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Reserve Studies

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Funding Reserve Analysis

for

Rovey Farm Ash Grove 2015

January 1, 2015



Funding Reserve Analysis
for
Rovey Farm Ash Grove 2015

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January 1, 2015

Mr./Ms. Board President - Board President Rovey Farm Estates Ash Grove
11011 S. 48th Street #210
Phoenix, Arizona 85044

Mr./Ms. President,

Subject: Rovey Farm Ash Grove 2015 Reserve Study

Castle Reserve Studies is pleased to present to Mr./Ms. Board President the requested Reserve Funding study. We believe that you will find the attached study to be thorough and complete. After you have had an opportunity to review the report, you may have some questions. Please do not hesitate to write or call. We would be pleased to answer any questions you may have.

Project Description

Rovey Farm Ash Grove is the gated neighborhood within the Rovey Farm Estates community. The association is located along Rovey Parkway and contains 120 single family homes. This associations study reflects the contributions necessary for street maintenance and common areas within the gates. These reserve items are separate from the Rovey Farm Estates.

Depth of Study

This report is a Reserve Study Update with site visit. A field inspection was not conducted and information from association was used to verify the existing component conditions and quantities. In-place testing, laboratory testing, and non-destructive testing of the reserve study components were not performed. Field measurements of some components were made to either verify improvement plan take-offs or determine directly the quantities of a component. Photographs were taken of the components.

Reserve Funding Goal

The reserve fund is set to be as close to Fully Funded as possible on an annual basis.

Financial Condition of Association

At the time of study, the reserve balance for Rovey Farm Ash Grove was \$357,036. With a monthly contribution of \$3,340, the projected reserve balance on January 1, 2015 is \$376,850.

Summary of Financial Assumptions

The table below contains a partial summary of information provided by Mr./Ms. Board President for the Rovey Farm Ash Grove 2015 funding study.

<i>Reserve Study by Calendar Year Starting</i>	<i>January 1, 2015</i>
<i>Funding Study Length</i>	<i>30 Years</i>
<i>Number of Dues Paying Members</i>	<i>120</i>
<i>Reserve Balance as of January 1, 2015¹</i>	<i>\$ 376,850</i>
<i>Annual Inflation Rate</i>	<i>3.00%</i>
<i>Tax Rate on Reserve Interest ²</i>	<i>30.00%</i>
<i>Minimum Reserve Account Balance</i>	<i>\$ 0</i>
<i>Dues Change Period</i>	<i>1 Year</i>
<i>Annual Operating Budget</i>	<i>\$ 0</i>

¹ See "Financial Condition of Association" in this report.

² Taxed as an IRS exempt association

Recommended Payment Schedule

The table below contains Castle Reserve Studies recommended schedule of payments for the next five years. Failure to follow the proposed schedule of payments may result in inadequate reserve funds or require the use of Special Assessments in the future.

Proposed Modified Payment

Calendar Year	Member Monthly Reserve Payment	Monthly Reserve Payment	Annual Reserve Payment	Proposed Reserve Balance
2015	\$ 27.50	\$ 3,300	\$ 39,600	\$ 416,478
2016	\$ 27.91	\$ 3,350	\$ 40,194	\$ 418,479
2017	\$ 28.33	\$ 3,400	\$ 40,797	\$ 438,279
2018	\$ 28.76	\$ 3,451	\$ 41,409	\$ 479,720
2019	\$ 29.19	\$ 3,502	\$ 42,030	\$ 521,784
2020	\$ 29.63	\$ 3,555	\$ 42,660	\$ 554,428

* Annual Reserve Payments have been manually modified.

Modified to reflect 2014 budget.

Initial Reserves

Initial reserves for this Reserve Study were known to be \$ 376,850 on January 1, 2015. Based upon a study start date of January 1, 2015 a total of 0 days of accrued interest at 0.01 percent per annum were compounded to yield an initial reserve balance of \$ 376,850.

The implicit assumption has been made that the reserve accounts were not drawn down between the date of the known reserve balance and the study start date.

Inflation Estimate

Inflation for the last year has been reviewed, and a best fit regression analysis for the last 12 months is 3.00 percent. An inflation multiplier of 3.00 percent per annum has been applied to all future expenses.

Reserve Study Assumptions

- Cost estimates and financial information are accurate and current.
- No unforeseen circumstances will cause a significant reduction of reserves.
- Sufficient comprehensive property insurance exists to protect from insurable risks.
- The association plans to continue to maintain the existing common areas and amenities.
- Reserve payments occur at the end of every calendar month.
- Expenses occur at the end of the expense year.

Percent Funded

Many reserve studies use the concept of "Percent Funded" to measure the reserve account balance against a theoretically perfect value. Percent Funded is often used as a measure of the "Financial Health" of an association. The assumption is, the higher the percentage, the greater the "Financial Health." The question of substance is simply: How much is enough? To answer the question, some understanding of Percent Funded is required.

Percent Funded is the ratio of current cash reserves divided by the Fully Funded value at any instant in time. Fully Funded is defined as the present value of the sum of all reserve items divided by the expected life of each item. In essence, Fully Funded is simply the total of the average net present value of the association improvements. Reserve items with a remaining life greater than the study life are not included in the calculation. For example; building framing, foundations, water lines, and other long-lived items that fall outside the envelope of the reserve study are excluded from the calculation. Percent Funded is therefore, the current reserve balance divided by the Fully Funded value multiplied by 100 (to give a percentage). The concept of percent funded is useful when the reserve study is comprehensive, but misleading when the reserve study is superficial or constrained. As a result, we recommend that the statement "Percent Funded" be used with caution.

Summary of Findings

Castle Reserve Studies has estimated future projected expenses for Rovey Farm Ash Grove 2015 based upon preservation of existing improvements.

The attached funding study is limited in scope to those expense items listed in the attached "Rovey Farm Ash Grove 2015 Reserve Study Expense Items." Expense items which have an expected life of more than 30 Years are not included in this reserve study unless payment for these long-lived items occurs within the 30 Years of the reserve study envelope.

Of primary concern is the preservation of a positive funding balance with funds sufficient to meet projected expenses throughout the study life. Based upon the attached funding study, it is our professional opinion that member monthly fees as shown in the attached "Rovey Farm Ash Grove 2015 Dues Summary" will realize this goal. Some reserve items in the "Revenue Summary Table" may not contain payments. In this analysis, the initial reserves were

used to make annual payments for expense items in their order of occurrence until the initial reserve was consumed.

Study Method

Funding studies may be done in several ways, but we believe that the value of a funding study lies in the details. "Bulk" studies are quick, usually inexpensive, and almost always border on worthless. We believe that meaningful answers to funding studies lie in the details. In this study, we have used the "Component" method because it is the only method which allows scrutiny of the funding details. The method is pragmatic, and allows human judgement and experience to enter into the equation.

Unless noted otherwise, the present cost of every reserve item in this report has been estimated using the "National Construction Estimator", a nationally recognized standard, and modified by an area cost adjustment factor. Where possible, known costs have been used. In addition, every reserve item has been given an estimated remaining useful life, an estimated useful life when new, and has been cast into the future to determine the inflated cost.

Equal annual payments are calculated for each reserve item based upon a payment starting year and a payment ending year using the end of period payment method. Interest earned on accumulated reserve funds and taxes on the reserve interest are also calculated. Initial reserve funds are consumed as expenses occur until fully depleted, reducing annual reserve payments to a minimum. As you review this report, we are certain that you will appreciate the level of detail provided, allowing you to review each reserve item in detail.

Impact of Component Life

The projected life expectancy of the major components and the reserve funding needs of the association are closely tied. Performing the appropriate routine maintenance for each major component generally increases the component useful life, effectively moving the component expense into the future which reduces the reserve funding payments of the association. Failure to perform such maintenance can shorten the remaining useful life of the major components, bringing the replacement expense closer to the present which increases the reserve funding payments of the association.

Keeping Your Reserve Study Current

Castle Reserve Studies believes that funding studies are an essential part of property management. People and property are constantly changing and evolving. As a result, the useful life of a funding study is at best a few years, and certainly not more than five years. This reserve study should be updated:

- At least every three years
- At changes in interest rates
- At changes in inflation rates
- At changes in the number of dues paying members
- Before starting new improvements
- Before making changes to the property
- After a flood or fire
- After the change of ownership or management
- After Annexation or Incorporation

Items Beyond the Scope of this Report

- Building or land appraisals for any purpose.
- State or local zoning ordinance violations.
- Building code violations.
- Soils conditions, soils contamination or geological stability of site.
- Engineering analysis or structural stability of site.
- Air quality, asbestos, electromagnetic radiation, formaldehyde, lead, mercury, or radon.
- Water quality or other environmental hazards.
- Invasions by termites and any or all other destroying organisms or insects.
- Damage or destruction due to birds, bats or animals to buildings or site.
- This study is not a pest inspection.
- Adequacy or efficiency of any system or component on site.
- Specifically excluded reserve items.
- Septic systems and septic tanks.
- Buried or concealed portions of swimming pools, pool liners, Jacuzzis and spas or similar items.
- Items concealed by signs, carpets or other things.
- Missing or omitted information supplied by the association for the purposes of this reserve study preparation.
- Hidden improvements such as sewer lines, water lines, or other buried or concealed items.

Governing Documents

A review was made of the Conditions, Covenants and Restrictions (CC&R's) governing documents. These were provided to Castle Reserve Studies by the current management company. These documents have been recorded within Maricopa County. This reserve study was prepared in accordance with these CCR's

Statement of Qualifications

Castle Reserve Studies is a professional in the business of preparing reserve studies for community associations. I have inspected the association improvements, and have made a complete review of all components required to complete a reserve study. I have completed a physical inspection of the components listed in this reserve study. My inspection included a review of current conditions, economic life, remaining useful life, and replacement cost of all components included in this reserve study. No destructive testing was done. This was done by field measurements, not from drawing take-offs.

Conflict of Interest

As the preparer of this reserve study, Castle Reserve Studies certifies that we do not have any vested interests, financial interests, or other interests that would cause a conflict of interest in the preparation of this reserve study.

Castle Reserve Studies would like to thank Rovey Farm Estates Ash Grove for the opportunity to be of service in the preparation of the attached Funding Study. Again, please feel free to write or call at our letterhead address if you have any questions.

Prepared by Castle Reserve Studies

Rovey Farm Ash Grove 2015 Funding Study Summary - Continued

Prepared by:

Marcus Castle

Marcus Castle
Reserve Analyst

Enclosures:

1 Page of Photographs Attached
Annual Reserves Summary
Glossary of Terms



Entry/Exit Gate Motor



Entry/Exit Gate Replace



Entry/Exit Gate System



Streets Paving and Crack Seal



Streets Paving and Crack Seal



Streets Paving and Crack Seal

Glossary of Terms Used in this Reserve Study

CATEGORY: A group of associated reserve items.

CASH FLOW: The collection and expenditure of money over time.

CASH FLOW METHOD: A method of developing a Reserve Funding Plan where contributions to the Reserve fund are designed to offset the variable annual expenditures from the Reserve fund.

DEPRECIATION: AFI uses straight line depreciation. Defined as the Present Cost divided by the Expected Life and multiplied by the sum of the Expected Life less the Remaining Life. Depreciation for a new reserve item begins at zero and ends with the replacement cost of the component.

(Present Cost - Net Present Value = Depreciated value of the component)

EFFECTIVE AGE: The difference between Expected Life and the Remaining Life. Not usually the same as the chronological age.

EXPECTED LIFE: The estimated time, in years, that a reserve item can be expected to perform its intended function.

FINANCIAL ANALYSIS: That portion of a Reserve Study which evaluates both the present and the future association reserve fund. Recommended Reserve contributions are calculated, and the projected Reserve income and expense over time is presented.

FULLY FUNDED: 100% Funded. When the actual or projected Reserve balance is equal to the Fully Funded Balance. Occurs when the funds in the reserve account are equal to the Depreciated Value of the assets.

FULLY FUNDED BALANCE (FFB): An indicator against which the Reserve balance can be compared. This number is calculated for each reserve item by year, then totaled.

NUMBER OF UNITS: A measurement used with the Unit Cost to calculate the Present Cost. Square feet, cubic yards, lineal feet are examples.

PERCENT FUNDED: The ratio of the actual Reserve Balance to the Fully Funded Reserve Balance expressed as a percentage. The value of the Percent Funded changes with time.

PHYSICAL INSPECTION: The portion of the Reserve Study that generates the reserve item inventory and the condition of the reserve items.

PRESENT COST: The cost of a component today. Consists of the Unit Cost times the Number of Units of that component.

RAW ANNUAL PAYMENT: The actual annual contribution towards future replacement of reserve item. This cost will supplement current reserve dollars saved.

REMAINING LIFE: The estimated number of years that an existing reserve item will serve its intended function.

REPLACEMENT COST: The cost of replacing a reserve item to a new condition. The Current Replacement Cost is the cost to replace a reserve item today.

RESERVE BALANCE: Actual or projected funds at year end that the association has available to defray future expenses. Also known as Reserves, Reserve Accounts, or Cash Reserves.

RESERVE ITEM: An element of a reserve category. Reserve Items consist of association facilities, which must be maintained or replaced by the association. Also known as a "Component".

RESERVE STUDY: A budget planning tool which analyses the current reserve fund and expected future expenses. A Reserve Study consists of a Physical Inspection of the facilities and a Financial Analysis of the reserve fund.

RESERVE STUDY ANALYST: A qualified individual that prepares Reserve Studies.

SPECIAL ASSESSMENT: An assessment levied on the members of an association in addition to regular assessments. Special Assessments are often regulated by Governing Documents or local statutes.

UNIT COST: The present cost of a reserve item on a unit basis. Dollars per foot of fence is an example.

NET PRESENT VALUE: The current value of the component less the depreciated value of that component.

UNADJUSTED REVENUE: The average annual contribution of reserve item, including rate of inflation.

Rovey Farm Ash Grove 2015 Reserve Study Expense Item Summary

Reserve Items	Current Cost When New	Estimated Remaining Life	Expected Life When New	First Replacement Cost	Raw Annual Payment	Repeating Item?
Entry Gate						
Gate Motors	\$ 36,000	1 Years	12 Year	\$ 38,223	\$ 19,110	Yes
Wrought Iron Gate Replace	\$ 24,000	19 Years	30 Years	\$ 43,698	\$ 2,183	Yes
Gate Entry System	\$ 8,400	5 Years	16 Years	\$ 10,054	\$ 1,675	Yes
Streets						
Seal Coat and Crack Seal	\$ 19,220	2 Years	5 Years	\$ 21,028	\$ 7,008	Yes
Paving 1 Inch Overlay	\$ 297,910	6 Years	15 Years	\$ 367,429	\$ 52,472	Yes
Lighting						
Street Lighting	\$ 38,400	19 Years	30 Years	\$ 69,917	\$ 3,492	Yes

Raw Annual Payments do not include earned interest, tax adjustments or salvage.

Months Remaining in Calendar Year 2015: 12

Expected annual inflation: 3.00%

Interest earned on reserve funds: 0.01%

Initial Reserve: \$ 376,850

Rovey Farm Ash Grove 2015 Funding Study Expense Item Summary - Continued

Abbreviations

AC - Asphalt	EP - Electrical Panelboard	PNT - Paint
AQ - Average Quality	EXT - Exterior	PVMT - Pavement
BLDG - Building	FA - Fire Alarm	PWD - Plywood
BLK - Block	FLR - Floor	QT - Quarry Tile
BUR - Built up Roof	FN - Fence	R/R - Remove and Replace
C&G - Curb and Gutter	FND - Foundation	RA - Return Air
CAB - Cabinet	FPL - Fireplace	RCP - Reinforced Concrete Pipe
CB - Catch Basin	FTG - Footing	RD - Roof Drain
CEM - Cement	FY - Fiscal Year	REM - Remove
CFT - Cubic Foot	HQ - High Quality	RL - Rail
CIP - Cast-in-place Concrete	LAM - Laminate	S - South
CMU - Concrete Masonry Unit	LAV - Lavatory	SCB - Speed Control Bump
COL - Column	LC - Light Control	SHTH - Sheathing
CPT - Carpet	LW - Lightweight Concrete	SQ - Square
CT - Ceramic Tile	MAS - Masonry	ST - Steel
CTR - Counter	MFD - Metal Floor Decking	STO - Storage
CYD - Cubic Yard	MH - Manhole	SYS - System
D - Drain	MQ - Medium Quality	VB - Vapor Barrier
DEM - Demolish	MRB - Marble	W - West
DR - Door	MRD - Metal Roof Decking	WC - Water Closet
DS - Downspout	N - North	WIN - Window
DW - Dumb Waiter	PCC - Portland Cement Concrete	YD - Yard
E - East	PCC - Portland Cement Concrete	
EA - Each	PG - Plate Glass	
ELEC - Electrical	PNL - Panel	

Rovey Farm Ash Grove 2015 Reserve Study Expense Item Listing

Reserve Items	Unit Cost	No Units	Current Cost When New	Estimated Remaining Life	Expected Life When New	Calendar Year	Estimated Future Cost	Raw Annual Payment
Entry Gate								
Gate Motors	\$ 3,000 ea	12	\$ 36,000	1 Year	12 Years	2016	\$ 38,223	\$ 19,109.79
				12 Year		2028	\$ 54,762	\$ 4,560.77
						2040	\$ 78,457	\$ 6,534.15
						2052	\$ 112,404	\$ 9,361.39
Wrought Iron Gate Replace	\$ 4,000 ea	6	\$ 24,000	19 Years	30 Years	2034	\$ 43,698	\$ 2,182.73
				30 Years		2064	\$ 107,359	\$ 3,573.30
Gate Entry System	\$ 2,800 ea	3	\$ 8,400	5 Years	16 Years	2020	\$ 10,054	\$ 1,675.23
				16 Years		2036	\$ 16,239	\$ 1,014.12
						2052	\$ 26,228	\$ 1,637.92
Streets								
Seal Coat and Crack Seal	\$ 0.10 / sf	192200 sf	\$ 19,220	2 Years	5 Years	2017	\$ 21,028	\$ 7,008.20
				5 Years		2022	\$ 24,426	\$ 4,884.02
						2027	\$ 28,374	\$ 5,673.36
						2032	\$ 32,959	\$ 6,590.27
						2037	\$ 38,286	\$ 7,655.36
						2042	\$ 44,474	\$ 8,892.60
Paving 1 Inch Overlay	\$ 1.55 / sf	192200 sf	\$ 297,910	6 Years	15 Years	2021	\$ 367,429	\$ 52,471.67
				15 Years		2036	\$ 575,919	\$ 38,366.00
						2051	\$ 902,714	\$ 60,136.09
Lighting								
Street Lighting	\$ 600 ea	64	\$ 38,400	19 Years	30 Years	2034	\$ 69,917	\$ 3,492.37
				30 Years		2064	\$ 171,775	\$ 5,717.27

Raw Annual Payments do not include earned interest, tax adjustments or payments made with initial reserves.

Months Remaining in Calendar Year 2015: 12

Expected annual inflation: 3.00% Interest earned on reserve funds: 0.01% Initial Reserve: \$ 376,850

Present Costs

Category	Item Name	No Units	Unit Cost	Present Cost	Net Present Value
Entry Gate	Gate Motors	12	\$ 3,000.00 ea	\$ 36,000.00	\$ 3,000.00
	Wrought Iron Gate Replace	6	\$ 4,000.00 ea	\$ 24,000.00	\$ 15,200.00
	Gate Entry System	3	\$ 2,800.00 ea	\$ 8,400.00	\$ 2,625.00
Entry Gate Sub Total =				\$ 68,400.00	\$ 20,825.00
Streets	Seal Coat and Crack Seal	192200 sf	\$ 0.10 / sf	\$ 19,220.00	\$ 7,688.00
	Paving 1 Inch Overlay	192200 sf	\$ 1.55 / sf	\$ 297,910.00	\$ 119,164.00
Streets Sub Total =				\$ 317,130.00	\$ 126,852.00
Lighting	Street Lighting	64	\$ 600.00 ea	\$ 38,400.00	\$ 24,320.00
Totals =				\$ 423,930.00	\$ 171,997.00

Rovey Farm Ash Grove 2015 Funding Study - Depreciation by Item and by Calendar Year

Item Description	2015	2016	2017	2018	2019	2020	2021	2022	2023
Entry Gate									
Gate Motors	\$ 34,242	\$ 38,223	\$ 3,282	\$ 6,764	\$ 10,455	\$ 14,363	\$ 18,500	\$ 22,876	\$ 27,500
Wrought Iron Gate Replace	\$ 9,573	\$ 10,686	\$ 11,858	\$ 13,092	\$ 14,389	\$ 15,753	\$ 17,187	\$ 18,694	\$ 20,276
Gate Entry System	\$ 6,110	\$ 6,820	\$ 7,568	\$ 8,355	\$ 9,184	\$ 10,054	\$ 648	\$ 1,334	\$ 2,062
Entry Gate Depreciation Subtotal :	\$ 49,925	\$ 55,729	\$ 22,708	\$ 28,211	\$ 34,028	\$ 40,170	\$ 36,335	\$ 42,904	\$ 49,838
Streets									
Seal Coat and Crack Seal	\$ 13,203	\$ 17,006	\$ 21,028	\$ 4,333	\$ 8,931	\$ 13,803	\$ 18,964	\$ 24,426	\$ 5,034
Paving 1 Inch Overlay	\$ 191,857	\$ 217,462	\$ 244,447	\$ 272,872	\$ 302,800	\$ 334,296	\$ 367,429	\$ 25,240	\$ 52,016
Streets Depreciation Subtotal :	\$ 205,060	\$ 234,468	\$ 265,475	\$ 277,205	\$ 311,731	\$ 348,099	\$ 386,393	\$ 49,666	\$ 57,050
Lighting									
Street Lighting	\$ 15,317	\$ 17,098	\$ 18,973	\$ 20,946	\$ 23,022	\$ 25,205	\$ 27,500	\$ 29,911	\$ 32,442
Total Depreciation :	\$ 270,301	\$ 307,295	\$ 307,156	\$ 326,363	\$ 368,780	\$ 413,476	\$ 450,228	\$ 122,481	\$ 139,331

Rovey Farm Ash Grove 2015 - Depreciation Report by Calendar Year - Continued

Item Description	2024	2025	2026	2027	2028	2029	2030	2031	2032
Entry Gate									
Gate Motors	\$ 32,384	\$ 37,541	\$ 42,981	\$ 48,717	\$ 54,762	\$ 4,702	\$ 9,691	\$ 14,978	\$ 20,578
Wrought Iron Gate Replace	\$ 21,938	\$ 23,682	\$ 25,511	\$ 27,430	\$ 29,442	\$ 31,551	\$ 33,761	\$ 36,076	\$ 38,501
Gate Entry System	\$ 2,834	\$ 3,650	\$ 4,513	\$ 5,425	\$ 6,389	\$ 7,406	\$ 8,479	\$ 9,611	\$ 10,804
Entry Gate Depreciation Subtotal :	\$ 57,156	\$ 64,873	\$ 73,005	\$ 81,572	\$ 90,593	\$ 43,659	\$ 51,931	\$ 60,665	\$ 69,883
Streets									
Seal Coat and Crack Seal	\$ 10,374	\$ 16,034	\$ 22,029	\$ 28,374	\$ 5,847	\$ 12,050	\$ 18,625	\$ 25,589	\$ 32,959
Paving 1 Inch Overlay	\$ 80,397	\$ 110,457	\$ 142,270	\$ 175,917	\$ 211,479	\$ 249,042	\$ 288,694	\$ 330,528	\$ 374,639
Streets Depreciation Subtotal :	\$ 90,771	\$ 126,491	\$ 164,299	\$ 204,291	\$ 217,326	\$ 261,092	\$ 307,319	\$ 356,117	\$ 407,598
Lighting									
Street Lighting	\$ 35,101	\$ 37,891	\$ 40,818	\$ 43,888	\$ 47,107	\$ 50,481	\$ 54,018	\$ 57,722	\$ 61,602
Total Depreciation :	\$ 183,028	\$ 229,253	\$ 278,122	\$ 329,751	\$ 355,026	\$ 355,233	\$ 413,268	\$ 474,504	\$ 539,083

Rovey Farm Ash Grove 2015 - Depreciation Report by Calendar Year - Continued

Item Description	2033	2034	2035	2036	2037	2038	2039	2040	2041
Entry Gate									
Gate Motors	\$ 26,505	\$ 32,774	\$ 39,399	\$ 46,397	\$ 53,784	\$ 61,578	\$ 69,796	\$ 78,457	\$ 6,737
Wrought Iron Gate Replace	\$ 41,040	\$ 43,698	\$ 1,501	\$ 3,093	\$ 4,781	\$ 6,568	\$ 8,460	\$ 10,461	\$ 12,576
Gate Entry System	\$ 12,060	\$ 13,383	\$ 14,775	\$ 16,239	\$ 1,046	\$ 2,155	\$ 3,331	\$ 4,577	\$ 5,895
Entry Gate Depreciation Subtotal :	\$ 79,605	\$ 89,855	\$ 55,675	\$ 65,729	\$ 59,611	\$ 70,301	\$ 81,587	\$ 93,495	\$ 25,208
Streets									
Seal Coat and Crack Seal	\$ 6,792	\$ 13,998	\$ 21,636	\$ 29,725	\$ 38,286	\$ 7,890	\$ 16,260	\$ 25,132	\$ 34,529
Paving 1 Inch Overlay	\$ 421,128	\$ 470,098	\$ 521,658	\$ 575,919	\$ 39,562	\$ 81,532	\$ 126,017	\$ 173,133	\$ 222,999
Streets Depreciation Subtotal :	\$ 427,920	\$ 484,096	\$ 543,294	\$ 605,644	\$ 77,848	\$ 89,422	\$ 142,277	\$ 198,265	\$ 257,528
Lighting									
Street Lighting	\$ 65,664	\$ 69,917	\$ 2,401	\$ 4,949	\$ 7,649	\$ 10,509	\$ 13,536	\$ 16,737	\$ 20,121
Total Depreciation :	\$ 573,190	\$ 643,868	\$ 601,369	\$ 676,322	\$ 145,109	\$ 170,232	\$ 237,400	\$ 308,497	\$ 302,856

Rovey Farm Ash Grove 2015 - Depreciation Report by Calendar Year - Continued

Item Description	2042	2043	2044	2045
Entry Gate				
Gate Motors	\$ 13,884	\$ 21,459	\$ 29,482	\$ 37,974
Wrought Iron Gate Replace	\$ 14,809	\$ 17,167	\$ 19,655	\$ 22,278
Gate Entry System	\$ 7,289	\$ 8,762	\$ 10,319	\$ 11,962
Entry Gate Depreciation Subtotal :	\$ 35,982	\$ 47,388	\$ 59,456	\$ 72,214
Streets				
Seal Coat and Crack Seal	\$ 44,474	\$ 9,165	\$ 18,888	\$ 29,194
Paving 1 Inch Overlay	\$ 275,738	\$ 331,479	\$ 390,356	\$ 452,508
Streets Depreciation Subtotal :	\$ 320,212	\$ 340,644	\$ 409,244	\$ 481,702
Lighting				
Street Lighting	\$ 23,695	\$ 27,467	\$ 31,448	\$ 35,644
Total Depreciation :	\$ 379,889	\$ 415,500	\$ 500,148	\$ 589,559

Rovey Farm Ash Grove 2015 Funding Study Modified Cash Flow Analysis

Calendar Year	Annual Dues	Annual Interest	Salvage	Annual Expenses	Annual Income Tax	Net Reserve Funds	% Funded	Fully Funded Balance
2015	\$ 39,600	\$ 40			\$ 12	\$ 416,478	154.1%	\$ 270,301
2016	\$ 40,194	\$ 43		\$ 38,223	\$ 13	\$ 418,479	136.2%	\$ 307,295
2017	\$ 40,797	\$ 44		\$ 21,028	\$ 13	\$ 438,279	142.7%	\$ 307,156
2018	\$ 41,409	\$ 46			\$ 14	\$ 479,720	147.0%	\$ 326,363
2019	\$ 42,030	\$ 50			\$ 15	\$ 521,784	141.5%	\$ 368,780
2020	\$ 42,660	\$ 54		\$ 10,054	\$ 16	\$ 554,428	134.1%	\$ 413,476
2021	\$ 43,300	\$ 57		\$ 367,429	\$ 17	\$ 230,340	51.2%	\$ 450,228
2022	\$ 43,950	\$ 25		\$ 24,426	\$ 8	\$ 249,882	204.0%	\$ 122,481
2023	\$ 44,609	\$ 27			\$ 8	\$ 294,510	211.4%	\$ 139,331
2024	\$ 45,278	\$ 32			\$ 9	\$ 339,810	185.7%	\$ 183,028
2025	\$ 45,957	\$ 36			\$ 11	\$ 385,793	168.3%	\$ 229,253
2026	\$ 46,647	\$ 41			\$ 12	\$ 432,468	155.5%	\$ 278,122
2027	\$ 47,346	\$ 45		\$ 28,374	\$ 14	\$ 451,472	136.9%	\$ 329,751
2028	\$ 48,057	\$ 47		\$ 54,762	\$ 14	\$ 444,800	125.3%	\$ 355,026
2029	\$ 48,778	\$ 47			\$ 14	\$ 493,611	139.0%	\$ 355,233
2030	\$ 49,509	\$ 52			\$ 15	\$ 543,156	131.4%	\$ 413,268
2031	\$ 50,252	\$ 57			\$ 17	\$ 593,447	125.1%	\$ 474,504
2032	\$ 51,006	\$ 62		\$ 32,959	\$ 19	\$ 611,537	113.4%	\$ 539,083
2033	\$ 51,771	\$ 64			\$ 19	\$ 663,352	115.7%	\$ 573,190
2034	\$ 52,547	\$ 69		\$ 113,615	\$ 21	\$ 602,332	93.5%	\$ 643,868
2035	\$ 53,335	\$ 63			\$ 19	\$ 655,711	109.0%	\$ 601,369
2036	\$ 54,135	\$ 68		\$ 592,158	\$ 20	\$ 117,736	17.4%	\$ 676,322
2037	\$ 54,948	\$ 14		\$ 38,286	\$ 4	\$ 134,408	92.6%	\$ 145,109
2038	\$ 55,772	\$ 16			\$ 5	\$ 190,190	111.7%	\$ 170,232
2039	\$ 56,608	\$ 22			\$ 6	\$ 246,814	104.0%	\$ 237,400
2040	\$ 57,457	\$ 27		\$ 78,457	\$ 8	\$ 225,834	73.2%	\$ 308,497
2041	\$ 58,319	\$ 25			\$ 8	\$ 284,171	93.8%	\$ 302,856
2042	\$ 59,194	\$ 31		\$ 44,474	\$ 9	\$ 298,913	78.7%	\$ 379,889
2043	\$ 60,082	\$ 33			\$ 10	\$ 359,018	86.4%	\$ 415,500
2044	\$ 60,983	\$ 39			\$ 12	\$ 420,028	84.0%	\$ 500,148
2045	\$ 61,898	\$ 45			\$ 13	\$ 481,957	81.7%	\$ 589,559
Totals :	\$ 1,548,430	\$ 1,319	\$ 0	\$ 1,444,245	\$ 396			

The cash distribution shown in this table applies to repair and replacement cash reserves only.

Basis of Funding Study - Modified Cash Flow

Cash reserves have been set to a minimum of \$ 0

Cash Flow has been modified with the forced Fixed Payments.

Months Remaining in Calendar Year 2015: 12 Inflation = 3.00 % Interest = 0.01 %

Study Life = 30 years Initial Reserve Funds = \$ 376,850.00 Final Reserve Value = \$ 481,957.33

Rovey Farm Ash Grove 2015 Modified Reserve Dues Summary

Projected Dues by Month and by Calendar Year

Calendar Year	Member Monthly Operations Payment	Member Monthly Reserve Payment	Member Total Monthly Payment	Member Total Annual Payment	Monthly Reserve Payment	Annual Reserve Payment
2015	NA	\$ 27.50	\$ 27.50	\$ 330.00	\$ 3,300	\$ 39,600
2016	NA	\$ 27.91	\$ 27.91	\$ 334.95	\$ 3,350	\$ 40,194
2017	NA	\$ 28.33	\$ 28.33	\$ 339.97	\$ 3,400	\$ 40,797
2018	NA	\$ 28.76	\$ 28.76	\$ 345.07	\$ 3,451	\$ 41,409
2019	NA	\$ 29.19	\$ 29.19	\$ 350.25	\$ 3,502	\$ 42,030
2020	NA	\$ 29.63	\$ 29.63	\$ 355.50	\$ 3,555	\$ 42,660
2021	NA	\$ 30.07	\$ 30.07	\$ 360.84	\$ 3,608	\$ 43,300
2022	NA	\$ 30.52	\$ 30.52	\$ 366.25	\$ 3,662	\$ 43,950
2023	NA	\$ 30.98	\$ 30.98	\$ 371.74	\$ 3,717	\$ 44,609
2024	NA	\$ 31.44	\$ 31.44	\$ 377.32	\$ 3,773	\$ 45,278
2025	NA	\$ 31.91	\$ 31.91	\$ 382.98	\$ 3,830	\$ 45,957
2026	NA	\$ 32.39	\$ 32.39	\$ 388.72	\$ 3,887	\$ 46,647
2027	NA	\$ 32.88	\$ 32.88	\$ 394.55	\$ 3,946	\$ 47,346
2028	NA	\$ 33.37	\$ 33.37	\$ 400.47	\$ 4,005	\$ 48,057
2029	NA	\$ 33.87	\$ 33.87	\$ 406.48	\$ 4,065	\$ 48,778
2030	NA	\$ 34.38	\$ 34.38	\$ 412.58	\$ 4,126	\$ 49,509
2031	NA	\$ 34.90	\$ 34.90	\$ 418.77	\$ 4,188	\$ 50,252
2032	NA	\$ 35.42	\$ 35.42	\$ 425.05	\$ 4,250	\$ 51,006
2033	NA	\$ 35.95	\$ 35.95	\$ 431.42	\$ 4,314	\$ 51,771
2034	NA	\$ 36.49	\$ 36.49	\$ 437.89	\$ 4,379	\$ 52,547
2035	NA	\$ 37.04	\$ 37.04	\$ 444.46	\$ 4,445	\$ 53,335
2036	NA	\$ 37.59	\$ 37.59	\$ 451.13	\$ 4,511	\$ 54,135
2037	NA	\$ 38.16	\$ 38.16	\$ 457.90	\$ 4,579	\$ 54,948
2038	NA	\$ 38.73	\$ 38.73	\$ 464.76	\$ 4,648	\$ 55,772
2039	NA	\$ 39.31	\$ 39.31	\$ 471.74	\$ 4,717	\$ 56,608
2040	NA	\$ 39.90	\$ 39.90	\$ 478.81	\$ 4,788	\$ 57,457
2041	NA	\$ 40.50	\$ 40.50	\$ 485.99	\$ 4,860	\$ 58,319
2042	NA	\$ 41.11	\$ 41.11	\$ 493.28	\$ 4,933	\$ 59,194
2043	NA	\$ 41.72	\$ 41.72	\$ 500.68	\$ 5,007	\$ 60,082
2044	NA	\$ 42.35	\$ 42.35	\$ 508.19	\$ 5,082	\$ 60,983
2045	NA	\$ 42.98	\$ 42.98	\$ 515.82	\$ 5,158	\$ 61,898

Dues Summary has been modified with forced Fixed Payments.

In the context of the Reserve Payment Summary, the "Annual Reserve Payment" corresponds with the "Annual Revenue" in the Cash Flow report.

Number of Payment Months in Calendar Year 2015: 12

Number of Years of Constant Payments: 1

No of Dues Paying Members: 120

Rovey Farm Ash Grove 2015 Funding Unadjusted Revenue by Calendar Year

Item Name	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Reserve Category : Entry Gate															
Gate Motors	\$ 19,110	\$ 19,110	\$ 4,561	\$ 4,561	\$ 4,561	\$ 4,561	\$ 4,561	\$ 4,561	\$ 4,561	\$ 4,561	\$ 4,561	\$ 4,561	\$ 4,561	\$ 4,561	\$ 6,534
Wrought Iron Gate Replace	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183
Gate Entry System	\$ 1,675	\$ 1,675	\$ 1,675	\$ 1,675	\$ 1,675	\$ 1,675	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,014
Entry Gate Subtotal :	\$ 22,968	\$ 22,968	\$ 8,419	\$ 8,419	\$ 8,419	\$ 8,419	\$ 7,758	\$ 7,758	\$ 7,758	\$ 7,758	\$ 7,758	\$ 7,758	\$ 7,758	\$ 7,758	\$ 9,731
Reserve Category : Streets															
Seal Coat and Crack Seal	\$ 7,008	\$ 7,008	\$ 7,008	\$ 4,884	\$ 4,884	\$ 4,884	\$ 4,884	\$ 4,884	\$ 5,673	\$ 5,673	\$ 5,673	\$ 5,673	\$ 5,673	\$ 6,590	\$ 6,590
Paving 1 Inch Overlay	\$ 52,472	\$ 52,472	\$ 52,472	\$ 52,472	\$ 52,472	\$ 52,472	\$ 52,472	\$ 38,366	\$ 38,366	\$ 38,366	\$ 38,366	\$ 38,366	\$ 38,366	\$ 38,366	\$ 38,366
Streets Subtotal :	\$ 59,480	\$ 59,480	\$ 59,480	\$ 57,356	\$ 57,356	\$ 57,356	\$ 57,356	\$ 43,250	\$ 44,039	\$ 44,039	\$ 44,039	\$ 44,039	\$ 44,039	\$ 44,956	\$ 44,956
Reserve Category : Lighting															
Street Lighting	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492
Total Revenue :	\$ 85,940	\$ 85,940	\$ 71,391	\$ 69,267	\$ 69,267	\$ 69,267	\$ 68,606	\$ 54,500	\$ 55,289	\$ 56,206	\$ 58,180				

Rovey Farm Ash Grove 2015 Funding Unadjusted Revenue by Calendar Year - Continued

Item Name	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Reserve Category : Entry Gate															
Gate Motors	\$ 6,534	\$ 6,534	\$ 6,534	\$ 6,534	\$ 6,534	\$ 6,534	\$ 6,534	\$ 6,534	\$ 6,534	\$ 6,534	\$ 6,534	\$ 9,361	\$ 9,361	\$ 9,361	\$ 9,361
Wrought Iron Gate Replace	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 2,183	\$ 3,573	\$ 3,573	\$ 3,573	\$ 3,573	\$ 3,573	\$ 3,573	\$ 3,573	\$ 3,573	\$ 3,573	\$ 3,573
Gate Entry System	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,014	\$ 1,638	\$ 1,638	\$ 1,638	\$ 1,638	\$ 1,638	\$ 1,638	\$ 1,638	\$ 1,638
Entry Gate Subtotal :	\$ 9,731	\$ 9,731	\$ 9,731	\$ 9,731	\$ 9,731	\$ 11,121	\$ 11,121	\$ 11,745	\$ 11,745	\$ 11,745	\$ 11,745	\$ 14,572	\$ 14,572	\$ 14,572	\$ 14,572
Reserve Category : Streets															
Seal Coat and Crack Seal	\$ 6,590	\$ 6,590	\$ 6,590	\$ 7,655	\$ 7,655	\$ 7,655	\$ 7,655	\$ 7,655	\$ 8,893	\$ 8,893	\$ 8,893	\$ 8,893	\$ 8,893	\$ 10,330	\$ 10,330
Paving 1 Inch Overlay	\$ 38,366	\$ 38,366	\$ 38,366	\$ 38,366	\$ 38,366	\$ 38,366	\$ 38,366	\$ 60,136	\$ 60,136	\$ 60,136	\$ 60,136	\$ 60,136	\$ 60,136	\$ 60,136	\$ 60,136
Streets Subtotal :	\$ 44,956	\$ 44,956	\$ 44,956	\$ 46,021	\$ 46,021	\$ 46,021	\$ 46,021	\$ 67,791	\$ 69,029	\$ 69,029	\$ 69,029	\$ 69,029	\$ 69,029	\$ 70,466	\$ 70,466
Reserve Category : Lighting															
Street Lighting	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 3,492	\$ 5,717	\$ 5,717	\$ 5,717	\$ 5,717	\$ 5,717	\$ 5,717	\$ 5,717	\$ 5,717	\$ 5,717	\$ 5,717
Total Revenue :	\$ 58,180	\$ 58,180	\$ 58,180	\$ 59,245	\$ 59,245	\$ 62,860	\$ 62,860	\$ 85,254	\$ 86,491	\$ 86,491	\$ 86,491	\$ 89,319	\$ 89,319	\$ 90,756	\$ 90,756

Prepared by Castle Reserve Studies
Rovey Farm Ash Grove 2015 Funding Study - Expenses by Item and by Calendar Year

Item Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	
<i>Reserve Category : Entry Gate</i>																								
Gate Motors		\$ 38,223													\$ 54,762									
Wrought Iron Gate Replace																				\$ 43,698				
Gate Entry System						\$ 10,054																\$ 16,239		
Category Subtotal :		\$ 38,223				\$ 10,054									\$ 54,762					\$ 43,698		\$ 16,239		
<i>Reserve Category : Streets</i>																								
Seal Coat and Crack Seal			\$ 21,028					\$ 24,426					\$ 28,374						\$ 32,959					\$ 38,286
Paving 1 Inch Overlay							\$ 367,429																	\$ 575,919
Category Subtotal :			\$ 21,028				\$ 367,429	\$ 24,426					\$ 28,374						\$ 32,959					\$ 38,286
<i>Reserve Category : Lighting</i>																								
Street Lighting																					\$ 69,917			
Expense Totals :		\$ 38,223	\$ 21,028			\$ 10,054	\$ 367,429	\$ 24,426				\$ 28,374	\$ 54,762					\$ 32,959		\$ 113,615		\$ 592,158		\$ 38,286

Prepared by Castle Reserve Studies
Rovey Farm Ash Grove 2015 Funding Study Expenses by Calendar Year - Continued

Item Description	2038	2039	2040	2041	2042	2043	2044	2045
Reserve Category : Entry Gate								
Gate Motors			\$ 78,457					
Wrought Iron Gate Replace								
Gate Entry System								
Category Subtotal:			\$ 78,457					
Reserve Category : Streets								
Seal Coat and Crack Seal					\$ 44,474			
Paving 1 Inch Overlay								
Category Subtotal:					\$ 44,474			
Reserve Category : Lighting								
Street Lighting								
Expense Totals:			\$ 78,457		\$ 44,474			

January 1, 2015

Expense Summary Report by Year

Year	Category	Item Name	Expense
2016	Entry Gate	Gate Motors	\$ 38,223
2016 Annual Expense Total = \$ 38,223			
2017	Streets	Seal Coat and Crack Seal	\$ 21,028
2017 Annual Expense Total = \$ 21,028			
2020	Entry Gate	Gate Entry System	\$ 10,054
2020 Annual Expense Total = \$ 10,054			
2021	Streets	Paving 1 Inch Overlay	\$ 367,429
2021 Annual Expense Total = \$ 367,429			
2022	Streets	Seal Coat and Crack Seal	\$ 24,426
2022 Annual Expense Total = \$ 24,426			
2027	Streets	Seal Coat and Crack Seal	\$ 28,374
2027 Annual Expense Total = \$ 28,374			
2028	Entry Gate	Gate Motors	\$ 54,762
2028 Annual Expense Total = \$ 54,762			
2032	Streets	Seal Coat and Crack Seal	\$ 32,959
2032 Annual Expense Total = \$ 32,959			
2034	Entry Gate	Wrought Iron Gate Replace	\$ 43,698
	Lighting	Street Lighting	\$ 69,917
2034 Annual Expense Total = \$ 113,615			
2036	Entry Gate	Gate Entry System	\$ 16,239
	Streets	Paving 1 Inch Overlay	\$ 575,919
2036 Annual Expense Total = \$ 592,158			
2037	Streets	Seal Coat and Crack Seal	\$ 38,286
2037 Annual Expense Total = \$ 38,286			

Prepared by Castle Reserve Studies

Year	Category	Item Name	Expense
2040	Entry Gate	Gate Motors	\$ 78,457
			2040 Annual Expense Total = \$ 78,457
2042	Streets	Seal Coat and Crack Seal	\$ 44,474
			2042 Annual Expense Total = \$ 44,474