# Precision 20/20 Full Reserve Study for The Creekside Crossing Homeowners Association Plainfield, Illinois April 22, 2014







Long-term thinking. Everyday commitment.

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#### 1. RESERVE STUDY EXECUTIVE SUMMARY

**Client:** The Creekside Crossing Homeowners Association (Creekside Crossing)

Location: Plainfield, Illinois

Reference: 140041

**Property Basics:** The Creekside Crossing Homeowners Association is a planned unit development which is responsible for the common elements shared by 614 proposed units. At the time of our inspection, 188 units in 145 buildings were complete. The Association began construction in 2005. The development contains four stormwater management ponds, asphalt walking paths and four entrances with monuments.

**Reserve Components Identified:** Seven Reserve Components

**Inspection Date:** April 22, 2014

**Funding Goal:** The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures. Our recommended Funding Plan recognizes this threshold funding year in 2035 due to pond sediment removal.

**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
- 2.3% 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:** \$23,600 as of March 31, 2014. A potential deficit in reserves might occur by 2019 based upon continuation of the most recent annual reserve contribution of \$5,000 and the identified Reserve Expenditures.

**Recommended Reserve Funding:** The Association budgeted \$5,000 for Reserve Contributions in 2014. We recommend the Association budget annual phased increases in Reserve Contributions of \$3,000 from 2015 through 2019. Afterwards, the Association should budget gradual annual increases in reserve funding, that in part consider the effects of inflation. The initial adjustment in Reserve Contributions of \$3,000 represents about a three percent (3.1%) adjustment in the 2014 total Operating Budget of \$96,475. This initial adjustment of \$3,000 is equivalent to an average monthly increase of \$1.33 per current homeowner.

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

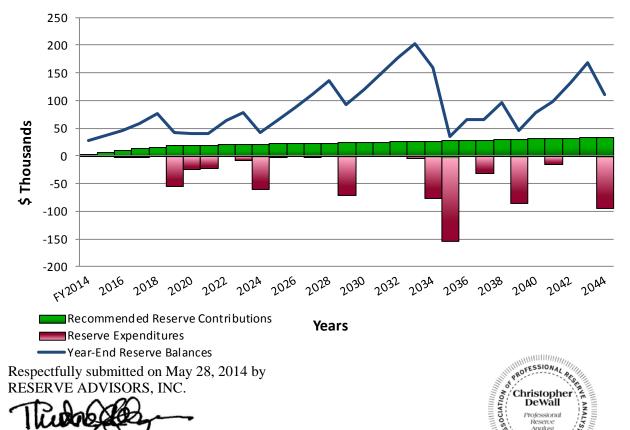






Creekside Crossing
Recommended Reserve Funding Table and Graph

	Reserve	Reserve		Reserve	Reserve		Reserve	Reserve
Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)
2015	8,000	35,907	2025	23,000	63,007	2035	28,700	34,871
2016	11,000	45,402	2026	23,500	87,329	2036	29,300	64,716
2017	14,000	58,023	2027	24,000	110,743	2037	30,000	65,081
2018	17,000	75,755	2028	24,500	136,596	2038	30,700	96,666
2019	20,000	42,754	2029	25,100	93,396	2039	31,400	45,123
2020	20,500	40,854	2030	25,700	120,265	2040	32,100	77,896
2021	21,000	41,046	2031	26,300	148,033	2041	32,800	97,397
2022	21,500	63,116	2032	26,900	176,709	2042	33,500	132,153
2023	22,000	78,561	2033	27,500	203,513	2043	34,300	168,095
2024	22,500	41,757	2034	28,100	158,690	2044	35,100	111,151



Theodore J. Salgado, PRA<sup>1</sup>, RS<sup>2</sup>, Principal Visual Inspection and Report by: Christopher C. DeWall, PRA, RS

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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

#### The Creekside Crossing Homeowners Association

#### Plainfield, Illinois

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, April 22, 2014.

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**

The Creekside Crossing Homeowners Association is a planned unit development which is responsible for the common elements shared by 614 proposed units. At the time of our inspection, 188 units in 145 buildings were complete. The Association began construction in 2005. The development contains four stormwater management ponds, asphalt walking paths and four entrances with monuments. We identify seven 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 Others
- Property Exhibiting Defects for Remedy 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:

- Creekside Crossing 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, Common
- Inlet/Outlet Structures, Ponds
- Pipes, Subsurface Stormwater Pipes

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 \$1,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Landscape
- Paint Finishes, Touch Up
- Ponds, Shoreline Maintenance and Erosion Control
- Ponds, Treatment
- Other Repairs normally funded through the Operating Budget

Property Maintained by Homeowners relates to unit:

- Homes and Lots
- Mailboxes



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

Property Maintained by Others relates to:

- Light Poles and Fixtures (Village of Plainfield)
- Pavilion (Park District)
- Playground Equipment (Park District)
- Sidewalks, Adjacent to Streets (Village of Plainfield)
- Storm Water Management Area, North of Island Drive (Park District)
- Street Systems (Village of Plainfield)
- Walking Paths, Adjacent to Drauden Road and north of Island Drive (Village of Plainfield)

We have also conducted a Transition Study, issued under separate cover, identifying specific design, construction and condition defects. For purposes of this Reserve Study, we exclude without limitation all costs to remediate active or latent defects and we consider all the Reserve Components remediated, free from defect and in good or normal condition with respect to their age. Property Exhibiting Defects for Remedy by Others relates to:

- Landscape, Trees, Shrubs and Plantings
- Ponds
- Stormwater Pipes



#### 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
- 2014 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**

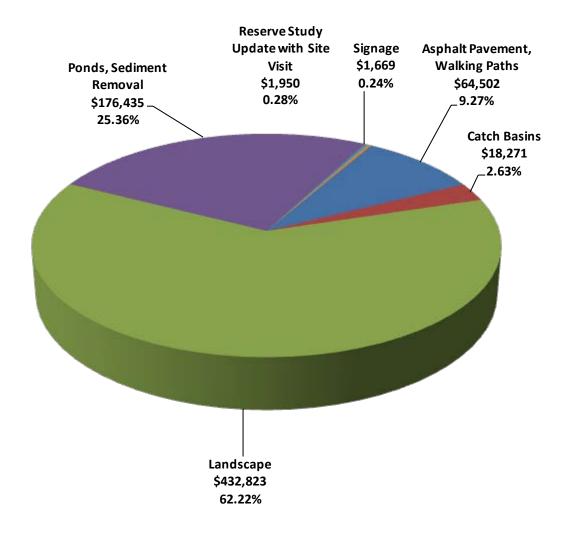
- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end
- Predicted reserves based on current funding level

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

**Creekside Crossing**Future Expenditures Relative Cost Illustration



Page 3.2 - Reserve Expenditures and Funding Plan

# **RESERVE EXPENDITURES**

## The Creekside Crossing Homeowners Association Plainfield, Illinois

#### **Explanatory Notes:**

- 1) 2.3% is the estimated future Inflation Rate for estimating Future Replacement Costs.
- 2) FY2014 is Fiscal Year beginning January 1, 2014 and ending December 31, 2014.

	<u>Quan</u>	<u>tities:</u>			Estimated	Life A	nalysis,		2014 Cost	Total																
Line	30-Year	Per			1st Year of	f Ye	ears	Unit	per	Future	RUL = 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Item	Total	Phase	Units	Reserve Component Inventory	Event	Useful	Remaining	Cost, \$	Phase, \$	Costs, \$	FY2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
4.020	5,350	•	•	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2017	3 to 5	3	1.70	•	12,901				1,945								2,323				2,540
4.080	2,140	0 <b>1,07</b>	O Square Yards	Asphalt Pavement, Total Replacement, Walking Paths	2021	12 to 18	7	17.00	18,190	51,601								21,256								
4.100	2	2	1 Allowance	Catch Basins, Landscape, Inspections and Capital Repairs	2023	15 to 20	9	6,000.00	6,000	18,271										7,330						
4.500	(	6	1 Allowance	Landscape, Partial Replacements	2019	to 5	5	48,000.00	48,000	432,823						53,649					59,962					67,018
4.730	1,600	0 <b>8</b> 0	<b>0</b> Square Yards	Pond, Sediment Removal, Area B, Partial	2020	15 to 20	6	25.00	20,000	54,769							22,857									
4.731	3,050	<b>3,05</b>	0 Square Yards	Ponds, Sediment Removal, Remaining, Partial	2035	to 30	21	25.00	76,250	121,666																
4.800		1	1 Allowance	Signage, Renovation	2027	15 to 20	13	1,250.00	1,250	1,669														1,669		
	•	1	1 Allowance	Reserve Study Update with Site Visit	2016	2	2	1,950.00	1,950	1,950			1,950													
				Anticipated Expenditures, By Year						\$695,650	0	0	1,950	1,945	0	53,649	22,857	21,256	0	7,330	59,962	2,323	0	1,669	0	69,558

# **RESERVE EXPENDITURES**

## The Creekside Crossing Homeowners Association Plainfield, Illinois

	Quantit	ties:		Training, minor	Estimated	Life A	Analysis,		2014 Cost	Total															
Line Item	30-Year Total	Per Phase	Units	Reserve Component Inventory	1st Year of Event		ears Remaining	Unit Cost, \$	per Phase, \$	Future Costs, \$	16 2030	17 2031	18 2032	19 2033	20 2034	21 2035	22 2036	23 2037	24 2038	25 2039	26 2040	27 2041	28 2042	29 2043	30 2044
4.020	5,350	1,070	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2017	3 to 5	3	1.70	1,819	12,901				2,776								3,317			
4.080	2,140	1,070	Square Yards	Asphalt Pavement, Total Replacement, Walking Paths	2021	12 to 18	7	17.00	18,190	51,601								30,345							
4.100	2	1 /	Allowance	Catch Basins, Landscape, Inspections and Capital Repairs	2023	15 to 20	9	6,000.00	6,000	18,271												10,941			
4.500	6	1 /	Allowance	Landscape, Partial Replacements	2019	to 5	5	48,000.00	48,000	432,823					74,904					83,719					93,571
4.730	1,600	800	Square Yards	Pond, Sediment Removal, Area B, Partial	2020	15 to 20	6	25.00	20,000	54,769						31,912									
4.731	3,050	3,050	Square Yards	Ponds, Sediment Removal, Remaining, Partial	2035	to 30	21	25.00	76,250	121,666						121,666									
4.800	1	1 /	Allowance	Signage, Renovation	2027	15 to 20	13	1,250.00	1,250	1,669															
	1	1 /	Allowance	Reserve Study Update with Site Visit	2016	2	2	1,950.00	1,950	1,950															
				Anticipated Expenditures, By Year						\$695,650	0	0	0	2,776	74,904	153,578	0	30,345	0	83,719	0	14,258	0	0	93,571

# **RESERVE FUNDING PLAN**

CASH FLOW ANALYSIS
The Creekside Crossing

Homeowners Association	]	ndividual Res	erve Budgets	& Cash Flows	s for the Next	30 Years										
Plainfield, Illinois	FY2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Reserves at Beginning of Year (Note 1)	23,600	27,560	35,907	45,402	58,023	75,755	42,754	40,854	41,046	63,116	78,561	41,757	63,007	87,329	110,743	136,596
<b>Total Recommended Reserve Contributions (Note 2)</b>	3,750	8,000	11,000	14,000	17,000	20,000	20,500	21,000	21,500	22,000	22,500	23,000	23,500	24,000	24,500	25,100
Plus Estimated Interest Earned, During Year (Note 3)	210	347	445	566	732	648	457	448	570	775	658	573	822	1,083	1,353	1,258
Less Anticipated Expenditures, By Year	0	0	(1,950)	(1,945)	0	(53,649)	(22,857)	(21,256)	0	(7,330)	(59,962)	(2,323)	0	(1,669)	0	(69,558)
Anticipated Reserves at Year End	<u>\$27,560</u>	<u>\$35,907</u>	<u>\$45,402</u>	<u>\$58,023</u>	<u>\$75,755</u>	<u>\$42,754</u>	<u>\$40,854</u>	<u>\$41,046</u>	<u>\$63,116</u>	<u>\$78,561</u>	<u>\$41,757</u>	<u>\$63,007</u>	<u>\$87,329</u>	<u>\$110,743</u>	<u>\$136,596</u>	<u>\$93,396</u>
Predicted Reserves based on 2014 funding level of: \$5.00	27 560	32 891	36 320	39 791	45 256	(3.163)	(21 153)									

0004			Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued											
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	
120,265	148,033	176,709	203,513	158,690	34,871	64,716	65,081	96,666	45,123	77,896	97,397	132,153	168,095	
26,300	26,900	27,500	28,100	28,700	29,300	30,000	30,700	31,400	32,100	32,800	33,500	34,300	35,100	
1,468	1,776	2,080	1,981	1,059	545	710	885	776	673	959	1,256	1,642	1,527	
0	0	(2,776)	(74,904)	(153,578)	0	(30,345)	0	(83,719)	0	(14,258)	0	0	(93,571)	
<u>\$148,033</u>	<u>\$176,709</u>	<u>\$203,513</u>	<u>\$158,690</u>	\$34,871	<u>\$64,716</u>	<u>\$65,081</u>	<u>\$96,666</u>	<u>\$45,123</u>	<u>\$77,896</u>	<u>\$97,397</u>	<u>\$132,153</u>	<u>\$168,095</u>	\$111,151 (NOTE 4)	
6 0	<b>26,300</b> 9 1,468 0 0	6 120,265 148,033 0 26,300 26,900 9 1,468 1,776 0 0 0	6       120,265       148,033       176,709         0       26,300       26,900       27,500         9       1,468       1,776       2,080         0       0       0       (2,776)	6     120,265     148,033     176,709     203,513       0     26,300     26,900     27,500     28,100       9     1,468     1,776     2,080     1,981       0     0     (2,776)     (74,904)	6       120,265       148,033       176,709       203,513       158,690         0       26,300       26,900       27,500       28,100       28,700         9       1,468       1,776       2,080       1,981       1,059         0       0       (2,776)       (74,904)       (153,578)	6       120,265       148,033       176,709       203,513       158,690       34,871         0       26,300       26,900       27,500       28,100       28,700       29,300         9       1,468       1,776       2,080       1,981       1,059       545         0       0       0       (2,776)       (74,904)       (153,578)       0         5       \$148,033       \$176,709       \$203,513       \$158,690       \$34,871       \$64,716	6       120,265       148,033       176,709       203,513       158,690       34,871       64,716         0       26,300       26,900       27,500       28,100       28,700       29,300       30,000         9       1,468       1,776       2,080       1,981       1,059       545       710         0       0       0       (2,776)       (74,904)       (153,578)       0       (30,345)         5       \$148,033       \$176,709       \$203,513       \$158,690       \$34,871       \$64,716       \$65,081	6       120,265       148,033       176,709       203,513       158,690       34,871       64,716       65,081         0       26,300       26,900       27,500       28,100       28,700       29,300       30,000       30,700         9       1,468       1,776       2,080       1,981       1,059       545       710       885         0       0       0       (2,776)       (74,904)       (153,578)       0       (30,345)       0         5       \$148,033       \$176,709       \$203,513       \$158,690       \$34,871       \$64,716       \$65,081       \$96,666	6       120,265       148,033       176,709       203,513       158,690       34,871       64,716       65,081       96,666         0       26,300       26,900       27,500       28,100       28,700       29,300       30,000       30,700       31,400         9       1,468       1,776       2,080       1,981       1,059       545       710       885       776         0       0       0       (2,776)       (74,904)       (153,578)       0       (30,345)       0       (83,719)         5       \$148,033       \$176,709       \$203,513       \$158,690       \$34,871       \$64,716       \$65,081       \$96,666       \$45,123	6       120,265       148,033       176,709       203,513       158,690       34,871       64,716       65,081       96,666       45,123         0       26,300       26,900       27,500       28,100       28,700       29,300       30,000       30,700       31,400       32,100         9       1,468       1,776       2,080       1,981       1,059       545       710       885       776       673         0       0       0       (2,776)       (74,904)       (153,578)       0       (30,345)       0       (83,719)       0         5       \$148,033       \$176,709       \$203,513       \$158,690       \$34,871       \$64,716       \$65,081       \$96,666       \$45,123       \$77,896	6       120,265       148,033       176,709       203,513       158,690       34,871       64,716       65,081       96,666       45,123       77,896         0       26,300       26,900       27,500       28,100       28,700       29,300       30,000       30,700       31,400       32,100       32,800         9       1,468       1,776       2,080       1,981       1,059       545       710       885       776       673       959         0       0       0       (2,776)       (74,904)       (153,578)       0       (30,345)       0       (83,719)       0       (14,258)         5       \$148,033       \$176,709       \$203,513       \$158,690       \$34,871       \$64,716       \$65,081       \$96,666       \$45,123       \$77,896       \$97,397	6       120,265       148,033       176,709       203,513       158,690       34,871       64,716       65,081       96,666       45,123       77,896       97,397         0       26,300       26,900       27,500       28,100       28,700       29,300       30,000       30,700       31,400       32,100       32,800       33,500         9       1,468       1,776       2,080       1,981       1,059       545       710       885       776       673       959       1,256         0       0       0       (2,776)       (74,904)       (153,578)       0       (30,345)       0       (83,719)       0       (14,258)       0         5       \$148,033       \$176,709       \$203,513       \$158,690       \$34,871       \$64,716       \$65,081       \$96,666       \$45,123       \$77,896       \$97,397       \$132,153	6       120,265       148,033       176,709       203,513       158,690       34,871       64,716       65,081       96,666       45,123       77,896       97,397       132,153         0       26,300       26,900       27,500       28,100       28,700       29,300       30,000       30,700       31,400       32,100       32,800       33,500       34,300         9       1,468       1,776       2,080       1,981       1,059       545       710       885       776       673       959       1,256       1,642         0       0       0       (2,776)       (74,904)       (153,578)       0       (30,345)       0       (83,719)       0       (14,258)       0       0         5       \$148,033       \$176,709       \$203,513       \$158,690       \$34,871       \$64,716       \$65,081       \$96,666       \$45,123       \$77,896       \$97,397       \$132,153       \$168,095	

# **Explanatory Notes:**

- 1) Year 2014 starting reserves are as of March 31, 2014; FY2014 starts January 1, 2014 and ends December 31, 2014.
- 2) Reserve Contributions for 2014 are the remaining budgeted 9 months; 2015 is the first year of recommended contributions.
- 3) 1.1% is the estimated annual rate of return on invested reserves; 2014 is a partial year of interest earned.
- 4) Accumulated year 2044 ending reserves consider 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*.

Asphalt Pavement, Crack Repair, Patch and Seal Coat - Asphalt pavement comprises 1,070 square yards of walking paths from Drauden Road to Portage Lane and on to Creekview Drive. The pavement is original and in good overall condition. We note an isolated crack. To maximize the life of the pavement, the Association should plan for seal coat applications and 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.

We recommend periodic seal coat applications, crack repairs and patching to maintain the pavement. These activities minimize the damaging effects of vehicle fluids, maintain a uniform and positive appearance, and maximize the useful life of the pavement. 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.

Creekside Crossing 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.

We recommend that Creekside Crossing plan the next application of seal coat by 2017 and subsequent applications 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, Walking Paths – As state above, the Association maintains 1,070 square yards of asphalt walking paths from Drauden Road to Portage Lane and on to Creekview Drive. These paths are original and in good overall condition. We note an isolated crack as shown on Page 5.2 of *Photographs*. 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 12- to 18-years for walking path asphalt pavement. We recommend the Association budget for total replacement by 2021 and again by 2037. 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*.

Catch Basins - The Association maintains the landscape catch basins throughout the property that collect storm water from the lots and conduct it into the storm water system. The overall condition of the catch basins is good without settlement visually apparent. The useful life of catch basins is up to 60 years. However, achieving this useful life usually requires interim capital repairs or partial replacements every 15- to 20-years.



The Association should anticipate the occasional displacement or failure of a catch basin and the surrounding soil from erosion. Erosion causes settlement around the collar of catch basins. Left unrepaired, the *entire catch basin* will shift and need replacement. The exact times and amount of capital repairs or replacements are dependent upon variable natural forces. Based on the age and condition of the catch basins, we recommend the Association anticipate the inspection, capital repair or partial replacement of the catch basins by 2023 and again by 2041. Our allowance on Line Item 4.100 of *Reserve Expenditures* includes an inspection of the catch basins and resetting of up to 10 catch basins.

Landscape, Partial Replacements - The Association contains a large quantity of trees, shrubbery and other landscape elements. Replacement of these elements is an ongoing need. We have also conducted a Transition Study, issued under separate cover, identifying specific design, construction and condition defects with the landscape.

Many associations budget for these replacements as normal maintenance. Other associations fund ongoing replacements from reserves. Large amounts of landscape may need replacement due to disease, drought or other forces of nature. If the cost of removal and replacement is substantial, funding from reserves is logical. The Association may also desire to periodically update the appearance of the community through major improvements to the landscape. In consideration of these factors and at the request of Management and the Board, we include a landscape allowance every five years beginning by 2019 to ensure the accumulation of sufficient reserves for partial replacements of the landscape. The times and costs of these replacements may vary. However, we judge the amounts shown on Line Item 4.500 of *Reserve Expenditures* sufficient to budget appropriate reserves.



**Ponds** - The Association maintains four ponds. Refer to Section 5 of the narrative: *Photographs* for specific names and locations of the ponds. The health or condition of a pond 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. Three factors which affect the health of ponds are erosion, buildup of silt and algae blooms. We have also conducted a Transition Study, issued under separate cover, identifying specific design, construction and condition defects with the ponds. 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 shallower 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 Creekside Crossing consider the use of fertilizers with low or no phosphorus content for areas adjacent to the ponds.

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 ponds and limit algae blooms and slow the eutrophication process. We discuss each management method below.

*Erosion Control* - The pond shorelines comprise 7,200 linear feet of natural vegetation. Shorelines are subject to fluctuations in water levels, increased plant growth and migrating storm and ground water resulting in the need for erosion control measures. 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

We recommend that the Association plan to fund shoreline erosion control through the operating budget.

Sediment Removal - Approximately 48,100 square yards of water surface area comprise the ponds. 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 Creekside Crossing contract with a local engineer for periodic 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.

We note natural vegetation at the perimeter of the ponds. This condition suggests the Association should plan for eventual removal of sediment from the decay of seasonal vegetation at the pond perimeters.

Based on the visual condition, visibly apparent erosion and natural buffer zones, we recommend the Association anticipate the need to remove pond sediment every 30 years. We recommend the Association anticipate sediment removal within the small section and neck of Stormwater Management Area South every 15- to 20-years. For reserve budgeting purposes, we estimate the need to remove the sediment at the small section and around the neck of Stormwater Management Area South, or approximately 800 square yards, by 2020 and again by 2035. We recommend the Association anticipate the need to remove the sediment at approximately 3,050 square yards, or eight percent (8%) of the surface area of the remaining three ponds 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 2035. The time and cost of this maintenance activity may vary. However, we judge the amount shown on Line Items 4.730 and 4.731 of *Reserve Expenditures* sufficient to budget appropriate reserves. The Association should consider disposal of the sediment on-site to lower the cost of disposal.



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

**Signage** - The Association maintains four property identification signs that include the following elements:

- Light Fixtures
- Painted Letters
- Masonry Monuments

The signage is original and in good 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 15- to 20-years, or by 2027. Renovation should include the following work:

- Repointing and repairs to the 2,400 square feet of masonry
- Replacement of the remaining components listed above

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

#### **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, April 22, 2014. The Condition Assessment contains references to these photographs.

The following is an overview image of the subject property:



The next pages contain the photographs related to the Condition Assessment

**Page 5.1 - Photographs** 





Asphalt walking path west of Portage Lane overview



Path crack



Walking path east of Portage Lane overview

Page 5.2 - Photographs





Typical landscape catch basin



Creekview Drive landscape



Entrance area landscape

Page 5.3 - Photographs





Landscape along Renwick Road



Stormwater Management Area North overview



Stormwater Management Area North shoreline

Page 5.4 - Photographs





Stormwater Management Area South overview



Stormwater Management Area A overview



North portion of Stormwater Management Area B

Page 5.5 - Photographs





South portion of Stormwater Management Area B



Stormwater Management Area B shoreline



Typical entrance monument and landscape

Page 5.6 - Photographs



#### 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.

Creekside Crossing 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<sup>1</sup> set forth by the Community Associations Institute (CAI) and the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Full Reserve Study." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

<sup>&</sup>lt;sup>1</sup> Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".



Information Furnished by the Association											
2014 unaudited Cash Status of the Reserve Fund	\$23,600										
2014 Remaining Budgeted Reserve Contribution	\$3,750										
Anticipated Interest on Reserve Fund	\$210										
Less Anticipated Reserve Expenditures	\$0										
Projected 2014 Year-End Reserve Balance	\$27,560										

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

Local<sup>2</sup> 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 Plainfield, Illinois at an annual inflation rate of 2.3%. 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 Creekside Crossing and their effects on remaining useful lives

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

The anticipated effects of appreciation of the reserves over time in accord with an anticipated future return or yield on investment of your cash equivalent assets at an annual rate of 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

<sup>&</sup>lt;sup>2</sup> See Credentials for addition information on our use of published sources of cost data.



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

Interest Rate and Inflation Data		20	)13			20	)14	
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-In	flation Rate, I	Bureau of La	bor Statistics	(Year over Y	ear August 20	)13)		1.7%
National Market Savings Rates as found in	0.12%	for Money I	Market Savin	gs	0.40%	for 2-Year C	ertificate of De	posit
http://www.bankrate.com	0.25%	for 1-Year (	Certificate of I	Deposit	0.50%	for 3-Year C	ertificate of De	posit
Estimated Near Term Yield Rate for Reserve S	Savings			1.1%				
Est. Near Term Local Inflation Rate for Futur	e Capital Ex	penditures		2.3%				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 Creekside Crossing 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) Creekside Crossing 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 coauthored "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 coauthored "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



#### CHRISTOPHER C. DEWALL, PRA, RS Responsible Advisor

#### **CURRENT CLIENT SERVICES**

Christopher C. DeWall, a Mechanical Engineer, is an Advisor for *Reserve Advisors, Inc.* Mr. DeWall 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 and homeowner associations. Christopher DeWall frequently serves as the *Quality Assurance Review Coordinator* for all types of developments.

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

- **1301 Throckmorton Residences** reside on the top 13 floors of a 33-story building located downtown Fort Worth, Texas. Built in 2009, the building overlooks the Fort Worth Water Gardens and includes a pool and Zen garden atop the Omni Fort Worth Hotel.
- **North Beach Condominium Association** consists of 40 townhome units in six buildings situated at the edge of a stunning 115 acre pond in Bethany Beach, Delaware just minutes form the Atlantic Ocean. The development contains a boardwalk, pool house and pool.
- **Belfair Property Owners Association** is a private golf community situated on the Belfair Plantation five miles from Hilton Head Island. Magnificent oak trees over one hundred years old line the entrance to this property that dates back to the plantation built in 1811. The community amenities include a recently expanded clubhouse, two 18-hole golf courses, pool and exercise buildings and a state-of-the-art 29 acre practice facility. Belfair offers freshwater lakes, saltwater marshes and South Carolina wildlife.
- **Prairie Park at Wheeling Condominium Association** is a midrise community of 240 units in four buildings located in Wheeling, Illinois. The property includes an elaborate waterfall at the entrance to the community and a clubhouse with indoor pool for year round entertainment.
- **Crystal Park Unit Owners Association** This 12-story building built in 1985 is located in the Crystal City portion of Alexandria, Virginia. The property includes an elevated pool and pool deck above two floors of parking garage. Unit owners enjoy a majestic view of the runway at Reagan International Airport with the U.S. Capitol Building and Washington Monument rising above the horizon in the background.
- **Fieldpoint Community Association** is an upper scale community that consists of 101 townhomes and 63 single family homes in three sub-associations. Located just north of New York City, this development contains a clubhouse, playground and two separate pools.
- **Seven Lakes Landowners Association** is a large planned unit development located in West End, North Carolina. The Association consists of 1,507 single family homes and includes a clubhouse, stable, onsite office, maintenance buildings, lakes, ponds, pools, sports courts and approximately 25 miles of roads.

#### PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Inc., Mr. DeWall attended the University of Wisconsin in Madison, Wisconsin where he attained his Bachelor of Science degree in Mechanical Engineering. At the University of Wisconsin, Mr. DeWall helped design and fabricate a wheelchair with a seat capable of raising and lowering to and from the ground. Mr. DeWall is also the proud owner of a patent for a trigger lock on a pressure washer gun he developed while interning at Briggs and Stratton Power Products.

#### **EDUCATION**

University of Wisconsin - B.S. Mechanical Engineering

#### PROFESSIONAL AFFILIATIONS

Professional Reserve Analyst (PRA) - Association of Professional Reserve Analysts Reserve Specialist (RS) - Community Associations Institute



#### TODD M. WALTER, P.E., RS, PRA Director of Production Management

#### **CURRENT CLIENT SERVICES**

Todd M. Walter, a Professional Engineer (P.E.) in Civil Engineering, is a Director for *Reserve Advisors, Inc.*, which is dedicated to serving community associations, religious organizations, educational facilities, and public and private entities throughout the United States. Mr. Walter is responsible for the inspection and analysis of the property's current condition, recommending engineering solutions to prolong the lives of building components, forecasting capital expenditures for the repair and/or replacement of the property components, and technical report preparation on assignments. Todd Walter frequently serves as the *Quality Assurance Review Coordinator* for all types of developments.

Todd Walter has conducted nearly 1,300 Reserve Studies, primarily in the Chicago area. The following is a partial list of clients served by Mr. Walter demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

The Elysian Private Residences Upscale 52-story development near Chicago's Magnificent Mile.

One Museum Park East Modern 64-story curtain wall tower with numerous amenities overlooking the museum campus in Chicago.

**Commodore Green Brier Landmark** Elegant, historic condominiums with original face brick, terra cotta and stone architecture in Chicago.

**Montgomery on Superior** Conversion of the former Montgomery Ward headquarters in Chicago into upscale residences. The tower includes travertine stone cladding and curtain wall systems.

The Carlyle Vintage, prime real estate on Chicago's Lake Shore Drive at the north end of the Magnificent Mile.

**Clinton Complex** This development includes several former manufacturing structures built in the 1800's and converted to condominiums in Chicago

**3550 Association** Twin 28-story towers with over 700 units on Lake Shore Drive in Chicago. Extensive lobbies and garage structure at the base of the towers.

**Loring Green East and West** These two towers are two of the most recognized residential high rises in Minneapolis. The towers comprise entirely brick masonry facades with extensive amenities. The development includes a landscaped plaza roof system.

Galleria Residences High rise luxury condominiums constructed above a Westin Hotel near Minneapolis.

#### PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Inc., Mr. Walter was a Civil Engineer and on-site project manager for Owens-Illinois. He was responsible for the construction inspection of structural projects throughout the United States. He has designed structural components and prepared construction specifications for national and international engineering projects.

#### **EDUCATION**

Ohio University - B.S. Civil Engineering

#### PROFESSIONAL AFFILIATIONS

Professional Engineering License - Wisconsin 2003, Illinois 2003, Ohio 2009, Michigan 2009, Indiana 2009, Minnesota 2009

LEED (Leadership in Energy and Environmental Design) Green Associate

American Society of Civil Engineers

Reserve Specialist (RS) - Community Associations Institute

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



#### RESOURCES

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

Association of Construction Inspectors, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at 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.

<u>Community Associations Institute</u>, (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.

<u>Marshall & Swift / Boeckh</u>, (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

<u>Reserve Advisors, Inc.</u>, 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.