MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.

MEMBER OF community ASSOCIATIONS INSTITUTE

(Final Report, Revised August 9, 2013)

Condition Assessment
and
Reserve Fund Plan
2013

for

Crossings
On the Potomac

Hedgesville, West Virginia

Prepared for:

The Board of Directors

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.

MEMBER OF community ASSOCIATIONS INSTITUTE

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August 9, 2013

Mr. Dallas Grim, Vice President
Crossings on the Potomac Property Owners Association
P.O. Box 417
Hedgesville, West Virginia 25427

RE: **CONDITION ASSESSMENT AND RESERVE FUND PLAN 2013**
Crossings on the Potomac Property Owners Association
(Final Report, Revised August 9, 2013)
Hedgesville, West Virginia
Project No. 7457

Dear Mr. Grim:

Mason & Mason Capital Reserve Analysts, Inc. has completed the final report for Crossings on the Potomac.

The final report reflects changes, directed by your email and phone conversation with Jim Sr. on August 7, 2013.

We genuinely appreciate the opportunity to work with you and the Property Owners Association.

Sincerely,

Mason & Mason Capital Reserve Analysts, Inc.

James G. Mason III, R. S.
Reserve Analyst

James G. Mason, R. S.
Principal

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FOREWORD

PLEASE READ THIS FIRST

This report contains information the Board requires to fulfill its fiduciary responsibilities with respect to the financial health of the Association. Even if you are already familiar with the concepts of capital reserve planning, it requires some study. The information in this report is vital to your Association's financial health. Unless you understand it, your Association may not follow it. This may lead to underfunding and financial stress at some time in the future.

Our years of experience providing reserve analysis to both first-time and multi-update return clients have compelled us to develop a logical funding approach, which is based on generational equity and fairness to common-interest property owners that helps ensure realistic reserve funding levels.

Our approach is neither standard, nor is it necessarily easy to understand without first becoming familiar with some basic concepts. Section 3 explains these concepts in more detail. We want you to understand them because a well-informed Association makes the best decisions for its common-property owners.

SUMMARY OF KEY ISSUES

Different readers will look for different things from this report. Perhaps the *homeowner* will just be looking for the high points. A *prospective buyer* may be looking at the general financial condition of the Association's reserves. A *Board member* should probe deeper in order to understand the financial tools that will be helpful in fulfilling their fiduciary responsibilities to the Association.

The Summary of Key Issues presents a recapitulation of the most important findings of Crossings on the Potomac's Reserve Fund Plan. Each is discussed in greater detail in the body of the report. We encourage the reader to "go deeper" into the report, and we have written it in a way that's understandable to a first-time reader.

Analyzing the capital reserves reveals that:

- The reserve fund is approximately **34%** funded through 2012. **Our goal is to become fully funded by the end of the 20-year period (2032).**

In order to achieve this goal the P.O.A. should:

- Increase the annual contribution in **2013** from **$22,220** to **$90,299**, and plan on annual increases of **3.0%** to reflect inflation thereafter.
- This represents an increase from **$132.26** to **$537.49** (a net increase of **$405.23**) per property owner, per year (based on **168** residences).

Supporting data are contained in the body of this report, and we encourage the reader to take the time to understand it.

VISUAL EVALUATION METHODOLOGY

The first step in the process is collection of specific data on each of your community's commonly-held components. This information includes quantity and condition of each included component. We collect most of this data during the on-site field survey. When this information is not available in the field, we may obtain it by discussion with those knowledgeable through management or service activities.

The field survey or condition assessment is visual and non-invasive. We don't perform destructive testing to uncover hidden conditions; perform operational testing of mechanical, electrical, plumbing, fire and life safety protection; or perform code compliance analysis.

We make no warranty that every defect has been identified. Our scope of work doesn't include an evaluation of moisture penetration, mold, indoor air quality, or other environmental issues. While we may identify safety hazards observed during the course of the field survey, this report shouldn't be considered a safety evaluation of components.

Replacement costs are sometimes based on published references, such as R. S. Means. However, our opinions of replacement costs usually include removal and disposal and are usually based on experience with similar projects including information provided by local contractors and reported client experience. Actual construction costs can vary significantly due to seasonal considerations, material availability, labor, economy of scale, and other factors beyond our control.

Projected useful service lives are based on statistical data and our opinion of their current visual condition. No guarantee of component service life expectancies are expressed or implied and none should be inferred by this report. Your actual experience in replacing components may differ significantly from the projections in the report, because of conditions beyond our control or that were not visually apparent at the time of the survey.

1. INTRODUCTION

1.1 Background: Crossings on the Potomac Property Owners Association is comprised of 168 single-family lots, located on Little Georgetown Road in Hedgesville, West Virginia. The community was constructed circa 2003. The community is divided into four gated sections and includes ten private roads; Piscataway Lane, Culpepper Court, Sharpsburg Court, Chesapeake Lane, Americana Lane, Molly Pritcher Court, Musterfield Court, Conococheaque Lane, Anacostia Lane, and Nimitz Lane. The roads do not include curbs or gutters, but do include gravel shoulders. An additional gravel parking area is included at the marina.

We are providing the Condition Assessment and Reserve Fund Plan based on Proposal Acceptance Agreement No. 7457. Our services are subject to all terms and conditions specified therein.

Mason & Mason did not review the declarations, covenants, or other organization documents pertaining to the establishment and governance of the Property Owners Association. Ultimately, the establishment, management, and expenditure of reserves are within the discretion of the Association and its Board of Directors pursuant to their organizational documents and subject to the laws of the applicable jurisdiction. We are not otherwise financially associated with the Association, and we therefore do not have any conflicts of interest that would bias this report. Information provided by Crossings on the Potomac is deemed reliable. This report is not intended to be an audit or a forensic investigation. This report is not a mandate, but is intended to be a guide for future planning.

James G. Mason III, R. S. conducted the field evaluation for this Level I report on June 4, 2013. We met with Mr. Wayne A. Maffett for a tour of the property and a summary of the components history. The weather was clear and the temperature was approximately 75 degrees F. Precipitation had not occurred for several days prior to the site visit. The pavements, walkways, and grounds were generally dry and clean of debris.

1.2 Principal Findings: The common assets appear to be in overall good condition. The community is now reaching a ten-year benchmark in terms of replacement of major systems. The approximately 10 year old asphalt roads are constructed with gravel shoulders and appear to be in very good condition. Although we observed very minor longitudinal and transverse cracking, we did not observe any alligator or deflected cracking (indicative of sub-base damage). Due to a limited amount of vehicle traffic (mainly due to a lack of currently constructed homes), and an apparently well-constructed sub-base, the pavement is holding up well. Pavement maintenance, which includes future full-depth repair and crack filling, is scheduled every five years. As empty lots are constructed, and construction traffic increases, we expect the asphalt deficiency rate to increase somewhat. Future restoration of the roads has been scheduled mid-term.

Site features, such as the entrance monuments, entrance signs, entrance gates, gate electronic and electrical equipment, marina restroom fencing, wood signage, light poles and fixtures, traffic guiderails, and storm water drainage structures appear to range from fair to good condition, with no major deficiencies observed.

The community docks are also in good condition, but will require maintenance to prevent rusting of components. Greasing of the locking pins may help the docks and the gangplanks with the constant movement and water level changes when the docks are in place. Care must be given with all parts of the docks as they are removed and re-installed in the river each season.

Financially, the P.O.A. requires a substantial increase in contributions to reserves. We have established a sufficient contribution level to eventually achieve the fully funded goal (Hybrid Approach).

In order to maintain the physical attributes that preserve property values and provide a safe environment for occupants and guests, a series of capital expenditures should be anticipated. Consequently, we have scheduled near-, mid-, and late-term restoration and replacement projects based on anticipated need from our experience with similar properties.

Generally, our approach is to group appropriately related component replacement items into projects. This creates a more realistic model and allows a grouping time line that is more convenient to schedule and logical to accomplish. Please see the Table 1 Discussion, Column 18, and the Asphalt Pavement Report in Section 7, for specific information.

2. FINANCIAL ANALYSIS

We are currently in unprecedented financial times. Previous standardized methods for determining or projecting inflation and interest income are not currently reliable. Recent inflation experience has surpassed government CPI and construction cost sources. This appears to result from a combination of factors, particularly wage rates and demand for services. We track the inflation rate among our clients based on their reported costs for typical services. A 3.5% annual rate reflects their general experience over the past decade. However, currently we are seeing somewhat lower rates and we are using 3%. Interest income has dropped substantially, and many smaller Associations are reduced to savings accounts or certificates of deposit, which are yielding only 1% to 2%.

Unlike reserves, interest income is taxable, so this further reduces the net gain. The combination of ever higher costs and lower interest income is driving reserve funding requirements substantially higher. It is impossible to forecast whether anticipated lower demand will help reduce or stabilize costs in the future. You can only delay repairs for so long.

During these times, it is prudent to keep a close watch on the economy and be ready to respond by updating the reserve fund plan as economic changes dictate.

Since asphalt pavement is particularly sensitive to oil costs and is generally the single most expensive component in many communities who own their streets, reserve fund plan pavement costs should be adjusted periodically to reflect market conditions. Gasoline prices do not necessarily reflect asphalt prices. Refinery practices combined with government plans for massive infrastructure projects will most likely result in continued shortages and subsequent higher costs for both asphalt and concrete products.

2.1 Calculation Basics: The P.O.A. is on a calendar fiscal year. Management reported that the un-audited reserve fund balance, including cash and securities, as of **December 31, 2012,** was **$165,295**. We have used a **2.00%** annual interest income factor and a **3.0%** inflation factor in our calculations. The total expenditures for the twenty-year period for both the **Cash Flow Method** and **Component Method** are projected to be **$1,403,493**.

2.2 Current Funding Analysis, Cash Flow Method (Table 3): The 2013 annual contribution to reserves has been set at **$22,220 with a presumed 3% annual increase**. This contribution includes 'Roadway Reserve Fund' and 'Operating Reserve Fund'. At this level, the total for all annual contributions for the twenty-year period would be **$597,060**, and the total interest income is projected to be **$97,977**. **This funding results in the depletion of the reserve fund by 2028.**

2.3 Alternative Funding Analysis, Cash Flow Method, Hybrid Approach (Table 3.1): This plan provides the annual contributions necessary to maintain balances more consistent with the **fully funded goal by increasing the annual contribution to $90,299 in 2014 and providing an annual escalation factor of 3.00%, matching inflation thereafter. This plan allows for a gradual increase over time after the initial increase, and addresses generational equity issues.** The total for all annual contributions for the twenty-year period would be **$2,290,244**, and the total interest income is projected to be **$380,363**. The **fully funded** balance in **2032** is **$1,432,409.**

2.4 Funding Analysis, Component Method (Table 4): This method of funding would require variable annual contributions, averaging **$111,702** over the twenty-year period. The total for all annual contributions would be **$2,234,031**, and the total interest income is projected to be **$436,576**. The **fully funded** balance in **2032** is **$1,432,409**. The Component Method model considers the current reserve fund balance in computing individual component contributions for current cycles. The Component Method model distributes the current reserve fund balance proportionally to all components prior to calculating the individual component contributions for each component cycle.

3. METHODS OF FUNDING

Once the data are compiled, our proprietary software produces two distinct funding methods. These are the **Component Method and Cash Flow Method**. Each of these methods is used in analyzing your Association's reserve status and each plays a role in the Board's decision on how to fund reserves. While we provide the guidance, the choice of funding method is ultimately the prerogative of the Board. Considering the vulnerability of the Association's assets, its risk tolerance, and its ability to fund contributions, the Board should decide how the Association will fund its reserves and at what level.

3.1 Component Method: As reserve analysts, we recognize the value of Component Method calculations as they address both future replacement costs and the time remaining to fund them. **This is the foundation of the savings concept. You will see the term "fully funded." This simply means you are on schedule, in any given year, to accrue sufficient funds by the component's replacement date. It does not mean you must have 100% of the funds ahead of time.** Simplified Example: A component projected to cost $1,000 at the end of its 10-year life cycle would require a $100

annual contribution in each of the 10 years. As long as you follow this contribution plan, the component is "fully funded."

Prior to determining the actual required annual contribution, a complex calculation apportions the existing reserve fund to each component. Each component's remaining unfunded balance forms the basis for the required contribution going forward.

Funds set aside for replacement of individual components are not normally used for the replacement of other components, even though the funds reside in the same bank account. In rare cases where a reserve fund is actually overfunded, $0 will be displayed on the Component Method tables, indicating that the component is fully funded for that cycle.

While the time basis for the report is a 20-year period, the Component Method allows for inclusion of long-life components that may require replacement after the specified period. **This allows for funding of long-life components contemporaneously, which is fundamentally fair if they are serving the current owners. This is in contrast to saying "if it doesn't require replacement within our 20-year period, we're going to ignore it."**

Due to replacement cycle time and cost differentials, the Component Method typically results in annual contribution fluctuations, which often makes it difficult for a Board to implement. **However, its guidance is essential and invaluable for understanding funding liabilities and making informed recommendations.**

Table 4 shows these calculations, as well as projects interest income, expenses with inflation, and yearly balances, which will be "fully funded."

3.2 Cash Flow Method: The Cash Flow Method is easier to implement. It is a simple 20-year spread sheet that includes the starting balance, current contribution, interest income, inflation rate, projected expenses, and resulting yearly balances. The Cash Flow Method pools the contributions allocated to each of the Association's common components into a single "account."

Table 3 shows these calculations. This table reflects the information you provided on your reserve fund balance and current contribution. It also shows projected yearly positive or negative balances. **The Cash Flow Method doesn't include replacement funding for anything beyond the 20-year period, thus leaving a potential shortfall in funding and failing to address generational equity if not specifically set to do so.** It doesn't provide any real guidance beyond the basic information. There are several variations on cash flow goals such as Threshold Funding (just enough to stay positive) and Percentage Funding (a predetermined level based on some arbitrary percentage), but these schemes don't address the reality of fully funding, and typically are just a way of passing the obligation on to the next generation.

3.3 Hybrid Approach: Please note that this is not a method, rather a way (approach) for us to utilize the Cash Flow Method, while insuring the appropriate funding levels are achieved long-term. Our Hybrid Approach uses the projected fully funded balance at the end of the 20-year period from Table 4 as a funding goal. We then set up Cash Flow funding plans. Table 3 is your "*where we are now*" Cash Flow spreadsheet modeling your reserve balance and current contribution. Table 3.1 (and possibly others) provides alternative(s) to this that meet the fully funded goal from Table 4.

We usually establish a new Cash Flow contribution that requires only small annual inflationary increases to reach the fully funded goal at the end of the 20-year period. This has the added effect of establishing a funding plan that addresses inflation. The contribution in the first year, adjusted for inflation, is equal to the contribution in the last year, based on inflated dollars (future value of money). This approach will also allow underfunded Associations the time to catch up, mitigating undue hardships. It balances the risk of temporary underfunding with the benefit of consistent predictable increasing contributions. The combination of the Component and Cash Flow Methods (Hybrid Approach) provides the advantages of both methods.

4. RESERVE PROGRAMMING

The Mason & Mason proprietary software used to produce the financial tables (Tables 1 through 4) have been under continual refinement for over a decade. It is unique in the industry as it provides comprehensive modeling through Microsoft Access and Excel that addresses the many challenges of reserve funding, allows analysts and clients to run "what if" scenarios, provides an easy to understand matrix of views and functions, and is easily provided to clients through e-mail.

4.1 Interest Income on Reserve Funds: Most Associations invest at least part of their reserve funds. Small Associations may simply use a savings account or certificates of deposit, while large Associations may have multiple investments with short-, medium-, and long-term instruments. One issue that is difficult to quantify is the percentage of funds invested. Some Associations invest a fairly substantial portion, while others hold back due to current cash outflow obligations. Some Associations do not reinvest the investment proceeds in their reserves; rather they divert the cash into their operations fund. We do not agree with this approach as it has the effect of requiring additional reserve contributions to make up for the difference. There is also the issue of changing rates over the 20-year period. In the recent past we have seen large swings in relatively short time periods. While reserve funds are not usually taxable by the IRS, the investment income generated by the reserve fund is taxable in most situations. Even with all these potential pitfalls, investment income still represents a substantial source of additional funds and for this reason should not be ignored. There is no way to make "one size fits all" with any accuracy for the individual Association. Our approach to this dilemma is to use lower approximations that compensate for less than 100% of funds invested. We feel this is still better than not recognizing it, and periodic updates allow for adjustments based on experience. The rate can be set at any level, including zero, for Associations desiring to not recognize interest. **The rate should reflect, as accurately as possible, the actual composite rate of return on all securities and other instruments of investment including allowances for taxes.**

The interest income displayed on Table 3 and Table 4 is the summation of the beginning reserve fund interest accrual and the interest earned on the contributions minus the interest lost by withdrawing the capital expenditures. This method of calculation, while not exact, approximates the averages of the three principal components of a reserve fund for each twelve-month period.

4.2 Future Replacement Costs (Inflation): Inflation is a fact of life. In order to replicate future financial conditions as accurately as possible, inflation on replacement costs should be recognized. The financial tables have been programmed to calculate inflation based upon a pre-determined rate. This rate can be set at any level, including zero. **A plan that doesn't include inflation is a 1-year plan, and any data beyond that first year won't reflect reality.**

4.3 Simultaneous Funding: This is a method of calculating funding for multiple replacement cycles of a single component over a period of time from the same starting date. Simple Example: Funding for a re-roofing project, while, at the same time, funding for a second, subsequent re-roofing project. This method serves a special purpose if multiple-phase projects are all near-term, but will result in higher annual contribution requirements and leads to generational equity issues otherwise. We use this type of programming only in special circumstances.

4.4 Sequential Funding: This is a method of calculating funding for multiple replacement cycles of a single component over a period of time where each funding cycle begins when the previous cycle ends. Simple Example: Funding for the second re-roofing project begins after the completion of the initial re-roofing project. This method of funding appears to be fundamentally equitable. We use this type of programming except in special circumstances.

4.5 Normal Replacement: Components are scheduled for complete replacement at the end of their useful service lives. Simple Example: An entrance sign is generally replaced all at once.

4.6 Cyclic Replacement: Components are replaced in stages over a period of time. Simple Example: Deficient sidewalk panels are typically replaced individually as a small percentage, rather than the complete system.

4.7 Minor Components: A minimum component value is usually established for inclusion in the reserve fund. Components of insignificant value in relation to the scale of the Association shouldn't be included and should be deferred to the operations budget. A small Association might exclude components with aggregate values less than $1,000, while a large Association might exclude components with aggregate values of less than $10,000. Including many small components tends to over complicate the plan and doesn't provide any relative value or utility.

4.8 Long Life Components: Almost all Associations have some components with long or very long useful service lives typically ranging between thirty and sixty years. Traditionally, this type of component has been ignored completely. Simple Example: Single replacement components such as entrance monuments should be programmed for full replacement at their statistical service life. This allows for all common property owners to pay their fair share during the time the component serves them. This also has the added effect of reducing the funding burden significantly as it is carried over many years.

4.9 Projected Useful Service Life: Useful service lives of components are established using construction industry standards and our local experience as a guideline. Useful service lives can vary greatly due to initial quality and installation, inappropriate materials, maintenance practices or lack thereof, environment, parts attrition, and obsolescence. By visual observation, the projected useful service life may be shortened or extended due to the present condition. The projected useful service life is not a mandate, but a guideline, for anticipating when a component will require replacement and how many years remain to fund it.

4.10 Generational Equity: As the term applies to reserves, it is the state of fairness between and over the generations relating to responsibility for assets you are utilizing during your time of ownership. It is neither reasonable, nor good business to defer current liabilities to future owners. This practice is not only unfair; it can also have a very negative impact on future property values.

5. UPDATING THE RESERVE FUND PLAN

A reserve fund plan should be periodically updated to remain a viable planning tool. Changing financial conditions and widely varying aging patterns of components dictate that revisions should be undertaken periodically from one to five years, depending upon the complexity of the common assets and the age of the community. Weather, which is unpredictable, plays a large part in the aging process.

Full Updates (Level II) include a site visit to observe current conditions. These updates include adjustments to the component inventory, replacement schedules, annual contributions, balances, replacement costs, inflation rates, and interest income.

We encourage Associations that are undergoing multiple simultaneous or sequential costly restoration projects (usually high rise buildings) to perform Level III Administrative Updates. Administrative updates do not include a condition assessment. They are accomplished by comparing original projections with actual experience during the interim period as reported by Management. These updates can be performed annually and include adjustments to the replacement schedules, contributions, balances, replacement costs, inflation rates, and interest income. The Level III Administrative Update can be a cost-effective way of keeping current between Level II Full Update cycles. Full Updates (Level II) and Administrative Updates (Level III) help to ensure the integrity of the reserve fund plan.

6. PREVENTIVE MAINTENANCE

The following preventive maintenance practices are suggested to assist the Association in the development of a routine maintenance program. The recommendations are not to be considered the only maintenance required, but should be included in an overall program. The development of a maintenance checklist and an annual condition survey will help extend the useful service lives of the Association's assets.

This section includes best maintenance practices or life-extension maintenance for many, but not necessarily all, components in the report. Items for which no maintenance is necessary, appropriate or beyond the purview of this report are not included in this section. We typically include them for townhomes and garden condominiums while mid- and high-rise buildings are generally too complex.

6.1 Asphalt Pavement: Pavement maintenance is the routine work performed to keep a pavement, subjected to normal traffic and the ordinary forces of nature, as close as possible to its as-constructed condition. Asphalt overlays may be used to correct both surface deficiencies and structural deficiencies. Surface deficiencies in asphalt pavement usually are corrected by thin resurfacing, but structural deficiencies require overlays designed on factors such as pavement properties and traffic loading. Any needed full-depth repairs and crack filling should be accomplished prior to overlaying. The edgemill and overlay process includes milling the edges of the pavement at the concrete gutter and feathering the depth of cut toward the center of the drive lane. Milling around meter heads and utility features is sometimes required. The typical useful life for an asphalt overlay is twenty years.

6.2 Asphalt Full-Depth Repairs: In areas where significant alligator cracking, potholes, or deflection of the pavement surface develops, the existing asphalt surface should be removed to the stone base course and the pavement section replaced with new asphalt. Generally, this type of failure is directly associated with the strength of the base course. When the pavement is first constructed, the stone base consists of a specific grain size distribution that provides strength and rigidity to the pavement section. Over time, the stone base course can become contaminated with fine-grained soil particles from the supporting soils beneath the base course. The most positive repair to such an area is to remove the contaminated base course and replace it with new base stone to the design depth. It is appropriate to perform these types of repairs immediately prior to asphalt restoration projects. Generally, this type of repair should not be required for approximately five years after an asphalt restoration project.

6.3 Asphalt Crack Filling: Cracks that develop throughout the life of the asphalt should be thoroughly cleaned of plant growth and debris (lanced) and then filled with a rubberized asphalt crack sealant. If the crack surfaces are not properly prepared, the sealant will not adhere. Crack filling should be accomplished every three to six years to prevent infiltration of water through the asphalt into the sub-grade, causing damage to the road base. It is appropriate to perform these types of repairs immediately prior to edgemill and overlay. Generally, this type of repair should not be required for approximately five years after an edgemill and overlay project.

6.4 Ground Level Concrete Slabs or Concrete Patios: Any cracks occurring in ground-level concrete slabs should be routed and sealed. In order to extend the useful service life of concrete in contact with the ground, a penetrating sealer to prevent moisture infiltration into the concrete should be applied. This process should be repeated at approximately five- to ten-year intervals.

6.5 Entrance Signage: The wood components of entrance signs should be periodically cleaned of loose paint, lamination cracks should be re-sealed, and the sign repainted to maintain appearance. Out-of-plumb posts should be straightened and secured.

6.6 Bare Wood Components: Bare wood components, both non-treated and pressure-treated, generally will achieve a greater useful service life and improved appearance if preventative maintenance is performed. Periodic pressure washing and sealing with wood preservative is recommended on all wood components. Rough edges and splinters should be sanded prior to sealing. Damaged, warped, or deteriorated wood components should be replaced as necessary. Generally, securing or repairing wood components with screws will provide a better fastening method than nails.

6.7 Light Poles: Outdoor lighting has a limited service life because of the accelerated aging process due to weather extremes. Remediation of the pole fixtures is a viable alternative to full replacement and would include painting the poles along with lamp housing replacement, including ballasts and capacitors. Any poles observed to be out of plumb should be straightened. Periodic cleaning of peeling paint and rust, priming and re-painting of poles and fixtures will help extend the useful service life.

6.8 Painted Wood Fences: Wood components, such as privacy fences, generally will achieve a greater useful service life and improved appearance if preventative maintenance is performed. Periodic scraping of loose paint, priming, and repainting projects should be performed. Damaged or deteriorated wood components should be replaced as necessary. Generally, securing or repairing wood components with screws will provide a better fastening method than nails. Vegetation should be controlled to extend the useful service life. Loose or leaning sections should be straightened and secured. Landscaping practices, such as weed eating, will shorten the useful service life of wood components. Bases may be protected with metal sleeves to prevent damage.

6.9 Tree Trimming, Removal, and Replacement: As communities age, trees, both native and planted, may become problematic if periodic care is not accomplished. Trees may become damaged by weather or disease, or they may outsize their location. Proper, diligent tree trimming may alleviate future problems with regard to damage to adjacent structures. Proper tree trimming also helps maintain a healthy tree and may reduce windage in inclement weather. Proper tree trimming should not be confused with the common practice of topping, which produces not only an unattractive tree, but also an unhealthy one due to weakening of the root structure. Tree root damage of asphalt footpaths and sidewalks is also a common problem. The best solution is re-routing the adjacent structure, if possible, to prevent future damage. If re-routing is not possible, tree roots causing the damage may be pruned back when replacement of the damaged component is accomplished. The practice of moderate mulching is beneficial for trees. However, repeated mulching against the tree trunk, year after year, without removal of the old mulch can eventually kill trees by trapping moisture against the

bark, allowing fungi and insects to easily infiltrate the tree. Mulch should be placed around trees to the drip line, but should not be touching the bark.

7. ASPHALT PAVEMENT REPORT

Street Name	Total SY Asphalt Pavement	SY Full-Depth Repairs	Linear Footage Cracks
Piscataway Lane	7,072	0	12
Culpepper Court	1,756	0	0
Sharpsburg Court	2,616	0	18
Chesapeake Lane	4,750	0	56
Americana Lane	15,436	0	20
Molly Pritcher Court	3,042	0	12
Musterfield Court	1,957	0	18
Conococheaque Lane	1,395	0	0
Anacostia Lane	9,527	0	5
Nimitz Lane	10,667	0	40
TOTALS	**58,218**	**0**	**181**

All quantities approximate

COMPONENT DATA AND ASSET REPLACEMENT SCHEDULE
TABLE 1 EXPLANATION

This table lists the common assets included in the reserve fund plan and provides details of the replacement schedules. A narrative discussion is provided adjacent to each component. Photo references and maintenance protocol reference numbers are also provided. An explanation of each column in the table follows:

Column **1** **Component No.** is consistent throughout all tables.

Column **2** **Component** is a brief description of the component.

Column **3** **Quantity** of the component studied, which may be an exact number, a rough estimate, or simply a (1) if the expenditure forecast is a lump sum allowance for replacement of an unquantified component.

Column **4** **Unit of Measurement** used to quantify the component:

SY = Square Yards
SF = Square Feet
LF = Linear Feet
EA = Each
LS = Lump Sum
PR = Pair
CY = Cubic Yards

Column **5** **Unit Cost** used to calculate the required expenditure. This unit cost includes removal of existing components and installation of new components, including materials, labor, and overhead and profit for the contractor.

Column **6** **Total Asset Base** is the total value of common assets included in the study in current dollars. In addition to capital assets, this figure includes one cycle of maintenance liability.

Column **7** **Typical Service Life (Yrs) or Cycle** is the typical life expectancy of similar components in average conditions or the length of years between replacement cycles, and does not necessarily reflect the conditions observed during the field evaluation. This number is furnished for reference and is not necessarily computed in the system.

Column **8** **1st Cycle Year** is the scheduled year of the first projected replacement or repair.

Column **9** **Percentage of Replacement** is the percentage of component value to be replaced in the first replacement cycle.

Column **10** **Cost for 1st Cycle** is the future cost (with inflation) of the replacement. It is the product of Column 6 times Column 9 in future dollars.

Column **11** **2nd Cycle Year** is the scheduled year of the second projected replacement or repair. If a second cycle is not listed, it is because the first cycle is beyond the end of the study.

Column **12** **Percentage of Replacement** is the percentage of component value to be replaced in the second replacement cycle. This can vary from the percentage of the first cycle for various reasons, such as the increased age of a component may require a larger amount of repair.

Columns **13** Through **16** **Cycles, Percentage, and Cost** repeat as itemized above. Although not shown on the tables, the cycles continue throughout the study period and beyond.

Column **18** **Discussion** is the description and observed condition of the component and the methodology employed in the decision-making process. Includes the photo reference, **(Photo #1, #2, etc.)** and Maintenance Protocol reference numbers **(7.1, 7.2 etc.)** if applicable.

Reserve Fund Plan for
CROSSINGS ON THE POTOMAC PROPERTY OWNERS ASSOCIATION
Hedgesville, West Virginia

COMPONENT DATA AND ASSET REPLACEMENT SCHEDULE
TABLE 1
2013 Through 2032

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
www.masonreserves.com 800-776-6980 Fax 800-776-6408

Component No.	Component	Quantity	Unit of Measurement	Unit Cost	Total Asset Base	Typical Service or Cycle Life in Yrs	1st Cycle Year	Percentage of Replacement	Cost For 1st Cycle	2nd Cycle Year	Percentage of Replacement	Cost For 2nd Cycle	3rd Cycle Year	Percentage of Replacement	Cost For 3rd Cycle	DISCUSSION
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18
1 ASPHALT COMPONENTS																
1.1	Asphalt Restoration Project	58,218	SY	$12.00	$698,616	24	2028	100%	1,088,421	2052	100%	2,212,536				The roads throughout Crossings on the Potomac are constructed without concrete curbs and gutters and have well maintained gravel shoulders. The asphalt pavement throughout appears to be in very good condition. The thickness of the pavement could not be visually determined. Restoration includes overlay with 1-½" new compacted asphalt. Core sampling should be used to determine the depth and condition of the sub-base and pavement prior to restoration. Costs do not include any inadequate sub-base. The gravel shoulders throughout the roads are mainly in good condition, and gravel should be renewed under Operations. A full asphalt service life is dependent on preventative maintenance being performed as suggested in the Preventive Maintenance section of the report and scheduled in Item 1.2. See the Asphalt Pavement Report, Section 7, for additional details. Management requested a 24 year service life.
1.2	Asphalt Repair Allowance	1	LS	$36,000.00	$36,000	5	2018	25%	$10,433	2023	50%	$24,190	2028	100%	$56,087	No surface ground water seepage was observed. Essentially none of the pavement area exhibits deflection or a pattern of cracking that is indicative of sub-base damage or insufficient asphalt depth, and only 181 linear feet of longitudinal or transverse cracking was observed. Repairs are essential in order to achieve the projected remaining service life of the pavement. Full-depth repairs and crack filling are scheduled every five years throughout the study period, including the year of the asphalt restoration project. See the Asphalt Pavement Report, Section 7, for additional details.
2 CONCRETE COMPONENTS																
2.1	Concrete Loading Ramp & Landing Pads	1,884	SF	$15.00	$28,260	5	2016	10%	$3,088	2021	15%	$5,370	2026	20%	$8,300	A concrete boat loading ramp is constructed at the marina. The ramp appears to be properly constructed of 6' x 17' individual concrete slab sections allowing loading and unloading of boats for the community. Concrete thickness could not be visually determined. They are in generally good condition. About 22 square feet (about 1% of the total area) exhibits minor cracks. This component includes the two 4' x 6' concrete pads constructed as the landing for the two gangplanks, which are in very good condition. Scaling and cracking should be anticipated as concrete ages. Severely scaled sections will tend to deteriorate more quickly over time and should be replaced in each replacement cycle. Cyclic repairs are scheduled, as full replacement at one time is not appropriate or anticipated. The Board should be aware that repairs to small quantities of concrete may be more costly because of the difficulty of attracting competitive bids for small projects, which may not meet contractor minimums.
3 SITE FEATURES																
3.1	Modular Block Entrance Features Allowance	7	EA	$21,000.00	$147,000	40	2043	100%	$356,808							Seven modular block monuments are constructed at the entrance to Americana Lane, Conococheaque Lane, Piscataway Lane and at Chesapeake Lane gated entrances. Each monument site consists of a 4' x 4' x 8' column installed at each end with a 14' x 2' wall and two 4' x 6' pressure-treated wood beams integrated between the columns. Each site contains two monuments, separated by a metal gate, with exception of the Piscataway Lane entrance. This entrance has one monument and a single column on the opposite side. This category includes the four modular block keypad islands, constructed at the front of each monument site. All modular block and wood components appear to be in good condition. With periodic maintenance performed under the Operations budget, the monuments should have a very long service life.
3.2	Carved Entrance Signage	7	EA	$1,800.00	$12,600	20	2023	100%	$16,933	2043	100%	$30,584				Painted, carved H.D.U. (High Density Urethane) signs are installed on the modular block monuments at each gated community entrance. The oval signs are seven feet by four feet high. All of the signs are in good condition. One sign at the Piscataway Lane entrance has recently received repainting, due to its constant exposure to sunlight. The rear mounting boards of both signs installed on Conococheaque Lane appear to have been chewed,(by deer), which will eventually require replacement. Continued maintenance will help extend the service life of the signs.
3.3	Metal Entrance Gates	4	PR	$3,000.00	$12,000	15	2018	100%	$13,911	2033	100%	$21,673				Four sets of painted aluminum gates are installed between the modular block monuments, providing community security. Each gate is twelve feet long by five feet in height and mounted to the block columns. Most of the gates appear to be in fair to good condition, but they were not all aligned properly. Maintenance, such as painting and proper gate alignment may help to extend their service lives.
3.4	Gate Electronic Equipment Allowance	4	EA	$7,500.00	$30,000	8	2018	100%	$34,778	2025	100%	$42,773	2032	100%	$52,605	Each gated entrance to the community includes a Linear Model AE-500 Commercial Telephone Entry System, US Automatic, Patriot swing gate operator, which includes two Danaher 24" linear actuators, a single solar panel, and battery for backup for power outages. This is a dial out system, controlled by keypad, remote openers, and uses a phone line for communication. We understand that the entire system was replaced after seven years of service. These systems are typically replaced in their entirety, as parts may become obsolete. Since we cannot predict the future equipment service life, we are providing an allowance for replacement as needed. Cost is based on the previous replacement, circa 2010, reported by the Association.
3.5	Restroom Fencing	48	LF	$23.00	$1,104	15	2020	100%	$1,358	2035	100%	$2,115				Painted, pressure-treated wood fencing is constructed around the portable toilet at the marina parking area. The fencing is in good condition, but should continue to be maintained under operations, including re-fastening boards and staining the wood.
3.6	Wood Signage	9	EA	$700.00	$6,300	20	2021	100%	$7,981	2041	100%	$14,414				There are approximately nine informational and community name, painted wood signs. They are installed at the marina parking area and in front of each entrance monument. They are an average size of 3' x 3' and mounted to painted 4 x 4 wood posts. The signs range from fair to good condition.
3.7	Light Poles & Fixtures	4	EA	$2,600.00	$10,400	30	2039	100%	$22,429							Management advised that the community is responsible for maintenance and replacement of four street lights. These lights are installed adjacent to each control panel island at each entrance. The remaining light poles and fixtures are responsibility of the electric company. Four metal light poles, about 12' high, with traditional lantern fixtures provide area illumination. They appear to be in good condition. The lighting was not observed after dark. No problems were reported with lighting.
3.8	Traffic Guiderails	914	LF	$36.00	$32,904	30	2033	100%	$59,428							A metal guiderail mounted on metal posts is installed on each side of Americana Lane at two locations. They appear to be in good condition and should provide a long service life, with no maintenance other than repairs in the case of impact damage.

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COMPONENT DATA AND ASSET REPLACEMENT SCHEDULE
TABLE 1
2013 Through 2032

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Component No.	Component	Quantity	Unit of Measurement	Unit Cost	Total Asset Base	Typical Service or Cycle Life in Yrs	1st Cycle Year	Percentage of Replacement	Cost For 1st Cycle	2nd Cycle Year	Percentage of Replacement	Cost For 2nd Cycle	3rd Cycle Year	Percentage of Replacement	Cost For 3rd Cycle	DISCUSSION
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18
3.9	Storm Water Drainage System Allowance	1	LS	$8,500.00	$8,500	7	2020	100%	$10,454	2027	100%	$12,857	2034	100%	$15,813	Storm water drainage is provided by large steel culverts, concrete culverts, a large quantity of rip-rap, and possible underground structures, leading storm water offsite. Though storm water drainage systems are a long life component and catastrophic failure is not anticipated, it is prudent for the community to plan for localized repairs and repairs to ancillary damage. This category may also be used to address localized erosion issues.
4 COMMUNITY DOCKS																
4.1	Boat Ramp Gate	1	EA	$1,200.00	$1,200	20	2029	100%	$1,926	2049	100%	$3,478				A steel gate, approximately 20 feet long, mounted on steel posts, is constructed at the community marina, providing access to the boat loading ramp. The gate was observed in a closed and locked state. It is in good condition, but will require painting in the future to avoid rust and deterioration.
4.2	Floating Dock System	4,638	SF	$76.00	$352,488	30	2033	100%	$636,633							Two floating docks are installed on the Potomac for residential use. The docks are installed only for a few months out of the year, then are dismantled, removed from the water via a crane, and set in the dock parking area over the winter and stored. Each dock has a 67' x 4' stainless steel gangplank, mounted on a 4' x 6' concrete pad and extends to the dock, where it is hinged to the floating docks. The dock framing is constructed of galvanized steel platforms, which sit on large, plastic float drums (thick-walled black polyethylene case filled with polystyrene foam flotation). The decking is constructed from 2 x 6 composite materials. Each dock is held in place with a system of crossed guide wires and galvanized steel outriggers, which are attached to posts at the top of the embankment and set in concrete. The approximate cost of the system was provided by Management. All components appear to be in good condition. Minor rusting was observed.

CALENDAR OF EXPENDITURES
TABLE 2 EXPLANATION

This table is a yearly plan of action of replacements and costs. A description of the columns in the table follows:

Column **1** **Year** is the year of the projected replacement and expenditure.

Column **2** **Component No.** itemizes the components and is consistent throughout the tables.

Column **3** **Component** is a brief description of the component.

Column **4** **Present Cost** is the cost for the cycle in today's dollars.

Column **5** **Future Cost (Inflated)** is the cost for the cycle in future dollars.

Column **6** **Total Annual Expenditures** gives the total expenditures by year.

Column **7** **Action** is an area provided for the Board to make notations as to action taken on each component.

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Reserve Fund Plan for
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CALENDAR OF EXPENDITURES
TABLE 2
2013 Through 2032

MASON & MASON
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YEAR	COMPONENT NO.	COMPONENT	PRESENT COST 2013	FUTURE COST (INFLATED)	TOTAL ANNUAL EXPENDITURES	ACTION
1	2	3	4	5	6	7
2013					2013	
					NO EXPENDITURES	
2014					2014	
					NO EXPENDITURES	
2015					2015	
					NO EXPENDITURES	
2016					2016	
	2.1	Concrete Loading Ramp & Landing Pads	$2,826	$3,088	TOTAL EXPENDITURES	
					$3,088	
2017					2017	
					NO EXPENDITURES	
2018					2018	
	1.2	Asphalt Repair Allowance	$9,000	$10,433	TOTAL EXPENDITURES	
	3.3	Metal Entrance Gates	$12,000	$13,911		
	3.4	Gate Electronic Equipment Allowance	$30,000	$34,778		
					$59,123	
2019					2019	
					NO EXPENDITURES	
2020					2020	
	3.5	Restroom Fencing	$1,104	$1,358	TOTAL EXPENDITURES	
	3.9	Storm Water Drainage System Allowance	$8,500	$10,454		
					$11,812	
2021					2021	
	2.1	Concrete Loading Ramp & Landing Pads	$4,239	$5,370	TOTAL EXPENDITURES	
	3.6	Wood Signage	$6,300	$7,981		
					$13,350	
2022					2022	
					NO EXPENDITURES	
2023					2023	
	1.2	Asphalt Repair Allowance	$18,000	$24,190	TOTAL EXPENDITURES	
	3.2	Carved Entrance Signage	$12,600	$16,933		
					$41,124	
2024					2024	
					NO EXPENDITURES	
2025					2025	
	3.4	Gate Electronic Equipment Allowance	$30,000	$42,773	TOTAL EXPENDITURES	
					$42,773	
2026					2026	
	2.1	Concrete Loading Ramp & Landing Pads	$5,652	$8,300	TOTAL EXPENDITURES	
					$8,300	
2027					2027	
	3.9	Storm Water Drainage System Allowance	$8,500	$12,857	TOTAL EXPENDITURES	
					$12,857	
2028					2028	
	1.1	Asphalt Restoration Project	$698,616	1,088,421	TOTAL EXPENDITURES	
	1.2	Asphalt Repair Allowance	$36,000	$56,087		
					1,144,508	
2029					2029	
	4.1	Boat Ramp Gate	$1,200	$1,926	TOTAL EXPENDITURES	
					$1,926	
2030					2030	
					NO EXPENDITURES	
2031					2031	
	2.1	Concrete Loading Ramp & Landing Pads	$7,065	$12,028	TOTAL EXPENDITURES	
					$12,028	
2032					2032	

Reserve Fund Plan for
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CALENDAR OF EXPENDITURES
TABLE 2
2013 Through 2032

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
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YEAR	COMPONENT NO.	COMPONENT	PRESENT COST 2013	FUTURE COST (INFLATED)	TOTAL ANNUAL EXPENDITURES	ACTION
1	2	3	4	5	6	7
	3.4	Gate Electronic Equipment Allowance	$30,000	$52,605	TOTAL EXPENDITURES	
					$52,605	

CURRENT FUNDING ANALYSIS CASH FLOW METHOD
TABLE 3.0 EXPLANATION

and, if applicable,

ALTERNATIVE FUNDING ANALYSIS CASH FLOW METHOD
TABLE 3.1, 3.2, 3,3 (etc.) EXPLANATION

Table 3.0 shows the financial picture over the twenty-year study period, using the current annual contribution and the reserve fund balance reported at the beginning of the study year. If the results of the study indicate a need to increase the annual contribution to maintain adequate balances throughout the study period, Table 3.1, and possibly, 3.2 will be provided for consideration. Alternatives might also be provided if a community is over-funded and desires to adjust the annual contribution downward.

Alternative funding may be achieved by increasing the annual contribution to a fixed yearly amount or by applying an annual escalation factor to increase contributions over time, or a combination of both methods. An inflation factor and interest income factor may be included in the calculations on this page.

A description of the columns in the table follows:

Column **1** **Year**

Column **2** **Total Asset Base** of all common capital assets included in the reserve fund with costs adjusted for inflation.

Column **3** **Beginning Reserve Fund Balance** is the reserve fund balance after all activity in the prior year is completed.

Column **4** **Annual Contribution,** on Table 3, is the amount contributed annually to the reserve fund as reported by the Board of Directors. On the Alternative Funding Analysis tables (3.1, 3.2, etc.), the annual contribution is projected to maintain positive balances throughout the study period.

Column **5** **Interest Income,** which is indicated in the heading of the table, is applied to the reserve fund balance and is accrued monthly throughout each year after the yearly expenditures are deducted. The interest income percentage may be varied to reflect actual experience of the community investments.

Column **6** **Capital Expenditures** are annual totals of expenditures for each year of the study period adjusted by the inflation percentage listed in the heading of the table.

Column **7** **Ending Reserve Fund Balance** is the result of the beginning reserve fund balance plus the annual contribution, plus interest income, less capital expenditures for the year.

Column **8** **Balance to Asset Base Ratio,** expressed as a percentage, is the ratio between the ending reserve fund balance and the total asset base for that year. The ratio is useful to the analysts in understanding general financial condition, but there is no standard ratio as each community's condition and complexity varies.

Reserve Fund Plan for
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CURRENT FUNDING ANALYSIS
CASH FLOW METHOD
TABLE 3

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
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In Dollars	Beginning Reserve Fund Balance:	Annual Contribution To Reserves:	Contribution Percentage Increase:	Annual Inflation Factor:	Annual Interest Income Factor:
	165,295	22,220	3.00%	3.00%	2.00%

YEAR	TOTAL ASSET BASE	BEGINNING RESERVE FUND BALANCE	ANNUAL CONTRIBUTION	INTEREST INCOME	CAPITAL EXPENDITURES	ENDING RESERVE FUND BALANCE
1	2	3	4	5	6	7
2013	1,377,372	165,295	22,220	3,579	0	191,094
2014	1,418,693	191,094	22,887	4,107	0	218,087
2015	1,461,254	218,087	23,573	4,659	0	246,319
2016	1,505,092	246,319	24,280	5,203	3,088	272,714
2017	1,550,244	272,714	25,009	5,777	0	303,500
2018	1,596,752	303,500	25,759	5,764	59,122	275,901
2019	1,644,654	275,901	26,532	5,858	0	308,291
2020	1,693,994	308,291	27,328	6,392	11,812	330,199
2021	1,744,814	330,199	28,148	6,827	13,351	351,823
2022	1,797,158	351,823	28,992	7,417	0	388,232
2023	1,851,073	388,232	29,862	7,715	41,123	384,686
2024	1,906,605	384,686	30,758	8,100	0	423,543
2025	1,963,803	423,543	31,680	8,429	42,773	420,880
2026	2,022,717	420,880	32,631	8,761	8,300	453,971
2027	2,083,399	453,971	33,610	9,390	12,857	484,114
2028	2,145,901	484,114	34,618	0	1,144,508	(625,776)
2029	2,210,278	(625,776)	35,657	0	1,926	(592,045)
2030	2,276,586	(592,045)	36,726	0	0	(555,319)
2031	2,344,884	(555,319)	37,828	0	12,028	(529,519)
2032	2,415,230	(529,519)	38,963	0	52,605	(543,161)
STUDY PERIOD TOTALS			597,060	97,977	1,403,493	

Reserve Fund Plan for
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ALTERNATIVE FUNDING ANALYSIS
CASH FLOW METHOD
HYBRID APPROACH
TABLE 3.1

MASON & MASON
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In Dollars	Beginning Reserve Fund Balance:	Annual Contribution To Reserves:	Contribution Percentage Increase:	Annual Inflation Factor:	Annual Interest Income Factor:
	165,295	22,220	3.00%	3.00%	2.00%

YEAR	TOTAL ASSET BASE	BEGINNING RESERVE FUND BALANCE	ANNUAL CONTRIBUTION	INTEREST INCOME	CAPITAL EXPENDITURES	ENDING RESERVE FUND BALANCE
1	2	3	4	5	6	7
2013	1,377,372	165,295	22,220	3,579	0	191,094
2014	1,418,693	191,094	90,299	4,841	0	286,234
2015	1,461,254	286,234	93,008	6,791	0	386,033
2016	1,505,092	386,033	95,798	8,802	3,088	487,545
2017	1,550,244	487,545	98,672	10,916	0	597,134
2018	1,596,752	597,134	101,632	12,518	59,122	652,162
2019	1,644,654	652,162	104,681	14,304	0	771,147
2020	1,693,994	771,147	107,822	16,612	11,812	883,769
2021	1,744,814	883,769	111,056	18,904	13,351	1,000,378
2022	1,797,158	1,000,378	114,388	21,439	0	1,136,204
2023	1,851,073	1,136,204	117,820	23,771	41,123	1,236,672
2024	1,906,605	1,236,672	121,354	26,284	0	1,384,310
2025	1,963,803	1,384,310	124,995	28,839	42,773	1,495,371
2026	2,022,717	1,495,371	128,745	31,496	8,300	1,647,312
2027	2,083,399	1,647,312	132,607	34,556	12,857	1,801,617
2028	2,145,901	1,801,617	136,585	25,417	1,144,508	819,111
2029	2,210,278	819,111	140,683	18,046	1,926	975,913
2030	2,276,586	975,913	144,903	21,278	0	1,142,094
2031	2,344,884	1,142,094	149,250	24,549	12,028	1,303,865
2032	2,415,230	1,303,865	153,728	27,422	52,605	1,432,409
STUDY PERIOD TOTALS			2,290,244	380,363	1,403,493	FULLY FUNDED BALANCE GOAL

FUNDING ANALYSIS COMPONENT METHOD
TABLE 4 EXPLANATION

Table 4 is a yearly list of annual contributions toward each component, which must be made to achieve 100% funding. The reserve fund balance is the balance at the beginning of the study year. The beginning reserve fund balance is applied, proportionately, to each component prior to calculating the yearly contribution for each component. Future costs (inflation) are factored into the replacement cycles. The annual contribution for each year is calculated in the bottom row of the study labeled **Annual Component Contribution Totals.** Interest and inflation are calculated at the same annual rates as the Cash Flow Method (Table 3).

Column **1**	**Component Number** is consistent throughout the tables.
Column **2**	**Component** is a brief description of the component.
Columns **3 - 22**	**Years** lists the annual contribution amount toward each component throughout the twenty-year study period, which is totaled at the bottom of the component table.

COMPONENT METHOD SUMMARY

The component method summary computes the beginning reserve fund balance, the annual component contribution, the annual expenditures, and interest income. It then provides the ending reserve fund balance for each year of the study.

Reserve Fund Plan for
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FUNDING ANALYSIS
COMPONENT METHOD
TABLE 4

MASON & MASON
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Beginning Reserve Fund Balance:

In Dollars **165,295**

Component Number	COMPONENT	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
1 ASPHALT COMPONENTS																					
1.1	Asphalt Restoration Project	56,316	56,316	56,316	56,316	56,316	56,316	56,316	56,316	56,316	56,316	56,316	56,316	56,316	56,316	56,316	71,783	71,783	71,783	71,783	71,783
1.2	Asphalt Repair Allowance	1,983	1,983	1,983	1,983	1,983	4,597	4,597	4,597	4,597	4,597	10,657	10,657	10,657	10,657	10,657	3,089	3,089	3,089	3,089	3,089
2 CONCRETE COMPONENTS																					
2.1	Concrete Loading Ramp & Landing Pads	860	860	860	1,020	1,020	1,020	1,020	1,020	1,577	1,577	1,577	1,577	1,577	2,285	2,285	2,285	2,285	2,285	2,649	2,649
3 SITE FEATURES																					
3.1	Modular Block Entrance Features Allowance	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789
3.2	Carved Entrance Signage	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243	1,243
3.3	Metal Entrance Gates	2,070	2,070	2,070	2,070	2,070	1,238	1,238	1,238	1,238	1,238	1,238	1,238	1,238	1,238	1,238	1,238	1,238	1,238	1,238	1,238
3.4	Gate Electronic Equipment Allowance	5,941	5,941	5,941	5,941	5,941	5,688	5,688	5,688	5,688	5,688	5,688	5,688	6,996	6,996	6,996	6,996	6,996	6,996	6,996	8,604
3.5	Restroom Fencing	148	148	148	148	148	148	148	121	121	121	121	121	121	121	121	121	121	121	121	121
3.6	Wood Signage	738	738	738	738	738	738	738	738	586	586	586	586	586	586	586	586	586	586	586	586
3.7	Light Poles & Fixtures	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620
3.8	Traffic Guiderails	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114	2,114
3.9	Storm Water Drainage System Allowance	1,390	1,390	1,390	1,390	1,390	1,390	1,390	1,710	1,710	1,710	1,710	1,710	1,710	1,710	2,103	2,103	2,103	2,103	2,103	2,103
4 COMMUNITY DOCKS																					
4.1	Boat Ramp Gate	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94	141	141	141	141
4.2	Floating Dock System	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647	22,647
ANNUAL COMPONENT CONTRIBUTION TOTALS		103,978	103,978	103,978	104,138	104,138	105,667	105,667	105,960	106,365	106,365	112,400	112,400	113,708	114,416	114,809	122,708	122,755	122,755	123,119	124,727

COMPONENT METHOD SUMMARY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
BEGINNING RESERVE FUND BALANCE	165,295	273,743	384,379	497,249	609,471	727,046	789,417	912,170	1,025,885	1,140,765	1,271,315	1,369,478	1,510,745	1,613,413	1,753,341	1,891,935	909,660	1,050,188	1,195,478	1,332,041
PLUS ANNUAL COMPONENT CONTRIBUTION	103,978	103,978	103,978	104,138	104,138	105,667	105,667	105,960	106,365	106,365	112,400	112,400	113,708	114,416	114,809	122,708	122,755	122,755	123,119	124,727
CAPITAL EXPENDITURES	0	0	0	3,088	0	59,122	0	11,812	13,351	0	41,123	0	42,773	8,300	12,857	1,144,508	1,926	0	12,028	52,605
SUBTOTAL	269,273	377,721	488,357	598,299	713,609	773,591	895,084	1,006,318	1,118,899	1,247,130	1,342,592	1,481,878	1,581,680	1,719,529	1,855,293	870,135	1,030,489	1,172,943	1,306,569	1,404,163
PLUS INTEREST INCOME @ 2.00%	4,470	6,659	8,892	11,172	13,437	15,827	17,086	19,567	21,866	24,185	26,886	28,867	31,733	33,813	36,641	39,525	19,699	22,535	25,472	28,246
FULLY FUNDED RESERVE FUND BALANCE	273,743	384,379	497,249	609,471	727,046	789,417	912,170	1,025,885	1,140,765	1,271,315	1,369,478	1,510,745	1,613,413	1,753,341	1,891,935	909,660	1,050,188	1,195,478	1,332,041	1,432,409

FULLY FUNDED BALANCE GOAL

PERCENT FUNDED FOR CURRENT CYCLE	34%	TOTAL EXPENDITURES	1,403,493	TOTAL CONTRIBUTIONS	2,234,031	STUDY PERIOD TOTAL INTEREST	436,576	AVERAGE ANNUAL CONTRIBUTION	111,702

PHOTOGRAPHS
WITH
DESCRIPTIVE NARRATIVES

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.

PHOTO #1
The P.O.A. asphalt roads throughout the community are in very good condition for their age. It appears that the original contractor established a proper sub-base prior to paving. Eventual restoration will be required and has been scheduled.

PHOTO #2
This is an example of a past full-depth repair. Any alligator or deflected pavement in the future will require full-depth repair. This should be accomplished during pavement maintenance projects, and prior to the asphalt restoration project.

PHOTO #3
This is an example of transverse cracking. Longitudinal and transverse cracking should be filled during pavement maintenance projects, scheduled every five years. Some crack filling was recently completed.

PHOTO #4
The concrete boat ramp is in good condition. This ramp was properly constructed in individual sections. This construction helps to prevent major cracking in the future, which would require the entire ramp to be replaced at one time.

PHOTO #5
The modular block entrance monuments are in good condition. No deficiencies were observed on any of the monuments or the access key islands.

PHOTO #6
We understand that the damage found on the rear of the Conococheaque Lane entrance signs is caused by deer. This backboard may require replacement earlier than we have the sign scheduled for replacement, which should be completed under Operations.

PHOTO #7
The metal entrance gates range from fair to good condition. Some gates were misaligned and should be straightened.

PHOTO #8
We understand that all of the electronics, other than the keypads were replaced on all four of the entrances circa 2011. All components appeared to be functioning properly during our condition assessment. Battery operation was not tested.

PHOTO #9
The wood privacy fencing installed around the portable toilets is in good condition. Maintenance, such as staining and repairing of loose boards should continue.

PHOTO #10
The wood signage installed throughout the community ranges from fair to good condition. Some signs and posts require repainting.

PHOTO #11
The P.O.A. street lights installed at each key access pad island are in good condition. We did not observe lighting after dark and no problems were reported.

PHOTO #12
Culverts constructed of pre-cast concrete or galvanized corrugated steel are installed in various locations throughout the community to facilitate storm water drainage. Additionally, large areas of rip-rap were also installed to prevent erosion.

PHOTO #13
The locked metal gate at the top of the boat ramp is a great addition to prevent unauthorized access. The gate and posts will require future painting to prevent rusting.

PHOTO #14
The floating docks are also in good condition. All of the plastic float drums appeared to be buoyant, all decking was in good condition, and the framing and outriggers were mostly rust free. No unusual wear was observed.

PHOTO #15
The concrete pads and the gangplanks were also in good condition, with no major deterioration observed.