

**TURNOVER INSPECTION
for
COPPER COVE PRESERVE**

**Prepared For and
Submitted To:**

**Transition Committee
Copper Cove Preserve Community Association, Inc.
C/o: Bob Stanley
3889 Treasure Cove Circle
Naples, Florida 34114**

Prepared By:

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Executive Summary

Purpose and Scope

COPPER COVE PRESERVE COMMUNITY ASSOCIATION, INC. engaged the services of *W.J. Johnson & Associates* to perform a Turnover Inspection of the common elements of their community.

The purpose of the Turnover Inspection is to determine the degree of compliance of “in place” construction to plans, specifications, Building Codes, good construction practices and to identify any construction deficiencies. On-site observations consisted of visual inspections of the common elements as described below.

General Description

COPPER COVE PRESERVE COMMUNITY ASSOCIATION is a community planned for 217 single family homes located at Treasure Cove Boulevard in Naples, Florida. Site construction began in 2006 and, as of this date, all home lots have either been built out or are under construction.

The common elements of the Association include:

- Asphalt Pavement & Concrete Gutters
- Sidewalks
- Monument Entrance Signage
- Entrance Gates & Access Control
- Irrigation
- Landscaping
- Lake Banks
- Street Lighting
- Preserve Areas
- Site Drainage

Summary of Findings

Inspections

In general, the property is well constructed and in good condition. The following is a list of the most significant deficiencies observed during the site inspections:

- The asphalt roadways, south of the utility easement, were stained throughout the community and the concrete gutters were chipped and exhibited differential settlement/subsidence in sporadic locations. Many of the gutters were water stained indicating improper drainage. A high quality, asphalt based, seal coating is recommended every five years to preserve the asphalt surfaces to their full useful life of 25 years. Gutters in the worst condition should be replaced and reset to eliminate, or at least minimize, standing water. See pages 8 & 9.

- The asphalt roadways, north of the utility easement, were stained, chipped and gouged. The concrete gutters exhibited differential settlement/subsidence in sporadic locations with evidence of standing water. The final asphalt lift is due to be installed this year. This will cover the existing asphalt blemishes. Gutters in the worst condition should be replaced and reset to eliminate, or at least minimize, standing water. See pages 10 & 11.
- Concrete sidewalks were stained in many locations with evidence of standing water due to improper drainage at some locations. Sections of the sidewalk with evidence of standing water should be removed and reset to eliminate, or at least minimize, such conditions. Sidewalks should be pressure washed annually and consideration should be given to applying a stain repellent nonskid (impregnating silicone polymer) concrete sealer to areas most prone to staining. See pages 12 & 13.
- The community has consistently exceeded its allowed irrigation pumping volume, which is a significant concern. Remote monitoring by the Flowguard system indicates the pumps are being over demanded. The settings on the Hunter control unit indicate the unit is set to run two days a week; however, the remotely monitored Flowguard sensor indicates the unit is operating 7 days a week from 3:00 pm until 11:00 am the following day, at 150 gpm to 200 gpm. The total pumping for January 2015 was 1.71 million gallons over the allowed limit, a clear violation of the water use permit. Due to this high usage, the pump station is experiencing higher than usual mechanical issues. Pumps have been averaging a lifespan of only 3 years, half of what would normally be experienced, and the disc filters are currently malfunctioning. As was mentioned above, the system is equipped with both a mini-click moisture sensor and a Hunter remote wireless moisture sensor. Currently, it is not known which moisture sensor is controlling the irrigation. This time of year is the dry season, so neither sensor should be interrupting the pumps. However, the Hunter controller is set to two days of operation a week, yet the pumps are delivering water 7 days a week. It is recommended that the community contact their Hoover representative to resolve conflicts between the two controllers. See pages 17-19.

See the **Appendix** for a complete list of **Itemized Deficiencies and/or Required Maintenance**.

Capital Reserve Review

The current Capital Reserve Fund schedule includes 4 line items with estimated replacement costs of \$220,000. It is recommended that the Capital Reserve Fund be expanded to include 11 line items with estimated replacement costs of \$ 985,870.

As of 1/1/2015, the *Fully Funded Balance* of the Capital Reserve Fund was \$ 98,959. There was no reserve balance as of 1/1/15, so the Capital Reserve Fund was 0% *Fully Funded* as of that date.

Funding of the current Capital Reserve Fund schedule is set at \$16,846 for 2015. Using a *Cash Flow Method* of funding for the expanded Capital Reserve Fund schedule, the annual assessment should be \$ 41,400 in 2016. The 2016 annual assessment should then be increased by the *Projected Annual Inflation Rate* of 2.27% each year through 2045.

Limiting Conditions / Inspection Procedures

This assessment is made especially subject to the following conditions and stipulations.

W.J. Johnson & Associates (the Engineer) assumes no responsibility for matters that are legal in nature. While the Engineer may offer suggestions in the way of strategy in utilizing the findings presented herein, it is incumbent upon the Owners to seek advice of legal counsel.

A visual inspection was made of all details discussed herein without benefit of “destructive testing,” unless otherwise noted. Destructive testing refers to the cutting or breaking of a surface to reveal internal details otherwise not visible.

While problems or defects internal to a structure are often suspected through surface evidence, any fault so concealed and, therefore, not identified shall not represent a liability to the Engineer. In any event, Engineer’s Liability is limited to the value of services rendered.

This report is prepared by *W.J. Johnson & Associates*, expressly for the use of its client named herein and for the purpose stated herein.

Possession of this report or any copy thereof does not carry with it the right of publication, nor may the same or any of its parts, be used for any purpose by anyone without the expressed written consent of *W.J. Johnson & Associates*.

By reason of this assessment, the Engineer shall not be required to give testimony or attendance in court or any governmental hearing with reference to the property in question without adequate or sufficient notice for preparation, and, at an additional fee.

The Engineer has no interest, present or prospective, in the property assessed. This assessment report and any copies of it shall remain the sole property of the Engineer until all fees and charges are paid, and as such, property may be recalled from any and all persons or firms holding the original or copies hereof.

INSPECTION PROCEDURES

The following Codes were used in the preparation of our report:

- Florida Building Code 2004 to 2010 Edition
- Florida Plumbing Code 2004 to 2010 Edition
- Florida Mechanical Code 2004 to 2010 Edition
- Collier County Land Development Code
- Florida Statutes

Our inspection included, but was not limited to, the following areas:

Asphalt Roadway & Concrete Gutters

An inspection was conducted of all asphalt paved roads and concrete gutters throughout the community. The observations are noted in this report.

Concrete Walkways

All community concrete walkways were observed and noted in this report

Monument Signage

All community monument signage was observed and noted in this report.

Irrigation System

The condition of the irrigation system was observed and noted in this report.

Landscaping

The landscaping of the community was observed and noted in this report.

Lake Banks

The lake banks of the community was observed and noted in this report.

Storm Water Drainage

Storm water drainage systems were observed and noted in this report.

Introduction

In accordance with an authorization from Copper Cove Preserve Community Association, Inc. an inspection and evaluation of the common elements of the association located in Naples, Florida was performed. This report presents the results of the investigation, including recommendations for appropriate repairs and corrective measures.

The objective of this investigation was to present an assessment of the degree of compliance of the site improvements with plans, specifications and the 2004 to 2010 Florida Building Code. The inspection endeavored to determine compliance of the plans, specifications and Codes.

This investigation did not employ any destructive testing procedures and thus drew conclusions based upon visible surface conditions only. Further, the inspection procedure was to conduct a random sample of conditions to establish the types of defects that exist.

The following individuals from *W.J. Johnson & Associates* performed the site inspections on February 20, 2015.

Brendan Larkin, P. E.: Civil, site drainage, walkways, curbing, signage, street lighting, and roadways.

Paul Klens L.A. & Certified Arborist: Landscaping, irrigation coverage, lake banks, preserve areas, and site drainage.

PROJECT DEVELOPMENT & DESIGN TEAM

Developer: Lennar Homes
3118 Aviamar Circle
Naples, FL 34114

Civil Engineering: Q. Grady Minor and Associates, P.A.
3800 Via Del Ray
Bonita Springs, FL 34134

Observations & Recommendations

Asphalt Pavement & Concrete Gutters/Curbing: South

Technical Description: The asphalt roadways south of the utility easement were constructed approximately eight years ago and the final lift was applied in late 2014 covering approximately 184,600 sq. ft. These include the entrance to Treasure Cove Blvd., Ruby Way, Sapphire Way and the southern portion of Treasure Cove Circle.

Seal Coat Resurface

Observed Condition:	Yes	No	N/A	Current Age	0 yrs.	0 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	5 yrs.	25 yrs.
2. Compliance to Building Codes & ADA:	X			Remaining Useful Life	5 yrs.	25 yrs.
3. Good Workmanship/Construction Practices:		X				
4. Preventative Maintenance Procedures in Place:		X		Estimated Replacement Cost	\$30,767	\$143,577
5. Inspection Certificates Current:			X			

Observed Deficiencies and Recommended Remedies: Roadways were stained throughout and the concrete gutters were chipped and exhibited differential settlement/subsidence in sporadic locations. Many of the gutters were water stained indicating improper drainage. A high quality, asphalt based, seal coating is recommended every five years to preserve the asphalt surfaces to their full useful life of 25 years. Gutters in the worst condition should be replaced and reset to eliminate, or at least minimize, standing water.



Typical asphalt surface, note water stained gutters-south area



Stains in roadway surface – south area



Stains in roadway surface – south area



Water stained gutter – south area



Evidence of repair of concrete gutter – south area



Water stains/chips at gutter – south area

Asphalt Pavement & Concrete Gutters/Curbing: North

Technical Description: The asphalt roadways north of the utility easement were constructed approximately two years ago and cover approximately 80,600 sq. ft. These include the entrance to Treasure Cove Court and the northern portion of Treasure Cove Circle. The final asphalt lift has not been applied yet.

Seal Coat Resurface

Observed Condition:	Yes	No	N/A	Current Age	0 yrs.	0 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	5 yrs.	25 yrs.
2. Compliance to Building Codes & ADA:	X			Remaining Useful Life	5 yrs.	25 yrs.
3. Good Workmanship/Construction Practices:		X				
4. Preventative Maintenance Procedures in Place:		X		Estimated Replacement Cost	\$13,434	\$62,692
5. Inspection Certificates Current:			X			

Observed Deficiencies and Recommended Remedies: The asphalt road surfaces were stained, chipped and gouged. The concrete gutters exhibited differential settlement/subsidence in sporadic locations with evidence of standing water. The final asphalt lift is due to be installed this year. This will cover the existing asphalt blemishes. Gutters in the worst condition should be replaced and reset to eliminate, or at least minimize, standing water.



Typical asphalt surface – north area



Sporadic gauges in roadway surface - north area



Chipped gutter – north area



Final asphalt lift needed at north area



Gutter stain/chips at north area



Gutter stains at north area

Concrete Sidewalks

Technical Description: There is approximately 25,100 square feet of concrete sidewalk surface located alongside of the asphalt roadways north of the utility easement. There is approximately 54,500 square feet of concrete sidewalk surface located along side of the asphalt roadways south of the utility easement. Sidewalks are repaired as needed.

					North	South
Observed Condition:	Yes	No	N/A	Current Age	0 yrs.	2 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	15-35 yrs.	15-35 yrs.
2. Compliance to Building Codes & ADA:	X			Remaining Useful Life	15-35 yrs.	13-33 yrs.
3. Good Workmanship/Construction Practices:	X					
4. Preventative Maintenance Procedures in Place:		X		Estimated Replacement Cost	\$167,160	\$363,240
5. Inspection Certificates Current:			X			

Observed Deficiencies and Recommended Remedies: Concrete sidewalks were stained in many locations, with evidence of standing water, due to improper drainage at some locations. Sections of the sidewalk with evidence of standing water should be removed and reset to eliminate, or at least minimize, such conditions. Sidewalks should be pressure washed annually and consideration should be given to applying a stain repellent nonskid (impregnating silicone polymer) concrete sealer to areas most prone to staining. Due to a variety of reasons, sidewalk sections wear unevenly with some sections lasting 15 years or less and others lasting for 35 years or more. Therefore, it is recommended that when the sidewalks reach 15 years in age, the association should plan to replace 5% of the sections each year thereafter.



Stains on concrete walkway – north area



Stains on concrete sidewalk – north area



Stains on concrete sidewalk - south area



Stains on concrete sidewalk - south area



Stains/standing water on concrete sidewalk



Stains on concrete sidewalk - south area

Monument Entrance Sign

Technical Description: There is one monument sign at the main entrance area with portions of decorative iron gates with concrete block columns. The monument sign/columns are constructed of masonry block and cast concrete.

Observed Condition: Good	Yes	No	N/A	Current Age	8 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	20 yrs.
2. Compliance to Building Codes & ADA:			X	Remaining Useful Life	12 yrs.
3. Good Workmanship/Construction Practices:	X				
4. Preventative Maintenance Procedures in Place:		X		Estimated Replacement Cost	\$ 15,000
5. Inspection Certificates Current:			X		

Observed Deficiencies and Recommended Remedies: The main entrance sign, gate and columns are in generally good condition. However, the central icon decal has deteriorated and should be replaced. Portions of the decorative metal fencing have oxidized. The current coating of the fencing should be stripped off and the oxidation removed. It should then be primed and coated with an Ultra High Performance coating system with a 10-15 year warranty. The sign should be inspected and pressure-washed on an annual basis. The stucco elements should be re-painted every seven years.



Main entrance sign



Main entrance sign



Main entrance sign decal deterioration



Main entrance sign decorative fence



Deterioration/oxidation at decorative fence



Decorative fence at columns

Entrance Gates & Access Control

Technical Description: The two main metal entrance gates are remote coded and have bar code reader gate operators. Exit gates are motion/range operated.

Observed Condition:	Yes	No	N/A	Current Age	2 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	20 yrs.
2. Compliance to Building Codes & ADA:			X	Remaining Useful Life	18 yrs.
3. Good Workmanship/Construction Practices:		X			
4. Preventative Maintenance Procedures in Place:		X		Estimated Replacement Cost	\$15,000
5. Inspection Certificates Current:			X		

Observed Deficiencies and Recommended Remedies: The main entrance gate could not be tested as they have reportedly not worked since they were installed. At the time of our inspection, the mechanical systems of the gates were reportedly scheduled to be completely refurbished.



Main Gate



Main Gate

Irrigation

Technical Description: Irrigation water at Copper Cove Preserve is drawn from the lakes in the community. A recharge well for the lakes is also in place. Water is lifted from the NE corner of lake 3 by a Hoover Pumping System pump station. The pump station is equipped with Hoover’s trademarked Flowguard monitoring system. This system monitors flow rates and pumping pressure and allows for remote monitoring of the units performance. This installation has two main, submerged pumps and one smaller jockey pump, which are controlled by a variable frequency drive. The maximum pumping capacity is 300 GPM at a line pressure of 70 PSI. Hoover installed a mini-click rain sensor, which records indicate is serviced regularly. It is interesting to note that there is also a Hunter irrigation controller at the pump station. This controller is equipped with a Hunter remote sensing moisture control. This controller is set to operate the system on Wednesdays and Saturdays. Copper Cove Preserve is equipped with a lake recharge well, but that well did not come on line until November 2014.

Observed Condition:	Yes	No	N/A	Current Age	8 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	10 yrs.*
2.Compliance to Building Codes & ADA:			X	Remaining Useful Life	2 yrs.*
3.Good Workmanship/Construction Practices:	X				
4.Preventative Maintenance Procedures in Place:	X			Estimated Replacement Cost	\$10,000 pump only
5.Inspection Certificates Current:			X		

*Useful life is estimated by Hoover personnel, however this unit has been over worked and has already experienced component failure. See below for discussion.

Observed Deficiencies and Recommended Remedies: The community has consistently exceeded its allowed pumping volume, which is a significant concern. Remote monitoring by the Flowguard system indicates the pumps are being over demanded. It is thought this over-demand could be due to the many new homes built in the last few years with new landscapes requiring extra water. However, most lots are now built and the system is still exceeding the allowed usage of 4.06 million gallons/month. The settings on the hunter control unit indicate the unit is set to run two days a week, however the remotely monitored Flowguard sensor indicates the unit is operating 7 days a week from 3:00 pm until 11:00 am the following day at 150 gpm to 200 gpm. The total pumping for January 2015 was 5.77 million gallons. This is an overage of 1.71 million gallons per month, a clear violation of the water use permit. Due to this high usage, the pump station is experiencing higher than usual mechanical issues. Pumps have been averaging a lifespan of only 3 years, half of what would normally be experienced, and the disc filters are currently malfunctioning.

As was mentioned above, the system is equipped with both a mini-click moisture sensor and a Hunter remote wireless moisture sensor. Currently, it is not known which moisture sensor is controlling the irrigation. This time of year is the dry season, so neither sensor should be interrupting the pumps. However, the Hunter controller is set to two days of operation a week, yet the pumps are delivering water 7 days a week. It is recommended that the community contact their Hoover representative to resolve conflicts between the two controllers.



Dry components of the pump station



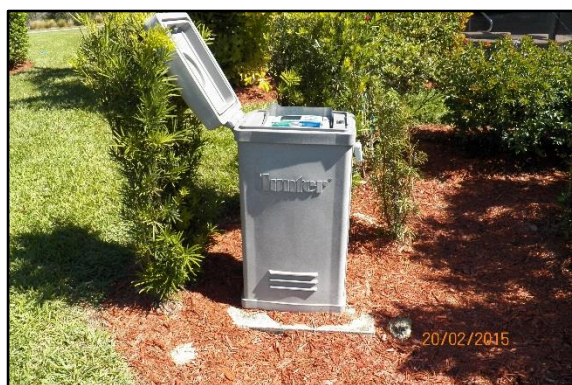
Four self Cleaning Disc Filters



Variable Frequency Pump control



Supply Lines from Submerged Pumps



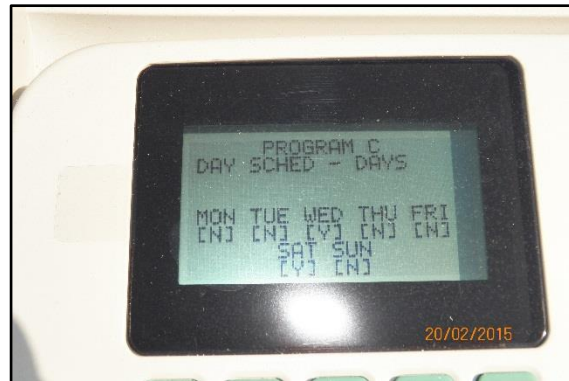
Hunter Pedestal Controller



Mini Click Moisture Sensor



Hunter Remote Rain Sensor Receiver



Hunter controller Run Schedule Display

Landscaping

Technical Description: A review of the approved landscape plans indicate the common area landscape is in compliance, except as noted below. Buffer trees are the correct distance on center, buffer hedges are intact and in the right places, and species installed match or are equivalent to those called out on the approved landscape plans. Buffer trees consist of a mixture of Southern Live Oaks (*Quercus virginiana*) and Southern Magnolia (*Magnolia grandiflora* ‘D D Blanchard’). It is important to recognize that the existing preserves are functioning as buffers for a significant portion of the property.

Originally, a clubhouse and pool area were planned for Copper Cove Preserve at the west side of the entry on a 2.2 acre parcel. The developer ushered SDP permit plans through the entire development review process and approvals from all the governing agencies granted. Although the required type ‘D’ buffer was installed along Treasure Cove Circle, the clubhouse was never built and the permit period of 3 years has expired.

Observed Condition:	Yes	No	N/A	Current Age	8 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	25+ yrs.
2. Compliance to Building Codes & ADA:			X	Remaining Useful Life	17+ yrs.
3. Good Workmanship/Construction Practices:	X				
4. Preventative Maintenance Procedures in Place:	X			Estimated Replacement Cost	\$125,000
5. Inspection Certificates Current:			X		

Observed Deficiencies and Recommended Remedies: No observed deficiencies. In communities such as this, landscape will often begin to outgrow its environment and begin to encroach on structures such as sidewalks, pavement and buildings within 20 to 30 yrs. For this reason, it is recommended that when the original landscaping reaches 20 years of age, the association should plan to begin a program of generational replacement over a period of 10 years.



Type ‘D’ Buffer

Lake Banks

Technical Description: There are 4 lakes in Copper Cove Preserve and all 4 appear to be in compliance with the approved civil engineering plans. Littoral plantings exceed the area requirements shown on the approved plans with the dominant species being Soft Rush (*Juncus effuses*) and Pickerel Weed (*Pontederia cordata*). As mentioned, the littoral plantings seem to have colonized much of the perimeter of all the lakes.

Observed Condition:	Yes	No	N/A	Current Age	8 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	25+ yrs.
2. Compliance to Building Codes & ADA:			X	Remaining Useful Life	17+ yrs.
3. Good Workmanship/Construction Practices:	X				
4. Preventative Maintenance Procedures in Place:	X			Estimated Replacement Cost	\$40,000
5. Inspection Certificates Current:			X		

Observed Deficiencies and Recommended Remedies: Lake bank slopes appear to be in compliance with the approved plans; however, lake bank erosion is occurring. All the lakes exhibited a 6” – 12” “lip” forming at and just below control elevation, in spite of good littoral growth. The worst erosion is occurring along the eastern and southeastern banks due to the predominant wind direction during the low water season. Maintaining a constant water elevation during the dry season will help minimize erosion. Copper Cove Preserve is equipped with a lake recharge well, but that well did not come on line until November 2014, and they cannot pump more water out of the aquifer than their water use permit allows (4.06 million gallons/mo). Until the community addresses the excessive irrigation demand, the well will not be able to keep up. It was also noted that there is considerable construction debris and trash blowing into lakes 1 & 2.



Herbaceous Emergent Littoral Vegetation



Woody Wetland Species at Control Elevation



Erosion Lip Forming on Lake 3



Trash caught in Littorals in Lake 2

Street Lighting & Traffic Signage

Technical Description: There are 26 metal lamp posts throughout the development and are reportedly maintained by FPL and are therefore not in the reserve fund. The speed limit signs on the main entrance road, Champion Drive, located directly off of Collier Boulevard, are designated 30 mph, then, as this road merges into Treasure Cove Boulevard, the speed limit signs are designated 15 mph. The speed limit signs in the development are designated 25 mph. Drawings were not provided to verify specifications, locations and/or quantity of road and speed limit signs. However, traffic control signage and street signs appear to be in compliance with DOT regulations.

Observed Condition:	Yes	No	N/A	Current Age	6 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	25 yrs.
2. Compliance to Building Codes & ADA:	X			Remaining Useful Life	19 yrs.
3. Good Workmanship/Construction Practices:	X				
4. Preventative Maintenance Procedures in Place:		X		Estimated Replacement Cost	N/A
5. Inspection Certificates Current:			X		

Observed Deficiencies and Recommended Remedies: The lamp posts were observed to be in good condition, with evidence of light wear and tear, with sporadic paint chips. Road signs were in generally good condition. Lamp posts should be cleaned annually and repainted every seven years.



Typical Lamp Post



Typical Lamp Post



Typical street sign



Typical speed limit sign at development



Typical 15 mph speed limit sign on Treasure Cove Blvd.



Typical 30 mph speed limit sign at main entrance road on Champion Drive off Collier Blvd.



"Gate Ahead" sign at entrance road to gates

Preserve Areas

Technical Description: With the one exception noted below, the preserve areas are in compliance with the Collier County Land Development Code. They are free of trash and debris and there is no evidence of invasive exotic species. For much of the community, the preserve areas function as the required landscape buffers.

Observed Condition:	Yes	No	N/A	Current Age	8 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	35+ yrs.
2. Compliance to Building Codes & ADA:			X	Remaining Useful Life	Unknown
3. Good Workmanship/Construction Practices:	X				
4. Preventative Maintenance Procedures in Place:	X			Estimated Replacement Cost	Unknown
5. Inspection Certificates Current:	X				

Observed Deficiencies and Recommended Remedies: As mentioned above, the preserve areas are in good condition, with one exception. There is a small, designated preserve area between 3775 and 3771 Treasure Cove Circle that has had virtually all vegetation removed. The insult began when invasive exotic plant species were not suppressed, hence crowding out native species. Removal of these invasive exotic species left little remaining vegetation. As the preserve boundaries were never clearly or accurately marked, non-native plant species and a retaining wall were installed inside the preserve boundaries. Recently the invasive exotics have been removed as well as the non-native plantings; however, the area is in need of restoration and the existing retaining wall will need to be removed.



Clean Preserve and Buffer



Bare preserve with un-stabilized Slope



Actual Preserve Boundary and Sign Placement



Encroaching Retaining Wall in Preserve

Site Drainage

Technical Description: The drainage concept for Copper Cove Preserve is a conventional combination of surface sheet flows and hard piped conveyances. Runoff from between the individual houses is directed either toward the street where it is collected by a valley gutter catch basin system, or towards the lakes at the rear of the properties. Civil engineering plans indicate a high point between each structure with a shared drainage easement. On-site measurements and observations indicate positive slope from the property midpoint toward the street and toward the lakes. Catch basins with grates are in the locations shown on the approved plans and are free of trash and debris. Head walls for the lake outfalls appear to be as shown in the plans and in the proper locations as shown on the plans.

Observed Condition: Good	Yes	No	N/A	Current Age	8 yrs.
1. Compliance to Plans & Specifications:	X			Est. Useful Life	35+ yrs.
2. Compliance to Building Codes & ADA:	X			Remaining Useful Life	Unknown
3. Good Workmanship/Construction Practices:	X				
4. Preventative Maintenance Procedures in Place:	X			Estimated Replacement Cost	Unknown
5. Inspection Certificates Current:			X		

Observed Deficiencies and Recommended Remedies: No deficiencies were observed.



Valley Gutters



Storm Grate In Good condition

Capital Reserve Review

Fund Status

The current Capital Reserve Fund schedule includes 4 line items with estimated replacement costs of \$220,000. It is recommended that the Capital Reserve Fund be expanded to include 11 line items with estimated replacement costs of \$985,870. See the **Copper Cove Capital Reserve Budget Worksheet** on page 29 for full details.

As of 1/1/2015, the *Fully Funded Balance* of the Capital Reserve Fund was \$98,959. There was no reserve balance as of 1/1/15 so the Capital Reserve Fund was 0% *Fully Funded* as of that date. See **Copper Cove Reserve Fund Status** on page 30 for full details.

Proposed Funding

With the expanded Capital Reserve Fund schedule, total reserve expenditures over the next 30 years are projected to be \$ 1,759,647. See **Copper Cove Projected Reserve Expenditures** on pages 31-33 for full details. Projected expenditures are expressed in future dollars using a *Projected Annual Inflation Rate* of 2.27%. See Appendix for details of *Projected Annual Inflation Rate*.

Funding of the current Capital Reserve Fund schedule is set at \$16,846 for 2015. Using a *Cash Flow Method* of funding for the expanded Capital Reserve Fund schedule, the annual assessment should be \$ 41,400 in 2016. The 2016 annual assessment should then be increased by the *Projected Annual Inflation Rate* of 2.27% each year through 2045.

This proposed funding results in a reserve balance of \$ 191,742 at the end of 2045. This is approximately equivalent to the *Fully Funded Balance* of \$98,959 in 2015 dollars. See **Copper Cove Cash Flow Funding Plan** on page 34.

COPPER COVE CAPITAL RESERVE BUDGET WORKSHEET

5/19/2015

BUDGET ITEM:

	Years		Remain Life	Quantities		Replacement Costs		References
	Current AGE	Life Expect		Unit Of Measure	Total Units	Per Unit	Total	
Asphalt Pavement & Concrete Gutters								
South Seal Coating	0	5	5	Sq. Yds.	20,511	\$1.50	\$30,767	From recent projects
South Resurfacing	0	25	25	Sq. Yds.	20,511	\$7.00	\$143,577	From recent projects
North Seal Coating	0	5	5	Sq. Yds.	8,956	\$1.50	\$13,434	From recent projects
North Resurfacing	0	25	25	Sq. Yds.	8,956	\$7.00	\$62,692	From recent projects
Sidewalks								
South: 5% annual replacements years 15-35	2	25	23	Sq. Yds.	6,054	\$60.00	\$363,240	From recent projects
North: 5% annual replacements years 15-35	0	25	25	Sq. Yds.	2,786	\$60.00	\$167,160	From recent projects
Entrance								
Monument Entrance Signage	8	20	12	Lump Sum	1	\$15,000.00	\$15,000	Budget Estimate
Entrance Gates & Access Control	2	20	18	Lump Sum	1	\$15,000.00	\$15,000	From recent projects
Miscellaneous								
Irrigation: Pump	8	10	2	Lump Sum	1	\$10,000.00	\$10,000	Hoover
Landscaping: 10% annual replacements years 20-30	8	25	17	Lump Sum	1	\$125,000.00	\$125,000	From recent projects
Lake Banks: restoration	9	25	16	Lump Sum	1	\$40,000.00	\$40,000	Budget Estimate
GRAND TOTAL							\$985,870	

COPPER COVE RESERVE FUND STATUS

AS OF 12/31/2014

1. PROJECTED RESERVE FUND BALANCE:

\$0

2. FULLY FUNDED RESERVE BALANCE CALCULATIONS:

COMMON ELEMENT	Years			2015 Replacement Costs	Fully Funded Balances*
	Current AGE	Life Expect	Remain Life		
Asphalt Pavement & Concrete Gutters					
South Seal Coating	0	5	5	\$30,767	\$0
South Resurfacing	0	25	25	\$143,577	\$0
North Seal Coating	0	5	5	\$13,434	\$0
North Resurfacing	0	25	25	\$62,692	\$0
Sidewalks					
South: 5% annual replacements years 15-35	2	25	23	\$363,240	\$29,059
North: 5% annual replacements years 15-35	0	25	25	\$167,160	\$0
Entrance					
Monument Entrance Signage	8	20	12	\$15,000	\$6,000
Entrance Gates & Access Control	2	20	18	\$15,000	\$1,500
Miscellaneous					
Irrigation: Pump	8	10	2	\$10,000	\$8,000
Landscaping: 10% annual replacements years 20-30	8	25	17	\$125,000	\$40,000
Lake Banks: restoration	9	25	16	\$40,000	\$14,400
GRAND TOTAL				\$985,870	\$98,959

3. FUND STATUS = Reserve Balance ÷ Fully Funded Balance x 100% =

0.00%

* Fully Funded Common Element = Replacement Cost ÷ Life Expectancy x Current Age
 * Fully Funded Reserve Balance = ∑ Fully Funded Common Element Balances

COPPER COVE PROJECTED RESERVE EXPENDITURES

DATE: 5/19/15

Inflation Rate: 2.27%

BUDGET ITEM:	Years		2015 Replacement Costs	0	1	2	3	4	5	6	7	8	9	10
	Current AGE	Life Expect												
Asphalt Pavement & Concrete Gutters														
South Seal Coating	0	5	5						\$30,767					\$38,509
South Resurfacing	0	25	25						\$143,577					
North Seal Coating	0	5	5						\$13,434					\$16,815
North Resurfacing	0	25	25						\$62,692					
Sidewalks														
South: 5% annual replacements years 15-35	2	25	23						\$363,240					
North: 5% annual replacements years 15-35	0	25	25						\$167,160					
Entrance														
Monument Entrance Signage	8	20	12						\$15,000					
Entrance Gates & Access Control	2	20	18						\$15,000					
Miscellaneous														
Irrigation: Pump	8	10	2						\$10,459					
Landscaping: 10% annual replacements years 20-30	8	25	17						\$125,000					
Lake Banks: restoration	9	25	16						\$40,000					
GRAND TOTAL				\$0	\$0	\$10,459	\$0	\$0	\$49,450	\$0	\$0	\$0	\$0	\$55,324

COPPER COVE PROJECTED RESERVE EXPENDITURES

DATE: 5/19/15

Inflation Rate: 2.27%

BUDGET ITEM:	Years		2015 Replacement Costs	11 2026	12 2027	13 2028	14 2029	15 2030	16 2031	17 2032	18 2033	19 2034	20 2035
	Current AGE	Life Expect											
Asphalt Pavement & Concrete Gutters													
South Seal Coating	0	5	\$30,767					\$43,083					\$48,200
South Resurfacing	0	25	\$143,577										
North Seal Coating	0	5	\$13,434					\$18,812					\$21,046
North Resurfacing	0	25	\$62,692										
Sidewalks													
South: 5% annual replacements years 15-35	2	25	\$363,240			\$24,316	\$24,868	\$25,432	\$26,010	\$26,600	\$27,204	\$27,821	\$28,453
North: 5% annual replacements years 15-35	0	25	\$167,160					\$11,704	\$11,969	\$12,241	\$12,519	\$12,803	\$13,094
Entrance													
Monument Entrance Signage	8	20	\$15,000		\$19,637								
Entrance Gates & Access Control	2	20	\$15,000									\$22,468	
Miscellaneous													
Irrigation: Pump	8	10	\$10,000		\$13,091								
Landscaping: 10% annual replacements years 20-30	8	25	\$125,000		\$16,364	\$16,735	\$17,115	\$17,504	\$17,901	\$18,308	\$18,723	\$19,148	\$19,583
Lake Banks: restoration	9	25	\$40,000					\$56,012					
GRAND TOTAL			\$985,870	\$0	\$49,092	\$41,051	\$41,983	\$172,547	\$55,880	\$57,149	\$80,914	\$59,773	\$130,375

COPPER COVE PROJECTED RESERVE EXPENDITURES

DATE: 5/19/15

Inflation Rate: 2.27%

BUDGET ITEM:	Years		2015 Replacement Costs	21 2036	22 2037	23 2038	24 2039	25 2040	26 2041	27 2042	28 2043	29 2044	30 2045
	Current AGE	Life Expect											
Asphalt Pavement & Concrete Gutters													
South Seal Coating	0	5	\$30,767					\$251,647					\$60,329
South Resurfacing	0	25	\$143,577										
North Seal Coating	0	5	\$13,434										\$26,342
North Resurfacing	0	25	\$62,692					\$109,880					
Sidewalks													
South: 5% annual replacements years 15-35	2	25	\$363,240	\$29,099	\$29,759	\$30,435	\$31,126	\$31,832	\$32,555	\$33,294	\$34,050	\$34,823	\$35,613
North: 5% annual replacements years 15-35	0	25	\$167,160	\$13,391	\$13,695	\$14,006	\$14,324	\$14,649	\$14,982	\$15,322	\$15,669	\$16,025	\$16,389
Entrance													
Monument Entrance Signage	8	20	\$15,000										
Entrance Gates & Access Control	2	20	\$15,000										
Miscellaneous													
Irrigation: Pump	8	10	\$10,000										\$16,386
Landscaping: 10% annual replacements years 20-30	8	25	\$125,000	\$20,027									
Lake Banks: restoration	9	25	\$40,000										
GRAND TOTAL			\$985,870	\$62,517	\$59,840	\$44,441	\$45,450	\$408,008	\$47,537	\$48,616	\$49,719	\$50,848	\$138,673

COPPER COVE CASH FLOW FUNDING PLAN

No.	Year	Proposed Funding			Expenditures		Earned Interest		Ending Year Balance	
		Beginning Year Balance	Annual Contribution	Annual Increase	Special Assessments	Planned	Deferred	Amount		Rate
0	2015	\$0	\$16,846	0.00%		\$0		\$5	0.06%	\$16,851
1	2016	\$16,851	\$41,400	145.76%		\$0		\$23	0.06%	\$58,274
2	2017	\$58,274	\$42,340	2.27%		\$10,459		\$1,447	1.95%	\$91,601
3	2018	\$91,601	\$43,301	2.27%		\$0		\$2,208	1.95%	\$137,111
4	2019	\$137,111	\$44,284	2.27%		\$0		\$3,105	1.95%	\$184,500
5	2020	\$184,500	\$45,289	2.27%		\$49,450		\$3,557	1.95%	\$183,896
6	2021	\$183,896	\$46,317	2.27%		\$0		\$4,038	1.95%	\$234,251
7	2022	\$234,251	\$47,369	2.27%		\$0		\$5,030	1.95%	\$286,649
8	2023	\$286,649	\$48,444	2.27%		\$0		\$6,062	1.95%	\$341,155
9	2024	\$341,155	\$49,543	2.27%		\$0		\$7,136	1.95%	\$397,834
10	2025	\$397,834	\$50,668	2.27%		\$55,324		\$7,712	1.95%	\$400,891
11	2026	\$400,891	\$51,818	2.27%		\$0		\$8,323	1.95%	\$461,032
12	2027	\$461,032	\$52,995	2.27%		\$49,092		\$9,028	1.95%	\$473,962
13	2028	\$473,962	\$54,198	2.27%		\$41,051		\$9,370	1.95%	\$496,479
14	2029	\$496,479	\$55,428	2.27%		\$41,983		\$9,812	1.95%	\$519,736
15	2030	\$519,736	\$56,686	2.27%		\$172,547		\$9,005	1.95%	\$412,880
16	2031	\$412,880	\$57,973	2.27%		\$55,880		\$8,072	1.95%	\$423,044
17	2032	\$423,044	\$59,289	2.27%		\$57,149		\$8,270	1.95%	\$433,454
18	2033	\$433,454	\$60,635	2.27%		\$80,914		\$8,255	1.95%	\$421,430
19	2034	\$421,430	\$62,011	2.27%		\$59,773		\$8,240	1.95%	\$431,908
20	2035	\$431,908	\$63,419	2.27%		\$130,375		\$7,769	1.95%	\$372,720
21	2036	\$372,720	\$64,858	2.27%		\$62,517		\$7,291	1.95%	\$382,352
22	2037	\$382,352	\$66,331	2.27%		\$59,840		\$7,519	1.95%	\$396,362
23	2038	\$396,362	\$67,836	2.27%		\$44,441		\$7,957	1.95%	\$427,714
24	2039	\$427,714	\$69,376	2.27%		\$45,450		\$8,574	1.95%	\$460,214
25	2040	\$460,214	\$70,951	2.27%		\$408,008		\$5,688	1.95%	\$128,845
26	2041	\$128,845	\$72,562	2.27%		\$47,537		\$2,756	1.95%	\$156,626
27	2042	\$156,626	\$74,209	2.27%		\$48,616		\$3,304	1.95%	\$185,523
28	2043	\$185,523	\$75,893	2.27%		\$49,719		\$3,873	1.95%	\$215,570
29	2044	\$215,570	\$77,616	2.27%		\$50,848		\$4,465	1.95%	\$246,803
30	2045	\$246,803	\$79,378	2.27%		\$138,673		\$4,235	1.95%	\$191,742
Totals			\$1,769,260		\$0	\$1,759,647	\$0	\$182,128		

APPENDIX

HISTORICAL INFLATION & CD RATES

	INFLATION RATES*												AVERAGE
	JAN	FEB	MAR	APRIL	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	
2005	3.99	3.01	3.15	3.51	2.80	2.53	3.17	3.64	4.69	4.35	3.46	3.42	3.43
2006	2.08	3.60	3.36	3.55	4.17	4.32	4.15	3.82	2.06	1.31	1.97	2.54	3.24
2007	4.28	2.42	2.78	2.57	2.69	2.69	2.36	1.97	2.76	3.54	4.31	4.08	2.85
2008	0.03	4.03	3.98	3.94	4.18	5.02	5.60	5.37	4.94	3.66	1.07	0.09	3.85
2009	1.63	0.24	-0.38	-0.74	-1.28	-1.43	-2.10	-1.48	-1.29	-0.18	1.84	2.72	-0.34
2010	1.63	2.14	2.31	2.24	2.02	1.05	1.24	1.15	1.14	1.17	1.14	1.50	1.64
2011	2.93	2.11	2.68	3.16	3.57	3.56	3.63	3.77	3.87	3.53	3.39	2.96	3.16
2012	1.59	2.87	2.65	2.30	1.70	1.66	1.41	1.69	1.99	2.16	1.76	1.74	2.07
2013	1.58	1.98	1.47	1.06	1.36	1.75	1.96	1.52	1.18	0.96	1.24	1.50	1.46
2014	-0.09	1.13	1.51	1.95	2.13	2.07	1.94	1.70	1.66	1.66	1.32	0.76	1.62
2015													-0.09
Wtd.Ave.													2.27

* Bureau of Labor Statistics Consumer Price Index

	6 MONTH CD RATES (1/2005-7/2013)												6 MONTH T-BILL RATES (8/2013-Present)**												AVERAGE		
	JAN	FEB	MAR	APRIL	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC			
2005	4.69	3.00	3.23	3.34	3.44	3.56	3.80	3.99	4.01	4.32	4.52	4.62	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	
2006	5.34	4.88	5.01	5.17	5.25	5.46	5.54	5.44	5.37	5.35	5.33	5.31	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23
2007	3.71	2.99	2.70	2.86	2.84	3.09	3.13	3.11	3.82	4.37	2.83	2.18	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14	3.14
2008	1.53	1.75	1.76	1.54	1.04	0.67	0.50	0.44	0.36	0.31	0.30	0.30	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
2009	0.29	0.30	0.34	0.42	0.64	0.75	0.62	0.44	0.38	0.35	0.35	0.41	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
2010	0.38	0.38	0.37	0.32	0.30	0.30	0.35	0.42	0.47	0.50	0.58	0.72	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
2011	0.58	0.52	0.50	0.47	0.46	0.48	0.46	0.40	0.37	0.35	0.33	0.32	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
2012	0.29	0.28	0.27	0.26	0.26	0.26	0.26	0.07	0.04	0.08	0.10	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
2013	0.07	0.08	0.08	0.05	0.05	0.06	0.06	0.05	0.04	0.05	0.07	0.10	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
2014	0.07	0.08	0.08	0.05	0.05	0.06	0.06	0.05	0.04	0.05	0.07	0.10	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
2015	0.08	0.08	0.08	0.05	0.05	0.06	0.06	0.05	0.04	0.05	0.07	0.10	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Wtd.Ave.																											

** ARM Indexes

Disclosures, General Conditions and Methods

1. *W.J. Johnson & Associates* is a Florida licensed Professional Engineering firm. The firm and the individuals within the firm who prepared this report have no conflict of interest which could have influenced the quality of services provided herein.
2. This report was prepared in conformance with modified ASTM standards and guidelines for property condition assessments and the Association of Professional Reserve Analysts for reserve studies.
3. Condition inspections were conducted without the benefit of destructive or invasive testing, and as such, conclusions were drawn from visual and measurable surface conditions.
4. Quantities were derived from drawings, aerial photography and physical measurements.
5. The replacement costs, useful life, and maintenance requirements presented in this report were derived from a variety sources including:
 - R.S. Means Building Construction Cost Data
 - R.S. Means Preventative Maintenance for Multi-Family Housing
 - Standard & Poor's Property Condition Assessment Criteria
 - Useful Life Tables derived by R.S. Means, Standard & Poor's and BOMA
 - Contractor estimates
 - Experience from previous projects

Project Team

J. Michael Faucett

Mr. Faucett holds a Bachelor of Industrial Engineering degree from the Georgia Institute of Technology. He is a member of the Association of Professional Reserve Analysts. Mr. Faucett has over forty two years of experience in industrial engineering, management consulting, project management and financial analysis. He has been a business owner for over twenty-seven years and has owned W.J. Johnson & Associates since 2002.

Brendan Larkin, P.E.

Mr. Larkin holds a B.S. degree in Civil Engineering and a Masters of Engineering in Construction Management, both from the University of Florida. He is a Licensed Professional Engineer in Florida and is also a Florida Certified General Contractor. Mr. Larkin has over 15 years of experience in forensic engineering, geotechnical design and threshold inspections. He has conducted numerous evaluations and damage assessments involving sink holes, water intrusion, storm damage and settlement.

Paul J. Klens, R.L.A.

Mr. Klens is a Florida Licensed Landscape Architect and Certified Arborist. Mr. Klens holds a B.S. degree in Agricultural Mechanizations from Pennsylvania State University and a Master's Degree in Landscape Architecture from North Carolina State University. Mr. Klens established his practice over 25 years ago, specializing in land development codes, horticultural evaluation, tree hazard evaluation, agronomy and landscape and irrigation design. Mr. Klens is qualified as an expert witness throughout Southwest Florida.

Glossary of Terms

1. *Cash Flow Method (A.K.A. Pooled Method)* - A method of calculating Reserve contributions where contributions to the Reserve Fund are designed to offset the variable annual expenditures from the Reserve Fund. Different 30 year Reserve Funding Plans are tested against the anticipated schedule of Reserve expenses until the desired funding goal is achieved. Each Reserve Funding Plan includes provisions for *projected annual inflation* and *projected earned interest*.
2. *Condition Assessment* - An evaluation of a common element's physical condition expressed in terms of Good, Fair, Poor using the following criteria:
 - Good: New, like new, no repairs or only superficial repairs needed, well maintained
 - Fair: Wear is consistent with age, minor repairs needed, adequately maintained
 - Poor: End of useful life, major repairs or replacement needed, not adequately maintained
3. *Deferred Expenditure*- Any planned expenditure for the replacement of an asset that is delayed beyond its *UL*. The delay could be due to an extended *UL* or to a lack of necessary funds.
4. *Fully Funded Balance (FFB)* - The total accrued depreciation of all the component assets within the Reserve Fund. The *FFB* represents the "used up" portion of the assets. The *FFB* is the denominator in the formula to determine *Percent Fully Funded*.
5. *Remaining Useful Life (RUL)* - The *UL* of an asset minus the current age of that asset, expressed in years.
6. *Useful Life (UL)* - The estimated portion of the total life, expressed in years, of an asset up until it is no longer economically viable to maintain and a significant reinvestment, rebuilding or renovation is necessary. The Useful Life of an asset has been attained when the annual cost of repair of that asset exceeds the annualized cost of replacement. Estimates of Useful Life are derived from various sources including Useful Life Tables derived by: R.S. Means, Standard & Poor's and BOMA. Estimates are based upon the assumption that the asset is adequately maintained. Inadequate maintenance will generally shorten Useful Life estimates.
7. *Percent Fully Funded* - The ratio, at a particular point in time (typically the beginning of the Fiscal Year), of the actual (or projected) Reserve Fund balance to the *FFB*, expressed as a percentage. This ratio is used to gauge the financial status of the Reserve Fund. Ideally, the actual (or projected) Reserve Fund balance would be equal to the *FFB*, in which case the Reserve Fund would be 100 *Percent Fully Funded*.
8. *Projected Annual Inflation Rate* - The rate, expressed as a percentage, at which current replacement costs of individual assets are expected to increase in each of the next 30 years. Since the rate is applied over a long term, it is derived from long term historical averages of verifiable

indices. In this case, the *Projected Annual Inflation Rate* is the monthly average of the Bureau of Labor Statistics' Consumer Price Index of the last 120 months (10 years).

9. *Projected Earned Interest Rate* - The rate, expressed as a percentage, at which interest is projected to be earned each year on the estimated average Reserve Fund balance for that year. Since the rate is applied over a long term, it is normally derived from long term historical averages of verifiable indices. However, with current interest rates at historic lows, a short term rate has been applied over the next two years and a long term rate beyond two years. Both rates were derived from ARM Indexes for 6-month CD rates. The short term rate is the monthly average over the last 12 months and the long term rate is the monthly average over the last 120 months (10 years).
10. *Special Assessment*- An assessment levied on the members of an association in addition to regular assessments. *Special Assessments* are often regulated by Governing Documents or applicable statutes.
11. *Straight Line Method (A.K.A. Component Method)* - A method of calculating Reserve contributions. With this method, separate account balances for each component asset are maintained within the Reserve Fund. Contributions are calculated by subtracting each individual account balance from the corresponding replacement cost for the asset and then dividing the result by the *estimated remaining useful life* of the asset. The sum of these calculations for each asset is the total annual contribution.

Itemized Deficiencies and/or Required Maintenance

1. The asphalt roadways, south of the utility easement, were stained throughout the community and the concrete gutters were chipped and exhibited differential settlement/subsidence in sporadic locations. Many of the gutters were water stained, indicating improper drainage. A high quality, asphalt based, seal coating is recommended every five years to preserve the asphalt surfaces to their full useful life of 25 years. Gutters in the worst condition should be replaced and reset to eliminate, or at least minimize, standing water. See pages 8 & 9.
2. The asphalt roadways, north of the utility easement, were stained, chipped and gouged. The concrete gutters exhibited differential settlement/subsidence in sporadic locations with evidence of standing water. The final asphalt lift is due to be installed this year. This will cover the existing asphalt blemishes. Gutters in the worst condition should be replaced and reset to eliminate, or at least minimize, standing water. See pages 10 & 11.
3. Concrete sidewalks were stained in many locations with evidence of standing water due to improper drainage at some locations. Sections of the sidewalk with evidence of standing water should be removed and reset to eliminate, or at least minimize, such conditions. Sidewalks should be pressure washed annually and consideration should be given to applying a stain repellent nonskid (impregnating silicone polymer) concrete sealer to areas most prone to staining. See pages 12 & 13.
4. The central icon decal on the monument entrance sign has deteriorated and should be replaced. Portions of the decorative metal fencing have oxidized. The current coating of the fencing should be stripped off and the oxidation removed. It should then be primed and coated with an Ultra High Performance coating system with a 10-15 year warranty. See pages 14 & 15.
5. The main entrance/exit gates were not operational at the time of inspection. The mechanical systems of the gates were reportedly scheduled to be completely refurbished. See page 16.
6. The community has consistently exceeded its allowed irrigation pumping volume, which is a significant concern. Remote monitoring by the Flowguard system indicates the pumps are being over demanded. The settings on the Hunter control unit indicate the unit is set to run two days a week; however, the remotely monitored Flowguard sensor indicates the unit is operating 7 days a week from 3:00 pm until 11:00 am the following day, at 150 gpm to 200 gpm. The total pumping for January 2015 was 1.71 million gallons over the allowed limit, a clear violation of the water use permit. Due to this high usage, the pump station is experiencing higher than usual mechanical issues. Pumps have been averaging a lifespan of only 3 years, half of what would normally be experienced, and the disc filters are currently malfunctioning. As was mentioned above, the system is equipped with both a mini-click moisture sensor and a Hunter remote wireless moisture sensor. Currently, it is not known which moisture sensor is controlling the irrigation. This time of year is the dry season, so neither sensor should be interrupting the pumps. However, the Hunter controller is set to two days of operation a week, yet the pumps are delivering water 7 days a week. It is recommended that the community contact their Hoover representative to resolve conflicts between the two controllers. See pages 17-19.

7. Although lake bank slopes appear to be in compliance with the approved plans, lake bank erosion is occurring. All the lakes exhibited a 6" – 12" "lip" forming at and just below control elevation in spite of good littoral growth. The worst erosion is occurring along the eastern and southeastern banks due to the predominant wind direction during the low water season. Maintaining a constant water elevation during the dry season will help minimize erosion. It was also noted that there is considerable construction debris and trash blowing into lakes 1 & 2. See pages 21 & 22.
8. There is a small, designated preserve area between 3775 and 3771 Treasure Cove Circle that has had virtually all vegetation removed. The insult began when invasive exotic plant species were not suppressed, hence crowding out native species. Removal of these invasive exotic species left little remaining vegetation. As the preserve boundaries were never clearly or accurately marked, non-native plant species and a retaining wall were installed inside the preserve boundaries. Recently, the invasive exotics have been removed, as well as the non-native plantings; however, the area is in need of restoration and the existing retaining wall will need to be removed. See pages 25 & 26.