

RESERVE FUND STUDY

*STONEBROOKE CONDOMINIUM ASSOCIATION
CHAGRIN FALLS, OHIO*



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Revision 0

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1.0 INTRODUCTION

The Association Management Company, Reserve Realty Company, acting on behalf of Stonebrooke Condominiums, authorized Criterium-Ackerman Engineers to conduct a Reserve Fund Study for this property, located in Chagrin Falls, Ohio with entrance from Miles Road. Studies of this nature are important to ensure that a community has sufficient funds for long-term, periodic capital expenditure requirements. Anticipating large expenditures over an extended period of time through a structured analysis and scheduling process assists the Association in meeting financial requirements without increasing the service fees above permitted maximums, borrowing the funds, or levying special financial assessments to the owners after the reserve fund is properly funded.

Typically, a community association has two broad funding requirements: the general operating fund and the capital repair and replacement reserves. In this report, we will focus on those items falling under the capital repair and replacement reserve criteria. We have projected a capital repair and replacement reserve for thirty (30) years. The first ten years are the most reliable. Such a study should be updated every few years.

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

This report is intended as a tool to determine reserve fund allocation requirements for the community, to manage future Association obligations, and to inform the community of future financial needs in general. This report has been prepared to benefit the property owners' knowledge. Some items beyond those of immediate concern may be discussed. Therefore, we recommend that the report be read in entirety to fully understand all of the information that has been obtained.

2.0 EXECUTIVE SUMMARY

Property Description:

The subject property is made up of 77 units, mostly duplex buildings in 40 total buildings with attached garages and common areas surrounding the buildings. Only 23 units have basements. The buildings have asphalt shingle roofs with vinyl siding and some masonry siding and trim. There are decks and patios with the buildings but are owner's responsibility. The concrete streets (E Stonebrooke Drive, W Stonebrooke Drive, Stonebrooke Oval), are private streets within the community. The property has retaining walls in many places that are stacked wood timbers, three mailbox stations with shelters and kiosks, street lights, wood fences and two ponds with fountains that are part of storm water management. There is also a decorative stone gate house and walls at the entrance.

Our reserve study analysis includes the following association property developed from association documents as well as a property inspection and discussions with the Property Manager and members of the Board of Directors.

- **Site**
 - Concrete streets and parking pads
 - Common area landscaping
 - Mailbox kiosks and shelters
 - Trees in common areas
 - Two ponds with fountains
 - Catch basins and site drainage
 - Light poles
 - Wood timber retaining walls
 - Wood fences
 - Signage

- **Building Exteriors**
 - Roofs (asphalt shingle)
 - Gutters and Downspouts
 - Siding and trim
 - Chimney's and chimney caps
 - Foundations on 23 units

Reserve Analysis Summary:

Following are the financial data used in the reserve fund analyses:

Reserve Fund Beginning Balance: \$25,222

Reserve Study Starting Date: 1/1/2020

Reserve Fund Internal Rate of Return: 1.0%

Inflation Rate: 2.5%

Current Number of Units Contributing to Reserve Fund: 77

2020 Annual Contribution: \$176,400

Our analysis of the reserve fund has determined that the Association's **2020 annual reserve fund contribution level of \$176,400 is adequate to maintain a positive reserve fund balance into the future years shown in this reserve study. We do not see a need to increase this level of contribution based on the results of this reserve study analysis.**

Overall Property Condition Assessment and Recommendations:

The following are issues of concern. These issues are discussed in greater detail in the Reserve Analysis Details section. In brief, these issues are:

- The property is in good condition for the age of the buildings, approximately 20 years for the oldest. The largest costs for this association will be concrete roads and roof replacements, both of which are still in good condition. We will focus our reserve study effort to establish a recommended amount to contribute each year to the reserve fund to avoid any future special assessments.

We highly recommend that the Association repeat a reserve analysis every three to five years. Each repetition of the reserve analysis, incorporating actual cost data in the analysis, improves the accuracy of the study projections. Unanticipated events that can or will impact the reserve can also be input into the analysis to increase the accuracy of projections. Likewise, reserve elements might have longer or shorter lives than projected and including accurate useful lives in the analysis will improve projections. Conversely, elements also may not last as long as their projected useful lives due to unforeseen problems and could need earlier replacement. Stonebrooke Condominiums should continue to maintain files and records of the reserve components to help improve the accuracy of the fund analysis and this will also help in future reserve studies.

Some elements could have much longer useful lives than commonly predicted by research data. Differences between an element's real and expected useful life could be due to many factors including use, environmental exposure, workmanship, quality of materials, design, etc.

3.0 PURPOSE & SCOPE

3.1 Purpose

This study's purpose is to determine a capital needs plan based on an analysis of the reserve fund. The plan is intended as a tool for Stonebrooke Condominiums to use to determine the allocation requirements into the reserve fund to meet future anticipated capital expenditures for the community. This report forecasts obligations for the community over the next thirty years.

3.2 Scope

This study follows the scope generally defined by Carriage Hill, Criterium-Ackerman Engineers, and the standards of the Community Associations Institute. The findings and recommendations are based on interviews with the community's Property Manager and Board Members; a review of available documents; and an investigation of the buildings and site.

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

1. The component must be a common element or otherwise noted as the Association's responsibility to replace.
2. The funding for replacement should be from one source only, not funded from another area of the budget or through a maintenance contract.
3. An element's replacement cost should be high enough to make it financially unsound to fund it from the operating budget.
4. Components, such as painting, which are considered deferred maintenance, are most appropriately funded from the Operating Budget instead of Reserves. However, Association by-laws may require that the Reserves fund these elements, in which case, they are included in the study.

The statements in this report are opinions about the present condition of the Association's reserve elements. They are based on visual evidence available during a site observation of all reasonably accessible areas that are the Association's responsibility. We did not remove any surface materials, perform any destructive testing, or move any furnishings. This study is not an exhaustive technical evaluation. Such an evaluation would entail a significantly larger scope than this effort.

3.3 Sources of Information

Onsite inspections of the property occurred on the following dates:

- February 26, 2020

The following people were interviewed during our study:

- Allen Wargo, Property Manager
- Russ Grundke, Board President
- Larry Turbow, Board Trustee

The following was made available to us and reviewed:

- Current financial status of the Associations fund
- Recent costs for capital expenses
- Description of past work on capital items in the community

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

- R.S. Means
- Our data files on similar projects
- Recent costs supplied by Stonebrooke Condominiums

3.4 Standards of Reference

For your reference, the following definitions may be helpful:

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

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

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

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

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

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

4.0 RESERVE ANALYSIS DETAILS

This section includes the detailed explanation of the reserve fund study and the particular elements included in the study.

The table that follows shows:

- The reserve elements included in this reserve study.
- Each element's assessed condition.
- The years that each element is expected to be replaced or installed.

Following the table is a brief assessment of each reserve element and an explanation of that element in the reserve analysis. Note that, although the current cost is used for each component, the reserve analysis adjusts this cost over time by an inflation rate input into the analysis. The reserve balance is also adjusted over time for the Association's internal rate of return, which is usually the approximate average interest rate of bank accounts, certificates of deposit or other reserve fund investments.

PROPERTY SUMMARY			
SYSTEM	CONDITION	ACTIVITY REQUIRED	ANTICIPATED YEAR OF ACTIVITY
SITE			
Concrete flatwork (streets and parking)	Good	Repair	Annual allowance
Light poles	Good	Replace	Every 30 years
Mailbox shelters	Good	Repair / Replace	Every 25 years
Mailbox kiosks	Good	Replace	Every 25 years
Catch basins and site drainage	Good	Repair as needed	Every 15 years
Landscaping non-annual project	Good	Replace	Every 5 years
Tree replacement	Good	Phased replacement	Every 10 years
Wood timber retaining walls	Good	Phased replacement	Every 15 years
Pond shore erosion control	Good	Repair	Every 12 years
Pond clean up or dredge	Good	Repair	Every 30 years
Pond repairs to overflows and pipes	Good	Repair	Every 30 years
Pond fountains	Good	Replace	Every 10 years
Entrance stone shelter and lights	Good	Repair	Every 25 years
Entrance sign	Good	Replace	Every 20 years
Wood fences	Good	Replace	Every 25 years
Irrigation systems	Good	Repair or Replace	Every 25 years
BUILDING EXTERIOR			
Roofs – phased replacement	Good	Phased Replacement	Every 20 years
Gutters and downspouts	Good	Phased Replacement	Every 25 years
Vinyl siding	Good	Phased repairs	Every 5 years
Masonry siding tuck pointing	Good	Repair	Every 20 years
Chimney caps	Good	Phased replacement	Every 10 years
Foundations	Good	Phased repairs	Every 10 years

5.0 OBSERVATIONS

Element Condition Assessments and Explanations:

This section contains an explanation of the reserve elements included in this study. Please keep in mind while reading the explanations that assumptions and estimates are used that are based on average cost and expected useful life data from researchers. Many factors can affect the various elements' actual costs and lives. Further, the choice to spend reserve funds on some elements is a matter of choice rather than necessity. For example, the element is replaced more for appearance than failure.

Each Association determines the standards to which the property is kept and decides whether and when to spend reserve funds for particular elements. As independent investigators, our job is to evaluate all of the assets for which the Association is responsible and assure that the funds are available to cover reserve expenditures when and if they occur.

We have included in this study elements that have useful lives beyond the 30-year time period of the study, for example street curbs and building siding extend beyond the 30 year study period.

Just as some elements will last longer than their useful lives; some elements will likely need replacing before the end of the useful lives. As long as these failures are not extremely abnormal, the reserve fund should be able to fund the replacement cost. The reason is that the study software allocates a certain amount of money each year for all elements, even those with useful lives beyond the 30-year time period of the study.

Site:

Concrete flatwork replacement

Concrete flatwork includes all the concrete work in the community, including streets and parking pads for Stonebrooke Condominiums. These items do not have a definite replacement period, but sections of concrete usually are repaired every few years. For this element, the replacement cost for the calculated square footage of concrete flatwork is calculated and based on a useful life of over 65 years a prorated annual allowance is established. We have calculated the square footage of concrete as follows, and the costs on our itemized worksheet are recent costs per square foot.

- Streets– 73,200 square feet
- Parking pads – 3,170 square feet

Since concrete is usually replaced more for appearance reasons rather than for structural-loss reasons, most replacement is by choice rather than by necessity. We have calculated repair costs for concrete using the annual

allowance we calculated for each item listed above. We show this as an annual allowance each year on the report pages, however we understand the Board along with the Property Manager will decide which years the repairs will actually be done and when the cumulative annual funding is utilized.

Ponds and Fountains

The two ponds and fountains appear to be in good condition and well maintained. The shore line has rip rap rock piles to protect from shore erosion and we did not observe shallow areas that would indicate build up of silt and dirt from storm water run-off. The day of our inspection we did not see the fountains in operation, however we have included the fountains as shown in the following historical satellite views from Google Earth.

It will be required to continue good maintenance practices so we have included costs for the following:

1. Future fountain repairs and replacements. There is a total of 2 fountains that are included.
2. Shore erosion control by means of refreshing the rip rap shore along shore lines every 12 years.
3. Dredging of both ponds once every 30 years to ensure the ponds remain deep enough for proper storm water drainage control.



Pond on West Side of Stonebrooke Oval



Pond on South Side of Stonebrooke Oval

Miscellaneous site common elements

There are site items that the Association will need to budget in the reserve study that have maintenance costs but occasionally require capital costs. These items include the following and are included in our reserve study itemized work sheet.

The mailbox support structures are in good condition and are made with wood posts and covers that protect the groups of mailboxes. We have included an allowance of \$700 for each of the 6 mailbox support structures to be repaired or replaced every 30 years.

- **Mailbox Shelters and Kiosks** – There are 3 mailbox stations that have parking, shelters and kiosks. The mailbox shelters are in good condition and are made with wood and roofs that protect the kiosks. We have included an allowance of \$2,500 for each of the 3 mailbox shelters to be repaired or replaced every 25 years. We also include a separate allowance to replace the mailbox kiosks once every 25 years.
- **Landscape upgrade project** - We have included an allowance for landscape upgrades, beyond the normal general landscape maintenance. This could include removing old landscaping or replanting or adding shrubs or flower beds when required at the entrance island or common areas. These are costs that are not included annually for typical lawn care or general landscape maintenance. We have also included a separate allowance on our Itemized Worksheet for phased replacement of the trees that line the private streets of this association.

- **Wood fences** – There is 300 lineal feet of fence used for privacy. We have included an allowance for replacement based on 25 years of useful life.
- **Irrigation systems** – There are irrigation systems in common areas. These systems require maintenance that can be a budget from the operating fund, but we have also included replacement costs for the piping and the controllers once every 25 years.
- **Timbers for retaining walls** – We observed that there are wood timber retaining walls at some of the properties between buildings and along steep hills and they are in good condition. We have included phased replacement of portions of timber walls once every 15 years.
- **Catch basins and site drainage** – Based on our observations we estimate that there are 38 catch basins throughout the property, some along street curbs and others in grass areas, that are part of storm water management. We have included an allowance for repairs to basins and basin grates.
- **Entrance sign / stone shelter and walls / lights**– The main entrance from Mills Road has stone walls on both sides of the street, a single sign and a stone shelter. We have included three allowances:
 - Repairs and tuck pointing of stone walls and shelter every 25 years.
 - Replacement of the 4 lights on the walls once every 25 years.
 - Replacement of the entrance sign once every 20 years.
- **Light poles along association streets** – We have included \$800 for each light pole and fixture to be replaced once every 30 years. This could be phased depending on the condition of the poles.

Building Exteriors:

Roofs

Stonebrooke Condominiums buildings had previous phased roof replacements in 2015 through 2019. We used those dates along with our observations of the roofs being in good condition to determine the remaining useful life. We typically give the roofs a 20-year life and therefore we have shown five phases for future roof replacements in years 2035 through 2039 for replacement of the asphalt shingle roofs. We measured the roofs and we included five phases based on the number of units that were replaced in the past five phases.

For the asphalt roofs we recommend removal of the shingles down to the roof deck so that the deck and flashing can be inspected for damage. In the reserve study, we included \$400 per 100 square feet, which is the cost to remove the old roofs and install new roofing paper, shingles and flashing.

We recommend that the roofs be regularly inspected for nail pops, leaks, lifted shingles and other problems. Correcting these problems as soon as they are found can help prolong the life of the roof and the roof deck.

Gutters and downspouts

Gutters and downspouts have an expected useful life of about 25 years, although our experience is that they can last much longer. We measured the total length of gutters and downspouts to be replaced and have included the gutter replacements at the same time with the roofs. We have shown gutters and downspouts are replaced in years 2035 through 2039. These costs are based on \$12 per lineal foot and are for 6 inch wide gutters.

Siding

There are vinyl and masonry veneer siding sections on the buildings at Stonebrooke Condominiums. We have assigned an annual allowance for repairs of vinyl siding based on the total surface area of 86,240 square feet and the expected useful life of 40 years. The Association's manager and Board of Directors will decide which years to spend these allowances for siding repairs based on the condition at that time. The vinyl siding is currently in good condition and we show annual costs in our reports.

For the masonry siding materials, we have included an allowance for mortar repairs in future years and tuck pointing. These repairs are shown every 20 years and the masonry siding appears to be in good condition at this time.

Miscellaneous Building Exterior Common Elements

There are building exterior items that the Association will need to budget in the reserve study. These items include the list below.

- Only 23 units have basements. It is common for foundations to need repairs in future years due to soil erosion and drainage issues that occur around foundations. We have an allowance of \$5,000 once every 10 years for foundations that need some repair.
- We have an allowance to replace chimney caps on a phased schedule once every 10 years at a cost of \$300 per chimney cap.

6.0 RESERVE ANALYSIS SUMMARY

Other:

Reserve Fund Study

We highly recommend that the reserve study be repeated every few years, which will assure that capital expense projections are accurate. In this reserve study, we include funding for a repeat study every five years.

Unplanned Capital Expenses (Contingency)

We recommend that a contingency be added to the reserve fund contributions as there could be unknown capita costs. In the case of Stonebrooke Condominiums we have added an annual \$2,000 contingency to cover possible costs associated with unforeseen capital expenditures.

Overview:

Using software developed by Criterium Engineers and KPMG Peat Marwick, we have analyzed capital reserves expenditures to project the needed annual reserve funding. The intent of this reserve fund projection is to help the Association develop a reserve fund that provides for anticipated replacement of reserve elements over the next 30 years. This projection takes into consideration a reasonable return on invested reserve funds and inflation. Please review this information thoroughly and let us know if any changes are needed.

The reserve elements included in this study were those that the Association identified or that we determined during our site visits as being covered by the reserve fund. The Stonebrooke Condominiums should confirm that these elements are funded by the reserve fund.

This includes the following:

- A summary sheet that defines all the criteria used for the financial alternatives, including the assumed inflation rate and rate of return on deposited reserve funds.
- A table that lists anticipated replacements complete with estimated remaining life expectancies, projected costs of replacement, a frequency (in years) for when these items require replacement, and a projection based on this frequency.
- A table and graph that present projected annual balances versus capital expenditures based on your current funding rate and reserve balances, and alternatives to your current funding rate if the study projected that the reserve is not adequately funded. The graphs illustrate what effect the alternative funding methods will have over the study's thirty-year period versus the anticipated reserve expenditures. Care should be taken in comparing graphs because each graph's scale could be different.

7.0 CONCLUSION

Reserve Analysis Summary:

Our analysis of the reserve fund has determined that the Association's reserve fund is adequately funded for the full 30-year reserve study period based on continuing funding the reserve fund at the same rate as the Association's 2020 annual reserve fund contribution level of \$176,400. We do not see a need to increase this level of contribution based on the results of this reserve study analysis.

Also, as stated in the introduction section, it is very important that the Association be advised that the first ten years are the most reliable and updating the reserve study every 3 to 5 years is advised.

8.0 LIMITATIONS

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

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

We did not investigate the following areas:

- Buried utilities or infrastructure
- Concealed structural members or systems
- Attic areas
- All interior spaces

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

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

In our Reserve Fund Analysis, we have provided estimated costs. These costs are based on our general knowledge of building systems and the contracting and construction industry. When appropriate, we have relied on standard sources, such as Means Building Construction Cost Data, to develop estimates. Actual costs can vary significantly, based on the availability of qualified contractors to do the work, as well as many other variables. We cannot be responsible for the specific cost estimates provided.

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

If you have any questions about this study or the reserve fund analysis, please feel free to contact us. Thank-you for the opportunity to be of assistance to you.

Respectfully submitted,
Criterium-Ackerman Engineers
Daniel E. Raabe, P.E.,
Robert T. Ackerman, P.E.,



Aerial View of Stonebrooke Condominiums

Stonebrooke Condominiums
Chagrin Falls, Ohio

Appendix A: RESERVE FUND REPORTS

Reserve Study Worksheet Rev 0



General Information:

Organization: **Stonebrooke Condominium Association**
 Address: **Stonebrooke Oval**
Chagrin Falls, Ohio 44139

Number of Units	77
Age of Building (in years)	20
Study Period (in years)	30
Normal Fiscal Year starts:	January 1, 2020
Site Inspection Date	February 26, 2020
Reserve Funds at start	\$25,222
Rate of Return on invested Reserve Funds (%)	1.0%
Inflation Rate (%)	2.5%

Current Funding Levels				
	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
Reserve Fund Contribution.....	\$14,700	\$176,400	\$190.91	\$2,290.91
Balance Computed Final Year.....	\$2,112,456			

Summary Sheet Rev 0

Stonebrooke Condominium Association



Fiscal Years:
Normal: Jan 2020

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	1	2	3	4	5	6	7	8	9	10
Current Funding Levels										
Beginning Reserve Fund Balance:	\$25,222	\$178,990	\$333,679	\$489,283	\$645,796	\$797,636	\$946,805	\$1,098,824	\$1,242,139	\$1,393,463
Revenue:	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400
Investment Earnings:	\$1,772	\$3,304	\$4,844	\$6,394	\$7,897	\$9,374	\$10,879	\$12,298	\$13,797	\$15,269
Capital Expenditures:	\$24,405	\$25,015	\$25,640	\$26,281	\$32,457	\$36,606	\$35,260	\$45,383	\$38,873	\$42,967
Ending Reserve Balance:	\$178,990	\$333,679	\$489,283	\$645,796	\$797,636	\$946,805	\$1,098,824	\$1,242,139	\$1,393,463	\$1,542,165

Fiscal Years:	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Normal: Jan 2020	11	12	13	14	15	16	17	18	19	20

Current Funding Levels

Beginning Reserve Fund Balance:	\$1,542,165	\$1,614,052	\$1,757,463	\$1,920,052	\$2,072,996	\$2,193,607	\$1,848,624	\$1,622,211	\$1,285,277	\$1,094,142
Revenue:	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400
Investment Earnings:	\$15,981	\$17,401	\$19,010	\$20,525	\$21,719	\$18,303	\$16,061	\$12,726	\$10,833	\$8,479
Capital Expenditures:	\$120,494	\$50,390	\$32,821	\$43,981	\$77,508	\$539,686	\$418,875	\$526,059	\$378,368	\$422,652
Ending Reserve Balance:	\$1,614,052	\$1,757,463	\$1,920,052	\$2,072,996	\$2,193,607	\$1,848,624	\$1,622,211	\$1,285,277	\$1,094,142	\$856,369

Fiscal Years:	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	30
Normal: Jan 2020	21	22	23	24	25	26	27	28	29		

Current Funding Levels

Beginning Reserve Fund Balance:	\$856,369	\$958,105	\$1,095,969	\$1,242,658	\$1,389,754	\$1,528,099	\$1,599,590	\$1,735,394	\$1,871,541	\$2,019,209	
Revenue:	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400	\$176,400
Investment Earnings:	\$9,486	\$10,851	\$12,304	\$13,760	\$15,130	\$15,838	\$17,182	\$18,530	\$19,992	\$20,915	
Capital Expenditures:	\$84,150	\$49,387	\$42,014	\$43,065	\$53,185	\$120,747	\$57,778	\$58,784	\$48,724	\$104,069	
Ending Reserve Balance:	\$958,105	\$1,095,969	\$1,242,658	\$1,389,754	\$1,528,099	\$1,599,590	\$1,735,394	\$1,871,541	\$2,019,209	\$2,112,456	

Stonebrooke Condominium Association

Itemized Worksheet Rev 0

Capital Item To Be Replaced	Quantity	Unit cost	Reserve Requirement	Frequency (yrs)	Remaining Life (yrs)	Full Funding Balance
Site						
Concrete streets	73,200 square feet	\$14.00	\$15,781.92	1	0	\$15,781.92
Concrete parking pads	3,170 square feet	\$12.00	\$585.82	1	0	\$585.82
Mailbox shelter structures (three total)	3 cost each	\$2,500.00	\$7,500.00	25	13	\$3,600.00
Mailbox kiosks - replacement allowance	7 kiosks	\$2,000.00	\$14,000.00	25	11	\$7,840.00
Light poles / fixtures - replacement allowance	15 light poles	\$800.00	\$12,000.00	30	17	\$5,200.00
Wood timber retaining walls - replace sections	780 wood timbers	\$110.00	\$21,450.00	15	14	\$1,430.00
Pond shore erosion control	1 allowance	\$5,000.00	\$5,000.00	12	9	\$1,250.00
Pond clean out or dredge if required	1 allowance	\$25,000.00	\$25,000.00	30	17	\$10,833.33
Pond inflow and overflow repairs	1 allowance	\$10,000.00	\$10,000.00	30	17	\$4,333.33
Tree replacement in common areas	80 phased	\$300.00	\$24,000.00	10	10	\$0.00
Landscape upgrade project (non-annual project)	1 allowance	\$5,000.00	\$5,000.00	5	4	\$1,000.00
Entrance sign	1 allowance	\$3,000.00	\$3,000.00	20	15	\$750.00
Entrance stone shelter and walls	1 allowance	\$4,000.00	\$4,000.00	25	14	\$1,760.00
Light fixtures at entrance	4 cost each	\$400.00	\$1,600.00	25	15	\$640.00
Wood fences - phased replacement	300 lineal feet	\$25.00	\$7,500.00	25	8	\$5,100.00
Irrigation systems - replace sections	1 allowance	\$8,000.00	\$8,000.00	25	7	\$5,760.00
Catch basins and site drainage repairs	38 catch basins	\$2,300.00	\$32,775.00	15	10	\$10,925.00
Pond fountains (replacement)	2 cost each	\$3,000.00	\$6,000.00	10	6	\$2,400.00
Building Exterior						
Roof replacement - 20 units from 2015	760 squares	\$400.00	\$304,000.00	20	15	\$76,000.00
Roof replacement - 15 units from 2016	570 squares	\$400.00	\$228,000.00	20	16	\$45,600.00
Roof replacement - 16 units from 2017	608 squares	\$400.00	\$243,200.00	20	17	\$36,480.00
Roof replacement - 13 units from 2018	494 squares	\$400.00	\$197,600.00	20	18	\$19,760.00
Roof replacement - 14 units from 2019	532 squares	\$400.00	\$212,800.00	20	19	\$10,640.00
Gutters and downspouts - phase 1 of 5	2,640 lineal feet	\$12.00	\$31,680.00	25	15	\$12,672.00
Gutters and downspouts - phase 2 of 5	1,980 lineal feet	\$12.00	\$23,760.00	25	16	\$8,553.60
Gutters and downspouts - phase 3 of 5	2,112 lineal feet	\$12.00	\$25,344.00	25	17	\$8,110.08
Gutters and downspouts - phase 4 of 5	1,716 lineal feet	\$12.00	\$20,592.00	25	18	\$5,765.76
Gutters and downspouts - phase 5 of 5	1,848 lineal feet	\$12.00	\$22,176.00	25	19	\$5,322.24

Stonebrooke Condominium Association



Itemized Worksheet Rev 0

Capital Item To Be Replaced	Quantity	Unit cost	Reserve Requirement	Frequency (yrs)	Remaining Life (yrs)	Full Funding Balance
Vinyl siding repairs	86,240 square feet	\$3.50	\$6,036.80	1	0	\$6,036.80
Masonry siding repair (tuck point)	1 allowance	\$10,000.00	\$10,000.00	20	10	\$5,000.00
Chimney cap replacement	77 cost each	\$300.00	\$5,775.00	10	7	\$1,732.50
Foundation repairs (23 basements total)	1 allowance	\$5,000.00	\$5,000.00	10	5	\$2,500.00
Other						
Reserve Study Update	1 allowance	\$2,950.00	\$2,950.00	5	5	\$0.00
Unplanned capital expenses (reserve contingency)	1 allowance	\$2,000.00	\$2,000.00	1	0	\$2,000.00
		Totals	\$1,544,106.54			\$325,362.38
		Total Over Term	\$2,405,413.08			

Stonebrooke Condominium Association

Current Funding Levels Rev 0
Beginning Balance as of start of year beginning Jan 2020: \$25,222

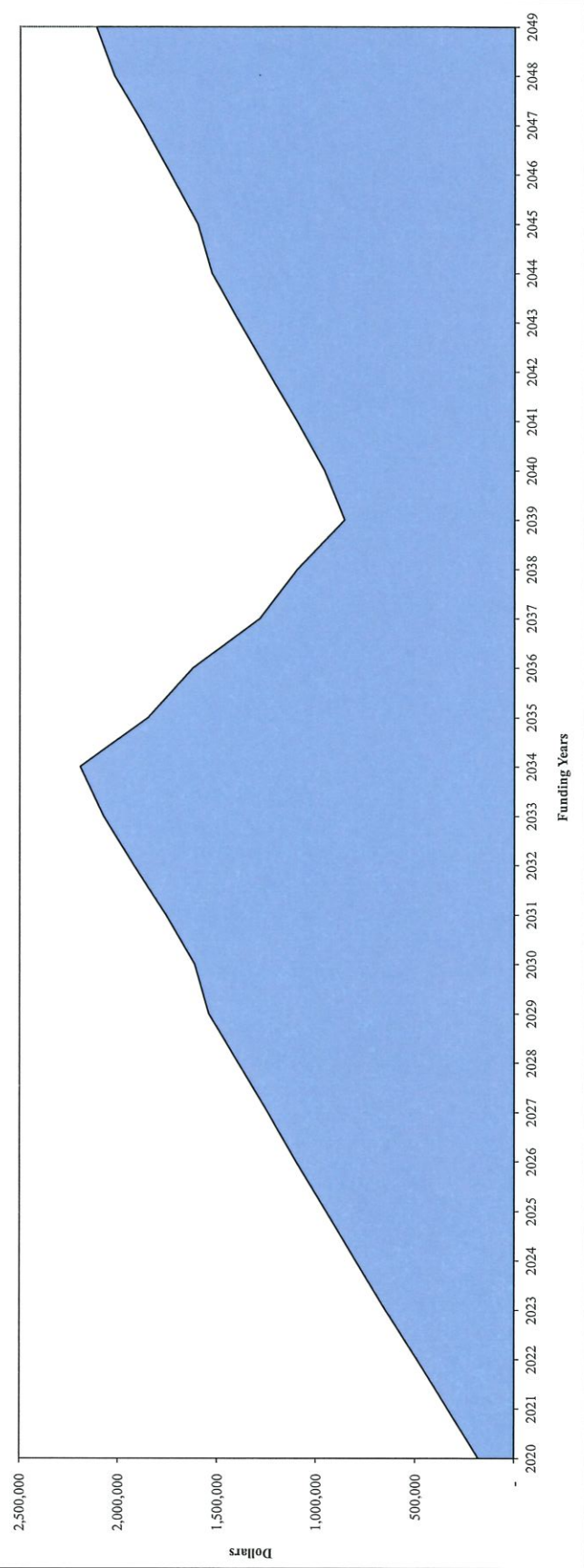
CONTRIBUTIONS	
AMOUNT	
\$176,400.00	total per year
\$2,290.91	per unit per year
\$14,700.00	total per month
\$190.91	per unit per month

Projected Annual Funding and Expenditures:

Year:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Year Number:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
End of Year Reserve Fund Balance	178,990	333,679	489,283	645,796	797,636	946,805	1,098,824	1,242,139	1,393,463	1,542,165	1,614,052	1,757,463	1,920,052	2,072,996	2,193,607
Capital Expenditures:	24,405	25,015	25,640	26,281	32,457	36,606	35,260	45,383	38,873	42,967	120,494	50,390	32,821	43,981	77,508
Total Revenue (all sources)	178,172	179,704	181,244	182,794	184,297	185,774	187,279	188,698	190,197	191,669	192,381	193,801	195,410	196,925	198,119

Year:	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
Year Number:	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
End of Year Reserve Fund Balance	1,848,624	1,622,211	1,285,277	1,094,142	856,369	958,105	1,095,969	1,242,658	1,389,754	1,528,099	1,599,590	1,735,394	1,871,541	2,019,209	2,112,456
Capital Expenditures:	539,686	418,875	526,059	378,368	422,652	84,150	49,387	42,014	43,065	53,185	120,747	57,778	58,784	48,724	104,069
Total Revenue (all sources)	194,703	192,461	189,126	187,233	184,879	185,886	187,251	188,704	190,160	191,530	192,238	193,582	194,930	196,392	197,315

Current Funding Levels Rev 0



Stonebrooke Condominium Association

Annual Expense By Year Rev 0

	Year:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Year Number:	1	2	3	4	5	6	7	8	9	10
Site											
Concrete streets		15,782	15,782	15,782	15,782	15,782	15,782	15,782	15,782	15,782	15,782
Concrete parking pads		586	586	586	586	586	586	586	586	586	586
Mailbox shelter structures (three total)		0	0	0	0	0	0	0	0	0	0
Mailbox kiosks - replacement allowance		0	0	0	0	0	0	0	0	0	0
Light poles / fixtures - replacement allowance		0	0	0	0	0	0	0	0	0	0
Wood timber retaining walls - replace sections		0	0	0	0	0	0	0	0	0	0
Pond shore erosion control		0	0	0	0	0	0	0	0	0	5,000
Pond clean out or dredge if required		0	0	0	0	0	0	0	0	0	0
Pond inflow and overflow repairs		0	0	0	0	0	0	0	0	0	0
Tree replacement in common areas		0	0	0	0	0	0	0	0	0	0
Landscape upgrade project (non-annual project)		0	0	0	0	5,000	0	0	0	0	5,000
Entrance sign		0	0	0	0	0	0	0	0	0	0
Entrance stone shelter and walls		0	0	0	0	0	0	0	0	0	0
Light fixtures at entrance		0	0	0	0	0	0	0	0	0	0
Wood fences - phased replacement		0	0	0	0	0	0	0	0	0	0
Irrigation systems - replace sections		0	0	0	0	0	0	0	0	7,500	0
Catch basins and site drainage repairs		0	0	0	0	0	0	0	8,000	0	0
Pond fountains (replacement)		0	0	0	0	0	0	0	0	0	0
								6,000			
Building Exterior											
Roof replacement - 20 units from 2015		0	0	0	0	0	0	0	0	0	0
Roof replacement - 15 units from 2016		0	0	0	0	0	0	0	0	0	0
Roof replacement - 16 units from 2017		0	0	0	0	0	0	0	0	0	0
Roof replacement - 13 units from 2018		0	0	0	0	0	0	0	0	0	0
Roof replacement - 14 units from 2019		0	0	0	0	0	0	0	0	0	0
Gutters and downspouts - phase 1 of 5		0	0	0	0	0	0	0	0	0	0
Gutters and downspouts - phase 2 of 5		0	0	0	0	0	0	0	0	0	0
Gutters and downspouts - phase 3 of 5		0	0	0	0	0	0	0	0	0	0
Gutters and downspouts - phase 4 of 5		0	0	0	0	0	0	0	0	0	0
Gutters and downspouts - phase 5 of 5		0	0	0	0	0	0	0	0	0	0
Vinyl siding repairs		6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037
Masonry siding repair (tuck point)		0	0	0	0	0	0	0	0	0	0
Chimney cap replacement		0	0	0	0	0	0	0	5,775	0	0
Foundation repairs (23 basements total)		0	0	0	0	0	5,000	0	0	0	0
Other											
Reserve Study Update		0	0	0	0	0	2,950	0	0	0	0
Unplanned capital expenses (reserve contingency)		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total Costs		24,405	24,405	24,405	24,405	29,405	32,355	30,405	38,180	31,905	34,405
Total Costs Adjusted For 2.5% Inflation		24,405	25,015	25,640	26,281	32,457	36,606	35,260	45,383	38,873	42,967

Stonebrooke Condominium Association

Annual Expense By Year Rev 0

	Year:	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
	Year Number:	11	12	13	14	15	16	17	18	19	20
Site											
Concrete streets		15,782	15,782	15,782	15,782	15,782	15,782	15,782	15,782	15,782	15,782
Concrete parking pads		586	586	586	586	586	586	586	586	586	586
Mailbox shelter structures (three total)		0	0	0	7,500	0	0	0	0	0	0
Mailbox kiosks - replacement allowance		0	14,000	0	0	0	0	0	0	0	0
Light poles / fixtures - replacement allowance		0	0	0	0	0	0	0	12,000	0	0
Wood timber retaining walls - replace sections		0	0	0	0	21,450	0	0	0	0	0
Pond shore erosion control		0	0	0	0	0	0	0	0	0	0
Pond clean out or dredge if required		0	0	0	0	0	0	0	25,000	0	0
Pond inflow and overflow repairs		0	0	0	0	0	0	0	10,000	0	0
Tree replacement in common areas		24,000	0	0	0	0	0	0	0	0	0
Landscape upgrade project (non-annual project)		0	0	0	0	5,000	0	0	0	0	5,000
Entrance sign		0	0	0	0	0	3,000	0	0	0	0
Entrance stone shelter and walls		0	0	0	0	4,000	0	0	0	0	0
Light fixtures at entrance		0	0	0	0	0	1,600	0	0	0	0
Wood fences - phased replacement		0	0	0	0	0	0	0	0	0	0
Irrigation systems - replace sections		0	0	0	0	0	0	0	0	0	0
Catch basins and site drainage repairs		32,775	0	0	0	0	0	0	0	0	0
Pond fountains (replacement)		0	0	0	0	0	0	6,000	0	0	0
Building Exterior											
Roof replacement - 20 units from 2015		0	0	0	0	0	304,000	0	0	0	0
Roof replacement - 15 units from 2016		0	0	0	0	0	0	228,000	0	0	0
Roof replacement - 16 units from 2017		0	0	0	0	0	0	0	243,200	0	0
Roof replacement - 13 units from 2018		0	0	0	0	0	0	0	0	197,600	0
Roof replacement - 14 units from 2019		0	0	0	0	0	0	0	0	0	212,800
Gutters and downspouts - phase 1 of 5		0	0	0	0	0	31,680	0	0	0	0
Gutters and downspouts - phase 2 of 5		0	0	0	0	0	0	23,760	0	0	0
Gutters and downspouts - phase 3 of 5		0	0	0	0	0	0	0	25,344	0	0
Gutters and downspouts - phase 4 of 5		0	0	0	0	0	0	0	0	20,592	0
Gutters and downspouts - phase 5 of 5		0	0	0	0	0	0	0	0	0	22,176
Vinyl siding repairs		6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037
Masonry siding repair (tuck point)		10,000	0	0	0	0	0	0	0	0	0
Chimney cap replacement		0	0	0	0	0	0	0	5,775	0	0
Foundation repairs (23 basements total)		0	0	0	0	0	5,000	0	0	0	0
Other											
Reserve Study Update		2,950	0	0	0	0	2,950	0	0	0	0
Unplanned capital expenses (reserve contingency)		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total Costs		94,130	38,405	24,405	31,905	54,855	372,635	282,165	345,724	242,597	264,381
Total Costs Adjusted For 2.5% Inflation		120,494	50,390	32,821	43,981	77,508	539,686	418,875	526,059	378,368	422,652

Stonebrooke Condominium Association

Annual Expense By Year Rev 0

	Year:	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
	Year Number:	21	22	23	24	25	26	27	28	29	30
Site											
Concrete streets		15,782	15,782	15,782	15,782	15,782	15,782	15,782	15,782	15,782	15,782
Concrete parking pads		586	586	586	586	586	586	586	586	586	586
Mailbox shelter structures (three total)		0	0	0	0	0	0	0	0	0	0
Mailbox kiosks - replacement allowance		0	0	0	0	0	0	0	0	0	0
Light poles / fixtures - replacement allowance		0	0	0	0	0	0	0	0	0	0
Wood timber retaining walls - replace sections		0	0	0	0	0	0	0	0	0	21,450
Pond shore erosion control		0	5,000	0	0	0	0	0	0	0	0
Pond clean out or dredge if required		0	0	0	0	0	0	0	0	0	0
Pond inflow and overflow repairs		0	0	0	0	0	0	0	0	0	0
Tree replacement in common areas		24,000	0	0	0	0	0	0	0	0	0
Landscape upgrade project (non-annual project)		0	0	0	0	5,000	0	0	0	0	5,000
Entrance sign		0	0	0	0	0	0	0	0	0	0
Entrance stone shelter and walls		0	0	0	0	0	0	0	0	0	0
Light fixtures at entrance		0	0	0	0	0	0	0	0	0	0
Wood fences - phased replacement		0	0	0	0	0	0	0	0	0	0
Irrigation systems - replace sections		0	0	0	0	0	0	0	0	0	0
Catch basins and site drainage repairs		0	0	0	0	0	32,775	0	0	0	0
Pond fountains (replacement)		0	0	0	0	0	0	6,000	0	0	0
Building Exterior											
Roof replacement - 20 units from 2015		0	0	0	0	0	0	0	0	0	0
Roof replacement - 15 units from 2016		0	0	0	0	0	0	0	0	0	0
Roof replacement - 16 units from 2017		0	0	0	0	0	0	0	0	0	0
Roof replacement - 13 units from 2018		0	0	0	0	0	0	0	0	0	0
Roof replacement - 14 units from 2019		0	0	0	0	0	0	0	0	0	0
Gutters and downspouts - phase 1 of 5		0	0	0	0	0	0	0	0	0	0
Gutters and downspouts - phase 2 of 5		0	0	0	0	0	0	0	0	0	0
Gutters and downspouts - phase 3 of 5		0	0	0	0	0	0	0	0	0	0
Gutters and downspouts - phase 4 of 5		0	0	0	0	0	0	0	0	0	0
Gutters and downspouts - phase 5 of 5		0	0	0	0	0	0	0	0	0	0
Vinyl siding repairs		6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037
Masonry siding repair (tuck point)		0	0	0	0	0	0	0	0	0	0
Chimney cap replacement		0	0	0	0	0	0	0	5,775	0	0
Foundation repairs (23 basements total)		0	0	0	0	0	5,000	0	0	0	0
Other											
Reserve Study Update		2,950	0	0	0	0	2,950	0	0	0	0
Unplanned capital expenses (reserve contingency)		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total Costs		51,355	29,405	24,405	24,405	29,405	65,130	30,405	30,180	24,405	50,855
Total Costs Adjusted For 2.5% Inflation		84,150	49,387	42,014	43,065	53,185	120,747	57,778	58,784	48,724	104,069

Appendix B: PROJECT PHOTOGRAPHS

Location:
Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:
Bob Ackerman, P.E.

Date:
February 26, 2020



Description:

Entrance sign

Photo Number

1



Description:

Entrance gate
house

Photo Number

2

Location:

Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:

Bob Ackerman, P.E.

Date:

February 26, 2020

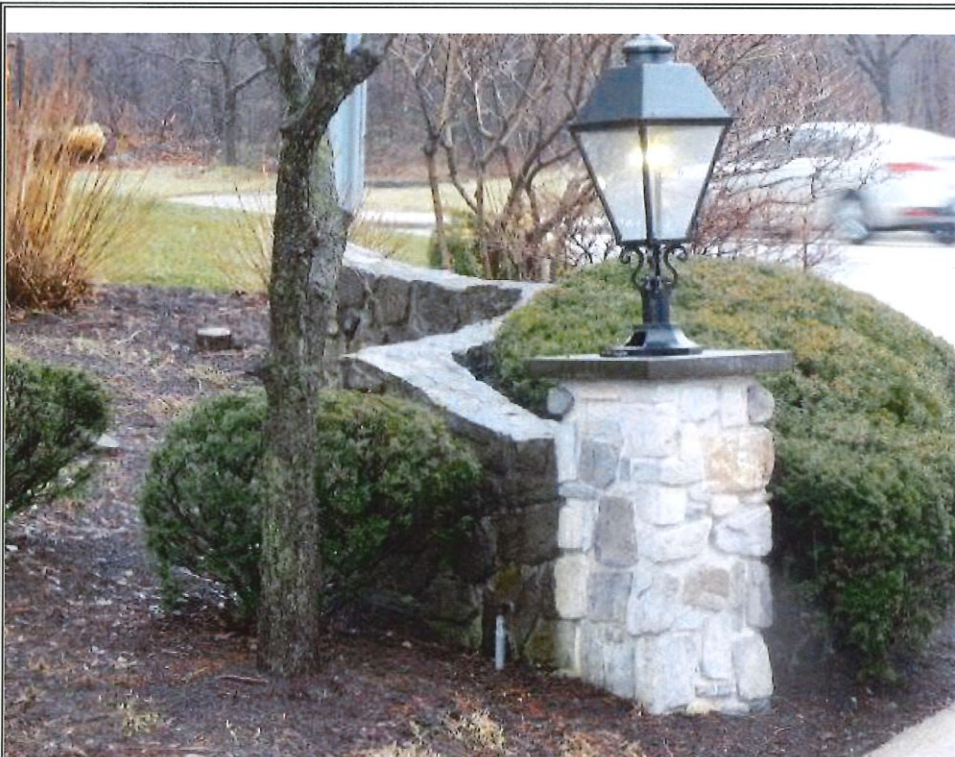


Description:

Lights at entrance

Photo Number

3



Description:

View of stone wall
at entrance

Photo Number

4

Location:
Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:
Bob Ackerman, P.E.

Date:
February 26, 2020



Description:

One of three
mailbox stations

Photo Number
5



Description:

Guest parking
spots

Photo Number
6

Location:
Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:
Bob Ackerman, P.E.

Date:
February 26, 2020



Description:

Back of mailbox shelter

Photo Number
7



Description:

Second mailbox station with parking

Photo Number
8

Location:
Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:
Bob Ackerman, P.E.

Date:
February 26, 2020



Description:

Close view of kiosks inside shelter

Photo Number
9



Description:

Overview of third mailbox station and parking

Photo Number
10

Location:

Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:

Bob Ackerman, P.E.

Date:

February 26, 2020



Description:

One of two ponds

Photo Number

11



Description:

Close view of
pond overflow

Photo Number

12

Location:
Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:
Bob Ackerman, P.E.

Date:
February 26, 2020



Description:

Second pond near road

Photo Number
13



Description:

Wood fence at pond

Photo Number
14

Location:

Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:

Bob Ackerman, P.E.

Date:

February 26, 2020



Description:

Large retaining wall

Photo Number

15



Description:

Close view of wall

Photo Number

16

Location:

Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:

Bob Ackerman, P.E.

Date:

February 26, 2020



Description:

Another retaining wall

Photo Number

17



Description:

Retaining wall
between buildings

Photo Number

18

Location:
Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:
Bob Ackerman, P.E.

Date:
February 26, 2020



Description:

French drain

Photo Number
19



Description:

Catch basin with
erosion

Photo Number
20

Location:

Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:

Bob Ackerman, P.E.

Date:

February 26, 2020



Description:

Another catch
basin drain

Photo Number

21



Description:

French drain

Photo Number

22

Location:
Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:
Bob Ackerman, P.E.

Date:
February 26, 2020



Description:

Another catch basin

Photo Number
23



Description:

Street catch basin

Photo Number
24

Location:

Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:

Bob Ackerman, P.E.

Date:

February 26, 2020



Description:

Overview of
concrete street

Photo Number

25



Description:

Another street
view

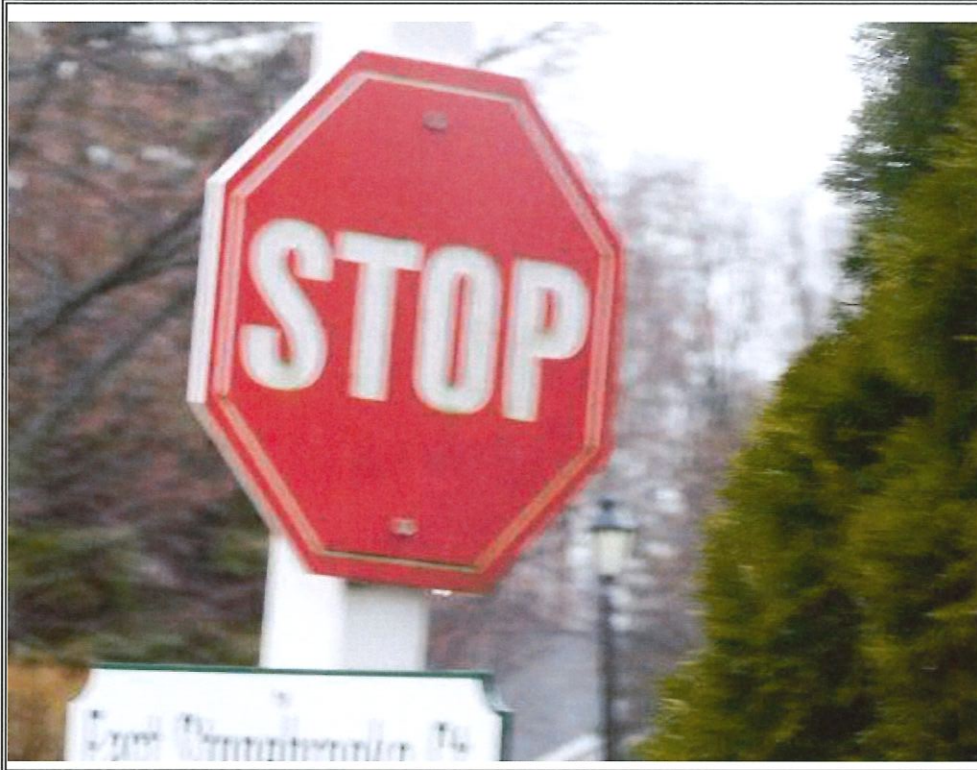
Photo Number

26

Location:
Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:
Bob Ackerman, P.E.

Date:
February 26, 2020



Description:

Typical signage

Photo Number

27



Description:

Typical lamp post

Photo Number

28

Location:
Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:
Bob Ackerman, P.E.

Date:
February 26, 2020



Description:

Elevation view of
typical front

Photo Number
29



Description:

Another front view

Photo Number
30

Location:
Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:
Bob Ackerman, P.E.

Date:
February 26, 2020



Description:

Front view with
garage door

Photo Number
31



Description:

Another style front

Photo Number
32

Location:

Stonebrooke Condominiums
Chagrin Falls, Ohio

Photo Taken by:

Bob Ackerman, P.E.

Date:

February 26, 2020



Description:

Side elevation
view

Photo Number

33



Description:

Back elevation
view

Photo Number

34