RESERVE FUND STUDY

Prepared for:

TARTAN WEST COMMUNITY ASSOCIATION
7195 TUSCANY DR
DUBLIN, OHIO 43016-6131

Prepared by:

Criterium Liszkay Engineers
1075 Beecher Crossing N, Suite D
Gahanna, OH 43230
614-418-7200
www.criteriumliszkay.com

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1.0 INTRODUCTION

The Board of Directors of Tartan West Community Association engaged Criterium Liszkay Engineers to conduct a Reserve Fund Study for Tartan West Community Association. This community is in Dublin, Ohio. The Association is managed by Jennifer Grooms of NAI Ohio Equities.

Studies of this nature are important to ensure a community has sufficient funds for long-term, periodic capital expenditure requirements. Anticipating large expenditures over an extended period through a structured analysis and scheduling process assists the Association in planning for and meeting its financial requirements without increasing the fees above permitted maximums, borrowing the funds, or levying special financial assessments to the owners.

This report must be reviewed in its entirety to understand our findings and their limitations. The Appendices are an integral part of this report and must be included in any review.

We have conducted the study in general accordance with the National Reserve Study Standards published by the Community Associations Institute (CAI).

Adam Rich, P.E., R.S., of Criterium Liszkay Engineers performed this study and prepared this report and the attached financial analysis. This report is principally based on his visual site inspection on February 26, 2025 and March 17, 2025. Patrick Older, R.S. of Criterium Liszkay Engineers reviewed this report. Criterium Liszkay has not previously performed a study for this association. A reserve study has been completed by others in the past for the association.

The present amount of funds in the reserve account was not audited by Criterium Liszkay Engineers but is based on information provided by Jennifer Grooms.

In reviewing the engineering assumptions, cost estimates and projected fund values herein, please understand that accuracy diminishes the farther into the future costs are forecast. Long range facility repair/replacement projections are intended only to indicate the likely pattern of reserve expenditures and to inform financial planning.

Criterium Liszkay Engineers agrees with CAI's recommendation that reserve studies should be updated every three years as best practice and every five years at a minimum to allow periodic adjustment of facility plans and funding strategies.

Criterium presents this confidential report for the Board's review and use.

2.0 EXECUTIVE SUMMARY

The Tartan West Community Association is a community consisting of a mixture of homes and condominium units. The community comprises approximately 263 acres of land. The community consists of several ponds and wetlands, grounds and landscaping, several structures, and mechanical equipment. It is located in Dublin, Ohio within Union County. Construction started on this community in approximately 2004 and is complete.

Based on our evaluation, the current level of contributions to the reserve fund for this community is not adequate. Alternative funding plans have been developed for the board to consider. These plans are developed to be able to meet the future capital expenditure requirements that we have forecast. A detailed analysis of the expected

capital costs and reserve fund balance is provided in Appendix A.

Based on our observations, the following item(s) are of immediate concern:

- None

There are several expenditures to be expected over the study period. For your convenience, we have prepared the following summaries of the condition of the components of each portion of the property.

System	Condition	Activity Anticipated	Funding Source
Site			
Stormwater Underground Drainage	Unknown	Repair/Partial Replace	Reserve Fund
Concrete Sidewalks	Good	Repair/Partial Replace	Reserve Fund
Pavers	Good-Fair	Replace	Reserve Fund
		Repair	Operating Budget
Masonry Sign Monuments	Fair	Repair	Reserve Fund
		Powerwash/Seal	Operating Budget
Nine Retention Ponds/Wetlands (1-9)	Fair	Sediment Study, Dredge, Edge Repair, Vegetation Control	Reserve Fund
		Treatments	Operating Budget
Waterfalls	Fair	Repair	Reserve Fund
Stacked Stone Retaining Walls	Good-Fair	Repair/Partial Replace	Reserve Fund
Landscaping	Good	Partial Replace	Reserve Fund
Trees	Good	Remove/Replace	Reserve Fund
Signage	Good	Replace	Operating Budget
Building Exterior			
Asphalt Shingle Roofing (One Structure)	Good	Replace	Reserve Fund
		Repair	Operating Budget
Clay Tile Roofing (Five Structures)	Good	Replace	Reserve Fund
		Repair	Operating Budget
Stucco/Masonry Veneer	Fair	Repair	Reserve Fund
		Repaint	Operating Budget
Engineered Siding/Wood Trim	Fair	Repair/Repaint	Operating Budget
Wood shutters	Fair	Repair/Repaint	Operating Budget
Doors and Windows	Fair	Replace	Reserve Fund
Building Interior			
Pump Houses (Two Structures)	Fair	Repair/Paint	Reserve Fund
Attic framing	Unknown	Inspect	Reserve Fund
Foundations	Good	Inspect	Reserve Fund
Mechanical			
Underground Utilities (Electric, Water, Sewer)	Unknown	Repair/Partial Replace	Reserve Fund
Wells (Two)	Unknown	Repair	Reserve Fund
Pump House Backflow Preventers, Valves, Piping	Fair	Repair/Partial Replace	Reserve Fund
Irrigation System	Good/ Unknown	Repair/Replace	Reserve Fund
Pond Aerators	Unknown	Replace	Reserve Fund
Pond Pumps	Unknown	Replace	Reserve Fund
Pond Aeration Compressors	Unknown	Replace	Reserve Fund
Pond Fountains	Unknown	Replace	Reserve Fund
Electrical Boxes, Conduits, Heaters, Transformer	Fair	Repair/Partial Replace	Reserve Fund
Landscape Lighting	Fair	Inspect/Repair	Operating Budget
		Replace	Reserve Fund
Structure Lighting	Fair	Replace	Reserve Fund
Amenities			

Pergolas (One at ponds 7/8, Two at Corazon/Hyland)	Fair	Repair/Recoat	Reserve Fund
Vineyards	Fair	Repair	Operating Budget
Other			
Reserve Study	NA	Update	Reserve Fund

Table 2.1 Property Condition Summary

3.0 PURPOSE & SCOPE

3.1 PURPOSE

The purpose of this study is to perform a reserve fund analysis and to develop a capital needs plan that the board can use to determine if the Association has sufficient funds to cover anticipated future expenditures. If it is determined that the Association will not have sufficient funds to cover future expenditures, the study will recommend alternative funding approaches that the board can use to address any forecast shortfalls.

This report forecasts major capital expenditures for the community for a period of years into the future. It should be noted that events could occur that would have an adverse impact on the assumptions made in this study regarding the remaining useful life of a component or system. Likewise, economic fluctuations can have an impact on component or system replacement and repair costs, as well as on the rate of return that an association's investments can earn. Therefore, a study such as this should be updated from time to time, usually on a five-year cycle, to reflect the most accurate needs and obligations of the community association. We concur with the Community Associations Institute guidelines and recommend that this reserve study be updated every three to five years.

For purposes of financial planning, association-responsible expenses are typically divided into two categories:

- Operation and maintenance (O&M) of commonly held elements of real property and other assets. These O&M expenses usually include taxes, insurance, property management costs and other service fees. Preventative maintenance is a critical aspect affecting a community's life cycle costs and structural safety. It is encouraged that your association have a preventative maintenance plan prepared in conjunction with the reserve study (if none exists).
- Reserve capital expenditures for major periodic repairs or replacement of commonly held elements such as building roofing, roads, etc.

The focus of this study is to identify and estimate the expected capital expenditures that the community will incur in the future and evaluate the ability of the community's reserve funding to meet these expenditures.

3.2 SCOPE

This study has been performed according to the scope as generally defined by the board of the Tartan West Community Association, Criterium Liszkay Engineers, and the standards of the Community Associations Institute (CAI). The findings and recommendations are based on interviews with representatives of the Association, and an investigation of the site. The guidelines used to determine which physical components within the community are to be included in the component inventory are based on the following general criteria:

1. The component must be a common element or otherwise noted to be the responsibility of the Association to maintain or replace.
2. The funding for replacement should be from one source only, not funded from another area of the budget or through a maintenance contract.
3. The cost of repair or replacement should be high enough to make it financially unsound to fund it from the operating budget.
4. Components which are considered deferred maintenance, are most appropriately funded from the Operating Budget instead of Reserves.

This study estimates the funding levels required for maintaining the long-term viability of the facility. Our approach involves:

1. Examining association managed equipment and site facilities.
2. Predicting their remaining service life and approximating how frequently they will require repair or replacement.
3. Estimating repair or replacement costs for each capital item and applying a inflation rate to all costs.
4. Using data developed in Steps 1, 2 and 3 to project Capital Reserve balances requirements through the study period.

The statements in this report are opinions about the present condition of the subject community. They are based on visual evidence available during a diligent investigation of all reasonably accessible areas falling under the responsibility of the Association. We did not remove any surface materials, perform any destructive testing, or move any furnishings. This study is not an exhaustive technical evaluation. Such an evaluation would entail a significantly larger scope than this effort. Material information regarding issues observed at the property may be included as to not cause a distortion of the association's situation.

Information provided by the association regarding financial, physical, quantity, or historical issues will be deemed reliable by Criterium Liszkay Engineers and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records.

Information provided by the association about association reserve projects will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection.

3.3 SOURCES OF INFORMATION

An on-site inspection of the property was conducted by the author on the following date:

- February 26, 2025 & March 17, 2025

Persons interviewed or providing information during and after our site investigation included:

- John Ehmann, President of the Board of Directors
- Jennifer Grooms, Community Association Manager, NAI Ohio Equities

We based our cost estimates on some or all of the following data sources:

- Stone Environmental, December 1, 2021 report
- Lozier Group, 2020 reserve study report

- Costs and schedule information from our historical files
- R.S. Means
- Local contractors

Neither the Condominium Declarations nor the construction drawings were reviewed.

Your association's preventative maintenance plan should incorporate all applicable common elements, not just those components included within this reserve study. Criterium Liszkay Engineers can only be aware of preventative maintenance plans or programs that have been disclosed to us by the association. An audit or evaluation of any maintenance plans or maintenance contract is outside the scope of services for this reserve study.

3.4 LEVEL OF SERVICE

The Community Association Institute (CAI) identifies four levels of service for Reserve Studies:

I. Full Reserve Study, with site visit
II. Reserve Study Update, with site visit
III. Reserve Study Update, without site visit
IV. Preliminary, Community Not Yet Constructed

All may be appropriate for a community, depending on the condition of the facility and the phase of their planning cycle.

Our current study is a **Level II - Reserve Study Update, with Site Visit**.

Criterium Liszkay Engineer's actual scope of service is enhanced and exceeds the CAI standard in the following ways:

- Our investigation and evaluation of the property is performed by experienced Professional Engineers.
- After preparing and submitting our initial analysis, we engage in a collaborative review process with the Association Board, for the purpose of developing a long-range financial plan that is responsive to the needs of the Association.

3.5 STANDARDS OF REFERENCE

For your reference, the following definitions may be helpful:

Excellent: Component or system is in "as new" condition, requiring no rehabilitation and should perform in accordance with expected performance.

Good: Component or system is sound and performing its function, although it may show signs of normal wear and tear. Some minor rehabilitation work may be required.

Fair: Component or system falls into one or more of the following categories: a) Evidence of previous repairs not in compliance with commonly accepted practice, b) Workmanship not in compliance with commonly accepted standards, c) Component or system is obsolete, d) Component or system approaching end of expected performance. Repair or replacement is required to prevent further deterioration or to prolong expected life.

Poor: Component or system has either failed or cannot be relied upon to continue performing its original function due to having exceeded its expected performance, excessive deferred maintenance, or state of disrepair. Present condition could contribute to

or cause the deterioration of other adjoining elements or systems. Repair or replacement is required.

Adequate: A component or system is of a capacity that is defined as enough for what is required, sufficient, suitable, and/or conforms to standard construction practices.

All ratings are determined by comparison to other buildings of similar age and construction type. Further, some details of workmanship and materials will be examined more closely in higher quality buildings where such details typically become more relevant.

All directions (left, right, rear, etc.), when used, are taken from the viewpoint of an observer standing in front of a building and facing it.

Reserve Fund – Non-annual maintenance items that will require significant expenditure over the life of the buildings. Included are items that will reach the end of their estimated useful life during the course of this forecast or in the opinion of the investigator, will require attention during that time.

4.0 PHYSICAL DESCRIPTION

4.1 SITE

The overall site is approximately 263 acres.

There are many underground stormwater facilities which collect rainwater and transfer this water to the community ponds. Some water discharges from the ponds into local waterways.

There are small areas of concrete and paver surfaces near the site structures.

The community consists of several sub-neighborhoods and each is designated with masonry signage monuments with the sub-neighborhood name.

There are 7 ponds and 2 wetland areas on-site. There are waterfall structures between ponds 1 and 2, 1 and 3, and within 3. Ground wells are used to supplement pond water. A series of pumps moves water between some ponds to ensure the waterfalls operate.

There is landscaping, trees and signage throughout the community.

The city of Dublin is responsible for the asphalt walking trails throughout the site. The Club at Corazon is responsible for the club grounds and facilities, and also pays the association for some irrigation services. The city of Dublin is responsible for pond #5.

4.2 BUILDING EXTERIOR

A pump house next to pond #6 has an asphalt shingle roof, and walls clad with masonry veneer and engineered siding and it utilizes wood trim. This building has 2 doors and 2 windows.

The following structures have a clay tile roof:

1. Pump house on the west side of pond #1
2. (2) Entrance tower structures at the Corazon Dr/Hyland-Croy Rd intersection
3. Entrance tower structure at the Tuscany Dr/Hyland-Croy Rd intersection

4. Entrance tower structure at the Corazon Dr/Manley Rd intersection

The signage monuments and entrance structures are clad in stucco and masonry veneer.

The pump house on the west side of pond #1 has walls clad in stucco and masonry veneer, and utilizes wood trim. This building has 2 doors.

4.3 BUILDING INTERIOR

The interior of the two pump houses are finished with drywall walls and each have an attic. The pump house on the west side of pond #1 has a drywall ceiling, while the pump house next to pond #6 does not have a finished ceiling.

4.4 MECHANICAL

Electrical, water, stormwater, sewage, and gas services are provided underground. The electric and gas are metered individually.

The association is responsible for common underground water services, stormwater and sewer lines.

The association is responsible for underground electrical services from ground mounted transformers to meter boxes.

The natural gas utility is responsible for underground gas lines to individual meters.

Each unit owner is responsible for the water piping, gas piping, electrical system, and drainage system within their unit.

The pump house next to pond #6 contains water equipment and has two water meters, valves, backflow preventers, and piping. It is believed that this pump house serves the Savona sub-neighborhood.

The community has several irrigation systems throughout the community.

Some of the ponds include fountains and aerators.

Several pumps and other equipment serve the ponds, and irrigation system.

There is landscape lighting around most of the site structures, including monuments and the waterfalls.

Wall lights are present on several of the site structures, and the interiors of the pump houses include a lighting system.

4.5 AMENITIES

There is a pergola structure between ponds #7 and #8. The main structure is constructed of wood, and the columns are clad in masonry veneer. A paver surface is below the pergola.

There are two pergola structures at the Corazon Dr/Hyland-Croy Rd intersection. These structures are constructed of wood and utilize heavy gage steel connectors. A concrete surface is below the pergola.

At the Corazon/Hyland-Croy Rd intersection there are a series of vineyards comprised of wood posts, steel cables, grape vines, and an irrigation system.

4.6 OTHER

N/A

5.0 CONDITION ASSESSMENT

Our condition assessment included representative sampling of the site improvements, building spaces, components, systems and equipment. We cannot be responsible for aberrations. No destructive testing was performed. Field and aerial measurements were used for takeoffs. We did not undertake a comprehensive environmental assessment of the community, nor perform any sampling or testing for hazardous materials.

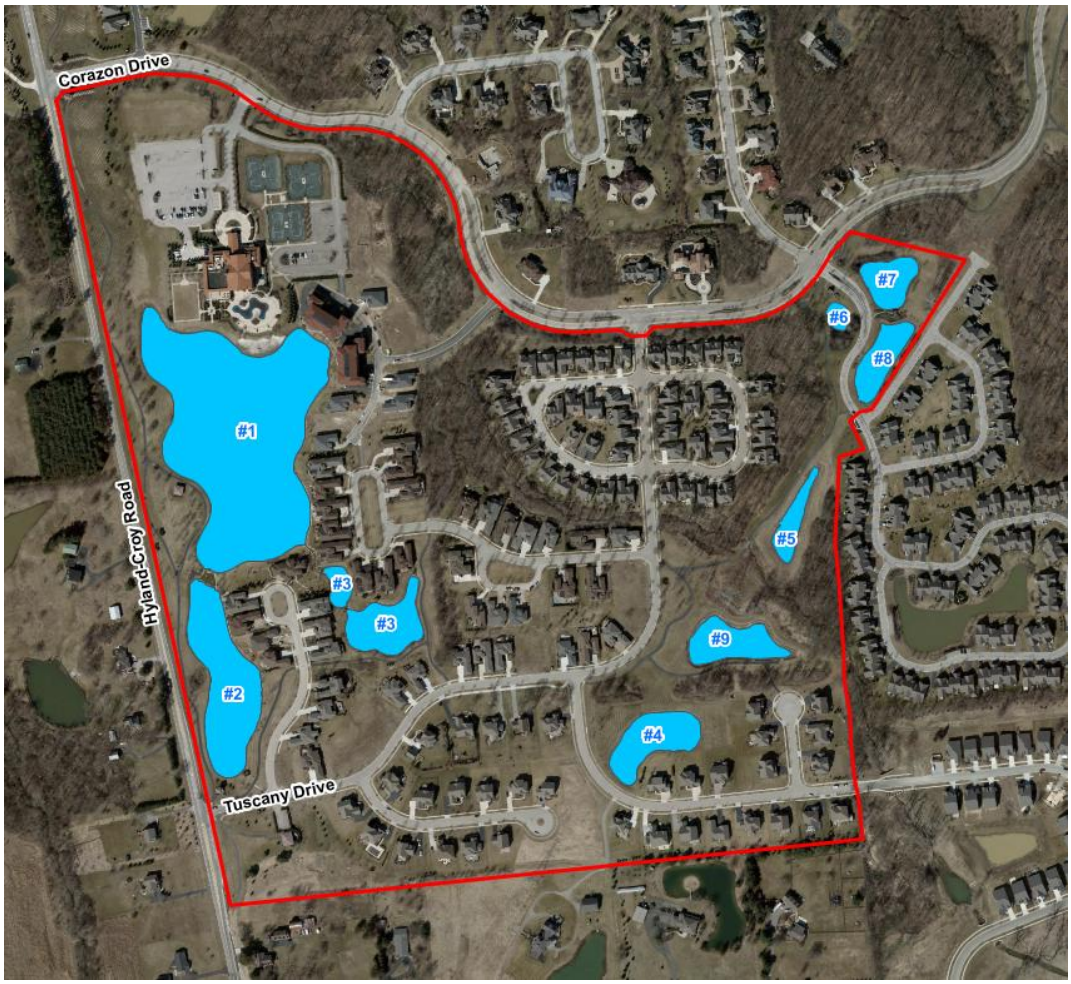
5.1 SITE

The concrete surfaces were cracked in some locations, and standing water was observed on select areas.

The pavers are reaching the end of their useful life. Present repairs are required, and full replacement will be required during this study period.

The masonry sign monuments exhibited corrosion at the stucco corner beads, failed joints between stones, and mulch piled too high up the masonry stone veneer walls. It is recommended to repair these issues soon to prevent further deterioration of these structures from moisture damage. We also recommend that the monuments be regularly powerwashed. If not maintained, replacing these structures is relatively expensive.

The sign was loose on the Belle Verde monument which is located on the north side of Corazon Dr, just east of Donatello Dr.



Pond #1 – This is the largest pond. Erosion of the edge was observed, especially on the north and west. Vegetation was present around some of the perimeter. The erosion around this pond is by magnitude the worst of the ponds. Plans to control this erosion in the short term should be implemented.

Pond #2 - The pond surface was partially frozen over at the time of the inspection. Some stone edge rip-rap was present on the south end of the pond. It was reported by the board that this stone was installed due to edge erosion. Erosion of the edge was observed in other areas of the pond.

Pond #3 - The pond surface was frozen over at the time of the inspection. There was visible leaf build-up below the water surface along the pond edges.

Pond #4 - The pond surface was frozen over at the time of the inspection. The edges of this pond are eroding. The stone veneer on the headwalls is failing in some areas and should be repaired. Some cleanup of debris and vegetation is needed around this area. Vegetation was present around some of the perimeter. It should be decided if vegetation is the preferred edge erosion control method, and formally installed around the entire perimeter.

Wetland #5 – Some cleanup of debris and vegetation is needed around this area. The stone veneer on the headwalls is failing in some areas and should be repaired. Note that the Stone

Environmental report states: "Pond 5 is not considered part of the Tartan West community and is maintained by the City of Dublin."

Pond #6 – This is the smallest pond. The pond surface was frozen over at the time of the inspection. No visible concerns were noted.

Pond #7 - The pond surface was frozen over at the time of the inspection. There was visible leaf build-up below the water surface along the pond edges.

Pond #8 – The edges of this pond are eroding. There was visible leaf build-up below the water surface along the pond edges.

Wetland #9 - Was mostly filled with cattails and other wetland vegetation. The board reported there have been occasions in the past when the pond emits a foul odor and that very little has been done with this pond over the years. In their December 1, 2021 report, Stone Environmental defines this pond as a "wetland", and recommends among other things, to "Investigate design implications to convert Pond 9 (wetland design) to a pond. We recommend that a civil engineer be consulted to further explore this conversion to a true pond if the plant growth and odor are a concern. The stone veneer on the headwalls should be powerwashed, tuck-pointed and sealed with a siloxane based sealant.

Dredging of the ponds in the future is likely. Dredging is typically recommended when the pond has lost 50% of its design storage capacity, but may be desired earlier due to algae and other issues which can be caused by excess sediment. By extrapolating data from the 2020 sediment study, and projecting a rate of sediment build-up in the future based on the known data, we have included funds for dredging projects.

It was reported by the board that some of the pond edge erosion may be being caused by muskrat activity. We have included funds for additional pond edge repair.

The board of directors provided guidance on funds to include for both edge repair and pond dredging.

It was reported by the board that the association spends approximately $25,000-30,000 per year on sediment control treatments.

Some deterioration was observed of the waterfall structure between ponds #1 and #2. Periodic repairs to these waterfalls should be made to prolong their useful life.

5.2 BUILDING EXTERIOR

The asphalt shingle and clay tile roofs were not accessed but were visually viewed from below.

The wood trim and wood on all of the structures and pergolas is in need of repairs and recoating at this time.

The following issues were observed on the exterior of the pump house next to pond #6 and should be corrected as soon as possible:

1. Deteriorated hardware on the doors
2. A damaged window insulated glass unit
3. Deteriorated engineering siding in select locations
4. Mulch piled in contact with the masonry stone veneer

5. Corroding fasteners on the trim boards
6. Doors in need of re-coating
7. Worn and corroded wall light fixtures

5.3 BUILDING INTERIOR

The following issues were observed on the interior of the pump house next to pond #6 and should be corrected as soon as possible:

1. Evidence of mice activity including damage to the insulation and contamination of equipment with mice waste.
2. Holes/gaps in the exterior façade
3. Falling and missing attic insulation
4. Wood posts being used to support piping equipment, where specialty steel pipe supports should be being used.
5. Danger Red Tags on some of the equipment
6. Excessive debris on the floor

The interior of the pump house on the west side of pond #1 needs to be cleaned.

5.4 MECHANICAL

There are electrical panels which are not readily accessible due to vegetation along Hyland-Croy Rd, just west of the pump house. This vegetation should be removed or relocated to allow adequate clearance around the panels.

The pumps at the southeast corner of pond #2 are being protected from freezing by hay bales and tarps. Additionally, these pumps are not readily accessible for inspection or repairs due to overgrown vegetation. We recommend that consideration be given to installing a heated structure over these pumps so that they are protected from freezing and easily accessible for repairs and inspection.

It was reported that several pump replacements have recently been performed.

It was reported by the board that these wells may serve hard water, which has caused issues with the ponds.

The lights inside the pump house on the west side of pond #1 did not work.

Some corroded metal electrical boxes were observed.

It is recommended that a regular maintenance item be completed to ensure the below grade landscaping lights, irrigation boxes, and electrical boxes be cleared of all debris and vegetation.

5.5 AMENITIES

It was reported by Jennifer Grooms that work to restore the two pergolas at the Corazon/Highland-Croy intersection is planned to take place in 2025.

The pergola at ponds #7/8 is presently in need of recoating.

5.6 OTHER

N/A

6.0 RESERVE FUND ANALYSIS

6.1 METHODOLOGY

Using software developed by Criterium Engineers and KPMG Peat Marwick, we have analyzed capital reserves requirements for the projected capital expenditures to determine the amount needed. This projection takes into consideration a reasonable return on invested monies and inflation.

The intent of this reserve fund projection is to help the Association develop a reserve fund to provide for anticipated repair or replacements of various system components during the study period. Unless specifically noted, the components included within this studies financial analysis have an anticipated remaining useful life which falls within the study period. No funding for components beyond the study period has been included in the analysis.

The capital items listed are those that are typically the responsibility of the association. However, association by-laws vary, and therefore, which components are the responsibilities of the owner, and which is the responsibility of the association can vary.

This projection provides the following:

- An input sheet that defines all the criteria used for the financial alternatives, including the assumed inflation rate and rate of return on deposited reserve funds.
- A table that lists anticipated replacement and/or repair items complete with estimated remaining life expectancies, projected costs of replacement and/or repair, a frequency in years of when these items require replacement and/or repair, and a projection based on this frequency.
- A table and graph that represent end of year balances versus capital expenditures based on your current funding program and reserve balances, and alternatives to your current program. The provided graphs illustrate what effects the funding methods will have over the presented study period versus the anticipated capital expenditures. Care should be taken in analyzing the graphs due to varying graphic scales that occur within each graph and between graphs.
- The Association should bear in mind that unanticipated expenditures can always arise, and maintenance of a significant reserve fund balance can be viewed as a way to avoid special assessments.

6.2 CURRENT FUNDING

The association provided us with the following information about the Association budget and finances, and our analysis is based on this information:

- Fiscal Year Starting Date: January 1
- Year 1 of Study Period: 2026
- Starting Reserve Fund Balance (as of 1/1/26): $140,571

- 2025 Reserve Rate of Contribution: $81,220
- Planned Special Assessments: None

6.3 RESERVE EXPENDITURE PROJECTION

Our initial analysis was a projection of the Association's reserve balance assuming that the Our initial analysis was a projection of the Association's reserve balance assuming that the current rate of contribution remains constant over the study period with no increases. **Based on the calculations in this study, the current reserve funding rate is not adequate.**

Subsequently, we developed alternatives to your current funding program which each seeks to maintain a positive reserve balance. See Appendix A for details of these alternative funding plans.

We recommend that the board adopt an alternative that best reflects the objectives of the community.

Threshold Funding: This funding goal would provide a contingency balance (cushion) to cover unanticipated costs, or costs higher than expected to avoid enacting a special assessment to cover these costs.

Baseline Funding: This funding goal seeks to maintain a positive (greater than $0) reserve fund balance in each year of the study. This funding goal would comply with Ohio Revised Code (ORC) 5311.

Funding Goal: A funding goal is the target reserve fund balance to be achieved throughout the study period. The alternatives seek to maintain a minimum reserve fund balance in each year of the study as described below.

Alternative 1 seeks to maintain a threshold funding goal of 0.5x (50%) of your average annual capital expenditure adjusted for inflation.

Alternative 2 seeks to maintain a positive (greater than $0) reserve fund balance in each year of the study. This "Funding Goal" is generally referred to as "Baseline Funding".

Alternative 3 seeks to maintain a threshold funding goal of 1x (100%) of your average annual capital expenditure adjusted for inflation.

7.0 LIMITATIONS

Criterium Liszkay Engineers shall perform duties to at least the professional standards consistent with a licensed, Professional Engineer, but does not guarantee or warrant that all adverse conditions concerning the property can be or will be discovered and included in the report. The photographs are an integral part of this report and must be included in any review.

This study is limited to the visual observations made during our inspection. We did not undertake any excavation, conduct any destructive or invasive testing, remove surface materials or finishes, or displace furnishings or equipment. Further, we did not enter any attic

areas. Accordingly, we cannot comment on the condition of systems that we could not see, such as buried structures and utilities, nor are we responsible for conditions that could not be seen or were not within the scope of our services at the time of inspection. The observations described in this study are valid on the date of the investigation. We do not render an opinion on any uninvestigated portions of the community.

We did not perform any computations or other engineering analysis or design as part of this study, nor did we conduct a comprehensive code compliance investigation. Likewise, this is not a structural, structural integrity evaluation, or seismic assessment.

This information in this study is not to be considered a warranty of condition, quality, compliance or cost. No warranty is implied. Criterium Liszkay Engineers shall incur no civil liability for performing the physical or financial portions of this reserve study.

Financial data, records of past expenses, and cost estimates provided by others have been taken in good faith and at face value. No audit or other verification has been performed. Study updates may rely on the validity of data within prior reserve studies including component quantities.

Reserve budgets are opinions of likely expenses based on reasonable cost estimates. We have not obtained competitive quotations or estimates from contractors. Actual costs can vary significantly based on the specific scope of work developed, availability of materials and qualified contractors, and many other variables. We cannot be responsible for variances.

Criterium Liszkay Engineers does not offer financial counseling services. Although reasonable rates of inflation and return on investment must be assumed to calculate projected balances, no one can accurately predict actual economic performance. Although reserve fund management and investment may be discussed during the study, we do not purport to hold any special qualifications in this area.

We recommend that the Board seek other professional guidance before finalizing their current reserve fund planning activity. Depending on issues that may arise, an appropriate team of consultants to aid decision-making might include their property manager, accountant, financial advisor and attorney.

Criterium Liszkay Engineers prepared this confidential report for the review and use of the Board of the Association. We do not intend any other individual or party to rely upon this study without our express written consent. If another individual or party relies on this study, they shall indemnify, defend and hold Criterium Liszkay Engineers, its subsidiaries, affiliates, officers, directors, members, shareholders, partners, agents, employees, and such other parties in interest specified by Criterium Liszkay Engineers harmless for any damages, losses, or expenses they may incur as a result of its use. Any use or reliance of the report by an individual or party other than shall constitute acceptance of these terms and conditions.

Criterium Liszkay Engineers has no familial or marital relationship, ownership interest, or ongoing business relationship with the association.

8.0 CONCLUSION

Criterium Liszkay Engineers appreciates this opportunity to assist the Board in support of the Association's facility and financial planning, and we are pleased to present this report for

your consideration and use.

All of our work for this study has been carried out in strict accordance with the CAI Code of Ethics. We consider our report confidential and will not share its content with anyone but the Board without its knowledge and release.

This analysis finds that your current reserve fund is not adequately funded over the study period. Many expenses occur over the study period, but the most significant expenses you will need to prepare for are the pond dredging, pond edge repair, landscaping and irrigation system replacement.

We trust that this report answers any questions that may arise. If you have any questions about this study or the reserve fund analysis, please feel free to contact us. Thank you for the opportunity to be of assistance to you.

Thank you.

Respectfully submitted,

CRITERIUM LISZKAY ENGINEERS

Adam Rich, P.E., R.S.
Engineer Investigating & Reporting

APPENDIX A
FINANCIAL EXHIBITS

Initial Capital Reserve Funding Information provided by the Association and agreed Forecasting Assumptions

1 Organization: **Tartan West Community Association**

2 Address: **7195 Tuscany Dr**
Dublin, Ohio 43016

3	Number of Units	**388**
4	Age of Building (in years)	**21**
5a	Study Period (in years)	**20**
5b	Normal Fiscal Year starts:	**January 1, 2026**
5c	Partial Fiscal Year starts:	**January 1, 2026**
5d	Partial Year Length:	**12 months**
6	Site Inspection Date	**February 26, 2025**
7	Reserve Funds at start	**$140,571**
8	Rate of Return on invested Reserve Funds (%)	**1.00%**
9	Inflation Rate (%)	**4.00%**

	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
Res. Fund Contrib. (First Year).....	$6,768	$81,220	$17.44	$209.33
Res. Fund Contrib. (Remaining Years)..	$6,768	$81,220	$17.44	$209.33

Itemized Worksheet

Capital Item To Be Replaced	Quantity Count	Units	Unit cost	CapEx Budget	Expected Useful Life (or Frequency) Years	Remaining Useful Life Years	Planning Notes
Site							
Underground Drainage - Repair/Partial Replace Contingency	1	ls	$3,000.00	$3,000	1	0	Stormwater drainage system
Concrete Flatwork - Repair/Partial Replace	340	sq ft	$13.00	$4,420	5	0	50 year EUL, 10% of approx. 3,400 sq ft every 5 years
Pavers - Replace	900	sq ft	$28.00	$25,200	30	9	
Masonry Sign Monuments - Repair	8	ea	$500.00	$4,000	5	0	Assuming 50 years of useful life and replacing 10% of (4000 lf) every 5 years.
Ponds - Sediment Study	7	ea	$2,000.00	$14,000	10	0	Last completed in 2020 by Jones Fish
Ponds - Dredge Contingency	14,786	cy	$24.00	$354,864	15	2	Dredging 50% of anticipated 2040 sediment every 15 years. Approx. 632,000 sq ft pond area (7 ponds).
Ponds - Edge Repair	5,078	lf	$100.00	$507,750	15	1	Repairing 50% of the approx. 10,155 lf of pond edge every 15 years
Wetlands - Vegetation Control Project	1	ls	$30,000.00	$30,000	10	2	For Wetlands #5 and #9
Waterfalls - Repair Contingency	1	ls	$10,000.00	$10,000	10	5	
Stacked Stone Retaining Walls - Repair/Partial Replace	120	sf	$45.00	$5,400	6	5	25 year EUL, 20% of approx. 600 sq ft every 5 years
Landscaping - Partial Replace Contingency	1	ls	$13,000.00	$13,000	1	0	
Trees - Remove/Replace Contingency	1	ls	$2,000.00	$2,000	1	0	
Building Exterior							
Asphalt Shingles - Replace	4	sq	$1,000.00	$4,000	25	4	
Clay Tile Roofing - Replace	30	sq	$1,900.00	$57,000	40	19	
Stucco/Masonry - Repair	600	sq ft	$20.00	$12,000	5	0	10% of approx. 6,000 sq ft every 5 years
Doors and Windows - Replace	1	ls	$8,000.00	$8,000	30	9	4 doors, 2 windows
Building Interior							
Pump Houses - Repair/Paint	2	ea	$3,000.00	$6,000	10	5	At pond #1 and pond #6
Inspect - Attics and Foundations	6	ea	$500.00	$3,000	10	4	(4) towers and (2) pump houses

Itemized Worksheet

Capital Item To Be Replaced	Quantity Count	Units	Unit cost	CapEx Budget	Expected Useful Life (or Frequency) Years	Remaining Useful Life Years	Planning Notes
Mechanical							
Underground Utility Lines - Repair/Partial Replace Contingency	1	ls	$3,000.00	$3,000	1	0	
Wells - Repair Contingency	2	ea	$1,500.00	$3,000	1	0	Pond #1 400gpm, Pond #6
Pump House Pond #5 Plumbing - Repair/Partial Replace Contingency	1	ls	$1,000.00	$1,000	1	0	
Irrigation System - Replace	1	ls	$250,000.00	$250,000	25	14	Extended useful life due to regular repairs
Irrigation System - Repair Contingency	1	ls	$7,500.00	$7,500	1	0	
Pond Aerators - Replace	14	ea	$750.00	$10,500	8	2	(10) at pond #1, (4) at pond #3
Pond Fountains - Replace	7	ea	$1,750.00	$12,250	8	2	(1) pond #6, (3) pond #7, (3) pond #8
Pond Pumps - Replace	1	ls	$60,000.00	$60,000	10	8	Pond 1 to 2 1,100gpm, Pond 3 to 2 350gpm (3 pumps total)
Pond Aeration Compressors - Replace	4	ea	$4,000.00	$16,000	7	2	(3) Pond #1, (1) at pond #3
Electrical Boxes/Components - Repair/Partial Replace Contingency	1	ls	$5,000.00	$5,000	5	5	
Landscape Lighting - Partial Replace Contingency	1	ls	$2,000.00	$2,000	1	0	
Structure Lighting - Replace Contingency	1	ls	$15,000.00	$15,000	25	4	
Amenities							
Pergola at Pond 7/8 - Repair/Recoat	1	ea	$3,500.00	$3,500	7	0	
Pergolas at Corazon/Hyland - Repair/Recoat	2	ea	$14,000.00	$28,000	7	6	Last completed in 2025
Other							
Reserve Study - Update	1	ls	$4,437.00	$4,437	5	4	

Total Over Term with Inflation $5,174,906

* Costs are typically 10%±

** Reserve study is based on a 20 year projection of non-annual maintenance

Annual Capital Expenditure Budgets -

Line Item Budgets in Current Dollars -

Note: Values highlighted in yellow represent customized figures.

20 Year Projection
Annual totals inflated @ 4.00% at the bottom line

Year:	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Year Number:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Site															
Underground Drainage - Repair/Partial Replace Contingency	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Concrete Flatwork - Repair/Partial Replace	4,420	0	0	0	0	4,420	0	0	0	0	4,420	0	0	0	0
Pavers - Replace	0	0	0	0	0	0	0	0	0	25,200	0	0	0	0	0
Masonry Sign Monuments - Repair	4,000	0	0	0	0	4,000	0	0	0	0	4,000	0	0	0	0
Ponds - Sediment Study	14,000	0	0	0	0	0	0	0	0	0	14,000	0	0	0	0
Ponds - Dredge Contingency	0	0	118,288	118,288	118,288	0	0	0	0	0	0	0	0	0	0
Ponds - Edge Repair	0	101,550	101,550	101,550	101,550	101,550	0	0	0	0	0	0	0	0	0
Wetlands - Vegetation Control Project	0	0	30,000	0	0	0	0	0	0	0	0	0	30,000	0	0
Waterfalls - Repair Contingency	0	0	0	0	0	10,000	0	0	0	0	0	0	0	0	0
Stacked Stone Retaining Walls - Repair/Partial Replace	0	0	0	0	0	5,400	0	0	0	0	0	5,400	0	0	0
Landscaping - Partial Replace Contingency	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000
Trees - Remove/Replace Contingency	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Building Exterior															
Asphalt Shingles - Replace	0	0	0	0	4,000	0	0	0	0	0	0	0	0	0	0
Clay Tile Roofing - Replace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stucco/Masonry - Repair	12,000	0	0	0	0	12,000	0	0	0	0	12,000	0	0	0	0
Doors and Windows - Replace	0	0	0	0	0	0	0	0	0	8,000	0	0	0	0	0
Building Interior															
Pump Houses - Repair/Paint	0	0	0	0	0	6,000	0	0	0	0	0	0	0	0	0
Inspect - Attics and Foundations	0	0	0	0	3,000	0	0	0	0	0	0	0	0	0	3,000
Mechanical															
Underground Utility Lines - Repair/Partial Replace Contingency	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Wells - Repair Contingency	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Pump House Pond #5 Plumbing - Repair/Partial Replace Contingency	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Irrigation System - Replace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125,000
Irrigation System - Repair Contingency	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Pond Aerators - Replace	0	0	10,500	0	0	0	0	0	0	0	10,500	0	0	0	0
Pond Fountains - Replace	0	0	12,250	0	0	0	0	0	0	0	12,250	0	0	0	0
Pond Pumps - Replace	0	0	0	0	0	0	0	0	60,000	0	0	0	0	0	0
Pond Aeration Compressors - Replace	0	0	16,000	0	0	0	0	0	0	16,000	0	0	0	0	0
Electrical Boxes/Components - Repair/Partial Replace Contingency	0	0	0	0	0	5,000	0	0	0	0	5,000	0	0	0	0
Landscape Lighting - Partial Replace Contingency	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Structure Lighting - Replace Contingency	0	0	0	0	15,000	0	0	0	0	0	0	0	0	0	0
Amenities															
Pergola at Pond 7/8 - Repair/Recoat	3,500	0	0	0	0	0	0	3,500	0	0	0	0	0	0	3,500
Pergolas at Corazon/Hyland - Repair/Recoat	0	0	0	0	0	0	28,000	0	0	0	0	0	0	28,000	0
Other															
Reserve Study - Update	0	0	0	0	4,437	0	0	0	0	4,437	0	0	0	0	4,437
Total Costs	**72,420**	**136,050**	**323,088**	**254,338**	**280,775**	**182,870**	**62,500**	**38,000**	**94,500**	**88,137**	**96,670**	**39,900**	**64,500**	**62,500**	**170,437**
Total Costs Adjusted For 4% Inflation	**72,420**	**141,492**	**349,452**	**286,096**	**328,467**	**222,489**	**79,082**	**50,005**	**129,330**	**125,446**	**143,095**	**61,424**	**103,267**	**104,067**	**295,142**

Annual Capital Expenditure Budgets -

Line Item Budgets in Current Dollars -

20 Year Projection

Annual totals inflated @ 4.00% at the bottom line

Note: Values highlighted in yellow represent customized figures.

Note: Values highlighted in yellow represent customized figures.

	Year:	2041	2042	2043	2044	2045
	Year Number:	16	17	18	19	20
Site						
Underground Drainage - Repair/Partial Replace Contingency		3,000	3,000	3,000	3,000	3,000
Concrete Flatwork - Repair/Partial Replace		4,420	0	0	0	0
Pavers - Replace		0	0	0	0	0
Masonry Sign Monuments - Repair		4,000	0	0	0	0
Ponds - Sediment Study		0	0	0	0	0
Ponds - Dredge Contingency		0	0	118,288	118,288	118,288
Ponds - Edge Repair		101,550	101,550	101,550	101,550	101,550
Wetlands - Vegetation Control Project		0	0	0	0	0
Waterfalls - Repair Contingency		10,000	0	0	0	0
Stacked Stone Retaining Walls - Repair/Partial Replace		0	0	5,400	0	0
Landscaping - Partial Replace Contingency		13,000	13,000	13,000	13,000	13,000
Trees - Remove/Replace Contingency		2,000	2,000	2,000	2,000	2,000
Building Exterior						
Asphalt Shingles - Replace		0	0	0	0	0
Clay Tile Roofing - Replace		0	0	0	0	57,000
Stucco/Masonry - Repair		12,000	0	0	0	0
Doors and Windows - Replace		0	0	0	0	0
Building Interior						
Pump Houses - Repair/Paint		6,000	0	0	0	0
Inspect - Attics and Foundations		0	0	0	0	0
Mechanical						
Underground Utility Lines - Repair/Partial Replace Contingency		3,000	3,000	3,000	3,000	3,000
Wells - Repair Contingency		3,000	3,000	3,000	3,000	3,000
Pump House Pond #5 Plumbing - Repair/Partial Replace Continge		1,000	1,000	1,000	1,000	1,000
Irrigation System - Replace		125,000	0	0	0	0
Irrigation System - Repair Contingency		7,500	7,500	7,500	7,500	7,500
Pond Aerators - Replace		0	0	0	10,500	0
Pond Fountains - Replace		0	0	0	12,250	0
Pond Pumps - Replace		0	0	0	60,000	0
Pond Aeration Compressors - Replace		0	16,000	0	0	0
Electrical Boxes/Components - Repair/Partial Replace Contingenc		5,000	0	0	0	0
Landscape Lighting - Partial Replace Contingency		2,000	2,000	2,000	2,000	2,000
Structure Lighting - Replace Contingency		0	0	0	0	0
Amenities						
Pergola at Pond 7/8 - Repair/Recoat		0	0	0	0	0
Pergolas at Corazon/Hyland - Repair/Recoat		0	0	0	0	0
Other						
Reserve Study - Update		0	0	0	0	4,437
Total Costs		**302,470**	**152,050**	**259,738**	**337,088**	**315,775**
Total Costs Adjusted For 4% Inflation		**544,731**	**284,787**	**505,944**	**682,878**	**665,290**

Current Level of Contribution to Capital Reserves

Projected ahead unchanged throughout the Planning Period

Year	Year Number	Beginning Reserve Fund Balance	Fee Revenue	Contribution Per Unit/ Month	Investment Earnings	Total Revenue	Capital Expenditures	Ending Balance
2026	1	$140,571	$81,220	$17	$1,494	$82,714	$72,420	$150,865
2027	2	$150,865	$106,440	$23	$1,158	$107,598	$141,492	$116,971
2028	3	$116,971	$106,440	$23	$0	$106,440	$349,452	($126,041)
2029	4	($126,041)	$106,440	$23	$0	$106,440	$286,096	($305,697)
2030	5	($305,697)	$106,440	$23	$0	$106,440	$328,467	($527,724)
2031	6	($527,724)	$106,440	$23	$0	$106,440	$222,489	($643,773)
2032	7	($643,773)	$106,440	$23	$0	$106,440	$79,082	($616,416)
2033	8	($616,416)	$106,440	$23	$0	$106,440	$50,005	($559,981)
2034	9	($559,981)	$106,440	$23	$0	$106,440	$129,330	($582,871)
2035	10	($582,871)	$121,960	$26	$0	$121,960	$125,446	($586,357)
2036	11	($586,357)	$121,960	$26	$0	$121,960	$143,095	($607,492)
2037	12	($607,492)	$121,960	$26	$0	$121,960	$61,424	($546,957)
2038	13	($546,957)	$121,960	$26	$0	$121,960	$103,267	($528,263)
2039	14	($528,263)	$121,960	$26	$0	$121,960	$104,067	($510,370)
2040	15	($510,370)	$121,960	$26	$0	$121,960	$295,142	($683,552)
2041	16	($683,552)	$121,960	$26	$0	$121,960	$544,731	($1,106,323)
2042	17	($1,106,323)	$121,960	$26	$0	$121,960	$284,787	($1,269,150)
2043	18	($1,269,150)	$137,480	$30	$0	$137,480	$505,944	($1,637,614)
2044	19	($1,637,614)	$137,480	$30	$0	$137,480	$682,878	($2,183,012)
2045	20	($2,183,012)	$137,480	$30	$0	$137,480	$665,290	($2,710,823)

Alternate Funding Plan No. 1 - Threshold Funding (50% of Avg Annual Expenditure)

Year	Year Number	Beginning Reserve Fund Balance	Fee Revenue	Contribution Per Unit/ Month	Investment Earnings	Total Revenue	Capital Expenditures	Ending Balance	Minimum Threshold Balance
2026	1	$140,571	$81,220	$17	$1,494	$82,714	$72,420	$150,865	$129,373
2027	2	$150,865	$274,704	$59	$2,841	$277,545	$141,492	$286,917	$134,548
2028	3	$286,917	$274,704	$59	$2,122	$276,826	$349,452	$214,291	$139,929
2029	4	$214,291	$274,704	$59	$2,029	$276,733	$286,096	$204,929	$145,527
2030	5	$204,929	$274,704	$59	$1,512	$276,216	$328,467	$152,677	$151,348
2031	6	$152,677	$274,704	$59	$2,049	$276,753	$222,489	$206,941	$157,402
2032	7	$206,941	$274,704	$59	$4,026	$278,730	$79,082	$406,588	$163,698
2033	8	$406,588	$274,704	$59	$6,313	$281,017	$50,005	$637,599	$170,246
2034	9	$637,599	$274,704	$59	$7,830	$282,534	$129,330	$790,803	$177,055
2035	10	$790,803	$274,704	$59	$9,401	$284,105	$125,446	$949,462	$184,138
2036	11	$949,462	$274,704	$59	$10,811	$285,515	$143,095	$1,091,881	$191,503
2037	12	$1,091,881	$274,704	$59	$13,052	$287,756	$61,424	$1,318,212	$199,163
2038	13	$1,318,212	$274,704	$59	$14,896	$289,600	$103,267	$1,504,546	$207,130
2039	14	$1,504,546	$274,704	$59	$16,752	$291,456	$104,067	$1,691,935	$215,415
2040	15	$1,691,935	$274,704	$59	$16,715	$291,419	$295,142	$1,688,212	$224,032
2041	16	$1,688,212	$274,704	$59	$14,182	$288,886	$544,731	$1,432,367	$232,993
2042	17	$1,432,367	$274,704	$59	$14,223	$288,927	$284,787	$1,436,507	$242,313
2043	18	$1,436,507	$274,704	$59	$12,053	$286,757	$505,944	$1,217,320	$252,005
2044	19	$1,217,320	$274,704	$59	$8,091	$282,795	$682,878	$817,237	$262,085
2045	20	$817,237	$274,704	$59	$4,267	$278,971	$665,290	$430,917	$272,569

Alternate Funding Plan No. 2 - Baseline Funding

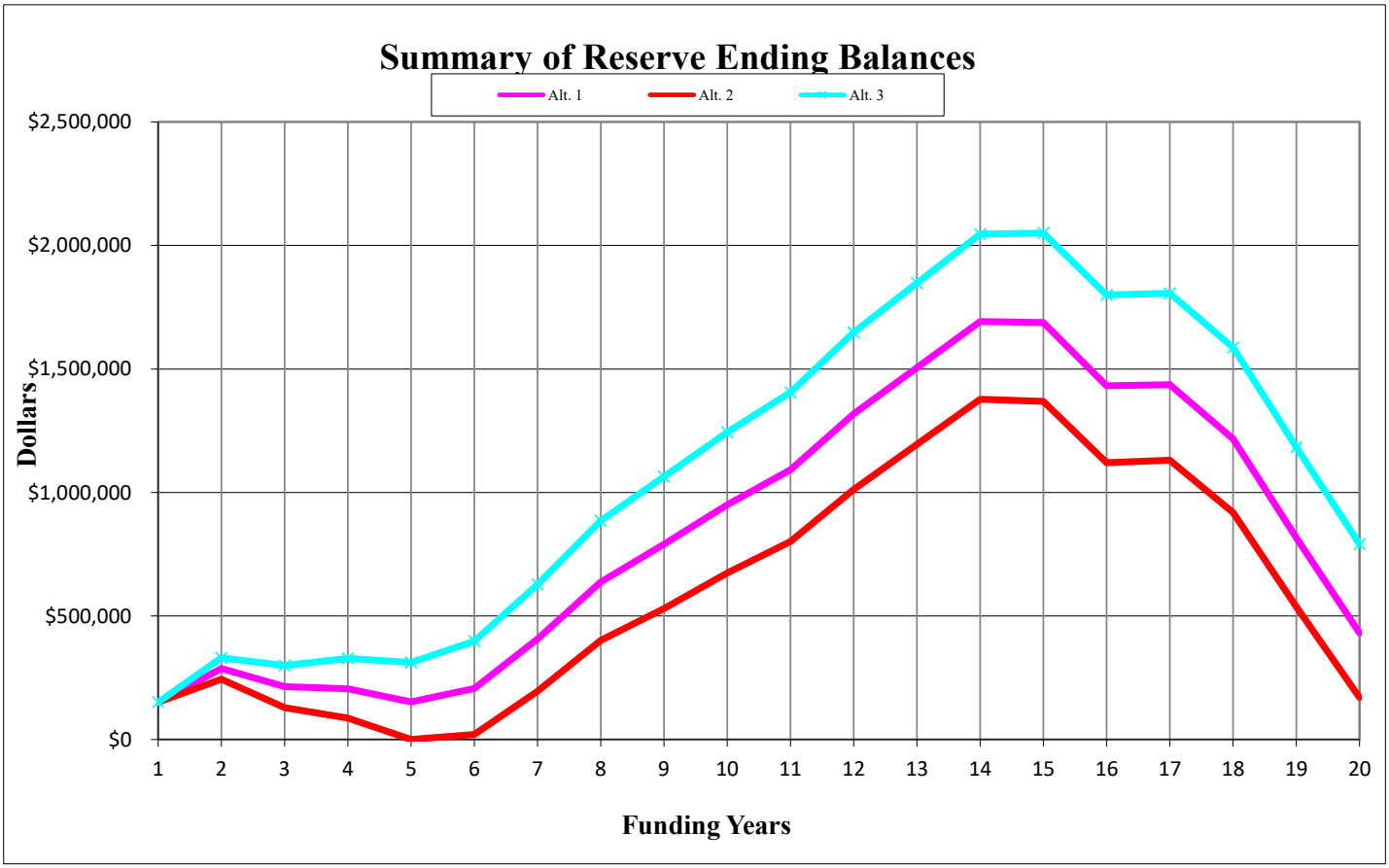
Year	Year Number	Beginning Reserve Fund Balance	Fee Revenue	Contribution Per Unit/ Month	Investment Earnings	Total Revenue	Capital Expenditures	Ending Balance	Minimum Threshold Balance
2026	1	$140,571	$81,220	$17	$1,494	$82,714	$72,420	$150,865	$0
2027	2	$150,865	$232,800	$50	$2,422	$235,222	$141,492	$244,594	$0
2028	3	$244,594	$232,800	$50	$1,279	$234,079	$349,452	$129,222	$0
2029	4	$129,222	$242,345	$52	$855	$243,200	$286,096	$86,326	$0
2030	5	$86,326	$242,345	$52	$2	$242,347	$328,467	$206	$0
2031	6	$206	$242,345	$52	$201	$242,545	$222,489	$20,262	$0
2032	7	$20,262	$252,281	$54	$1,935	$254,216	$79,082	$195,395	$0
2033	8	$195,395	$252,281	$54	$3,977	$256,258	$50,005	$401,647	$0
2034	9	$401,647	$252,281	$54	$5,246	$257,527	$129,330	$529,844	$0
2035	10	$529,844	$262,624	$56	$6,670	$269,295	$125,446	$673,692	$0
2036	11	$673,692	$262,624	$56	$7,932	$270,557	$143,095	$801,154	$0
2037	12	$801,154	$262,624	$56	$10,024	$272,648	$61,424	$1,012,378	$0
2038	13	$1,012,378	$273,392	$59	$11,825	$285,217	$103,267	$1,194,328	$0
2039	14	$1,194,328	$273,392	$59	$13,637	$287,029	$104,067	$1,377,290	$0
2040	15	$1,377,290	$273,392	$59	$13,555	$286,947	$295,142	$1,369,095	$0
2041	16	$1,369,095	$284,601	$61	$11,090	$295,691	$544,731	$1,120,055	$0
2042	17	$1,120,055	$284,601	$61	$11,199	$295,800	$284,787	$1,131,068	$0
2043	18	$1,131,068	$284,601	$61	$9,097	$293,698	$505,944	$918,822	$0
2044	19	$918,822	$296,270	$64	$5,322	$301,592	$682,878	$537,536	$0
2045	20	$537,536	$296,270	$64	$1,685	$297,955	$665,290	$170,200	$0

Alternate Funding Plan No. 3 - Threshold Funding (100% of Avg Annual Expenditure)

Year	Year Number	Beginning Reserve Fund Balance	Fee Revenue	Contribution Per Unit/ Month	Investment Earnings	Total Revenue	Capital Expenditures	Ending Balance	Minimum Threshold Balance
2026	1	$140,571	$81,220	$17	$1,494	$82,714	$72,420	$150,865	$258,745
2027	2	$150,865	$318,051	$68	$3,274	$321,326	$141,492	$330,698	$269,095
2028	3	$330,698	$314,871	$68	$2,961	$317,832	$349,452	$299,078	$279,859
2029	4	$299,078	$311,722	$67	$3,247	$314,969	$286,096	$327,952	$291,053
2030	5	$327,952	$308,605	$66	$3,081	$311,686	$328,467	$311,171	$302,695
2031	6	$311,171	$305,519	$66	$3,942	$309,461	$222,489	$398,142	$314,803
2032	7	$398,142	$302,464	$65	$6,215	$308,679	$79,082	$627,739	$327,395
2033	8	$627,739	$299,439	$64	$8,772	$308,211	$50,005	$885,944	$340,491
2034	9	$885,944	$296,445	$64	$10,531	$306,975	$129,330	$1,063,590	$354,111
2035	10	$1,063,590	$293,480	$63	$12,316	$305,796	$125,446	$1,243,940	$368,275
2036	11	$1,243,940	$290,545	$62	$13,914	$304,459	$143,095	$1,405,304	$383,006
2037	12	$1,405,304	$287,640	$62	$16,315	$303,955	$61,424	$1,647,835	$398,326
2038	13	$1,647,835	$284,764	$61	$18,293	$303,057	$103,267	$1,847,625	$414,260
2039	14	$1,847,625	$281,916	$61	$20,255	$302,171	$104,067	$2,045,728	$430,830
2040	15	$2,045,728	$279,097	$60	$20,297	$299,394	$295,142	$2,049,980	$448,063
2041	16	$2,049,980	$276,306	$59	$17,816	$294,121	$544,731	$1,799,370	$465,986
2042	17	$1,799,370	$273,543	$59	$17,881	$291,424	$284,787	$1,806,007	$484,625
2043	18	$1,806,007	$270,807	$58	$15,709	$286,516	$505,944	$1,586,580	$504,010
2044	19	$1,586,580	$268,099	$58	$11,718	$279,817	$682,878	$1,183,518	$524,170
2045	20	$1,183,518	$265,418	$57	$7,836	$273,255	$665,290	$791,483	$545,137

Summary of Reserve Ending Balances

Year	Year Number	Yearly Expenditures	Alt. 1	Alt. 2	Alt. 3
2026	1	$72,420	$150,865	$150,865	$150,865
2027	2	$141,492	$286,917	$244,594	$330,698
2028	3	$349,452	$214,291	$129,222	$299,078
2029	4	$286,096	$204,929	$86,326	$327,952
2030	5	$328,467	$152,677	$206	$311,171
2031	6	$222,489	$206,941	$20,262	$398,142
2032	7	$79,082	$406,588	$195,395	$627,739
2033	8	$50,005	$637,599	$401,647	$885,944
2034	9	$129,330	$790,803	$529,844	$1,063,590
2035	10	$125,446	$949,462	$673,692	$1,243,940
2036	11	$143,095	$1,091,881	$801,154	$1,405,304
2037	12	$61,424	$1,318,212	$1,012,378	$1,647,835
2038	13	$103,267	$1,504,546	$1,194,328	$1,847,625
2039	14	$104,067	$1,691,935	$1,377,290	$2,045,728
2040	15	$295,142	$1,688,212	$1,369,095	$2,049,980
2041	16	$544,731	$1,432,367	$1,120,055	$1,799,370
2042	17	$284,787	$1,436,507	$1,131,068	$1,806,007
2043	18	$505,944	$1,217,320	$918,822	$1,586,580
2044	19	$682,878	$817,237	$537,536	$1,183,518
2045	20	$665,290	$430,917	$170,200	$791,483



APPENDIX B
PHOTOGRAPHS

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Aerial photograph of community. This image is from the auditor.

Photo Number
1

Description:
Roadway map of community. North is up. This image is from Google Maps.

Photo Number
2

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
An example of the typical stormwater catch basin covers throughout the community.

Photo Number
3

Description:
Cracked concrete and standing water on the concrete surface.

Photo Number
4

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Deteriorated pavers and settlement at the pond #6 pump house.

Photo Number
5

Description:
An example of the masonry sign monuments.

Photo Number
6

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Two areas of deterioration observed on most monuments included corroding stucco corner beads and failed stone joint sealant/mortar.

Photo Number
7

Description:
A map of the community ponds/wetlands. This map is by others.

Photo Number
8

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Eroding west edge of pond #1. Note the pump house.

Photo Number
9

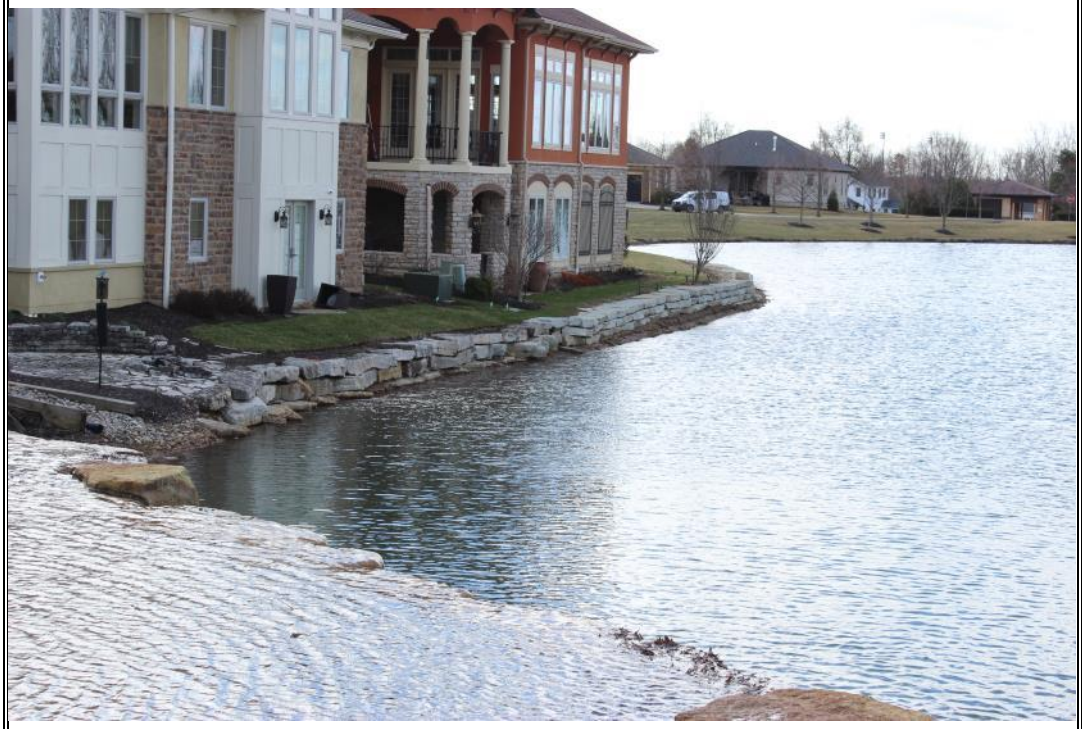
Description:
Waterfall between ponds #1 and #2.

Photo Number
10

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025



Description:
Some stone edging along the east bank of pond #2.

Photo Number
11

Description:
Waterfalls at ponds #2 and #3.

Photo Number
12

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Failing stone veneer at a headwall at pond #4.

Photo Number
13

Description:
Wetland #5.

Photo Number
14

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Pond #6.

Photo Number
15

Description:
Pond #7.

Photo Number
16

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Eroding edge of pond #8

Photo Number
17

Description:
Vegetation in wetland #9.

Photo Number
18

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Signs of settlement at the stacked stone retaining wall on the south side of pond #6.

Photo Number
19

Description:
An example of site signage.

Photo Number
20

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
The pump house asphalt shingle roof.

Photo Number
21

Description:
The pump house clay tile roof. Note the deteriorated wood fascia board.

Photo Number
22

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Stucco which runs too close to the ground likely causing moisture damage and corroding corner beads.

Photo Number
23

Description:
A masonry monument in need of powerwashing and sealing.

Photo Number
24

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Deteriorated engineered siding on the pump house.

Photo Number
25

Description:
A deteriorated door and door hardware on the pump house.

Photo Number
26

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
A damaged window on the pump house. Note the mulch piled above the base of the masonry stone veneer.

Photo Number
27

Description:
The interior of the pond #6 pump house. Note the failing ceiling insulation.

Photo Number
28

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
The interior of the pond #6 pump house. Note gap to the outside, missing wall insulation and evidence of mice.

Photo Number
29

Description:
The interior of the pond #1 pump house.

Photo Number
30

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Metal riser and cap for an underground waterline stop valve. Note also the landscaping light.

Photo Number
31

Description:
A well head near pond #6.

Photo Number
32

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
A well head near pond #1.

Photo Number
33

Description:
The piping, valves, backflow preventers and meters inside the interior of the pond #6 pump house.

Photo Number
34

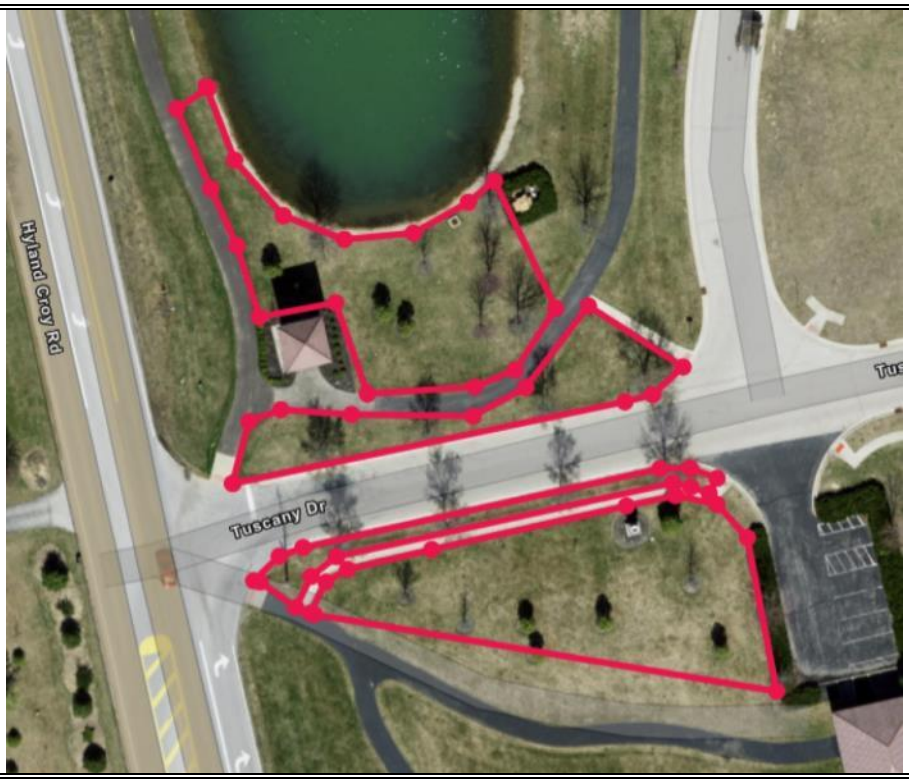
Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Irrigation system map at the Corazon/Hyland intersection. This map was prepared by others. Note that the board reports that the purple system has been abandoned.

Photo Number
35



Description:
Irrigation system map at the Tuscany/Hyland intersection. This map was prepared by others.

Photo Number
36

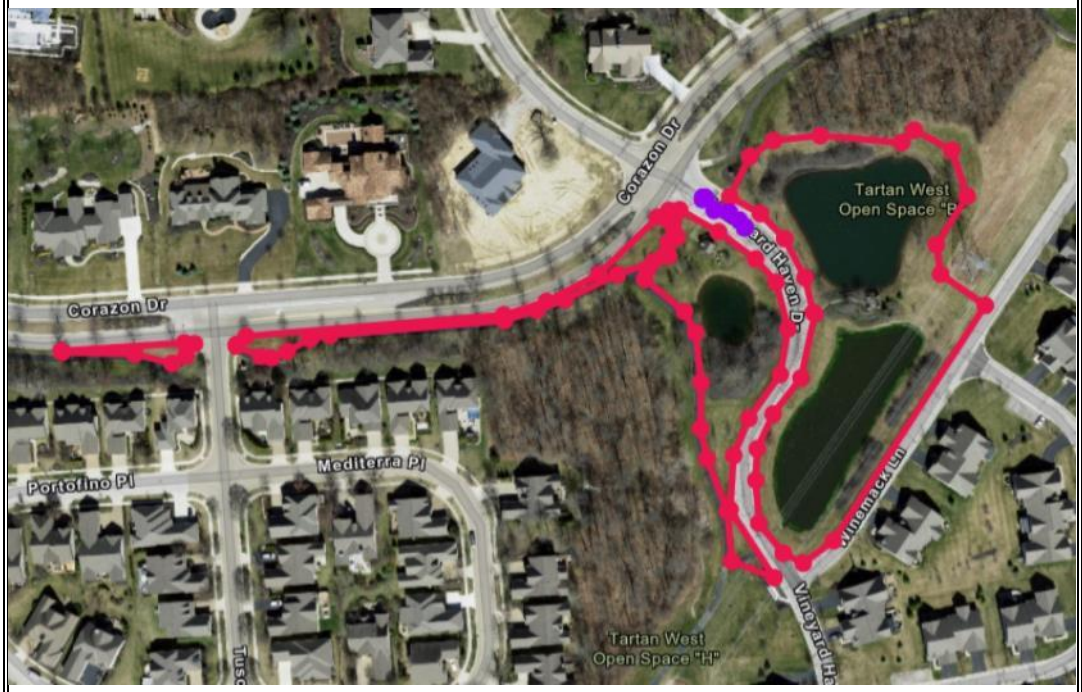
Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Irrigation system map at the Calabria islands. This map was prepared by others.

Photo Number
37



Description:
Irrigation system map at the Corazon/Vineyard Haven intersection. This map was prepared by others.

Photo Number
38

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

	**Description:** Irrigation controller at pond #6. **Photo Number** **39**
	**Description:** Irrigation controller on south side of pond #2. **Photo Number** **40**

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Typical irrigation valve box. These are located throughout the community and serve the irrigation systems. Some boxes are rectangular.

Photo Number
41

Description:
An irrigation system head.

Photo Number
42

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
The abandoned irrigation system at the vineyard.

Photo Number
43

Description:
Pond aeration equipment inside the pump house at pond #1.

Photo Number
44

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Pond pumps near the south end of pond #2.

Photo Number
45

Description:
An electrical panel not easily accessible and without proper clearance on the west side of ponds #1/2.

Photo Number
46

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Electrical panels and transformer inside the pump house at pond #1.

Photo Number
47

Description:
A corroded electrical breaker panel at pond #6.

Photo Number
48

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
Control and electrical panels between ponds #7 & #8.

Photo Number
49

Description:
Typical landscaping lights at the monuments. Several of these were found to be covered with mulch.

Photo Number
50

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
An exterior light on the pump house at pond #6. Note the 2 water meter reading devices.

Photo Number
51

Description:
Pergola between ponds #7 and #8. This pergola is in need of recoating.

Photo Number
52

Location:
Tartan West
Dublin, Ohio

Photo Taken by:
Adam Rich, P.E., R.S.

Date:
Feb 26, 2025

Description:
One of two Pergolas at the Corazon/Hyland intersection. It was reported that these are planned to be refurbished in 2025.

Photo Number
53

APPENDIX C
PROJECT TEAM QUALIFICATIONS

LISZKAY CRITERIUM ENGINEERS

LISZKAY CRITERIUM® ENGINEERS

BUILDING INSPECTION ENGINEERS
PROUDLY SERVING CENTRAL OHIO SINCE 1970

Adam Rich, P.E., R.S.

President

Adam Rich is a licensed professional engineer from New Albany, Ohio with over 12 years of experience in structural and civil engineering-related services. Having performed more than 600 residential building and other structural inspections. Work has included structural investigations and structural design. Serving in roles as design team leader, project manager, COO, and President. Mr. Rich has expertise in structural engineering, organizational management, financial modeling, and process development.

Prior to joining Criterium Liszkay Engineers, Adam spent eight years as an Engineering consultant. Designing and inspecting projects in the industrial, power, and bulk materials handling industries. He also spent six years in property management completing condition assessments of several hundred residential single and multi-family properties.

In addition to his qualifications and experience in engineering, Adam is also a real estate licensee. Mr. Rich held the seats of treasurer and president to a 100-unit condominium association, and treasurer of a commercial building condominium association.

EDUCATION, LICENSURE, CREDENTIALS AND PROFESSIONAL AFFILIATION

- The Ohio State University, Bachelors of Science, Civil Engineering with a specialization in Structures. (2006)
- Licensed Professional Engineer - State of Ohio since 2011, State of Virginia since 2011
- Reserve Specialist (R.S.) Designation - Community Associations Institute
- Licensed Real Estate Salesperson - State of Ohio since 2013
- A member of the Community Associations Institute (CAI), Columbus Realtors, Columbus Commercial and Industrial Investment Realtors (CCIIR)

adam@criteriumliszkay.com
cell: 614-218-0686 direct office: 614-418-7202