MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.

MEMBER OF community ASSOCIATIONS INSTITUTE

Condition Assessment
&
Reserve Fund Plan
2015
Sample Townhomes

Manassas, Virginia

Prepared for:
The Board of Directors
&
Management Company, Inc.

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.

MEMBER OF community ASSOCIATIONS INSTITUTE

P. O. Box 1 Fort Valley, Virginia 22652 800-776-6980 admin@masonreserves.com Fax 800-776-6408

October 13, 2014

Ms. Norma White, CMCA, AMS, Association Manager
Management Company, Inc.
9093 Narrow Road, Suite 602
Manassas, Virginia 20110

RE: CONDITION ASSESSMENT AND RESERVE FUND PLAN 2015
Sample Townhomes Homeowners Association
Manassas, Virginia
Project No. 88888

Dear Ms. White:

Mason & Mason Capital Reserve Analysts, Inc. has completed the report for Sample Townhomes.

As outlined in our proposal, the report is being submitted to you and the Board of Directors for review and comment. A review of the Summary of Key Issues iii, and Sections 1 and 2 will provide you with our findings and financial analyses. We will be happy to meet with the Board to help them fully understand the issues. If no changes are necessary, please consider this version the final report. If changes are requested, Mason & Mason will make the revisions and re-issue the report. We encourage the Board to complete this process expeditiously and will support the effort.

We genuinely appreciate the opportunity to work with you and the 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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RESERVE FUND PLAN

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 Sample Townhomes' 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 6% funded through 2014. Our goal is to become fully funded by the end of the 20-year period (2034).

In order to achieve this goal the Association should:

- Set the annual contribution in 2015 at $21,668, and plan on annual increases of 2.5% to reflect inflation thereafter.
- This sets the reserve contribution at $18.06 per residential unit, per month (based on 100 units).

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 is 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: Sample Townhomes Homeowners Association is comprised of 100 townhomes in 19 buildings, located on Salty Drive in Manassas, Virginia. The community was constructed circa 1995. Five private streets, Salty Drive, Sweet Court, Sour Court, Cold Drive, and Hot Lane are within the community. The street layout includes concrete sidewalks, curbs and gutters, and 21 parking bays providing 225 spaces.

We are providing the Condition Assessment and Reserve Fund Plan based on Proposal Acceptance Agreement No. 88888 dated August 4, 2014. 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 Homeowners 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 Management Company or the Association, and we therefore do not have any conflicts of interest that would bias this report. Information provided by Management 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 report on October 6, 2014. The weather was clear and the temperature was approximately 70 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 fair to good condition. The community is now reaching a 35-year benchmark in terms of replacement of major systems. The streets and parking bays are in good condition, having received restoration circa 2009/2010. The community has been very proactive with pavement maintenance projects, including crack filling and seal coating, which was accomplished on all streets between 2012 and 2014. We suggest that pavement maintenance projects should be completed every six years, and should include full-depth repair of deflected asphalt, crack filling, and seal coating. We have scheduled the next asphalt restoration project late-term.

There is a moderate quantity of cracked, settled and/or heaved concrete sidewalks, which are potential tripping hazards. The liability and costs associated with personal injury lawsuits resulting primarily from sidewalk and curb tripping hazards are too great to defer repair. It is our opinion that addressing deficiencies, which pose a hazard to pedestrians, should not be deferred. Most of the deficiencies were observed in front of the townhomes located on Salty Lane and Sweet Court. As such, we recommend correcting the tripping hazards observed throughout the sidewalks as soon as practicable. The curbs and gutters are in good condition with a minor amount of cracking and settlement observed. The concrete steps are in good condition, with no deficiencies observed.

The entrance monuments, street signage, concrete retaining walls, metal handrailings, and the mailbox stations are in good condition. The light poles and fixtures are marked with NOVAC, indicating that the power company would be responsible for replacement of the poles or the fixtures.

We have included a Storm Water Drainage System Allowance, as we observed several yard drains and curb drop inlets, indicating an extensive underground drainage system. This allowance can also be used for erosion control.

Financially, the community requires an increase in contributions to reserves, and we have established a sufficient contribution schedule to eventually achieve the fully funded goal.

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 track the annual inflation rate among our clients based on their reported costs for typical services. A 3.5% annual rate reflects their general pre-recession experience. However, currently we are seeing somewhat lower rates and we are using 2.5%. Interest income has dropped substantially, and many smaller Associations and Condominiums are reduced to savings accounts or certificates of deposit, which are yielding 1% or less. Unlike reserves, interest income is taxable, so this further reduces the net gain. 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.

2.1 Calculation Basics: The Association is on a calendar fiscal year. Management reported that the un-audited reserve fund balance, including cash and securities, as of December 31, 2014, is projected to be $8,517. We have used a 1.00% annual interest income factor and a 2.50% 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 $297,838.

2.2 Funding Analysis, Cash Flow Method, Hybrid Approach (Table 3): This plan provides the annual contributions necessary to maintain balances consistent with the fully funded goal by setting the annual contribution to $21,668 in 2015 and providing an annual escalation factor of 2.50%, matching inflation thereafter. This plan allows for a gradual increase over time and addresses generational equity issues. The total for all annual contributions for the twenty-year period would be $553,513, and the total interest income is projected to be $33,409. The fully funded balance in 2034 is $297,601.

2.3 Funding Analysis, Component Method (Table 4): This method of funding would require variable annual contributions, averaging $27,392 over the twenty-year period. The total for all annual contributions would be $547,845, and the total interest income is projected to be $39,077. The fully funded balance in 2034 is $297,601. The Component Method model considers the current reserve fund balance in computing individual component contributions for current cycles.

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 Seal Coating: The purpose is to seal and add new life to a roadway surface. It protects the existing pavement but does not add significant structural strength. A surface treatment can range from a single, light application of emulsified asphalt as a "fog" seal, to a multiple-surface course made up of alternate applications of asphalt and fine aggregate. Seal coating of all asphalt pavements should be performed at approximately six-year intervals, or approximately twice during the service life of the asphalt pavement. Seal coating more often is generally not cost-effective. The material used should be impervious to petroleum products and should be applied after crack filling, oil-spot cleaning, and full-depth repairs have been accomplished. Seal coating is a cost-effective way of extending the life of asphaltic concrete pavement. Seal coating is generally not scheduled for up to five years after an asphalt restoration project.

6.3 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.

6.4 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.

6.5 Concrete Sidewalks: When sidewalks are cracked or scaled or sections have settled, the resulting differential or "tripping hazard" can present a liability problem for the Association if personal injury should occur as a result. Tripping hazards should be repaired expeditiously to promote safety and prevent liability problems for the community. Generally, where practical and appropriate, concrete element repairs and replacements are scheduled in the same years to promote cost efficiencies. Replacements are usually scheduled in cycles because the necessity of full replacement at one time is unlikely. Typically, damaged or differentially settled sections can be removed by saw cutting or jack hammer and re-cast. Concrete milling of the differential surfaces is sometimes an appropriate, cost-effective alternative to re-casting. Skim coating is not an effective repair for scaled or settled concrete surfaces and, over time, will usually worsen the problem.

6.6 Concrete Curbs and Gutters: Vehicle impacts, differential settlement, construction damage, and cracking and spalling of the concrete will eventually result in the need for replacement of some curb sections. A typical damaged or settled section, usually 10 feet in length, will be removed by saw cutting or jack hammer and re-cast. Replacements are scheduled in cycles because the necessity of full replacement at one time is unlikely.

6.7 Concrete Steps: Concrete steps should be replaced when cracking, deterioration, or settlement occurs. Cracks, which occur at the intersection of treads and risers, should be filled with an appropriate sealant to prevent water infiltration.

6.8 Brick Entrance Monument: Brick monuments should be inspected periodically for step cracks in the mortar and shear cracks through the brick and mortar, indicating settlement problems. Signs of efflorescence on the brick face and mortar or spalling brick faces should be investigated. Efflorescence, a residue of fine white crystals resulting from salts leaching from the mortar, serves as a warning that water is infiltrating the structure. Water infiltration problems are usually initiated at the top of an improperly sealed coping. Eliminating the infiltration of water into the monument from the coping can be accomplished by various methods, depending on the brick detail. Installation of a metal coping is sometimes a cost-effective method of solving these problems and extending the life of the brick structure. Sealing of brick surfaces with breathable coatings will also extend the useful service life of the brick. All vegetation, such as vines or tree limbs should be kept clear of the monument to prevent damage. As brick components age, depending upon the initial quality of the mortar and the long-term environment of the monument, mortar joints may deteriorate. This condition can be corrected by tuckpointing. Applying soft sealants to the deteriorated joints or to cover up mortar joint cracks is not recommended. Deteriorated or cracked mortar joints should be repaired by cutting damaged material ¾-inch deep with a diamond blade masonry saw. The void should then be filled with new mortar and the joints struck to match the original work.

6.9 Street Signage: Metal perforated-post and pressure-treated wood post street signs generally require very little maintenance over their useful service life. Signage tends to fade due to environmental exposure. Cleaning of peeled paint, periodic cleaning of rust (metal posts) and repainting of wood and metal posts will maintain appearance. There is little that can be done with the signs except to replace them periodically. The wood components of entrance signs should be periodically cleaned of loose paint and repainted to maintain appearance. Out-of-plumb posts should be straightened and secured.

6.10 Metal Handrailings: Metal handrailings should be periodically straightened, loose connections repaired, cleaned of rust, primed, and painted to maintain appearance and extend the useful service life. Bases should be periodically cleaned and sealed to prevent moisture infiltration, which will cause damage to the concrete in freeze / thaw cycles. Welding new bases to replace deteriorated bases is a viable alternative to replacing handrailings.

6.11 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	Parking Spaces	Parking Bays
Salty Drive	1,823	11	10	51	5
Sweet Court	1,443	0	5	44	4
Sour Court	1,554	0	30	46	4
Cold Drive	1,779	0	20	41	5
Hot Lane	1,739	0	0	43	3
TOTALS	8,338	11	65	225	21

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
SAMPLE TOWNHOMES HOMEOWNERS ASSOCIATION
Manassas, Virginia

COMPONENT DATA AND ASSET REPLACEMENT SCHEDULE
TABLE 1
2015 Through 2034

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	8,338	SY	$12.00	$100,056	18	2029	100%	$141,377	2047	100%	$220,499				This component includes five asphalt drivelanes and the parking bays of the community. Neither the depth nor the sub-base of the pavement could be visually determined. We understand that two of the streets (Names) were restored circa 2009 and the remaining three streets were restored circa 2010. All pavements are in good condition. Very minor areas of alligator cracking (indicative of sub-base damage or insufficient asphalt depth) were observed on the drivelanes or parking bays. Restoration includes edgemilling and 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 include striping, but not replacement of any inadequate sub-base.
1.2	Asphalt Seal Coat	8,338	SY	$1.20	$10,006	6	2019	100%	$11,044	2025	100%	$12,808	2035	100%	$16,395	We understand that Name and Name were seal coated circa 2012 and the remaining three streets were seal coated circa 2014. Seal coating may help prevent water infiltration into the sub-base through micro-cracks, but is largely a cosmetic issue. To help improve curb appeal after repairs, we have scheduled seal coating projects every six years, except in the year of the pavement restoration project when it is not necessary. Crack filling and full-depth repairs should be completed prior to application to achieve maximum benefit from the seal coating. Seal coating projects include re-striping.
1.3	Asphalt Repair Allowance	1	LS	$15,000.00	$15,000	6	2019	25%	$4,139	2025	50%	$9,601	2029	100%	$21,195	Approximately 11 square yards of alligator cracked or deflected pavement (indicative of sub-base damage), and about 65 linear feet of non-filled 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 six 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 Sidewalks	12,104	SF	$11.50	$139,196	5	2015	4%	$5,568	2020	3%	$4,725	2025	3%	$5,345	Concrete sidewalks, generally 4' wide, are present on one or both sides of streets within the community. Their thickness could not be visually determined. They are in generally good condition. About 448 square feet (3.7% of the total area) is either cracked, settled or heaved between sections. A majority of the settlement was observed on Name Lane and Name Court. We have not scheduled replacement of all sections with lesser surface defects. 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. Concrete repairs are scheduled to coincide with work on other concrete components to take advantage of economies of scale in packaging concrete restoration work. 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. Any trip hazards or hazardous surface deficiencies should be addressed as soon as practicable to prevent personal injury.
2.2	Concrete Curbs & Gutters	5,914	LF	$36.00	$212,904	5	2015	2%	$4,258	2020	2%	$4,818	2025	2%	$5,451	The drivelanes and parking bays are lined with standard-profile, cast-in-place, concrete curbs and gutters. They are in generally good condition with about 1.1% of the length exhibiting transverse cracks or settled sections. We observed approximately seven damaged sections, which should be replaced. Minor chips usually do not justify replacement. Curb paint is in good condition and curbs can be repainted under the operations budget. Cyclic repairs are scheduled, as full replacement at one time is not appropriate or anticipated. Curb repairs are scheduled to coincide with work on other concrete components to maximize economies of scale. 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. Any trip hazards or hazardous surface deficiencies should be addressed as soon as practicable to prevent personal injury.
2.3	Concrete Steps	368	SF	$65.00	$23,920	5	2020	5%	$1,353	2025	5%	$1,531	2030	5%	$1,732	Cast-in-place concrete steps are constructed within the community providing access at grade differentials. Steps appear to be in generally good condition. Cyclic repairs are scheduled as full replacement at one time is not appropriate or anticipated. Concrete repairs are scheduled to coincide with other concrete components to promote cost efficiencies. Any trip hazards or hazardous surface deficiencies should be addressed as soon as practicable to prevent personal injury.

Reserve Fund Plan for
SAMPLE TOWNHOMES HOMEOWNERS ASSOCIATION
Manassas, Virginia

COMPONENT DATA AND ASSET REPLACEMENT SCHEDULE
TABLE 1
2015 Through 2034

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
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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 SITE FEATURES																
3.1	Brick Entrance Features	1	LS	$23,000.00	$23,000	60	2040	100%	$42,641							Four brick and mortar bollards are constructed at the entrance to the community on Name Lane. Each bollard is 3' x 3' x 8', with two H.D.U. (High Density Urethane) signs attached to the front two bollards. Each set of monuments have 22 linear feet of metal fencing attached to each bollard. All fencing, signs, brick and mortar appear to be in good condition with no deteriorated mortar, cracked mortar or brick, or spalled brick faces observed. With periodic maintenance performed under the operations budget, the monuments should have a very long service life.
3.2	Street and Informational Signage	9	EA	$160.00	$1,440	20	2025	100%	$1,843	2045	100%	$3,020				Standard metal traffic, parking and access control signs, typically 12" by 18" and mounted on wood posts, are located throughout the community. Other signs, such as stop signs, are mounted on 4" by 4" timber posts. A total of approximately nine signs are installed. Posts and signs appear to be in good condition.
3.3	Concrete Retaining Walls	1,360	SF	$50.00	$68,000	60	2040	100%	$126,068							Cast concrete pre-formed panels, in 10 foot sections are installed in front of several townhomes on Name Drive. The stamped brick panels are held in place by cast in place, concrete forms. The forms and the panels appear to be in good condition, with no cracked concrete or deflection observed. This project will include removal of the handrailing, removal of the old panels, removal of the soil behind the walls, replacement of the panels and backfill. These observations should be viewed in the context of capital reserve budget projections, and not as a structural analysis. Any questions regarding the safety or structural integrity of the walls should be referred to a professional engineer.
3.4	Metal Railing	388	LF	$60.00	$23,280	50	2040	100%	$43,160							A painted metal railing, 3'-6" high is attached along the top of the concrete retaining wall on Name Drive. This category includes the handrailing at three sets of steps. The retaining wall railing is in good condition. It is integral to the retaining wall system, and restoration of the retaining wall will require removal of the railing. With proper, diligent maintenance, including cleaning of peeling paint, priming, and painting, and repairing deteriorated areas by welding replacement parts, this railing may be reusable, and may have a very long service life.
3.5	Mailbox Modules	10	EA	$1,800.00	$18,000	25	2031	100%	$26,721	2056	100%	$49,539				Ten mailbox modules have been installed at various locations throughout the community. They are pedestal mounted to concrete pads and have 12 letter sized boxes. All mailbox modules appear to be in good condition.
3.6	Storm Water Drainage System Allowance	1	LS	$8,500.00	$8,500	7	2022	100%	$10,104	2029	100%	$12,010	2036	100%	$14,276	Storm water drainage is provided by concrete yard drains, curb drop inlets, and underground structures, leading storm water offsite. We understand that responsibility for some or parts of the system may rest with local government. 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, even if a public entity has primary responsibility. This category may also be used to address localized erosion issues. This line item addresses potential storm water collection, drainage, and erosion issues throughout the study period and does not represent a single expense or action already identified as necessary.

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
SAMPLE TOWNHOMES HOMEOWNERS ASSOCIATION
Manassas, Virginia

CALENDAR OF EXPENDITURES
TABLE 2
2015 Through 2034

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
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YEAR	COMPONENT NO.	COMPONENT	PRESENT COST 2015	FUTURE COST (INFLATED)	TOTAL ANNUAL EXPENDITURES	ACTION
1	2	3	4	5	6	7
2015					2015	
	2.1	Concrete Sidewalks	$5,568	$5,568	TOTAL EXPENDITURES	
	2.2	Concrete Curbs & Gutters	$4,258	$4,258		
					$9,826	
2016					2016	
					NO EXPENDITURES	
2017					2017	
					NO EXPENDITURES	
2018					2018	
					NO EXPENDITURES	
2019					2019	
	1.2	Asphalt Seal Coat	$10,006	$11,044	TOTAL EXPENDITURES	
	1.3	Asphalt Repair Allowance	$3,750	$4,139		
					$15,184	
2020					2020	
	2.1	Concrete Sidewalks	$4,176	$4,725	TOTAL EXPENDITURES	
	2.2	Concrete Curbs & Gutters	$4,258	$4,818		
	2.3	Concrete Steps	$1,196	$1,353		
					$10,895	
2021					2021	
					NO EXPENDITURES	
2022					2022	
	3.6	Storm Water Drainage System Allowance	$8,500	$10,104	TOTAL EXPENDITURES	
					$10,104	
2023					2023	
					NO EXPENDITURES	
2024					2024	
					NO EXPENDITURES	
2025					2025	
	1.2	Asphalt Seal Coat	$10,006	$12,808	TOTAL EXPENDITURES	
	1.3	Asphalt Repair Allowance	$7,500	$9,601		
	2.1	Concrete Sidewalks	$4,176	$5,345		
	2.2	Concrete Curbs & Gutters	$4,258	$5,451		
	2.3	Concrete Steps	$1,196	$1,531		
	3.2	Street and Informational Signage	$1,440	$1,843		
					$36,579	

Reserve Fund Plan for
SAMPLE TOWNHOMES HOMEOWNERS ASSOCIATION
Manassas, Virginia

CALENDAR OF EXPENDITURES
TABLE 2
2015 Through 2034

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

YEAR	COMPONENT NO.	COMPONENT	PRESENT COST 2015	FUTURE COST (INFLATED)	TOTAL ANNUAL EXPENDITURES	ACTION
1	2	3	4	5	6	7
2026					2026	
					NO EXPENDITURES	
2027					2027	
					NO EXPENDITURES	
2028					2028	
					NO EXPENDITURES	
2029					2029	
	1.1	Asphalt Restoration Project	$100,056	$141,377	TOTAL EXPENDITURES	
	1.3	Asphalt Repair Allowance	$15,000	$21,195		
	3.6	Storm Water Drainage System Allowance	$8,500	$12,010		
					$174,581	
2030					2030	
	2.1	Concrete Sidewalks	$4,176	$6,048	TOTAL EXPENDITURES	
	2.2	Concrete Curbs & Gutters	$4,258	$6,167		
	2.3	Concrete Steps	$1,196	$1,732		
					$13,947	
2031					2031	
	3.5	Mailbox Modules	$18,000	$26,721	TOTAL EXPENDITURES	
					$26,721	
2032					2032	
					NO EXPENDITURES	
2033					2033	
					NO EXPENDITURES	
2034					2034	
					NO EXPENDITURES	

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
SAMPLE TOWNHOMES HOMEOWNERS ASSOCIATION
Manassas, Virginia

FUNDING ANALYSIS
CASH FLOW METHOD
HYBRID APPROACH
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:
	8,517	21,668	2.50%	2.50%	1.00%

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
2015	643,302	8,517	21,668	150	9,826	20,509
2016	659,384	20,509	22,210	327	0	43,046
2017	675,869	43,046	22,765	556	0	66,368
2018	692,765	66,368	23,335	794	0	90,496
2019	710,085	90,496	23,918	957	15,183	100,187
2020	727,837	100,187	24,516	1,081	10,896	114,888
2021	746,033	114,888	25,129	1,291	0	141,307
2022	764,683	141,307	25,757	1,505	10,104	158,465
2023	783,801	158,465	26,401	1,735	0	186,601
2024	803,396	186,601	27,061	2,022	0	215,684
2025	823,480	215,684	27,737	2,119	36,579	208,961
2026	844,067	208,961	28,431	2,254	0	239,646
2027	865,169	239,646	29,142	2,566	0	271,353
2028	886,798	271,353	29,870	2,888	0	304,112
2029	908,968	304,112	30,617	2,274	174,582	162,421
2030	931,693	162,421	31,382	1,727	13,947	181,583
2031	954,985	181,583	32,167	1,854	26,721	188,883
2032	978,859	188,883	32,971	2,077	0	223,930
2033	1,003,331	223,930	33,795	2,433	0	260,159
2034	1,028,414	260,159	34,640	2,802	0	297,601
STUDY PERIOD TOTALS			553,513	33,409	297,838	

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
SAMPLE TOWNHOMES HOMEOWNERS ASSOCIATION
Manassas, Virginia

FUNDING ANALYSIS
COMPONENT METHOD
TABLE 4

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
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Beginning Reserve Fund Balance:

In Dollars **8,517**

Component Number	COMPONENT	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
1 ASPHALT COMPONENTS																					
1.1	**Asphalt Restoration Project**	9,272	9,272	9,272	9,272	9,272	9,272	9,272	9,272	9,272	9,272	9,272	9,272	9,272	9,272	11,176	11,176	11,176	11,176	11,176	11,176
1.2	**Asphalt Seal Coat**	2,650	2,650	2,650	2,650	2,070	2,070	2,070	2,070	2,070	2,070	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558
1.3	**Asphalt Repair Allowance**	993	993	993	993	1,552	1,552	1,552	1,552	1,552	1,552	5,191	5,191	5,191	5,191	993	993	993	993	993	993
2 CONCRETE COMPONENTS																					
2.1	**Concrete Sidewalks**	6,133	921	921	921	921	1,042	1,042	1,042	1,042	1,042	1,179	1,179	1,179	1,179	1,179	1,334	1,334	1,334	1,334	1,334
2.2	**Concrete Curbs & Gutters**	4,925	939	939	939	939	1,063	1,063	1,063	1,063	1,063	1,202	1,202	1,202	1,202	1,202	1,360	1,360	1,360	1,360	1,360
2.3	**Concrete Steps**	264	264	264	264	264	298	298	298	298	298	338	338	338	338	338	382	382	382	382	382
3 SITE FEATURES																					
3.1	**Brick Entrance Features**	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451	1,451
3.2	**Street and Informational Signage**	170	170	170	170	170	170	170	170	170	170	136	136	136	136	136	136	136	136	136	136
3.3	**Concrete Retaining Walls**	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290
3.4	**Metal Railing**	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474
3.5	**Mailbox Modules**	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,505	1,744	1,744	1,744	1,744
3.6	**Storm Water Drainage System Allowance**	1,393	1,393	1,393	1,393	1,393	1,393	1,393	1,656	1,656	1,656	1,656	1,656	1,656	1,656	1,968	1,968	1,968	1,968	1,968	1,968
ANNUAL COMPONENT CONTRIBUTION TOTALS		34,520	25,322	25,322	25,322	25,301	25,580	25,580	25,843	25,843	25,843	29,252	29,252	29,252	29,252	27,270	27,627	27,866	27,866	27,866	27,866

COMPONENT METHOD SUMMARY	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
BEGINNING RESERVE FUND BALANCE	8,517	33,484	59,280	85,335	111,652	123,029	139,088	166,204	183,753	211,583	239,692	234,932	266,703	298,793	331,206	187,369	203,081	206,418	236,509	266,902
PLUS ANNUAL COMPONENT CONTRIBUTION	34,520	25,322	25,322	25,322	25,301	25,580	25,580	25,843	25,843	25,843	29,252	29,252	29,252	29,252	27,270	27,627	27,866	27,866	27,866	27,866
CAPITAL EXPENDITURES	9,826	0	0	0	15,183	10,896	0	10,104	0	0	36,579	0	0	0	174,582	13,947	26,721	0	0	0
SUBTOTAL	33,211	58,806	84,602	110,657	121,770	137,713	164,668	181,943	209,596	237,426	232,365	264,184	295,955	328,045	183,894	201,049	204,226	234,284	264,375	294,768
PLUS INTEREST INCOME @ 1.00%	273	474	733	995	1,259	1,375	1,536	1,810	1,986	2,266	2,567	2,519	2,838	3,161	3,475	2,032	2,192	2,225	2,527	2,833
FULLY FUNDED RESERVE FUND BALANCE	33,484	59,280	85,335	111,652	123,029	139,088	166,204	183,753	211,583	239,692	234,932	266,703	298,793	331,206	187,369	203,081	206,418	236,509	266,902	297,601

FULLY FUNDED BALANCE GOAL

PERCENT FUNDED FOR CURRENT CYCLE	6%	**TOTAL EXPENDITURES**	297,838	**TOTAL CONTRIBUTIONS**	547,845	**STUDY PERIOD TOTAL INTEREST**	39,077	**AVERAGE ANNUAL CONTRIBUTION**	27,392

PHOTOGRAPHS
WITH
DESCRIPTIVE NARRATIVES

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.

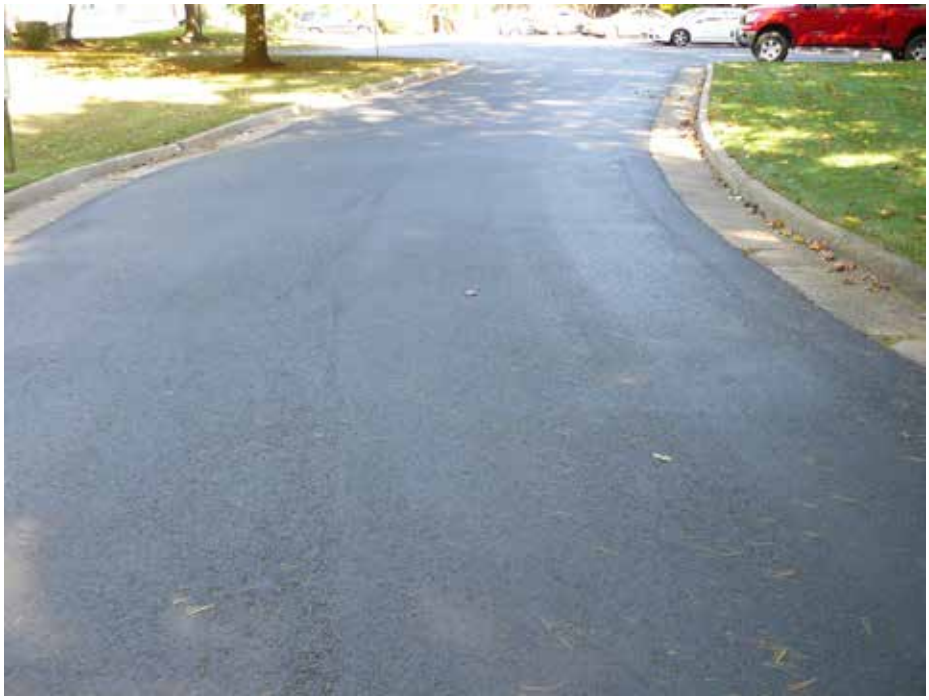

PHOTO #1
All five drivelanes are in overall good condition. No major deflection was observed.

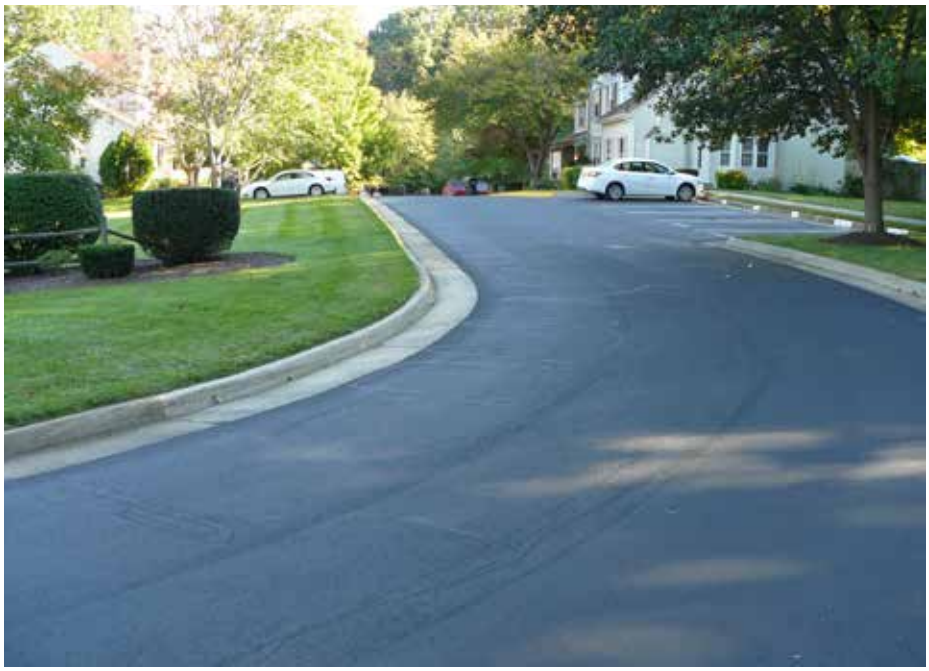

PHOTO #2
All streets have received crack filling, seal coating, and restriping in the last three years.

PHOTO #3
A minor amount of deflected cracking was observed. These areas should receive full-depth repair during the next pavement maintenance cycle.

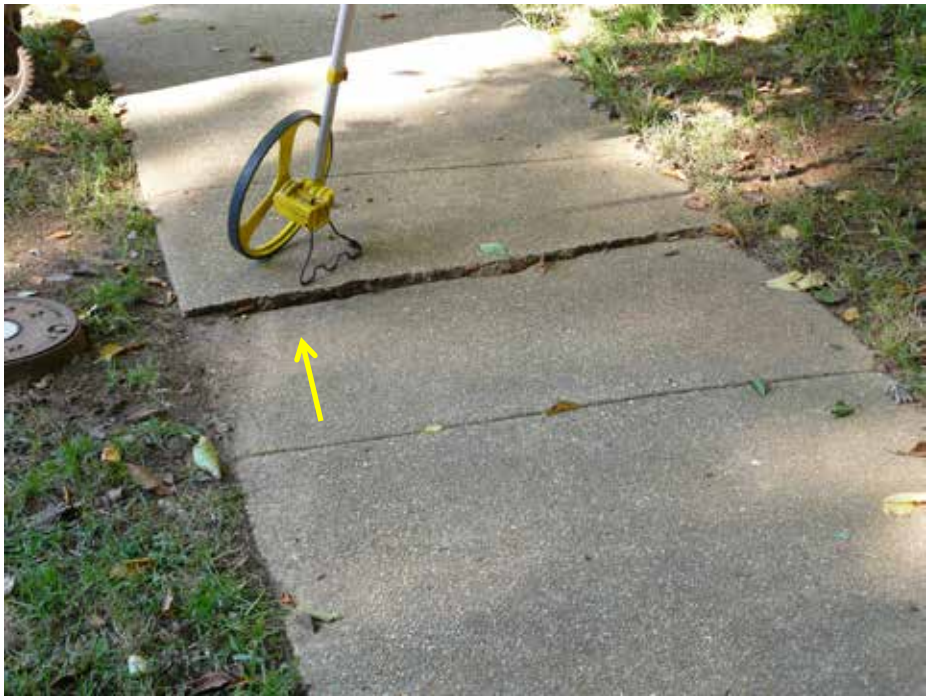

PHOTO #4
A few concrete sidewalk panels have cracked and settled. These are potential tripping hazards. These deficient sections of concrete should receive cyclic near-term repair.

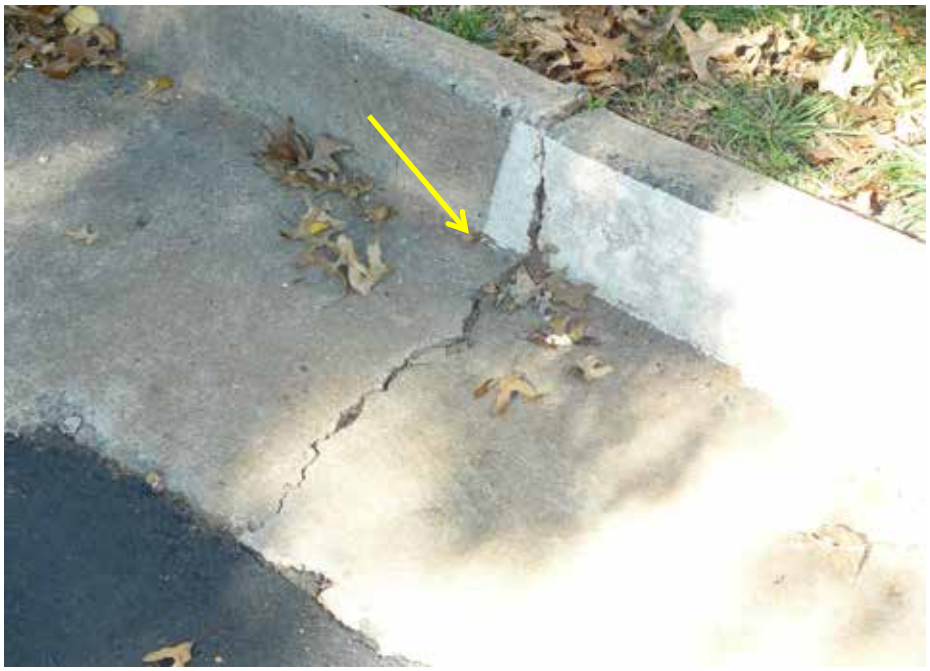

PHOTO #5
A few of the concrete curb and gutter sections have also cracked and settled, requiring near-term replacement.

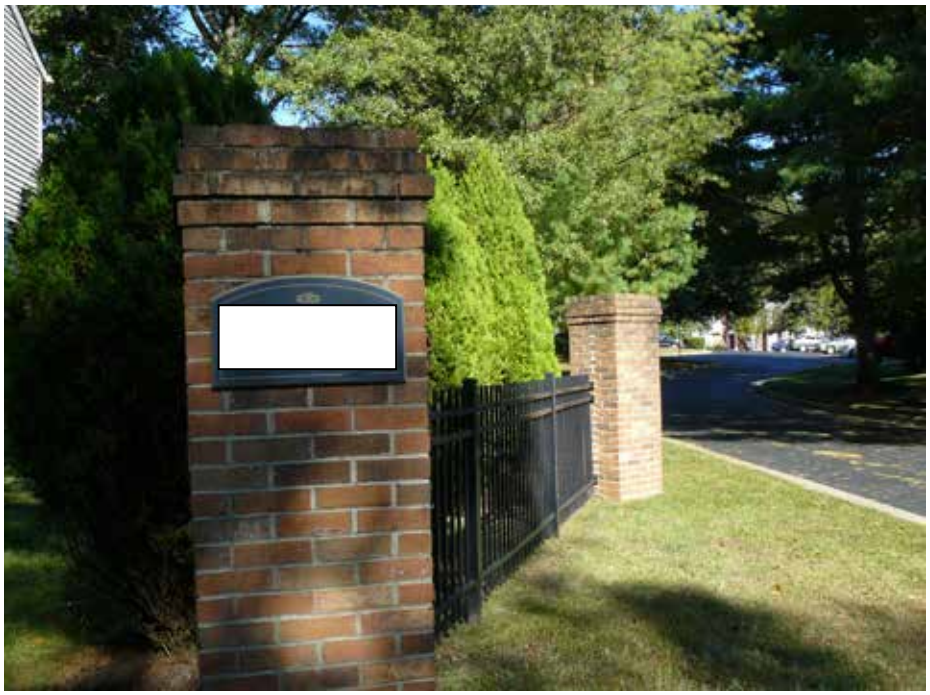

PHOTO #6
The two brick and mortar entrance monuments on Hot Lane are in good condition for their age. Maintenance such as pressure-washing and eventual tuckpointing will help to extend their service life.

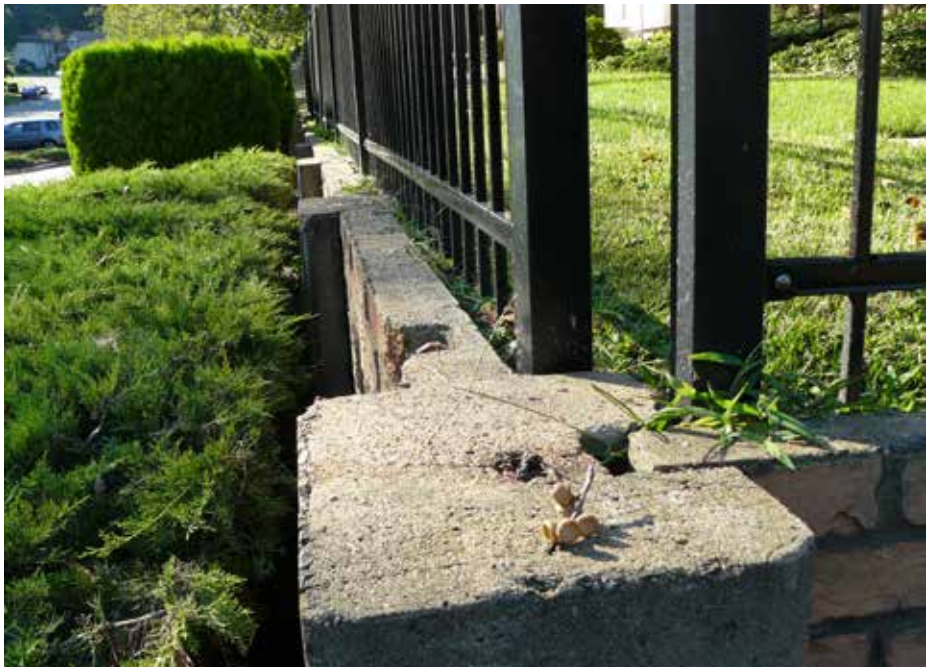

PHOTO #7
The concrete retaining walls constructed in front of several townhomes on Cold Drive are pre-cast panels, supported by cast in place concrete forms. The retaining walls are in good condition with no deflection observed.

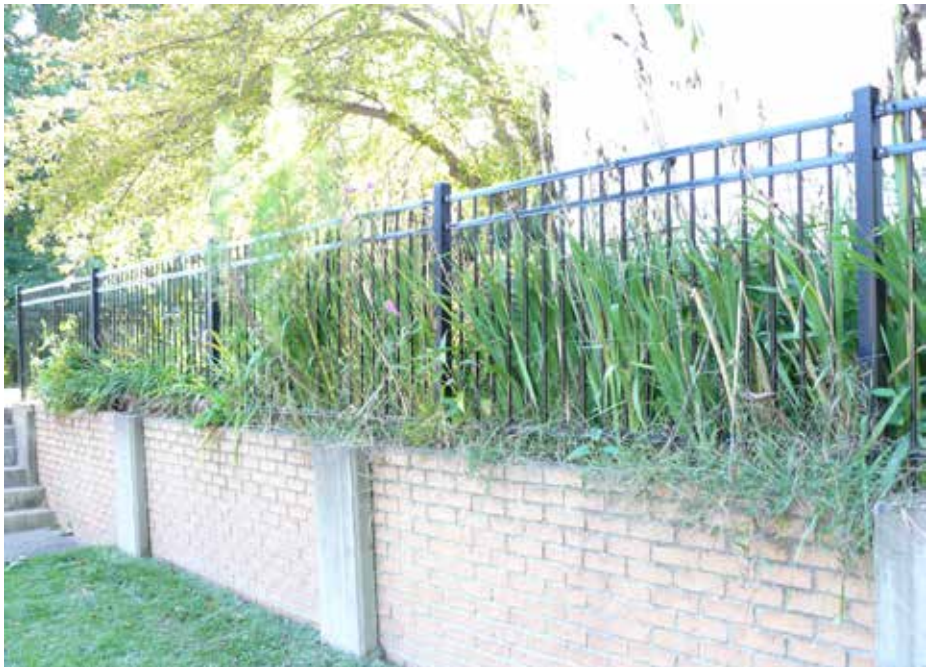

PHOTO #8
The metal railing installed for safety above the retaining wall is also in good condition.

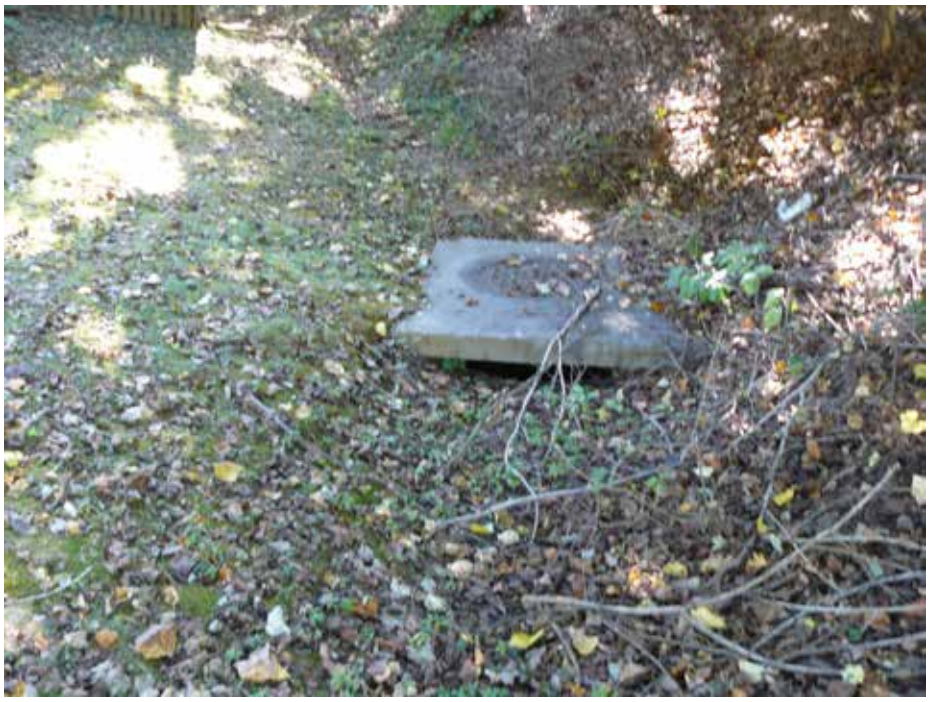

PHOTO #9
Several curb drop inlets and concrete yard drains were observed, which should be kept clear of debris for proper drainage.