Precision 20/20
Full Reserve Study
for
Westerley Homeowners Association
Sterling, Virginia
October 10, 2013

RESERVE ADVISORS
Long-term thinking. Everyday commitment.

RESERVE ADVISORS

TABLE OF CONTENTS

Corporate Office
Reserve Advisors, Inc.
735 N. Water Street, Suite 175
Milwaukee, WI 53202

1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Westerley Homeowners Association (Westerley)
Location: Sterling, Virginia
Reference: 040356

Property Basics: Westerley Homeowners Association comprises 190 townhome unit owners and 123 single family homes. The development was built from 1994 to 2001 and contains clubhouse, pool, wood fences, and townhome maintained asphalt pavement streets.

Reserve Components Identified: 19 Common Reserve Components and 6 Townhome Reserve Components.

Inspection Date: October 10, 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 Common Reserves Funding Plan recognizes these threshold funding years in 2019 and 2020 due to replacement of the wood fences and pool house exterior renovations. Our recommended Townhome Reserves Funding Plan recognizes this threshold funding year in 2038 due to replacement of the asphalt pavement.

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
- 1.1% annual rate of return on invested reserves
- 2.0% 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: Common Reserves of $163,229 and Townhome Reserves of $171,434 as of October 31, 2013.

Recommended Reserve Funding: The Association budgeted $59,258 total for Reserve Contributions in 2013: $24,962 for Common Reserves and $34,296 for Townhome Reserves. For the Common Reserve Contribution, we recommend that the Association budget annual phased increases in Reserve Contributions of approximately $2,300 from 2014 through 2018. Afterwards, the Association should budget gradual annual increases in reserve funding, that in part consider the effects of inflation through 2043, the limit of this study's Cash Flow Analysis. The initial adjustment in Reserve Contributions of $2,338 represents about a one percent (0.7%) adjustment in the 2013 total Operating Budget of $345,951. This initial adjustment of $2,338 is equivalent to an average monthly increase of $0.62 per unit owner.

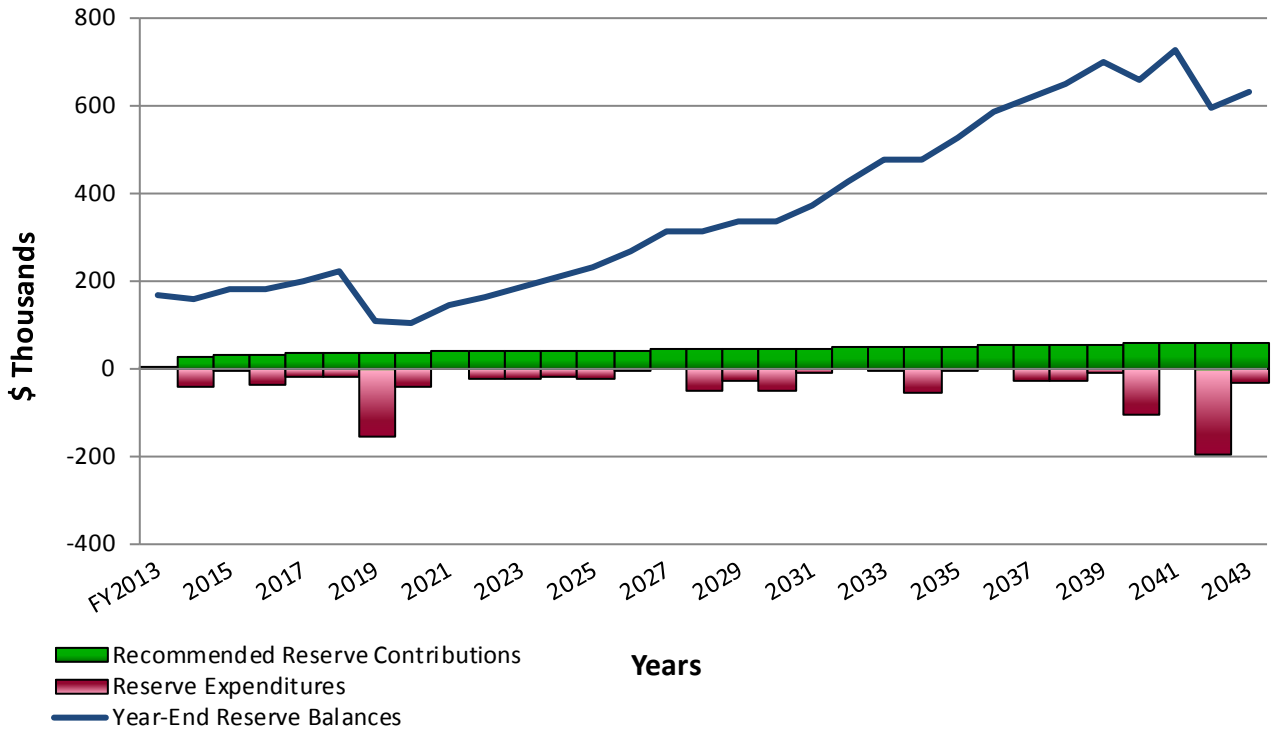
For the Townhome Reserve Contribution, The Association may adopt a reduced reserve budget of

$27,500 in 2014. Afterwards, the Association should budget gradual annual increases in reserve funding, that in part consider the effects of inflation through 2043, the limit of this study's Cash Flow Analysis. The recommended year 2014 Reserve Contribution of $27,500 is equivalent to an average monthly contribution of $7.32 per unit owner. The ***Townhome Reserve Funding Plan*** recommends 2043 year end accumulated reserves of approximately $207,850 . We judge this amount of accumulated reserves in 2043 desirable or necessary, to fund the likely replacement of the subsequent replacement of the asphalt pavement after 2043. Future replacement costs beyond the next 30 years for the asphalt pavement are likely to more than double the current cost of replacement. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2043 year end reserves.

Certification: This Precision 20/20 Full Reserve Study exceeds the Community Associations Institute (CAI) and Association of Professional Reserve Analysts (APRA) standards fulfilling the requirements of a “Level I Full Reserve Study.”

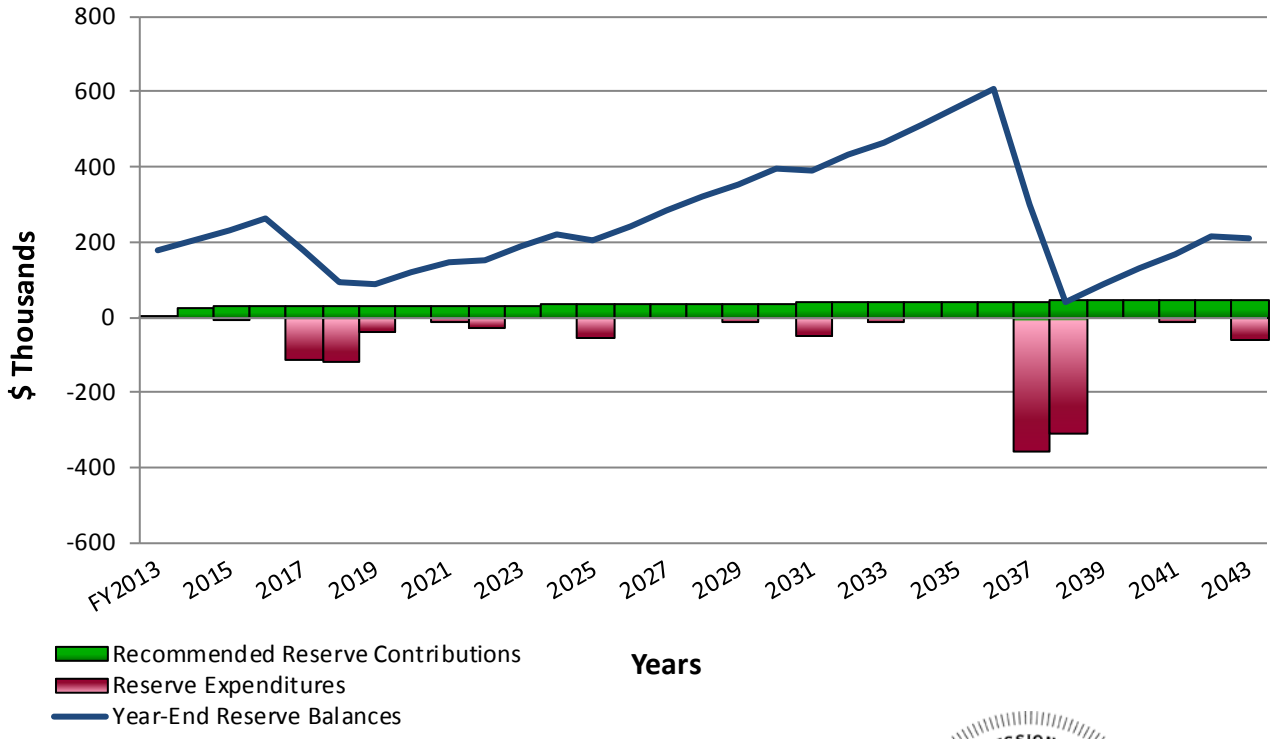
Westerley Common
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2014	27,300	157,655	2024	41,100	208,975	2034	50,100	475,725
2015	29,600	182,403	2025	41,900	229,175	2035	51,100	526,121
2016	31,900	181,059	2026	42,700	267,555	2036	52,100	584,295
2017	34,200	198,980	2027	43,600	314,338	2037	53,100	617,850
2018	36,500	220,440	2028	44,500	312,659	2038	54,200	649,022
2019	37,200	106,218	2029	45,400	332,831	2039	55,300	700,660
2020	37,900	104,746	2030	46,300	333,374	2040	56,400	658,875
2021	38,700	144,811	2031	47,200	373,012	2041	57,500	723,939
2022	39,500	163,620	2032	48,100	425,480	2042	58,700	595,507
2023	40,300	183,879	2033	49,100	475,048	2043	59,900	629,503



Westerley Townhome
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2014	27,500	207,073	2024	33,600	222,880	2034	41,000	512,364
2015	28,100	229,220	2025	34,300	206,676	2035	41,800	560,030
2016	28,700	260,599	2026	35,000	244,142	2036	42,600	609,025
2017	29,300	178,880	2027	35,700	282,724	2037	43,500	301,187
2018	29,900	94,584	2028	36,400	322,434	2038	44,400	39,229
2019	30,500	88,177	2029	37,100	352,221	2039	45,300	85,210
2020	31,100	120,418	2030	37,800	394,103	2040	46,200	132,601
2021	31,700	144,174	2031	38,600	388,911	2041	47,100	167,388
2022	32,300	152,282	2032	39,400	432,806	2042	48,000	217,493
2023	32,900	187,038	2033	40,200	466,012	2043	49,000	207,850



Respectfully submitted on June 11, 2014 by
RESERVE ADVISORS, INC.

Theodore J. Salgado, PRA[1], RS[2], Principal
Visual Inspection and Report by: Jacob R. Bolda, RS

[1] PRA (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 *Precision 20/20 Full Reserve Study* of

Westerley Homeowners Association

Sterling, Virginia

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, October 10, 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, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Photographs -** Documentation of Condition of various property elements
- **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

Westerley Homeowners Association comprises 190 townhome unit owners and 123 single family homes. The development was built from 1994 to 2001 and contains clubhouse, pool, wood fences, and townhome maintained asphalt pavement streets. We identify 19 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 and the Board. These classes of property include:

- Reserve Components
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements
- Property Maintained by Homeowners
- Property Maintained by Townhome Homeowners
- Property Maintained by Single Family Homeowners
- Property Maintained by Others

We advise that 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:

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

Long-Lived Property Elements do not have predictable Remaining Useful Lives. 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.

- Electrical Systems, Pool House
- Foundations, Pool House
- Pipes, Interior Building, Water and Sewer, Pool House
- Pipes, Subsurface Utilities
- Pool Structure
- Structural Frames, Pool House

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 $2,500 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Asphalt Pavement, Pool Parking Area, Crack Repair, Patch and Seal Coat
- Concrete, Sidewalks, Pool Area, Partial Replacements
- Landscape
- Paint Finishes, Touch Up
- Pavers, Masonry, Playground
- Retaining Walls, Timber, Tamarack Ridge Square
- Other Repairs normally funded through the Operating Budget

Property Maintained by Townhome Homeowners relates to unit:

- Homes and Lots

Property Maintained by Single Family Homeowners (excluded from Reserve Study) relates to unit:

- Driveways and Concrete Aprons
- Homes and Lots

Certain items have been designated as the responsibility of others to repair or replace. Property Maintained by Others relates to:

- Asphalt Pavement Street System at Single Family Homes (Municipality)
- Catch Basins (Virginia Department of Transportation)
- Concrete Sidewalks (Municipality)
- Light Poles and Fixtures (Dominion Power)

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities replaced during the next 30 years
- 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
- 2013 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

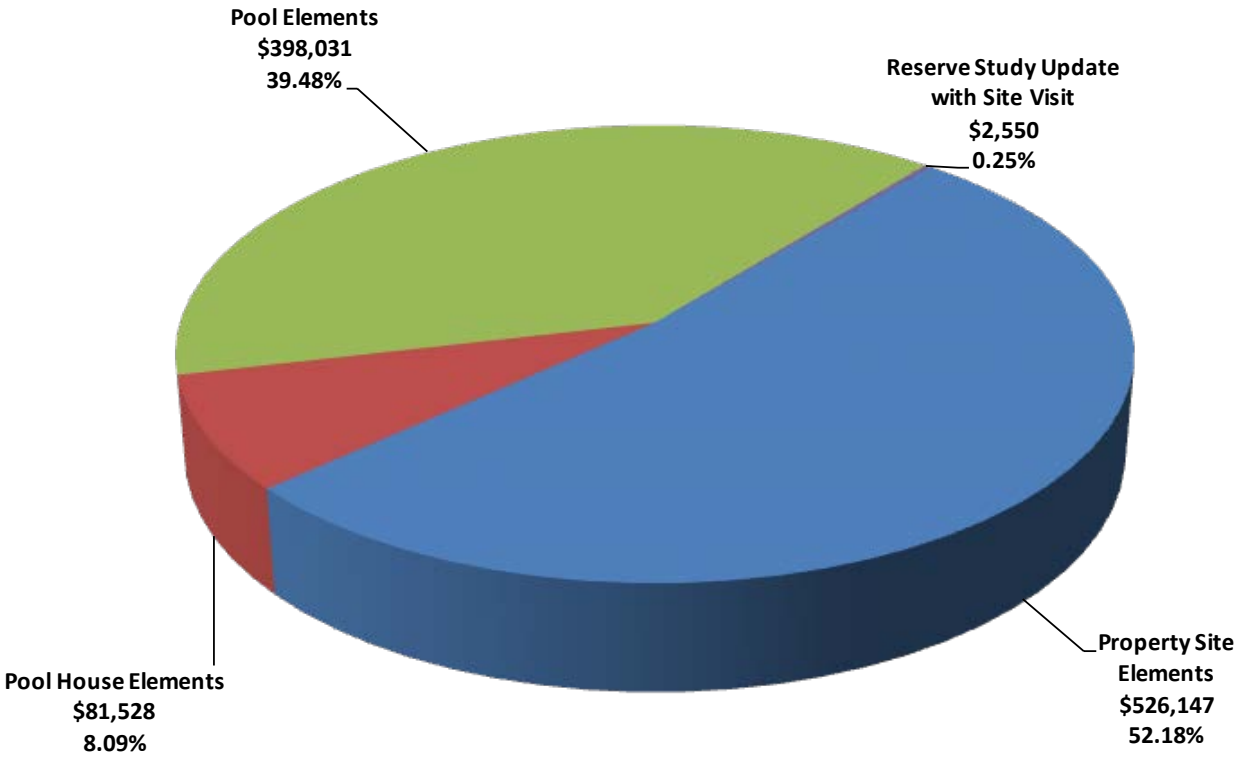
Reserve Funding Plan

- 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***.

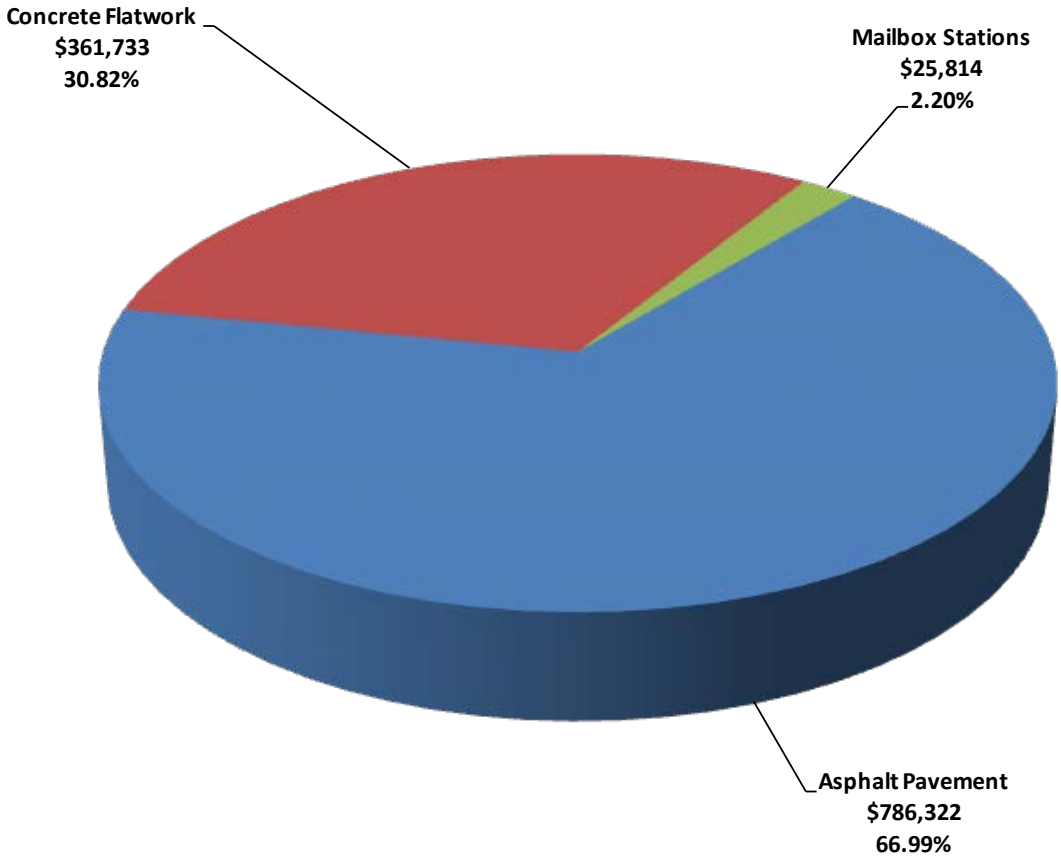
The most important category of Common Reserve Components noted in ***Reserve Expenditures*** is the Property Site Elements. The following chart illustrates the relative importance of the Reserve Expenditures and relative funding during the next 30 years.

Westerley Common
Future Expenditures Relative Cost Illustration



The most important category of Townhome Reserve Components noted in ***Reserve Expenditures*** is the Asphalt Pavement. The following chart illustrates the relative importance of the Reserve Expenditures and relative funding during the next 30 years.

Westerley Townhome
Future Expenditures Relative Cost Illustration



Reserve Advisors, Inc.

Common

RESERVE EXPENDITURES

Westerley Homeowners Association
Sterling, Virginia

Explanatory Notes:

1) 2.0% is the estimated future Inflation Rate for estimating Future Replacement Costs.
2) FY2013 is Fiscal Year beginning January 1, 2013 and ending December 31, 2013.

Line Item	Quantities: 30-Year Total	Per Phase	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Unit Cost, $	2013 Cost per Phase, $	Total Future Costs, $	RUL = 0 FY2013	1 2014	2 2015	3 2016	4 2017	5 2018	6 2019	7 2020	8 2021	9 2022	10 2023	11 2024	12 2025	13 2026	14 2027	15 2028	16 2029	17 2030	18 2031	19 2032	20 2033
				Property Site Elements																										
4.041	560	**560**	Square Yards	Asphalt Pavement, Mill and Overlay	2017	15 to 20	4	16.00	8,960	**9,699**					9,699															
4.046	560	**560**	Square Yards	Asphalt Pavement, Total Replacement	2037	15 to 20	24	29.00	16,240	**26,121**																				
4.080	820	**410**	Square Yards	Asphalt Pavement, Total Replacement, Walking Paths	2014	10 to 15	1	35.00	14,350	**34,336**		14,637														19,699				
4.285	730	**730**	Linear Feet	Fences, Wood, Split Rail	2019	to 25	6	16.50	12,045	**13,565**							13,565													
4.286	3,000	**1,500**	Linear Feet	Fence, Wood, Shadowbox, Replacement	2019	to 25	6	40.00	60,000	**174,121**							67,570													
4.287	5,500	**1,100**	Linear Feet	Fences, Wood, Painted, Paint Applications	2016	4 to 6	3	6.00	6,600	**45,318**				7,004							8,206					9,060				
4.288	2,200	**1,100**	Linear Feet	Fences, Wood, Painted, Replacement	2019	to 25	6	40.00	44,000	**127,688**							49,551													
4.660	1	**1**	Allowance	Playground Equipment	2025	15 to 20	12	19,000.00	19,000	**24,097**												24,097								
4.730	1,920	**960**	Square Yards	Retention Basins, Sediment and Overgrowth Removal, Partial	2014	to 35	1	25.00	24,000	**60,856**		24,480																		
4.800	2	**1**	Allowance	Signage, Renovation	2015	to 20	2	4,000.00	4,000	**10,346**			4,162																	
				Pool House Elements																										
5.310	1	**1**	Allowance	Exterior Renovation	2019	to 25	6	20,000.00	20,000	**22,523**							22,523													
5.500	2	**1**	Allowance	Interior Renovation, Complete	2023	to 20	10	18,000.00	18,000	**54,547**											21,942									
5.510	1	**1**	Allowance	Interior Renovation, Paint Applications	2033	to 10	20	3,000.00	3,000	**4,458**																				4,458
				Pool Elements																										
6.200	16,200	**5,400**	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2018	8 to 12	5	1.90	10,260	**41,970**						11,328									13,809				
6.300	13,600	**3,400**	Square Feet	Covers, Vinyl	2018	6 to 8	5	1.60	5,440	**30,949**						6,006							7,037							
6.400	535	**535**	Linear Feet	Fences, Chain Link	2022	to 25	9	35.00	18,725	**22,378**									22,378											
6.500	3	**1**	Allowance	Furniture	2016	to 12	3	26,600.00	26,600	**109,431**				28,228											35,800					
6.600	4	**1**	Allowance	Mechanical Equipment, Phased	2017	to 15	4	8,000.00	8,000	**43,157**					8,659						9,947							11,426		
6.800	10,080	**3,360**	Square Feet	Pool Finish	2020	8 to 12	7	10.50	35,280	**150,146**							40,526										49,401			
	1	**1**	Allowance	**Reserve Study Update with Site Visit**	2015	2	2	2,550.00	2,550	**2,550**			2,550																	
				Anticipated Expenditures, By Year						**$1,008,256**	0	39,117	6,712	35,232	18,358	17,334	153,209	40,526	0	22,378	21,942	18,153	24,097	7,037	0	49,609	28,759	49,401	11,426	0	4,458

Common

RESERVE EXPENDITURES

Westerley Homeowners Association

Sterling, Virginia

Line Item	Reserve Component Inventory	21 2034	22 2035	23 2036	24 2037	25 2038	26 2039	27 2040	28 2041	29 2042	30 2043
	Property Site Elements										
4.041	Asphalt Pavement, Mill and Overlay										
4.046	Asphalt Pavement, Total Replacement				26,121						
4.080	Asphalt Pavement, Total Replacement, Walking Paths										
4.285	Fences, Wood, Split Rail										
4.286	Fence, Wood, Shadowbox, Replacement									106,551	
4.287	Fences, Wood, Painted, Paint Applications	10,003					11,045				
4.288	Fences, Wood, Painted, Replacement									78,137	
4.660	Playground Equipment										
4.730	Retention Basins, Sediment and Overgrowth Removal, Partial	36,376									
4.800	Signage, Renovation		6,184								
	Pool House Elements										
5.310	Exterior Renovation										
5.500	Interior Renovation, Complete										32,605
5.510	Interior Renovation, Paint Applications										
	Pool Elements										
6.200	Concrete Deck, Inspections, Partial Replacements and Repairs					16,833					
6.300	Covers, Vinyl	8,245								9,661	
6.400	Fences, Chain Link										
6.500	Furniture							45,403			
6.600	Mechanical Equipment, Phased					13,125					
6.800	Pool Finish							60,219			
	Reserve Study Update with Site Visit										
	Anticipated Expenditures, By Year	54,624	6,184	0	26,121	29,958	11,045	105,622	0	194,349	32,605

RESERVE FUNDING PLAN

Common

CASH FLOW ANALYSIS

Westerley Homeowners Association

Sterling, Virginia

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Reserves at Beginning of Year (Note 1)	163,229	167,692	157,655	182,403	181,059	198,980	220,440	106,218	104,746	144,811	163,620	183,879	208,975	229,175	267,555	314,338
	Total Recommended Reserve Contributions (Note 2)	**4,160**	**27,300**	**29,600**	**31,900**	**34,200**	**36,500**	**37,200**	**37,900**	**38,700**	**39,500**	**40,300**	**41,100**	**41,900**	**42,700**	**43,600**	**44,500**
Plus	**Estimated Interest Earned, During Year (Note 3)**	303	1,780	1,860	1,988	2,079	2,294	1,787	1,154	1,365	1,687	1,901	2,149	2,397	2,717	3,183	3,430
Less	**Anticipated Expenditures, By Year**	0	(39,117)	(6,712)	(35,232)	(18,358)	(17,334)	(153,209)	(40,526)	0	(22,378)	(21,942)	(18,153)	(24,097)	(7,037)	0	(49,609)
	Anticipated Reserves at Year End	$167,692	$157,655	$182,403	$181,059	$198,980	$220,440	$106,218 **(NOTE 5)**	$104,746 **(NOTE 5)**	$144,811	$163,620	$183,879	$208,975	$229,175	$267,555	$314,338	$312,659

(continued)

Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued

		2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	Reserves at Beginning of Year	312,659	332,831	333,374	373,012	425,480	475,048	475,725	526,121	584,295	617,850	649,022	700,660	658,875	723,939	595,507
	Total Recommended Reserve Contributions	**45,400**	**46,300**	**47,200**	**48,100**	**49,100**	**50,100**	**51,100**	**52,100**	**53,100**	**54,200**	**55,300**	**56,400**	**57,500**	**58,700**	**59,900**
Plus	**Estimated Interest Earned, During Year**	3,531	3,644	3,864	4,368	4,926	5,201	5,480	6,074	6,576	6,930	7,383	7,437	7,564	7,217	6,701
Less	**Anticipated Expenditures, By Year**	(28,759)	(49,401)	(11,426)	0	(4,458)	(54,624)	(6,184)	0	(26,121)	(29,958)	(11,045)	(105,622)	0	(194,349)	(32,605)
	Anticipated Reserves at Year End	$332,831	$333,374	$373,012	$425,480	$475,048	$475,725	$526,121	$584,295	$617,850	$649,022	$700,660	$658,875	$723,939	$595,507	$629,503 **(NOTE 4)**

Explanatory Notes:

1) Year 2013 starting reserves are as of October 31, 2013; FY2013 starts January 1, 2013 and ends December 31, 2013.

2) Reserve Contributions for 2013 are the remaining budgeted 2 months; 2014 is the first year of recommended contributions.

3) 1.1% is the estimated annual rate of return on invested reserves; 2013 is a partial year of interest earned.

4) Accumulated year 2043 ending reserves consider the need to fund for replacement of the replacement of the pool structure and deck shortly after 2043, and the age, size, overall condition and complexity of the property.

5) Threshold Funding Years (reserve balance at critical point).

Reserve Advisors, Inc.

Townhome

RESERVE EXPENDITURES

Westerley Homeowners Association
Sterling, Virginia

Explanatory Notes:

1) **2.0%** **is the estimated future Inflation Rate for estimating Future Replacement Costs.**
2) **FY2013 is Fiscal Year beginning January 1, 2013 and ending December 31, 2013.**

Line Item	Quantities: 30-Year Total	Per Phase	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Unit Cost, $	2013 Cost per Phase, $	Total Future Costs, $	RUL = 0 FY2013	1 2014	2 2015	3 2016	4 2017	5 2018	6 2019	7 2020	8 2021	9 2022	10 2023	11 2024	12 2025	13 2026	14 2027	15 2028	16 2029	17 2030	18 2031	19 2032	20 2033
				Property Site Elements																										
4.020	68,700	**11,450**	Square Yards	Asphalt Pavement, Crack Repair and Patch	2015	3 to 5	2	0.70	8,015	**64,762**			8,339						9,391				10,165				11,003				11,910
4.040	11,460	**5,730**	Square Yards	Asphalt Pavement, Mill and Overlay, Phased	2017	15 to 20	4	14.50	83,085	**181,667**					89,934	91,733														
4.045	11,460	**5,730**	Square Yards	Asphalt Pavement, Total Replacement, Phased	2037	15 to 20	24	29.00	166,170	**539,893**																				
4.110	2,800	**700**	Linear Feet	Concrete Curbs and Gutters, Partial	2017	to 65	4	31.00	21,700	**117,952**					23,489	23,959														
4.140	17,000	**3,400**	Square Feet	Concrete Sidewalks, Partial	2019	to 65	6	9.90	33,660	**243,781**							37,907						42,689					48,075		
4.600	16	**16**	Each	Mailbox Stations	2022	to 25	9	1,350.00	21,600	**25,814**										25,814										
				Anticipated Expenditures, By Year						**$1,173,869**	0	0	8,339	0	113,423	115,692	37,907	0	9,391	25,814	0	0	52,854	0	0	0	11,003	0	48,075	0	11,910

Townhome

RESERVE EXPENDITURES

Westerley Homeowners Association
Sterling, Virginia

Line Item	Reserve Component Inventory	21 2034	22 2035	23 2036	24 2037	25 2038	26 2039	27 2040	28 2041	29 2042	30 2043
	Property Site Elements										
4.020	Asphalt Pavement, Crack Repair and Patch								13,954		
4.040	Asphalt Pavement, Mill and Overlay, Phased										
4.045	Asphalt Pavement, Total Replacement, Phased				267,274	272,619					
4.110	Concrete Curbs and Gutters, Partial				34,903	35,601					
4.140	Concrete Sidewalks, Partial				54,140						60,970
4.600	Mailbox Stations										
	Anticipated Expenditures, By Year	0	0	0	356,317	308,220	0	0	13,954	0	60,970

RESERVE FUNDING PLAN

Townhome

CASH FLOW ANALYSIS

Westerley Homeowners Association

Sterling, Virginia

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Reserves at Beginning of Year (Note 1)	171,434	177,470	207,073	229,220	260,599	178,880	94,584	88,177	120,418	144,174	152,282	187,038	222,880	206,676	244,142	282,724
	Total Recommended Reserve Contributions (Note 2)	**5,716**	**27,500**	**28,100**	**28,700**	**29,300**	**29,900**	**30,500**	**31,100**	**31,700**	**32,300**	**32,900**	**33,600**	**34,300**	**35,000**	**35,700**	**36,400**
Plus	**Estimated Interest Earned, During Year (Note 3)**	320	2,103	2,386	2,679	2,404	1,496	1,000	1,141	1,447	1,622	1,856	2,242	2,350	2,466	2,882	3,310
Less	**Anticipated Expenditures, By Year**	0	0	(8,339)	0	(113,423)	(115,692)	(37,907)	0	(9,391)	(25,814)	0	0	(52,854)	0	0	0
	Anticipated Reserves at Year End	$177,470	$207,073	$229,220	$260,599	$178,880	$94,584	$88,177	$120,418	$144,174	$152,282	$187,038	$222,880	$206,676	$244,142	$282,724	$322,434

(continued)

Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued

		2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	Reserves at Beginning of Year	322,434	352,221	394,103	388,911	432,806	466,012	512,364	560,030	609,025	301,187	39,229	85,210	132,601	167,388	217,493
	Total Recommended Reserve Contributions	**37,100**	**37,800**	**38,600**	**39,400**	**40,200**	**41,000**	**41,800**	**42,600**	**43,500**	**44,400**	**45,300**	**46,200**	**47,100**	**48,000**	**49,000**
Plus	**Estimated Interest Earned, During Year**	3,690	4,082	4,283	4,495	4,916	5,352	5,866	6,395	4,979	1,862	681	1,191	1,641	2,105	2,327
Less	**Anticipated Expenditures, By Year**	(11,003)	0	(48,075)	0	(11,910)	0	0	0	(356,317)	(308,220)	0	0	(13,954)	0	(60,970)
	Anticipated Reserves at Year End	$352,221	$394,103	$388,911	$432,806	$466,012	$512,364	$560,030	$609,025	$301,187	$39,229	$85,210	$132,601	$167,388	$217,493	$207,850
											(NOTE 5)					**(NOTE 4)**

Explanatory Notes:

1) Year 2013 starting reserves are as of October 31, 2013; FY2013 starts January 1, 2013 and ends December 31, 2013.

2) Reserve Contributions for 2013 are the remaining budgeted 2 months; 2014 is the first year of recommended contributions.

3) 1.1% is the estimated annual rate of return on invested reserves; 2013 is a partial year of interest earned.

4) Accumulated year 2043 ending reserves consider the need to fund for replacement of the subsequent replacement of the asphalt pavement shortly after 2043, and the age, size, overall condition and complexity of the property.

5) Threshold Funding Year (reserve balance at critical point).

4. CONDITION ASSESSMENT

The Condition Assessment of this *Precision 20/20 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*.

Property Site Elements

Asphalt Pavement, Repaving - Asphalt pavement comprises 555 square yards of the pool area. The pavement is original and in good to fair overall condition. We note prior crack repair. The useful life of pavement in Sterling is from 15- to 20-years. 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. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the mill and overlay method for initial repaving followed by the total replacement method for subsequent repaving at Westerley.

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. Westerley should repair any isolated areas of deteriorated pavement periodically. The Association should funding these activities through the operating budget. We recommend the Association plan for a phased milling and overlayment of the pavement with area patching of up to ten percent (10%) by 2017. We recommend the Association plan for total replacement by 2037. We depict this information on Line Items 4.041 and 4.046 of ***Reserve Expenditures***. Our estimate includes partial replacement of the concrete curbs and gutters as needed in coordination with asphalt repaving.

Asphalt Pavement, Repaving, Walking Paths - The Association maintains 410 square yards of asphalt walking paths along the painted fence parallel to Southern Oaks Terrace and a small section between the townhomes at Vermont Maple Terrace. These paths are original and in poor overall condition. We note tree root damage, cracks and edge cracks. Pages 5.2 and 5.3 of ***Photographs*** depict these conditions. 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. We recommend the Association budget for total replacement of the asphalt walking path pavement by 2014 and again by 2029. We anticipate total replacement is likely to maintain a safe pedestrian walking surface. We include this information on Line Item 4.080 of ***Reserve Expenditures***.

Fences, Wood – The Association maintains approximately 730 linear feet of split rail wood fences, 1,500 linear feet of shadowbox wood fences and 1,100 linear feet of painted wood

fences. They are found at around the retention basins, parallel to Antioch Place and along the walking path parallel to Southern Oaks Terrace, respectively. The fences are original and in good to fair condition. We note no visible deterioration at the split rail and painted fences. We note lean and board warp at the shadowbox fences. Pages 5.5 and 5.6 of ***Photographs*** depict these conditions. Wood fences of this type have useful lives of up to 25 years. The Association should anticipate partial replacements every five years due to the nonuniform nature of wood deterioration. Along with these partial replacements, the Association should apply periodic paint applications to the painted wood fences. We suggest the Association plan for replacement of the split rail fences by 2019. We suggest the Association plan for replacement of the painted and shadowbox fences by 2019 and again by 2042. We recommend the Association apply paint to the painted fences along the asphalt pavement walking paths by 2016 prior to replacement, and again in 2024 and every five years thereafter except when replacement occurs. We depict this information on Line Items 4.285 to 4.288 of ***Reserve Expenditures***.

Playground Equipment - The Association maintains playground equipment near the pool area. The playground equipment includes the following elements:

- Swingsets
- Playsets
- Surface, Wood Chips
- Border, Wood
- Picnic Benches

The playground equipment was installed in 2005 and is in good condition. 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 http://www.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 20- years. We recommend replacement of the playground equipment by 2025. We include this information on Line Item 4.660 of ***Reserve Expenditures***. We include the chain link fence quantity with the pool fence.

Retention Basins - The Association maintains three retention basins comprising approximately 1,600 total square yards of surface area located near Southern Oaks Terrace, Backwater Drive and Tamarack Ridge Square. The health or condition of a retention basin is reflected in the clarity of the water, balance of plant life, the ability of the water to retain life giving gases and the health of the fish in larger bodies of water. Retention basins are used to manage water quality and storm water drainage. When retention basins are found to have water in them the majority of the time, best management practices similar to that of a pond also apply. For purposes of this simplicity, we reference the retention basins as "ponds." Three factors which affect the health of ponds are erosion, buildup of silt and algae blooms. We note overgrowth as depicted on Pages 5.7 and 5.8 of ***Photographs***. Management and the Board do not report any problems with algae blooms. We include the following solutions and procedures as a summary of the minimum requirements for successful pond management for present and future board members.

Eutrophication is a process in which a pond becomes more shallow and more biologically productive. Human or animal activity often increases the rate of eutrophication. Erosion and storm water deposit fines or silt into the pond and affect the rate of eutrophication. The amount and intensity of rainfall, soil saturation levels and ground cover all affect the amount of deposits into the pond. Run-off from construction excavations is another contributor to changes in the

depth of the pond. Lawn fertilizers are another source of nutrients that contribute to eutrophication. Fertilizers often contain nitrogen and phosphorous which exacerbate nutrient loads into the water system. We advise that Westerley consider the use of fertilizers with low or no phosphorus content for areas adjacent to the retention basins.

Another method to slow eutrophication is the use of algae-killing chemical treatments. Introduction of metal compounds, such as copper sulfate, to the water renders the nutrients inactive to the algae. If necessary, we recommend the Association fund the use of chemical treatments to control algae growth in the pond through the operating budget. The Association should first obtain all permits necessary for the use of chemical treatments.

There are several methods with which the Association can manage the retention basins and limit algae blooms and slow the eutrophication process. We discuss each management method below.

Sediment Removal - Approximately 1,600 square yards of water surface area comprise the retention basins. The gradual build-up of natural debris, including tree leaves, branches and silt, may eventually change the topography of areas of the pond. Silt typically accumulates at inlets, outlets and areas of shoreline erosion. Sediment removal of ponds becomes necessary if this accumulation alters the quality of pond water or the functionality of the ponds as storm water management structures. Sediment removal is the optimal but also the most capital intensive method of pond management. Excavation equipment used for sediment removal includes clamshells, draglines and suction pipe lines. Sediment removal can also include shoreline regrading. Regrading includes removal of collapsed and eroded soil, and redefining the shoreline.

Determining the amount of silt to remove is difficult to estimate but is dependent on the surface area of the body of water and depth of sediment to remove. The surface area of a body of water can be easily estimated with relatively reasonable accuracy. However, difficulties arise in determining the depth of removal, where to remove and the cost per cubic yard. We discuss each of these three factors in the following three paragraphs.

A visual inspection of a body of water cannot reveal the amount of accumulated silt. This is especially true on larger bodies of water. It is therefore inaccurate to assume

an entire body of water will require sediment removal. It is more cost effective to spot remove in areas of intense silt accumulation as noted through bathymetric surveys. The amount or depth of silt is determined through prodding into the silt until a relatively solid base is found or through bathymetric surveys. A bathymetric survey establishes a base of data about the depth of the body of water over many locations against which the data of future surveys is compared. These invasive procedures are beyond the scope of a Reserve Study and require multiple visits to the site. We recommend Westerley contract with a local engineer for annual bathymetric surveys. Future updates of the Reserve Study can incorporate future anticipated expenditures based on the results of the bathymetric surveys.

Unit costs per cubic yard to remove can vary significantly based on the type of equipment used, quantity of removed material and disposal of removed material. Sediment removal costs must also include mobilization, or getting the equipment to and from the site. Mobilization costs to position the equipment on the water surface are much higher compared to removal with a back hoe from the shoreline. Also, the portion of the overall cost to remove associated with mobilization varies based the on the volume removed. Costs for sediment disposal also vary depending on the site. Compact sites will require hauling and in some cases disposal fees.

The steep shoreline embankments are likely to exacerbate soil movement and erosion. The use and maintenance of landscape, natural vegetation and/or stone rip rap along the pond shorelines will help maintain an attractive appearance and prevent soil erosion.

Shoreline plantings are referred to as buffer zones. Buffer zones provide the following advantages:

- Control insects naturally
- Create an aesthetically pleasing shoreline
- Enhance water infiltration and storage
- Filter nutrients and pollutants
- Increase fish and wildlife habitat
- Reduce lawn maintenance
- Stabilize shoreline and reduce erosion
- Trap sediments

These buffer zones can become overgrown and deciduous trees in the vicinity of the retention basins will deposit leaves in the water during the autumn season. We also note natural vegetation at the perimeter of a portion of the retention basins. These conditions suggest the Association should plan for eventual removal of sediment from the decay of seasonal vegetation at the pond perimeters.

Based on the visual condition, adjacent deciduous trees and visibly apparent erosion, we recommend the Association anticipate the need to remove pond sediment and overgrowth every 20 years. For reserve budgeting purposes, we estimate the need to remove sixty percent (60%), or approximately 960 square yards of the surface area an

average depth of one yard. However, the actual volume of material to remove may vary dependent upon an invasive analysis at the time of removal. We conservatively recommend that the Association budget for this variable but probable activity by 2014 and again by 2034. The time and cost of this maintenance activity may vary. However, we judge the amount shown on Line Item 4.730 of ***Reserve Expenditures*** sufficient to budget appropriate reserves.

The above management methods will help to maintain the retention basins and potentially reduce more costly future maintenance expenditures.

Signage - The Association maintains a property identification sign at the entrance to the property that include the following elements:

- Stone identification sign
- Stone pillars
- Stone retaining wall
- Wood fences

The signage is original and in good to fair condition. Community signage contributes to the overall aesthetic appearance to owners and potential buyers. Renovation or 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 times for replacement or renovation are discretionary. We recommend the Association plan to renovate the signage every 20 years, or by 2015 and again by 2035. Renovation should include the following work:

- Repointing and repairs to the stone masonry
- Capital repairs to the retaining wall
- Replacement of the wood fences

We note this information on Line Item 4.800 of ***Reserve Expenditures***. The Association should fund interim repairs and replacements through the operating budget.

Pool House Elements

Exterior Renovations - The pool house exterior comprises the following:

- 1,370 square feet of siding

- 230 square feet of windows and doors
- 11 squares of asphalt shingle roofs
- 80 linear feet of gutters and downspouts

The pool house exterior elements are original and in good condition. We note deterioration of the wood trim as depicted on Page 5.10 of ***Photographs***. The Association plans to replace the trim through the operating budget. The useful lives of the pool 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.

We recommend the Association anticipate complete exterior renovations every up to 25 years. These *complete* renovations should include replacement of each of the previously mentioned elements. Based on the age and visual condition of these exterior pool house elements, we recommend the Association budget for the next coordinated complete exterior renovation by 2019. Line Item 5.310 of ***Reserve Expenditures*** notes our estimate of future costs and anticipated times of exterior pool house renovations.

Interior Renovations - The pool house interior comprises approximately 600 square feet of finished area. Interior components of the pool house include:

- Painted concrete floor coverings
- Tile wall edging
- Paint finishes on the walls and ceilings
- Plumbing fixtures
- Light fixtures including exit and emergency lights
- Furnishings

The Association last partially renovated the pool house interior in 2013. The useful lives 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 combine their replacements into coordinated interior renovations.

We recommend the Association anticipate complete interior renovations every 20 years. These *complete* renovations should include replacement of all the interior components listed above including paint applications to the floors, walls and ceilings.

Based on the age and visual condition of these interior pool house elements, we recommend the Association budget for a coordinated complete interior renovation by 2023 and again by 2043.

In addition to the complete renovation, Westerley should also anticipate partial interior renovations every 10 years. These *partial* renovations should include the following:

- Application of paint finish to all surfaces

Based on the reported age and visual condition of these interior pool house elements, we recommend the Association budget for coordinated partial interior renovations by 2033. Line Items 5.00 and 5.510 of ***Reserve Expenditures*** note our estimates of future costs and anticipated times of interior pool house renovations.

Pool Elements

Concrete Deck - A concrete deck surrounds the pool and comprises approximately 5,400 square feet. The deck was installed in 1997 and is in good condition. We note prior crack repairs. Page 5.11 of ***Photographs*** depicts this condition. The useful life of a concrete pool deck is up to 60 years. However, we recommend the Association conduct inspections, partial replacements and repairs to the deck every 8- to 12-years.

Inadequate subsurface preparation, improper concrete mixtures, poor finishing techniques, soil movement and water infiltration underneath the concrete deck can cause significant settlement and cracks in the concrete. The pool deck should also be free of trip hazards for the safety of residents and their guests. We recommend the Association budget for the following by 2018 and every 10 years thereafter:

- Selective cut out and replacements of up to ten percent (10%) of concrete
- Crack repairs as needed
- Mortar joint repairs
- Caulk replacement

The times, amounts and related costs of these repairs and replacements may vary. However, we judge the amounts shown on Line Item 6.200 of ***Reserve Expenditures*** sufficient to budget appropriate reserves.

Covers - Two vinyl covers protect the main pool and wading pool during the off season. The covers were replaced in 2010, comprise approximately 3,400 total square feet, and are in good overall condition. We note isolated cover damage as depicted on Page 5.12 of ***Photographs***. The pool covers protect against unlawful entry and liability exposure, keep the pools clear of unwanted leaves and debris, and protect the pools from harsh conditions during winter. The useful life of the pool covers are from six- to eight-years. We recommend Westerley anticipate replacement of these covers by 2018 and every eight years thereafter. We depict this information on Line Item 6.300 of ***Reserve Expenditures***.

Fences, Chain Link - The Association maintains approximately 535 linear feet of chain link fence at the pool deck. The fence is 1997 and in good to fair overall condition. We note vinyl coating deterioration. Page 5.12 of ***Photographs*** depicts this condition. Chain link fences have useful lives of up to 25 years. We recommend the Association anticipate replacement of

the pool fence by 2022 concurrent with any necessary replacement of the concrete pool deck. We include this information on Line Item 6.400 of ***Reserve Expenditures***.

Furniture - Associated furniture and fixtures around the pool include the following:

- Chairs (59)
- Ladders and life safety equipment
- Life Guard Stands (2)
- Lounges (38)
- Tables (8)
- Umbrellas (11)

These items were purchased in 1997 and are in good to fair condition. Pool furniture has a useful life of up to 12 years. We recommend the Association budget an allowance for replacement of the pool furniture and fixtures by 2016 and every 12 years thereafter. The times and costs of these replacements may vary. However, we judge the amounts shown on Line Item 6.500 of ***Reserve Expenditures*** sufficient to budget appropriate reserves. We recommend interim re-strapping, refinishing, cushion replacements, reupholstering and other repairs to the furniture as normal maintenance to maximize its useful life.

Mechanical Equipment - The pool mechanical equipment comprises the following:

- Automatic chlorinator
- Controls
- Filters
- Interconnected pipe, fittings and valves
- Pumps
- Electrical panel
- Exhaust fan

The pool mechanical equipment is original and in satisfactory condition. Pool mechanical equipment has a useful life of up to 15 years. Failure of the pool mechanical equipment as a single event is unlikely. Based on condition, we recommend the Association anticipate replacement of up to fifty percent (50%) of the pool mechanical equipment by 2017

and every seven years thereafter. We consider interim replacement of motors and minor repairs as normal maintenance. We note this information on Line Item 6.600 of ***Reserve Expenditures***.

Pool Finish - The pool wall and floor surfaces have a plaster finish of 3,360 square feet based on the horizontal surface area. The finish is 2010 and in good condition. We were unable to inspect the pool due to the cover. This type of pool finish deteriorates with time and requires periodic maintenance and replacement. We recommend the Association anticipate the need to replace the finish and conduct related repairs every 8- to 12-years to maintain the integrity of the pool structure. Removal and replacement provides the opportunity to inspect the pool structure and to allow for partial repairs of the underlying concrete surfaces as needed. We recommend the Association budget for the following by 2020 and every 10 years thereafter:

- Removal and replacement of the finish
- Partial replacements of the scuppers and coping as needed
- Replacement of tiles as needed
- Replacement of joint sealants as needed
- Concrete structure repairs as needed

We include this information on Line Item 6.800 of ***Reserve Expenditures***.

Townhome Elements

Asphalt Pavement, Crack Repair and Patch - Asphalt pavement comprises 11,450 square yards throughout the townhome areas. The pavement was installed in 1997 and is in good overall condition. We note cracks and prior crack repair. To maximize the life of the pavement, the Association should plan for repairs every three- to five-years. These activities reduce water infiltration and the effects of inclement weather. We elaborate on solutions and procedures necessary for the optimal maintenance of asphalt pavement in the following discussion.

Asphalt pavement is susceptible to isolated areas of accelerated deterioration in areas that experience freeze-thaw cycles, at the centerlines of streets and at high traffic areas such as intersections. Depressions often appear at areas where vehicles park such as driveways and parking areas. Isolated areas of depressions, cracks and deterioration indicate the need for crack repairs and patching. The contractor should patch areas that exhibit potholes, alligator or spider web pattern cracks, and areas of pavement that are severely deteriorated from oil and gasoline deposits from parking vehicles. Area patching requires total replacement of isolated areas of pavement. The contractor should mechanically rout and fill all cracks with hot emulsion. Crack repair minimizes the chance of the cracks transmitting through the pavement.

There are four main types of seal coats available: fog coat, acrylic sealer, chip seals and asphaltic emulsion. A *fog coat* is a simple mixture of water and asphalt. *Acrylic sealers* include an acrylic additive to the water and asphalt mixture for greater resistance to abrasion. *Fog coats* and *acrylic sealers* are typically spray applied and are only for aesthetic purposes. *Chip seal* is the most substantial type of seal coat which involves placement of oil and aggregate on the driving surface. Either a roller or normal vehicular traffic works the gravel into the oil. *Asphaltic emulsions* combine a sharp sand mixture or mineral fibers, and an emulsifying agent with the water and asphalt mixture. *Asphaltic emulsions* are typically hand applied with squeegees to ensure that the sealer fills surface abrasions and minor cracks. This prevents the infiltration of water through cracks into the underlying pavement base. Seal coats therefore minimize the damaging effects of water from expansion and contraction. We regard *asphaltic emulsions* as the most effective and economical type of seal coat.

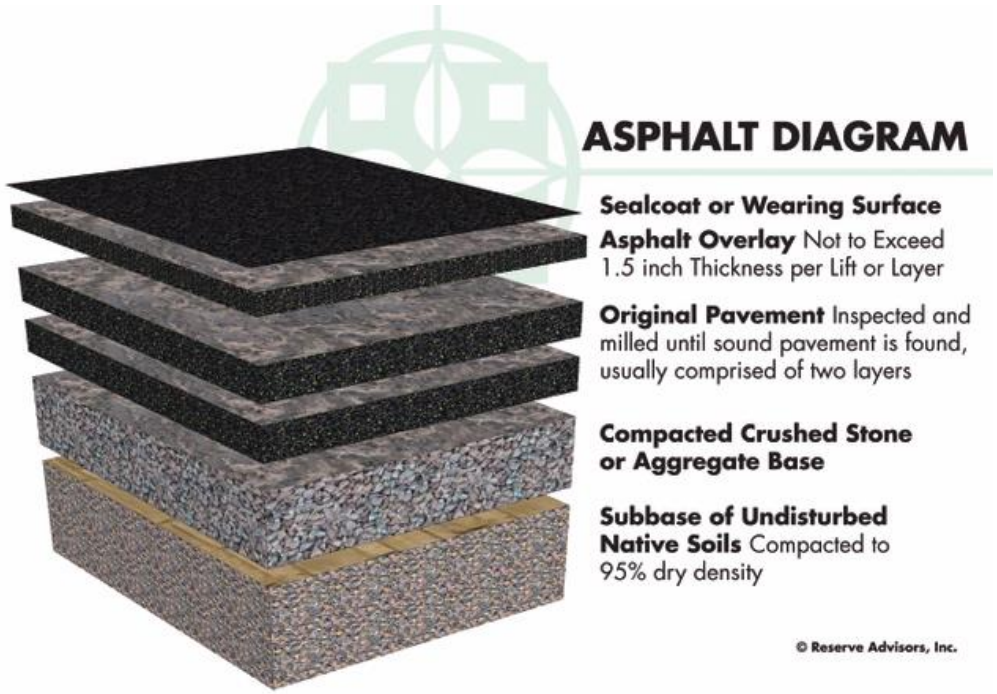
Westerley should repair any isolated areas of deteriorated pavement prior to seal coat applications. Proposals for seal coat applications should include crack repairs and patching. The contractor should only apply seal coat applications after repairs are completed. A seal coat does not bridge or close cracks, therefore, unrepaired cracks render the seal coat applications useless. Our future estimates of cost include an allowance for repair activities.

Westerley should budget for crack repairs and patching by 2015 prior to replacement of the pavement. The Association should budget for subsequent crack repairs and patching by 2021 and every four years thereafter except when repaving occurs. Line Item 4.020 of ***Reserve Expenditures*** notes our estimate of future costs and anticipated times of these activities.

Asphalt Pavement, Repaving - Asphalt pavement comprises 11,453 square yards throughout the townhome areas. The pavement was installed in 1997 and is in good overall condition. We note cracks and prior crack repair. Pages 5.13 through 5.15 of ***Photographs*** depict these conditions. The useful life of pavement in Sterling 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. The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing

course. The wearing course comprises a finer aggregate for a smoother more watertight finish. The following diagram depicts these components:



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 mill and

overlay method for initial repaving followed by the total replacement method for subsequent repaving at Westerley.

A variety of repairs are necessary to deteriorated pavement prior to the application of an overlay. The contractor should use a combination of area patching, crack repair and milling before the overlayment. Properly milled pavement removes part of the existing pavement and permits the overlay to match the elevation of adjacent areas not subject to repaving. Milling also allows the contractor to make adjustments to the slope of the pavement to ensure proper drainage. The contractor should clean the milled pavement to ensure proper bonding of the new overlayment. We recommend an overlayment thickness that averages 1½ inches (not less than one inch or more than two inches). Variable thicknesses are often necessary to create an adequate slope for proper drainage. The contractor should identify and quantify areas of pavement that require area patching, crack repair and milling to help the Association compare proposed services.

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. Westerley should repair any isolated areas of deteriorated pavement concurrent with periodic seal coat applications. We recommend the Association plan for a phased milling and overlayment of the pavement with area patching of up to ten percent (10%) beginning by 2017 and concluding by 2018. We recommend the Association plan a phased total replacement beginning by 2037 and concluding by 2038. We depict this information on Line Items 4.040 and 4.045 of ***Reserve Expenditures***. The Association should coordinate asphalt repaving with related activities such as partial replacement of concrete curbs and gutters, and capital repairs to catch basins.

Concrete, Flatwork - The Association maintains various applications of concrete flatwork. These applications of concrete have useful lives of up to 65 years although isolated deterioration of limited areas of concrete is common. Inclement weather, inadequate subsurface preparation and improper concrete mixtures or finishing techniques can result in premature deterioration such as settlement, chips, cracks and spalls. Variable conditions like these result in the need to plan for periodic partial replacements of the concrete flatwork throughout the next 30 years. We comment on the respective quantities, conditions and times of partial replacements of concrete flatwork in the following sections of this narrative.

Concrete Curbs and Gutters – Concrete curbs and gutters line the pavement of Westerley. These 24-inch curbs and gutters comprise 9,333 linear feet and are in good condition overall. We note no visible deterioration. We estimate that up to 700 linear feet of curbs and gutters, or eight percent (7.5%) of the total, will require replacement in conjunction with each repaving event. We depict this information on Line Item 4.110 of

Reserve Expenditures. We assume the use of 3,500 psi (pounds per square inch) concrete.

Concrete Sidewalks - Concrete sidewalks comprise 34,000 square feet throughout the community. The sidewalks are in good overall condition. We note settlement. We estimate that up to 17,000 square feet of concrete sidewalks, or fifty percent (50%) of the total, will require replacement during the next 30 years. We recommend the Association budget for replacement of 3,400 square feet of concrete sidewalks every six years beginning by 2019. Line Item 4.140 of ***Reserve Expenditures*** notes our estimate of future costs and anticipated times of replacements. We base our estimate of replacement on four-inch thick, 3,000 psi (pounds per square inch) concrete with 6x6 - W1.4xW1.4 steel reinforcing mesh. We recommend an annual inspection of the sidewalks to identify potential trip hazards. We suggest that the Association grind down or mark these hazards with orange safety paint prior to replacement and fund this ongoing activity through the operating budget.

The times and costs of these replacements may vary. However, the estimated expenditures detailed in ***Reserve Expenditures*** are sufficient to budget appropriate reserves.

Mailbox Stations - The Association maintains 16 metal mailbox stations throughout the townhome areas that contain 223 individual mailboxes. The mailbox stations were installed with the townhomes in 1997, are in good condition and have a useful life of up to 25 years. Westerley should budget for replacement of the mailbox stations by 2022. We depict this information on Line Item 4.600 of ***Reserve Expenditures***. The Association should verify the new mailboxes meet the specifications of the *United States Postal Service*.

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. PHOTOGRAPHS

Photographs document the conditions of various property components as of the date of our visual inspection, October 10, 2013. The Condition Assessment contains references to these photographs.

The following is an overview image of the pool house and pool area:

The next pages contain the photographs related to the Condition Assessment

Asphalt pavement pool parking area

Asphalt pavement walking path parallel to Southern Oaks Terrace

Asphalt pavement walking path tree root damage parallel to Southern Oaks Terrace

Asphalt pavement walking path edge cracks parallel to Southern Oaks Terrace

Asphalt pavement walking path cracks parallel to Southern Oaks Terrace

Asphalt pavement walking path between townhomes at Vermont Maple Terrace

Wood split rail fence at retention basin

Wood split rail fence at retention basin

Painted fence along asphalt pavement walking path

Painted fence along asphalt pavement walking path

Shadowbox wood fence lean

Shadowbox wood fence along drainage area

Shadowbox wood stockade fence board warp

Playground equipment

Swing set

Picnic benches

Note: Replace masonry pavers through the operating budget

Retention basin near Tamarack Ridge Square

Retention basin near Southern Oaks Terrace

Retention basin near Backwater Drive

Entrance monument signage

Masonry pillar accents at entrance monument signage

Wood fence at entrance monument signage

Pool house exterior

Pool house exterior

Pool house exterior wood trim deterioration

Pool house interior rest room area

Pool house tile edging

Concrete pool deck crack repairs

Concrete pool deck crack repairs

Concrete pool deck crack repairs

Vinyl cover damage

Vinyl coated chain link fence around pool area and playground area

Chain link fence vinyl coating deterioration

Pool lounge chairs

Water heater

Townhome asphalt pavement cracks and crack repair

Townhome asphalt pavement cracks and crack repair

Townhome asphalt pavement cracks and crack repair

Townhome asphalt pavement cracks

Townhome asphalt pavement cracks and crack repair

Townhome asphalt pavement cracks and crack repair

Townhome concrete curb and gutter

Townhome concrete sidewalk settlement

Townhome light pole and fixture

6. 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.

Westerley 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 standards[1] set forth by 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".

Common Reserve Information Furnished by the Association	
2013 unaudited Cash Status of the Reserve Fund	$163,229
2013 Remaining Budgeted Reserve Contribution	$4,160
Anticipated Interest on Reserve Fund	$303
Less Anticipated Reserve Expenditures	$0
Projected 2013 Year-End Reserve Balance	$167,692

Townhome Reserve Information Furnished by the Association	
2013 unaudited Cash Status of the Reserve Fund	$171,434
2013 Remaining Budgeted Reserve Contribution	$5,716
Anticipated Interest on Reserve Fund	$320
Less Anticipated Reserve Expenditures	$0
Projected 2013 Year-End Reserve Balance	$177,470

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

Local[2] 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 Sterling, Virginia at an annual inflation rate of 2.0%. 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 Westerley 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.

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

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 1.1% (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 table summarizes rates of inflation and key rates for government securities, generally considered as safe investment alternatives.

Interest Rate and Inflation Data	2013				2014			
Average or Last Actual = (A)	2013:1 (A)	2013:2 (A)	2013:3 (A)	2013:4 (E)	2014:1 (E)	2014:2 (E)	2014:3 (E)	2014:4 (E)
1-Year Treasury Bill	0.15%	0.13%	0.13%	0.12%	0.13%	0.15%	0.15%	0.15%
10-Year Treasury Note	1.86	1.86	2.65	2.70%	2.80%	2.90%	3.00%	3.10%
30-Year Treasury Bond	3.10	3.08	3.70	3.85%	4.00%	4.15%	4.30%	4.50%
Consumer Price Index (annualized rate)	3.21%	-1.68%	1.30%	1.50%	2.25%	2.80%	3.00%	3.25%
Residential Construction" Producer Price Index-Inflation Rate, Bureau of Labor Statistics (Year over Year August 2013)								1.7%
National Market Savings Rates as found in	0.12%	for Money Market Savings			0.40%	for 2-Year Certificate of Deposit		
http://www.bankrate.com	0.25%	for 1-Year Certificate of Deposit			0.50%	for 3-Year Certificate of Deposit		
Estimated Near Term Yield Rate for Reserve Savings	1.1%							
Est. Near Term Local Inflation Rate for Future Capital Expenditures	2.0%							**10/17/2013**

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

7. 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 Westerley 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) Westerley 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.

8. 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. We will consider any additional information made available to us in the interest of promptly issuing a Final Report (if requested). However, the Report represents a valid opinion of our findings and recommendations and is deemed complete and final if no Final Report or changes are requested within six months of our inspection. We retain the right to withhold the Report or Final 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 our Report(s) 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.

9. 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 a 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, Inc., 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, a Review Coordinator, 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, Inc. 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 100-story John Hancock Center 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 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

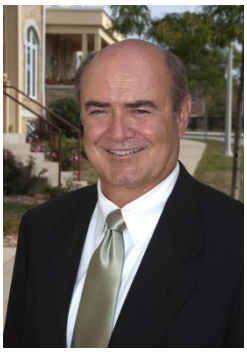
Mr. Salgado has testified successfully before the Butler County Board of Tax Revisions in Ohio. His depositions in pretrial discovery proceedings relating to reserve studies of Crestview Estates Condominium Association in Wauconda, Illinois, Rivers Point Row Property Owners Association, Inc. in Charleston, 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, Registered in 1982

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 exhibiting, and direct mail promotions. 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.

Mr. Poehlmann served on the national Board of Trustees of Community Associations Institute. Community Associations Institute (CAI) is a national, nonprofit 501(c)(6) trade association created in 1973 to provide education and resources to America's 305,000 residential condominium, cooperative and homeowner associations and related professionals and service providers. The Institute is dedicated to fostering vibrant, responsive, competent community associations that promote harmony, community, and responsible leadership.

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 Planning for Replacement of Property Doesn't Have to Be Like a Trip to the Dentist, Reserve Studies for the First Time Buyer, Sound Association Planning Parallels Business Concepts, and Reserve Studies Minimize Liability. He has worked with a variety of publications, including the Chicago Tribune, The Milwaukee Journal/Sentinel, Common Ground, Common Interest, and Condo Management. He also co-authored "Reserves", an educational videotape produced by Reserve Advisors on the subject of Reserve Studies and the benefits of maintaining appropriate reserves. The videotape is available through Reserve Advisors or CAI's website, www.caionline.org and libraries in the State of Virginia.

INDUSTRY SERVICE AWARDS

CAI National Rising Star Award - To an individual whose leadership abilities and professional contributions have earmarked them for even greater accomplishments in the future.

CAI Michigan Chapter Award - "Given to the individual who contributed their time, expertise, and resources toward improving the quality of services offered by the chapter. Mr. Poehlmann was unanimously selected as the winner of the 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

QUALIFICATIONS
JACOB R. BOLDA, RS
Responsible Advisor

CURRENT CLIENT SERVICES

Jacob R. Bolda, a Structural Engineer, is an Advisor for ***Reserve Advisors, Inc***. Mr. Bolda is responsible for the inspection and analysis of the property's current condition, recommending engineering solutions to prolong the lives of the components, forecasting capital expenditures for the repair and/or replacement of the property components, and preparing technical Reserve Study reports on assignments. He 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.

The following is a partial list of clients served by Jacob Bolda demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

Estrella Located in Goodyear, Arizona, is a planned unit development which began in 1987 and plans to have 45,000 homes at completion. Estrella contains a clubhouse, two lakes, yacht house, parks throughout the community with various amenities, and perimeter walls.

Anson House Located in Charleston, South Carolina, is a five-story condominium style development of 32 units in a single building. The exterior of the building comprises brick and stone masonry, stucco, windows and doors, and modified bitumen roof. The building was built in 2008. The development contains a ground level covered garage and masonry pavers.

Shadow Lake Condominium Association Located in Cold Spring, Kentucky, is a townhome style development of 170 units in 31 buildings. The exteriors of the buildings comprise asphalt shingle roofs, masonry walls, and vinyl siding. The buildings were built from 1998 to 2004. The development contains a clubhouse, pool and a pond.

Newport Village Homeowners Association Located in Monkey Island, Oklahoma, is a condominium style development of 65 single family homes. The exteriors of the buildings comprise asphalt shingle roofs, windows and doors, composite hardboard siding, and masonry veneer. The buildings were built from 1997 to 2003. The development contains asphalt pavement, concrete flatwork, docks, fences, recreational areas and a pool area.

The Arbors Community Association Located in Colmar, Pennsylvania, is a planned unit development which is responsible for the common elements shared by 87 single family homes. The development was built from 2003 to 2006 and contains asphalt pavement access drives, concrete flatwork and a mailbox shelter.

Regatta Townhomes Homeowners Association Located in Kemah, Texas, is a homeowners association which is responsible for the common elements shared by 72 unit owners. The development was built in 1997 and contains concrete flatwork, fences, gates and a pool area.

Elizabeth Lofts Condominium Association Located in Charlotte, North Carolina, is a three-story condominium style development of 43 units in a single building. The exterior of the building comprises an asphalt shingle roof, a thermoplastic flat roof, masonry walls and composite siding. The building was built in 1998. The development contains a garage located under the building, an adjacent parking lot, masonry perimeter walls and wood fence.

PRIOR RELEVANT EXPERIENCE

Before joining ***Reserve Advisors, Inc.***, Mr. Bolda completed his Master of Science in Structural Engineering degree including a written capstone report titled, "Load Distribution and Load-Deflection Behavior of Hooked Reinforcing Bars Loaded in Tension." During the interim breaks of graduate work, Mr. Bolda worked with Larson Engineering, Inc. He engineered, designed, and drafted curtain wall and storefront systems, commercial freezer buildings, heavy industrial reinforced concrete foundations, and structural steel bin sets designed to withstand both wind and seismic forces.

EDUCATION

Milwaukee School of Engineering - M.S. Structural Engineering
Milwaukee School of Engineering - B.S. Architectural Engineering

QUALIFICATIONS
MIKE S. BENTLEY, PRA, RS
Review Coordinator

CURRENT CLIENT SERVICES

Mike S. Bentley, a Civil Engineer, is an Advisor for ***Reserve Advisors, Inc***. Mr. Bentley is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes, high rise condominium towers, homeowner associations, and religious and educational facilities. Mr. Bentley frequently serves as the ***Quality Assurance Review Coordinator*** for all types of developments.

The following is a partial list of clients served by Mike S. Bentley demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

Summit Hotel Condominium Owner's Association At the base of the Big Sky Mountain in Montana, this 11-story high, 221 room condominium hotel serves vacationers year round. The Association maintains a stucco and masonry exterior, interior finishes, furnishings and appliances as well as the full range of mechanical equipment including three elevators, two chillers, two cooling towers and three boilers. The Summit also includes two restaurants, a full service kitchen, a pool, steam room and fitness room.

Emerald Chase Homeowners Association This planned unit development lays nestled within the wooded suburbs of Raleigh, North Carolina. Built in 1986, Emerald Chase maintains over two miles of asphalt pavement roads as well as an irrigation system.

Riverbridge Condominium Association Situated on the bank of the Milwaukee River, these three newly developed mid-rise buildings contain 117 units as well as an underground parking garage. In addition to the building's interior amenities, a security system and mechanical systems, Riverbridge also maintains a cantilevered concrete plaza giving pedestrians breathtaking views of the river below.

Patuxent Point Community Association A quaint community located in Patuxent, Maryland comprises 106 units in 18 buildings. Amenities at this coastal community include a clubhouse, tennis courts, pool, playground and asphalt walking paths. The painted wood siding on the exterior walls of the three-story townhomes give Patuxent Point a sense of charm and warmth.

Clubs at Bradford Place Community Association Seventy-nine units housed in 31 duplexes and triplexes comprise this retirement community on the outskirts of Chicago. The Association maintains the asphalt pavement driveways and concrete sidewalks throughout the community in addition to the vinyl siding and brick exteriors.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Inc., Mr. Bentley attended Columbia University in New York, New York where he attained his Bachelor of Science degree in Civil Engineering. His studies focused on structural engineering as well as construction management.

EDUCATION

Columbia University - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Professional Reserve Analyst (PRA) - Association of Professional Reserve Analysts
Engineer In Training (E.I.T.) Registration – New York 2005
Reserve Specialist (RS) - Community Associations Institute

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 http://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 http://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 http://www.msbinfo.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 http://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.