# Michigan Reserve Associates LLC

424 Little Lake Drive, Suite 23 Voice: (734) 237-1828 paul@MichiganReserveAssociates.com Ann Arbor, MI 48103 Fax: (734) 661-1259 www.MichiganReserveAssociates.com



July 29, 2020

Board of Directors
East Lansing City Center Condominium Association
175 Watertower Place
East Lansing, MI 48823

Re: Preliminary Reserve Study – Next Steps in the Process East Lansing City Center Condominium Association East Lansing, Michigan

Dear Board of Directors:

Please find enclosed the preliminary reserve study. In this letter I will comment briefly on the next steps required to finalize the reserve study.

Now that the preliminary report has been delivered, the next step is a collaborative review process. I truly regard this process as a partnership in which all of us are working to provide the best and most accurate reserve study possible. This process typically takes most associations about one to two months to complete. During that time, the Association should carefully read the preliminary reserve report and review the accompanying charts and graphs. All comments are welcome. In particular, the Association should make sure that all Reserve Components have been accounted for and that the reserve fund balance information provided to Michigan Reserve Associates has been presented back to the association accurately.

Please note that the reserve component list and cash flow pages located in the addenda of the reserve study have been optimized for legal-size paper. If you choose to print out the reserve study, please print these pages on legal-size paper to provide the most legible reading experience. Alternatively, you can use the "zoom" function in the Adobe Acrobat reader to adjust the pages to your specific needs on your video screen.

If at the end of the review process you decide that no changes are needed, then the reserve study process is complete and no further communications are needed with Michigan Reserve Associates.

However, if you wish to request changes to the reserve study, please follow the series of escalating communication steps detailed below. It is our experience that virtually all issues and questions can be resolved by using the following protocol.

1) Submit questions and comments in writing (email preferred) and reference the reserve study report's page numbers when relevant. All communications should be vetted internally and funneled through a designated point person, such as a board member or property manager. It can get confusing if multiple people request changes, especially

if there is not common agreement from the association on what those changes should be.

2) If, after written communications have been completed, more in-depth communication is needed, a conference call can be arranged. Please provide a list of general topics and questions in advance so that we are effective with our time together.

Sincerely,

Paul K.T. Conahan, MBA, RS

Paul Conalun

# RESERVE STUDY

(UPDATE, WITH-SITE-VISIT/ON-SITE REVIEW)

East Lansing City Center Condominium Association East Lansing, Michigan

Commencing First Fiscal Year: January 1, 2021 to December 31, 2021



Photo: View of exterior building elevations



Michigan Reserve Associates LLC 424 Little Lake Drive, Suite 23 Ann Arbor, MI 48103 Phone: (734) 237-1828 • Fax: (734) 661-1259 www.MichiganReserveAssociates.com

© 2020 Michigan Reserve Associates LLC

# Michigan Reserve Associates LLC

424 Little Lake Drive, Suite 23 Ann Arbor, MI 48103 Voice: (734) 237-1828 Fax: (734) 661-1259 info@MichiganReserveAssociates.com www.MichiganReserveAssociates.com



July 29, 2020

Board of Directors
East Lansing City Center Condominium Association
175 Watertower Place
East Lansing, MI 48823

Re: "Update, With Site-Visit/On-Site Review" Reserve Study East Lansing City Center Condominium Association East Lansing, Michigan

Dear Board of Directors:

In fulfillment of our agreement as outlined in the letter of engagement dated February 25, 2020, we are pleased to transmit this "Update, With Site-Visit/On-Site Review" Reserve Study for the East Lansing City Center Condominium Association. This report details the development of our study and sets forth our conclusions, along with supporting data and reasoning which forms the basis of our conclusions.

The conclusions in this Reserve Study are qualified by certain definitions, assumptions, limiting conditions, and certifications which are set forth in the attached report.

The intended user of this report is the East Lansing City Center Condominium Association. This study is to be used by the intended user for the purpose of budgeting and long-term major repair and replacement planning. The scope of work included in this study is unique to the intended use and intended user, and this report may not be utilized for any other use or user.

This study complies with the standards promulgated by the Community Associations Institute (CAI) for a "Update, With Site-Visit/On-Site Review" Reserve Study. In addition, this study adheres to the applicable sections of the *Uniform Standards of Professional Appraisal Practice* of the Appraisal Foundation, as well as the *Code of Professional Ethics* of the Appraisal Institute.

This letter also confirms that Michigan Reserve Associates has provided the client with an option to receive an **Update With Site Visit** reserve study within five-years of the date shown above. This option provides the client with the right but not the obligation to receive an updated reserve study at a guaranteed update price \$1,410 and this option may be used more than once in a five-year period.

Respectfully submitted,

Paul K.T. Conahan, MBA, RS

Paul Conalun

State Certified General Real Estate Appraiser

License No. 1201002454

# **TABLE OF CONTENTS**

SUMMARY AND RECOMMENDED FUNDING PLAN	2
Introduction	2
Recommended Funding Plan	3
INTRODUCTION AND METHODOLOGY	8
Introduction	8
Methodology	11
PHYSICAL ANALYSIS	16
Identification of Reserve Components	16
Aerial and Location Map	16
Condition Assessment	19
Building Components	19
FINANCIAL ANALYSIS	22
Financial Assumptions	22
Estimation of Inflation Rate	23
Summary and Conclusion of Selected Rates	24
Recommended Funding Plan	24
ADDENDA	A
Photographs	В
Reserve Expenditures and Reserve Funding Plan	K
Historic and Recommended Reserve Funding Plan	L
Reserve Funding Plan Graphs	M
Certifications, Assumptions and Limiting Conditions	P
Qualifications – Paul K.T. Conahan, MBA, RS	U

### SUMMARY AND RECOMMENDED FUNDING PLAN

#### Introduction

A Reserve Study is a tool which anticipates major common area repair and replacement expenses and develops a prudent Reserve Funding Plan to pay for these expenses. By its nature, a Reserve Study must make assumptions about the future, which can sometimes be unpredictable. However, by using meticulous research and analysis together with proven methodologies, a well-executed Reserve Study provides condominium associations with valuable budget planning information and guidance on upcoming long-term maintenance and repairs.

In addition, a Reserve Study is a key marketing component for well-run condominium associations, since potential buyers can be assured that common elements will be cared for, and that association fees will not increase dramatically due to a lack of foresight and planning.

East Lansing City Center Condominium Association (East Lansing City Center) directed Michigan Reserve Associates to do a "Update, With Site-Visit/On-Site Review" Reserve Study. On June 12, 2020 we performed an on-site noninvasive inspection.

A Reserve Study consists of two major components.

Physical Analysis	Financial Analysis
<ul> <li>Component Survey and Inventory</li> </ul>	<ul> <li>Current Reserve Fund Status</li> </ul>
Assessment of Component Condition	<ul> <li>Recommended Funding Plan</li> </ul>
• Estimate of Useful Life, Effective Age,	
Remaining Useful Life, and Replacement Cost	

East Lansing City Center consists of 43 units. The project was built in 2001.

The Reserve Components were established based on our review of the governing documents (e.g., master deed and bylaws for condominiums, declaration of covenants and restrictions and/or bylaws for homeowners associations, or occupancy agreement in a cooperative

association), and interviews with representatives of Krimson. The following table provides an inventory of the reserve components:

# **Inventory of Reserve Components**

	Quantities	First Year of	Life Ana	lysis (Yrs.)
Reserve Component Inventory	<u>Total</u>	Replacement	<u>Normal</u>	Remaining
<b>Building Components</b>				
Asphalt Roof Shingles and OSB Decking; Replacement	3,432 SF	2021	25	1
EPDM Membrane Roof Cover; Replacement	19,042 SF	2024	20	4
Common Areas; Partial Flooring Replacement and Part. Painting; Phased	10,044 SF	2024	12	4
Windows, Doorwalls, and Exterior Doors; Phased Replacement	9,338 SF	2021	35	1
Wood Decks; Phased Replacement	648 SF	2026	25	6
Exercise Equipment (Average Cost Per Unit); Phased Replacement	4 UNITS	2025	15	5
Elevator; Modernization (Cab, Controller, Door Opener, Hydro Tank)	1 UNIT	2023	20	3
Roof Top HVAC Units (2 Units); Replacement	1 LOT	2024	20	4
Video Security DVR+Computer; Replacement	1 LOT	2021	10	1
Fob Security System; Replacement	1 LOT	2033	15	13
Trash Compactor; Capital Repairs	1 UNIT	2025	10	5
Other Components				
Reserve Study; Update (Guaranteed Update Price Years 1-5)	1 UNIT	2024	5	4

#### RECOMMENDED FUNDING PLAN

The purpose of this reserve study is to assist the client in developing the budget for the next fiscal year. Since the next fiscal year for East Lansing City Center commences January 1, 2021, the reserve fund balance as of January 1, 2021 must be calculated to account for revenues and expenses between the present date and the start of the new fiscal year.

According to information provided by Krimson, the East Lansing City Center reserve fund balance as of January 1, 2021 will be \$236,521. This balance was calculated by taking the reserve balance of \$208,268 as of January 31, 2020, adding \$37,785 in anticipated reserve revenue until the end of the fiscal year, then adding \$420 in earned interest until the end of the fiscal year, and deducting \$9,952 in anticipated reserve expenditures until the end of the fiscal year. This calculation is shown below.

Projected Reserve Fund Balance as of 01/01/2021					
Reserve Fund Balance as of 01/31/2020			\$	208,268	
Plus Remaining Reserve Contribution until End of C	urrent Fiscal	Year		37,785	
Plus Estimated Interest From Reserve Funds Until End of Current Fiscal Year				420	
Minus Remaining Reserve Expenditures Until End o	f Current Fisc	al Year			
Fire Suppression Equipment	\$	4,742			
Reserve Study Update		1,210			
Window Replacement		4,000			
Total Expenditures To Deduct				(9,952)	
Equals Projected Reserve Fund Balance as of 01/0	1/2021		\$	236,521	

Using the current Reserve Contribution amount plus a typical 0% annual increase, the projected Reserve Balance will remain positive until the year 2024, at which time there will be a negative balance of \$104,363. The Reserve Balance will be negative \$133,202 by the year 2045. This indicates that the current Reserve Balance and annual Reserve Contributions will be inadequate to fund the anticipated Reserve Expenditures (see "Reserve Funding Plan Graphs" beginning on page M).

This Reserve Study calculates Reserve Expenditures based on local costs, estimated interest which will accrue to the Reserve Funds collected, and accounting for projected future inflation for materials and workmanship.

The following is our recommend Reserve Funding Plan Contributions for the duration of the projection period, along with a snapshot of the current and Recommended Reserve Contribution.

#### **Recommended Annual Reserve Contributions**

	Recommended	Additional	Recommended		Additional
Year	Reserve Contrib.	Reserve Contribution	Year	Reserve Contrib.	Reserve Contribution
2021	\$ 35,000	\$ 46,500	2034	\$ 40,200	\$ -
2022	35,400	46,500	2035	40,600	-
2023	35,800	46,500	2036	41,000	-
2024	36,200	46,500	2037	41,400	-
2025	36,600	46,500	2038	41,800	-
2026	37,000	46,500	2039	42,200	-
2027	37,400	46,500	2040	42,600	-
2028	37,800	46,500	2041	43,000	-
2029	38,200	-	2042	43,400	-
2030	38,600	-	2043	43,800	-
2031	39,000	-	2044	44,200	-
2032	39,400	-	2045	44,600	-
2033	39,800	-			

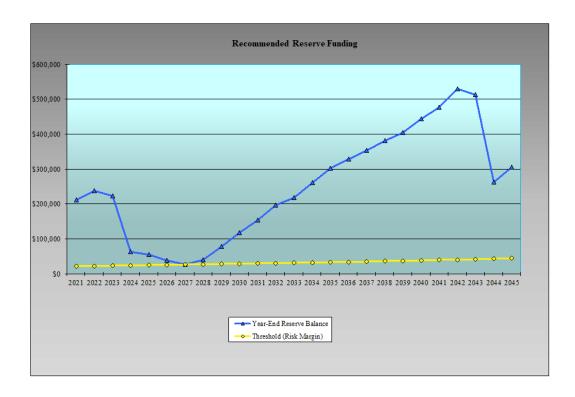
#### **Snapshot of Current and Recommended Reserve Contribution**

	I	Annual	Per Unit
	A	Amount	Per Month (Average)
Projected Reserve Contribution at Start of Next Fiscal Year	\$	41,220	\$ 79.88
Recommended Reserve Contribution at Start of Next Fiscal Year	\$	35,000	\$ 67.83
Amount of Increase/(Decrease) Current vs. Recommended	\$	(6,220)	\$ (12.05)
Additional Reserve Contribution (Years 1-8)	\$	46,500	\$ 90.12

The recommended year 2021 Reserve Contribution of \$35,000 (\$67.83 per unit per month) reflects a decrease of \$6,220, relative to the projected historic Reserve Contribution, or a decrease of \$12.05 per unit per month. Because the Association's current reserve fund balance is nominal, and since there will be significant reserve expenditures in the near term, a time limited Additional Reserve Contribution of \$46,500 per year for eight years is required. Starting with the 2021 Recommended Reserve Contribution of \$35,000 per annum, plus the Additional Reserve Contribution of \$46,500 per year for eight years, and then increasing the Recommended Reserve Contribution by 1.0% per year, the Association's Reserves will typically remain above zero as well as above the Threshold for all years shown ("Threshold" is discussed in the next paragraph).

By following the recommended Reserve Contributions, the Association will gradually accrue a Reserve Fund which will provide the financial means to address the major Reserve Component Expenditures which will arise in the future. The recommended Reserve Contribution amount will provide adequate, but not excessive, levels of Reserves, while still maintaining a reasonable Threshold Margin which suits the particular needs of the Association and will provide a "safety buffer" for unanticipated Reserve Expenditures which are unpredictable but inevitable.

The following graph illustrates the year-end Reserve Fund balance using the Recommended Reserve Funding Plan for the next 25 years.



In order to ensure that significant overfunding or underfunding does not occur, we recommend that the East Lansing City Center Condominium Association update this Reserve Study every three to five years, or when any major changes in the Physical or Financial analysis occur. Such changes include accelerated Reserve Component Expenditures undertaken at the client's discretion, addition (construction) or demolition of Reserve Components, interest rate changes on reserve investments, and changes in local building costs.

Respectfully sub-			
Paul Conahan, N			
Wildingan Reser	ve Associates EDC		

#### INTRODUCTION AND METHODOLOGY

#### Introduction

A Reserve Study is a tool which anticipates major common area repair and replacement expenses and develops a prudent Reserve Funding Plan to pay for these expenses. By its nature, a Reserve Study must make assumptions about the future, which can sometimes be unpredictable. However, by using meticulous research and analysis together with proven methodologies, a well-executed Reserve Study provides condominium associations with valuable budget planning information, and guidance on upcoming long-term maintenance and repairs.

In addition, a Reserve Study is a key marketing component for well-run condominium associations, since potential buyers can be assured that common elements will be cared for, and that association fees will not increase dramatically due to a lack of foresight and planning.

There are three levels of service for Reserve Studies as espoused by the Community Associations Institute.<sup>1</sup>

- I) Full: A Full Reserve Study consists of the following:
  - Component Inventory
  - Condition Assessment (based upon on-site visual observation)
  - Life and Valuation Estimates
  - Reserve Fund Status
  - Recommended Reserve Funding Plan

#### II) Update, With-Site-Visit/On-Site Review, consists of:

- Component Inventory (verification only, not quantification)
- Condition Assessment (based upon on-site visual observation)
- Life and Valuation Estimates

<sup>&</sup>lt;sup>1</sup> "RS National Reserve Study Standards," Community Associations Institute, April 2009, p. 2.

- Reserve Fund Status
- Recommended Reserve Funding Plan

#### III) Update, No-Site-Visit/Off-Site Review, consists of:

- Life and Valuation Estimates
- Reserve Fund Status
- Recommended Reserve Funding Plan

This is a "Update, With Site-Visit/On-Site Review" Reserve Study. For simplicity, the terms "Update, With Site-Visit/On-Site Review" Reserve Study and "Reserve Study" will be used interchangeably following this section.

Typically, the Level I (Full Reserve Study) option is only required for an association's first Reserve Study. This is our most comprehensive offering and should be used by associations which are ordering their first reserve study, or whose previous reserve study is so dated and/or inaccurate as to require a "blank slate" approach to re-survey the various common element components and their conditions. As part of our scope of work, we will thoroughly review your governing documents, maintenance schedule, and interview Board members and/or property management representatives to determine what items should be included in the list of reserve components. We will then estimate Useful Life, Remaining Useful Life, and Replacement Cost, all documented and supported with color photographs. From this Physical Analysis we will then perform a Financial Analysis which will account for your current reserve funding situation and recommend an ongoing Reserve Funding Plan.

Level II (Update, With-Site-Visit/On-Site Review) reserve studies are recommended if the association is confident that the Reserve Components have been accurately surveyed, and no major changes have occurred since the last Full Reserve Study. The scope of work includes an on-site inspection to update Useful Life, Remaining Useful Life, Cost Figures, and Financial Assumptions, but component quantities will not be re-surveyed.

When doing an "Update With Site Visit" assignment, the Reserve Component inventory is not quantified. The quantification of reserve components as determined by the previous reserve study will be assumed to be accurate.

Level III (Update, No-Site-Visit/Off-Site Review) reserve studies are useful when the association is confident that the Reserve Components have been accurately identified and surveyed, but due to the minimal number of Reserve Components, and short-time period elapsed since the last Reserve Study, the association does not feel an on-site inspection would be required. In order to provide a credible reserve study, we only provide this type of reserve study for existing clients, and our previous reserve study (with site visit) is less than five years old. Narrative content of this type of Reserve Study is extremely limited, with most communication occurring via an Executive Summary, charts and graphs (Reserve Expenditures and Reserve Funding Plan).

When doing an "Update Without Site Visit" assignment, the Reserve Component conditions are not visually confirmed and updated, and the Remaining Useful Lives of the Reserve Components will typically be calculated based on the assumption that the actual time elapsed since the previous reserve study is added to the effective age as determined in the previous reserve study. The quantification of Reserve Components as determined by the previous reserve study will be assumed to be accurate.

East Lansing City Center Condominium Association (East Lansing City Center) directed Michigan Reserve Associates to do a "Update, With Site-Visit/On-Site Review" Reserve Study. On June 12, 2020 we performed an on-site noninvasive inspection.

#### METHODOLOGY

The Physical Analysis precedes the Financial Analysis since we must first determine the projected expenses before evaluating the Association's financial status to develop a Recommended Reserve Funding Plan.

The Physical Analysis therefore starts with an inventory of Reserve Components. To establish what items to include in our inventory, we reviewed the Association's governing documents, recent Reserve expenditures, and conducted interviews with the Association's representatives to determine if there are historical precedents which warrant inclusion in the Reserve Component Inventory.

What Physical Assets Should be Included in an Inventory of Reserve Components?

Reserves are large items that require advance planning to repair or replace. Operating expenses are ongoing, predictable expenses that repeat throughout the year or from year-to-year, with modest unanticipated items typically covered by a maintenance contingency in the budget, whereas larger items may be covered by additional assessments or insurance.

There is a national standard five-part test to establish whether an item should be funded through reserves. First, the item must be a common element maintenance responsibility. Second, the component must have a limited life. Third, the limited life must be predictable. Fourth, the item must be above a threshold cost. Fifth, the item is required by local codes. A sixth criteria is not part of the national standard but is inherent in the methodology used in this Reserve Study. Only Reserve Components which fall within the 25-year time horizon are included in our analysis. Therefore, Reserve Components presented in this Reserve Study are association responsibilities, major items, with limited and predictable lives which fall within the 25-year projection period. Items such as foundations and major infrastructure components are not included in reserves since they do not have limited useful life expectancies which can be predicted. Small items, such as metal street signs are not considered Reserve Components due to their nominal costs (i.e., they do not pass Test # 4 above).<sup>2</sup>

MICHIGAN RESERVE ASSOCIATES

<sup>&</sup>lt;sup>2</sup> *Ibid.*, p. 2.

As it relates to the Association, we suggested that items costing more than \$3,000 and that have a minimum predictable Useful Life of at least three years be considered Reserve Components. The reason for this is that there should be a firewall between the reserve and operating accounts so that reserve funds do not get treated as an extension of operating funds. Reserve expenses are typically defined as being used major repairs and replacements. We are not lawyers, but we do recommend that the Association adopt a clear definition of what constitutes a Reserve Component which will be funded via Reserve Funds. We recommend that the Association consult with an experienced community association attorney to develop such a definition of Reserve Components.

#### How are Useful Life and Remaining Useful Life Established?

Useful Life is estimated based on our experience with the Reserve Component, after accounting for quality, expected maintenance, and weather exposure. Remaining Useful Life is primarily a function of the current noninvasive observed condition. The complement of Remaining Useful Life is Effective Age. Typically, Effective Age does not equal Actual Age due to differences in quality, rate of wear, and degree of maintenance attention a particular item receives. For Reserve Components where age characteristics are not readily visible (e.g., complex heating/cooling systems, elevators, security systems, etc.), we rely on interviews with the Association's service vendor. If the vendor is no longer available, we use national benchmarks, primarily from the *Marshall & Swift* cost estimating service.

#### How are Cost Estimates Established?

Whenever possible, we use recent historical information for Reserve Components which have been replaced or repaired, since this gives an actual localized data point from which to estimate future costs. Additional sources of information are comparisons with other condominium and homeowners associations for which we have performed work, as well as interviews with local vendors. Costs are also compared with those published by *Marshall & Swift* to provide a feedback mechanism to verify local vendor costs against national and regional cost data.

How Much Reserves Should We Contribute?

We utilize four principles when developing a Recommended Reserve Funding Plan. First, there must be sufficient cash on hand to handle the Reserve projects which arise. Second, we seek to provide a stable rate of contribution since this makes it easier for the Association and Association residents to plan their budgets year-to-year. Third, the Reserve Funding Recommendation attempts to evenly distribute the contributions over the years so that owners pay their fair share in proportion to the time that they have owned their unit. Finally, the Recommended Reserve Funding Plan must be fiscally responsible using reasonable and prudent financial assumptions with a risk profile tailored to the client.<sup>3</sup>

What is Our Funding Goal?

There are four different funding goals which are independent of the methodology utilized. These goals are:

- 1) Baseline Funding: Anticipated costs and their expected timing over the projection period are calculated. The reserve contribution is then set to keep the reserve cash balance above zero.
- 2) Full Funding: Setting a reserve funding goal of attaining and maintaining reserves at or near 100% funded. For example, an association would set aside \$10,000 per year for a component (e.g., roof) which will cost \$100,000 to replace in 10 years. Full funding is considered the most expensive (and therefore conservative) funding formula since money for all reserve components is set aside and accounted for.
- 3) Statutory Funding: Establishing a reserve funding goal of setting aside the specific minimum or regulatory amount of reserves requires by local statutes.
- 4) Threshold Funding: Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. Depending on the threshold, this funding goal may be more or less conservative than Full Funding.

<sup>&</sup>lt;sup>3</sup> *Ibid.*, p. 4.

With Baseline Funding, there is no margin for error, and if expenses are higher than budgeted, or projects occur earlier than planned, additional assessments can occur, although this risk can be somewhat alleviated by regular updates to the Reserve Study.

Statutory Funding is not recommended because there is no direct correlation between the statutory minimum and the association's actual financial needs. For example, a statutory 10% minimum for the reserve contribution might be acceptable for a newer development with relatively few common elements, and a properly developed maintenance and overall budget plan. However, the 10% minimum might be wildly off the mark for an older development with extensive common element obligations and a maintenance and overall budget that are themselves underfunded.

In our opinion, Full Funding provides an excessive level of funding since the association is typically setting aside money that it will not be using for decades. On the other hand, this funding goal has the distinction of typically being the most conservative funding formula which may be seen as a virtue by some associations.

We recommend using Threshold Funding with a safety margin set above 100% of Baseline Funding. Although the safety margin is arbitrary, it should be customized to the client's risk profile. As a rule of thumb, we suggest a safety margin of \$500 per unit as prudent for associations similar to the subject. When an association is considering what their threshold safety margin should be, a good question to ask is "What is a reasonable level of money to have on hand due to unpredictable events?" Small amounts can usually be covered by maintenance contingency funds or short-term loans, while very large unplanned events are typically covered by insurance.<sup>4</sup>

An added benefit of using Threshold Funding as recommended above is that it provides a layer of global risk management against the many future unknowns which must be assumed for the purposes of a reserve study. For example, reserve studies must make assumptions

MICHIGAN RESERVE ASSOCIATES

<sup>&</sup>lt;sup>4</sup> *Ibid.*, p. 3.

about future rates of inflation, rates of return on reserve investments, and the Useful Lives of Reserve Components. One way of accounting for the many different risk factors inherent in reserve study assumptions would be to attempt to individually forecast the future replacement cost for each Reserve Component. For example, certain Reserve Components which depend on petroleum-based commodity materials (such as paving and roof shingles) have recently been increasing at a rate significantly greater than inflation. However, not only would it be impractical to forecast future Replacement Costs for potentially dozens of Reserve Components (some of which may actually experience deflation over time), it is more straightforward to concede that future risk can realistically only be managed at a macro, rather than micro, level.

MICHIGAN RESERVE ASSOCIATES

#### PHYSICAL ANALYSIS

#### **IDENTIFICATION OF RESERVE COMPONENTS**

East Lansing City Center consists of 43 units. Project was completed in 2001. The following graphic provides an aerial view of the project.

#### **AERIAL AND LOCATION MAP**



The Physical Analysis starts with an inventory of Reserve Components. To establish what items to include in our inventory, we reviewed the Association's governing documents, recent Reserve expenditures, and conducted interviews with the Association's representatives. Please see the Reserve Expenditures spreadsheet in the Addenda for a listing of individual line items, estimates for Useful Life, Remaining Useful Life, and current Replacement Cost for each component.

Based on the national five-part test described on page 11, there are certain items which have not been included in this reserve study.

Items which may pass the five-part inclusion test as a Reserve Component discussed on page 11 but were specifically excluded in this Reserve Study at the direction of the client are:

- Building; fire protection control panel (Simplex 4010); replacement This item does not have a predictable useful life and is best replaced on an "as needed" basis via operating or contingency funds.
- Building; basement furnace; replacement The Association reports that this item has
  never been used since the ambient temperature in the basement remains well above
  freezing even during harsh winters. For this reason, the Association does not maintain
  or repair this furnace, and this item was assumed to not require replacement moving
  forward.
- Building; common area furnishings and kitchenette appliances; replacement –
   Furnishings are assumed to be replaced "as needed" using operating or contingency funds.

Items which may fail the five-part inclusion test as a Reserve Component discussed on page 11 but were specifically included in this Reserve Study at the direction of the Client are:

None noted

Noteworthy items which did not meet the criteria (see page 11) for inclusion as Reserve Components are broken down by category below:

# Item failed test #1 (Not an association common element maintenance/replacement responsibility)

- Units; interior surfaces; replacement (co-owner responsibility)
- Units; mechanical systems; replacement (co-owner responsibility)
- Building; CVS EPDM roof cover; replacement (commercial unit responsibility)
- Building; commercial units mechanical heating/cooling equipment (commercial unit responsibility)

## Item failed test #2 (No limited life)

None noted

#### Item failed test #3 (No Predictable Limited Life)

- Site; electrical power distribution systems; replacement
- Site; sewer and water mains; replacement
- Site; tree and shrub replacement
- Site; routine asphalt crack filling and repair
- Building; foundations; replacement
- Building; structural framing; replacement

#### Item failed test #4 (Cost is Below the Assumed Threshold Amount of \$3,000)

- Items in this category which are assumed to be funded (either on an "as needed" or scheduled basis) by the Association's operating budget are:
  - Building; entry intercom panel; replacement
  - Building; wood decks; staining (last done 2019 for \$2,125)
  - Building; stairwell electric heaters; replacement

Noteworthy items which passed Tests 1-4 on page 11, and are thus considered Reserve Components, but were not explicitly accounted for in this Reserve Study because the Remaining Useful Life is beyond the 25-year time horizon:

- Building; fire suppression system; lines and heads; replacement
- Building; entry lobby; tile flooring (installed in 2019 at a cost of \$12,224)
- Building; asphalt roof shingles; replacement (assumed newly installed in 2021)
- Building; metal mailboxes; replacement
- Units; brick siding; replacement
- Units; brick tuck pointing Tuck pointing costs depend largely on the condition of the
  existing installation and overall accessibility. For this reason, it is typical for tuck
  pointing to be bid on a time and materials basis. The Useful Life for tuck pointing
  ranges from 25 to 50 years, and not all of the brick veneer will require tuck pointing
  depending on location and orientation to the elements.

#### CONDITION ASSESSMENT

The following narrative details the condition assessment of the significant Reserve Components, along with relevant commentary and cost source, if applicable.

#### **BUILDING COMPONENTS**

Asphalt Roof Shingles: Asphalt shingles were observed to be in average condition relative to their age. We note that the claimed shingle life of 25-30 years is typically based on moderate weather conditions compared to Michigan and Ohio, and the claimed life is not typically realized. We therefore used a more realistic 25-year Useful Life. At time of replacement, existing roofing is assumed to be completely removed and then replaced using asphalt shingles with a similar expected Useful Life. Replacement cost was estimated using the *Marshall and Swift Valuation Service* as well as actual costs obtained from roofing projects performed at several condominium associations. We recommend that the Association implement a regular annual inspection program to ensure that trees are not rubbing against roof shingles, since constant friction can dramatically shorten the Useful Life of the asphalt shingles.

A 10% cost factor is included in the overall asphalt shingle replacement cost to account for typical partial replacement of wood decking/sheathing and fascia boards as applicable.

When evaluating roof shingles, the following are the primary indicators that it is time for a roof replacement:

<u>Granule Loss:</u> Asphalt shingles are made-up of a base supporting material, asphalt, and mineral granules. The granules protect against ultra-violet degradation and physical damage. Excessive granule loss leads to bald patches, and these areas lead to drying out and splitting.

<u>Lifting and Curling:</u> As shingles near the end of their useful life, the most obvious physical indicator is lifting and curling, which telegraph that the

shingles are drying out. At this stage, roof failure is imminent, and a roof replacement, or a reroofing will need to be completed.

A roof replacement involves removing the existing shingles down to the sheathing, and replacing with new shingles. A reroofing is installation of new shingles over the old shingles, assuming there is only one layer of old shingles and no curling. In general, a roof replacement is the preferred roofing method since most roofing manufacturer warranties only apply to full replacements. In addition, reroofs typically have a shorter useful life since the new shingles are installed on an uneven surface and do not lay flat, making them prone to blow offs and cracks forming over the uneven surfaces, similar to street reflective cracking in asphalt overlays.

EPDM (Ethylene Propylene Diene Monomer) Membrane Roof Cover: The EPDM membrane roof cover was generally observed to be in average condition. EPDM has an expected Useful Life of 20 years, which corresponds to the typical warranty period offered by manufacturers. Cost includes removal and disposal of existing EPDM roof material, including any underlying insulation. Replacement material is assumed to consist of a minimum of  $3\frac{1}{2}$  inches of polyisocyanurate and/or loose insulation, and 60 mil EPDM fully adhered membrane cover. Cost data was provided via our proprietary database of actual Michigan replacement costs, which was also cross-checked using the *Marshall Valuation Service*.

**Windows and Doorwalls and Exterior Doors:** Useful life can vary widely depending on usage patterns and orientation to the elements. Given the anodized aluminum finish and commercial-grade quality of the units, a 35-year Useful Life was selected.

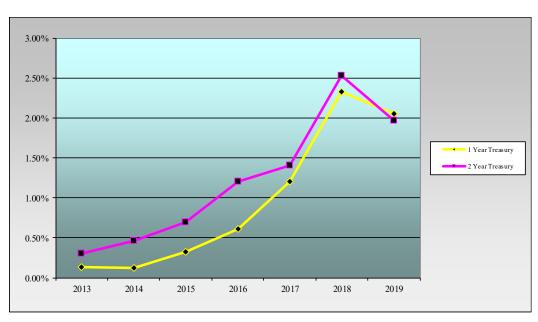
**Wood Decks:** The exterior decks are made of treated wood which has an expected Useful Life of 25 years. Per square foot cost includes adjustments made for railings and added deck height, as well as the greater expense for treated wood versus non-treated wood. Wood decks were assumed to be replaced with similar decks made of treated wood. Much of these maintenance costs could be avoided by using a polymer composite building material (e.g.,

decks.		
	nits: Replacement cost was provided by the Association's HVAC vendor. Co	
includes crar	ne rental, and an allowance for permits for traffic modifications to allow the cra	ine
to operate.		

#### FINANCIAL ANALYSIS

#### FINANCIAL ASSUMPTIONS

The following chart details the historical trend for typical savings investment vehicles (oneand two-year Treasuries) as published by the U.S. Treasury Department.



**Trend for Sample Investment Types** 

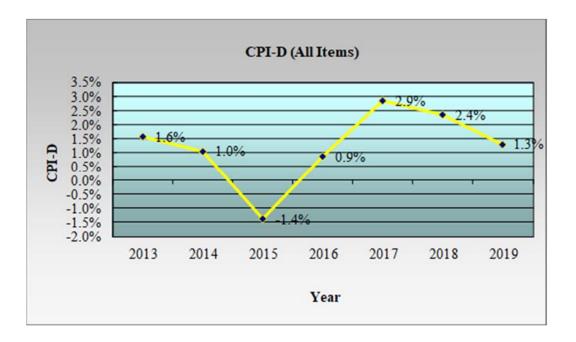
Treasuries provide a good investment benchmark since they reflect a very safe investment whose risk profile matches that of most condominium associations. By using "laddering" in which maturities are staggered over time, an Association can often gain some of the higher yield of a longer-term investment, while still having access to liquid funds as the various investments mature in series.

A broad-based analysis of rates is required since the investment yield-rate selected will be utilized for the entire 25-year projection period, and the rate selected should therefore reflect what can be expected during a 25-year time period, with nominal attention paid to current investment rates.

For the purposes of this Reserve Study, we will use a Reserve savings yield rate of 2.0%. We did not make any adjustments to account for the impact of Federal Income Tax on investment income since the Association's tax situation can change over time. We advise the client to consult with its accountant and/or professional investment advisor to develop or refine an investment strategy consistent with the Association's risk profile and Reserve investment profile.

#### **ESTIMATION OF INFLATION RATE**

The following graph illustrates the five-year historical trend for the Consumer Price Index (CPI-D; all Items) as published by the U.S. Bureau of Labor Statistics.



As discussed for Reserve savings, a broad-based analysis of rates is required since the inflation rate selected will be utilized for the entire 25-year projection period. In addition, the CPI-D measures inflation for a wide-range of goods, and therefore does not correlate directly with changes in the cost of materials and labor for repair/replacement of Reserve Components.

For the purposes of this Reserve Study, we will use a 3.0% annual inflation rate. Although inflation may be above or below a 3.0% annual inflation rate during any particular year of the

25-year projection period, we anticipate a 3.0% annual inflation rate to represent the average rate over time.

#### SUMMARY AND CONCLUSION OF SELECTED RATES

Having the Reserve savings yield rate less than the expected long-term inflation rate is a conservative assumption since most investments are made with the primary purpose of matching or exceeding inflation. However, associations typically follow a reserve investment policy which strongly emphasizes safety and preservation of capital. Since risk and reward are directly related, the lower risk profile utilized by associations typically results in a lower rate of return, and therefore having the reserve savings investment yield be less than the expected inflation rate was considered reasonable.

#### RECOMMENDED FUNDING PLAN

The purpose of this reserve study is to assist the client in developing the budget for the next fiscal year. Since the next fiscal year for East Lansing City Center commences January 1, 2021, the reserve fund balance as of January 1, 2021 must be calculated to account for revenues and expenses between the present date and the start of the new fiscal year.

According to information provided by Krimson, the East Lansing City Center reserve fund balance as of January 1, 2021 will be \$236,521. This balance was calculated by taking the reserve balance of \$208,268 as of January 31, 2020, adding \$37,785 in anticipated reserve revenue until the end of the fiscal year, then adding \$420 in earned interest until the end of the fiscal year, and deducting \$9,952 in anticipated reserve expenditures until the end of the fiscal year. This calculation is shown below.

Projected Reserve Fund Balance as of 01/01/2021					
Reserve Fund Balance as of 01/31/2020			\$	208,268	
Plus Remaining Reserve Contribution until End of C	urrent Fiscal`	Year		37,785	
Plus Estimated Interest From Reserve Funds Until End of Current Fiscal Year				420	
Minus Remaining Reserve Expenditures Until End o	f Current Fisc	al Year			
Fire Suppression Equipment	\$	4,742			
Reserve Study Update		1,210			
Window Replacement	4,000				
Total Expenditures To Deduct				(9,952)	
Equals Projected Reserve Fund Balance as of 01/0	1/2021		\$	236,521	

Using the current Reserve Contribution amount plus a typical 0% annual increase, the projected Reserve Balance will remain positive until the year 2024, at which time there will be a negative balance of \$104,363. The Reserve Balance will be negative \$133,202 by the year 2045. This indicates that the current Reserve Balance and annual Reserve Contributions will be inadequate to fund the anticipated Reserve Expenditures (see "Reserve Funding Plan Graphs" beginning on page M).

This Reserve Study calculates Reserve Expenditures based on local costs, estimated interest which will accrue to the Reserve Funds collected, and accounting for projected future inflation for materials and workmanship.

The following is our recommend Reserve Funding Plan Contributions for the duration of the projection period, along with a snapshot of the current and Recommended Reserve Contribution.

#### **Recommended Annual Reserve Contributions**

	Recommended	Additional	Recommended		Additional
Year	Reserve Contrib.	Reserve Contribution	Year	Reserve Contrib.	Reserve Contribution
2021	\$ 35,000	\$ 46,500	2034	\$ 40,200	\$ -
2022	35,400	46,500	2035	40,600	-
2023	35,800	46,500	2036	41,000	-
2024	36,200	46,500	2037	41,400	-
2025	36,600	46,500	2038	41,800	-
2026	37,000	46,500	2039	42,200	-
2027	37,400	46,500	2040	42,600	-
2028	37,800	46,500	2041	43,000	-
2029	38,200	-	2042	43,400	-
2030	38,600	-	2043	43,800	-
2031	39,000	-	2044	44,200	-
2032	39,400	-	2045	44,600	-
2033	39,800	-			

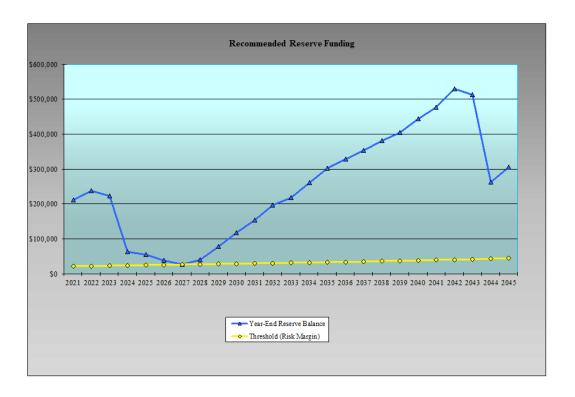
#### **Snapshot of Current and Recommended Reserve Contribution**

	I	Annual	Per Unit
	A	Amount	Per Month (Average)
Projected Reserve Contribution at Start of Next Fiscal Year	\$	41,220	\$ 79.88
Recommended Reserve Contribution at Start of Next Fiscal Year	\$	35,000	\$ 67.83
Amount of Increase/(Decrease) Current vs. Recommended	\$	(6,220)	\$ (12.05)
Additional Reserve Contribution (Years 1-8)	\$	46,500	\$ 90.12

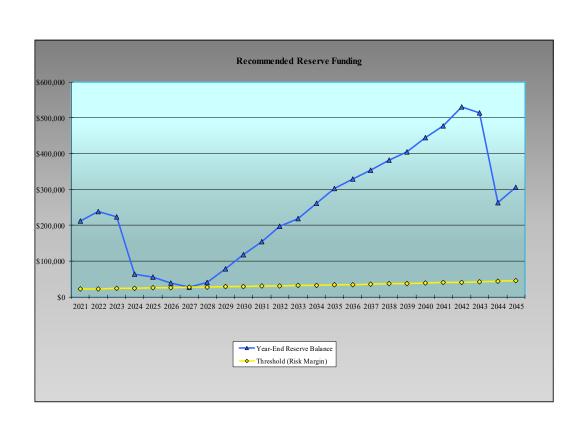
The recommended year 2021 Reserve Contribution of \$35,000 (\$67.83 per unit per month) reflects a decrease of \$6,220, relative to the projected historic Reserve Contribution, or a decrease of \$12.05 per unit per month. Because the Association's current reserve fund balance is nominal, and since there will be significant reserve expenditures in the near term, a time limited Additional Reserve Contribution of \$46,500 per year for eight years is required. Starting with the 2021 Recommended Reserve Contribution of \$35,000 per annum, plus the Additional Reserve Contribution of \$46,500 per year for eight years, and then increasing the Recommended Reserve Contribution by 1.0% per year, the Association's Reserves will typically remain above zero as well as above the Threshold for all years shown ("Threshold" is discussed in the next paragraph).

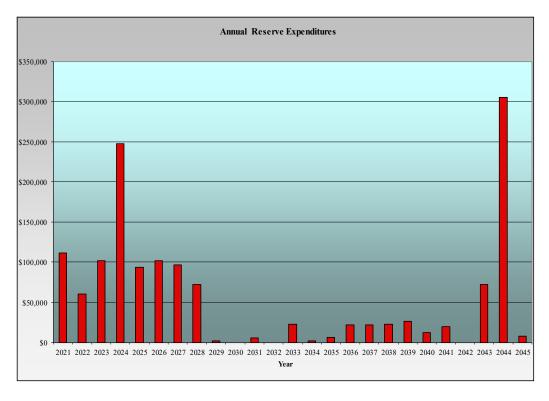
By following the recommended Reserve Contributions, the Association will gradually accrue a Reserve Fund which will provide the financial means to address the major Reserve Component Expenditures which will arise in the future. The recommended Reserve Contribution amount will provide adequate, but not excessive, levels of Reserves, while still maintaining a reasonable Threshold Margin which suits the particular needs of the Association and will provide a "safety buffer" for unanticipated Reserve Expenditures which are unpredictable but inevitable.

The following graph illustrates the year-end Reserve Fund balance using the Recommended Reserve Funding Plan for the next 25 years.



In order to ensure that significant overfunding or underfunding does not occur, we recommend that the East Lansing City Center Condominium Association update this Reserve Study every three to five years, or when any major changes in the Physical or Financial analysis occur. Such changes include accelerated Reserve Component Expenditures undertaken at the client's discretion, addition (construction) or demolition of Reserve Components, interest rate changes on reserve investments, and changes in local building costs.





**ADDENDA** 

# **PHOTOGRAPHS**



Photograph 1: Typical view of exterior building elevations



Photograph 2: Typical view of wood decks

# **PHOTOGRAPHS**



Photograph 3: Typical view of EPDM roof area



Photograph 4: Typical view of asphalt shingle roof area

# **PHOTOGRAPHS**



Photograph 5: Typical view of wood decks



Photograph 6: Typical view of roof top unit



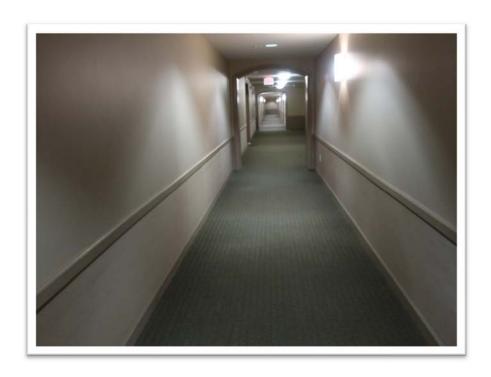
Photograph 7: Typical view of roof top unit



Photograph 8: Typical view of common area



Photograph 9: Typical view of common hallway finishes



Photograph 10: Typical view of common hallway finishes



Photograph 11: Typical view of common hallway finishes



Photograph 12: Typical view of common hallway finishes



Photograph 13: Typical view of window system



Photograph 14: Typical view of exercise equipment



Photograph 15: Typical view of elevator hydro tank



Photograph 16: Typical view of trash compactor



Photograph 17: Typical view of video security system

# RESERVE EXPENDITURES AND RESERVE FUNDING PLAN

Formatted for Legal-Size Paper (or Use 150%+ Magnification To View on a Monitor)

## Assumptions

3.0% annual inflation rate

2021 year of analysis

			Remaining Useful Lives and Estimated Future Replacements Costs																											
	Quantities	First Year of	Life Ana	alysis (Yrs.)		RUL=1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Reserve Component Inventory	<u>Total</u>	<u>Replacement</u>	<u>Normal</u>	<u>Remaining</u>	Unit Cost (S)	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	2032	<u>2033</u>	<u>2034</u>	<u>2035</u>	<u>2036</u>	<u>2037</u>	2038	2039	<u>2040</u>	<u>2041</u>	<u>2042</u>	<u>2043</u>	<u>2044</u>	<u>2045</u>
<b>Building Components</b>																														
Asphalt Roof Shingles and OSB Decking, Replacement	3,432 SF	2021	25	1	14.28 PSF	49,001					-																		-	-
EPDM Membrane Roof Cover; Replacement	19,042 SF	2024	20	4	4.50 PSF	-			93,635				-					-			-					-			169,115	-
Common Areas; Partial Flooring Replacement and Part. Painting: Phased	10,044 SF	2024	12	4	5.50 /SF	-			15,091	15,544	16,010	16,490	-					-			21,516	22,162	22,827	23,511		-				-
Windows, Doorwalls, and Exterior Doors; Phased Replacement	9,338 SF	2021	35	1	50.00 /SF	58,363	60,113	61,917	63,774	65,688	67,658	69,688	71,779			-		-			-	-	-			-				-
Wood Decks; Phased Replacement	648 SF	2026	25	6	27.00 PSF	-				-	10,141	10,446	-			-		-			-					-				-
Exercise Equipment (Average Cost Per Unit); Phased Replacement	4 UNITS	2025	15	5	3,500 /UNIT	-	-	-	-	7,879	8,115	-	-		-	-	-	-	-	-	-	-	-	-	12,275	12,643	-	-		-
Elevator; Modernization (Cab, Controller, Door Opener, Hydro Tank)	1 UNIT	2023	20	3	75,000 /UNIT	-	-	39,784	40,977	-	-		-		-	-	-	-		-	-	-	-	-	-	-	-	71,854	74,009	
Roof Top HVAC Units (2 Units); Replacement	1 LOT	2024	20	4	30,000 /LOT	-			32,782	-			-			-		-			-	-	-			-			59,208	-
Video Security DVR+Computer; Replacement	1 LOT	2021	10	1	4,000 /LOT	4,000	-	-	-	-		-	-		-	5,376	-	-	-	-	-	-	-	-	-	7,224	-	-		-
Fob Security System, Replacement	1 LOT	2033	15	13	16,000 /LOT	-	-	-	-	-	-		-		-	-	-	22,812		-	-	-	-	-	-	-	-	-		-
Trash Compactor; Capital Repairs	1 UNIT	2025	10	5	4,000 /UNIT	-	-	-	-	4,502		-	-	-	-	-	-	-	-	6,050	-	-	-	-	-	-	-	-		8,131
Other Components																														
Reserve Study; Update (Guaranteed Update Price Years 1-5)	1 UNIT	2024	5	4	1,410 /UNIT		-	-	1,410	-	-			1,786		-	-		2,071	-			-	2,400			-	-	2,783	-
						111,364	60,113	101,701	247,669	93,612	101,925	96,624	71,779	1,786		5,376		22,812	2,071	6,050	21,516	22,162	22,827	25,912	12,275	19,867		71,854	305,115	8,131

## HISTORIC AND RECOMMENDED RESERVE FUNDING PLAN

Formatted for Legal-Size Paper (or Use 150%+ Magnification To View on a Monitor)

#### Assumptions

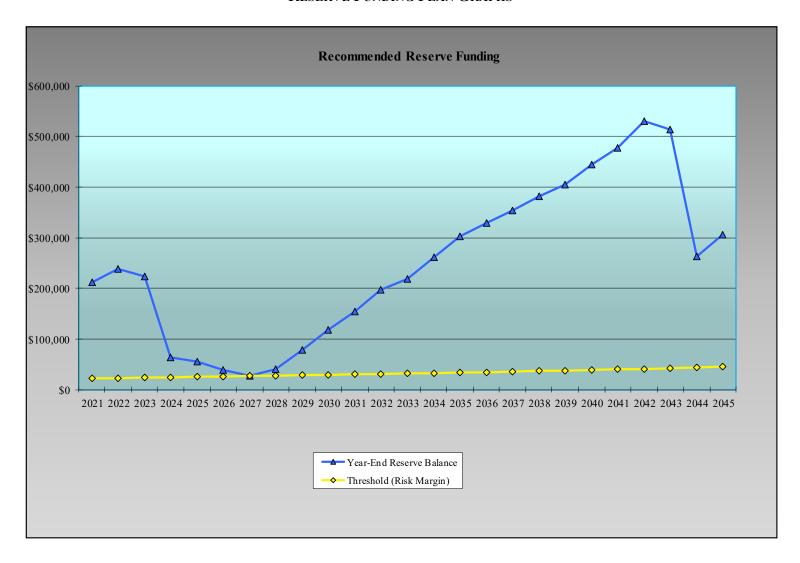
- 2.0% Average Interest Rate Earned on Invested Reserves
- 0.0% Annual Increase in Collected Reserve Funds for Historic Projection
- 1.0% Annual Increase in Collected Reserve Funds for Recommended Funding Plan
- \$ 500 Per Unit; Threshold For 1st Year
  - 43 Number of Units
  - No Autocalculate Reserve Contributions

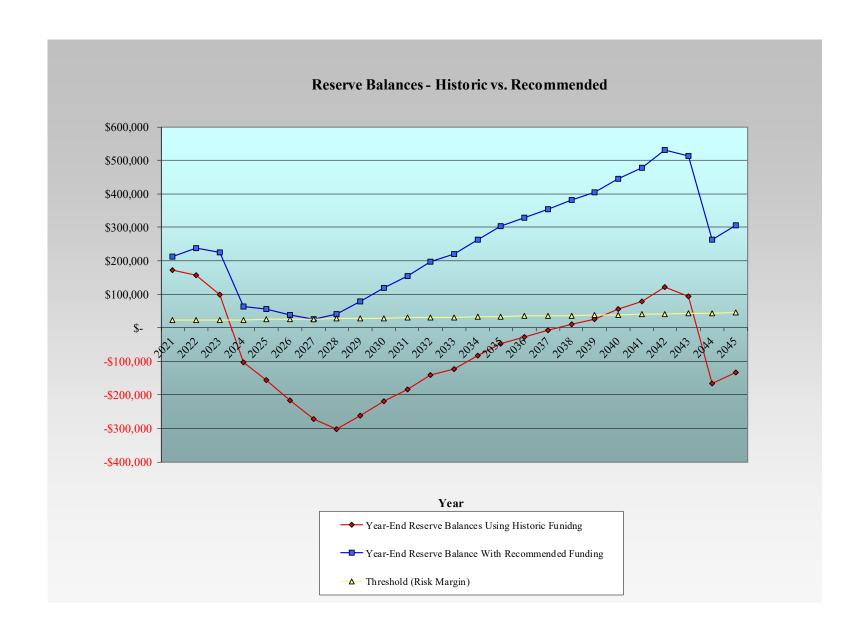
#### Historic Reserve Funding Projection

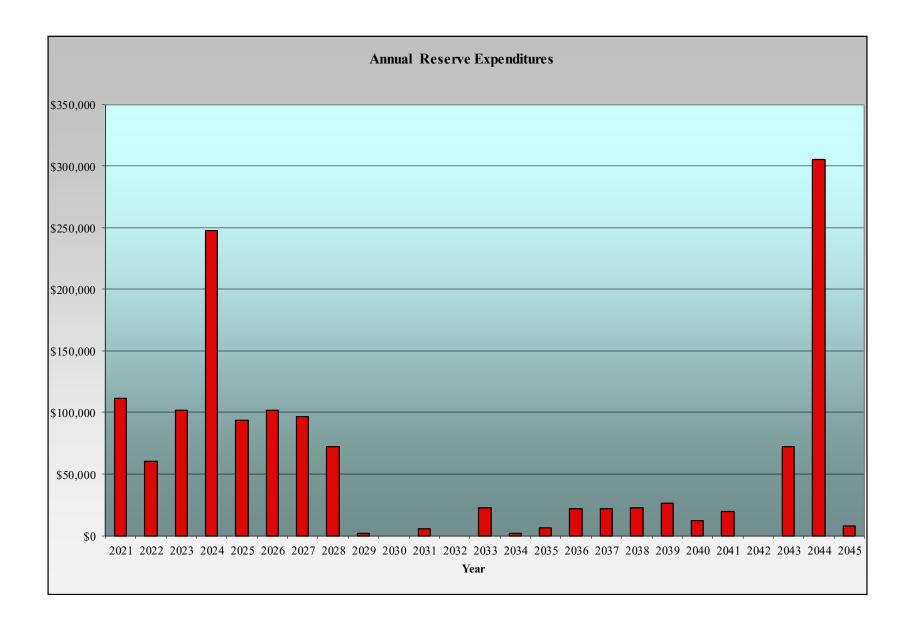
			<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	2028	2029	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	<u>2036</u>	<u>2037</u>	<u>2038</u>	2039	<u>2040</u>	<u>2041</u>	<u>2042</u>	<u>2043</u>	<u>2044</u>	<u>2045</u>
	Reserve Balance at Beginning of Fiscal Year	\$	236.521 \$	171.557 \$	156,544 \$	99,644 \$	(104,363) \$	(156,306) \$	(216,561) \$	(271,515) \$	(301,625) \$	(261,741) \$	(220,072) \$	(183,779) \$	(142,109) \$	(123,252) \$	(83,653) \$	(48,035) \$	(27,882) \$	(8,374) \$	10.469 \$	26.435 \$	56,359 \$	79,288 \$	122,543 \$	94,809 \$	(166,740)
Plus	Recurring Reserve Contribution	Ť	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220	41,220
Plus	Additional Reserve Contribution		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equals	Interim Reserve Balance		277,741	212,777	197,764	140,864	(63,143)	(115,086)	(175,341)	(230,295)	(260,405)	(220,521)	(178,852)	(142,559)	(100,889)	(82,032)	(42,433)	(6,815)	13,338	32,846	51,689	67,655	97,579	120,508	163,763	136,029	(125,520)
Plus	Estimated Interest Earned, During Year <sup>1</sup>		5,180	3,880	3,580	2,442	449	449	449	449	449	449	449	449	449	449	449	449	449	449	659	978	1,576	2,035	2,900	2,345	449
Equals	New Reserve Balance		282,921	216,658	201,345	143,306	(62,694)	(114,636)	(174,891)	(229,846)	(259,955)	(220,072)	(178,403)	(142,109)	(100,440)	(81,583)	(41,984)	(6,365)	13,788	33,295	52,347	68,633	99,155	122,543	166,663	138,375	(125,070)
Less	Anticipated Expenditures, By Year		(111,364)	(60,113)	(101,701)	(247,669)	(93,612)	(101,925)	(96,624)	(71,779)	(1,786)	-	(5,376)	-	(22,812)	(2,071)	(6,050)	(21,516)	(22,162)	(22,827)	(25,912)	(12,275)	(19,867)	-	(71,854)	(305,115)	(8,131)
Equals	Anticipated Balance of Reserve Fund at Year End	\$	171,557 \$	156,544 \$	99,644	-\$104,363	-\$156,306	-\$216,561	-\$271,515	-\$301,625	-\$261,741	-\$220,072	-\$183,779	-\$142,109	-\$123,252	-\$83,653	-\$48,035	-\$27,882	-\$8,374 \$	10,469 \$	26,435 \$	56,359 \$	79,288 \$	122,543 \$	94,809	-\$166,740	-\$133,202
Threshold	\$21,50	0 \$	22,145 \$	22,809 \$	23,494 \$	24,198 \$	24,924 \$	25,672 \$	26,442 \$	27,236 \$	28,053 \$	28,894 \$	29,761 \$	30,654 \$	31,573 \$	32,521 \$	33,496 \$	34,501 \$	35,536 \$	36,602 \$	37,700 \$	38,831 \$	39,996 \$	41,196 \$	42,432 \$	43,705 \$	45,016
Target																											
Amount Ov	ver/ <mark>Under</mark> Threshold	\$	149,412 \$	133,735 \$	76,150	-\$128,561	-\$181,230	-\$242,233	-\$297,958	-\$328,860	-\$289,794	-\$248,966	-\$213,540	-\$172,763	-\$154,826	-\$116,174	-\$81,531	-\$62,383	-\$43,910	-\$26,134	-\$11,265 \$	17,527 \$	39,292 \$	81,347 \$	52,377	-\$210,445	-\$178,218
Recomme	nded Funding Plan																										
			<u>2021</u>	2022	2023	2024	2025	2026	<u>2027</u>	2028	2029	2030	2031	2032	2033	2034	<u>2035</u>	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
	Reserve Balance at Beginning of Fiscal Year	\$	236,521 \$	211,770 \$	238,177 \$	223,931 \$	63,835 \$	54,998 \$	38,077 \$	26,522 \$	39,986 \$	77,616 \$	118,189 \$	154,603 \$	197,524 \$	218,896 \$	261,842 \$	302,071 \$	328,043 \$	354,293 \$	380,808 \$	405,172 \$	444,065 \$	476,548 \$	529,952 \$	512,975 \$	262,801
Plus	Recommended Recurring Reserve Contributions		35,000	35,400	35,800	36,200	36,600	37,000	37,400	37,800	38,200	38,600	39,000	39,400	39,800	40,200	40,600	41,000	41,400	41,800	42,200	42,600	43,000	43,400	43,800	44,200	44,600
Plus	Additional Reserve Contribution		46,500	46,500	46,500	46,500	46,500	46,500	46,500	46,500			5	-	-	-	153	7			5	-	-	-	-		-
Equals	Interim Reserve Balance		318,021	293,670	320,477	306,631	146,935	138,498	121,977	110,822	78,186	116,216	157,189	194,003	237,324	259,096	302,442	343,071	369,443	396,093	423,008	447,772	487,065	519,948	573,752	557,175	307,401
Plus	Estimated Interest Earned, During Year <sup>1</sup>		5,112	4,621	5,154	4,873	1,676	1,503	1,169	942	1,216	1,973	2,789	3,522	4,384	4,816	5,679	6,488	7,012	7,541	8,076	8,568	9,350	10,004	11,076	10,741	5,742
Equals	New Reserve Balance		323,133	298,291	325,631	311,504	148,610	140,002	123,146	111,765	79,402	118,189	159,978	197,524	241,708	263,912	308,121	349,559	376,455	403,634	431,084	456,340	496,415	529,952	584,829	567,916	313,144
Less	Anticipated Expenditures, By Year		(111,364)	(60,113)	(101,701)	(247,669)	(93,612)	(101,925)	(96,624)	(71,779)	(1,786)		(5,376)		(22,812)	(2,071)	(6,050)	(21,516)	(22,162)	(22,827)	(25,912)	(12,275)	(19,867)	ä	(71,854)	(305,115)	(8,131)
Equals	Anticipated Balance of Reserve Fund at Year End	S	211,770 \$	238,177 \$	223,931 \$	63,835 \$	54,998 \$	38,077 \$	26,522 \$	39,986 \$	77,616 \$	118,189 \$	154,603 \$	197,524 \$	218,896 \$	261,842 \$	302,071 \$	328,043 \$	354,293 \$	380,808 \$	405,172 \$	444,065 \$	476,548 \$	529,952 \$	512,975 \$	262,801 \$	305,012
1 Assuming	reserves are invested monthly during the course of the year	ar																									
Amount Ov	er/ <mark>Under</mark> Threshold	S	189,625 \$	215,368 \$	200,437 \$	39,636 \$	30,074 \$	12,405 \$	80 \$	12,751 \$	49,564 \$	89,295 \$	124,842 \$	166,870 \$	187,323 \$	229,321 \$	268,574 \$	293,542 \$	318,757 \$	344,206 \$	367,472 \$	405,234 \$	436,552 \$	488,756 \$	470,543 \$	219,096 \$	259,996

MICHIGAN RESERVE ASSOCIATES

## RESERVE FUNDING PLAN GRAPHS







### CERTIFICATIONS, ASSUMPTIONS AND LIMITING CONDITIONS

#### **Certifications**

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions and conclusions.
- I have no present or prospective interest in the property that is the subject of this report, and no personal interest with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined outcome that favors the cause of the client, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- My analyses, opinions, and conclusions are developed, and this report has been prepared, in conformity with the
  relevant sections of the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation and
  the Code of Professional Ethics of the Appraisal Institute.
- I have made a non-invasive inspection of the property that is the subject of this report.
- No one provided significant professional assistance to the person signing this report.
- I certify that the use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- In Michigan, appraisers are required to be licensed/certified and are regulated by the Michigan Department of Consumer and Industry Services, Licensing Division, P.O. Box 30018, Lansing, Michigan 48909.

Paul K.T. Conahan, MBA, RS

Paul Conalun

State Certified General Real Estate Appraiser

License No. 1201002454

### **Assumptions and Limiting Conditions**

## <u>Assumptions</u>

- When doing an "Update With Site Visit" assignment, the Reserve Component inventory was not quantified, although minor additions/deletions of the component inventory, along with their quantities and install dates, were accounted for. The quantification of Reserve Components as determined by the previous reserve study were assumed to be accurate.
- When doing an "Update Without Site Visit" assignment, the Reserve Component conditions were not visually confirmed and updated, and the Remaining Useful Lives of the Reserve Components were calculated based on the assumption that the actual time elapsed since the previous reserve study was added to the effective age as determined in the previous reserve study. However, minor additions/deletions of the Reserve Components, along with their quantities and dates of installation, as reported by the client, were accounted for. Excluding any changes reported by the client, the quantification of Reserve Components as determined by the previous reserve study were assumed to be accurate.
- Responsible and competent property management are assumed. This includes not only responsible and competent oversight with regard to the repair and replacement of the Reserve Components, but also responsible and competent financial management, with particular regard to prudent investment of the Association's reserve funds.
- Information furnished by representatives of the association regarding financial, physical, quantity, or historical issues were assumed reliable. However, no warranty is given for the accuracy of this information. The actual or projected total reserve balance presented in the Reserve Study is based upon information provided but was not audited. Client's receipt of the final reserve study will serve as verification that the client has reviewed the reserve study and confirmed that all information provided by the association has been accurately represented in the final reserve study.
- It is assumed that there are no hidden or unapparent conditions on the property, subsoil or structure. No responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them.
- Unless otherwise stated in this report, the existence of hazardous materials, which may or may not be present on the property, was not observed by the author of this report. The author has no knowledge of the existence of such materials on or in the property. The author, however, is not qualified to detect such substances. The presence of substances such as asbestos, urea formaldehyde foam insulation, lead-based paint, or other potentially hazardous materials may adversely affect the property and require remediation. We assumed that there are no such materials on the property. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if desired.
- It is assumed that there is full compliance with all applicable federal, state, and local environmental regulations and laws, and all other applicable laws and regulations.

- It is assumed that all required licenses, certificates of occupancy, consents or other legislative or administrative authority from any local, state or national government or private entity or organization have been obtained.
- The client is assumed to have deemed previously developed component quantities as accurate and reliable (for update reports only).
- The current work is reliant on the validity of prior Reserve Studies (for update reports only).

## **Limiting Conditions**

- Any dispute arising under this agreement will be settled using binding arbitration under the rules of the American Arbitration Association. Arbitration shall be held in the City of Ann Arbor, Michigan, and one arbitrator will be appointed. Any arbitration award may be entered by any court of competent jurisdiction. The Client understands that absent these provisions, the Client would have the right to sue in court and have a jury trial.
- Unless the time frame is shorter under applicable law, any legal action or claim relating to the reserve study or reserve study provider shall be filed in the applicable arbitration tribunal, within two years from the date of delivery to Client of the reserve study to which the claims or causes of action relate or, in the case of acts or conduct after delivery of the report, two years from the date of the alleged acts or conduct. The time frame stated in this section shall not be extended by any delay in the discovery or accrual of the underlying claims, causes of action or damages. The time frame stated shall apply to all non-criminal claims or causes of action of any type.
- By its nature, a reserve study must make assumptions about the future. Michigan Reserve Associates LLC cannot be held responsible for unforeseeable events that dramatically alter future costs from those projected in the reserve study.
- Reserve Studies do not typically include the repair or replacement of plumbing, electrical wiring, or telephone lines.
- Information provided about reserve projects will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection.
- For mechanical systems, we have observed those parts of the mechanical equipment and systems that constitute an integral part of the property and that are generally visible. From such observation, we have reported any apparent conditions that we believe might bear on the conclusions of this report. We have not, however, extensively tested such mechanical systems and equipment, and we assume no responsibility for their operating performance.
- No invasive testing was performed on the Reserve Components. We render no opinion on the structural integrity of the property, nor do we offer an opinion as to conformity with governmental code requirements.
- Our opinion of Remaining Useful Life is not a guarantee or warranty of the Reserve Components.

- This study is to be used by the intended user for the purpose of budgeting and long-term major repair and replacement planning. The scope of work included in this study is unique to the intended use and intended user, and this report may not be utilized for any other use or user. Such other uses include, but are not limited to, performing an audit, quality/forensic analysis, or background checks of historical records. The client and its representatives may not transmit this reserve study in any fashion to persons or entities that perform reserve studies.
- Client agreed to furnish Michigan Reserve Associates LLC with a complete and up-to-date set of governing documents. Michigan Reserve Associates LLC cannot be held responsible for incomplete or incorrect documents. We are not attorneys and we cannot guarantee that all reserve components have been properly included or excluded in the reserve study. Client agrees to review the reserve study for accuracy during the review process, and seek legal counsel when necessary. Client agrees that all responsibility for the list of reserve components presented in the final reserve study shall be borne by the client.
- The Americans with Disabilities Act (ADA) became effective on January 26, 1992. We have not made a specific compliance survey and analysis of the subject property to determine whether or not it is in conformity with the various requirements of the ADA. It is possible that a compliance survey of the property, together with a detailed analysis of the requirements of the ADA, could reveal that the property is not in compliance with one or more requirements of the ADA. If so, this fact could have a negative impact on the property and trigger compliance costs. We did not consider noncompliance with the ADA requirements for this assignment.
- Our inspection did not address or render an opinion on repairs or replacements arising from original construction defects or unpredictable acts of nature.
- We are not financial advisors, and we recommend that the client consult with its accountant and/or professional investment advisor(s) to develop and refine an investment strategy consistent with the Association's risk profile and Reserve investment profile.
- We are not attorneys, and we recommend that the client consult with its attorney regarding reserve requirements and any other interpretations of relevant law, such as, but not limited to, the Michigan Condominium Act, complementary legislation such as the Nonprofit Corporation Act, and Administrative Rulings.
- Roof areas were measured from the ground using generally accepted techniques which take into account the building footprint, roof overhang, roof pitch, and unique roofing characteristics.
- Possession of this report, or a copy thereof, does not carry with it the right of publication. It
  may not be used for any purpose by any person other than the party to whom it is addressed
  without the written consent of Michigan Reserve Associates LLC, and in any event only with
  properly written qualifications and only in its entirety.
- Any illustrative material in this report is included only to assist the reader in visualizing the property and/or provide graphical support to the narrative text.

- We are not by reason of this report, required to give further in-person consultation, testimony or be in attendance in court with reference to the property in question unless prior arrangements have been made.
- Liability due to negligence is limited to the actual cost paid by the client for this engagement.
- Michigan Reserve Associates LLC reserves the right to include your Association's name in our client list. However, all information provided to us, as well as details of interviews, conversations, and the Reserve Study shall be strictly confidential and will not be disbursed to any third party.

### QUALIFICATIONS - PAUL K.T. CONAHAN, MBA, RS

#### **CONTACT INFORMATION**

Mail: 424 Little Lake Drive, Suite 23, Ann Arbor, Michigan 48103

Phone: (734) 661-1259

Fax: (734) 661-1259

E-mail: paul@MichiganReserveAssociates.com

Web: www.MichiganReserveAssocaites.com

### **EMPLOYMENT RECORD**

Principal, Michigan Reserve Associates LLC, Ann Arbor, Michigan, 2005-Present

Principal, Davis M. Somers Commercial Appraisal Company, Ann Arbor, Michigan, 2018 to the present

Principal, Davis M. Somers Company, Ann Arbor, Michigan, 1991-2018

REALTOR® Associate, Fee Simple Realty, Honolulu, Hawaii, 1985-1987

#### ADDITIONAL EXPERIENCE

Qualified as Expert Witness, Washtenaw County Circuit Court

Michigan Department of Transportation Approved Level II Appraiser

Approved Fee Appraiser for the United States Veterans Administration

### **EDUCATION AND DESIGNATIONS**

Bachelor of Arts (BA), Biopsychology, Vassar College, Poughkeepsie, New York, Graduated in 1991

Master of Business Administration (MBA) With an Emphasis in Real Estate and Finance, Stephen M. Ross School of Business, University of Michigan, Graduated in 1999

Reserve Specialist (RS), Community Associations Institute, Alexandria, Virginia, Awarded in 2010

## APPRAISAL EDUCATION (MOST RECENT SHOWN FIRST)

2020-2021 7-Hour National USPAP Update Course, McKissock, February 2020

Michigan Law, McKissock, February 2020

Essential Elements of Disclosures and Disclaimers, February 2020

Residential Construction for Appraisers, McKissock, February 2019

Essential Elements of Disclosures and Disclaimers, McKissock, February 2019

Understanding Residential Construction, McKissock, February 2018

2018-2019 7-Hour National USPAP Update Course, McKissock, February 2018

Michigan Law, McKissock, February 2018

Green Building Construction, McKissock, January 2017

Essential Elements of Disclosures and Disclaimers, McKissock, January 2017

2016-17 7-Hour National USPAP Update Course, McKissock, February 2016

Contemporary Michigan Property Tax Issues, Appraisal Institute, February 2016

Fundamental Concepts of Analysis, McKissock, January 2015

Appraising Fast Food Properties, McKissock, January 2015

Environmental Issues for Appraisers, McKissock, February 2014

Fundamentals of Separating Real Property, Personal Property, and Intangible Business Assets (Course 833), Appraisal Institute, Instructor James Vernor, Ph.D., MAI, April 2012

Essential Elements of Disclosures and Disclaimers, McKissock, December 2011

Appraising Convenience Stores, Appraisal Institute, January 2011

GIS, The Executive Overview, Appraisal Institute, January 2011

Commercial/Residential Construction Inspection, Appraisal Institute, April 2009

Appraising from Blueprints and Specifications, Appraisal Institute, April 2009

Valuation of Detrimental Conditions, Appraisal Institute, Novi, December 2007

What Clients Would Like Their Appraisers to Know, Southfield, December 2006

Effective Appraisal Writing, Appraisal Institute, Ypsilanti, Michigan, October 2006

Appraising Local Retail Properties, Appraisal Institute, Southfield, Michigan, June 2004

Appraising the Tough Ones, Appraisal Institute, Ypsilanti, Michigan, December 2003

Highest & Best Use and Market Analysis (Course 520), Appraisal Institute, Troy, Michigan, April/May 2001

Other Relevant Courses Taken:

Advanced Applications (Course 550), Appraisal Institute Report Writing and Valuation Analysis (Course 540), Appraisal Institute Advanced Income Capitalization (Course 510), Appraisal Institute Challenged and passed Appraisal Procedures (Course 120), Appraisal Institute Capitalization Theory and Techniques Part A, Appraisal Institute The Appraiser as an Expert Witness, Appraisal Institute

### LICENSES

Certified General Real Estate Appraiser Number 1201002454, State of Michigan, Obtained in 1993

Active Real Estate Associate Broker License Number 6502139365, State of Michigan, Obtained in 2002 (Michigan Real Estate Salesperson License obtained in 1992)

Inactive Real Estate Sales License Number RS-36782, State of Hawaii, Obtained in 1985

#### ASSOCIATIONS

Member, Community Associations Institute, Since 2005

Member, United Condominium Owners of Michigan, Since 2005

Member, International Right of Way Association, Gardena, California, Since 1996

### **REGULATORY NOTES**

In Michigan, appraisers are required to be licensed/certified and are regulated by the Michigan Department of Labor and Economic Growth, Licensing Division, P.O. Box 30018, Lansing, Michigan 48909.

#### PARTIAL LIST OF CLIENTS

Condominium/Homeowners Associations

1001 Covington Association (Detroit)

297 Condominium Owners Association

(Muskegon)

Aberdeen at Hartford Association

(Macomb)

Autumn Woods Condominium

Association (Ypsilanti)

Bay Cliff Estates Association (Suttons

Bay)

Bellefontaine Meadows Homeowners

Association (Dayton, Ohio)

Benstein Crossing Condominium

Association (Commerce Township)

Birch Grove II Condominium Association

(Chesterfield)

Black Bear Farms Co-Owners' Association (Traverse City)

Breaker Cove (Bay City)

Brentwood Park Condominium Association (East Lansing)

Bridgewater Place Condominium

Association (Bridgewater)

Byron Forest Condominium Association

(Byron Center)

Cedar Creek Commons Association

(Traverse City)

Centennial Farm Phase I, Inc. (South

Lyon)

Centennial Farm Phase II, Inc. (South

Lyon)

Chateau Vert Association (Ypsilanti)

Chapel Hill Condominium Association

(Ann Arbor)

Chelsea Square Condominium

Association (Canton)

Colony Farms Condominium Association

(Plymouth)

Cornerstone Village Homeowners

Association (Macomb)

Cottage Glens Owners Association

(Williamsburg)

Creekwood Estates Association (Bay

City)

Crossings at Irving Avenue Condominium

Association (Royal Oak)

Crystal Village Manor (Marysville)

Douglas Harbor Village Condominium

Association (Douglas)

**Eaglecrest Condominium Association** 

(Grand Rapids)

East Lansing City Center Condominium

Association (East Lansing)

Echo Valley Condominium Association

(Farmington Hills)

Fairlane Woods Association (Dearborn)

Fairways at Oak Pointe Condominium Association (Brighton)

Fieldstone Village Condominium Association (Chelsea)

Forest at Orchard Lake Association (Farmington Hills)

Fox Pointe Association (Ann Arbor)

Gallery Park Homeowners Association (Ann Arbor)

Glen Arbor Condominium Association (Grand Blanc)

Great Oak Cohousing Association (Ann Arbor)

Grosse Pointe Gardens Association (Harper Woods)

Hamilton House Condominium Association (Okemos)

Hampton Ridge North HOA (Canton)

Harbour Towne Condominium Association (Muskegon)

Haven Condominium Association (South Haven)

Heatherwood Condominium Association (Ann Arbor)

Highland Park Condominium Association (Cleveland, Ohio)

Heritage Falls Condominium Association (Ann Arbor)

Hidden Creek of Oceola Condominium Association (Howell)

Hidden Glen Condominium Association (Canton)

Hidden Lake Community Association (South Lyon)

Hometown Village of Marion Association (Howell)

Hometown Village at Waterstone Association (Oxford)

Indian Village Condominium Association (Grand Rapids)

Island Lake of Novi Community Association (Novi)

Island Lake South Harbor Association (Novi)

Island Lake Woods Association (Novi)

Kirkway Homeowners Association (Canton)

Knightsbridge Gate Association (Novi)

Lake Ridge Condominium Association (Traverse City)

Lakeside Village Association (Haslett)

Lakeside Village North Association (Haslett)

Lake Village II (Walled Lake)

Legacy Park Condominium Association (Dearborn Heights)

Liberty Lofts Condominium Association (Ann Arbor)

Links of Pheasant Run Condominium Association (Canton)

Locklin Pines Cluster Condominium Association (West Bloomfield)

Lost Creek Condominium Association (East Lansing)

LVP Property Owners Association (Findlay, Ohio)

Marquette Village Condominium Association (Westland)

Meadowview Common Condominium Association (Elk Rapids)

Newberry Place Cohousing Condominium Association (Grand Rapids)

Northridge Estates Homeowners Association (Northville)

Northridge Villas Association (Northville)

Northville Hills Golf Club Homeowners Association (Northville)

Northville Hollow Condominium Association (Northville)

Oakhurst Owners' Association (Clarkston)

Oakley Meadow Condominiums Association (Tiffin, Ohio)

Okemos Preserve Condominium Association (East Lansing)

Oxford Park Condominium Association (Canton)

Parkview Manor Association (Flint)

Parkway Condominium Association (Livonia)

Perry Farm Village Association (Harbor Springs)

Pheasant Run Condominium Association (Portage)

Pine Creek Condominiums of Haslett Association (Haslett)

Pinehurst Condominium Association (Trenton)

Pittsfield Village Condominium Association (Ann Arbor)

Plymouth Corners Condominium Association (Plymouth)

Plymouth Landing Association (Canton)

Pointe Park Homeowners Association (Grosse Point Park)

Providence Tower Association (Southfield)

Quail Run of South Lyon Condominium Association (South Lyon)

Raintree Condominiums of Chesterfield Association (Chesterfield)

Reserve at Tull Lake Condominium Association (White Lake)

River House Co-Op (Detroit)

River Park Estates Condominium Association (Lansing)

River's Edge at Cherry Hill Village I Homeowners Association (Canton)

Riverside Glen Homeowners Association (Macomb)

Riverside Park Place Condominium Association (Ann Arbor)

River South Homeowners Association (Fairview Park, Ohio)

Rochester Park II Association (Rochester)

Saddlebrook Condominium Homeowners Association (Plymouth)

Saddle Creek Association (South Lyon)

Sand Piper Condominium Association (Glen Arbor)

St. Lawrence Estates Condominium Association (Northville)

Scio Village Condominium Association (Ann Arbor)

Spruce Manor Condominium Association (Royal Oak)

Steeple Chase of Northville Owners Association (Northville)

Steeple Ridge Condominium Association (Clarkston)

Stone Lake Condominium Association (East Lansing)

Stonewater Homeowners Association (Northville)

Stratford Townhouses Consumer Housing Cooperative (Grand Rapids)

Sunset Torch Association (Bellaire)

The Atrium Inn Condominium Association (Boyne City)

The Courtyards at Little Bear

Condominium Association (Lewis Center, Ohio)

The Landings at Rayner Ponds Condominium Association (Mason)

The Links of Northville Hills Golf Club Condominium Association (Northville)

The Lodge at East Bay Co-Owners Association (Elk Rapids)

The Maples of Novi, Maple Pointe Association (Novi)

The Mountain Grand Owners' Association (Boyne Falls)

The Ponds Cooperative Homes (Okemos)

The Preserve at Maple Lake Association (Milford)

The Ravines of Northville Homeowners Association (Northville)

The Reserve at the Fairways Condominium Phase 1 Association, Inc. (Huber Heights, Ohio)

The Residences at TPC Association (Dearborn)

The Village Condominium Association (Grosse Pointe)

The Willits Condominium Association (Birmingham)

Thornberry Condominium Association (Midland)

Thornton Farms Condominium Association (Dexter)

Tollgate Woods Homeowners Association (Novi)

Touchstone Cohousing Association (Ann Arbor)

Traditions at Cambridge Association (Canton)

University Commons Condominium Association (Ann Arbor)

Valley Wood Condominium Association (Livonia)

Vantage Pointe Condominium Association (Glen Arbor)

Venn Manor (Detroit)

Verndale Lakes Condominium Association (Lansing)

Versailles Place Condominium Association (Farmington Hills)

Village Oaks Common Areas Association (Novi)

Villa Capri Condominium Association (Warren)

Villas at Northville Hills Condominium Association (Northville)

Villas at Stonehenge Condominium Association (Kalamazoo)

Vistas of Central Park Condominium Association (Canton)

Walden Hills II Condominium Association (Ann Arbor)

Walnut Woods Condominium Association (West Bloomfield)

Walton Pond Condominium Association (Pontiac)

Waters Edge Condominium Association (Clarkston)

Waterside Homeowners Association (Maumee, Ohio)

Wedgewood Village Association (Plymouth)

Whetherstone Condominium Association (White Lake)

Whitney Court of West Bloomfield (West Bloomfield)

Windward Court Condominium Association (Detroit)

Woodfield Square Association (Brighton)

Woodland Creek Condominium Association (Kentwood)

Woodland Ridge of Commerce Association (Commerce Township)

Woodland Trails Condominium Association (Okemos)

Woodlore Condominium Owners Association (Livonia)

Woods of Northville (Plymouth)

Woodside Meadows Condominium Association (Ann Arbor)

Woodward Place Association (Birmingham)

Woodward Place at Brush Park I Association (Detroit)

Woodwind Glen Condominium Association (South Lyon) Educational/Institutional/Non-Residential Organizations

Anthroposophical Society in America (Ann Arbor)

Chelsea District Library (Chelsea)

Gateway Center Association (Office Condominiums; Saline)

Michigan Friends Center (Chelsea)

Oak Grove AME Church (Detroit)

Rudolph Steiner School of Ann Arbor (Ann Arbor)

St. Joseph River Yacht Club (St. Joseph)

The Waterfront Marina of St. Joseph (St. Joseph)

Ward Evangelical Presbyterian Church (Northville)