

Revised **FULL RESERVE STUDY** The Jonathan Association



Chaska, Minnesota
Inspected - September 29, 2016
Revised - October 5, 2017



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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: The Jonathan Association (The Jonathan)

Location: Chaska, Minnesota

Reference: 090700

Property Basics: The Jonathan Association is a master association which is responsible for the common elements shared by approximately 3,000 units. The Association was built beginning in the 1960s through 2016. The development contains walking paths, mail pavilions, playgrounds and signage.

Reserve Components Identified: 115 Reserve Components.

Inspection Date: September 29, 2016. We conducted previous Reserve Studies on October 30, 2009 and April 25, 2013.

Funding Goal: The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures. Our recommended Funding Plan recognizes these threshold funding years in 2019 and 2030 due to replacement of the asphalt pavement walking paths and the timber underpasses.

Cash Flow Method: We use the Cash Flow Method to compute the Reserve Funding Plan. This method offsets future variable Reserve Expenditures with existing and future stable levels of reserve funding. Our application of this method also considers:

- current and future local costs of replacement
- 0.90% annual rate of return on invested reserves
- 1.8% future Inflation Rate for estimating Future Replacement Costs

Sources for Local Costs of Replacement: Our proprietary database, historical costs and published sources, i.e., R.S. Means, Incorporated.

Cash Status of Reserve Fund: \$368,693 as of August 31, 2016.

Recommended Reserve Funding: The Association budgeted \$262,990 for Reserve Contributions in 2016 and \$275,200 in 2017. We recommend the Association budget annual phased increases in Reserve Contributions of approximately \$110,000 from 2018 through 2019. By 2020, the Association will have fully funded for the near term walking path repairs. Therefore, the Association may anticipate a decrease in the annual Reserve Contribution to \$345,000. Beginning in 2021, the Association can budget less significant increases in reserve funding that in part consider the effects of inflation. By 2031, the Association will have fully funded for the total replacement of the walking paths and underpasses. Therefore, the Association may anticipate a decrease in the annual Reserve Contribution to \$280,000. Afterwards, the Association can again budget less significant increases in reserve funding that in part consider the effects of inflation through 2046, the limit of this study's Cash Flow Analysis. The initial recommended adjustment in Reserve Contributions of \$110,000 represents about a twelve percent (12.4%) adjustment in the 2017 total Operating Budget of \$885,427. This initial recommended adjustment of \$110,000 is equivalent to an increase of \$3.06 in the monthly contributions per homeowner.

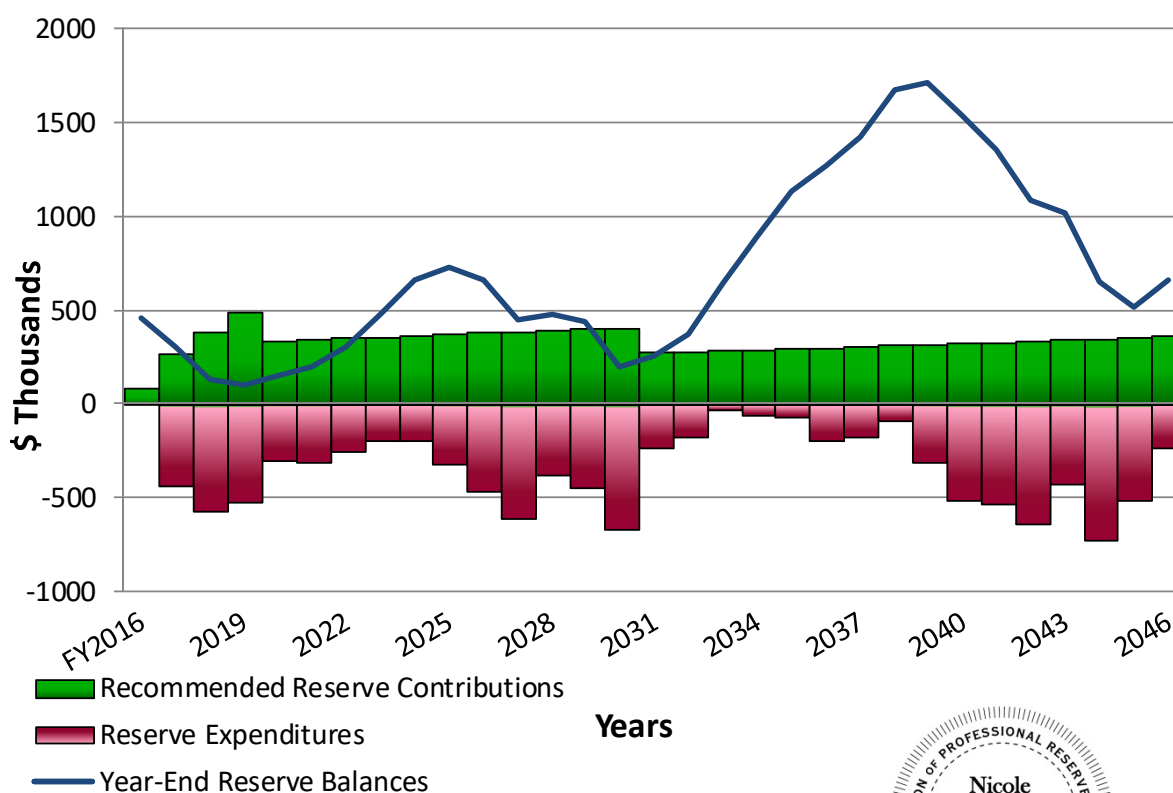


Our revised findings reflect both external market and internal property changes. The result is an overall *increase* in the recommended ***Reserve Funding Plan*** since our last Reserve Study on April 25, 2013. The overall increase relates primarily to additional tree treatment expenditures and the additional expense to renovation of the Eitel House.

Certification: This *Full Reserve Study* exceeds the Community Associations Institute (CAI) and the Association of Professional Reserve Analysts (APRA) standards fulfilling the requirements of a “Level I Full Reserve Study.”

The Jonathan
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2017	275,200	300,957	2027	390,900	446,114	2037	311,500	1,423,830
2018	385,200	124,540	2028	397,900	472,077	2038	317,100	1,673,485
2019	495,200	102,236	2029	405,100	441,326	2039	322,800	1,705,897
2020	345,000	149,348	2030	412,400	194,275	2040	328,600	1,541,794
2021	351,200	194,817	2031	280,000	252,088	2041	334,500	1,358,173
2022	357,500	302,989	2032	285,000	374,101	2042	340,500	1,081,120
2023	363,900	478,433	2033	290,100	642,452	2043	346,600	1,014,149
2024	370,500	661,857	2034	295,300	886,751	2044	352,800	653,980
2025	377,200	728,872	2035	300,600	1,135,891	2045	359,200	511,698
2026	384,000	658,045	2036	306,000	1,266,700	2046	365,700	657,543



Respectfully submitted on October 5, 2017 by
RESERVE ADVISORS, INC.



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¹PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at <http://www.apra-usa.com>.

² RS (Reserve Specialist) is the reserve provider professional designation of the Community Associations Institute (CAI) representing America's more than 300,000 condominium, cooperative and homeowners associations.



2. RESERVE STUDY REPORT

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of

The Jonathan Association

Chaska, Minnesota

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, September 29, 2016. We conducted previous Reserve Studies on October 30, 2009 and April 25, 2013.

We present our findings and recommendations in the following report sections and spreadsheets:

- **Identification of Property** - Segregates all property into several areas of responsibility for repair or replacement
- **Reserve Expenditures** - Identifies reserve components and related quantities, useful lives, remaining useful lives and future reserve expenditures during the next 30 years
- **Reserve Funding Plan** - Presents the recommended Reserve Contributions and year-end Reserve Balances for the next 30 years
- **Condition Assessment** - Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology** - Lists the national standards, methods and procedures used, financial information relied upon for the Financial Analysis of the Reserve Study
- **Definitions** - Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions** - Describes Assumptions and Professional Service Conditions
- **Credentials and Resources**

IDENTIFICATION OF PROPERTY



The Jonathan Association is a master association which is responsible for the common elements shared by approximately 3,000 units. The Association was built beginning in the 1960s through 2016. The development contains walking paths, mail pavilions, playgrounds and signage. We identify 115 major reserve components that are likely to require capital repair or replacement during the next 30 years.

Our investigation includes Reserve Components or property elements as set forth in your Declaration. Our analysis begins by segregating the property elements into several areas of responsibility for repair and replacement. Our process of identification helps assure that future boards and the management team understand whether reserves, the operating budget or Homeowners fund certain replacements and assists in preparation of the annual budget. We derive these segregated classes of property from our review of the information provided by the Association and through conversations with Management. These classes of property include:

- Reserve Components
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements

- Property Maintained by Homeowners
- Property Maintained by Others

We advise the Board conduct an annual review of these classes of property to confirm its policy concerning the manner of funding, i.e., from reserves or the operating budget.

The Reserve Study identifies Reserve Components as set forth in your Declaration or which were identified as part of your request for proposed services. Reserve Components are defined by CAI as property elements with:

- The Jonathan responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

Long-Lived Property Elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the 30-year scope of the study. The operating budget should fund infrequent repairs. Funding untimely or unexpected replacements from reserves will necessitate increases to Reserve Contributions. Periodic updates of this Reserve Study will help determine the merits of adjusting the Reserve Funding Plan. We identify the following Long-Lived Property Elements as excluded from reserve funding at this time.

- Foundations, Common
- Pipes, Interior Building, Common
- Pipes, Subsurface Utilities, Common
- Structural Frames, Common
- Walls, Fiber Cement Siding, Storage Facility (Constructed in 2011)
- Walls, Wood Siding, Lake Grace Pavilion (Constructed in 2016)

The operating budget provides money for the repair and replacement of certain Reserve Components. Operating Budget Funded Repairs and Replacements relate to:

- General Maintenance to the Common Elements
- Expenditures less than \$4,000 (Excluding Neighborhood Elements) (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Asphalt Pavement, Crack Repair, Patch and Seal Coat, Karen House

- Concrete Flatwork, Clover Field
- Electrical and Plumbing Systems, Karen House
- Irrigation Systems (Clover Field, Clover Preserve, Clover Ridge and Traditions)
- Landscape, Annual Maintenance
- Light Fixtures, Silo
- Paint Finishes, Touch Up
- Pavilion, Interiors, Doors, Fire Pit, Light Fixtures
- Propane and Unit Heater, Storage Building
- Sidewalks and Railings, Karen House
- Other Repairs normally funded through the Operating Budget

Certain items have been designated as the responsibility of the homeowners to repair or replace at their cost. Property Maintained by Homeowners, including items billed back to Homeowners, relates to unit:

- Homes and Lots
- Retaining Wall (Neighborhood 7 along Innsbruck Drive)

Certain items have been designated as the responsibility of others to repair or replace.

Property Maintained by Others relates to:

- Art and Sculptures (Municipality)
- Light Poles and Fixtures (Municipality)
- Obelisk (Municipality)
- Ponds and Lakes (Municipality and Sub Associations)
- Retaining Walls (Except those maintained by The Jonathan) (Municipality and Sub Associations)
- Roadway Underpass Structures List Items (Except those maintained by The Jonathan) (Municipality)
- Signage, Sub Associations (Sub Associations)
- Walking Paths (Except those maintained by The Jonathan) (Municipality and Sub Associations)

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
 - useful life
 - remaining useful life
- Unit cost of replacement
- 2016 local cost of replacement
- Total future costs of replacement anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

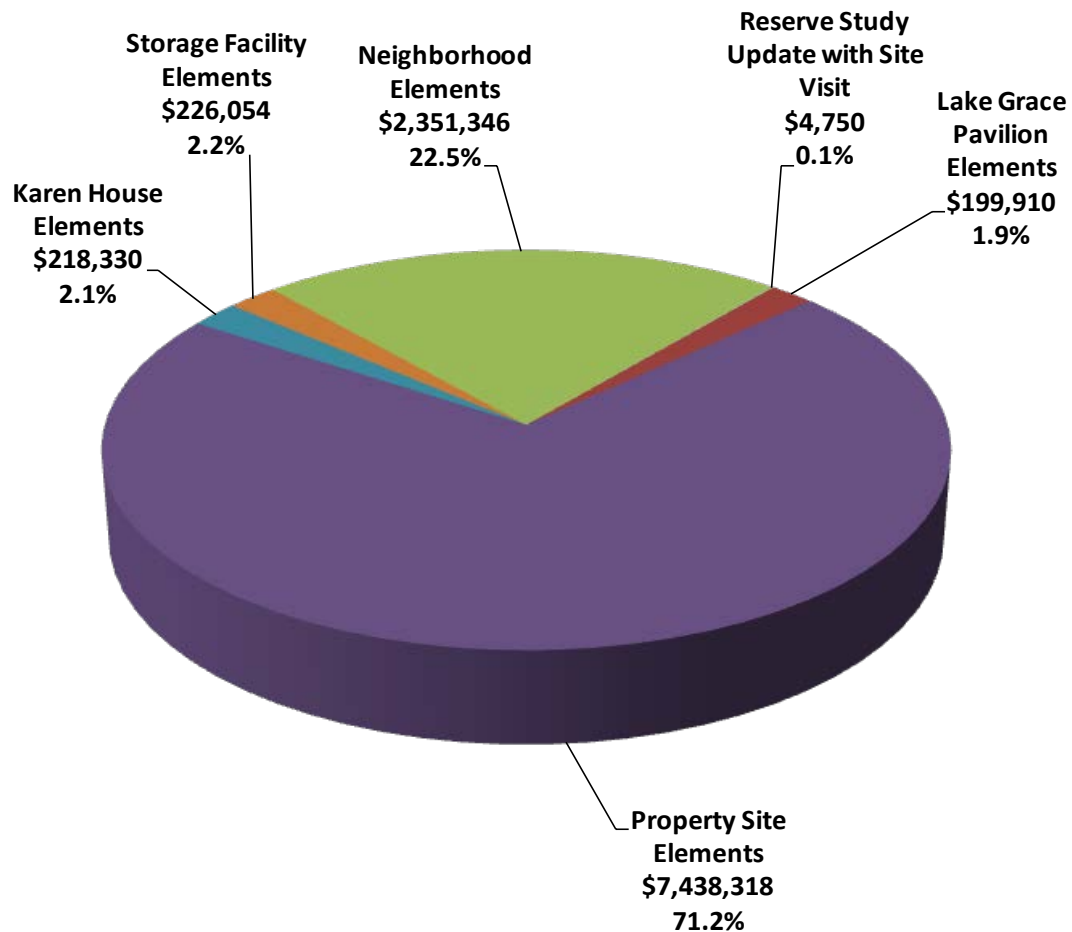
- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end
- Predicted reserves based on current funding level

Financial statements prepared by your association, by you or others might rely in part on information contained in this section. For your convenience, we have provided an electronic data file containing the tables of ***Reserve Expenditures*** and ***Reserve Funding Plan***.



The following chart illustrates the relative importance of the categories noted in *Reserve Expenditures* and relative funding during the next 30 years.

The Jonathan
Future Expenditures Relative Cost Illustration



RESERVE EXPENDITURES

The Jonathan
Association
Chaska, Minnesota

Explanatory Notes:

- 1) 1.8% is the estimated future Inflation Rate for estimating Future Replacement Costs.
2) FY2016 is Fiscal Year beginning January 1, 2016 and ending December 31, 2016.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$					RUL = 0 FY2016	1 2017	2 2018	3 2019	4 2020	5 2021	6 2022	7 2023	8 2024	9 2025	10 2026	11 2027	12 2028	13 2029	14 2030	15 2031
						Useful	Remaining	Unit (2016)	Per Phase (2016)	Total (2016)	30-Year Total (Inflated)																	
Neighborhood #1 Elements																												
1.360	1	1 Each	Bus Shelter, Wood, Refurbishment		2024	to 20	8	3,000.00	3,000	3,000	8,404									3,460								
1.650	5	5 Each	Mailbox Stations, Metal		2028	to 25	12	1,800.00	9,000	9,000	11,148														11,148			
1.660	1	1 Each	Playground Equipment		2027	15 to 25	11	28,000.00	28,000	28,000	81,043													34,071				
1.790	360	360 Square Feet	Retaining Wall, Masonry		2045	to 35	29	42.00	15,120	15,120	25,365																	
1.810	1	1 Each	Signage		2031	15 to 20	15	750.00	750	750	2,261																	980
Neighborhood #2 Elements																												
2.650	1	1 Each	Mailbox Station, Metal		2032	to 25	16	1,800.00	1,800	1,800	2,395																	
2.810	1	1 Each	Signage		2031	15 to 20	15	750.00	750	750	2,261																	980
Neighborhood #3 Elements																												
3.360	1	1 Each	Mail Pavilion, Wood, Refurbishment		2019	to 20	3	3,500.00	3,500	3,500	8,968					3,692												
3.600	3	3 Each	Mailboxes		2019	to 20	3	1,600.00	4,800	4,800	12,299					5,064												
3.660	1	1 Each	Playground Equipment		2018	15 to 25	2	30,000.00	30,000	30,000	73,952			31,090														
3.810	1	1 Each	Signage		2031	15 to 20	15	750.00	750	750	2,261																	980
Neighborhood #4 Elements																												
4.360	1	1 Each	Mail Pavilion, Wood, Refurbishment		2019	to 20	3	4,000.00	4,000	4,000	10,249					4,220												
4.600	4	4 Each	Mailboxes		2019	to 20	3	1,400.00	5,600	5,600	14,349					5,908												
4.650	3	3 Each	Mailbox Stations, Metal		2032	to 25	16	1,600.00	4,800	4,800	6,386																	
4.660	1	1 Each	Playground Equipment		2030	15 to 25	14	22,000.00	22,000	22,000	28,242															28,242		
4.810	1	1 Each	Signage		2031	15 to 20	15	750.00	750	750	2,261																	980
Neighborhood #5 Elements																												
5.360	1	1 Each	Mail Pavilion, Wood, Refurbishment		2024	to 20	8	3,500.00	3,500	3,500	9,805									4,037								
5.600	1	1 Each	Mailboxes		2024	to 20	8	7,000.00	7,000	7,000	19,609									8,074								
5.660	1	1 Each	Playground Equipment		2030	15 to 25	14	40,000.00	40,000	40,000	51,349															51,349		
5.810	1	1 Each	Signage		2031	15 to 20	15	750.00	750	750	2,261																	980
Neighborhood #6 Elements																												
6.100	600	600 Square Yards	Asphalt Pavement, Basketball Court, Total Replacement		2017	15 to 20	1	39.50	23,700	23,700	57,390		24,127															
6.360	3	3 Each	Bus Shelter and Mail Pavilions, Wood, Refurbishment		2019	to 20	3	3,500.00	10,500	10,500	26,904					11,077												
6.600	1	1 Each	Mailboxes		2019	to 20	3	1,600.00	1,600	1,600	4,100					1,688												
6.650	3	3 Each	Mailbox Stations, Metal		2032	to 25	16	1,800.00	5,400	5,400	7,184																	
6.660	1	1 Each	Playground Equipment		2021	15 to 25	5	19,000.00	19,000	19,000	49,412					20,773												
6.810	2	2 Each	Signage		2031	15 to 20	15	750.00	1,500	1,500	4,522																	1,960
6.820	1	1 Allowance	Signage, Monument, Masonry, Refurbishment		2025	15 to 20	9	3,500.00	3,500	3,500	9,982								4,110									

RESERVE EXPENDITURES

The Jonathan Association Chaska, Minnesota				Estimated 1st Year of Event	Life Analysis, Years		Costs, \$				16 2032	17 2033	18 2034	19 2035	20 2036	21 2037	22 2038	23 2039	24 2040	25 2041	26 2042	27 2043	28 2044	29 2045	30 2046		
Line Item	Total Quantity	Per Phase Quantity	Units		Unit (2016)	Per Phase (2016)	Total (2016)	30-Year Total (Inflated)																			
Reserve Component Inventory																											
Neighborhood #1 Elements																											
1.360	1	1 Each	Bus Shelter, Wood, Refurbishment	2024	to 20	8	3,000.00	3,000	3,000	8,404														4,944			
1.650	5	5 Each	Mailbox Stations, Metal	2028	to 25	12	1,800.00	9,000	9,000	11,148																	
1.660	1	1 Each	Playground Equipment	2027	15 to 25	11	28,000.00	28,000	28,000	81,043														46,972			
1.790	360	360 Square Feet	Retaining Wall, Masonry	2045	to 35	29	42.00	15,120	15,120	25,365														25,365			
1.810	1	1 Each	Signage	2031	15 to 20	15	750.00	750	750	2,261															1,281		
Neighborhood #2 Elements																											
2.650	1	1 Each	Mailbox Station, Metal	2032	to 25	16	1,800.00	1,800	1,800	2,395	2,395																
2.810	1	1 Each	Signage	2031	15 to 20	15	750.00	750	750	2,261															1,281		
Neighborhood #3 Elements																											
3.360	1	1 Each	Mail Pavilion, Wood, Refurbishment	2019	to 20	3	3,500.00	3,500	3,500	8,968								5,276									
3.600	3	3 Each	Mailboxes	2019	to 20	3	1,600.00	4,800	4,800	12,299								7,235									
3.660	1	1 Each	Playground Equipment	2018	15 to 25	2	30,000.00	30,000	30,000	73,952					42,862												
3.810	1	1 Each	Signage	2031	15 to 20	15	750.00	750	750	2,261															1,281		
Neighborhood #4 Elements																											
4.360	1	1 Each	Mail Pavilion, Wood, Refurbishment	2019	to 20	3	4,000.00	4,000	4,000	10,249								6,029									
4.600	4	4 Each	Mailboxes	2019	to 20	3	1,400.00	5,600	5,600	14,349								8,441									
4.650	3	3 Each	Mailbox Stations, Metal	2032	to 25	16	1,600.00	4,800	4,800	6,386	6,386																
4.660	1	1 Each	Playground Equipment	2030	15 to 25	14	22,000.00	22,000	22,000	28,242																	
4.810	1	1 Each	Signage	2031	15 to 20	15	750.00	750	750	2,261															1,281		
Neighborhood #5 Elements																											
5.360	1	1 Each	Mail Pavilion, Wood, Refurbishment	2024	to 20	8	3,500.00	3,500	3,500	9,805													5,768				
5.600	1	1 Each	Mailboxes	2024	to 20	8	7,000.00	7,000	7,000	19,609													11,535				
5.660	1	1 Each	Playground Equipment	2030	15 to 25	14	40,000.00	40,000	40,000	51,349																	
5.810	1	1 Each	Signage	2031	15 to 20	15	750.00	750	750	2,261															1,281		
Neighborhood #6 Elements																											
6.100	600	600 Square Yards	Asphalt Pavement, Basketball Court, Total Replacement	2017	15 to 20	1	39.50	23,700	23,700	57,390				33,263													
6.360	3	3 Each	Bus Shelter and Mail Pavilions, Wood, Refurbishment	2019	to 20	3	3,500.00	10,500	10,500	26,904								15,827									
6.600	1	1 Each	Mailboxes	2019	to 20	3	1,600.00	1,600	1,600	4,100								2,412									
6.650	3	3 Each	Mailbox Stations, Metal	2032	to 25	16	1,800.00	5,400	5,400	7,184	7,184																
6.660	1	1 Each	Playground Equipment	2021	15 to 25	5	19,000.00	19,000	19,000	49,412								28,639									
6.810	2	2 Each	Signage	2031	15 to 20	15	750.00	1,500	1,500	4,522															2,562		
6.820	1	1 Allowance	Signage, Monument, Masonry, Refurbishment	2025	15 to 20	9	3,500.00	3,500	3,500	9,982														5,872			

RESERVE EXPENDITURES

The Jonathan
Association
Chaska, Minnesota

Explanatory Notes:

- 1) 1.8% is the estimated future Inflation Rate for estimating Future Replacement Costs.
2) FY2016 is Fiscal Year beginning January 1, 2016 and ending December 31, 2016.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$				RUL = 0 FY2016	1 2017	2 2018	3 2019	4 2020	5 2021	6 2022	7 2023	8 2024	9 2025	10 2026	11 2027	12 2028	13 2029	14 2030	15 2031
						Useful	Remaining	Unit (2016)	Per Phase (2016)	Total (2016)	30-Year Total (Inflated)																
Neighborhood #7 Elements																											
7.360	1	1 Each	Mail Pavilion, Wood, Refurbishment		2019	to 20	3	4,500.00	4,500	4,500	11,530				4,747												
7.600	15	15 Each	Mailboxes		2019	to 20	3	1,600.00	24,000	24,000	61,494				25,319												
7.660	2	2 Each	Playground Equipment		2029	15 to 25	13	34,000.00	68,000	68,000	85,749													85,749			
7.810	3	3 Each	Signage		2031	15 to 20	15	750.00	2,250	2,250	6,783															2,940	
Neighborhood #8 Elements																											
8.360	1	1 Each	Mail Pavilions, Wood, Refurbishment		2019	to 20	3	3,500.00	3,500	3,500	8,968				3,692												
8.600	7	7 Each	Mailboxes		2019	to 20	3	1,600.00	11,200	11,200	28,698				11,816												
8.660	1	1 Each	Playground Equipment		2027	15 to 25	11	35,000.00	35,000	35,000	101,305												42,589				
8.790	400	400 Square Feet	Retaining Walls, Stone Masonry (Replace with Interlocking Masonry)		2019	to 35	3	48.00	19,200	19,200	20,256				20,256												
8.810	1	1 Each	Signage		2031	15 to 20	15	750.00	750	750	2,261															980	
Neighborhood #9 Elements																											
9.360	1	1 Each	Mail Pavilions, Wood, Refurbishment		2019	to 20	3	3,000.00	3,000	3,000	7,687				3,165												
9.600	3	3 Each	Mailboxes		2019	to 20	3	2,000.00	6,000	6,000	15,374				6,330												
9.660	1	1 Each	Playground Equipment		2027	15 to 25	11	35,000.00	35,000	35,000	101,305												42,589				
9.810	2	2 Each	Signage		2031	15 to 20	15	750.00	1,500	1,500	4,522															1,960	
Neighborhood #10 (Tuscany Hills) Elements																											
10.360	3	3 Each	Mail Pavilions, Wood, Refurbishment		2019	to 20	3	4,000.00	12,000	12,000	30,748				12,660												
10.600	8	8 Each	Mailboxes		2019	to 20	3	1,700.00	13,600	13,600	34,847				14,348												
10.660	1	1 Each	Playground Equipment		2027	15 to 25	11	30,000.00	30,000	30,000	86,833												36,505				
10.820	1	1 Allowance	Signage, Monument, Stucco and Masonry, Refurbishment		2018	15 to 20	2	7,500.00	7,500	7,500	18,877			7,772													
Neighborhood #11 (Victory Way) Elements																											
11.360	3	3 Each	Mail Pavilions, Wood, Refurbishment		2024	to 20	8	3,500.00	10,500	10,500	29,414								12,111								
11.600	16	16 Each	Mailboxes		2024	to 20	8	1,700.00	27,200	27,200	76,197								31,373								
11.650	2	2 Each	Mailbox Stations, Metal		2019	to 25	3	1,800.00	3,600	3,600	9,731				3,798												
11.660	2	1 Each	Playground Equipment, Phased		2027	15 to 25	11 to 14	25,500.00	25,500	51,000	106,543											31,029			32,735		
11.790	120	120 Square Feet	Retaining Walls, Masonry		2034	to 35	18	42.00	5,040	5,040	6,948																
11.810	2	2 Each	Signage, Metal with Masonry		2031	15 to 20	15	1,000.00	2,000	2,000	6,030															2,614	
11.820	1	1 Allowance	Signage, Monument, Wood and Concrete, Refurbishment		2024	15 to 20	8	3,500.00	3,500	3,500	9,805								4,037								
Neighborhood #12 (Heather Ridge) Elements																											
12.360	2	2 Each	Mail Pavilions, Wood, Refurbishment		2024	to 20	8	3,500.00	7,000	7,000	19,609								8,074								
12.600	4	4 Each	Mailboxes		2024	to 20	8	1,800.00	7,200	7,200	20,170								8,305								
12.660	1	1 Each	Playground Equipment		2027	15 to 25	11	25,000.00	25,000	25,000	72,360											30,420					
12.820	1	1 Allowance	Signage, Monument, Masonry, Refurbishment		2026	15 to 20	10	6,000.00	6,000	6,000	17,419											7,172					

RESERVE EXPENDITURES

The Jonathan
Association
Chaska, Minnesota

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$						16 2032	17 2033	18 2034	19 2035	20 2036	21 2037	22 2038	23 2039	24 2040	25 2041	26 2042	27 2043	28 2044	29 2045	30 2046	
						Useful	Remaining	Unit (2016)	Per Phase (2016)	Total (2016)	30-Year Total (Inflated)																		
Neighborhood #7 Elements																													
7.360	1	1 Each	Mail Pavilion, Wood, Refurbishment		2019	to 20	3	4,500.00	4,500	4,500	11,530									6,783									
7.600	15	15 Each	Mailboxes		2019	to 20	3	1,600.00	24,000	24,000	61,494									36,175									
7.660	2	2 Each	Playground Equipment		2029	15 to 25	13	34,000.00	68,000	68,000	85,749																		
7.810	3	3 Each	Signage		2031	15 to 20	15	750.00	2,250	2,250	6,783																	3,843	
Neighborhood #8 Elements																													
8.360	1	1 Each	Mail Pavilions, Wood, Refurbishment		2019	to 20	3	3,500.00	3,500	3,500	8,968									5,276									
8.600	7	7 Each	Mailboxes		2019	to 20	3	1,600.00	11,200	11,200	28,698									16,882									
8.660	1	1 Each	Playground Equipment		2027	15 to 25	11	35,000.00	35,000	35,000	101,305																58,716		
8.790	400	400 Square Feet	Retaining Walls, Stone Masonry (Replace with Interlocking Masonry)		2019	to 35	3	48.00	19,200	19,200	20,256																		
8.810	1	1 Each	Signage		2031	15 to 20	15	750.00	750	750	2,261																1,281		
Neighborhood #9 Elements																													
9.360	1	1 Each	Mail Pavilions, Wood, Refurbishment		2019	to 20	3	3,000.00	3,000	3,000	7,687									4,522									
9.600	3	3 Each	Mailboxes		2019	to 20	3	2,000.00	6,000	6,000	15,374									9,044									
9.660	1	1 Each	Playground Equipment		2027	15 to 25	11	35,000.00	35,000	35,000	101,305															58,716			
9.810	2	2 Each	Signage		2031	15 to 20	15	750.00	1,500	1,500	4,522																2,562		
Neighborhood #10 (Tuscany Hills) Elements																													
10.360	3	3 Each	Mail Pavilions, Wood, Refurbishment		2019	to 20	3	4,000.00	12,000	12,000	30,748									18,088									
10.600	8	8 Each	Mailboxes		2019	to 20	3	1,700.00	13,600	13,600	34,847									20,499									
10.660	1	1 Each	Playground Equipment		2027	15 to 25	11	30,000.00	30,000	30,000	86,833															50,328			
10.820	1	1 Allowance	Signage, Monument, Stucco and Masonry, Refurbishment		2018	15 to 20	2	7,500.00	7,500	7,500	18,877								11,105										
Neighborhood #11 (Victory Way) Elements																													
11.360	3	3 Each	Mail Pavilions, Wood, Refurbishment		2024	to 20	8	3,500.00	10,500	10,500	29,414															17,303			
11.600	16	16 Each	Mailboxes		2024	to 20	8	1,700.00	27,200	27,200	76,197															44,824			
11.650	2	2 Each	Mailbox Stations, Metal		2019	to 25	3	1,800.00	3,600	3,600	9,731															5,933			
11.660	2	1 Each	Playground Equipment, Phased		2027	15 to 25	11 to 14	25,500.00	25,500	51,000	106,543															42,779			
11.790	120	120 Square Feet	Retaining Walls, Masonry		2034	to 35	18	42.00	5,040	5,040	6,948			6,948															
11.810	2	2 Each	Signage, Metal with Masonry		2031	15 to 20	15	1,000.00	2,000	2,000	6,030															3,416			
11.820	1	1 Allowance	Signage, Monument, Wood and Concrete, Refurbishment		2024	15 to 20	8	3,500.00	3,500	3,500	9,805														5,768				
Neighborhood #12 (Heather Ridge) Elements																													
12.360	2	2 Each	Mail Pavilions, Wood, Refurbishment		2024	to 20	8	3,500.00	7,000	7,000	19,609															11,535			
12.600	4	4 Each	Mailboxes		2024	to 20	8	1,800.00	7,200	7,200	20,170															11,865			
12.660	1	1 Each	Playground Equipment		2027	15 to 25	11	25,000.00	25,000	25,000	72,360															41,940			
12.820	1	1 Allowance	Signage, Monument, Masonry, Refurbishment		2026	15 to 20	10	6,000.00	6,000	6,000	17,419															10,247			

RESERVE EXPENDITURES

The Jonathan
Association
Chaska, Minnesota

Explanatory Notes:

- 1) 1.8% is the estimated future Inflation Rate for estimating Future Replacement Costs.
2) FY2016 is Fiscal Year beginning January 1, 2016 and ending December 31, 2016.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$				RUL = 0 FY2016	1 2017	2 2018	3 2019	4 2020	5 2021	6 2022	7 2023	8 2024	9 2025	10 2026	11 2027	12 2028	13 2029	14 2030	15 2031	
						Useful	Remaining	Unit (2016)	Per Phase (2016)	Total (2016)	30-Year Total (Inflated)																	
Clover Field Elements																												
13.200	1	1 Each	Gazebo		2025	15 to 25	9	12,000.00	12,000	12,000	34,221									14,090								
13.600	9	9 Each	Mailbox Stations, Metal		2028	to 25	12	1,800.00	16,200	16,200	20,067													20,067				
13.620	1	1 Allowance	Mailbox Stations, Wood Frame (Replace with Metal Cluster Boxes)		2017	to 20	1	7,150.00	7,150	7,150	18,520		7,150															
13.660	1	1 Each	Playground Equipment, Hundertmark Road		2030	15 to 25	14	28,000.00	28,000	28,000	35,944															35,944		
13.670	1	1 Each	Playground Equipment, Juliet Park, Proposed		2018	15 to 25	2	25,000.00	25,000	25,000	61,627			25,908														
13.820	1	1 Allowance	Signage, Monument, Masonry, Refurbishment		2026	15 to 20	10	5,500.00	5,500	5,500	15,967										6,574							
Clover Preserve Elements																												
14.360	1	1 Each	Mail Pavilion, Wood, Refurbishment		2024	to 20	8	4,000.00	4,000	4,000	11,206									4,614								
14.600	6	6 Each	Mailboxes		2024	to 20	8	1,800.00	10,800	10,800	30,255									12,457								
14.660	1	1 Each	Playground Equipment		2030	15 to 25	14	28,000.00	28,000	28,000	35,944															35,944		
Clover Ridge Elements																												
15.360	1	1 Each	Bus Shelter, Wood, Refurbishment		2024	to 20	8	3,500.00	3,500	3,500	9,805									4,037								
15.600	16	16 Each	Mailbox Stations, Metal		2032	to 25	16	2,100.00	33,600	33,600	44,700																	
15.620	1	1 Allowance	Mailbox Stations, Wood Frame (Replace with Metal Cluster Boxes)		2018	to 20	2	7,300.00	7,300	7,300	19,382			7,565														
Traditions Elements																												
16.360	2	2 Each	Mail Pavilions, Wood, Refurbishment		2024	to 20	8	3,000.00	6,000	6,000	16,808									6,920								
16.600	4	4 Each	Mailboxes		2024	to 20	8	1,600.00	6,400	6,400	17,929									7,382								
16.650	9	9 Each	Mailbox Stations, Metal		2032	to 25	16	1,800.00	16,200	16,200	21,552																	
16.660	1	1 Each	Playground Equipment		2030	15 to 25	14	28,000.00	28,000	28,000	35,944															35,944		
16.750	1	1 Allowance	Trellis, Columns and Pavers, Refurbishment		2022	15 to 25	6	20,000.00	20,000	20,000	52,949							22,260										
Autumn Woods Elements																												
17.280	1	1 Each	Mail Pavilions, Brick, Refurbishment		2024	to 20	8	6,000.00	6,000	6,000	16,808									6,920								
17.360	2	2 Each	Mail Pavilions, Wood, Refurbishment		2019	to 20	3	3,300.00	6,600	6,600	16,911				6,963													
17.600	4	4 Each	Mailboxes		2019	to 20	3	1,600.00	6,400	6,400	16,399				6,752													
17.620	1	1 Allowance	Mailbox Stations, Wood Frame (Replace with Metal Cluster Boxes)		2019	to 20	3	8,475.00	8,475	8,475	21,715				8,941													
17.650	8	8 Each	Mailbox Stations, Metal		2028	to 25	12	1,800.00	14,400	14,400	17,838													17,838				
17.660	2	1 Each	Playground Equipment (Includes Basketball Court), Phased		2021	15 to 25	5 to 11	35,000.00	35,000	70,000	192,325						38,265						42,589					
17.820	4	4 Each	Signage, Monument, Brick, Refurbishment		2024	15 to 20	8	2,500.00	10,000	10,000	28,013									11,534								
17.825	1	1 Each	Signage, Monument, Stucco and Composite, Refurbishment		2031	15 to 20	15	3,500.00	3,500	3,500	10,551															4,574		
Oak Valley Elements																												
18.650	4	4 Each	Mailbox Stations, Metal		2032	to 25	16	1,800.00	7,200	7,200	9,578																	
18.810	1	1 Each	Signage		2031	15 to 20	15	850.00	850	850	2,563															1,111		
Karen House Elements																												
19.040	1,850	1,850 Square Yards	Asphalt Pavement, Total Replacement, Parking Areas and Driveway		2031	15 to 20	15	31.00	57,350	57,350	74,946															74,946		
19.110	1	1 Allowance	Building Services Equipment		2032	12 to 18	16	3,800.00	3,800	3,800	5,055																	
19.450	1	1 Allowance	Exterior, Renovation, Partial		2017	to 15	1	6,500.00	6,500	6,500	26,015		6,617													8,494		
19.500	1	1 Allowance	Interior, Renovation		2018	to 10	2	10,000.00	10,000	10,000	52,005			10,363									11,953					
19.600	4	2 Each	Light Poles and Fixtures, Phased		2020	to 25	4 to 16	2,200.00	4,400	8,800	17,830					4,725												

RESERVE EXPENDITURES

The Jonathan Association Chaska, Minnesota				Estimated 1st Year of Event	Life Analysis, Years		Costs, \$				16 2032	17 2033	18 2034	19 2035	20 2036	21 2037	22 2038	23 2039	24 2040	25 2041	26 2042	27 2043	28 2044	29 2045	30 2046
Line Item	Total Quantity	Per Phase Quantity	Units		Useful	Remaining	Unit (2016)	Per Phase (2016)	Total (2016)	30-Year Total (Inflated)															
Reserve Component Inventory																									
<u>Clover Field Elements</u>																									
13.200	1	1 Each	Gazebo	2025	15 to 25	9	12,000.00	12,000	12,000	34,221														20,131	
13.600	9	9 Each	Mailbox Stations, Metal	2028	to 25	12	1,800.00	16,200	16,200	20,067															
13.620	1	1 Allowance	Mailbox Stations, Wood Frame (Replace with Metal Cluster Boxes)	2017	to 20	1	7,150.00	7,150	7,150	18,520											11,370				
13.660	1	1 Each	Playground Equipment, Hundertmark Road	2030	15 to 25	14	28,000.00	28,000	28,000	35,944															
13.670	1	1 Each	Playground Equipment, Juliet Park, Proposed	2018	15 to 25	2	25,000.00	25,000	25,000	61,627					35,719										
13.820	1	1 Allowance	Signage, Monument, Masonry, Refurbishment	2026	15 to 20	10	5,500.00	5,500	5,500	15,967														9,393	
<u>Clover Preserve Elements</u>																									
14.360	1	1 Each	Mail Pavilion, Wood, Refurbishment	2024	to 20	8	4,000.00	4,000	4,000	11,206													6,592		
14.600	6	6 Each	Mailboxes	2024	to 20	8	1,800.00	10,800	10,800	30,255													17,798		
14.660	1	1 Each	Playground Equipment	2030	15 to 25	14	28,000.00	28,000	28,000	35,944															
<u>Clover Ridge Elements</u>																									
15.360	1	1 Each	Bus Shelter, Wood, Refurbishment	2024	to 20	8	3,500.00	3,500	3,500	9,805													5,768		
15.600	16	16 Each	Mailbox Stations, Metal	2032	to 25	16	2,100.00	33,600	33,600	44,700	44,700														
15.620	1	1 Allowance	Mailbox Stations, Wood Frame (Replace with Metal Cluster Boxes)	2018	to 20	2	7,300.00	7,300	7,300	19,382											11,817				
<u>Traditions Elements</u>																									
16.360	2	2 Each	Mail Pavilions, Wood, Refurbishment	2024	to 20	8	3,000.00	6,000	6,000	16,808													9,888		
16.600	4	4 Each	Mailboxes	2024	to 20	8	1,600.00	6,400	6,400	17,929													10,547		
16.650	9	9 Each	Mailbox Stations, Metal	2032	to 25	16	1,800.00	16,200	16,200	21,552	21,552														
16.660	1	1 Each	Playground Equipment	2030	15 to 25	14	28,000.00	28,000	28,000	35,944															
16.750	1	1 Allowance	Trellis, Columns and Pavers, Refurbishment	2022	15 to 25	6	20,000.00	20,000	20,000	52,949								30,689							
<u>Autumn Woods Elements</u>																									
17.280	1	1 Each	Mail Pavilions, Brick, Refurbishment	2024	to 20	8	6,000.00	6,000	6,000	16,808													9,888		
17.360	2	2 Each	Mail Pavilions, Wood, Refurbishment	2019	to 20	3	3,300.00	6,600	6,600	16,911							9,948								
17.600	4	4 Each	Mailboxes	2019	to 20	3	1,600.00	6,400	6,400	16,399							9,647								
17.620	1	1 Allowance	Mailbox Stations, Wood Frame (Replace with Metal Cluster Boxes)	2019	to 20	3	8,475.00	8,475	8,475	21,715							12,774								
17.650	8	8 Each	Mailbox Stations, Metal	2028	to 25	12	1,800.00	14,400	14,400	17,838															
17.660	2	1 Each	Playground Equipment (Includes Basketball Court), Phased	2021	15 to 25	5 to 11	35,000.00	35,000	70,000	192,325							52,755							58,716	
17.820	4	4 Each	Signage, Monument, Brick, Refurbishment	2024	15 to 20	8	2,500.00	10,000	10,000	28,013												16,479			
17.825	1	1 Each	Signage, Monument, Stucco and Composite, Refurbishment	2031	15 to 20	15	3,500.00	3,500	3,500	10,551														5,977	
<u>Oak Valley Elements</u>																									
18.650	4	4 Each	Mailbox Stations, Metal	2032	to 25	16	1,800.00	7,200	7,200	9,578	9,578														
18.810	1	1 Each	Signage	2031	15 to 20	15	850.00	850	850	2,563														1,452	
<u>Karen House Elements</u>																									
19.040	1,850	1,850 Square Yards	Asphalt Pavement, Total Replacement, Parking Areas and Driveway	2031	15 to 20	15	31.00	57,350	57,350	74,946															
19.110	1	1 Allowance	Building Services Equipment	2032	12 to 18	16	3,800.00	3,800	3,800	5,055	5,055														
19.450	1	1 Allowance	Exterior, Renovation, Partial	2017	to 15	1	6,500.00	6,500	6,500	26,015														10,904	
19.500	1	1 Allowance	Interior, Renovation	2018	to 10	2	10,000.00	10,000	10,000	52,005					13,787						15,902				
19.600	4	2 Each	Light Poles and Fixtures, Phased	2020	to 25	4 to 16	2,200.00	4,400	8,800	17,830	5,854												7,251		

RESERVE EXPENDITURES

The Jonathan
Association
Chaska, Minnesota

Explanatory Notes:

- 1) 1.8% is the estimated future Inflation Rate for estimating Future Replacement Costs.
2) FY2016 is Fiscal Year beginning January 1, 2016 and ending December 31, 2016.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$				RUL = 0 FY2016	1 2017	2 2018	3 2019	4 2020	5 2021	6 2022	7 2023	8 2024	9 2025	10 2026	11 2027	12 2028	13 2029	14 2030	15 2031
						Useful	Remaining	Unit (2016)	Per Phase (2016)	Total (2016)	30-Year Total (Inflated)																
19.650	12	12	Squares	Roof, Asphalt Shingles (Includes Gutters and Downspouts)	2031	15 to 20	15	1,000.00	12,000	12,000	15,682																15,682
19.810	2	2	Each	Signage	2031	15 to 20	15	850.00	1,700	1,700	5,125																2,222
19.950	400	200	Square Feet	Windows and Doors, Phased	2017	to 35	1 to 25	42.00	8,400	16,800	21,672		8,551														
Lake Grace Pavilion Elements																											
20.500	1	1	Allowance	Landscape, Beach Hardscape	2017	to 25	1	50,000.00	50,000	50,000	129,508		50,000														
20.220	340	340	Square Feet	Retaining Walls, Timber (Replace with Masonry)	2018	15 to 20	2	45.00	15,300	15,300	15,856			15,856													
20.280	25	25	Squares	Roofs, Asphalt Shingles	2034	15 to 20	18	300.00	7,500	7,500	10,340																
20.760	2,050	2,050	Square Feet	Walls, Wood Siding, Paint Finish Applications and Capital Repairs	2021	4 to 6	5	2.60	5,330	5,330	44,206						5,827				6,371						6,965
Property Site Elements																											
21.010	2	1	Allowance	Asphalt Pavement, Walking Paths, Repairs, Budgeted	2017	N/A	1 to 3	130,000.00	130,000	260,000	390,000		150,000	240,000													
21.020	37,350	7,470	Square Yards	Asphalt Pavement, Walking Paths, Crack Repair, Patch and Seal Coat, Phased	2019	3 to 5	3 to 7	2.60	19,422	97,110	464,875				20,490	20,859	21,234	21,616	22,005	22,401						24,932	25,381
21.080	37,350	7,470	Square Yards	Asphalt Pavement, Walking Paths, Total Replacement, Phased	2025	10 to 15	9 to 13	34.00	253,980	1,269,900	3,565,721									298,215	303,583	309,047	314,610	320,273			
21.100	1	1	Allowance	Eitel House, Complete Renovation	2019	N/A	3	150,000.00	150,000	150,000	158,247				158,247												
21.150	1	1	Allowance	Eitel House, Partial Renovation	2037	to 20	21	90,000.00	90,000	90,000	130,902																
21.450	1	1	Allowance	Landscape, Tree Treatment and Removal, Emerald Ash Borer	2017	N/A	1 to 7	150,000.00	150,000	150,000	1,128,385		152,700	155,449	158,247	161,095	163,995	166,947	169,952								
21.500	1	1	Allowance	Landscape, Partial Replacements and Tree Trimming (Near Term is Budgeted)	2017	to 5	1	20,000.00	20,000	20,000	249,545		20,360	20,726	21,100	21,479	21,866				23,906						26,136
21.620	7,900	1,975	Square Feet	Pavers, Masonry, Clover Field, Phased	2020	15 to 20	4 to 10	16.00	31,600	126,400	348,104					33,937		35,170		36,448		37,772					
21.660	1	1	Each	Playground Equipment, Jonathan Acres	2027	15 to 25	11	32,000.00	32,000	32,000	92,621											38,938					
21.810	1	1	Each	Signage, Marsh Halberg Sliding Hill	2031	15 to 20	15	850.00	850	850	2,563																1,111
21.820	3	1	Allowance	Site Furniture, Phased	2020	15 to 20	4 to 16	28,000.00	28,000	84,000	188,389				30,071						33,468						
21.900	1	1	Allowance	Silo, Paint Finishes and Capital Repairs	2021	5 to 7	5	25,300.00	25,300	25,300	209,838						27,660				30,241						33,063
21.970	5	5	Each	Underpasses, Timber, Inspections and Capital Repairs	2018	10 to 15	2	8,500.00	42,500	42,500	111,626			44,044													
21.980	5	5	Each	Underpasses, Timber, Replacement	2030	to 40	14	60,000.00	300,000	300,000	385,115															385,115	
21.990	2	2	Each	Windmills	2028	to 50+	12	5,000.00	10,000	10,000	12,387											12,387					
Storage Facility Elements																											
22.050	3	3	Each	Doors, Garage, Sectional	2036	to 25	20	1,700.00	5,100	5,100	7,287																
22.500	1	1	Each	Maintenance Vehicles, Golf Cart	2021	to 10	5	7,000.00	7,000	7,000	27,735						7,653										9,148
22.510	1	1	Each	Maintenance Vehicles, Pick-up Truck	2020	to 10	4	25,000.00	25,000	25,000	97,303					26,849									32,093		
22.520	1	1	Each	Maintenance Vehicles, Trailer	2022	10 to 15	6	5,000.00	5,000	5,000	12,837							5,565									
22.530	1	1	Each	Maintenance Vehicles, Utility Task Vehicle (2017 is Budgeted)	2017	10 to 15	1	20,000.00	20,000	20,000	72,191		15,730												25,220		
22.710	23	23	Squares	Roof, Asphalt Shingles	2029	15 to 20	13	300.00	6,900	6,900	8,701														8,701		
		1	Allowance	Reserve Study Update with Site Visit	2018	2	2	4,750.00	4,750	4,750	4,750			4,750													
Anticipated Expenditures, By Year																											

RESERVE EXPENDITURES

The Jonathan Association Chaska, Minnesota				Estimated 1st Year of Event	Life Analysis, Years		Costs, \$				16 2032	17 2033	18 2034	19 2035	20 2036	21 2037	22 2038	23 2039	24 2040	25 2041	26 2042	27 2043	28 2044	29 2045	30 2046
Line Item	Total Quantity	Per Phase Quantity	Units		Reserve Component Inventory	Useful	Remaining	Unit (2016)	Per Phase (2016)	Total (2016)															
19.650	12	12 Squares	Roof, Asphalt Shingles (Includes Gutters and Downspouts)	2031	15 to 20	15	1,000.00	12,000	12,000	15,682															
19.810	2	2 Each	Signage	2031	15 to 20	15	850.00	1,700	1,700	5,125															2,903
19.950	400	200 Square Feet	Windows and Doors, Phased	2017	to 35	1 to 25	42.00	8,400	16,800	21,672										13,121					
Lake Grace Pavilion Elements																									
20.500	1	1 Allowance	Landscape, Beach Hardscape	2017	to 25	1	50,000.00	50,000	50,000	129,508											79,508				
20.220	340	340 Square Feet	Retaining Walls, Timber (Replace with Masonry)	2018	15 to 20	2	45.00	15,300	15,300	15,856															
20.280	25	25 Squares	Roofs, Asphalt Shingles	2034	15 to 20	18	300.00	7,500	7,500	10,340			10,340												
20.760	2,050	2,050 Square Feet	Walls, Wood Siding, Paint Finish Applications and Capital Repairs	2021	4 to 6	5	2.60	5,330	5,330	44,206					7,615					8,326					9,102
Property Site Elements																									
21.010	2	1 Allowance	Asphalt Pavement, Walking Paths, Repairs, Budgeted	2017	N/A	1 to 3	130,000.00	130,000	260,000	390,000															
21.020	37,350	7,470 Square Yards	Asphalt Pavement, Walking Paths, Crack Repair, Patch and Seal Coat, Phased	2019	3 to 5	3 to 7	2.60	19,422	97,110	464,875	25,838	26,303	26,777	27,258	27,749	28,249	28,757	29,275						32,582	33,169
21.080	37,350	7,470 Square Yards	Asphalt Pavement, Walking Paths, Total Replacement, Phased	2025	10 to 15	9 to 13	34.00	253,980	1,269,900	3,565,721									389,714	396,729	403,870	411,140	418,540		
21.100	1	1 Allowance	Eitel House, Complete Renovation	2019	N/A	3	150,000.00	150,000	150,000	158,247															
21.150	1	1 Allowance	Eitel House, Partial Renovation	2037	to 20	21	90,000.00	90,000	90,000	130,902						130,902									
21.450	1	1 Allowance	Landscape, Tree Treatment and Removal, Emerald Ash Borer	2017	N/A	1 to 7	150,000.00	150,000	150,000	1,128,385															
21.500	1	1 Allowance	Landscape, Partial Replacements and Tree Trimming (Near Term is Budgeted)	2017	to 5	1	20,000.00	20,000	20,000	249,545					28,575					31,241					34,156
21.620	7,900	1,975 Square Feet	Pavers, Masonry, Clover Field, Phased	2020	15 to 20	4 to 10	16.00	31,600	126,400	348,104									48,488		50,249		52,074		53,966
21.660	1	1 Each	Playground Equipment, Jonathan Acres	2027	15 to 25	11	32,000.00	32,000	32,000	92,621														53,683	
21.810	1	1 Each	Signage, Marsh Halberg Sliding Hill	2031	15 to 20	15	850.00	850	850	2,563															1,452
21.820	3	1 Allowance	Site Furniture, Phased	2020	15 to 20	4 to 16	28,000.00	28,000	84,000	188,389	37,250						41,458					46,142			
21.900	1	1 Allowance	Silo, Paint Finishes and Capital Repairs	2021	5 to 7	5	25,300.00	25,300	25,300	209,838					36,147					39,520					43,207
21.970	5	5 Each	Underpasses, Timber, Inspections and Capital Repairs	2018	10 to 15	2	8,500.00	42,500	42,500	111,626											67,582				
21.980	5	5 Each	Underpasses, Timber, Replacement	2030	to 40	14	60,000.00	300,000	300,000	385,115															
21.990	2	2 Each	Windmills	2028	to 50+	12	5,000.00	10,000	10,000	12,387															
Storage Facility Elements																									
22.050	3	3 Each	Doors, Garage, Sectional	2036	to 25	20	1,700.00	5,100	5,100	7,287					7,287										
22.500	1	1 Each	Maintenance Vehicles, Golf Cart	2021	to 10	5	7,000.00	7,000	7,000	27,735										10,934					
22.510	1	1 Each	Maintenance Vehicles, Pick-up Truck	2020	to 10	4	25,000.00	25,000	25,000	97,303									38,361						
22.520	1	1 Each	Maintenance Vehicles, Trailer	2022	10 to 15	6	5,000.00	5,000	5,000	12,837					7,272										
22.530	1	1 Each	Maintenance Vehicles, Utility Task Vehicle (2017 is Budgeted)	2017	10 to 15	1	20,000.00	20,000	20,000	72,191										31,241					
22.710	23	23 Squares	Roof, Asphalt Shingles	2029	15 to 20	13	300.00	6,900	6,900	8,701															
		1 Allowance	Reserve Study Update with Site Visit	2018	2	2	4,750.00	4,750	4,750	4,750															
Anticipated Expenditures, By Year										\$10,438,708	165,792	26,303	57,852	60,521	185,954	166,423	81,320	305,527	507,252	531,112	628,481	422,957	720,442	506,704	225,093

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS																
The Jonathan Association																
Chaska, Minnesota																
	FY2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Reserves at Beginning of Year (Note 1)	368,693	457,594	300,957	124,540	102,236	149,348	194,817	302,989	478,433	661,857	728,872	658,045	446,114	472,077	441,326	194,275
Total Recommended Reserve Contributions (Note 2)	87,663	275,200	385,200	495,200	345,000	351,200	357,500	363,900	370,500	377,200	384,000	390,900	397,900	405,100	412,400	280,000
Plus Estimated Interest Earned, During Year (Note 3)	1,238	3,398	1,906	1,016	1,127	1,542	2,230	3,501	5,108	6,230	6,213	4,946	4,113	4,092	2,847	2,000
Less Anticipated Expenditures, By Year	0	(435,235)	(563,523)	(518,520)	(299,015)	(307,273)	(251,558)	(191,957)	(192,184)	(316,415)	(461,040)	(607,777)	(376,050)	(439,943)	(662,298)	(224,187)
Anticipated Reserves at Year End	<u>\$457,594</u>	<u>\$300,957</u>	<u>\$124,540</u>	<u>\$102,236</u> (NOTE 5)	<u>\$149,348</u>	<u>\$194,817</u>	<u>\$302,989</u>	<u>\$478,433</u>	<u>\$661,857</u>	<u>\$728,872</u>	<u>\$658,045</u>	<u>\$446,114</u>	<u>\$472,077</u>	<u>\$441,326</u>	<u>\$194,275</u> (NOTE 5)	<u>\$252,088</u>

(continued)																
	Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued															
	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	
Reserves at Beginning of Year	252,088	374,101	642,452	886,751	1,135,891	1,266,700	1,423,830	1,673,485	1,705,897	1,541,794	1,358,173	1,081,120	1,014,149	653,980	511,698	
Total Recommended Reserve Contributions	285,000	290,100	295,300	300,600	306,000	311,500	317,100	322,800	328,600	334,500	340,500	346,600	352,800	359,200	365,700	
Plus Estimated Interest Earned, During Year	2,805	4,554	6,851	9,061	10,763	12,053	13,875	15,139	14,549	12,991	10,928	9,386	7,473	5,222	5,238	
Less Anticipated Expenditures, By Year	(165,792)	(26,303)	(57,852)	(60,521)	(185,954)	(166,423)	(81,320)	(305,527)	(507,252)	(531,112)	(628,481)	(422,957)	(720,442)	(506,704)	(225,093)	
Anticipated Reserves at Year End	<u>\$374,101</u>	<u>\$642,452</u>	<u>\$886,751</u>	<u>\$1,135,891</u>	<u>\$1,266,700</u>	<u>\$1,423,830</u>	<u>\$1,673,485</u>	<u>\$1,705,897</u>	<u>\$1,541,794</u>	<u>\$1,358,173</u>	<u>\$1,081,120</u>	<u>\$1,014,149</u>	<u>\$653,980</u>	<u>\$511,698</u>	<u>\$657,543</u> (NOTE 4)	

Explanatory Notes:

- 1) Year 2016 starting reserves are as of August 31, 2016; FY2016 starts January 1, 2016 and ends December 31, 2016.
- 2) Reserve Contributions for 2016 are the remaining budgeted 4 months; 2017 is budgeted; 2018 is the first year of recommended contributions.
- 3) 0.90% is the estimated annual rate of return on invested reserves; 2016 is a partial year of interest earned.
- 4) Accumulated year 2046 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).



4. CONDITION ASSESSMENT

The Condition Assessment of this *Full Reserve Study* includes *Enhanced Solutions and Procedures* for select significant components. These narratives describe the Reserve Components, document specific problems and conditions, and may include detailed solutions and procedures for necessary capital repairs and replacements for the benefit of current and future board members. We advise the Board use this information to help define the scope and procedures for repair or replacement when soliciting bids or proposals from contractors. *However, the Report in whole or part is not and should not be used as a design specification or design engineering service.*

Neighborhood Elements

Bus Structures and Mail Pavilions - The Jonathan maintains 32 mail pavilions and bus shelters throughout the community. The pavilions and shelters comprise wood and composite hardboard siding, cedar shake and asphalt shingle roofs and acrylic windows. The Association also maintains one brick mail pavilion at Autumn Woods. These elements vary in ages, and the conditions vary from good to fair. We note paint finish deterioration and siding rot.



Mailbox pavilion at Autumn Woods



Paint finish deterioration at mailbox pavilion at Neighborhood 10



Typical paint finish deterioration



Siding rot at mailbox pavilion



Bus shelter



The Association should budget for paint finish applications, replacement of deteriorated siding, masonry repointing and roof replacements up to every 20 years. The following table depicts the location, type of structure, quantity of structures, our recommended year of initial replacement and the Line Item where this information is depicted in ***Reserve Expenditures***:

Neighborhood/Location	Structure	Quantity	Year of Initial Replacement	Reserve Expenditures Line Item
Neighborhood 1	Bus Shelter	1	2024	1.360
Neighborhood 3	Mailbox Pavilion	1	2019	3.360
Neighborhood 4	Mailbox Pavilion	1	2019	4.360
Neighborhood 5	Mailbox Pavilion	1	2024	5.360
Neighborhood 6	Bus Shelter	1	2019	6.360
Neighborhood 6	Mailbox Pavilion	2	2019	6.360
Neighborhood 7	Mailbox Pavilion	5	2019	7.360
Neighborhood 8	Mailbox Pavilion	2	2019	8.360
Neighborhood 9	Mailbox Pavilion	1	2019	9.360
Neighborhood 10 (Tuscany Hills)	Mailbox Pavilion	3	2019	10.360
Neighborhood 11 (Victoria Way)	Mailbox Pavilion	4	2024	11.360
Neighborhood 12 (Heather Ridge)	Mailbox Pavilion	2	2024	12.360
Clover Preserve	Mailbox Pavilion	2	2024	14.360
Clover Ridge	Bus Shelter	1	2024	15.360
Traditions	Mailbox Pavilion	2	2024	16.360
Autumn Woods	Mailbox Pavilion	2	2019	17.360
Autumn Woods	Mailbox Pavilion (Brick)	1	2024	17.280

We recommend the Association budget for subsequent refurbishments every 20 years thereafter. We recommend the Association budget for repairs and paint finish applications between refurbishments and fund this maintenance through the operating budget.

Mailbox Stations - The Association maintains metal mailboxes at the mail pavilions, metal cluster mailbox stations and wood mailbox stations throughout the property that serve the residents of The Jonathan.



Metal mailboxes at mailbox pavilion



Mailbox stations



Wood mailbox stations



Metal mailbox stations

The mailboxes vary greatly in age and range in conditions from good to fair. The following table depicts the location, style and material, quantity and condition of the various types of mailboxes at The Jonathan:

Neighborhood	Description, Material	Quantity	Condition
Neighborhood 1	Mailbox Stations, Metal	5	Good to Fair
Neighborhood 2	Mailbox Station, Metal	1	Good
Neighborhood 3	Mailboxes, Metal (Mail Pavilion)	3	Fair
Neighborhood 4	Mailboxes, Metal (Mail Pavilion)	4	Fair
Neighborhood 4	Mailbox Stations, Metal	3	Good
Neighborhood 5	Mailboxes, Metal (Mail Pavilion)	1	Good to Fair
Neighborhood 6	Mailboxes, Metal (Mail Pavilion)	1	Fair
Neighborhood 6	Mailbox Stations, Metal	3	Good
Neighborhood 7	Mailboxes, Metal (Mail Pavilion)	15	Fair
Neighborhood 8	Mailboxes, Metal (Mail Pavilion)	7	Fair
Neighborhood 9	Mailboxes, Metal (Mail Pavilion)	3	Fair
Neighborhood 10 (Tuscany Hills)	Mailboxes, Metal (Mail Pavilion)	8	Fair
Neighborhood 11 (Victoria Way)	Mailboxes, Metal (Mail Pavilion)	16	Good
Neighborhood 11 (Victoria Way)	Mailbox Stations, Metal	2	Fair
Neighborhood 12 (Heather Ridge)	Mailboxes, Metal (Mail Pavilion)	4	Fair
Clover Field	Mailbox Stations, Metal	9	Good
Clover Field	Mailbox Stations, Wood Frame	22	Good
Clover Preserve	Mailboxes, Metal (Mail Pavilion)	6	Good
Clover Ridge	Mailbox Stations, Metal	16	Good
Clover Ridge	Mailbox Stations, Wood Frame	7	Good
Traditions	Mailboxes, Metal (Mail Pavilion)	4	Good
Traditions	Mailbox Stations, Metal	9	Good
Autumn Woods	Mailboxes, Metal (Mail Pavilion)	4	Fair
Autumn Woods	Mailbox Stations, Wood Frame	65	Fair
Autumn Woods	Mailbox Stations, Metal	8	Good
Oak Valley Townhomes	Mailbox Stations, Metal	4	Good

Metal mailbox stations at the mail pavilions and wood frame mailbox stations have a useful life of up to 20 years. Metal cluster stations have a useful life of up to 25 years. Management informs us the Association will replace the mailboxes with wood frames at Clover Field, Clover Ridge and Autumn Woods with metal cluster stations beginning in 2017 and concluding by 2019. The following table depicts our recommended time of initial replacement of the mailboxes and lists the Line Item number where this information is shown in ***Reserve Expenditures***:

Neighborhood	Description, Material	Year of Initial Replacement	Reserve Expenditures Line Item
Neighborhood 1	Mailbox Stations, Metal	2028	1.650
Neighborhood 2	Mailbox Station, Metal	2032	2.650
Neighborhood 3	Mailboxes, Metal (Mail Pavilion)	2019	3.600
Neighborhood 4	Mailboxes, Metal (Mail Pavilion)	2019	4.600
Neighborhood 4	Mailbox Stations, Metal	2032	4.650
Neighborhood 5	Mailboxes, Metal (Mail Pavilion)	2024	5.600
Neighborhood 6	Mailboxes, Metal (Mail Pavilion)	2019	6.600
Neighborhood 6	Mailbox Stations, Metal	2032	6.650
Neighborhood 7	Mailboxes, Metal (Mail Pavilion)	2019	7.600
Neighborhood 8	Mailboxes, Metal (Mail Pavilion)	2019	8.600
Neighborhood 9	Mailboxes, Metal (Mail Pavilion)	2019	9.600
Neighborhood 10 (Tuscany Hills)	Mailboxes, Metal (Mail Pavilion)	2019	10.600
Neighborhood 11 (Victoria Way)	Mailboxes, Metal (Mail Pavilion)	2024	11.600
Neighborhood 11 (Victoria Way)	Mailbox Stations, Metal	2019	11.650
Neighborhood 12 (Heather Ridge)	Mailboxes, Metal (Mail Pavilion)	2024	12.600
Clover Field	Mailbox Stations, Metal	2028	13.600
Clover Field	Mailbox Stations, Wood Frame	2017	13.620
Clover Preserve	Mailboxes, Metal (Mail Pavilion)	2024	14.600
Clover Ridge	Mailbox Stations, Metal	2032	15.600
Clover Ridge	Mailbox Stations, Wood Frame	2018	15.620
Traditions	Mailboxes, Metal (Mail Pavilion)	2024	16.600
Traditions	Mailbox Stations, Metal	2032	16.650
Autumn Woods	Mailboxes, Metal (Mail Pavilion)	2019	17.600
Autumn Woods	Mailbox Stations, Wood Frame	2019	17.620
Autumn Woods	Mailbox Stations, Metal	2028	17.650
Oak Valley Townhomes	Mailbox Stations, Metal	2032	18.650

We recommend The Jonathan anticipate subsequent replacements of the wood frame and metal mailboxes at the mail pavilions 20 years after the initial replacement and subsequent replacement of the metal cluster mailbox stations 25 years after the initial recommend replacement. Management informs us the Developer may fund the replacement of the mailboxes at Clover Field and Clover Ridge in 2017. Future updates to the study will consider any changes and adjust the time of replacement accordingly. The Association should verify the new mailboxes meet the specifications of the *United States Postal Service*.

Playground Equipment - The Association maintains playground equipment throughout the neighborhoods. The playground equipment varies in age, and the condition varies from good

to fair. The Association replaced playground equipment at Neighborhood 7 in 2011 and at Neighborhoods 4, 5 and 11 in 2012. Management informs us the Developer may fund the replacement of the playground in Clover Preserve in 2017. Future updates to the study will consider any changes and adjust the time of replacement accordingly. The ages of the remaining pieces of playground equipment were not available at the time of our inspection.



Playground at Neighborhood 9



Finish deterioration and worn landing at play equipment



Playground at Neighborhood 7



Coating deterioration at playground stairs at Neighborhood 11

Safety is the major purpose for maintaining playground equipment. We recommend an annual inspection of the playground equipment to identify and repair as normal maintenance



loose connections and fasteners or damaged elements. We suggest the Association learn more about the specific requirements of playground equipment at PlaygroundSafety.org. We recommend the use of a specialist for the design or replacement of the playground equipment environment. Playground equipment of this type has a useful life of 15- to 25-years. The following table depicts the location, condition, recommend year of initial replacement and Line Item where this information is depicted in ***Reserve Expenditures***:

Neighborhood - Location	Condition	Year of Initial Replacement	Reserve Expenditures Line Item
Neighborhood 1 - Trail Head	Good	2027	1.660
Neighborhood 3 - Warner Cir	Fair	2018	3.660
Neighborhood 4 - Bender Rd and Bender Ct	Good	2030	4.660
Neighborhood 5 - Van Sloun Rd abd Ramsey Ct	Good	2030	5.660
Neighborhood 6 - Von Herten Cir	Fair	2021	6.660
Neighborhood 7 - Koehnen Cir	Good to Fair	2029	7.660
Neighborhood 7 - Innsbruck Dr	Good to Fair	2029	7.660
Neighborhood 8 - Eitle House	Good	2027	8.660
Neighborhood 9 - Haering Cir	Fair	2027	9.660
Neighborhood 10 - Ashley Dr	Fair	2027	10.660
Neighborhood 11 - Schindler Crossing and Grimm Rd	Good to Fair	2027	11.660
Neighborhood 11 - Maxwell Ln and Van Sloun Rd	Good	2030	11.660
Neighborhood 12 - Lano St and Brinkhaus St	Fair	2027	12.660
Clover Field - Mark Twain Dr and Hundertmark Rd	Good	2030	13.660
Clover Preserve - Clover Preserve Dr and Clover Field Cir	Good	2030	14.660
Traditions - Legacy Ln and Kerber Pass	Good	2030	16.660
Autumn Woods - Acorn Rd and Autumn Woods Dr	Fair	2021	17.660
Autumn Woods - Butternut Dr and Ironwood Blvd	Good	2027	17.660
Jonathan Acres - Windmill Ct	Good	2027	21.660

We anticipate subsequent replacement of the playgrounds every 18 years thereafter.

In addition to these playgrounds, Management informs us the Association proposed installing playground equipment at Juliet Park in Clover Field. We include this information on Line Item 13.760 of ***Reserve Expenditures***.

Signage - The Association maintains 31 various styles of community identification signs throughout The Jonathan. Nineteen are metal signs that are in good condition at less than one year of age. The remaining monuments comprise brick, stucco, wood concrete and composite

and vary in age, and the condition varies from good to poor. We note stucco cracks and loose masonry at the monuments and new metal signs throughout the property.



Typical new aluminum sign



Stone monument sign



Brick cracks at Neighborhood 11 entrance monument



Stucco cracks at Neighborhood 10 at entrance monument

The following table depicts the location, material, quantity and condition of the various signage and entrance monuments:

Neighborhood/Location	Materials	Quantity	Condition
Neighborhood 1	Metal	1	Good, New
Neighborhood 2	Metal	1	Good, New
Neighborhood 3	Metal	1	Good, New
Neighborhood 4	Metal	1	Good, New
Neighborhood 5	Metal	1	Good, New
Neighborhood 6	Metal	2	Good, New
Neighborhood 6 (Alexander Circle)	Wood with Brick	1	Fair
Neighborhood 7	Metal	3	Good, New
Neighborhood 8	Metal	1	Good, New
Neighborhood 9	Metal	2	Good, New
Neighborhood 10 (Tuscany Hills)	Stucco	2	Fair to Poor
Neighborhood 11 (Victoria Way)	Metal with Brick	2	Good, New
Neighborhood 11 (Schlinders Crossing)	Wood and Concrete	1	Fair
Neighborhood 12 (Heather Ridge)	Brick	2	Good
Clover Field	Wood with Brick	1	Good
Autumn Woods	Brick	4	Fair
Autumn Woods (Hunters Run)	Stucco and Composite	1	Good
Oak Valley	Metal	1	Good, New
Karen House	Metal	2	Good, New
Marsh Halberg Sliding Hill	Metal	1	Good, New

The functional useful life of the signs and monuments is from 15- to 20-years. The community signs contribute to the overall aesthetic appearance of the property to owners and potential buyers. Replacement of community signs is often predicated upon the desire to "update" the perceived identity of the community rather than for utilitarian concerns. Therefore, the specific time for replacement of the signs is discretionary. In addition to replacement of the metal signs, the Association should budget for refurbishment of the entrance monuments that includes repairs to the stucco and masonry and replacement of wood and composite elements. The following table shows our recommend years of replacements and refurbishments and the Line Item number of the *Reserve Expenditures* where this information is depicted:

Neighborhood/Location	Materials	Year of Initial Replacement	Year of Subsequent Replacement	Reserve Expenditures Line Item
Neighborhood 1	Metal	2031	2046	1.810
Neighborhood 2	Metal	2031	2046	2.810
Neighborhood 3	Metal	2031	2046	3.810
Neighborhood 4	Metal	2031	2046	4.810
Neighborhood 5	Metal	2031	2046	5.810
Neighborhood 6	Metal	2031	2046	6.810
Neighborhood 6 (Alexander Circle)	Wood with Brick	2025	2045	6.820
Neighborhood 7	Metal	2031	2046	7.810
Neighborhood 8	Metal	2031	2046	8.810
Neighborhood 9	Metal	2031	2046	9.810
Neighborhood 10 (Tuscany Hills)	Stucco	2018	2038	10.820
Neighborhood 11 (Victoria Way)	Metal with Brick	2031	2046	11.810
Neighborhood 11 (Schlinders Crossing)	Wood and Concrete	2024	2044	11.820
Neighborhood 12 (Heather Ridge)	Brick	2026	2046	12.820
Clover Field	Wood with Brick	2026	2046	13.820
Autumn Woods	Brick	2024	2044	17.820
Autumn Woods (Hunters Run)	Stucco and Composite	2031	2046	17.825
Oak Valley	Metal	2031	2046	18.810
Karen House	Metal	2031	2046	19.810
Marsh Halberg Sliding Hill	Metal	2031	2046	21.810

The Associations should fund interim repairs to the entrance monuments through the operating budget as needed.

Asphalt Pavement, Basketball Court - The Jonathan maintains 600 square yards of asphalt comprising one basketball court at Neighborhood 6. The court is in poor overall condition at an unknown age. We note significant surface cracks and pavement deterioration.



Basketball court overview at Neighborhood 6



Surface cracks and deteriorated pavement

Basketball courts have useful lives of 15- to 20-years. Management informs us the Association plans to replace the basketball court in 2017. The Association should budget for subsequent replacement of the court by 2035. We note this information on Line Item 6.100 of *Reserve Expenditures*. We recommend replacement of the goal posts and hoops from the operating budget on an as needed basis

Gazebo - The Association maintains the wood frame gazebo near the roundabout at Clover Field. The gazebo is in good to fair condition at approximately 12 years of age. We note paint finish deterioration.



Gazebo at Clover Ridge



Paint finish deterioration at gazebo

Wood structures exposed to weather have a useful life of 15- to 25-years with periodic maintenance. We recommend The Jonathan budget for replacement by 2025 and budget for paint applications and repairs through the operating budget. A subsequent replacement is likely by 2045. We depict this information on Line Item 13.200 of *Reserve Expenditures*.

Retaining Walls, Masonry - The Association maintains masonry retaining walls at Neighborhoods 1 and 11 which comprise a total of 480 square feet of dry-set masonry and a stone retaining wall at Neighborhood 8 which comprises 400 square feet of stone masonry. The retaining walls vary in condition from good to poor at various unknown ages.



Retaining wall at Eitle House (Neighborhood 8)



Retaining wall at Eitle House (Neighborhood 8)

We recommend the Association replace the stone masonry retaining wall at Neighborhood 8 with interlocking masonry at the time of replacement. Interlocking masonry retaining walls have useful lives of up to 35 years. We recommend the Association plan for replacement of the retaining walls at Neighborhood 1 by 2045, at Neighborhood 8 by 2019 and at Neighborhood 11 by 2034. We depict this information on Line Items 1.790, 8.790 and 11.790 of *Reserve Expenditures*. The Association should fund for repairs or partial replacements through the operating budget.

Trellis, Columns and Pavers - The Jonathan maintains one wood trellis with masonry columns over a walkway of brick pavers at Traditions. The wood trellis comprises 420 square feet and the brick pavers comprise 400 square feet. The trellis is in fair overall condition at an unknown age.



Trellis and masonry columns



Minor settlement at brick pavers

These elements have a useful life of 15- to 25-years. We recommend the Association budget for replacement of the wood elements of the trellis and brick pavers and repairs to the masonry columns as needed by 2022 and again by 2040. We depict this information on Line Item 16.750 of *Reserve Expenditures*.

Karen House Elements



Main entrance of Karen House



Rear overview of Karen House



Front overview of Karen House

Asphalt Pavement, Repaving - Asphalt pavement comprises 1,850 square yards of driveway and parking areas at the Karen House. This quantity includes the pavement at the trash receptacles that was installed recently. The pavement is in good overall condition at less than five years of age.



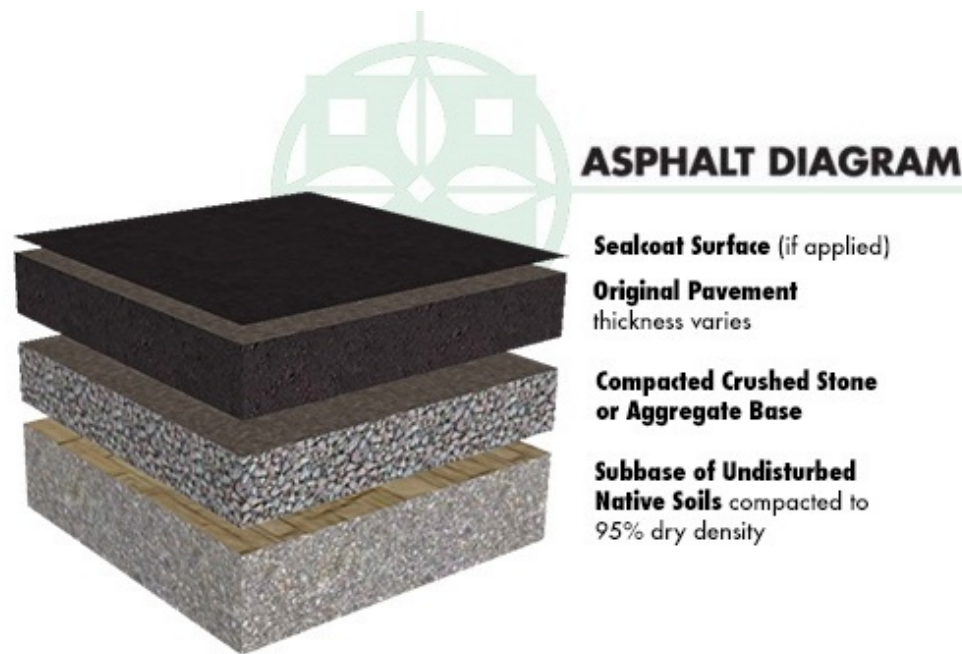
Asphalt pavement at Karen House



Asphalt driveway at Karen House

The useful life of pavement in Chaska is from 15- to 20-years. We include the following repaving solutions and procedures for the benefit of the present and future board members.

Components of asphalt pavement include native soil, aggregate and asphalt. First the contractor creates a base course of aggregate or crushed stone and native soil. The base course is individually compacted to ninety-five percent (95%) dry density prior to the application of the asphalt. Compaction assures a stable base for the asphalt that reduces the possibility of settlement. Driveway and access drive pavement is typically constructed with a compacted base and a single course of asphalt pavement. As such, the pavement is subject to greater wear from vehicle traffic, erosion, and effects of the freeze and thaw cycle. The following diagram depicts these components:



©Reserve Advisors, Inc.

The manner of repaving is either a mill and overlay or total replacement. A mill and overlay is a method of repaving where cracked, worn and failed pavement is mechanically removed or milled until sound pavement is found. A new layer of asphalt is overlaid atop the remaining base course of pavement. Total replacement includes the removal of all existing asphalt down to the base course of aggregate and native soil followed by the application of two or more new lifts of asphalt. We recommend mill and overlayment on asphalt pavement that exhibits normal deterioration and wear. We recommend total replacement of asphalt pavement that exhibits severe deterioration, inadequate drainage, pavement that has been overlaid multiple times in the past or where the configuration makes overlayment not possible. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the total replacement method of repaving at The Jonathan.



Total replacement requires the removal of all existing asphalt. For area patching, we recommend the contractor use a rectangular saw cut to remove the deteriorated pavement. For larger areas such as entire parking areas or driveways, we recommend the contractor grind, mill or pulverize the existing pavement to remove it. The contractor should then augment and compact the existing aggregate and native soil to create a stable base. Finally the contractor should install the new asphalt in at least two lifts.

The time of replacement is dependent on the useful life, age and condition of the pavement. The useful life is dependent in part on the maintenance applied to the pavement, the amounts and concentration of auto solvents that penetrate the pavement, the exposure to sunlight and detrimental effects of inclement weather. The Jonathan should repair any isolated areas of deteriorated pavement periodically. We recommend the Association plan for repaving of the driveway and parking area at the Karen House by 3031. We depict this information on Line Item 19.040 of *Reserve Expenditures*.

Building Services Equipment - The Karen House heating, ventilating and air conditioning (HVAC) equipment includes a remote condensing unit and a gas-fired forced air furnace. The building services equipment components are reported in satisfactory operational condition. Management informs us the Association replaced the furnace in 2017. The useful life of residential size units is from 12- to 18-years. We recommend the Association anticipate the replacement of this equipment by 2032. We base our cost on Line Item 19.110 of *Reserve Expenditures* on historic costs provided by Management.

Exterior Renovations - The Karen House exterior comprises the following:

- Brick masonry
- Wood porch and columns

- Windows and doors
- Asphalt shingle roof
- Exterior light fixtures
- Gutters and downspouts

The Karen House exterior elements vary in age and are in fair to poor overall condition.



Rotten wood pillar



Porch overview

The useful lives of the Karen House exterior elements vary significantly. However, due to the relatively small quantities and interrelated nature of these elements, we recommend the Association combine their replacements into coordinated exterior renovations. Our renovation allowance excludes the roof with gutters and downspouts and windows and doors as we include replacement of these items on separate line items.

We recommend the Association anticipate exterior renovations up to every 15 years.

These renovations should include the following:

- Inspection of the brick masonry including partial repointing as needed
- Application of paint finish including partial replacement at the wood trim and columns
- Replacement of the window and door joint sealant as needed

Based on the age and visual condition of these exterior Karen House elements, at the request of Management, we include an expenditure of \$6,500 plus inflation in 2017 and every 14 years thereafter. Line Item 19.450 of *Reserve Expenditures* notes this information.

Interior Renovations – The Karen House interior comprises paint finishes, carpet and vinyl floor coverings, plumbing and lighting fixtures, kitchen cabinets and countertops and various appliances and furnishings. The Karen House interior elements are in fair overall condition at various ages.



Meeting room



Office space



Upstairs kitchen and storage

The useful life of these interior building elements vary. However due to the interrelated nature of these elements and the desire to achieve a uniform appearance, we recommend the Association coordinate their replacements into interior renovations. We recommend the Association anticipate interior renovations up to every 10 years. These renovations should include the following:

- Application of paint finish to all surfaces
- Replacement of the carpet and vinyl floor coverings
- Replacement of up to twenty-five percent (25%) of the plumbing fixtures, light fixtures, kitchen cabinets and countertops, appliances and furnishings

Based on the age and visual condition of these interior elements, we recommend the Association budget for a coordinated complete interior renovation in 2018 and every eight years thereafter. We note this information on Line Item 19.500 of *Reserve Expenditures*.

Light Poles and Fixtures - The Association uses four metal light fixtures atop metal poles to illuminate the Karen House.



Light pole and fixture at Karen House parking

These elements are in fair overall condition at an unknown age and have useful lives of up to 25 years. The Association should anticipate the need for replacement beginning by 2020



and concluding by 2032. A subsequent phased replacement is likely beginning by 2044. We note this information on Line Item 19.600 of *Reserve Expenditures*.

Roof, Asphalt Shingles - The Karen House roof comprises 12 *squares*¹ of asphalt shingles. The roof is in good condition at three years of age. The useful life of an asphalt shingle roof is from 15- to 20-years. We recommend the Association anticipate complete replacement of the Karen House roof by 2031. We note this information on Line Item 19.650 of *Reserve Expenditures*. Our cost for replacement includes an allowance for replacement of the gutters and downspouts and is based on historic costs provided by Management.

Windows and Doors - The Karen House windows and doors comprise approximately 400 square feet. Approximately 200 square feet of windows at the lower level have been replaced and are in good to fair condition at an unknown age. The remaining 200 square feet of windows and doors are likely original and are in fair to poor condition. The useful life of wood frame windows and exterior doors is up to 35 years. The useful life of the windows and doors is based on the occurrence of water infiltration, thermal inefficiencies compared to present technology, type of frame, availability of replacement parts and aesthetics. Based on these factors, we recommend the Association anticipate replacement of the original windows and doors by 2017 and the remaining windows and doors by 2041. We depict this information on Line Item 19.950 of *Reserve Expenditures*.

¹We quantify the roof area in *squares*, where one square is equal to 100 square feet of surface area.

Lake Grace Pavilion Elements



Lake Grace Pavilion



Lake Grace Pavilion

Landscape, Beach Hardscape - The Association maintains the concrete flatwork and shoreline at the Lake Grace beach next to the pavilion. Management informs us the Association plans to replace the concrete, install new retaining walls and replace the landscape at this location in 2017.



Location of future landscape repairs



Concrete deterioration at pavilion

We include an expenditure of \$50,000 in 2017 at the request of Management to fund this landscape renovation. We recommend the Association anticipate a subsequent hardscape renovation by 2042. The times and costs of these replacements may vary. However, we judge

the amounts show on Line Item 20.500 of ***Reserve Expenditures*** sufficient to budget appropriate reserves.

Retaining Wall, Timber - The Association maintains the retaining wall near the Lake Grace Pavilion that comprises approximately 340 square feet of wood timbers. The retaining wall is in fair to poor condition at an unknown age. We note leaning sections.



Leaning timber retaining wall near pavilion

Timber retaining walls have a useful life of 15- to 20-years. We recommend the Association anticipate replacement by 2018. We advise The Jonathan replace with a modular, interlocking dry-set masonry retaining wall system. The cost of dry-set masonry retaining walls is similar to the cost of timber walls. However, dry-set masonry retaining walls offer a longer useful life of up to 35 years and lower total maintenance costs. We include this information on Line Item 20.220 of ***Reserve Expenditures***.

Roof, Asphalt Shingles - The Lake Grace pavilion roof comprises 25 squares of asphalt shingles. The roof is in good condition at less than one year of age.



Asphalt shingle roof



Lake Grace pavilion

The useful life of an asphalt shingle roof is from 15- to 20-years. We recommend the Association anticipate complete replacement of the pavilion roof by 2034. We note this information on Line Item 20.280 of *Reserve Expenditures*.

Walls, Wood Siding – Wood siding comprises approximately 2,050 square feet of the exterior walls at the pavilion. The siding is in good condition at less than one year of age.



Wood siding at pavilion

With the benefit of paint finish applications every four- to six-years, wood siding has a useful life of up to 35 years. Therefore, we do not anticipate the need to replace the wood siding within the scope of the study. The Association should budget for paint finish applications and

capital repairs by 2021 and every five years thereafter. We depict this information on Line Item 20.760 of *Reserve Expenditures*.

Property Site Elements

Asphalt Pavement, Walking Paths - The Association maintains approximately 37,350 square yards of asphalt walking paths throughout the neighborhoods at The Jonathan. These paths are in good to poor condition at various ages. We note repaired sections of walking paths in good condition and areas with significant pavement deterioration, cracks and settlement.



Walking path deterioration at Autumn Woods



Replaced walking path near trail head



Walking path crack repairs at Neighborhood 5



Asphalt pavement failure at Neighborhood 6



Recently replaced walking path at Neighborhood 9



Pavement deterioration at Neighborhood 7

Management informs us the Association is in the process of repairing the pavement. Between 2014 and 2015 the Association completed repairs to approximately 16,900 square yards of walking paths and in 2016 the Association completed repairs to approximately 5,450 square yards of walking paths. These repairs included overlayment, crack fills and seal coats based on condition. Walking path asphalt pavement is typically not as thick as parking area or street asphalt pavement. This type of pavement application has the potential for deterioration from tree roots, settlement and development of cracks. The need to maintain a safe pedestrian surface results in a useful life of 10- to 15-years for walking path asphalt pavement. To achieve this useful life, we recommend the Association also budget for crack fill, patch repairs and seal coat applications every three- to five- years. These activities reduce water infiltration and the effects of inclement weather.

We include expenditures for the remaining phases of the current walking path repair project. We base our estimate of cost on the schedule provided by Management. Following the scheduled asphalt repair events in 2017 and 2018, we recommend the Association budget for phased seal coat, crack repair and patch events beginning by 2019 and concluding by 2024 and

every five years there after except when replacement occurs. We recommend the Association budget for total a phased replacement beginning by 2025 and concluding by 2029 and again beginning by 2040 and concluding by 2044. We anticipate total replacement is likely to maintain a safe pedestrian walking surface. We include this information on Line Items 21.010 through 21.080 of *Reserve Expenditures*.

Eitel House – The Association maintains the Eitel House in Neighborhood 8. The Eitel House is in poor condition. Management informs us the Association will renovate the building to working condition so it may be used for meetings and events. The Eitel House is comprised of the following:

- Masonry veneer
- Asphalt shingle roof
- Wood windows
- Gutters and downspouts
- Light fixtures
- Interiors (We were unable to inspect the interior of the building at the time of our inspection.)



Eitel House building overview



Masonry deterioration and typical step cracks at Eitel House



Eitel House building overview

The useful lives of these building elements vary significantly. However, due to the poor conditions, relatively small quantities and interrelated nature of these elements, we recommend the Association combine their replacements into coordinated renovations. At the request of Management we include an allowance of \$150,000 by 2019 for a total renovation of the Eitel House. We recommend the Association anticipate partial renovations every 20 years thereafter. At the request of Management, we include an allowance of \$90,000 by 2037 for partial renovations of the Eitel House. Line Items 21.100 and 21.150 of *Reserve Expenditures* note our estimate of future costs and anticipated times of exterior clubhouse renovations.

Although it is likely that the times of replacement and extent of repair costs may vary from the budgetary allowance, The Jonathan could budget sufficient reserves for these renovations and have the opportunity to adjust its future reserves up or down to meet any changes to these budgetary estimates. Updates of this Reserve Study would incorporate changes to budgetary costs through a continued historical analysis of the actual repairs to the Eitel House.

Landscape, Partial Replacements and Tree Trimming - The Association contains a large quantity of trees, shrubbery and other landscape elements. Replacement of these elements



is an ongoing need. Many associations budget for these replacements as normal maintenance. Other associations fund ongoing replacements from reserves. Large amounts of landscape may need replacement due to disease, drought or other forces of nature. The Association reports an invasion of the emerald ash borer. The larva of the emerald ash borer eats the inner bark of ash trees, preventing a tree from distributing nutrients and water throughout the tree and its roots. This ultimately kills the tree. If the cost of removal and replacement is substantial, funding from reserves is logical. The Association may also desire to periodically update the appearance of the community through major improvements to the landscape. In consideration of the presence of the emerald ash borer and at the request of Management and the Board, we include an allowance of \$150,000 plus inflation beginning in 2017 and concluding by 2023 for treatment and removal of diseased ash trees. Additionally, we include an landscape allowance of \$20,000 plus inflation in 2017 through 2021 and every five years thereafter to ensure the accumulation of sufficient reserves for partial replacements of the landscape. We include a higher frequency of events in the near term at the request of Management to fund tree trimming throughout The Jonathan. The times and costs of these replacements may vary. However, we judge the amounts shown on Line Items 21.450 and 21.500 of *Reserve Expenditures* sufficient to budget appropriate reserves.

Pavers, Masonry, Clover Field – The Association maintains approximately 7,900 square feet of brick pavers at the roundabout on Hundertmark Drive and at the gazebo. The pavers are in good overall condition at approximately 10 years of age.



Pavers at gazebo



Pavers at gazebo

Manufacturers construct masonry pavers as a traffic surface for installation without mortar. Pavers comprise special types of clays that are baked at higher temperatures and for a longer time than other masonry types. Thus, masonry pavers have greater strength and durability than common masonry.

Masonry pavers have a long functional useful life. However, over time, the negative effects of inclement weather, erosion and pedestrian traffic will create isolated areas of deterioration. We advise the Association budget for complete replacement of the pavers every 15- to 20-years. We recommend the Association budget for a phased total replacement beginning by 2020 and concluding by 2026. A subsequent phased total replacement is likely beginning by 2040 and concluding by 2046. We depict this information on Line Item 21.620 of *Reserve Expenditures*. We suggest the Association conduct interim resetting and replacement of minor areas of pavers as normal maintenance, funded from the operating budget.

Site Furniture - The Jonathan maintains site furniture, including benches and picnic tables, doggy pots and trash receptacles throughout the property. The site furniture varies in age and the condition varies from good to fair.



Wood park bench



Metal park bench

These elements have a useful life of 15- to 20-years. We recommend the Association budget for the phased replacement of the furniture beginning by 2020 and concluding by 2032. A subsequent phased replacement is likely beginning by 2038. We depict this information on Line Item 21.820 of *Reserve Expenditures*.

Silo - The Jonathan maintains the silo at the intersection of Hundertmark Road and North Chestnut Street near Neighborhood 4. The property identification silo was painted and banded in 2016. The paint finish is in good condition.



Silo near neighborhoods 3 and 4



New paint application at silo

We anticipate a useful life of five- to seven-years for the paint finish and include an allowance by 2023 and every five years thereafter. We depict this information on Line Item 21.900 of *Reserve Expenditures*. We base our cost on the historic project cost provided by Management.

Underpasses, Timber - The Association maintains five underpasses that allow the bike path to continue under the streets throughout The Jonathan. These underpasses comprise wood structures and timber retaining walls. They vary in condition from good to fair at various unknown ages. We note soil loss and wood rot.



Walking path underpass at street



Soil loss at wood



Wood rot at underpass

Timber structures like these have a useful life of up to 40 years with the benefit of regular inspections and partial repairs. We recommend the Association budget for inspection and partial repairs to the wood underpasses every 10- to 15-years and include an allowance for this work by 2018. We recommend the Association anticipate replacement by 2030. We include this information on Line Items 21.970 and 21.980 of *Reserve Expenditures*.

Windmills - The Jonathan maintains one windmill at the Karen House and one windmill at the Eitel House. The windmills are in fair condition.



Windmill at Karen House

The windmills have a useful life of up to 50 years. The Association should fund paint applications and repairs to the windmills through the operating budget as needed. We recommend the Association anticipate replacement by 2028. We depict this information on Line Item 21.990 of *Reserve Expenditures*.

Storage Facility Elements



Front overview of storage building



Rear overview of storage building

Doors, Garage - The Association maintains the three garage doors at the storage facility near the Karen House. The garage doors are original to construction in 2011 and are in good overall condition. The garage doors have a useful life of up to 25 years. We recommend the Association anticipate replacement of the garage doors by 2036. We note this information on Line Item 22.050 of *Reserve Expenditures*.

Maintenance Vehicles - The Jonathan maintains four maintenance vehicles. These vehicles include:

- Golf cart, *Pug*
- Pickup truck, *Chevrolet*
- Trailer
- Utility task vehicle (UTV), *Bobcat*

Management informs us the utility task vehicle has high use and they anticipate replacement in 2017.



Pug golf cart



Bobcat UTV



Pickup truck

The following table depicts the type of maintenance vehicle, useful life and estimated years of replacement:

Maintenance Vehicle	Useful Life	Years of Replacement
Golf Cart	to 10	2021, 2031, 2041
Pickup Truck	to 10	2020, 2030, 2040
Trailer	10 to 15	2022, 2037
Utility Task Vehicle	10 to 15	2017, 2029, 2041

We depict this information on Line Items 22.500 through 22.530 of ***Reserve Expenditures***. We base our cost for replacement of the utility task vehicle on information provided by Management.

Roof, Asphalt Shingles - The storage facility comprises 23 squares of asphalt shingles. The roof is original to construction in 2011 and in good condition.



Asphalt shingle roof rake at storage building

The useful life of an asphalt shingle roof is from 15- to 20-years. We recommend the Association anticipate complete replacement of the storage facility roof by 2029. We note this information on Line Item 22.710 of ***Reserve Expenditures***.

Reserve Study Update

An ongoing review by the Board and an Update of this Reserve Study in two- to three-years are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. Many variables change after the study is conducted that may result in significant overfunding or underfunding the reserve account. Variables that may affect the Reserve Funding Plan include, but are not limited to:

- Deferred or accelerated capital projects based on Board discretion



- Changes in the interest rates on reserve investments
- Changes in the *local* construction inflation rate
- Additions and deletions to the Reserve Component Inventory
- The presence or absence of maintenance programs
- Unusually mild or extreme weather conditions
- Technological advancements

Periodic updates incorporate these variable changes since the last Reserve Study or Update.

The Association can expense the fee for an Update with site visit from the reserve account. This fee is included in the Reserve Funding Plan. We base this budgetary amount on updating the same property components and quantities of this Reserve Study report. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.

5. METHODOLOGY

Reserves for replacement are the amounts of money required for future expenditures to repair or replace Reserve Components that wear out before the entire facility or project wears out. Reserving funds for future repair or replacement of the Reserve Components is also one of the most reliable ways of protecting the value of the property's infrastructure and marketability.

The Jonathan can fund capital repairs and replacements in any combination of the following:

1. Increases in the operating budget during years when the shortages occur
2. Loans using borrowed capital for major replacement projects
3. Level monthly reserve assessments annually adjusted upward for inflation to increase reserves to fund the expected major future expenditures
4. Special assessments

We do not advocate special assessments or loans unless near term circumstances dictate otherwise. Although loans provide a gradual method of funding a replacement, the costs are higher than if the Association were to accumulate reserves ahead of the actual replacement. Interest earnings on reserves also accumulate in this process of saving or reserving for future replacements, thereby defraying the amount of gradual reserve collections. We advocate the third method of *Level Monthly Reserve Assessments* with relatively minor annual adjustments. The method ensures that Homeowners pay their "fair share" of the weathering and aging of the commonly owned property each year. Level reserve assessments preserve the property and enhance the resale value of the homes.

This Reserve Study is in compliance with and exceeds the National standards¹ set forth by the Community Associations Institute (CAI) and the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Full Reserve Study." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

¹ Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".

Information Furnished by the Association	
2016 unaudited Cash Status of the Reserve Fund	368,693
2016 Remaining Budgeted Reserve Contribution	87,663
Anticipated Interest on Reserve Fund	1,238
Less Anticipated Reserve Expenditures	0
Projected 2016 Year-End Reserve Balance	\$457,594

2017 Budgeted Reserve Contribution of \$275,200

The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan

Local² costs of material, equipment and labor

Current and future costs of replacement for the Reserve Components

Costs of demolition as part of the cost of replacement

Local economic conditions and a historical perspective to arrive at our estimate of long term future inflation for construction costs in Chaska, Minnesota at an annual inflation rate of 1.8%. Isolated or regional markets of greater construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

The past and current maintenance practices of The Jonathan and their effects on remaining useful lives

The Funding Plan excludes necessary operating budget expenditures. It is our understanding that future operating budgets will provide for the ongoing normal maintenance of Reserve Components.

The anticipated effects of appreciation of the reserves over time in accord with an anticipated future return or yield on investment of your cash equivalent assets at an annual rate of 0.90% (We did not consider the costs, if any, of Federal and State Taxes on income derived from interest and/or dividend income).

Interest rates on reserves are steady or increasing in concert with the certificates of deposit and money market rates. Slight increases exist in the savings rates of one, two or three-year CDs. Without significant differences in these savings rates, shorter term investments are the choice of many investors. We recommend consultation with a professional investment adviser before investing reserves to determine an appropriate investment strategy to maximize a safe return on reserve savings. The following

² See Credentials for addition information on our use of published sources of cost data.



table summarizes rates of inflation and key rates for government securities, generally considered as safe investment alternatives.

Interest Rate and Inflation Data	2015				2016			
	2015:1 (A)	2015:2 (A)	2015:3 (A)	2015:4 (A)	2016:1 (A)	2016:2 (E)	2016:3 (E)	2016:4 (E)
Average or Last Actual = (A)								
1-Year Treasury Bill	0.25%	0.27%	0.30%	0.65%	0.60%	0.55%	0.60%	0.65%
10-Year Treasury Note	1.90%	2.50%	2.70%	2.25%	1.80%	1.80%	1.85%	1.90%
30-Year Treasury Bond	2.55%	3.20%	3.40%	3.00%	2.65%	2.60%	2.60%	2.65%
Consumer Price Index (annualized rate)	0.00%	0.00%	0.00%	0.00%	0.10%	0.00%	0.00%	0.00%
Although past indicators are not predictive of future inflation in "building" construction, minimal inflation exists for past 2 years April, 2014 to April 2016 of 1% to 2.5%.								
Savings Rates Results RANGE as found in http://www.bankrate.com	0.02 to 1.11% Money Market Savings				0.15 to 1.45% for 2-Year Certificate of Deposit			
	0.1 to 1.25% 1-Year Certificate of Deposit				0.15 to 1.50% for 3-Year Certificate of Deposit			
Estimated Near Term Yield Rate for Reserve Savings	0.90%							
Est. Near Term Local Inflation Rate for Future Capital Expenditures	1.8%							
05/05/2016								

Updates to this Reserve Study will continue to monitor historical facts and trends concerning the external market conditions.



6. DEFINITIONS

Definitions are derived from the standards set forth by the Community Associations Institute (CAI) representing America's 305,000 condominium and homeowners associations and cooperatives, and the Association of Professional Reserve Analysts, setting the standards of care for reserve study practitioners

Cash Flow Method - A method of calculating Reserve Contributions where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different Reserve Funding Plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

Component Method - A method of developing a Reserve Funding Plan with the total contribution is based on the sum of the contributions for individual components.

Current Cost of Replacement - That amount required today derived from the quantity of a *Reserve Component* and its unit cost to replace or repair a Reserve Component using the most current technology and construction materials, duplicating the productive utility of the existing property at current *local* market prices for *materials*, *labor* and manufactured equipment, contractors' overhead, profit and fees, but without provisions for building permits, overtime, bonuses for labor or premiums for material and equipment. We include removal and disposal costs where applicable.

Fully Funded Balance - The Reserve balance that is in direct proportion to the fraction of life "used up" of the current Repair or Replacement cost similar to Total Accrued Depreciation.

Funding Goal (Threshold) - The stated purpose of this Reserve Study is to determine the adequate, not excessive, minimal threshold reserve balances.

Future Cost of Replacement - *Reserve Expenditure* derived from the inflated current cost of replacement or current cost of replacement as defined above, with consideration given to the effects of inflation on local market rates for materials, labor and equipment.

Long-Lived Property Component - Property component of The Jonathan responsibility not likely to require capital repair or replacement during the next 30 years with an unpredictable remaining Useful Life beyond the next 30 years.

Percent Funded - The ratio, at a particular point of time (typically the beginning of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.

Remaining Useful Life - The estimated remaining functional or useful time in years of a *Reserve Component* based on its age, condition and maintenance.

Reserve Component - Property elements with: 1) The Jonathan responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

Reserve Component Inventory - Line Items in *Reserve Expenditures* that identify a *Reserve Component*.

Reserve Contribution - An amount of money set aside or *Reserve Assessment* contributed to a *Reserve Fund* for future *Reserve Expenditures* to repair or replace *Reserve Components*.

Reserve Expenditure - Future Cost of Replacement of a Reserve Component.

Reserve Fund Status - The accumulated amount of reserves in dollars at a given point in time, i.e., at year end.

Reserve Funding Plan - The portion of the Reserve Study identifying the *Cash Flow Analysis* and containing the recommended Reserve Contributions and projected annual expenditures, interest earned and reserve balances.

Reserve Study - A budget planning tool that identifies the current status of the reserve fund and a stable and equitable Funding Plan to offset the anticipated future major common area expenditures.

Useful Life - The anticipated total time in years that a *Reserve Component* is expected to serve its intended function in its present application or installation.



7. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, Inc. will perform its services as an independent contractor in accordance with our professional practice standards. Our compensation is not contingent upon our conclusions.

Our inspection and analysis of the subject property is limited to visual observations and is noninvasive. We will inspect sloped roofs from the ground. We will inspect flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. The report is based upon a “snapshot in time” at the moment of our observation. Conditions can change between the time of inspection and the issuance of the report. Reserve Advisors does not investigate, nor assume any responsibility for any existence or impact of any hazardous materials, structural, latent or hidden defects which may or may not be present on or within the property. Our opinions of estimated costs and remaining useful lives are not a guarantee of the actual costs of replacement, a warranty of the common elements or other property elements, or a guarantee of remaining useful lives.

We assume, without independent verification, the accuracy of all data provided to us. You agree to indemnify and hold us harmless against and from any and all losses, claims, actions, damages, expenses or liabilities, including reasonable attorneys' fees, to which we may become subject in connection with this engagement, because of any false, misleading or incomplete information which we have relied upon as supplied by you or others under your direction, or which may result from any improper use or reliance on the report by you or third parties under your control or direction. Your obligation for indemnification and reimbursement shall extend to any controlling person of Reserve Advisors, Inc., including any director, officer, employee, affiliate, or agent. Liability of Reserve Advisors, Inc. and its employees, affiliates, and agents for errors and omissions, if any, in this work is limited to the amount of its compensation for the work performed in this engagement.

Report - Reserve Advisors, Inc. will complete the services in accordance with the Proposal. The Report represents a valid opinion of our findings and recommendations and is deemed complete. However, we will consider any additional information made available to us in the interest of promptly issuing a Revised Report if changes are requested within six months of receiving the Report. We retain the right to withhold a Revised Report if payment for services is not rendered in a timely manner. All files, work papers or documents developed by us during the course of the engagement remains our property.

Your Obligations - You agree to provide us access to the subject property during our on-site visual inspection and tour. You will provide to us to the best of your ability and if reasonably available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete our Study. You agree to pay our actual attorneys' fees and any other costs incurred in the event we have to initiate litigation to collect on any unpaid balance for our services.

Use of Our Report and Your Name - Use of this Report is limited to only the purpose stated herein. Any use or reliance for any other purpose, by you or third parties, is invalid. Our Reserve Study Report in whole or part is not and cannot be used as a design specification, design engineering services or an appraisal. You may show our report in its entirety to those third parties who need to review the information contained herein. The Client and other third parties viewing this report should not reference our name or our report, in whole or in part, in any document prepared and/or distributed to third parties without our written consent. ***This report contains intellectual property developed by Reserve Advisors, Inc. specific to this engagement and cannot be reproduced or distributed to those who conduct reserve studies without the written consent of Reserve Advisors, Inc.***



We reserve the right to include our client's name in our client lists, but we will maintain the confidentiality of all conversations, documents provided to us, and the contents of our reports, subject to legal or administrative process or proceedings. These conditions can only be modified by written documents executed by both parties.

Payment Terms, Due Dates and Interest Charges - The retainer payment is due upon authorization and prior to shipment of the report. The final payment of the fee is due immediately upon receipt of the Report. Subsequent changes to the report can be made for up to six months from the initial report date. Any outstanding balance after 30 days of the invoice date is subject to an interest charge of 1.5% per month. Any litigation necessary to collect an unpaid balance shall be venued in Milwaukee County Circuit Court in the State of Wisconsin.

CONDITIONS OF OUR SERVICE ASSUMPTIONS

To the best of our knowledge, all data set forth in this report are true and accurate. Although gathered from reliable sources, we make no guarantee nor assume liability for the accuracy of any data, opinions, or estimates identified as furnished by others that we used in formulating this analysis.

We did not make any soil analysis or geological study with this report; nor were any water, oil, gas, coal, or other subsurface mineral and use rights or conditions investigated.

Substances such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials could, if present, adversely affect the validity of this study. Unless otherwise stated in this report, the existence of hazardous substance, that may or may not be present on or in the property, was not considered. Our opinions are predicated on the assumption that there are no hazardous materials on or in the property. We assume no responsibility for any such conditions. We are not qualified to detect such substances, quantify the impact, or develop the remedial cost.

We have made a visual inspection of the property and noted visible physical defects, if any, in our report. Our inspection and analysis was made by employees generally familiar with real estate and building construction; however, we did not do any invasive testing. Accordingly, we do not opine on, nor are we responsible for, the structural integrity of the property including its conformity to specific governmental code requirements, such as fire, building and safety, earthquake, and occupancy, or any physical defects that were not readily apparent during the inspection.

Our opinions of the remaining useful lives of the property elements do not represent a guarantee or warranty of performance of the products, materials and workmanship.



8. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Founded in 1991, Reserve Advisors, Inc. is the leading provider of reserve studies, insurance appraisals, developer turnover transition studies, expert witness services, and other engineering consulting services. Clients include community associations, resort properties, hotels, clubs, non-profit organizations, apartment building owners, religious and educational institutions, and office/commercial building owners in 48 states, Canada and throughout the world.

The **architectural engineering consulting firm** was formed to take a leadership role in helping fiduciaries, boards, and property managers manage their property like a business with a long range master plan known as a Reserve Study.

Reserve Advisors employs the **largest staff of Reserve Specialists** with bachelor's degrees in engineering dedicated to Reserve Study services. Our principals are founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our principals is a Past President of the Association of Professional Reserve Analysts (APRA). Our vast experience with a variety of building types and ages, on-site examination and historical analyses are keys to determining accurate remaining useful life estimates of building components.

No Conflict of Interest - As consulting specialists, our **independent opinion** eliminates any real or perceived conflict of interest because we do not conduct or manage capital projects.

TOTAL STAFF INVOLVEMENT

Several staff members participate in each assignment. The responsible advisor involves the staff through a Team Review, exclusive to Reserve Advisors, and by utilizing the experience of other staff members, each of whom has served hundreds of clients. We conduct Team Reviews, an internal quality assurance review of each assignment, including: the inspection; building component costing; lifing; and technical report phases of the assignment. Each Team Review requires the attendance of several engineers, Director of Quality Assurance and other participatory peers. Due to our extensive experience with building components, we do not have a need to utilize subcontractors.

OUR GOAL

To help our clients fulfill their fiduciary responsibilities to maintain property in good condition.

VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

Reserve Advisors has conducted reserve studies for a multitude of different communities and building types. We've analyzed thousands of buildings, from as small as a 3,500-square foot day care center to the 2,600,000-square foot 98-story Trump International Hotel and Tower in Chicago. We also routinely inspect buildings with various types of mechanical systems such as simple electric heat, to complex systems with air handlers, chillers, boilers, elevators, and life safety and security systems.

We're familiar with all types of building exteriors as well. Our well versed staff regularly identifies optimal repair and replacement solutions for such building exterior surfaces such as adobe, brick, stone, concrete, stucco, EIFS, wood products, stained glass and aluminum siding, and window wall systems.

OLD TO NEW

Reserve Advisors experience includes ornate and vintage buildings as well as modern structures. Our specialists are no strangers to older buildings. We're accustomed to addressing the unique challenges posed by buildings that date to the 1800's. We recognize and consider the methods of construction employed into our analysis. We recommend appropriate replacement programs that apply cost effective technologies while maintaining a building's character and appeal.



QUALIFICATIONS
THEODORE J. SALGADO
Principal Owner

CURRENT CLIENT SERVICES

Theodore J. Salgado is a co-founder of Reserve Advisors, Inc., which is dedicated to serving community associations, city and country clubs, religious organizations, educational facilities, and public and private entities throughout the United States. He is responsible for the production, management, review, and quality assurance of all reserve studies, property inspection services and consulting services for a nationwide portfolio of more than 6,000 clients. Under his direction, the firm conducts reserve study services for community associations, apartment complexes, churches, hotels, resorts, office towers and vintage architecturally ornate buildings.



PRIOR RELEVANT EXPERIENCE

Before founding Reserve Advisors, Inc. with John P. Poehlmann in 1991, Mr. Salgado, a professional engineer registered in the State of Wisconsin, served clients for over 15 years through American Appraisal Associates, the world's largest full service valuation firm. Mr. Salgado conducted facilities analyses of hospitals, steel mills and various other large manufacturing and petrochemical facilities and casinos.

He has served clients throughout the United States and in foreign countries, and frequently acted as project manager on complex valuation, and federal and state tax planning assignments. His valuation studies led to negotiated settlements on property tax disputes between municipalities and property owners.

Mr. Salgado has authored articles on the topic of reserve studies and facilities maintenance. He also co-authored *Reserves*, an educational videotape produced by Reserve Advisors on the subject of Reserve Studies and maintaining appropriate reserves. Mr. Salgado has also written in-house computer applications manuals and taught techniques relating to valuation studies.

EXPERT WITNESS

Mr. Salgado has testified successfully before the Butler County Board of Tax Revisions in Ohio. His depositions in pretrial discovery proceedings relating to reserve studies of Crestview Estates Condominium Association in Wauconda, Illinois, Rivers Point Row Property Owners Association, Inc. in Charleston, South Carolina and the North Shore Club Associations in South Bend, Indiana have successfully assisted the parties in arriving at out of court settlements.

EDUCATION - Milwaukee School of Engineering - B.S. Architectural Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

American Association of Cost Engineers - Past President, Wisconsin Section
Association of Construction Inspectors - Certified Construction Inspector
Association of Professional Reserve Analysts - Past President & Professional Reserve Analyst (PRA)
Community Associations Institute - Member and Volunteer Leader of multiple chapters
Concordia Seminary, St. Louis - Member, National Steering Committee
Milwaukee School of Engineering - Member, Corporation Board
Professional Engineer, Wisconsin (1982) and North Carolina (2014)

Ted continually maintains his professional skills through American Society of Civil Engineers, ASHRAE, Association of Construction Inspectors, and continuing education to maintain his professional engineer licenses.



JOHN P. POEHLMANN, RS
Principal

John P. Poehlmann is a co-founder of Reserve Advisors, Inc. He is responsible for the finance, accounting, marketing, and overall administration of Reserve Advisors, Inc. He also regularly participates in internal Quality Control Team Reviews of Reserve Study reports.



Mr. Poehlmann directs corporate marketing, including business development, advertising, press releases, conference and trade show exhibiting, and electronic marketing campaigns. He frequently speaks throughout the country at seminars and workshops on the benefits of future planning and budgeting for capital repairs and replacements of building components and other assets.

PRIOR RELEVANT EXPERIENCE

Mr. Poehlmann served on the national Board of Trustees of Community Associations Institute. An international organization, Community Associations Institute (CAI) is a nonprofit 501(c)(3) trade association created in 1973 to provide education and resources to America's 335,000 residential condominium, cooperative and homeowner associations and related professionals and service providers.

He is a founding member of the Institute's Reserve Committee. The Reserve Committee developed national standards and the Reserve Specialist (RS) Designation Program for Reserve Study providers. Mr. Poehlmann has authored numerous articles on the topic of Reserve Studies, including Reserve Studies for the First Time Buyer, Minimizing Board Liability, Sound Association Planning Parallels Business Concepts, and Why Have a Professional Reserve Study. He is also a contributing author in Condo/HOA Primer, a book published for the purpose of sharing a wide background of industry knowledge to help boards in making informed decisions about their communities.

INDUSTRY SERVICE AWARDS

CAI Wisconsin Chapter Award
CAI National Rising Star Award
CAI Michigan Chapter Award

EDUCATION

University of Wisconsin-Milwaukee - Master of Science Management
University of Wisconsin - Bachelor of Business Administration

PROFESSIONAL AFFILIATIONS

Community Associations Institute (CAI) - Founding member of Reserve Committee; former member of National Board of Trustees; Reserve Specialist (RS) designation; Member of multiple chapters

Association of Condominium, Townhouse, & Homeowners Associations (ACTHA) – member



ALAN M. EBERT, P.E., PRA, RS
Director of Quality Assurance

CURRENT CLIENT SERVICES

Alan M. Ebert, a Professional Engineer, is Director of Quality Assurance for Reserve Advisors. Mr. Ebert is responsible for the management, review and quality assurance of reserve studies. In this role, he assumes the responsibility of stringent report review analysis to assure report accuracy and the best solution for Reserve Advisors' clients.

Mr. Ebert has been involved with hundreds of Reserve Study assignments. The following is a partial list of clients served by Alan Ebert demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

Brownsville Winter Haven Located in Brownsville, Texas, this unique homeowners association contains 525 units. The Association maintains three pools and pool houses, a community and management office, landscape and maintenance equipment, and nine irrigation canals with associated infrastructure.

Rosemont Condominiums This unique condominium is located in Alexandria, Virginia and dates to the 1940's. The two mid-rise buildings utilize decorative stone and brick masonry. The development features common interior spaces, multi-level wood balconies and common asphalt parking areas.

Stillwater Homeowners Association Located in Naperville, Illinois, Stillwater Homeowners Association maintains four tennis courts, an Olympic sized pool and an upscale ballroom with commercial-grade kitchen. The community also maintains three storm water retention ponds and a detention basin.

Birchfield Community Services Association This extensive Association comprises seven separate parcels which include 505 townhome and single family homes. This Community Services Association is located in Mt. Laurel, New Jersey. Three lakes, a pool, a clubhouse and management office, wood carports, aluminum siding, and asphalt shingle roofs are a few of the elements maintained by the Association.

Oakridge Manor Condominium Association Located in Londonderry, New Hampshire, this Association includes 104 units at 13 buildings. In addition to extensive roads and parking areas, the Association maintains a large septic system and significant concrete retaining walls.

Memorial Lofts Homeowners Association This upscale high rise is located in Houston, Texas. The 20 luxury units include large balconies and decorative interior hallways. The 10-story building utilizes a painted stucco facade and TPO roof, while an on-grade garage serves residents and guests.

PRIOR RELEVANT EXPERIENCE

Mr. Ebert earned his Bachelor of Science degree in Geological Engineering from the University of Wisconsin-Madison. His relevant course work includes foundations, retaining walls, and slope stability. Before joining Reserve Advisors, Mr. Ebert was an oilfield engineer and tested and evaluated hundreds of oil and gas wells throughout North America.

EDUCATION

University of Wisconsin-Madison - B.S. Geological Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

Professional Engineering License - Wisconsin, North Carolina

Reserve Specialist (RS) - Community Associations Institute

Professional Reserve Analyst (PRA) - Association of Professional Reserve Analysts



NICOLE L. LOWERY, PRA, RS
Associate Director of Quality Assurance

CURRENT CLIENT SERVICES

Nicole L. Lowery, a Civil Engineer, is an Associate Director of Quality Assurance for Reserve Advisors. Ms. Lowery is responsible for the management, review and quality assurance of reserve studies. In this role, she assumes the responsibility of stringent report review analysis to assure report accuracy and the best solution for Reserve Advisors' clients.

Ms. Lowery has been involved with hundreds of Reserve Study assignments. The following is a partial list of clients served by Nicole Lowery demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

Amelia Surf & Racquet Club This oceanfront condominium community comprises 156 units in three mid rise buildings. This Fernandina Beach, Florida development contains amenities such as clay tennis courts, two pools and boardwalks.

Ten Museum Park This boutique, luxury 50-story high rise building in downtown Miami, Florida consists of 200 condominium units. The amenities comprise six pools including resistance and plunge pools, a full-service spa and a state-of-the-art fitness center. The property also contains a multi-level parking garage.

3 Chisolm Street Homeowners Association This historic Charleston, South Carolina community was constructed in 1929 and 1960 and comprises brick and stucco construction with asphalt shingle and modified bitumen roofs. The unique buildings were originally the Murray Vocational School. The buildings were transformed in 2002 to 27 high-end condominiums. The property includes a courtyard and covered parking garage.

Lakes of Pine Run Condominium Association This condominium community comprises 112 units in 41 buildings of stucco construction with asphalt shingle roofs. Located in Ormond Beach, Florida, it has a domestic water treatment plant and wastewater treatment plant for the residents of the property.

Rivertowne on the Wando Homeowners Association This exclusive river front community is located on the Wando River in Mount Pleasant, South Carolina. This unique Association includes several private docks along the Wando River, a pool and tennis courts for use by its residents.

Biltmore Estates Homeowners Association This private gated community is located in Miramar, Florida, just northwest of Miami, Florida and consists of 128 single family homes. The lake front property maintains a pool, a pool house and private streets.

Bellavista at Miromar Lakes Condominium Association Located in the residential waterfront resort community of Miromar Lakes Beach & Golf Club in Fort Myers, Florida, this property comprises 60 units in 15 buildings. Amenities include a clubhouse and a pool.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Ms. Lowery was a project manager with Kipcon in New Brunswick, New Jersey and the Washington, D.C. Metro area for eight years, where she was responsible for preparing reserve studies and transition studies for community associations. Ms. Lowery successfully completed the bachelors program in Civil Engineering from West Virginia University in Morgantown, West Virginia.

EDUCATION

West Virginia University - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Reserve Specialist (RS) - Community Associations Institute

Professional Reserves Analyst (PRA) - Association of Professional Reserve Analysts



MOLLY A. GARROW, RS
Responsible Advisor

CURRENT CLIENT SERVICES

Molly A. Garrow, a Biological Systems Engineer, is an Advisor for Reserve Advisors. Ms. Garrow is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. She also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes and homeowner associations. Ms. Garrow frequently serves as the Quality Assurance Review Coordinator for all types of developments.

The following is a partial list of clients by Molly Garrow demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

Brookview Garden Homes Homeowner Association Located in Woodbury, Minnesota, this inviting community comprises 96 townhomes in 14 buildings. The buildings feature aluminum siding, masonry veneer and asphalt shingle roofs. The development includes asphalt driveways, a pond and concrete sidewalks.

Cashion Woods Community Association, Inc. This community of 69 homes is located in Huntersville, North Carolina. Homeowners enjoy the use of a central park, play equipment and picnic areas. Located throughout the property are walking paths and an irrigation system.

Southwood Residential Community Association, Inc. Located in Tallahassee, Florida, this community development district consists of 252 townhomes amongst three unique sub-Associations. The residents' amenities include a clubhouse, tennis courts, pool and play equipment.

Marwood Condominium Association, Inc. This mid-rise located in Minneapolis, Minnesota contains 27 units and an underground parking garage. Built in 1979, the exterior of the building comprises masonry, an asphalt shingle roof and common windows and doors. The interior contains common areas and various mechanical equipment.

Leeds Square Condominiums This townhome style development located in Warrenton, Virginia contains 169 units in 19 buildings. Built in the 1970's, the buildings comprise asphalt shingle and metal roofs, vinyl siding, masonry and balconies. The development contains a pool, pool house, playground and tennis courts.

Tamarack Condominiums Built in 1968, this townhome style development is located in Columbus, Ohio. Built in 1968, the building exteriors comprise masonry, vinyl siding and mansard style- asphalt shingle roofs. The Association maintains a community building, asphalt pavement, wood fences and concrete flatwork.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Ms. Garrow attended the University of Wisconsin in Madison, Wisconsin where she attained her Bachelor of Science degree in Biological Systems Engineering. Her studies focused on environmental engineering and natural resources. While attending the University of Wisconsin, Ms. Garrow led a team of her peers in developing a storm water management and erosion control system for the Office of Lakes and Watersheds in Dane County, Wisconsin.

EDUCATION

University of Wisconsin – B.S. Biological Systems Engineering

PROFESSIONAL AFFILIATIONS

Engineer In Training (E.I.T.) Registration – Wisconsin
Reserve Specialist (RS) – Community Associations Institute



MEGAN C. KONECNY, PRA, RS
Review Coordinator

CURRENT CLIENT SERVICES

Megan C. Konecny, an environmental/civil engineer, is an Advisor for Reserve Advisors. Ms. Konecny is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. She also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services on apartments, townhomes, high rise condominium towers and planned unit developments. Ms. Konecny frequently serves as the Quality Assurance Review Coordinator for Multi-story, Recreational and Townhome communities.

The following is a partial list of clients served by Megan Konecny demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

Archbishop Spalding High School - A private high school located southwest of Annapolis, Maryland with an enrollment of 1,050 students. The property includes athletic facilities, an auditorium, gymnasium, library, cafeteria with kitchen, chapel, and approximately 50 classrooms.

Olympic Club - A private athletic club with historic clubhouses located in downtown San Francisco and overlooking the Pacific Ocean. Exclusive amenities include 45 holes of golf, swimming pools, gymnasiums, squash, handball and tennis courts and a fitness center. The United States Golf Association recognizes the Olympic Club as one of the first 100 golf clubs established in the United States. The Club has hosted five U.S Open Championships.

East Meadows - Community of 74 units in 17 single family style buildings and 12 three-story multiple unit buildings located in a wooded area west of Detroit, Michigan. Professional services included loan scenario development to assist the Association evaluate the most prudent method of financing its exterior restoration.

Park Lane Condominium Associations - A gated community located in Chicago suburb that includes 136 units in one intricate three-story building and 17 townhome style units in four buildings. The development includes under-building garage parking, an outdoor pool, tennis courts, and a unique sub level recreation center that features a roof top pergola.

Jonathan's Landing Golf Club - Located just north of West Palm Beach, Jonathan's Landing is a premier member owned, private club. Exclusive amenities include 54 holes of championship golf, two club houses and ten Har-Tur tennis courts.

University Club Tower - Located on an urban waterfront site in downtown Milwaukee, The University Club Tower offers breathtaking views of Lake Michigan. At 446 feet, the tower is the tallest residential building in Wisconsin. Exclusive amenities include a rooftop terrace, health club, community room with humidity controlled wine room and garage parking.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Ms. Konecny attended Marquette University in Milwaukee, Wisconsin where she specialized in Environmental Engineering. There, she participated in the design of a Chicago subdivision that included preliminary grading of the site, design of the storm sewer system and stormwater management with Cowhey Gundmunson Ledger, Limited. Ms. Konecny also worked with Everitt Knitting where she provided inspection services and resolved production problems.

EDUCATION

Marquette University - B.S. Civil with emphasis in Environmental Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Reserve Specialist (RS) - Community Associations Institute

Professional Reserves Analyst (PRA) - Association of Professional Reserve Analysts

Director of the Board - Association of Professional Reserve Analysts



RESOURCES

Reserve Advisors, Inc. utilizes numerous resources of national and local data to conduct its Professional Services. A concise list of several of these resources follows:

Association of Construction Inspectors, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at www.iami.org. Several advisors and a Principal of Reserve Advisors, Inc. hold Senior Memberships with ACI.

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., (ASHRAE) the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., devoted to the arts and sciences of heating, ventilation, air conditioning and refrigeration; recognized as the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines, found on the web at www.ashrae.org. Reserve Advisors, Inc. actively participates in its local chapter and holds individual memberships.

Community Associations Institute, (CAI) America's leading advocate for responsible communities noted as the only national organization dedicated to fostering vibrant, responsive, competent community associations. Their mission is to assist community associations in promoting harmony, community, and responsible leadership.

Marshall & Swift / Boeckh, (MS/B) the worldwide provider of building cost data, co-sourcing solutions, and estimating technology for the property and casualty insurance industry found on the web at www.marshallswift.com.

R.S. Means CostWorks, North America's leading supplier of construction cost information. As a member of the Construction Market Data Group, Means provides accurate and up-to-date cost information that helps owners, developers, architects, engineers, contractors and others to carefully and precisely project and control the cost of both new building construction and renovation projects found on the web at www.rsmeans.com.

Reserve Advisors, Inc., library of numerous periodicals relating to reserve studies, condition analyses, chapter community associations, and historical costs from thousands of capital repair and replacement projects, and product literature from manufacturers of building products and building systems.