Comp #: 100 Concrete/Curb - Repair/Replace

Quantity: Extensive square feet

Location: Sidewalks, curbing, roadway gutters, etc...

Evaluation: Common area concrete at sidewalks, curbing and roadway gutters is in good condition, with no significant damage or deterioration observed. All concrete surfaces within individual unit boundaries is reportedly the

responsibility of individual unit owners to maintain, repair and replace. Sidewalks, curbs and gutters adjacent to

roadways and any concrete within parks is association responsibility.

As routine maintenance, inspect regularly, pressure wash for appearance and repair promptly as needed to prevent water penetrating into the base and causing further damage. Repair any trip and fall hazards (1/2" or more displacement) immediately to ensure safety.

In our experience, patterns of deterioration begin to occur as the community continues to age, but it is difficult to predict timing, cost and scope at this time. Association has not yet reached the age or condition where we suggest a rotating funding allowance to supplement the operating / maintenance budget. Incorporate funding as conditions, actual expense patterns dictate within future reserve study updates. Treat local needs currently as general maintenance and repair expense - inspect each year and allocate for local repairs within the maintenance budget.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

April 23,2012 Page 1 of 23

Comp #: 112 Metal Fencing - Repair/Replace

Quantity: Approx 230 linear feet Location: Adjacent to main entry gates

Evaluation: Generally good condition of metal fencing and pedestrian gates noted with no significant damage or instability

evident at this time. Sturdy item that can typically last for an extended period with ordinary care and

maintenance. In our experience, however, eventual replacement is warranted due to constant wear, usage and exposure over time. Plan to replace at roughly the time frame below. No anticipation of refinishing of this type of powder coated fencing at this time. Timeline for future painting is difficult to predict, suggest possible inclusion into future reserve study update. As routine maintenance, inspect regularly to ensure stability of fencing and

repair promptly as needed from general operating funds.

Useful Life: 30 years

Remaining Life: 24 years



Best Case: \$11,500.00 Worst Case: \$16,100.00

\$50/LF, Lower allowance to replace \$70/LF, Higher allowance to replace

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 2 of 23

Comp #: 120 Asphalt - Resurface

Quantity: Approx 650,000 square ft

Location: Roadways throughout community

Evaluation: The structural integrity of the private roadways appears to be in good condition. No cracking, waviness or other

issues noted. We assume installation per engineering plans & spec's.

As routine maintenance, keep roadways clean, free of debris and well drained; fill/seal cracks to prevent water from penetrating into the sub-base and accelerating damage. Even with ordinary care and maintenance, plan for eventual large scale resurface (grind & overlay) at roughly the time frame below. As timing draws nearer, consult with asphalt vendor/consultant for recommendations and complete scope.

Useful Life: 30 years

Remaining Life: 24 years



Best Case: \$910,000.00

\$1.40/Sq Ft, Lower estimate to resurface (overlay)

Worst Case: \$1,170,000.00

\$1.80/Sq Ft, Higher estimate to resurface

(overlay)

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 3 of 23

Inventory Appendix

Client: 23055A Grand Firs HOA

Comp #: 121 Asphalt - Seal/Repair

Quantity: Approx 650,000 square ft

Location: Roadways throughout community

Evaluation: Good surface condition noted with no significant damage/deterioration observed. We were informed that asphalt

has not been seal coated. We usually recommend regular cycles of seal coating for low traffic roadways; however, cambered surface configurations such as yours are not typically seal coated because of the inherent

drainage provision.

As routine maintenance, fill cracks and clean oil stains promptly to avoid further damage. Treat local repairs as general maintenance expense. Funding for asphalt seal coating or periodic repair may be added to future reserve studies as needed/desired.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

April 23,2012 Page 4 of 23

122 Asphalt Paths/Courts - Resurface Comp #:

Quantity: Approx 9,200 square ft

Location: Basketball courts and pathways at common area parks in Tracts B, E, L and R

Evaluation: Good condition throughout with no significant damage observed. We recommend regular inspections, repair and

cleaning of asphalt pathways and basketball courts to help extend useful life cycles. Plan for regular intervals of resurface (overlay) of asphalt pathways and basketball courts at roughly the time frame indicated below.

Resurface these areas as part of roadway resurface project, no need for separate funding.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

April 23,2012 Page 5 of 23

Comp #: 135 Entry Gates - Repair/Replace

Quantity: (2) 30' swing gates Location: Community entrance/exit

Evaluation: Good condition noted of physical components of metal entry gates observed during our site inspection. We

recommend regular professional inspections, maintenance and repairs to help extend useful life cycle; clean for appearance and paint/touch-up as needed within general maintenance / operational funding. Although metal gates are typically durable, we recommend setting aside funding for replacement if the need arises. Replacement may eventually be needed due to ordinary wear/usage, exposure or damage not covered by

insurance.

Useful Life: 30 years

Remaining Life: 24 years



Best Case: \$12,000.00 Worst Case: \$20,000.00

\$6,000/each (x2), Lower estimate to replace \$10,000/each (x2), Higher estimate to replace

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 6 of 23

Comp #: 136 Entry Gate Operators - Replace

Quantity: (4) Chamberlain Elite Location: Adjacent to entry/exit gates

Evaluation: Fair condition noted with no functional/operational problems observed during our site inspection and no reported

problems. As routine maintenance, we recommend regular professional inspections including service and repair as needed from the operating budget. Even with ongoing maintenance, plan for replacement at typical life

expectancy indicated below. Monitor actual expenses closely for future reserve study updates.

Useful Life: 15 years

Remaining Life: 9 years



Best Case: \$10,000.00 Worst Case: \$14,000.00

\$2,500/each (x4), Lower estimate to replace \$3,500/each (x4), Higher estimate to replace

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 137 Gate Access Panels - Replace

Quantity: (2) Elite panels

Location: Adjacent to entry/exit location

Evaluation: Fair condition noted, with no functional issues observed during our site inspection and none reported to us. We recommend regular, professional inspections and maintenance funded from the operating budget; wipe down

surfaces periodically with an appropriate cleaner for appearance, being careful to avoid control buttons. Best to plan for replacement at typical interval below, due to constant usage and exposure to weather elements.

Useful Life: 15 years

Remaining Life: 9 years



Best Case: \$4,000.00 Worst Case: \$6,000.00

\$2,000/each (x2), Lower estimate to replace \$3,000/each (x2), Higher estimate to replace

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 7 of 23

Comp #: 140 Wood Fence - Replace

Quantity: Approx 18,000 linear feet

Location: Perimeter fencing throughout community

Evaluation: Majority of wood fencing is in good condition with some areas of minor damage and past repair, but no

significant deterioration noted. Fence appears to have never been stained or treated and is being allowed to gray naturally. As routine maintenance, inspect regularly for any damage and repair as needed. Avoid contact with ground, sprinkler patterns and surrounding vegetation. Regular cycles of stain/paint will help to maintain appearance and maximize life and can be added to reserve funding in the future if Association desires. Plan to

replace at roughly the time frame indicated below.

Useful Life: 20 years

Remaining Life: 14 years



Best Case: \$360,000.00 Worst Case: \$540,000.00

\$20/LF, Lower estimate to replace \$30/LF, Higher estimate to replace

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 8 of 23

Comp #: 145 Split Rail Fence - Replace

Quantity: Approx 7,500 linear feet

Location: Perimeter of wetlands and stormwater ponds at Tracts C, D and H

Evaluation: Split rail fencing is in generally good, stable condition. Assumed that this will not be sealed and left to

weather/age naturally. Avoid contact with surrounding landscape if possible. Repair in between replacement cycles as needed from operating budget. Plan for replacement at roughly the time frame indicated below.

Useful Life: 20 years

Remaining Life: 14 years



Best Case: \$105,000.00 Worst Case: \$120,000.00

\$14.00/LF, Lower estimate to replace \$16.00/LF, Higher estimate to replace

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 155 Chain Link Fence - Replace

Quantity: Approx 2.050 linear feet

Location: Partial perimeter of parks at Tracts B, E, L and R

Evaluation: Fair condition noted with some damage to fencing at park in Tract L, but no widespread deterioration observed.

Inspect regularly; clean and repair locally as needed as part of general maintenance, operating funding. Even with ordinary care and maintenance, plan to replace this fence as shown below due to deterioration that will

result from constant exposure.

Useful Life: 30 years

Remaining Life: 24 years



Best Case: \$36,900.00 Worst Case: \$49,200.00

\$18/LF, Lower estimate to replace \$24/LF, Higher estimate to replace

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 9 of 23

Comp #: 160 Pole Lights - Replace

Quantity: Approx (90) assemblies

Location: Adjacent to roadways within community

Evaluation: Pole lights appear to be in good, stable condition, no problems or concerns reported. Observed during daylight

hours; assumed to be in functional operating condition. As routine maintenance, inspect, repair/change bulbs as needed. Best to plan for large scale replacement at roughly the time frame below for cost efficiency and

consistent quality/appearance throughout association.

Useful Life: 20 years

Remaining Life: 14 years



Best Case: \$135,000.00

\$1,500/each (x90), Lower allowance to replace;

installed

Worst Case: \$180,000.00

\$2,000/each (x90), Higher allowance, more

elaborate fixtures, etc.

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 164 Landscape Lights - Replace

Quantity: Approx (38) lights

Location: Landscaped areas at main entrances

Evaluation: Mostly fair condition with no significant damage/deterioration noted during our site inspection; observed during

daylight hours and assumed to be functional. Inspect regularly and change bulbs as needed. Plan on cycles of

full replacement at roughly the time frame indicated below due to constant exposure to the elements.

Useful Life: 15 years

Remaining Life: 9 years



Best Case: \$2,300.00 Worst Case: \$3,000.00

\$60/each (x38), Lower allowance to replace \$80/each (x38), Higher allowance to replace

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 10 of 23

Comp #: 170 Landscape - Refurbish

Quantity: Extensive landscaping

Location: Common area open space tracts throughout community

Evaluation: Overall good condition of common area landscaping with no specific problems observed or identified by

association contact. Although typically funded as ongoing maintenance item, this component may be utilized for setting aside funds for larger expenses that do not occur on an annual basis, such as large scale plantings, resodding lawn areas, bark/mulch replenishment, etc. Often times these type of projects can be handled within the annual operating budget as a separate line item from the landscape maintenance contract. At this time no specific projects anticipated and no desire by community for refurbishing. Monitor and include funding in reserve

study updates if needed.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

April 23,2012 Page 11 of 23

Comp #: 175 Irrigation System - Repair/Replace

Quantity: Extensive system

Location: Throughout common area landscaping

Evaluation: No problems observed or reported during our inspection. As routine maintenance, inspect, test system and

repair as needed from operating budget. Follow proper winterization and re-energize procedures. If properly installed and bedded without defect, the lines will last 40 to 50 years or more. Other elements within this component are generally low cost (I.e. sprinkler heads, valves) and have a failure rate that is difficult to predict; best suited to be handled through the operating budget, not reserves. No basis for reserve funding at this time.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

Comp #: 176 Irrigation Timeclocks - Replace

Quantity: (13) Hunter controllers

Location: Scattered throughout common area open space tracts

Evaluation: No problems observed or reported of irrigation timeclocks throughout community. Inspect regularly and

repair/replace as needed. Expect intermittent failures and necessary replacement due to parts obsolescence,

technological upgrades, etc... Plan on replacement at roughly the timeframe indicated below.

Useful Life: 15 years

Remaining Life: 9 years



Best Case: \$3,900.00 Worst Case: \$6,500.00

\$300/each (x13), Lower allowance to replace \$500/each (x13), Higher allowance to replace

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 12 of 23

Comp #: 182 Drainage/Stormwater Sys - Maintain

Quantity: Extensive system

Location: Throughout common areas

Evaluation: Our reserve study includes only a visual review, and majority of the drainage system is out of view. No current

drainage problems observed or reported. As routine maintenance, inspect regularly, keep drains and grates free of debris and free flowing to ensure water drains as designed. Pipes can be 'scoped' to allow visual review of the interior of pipes. Repair as needed, including pumping out sediment, if needed, utilizing mobile evacuator service. Fund from operating and maintenance budget. No expectation of large-scale repairs/replacement at this

time. No reserve funding suggested.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

April 23,2012 Page 13 of 23

Comp #: 185 Stormwater Ponds - Clean/Refurbish

Quantity: (3) assorted sizes Location: Tracts D, F and P

Evaluation: No problems noted at ponds throughout community. Ongoing maintenance program and close inspection is

essential for performance and forestalling sediment removal. We assume ongoing vegetation and debris control as routine maintenance procedure. Guidelines for maintaining these systems are typically found on local municipality website. Even with proactive cleanings/inspections, debris will eventually build up raising floor and warranting sediment removal. Best to plan for sediment removal and repair of ponds at the interval below; ponds

should be professionally assessed before this time for more specific guidance.

Useful Life: 15 years

Remaining Life: 9 years



Best Case: \$15,000.00 Lower allowance to maintain Worst Case: \$25,000.00 Higher allowance to maintain

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 14 of 23

Comp #: 188 Wetlands - Maintain

Quantity: Approx (57) acres

Useful Life:

Remaining Life:

Location: Wetlands A, B and buffers in Tracts C and H

Evaluation: No problems observed in wetland areas based on our boundary area inspection. We recommend compliance

with any and all governmental regulations regarding these areas. Typically wetland areas are to remain undisturbed in a substantially natural state; periodic hazard tree removal is typically allowed. No basis for large

scale reserve funding suggested at this time.



Best Case: Worst Case:

Cost Source:

April 23,2012 Page 15 of 23

Comp #: 190 Trees - Trim/Remove

Quantity: Extensive, assorted

Location: Throughout common areas

Evaluation: No specific problems observed or reported at this time of trees throughout community. It is our understanding

that the maintenance of trees on individual lots is the responsibility of the individual homeowner and the Association is only responsible for trees at common area open space tracts. In similar communities, we have seen trees planted in planter strips between roadway and sidewalks needing to be replaced at roughly the 10-year mark of life. The main reason for replacement being the wrong species of trees planted for a small growth area and generally less than favorable planting location. If the wrong species are planted, the root systems can cause damage to the nearby concrete and asphalt, or the trees themselves may die prematurely due to confined root systems. If the community has not already done so, consult with a qualified arborist for a long-term plan for the care and management of the trees within the community, balancing aesthetics with protection of association assets. Tree trimming/removal expenses can be incorporated into future reserve study updates as needed.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

April 23,2012 Page 16 of 23

Comp #: 200 Entry Monuments - Replace

Quantity: (4) stone monoliths Location: Entry locations

Evaluation: Good condition of entry monuments consisting of stone monoliths with attached lettering. As routine

maintenance, inspect regularly, clean for appearance and repair as needed from operating budget. Long-lasting material, no expectation of cyclical large scale expenses impacting reserves at this time, no reserve funding

suggested.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

April 23,2012 Page 17 of 23

Comp #: 205 Mailboxes - Replace

Quantity: (28) metal cluster stands

Location: Adjacent to roadways within community

Evaluation: Good condition of metal cluster stands/boxes with no functional problems reported. Inspect regularly, clean by

wiping down for appearance, change lock cylinders, lubricate hinges and repair as needed from operating budget. Best to plan for total replacement at roughly the time frame below due to constant exposure, usage and wear over time. Note: USPS has a limited budget for replacement and should not be relied upon for purposes of

long term planning.

Useful Life: 20 years

Remaining Life: 14 years



Best Case: \$33,600.00 Worst Case: \$44,800.00

\$1,200/cluster stand (x28), Lower estimate to

remove and replace

\$1,600/cluster stand (x28), Higher estimate to remove and replace

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 18 of 23

Comp #: 210 Required Signage - Replace

Quantity: Approx (77) metal signs

Location: Adjacent to roadways within community

Evaluation: The majority of signage appears to be in good condition. Inspect regularly, clean for appearance and repair as

needed from operating budget. These types of signs are a smaller cost item, but collectively merit reserve

funding.

Useful Life: 20 years

Remaining Life: 14 years



Best Case: \$7,700.00 Worst Case: \$11,600.00

\$100/ea (x77), Lower allowance to replace \$150/ea (x77), Higher allowance to replace

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 330 Basketball Eqp - Replace

Quantity: (2) assemblies

Location: Common area Tracts B and L

Evaluation: Fair, playable condition observed. Inspect regularly and repair/replace net/hoop as needed within annual

operating budget. Although sturdy materials/equipment, plan for eventual replacement at the time frame below if

not damaged or abused.

Useful Life: 20 years

Remaining Life: 14 years



Best Case: \$1,600.00 Worst Case: \$2,400.00

\$800/each, Lower allowance to replace backboard, pole, hoop and net assembly \$1,200/each, Higher allowance to replace backboard, pole, hoop and net assembly

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 19 of 23

Comp #: 340 Play Equipment - Replace

Quantity: Extensive, assorted

Location: Park areas at Tracts B, E, L and R

Evaluation: Fair condition with no significant damage or unusual wear observed. Inspect for stability, damage and excessive

wear and utilize maintenance funds for any repairs needed between replacement cycles. Replacement cycles vary depending on the amount of use/abuse; however expect extensive park area renovation at roughly the time

frame listed below.

Useful Life: 15 years

Remaining Life: 9 years



Best Case: \$40,000.00 Lower replacement allowance Worst Case: \$60,000.00

Higher allowance; upgraded equipment,

accessories included, etc...

Cost Source: ARI Cost Database: Similar Project Cost History

April 23,2012 Page 20 of 23

Comp #: 346 Outdoor Furniture - Replace

Quantity: (22) assorted pieces

Location: Parks at Tracts B, E, L and R

Evaluation: Good condition noted of picnic tables, benches and trash receptacles; no significant damage or instability

observed at this time. Inspect regularly, clean for appearance and repair as needed from general operating funds. Best to plan for regular intervals of replacement at roughly the time frame indicated below to maintain

functionality and a quality appearance.

Useful Life: 20 years

Remaining Life: 14 years



Best Case: \$8,000.00 Worst Case: \$12,000.00

Lower allowance to replace outdoor furniture Higher allowance to replace outdoor furniture

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 350 Horseshoe Pits - Maintain

Quantity: (6) pits

Location: Park area at Tract R

Evaluation: Horseshoe pits appear to be in good, usable condition. These items are a minor expense and should be

maintained out of the operating budget, not reserves.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

April 23,2012 Page 21 of 23

905 Electrical Systems - Repair/Replace Comp #:

Quantity: Main, branch systems

Location: Throughout commnon areas of association

Evaluation: Analysis of electrical system(s), beyond visual inspection, is not within the scope of a reserve study. We were

informed of ongoing issues with the electrical system at the entry monument lighting, which will be addressed

and funded for as part on the entry monument replacement project.

Typically, if installed per architectural specifications, building codes, and electric codes, without defect, there is no predictable time frame for large scale repair/replacement expenses within the scope of our review. Treat minor repairs as ongoing maintenance expense.

Some electrical system components used historically are known to be life limited. Manufacturing defects can become apparent from time to time and certain site conditions can contribute to premature deterioration of system components. Periodic inspections and maintenance by an electrician may be wise operating expense. Some associations employ infrared or other testing methodologies to identify potential trouble spots.

A good resource book available for purchase is NFPA 70B Recommended Practices for Electrical Equipment Maintenance. Funding may be incorporated into future reserve study updates if conditions change. No basis for reserve funding at this time.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

April 23.2012 Page 22 of 23

Comp #: 999 Reserve Study - Update

Quantity: Annual update

Useful Life:

Remaining Life:

Location: Common areas of association

Evaluation: Per Washington law, chapter 64.34.380 RCW, reserve studies are to be updated annually, with site inspections

to occur no less than every three years to assess changes in condition (i.e., physical, economic, governmental, etc...) and the resulting effect on the community's long-term reserve plan. Most appropriately factored within

operating budget, not as reserve component.



Reserve Studies for Community Associations

Best Case: Worst Case:

Cost Source:

April 23,2012 Page 23 of 23