

GTW LVCC

# MULTI POOL PROJECT



## **Background and Current Situation**

The community currently has 10 swimming pools available for residents' use and enjoyment. These pools are sequentially numbered from 1 through 10, starting on the east side with Pool 1 and ending on the west side with Pool 10.

Over time, through normal wear and tear as well as insufficient maintenance and capital investment, many of these 10 pools have fallen into disrepair and no longer meet current safety codes and regulations. Pools 3 through 8 in particular have been identified as needing major renovations and repairs in order to be safely usable again by residents.

Pool 3 has significant structural issues, with a large void detected underneath the pool during recent demolition work. This void was likely caused over time by water leaking and eroding the soil underneath, which contains gypsum that can dissolve easily. The void requires major subgrade remediation including densification and soil stabilization. Without proper structural repairs, Pool 3 could be at risk of collapse.

Pools 4 through 8 all have a range of problems identified in recent Southern Nevada Health District (SNHD) inspections. Issues include cracked and uneven pool decks, deteriorated expansion joints, chipped and damaged plaster interior finish, broken or missing tiles, improper or outdated electrical and plumbing systems, and more. All of these pools will require comprehensive remodeling projects to address these issues and meet current commercial pool codes.

In addition to the work on the pool structure itself, the areas surrounding the pools have deficiencies that must be addressed. The fencing around most pools is aging and either unstable or short of the new minimum height standards. Surrounding decks need complete replacement and resurfacing in many cases.

Finally, recent changes to Suction Outlet Fitting Assembly (SOFA) regulations require upgrades to the pump and drainage systems to prevent suction entrapment hazards. Essentially, the drains and pipes need re-engineering to eliminate any risk of swimmers being trapped underwater due to suction forces.

All of these major repairs and renovations are well beyond basic maintenance, and require significant capital investment. Due to budget limitations, the community does not have the reserves available to renovate all 10 pools at once. Therefore, a strategic multi-year plan is needed to phase the work in a cost-effective manner over time as funding allows.

Pool Conditions Assessment

**Pool 1:**

- Southern Nevada Health District identified some missing tiles that must be replaced. Also noted etching in the plaster finish in some areas.
- The issues appear relatively minor currently, but should be monitored and addressed to prevent more severe deterioration over time.



**Pool 2:**

- No major issues indicated in recent SNHD inspection report.
- Minimal repairs or renovations anticipated to be required in the near future.



**Pool 3:**

- Closed indefinitely due to major void detected underneath pool during demolition work.
- Geotechnical report recommended subgrade densification and soil recompaction to stabilize structure.
- High probability of collapse without proper structural repairs.
- Two bid options obtained: \$19,200 to fill in and demolish pool completely, or higher cost to fully repair and reopen pool.



**Pool 4:**

- SNHD identified multiple cracks and elevation variations in the concrete deck.
- Interior plaster finish has been painted over rather than proper plaster surface applied.
- Needs full resurfacing and recap to meet commercial pool requirements.
- Many tiles damaged or missing. All tiles likely need replacement due to aging and detachment issues.
- Complete renovation required for structural integrity and to meet code.



**Pool 5:**

- SNHD report indicated degrading concrete deck with damaged expansion joints.
- Plaster interior finish is etched, chipped and generally in poor condition.
- Full resurfacing and recap required.
- Pump and computer equipment recently replaced due to failure.



**Pool 6:**

- Deck and interior finish in poor condition.
- Pump and equipment non-functional.
- Closed for approximately 3 years - full renovation overdue.



## Pool 7:

- SNHD identified cracked deck, missing tiles, plaster etching.
- Recently replumbed to address water leaks.
- Currently closed until further renovations completed.



## Pool 8:

- SNHD reported cracked and spalling deck surface.
- Multiple missing tiles, pervasive plaster etching and discoloration.
- Recently closed due to extent of disrepair.



**Pools 9 and 10:**

- SNHD noted some plaster etching and minor tile damage.
- Deck coating beginning to peel on Pool 10.
- Equipment recently updated on both pools.
- Limited repairs needed in short term.



In summary, Pools 3 through 8 all require major overhauls, while Pools 1, 2, 9 and 10 need mostly general maintenance and minor repairs at this stage. A strategic capital improvement plan is imperative to maximize the reuse of community assets.

### **Strategy**

When making decisions, it is important to consider the future costs and benefits of a course of action, rather than focusing only on resources already invested. There is a common bias known as the "sunk cost fallacy" where people feel compelled to continue pursuing a failing endeavor simply because they have already spent time, money, or effort on it.

To avoid this faulty logic, we need to be aware of the sunk cost fallacy and make rational choices based on a clear analysis of future costs versus future benefits. Just because we've already spent money or resources doesn't necessarily mean we should keep spending more. Rather, we should try to objectively weigh whether further allocation of resources is likely to pay off.

If the future projected costs outweigh the potential future gains, it is often wisest to simply move on rather than throwing good money after bad. Rather than perpetually chasing our sunk costs, we need to know when to cut our losses. Overcoming the strong pull of the sunk cost fallacy requires conscious focus on future productivity rather than past practices.

In summary, when evaluating any business or investment decision, we must avoid emotional attachment to prior resource expenditure. Carefully project future costs and outcomes instead. **Don't just consider how much has already been spent - analyze where additional investments are most likely to generate positive returns going forward.**

### **Pool Renovation Phased Plan**

To balance the need for renovations with budget limitations, a two-phase pool restoration plan is proposed spanning 2 years.

Phase 1 (Year 1):

Pool 3:

- Fill in completely at an estimated cost of \$19,200 - \$78,000, rather than attempting expensive subgrade structural repairs. Removes a collapsed safety hazard.

Pool 4:

- Complete commercial remodel including replastering, retiling, replacing handrails and pool lights. Electrical and plumbing upgrades.

- Repair/replace surrounding pool deck and install new concrete cantilever forms.
- Install new 7 foot tall safety fencing and gates.
- Estimated cost: \$146,345

**Pool 6:**

- Complete commercial remodel including replastering, retiling, replacing handrails and pool lights. Electrical and plumbing upgrades.
- Repair/replace surrounding pool deck and install new concrete cantilever forms.
- Install new 7 foot tall safety fencing and gates.
- Estimated cost: \$139,915

Total spend in Phase 1 = \$364,260

**Phase 2 (Year 2):****Pool 5:**

- Complete commercial remodel including replastering, retiling, replacing handrails and pool lights. Electrical and plumbing upgrades.
- Repair/replace surrounding pool deck and install new concrete cantilever forms.
- Install new 7 foot tall safety fencing and gates.
- Estimated cost: \$146,345

**Pool 7:**

- Complete commercial remodel including replastering, retiling, replacing handrails and pool lights. Electrical and plumbing upgrades.
- Repair/replace surrounding pool deck and install new concrete cantilever forms.
- Install new 7 foot tall safety fencing and gates.
- Estimated cost: \$146,345

**Pool 8:**

- Complete commercial remodel including replastering, retiling, replacing handrails and pool lights. Electrical and plumbing upgrades.
- Repair/replace surrounding pool deck and install new concrete cantilever forms.
- Install new 7 foot tall safety fencing and gates.
- Estimated cost: \$146,345

Total spend in Phase 2 = \$438,035

The total estimated cost for the complete pool renovation plan is \$802,295. This allows the most critical work to be completed in the first 1-2 years, while spreading expenditures over time based on budget capacity.

**5 Year Repayment Plan**

To fund this project while minimizing the annual impact on other community budgets, a 5 year repayment schedule is recommended following completion of the phased renovations.

- Total renovation cost: \$802,295
- Repayment period: 5 years

- Annual payment: \$148,899 - \$160,459
- Monthly payment: \$12,408- \$13,372

This results in equal monthly payments of \$12,408 - \$13,372 over the 60 month repayment term. Construction work would be completed in the first 2 years, followed by the ongoing repayment over years 3 through 5.

### **Conclusion and Recommendations**

In conclusion, this pool renovation proposal outlines a pragmatic, cost-effective approach to refresh the community's most valuable amenities over time. The work will bring all pools up to the latest safety codes, enhance resident enjoyment, and increase property values.

The recommended plan has several benefits:

- It prioritizes the most pressing repairs right away to avoid any safety issues.
- The phased 2 year schedule maximizes efficiency and cost control.
- The 5 year repayment term minimizes impact on annual community budgets.
- Pool renovations are appropriately spaced out based on budget capacity.

This report provides extensive detail on current conditions, specific repairs needed, costs estimates, project phasing, and the repayment structure. Please advise if the Board would like any aspects of the pool renovation plan modified or if additional details are needed on any section. Community input can also be solicited to finalize the project scope, additional pools to close, and specifications. We look forward to working together to renew these community assets and enhance outdoor recreation for all residents.