

# CAPITAL RESERVE STUDY

Prepared for:

**Monmouth Heights at Freehold Swim Club**  
Freehold, New Jersey

Care of:

Monmouth Heights at Freehold Swim Club  
31 Potter Road  
Freehold, New Jersey 07728

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## INTRODUCTION

A Capital Reserve Study is a report prepared to estimate the amount of money which must be put aside for future repairs and replacements to the Association's physical plant. The report is a tool for evaluating and establishing a stable level of reserve funding.

The primary reason to set aside reserve funds is to ensure that adequate funds are available for anticipated long-term maintenance of common areas. Reserve funding is a means of fairly distributing the costs of future replacement to the common elements among all owners. The reserve fund is integral to the Association's administration of fiscal planning and budgeting. In addition, the reserve funding is an indicator of the financial strength of the Association which will affect the value of the units.

This Reserve Study consists of two (2) parts: the physical analysis and the financial analysis. This Capital Reserve Study was prepared in accordance with the "National Reserve Study Standards" of the Community Associations Institute (C.A.I.). The level of service provided is a **Category II, Capital Reserve Study Update**. A Category II, Capital Reserve Study Update is a reserve study in which the following five (5) reserve study tasks are performed:

1. Component Inventory (verification only, not quantification)
2. Condition Assessment (based upon on-site visual observations)
3. Life and Valuation Estimates
4. Fund Status
5. Funding Plan

This report will analyze the future replacement costs for common elements which are capital items with a reasonably predictable useful life. The capital items will be limited to those items which have a useful life exceeding two (2) years. If a certain item requires replacement more often than every two (2) years, it should be included in the operating budget. Furthermore, items will be excluded if they have an insignificant cost or if they are permanent in nature. Items with an insignificant cost would be those that could be funded in the operating budget without any adverse financial impact. Items of a permanent nature are those which exceed the thirty (30) year study period and those which are integral to reconstruction of the entire project, such as; concrete footings, foundation walls, crawlspace and roof wood framing, in-wall utility services and stormwater piping. Since the remaining useful life estimates, inflation and interest need on-going review, it is recommended that the study be updated every three (3) to five (5) years. An older Association with a significant amount of repair and replacement activity may need to update its study annually.

## **DESCRIPTION OF DEVELOPMENT**

Monmouth Heights at Freehold Swim Club is a recreation facility for the residents of Monmouth Heights at Freehold. The swim club is located in the Township of Freehold, Monmouth County, New Jersey.

The buildings are concrete block with a mansard roof and low slop roof framed by wooden trusses. The mansard roof is comprised of strip shingles. The low slope roof is covered by modified bitumen material.

The main entrance to the recreation facility is located on Elton-Adelphia Road. The parking area is maintained and owned by the Association.

Recreational facilities within the community include an in-ground swimming pool, and tot-lot. Included in the pool building is men's and women's locker rooms, kitchen, multi-purpose room, and offices.

The Association is responsible for common elements such as open space, roads, curbs, sidewalks, parking areas, fencing, recreational facilities, utilities not located within easements or owned by the respective utility companies, exterior site lighting, roofing, foundations, common area building entrances, and other miscellaneous items.

## **DISCLOSURES**

The Capital Reserve Study has been performed under the agreement that all relevant information has been provided to FWH Associates, P.A (FWH). Any material issues that have not been disclosed would cause a distortion of the Association's situation. Information provided by the official representative of the Association regarding financial, physical, quantity or historical issues will be deemed reliable by FWH.

The reserve study will be a reflection of information provided to FWH and assembled for the Association's use, not for the purpose of performing an audit, quality/forensic analysis or background checks of historical records.

The Capital Reserve Study update is performed considering the client has deemed previously developed component quantities as accurate and reliable. All current work is reliant on the validity of prior reserve studies.

All information provided to FWH regarding reserve projects will be considered reliable. On-site inspections should not be considered project audits or quality inspections.

At the time this reserve study was conducted FWH has had no involvements with the Association, which could result in actual or perceived conflicts of interest.

## **TERMS AND DEFINITIONS**

### **1) Cash Flow Method**

A method of developing a Reserve Funding Plan where contributions to the Reserve fund are designed to offset the variable annual expenditures from the Reserve fund. Different Reserve Funding Plans are tested against the anticipated schedule of Reserve expenses until the desired Funding Goal is achieved.

### **2) Component**

The individual line items in the Reserve Study, developed or updated in the Physical Analysis. These elements form the building blocks for the Reserve Study. Components typically are:

- a) Association responsibility
- b) with limited Useful Life expectancies
- c) predictable Remaining Useful Life expectancies
- d) above a minimum threshold cost
- e) as required by local codes.

### **3) Component Inventory**

The task of selecting and quantifying Reserve Components. This task can be accomplished through on-site visual observations, review of association design and organizational documents, a review of established association precedents and discussion with appropriate Association representative(s).

### **4) Component Method**

A method of developing a Reserve Funding Plan where the total contributions are based on the sum of contributions for individual components. See “Cash Flow” method.

### **5) Condition Assessment**

The task of evaluating the current condition of the component based on observed or reported characteristics.

### **6) Current Replacement Cost**

See “Replacement Cost.”

**7) Deficit**

An actual (or projected) Reserve Balance at the end of any fiscal year or at the end of the study which is less than the Fully Funded Balance. The opposite would be a Surplus.

**8) Effective Age**

The difference between the Useful Life and the Remaining Useful Life. Not always equivalent to chronological age, since some components age irregularly. Used primarily in computations.

**9) Financial Analysis**

The portion of a Reserve Study where current status of the Reserves (measured as cash or Percent Funded) and a recommended Reserve contribution rate (Reserve Funding Plan) are derived and the projected Reserve income and expense over time is presented. The Financial Analysis is one of the two parts of a Reserve Study.

**10) Fully Funded**

One-hundred (100%) percent Funded. When the actual (or projected) Reserve Balance is equal to the Fully Funded Balance.

**11) Fully Funded Balance (FFB)**

Total Accrued Depreciation. An indicator against which Actual (or projected) Reserve Balance can be compared. The Reserve Balance that is in direct proportion to the fraction of the life “used up” of the current Repair or Replacement cost. This number is calculated for each component, then summed together for an association total. Two (2) formulae can be utilized, depending on the provider’s sensitivity to interest and inflation effects. Note: Both yield identical results when interest and inflation are equivalent.

$$(FFB) = CurrentCost \times \frac{EffectiveAge}{UsefulLife}$$

or

$$(FFB) = \left( CurrentCost \times \frac{EffectiveAge}{UsefulLife} \right) + \frac{CurrentCost \times \frac{EffectiveAge}{UsefulLife}}{(1 + InterestRate)^{RemainingLife}} - \frac{CurrentCost \times \frac{EffectiveAge}{UsefulLife}}{(1 + InflationRate)^{RemainingLife}}$$

**12) Fund Status**

The status of the Reserve Fund as compared to an established benchmark such as percent funding.

**13) Funding Goals**

Independent of methodology utilized, the following represent the basic categories of Funding Plan goals:

- a) **Baseline Funding:** Establishing a Reserve funding goal of keeping the Reserve cash balance above zero.
- b) **Full Funding:** Setting a Reserve funding goal of attaining and maintaining Reserves at or near one-hundred (100%) percent funded.
- c) **Statutory Funding:** Establishing a Reserve funding goal of setting aside the specific minimum amount of Reserves required by local statutes.
- d) **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 may be more or less conservative than “Fully Funding”.

**14) Funding Plan**

An Association’s plan to provide income to a Reserve Fund to offset anticipated expenditures from that fund.

**15) Funding Principles**

- a) Sufficient Funds when Required
- b) Stable Contribution Rate over the Years
- c) Evenly Distributed Contributions over the Years
- d) Fiscally Responsible

**16) Life and Valuation Estimates**

The task of estimating Useful Life, Remaining Useful Life and Repair or Replacement Costs for the Reserve components.

**17) 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.



**18) Physical Analysis**

The portion of the Reserve Study where the Component Inventory, Condition Assessment and Life and Valuation Estimate tasks are performed. This represents one of the two parts of the Reserve Study.

**19) Remaining Useful Life**

Also referred to as “Remaining Life”. The estimated time, in years, that a reserve component can be expected to *continue* to serve its intended function. Projects anticipated to occur in the initial year have “zero” Remaining Useful Life.

**20) Replacement Cost**

The cost of replacing, repairing or restoring a Reserve Component to its original functional condition. The Current Replacement Cost would be the cost to replace, repair or restore the component during that particular year.

**21) Reserve Balance**

Actual or projected funds as of a particular point in time that the Association has identified for use to defray the future replacement of those major components which the Association is obligated to maintain. Also known as Reserves, Reserve Accounts, Cash Reserves.

**22) Reserve Provider**

An individual that prepares Reserve Studies.

**23) Reserve Study**

A budget planning tool which identifies the current status of the reserve fund and a stable and equitable Funding Plan to offset the anticipated future major common area expenditures. The Reserve Study consists of two (2) parts: the Physical Analysis and the Financial Analysis.

**24) Responsible Charge**

A reserve specialist in responsible charge of a reserve study shall render regular and effective supervision to those individuals performing services which directly and materially affect the quality and competence rendered by the reserve specialist. A reserve specialist shall maintain such records as are reasonably necessary to establish that the reserve specialist exercised regular and effective supervision of a reserve study of which he was in responsible charge. A reserve specialist engaged in any of the following acts or practices shall be deemed not to have rendered the regular and effective supervision required herein:

- a) The regular and continuous absence from principal office premises from which professional services are rendered; except for performance of field work or presence in a field office maintained exclusively for a specific project;
- b) The failure to personally inspect or review the work of subordinates where necessary and appropriate;
- c) The rendering of a limited, cursory or perfunctory review of plans or projects in lieu of an appropriate detailed review;
- d) The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

**25) Special Assessment**

An assessment levied on the members of an Association in addition to regular assessments in anticipation of unexpected common element replacement and funding deficit. Special assessments are often regulated by governing documents or local statutes.

**26) Surplus**

An actual (or projected) Reserve Balance greater than the Fully Funded Balance. See "Deficit".

**27) Useful Life (UL)**

Total Useful Life or Depreciable Life. The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed in its present application or installation.

## **STUDY METHODOLOGY**

The quantities used in the replacement cost estimations of the common elements were taken from the previous Capital Reserve Study prepared by FWH Associates, dated April 2002. The remaining life expectancies of the common elements were determined by FWH through visual site inspections performed in 2011. The common elements were identified by the previous Capital Reserve Study, through the experience of FWH and by information provided by the Association. The Monmouth Heights at Freehold community was constructed in 1972, which is used as the base year of installation for the common elements.

The current replacement costs were estimated utilizing published construction cost data, estimates provided by contractors and cost data from recent similar projects performed by this firm. The useful life and remaining useful life were estimated based on field inspections of the items and on the assumption that an adequate maintenance schedule exists and will be followed. Without proper maintenance the common elements can deteriorate quickly and require funds from the reserves for replacement earlier than planned.

It should be noted that this data is an estimate based upon the experience of this firm. The work was performed pursuant to generally accepted standards of practice. Since accurate and detailed control over market conditions, usage, rate of deterioration, maintenance or weather conditions is not feasible, the actual costs and useful life expectancy will vary from the estimates presented. We cannot and do not represent or guarantee that the actual costs or useful life expectancy will not vary from those presented in this report. The future updates of the report will make adjustments so that these variations will have no significant impact. It is recommended that the study be updated every three (3) to five (5) years.

The Capital Reserve Funding Plan developed within this report is based on the cash flow or "pooling method". The cash flow method is a method of developing a Reserve Funding Plan where contributions to the Reserve Fund are designed to offset the variable annual expenditures from the Reserve Fund. Different Reserve Funding Plans are tested against the anticipated schedule of Reserve expenses until the desired Funding Goal is achieved. This report uses the threshold funding method, in which the reserve balance is kept above a specified dollar amount or percent funded amount.

The existing reserve amount effective as of January 1, 2012, has been projected into the future based on the existing funding plan and information provided by the Association. It is the opinion of FWH Associates, P.A. that the Associations' current reserve funding plan is inadequate. It will be necessary to increase the annual contribution in anticipation of future expenditures.

## CAPITAL ITEMS

### 1) **Asphalt Parking Area**

The paved parking area surfaces at the Monmouth Heights at Freehold community are constructed of bituminous concrete paving. Bituminous paving has a typical useful life of twenty (20) years after which it is expected to receive a new two (2”) inch asphalt wearing surface.

The existing surfaces of the roadway were observed to be in /below average condition. Existing surfaces were observed to contain long significant cracks, areas of alligating, separation at installation seams, depressed areas, potholes, patches indicating areas of previous repairs and edge failure particularly at storm inlets. It is expected that the roadways will require an overlay in 2018. Continued regular maintenance of the asphalt surface including crack filling and pothole repair will extend the useful life of the pavement system.

Prior to the installation of a new wearing course, reconstruction of areas containing base course failure, crack repair, milling along existing curbs and around utility penetrations is required. The cost to perform these additional operations are included in the unit cost provided within the schedule.

### 2) **Asphalt Sealcoating**

It is recommended that all parking areas receive sealcoating every five (5) years to protect the asphalt surface from exposure to ultra-violet light, water, solvents and fuels such as gasoline, brake fluid, oil and engine coolant, all which have a destructive effect on asphalt. The cost to repaint parking stall delineations is included in the unit cost within the schedule.

### 3) **Concrete Curb**

The parking areas at the Monmouth Heights at Freehold community are edged with standard 8” x 16” concrete curb. Concrete curb has a typical useful life of forty-five (45) years. The curb system was observed to be in average condition. It is recommended that curb replacement is coordinated with the resurfacing of the asphalt to prevent damage to either item during replacement and resurfacing.

### 4) **Concrete Surfaces**

- a) **Sidewalk** – The sidewalk at the Monmouth Heights at Freehold community is constructed of Portland Cement concrete which has a typical useful life of thirty (30) years. The sidewalks were observed to be in varying condition. Areas are experiencing an array of deficiencies such as; hairline cracks, spalled and broken corners, edge failure, scaling and heaved or depressed sections.

Any existing sidewalk posing possible trip or *safety* hazards should be replaced or “mudjacked” immediately through the operating budget.

- b) **Brick Paver** – Brick pavers are interspersed throughout the recreation

facility. The pavers were observed to be in average condition. The pavers are expected to perform for the remainder of their useful life, with continued maintenance. Minor damaged and settled paver walkways should be repaired and reset on an “as needed” basis through the maintenance budget.

Any existing pavers posing possible trip hazards should be repaired immediately through the operating budget.

5) **Exterior Lighting**

Pool building is illuminated with a halogen type bulb housed in aluminum fixtures which are mounted on the concrete block pool building walls. The lighting was observed to be in average condition. Exterior lighting has a useful life of twenty-five (25) years. It is expected that all lighting will be replaced with fixtures of the same type and intensity.

6) **Wood Landscape Borders**

The railroad ties, constructed of 6” x 6” pressure treated lumber, form a border around the landscape bed in the entrance to the pool area. These ties were observed to be in average condition. Wood borders possess a typical useful life of fifteen (15) years. It is recommended that exterior wood products are weatherproofed every three (3) to five (5) years to ensure that premature replacement will not be required.

7) **Chainlink Fence**

Six (6’) foot high, vinyl coated chainlink fence is located at the perimeter of the pool area. Fence of this type has a twenty-five (25) year typical useful life and was observed to be in average condition. It is important that the fencing receives regular maintenance in order to ensure it fully achieves its full expected useful life.

8) **Swimming Pool**

The Monmouth Heights at Freehold Swim Club is provided with an in-ground concrete swimming pool. It is the Association’s responsibility to fund for resurfacing of the pool, replacement of the pool coping, filtration system, pool deck and the replacement of other related equipment.

The interior surface of the pool is currently finished with plaster. Concrete pool surfaces typically require resurfacing every twenty (20) years to maintain a water tight surface and a smooth surface for swimmers. The pool is bordered with a decorative concrete pool coping and ceramic waterline tile. The surface was observed to be in average condition possessing minor cracks throughout and missing tile.

The pool filtration system consists of sand filters and pumps observed to be in working condition. The system was installed in 2007 and is expected to perform for the remainder of its typical useful life.

The deck surrounding the swimming pool is constructed of decorative brick pavers / Portland Cement, which have a thirty (30) year typical useful life.

The pool area is supplied with large canvas canopies supported by aluminum framing. The aluminum framing is in above average condition and it is anticipated that it will be re-used during replacement of the canvas material.

**9) Tot Lot**

One (1) tot lot is located at Monmouth Heights at Freehold. The structure was observed to be in average condition. The tot lot consists of one (1) modular climbing structure constructed of heavy duty vinyl and a four (4) seat swing set. The components were observed to be in average condition and are anticipated to perform for the remainder of their useful life.

The addition of safety bedding to prevent fall hazards must be provided on an “as needed” basis through the operating budget.

**10) Roofing**

a) **Strip Shingle Roofing** – The roofing that weatherproofs the Mansard roof at the recreation building at the Monmouth Heights at Freehold is an architectural “Timberline” shingle roofing. Shingles of this type have a twenty-five (25) year typical useful life. The current roofing was installed in 2007 as a complete replacement and was observed to be in average condition. . Although the building code allows for two (2) layers of shingles to be installed before a total removal of the roof material is necessary, roofing overlays are generally not advisable. Roofing components such as flashing, underlayment, edge metal and roof deck deterioration cannot be verified adequately during a roof overlay. Based on this, FWH recommends the next roofing effort should be a complete roof replacement.

b) **Modified Bitumen Roof** – The roofing that weatherproofs the low-slope portion of the recreation building residential buildings is a multi-ply modified bitumen membrane system. Although these systems have good weatherability and resistance to ultra-violet radiation, a protective surface is also recommended. Modified Bitumen roofs have a typical useful life of twenty (20) years. The building code allows for two (2) layers of roofing to be installed before a total removal of the roof material is necessary. The next roofing effort, which will be a complete roof replacement.

**11) Interior Finishes**

The Association is responsible the replacement of the interior finishes of the recreation building. The replacement of interior finishes is based largely on the element’s appearance and not its functionality.

- a) **Quarry Tile** – Quarry floor and wall tile is located in kitchen . The tile was observed to be in average condition. Quarry tile has a typical useful life of thirty (30) years.
- b) **Kitchen Amenities** – The Clubhouse is provided with a full kitchen containing refrigerators, ranges, microwaves, dishwashers, ice machines and a fire suppression hood. A line item has been added to fund for kitchen appliances in the offices at the real estate office as well. Only kitchen equipment with significant replacement costs have been included in the study

**12) Interior Lighting**

Illumination in the recreation building’s common areas / community buildings is achieved through various types of fixtures. Individual ceiling mounted fixtures will be replaced “as needed” through the operating budget. Interior lighting possesses a twenty five (25) year typical useful life..

## **EXCLUDED ITEMS**

### **1) Stormwater Management System**

The stormwater management system located at the Monmouth Heights at Freehold community has been omitted from this study; complete replacement of the piping and structures is not anticipated. Storm inlets and basin structures are expected to perform beyond the scope of the study. Storm drainage structures must receive inspection and maintenance on a regular basis through the operating budget to prevent costly replacement of the structures.

### **2) Powerwashing**

Powerwashing will improve the appearance of the building exterior and is considered a maintenance item. Powerwashing is especially recommended for facades without southern exposure.



Monmouth Heights Swim Club							
Replacement Reserve Schedule							
Effective as of :							
January 1st, 2012							
Existing Reserve Amount							
\$20,000							
Item	Year Installed	Useful Life	Est. Remaining Useful Life	Estimated Quantity	Unit	Unit Cost	Current Rep. Value
<b>SITWORK</b>							
<b><u>PAVED SURFACES</u></b>							
1 1/2" Cap Asphalt Resurface Lot 1	1994	20	7	4084	SY	\$14.50	\$59,218
1 1/2" Cap Asphalt Resurface Lot 2	1994	20	8	4960	SY	\$14.50	\$71,920
Asphalt Sealcoat / Crack Repair Lot 1	2002	7	1	4084	SY	\$3.50	\$14,294
Asphalt Sealcoat / Crack Repair Lot 2	2005	7	2	4960	SY	\$3.50	\$17,360
Concrete Curb - Lot 1 (5% with Resurface)	1968	30	7	753	LF	\$24.00	\$18,072
Concrete Curb - Lot 2 (5% with Resurface)	1968	30	8	898	LF	\$24.00	\$21,552
Concrete Sidewalk - Roadway (5% every 10 years)	1968	30	1	1005	SF	\$6.50	\$6,533
Concrete Pool Deck - every 5 years	1968	30	6	2000	SF	\$8.50	\$17,000
						<b>Sub-total</b>	<b>\$225,949</b>
<b><u>Fencing</u></b>							
6" Chain Link - Newer	2000	25	15	450	LF	\$16.75	\$7,538
6' Chain Link - Perimeter	1968	25	15	1100	LF	\$16.75	\$18,425
Timber Retaining Wall - 2' Tall	2010	15	14	120	LF	\$27.50	\$3,300
						<b>Sub-total</b>	<b>\$29,263</b>
<b><u>Recreational Facilities</u></b>							
Large Pool Resurfacing	2009	20	18	1	LS	\$40,000.00	\$40,000
Kiddie Pool Resurfacing	2009	20	18	1	LS	\$15,000.00	\$15,000
Diving Board Stand - High	1990	15	5	1	LS	\$3,500.00	\$3,500
Diving Board Stand - Low	2011	15	15	1	LS	\$3,000.00	\$3,000
Pool Filters	2008	15	11	1	LS	\$18,000.00	\$18,000
Tot Lot	2000	15	5	1	LS	\$18,000.00	\$18,000
						<b>Sub-total</b>	<b>\$97,500</b>

<b><u>POOL BUILDINGS</u></b>							
<b><u>Exterior Elements</u></b>							
Asphalt Roofing Shingles (overlay)	2007	25	21	19	SQ	\$245.00	\$4,655
Modified Bitumen Roofing	2007	25	21	48	SQ	\$335.00	\$16,080
Halogen Lights	2000	25	13	4	EA	\$400.00	\$1,600
						<b>Sub-total</b>	<b>\$22,335</b>
<b><u>Interior Elements</u></b>							
Quarry Tile - Kitchen	2010	30	28	234	SF	\$9.50	\$2,223
Flouresent Light Fixtures	2001	20	10	30	EA	\$75.00	\$2,250
Kitchen Equiptment	2000	20	5	1	LS	\$2,500.00	\$2,500
Water Fountains	2007	15	10	2	EA	\$750.00	\$1,500
Steel Doors - Single	1968	20	3	8	EA	\$550.00	\$4,400
Steel Doors - Double	1968	20	3	1	EA	\$900.00	\$900
Bilco Door	2009	20	18	1	EA	\$500.00	\$500
Canvas Shelter (Awings)	2008	15	12	5	EA	\$750.00	\$3,750
Pool Furniture Replacement - Every 4 Years	2010	4	3	1	LS	\$2,000.00	\$2,000
						<b>Sub-total</b>	<b>\$20,023</b>
						<b>GRAND TOTAL:</b>	<b>\$395,069</b>

**Monmouth Heights Swim Club**

**YEARLY CAPITAL REPLACEMENT SCHEDULE**

ITEM	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041		
<b>i Factor @ 4%</b>	<b>1.0000</b>	<b>1.0400</b>	<b>1.0816</b>	<b>1.1249</b>	<b>1.1699</b>	<b>1.2167</b>	<b>1.2653</b>	<b>1.3159</b>	<b>1.3686</b>	<b>1.4233</b>	<b>1.4802</b>	<b>1.5395</b>	<b>1.6010</b>	<b>1.6651</b>	<b>1.7317</b>	<b>1.8009</b>	<b>1.8730</b>	<b>1.9479</b>	<b>2.0258</b>	<b>2.1068</b>	<b>2.1911</b>	<b>2.2788</b>	<b>2.3699</b>	<b>2.4647</b>	<b>2.5633</b>	<b>2.6658</b>	<b>2.7725</b>	<b>2.8834</b>	<b>2.9987</b>	<b>3.1187</b>		
<b>SITWORK</b>																																
<b>PAVED SURFACES</b>																																
1 1/2" Cap Asphalt Resurface Lot 1							\$74,930																									\$164,180
1 1/2" Cap Asphalt Resurface Lot 2								\$94,642																								\$207,372
Asphalt Sealcoat / Crack Repair Lot 1	\$14,294								\$19,562								\$26,772								\$36,640							
Asphalt Sealcoat / Crack Repair Lot 2		\$18,054								\$24,709									\$33,816								\$46,279					
Concrete Curb - Lot 1 (5% with Resurface)							\$22,867																					\$50,104				
Concrete Curb - Lot 2 (5% with Resurface)								\$28,361																					\$62,142			
Concrete Sidewalk - Roadway (5% every 10 years)	\$6,533										\$9,670											\$14,315										
Concrete Pool Deck - every 5 years						\$20,683						\$26,171						\$33,114						\$41,900							\$53,017	
<b>Fencing</b>																																
6" Chain Link - Newer																\$13,053																
6' Chain Link - Perimeter															\$36,192																	
Timber Retaining Wall - 2' Tall													\$4,496																\$8,096			
<b>Recreational Facilities</b>																																
Large Pool Resurfacing																			\$77,916													
Kiddie Pool Resurfacing																			\$29,219													
Diving Board Stand - High					\$4,095																\$7,374											
Diving Board Stand - Low															\$5,403																	
Pool Filters											\$26,644																\$47,985					
Tot Lot					\$21,057																\$37,923											
<b>POOL BUILDINGS</b>																																
<b>Exterior Elements</b>																																
Asphalt Roofing Shingles (overlay)																						\$10,200										
Modified Bitumen Roofing																						\$35,233										
Halogen Lights												\$2,562																				
<b>Interior Elements</b>																																
Quarry Tile - Kitchen																													\$6,410			
Flouresent Light Fixtures										\$3,202																						
Kitchen Equipment					\$2,925																\$5,267											
Water Fountains									\$4,270																	\$7,690						
Steel Doors - Single			\$4,759																					\$10,428								
Steel Doors - Double			\$973																					\$2,133								
Bilco Door																			\$974													
Canvas Shelter (Awings)										\$5,773																			\$10,397			
Pool Furniture Replacement - Every 4 Years			\$2,163				\$2,531				\$2,960				\$3,463				\$4,052					\$4,740				\$5,545				
<b>TOTALS</b>	<b>\$20,827</b>	<b>\$18,054</b>	<b>\$7,896</b>		<b>\$28,077</b>	<b>\$20,683</b>	<b>\$100,327</b>	<b>\$123,003</b>	<b>\$19,562</b>	<b>\$32,181</b>	<b>\$39,275</b>	<b>\$31,944</b>	<b>\$2,562</b>	<b>\$4,496</b>	<b>\$52,708</b>	<b>\$5,403</b>	<b>\$26,772</b>	<b>\$175,038</b>	<b>\$4,052</b>	<b>\$50,564</b>	<b>\$59,748</b>		<b>\$17,300</b>	<b>\$41,900</b>	<b>\$44,330</b>	<b>\$94,264</b>	<b>\$230,226</b>	<b>\$275,924</b>	<b>\$8,096</b>	<b>\$53,017</b>		

<b>Monmouth Heights Swim Club</b>					
<b>30 YEAR CASH FLOW</b>					
Effective as of :					
<b>January 1st, 2012</b>					
Existing Reserve Amount					
<b>\$20,000</b>					
<b>Fiscal Year</b>	<b>Beginning Balance as of Jan. 1</b>	<b>Reserve Contribution (Jan 1 - Dec 31)</b>	<b>Net Interest @ 3%</b>	<b>Expenses</b>	<b>Ending Balance</b>
2011	\$20,000	\$20,000	\$900	\$20,827	\$20,073
2012	\$20,073	\$22,000	\$932	\$18,054	\$24,951
2013	\$24,951	\$24,200	\$1,112	\$7,896	\$42,367
2014	\$42,367	\$26,620	\$1,670	\$0	\$70,657
2015	\$70,657	\$29,282	\$2,559	\$28,077	\$74,421
2016	\$74,421	\$32,210	\$2,716	\$20,683	\$88,664
2017	\$88,664	\$35,431	\$3,191	\$100,327	\$26,960
2018	\$26,960	\$38,974	\$1,393	\$123,003	\$55,675
2019	(\$55,675)	\$42,872	\$0	\$19,562	\$32,366
2020	(\$32,366)	\$47,159	\$0	\$32,181	\$17,388
2021	(\$17,388)	\$51,875	\$256	\$39,275	\$4,532
2022	(\$4,532)	\$53,172	\$662	\$31,944	\$17,358
2023	\$17,358	\$54,501	\$1,338	\$2,562	\$70,635
2024	\$70,635	\$55,864	\$2,957	\$4,496	\$124,960
2025	\$124,960	\$57,260	\$4,608	\$52,708	\$134,120
2026	\$134,120	\$58,692	\$4,904	\$5,403	\$192,313
2027	\$192,313	\$60,159	\$6,672	\$26,772	\$232,371
2028	\$232,371	\$61,663	\$7,896	\$175,038	\$126,892
2029	\$126,892	\$63,204	\$4,755	\$4,052	\$190,799
2030	\$190,799	\$64,785	\$6,696	\$50,564	\$211,715
2031	\$211,715	\$66,404	\$7,348	\$59,748	\$225,719
2032	\$225,719	\$68,064	\$7,793	\$0	\$301,576
2033	\$301,576	\$69,766	\$10,094	\$17,300	\$364,136
2034	\$364,136	\$71,510	\$11,997	\$41,900	\$405,742
2035	\$405,742	\$73,298	\$13,272	\$44,330	\$447,982
2036	\$447,982	\$75,130	\$14,566	\$94,264	\$443,415
2037	\$443,415	\$77,009	\$14,458	\$230,226	\$304,655
2038	\$304,655	\$78,934	\$10,324	\$275,924	\$117,988
2039	\$117,988	\$80,907	\$4,753	\$8,096	\$195,552
2040	\$195,552	\$82,930	\$7,111	\$53,017	\$232,575
<b>TOTALS:</b>		<b>\$1,643,874</b>	<b>\$156,931</b>	<b>\$1,588,229</b>	<b>\$232,575</b>

## NOTES

- 1) The table of scheduled items lists all the capital expense items with useful life, remaining useful life, quantity and current replacement value.
- 2) The yearly capital replacement schedule provides a yearly synopsis of which items are to be replaced and when. It also shows which items will require replacement more than once through the course of the thirty (30) year study.
- 3) The expenses generated by the replacement of the capital items are projected into the future based upon an inflation rate of 4.0 %.
- 4) The interest rate applied to the reserve funds is 3.0 %.

## SUMMARY

- 1) The thirty (30) year cash flow table indicates an annual reserve contribution for the fiscal year of January 1 2012 to December 30 2012, to be **\$ 20,000**.

This results in a monthly contribution of **\$ 1,666,67**

- 2) The projected reserve balance at the end of this study is **\$ 232,537**.
- 3) It is necessary to increase the reserve contributions by ten (10%) percent per year in anticipation of large capital expenditures toward the end of the study.

## LIST OF ABBREVIATIONS

<b>ADJ.</b>	=	<b>Adjacent</b>
<b>AVG.</b>	=	<b>Average</b>
<b>BLDG.</b>	=	<b>Building</b>
<b>CT.</b>	=	<b>Court</b>
<b>CTD.</b>	=	<b>Coated</b>
<b>C.Y.</b>	=	<b>Cubic Yard</b>
<b>EA.</b>	=	<b>Each</b>
<b>E.O.Y.</b>	=	<b>End of Year</b>
<b>EXC.</b>	=	<b>Excellent</b>
<b>EXT.</b>	=	<b>Exterior</b>
<b>FL.</b>	=	<b>Floor</b>
<b>LAV.</b>	=	<b>Lavatory</b>
<b>L.F.</b>	=	<b>Linear Foot</b>
<b>LG.</b>	=	<b>Large</b>
<b>MBTU</b>	=	<b>Thousand British Thermal Units</b>
<b>MSF</b>	=	<b>Thousand Square Feet</b>
<b>NO.</b>	=	<b>Number</b>
<b>P.T.</b>	=	<b>Pressure Treated</b>
<b>REP.</b>	=	<b>Replacement</b>
<b>RES.</b>	=	<b>Residential</b>
<b>RM.</b>	=	<b>Room</b>
<b>S.F.</b>	=	<b>Square Foot</b>
<b>SM.</b>	=	<b>Small</b>
<b>SQ.</b>	=	<b>Square (100 square feet)</b>
<b>S.Y.</b>	=	<b>Square Yard</b>
<b>UTIL.</b>	=	<b>Utility</b>
<b>YR.</b>	=	<b>Year</b>

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