

**RESERVE STUDY PLAN LEVEL II  
UPDATE WITH VISUAL SITE INSPECTION**

Prepared for:

**ESTATES at MEADOWWOOD III  
HOMEOWNER'S ASSOCIATION**

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## 1.0 INTRODUCTION

Estates at Meadowwood III Homeowner's Association, through Ron White authorized Criterium – Pfaff Engineers to conduct a Reserve Study Analysis Plan - Level II: Update with visual site inspection. Studies of this nature are important to ensure that a community has sufficient funds for long-term, periodic capital expenditure requirements. Anticipating large expenditures over an extended period of time through a structured analysis and scheduling process assists the Association in meeting financial requirements without increasing the service fees above permitted maximums, borrowing the funds, or levying special financial assessments to the owners.

Typically, a community association has **two broad cash requirements: the general operating reserves and the capital repair and replacement reserves**. In this report, we will focus on those items falling under the capital repair and replacement reserve criteria. We have projected a capital repair and replacement reserve for thirty (30) years. The first ten years are the most reliable. Unless doing so would impose an unreasonable hardship, Washington State Law states that the association should update the reserve study annually. At least every three years, an updated reserve study must be prepared and based upon a visual site inspection conducted by a reserve study professional.

This report is structured to analyze components of the community for which the Association is responsible and to assess a useful expected life and useful remaining life to those components. The anticipated scheduled repair or replacement of the component and the anticipated expense for the activity are then analyzed in conjunction with the current capital reserves funding program for the community. Funding program recommendations are made with the objective of limiting substantial cash excesses while minimizing financial burdens that can result from significant cash inadequacies.

This report is intended to be used as a tool to determine reserve fund allocation requirements for the community, to manage future Association obligations, and to inform the community of future financial needs in general. The report that follows has been prepared from the perspective of what an owner of this property would benefit from knowing. Some items, beyond those of immediate concern, may be discussed. Therefore, the report should be read in its entirety in order to fully understand all of the information that has been obtained.

## 2.0 EXECUTIVE SUMMARY

The Estates at Meadowwood III Homeowner's Association serves 76 paying units. It is a residential development located in Liberty Lake, WA. We understand that the development was constructed in 2002.

Estates at Meadowwood III includes as common elements asphalt paved streets, vinyl and iron fencing, concrete sidewalks, an entry monument and automated entry and exit gates, common areas, irrigation systems, and storm drain systems. We were shown these items by Mr. Ron White, the manager of the association.

In this section of the report, we will address those issues that, in our opinion, will require immediate repair or replacement. For a more detailed discussion of all of our findings and any other material deficiencies that will require repair or replacement over the term of this study, refer to the appropriate sections of this report.

The common elements are in good condition with no items needing immediate attention. Items needing near term attention are some damaged slats and rails at the vinyl fence along Mission, corroding anchor bolts at the mailboxes, and an area of excessive moisture at the west common area.

The reserve account has a balance of \$61,114.36 at the time of the inspection. There are no regular contributions being made to the capital repair and replacement reserves. Based on our evaluation, **the current level of funding of the reserve for the common areas is not adequate, and a funding increase is recommended.** A more detailed analysis of the reserve funds has been provided in Appendix A.

There are, of course, other capital expenditures to be expected over the next thirty years. Those items that will require attention are discussed in detail in this report and can be found in their appropriate sections.

## 3.0 PURPOSE & SCOPE

### 3.1 Purpose

The purpose of this study is to perform a reserve fund analysis. It is intended to be used as a tool for the Estates at Meadowwood III Homeowner's Association in determining the allocation requirements into the reserve fund in order to meet future anticipated capital expenditures for the community.

This report forecasts obligations for the community thirty years into the future. It should be noted that events might occur that could have an effect on the underlying component or system useful life assumptions used in this study. Likewise, inevitable market fluctuations can have an impact on component or system replacement and repair costs. Therefore, a study such as this should be updated often, in order to reflect the most accurate needs and obligations of the community.

### 3.2 Scope

This study has been performed according to the scope as generally defined by Ron White representing the HOA and Criterium – Pfaff Engineers. The findings and recommendations are based on interviews with the community's management personnel; a review of available documents; and an investigation of the site.

The scope of work meets the requirements presented by the State of Washington. According to the State of Washington, RCW 64.38.065, "Unless doing so would impose an unreasonable hardship, an association with significant assets shall prepare and update a reserve study, in accordance with the association's governing documents and this chapter. The initial reserve study must be based upon a visual site inspection conducted by a reserve study professional." According to the RCW, the terminology for this Scope of Work is "Level I: Full reserve study funding analysis and plan".

This study was prepared by a Reserve Study Professional, as defined by State of Washington, RCW 64.34.020. The information provided by this study meets or exceeds the requirements of State of Washington, RCW 64.38.070.

The guidelines used to determine which physical components within the community are to be included in the component inventory are based on the following general criteria:

1. The component must be a common element, or otherwise noted to be the responsibility of the Association to replace.
2. The component must have an estimated remaining useful life of thirty years or less. As the site ages, additional components may need to be added.
3. The funding for replacement should be from one source only, not funded from another area of the budget or through a maintenance contract.
4. The cost of replacement should be high enough to make it financially unsound to fund it from the operating budget.
5. Components, such as painting, which are considered deferred maintenance, are most appropriately funded from the Operating Budget instead of Reserves.

Our reserve study analysis included evaluating the following association property:

- **Site and Grounds:** Vinyl fences are provided from the property boundary along Mission Ave. and south along Terrace Lane. Two sections of the fence are decorative stone and iron. An entry monument and entry and exit gates and operators are provided at the entry to the development. Five cluster mailboxes are located just inside the entry. The storm water system includes grated catch basins in and along the streets. Drainage pipes from the streets feed catch basins in the drainage swales at the base of the slope.
- **Private Streets, Sidewalks and Curbs:** The association maintains private asphalt paved streets. The streets include Lancashire Lane, King James Lane, Dunbarton Oaks Lane, and Terrace Lane. The roads have rolled concrete curbs and standard concrete curbs. The concrete sidewalks extend along Mission Ave. and along the entry up to the first homes.

For a complete inventory, please see Appendix B. The common element

inventory was obtained from discussion with board representatives.

This study estimates the funding levels required for maintaining the long-term viability of the facility. Our approach involves:

1. Examining association managed equipment, buildings, and site facilities.
2. Predicting their remaining service life and, approximating how frequently they will require repair or replacement.
3. Estimating repair or replacement costs (in 2020 dollars) for each capital item.
4. Using data developed in Steps 1, 2 and 3 to project Capital Reserve balances for Years 1 through 30.

The statements in this report are opinions about the present condition of the subject community. They are based on visual evidence available during a diligent investigation of all reasonably accessible areas falling under the responsibility of the Association. We did not remove any surface materials, perform any destructive testing, or move any furnishings. This study is not an exhaustive technical evaluation. Such an evaluation would entail a significantly larger scope than this effort. For additional limitations, see Section 8.0.

### 3.3 Sources of Information

Onsite inspection of the property occurred on the following date:

- 2 July 2020.

The following people were interviewed during our study:

- Ron White-Association Manager

We based our cost estimates on some or all of the following:

- R.S. Means
- Our data files on similar projects
- Local contractors
- Homewyse Website
- Quantities were obtained from the association and using Google Earth.

### 3.4 Standards of Reference

For your reference, the following definitions may be helpful:

*Excellent:* Component or system is in "as new" condition, requiring no rehabilitation and should perform in accordance with expected performance.

*Good:* Component or system is sound and performing its function, although it may show signs of normal wear and tear. Some minor rehabilitation work may be required.

*Fair:* Component or system falls into one or more of the following categories: a) Evidence of previous repairs not in compliance with commonly accepted practice, b) Workmanship not in compliance with commonly accepted standards, c) Component or system is obsolete, d) Component or system approaching end of expected performance. Repair or replacement is required to prevent further deterioration or to prolong expected life.

*Poor:* Component or system has either failed or cannot be relied upon to continue performing its original function as a result of having exceeded its expected performance, excessive deferred maintenance, or state of disrepair. Present condition could contribute to or cause the deterioration of other adjoining elements or systems. Repair or replacement is required.

*Adequate:* A component or system is of a capacity that is defined as enough for what is required, sufficient, suitable, and/or conforms to standard construction practices.

All ratings are determined by comparison to other buildings of similar age and construction type. Further, some details of workmanship and materials will be examined more closely in higher quality buildings where such details typically become more relevant.

All directions (left, right, rear, etc.), when used, are taken from the viewpoint of an observer standing in front of a building and facing it.

*Repair/Replacement Reserves* - Non-annual maintenance items that will require significant expenditure over the life of the buildings. Included are items that will reach the end of their estimated useful life during the course of this forecast, or, in the opinion of the investigator, will require attention during that time.

#### **4.0 DESCRIPTION**

This homeowner's association serves 76 lots. It is a residential development located in Liberty Lake, Washington. We understand that the development was begun in 2002.

The main entry is located at the south side of Mission Avenue approximately 1-3/4 mile from the Interstate 90 and Liberty Lake Road interchange. The entry includes an engraved boulder sign and a landscaped traffic island with basalt columns to support the hinged steel entry and exit gates. Another basalt column supports the entry keypad which controls the entry gate operators.

The entry provides access to King James Lane which extends north/south across the west side of the development. Lancashire Lane, Terrace Lane, and Dunbarton Oaks Lane branch off King James Lane. The streets have a combination of standard and rolled concrete curbs.

Five pedestal mounted cluster mailboxes and parcel lockers are located just inside the entry.

The vinyl fencing and concrete sidewalk begin at the northwest boundary on the south side of Mission Ave. The sidewalk continues up to the entry and beyond to the first homes where it becomes the individual owner's responsibility.

The fence continues south along the west side of Terrace Lane and includes a 20 ft gate. The fence includes a section of iron rails and stone columns along Mission and another near the intersection of Mission and

King James Lane. An entry monument is provided at the intersection of Mission and King James Lane.

Common elements also include an extensive drainage system with drainage grates over catch basins in the roads and swales. The catch basins collect runoff, allowing sediment to settle and feed underground drainage pipes that apparently lead down to the lower infiltration swales in the lower common area.

The common areas include irrigated grass, bushes, and trees.

## 5.0 OBSERVATIONS

The following key observations were made about the current condition of the common elements of the property.

The asphalt paved streets are in good condition. We understand that they were crack sealed and slurry sealed in 2018. Some of the cracks have opened slightly. We also observed a few areas that are starting to break up and a few areas with ponding water. These will need to be aggressively sealed and are planned to be removed and replaced in 2025. We were told that some areas near the entry were removed and replaced in 2019.

In general for all of the asphalt surfaces, preventative maintenance includes crack repair, drainage maintenance, patching of damaged areas and regular sealing. For a residential street, annual crack repair and sealcoating every 5 to 7 years is recommended. This helps seal small cracks, reduce moisture penetration and UV sun damage. Both crack sealing and sealcoating provide best results when the sealants are “squeegeed” into the surface. Proper repair of asphalt cracks includes routing the crack, and pneumatically cleaning it out, then injecting a quality asphalt emulsion sealant into the crack. Any deep and wide cracks should be partially filled with sand before sealing.

The road should be observed and any open cracks or damaged areas should be repaired annually. This will be a relatively low cost maintenance item that is best funded from the operating budget.

We have budgeted to sealcoat the streets again in 2024 and every 6 years with the exception of 2030 before the roads are resurfaced.

Residential paved streets have a published expected useful life (EUL) of 25 years, although we have observed many streets lasting much longer with good maintenance. These roads are in good condition overall and do not appear to have large areas with significant structural damage. We have planned for grinding and overlaying the streets in 2032 assuming regular sealing and crack repairs are accomplished in the interim.

A lower cost option may be to perform chip sealing at that time. This has an expected live of 15 years. Studies indicate that if the subgrade and asphalt are in good structural condition, chip sealing provides a good wear and traction surface at a lower cost than a complete asphalt overlay. We have not included this in our estimates.

The standard curbs, rolled curbs, and concrete sidewalk at the pedestrian



entry are in generally good condition. Some damage has occurred to the curbs and sidewalk at the entry area. We noted a large gap between two sidewalk sections near the mailboxes that should be filled.

A concrete pad under the entry gate operator is deteriorating badly. Since this serves to support and anchor the operator, we believe plans should be made to have it replaced with the operator replacement in 2026.

Concrete flatwork has a published expected useful life (EUL) of 30 years, however, we believe in this area and this situation the curbs and sidewalks can last indefinitely with minor repairs. This places their replacement outside of the 30 year analysis. We have included an allowance of \$2,000 every 10 years for spot curb and/or sidewalk repair to damaged areas beginning in 2025.

The vinyl fencing along Mission and Terrace Lane and gate foot vinyl gate is included along Terrace Lane. The vinyl fencing in good condition overall. One damaged rail and 3 damaged slats were observed along Mission. Replacement of these damaged panels is not included in this analysis and is assumed to be funded from the operating budget. Vinyl fencing has an expected life of 30 years. We have planned for its replacement in 2032.

The decorative steel and stone sections are approximately 35 feet long and 50 feet long and are in good condition. These should last indefinitely with good maintenance. We understand that they were painted last year. We have included repainting in 2026 and every 7 years thereafter.

The entrance monument is a stone structure with engraved and painted lettering and in good condition. The gate area granite support columns appear to be in good condition. With regular inspections and maintenance including sealing any cracks and gaps, these should last indefinitely.

The gates are in good condition. They were also repainted last year. We have planned for repainting in 2026 and every 7 years thereafter. With good maintenance, these gates should last at least 60 years which places them outside the study period. Replacement of the hinge bearings may be needed over the years. This cost is assumed to be taken from the operating budget.

The gate operators and sensors and touch pad controls are in good condition with an expected life of 15 years. The touchpad instructions are wearing away and may need to be replaced or supplemented. We understand these were all replaced in 2009 and we have planned for replacement of both operators, sensors, and the keypad controller in 2026 and 15 years thereafter.

The accent and monument lighting is assumed to be maintained from the operating budget.

The electrical system for the gate area has an expected life of 50+ years. The lights and receptacles are assumed to be maintained from the operating budget.

The five cluster mailboxes are in fair to good condition. We observed some peeling paint which is cosmetic and doesn't affect the function of the units. Some of the anchor bolts are rusting and should be coated with corrosion resistant paint. The units appear to be original to the development. These mailboxes have an EUL of 25 years. We have planned to replace the cluster mailboxes in 2027. These should be checked annually-especially for corrosion around the base of the pedestals and maintained as needed.

The approximately 12 storm drain grates located in the streets are in good condition. All grates should be inspected annually and the catch basins vacuumed of debris as needed. With regular maintenance, these should provide service beyond the analysis period although some can become damaged. To account for this, we have allowed for replacement of 3 grates in year 16.

The grates cover drainage catch basins that discharge to plastic drainage pipes. The pipes connect the catch basins and appear to continue underground to the catch basins in the lower swales.

We noted an excessively wet area in what appears to be a drainage area of the lower common area swale. This may be due to excessive irrigation, but appears to be more likely the result of a drainage issue. Further investigation is recommended including "scoping" the drainage pipe in this area with a video camera. We have included an allowance of \$2500 for this in 2021.

It should also be noted that it is especially important that the grates and drains be kept open and clear during the winter, since runoff cannot infiltrate the frozen ground and must drain through the drainage system.

The catch basins should be inspected annually to determine if they need to be cleaned. We have budgeted for cleaning all of the catch basins in 2025, 2035 and 2045.

The common water and sewage systems have expected useful lives well beyond the study period. These are not included in this study.

The common irrigation system was not tested. This is assumed to be maintained from the operation budget. The underground piping is assumed to have an indefinite life.

Our study does not include general landscaping maintenance which we assume to be maintained from the operating budget. We have allowed an allowance of \$1,500 every 5 years for removal and/or replacement of large trees starting in 2025.

We understand that the association is considering replacing the plastic landscape border in some areas with concrete borders. We have not included that in this analysis.

## 6.0 RESERVE FUND ANALYSIS

Using software developed by Criterium Engineers and KPMG Peat Marwick, we have analyzed capital reserves draw-down for the projected capital expenditures to determine the amount needed. **The following is a projected reserve fund analysis for non-annual items as discussed in the report.** This projection takes into consideration a reasonable return on invested moneys and inflation as directed by your board. Please review this thoroughly and let us know of any changes that may be desired.

The intent of this reserve fund projection is to help the Association develop a reserve fund to provide for anticipated repair or replacements of various system components during the next thirty years.

The capital items listed are those that are typically the responsibility of the Association and are derived from discussion and documents provided by your manager and board. However, association by-laws vary, and therefore, which components are the responsibility of the owner and which are the responsibility of the Association can vary. The Association should confirm that the items listed should be financed by the reserve fund.

This projection provides the following:

- An input sheet that defines all the criteria used for the financial alternatives, including the assumed inflation rate and rate of return on deposited reserve funds.
- A table that lists anticipated replacement and/or repair items complete with estimated remaining life expectancies, projected costs of replacement and/or repair, a frequency in years of when these items require replacement and/or repair, and a projection based on this frequency.
- A table that represents end of year balances and capital expenditures based on your current funding program and reserve balances, and alternatives to your current program.
- The Association should bear in mind that unanticipated expenditures can always arise and maintenance of a significant reserve fund balance can be viewed as a way to avoid special assessments. We suggest that the association consider maintaining a minimum reserve balance of at least \$10,000.00.

As required by Washington State RCW 64.38.070, we state that the interest rate for invested funds used in the analysis is 1.0% and inflation rate is 3.0%. We have included three baseline alternatives to your current funding program as well as the RCW mandated full funding plan and recommend that the Association adopt an alternative that best reflects the objectives of the community. Please keep in mind that there are a myriad of possible alternatives. In summary they are as follows:

**Current Funding Rate:** According to the information we received, the association has a reserve fund balance of \$61,114.36 at the time of the

study. There are no regular contributions planned. As a result, the capital reserves are considered to be underfunded.

- **Alternate Funding Plan 1:** Start with a contribution of \$75.00 per unit per month and then decrease it by \$45.00 per month after 15 years in 2035 for a final contribution of \$30.00 per unit per month. This will maintain a positive balance throughout the planning period.
- **Alternate Funding Plan 2:** Start with a contribution of \$75.00 per unit per month and then decrease it by 60% after 13 years in 2033 for a final contribution of \$12.00 per unit per month. This alternative will maintain a positive balance throughout the planning period.
- **Alternate Funding Plan 3:** Start with a contribution of \$45 per unit per month and maintain this through the planning period. Levy a special assessment of \$4,605.26 per unit in 2030. This alternative will maintain a positive balance throughout the planning period. It should be noted however, that special assessments are discouraged.
- **Full Funding Plan:** To achieve a full funding plan, the association can follow Alternative Funding Plan 1 but decrease the contribution by \$34.00 per unit per month in 2035. This will provide a fully funded balance at the end of the period.

Addendum A lists estimated capital reserves over the analysis period. It should be noted that due to limitations of our spreadsheet, we cannot increase the contribution, the make a decrease later. The association will likely be able to decrease the funding following the street resurfacing in 2045.

## 7.0 CONCLUSION

In summary, the common elements are in good condition. With good maintenance they should provide adequate service throughout their useful lives.

The reserves are underfunded. Three suggested alternatives and the state mandated full funding option are provided. **The association should consider establishing and begin contributing to a reserve account to maintain these common elements.** The association should determine the needed operating budget and contributions and apply any excess to the reserve account in conjunction with one of these alternatives.

## 8.0 LIMITATIONS

Per the State of Washington, RCW 64.38.070, the following disclosure has been included herein:

*“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.”*

The observations described in this study are valid on the date of the investigation and have been made under the conditions noted in the report. We prepared this study for the exclusive use of the Estates at Meadowwood III Homeowner’s Association. Criterium – Pfaff Engineers does not intend any other individual or party to rely upon this study without our express written consent. If another individual or party relies on this study, they shall indemnify and hold Criterium – Pfaff Engineers harmless for any damages, losses, or expenses they may incur as a result of its use.

This study is limited to the visual observations made during our inspection. We did not remove surface materials, conduct any destructive or invasive testing, move furnishings or equipment, or undertake any digging or excavation. Accordingly, we cannot comment on the condition of systems that we could not see, such as buried structures and utilities, nor are we responsible for conditions that could not be seen or were not within the scope of our services at the time of the investigation. We did not undertake to completely assess the stability of the roadways or the underlying soil since this effort would require excavation and destructive testing. Likewise, this is not a seismic assessment.

We did not investigate the following areas:

- Buried utilities or infrastructure
- Concealed structural members or systems

We do not render an opinion on uninvestigated portions of the community.

We did not perform any computations or other engineering analysis as part of this evaluation, nor did we conduct a comprehensive code compliance investigation. This study is not to be considered a warranty of condition, and no warranty is implied. The appendices are an integral part of this report and must be included in any review.

In our Reserve Fund Analysis, we have provided estimated costs. These costs are based on our general knowledge of building systems and the contracting and construction industry. When appropriate, we have relied on standard sources, such as Means Building Construction Cost Data, to develop estimates. However, for items that we have developed costs (e.g.: structural repairs), no standard guide for developing such costs exists. Actual costs can vary significantly, based on the availability of qualified contractors to do the work, as well as many other variables. We cannot be responsible for the specific cost estimates provided.

We have performed no design work as part of this study, nor have we obtained competitive quotations or estimates from contractors as this also is beyond the scope of the project. The actual cost to remedy deficiencies and deferred maintenance items that we have identified may vary significantly from estimates and competitive quotations from contractors.

If you have any questions about this study or the reserve fund analysis,

please feel free to contact us. Thank you for the opportunity to be of assistance to you.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Ken Pfaff". The signature is written in a cursive style with a large, stylized initial "K".

Kenneth Pfaff, P.E.  
Criterium – Pfaff Engineers

