – An opinion of the probable remaining life, in years, that a reserve component can be expected to continue to serve its intended function. Replacements anticipated to occur in the initial or base year have “zero” Remaining Life.

**Useful Life** - Total Useful Life or Depreciable Life. An opinion of the total probable life, in years, that a reserve component can be expected to serve its intended function in its present condition.

**Table 3.1A: Component Assessment and Valuation**

Note: All numbers provided are the engineer's opinion of probable life and cost in 2019 dollars. Exact numbers may vary.

	Component	Quantity	Units	Cost/Unit	Remaining Life (Years)	Useful Life (Years)	Total Cost	Cost per Unit	Avg. Cost per Unit per Year
<b>3.2</b>	<b>SITE</b>								
	Electrostatically paint all 3 metal gates	1	LS	\$6,500	1	5	\$6,500	\$68	\$13.68
	Clean and seal brick masonry at entrance gate #1 and gate #3	1	LS	\$9,000	1	10	\$9,000	\$95	\$9.47
	Replace Elite gate operators at gate #1	2	EA	\$4,500	8	12	\$9,000	\$95	\$7.89
	Replace Elite gate operators at gate #2	1	EA	\$4,500	8	12	\$4,500	\$47	\$3.95
	Replace Elite gate operators at gate #3	2	EA	\$4,500	3	12	\$9,000	\$95	\$7.89
	Replace control panel at gate #1	1	EA	\$3,000	11	15	\$3,000	\$32	\$2.11
	Replace control panel at gate #3	1	EA	\$3,000	6	15	\$3,000	\$32	\$2.11
	Replace the entrance sign	1	EA	\$2,500	18	40	\$2,500	\$26	\$0.66
	Replace the metal mailbox kiosks	6	EA	\$1,700	13	25	\$10,200	\$107	\$4.29
	Replace the pole mounted lights	6	EA	\$4,500	18	40	\$27,000	\$284	\$7.11
	Surveillance system upgrade allotment	1	LS	\$10,000	1	5	\$10,000	\$105	\$21.05
	Replace 3 trail bridges	3	EA	\$4,500	4	15	\$13,500	\$142	\$9.47
	Asphalt patching	7,000	SF	\$5.04	1	1	\$35,280	\$371	\$371.37
	Rubber crack sealing	1	LS	\$10,000	1	1	\$10,000	\$105	\$105.26
	Asphalt overlay - NE Livingston Mountain Road (Phase 3 & 4)	66,375	SF	\$2.85	8	30	\$189,169	\$1,991	\$66.38
	Asphalt overlay - Spud Mountain Road (Phase 1, 2, & 3)	162,805	SF	\$2.85	18	40	\$463,994	\$4,884	\$122.10
	Asphalt overlay - NE Livingston Mountain Circle (Phase 3)	59,005	SF	\$2.85	19	40	\$168,164	\$1,770	\$44.25
	Asphalt overlay - NE 85th Circle, NE 297th Court, and NE 298th Court (Phase 4)	102,405	SF	\$2.85	20	40	\$291,854	\$3,072	\$76.80
	Asphalt overlay - NE Livingston Mountain Court, NE 92nd Circle (Phase 1 & 3)	85,760	SF	\$2.85	21	40	\$244,416	\$2,573	\$64.32
	Asphalt overlay - NE 312th Avenue, NE 94th Circle, NE 90th Circle (Phase 5)	104,450	SF	\$2.85	22	40	\$297,683	\$3,134	\$78.34
	<i>Periodic street sign replacement and trail sign replacement assumed to be paid for via the operating budget.</i>								
	<i>General trail maintenance assumed to be paid for via the operating budget.</i>								
	<i>Road marker replacement assumed to be paid for via the operating budget.</i>								
	<i>Perimeter chain link fencing owned entirely by neighboring property</i>								
	<i>Underground utilities assumed to have a lifespan well beyond the 30-year duration of this study</i>								

Component	Quantity	Units	Cost/Unit	Remaining Life (Years)	Useful Life (Years)	Total Cost	Cost per Unit	Avg. Cost per Unit per Year
<b>3.3 STRUCTURE</b>								
	<i>There are no common structures in this development</i>							
<b>3.4 ROOFING</b>								
	<i>There are no common roofs in this development</i>							
<b>3.5 EXTERIOR</b>								
	<i>There are no common exteriors in this development</i>							
<b>3.6 ELECTRICAL SYSTEMS</b>								
	<i>There are no common electrical expenditures within the duration of this report</i>							
<b>3.7 PLUMBING SYSTEMS</b>								
	<i>There are no common plumbing expenditures within the duration of this report</i>							
<b>3.8 HVAC SYSTEMS</b>								
	<i>There are no common HVAC systems in this development</i>							
<b>3.9 ELEVATORS</b>								
	<i>There are no common elevators in this development</i>							
<b>3.10 FIRE DETECTION &amp; SUPPRESSION</b>								
	<i>There are no common fire protection systems in this development</i>							
<b>3.11 COMMON INTERIOR FINISHES</b>								
	<i>There are no common interior areas in this development</i>							
<b>3.12 MISCELLANEOUS MECHANICAL</b>								
	<i>There are no miscellaneous mechanical items not mentioned in other areas of this table</i>							
<b>3.13 AMENITIES</b>								
	<i>There are no amenities not mentioned in other areas of this table</i>							
<b>Average Cost Per Unit Per Year</b>								<b>\$1,019</b>

### 3.2 SITE

The address of this property is 7900 NE 298<sup>th</sup> Court, Camas, WA 98607.



Aerial image of property (courtesy of Google Earth)

#### **General Description of Site**

The Summit at Autumn Hills is a neighborhood that consists of 95 single family lots on approximately 500 acres in rural Clark County. This community is north of the City of Camas. There are 3 secured gates at 3 separate entrances to the property and approximately 5 miles of private roads in this community.

### Entrance Gates and Property Sign

There are three entrance gates in this neighborhood. The three entrance gates are the following:

Gate #1 (The Main Entrance Gate) consists of a brick wall and brick pillars and two swinging metal gates that are operated by two Elite gate operators. We understand that the gate was recently replaced do to vehicle damage. We understand that the gate control panel was largely replaced with all new components in 2014.

Gate #2 is a steel swinging gate constructed of steel square tubing that is operated by one Elite gate operator. We understand that this gate was installed in 2014.

Gate #3 consists of two brick pillars that act as fulcrum points for two swinging metal gates. These gates are operated by two Elite gate operators. There is an additional brick pillar with a gate control panel mounted to it.

The gates themselves should have a long lifespan and we have not budgeted for the replacement of the actual gates in the Reserve Study. Any future vehicle damage that occurs to these gates should be paid for by insurance of the driver that causes damage. We do recommend that the metal gates be electrostatically coated every 5 years to minimize corrosion

There are a total of two control panels and 5 Elite gate operators. We have budgeted for the control panels to be replaced on a 15 year cycle going forward. Additionally, we have budgeted for the gate operators to be replaced on a 12-year life cycle.

We have budgeted for the brick entrance monuments to be cleaned and sealed with a Siloxane water based masonry sealant every 10 years. This will also require minor tuck-pointing in the masonry.



Main Gate Brick Wall and Concrete Cap



Main Gate Brick Wall and Concrete Cap



Both Swinging Gates at Gate #3



One of Two Gate Operators at Gate #3





Both Swinging Gates at Main Gate



Electrical Breaker Panel and Meter at Gate #1



Gate #2



Gate #2 Operator

### Mailboxes

There are six metal mailbox kiosks at the main entrance to this neighborhood. These metal mailbox kiosks are generally in good condition. These metal mailbox kiosks have a typical lifespan of 25 years.



Mailboxes

### Pole Mounted Lights

There are 3 pole mounted lights near gate #1 at the main entrance to this neighborhood, one light at gate #2, and two lights at gate #3. These lights are the responsibility of the homeowners association to maintain. We have estimated that these lights will have a lifespan of 40 years.



One of Six Pole Mounted Lights

### Surveillance System

There is a surveillance system at gate #1 and at gate #3. We understand that this system is antiquated and there is a desire to upgrade this system within the near future to a more usable system with clearer images. We have budgeted for a periodic surveillance system upgrade allotment of \$10,000 every 5 years starting in 2020.



Surveillance Camera at Main Gate

### Road Signs and Trail Signs

There are numerous road signs and trail signs located throughout this development that include stop signs, speed limit signs, and trail marker signs. Generally the street signs are in good condition. We have not budgeted for any sign maintenance or replacement in this study, as we have assumed that sign replacement will be paid for via the operating budget.



Trail Sign



Road Sign

### Trail Bridges

There are 3 trail bridges that are part of the trail system. We understand that these trail bridges were constructed around 2008. We have assumed that these trail bridges will have a total lifespan of 15 years.



One of Three Trail Bridges

### Trail System

There is a trail system in this development that we understand consists of almost 4 miles of trails. Beyond the ultimate replacement of the 3 trail bridges, the trail system is maintained entirely via the general operating budget. Therefore, no funding has been budgeted for this trail system in the Reserve Study outside of the 3 bridges.



Typical Trail



Typical Trail

### Private Roads

The asphalt roads throughout The Summit at Autumn Hills are privately owned by the homeowners association. We understand that the roads were paved in phases with Phase 5 being the newest area of roads.

The roads committed has been very aggressive in recent years replacing extensive areas of their roads; however, this Association is of an age that there are many more areas to replace and have rubber crack sealing. Therefore, in order to stay in step with reality at this property, we have budgeted for an annual asphalt patching allotment that is much higher than we have budgeted for in the past.

There are approximately 5 miles of roads for an approximate total of 580,800 square feet of asphalt on this property. We have budgeted for overlaying the roads with a 2-inch asphalt overlay in sections, with asphalt life cycles that correspond to the amount of use. We have divided the overlay projects into 6 phases in order to spread the cost of asphalt overlays across several years to help miter the financial burden on the Association as a whole. The intervals that we believe are most appropriate are the following:

- NE Livingston Mountain Road (Phase 3 & 4) – South of Intersection with Livingston Mountain Circle: Asphalt overlay every 30 years
- Spud Mountain Road (Phase 1, 2, & 3): Asphalt overlay every 30 years
- NE Livingston Mountain Circle (Phase 3): Asphalt overlay every 40 years
- NE 85<sup>th</sup> Circle, NE 297<sup>th</sup> Court, and NE 298<sup>th</sup> Court (Phase 4): Asphalt overlay every 40 years
- NE Livingston Mountain Court, NE 92<sup>nd</sup> Circle (Phase 1 & 3): Asphalt overlay every 40 years
- NE 312<sup>th</sup> Avenue, NE 94<sup>th</sup> Circle, NE 90<sup>th</sup> Circle (Phase 5): Asphalt overlay every 40 years



Road Just Inside Main Gate



Typical Asphalt Cracking



Typical Area of Asphalt Damage in Need of Repair



Typical Area of Asphalt Damage in Need of Repair



Typical Area of Asphalt Damage



Typical Area of Asphalt Damage



Newly Patched Area of Asphalt



Cul-de-sac in Relatively Good Condition

### Road Markers

There are road marker poles located throughout the development. We understand that these road markers are in place to help drivers stay on the road during times of heavy fog. We understand from the roads committee that these road markers are replaced as necessary via the general operating budget as they are relatively inexpensive.



Typical Road Marker



Typical Road Marker

### Chain Link Fencing

There is chain link fencing along the perimeter of this development that is owned entirely by the neighboring property. Therefore, no funding has been allotted to replace this chain link fencing.



East Chain Link Fence Owned by Neighboring Property

### **3.3 STRUCTURE**

*There are no common structures in this development.*

### **3.4 ROOFING**

*There are no common roofs in this development.*

### **3.5 EXTERIOR**

*There are no common exteriors in this development.*

### **3.6 ELECTRICAL SYSTEMS**

*There are no common electrical systems in this development.*

### **3.7 PLUMBING SYSTEMS**

*There are no common plumbing systems in this development.*

### **3.8 HVAC SYSTEMS**

*There are no common HVAC systems in this development.*

### **3.9 ELEVATORS**

*There are no elevators in this development.*

### **3.10 FIRE DETECTION AND SUPPRESSION**

*There are no common fire detection and suppression systems in this development.*

### **3.11 COMMON INTERIOR FINISHES**

*There are no common interior areas in this development.*

### **3.12 MISCELLANEOUS MECHANICAL**

*There are no common miscellaneous mechanical items in this development.*

### **3.13 AMENITIES**

*There are no amenities on this property that are not accounted for in other sections of this report.*

### **3.20 SUMMARY OF ANNUAL ANTICIPATED EXPENSES**

Using the conclusions described throughout “Section 3.0 Physical Analysis”, the following Table 3.20 lists the annual anticipated capital expenses for each reserve item in the year that we believe is most probable. All of these anticipated expenses already have inflation factored into them at the assumed level that is listed in “Section 4.3 Assumptions for Future Interest Rate and Inflation”.





LEVEL 2 RESERVE STUDY FOR THE SUMMIT AT AUTUMN HILLS HOMEOWNERS ASSOCIATION

**TABLE 3.20: ANNUAL CAPITAL EXPENSES**

Action Required		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<b>3.3</b>	<b>STRUCTURE</b>													
	<i>There are no common structures in this development</i>													
<b>3.4</b>	<b>ROOFING</b>													
	<i>There are no common roofs in this development</i>													
<b>3.5</b>	<b>EXTERIOR</b>													
	<i>There are no common exteriors in this development</i>													
<b>3.6</b>	<b>ELECTRICAL SYSTEMS</b>													
	<i>There are no common electrical expenditures within the duration of this report</i>													
<b>3.7</b>	<b>PLUMBING SYSTEMS</b>													
	<i>There are no common plumbing expenditures within the duration of this report</i>													
<b>3.8</b>	<b>HVAC SYSTEMS</b>													
	<i>There are no common HVAC systems in this development</i>													
<b>3.9</b>	<b>ELEVATORS</b>													
	<i>There are no common elevators in this development</i>													
<b>3.10</b>	<b>FIRE DETECTION &amp; SUPPRESSION</b>													
	<i>There are no common fire protection systems in this development</i>													
<b>3.11</b>	<b>COMMON INTERIOR FINISHES</b>													
	<i>There are no common interior areas in this development</i>													
<b>3.12</b>	<b>MISCELLANEOUS MECHANICAL</b>													
	<i>There are no miscellaneous mechanical items not mentioned in other areas of this table</i>													
<b>3.13</b>	<b>AMENITIES</b>													
	<i>There are no amenities not mentioned in other areas of this table</i>													
<b>ANNUAL EXPENSES BY YEAR</b>		<b>\$0</b>	<b>\$72,903</b>	<b>\$48,038</b>	<b>\$59,313</b>	<b>\$66,157</b>	<b>\$52,492</b>	<b>\$77,351</b>	<b>\$55,689</b>	<b>\$314,094</b>	<b>\$59,080</b>	<b>\$60,853</b>	<b>\$102,129</b>	<b>\$64,558</b>

LEVEL 2 RESERVE STUDY FOR THE SUMMIT AT AUTUMN HILLS HOMEOWNERS ASSOCIATION

**TABLE 3.20: ANNUAL CAPITAL EXPENSES**

Action Required		2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
<b>3.2</b>	<b>SITE</b>													
	Electrostatically paint all 3 metal gates				\$10,431					\$12,092				
	Clean and seal brick masonry at entrance gate #1 and gate #3									\$16,743				
	Replace Elite gate operators at gate #1								\$16,255					
	Replace Elite gate operators at gate #2								\$8,128					
	Replace Elite gate operators at gate #3			\$14,022										
	Replace control panel at gate #1													
	Replace control panel at gate #3									\$5,581				
	Replace the entrance sign						\$4,256							
	Replace the metal mailbox kiosks	\$14,979												
	Replace the pole mounted lights						\$45,966							
	Surveillance system upgrade allotment				\$16,047					\$18,603				
	Replace 3 trail bridges							\$23,672						
	Asphalt patching	\$51,810	\$53,364	\$54,965	\$56,614	\$58,312	\$60,062	\$61,864	\$63,720	\$65,631	\$67,600	\$69,628	\$71,717	\$73,868
	Rubber crack sealing	\$14,685	\$15,126	\$15,580	\$16,047	\$16,528	\$17,024	\$17,535	\$18,061	\$18,603	\$19,161	\$19,736	\$20,328	\$20,938
	Asphalt overlay - NE Livingston Mountain Road (Phase 3 & 4)													
	Asphalt overlay - Spud Mountain Road (Phase 1, 2, & 3)						\$789,919							
	Asphalt overlay - NE Livingston Mountain Circle (Phase 3)							\$294,877						
	Asphalt overlay - NE 85th Circle, NE 297th Court, and NE 298th Court (Phase 4)								\$527,121					
	Asphalt overlay - NE Livingston Mountain Court, NE 92nd Circle (Phase 1 & 3)									\$454,686				
	Asphalt overlay - NE 312th Avenue, NE 94th Circle, NE 90th Circle (Phase 5)										\$570,390			

LEVEL 2 RESERVE STUDY FOR THE SUMMIT AT AUTUMN HILLS HOMEOWNERS ASSOCIATION

**TABLE 3.20: ANNUAL CAPITAL EXPENSES**

Action Required		2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
<b>3.3</b>	<b>STRUCTURE</b>													
	<i>There are no common structures in this development</i>													
<b>3.4</b>	<b>ROOFING</b>													
	<i>There are no common roofs in this development</i>													
<b>3.5</b>	<b>EXTERIOR</b>													
	<i>There are no common exteriors in this development</i>													
<b>3.6</b>	<b>ELECTRICAL SYSTEMS</b>													
	<i>There are no common electrical expenditures within the duration of this report</i>													
<b>3.7</b>	<b>PLUMBING SYSTEMS</b>													
	<i>There are no common plumbing expenditures within the duration of this report</i>													
<b>3.8</b>	<b>HVAC SYSTEMS</b>													
	<i>There are no common HVAC systems in this development</i>													
<b>3.9</b>	<b>ELEVATORS</b>													
	<i>There are no common elevators in this development</i>													
<b>3.10</b>	<b>FIRE DETECTION &amp; SUPPRESSION</b>													
	<i>There are no common fire protection systems in this development</i>													
<b>3.11</b>	<b>COMMON INTERIOR FINISHES</b>													
	<i>There are no common interior areas in this development</i>													
<b>3.12</b>	<b>MISCELLANEOUS MECHANICAL</b>													
	<i>There are no miscellaneous mechanical items not mentioned in other areas of this table</i>													
<b>3.13</b>	<b>AMENITIES</b>													
	<i>There are no amenities not mentioned in other areas of this table</i>													
<b>ANNUAL EXPENSES BY YEAR</b>		<b>\$81,474</b>	<b>\$68,490</b>	<b>\$84,566</b>	<b>\$99,139</b>	<b>\$74,841</b>	<b>\$917,227</b>	<b>\$397,948</b>	<b>\$633,284</b>	<b>\$591,938</b>	<b>\$657,152</b>	<b>\$89,364</b>	<b>\$92,045</b>	<b>\$94,806</b>

LEVEL 2 RESERVE STUDY FOR THE SUMMIT AT AUTUMN HILLS HOMEOWNERS ASSOCIATION

**TABLE 3.20: ANNUAL CAPITAL EXPENSES**

Action Required		2045	2046	2047	2048	2049
<b>3.2</b>	<b>SITE</b>					
	Electrostatically paint all 3 metal gates	\$14,018				
	Clean and seal brick masonry at entrance gate #1 and gate #3					
	Replace Elite gate operators at gate #1					
	Replace Elite gate operators at gate #2					
	Replace Elite gate operators at gate #3		\$19,992			
	Replace control panel at gate #1	\$6,470				
	Replace control panel at gate #3					
	Replace the entrance sign					
	Replace the metal mailbox kiosks					
	Replace the pole mounted lights					
	Surveillance system upgrade allotment	\$21,566				
	Replace 3 trail bridges					
	Asphalt patching	\$76,085	\$78,367	\$80,718	\$83,140	\$85,634
	Rubber crack sealing	\$21,566	\$22,213	\$22,879	\$23,566	\$24,273
	Asphalt overlay - NE Livingston Mountain Road (Phase 3 & 4)					
	Asphalt overlay - Spud Mountain Road (Phase 1, 2, & 3)					
	Asphalt overlay - NE Livingston Mountain Circle (Phase 3)					
	Asphalt overlay - NE 85th Circle, NE 297th Court, and NE 298th Court (Phase 4)					
	Asphalt overlay - NE Livingston Mountain Court, NE 92nd Circle (Phase 1 & 3)					
	Asphalt overlay - NE 312th Avenue, NE 94th Circle, NE 90th Circle (Phase 5)					

**TABLE 3.20: ANNUAL CAPITAL EXPENSES**

Action Required		2045	2046	2047	2048	2049
<b>3.3</b>	<b>STRUCTURE</b>					
	<i>There are no common structures in this development</i>					
<b>3.4</b>	<b>ROOFING</b>					
	<i>There are no common roofs in this development</i>					
<b>3.5</b>	<b>EXTERIOR</b>					
	<i>There are no common exteriors in this development</i>					
<b>3.6</b>	<b>ELECTRICAL SYSTEMS</b>					
	<i>There are no common electrical expenditures within the duration of this report</i>					
<b>3.7</b>	<b>PLUMBING SYSTEMS</b>					
	<i>There are no common plumbing expenditures within the duration of this report</i>					
<b>3.8</b>	<b>HVAC SYSTEMS</b>					
	<i>There are no common HVAC systems in this development</i>					
<b>3.9</b>	<b>ELEVATORS</b>					
	<i>There are no common elevators in this development</i>					
<b>3.10</b>	<b>FIRE DETECTION &amp; SUPPRESSION</b>					
	<i>There are no common fire protection systems in this development</i>					
<b>3.11</b>	<b>COMMON INTERIOR FINISHES</b>					
	<i>There are no common interior areas in this development</i>					
<b>3.12</b>	<b>MISCELLANEOUS MECHANICAL</b>					
	<i>There are no miscellaneous mechanical items not mentioned in other areas of this table</i>					
<b>3.13</b>	<b>AMENITIES</b>					
	<i>There are no amenities not mentioned in other areas of this table</i>					
<b>ANNUAL EXPENSES BY YEAR</b>		<b>\$139,704</b>	<b>\$120,572</b>	<b>\$103,597</b>	<b>\$106,705</b>	<b>\$109,906</b>

## 4.0 FINANCIAL ANALYSIS

The financial analysis in this Reserve Study is a proprietary system that was developed by Jeff Samdal & Associates. We have provided the funding method that we believe will most adequately fund the reserves of this Association.

### 4.1 CURRENT FINANCIAL INFORMATION AND CURRENT FUNDING PLAN

The Association's Reserve Fund balance was \$421,491 as of August 31, 2019 (Balance provided by Salvatore Fanale). According to our calculations detailed in this report, the Reserve Fund balance required for "Full Funding" of this property at this time is \$944,360. Therefore, the property is 44.6% funded.

The current annual contribution to the reserve fund is \$19,000, which averages \$16.67 per unit per month. For the purpose of comparison to our recommended funding plans, we have assumed that the Association will increase their current reserve fund contribution by 3% annually to account for inflation. This is shown in Table 4.5 "Reserve Fund Balance Sheet" (Section 4.5) and all subsequent figures.

This property is currently  
**44.6%** funded.

**This funding contribution is not adequate to obtain "Full Funding" of this property.**

### 4.2 RECOMMENDED RESERVE FUNDING PLAN

Full Funding is the ideal position for any property and represents a strong financial position. We recommend that all properties be Fully Funded, as Full Funding allows Associations to maintain their properties adequately and minimizes their risk of unplanned special assessments.

Ideally, the Association should be Fully Funded immediately; however, we recognize that financial realities can sometimes make this difficult. Therefore, we have provided three different plans to get the Association Fully Funded within three different time frames: Immediately, Within Five Years, and Within Ten Years. It is to the Association's benefit to be Fully Funded as soon as possible.

Our funding recommendations are as follows:

#### **Option One: Immediate Full Funding**

If the Association desires to be Fully Funded immediately, then based on the anticipated expenditures the Association will need to immediately contribute a total of \$522,869 to the Reserve Fund. This translates to an average of \$5,504 per unit. Following this initial contribution, the funding plan necessary to maintain a Fully Funded Capital Reserve Fund for the duration of this study will be a total property contribution of \$99,662 per year in the initial year, which translates to \$87.42 per unit per month. This annual contribution will need to be increased 3% each subsequent year to maintain Full Funding and to account for inflation.

For a detailed look at the annual funding contribution necessary per year, see Table 4.5 "Reserve Fund Balance Sheet" (Section 4.5).

-OR-

#### **Option One**

Average Immediate  
Contribution Per Unit:

**\$5,504**

Avg. Contribution  
Thereafter Per Unit Per  
Month:

**2020 \$87.42**

(with 3% annual  
increase thereafter)

**Option Two: Full Funding Within Five Years**

There is currently a “full funding” deficiency of \$522,869. This option makes up this deficiency over the next five years. Starting in 2020 for five years through 2024, the Association will make up their Reserve Fund deficiency by contributing \$210,507 annually (which includes \$110,845 in make-up funds and \$99,662 in capital maintenance funds that will increase annually with inflation). This translates to an average of \$184.66 per unit per month in the initial year.

If this plan is followed, the Association will be Fully Funded by the start of 2025. From this point on, the funding plan will be identical to funding plan listed above in the “Immediate Full Funding” option to maintain Full Funding. This means that the Association will reduce their Reserve Fund contribution to \$115,535 in 2025, which translates to \$101.35 per unit per month. This 2025 annual contribution will need to be increased 3% each subsequent year (to account for inflation) for the duration of this 30 year study to maintain Full Funding and to account for inflation.

For a detailed look at the annual funding contribution necessary per year, see Table 4.5 “Reserve Fund Balance Sheet” (Section 4.5).

-OR-

**Option Three: Full Funding Within Ten Years – RECOMMENDED PLAN**

There is currently a “full funding” deficiency of \$522,869. This option makes up this deficiency over the next ten years. Starting in 2020 for ten years through 2029, the Association will make up their Reserve Fund deficiency by contributing \$159,172 annually (which includes \$59,511 in make-up funds and \$99,662 in capital maintenance funds that will increase annually with inflation). This translates to an average of \$139.62 per unit per month in the initial year.

If this plan is followed, the Association will be Fully Funded by the start of 2030. From this point on, the funding plan will be identical to funding plan listed above in the “Immediate Full Funding” option to maintain Full Funding. This means that the Association will reduce their Reserve Fund contribution to \$133,937 in 2030, which translates to \$117.49 per unit per month. This 2030 annual contribution will need to be increased 3% each subsequent year for the duration of this 30 year study to maintain Full Funding and to account for inflation.

For a detailed look at the annual funding contribution necessary per year, see Table 4.5 “Reserve Fund Balance Sheet” (Section 4.5).

Other funding options are also possible. Section 4.6 details other common funding methods as well. It is up to the Association to decide which funding option is best for them.

<u>Option Two</u>	
Average Contributions Per Unit Per Month:	
2020	\$184.66
Increasing at 3% per year through:	
2024	\$195.63
At year end, full funding will be achieved. Then:	
2025	\$101.35
(with 3% annual increase thereafter)	

<u>Option Three</u>	
Average Contributions Per Unit Per Month:	
2020	\$139.62
Increasing at 3% per year through:	
2029	\$166.27
At year end, full funding will be achieved. Then:	
2030	\$117.49
(plus 3% annual increase thereafter)	



### 4.3 OTHER REQUIRED FUNDING PLAN OPTIONS

Per Washington State RCW 64.90.550, our Reserve Study is required to provide the following funding plans:

- **30-Year Make up** - Funding Plan necessary for the Association Reserve Fund to reach a Full Funding Level in 30 years.
- **Baseline Funding** - Minimum level of funding required in order to maintain the Reserve Fund above zero while paying for all components listed in Table 3.1 - Component Assessment and Valuation Table.

*Special Note: Because these are “bare minimum” funding options that increase an Association’s risk for special assessments (and financial instability), we do not recommend either of these funding options. We recommend that the Association obtain a level of Full Funding as soon as possible to ensure that the Association has the resources necessary to adequately maintain its collective property and minimize the burden of special assessments.*

These required options are as follows:

#### Option Four: Full Funding in 30 Years

There is currently a “full funding” deficiency of \$522,869. This option makes up this deficiency over the next thirty years. Starting in 2020 for thirty years through 2049, the Association will make up their Reserve Fund deficiency by contributing \$125,561 annually (which includes \$25,899 in make-up funds and \$99,662 in capital maintenance funds that will increase annually with inflation). This translates to an average of \$110.14 per unit per month in the initial year.

If this plan is followed, the Association will be Fully Funded by the start of 2050.

For a detailed look at the annual funding contribution necessary per year, see Table 4.5 “Reserve Fund Balance Sheet” (Section 4.5).

-OR-

#### Option Five: Baseline Funding – Keeping Reserve Balance above Zero

The funding plan necessary to maintain the Reserve Fund above zero for the duration of this study will be an annual contribution of \$115,000 per year in the initial year, which translates to \$100.88 per unit per month. This annual contribution will need to be increased 3% each subsequent year to maintain the Reserve Fund above zero and to account for inflation.

For a detailed look at the annual funding contribution necessary per year, see Table 4.5 “Reserve Fund Balance Sheet” (Section 4.5).

<b>Option Four</b>	
Average Contributions Per Unit Per Month:	
2020	\$110.14
Increasing at 3% per year through:	
2049	\$228.74

<b>Option Five</b>	
Average Contributions Per Unit Per Month:	
<b>\$100.88</b>	
(with 3% annual increase thereafter)	

#### 4.4 ASSUMPTIONS FOR FUTURE INTEREST RATE AND INFLATION

For the purposes of this report, we have assumed that the inflation rate over the next 30 years will average **3%**. This is based on historical averages over the last 25 years and our conservative best guess for the future. This percentage can vary greatly just as global economic conditions can vary, which is one reason why this Reserve Study should be updated annually per Washington State RCW 64.90.550, which we provide complimentary over the next two years with this Reserve Study (see Appendix).

For the purpose of this study, we will assume that the Association manages their money in the Reserve Fund so that the average interest rate return on its money will be equal to that of inflation. This is a conservative estimate given that since 1965, the average yield between short term treasuries and inflation has been 1.04%, which means that these relatively conservative investments have been able to outpace inflation over the long term (according to Crestmont Research, [www.crestmontresearch.com](http://www.crestmontresearch.com)). Since we have assumed that the inflation rate over the duration of this study will average **3%**, we have conservatively also assumed that the Reserve Fund average interest rate will equal **3%**. Again, this does not reflect current averages but rather a best guess of the future assuming you have invested effectively.

A common strategy is to invest in multiple accounts. Funds that will be necessary in the shorter term must be kept in a relatively liquid account. Funds that are not allotted for near future planned expenditures can be deposited into longer term investments which frequently earn higher interest rates. Consult with a qualified financial advisor for the best solution for your Association.

#### 4.5 ANNUAL FUND BALANCES; ANNUAL FUNDING TABLE AND FIGURES

The table and figures shown in this section are intended to give the Association a clearer view of the likely future financial position that the Association will be in, provided that the reserve funding plan is followed.

- Table 4.5: “Reserve Fund Balance Sheet”. This table lists annual revenue, expenses, and year end reserve fund balances. All Section 4.5 Figures are based on this data.
- Figure 4.5A-1: “Comparison of Funding Plans -- Reserve Fund Balances Through 2049”. This line graph depicts the funding balances of the proposed funding options vs. the current. Note the current plan, in dotted red, falls below zero in several places. This represents insufficient funding for repairs needed in these years.
- Figure 4.5A-2: “Comparison of Funding Plans -- Reserve Fund Balances Through 2029”. This line graph focuses on the next ten years, comparing the proposed plans to get the Association to a Full Funding status.
- Figure 4.5B: “Comparison of Funding Plans -- Association Contributions to Reserve Fund by Year”
- Figure 4.5C: “Comparison of Funding Plans – Percentage of Full Funding by Year”



LEVEL 2 RESERVE STUDY FOR THE SUMMIT AT AUTUMN HILLS HOMEOWNERS ASSOCIATION

**TABLE 4.5: RESERVE FUND BALANCE SHEET**

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>FULL FUNDING WITHIN 10 YEARS</b>												
Beginning Reserve Balance	421,491	432,100	532,626	664,441	791,892	919,439	1,067,999	1,199,199	1,359,841	1,266,644	1,433,223	1,606,844
Full Funding Annual Maintenance Funding	6,351	99,662	102,652	105,731	108,903	112,170	115,535	119,001	122,571	126,248	130,036	133,937
Planned Special Assessments / Make up Funds		59,511	59,511	59,511	59,511	59,511	59,511	59,511	59,511	59,511	59,511	
Annual Total Property Contribution to The Reserve Fund	6,351	159,172	162,162	165,242	168,414	171,681	175,046	178,512	182,082	185,759	189,547	133,937
Average Monthly Contribution to the Reserve Fund per Unit	16.67	139.62	142.25	144.95	147.73	150.60	153.55	156.59	159.72	162.95	166.27	117.49
Annual Capital Expenses	-	72,903	48,038	59,313	66,157	52,492	77,351	55,689	314,094	59,080	60,853	102,129
Interest Income	4,258	14,257	17,691	21,522	25,291	29,371	33,505	37,818	38,815	39,900	44,927	48,682
<b>Ending Reserve Balance</b>	<b>432,100</b>	<b>532,626</b>	<b>664,441</b>	<b>791,892</b>	<b>919,439</b>	<b>1,067,999</b>	<b>1,199,199</b>	<b>1,359,841</b>	<b>1,266,644</b>	<b>1,433,223</b>	<b>1,606,844</b>	<b>1,687,334</b>
Percentage of Full Funding	45.8%	53.1%	61.0%	67.8%	73.8%	79.4%	84.2%	88.8%	91.6%	96.1%	100.0%	100.0%
<i>Yellow Highlighted Cells Represent Make-Up Funds</i>												
<b>FULL FUNDING WITHIN 30 YEARS</b>												
Beginning Reserve Balance	421,491	432,100	498,510	595,187	686,444	776,712	886,875	978,526	1,098,432	963,277	1,086,639	1,215,747
Full Funding Annual Maintenance Funding	6,351	99,662	102,652	105,731	108,903	112,170	115,535	119,001	122,571	126,248	130,036	133,937
Planned Special Assessments / Make up Funds		25,899	25,899	25,899	25,899	25,899	25,899	25,899	25,899	25,899	25,899	25,899
Annual Total Property Contribution to The Reserve Fund	6,351	125,561	128,551	131,630	134,802	138,069	141,435	144,901	148,471	152,148	155,935	159,836
Average Monthly Contribution to the Reserve Fund per Unit	16.67	110.14	112.76	115.47	118.25	121.11	124.07	127.11	130.24	133.46	136.79	140.21
Annual Capital Expenses	-	72,903	48,038	59,313	66,157	52,492	77,351	55,689	314,094	59,080	60,853	102,129
Interest Income	4,258	13,753	16,163	18,940	21,623	24,585	27,568	30,694	30,469	30,294	34,025	37,338
<b>Ending Reserve Balance</b>	<b>432,100</b>	<b>498,510</b>	<b>595,187</b>	<b>686,444</b>	<b>776,712</b>	<b>886,875</b>	<b>978,526</b>	<b>1,098,432</b>	<b>963,277</b>	<b>1,086,639</b>	<b>1,215,747</b>	<b>1,310,793</b>
Percentage of Full Funding	45.8%	49.7%	54.7%	58.8%	62.3%	66.0%	68.7%	71.8%	69.7%	72.8%	75.7%	77.7%
<i>Yellow Highlighted Cells Represent Make-Up Funds</i>												
<b>BASELINE FUNDING</b>												
Beginning Reserve Balance	421,491	432,100	487,791	573,893	654,741	734,782	834,921	916,774	1,027,129	882,694	997,073	1,117,519
Full Funding Annual Maintenance Funding	6,351	115,000	118,450	122,004	125,664	129,434	133,317	137,316	141,435	145,679	150,049	154,550
Planned Special Assessments / Make up Funds												
Annual Total Property Contribution to The Reserve Fund	6,351	115,000	118,450	122,004	125,664	129,434	133,317	137,316	141,435	145,679	150,049	154,550
Average Monthly Contribution to the Reserve Fund per Unit	16.67	100.88	103.90	107.02	110.23	113.54	116.94	120.45	124.07	127.79	131.62	135.57
Annual Capital Expenses	-	72,903	48,038	59,313	66,157	52,492	77,351	55,689	314,094	59,080	60,853	102,129
Interest Income	4,258	13,594	15,690	18,157	20,535	23,198	25,887	28,728	28,224	27,780	31,250	34,312
<b>Ending Reserve Balance</b>	<b>432,100</b>	<b>487,791</b>	<b>573,893</b>	<b>654,741</b>	<b>734,782</b>	<b>834,921</b>	<b>916,774</b>	<b>1,027,129</b>	<b>882,694</b>	<b>997,073</b>	<b>1,117,519</b>	<b>1,204,253</b>
Percentage of Full Funding	45.8%	48.6%	52.7%	56.0%	58.9%	62.1%	64.4%	67.1%	63.9%	66.8%	69.5%	71.4%



LEVEL 2 RESERVE STUDY FOR THE SUMMIT AT AUTUMN HILLS HOMEOWNERS ASSOCIATION

**TABLE 4.5: RESERVE FUND BALANCE SHEET**

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
<b>FULL FUNDING WITHIN 10 YEARS</b>												
Beginning Reserve Balance	1,687,334	1,812,452	1,928,354	2,065,239	2,194,370	2,317,174	2,473,052	1,783,455	1,605,253	1,188,006	805,529	350,867
Full Funding Annual Maintenance Funding	137,955	142,094	146,357	150,747	155,270	159,928	164,726	169,667	174,757	180,000	185,400	190,962
Planned Special Assessments / Make up Funds												
Annual Total Property Contribution to The Reserve Fund	137,955	142,094	146,357	150,747	155,270	159,928	164,726	169,667	174,757	180,000	185,400	190,962
Average Monthly Contribution to the Reserve Fund per Unit	121.01	124.64	128.38	132.23	136.20	140.29	144.50	148.83	153.30	157.89	162.63	167.51
Annual Capital Expenses	64,558	81,474	68,490	84,566	99,139	74,841	917,227	397,948	633,284	591,938	657,152	89,364
Interest Income	51,721	55,283	59,019	62,950	66,673	70,792	62,904	50,079	41,280	29,461	17,090	12,050
<b>Ending Reserve Balance</b>	<b>1,812,452</b>	<b>1,928,354</b>	<b>2,065,239</b>	<b>2,194,370</b>	<b>2,317,174</b>	<b>2,473,052</b>	<b>1,783,455</b>	<b>1,605,253</b>	<b>1,188,006</b>	<b>805,529</b>	<b>350,867</b>	<b>464,515</b>
Percentage of Full Funding	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Yellow Highlighted Cells Represent Make-Up Funds</i>												
<b>FULL FUNDING WITHIN 30 YEARS</b>												
Beginning Reserve Balance	1,310,793	1,450,902	1,582,246	1,735,036	1,880,548	2,020,225	2,193,483	1,521,786	1,362,022	963,766	600,850	166,335
Full Funding Annual Maintenance Funding	137,955	142,094	146,357	150,747	155,270	159,928	164,726	169,667	174,757	180,000	185,400	190,962
Planned Special Assessments / Make up Funds	25,899	25,899	25,899	25,899	25,899	25,899	25,899	25,899	25,899	25,899	25,899	25,899
Annual Total Property Contribution to The Reserve Fund	163,854	167,993	172,256	176,647	181,169	185,827	190,625	195,567	200,657	205,899	211,299	216,861
Average Monthly Contribution to the Reserve Fund per Unit	143.73	147.36	151.10	154.95	158.92	163.01	167.21	171.55	176.01	180.61	185.35	190.23
Annual Capital Expenses	64,558	81,474	68,490	84,566	99,139	74,841	917,227	397,948	633,284	591,938	657,152	89,364
Interest Income	40,813	44,825	49,024	53,432	57,647	62,272	54,905	42,618	34,371	23,122	11,338	6,903
<b>Ending Reserve Balance</b>	<b>1,450,902</b>	<b>1,582,246</b>	<b>1,735,036</b>	<b>1,880,548</b>	<b>2,020,225</b>	<b>2,193,483</b>	<b>1,521,786</b>	<b>1,362,022</b>	<b>963,766</b>	<b>600,850</b>	<b>166,335</b>	<b>300,735</b>
Percentage of Full Funding	80.1%	82.1%	84.0%	85.7%	87.2%	88.7%	85.3%	84.8%	81.1%	74.6%	47.4%	64.7%
<i>Yellow Highlighted Cells Represent Make-Up Funds</i>												
<b>BASELINE FUNDING</b>												
Beginning Reserve Balance	1,204,253	1,336,428	1,460,246	1,605,951	1,744,852	1,878,425	2,046,124	1,369,450	1,205,333	803,387	437,490	749
Full Funding Annual Maintenance Funding	159,187	163,963	168,881	173,948	179,166	184,541	190,077	195,780	201,653	207,703	213,934	220,352
Planned Special Assessments / Make up Funds												
Annual Total Property Contribution to The Reserve Fund	159,187	163,963	168,881	173,948	179,166	184,541	190,077	195,780	201,653	207,703	213,934	220,352
Average Monthly Contribution to the Reserve Fund per Unit	139.64	143.83	148.14	152.59	157.16	161.88	166.73	171.74	176.89	182.20	187.66	193.29
Annual Capital Expenses	64,558	81,474	68,490	84,566	99,139	74,841	917,227	397,948	633,284	591,938	657,152	89,364
Interest Income	37,547	41,330	45,313	49,519	53,546	57,998	50,476	38,051	29,686	18,338	6,476	1,987
<b>Ending Reserve Balance</b>	<b>1,336,428</b>	<b>1,460,246</b>	<b>1,605,951</b>	<b>1,744,852</b>	<b>1,878,425</b>	<b>2,046,124</b>	<b>1,369,450</b>	<b>1,205,333</b>	<b>803,387</b>	<b>437,490</b>	<b>749</b>	<b>133,724</b>
Percentage of Full Funding	73.7%	75.7%	77.8%	79.5%	81.1%	82.7%	76.8%	75.1%	67.6%	54.3%	0.2%	28.8%



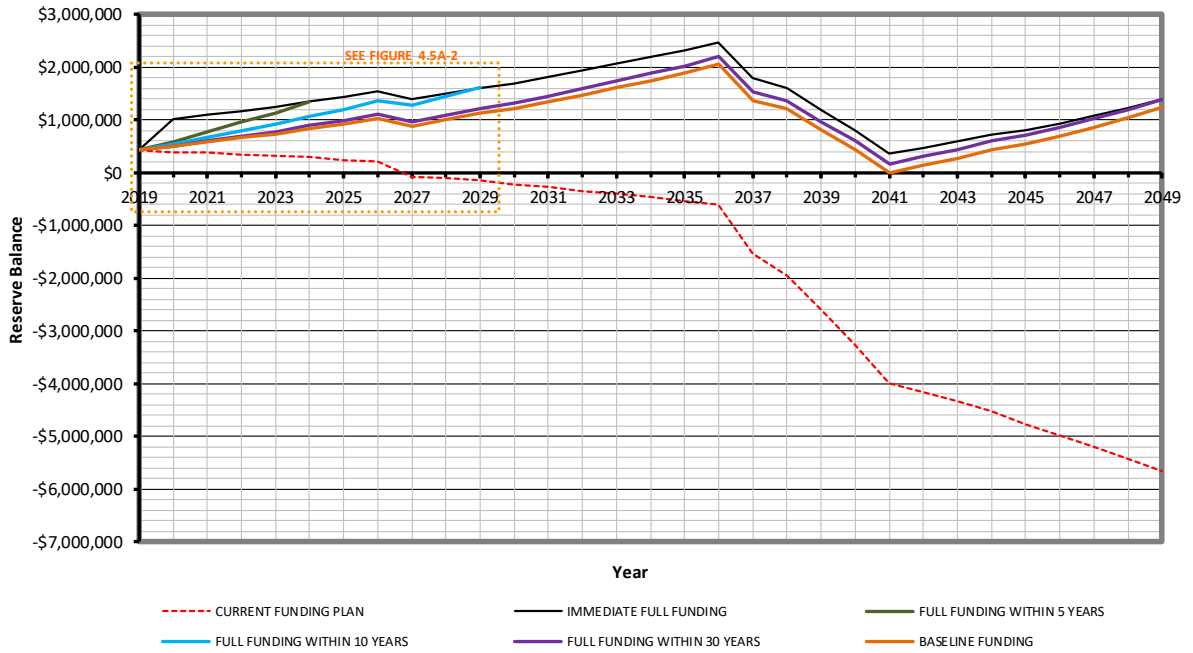
LEVEL 2 RESERVE STUDY FOR THE SUMMIT AT AUTUMN HILLS HOMEOWNERS ASSOCIATION

**TABLE 4.5: RESERVE FUND BALANCE SHEET**

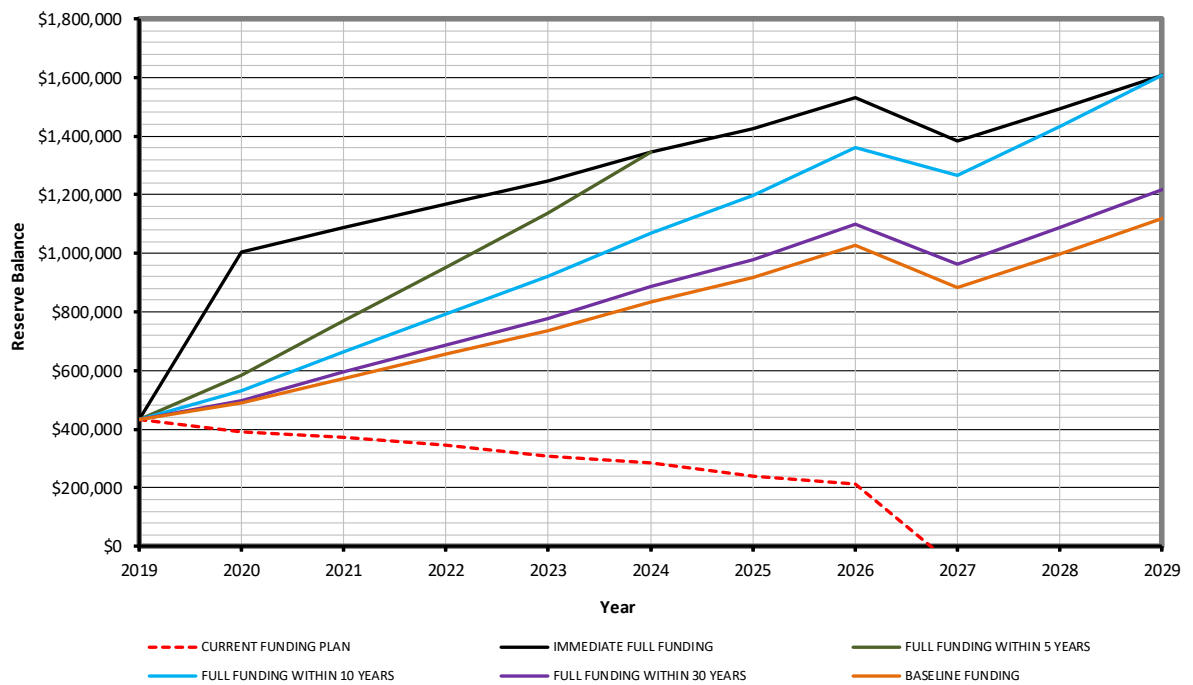
	2043	2044	2045	2046	2047	2048	2049
<b>FULL FUNDING WITHIN 10 YEARS</b>							
Beginning Reserve Balance	464,515	584,666	711,608	802,956	922,818	1,070,050	1,225,284
Full Funding Annual Maintenance Funding	196,691	202,592	208,669	214,929	221,377	228,019	234,859
Planned Special Assessments / Make up Funds							
Annual Total Property Contribution to The Reserve Fund	196,691	202,592	208,669	214,929	221,377	228,019	234,859
Average Monthly Contribution to the Reserve Fund per Unit	172.54	177.71	183.04	188.53	194.19	200.02	206.02
Annual Capital Expenses	92,045	94,806	139,704	120,572	103,597	106,705	109,906
Interest Income	15,505	19,157	22,383	25,504	29,451	33,921	38,633
<b>Ending Reserve Balance</b>	<b>584,666</b>	<b>711,608</b>	<b>802,956</b>	<b>922,818</b>	<b>1,070,050</b>	<b>1,225,284</b>	<b>1,388,870</b>
Percentage of Full Funding	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Yellow Highlighted Cells Represent Make-Up Funds</i>							
<b>FULL FUNDING WITHIN 30 YEARS</b>							
Beginning Reserve Balance	300,735	442,261	591,218	705,243	848,461	1,019,750	1,199,763
Full Funding Annual Maintenance Funding	196,691	202,592	208,669	214,929	221,377	228,019	234,859
Planned Special Assessments / Make up Funds	25,899	25,899	25,899	25,899	25,899	25,899	25,899
Annual Total Property Contribution to The Reserve Fund	222,590	228,491	234,569	240,829	247,277	253,918	260,759
Average Monthly Contribution to the Reserve Fund per Unit	195.25	200.43	205.76	211.25	216.91	222.74	228.74
Annual Capital Expenses	92,045	94,806	139,704	120,572	103,597	106,705	109,906
Interest Income	10,980	15,273	19,160	22,961	27,609	32,801	38,256
<b>Ending Reserve Balance</b>	<b>442,261</b>	<b>591,218</b>	<b>705,243</b>	<b>848,461</b>	<b>1,019,750</b>	<b>1,199,763</b>	<b>1,388,871</b>
Percentage of Full Funding	75.6%	83.1%	87.8%	91.9%	95.3%	97.9%	100.0%
<i>Yellow Highlighted Cells Represent Make-Up Funds</i>							
<b>BASELINE FUNDING</b>							
Beginning Reserve Balance	133,724	274,677	423,967	539,282	684,809	859,482	1,044,019
Full Funding Annual Maintenance Funding	226,962	233,771	240,784	248,008	255,448	263,112	271,005
Planned Special Assessments / Make up Funds							
Annual Total Property Contribution to The Reserve Fund	226,962	233,771	240,784	248,008	255,448	263,112	271,005
Average Monthly Contribution to the Reserve Fund per Unit	199.09	205.06	211.21	217.55	224.08	230.80	237.72
Annual Capital Expenses	92,045	94,806	139,704	120,572	103,597	106,705	109,906
Interest Income	6,035	10,325	14,235	18,090	22,822	28,131	33,737
<b>Ending Reserve Balance</b>	<b>274,677</b>	<b>423,967</b>	<b>539,282</b>	<b>684,809</b>	<b>859,482</b>	<b>1,044,019</b>	<b>1,238,854</b>
Percentage of Full Funding	47.0%	59.6%	67.2%	74.2%	80.3%	85.2%	89.2%



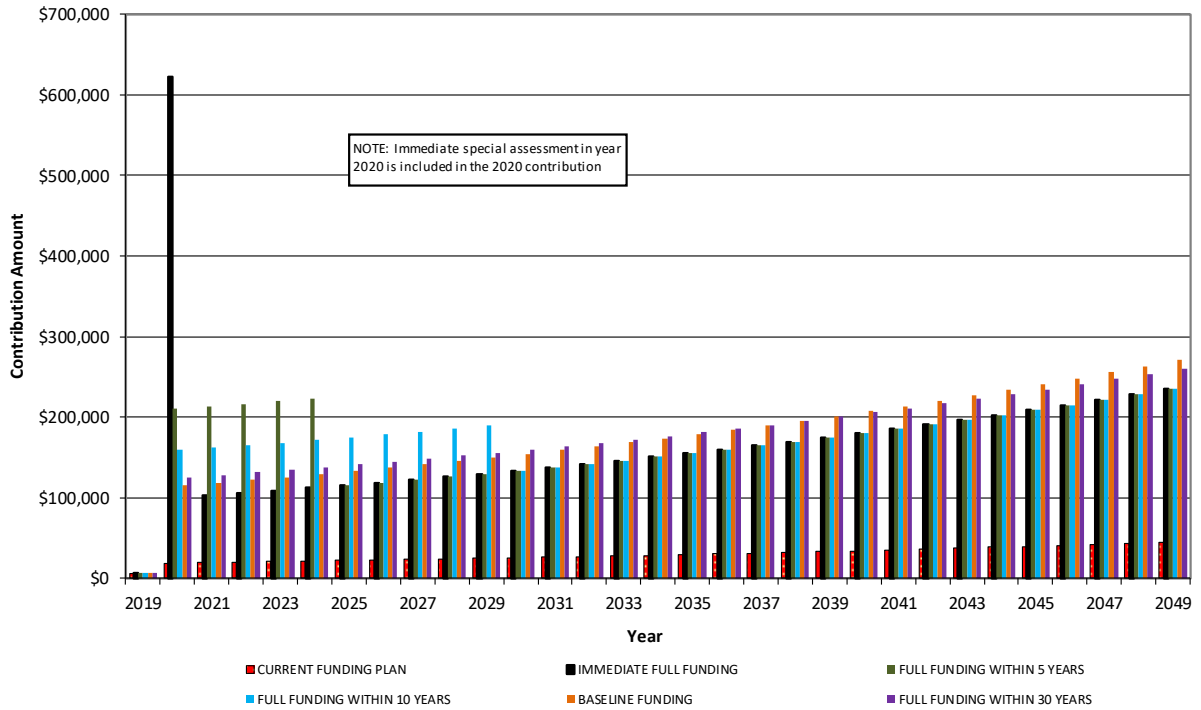
**Figure 4.5A-1 Comparison of Funding Plans – Reserve Fund Balances Through 2049**



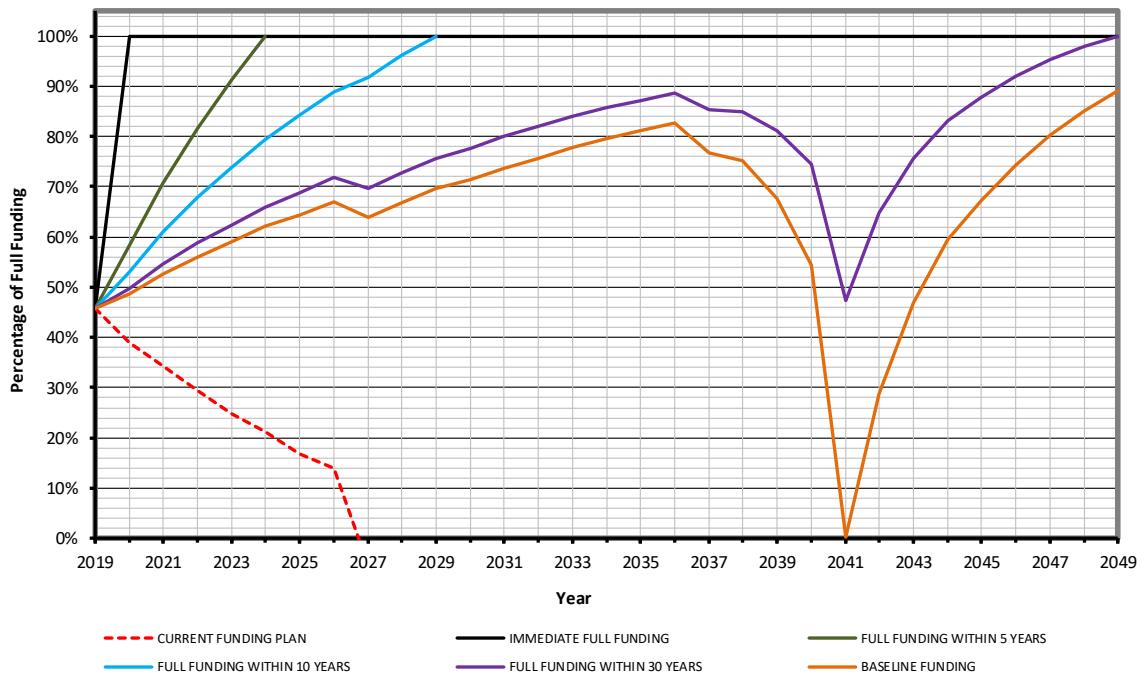
**Figure 4.5A-2 Comparison of Funding Plans – Reserve Fund Balances Through 2029**



**Figure 4.5B Comparison of Funding Plans -- Association Contributions to Reserve Fund by Year**



**Figure 4.5C Comparison of Funding Plans -- Percentage of Full Funding by Year**



#### **4.6 OTHER COMMON FUNDING METHODS**

The following methods are methods that are sometimes implemented. We believe that many of these funding methods that keep the reserve fund at less than “Fully Funded” represent a weaker position for the Association. As the Fully Funded percentage decreases, the likelihood of unplanned special assessments increases.

##### **Cash Flow Method**

A method of calculating Reserve contributions 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 anticipated schedule of Reserve expenses until the desired Funding Goal is achieved.

##### **Component Method**

A method of calculating Reserve contributions where the total reserve contribution is based on the sum of contributions for individual components.

##### **Baseline Funding**

Establishing a Reserve funding goal of keeping the Reserve cash balance above zero.

##### **Full Funding**

Setting a Reserve funding goal of attaining and maintaining the Reserve Fund at or near 100% funded. *Recommended by Jeff Samdal & Associates*

##### **Statutory Funding**

Establishing a Reserve funding goal of setting aside the specific minimum amount of Reserves required by local statutes.

##### **Threshold Funding**

Establishing a Reserve funding goal of keeping the Reserve Balance above a specified dollar or Percent Funded amount. Depending on the threshold this may be more or less conservative than “Fully Funded.”

## 5.0 LIMITATIONS

This report has been prepared for the exclusive use of Summit at Autumn Hills Homeowners Association and their property management company. We do not intend for any other party to rely on this report for any reason without our expressed written consent. If another individual or party relies on this study, they shall indemnify and hold Jeff Samdal & Associates harmless for any damages, losses, or expenses they may incur as a result of its use.

The Level 1 Reserve Study is a reflection of the information provided to us. This report has been prepared for Summit at Autumn Hills Homeowners Association's use, not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records. Our inspection report is not an exhaustive technical inspection of the property; we merely comment on the items that we believe that our clients would benefit from knowing. During a typical inspection, no invasive inspection is performed, no furnishings are moved, and no finishes are removed.

This report is a snap shot in time of the condition of the property at the time of inspection. The remaining life values that we list are based on our opinion of the remaining useful life and are by no means a guarantee. Our opinions are based on what we believe one could reasonably expect and are not based on worst case scenarios. These opinions are based upon our experience with other buildings of similar age and construction type. Opinions will vary and you may encounter contractors and/or consultants with differing opinions from ours. Ratings of various building components are most often determined by comparison to other buildings of similar age and construction type. The quality of materials originally impacts our judgment of their current state.

The life expectancy estimates that we prepare are based on National Association of Home Builders (NAHB) averages, Building Owners and Managers (BOMA) averages, product defined expected life averages, and our own assessment of typical life expectancy based on our experience with similar components in our area.

This report will tell you a great deal about the overall condition of this property. However, this report does not constitute a warranty, an insurance policy, or a guarantee of any kind. Owning any property involves some risk and while we can give an excellent overview of the property, we cannot inspect what we cannot see.

Our inspection and report do not include building code compliance or municipal regulatory compliance. Nor do they include mold investigations, hazardous materials investigations, or indoor air quality analysis.

The purpose of this report is not intended to be a statement of insurability of this property as insurance companies have particular standards for insurability of certain building types and certain building materials.

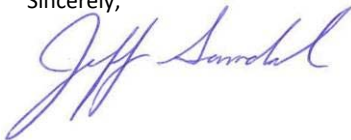
While we may comment that certain components have been recalled that we are aware of, we are not aware of all recalls. It is beyond the scope of this inspection to determine all systems or components that are currently or will be part of any recall in the future. You may wish to subscribe or contact the CPSC (Consumer Product Safety Commission) web site for recall information regarding any system or component. If a problem is encountered on your property, we cannot be responsible for any corrective action that you take, unless we have the opportunity to review the conditions, before repairs are made.

Please ensure that you have read and understand the entire proposal to perform this Level 1 Reserve Study that was signed prior to our inspection. If you have any questions regarding this document, please contact us.

We appreciate the opportunity to be of assistance and we hope that we have provided you a clear understanding of your financial situation and given you a better overall understanding of the your property. This report supersedes any opinion or discussion that occurred during the inspection and should be considered our complete opinion of the condition of this property.

Please contact us if you have any questions regarding this report. We will be happy to be of assistance.

Sincerely,



Jeff Samdal, PE, RS, PRA

## **APPENDIX**

### **Resume of Engineer Performing Study**

# Jeff Samdal, P.E., Principal

## Professional Qualifications and Experience

### Areas of Expertise

Mr. Samdal is the owner of Jeff Samdal & Associates, Inc. (formerly Samdal Engineering), a corporation that specializes in building inspections, engineering, project management, and related services. He is a double-licensed Professional Engineer (Mechanical and Civil) in Washington State. He is also an accredited Building Inspection Engineer (BIE) and Reserve Specialist (RS). He has performed thousands of building inspections as well as numerous additional services such as building envelope investigations, construction management, and general consulting for property owners pertaining to building maintenance and long term budgeting. Mr. Samdal consistently earns repeat and referral business because of his attention to detail, practical approach, knowledge of the industry, and genuine appreciation for clients' concerns for their real estate investments.

### Capabilities

Mr. Samdal is experienced at performing residential (single- and multi-family), commercial, and industrial inspections in Washington State and beyond. Mr. Samdal's experience includes the following:

- Property Condition Assessments (PCAs)
- Capital Needs Assessments (CNAs)
- Reserve Studies for Condominiums and Homeowner's Association
- Building Envelope Studies

### Relevant Work History

Mr. Samdal has been owner and operator of Jeff Samdal & Associates / Samdal Engineering since 2005. Before concentrating on building inspections, Mr. Samdal worked for Washington Group International's (WGI) Hydropower and Water Resources Group. While working for WGI, Mr. Samdal was involved in rebuilding and rehabilitating hydro facilities. He served as the on-site powerhouse and switchyard inspector during construction. His duties included design, drawing and specification preparation, cost estimating, scheduling, and construction management. Prior to working for WGI, Mr. Samdal worked for Duke Energy in a similar role.

### Education

BS in Mechanical Engineering, University of Washington

### Licenses and Certifications

- *Licensed Professional Engineer (PE)*, Mechanical Engineering, State of Washington, #40985
- *Licensed Professional Engineer (PE)*, Civil Engineering, State of Washington, #40985
- *Reserve Specialist (RS)*, Community Associations Institute (CAI), #173
- *Professional Reserve Analyst (PRA)*, Association of Professional Reserve Analysts
- *Building Inspection Engineer (BIE)*, National Association of Building Inspection Engineers
- *Structural Pest Inspector*, State of Washington, #70763

### Professional Affiliation

American Society of Mechanical Engineers, 2002 – present

### Community Involvement

Mr. Samdal is married with two kids and lives in Woodinville. He has volunteered as a Little League coach since 2009 starting with tee-ball and volunteers as a scout leader.