

TANGLEWOOD HILLS CONDOMINIUM ASSOCIATION
MAINTENANCE PLAN UPDATE
RESERVE STUDY
LEVEL III: UPDATE WITH NO VISUAL SITE INSPECTION
BUDGET YEAR
January 1, 2026 to December 31, 2026

 **SCHWINDT & Co.**
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TANGLEWOOD HILLS CONDOMINIUM ASSOCIATION

Executive Summary

Year of Report:

January 1, 2026 to December 31, 2026

Number of Units:

159 Units

Parameters:

Beginning Balance: \$312,459

Year 2026 Suggested Contribution: \$190,000

Year 2026 Projected Interest Earned: \$2,831

Inflation: 3.00%

Annual Increase to Suggested Contribution: 10.00%

Lowest Cash Balance Over 30 Years (Threshold): \$230,463

Average Reserve Assessment per Unit: \$99.58

Prior Year's Actual Contribution: \$130,000

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**Tanglewood Hills Condominium Association
Maintenance Plan Update
Reserve Study Update – Offsite
Disclosure Information
2026**

We have conducted an offsite reserve study update and maintenance plan update for the Tanglewood Hills Condominium Association for the year beginning January 1, 2026, in accordance with guidelines established by Community Associations Institute and the American Institute of Certified Public Accountants.

This reserve study and maintenance plan is in compliance with the legislative changes made in 2007 to ORS Chapters 94 and 100.

In addition to providing the reserve study and maintenance plan, we also provide tax and review/audit services to the Association through an affiliate company.

Ongoing inspections of the property should be performed by a licensed inspector, with the exception of a roof inspection which may be performed by a licensed roofing contractor.

Assumptions used for inflation, interest and other factors are detailed in page 27. Income tax factors were not considered due to variables affecting net taxable income and the election of the tax form to be filed.

Schwindt and Company believes that every association should have a complete building envelope inspection within 12 months of completion of all construction. This inspection must be performed by a licensed building envelope inspector. Ongoing inspections of the property should be performed by a licensed inspector, with the exception of a roof inspection which may be performed by a licensed roofing contractor.

Associations should have a complete building envelope study conducted every 3-5 years. If the Association chooses not to engage a qualified engineer or architect to perform a building envelope inspection, the Association should be 100% funded using the fully funded method of funding to ensure funds are available to pay for unexpected costs.

David T. Schwindt, the representative in charge of this report, is a designated Reserve Study Specialist and Certified Public Accountant licensed in the states of Oregon, Washington, California, and Arizona.

All information regarding the useful lives and costs of reserve components were derived by vendors, the Association's 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., and various construction pricing and scheduling manuals. In 2023-2024 the Association completed a project to replace the siding, decks, entry stairs and landings.

The terms *RS Means*, *National Construction Estimator*, and *Fannie Mae Expected Useful Life Tables and Forms* refer to construction industry estimating databases that are used throughout the industry to establish cost estimates and useful life estimates for common building components and products. We suggest that the Association obtain firm bids for these services.

Increases in Roofing and Painting Costs

Over the last several years, roofing, painting, and other costs have increased at a dramatic pace. Schwindt and Company has noted this in our reserve studies. We were not sure if this was a temporary price increase or the new normal in pricing. We are now of the opinion that these increased prices will most likely continue. Roofing costs have nearly doubled and painting costs have increased 50%. It is still possible to keep the increases to a minimum if Associations can find a vendor that will perform the work at a reduced price, however, these vendors are becoming rare.

The main reason for increased prices aside from normal cost increases appears to be the availability of labor. Many workers left the industry during the downturn and have not reentered the job market thus driving up wage costs to attract qualified

workers. Roofers and painters are also seeing increased demand for their services due to aging association property. These factors have created the perfect storm for increased prices.

These increases are being built into cost estimates and required contributions. Associations have seen an increase in the suggested reserve contributions beginning with the 2018/2019 budget years and depending on the year the roofing and painting projects occur, the increases may be substantial. As of 2020, we are seeing the prices remain at the elevated rate.

In 2023, the average annual inflation rate was 4.12% and has reduced to 2.75% in November 2024. At this time, Schwindt and Company is recommending an inflation rate of 3% in reserve studies. We will continue to monitor the inflation rate throughout this period. More information can be found at https://inflationdata.com/Inflation/Inflation_Rate/HistoricalInflation.aspx.

Currently, the price of oil has fluctuated greatly, and there are ongoing issues with the supply chain. As of now, it is unknown when these factors will be resolved, making it difficult to predict prices. We recommend the Association begin the replacement process several years out, including inspection, creation of a scope of work, and a competitive bidding process. For large projects, associations may choose to sign contracts a year before the work is to occur so that they can get scheduled during the spring and summer.

“Article 3, Section 3.2.1 of the Association’s Declaration states, “Each unit shall include windows, window frames, exterior doors, door frames, skylights and skylight frames if any.”

“Article 4, Section 4.2 of the Association’s Declaration states, “The cost of maintenance, repair, and replacement of the general common elements shall be a common expense, and the performance of such work shall be the responsibility of the Association. Although repair, maintenance and replacement of exterior doors and door frames (including patio and garage doors), windows and window frames shall be the responsibility of individual owners, exterior painting shall be the responsibility of the Association.”

“Article 5, Section 5.2 of the Association’s Declaration states, “The cost of maintenance, repair and replacement of the limited common elements shall be a common expense, and the performance of such work shall be the responsibility of the Association.”

“Article 17, Section 17.4 of the Association’s Declaration states, “The Association shall maintain all common elements in a clean and attractive condition. If the Association fails to do so, the Declarant may perform such maintenance at the expense of the Association.”

An earthquake insurance deductible is not included in the reserve study.

Many reserve studies do not include components such as the structural building envelope, plumbing (including water supply and piping), electrical systems, and water/sewer systems because they are deemed to be beyond the usual 30-year threshold and reserve study providers are generally not experts in determining the estimated useful lives and replacement costs of such assets. Associations that are 20+ years in age should consider adding funding for these components because the eventual cost may be one of the largest expenditures in the study. Because the eventual replacement costs and determination of the estimated useful life of such components depend on several factors, it is advisable to hire experts to advise the Association on such matters. Schwindt and Company believes the best way to determine costs and lives associated with these components is to perform an inspection of the applicable components which should include information about the component, steps to take to lengthen the estimated useful life, projected estimated useful life, and estimated replacement costs. This inspection should be conducted by experts and should include a written report. This information will allow the reserve study provider and the Association to include appropriate costs, lives, and projected expenditures in the study. Schwindt and Company believes that the cost of these inspections should be included in the reserve study as a funded component.

We are not aware of any material issues which, if not disclosed, would cause a material distortion of this report.

Certain information, such as the beginning balance of reserve funds and other information as detailed on the component detail reports, was provided by Association representatives and is deemed to be reliable by us. This reserve study is a reflection of the information provided to us and cannot be used for the purpose of performing an audit, a quality/forensic

analysis, or background checks of historical records.

Site visits should not be considered a project audit or quality inspection of the Association's property. A site visit does not evaluate the condition of the property to determine the useful life or needed repairs. Schwindt and Company suggests that the Association perform a building envelope inspection to determine the condition, performance, and useful life of all the components.

Certain costs outlined in the reserve study are subjective and, as a result, are for planning purposes only. The Association should obtain firm bids at the time of work. Actual costs will depend upon the scope of work as defined at the time the repair, replacement, or restoration is performed. All estimates relating to future work are good faith estimates and projections are based on the estimated inflation rate, which may or may not prove accurate. All future costs and life expectancies should be reviewed and adjusted annually.

This reserve study, unless specifically stated in the report, assumes no fungi, mold, asbestos, lead paint, urea-formaldehyde foam insulation, termite control substances, other chemicals, toxic wastes, radon gas, electro-magnetic radiation, other potentially hazardous materials (on the surface or sub-surface), or termites on the property. The existence of any of these substances may adversely affect the accuracy of this reserve study. Schwindt and Company assumes no responsibility regarding such conditions, as we are not qualified to detect substances, determine the impact, or develop remediation plans/costs.

Since destructive testing was not performed, this reserve study does not attempt to address latent and/or patent defects. Neither does it address useful life expectancies that are abnormally short due either to improper design, installation nor to subsequent improper maintenance. This reserve study assumes all components will be reasonably maintained for the remainder of their life expectancy.

Physical Analysis:

New projects generally include information provided by developers and/or refer to drawings.

Full onsite reserve studies generally include field measurements and do not include destructive testing. Drawings are usually not available for existing projects.

Onsite updates generally include observations of physical characteristics but do not include field measurements.

The client is considered to have deemed previously developed component quantities as accurate and reliable. The current work is reliant on the validity of prior reserve studies.

This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require the Association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement.

TANGLEWOOD HILLS CONDOMINIUM ASSOCIATION

MAINTENANCE PLAN UPDATE

BUDGET YEAR

January 1, 2026 to December 31, 2026

DRAFT

**Tanglewood Hills Condominium Association
Executive Summary of Maintenance Plan**

Regular maintenance of common elements is necessary to insure the maximum useful life and optimum performance of components. Of particular concern are items that may present a safety hazard to residents or guests if they are not maintained in a timely manner as well as components that perform a waterproofing function.

This maintenance plan is a cyclical plan that calls for maintenance at regular intervals. The frequency of the maintenance activity and the cost of the activity at the first instance follow a short descriptive narrative. This maintenance plan should be reviewed on an annual basis when preparing the annual operating budget for the Association.

Checklists, developed by Reed Construction Data, Inc., can be photocopied or accessed from the RS Means website:

<http://www.rsmeans.com/supplement/67346.asp>

They can be used to assess and document the existing condition of an association's common elements and to track the implementation of planned maintenance activities.

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**Tanglewood Hills Condominium Association
Maintenance Plan
2026**

Pursuant to Oregon State Statutes Chapters 94 and 100, which require a maintenance plan as an integral part of the reserve study, the maintenance procedures are as follows:

The Board of Directors should refer to this maintenance plan each year when preparing the annual operating budget for the Association to ensure that annual maintenance costs are included in the budget for the years that they are scheduled.

Property Inspection

Schwindt & Company recommends that a provision for the annual inspection of common area components be included in the maintenance plan for all associations. This valuable management tool will help to ensure that all components achieve a maximum useful life expectancy and that they function as intended throughout their lifespan.

This inspection process should include a careful visual review of the unit decks.

The inspection should be performed by a qualified professional and should include a written summary of conclusions with specific recommendations for any needed repairs or maintenance.

This expense should be included in the annual operating budget for the Association.

Frequency: Annually

Roof Inspection

Schwindt & Company recommends that a provision for the periodic inspection and maintenance of roofing and related components be included in the maintenance plan for all associations.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended that damaged or rusted flashings, roof penetration flashings, and shingles be replaced annually. Inspect presence and functioning of diverters and step flashings at the roof to wall intersections. Inspect all roof penetrations and spot inspect underlayment roof edges. This maintenance and inspection procedure should also occur on the carport roofs.

The frequency of this inspection will vary based on the age, condition, complexity, and remaining useful life of the roof system. As the roof components become older, the Association is well advised to consider increasing the frequency of this critical procedure.

The inspection should be performed by a qualified roofing professional and should include a written summary of conclusions with specific recommendations for any needed repairs or maintenance. Recommended maintenance should be performed promptly by a licensed roofing contractor.

We suggest that the Association obtain firm bids for this service.

This expense should be included in the annual operating budget for the Association.

Frequency: Annually

Lighting: Exterior & Common Area – Inspection/Maintenance

Note: Replacement of flickering or burned-out bulbs should be immediate.

Lighting is a crucial element in the provision of safety and security. All lighting systems should be inspected frequently and care must be taken to identify and correct deficiencies.

Various fixture types may be used according to area needs. Lighting systems should be designed to provide maximum, appropriate illumination at minimal energy expenditures. Lighting maintenance processes should include a general awareness of factors that cause malfunctions in lighting systems, such as dirt accumulation and lumen depreciation. It is important to fully wash, rather than dry-wipe, exterior surfaces to reclaim light and prevent further deterioration.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended that all exterior light fixtures at all elevations be inspected annually for proper functioning, including automatic light sensors. The exterior electrical conduit should be inspected to ensure that it is securely affixed. Inspect for any exposed wires. Inspect electrical service panels at each building, verify means of disconnecting service main, and report on unused circuit breaker panels not in use. Inspect exterior lights for presence of water. Inspect and test the ground-fault circuit-interrupter outlets for proper functioning. Respond quickly to reports from residents on any exterior lighting or electrical issues. Replace lamps with bulbs wherever possible. If water is found in any fixture, investigate source and repair.

Deficiencies, required maintenance, and required repairs after completion of review should be noted by the maintenance contractors and/or Association representatives.

Repairs and inspections should be completed by a qualified professional.

This expense should be included in the annual operating budget for the Association as general property maintenance expense.

Frequency: Annually

Pool Building

The pool building may experience heavy traffic that can have a dramatic impact on the life expectancy of the equipment. Preventive maintenance is critical. The overall condition of the floors and mats should be reviewed for deficiencies such as excessive wear, stains, tears, and tripping hazards. The overall condition of the following should be reviewed: walls/ceilings, lighting fixture protection, location of signs and fire safety devices, fire extinguishers, and trash receptacles. Mirrors and glass should be reviewed for cracked/broken surfaces or rough edges.

Deficiencies, required maintenance, and required repairs after completion of review should be noted by

the maintenance contractors and/or Association representatives.

This expense should be included in the annual operating budget for the Association as general property maintenance expense.

Frequency: Monthly

Exterior Stairs, Decks, & Patios

Individual stairs, decks, and patios should be carefully checked, particularly concrete and wood, on a monthly basis. Concrete should be reviewed for deficiencies such as alkali-aggregate expansion, honeycombing, chips, cracks, stains, lifted areas, tripping hazards, and/or unevenness. Railings should be reviewed for stability, hardware, and overall condition. Wood should be reviewed for deficiencies, such as dry rot, termites, instability, worn edges, cracks, holes and splintering. Footing/foundation should be reviewed for stability and overall condition deficiencies, such as cracks and broken or missing components. A safety review should include, but not be limited to, the sufficient distance maintained between flammables and other surfaces, as well as the overall condition of access points such as doors, windows, screens and thresholds.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended the following maintenance and inspection procedures for the stairs, decks, and patios.

All stair components, guardrails, and wood relating to the front entry decking and walkways should be inspected annually for deterioration, protruding screws or bolts, peeling paint, sharp edges, buckling, and loose boards or decking. Inspect connections of guardrails to other guardrails or any other building component. Inspect metal stair tread clips to ensure they are fastened securely and for rust. All stairs, entry decks, and wood walkways should be pressure washed annually or as necessary using the lowest pressure possible with the highest volume in order to clean the surface while not damaging or de-bonding the paint and non-skid coating. Any new wood used for repairs or replacement must be pressure treated, primed on all 6 sides, and installed with non-corrosive fasteners.

All beam supports and any metal flashing at decking edges transitioning to treads or support posts should be inspected.

This expense should be included in the annual operating budget for the Association as general property maintenance expense.

Frequency: Annually

Hot Water Heater – (Common Area Only) – Inspection/Maintenance

Maintenance of the hot water heater includes regularly scheduled inspections and maintenance.

The water heater and related components should be checked for water leaks and fuel supply leaks. The water heater and related components should also be checked for proper operation and settings. Filters should be changed and all components serviced as required. The surrounding area should be cleaned at the time of servicing.

Deficiencies, required maintenance, and required repairs after completion of review should be noted by the maintenance contractors and/or Association representatives.

Inspections and maintenance should be performed by a qualified, licensed service provider.

We understand that this expense [is] [should be] included in the annual operating budget for the Association.

Frequency: Monthly to Annually

Property Entrance - Review

The property entrance is a significant reflection on the development as a whole and is often the first stop in the development for residents, prospective residents or buyers, and visitors. The area should be consistently clean, functional, and accessible. In addition to serving as a point of initial access, the main entry may feature mailboxes, which should be secure and operational.

Mailboxes: Review overall condition and function of locks; proper lubrication of working parts; cleanliness of face plates; security of housing, in compliance with current postal regulations; accuracy and visibility of signage/accessibility of tactile lettering, where required; condition and function of slots and depositories for outgoing mail and packages.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended the mailboxes be inspected annually. The structural wood of the mailboxes should be inspected for signs of decay.

Deficiencies, required maintenance, and required repairs after completion of review should be noted by the maintenance contractors and/or Association representatives.

This expense should be included in the annual operating budget for the Association as general property maintenance expense.

Frequency: Monthly

Swimming Pool & Spa

Swimming pool maintenance should be performed in conjunction with a service contractor. Preventive maintenance in this area consists of validating all equipment is present and functional on a monthly basis. Only certified professionals should complete repairs or maintenance procedures more advanced than manufacturer's prescribed chemical treatments and cleaning. Maintenance staff should accompany the certified professional during statutory inspections and maintenance to ensure that the physical work complies with contract and manufacturer's specifications.

Preventive maintenance includes, but is not limited to, the review of the following: automatic fill device function; electrical component condition; pump/filter/chlorination function; thermostat; and heater function.

Deck surface condition should be reviewed for deficiencies such as rough areas and tripping and

slippage hazards. Fence and gates should be reviewed for the function of the anchors, latches and the overall condition. Handrails and ladders should be reviewed for stability, hardware and overall condition. Steps and treads should be reviewed for security and tread condition.

Safety equipment should be reviewed for its condition and function including, but not limited to, the following: the location and condition of the life ring; emergency telephone equipment; compliance of signage with codes and standards; visibility and overall condition of the signage; and fire extinguishers tag currency, placement, housing, hose, and overall condition.

Note: Any and all electrical outlets near water should be serviced by a ground-fault circuit-interrupter (GFI) to protect users from electrical shock.

Water condition and cleanliness should be reviewed and must comply with local health standards. The County Health Department or local water management authority determines health standards in most communities. Standards must be posted within the pool area.

Pool tile/plaster should be reviewed for its overall condition.

During the off-season when the pool is covered, check the security of the fastening system monthly to make sure it hasn't been tampered with.

Deficiencies, required maintenance, and required repairs after completion of review should be noted by the maintenance contractors and/or Association representatives.

This expense should be included in the annual operating budget for the Association.

Frequency: Monthly

Windows & Doors

The performance of and payment for the maintenance and repairs of windows and doors is solely the responsibility of the owners. Owners should be made aware of the consequence of not maintaining their property. A method should be adopted for owners to report problems.

These maintenance procedures should also be performed on the common area buildings. This expense for the common buildings should be included in the Association's operating budget and may be considered part of the annual property inspection.

Exterior window and door casings, sashes, and frames should be inspected annually for twisting, cracking, deterioration, or other signs of distress. Hardware and weather stripping should be checked for proper operation and fit. Gaskets and seals should be reviewed for signs of moisture intrusion. Weep holes should be cleaned. These building envelope components should be repaired and replaced as necessary.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended the following maintenance and inspection procedures for the windows and doors.

The windows should be inspected annually for water or condensation between the panes, and from the

interior, check perimeter trim and adjacent flooring or walls for staining from water. Clean debris out of all tracks and channels.

The common area doors should be inspected annually. Inspect the exterior door weather stripping to ensure a tight seal. Inspect that thresholds are securely attached. Doors should swing and close easily. Inspect locks to ensure that they are working properly. If any touch-up paint is needed, adhere to Pitt-Tech/Miller Paint's recommendations for surface preparation and paint application.

The sliding glass door for the common areas should be inspected annually. Inspect for smooth operation of the door and screen door on the tracks, inspect for water or condensation between the panes, and that the exterior weep holes at the bottom are clear of obstructions. Inspect for debris/organic material in the lower tracks or channels. From the interior, check perimeter trim and adjacent flooring and/or walls for water staining. Inspect the exterior perimeter sealant joints for voids. Inspect the vinyl piece that runs vertically along the left and right edges of the fixed window to ensure there are no gaps in the vinyl, as they should snap into place. Inspect the locking mechanism for proper function.

Clean out weep holes at the bottom of all windows to ensure they are open. Adjust door or screen door rollers if needed. Optional recommendations include cleaning exterior window glass. Avoid using a high pressure spray and instead use a water-based household cleaner and wipe down exterior frames if dirty.

This expense should be included in the annual operating budget for the Association.

Frequency: Annually

Gutters & Downspouts

Schwindt & Company recommends that all gutters and downspouts be cleaned, visually inspected, and repaired as required every 6 months in the spring and fall.

This important maintenance procedure will help to ensure that the gutters and downspouts are free-flowing at all times, thus preventing the backup of water within the drainage system. Such backup can lead to water ingress issues along the roof edges, around scuppers or other roof penetrations, and at sheet metal flashing or transition points that rely on quick and continuous discharge of water from surrounding roof surfaces to maintain a watertight building exterior.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommends that gutters be inspected for secure attachment to fascia, rust holes, and organic material growth. Inspect downspouts for secure attachments. Inspect gutter to downspout connections for tight connection. Inspect presence of screen at the gutter to downspout connection. Inspect downspouts terminate either to a tie-in drain or a splash block, preferably with a French drain nearby. Inspect the connection of the downspout to the tie-in drain and ensure the drain is free of debris. Look for a clean-out on tie-drains and clean.

Due to heavy tree canopy, frequent leaf removal in the fall is imperative. In conjunction with leaf removal, annual tree trimming to help keep branches as far away as possible from the building will reduce the volume of leaves. Flush gutters and downspouts often during the fall. If clean-outs are

accessible, clean as needed. Consider installation of gutter guard system.

This expense should be included in the annual operating budget for the Association.

Frequency: Semiannually, more often if necessary

HVAC–Clubhouse Air Conditioning Unit (Common Area Only)

Regular preventive maintenance of HVAC (heating, ventilation, and air-conditioning) systems is crucial to the quality of air and comfort level within the condominium community. Preventive maintenance is also important for energy efficiency and maximizing equipment life. HVAC systems should always sufficiently control temperature and humidity, distribute outside air uniformly, and isolate and remove odors and pollutants. Improper function and maintenance can cause indoor air pollution by allowing stale or contaminated air to remain in the building. It is essential that both the building's common HVAC system and those for individual units have fully functional and regularly inspected pressure control, filtration, and exhaust equipment. HVAC systems must also be properly sized in proportion to the area and number of occupants.

Management may opt to contract outside professionals to handle this task, although the following preventive maintenance procedures can be conducted by in-house maintenance personnel. If an outside service contractor is used, be sure to validate their performance by an audit of service performed.

When performing any maintenance procedures, always refer to manufacturer's recommendations. Diagnostic tools, such as a digital HVAC analyzer, can also be of help.

For all types of HVAC systems, change filters twice a year and post a sticker on the HVAC unit with the date of change and initials of the mechanic. If an outside service is used, plot the date of service on the wall chart and verify that performance is as per contract.

Frequency: Semiannually

Exterior Walls

The siding, trim, and other wood building components should be inspected for loose, missing, cracked or otherwise damaged components. Sealant joints should be checked for missing or cracked sealant.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommends the following inspections and maintenance procedures pertaining to the other walls.

Voids and hairline cracks should be inspected in the joint sealant. Reseal any voids and cracks with sealant that states on its label that it meets the ASTM C920 standard and is elastomeric latex. When applying, allow it to cure 24 hours (with no rain) before painting. Painting acts as a protective coat to the sealant.

Siding, including trim and fascia boards, should be inspected for the following: deterioration; holes; staining; and water seepage; and warping or bulging siding. Inspect for small vertical lines that appear to be paint flaking, which occurs in some locations due to the siding itself delaminating because of age.

Inspect for sealant voids on battens and trim at splice cuts. Inspect siding where it meets dissimilar materials, such as roofs, decking, and concrete stem walls. Inspect siding and trim of the bump-out windows at the side elevations with care. Inspect dryer vents for excessive lint build-up. Inspect all penetrations are properly flashed.

Pressure wash the exterior walls annually or as necessary using the lowest pressure possible with the highest volume in order to clean the surface while not damaging or de-bonding the paint.

Painted surfaces should be checked for paint deterioration, bubbling, or other signs of deterioration.

Dryer vents should be checked **twice a year** and cleared of lint. Also check operation of exhaust baffles to make sure they are present and that they move freely. Exhaust ducts should be cleared of debris **every 3 years**.

Any penetrations of the building envelope, such as utility lines and light fixtures, should be checked annually for signs of water intrusion. Hose bibs should be checked for leaks and other failures. Each hose bib should be shut off and drained during the winter to prevent damage from freezing. Inspect storm drains inlet and discharge locations for obstructions to ensure proper flow. Inspect water meters for visible leaks. Insulate hose bibs during the winter months. If any visual inspections suggest possible issues with a particular system, an in-line camera survey is recommended.

Annual inspections, to check for signs of water intrusion, should be made of the building envelope interfaces such as where the windows intersect with the walls and where the walls intersect with the roof. Inspect the concrete stem walls for cracking or crumbling. Inspect settlement of backfill soil next to wall for erosion. Inspect retaining walls for stability and drainage. Cracks in concrete should be patched and sealed. Any cracks larger than ¼ inches need immediate evaluation by a qualified professional.

Deficiencies, required maintenance, and required repairs after completion of review should be noted by the maintenance contractors and/or Association representatives.

Inspections should be made by a qualified professional.

This expense should be included in the annual operating budget for the Association.

Frequency: Annually

Wrought Iron Fence – Swimming Pool - Inspection

Metal fences require regular inspection of paint condition, rust and other corrosion, and vegetation and trash buildup. The overall condition of the fence should be reviewed for deficiencies such as vegetation encroachment, debris buildup, holes, sagging areas, missing segments, rust, and/or vandalism.

The wrought iron fence should be inspected for scratches, dents, and chips in the coating. Clean the fence with soapy water and oil springs and latches at the door. Scratches and dents should be coated with rust-resistant finish.

Deficiencies, required maintenance, and required repairs after completion of review should be noted by

the maintenance contractors and/or Association representatives.

This expense should be included in the Association's operating budget and may be considered part of the annual property inspection.

Frequency: Annually

Fire Extinguishers – Common Areas Only

The following annual preventive maintenance checklist is for the fire extinguishers located in the common areas. This inspection and certification must be conducted by a licensed specialty contractor and should be scheduled in advance to ensure that the date on extinguishers will not expire. Monthly inspections of fire extinguishers' general condition, housing, and locations per code should be conducted as part of preventive maintenance procedures. In addition to the annual preventive maintenance tasks outlined below, check the pressure and weight of each extinguisher in the facility every 6 months, according to its manufacturer's label. If the pressure is below the recommended minimum or if the extinguisher has been used, it should be recharged. Consult the National Fire Protection Association's (NFPA) Standard 10 for the specific requirements regarding the proper locations of fire extinguishers and signage.

Annual preventive maintenance checklist consists of the following: certification; housing condition; hose condition; proper location per code; count per code; and overall condition.

This expense should be included in the annual operating budget for the Association.

Frequency: Annual

Lawn Irrigation System

Periodic maintenance to the lawn irrigation system should be anticipated with this type of component. These maintenance procedures will include replacement of the control mechanism, replacement of damaged piping, upgrading of sprinkler heads and valve components, and any other work that is advised by repair professionals.

In recent years, improvements have been made to this type of system which has increased the efficiency of the water distribution process. Such improvements can be expected to continue to be made and the owners of such systems are well advised to plan on periodic upgrades to maintain the efficiency of their systems.

Lawn irrigation systems also require periodic testing to ensure proper operation. Sometimes this testing is mandated by ordinance or building codes. All work on lawn irrigation systems must be performed by licensed contractors who specialize in this type of work.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended that during the watering season, sprinkler heads are periodically checked for proper functioning.

This expense should be included in the annual operating budget for the Association.

Frequency: Annually

Fence – Chain Link

The chain link fence surrounding the garbage enclosure should undergo periodic maintenance in order to achieve a maximum useful life. Maintenance includes cleaning and locally repairing the fence. Inspect the fence for dirt. Clean the fence with a hose, a scrub brush, and soapy water.

This expense should be included in the Association's annual operating budget for the year in which it is scheduled.

Frequency: Annually

Exterior Siding Maintenance – Painting

Maintenance of the exterior siding includes regularly scheduled cleaning and inspection of the surface areas for cracks, peeling paint or other sealants, deterioration of the base material, and failure of caulking or other sealant materials that serve a waterproofing function.

This maintenance provision is for the periodic painting of the exterior siding. The siding should be cleaned, repaired as required, and primed and painted with premium quality exterior house paint in accordance with the siding manufacturer's specifications. The work should be performed by a qualified, licensed painting contractor.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended that any touch-up painting should use the same paint and adhere to Miller Paint's application recommendations for surface preparation and paint application.

This expense is included in the reserve study for the Association.

Frequency: Every 10 years

Asphalt – Seal Coating

Maintenance of asphalt paving includes the periodic application of an asphalt emulsion sealer or "seal coat". This procedure is typically performed every 4 to 7 years, depending on a variety of factors that can affect the useful life of the sealer.

Vehicle traffic is one such factor, and associations that have asphalt paving that carries considerable vehicle traffic should consider a maintenance program that calls for seal coating of asphalt driving surfaces as frequently as every 4 years.

This maintenance procedure involves thoroughly cleaning all pavements, filling of any surface cracks and patching of any locally damaged pavement surfaces. The emulsion sealer is then applied.

Parking area demarcation lines will need to be renewed each time a seal coat is applied. The component expense includes the cost of this work as well as the seal coating cost.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended that the parking surfaces are power swept and vacuumed annually. Repaint parking spaces, handicap zones, fire lanes curbs, and lane lines as needed. Patch holes as needed; based on the size of cracks or holes, different materials and methods are used. Inspect curbs for cracking, crumbling, and paint erosion. Inspect drain components for clogging. Inspect surface for cracks, holes, and loose pieces of asphalt. This inspection should occur annually.

This work should be performed by a licensed paving contractor.

The expense for asphalt seal coat is included in the reserve study for the Association.

Frequency: Every 5 years

Interior Paint – Common Areas

The interior painted surfaces of the laundry room and poll building should be cleaned, repaired as required, primed and painted with premium quality interior house paint in accordance with the manufacturer's specifications. The work should be performed by a qualified, licensed painting contractor.

This expense is included in the reserve study for the Association.

Frequency: Every 10 years

Handrails - Painting

The metal handrails should be cleaned and painted on a periodic basis to prevent deterioration of the metal material due to rust and oxidation. The railings on the decks and entry walkways are aluminum and do not require painting.

The work should be performed by a qualified, licensed painting contractor.

This expense is included in the reserve study for the Association.

Frequency: Every 10 years

Exterior Composite Decks – Inspection and Maintenance

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended that the decks be inspected and maintained annually. In 2023 the decks were replaced with a composite material. The deck boards should be inspected for signs of wear, fastening to joists below, and protruding screws. Inspect guardrails to ensure they are tightly fastened to the wing walls and inspect the upright posts to ensure they are tightly fastened to the deck edge board. Inspect the guardrails for deterioration. Where the deck meets the structure, proper integration is critical to maintain weather resistance and good performance. If drip panels are installed, inspect for adequate slope for water drainage and secure attachment to joists. Inspect drip line on the ground below drip panel for adequate drainage. Clean debris off deck boards, especially during the fall due to the heavy tree canopy. Drip

panels should be cleaned of debris twice per year.

This expense should be included in the Association's operating budget.

Frequency: Annually

Concrete Pavement

Maintenance of the concrete pavement should include cleaning the surface areas with pressure washing equipment. The pavement should also be visually reviewed for signs of undue stress and cracking. Noticeable cracks should be filled with a suitable concrete crack filler to prevent penetration of moisture below the concrete surface which will undermine the integrity of the base material over time.

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended that the concrete sidewalks be inspected annually. The sidewalks should be inspected for cracks, fissures, lifts, settling, depressions, or any tripping hazards. Inspect concrete wheel stops in the parking lot for cracking and splitting, and to insure they are secure and in the proper position. Inspect for vegetative overgrowth encroaching onto the sidewalk area. Clean and sweep the concrete often. Paint concrete step edges with high visibility outdoor paint. If any cracks are found to be larger than ¼ inch, replacement of the section is needed.

This expense should be included in the operating budget for the Association.

Frequency: Annually

Concrete Piers

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommended that the concrete piers located at the front elevations of all building at the first level entry decks and at the base of stairwell privacy walls be inspected annually. Inspect the metal bracket at the wood to concrete interface and this connection area in general. Inspect the ground cover at the base of pier to ensure the soil is well compacted. If new piers are needed, a City of Lake Oswego permit will need to be obtained, including an inspection of the reinforcement steel before the concrete is poured into the form.

This expense should be included in the operating budget for the Association.

Frequency: Annually

Landscaping

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommends that a walk-through of the property be done seasonally and routinely. During the walk-through, the Association should note vegetation touching or overhanging any building for trimming. Inspect vegetation for disease and poor health. Inspect sod for uniform thickness and presence of weeds or bare spots. Inspect the ground cover clearance around the 4x4 structural post holes at the front elevation stair assemblies to ensure the concrete is not covered. Seasonal clean-up by the landscaping vendors, routine mowing and edging the lawn, patching the lawn, seasonal fertilizing and shrub trimming should be done. Re-grade locations where wood comes into contact with organic ground cover to ensure a 1-2

inch clearance. Tree trimming should be performed by a certified arborist, especially to keep tree branches from touching or hanging over the buildings.

This expense should be included in the operating budget for the Association.

Frequency: Annually

Wood Fence – Inspection

The 2010 Maintenance Plan completed by Pete Fowler Construction Services, Inc. recommend that the wood fence should be inspected annually for dirt and for signs of deterioration. Clean the fence by either pressure washing or applying a cleaning solution and allow it to dry completely, and then stain.

This expense should be included in the operating budget for the Association.

Frequency: Annually

This maintenance plan is designed to preserve and extend the useful life of assets and is dependent upon proper inspection and follow up procedures.

DRAFT

Tanglewood Hills Condominium Association
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1011	Decks & Guardrails, Composite - Replacement (I)	2053	48 of 85
1039	Decks & Guardrails, Composite - Replacement (II)	2054	49 of 85
1067	Entry Walkways - Replacement	2053	49 of 85
1055	Front Elevation Concrete Piers - Repairs	2038	50 of 85
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Tanglewood Hills Condominium Association
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Tanglewood Hills Condominium Association
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	Total Unfunded Assets	<u>1</u>	
	Total Assets	61	

TANGLEWOOD HILLS CONDOMINIUM ASSOCIATION
RESERVE STUDY
LEVEL III: UPDATE WITH NO VISUAL SITE INSPECTION
BUDGET YEAR
January 1, 2026 to December 31, 2026

DRAFT

Tanglewood Hills Condominium Association

Property Description

Tanglewood Hills Condominium Association consists of 23 buildings with 159 units located in Lake Oswego, Oregon. The property was constructed in the year 1970 as apartments, and was converted to a condominiums in the year 2000. The siding was replaced with fiber cement, stair treads with concrete, and deck and entry walkway surfaces with composite decking in 2023. The Association shall provide exterior improvements upon each unit, such as paint, maintenance, repair and replacement of roofs, gutters, downspouts, rain drains, and exterior building surfaces. The individual homeowners are responsible for all maintenance and repair of the interior of their home.

All information regarding the useful lives and costs of reserve components were derived by vendors, the Association's 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., and various construction pricing and scheduling manuals.

A site visit was performed by Schwindt and Company in 2010, 2015, and 2024. Schwindt and Company did not investigate components for defects, materials, design or workmanship. This investigation would ordinarily be considered in a complete building envelope inspection. Our condition assessment considers if the component is wearing as intended. All components are considered to be in fair condition and appear to be wearing as intended unless noted otherwise in the component detail.

Funds are being accumulated in the replacement fund based on estimates of future need for repairs and replacement of common property components. Actual expenditures, investment income and provisions for income taxes however, may vary from estimated amounts and the variations may be material. Therefore, amounts accumulated in the replacement fund may not be adequate to meet future funding needs.

If additional funds are needed, the Association has the right, subject to board approval, to increase regular assessments or levy special assessments, or it may delay repairs or replacements until funds are available.

Tanglewood Hills Condominium Association
Lake Oswego, Oregon
Cash Flow Method - Threshold Funding Model Summary

Report Date	August 7, 2025
Account Number	2tangl
Budget Year Beginning	January 1, 2026
Budget Year Ending	December 31, 2026
Total Units	159

<i>Report Parameters</i>	
Inflation	3.00%
Interest Rate on Reserve Deposit	2.00%
2026 Beginning Balance	\$312,459

**Threshold Funding
Fully Reserved Model Summary**

- This study utilizes the cash flow method and the threshold funding model, which establishes a reserve funding goal that keeps the reserve balance above a specified dollar or percent funded amount. The threshold method assumes that the threshold method is funded with a positive threshold balance, therefore, "fully reserved".
- The following items were not included in the analysis because they have useful lives greater than 30 years: grading/drainage; foundation/footings; storm drains; telephone, cable, and internet lines.
- This funding scenario begins with a contribution of **\$190,000** in **2026** and increases **10.00%** until **2038**. In **2038** the contribution is **\$596,301** and increases 3.0% each year. A minimum balance of **\$230,463** is maintained.
- **This reserve study funding scenario uses a contribution increase higher than the estimated inflation rate. This puts the Association at a higher risk of special assessment.**
- The purpose of this study is to ensure that adequate replacement funds are available when components reach the end of their useful life. Components will be replaced as required, not necessarily in their expected replacement year. This analysis should be updated annually.

ICash Flow Method - Threshold Funding Model Summary of Calculations

Required Monthly Contribution	\$15,833.33
<i>\$99.58 per unit monthly</i>	
Average Net Monthly Interest Earned	<u>\$235.88</u>
Total Monthly Allocation to Reserves	\$16,069.21
<i>\$101.06 per unit monthly</i>	

Tanglewood Hills Condominium Association
Lake Oswego, Oregon
Cash Flow Method - Threshold Funding Model Projection

Beginning Balance: \$312,459

Year	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2026	190,000	2,831	274,826	230,463	2,060,751	11%
2027	209,000	6,813	5,771	440,506	2,394,097	18%
2028	229,900	10,944	22,432	658,918	2,763,920	24%
2029	252,890	14,296	87,192	838,912	3,087,768	27%
2030	278,179	17,604	116,951	1,017,744	3,400,901	30%
2031	305,997	23,730	7,305	1,340,167	3,846,592	35%
2032	336,597	21,459	458,799	1,239,424	3,851,918	32%
2033	370,256	7,127	1,086,270	530,537	3,223,133	16%
2034	407,282	4,827	511,327	431,319	3,180,442	14%
2035	448,010	2,477	550,534	331,272	3,109,622	11%
2036	492,811	10,063	98,823	735,324	3,513,964	21%
2037	542,092	20,640	5,483	1,292,573	4,038,962	32%
2038	596,301	29,142	170,768	1,747,249	4,422,224	40%
2039	614,190	35,768	306,850	2,090,358	4,689,957	45%
2040	632,616	47,695	68,987	2,701,682	5,224,256	52%
2041	651,595	57,689	195,465	3,215,501	5,658,251	57%
2042	671,142	71,703	25,519	3,932,827	6,294,668	62%
2043	691,277	65,622	1,054,977	3,634,749	5,904,625	62%
2044	712,015	75,649	271,341	4,151,072	6,325,257	66%
2045	733,375	89,517	112,149	4,861,816	6,938,166	70%
2046	755,377	103,053	164,117	5,556,130	7,532,095	74%
2047	778,038	118,279	116,359	6,336,088	8,209,677	77%
2048	801,379	135,807	40,515	7,232,759	9,002,850	80%
2049	825,421	154,141	41,851	8,170,469	9,836,100	83%
2050	850,183	169,415	236,191	8,953,877	10,512,366	85%
2051	875,689	189,794	23,738	9,995,621	11,446,480	87%
2052	901,959	210,966	30,755	11,077,791	12,420,685	89%
2053	929,018	57,998	8,706,065	3,358,742	4,508,422	74%
2054	956,889	51,143	1,341,678	3,025,096	3,965,842	76%
2055	985,595	68,760	150,718	3,928,733	4,654,796	84%

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Component Summary By Category

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
Roofing								
Roof Maintenance: Moss Treatment	2023	2026	2	0	0	1 Total	5,150.00	5,150
Roof: Composition - Replacement - I	2000	2032	30	2	6	77,513 SF	15.45@ 25%	299,394
Roof: Composition - Replacement - II	2000	2033	30	3	7	77,513 SF	15.45@ 25%	299,394
Roof: Composition - Replacement - III	2000	2034	30	4	8	77,513 SF	15.45@ 25%	299,394
Roof: Composition - Replacement - IV	2000	2035	30	5	9	77,513 SF	15.45@ 25%	299,394
Roofing - Total								\$1,202,726
Painting								
Painting, Exterior	2023	2033	10	0	7	171,172 SF	3.35	572,998
Painting, Interior	2000	2026	10	5	0	1 Total	1,733.41	1,733
Painting: Fence, Wrought Iron: Pool Building	2000	2026	6	9	0	209 LF	17.33	3,623
Painting - Total								\$578,355
Building Components								
Concrete - Waterproofing Subgrade - Repair	2009	2026	10	0	0	1 Total	21,667.71	21,668
Decks & Guardrails, Composite - Replaceme.	2023	2053	30	0	27	16,104 SF	61.80@ 50%	497,614
Decks & Guardrails, Composite - Replaceme.	2023	2054	30	1	28	16,104 SF	61.80@ 50%	497,614
Entry Walkways - Replacement	2023	2053	30	0	27	1 Total	850,524.56	850,525
Front Elevation Concrete Piers - Repairs	2023	2038	15	0	12	1 Total	11,440.56	11,441
Patios, Concrete - Partial Replacement	2000	2030	30	0	4	8,478 SF	17.33@ 20%	29,393
Siding, Fiber Cement - Repair	2023	2053	30	0	27	171,172 SF	26.73@ 25%	1,143,793
Siding, Fiber Cement - Replacement	<i>Unfunded</i>							
Stairs & Handrails - Replacement	2023	2053	30	0	27	36 Each	16,459.55	592,544
Tile Wall - Pool Building	2000	2026	15	5	0	1 Total	3,466.85	3,467
Building Components - Total								\$3,648,057
Gutters and Downspouts								
Gutters & Downspouts - Replacement	2023	2053	30	0	27	10,922 LF	10.40	113,622
Gutters and Downspouts - Total								\$113,622
Streets/Asphalt								
Asphalt Overlay	2014	2039	25	0	13	83,442 SF	2.25	187,744
Asphalt Repair - Kerr	2025	2035	10	0	9	27,814 SF	5.15@ 20%	28,648
Asphalt Repair - Touchstone	2024	2034	10	0	8	55,628 SF	5.15@ 20%	57,297
Asphalt Seal Coat - Kerr	2025	2030	5	0	4	27,814 SF	0.31	8,622
Asphalt Seal Coat - Touch Stone	2024	2029	5	0	3	55,628 SF	0.31	17,245
Streets/Asphalt - Total								\$299,557
Fencing/Security								
Fence, Chain Link: Garbage Enclosures	2000	2030	30	0	4	240 LF	30.76	7,381
Fence, Wood - Partial Replacement	2009	2034	25	0	8	1,000 SF	61.80@ 25%	15,450

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Component Summary By Category

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
<i>Fencing/Security continued...</i>								
Fence, Wrought Iron: Pool Building	2000	2030	30	0	4	209 LF	103.00	<u>21,527</u>
Fencing/Security - Total								\$44,358
Equipment								
Fire Extinguishers	2023	2038	15	0	12	38 Each	437.01	16,606
Fire Extinguishers - Enclosure Replacement	2012	2027	15	0	1	1 Total	1,641.88	1,642
Shower - Replacement: Pool Building	2000	2026	25	0	0	1 Total	2,600.11	2,600
Washer & Dryers	2000	2026	15	0	0	4 Each	1,733.41	6,934
Water Heater - Replacement	2011	2026	10	0	0	1 Total	1,802.50	<u>1,802</u>
Equipment - Total								\$29,584
Interior Furnishings								
Stone Flooring - Replacement: Pool Building	2000	2026	25	0	0	218 SF	11.18	<u>2,436</u>
Interior Furnishings - Total								\$2,436
Lighting								
Lights, Exterior	2023	2043	20	0	17	302 Each	180.25	54,435
Lights, Exterior: Pole	2000	2026	10	10	0	56 Each	346.69	19,415
Lights, Interior	2000	2026	15	0	0	10 Each	103.00	<u>1,030</u>
Lighting - Total								\$74,880
Recreation/Pool								
Pool Deck - Repair	2010	2026	15	0	0	1 Total	14,474.03	14,474
Pool Deck Epoxy Recoat	2014	2026	1	0	0	1,520 SF	2.61	3,961
Pool Filter	2008	2026	6	1	0	1 Total	3,170.90	3,171
Pool Furniture	2013	2026	5	0	0	1 Total	866.70	867
Pool Heater	2010	2026	6	0	0	1 Total	5,200.25	5,200
Pool Pump	2009	2026	5	1	0	1 Total	1,473.40	1,473
Pool Replaster	2000	2026	15	0	0	1 Total	34,668.35	<u>34,668</u>
Recreation/Pool - Total								\$63,815
Grounds Components								
Carport - Repairs	2023	2026	2	0	0	1 Total	5,150.00	5,150
Concrete Walkways - Partial Replacement	2000	2026	10	5	0	1 Total	12,314.12	12,314
Curbs - Partial Replacement	2023	2053	30	0	27	1 Total	5,746.60	5,747
Handrails, Metal - Partial Replacement	2023	2053	30	0	27	428 LF	82.40@ 25%	8,817
Irrigation Repairs/Upgrades	2000	2026	20	0	0	1 Total	17,334.19	17,334
Pathway: Asphalt Seal Coat	2023	2028	5	0	2	1 Total	1,733.41	1,733
Plumbing	2014	2026	3	0	0	1 Total	25,750.00	25,750
Sewer Line Repairs	2012	2026	3	0	0	1 Total	32,837.66	32,838
Site Drainage - Installation	2013	2026	1	1	0	1 Total	6,567.53	6,568

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Component Summary By Category

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
<i>Grounds Components continued...</i>								
Trash Enclosure - Repairs	2023	2028	5	0	2	1 Total	5,150.00	5,150
Treework	2025	2030	5	0	4	1 Total	15,000.00	15,000
Wood Retaining Wall: Bld O - Replacement	1970	2026	50	0	0	1 Total	15,450.00	15,450
Grounds Components - Total								<u>\$151,850</u>
Mailboxes								
Mailboxes - Replacement	2023	2053	30	0	27	11 Each	2,060.00	22,660
Mailboxes - Total								<u>\$22,660</u>
Doors and Windows								
Doors, Sliding Glass - Replacement: Comm..	2023	2053	30	0	27	1 Total	1,733.41	1,733
Doors, Wood - Replacement: Common Areas	2023	2053	30	0	27	5 Each	1,545.00	7,725
Windows - Replacement: Common Areas	2023	2053	30	0	27	4 Each	1,030.00	4,120
Doors and Windows - Total								<u>\$13,578</u>
Inspections								
Building Envelope Inspection	2024	2030	5	1	4	1 Total	7,725.00	7,725
Inspections - Total								<u>\$7,725</u>
Insurance Deductible								
Insurance Deductible	2012	2026	1	0	0	1 Total	25,750.00	25,750
Insurance Deductible - Total								<u>\$25,750</u>
Total Asset Summary								<u>\$6,278,953</u>

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Component Summary By Group

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
Capital								
Asphalt Overlay	2014	2039	25	0	13	83,442 SF	2.25	187,744
Carport - Repairs	2023	2026	2	0	0	1 Total	5,150.00	5,150
Decks & Guardrails, Composite - Replacement	2023	2053	30	0	27	16,104 SF	61.80@ 50%	497,614
Decks & Guardrails, Composite - Replacement	2023	2054	30	1	28	16,104 SF	61.80@ 50%	497,614
Doors, Sliding Glass - Replacement: Common Areas	2023	2053	30	0	27	1 Total	1,733.41	1,733
Doors, Wood - Replacement: Common Areas	2023	2053	30	0	27	5 Each	1,545.00	7,725
Fence, Chain Link: Garbage Enclosures	2000	2030	30	0	4	240 LF	30.76	7,381
Fence, Wrought Iron: Pool Building	2000	2030	30	0	4	209 LF	103.00	21,527
Fire Extinguishers	2023	2038	15	0	12	38 Each	437.01	16,606
Fire Extinguishers - Enclosure Replacement	2012	2027	15	0	1	1 Total	1,641.88	1,642
Lights, Exterior	2023	2043	20	0	17	302 Each	180.25	54,435
Lights, Exterior: Pole	2000	2026	10	10	0	56 Each	346.69	19,415
Lights, Interior	2000	2026	15	0	0	10 Each	103.00	1,030
Mailboxes - Replacement	2023	2053	30	0	27	11 Each	2,060.00	22,660
Pool Filter	2008	2026	6	1	0	1 Total	3,170.90	3,171
Pool Furniture	2013	2026	5	0	0	1 Total	866.70	867
Pool Heater	2010	2026	6	0	0	1 Total	5,200.25	5,200
Pool Pump	2009	2026	5	1	0	1 Total	1,473.40	1,473
Pool Replaster	2000	2026	15	0	0	1 Total	34,668.35	34,668
Roof: Composition - Replacement - I	2000	2032	30	2	6	77,513 SF	15.45@ 25%	299,394
Roof: Composition - Replacement - II	2000	2033	30	3	7	77,513 SF	15.45@ 25%	299,394
Roof: Composition - Replacement - III	2000	2034	30	4	8	77,513 SF	15.45@ 25%	299,394
Roof: Composition - Replacement - IV	2000	2035	30	5	9	77,513 SF	15.45@ 25%	299,394
Shower - Replacement: Pool Building	2000	2026	25	0	0	1 Total	2,600.11	2,600
Siding, Fiber Cement - Replacement	<i>Unfunded</i>							
Site Drainage - Installation	2013	2026	1	1	0	1 Total	6,567.53	6,568
Stairs & Handrails - Replacement	2023	2053	30	0	27	36 Each	16,459.55	592,544
Stone Flooring - Replacement: Pool Building	2000	2026	25	0	0	218 SF	11.18	2,436
Tile Wall - Pool Building	2000	2026	15	5	0	1 Total	3,466.85	3,467
Trash Enclosure - Repairs	2023	2028	5	0	2	1 Total	5,150.00	5,150
Washer & Dryers	2000	2026	15	0	0	4 Each	1,733.41	6,934
Water Heater - Replacement	2011	2026	10	0	0	1 Total	1,802.50	1,802
Windows - Replacement: Common Areas	2023	2053	30	0	27	4 Each	1,030.00	4,120
Wood Retaining Wall: Bld O - Replacement	1970	2026	50	0	0	1 Total	15,450.00	15,450
Capital - Total								\$3,226,303

Non-Capital

Asphalt Repair - Kerr	2025	2035	10	0	9	27,814 SF	5.15@ 20%	28,648
Asphalt Repair - Touchstone	2024	2034	10	0	8	55,628 SF	5.15@ 20%	57,297
Asphalt Seal Coat - Kerr	2025	2030	5	0	4	27,814 SF	0.31	8,622
Asphalt Seal Coat - Touch Stone	2024	2029	5	0	3	55,628 SF	0.31	17,245

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Component Summary By Group

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
<i>Non-Capital continued...</i>								
Building Envelope Inspection	2024	2030	5	1	4	1 Total	7,725.00	7,725
Concrete - Waterproofing Subgrade - Repair	2009	2026	10	0	0	1 Total	21,667.71	21,668
Concrete Walkways - Partial Replacement	2000	2026	10	5	0	1 Total	12,314.12	12,314
Curbs - Partial Replacement	2023	2053	30	0	27	1 Total	5,746.60	5,747
Entry Walkways - Replacement	2023	2053	30	0	27	1 Total	850,524.56	850,525
Fence, Wood - Partial Replacement	2009	2034	25	0	8	1,000 SF	61.80@ 25%	15,450
Front Elevation Concrete Piers - Repairs	2023	2038	15	0	12	1 Total	11,440.56	11,441
Gutters & Downspouts - Replacement	2023	2053	30	0	27	10,922 LF	10.40	113,622
Handrails, Metal - Partial Replacement	2023	2053	30	0	27	428 LF	82.40@ 25%	8,817
Insurance Deductible	2012	2026	1	0	0	1 Total	25,750.00	25,750
Irrigation Repairs/Upgrades	2000	2026	20	0	0	1 Total	17,334.19	17,334
Painting, Exterior	2023	2033	10	0	7	171,172 SF	3.35	572,998
Painting, Interior	2000	2026	10	5	0	1 Total	1,733.41	1,733
Painting: Fence, Wrought Iron: Pool Building	2000	2026	6	9	0	209 LF	17.33	3,623
Pathway: Asphalt Seal Coat	2023	2028	5	0	2	1 Total	1,733.41	1,733
Patios, Concrete - Partial Replacement	2000	2030	30	0	4	8,478 SF	17.33@ 20%	29,393
Plumbing	2014	2026	3	0	0	1 Total	25,750.00	25,750
Pool Deck - Repair	2010	2026	15	0	0	1 Total	14,474.03	14,474
Pool Deck Epoxy Recoat	2014	2026	1	0	0	1,520 SF	2.61	3,961
Roof Maintenance: Moss Treatment	2023	2026	2	0	0	1 Total	5,150.00	5,150
Sewer Line Repairs	2012	2026	3	0	0	1 Total	32,837.66	32,838
Siding, Fiber Cement - Repair	2023	2053	30	0	27	171,172 SF	26.73@ 25%	1,143,793
Treework	2025	2030	5	0	4	1 Total	15,000.00	15,000
Non-Capital - Total								\$3,052,650
Total Asset Summary								\$6,278,953

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Annual Expenditure Detail

Description	Expenditures
Replacement Year 2026	
Carport - Repairs	5,150
Concrete - Waterproofing Subgrade - Repair	21,668
Concrete Walkways - Partial Replacement	12,314
Insurance Deductible	25,750
Irrigation Repairs/Upgrades	17,334
Lights, Exterior: Pole	19,415
Lights, Interior	1,030
Painting, Interior	1,733
Painting: Fence, Wrought Iron: Pool Building	3,623
Plumbing	25,750
Pool Deck - Repair	14,474
Pool Deck Epoxy Recoat	3,961
Pool Filter	3,171
Pool Furniture	867
Pool Heater	5,200
Pool Pump	1,473
Pool Replaster	34,668
Roof Maintenance: Moss Treatment	5,150
Sewer Line Repairs	32,838
Shower - Replacement: Pool Building	2,600
Site Drainage - Installation	6,568
Stone Flooring - Replacement: Pool Building	2,436
Tile Wall - Pool Building	3,467
Washer & Dryers	6,934
Water Heater - Replacement	1,802
Wood Retaining Wall: Bld O - Replacement	15,450
Total for 2026	\$274,826
Replacement Year 2027	
Fire Extinguishers - Enclosure Replacement	1,691
Pool Deck Epoxy Recoat	4,080
Total for 2027	\$5,771
Replacement Year 2028	
Carport - Repairs	5,464

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Annual Expenditure Detail

Description	Expenditures
<i>Replacement Year 2028 continued...</i>	
Pathway: Asphalt Seal Coat	1,839
Pool Deck Epoxy Recoat	4,202
Roof Maintenance: Moss Treatment	5,464
Trash Enclosure - Repairs	5,464
Total for 2028	\$22,432
Replacement Year 2029	
Asphalt Seal Coat - Touch Stone	18,844
Plumbing	28,138
Pool Deck Epoxy Recoat	4,328
Sewer Line Repairs	35,883
Total for 2029	\$87,192
Replacement Year 2030	
Asphalt Seal Coat - Kerr	9,705
Building Envelope Inspection	8,695
Carport - Repairs	5,796
Fence, Chain Link: Garbage Enclosures	8,308
Fence, Wrought Iron: Pool Building	24,229
Patios, Concrete - Partial Replacement	33,082
Pool Deck Epoxy Recoat	4,458
Roof Maintenance: Moss Treatment	5,796
Treework	16,883
Total for 2030	\$116,951
Replacement Year 2031	
Pool Deck Epoxy Recoat	4,592
Pool Furniture	1,005
Pool Pump	1,708
Total for 2031	\$7,305
Replacement Year 2032	
Carport - Repairs	6,149

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Annual Expenditure Detail

Description	Expenditures
<i>Replacement Year 2032 continued...</i>	
Painting: Fence, Wrought Iron: Pool Building	4,326
Plumbing	30,747
Pool Deck Epoxy Recoat	4,730
Pool Filter	3,786
Pool Heater	6,209
Roof Maintenance: Moss Treatment	6,149
Roof: Composition - Replacement - I	357,492
Sewer Line Repairs	39,210
Total for 2032	\$458,799
Replacement Year 2033	
Painting, Exterior	704,716
Pathway: Asphalt Seal Coat	2,132
Pool Deck Epoxy Recoat	4,871
Roof: Composition - Replacement - II	368,217
Trash Enclosure - Repairs	6,334
Total for 2033	\$1,086,270
Replacement Year 2034	
Asphalt Repair - Touchstone	72,582
Asphalt Seal Coat - Touch Stone	21,845
Carport - Repairs	6,524
Fence, Wood - Partial Replacement	19,572
Pool Deck Epoxy Recoat	5,018
Roof Maintenance: Moss Treatment	6,524
Roof: Composition - Replacement - III	379,263
Total for 2034	\$511,327
Replacement Year 2035	
Asphalt Repair - Kerr	37,380
Asphalt Seal Coat - Kerr	11,250
Building Envelope Inspection	10,079
Plumbing	33,598
Pool Deck Epoxy Recoat	5,168

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Annual Expenditure Detail

Description	Expenditures
<i>Replacement Year 2035 continued...</i>	
Roof: Composition - Replacement - IV	390,641
Sewer Line Repairs	42,846
Treework	19,572
Total for 2035	\$550,534
Replacement Year 2036	
Carport - Repairs	6,921
Concrete - Waterproofing Subgrade - Repair	29,120
Concrete Walkways - Partial Replacement	16,549
Lights, Exterior: Pole	26,091
Painting, Interior	2,330
Pool Deck Epoxy Recoat	5,323
Pool Furniture	1,165
Pool Pump	1,980
Roof Maintenance: Moss Treatment	6,921
Water Heater - Replacement	2,422
Total for 2036	\$98,823
Replacement Year 2037	
Pool Deck Epoxy Recoat	5,483
Total for 2037	\$5,483
Replacement Year 2038	
Carport - Repairs	7,343
Fire Extinguishers	23,677
Front Elevation Concrete Piers - Repairs	16,312
Painting: Fence, Wrought Iron: Pool Building	5,166
Pathway: Asphalt Seal Coat	2,471
Plumbing	36,713
Pool Deck Epoxy Recoat	5,647
Pool Filter	4,521
Pool Heater	7,414
Roof Maintenance: Moss Treatment	7,343
Sewer Line Repairs	46,819

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Annual Expenditure Detail

Description	Expenditures
<i>Replacement Year 2038 continued...</i>	
Trash Enclosure - Repairs	7,343
Total for 2038	\$170,768
Replacement Year 2039	
Asphalt Overlay	275,709
Asphalt Seal Coat - Touch Stone	25,324
Pool Deck Epoxy Recoat	5,817
Total for 2039	\$306,850
Replacement Year 2040	
Asphalt Seal Coat - Kerr	13,042
Building Envelope Inspection	11,685
Carport - Repairs	7,790
Pool Deck Epoxy Recoat	5,991
Roof Maintenance: Moss Treatment	7,790
Treework	22,689
Total for 2040	\$68,987
Replacement Year 2041	
Lights, Interior	1,605
Plumbing	40,118
Pool Deck - Repair	22,550
Pool Deck Epoxy Recoat	6,171
Pool Furniture	1,350
Pool Pump	2,296
Pool Replaster	54,012
Sewer Line Repairs	51,160
Tile Wall - Pool Building	5,401
Washer & Dryers	10,802
Total for 2041	\$195,465
Replacement Year 2042	
Carport - Repairs	8,264

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Annual Expenditure Detail

Description	Expenditures
<i>Replacement Year 2042 continued...</i>	
Fire Extinguishers - Enclosure Replacement	2,635
Pool Deck Epoxy Recoat	6,356
Roof Maintenance: Moss Treatment	8,264
Total for 2042	\$25,519
Replacement Year 2043	
Lights, Exterior	89,974
Painting, Exterior	947,079
Pathway: Asphalt Seal Coat	2,865
Pool Deck Epoxy Recoat	6,547
Trash Enclosure - Repairs	8,512
Total for 2043	\$1,054,977
Replacement Year 2044	
Asphalt Repair - Touchstone	97,544
Asphalt Seal Coat - Touch Stone	29,358
Carport - Repairs	8,768
Painting: Fence, Wrought Iron: Pool Building	6,168
Plumbing	43,838
Pool Deck Epoxy Recoat	6,743
Pool Filter	5,398
Pool Heater	8,853
Roof Maintenance: Moss Treatment	8,768
Sewer Line Repairs	55,904
Total for 2044	\$271,341
Replacement Year 2045	
Asphalt Repair - Kerr	50,235
Asphalt Seal Coat - Kerr	15,119
Building Envelope Inspection	13,546
Pool Deck Epoxy Recoat	6,946
Treework	26,303
Total for 2045	\$112,149

Tanglewood Hills Condominium Association

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Annual Expenditure Detail

Description	Expenditures
Replacement Year 2046	
Carport - Repairs	9,301
Concrete - Waterproofing Subgrade - Repair	39,134
Concrete Walkways - Partial Replacement	22,241
Irrigation Repairs/Upgrades	31,307
Lights, Exterior: Pole	35,065
Painting, Interior	3,131
Pool Deck Epoxy Recoat	7,154
Pool Furniture	1,565
Pool Pump	2,661
Roof Maintenance: Moss Treatment	9,301
Water Heater - Replacement	3,256
Total for 2046	\$164,117
Replacement Year 2047	
Plumbing	47,903
Pool Deck Epoxy Recoat	7,369
Sewer Line Repairs	61,088
Total for 2047	\$116,359
Replacement Year 2048	
Carport - Repairs	9,868
Pathway: Asphalt Seal Coat	3,321
Pool Deck Epoxy Recoat	7,590
Roof Maintenance: Moss Treatment	9,868
Trash Enclosure - Repairs	9,868
Total for 2048	\$40,515
Replacement Year 2049	
Asphalt Seal Coat - Touch Stone	34,034
Pool Deck Epoxy Recoat	7,817
Total for 2049	\$41,851
Replacement Year 2050	
Asphalt Seal Coat - Kerr	17,527

Tanglewood Hills Condominium Association

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Annual Expenditure Detail

Description	Expenditures
<i>Replacement Year 2050 continued...</i>	
Building Envelope Inspection	15,703
Carport - Repairs	10,469
Painting: Fence, Wrought Iron: Pool Building	7,365
Plumbing	52,344
Pool Deck Epoxy Recoat	8,052
Pool Filter	6,446
Pool Heater	10,571
Roof Maintenance: Moss Treatment	10,469
Sewer Line Repairs	66,752
Treework	30,492
Total for 2050	\$236,191
Replacement Year 2051	
Pool Deck Epoxy Recoat	8,293
Pool Furniture	1,815
Pool Pump	3,085
Shower - Replacement: Pool Building	5,444
Stone Flooring - Replacement: Pool Building	5,101
Total for 2051	\$23,738
Replacement Year 2052	
Carport - Repairs	11,106
Pool Deck Epoxy Recoat	8,542
Roof Maintenance: Moss Treatment	11,106
Total for 2052	\$30,755
Replacement Year 2053	
Curbs - Partial Replacement	12,765
Decks & Guardrails, Composite - Replacement (I)	1,105,344
Doors, Sliding Glass - Replacement: Common Areas	3,850
Doors, Wood - Replacement: Common Areas	17,159
Entry Walkways - Replacement	1,889,261
Fire Extinguishers	36,887
Front Elevation Concrete Piers - Repairs	25,413

Tanglewood Hills Condominium Association

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Annual Expenditure Detail

Description	Expenditures
<i>Replacement Year 2053 continued...</i>	
Gutters & Downspouts - Replacement	252,386
Handrails, Metal - Partial Replacement	19,585
Mailboxes - Replacement	50,334
Painting, Exterior	1,272,795
Pathway: Asphalt Seal Coat	3,850
Plumbing	57,198
Pool Deck Epoxy Recoat	8,798
Sewer Line Repairs	72,942
Siding, Fiber Cement - Repair	2,540,694
Stairs & Handrails - Replacement	1,316,211
Trash Enclosure - Repairs	11,440
Windows - Replacement: Common Areas	9,152
Total for 2053	<u>\$8,706,065</u>
Replacement Year 2054	
Asphalt Repair - Touchstone	131,091
Asphalt Seal Coat - Touch Stone	39,455
Carport - Repairs	11,783
Decks & Guardrails, Composite - Replacement (II)	1,138,504
Pool Deck Epoxy Recoat	9,062
Roof Maintenance: Moss Treatment	11,783
Total for 2054	<u>\$1,341,678</u>
Replacement Year 2055	
Asphalt Repair - Kerr	67,512
Asphalt Seal Coat - Kerr	20,319
Building Envelope Inspection	18,204
Pool Deck Epoxy Recoat	9,334
Treework	35,348
Total for 2055	<u>\$150,718</u>

Tanglewood Hills Condominium Association
Lake Oswego, Oregon
Detail Report by Category

Roof Maintenance: Moss Treatment

Asset ID	1064	1 Total	@ \$5,150.00
Category	Non-Capital	Asset Actual Cost	\$5,150.00
Placed in Service	Roofing	Percent Replacement	100%
Useful Life	January 2023	Future Cost	\$5,150.00
Replacement Year	2		
Remaining Life	2026		
	0		

This provision provides funding for moss treatment on Buildings A, B, E, F, G, H, K, O, Q, R, and S per Pete Fowler.

Pete Fowler Construction Services, Inc. performed a Property Condition Assessment Report on March 12, 2012, and recommended that moss on roofs of Buildings A, B, E, F, G, H, K, O, Q, R, and S should be remove to get the full life-cycle out of the roofing products. Pete Fowler provided a cost of \$1,500 for this expense. A useful life of every 2 years was provided.

The Association will need to obtain bids for this work.

Roof: Composition - Replacement - I

Asset ID	1004	77,513 SF	@ \$15.45
Category	Capital	Asset Actual Cost	\$299,393.96
Placed in Service	Roofing	Percent Replacement	25%
Useful Life	January 2000	Future Cost	\$357,492.05
Adjustment	30		
Replacement Year	2		
Remaining Life	2032		
	6		

This provision provides funding for replacement of the composition roof at the residential buildings, carports, mailboxes, and garbage enclosures.

Schwindt & Company estimated 77,513 square feet of roofing areas. There are a total of 23 residential buildings and 24 carports.

According to the 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., roofs have a useful life of 25 years.

The cost and useful life assumption are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Roof: Composition - Replacement - II

Asset ID	1082	77,513 SF	@ \$15.45
Category	Capital	Asset Actual Cost	\$299,393.96
Placed in Service	Roofing	Percent Replacement	25%
Useful Life	January 2000	Future Cost	\$368,216.81
Adjustment	30		
Replacement Year	3		
Remaining Life	2033		
	7		

This provision provides funding for replacement of the composition roof at the residential buildings, carports, mailboxes, and garbage enclosures.

Schwindt & Company estimated 77,513 square feet of roofing areas. There are a total of 23 residential buildings and 24 carports.

According to the 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., roofs have a useful life of 25 years.

The cost and useful life assumption are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Roof: Composition - Replacement - III

Asset ID	1083	77,513 SF	@ \$15.45
Category	Capital	Asset Actual Cost	\$299,393.96
Placed in Service	Roofing	Percent Replacement	25%
Useful Life	January 2000	Future Cost	\$379,263.31
Adjustment	30		
Replacement Year	4		
Remaining Life	2034		
	8		

This provision provides funding for replacement of the composition roof at the residential buildings, carports, mailboxes, and garbage enclosures.

Schwindt & Company estimated 77,513 square feet of roofing areas. There are a total of 23 residential buildings and 24 carports.

According to the 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., roofs have a useful life of 25 years.

The cost and useful life assumption are based on accepted industry estimates as established by

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Roof: Composition - Replacement - III continued...

RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Roof: Composition - Replacement - IV

Asset ID	1084	77,513 SF	@ \$15.45
Category	Capital	Asset Actual Cost	\$299,393.96
Placed in Service	Roofing	Percent Replacement	25%
Useful Life	January 2000	Future Cost	\$390,641.21
Adjustment	30		
Replacement Year	5		
Remaining Life	2035		
	9		

This provision provides funding for replacement of the composition roof at the residential buildings, carports, mailboxes, and garbage enclosures.

Schwindt & Company estimated 77,513 square feet of roofing areas. There are a total of 23 residential buildings and 24 carports.

According to the 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., roofs have a useful life of 25 years.

The cost and useful life assumption are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Roofing - Total Current Cost

\$1,202,726

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Painting, Exterior

Asset ID	1003	171,172 SF	@ \$3.35
Category	Non-Capital	Asset Actual Cost	\$572,998.27
Placed in Service	Painting	Percent Replacement	100%
Useful Life	January 2023	Future Cost	\$704,715.60
Replacement Year	10		
Remaining Life	2033		
	7		

This provision provides funding for painting of the residential buildings. This should include caulking and sealing.

The siding was replaced with fiber cement in 2023.

Schwindt & Company estimated 171,172 square feet of siding.

The cost is based on a per square foot estimate from a local vendor. The Association should obtain a bid to confirm this estimate. The useful life assumption is based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

Painting, Interior

Asset ID	1013	1 Total	@ \$1,733.41
Category	Non-Capital	Asset Actual Cost	\$1,733.41
Placed in Service	Painting	Percent Replacement	100%
Useful Life	January 2000	Future Cost	\$1,733.41
Adjustment	10		
Replacement Year	5		
Remaining Life	2026		
	0		

This provision provides funding for interior painting of the laundry room and the pool building.

Schwindt & Company estimated 932 square feet of interior walls.

The cost is based on a per square foot estimate provided by Get-A-Quote.net.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Painting: Fence, Wrought Iron: Pool Building

Asset ID	1008	209 LF	@ \$17.33
	Non-Capital	Asset Actual Cost	\$3,622.99
Category	Painting	Percent Replacement	100%
Placed in Service	January 2000	Future Cost	\$3,622.99
Useful Life	6		
Adjustment	9		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for painting of the wrought iron fence at the pool building.

Schwindt & Company estimated 209 linear feet of fencing.

The cost is based on a per linear foot estimate provided by Verhaalen Painting, Inc. The Association will need to obtain bids for this work.

The useful life assumptions are based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Painting - Total Current Cost

\$578,355

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Concrete - Waterproofing Subgrade - Repair

Asset ID	1040	1 Total	@ \$21,667.71
	Non-Capital	Asset Actual Cost	\$21,667.71
Category	Building Components	Percent Replacement	100%
Placed in Service	January 2009	Future Cost	\$21,667.71
Useful Life	10		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for repairs to the waterproofing material used on some concrete areas.

According to the Association, this work was completed in 2009 for \$12,500 by Advanced Plumbing.

According to the 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., several buildings had waterproofing completed in 2009. Other buildings had previous waterproofing in recent years, however the specifics are unknown. Most buildings have a stem wall at the front and side elevations. There is a reverse grade at the front elevation of many buildings. Some of the garden level units have retaining walls in front of the window well. A useful life of 10 years was provided for repairs to the concrete waterproofing for the buildings that have not been completed. The buildings that were completed in 2009 should have a useful life of 40 years.

Decks & Guardrails, Composite - Replacement (I)

Asset ID	1011	16,104 SF	@ \$61.80
	Capital	Asset Actual Cost	\$497,613.60
Category	Building Components	Percent Replacement	50%
Placed in Service	January 2023	Future Cost	\$1,105,343.62
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision provides funding for the replacement of the decks and guardrails at the residential buildings to be completed in 2 phases at 50% each time.

Schwindt & Company estimated 16,104 square feet or 138 decks.

In 2023 the decks were replaced with a composite material and metal railings.

The cost and useful life assumption are based on accepted industry estimates as established by

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Decks & Guardrails, Composite - Replacement (I) continued...

RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Decks & Guardrails, Composite - Replacement (II)

Asset ID	1039	16,104 SF	@ \$61.80
Category	Capital	Asset Actual Cost	\$497,613.60
Building Components		Percent Replacement	50%
Placed in Service	January 2023	Future Cost	\$1,138,503.93
Useful Life	30		
Adjustment	1		
Replacement Year	2054		
Remaining Life	28		

This provision provides funding for the replacement of the decks and guardrails at the residential buildings to be completed in 2 phases at 50% each time.

Schwindt & Company estimated 16,104 square feet or 138 decks.

In 2023 the decks were replaced with a composite material and metal railings.

The cost and useful life assumption are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Entry Walkways - Replacement

Asset ID	1067	1 Total	@ \$850,524.56
Category	Non-Capital	Asset Actual Cost	\$850,524.56
Building Components		Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$1,889,260.85
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision provides funding to replacement of the entry walkways.

In 2023 the entrance walkway were replaced with compost decking for \$825,752.

The cost and useful life assumption are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Entry Walkways - Replacement continued...

to confirm this estimate.

Front Elevation Concrete Piers - Repairs

Asset ID	1055	1 Total	@ \$11,440.56
	Non-Capital	Asset Actual Cost	\$11,440.56
Category	Building Components	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$16,311.50
Useful Life	15		
Replacement Year	2038		
Remaining Life	12		

This provision provides funding for repairs to the concrete piers at the front elevation of the residential buildings. This component funds for replacement of the concrete piers that was not replaced in 2009.

Repairs were made as needed during the 2023 residing project.

Patios, Concrete - Partial Replacement

Asset ID	1010	8,478 SF	@ \$17.33
	Non-Capital	Asset Actual Cost	\$29,393.06
Category	Building Components	Percent Replacement	20%
Placed in Service	January 2000	Future Cost	\$33,082.14
Useful Life	30		
Replacement Year	2030		
Remaining Life	4		

This provision provides funding for partial replacement of the concrete patios at the residential buildings. Partial replacement is based on the expectation that most patios will be in good enough condition that a full replacement is not needed.

Schwindt & Company estimated 102 square feet of patios at the laundry area. There is 8,376 square feet of concrete patios at the residential units. The total area is 8,478 square feet of patios.

The cost is based on a per square foot estimate provided by Coast Pavement.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

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Detail Report by Category

Siding, Fiber Cement - Repair

Asset ID	1069	171,172 SF	@ \$26.73
	Non-Capital	Asset Actual Cost	\$1,143,792.70
Category	Building Components	Percent Replacement	25%
Placed in Service	January 2023	Future Cost	\$2,540,694.15
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision provides funding for repair to the fiber cement siding. The useful life is greater than 30 years, therefore this is for damaged sections which is estimated to be 25% of the total area.

In 2023, the Association resided the residential units.

Schwindt & Company estimated 171,172 square feet of siding.

Siding, Fiber Cement - Replacement

Asset ID	1002	171,172 SF	@ \$26.73
	Capital	Asset Actual Cost	\$4,575,170.80
Category	Building Components	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$18,355,104.99
Useful Life	50		
Replacement Year	2073		
Remaining Life	47		

This provision provides funding for replacement to the fiber cement siding.

In 2023, the Association resided the residential units. This was done for \$2,517,603 (walls) and \$907,103 (sheathing and insulation)

Schwindt & Company estimated 171,172 square feet of siding.

The cost and useful life assumption are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Stairs & Handrails - Replacement

Asset ID	1001	36 Each	@ \$16,459.55
Capital		Asset Actual Cost	\$592,543.96
Category	Building Components	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$1,316,211.39
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision provides funding for replacement to the entrance stair components and handrails at the front of the buildings. This includes the stringers, landing support beams, treads, privacy walls, intermediate landings, and all handrails including those at the front entry decking and walkways.

This was done in 2023 as part of the residing project. The stairs are concrete treads, landings are composite, and the railings are aluminum.

During Schwindt & Company's 2010 site visit, there were 36 entry stairways.

Tile Wall - Pool Building

Asset ID	1014	1 Total	@ \$3,466.85
Capital		Asset Actual Cost	\$3,466.85
Category	Building Components	Percent Replacement	100%
Placed in Service	January 2000	Future Cost	\$3,466.85
Useful Life	15		
Adjustment	5		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for replacement of the tile walls in the pool building.

Schwindt & Company estimated 56 square feet of tile.

The useful life and cost assumptions are based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Building Components - Total Current Cost

\$3,648,057

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Gutters & Downspouts - Replacement

Asset ID	1005	10,922 LF	@ \$10.40
	Non-Capital	Asset Actual Cost	\$113,621.57
Category	Gutters and Downspouts	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$252,386.33
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision provides funding for the partial replacement of the gutters and downspouts at the residential buildings, carports, and pool buildings. Partial replacement is based on the expectation that most gutters and downspouts will be in good enough condition that a full replacement is not needed.

Schwindt & Company estimated 10,922 linear feet of gutters and downspouts.

According to the 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., the gutters and downspouts have a useful life of 20 years. The useful life of this component has been revised to 25 years to coincide with the roof replacement. New gutters and downspouts were installed in 2009. They were installed at the top edge of the fascia correcting an earlier issue where they were attached at the bottom edge of the fascia, which caused roof water to overshoot the majority of the gutter.

The cost is based on a per linear foot estimate provided by Northwest Gutters.

The Association will need to obtain bids for this work.

Gutters and Downspouts - Total Current Cost

\$113,622

Tanglewood Hills Condominium Association

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Detail Report by Category

Asphalt Overlay

Asset ID	1021	83,442 SF	@ \$2.25
Category	Capital	Asset Actual Cost	\$187,744.50
Placed in Service	Streets/Asphalt	Percent Replacement	100%
Useful Life	January 2014	Future Cost	\$275,709.13
Replacement Year	25		
Remaining Life	2039		
	13		

This provision provides fund to overlay upper and lower asphalt area.

Schwindt & Company estimated 83,442 square feet of asphalt.

The cost is based on a per square foot estimate provided by a local vendor.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Asphalt Repair - Kerr

Asset ID	1086	27,814 SF	@ \$5.15
Category	Non-Capital	Asset Actual Cost	\$28,648.42
Placed in Service	Streets/Asphalt	Percent Replacement	20%
Useful Life	January 2025	Future Cost	\$37,379.69
Replacement Year	10		
Remaining Life	2035		
	9		

This provision provides funding for repair of the upper parking lot. It is estimated that 20% of the total area will need repair.

Schwindt & Company estimated 27,814 square feet of asphalt.

The cost is based on a per square foot estimate provided by a local vendor.

According to the 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., asphalt seal coat should occur every 3 to 5 years.

The Association will need to obtain bids for this work.

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Asphalt Repair - Touchstone

Asset ID	1087	55,628 SF	@ \$5.15
Category	Non-Capital	Asset Actual Cost	\$57,296.84
Placed in Service	Streets/Asphalt	Percent Replacement	20%
Useful Life	January 2024	Future Cost	\$72,581.92
Replacement Year	10		
Remaining Life	2034		
	8		

This provision provides funding for repair of the lower parking lot. It is estimated that 20% of the area will need repair.

Schwindt & Company estimated 55,628 square feet of asphalt.

The cost is based on a per square foot estimate provided by a local vendor.

According to the 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., asphalt seal coat should occur every 3 to 5 years.

A Property Condition Assessment Report was completed by Pete Fowler Construction Services, Inc. on March 12, 2012. The report recommended seal coating and repairing the asphalt for \$20,000.

The Association will need to obtain bids for this work.

This was done in 2024 for \$74,353.

Asphalt Seal Coat - Kerr

Asset ID	1023	27,814 SF	@ \$0.31
Category	Non-Capital	Asset Actual Cost	\$8,622.34
Placed in Service	Streets/Asphalt	Percent Replacement	100%
Useful Life	January 2025	Future Cost	\$9,704.52
Replacement Year	5		
Remaining Life	2030		
	4		

This provision provides funding for seal coating of the upper parking lot.

Schwindt & Company estimated 83,442 square feet of asphalt.

The cost is based on a per square foot estimate provided by a local vendor.

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Asphalt Seal Coat - Kerr continued...

According to the 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., asphalt seal coat should occur every 3 to 5 years.

A Property Condition Assessment Report was completed by Pete Fowler Construction Services, Inc. on March 12, 2012. The report recommended seal coating and repairing the asphalt for \$20,000.

The Association will need to obtain bids for this work.

Asphalt Seal Coat - Touch Stone

Asset ID	1085	55,628 SF	@ \$0.31
Category	Non-Capital	Asset Actual Cost	\$17,244.68
Placed in Service	Streets/Asphalt	Percent Replacement	100%
Useful Life	January 2024	Future Cost	\$18,843.73
Replacement Year	5		
Remaining Life	2029		
	3		

This provision provides funding for seal coating of the lower parking lot.

Schwindt & Company estimated 55,628 square feet of asphalt.

The cost is based on a per square foot estimate provided by a local vendor.

According to the 2010 maintenance plan completed by Pete Fowler Construction Services, Inc., asphalt seal coat should occur every 3 to 5 years.

The Association will need to obtain bids for this work.

Streets/Asphalt - Total Current Cost

\$299,557

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Fence, Chain Link: Garbage Enclosures

Asset ID	1006	240 LF	@ \$30.76
Category	Capital	Asset Actual Cost	\$7,381.39
Placed in Service	Fencing/Security	Percent Replacement	100%
Useful Life	January 2000	Future Cost	\$8,307.82
Replacement Year	30		
Remaining Life	2030		
	4		

This provision provides funding for replacement of the chain link fence at the garbage enclosures.

Schwindt & Company estimated 240 linear feet of fencing.

The cost and useful life assumptions are based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Fence, Wood - Partial Replacement

Asset ID	1012	1,000 SF	@ \$61.80
Category	Non-Capital	Asset Actual Cost	\$15,450.00
Placed in Service	Fencing/Security	Percent Replacement	25%
Useful Life	January 2009	Future Cost	\$19,571.60
Replacement Year	25		
Remaining Life	2034		
	8		

This provision provides funding for partial replacement of the wood fence at the residential buildings. The fences are painted. The painting cost is included in exterior painting. Partial replacement is based on the expectation that the Association will continue to paint the fences, and most fences will be in good enough condition that a full replacement is not needed.

Schwindt & Company estimated 1,000 square feet of fencing.

The cost is based on a per square foot estimate provided by Rick's Custom Fencing & Decking.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Fence, Wrought Iron: Pool Building

Asset ID	1007	209 LF	@ \$103.00
Capital		Asset Actual Cost	\$21,527.00
Category	Fencing/Security	Percent Replacement	100%
Placed in Service	January 2000	Future Cost	\$24,228.83
Useful Life	30		
Replacement Year	2030		
Remaining Life	4		

This provision provides funding for replacement of the wrought iron fence at the pool building. Part of the fence is sitting on a wood retaining wall.

Schwindt & Company estimated 209 linear feet of fencing.

The cost and useful life assumptions are based on estimates established on RS Means and/or the National Estimator. The Association will need to obtain bids for this work.

Fencing/Security - Total Current Cost

\$44,358

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Detail Report by Category

Fire Extinguishers

Asset ID	1017	38 Each	@ \$437.01
Capital		Asset Actual Cost	\$16,606.32
Category	Equipment	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$23,676.64
Useful Life	15		
Replacement Year	2038		
Remaining Life	12		

This provision provides funding for the replacement of the fire extinguishers.

During Schwindt & Company's site visit, there are 38 fire extinguishers.

According to the 2010 maintenance plan prepared by Pete Fowler Construction Services, Inc., fire extinguishers are located in the covered entry areas of all buildings and in some locations on the exterior wall of the laundry room. These fire extinguishers appear to no longer be in service and may not be required by code.

According to the Association, this component did not occur in 2012. They would like to reschedule for 2014.

The useful life and cost assumptions are based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Fire Extinguishers - Enclosure Replacement

Asset ID	1065	1 Total	@ \$1,641.88
Capital		Asset Actual Cost	\$1,641.88
Category	Equipment	Percent Replacement	100%
Placed in Service	January 2012	Future Cost	\$1,691.14
Useful Life	15		
Replacement Year	2027		
Remaining Life	1		

This provision provides funding for the replacement of the fire extinguisher enclosures.

During Schwindt & Company' site visit, there are 38 fire extinguishers.

In 2012, a Property Condition Assessment report was completed by Pete Fowler Construction Services, Inc. The report provided that some fire extinguisher enclosures were damaged. Pete Fowler Construction Services, Inc. recommends repairing the enclosures by installing a new glass at the front enclosure. They identified missing enclosures at Buildings B and E. The

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Fire Extinguishers - Enclosure Replacement continued...

cost for this expense is \$1,000.

According to the 2010 maintenance plan prepared by Pete Fowler Construction Services, Inc., fire extinguishers are located in the covered entry areas of all buildings and in some locations on the exterior wall of the laundry room. These fire extinguishers appear to no longer be in service and may not be required by code.

This component will be a one-time expense in 2013. Future repairs and/or replacement will be included in the fire extinguisher component.

The Association will need to obtain bids for this work.

Shower - Replacement: Pool Building

Asset ID	1035	1 Total	@ \$2,600.11
Category	Capital	Asset Actual Cost	\$2,600.11
Placed in Service	Equipment	Percent Replacement	100%
Useful Life	January 2000	Future Cost	\$2,600.11
Replacement Year	25		
Remaining Life	2026		
	0		

This provision provides funding for replacement of the shower stall in the pool building.

Schwindt & Company estimated 1 shower stall.

The cost and useful life assumptions are based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Washer & Dryers

Asset ID	1016	4 Each	@ \$1,733.41
Category	Capital	Asset Actual Cost	\$6,933.63
Placed in Service	Equipment	Percent Replacement	100%
Useful Life	January 2000	Future Cost	\$6,933.63
Replacement Year	15		
Remaining Life	2026		
	0		

This provision provides funding for replacement of the washers and dryers at the laundry

Tanglewood Hills Condominium Association

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Detail Report by Category

Washer & Dryers continued...

room.

According to the on-site maintenance person, the washers and dryers do not get use very much because each unit has their own washer and dryer.

During Schwindt & Company' 2010 site visit, there are 2 washers and 2 dryers.

The useful life and cost assumptions are based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Water Heater - Replacement

Asset ID	1060	1 Total	@ \$1,802.50
Category	Capital	Asset Actual Cost	\$1,802.50
Placed in Service	Equipment	Percent Replacement	100%
Useful Life	January 2011	Future Cost	\$1,802.50
Replacement Year	10		
Remaining Life	2026		
	0		

This provision provides funding to replace the water heater servicing the washers.

According to the Association, the water heater was replaced in 2011 for \$800 by ABM.

The useful life assumptions are based on estimates established on RS Means and/or the National Estimator.

Equipment - Total Current Cost

\$29,584

Tanglewood Hills Condominium Association

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Detail Report by Category

Stone Flooring - Replacement: Pool Building

Asset ID	1036	218 SF	@ \$11.18
Category	Capital	Asset Actual Cost	\$2,436.26
Placed in Service	Interior Furnishings	Percent Replacement	100%
Useful Life	January 2000	Future Cost	\$2,436.26
Replacement Year	25		
Remaining Life	2026		
	0		

This provision provides funding for replacement of the stone flooring in the pool building.

Schwindt & Company estimated 218 square feet of stone flooring.

The cost and useful life assumptions are based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Interior Furnishings - Total Current Cost **\$2,436**

Tanglewood Hills Condominium Association

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Detail Report by Category

Lights, Exterior

Asset ID	1038	302 Each	@ \$180.25
Category	Capital	Asset Actual Cost	\$54,435.50
Placed in Service	Lighting	Percent Replacement	100%
Useful Life	January 2023	Future Cost	\$89,973.59
Replacement Year	20		
Remaining Life	2043		
	17		

This provision provides funding for replacement of exterior lighting fixtures.

Schwindt & Company estimated 302 exterior lights.

The useful life and cost assumptions are based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Lights, Exterior: Pole

Asset ID	1026	56 Each	@ \$346.69
Category	Capital	Asset Actual Cost	\$19,414.51
Placed in Service	Lighting	Percent Replacement	100%
Useful Life	January 2000	Future Cost	\$19,414.51
Adjustment	10		
Replacement Year	10		
Remaining Life	2026		
	0		

This provision provides funding for replacement of the exterior pole light fixtures.

Schwindt & Company estimated 56 pole lights throughout the property.

The useful life and cost assumptions are based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Tanglewood Hills Condominium Association

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Detail Report by Category

Lights, Interior

Asset ID	1015	10 Each	@ \$103.00
Category	Capital	Asset Actual Cost	\$1,030.00
Placed in Service	Lighting	Percent Replacement	100%
Useful Life	January 2000	Future Cost	\$1,030.00
Replacement Year	15		
Remaining Life	2026		
	0		

This provision provides funding for replacement of interior lighting fixtures at the pool building, laundry room, and storage room.

Schwindt & Company estimated 10 interior lights.

The useful life and cost assumptions are based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Lighting - Total Current Cost

\$74,880

Tanglewood Hills Condominium Association

Lake Oswego, Oregon

Detail Report by Category

Pool Deck - Repair

Asset ID	1031	1 Total	@ \$14,474.03
	Non-Capital	Asset Actual Cost	\$14,474.03
Category	Recreation/Pool	Percent Replacement	100%
Placed in Service	January 2010	Future Cost	\$14,474.03
Useful Life	15		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for repair of the pool deck.

According to the Association, the pool deck was replaced in 2010 for \$8,350. This replacement was performed by Evan Mitchell of Alternative Surfaces (503-830-0207).

Evan provided a useful life of 15 years. Evan recommends one pressure wash annually to ensure minimal accumulation of sediment and moss. As ultra violet rays dull the surface epoxy, a re-coat is required approximately every 18-24 months. Alternative Surfaces charges \$1.50 per square foot for this maintenance.

Pool Deck Epoxy Recoat

Asset ID	1043	1,520 SF	@ \$2.61
	Non-Capital	Asset Actual Cost	\$3,960.97
Category	Recreation/Pool	Percent Replacement	100%
Placed in Service	January 2014	Future Cost	\$3,960.97
Useful Life	1		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for recoating of the epoxy of the pool deck.

According to the Association, the pool deck was replaced in 2010 for \$8,350. This replacement was performed by Evan Mitchell of Alternative Surfaces (503-830-0207).

In 2012, the Association provided that recoating of the epoxy on the pool deck was completed with funds from the operating budget. The Association would like to continue to fund this component in the reserve study.

Evan recommends one pressure wash annually to ensure minimal accumulation of sediment and moss. As ultra violet rays dull the surface epoxy, a re-coat is required approximately every 18-24 months. Alternative Surfaces charges \$1.50 per square feet.

Schwindt & Company estimated 1,520 square feet of the pool deck.

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Detail Report by Category

Pool Filter

Asset ID	1029	1 Total	@ \$3,170.90
	Capital	Asset Actual Cost	\$3,170.90
Category	Recreation/Pool	Percent Replacement	100%
Placed in Service	January 2008	Future Cost	\$3,170.90
Useful Life	6		
Adjustment	1		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for replacement of the pool filter.

According to the Association, the swimming pool is maintained by Wet Kat Pools (503-449-8881).

According to Nichelle of Wet Kat Pools, the pool filter should have a useful life of 5 to 8 years. She provided a cost of \$1,200 to \$1,500 to replace the pool filter.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Pool Furniture

Asset ID	1037	1 Total	@ \$866.70
	Capital	Asset Actual Cost	\$866.70
Category	Recreation/Pool	Percent Replacement	100%
Placed in Service	January 2013	Future Cost	\$866.70
Useful Life	5		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for the replacement of the pool furniture.

During Schwindt & Company's 2010 site visit, there were plastic chairs in the pool building.

The useful life and cost assumptions are based on estimates established on RS Means and/or the National Estimator.

Tanglewood Hills Condominium Association

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Detail Report by Category

Pool Heater

Asset ID	1027	1 Total	@ \$5,200.25
Capital		Asset Actual Cost	\$5,200.25
Category	Recreation/Pool	Percent Replacement	100%
Placed in Service	January 2010	Future Cost	\$5,200.25
Useful Life	6		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for replacement of the pool heater.

According to the Association, the swimming pool is maintained by Wet Kat Pools (503-449-8881).

According to Nichelle of Wet Kat Pools, the pool heater was replaced in 2010, and should have a useful life of 5 to 7 years. She provided a cost of \$3,000 to replace the pool heater.

Pool Pump

Asset ID	1028	1 Total	@ \$1,473.40
Capital		Asset Actual Cost	\$1,473.40
Category	Recreation/Pool	Percent Replacement	100%
Placed in Service	January 2009	Future Cost	\$1,473.40
Useful Life	5		
Adjustment	1		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for replacement of the pool pump.

According to the Association, the swimming pool is maintained by Wet Kat Pools (503-449-8881).

According to Nichelle of Wet Kat Pools, a motor of the pool pump was replaced in 2009. The pump system will need replacement in 3 to 4 years. She provided a cost of \$850 to replace the pool pump.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

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Detail Report by Category

Pool Replaster

Asset ID	1030	1 Total	@ \$34,668.35
	Capital	Asset Actual Cost	\$34,668.35
Category	Recreation/Pool	Percent Replacement	100%
Placed in Service	January 2000	Future Cost	\$34,668.35
Useful Life	15		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for replastering of the swimming pool.

According to the Association, the swimming pool is maintained by Wet Kat Pools (503-449-8881).

According to Nichelle of Wet Kat Pools, the cost to replaster the pool will be \$15,000 to \$20,000. The pool will need to be replastered in 3 years from 2010.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Recreation/Pool - Total Current Cost

\$63,815

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Detail Report by Category

Carport - Repairs

Asset ID	1088	1 Total	@ \$5,150.00
	Capital	Asset Actual Cost	\$5,150.00
Category	Grounds Components	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$5,150.00
Useful Life	2		
Replacement Year	2026		
Remaining Life	0		

This provision is for the repair of the carports, including the posts, as needed.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Concrete Walkways - Partial Replacement

Asset ID	1018	1 Total	@ \$12,314.12
	Non-Capital	Asset Actual Cost	\$12,314.12
Category	Grounds Components	Percent Replacement	100%
Placed in Service	January 2000	Future Cost	\$12,314.12
Useful Life	10		
Adjustment	5		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for the partial replacement of the concrete walkways. Partial replacement is based on the expectation that most walkways will be in good enough condition that a full replacement is not needed.

Schwindt & Company estimated 9,503 square feet of concrete walkways. During the 2010 site visit, there were many areas of trip hazards and cracks.

According to the Association, this component did not occur in 2012. It is rescheduled for 2013.

A Property Condition Assessment report was completed by Pete Fowler Construction Services, Inc. on March 9, 2012. The report provided that the concrete walkways were in good condition. However, repairs are required at isolated concrete walkways. Pete Fowler Construction Services, Inc. provided a cost of \$7,500. These repairs should be completed within 3 to 6 months from the date of this report.

Tanglewood Hills Condominium Association

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Detail Report by Category

Concrete Walkways - Partial Replacement continued...

Because of the age of the property, Pete Fowler Construction Services, Inc. provided that a 10 years useful life is reasonable for continuous repairs on the walkways.

The Association will need to obtain bids for this work.

Curbs - Partial Replacement

Asset ID	1025	1 Total	@ \$5,746.60
	Non-Capital	Asset Actual Cost	\$5,746.60
Category	Grounds Components	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$12,764.85
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision provides funding for partial replacement of the concrete curbs. Partial replacement is based on the expectation that most curbs will be in good enough condition that a full replacement is not needed.

Schwindt & Company estimated 2,225 lineal feet of curbing.

The Association will need to obtain bids for this work.

Handrails, Metal - Partial Replacement

Asset ID	1019	428 LF	@ \$82.40
	Non-Capital	Asset Actual Cost	\$8,816.80
Category	Grounds Components	Percent Replacement	25%
Placed in Service	January 2023	Future Cost	\$19,584.66
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision provides funding for the partial replacement of the metal handrails located on stairways. Partial replacement is based on the expectation that most handrails will be in good enough condition that a full replacement is not needed.

Schwindt & Company estimated 428 linear feet of metal handrails.

The cost is based on a per square foot estimate provided by Portland Fence Company.

The useful life assumption is based on estimates established on RS Means and/or the National

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Detail Report by Category

Handrails, Metal - Partial Replacement continued...

Estimator.

The Association will need to obtain bids for this work.

Irrigation Repairs/Upgrades

Asset ID	1042	1 Total	@ \$17,334.19
	Non-Capital	Asset Actual Cost	\$17,334.19
Category	Grounds Components	Percent Replacement	100%
Placed in Service	January 2000	Future Cost	\$17,334.19
Useful Life	20		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for repairs and/or upgrades to the irrigation system.

According to the Association's on-site maintenance person, \$5,000 per year is spent on average, to perform repairs and replacement of the irrigation system. The Association does not currently have a maintenance company. There has not been any major replacement to the irrigation system.

The cost and useful life is an estimate.

The Association will need to firm up cost with a bid once a vendor is obtained.

Pathway: Asphalt Seal Coat

Asset ID	1024	1 Total	@ \$1,733.41
	Non-Capital	Asset Actual Cost	\$1,733.41
Category	Grounds Components	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$1,838.97
Useful Life	5		
Replacement Year	2028		
Remaining Life	2		

This provision provides funding for seal coating of the asphalt pathway at the same time the parking lot is being seal coat.

Schwindt & Company estimated 1,890 square feet of asphalt pathway.

The cost is based on a per square foot estimate provided by Coast Pavement.

The useful life assumption is based on estimates established on RS Means and/or the National

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Detail Report by Category

Pathway: Asphalt Seal Coat continued...

Estimator.

In 2012, the Association provided that this component will occur in 2013.

The Association will need to obtain bids for this work.

Plumbing

Asset ID	1056	1 Total	@ \$25,750.00
Category	Non-Capital	Asset Actual Cost	\$25,750.00
Placed in Service	January 2014	Percent Replacement	100%
Useful Life	3	Future Cost	\$25,750.00
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for work to be performed on the plumbing of the buildings.

The useful life was provided in the Association's prior reserve study.

The cost is based on estimates provided by the Association.

In 2024-2025, the Association spent \$111,417 on sewer line repairs.

Sewer Line Repairs

Asset ID	1062	1 Total	@ \$32,837.66
Category	Non-Capital	Asset Actual Cost	\$32,837.66
Placed in Service	January 2012	Percent Replacement	100%
Useful Life	3	Future Cost	\$32,837.66
Replacement Year	2026		
Remaining Life	0		

This provision provides funding to repair sewer lines.

The cost and useful life were provided by the Association. In 2012, sewer line repairs cost \$27,430.

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Detail Report by Category

Site Drainage - Installation

Asset ID	1063	1 Total	@ \$6,567.53
Category	Capital	Asset Actual Cost	\$6,567.53
Placed in Service	January 2013	Percent Replacement	100%
Useful Life	1	Future Cost	\$6,567.53
Adjustment	1		
Replacement Year	2026		
Remaining Life	0		

This provision provides funding for installation of drainage at Building N.

Pete Fowler Construction Services, Inc. performed a Property Condition Assessment Report on March 12, 2012, and recommended that a catch basin with underground drain pipe that reaches Touchstone Drive be installed for adequate drainage. This installation will cost approximately \$4,000. This will be a one-time installation.

The Association will need to obtain bids for this work.

Trash Enclosure - Repairs

Asset ID	1089	1 Total	@ \$5,150.00
Category	Capital	Asset Actual Cost	\$5,150.00
Placed in Service	January 2023	Percent Replacement	100%
Useful Life	5	Future Cost	\$5,463.63
Replacement Year	2028		
Remaining Life	2		

This provision is for the repair of the trash enclosures as needed.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

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Detail Report by Category

Treework

Asset ID	1093	1 Total	@ \$15,000.00
	Non-Capital	Asset Actual Cost	\$15,000.00
Category	Grounds Components	Percent Replacement	100%
Placed in Service	January 2025	Future Cost	\$16,882.63
Useful Life	5		
Replacement Year	2030		
Remaining Life	4		

This provision is for tree work.

In 2024-2025, the Association spent \$17,499 on tree maintenance.

Wood Retaining Wall: Bld O - Replacement

Asset ID	1091	1 Total	@ \$15,450.00
	Capital	Asset Actual Cost	\$15,450.00
Category	Grounds Components	Percent Replacement	100%
Placed in Service	January 1970	Future Cost	\$15,450.00
Useful Life	50		
Replacement Year	2026		
Remaining Life	0		

This provision is for the replacement of the wood retaining wall on the backside of building O.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Grounds Components - Total Current Cost

\$151,850

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Detail Report by Category

Mailboxes - Replacement

Asset ID	1090	11 Each	@ \$2,060.00
	Capital	Asset Actual Cost	\$22,660.00
Category	Mailboxes	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$50,334.41
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision is for the replacement of the mailboxes.

Schwindt and Company estimated 11 mailboxes.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Mailboxes - Total Current Cost

\$22,660

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Detail Report by Category

Doors, Sliding Glass - Replacement: Common Areas

Asset ID	1034	1 Total	@ \$1,733.41
Capital		Asset Actual Cost	\$1,733.41
Category	Doors and Windows	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$3,850.40
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision provides fund for the replacement of the sliding glass door at the laundry room.

Schwindt & Company counted 1 sliding glass door.

The cost assumption is based on estimates established on RS Means and/or the National Estimator. The Association will need to obtain bids for this work.

Doors, Wood - Replacement: Common Areas

Asset ID	1032	5 Each	@ \$1,545.00
Capital		Asset Actual Cost	\$7,725.00
Category	Doors and Windows	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$17,159.46
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision provides funding for the replacement of the wood doors at the laundry room, pool building, and storage rooms.

Schwindt & Company estimated 5 wood doors.

The cost assumption is based on estimates established on RS Means and/or the National Estimator. The Association will need to obtain bids for this work.

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Detail Report by Category

Windows - Replacement: Common Areas

Asset ID	1033	4 Each	@ \$1,030.00
Capital		Asset Actual Cost	\$4,120.00
Category	Doors and Windows	Percent Replacement	100%
Placed in Service	January 2023	Future Cost	\$9,151.71
Useful Life	30		
Replacement Year	2053		
Remaining Life	27		

This provision provides funding for replacement of the windows at the laundry room and pool building.

Schwindt & Company counted 4 windows.

The cost assumption is based on estimates established on RS Means and/or the National Estimator.

The Association will need to obtain bids for this work.

Doors and Windows - Total Current Cost **\$13,578**

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Detail Report by Category

Building Envelope Inspection

Asset ID	1092	1 Total	@ \$7,725.00
Category	Non-Capital	Asset Actual Cost	\$7,725.00
Placed in Service	Inspections	Percent Replacement	100%
Useful Life	January 2024	Future Cost	\$8,694.56
Adjustment	5		
Replacement Year	1		
Remaining Life	2030		
	4		

This provision is for a building envelope inspection. Generally the life of the building envelope is greater than 30 years. We recommend the Association perform an inspection to determine the current condition of the system. Once the condition is known the reserve study should be updated.

Industry specialists recommend a building envelope inspection every 3-5 years.

Inspections - Total Current Cost

\$7,725

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Detail Report by Category

Insurance Deductible

Asset ID	1061	1 Total	@ \$25,750.00
	Non-Capital	Asset Actual Cost	\$25,750.00
Category	Insurance Deductible	Percent Replacement	100%
Placed in Service	January 2012	Future Cost	\$25,750.00
Useful Life	1		
Replacement Year	2026		
Remaining Life	0		

This provision is to pay for the insurance deductible in the event of a claim.

Insurance Deductible - Total Current Cost **\$25,750**

Additional Disclosures

Levels of Service

The following three categories describe the various types of Reserve Studies from exhaustive to minimal.

I. Full: A Reserve Study in which the following five Reserve Study tasks are performed:

- Component Inventory
- Condition Assessment (based upon on-site visual observations)
- Life and Valuation Estimates
- Fund Status
- Funding Plan

II. Update, With Site Visit/On-Site Review: A Reserve Study update in which the following five Reserve Study tasks are performed:

- Component Inventory (verification only, not quantification)
- Condition Assessment (based on on-site visual observations)
- Life and Valuation Estimates
- Fund Status
- Funding Plan

III. Update, No Site Visit/Off-Site Review: A Reserve Study update with no on-site visual observations in which the following three Reserve Study tasks are performed:

- Life and Valuation Estimates
- Fund Status
- Funding Plan

IV. Preliminary, Community Not Yet Constructed. A reserve study prepared before construction, that is generally used for budget estimates. It is based on design documents such as the architectural and engineering plans. The following three tasks are performed to prepare this type of study:

- Component inventory
- Life and valuation estimates
- Funding Plan

Terms and Definitions

Adequate Reserves: A replacement reserve fund and stable and equitable multiyear [funding plan](#) that together provide for the reliable and timely execution of the association's major repair and replacement projects as defined herein without reliance on additional supplemental funding.

Capital Improvements: Additions to the association's common area that previously did not exist. While these

components should be added to the reserve study for future replacement, the cost of construction or installation cannot be taken from the reserve fund.

Cash Flow Method (also known as pooling): A method of developing a reserve funding plan where funding of reserves is designed to offset the annual expenditures from the reserve fund.

To determine the selected funding plan, different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

Common Area: The areas identified in the community association's master deed or declarations of covenant easements and restrictions that the association is obligated to maintain and replace or based on a well-established association precedent.

Community Association: A nonprofit entity that exists to preserve the nature of the community and protect the value of the property owned by members. Membership in the community association is mandatory and automatic for all owners. All owners pay mandatory lien-based assessments that fund the operation of the association and maintain the common area or elements, as defined in the governing documents. The community association is served and lead by an elected board of trustees or directors.

Components: The individually listed projects within the physical analysis which are determined for inclusion using the process described within the component inventory. These components form the building blocks for the reserve study. **Components are selected to be included in the reserve study based on the following three-part test:**

1. The association has the obligation to maintain or replace the existing element.
2. The need and schedule for this project can be reasonably anticipated.
3. The total cost for the project is material to the association, can be reasonably estimated, and includes all direct and related costs.

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, review of association precedents, and discussion with appropriate representative(s) of the association.

The Reserve Specialist, in coordination with the client, will determine the methodology for including these components in the study. Typical evaluation techniques for consideration include:

- Inclusion of long-life components with funding in the study.
- Addition of long-life components with funding at the time when they fall within the 30-year period from the date of study preparation.
- Identification of long-life components in the component inventory even when they are not yet being funded in the 30-year funding plan.

Component Method (also known as Straight Line): A method of developing a reserve funding plan where the total funding is based on the sum of funding for the individual components.

Condition Assessment: The task of evaluating the current condition of the component based on observed or reported characteristics. The assessment is limited to a visual, non-invasive evaluation.

Effective Age: The difference between [useful life](#) and estimated [remaining useful life](#). Not always equivalent to chronological age since some components age irregularly. Used primarily in computations.

Financial Analysis: The portion of a reserve study in which the current status of the reserves (measured as cash or [percent funded](#)) and a recommended reserve funding plan are derived, and the projected reserve income and expense over a period of time are presented. The financial analysis is one of the two parts of a reserve study. A minimum of 30 years of income and expense are to be considered.

Fully Funded: 100 percent funded. When the actual (or projected) [reserve balance](#) is equal to the fully funded balance.

Fully Funded Balance (FFB): An indicator against which the actual (or projected) reserve balance can be compared. The reserve balance that is in direct proportion to the fraction of life “used up” of the current repair or [replacement cost](#). This number is calculated for each component, and then summed for an association total.

FFB = Current Cost X Effective Age/Useful Life

Example: For a component with a \$10,000 current replacement cost, a 10-year useful life, and effective age of 4 years, the fully funded balance would be \$4,000.

Fund Status: The status of the reserve fund reported in terms of cash or [percent funded](#).

Funding Goals:

The three funding goals listed below range from the most aggressive to most conservative:

Baseline Funding

Establishing a reserve funding goal of allowing the reserve cash balance to approach but never fall below zero during the cash flow projection. This is the funding goal with the greatest risk of being prepared to fund future repair and replacement of major components, **and it is not recommended** as a long-term solution/plan.

Baseline funding may lead to project delays, the need for a [special assessment](#), and/or a line of credit for the community to fund needed repairs and replacement of major components.

Threshold Funding

Establishing a reserve funding goal of keeping the [reserve balance](#) above a specified dollar or percent funded amount. Depending on the threshold selected, this funding goal may be weaker or stronger than “fully funded” with respective higher risk or less risk of cash problems. In determining the threshold, many variables should be considered, including things such as

investment risk tolerance, community age, building type, components that are not readily inspected, and components with a [remaining useful life](#) of more than 30 years.

Full Funding

Setting a reserve funding goal to attain and maintain reserves at or near 100 percent funded. Fully funded is when the actual or projected reserve balance is equal to the fully funded balance.

It should be noted that, in certain jurisdictions, there may be statutory funding requirements that would dictate the funding requirements. In all cases, these standards are considered the minimum to be referenced.

Funding Plan: An association’s plan to provide income to a reserve fund to offset anticipated expenditures from that fund. The plan must be a minimum of 30 years of projected income and expenses.

Funding Principles: A funding plan addressing these principles. These funding principles are the basis for the recommendations included within the reserve study:

- Sufficient funds when required.
- Stable funding rate over the years.
- Equitable funding rate over the years.
- Fiscally responsible.

Initial Year: The first fiscal year in the financial analysis or funding plan.

Life Estimates: The task of estimating [useful life](#) and [remaining useful life](#) of the reserve components.

Life Cycle Cost: The ongoing cost of deterioration which must be offset in order to maintain and replace common area components at the end of their useful life. Note that the cost of preventive maintenance and corrective maintenance determined through periodic structural inspections (if required) are included in the calculation of life cycle costs and often result in overall net lower life cycle costs.

Maintenance: Maintenance is the process of maintaining or preserving something, or the state of being maintained. Maintenance is often defined in three ways: preventive maintenance, corrective maintenance, and deferred maintenance. Maintenance projects commonly fall short of “replacement” but may pass the defining test of a reserve component and be appropriate for reserve funding. Maintenance types are categorized below:

Preventive Maintenance: Planned maintenance carried out proactively at predetermined intervals, aimed at reducing the performance degradation of the component such that it can attain, at minimum, its estimated useful life.

Deferred Maintenance: Maintenance which is not performed and leads to premature deterioration to the common areas due to lack of preventive maintenance.

This results in a reduction in the remaining useful life of the reserve components and the potential of inadequate funding. Typically, deferred maintenance creates a need for corrective maintenance.

Corrective Maintenance: Maintenance performed following the detection of a problem, with the goal of remediating the condition such that the intended function and life of the component or system is restored, preserved, or enhanced.

Many corrective maintenance projects could be prevented with a proactive, preventive maintenance program. Note that when the scope is minor, these projects may fall below the threshold of cost significance and thus are handled through the operational budget. In other cases, the cost and timing should be included within the reserve study.

Percent Funded: The ratio, at a particular point in time clearly identified as either the beginning or end of the association’s fiscal year, of the actual (or projected) [reserve balance](#) to the fully funded balance, expressed as a percentage.

While percent funded is an indicator of an association’s reserve fund size, it should be viewed in the context of how it is changing due to the association’s reserve funding plan, in light of the association’s risk tolerance and is not by itself a measure of “adequacy.”

Periodic Structural Inspection: [Structural system](#) inspections aimed at identifying issues when they become evident.

*Additional information and recommendations are included within the Condominium Safety Public Policy Report.
www.condosafety.com*

Physical Evaluation: 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.

Preventive Maintenance Schedule: A summary of the preventive maintenance tasks included within a maintenance manual which should be performed such that the useful lives of the components are attained or exceeded. This schedule should include both the timing and the estimated cost of the task(s).

Remaining Useful Life (RUL): Also referred to as “remaining life” (RL). The estimated time, in years, that a component can be expected to serve its intended function, presuming timely preventive maintenance. Projects expected to occur in the initial year have zero remaining useful life.

Replacement Cost: The cost to replace, repair, or restore the component to its original functional condition during that particular year, including all related expenses (including but not limited to shipping, engineering, design, permits, installation, disposal, etc.).

Reserve Balance: Actual or projected funds, clearly identified as existing either at the beginning or end of the association’s fiscal year, which will be used to fund reserve component expenditures. The source of this information should be disclosed within the reserve study.

Also known as beginning balance, reserves, reserve accounts, or cash reserves. This balance is based on information provided and not audited.

Reserve Study: A reserve study is a budget planning tool which identifies the components that a community association is responsible to maintain or replace, the current status of the reserve fund, and a stable and equitable funding plan to offset the anticipated future major common area expenditures.

This limited evaluation is conducted for budget and cash flow purposes. Tasks outside the scope of a reserve study include, but are not limited to, design review, construction evaluation, intrusive or destructive testing, preventive maintenance plans, and structural or safety evaluations.

Reserve Study Provider: An individual who prepares reserve studies. In many instances, the reserve study provider will possess a specialized designation such as the Reserve Specialist® (RS) designation administered by Community Associations Institute (CAI). This designation indicates that the provider has shown the necessary skills to perform a reserve study that conforms to these standards. In some instances, qualifications in excess of the RS designation will be required if supplemental subject matter expertise is required.

Reserve Study Provider Firm: A company that prepares reserve studies as one of its primary business activities.

Responsible Charge: A Reserve Specialist (RS) in responsible charge of a reserve study shall render regular and effective supervision to those individuals’ performing services that directly and materially affect the quality and competence of services 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 or she 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:

1. 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;

2. The failure to personally inspect or review the work of subordinates where necessary and appropriate;
3. The rendering of a limited, cursory or perfunctory review of plans or projects in lieu of an appropriate detailed review; and
4. The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

Site Visit: A visual assessment of the accessible areas of the components included within the reserve study.

The site visit includes tasks such as, but not limited to, on-site visual observations, a review of the association's design and governing documents, review of association precedents, and discussion with appropriate representative(s) of the association.

Special Assessment: A temporary assessment levied on the members of an association in addition to regular assessments. Note that special assessments are often regulated by governing documents or local statutes.

Special assessments, when used to make up for unplanned reserve fund shortfalls, may be an indicator of deferred maintenance, improper reserve project planning, and unforeseen catastrophes and accidents, as well as other surprises.

Structural System: The structural components within a building that, by contiguous interconnection, form a path by which external and internal forces, applied to the building, are delivered to the ground. This is generally a combination of structural beams, columns, and bracing and is not included within the reserve study, although it is reviewed as part of the recommended periodic structural inspections.

It is important to recognize that individual structural components which are not a part of the structural system, such as decks, balconies, and podium deck components may be included for reserve funding if they otherwise satisfy the three-part test.

Useful Life (UL): The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed presuming proactive, planned, preventive maintenance.

Best practice is that a component's Useful Life should reflect the actual preventive maintenance being performed (or not performed).

Valuation Estimates: The task of estimating the current repair or [replacement costs](#) for the reserve components.