



Centennial Park Aquatic Center (CPAC) & Orland Park Health and Fitness Center (OPH&FC) Modernization Projects Update

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OPH&FC and CPAC Modernization Projects

Why are the projects needed?

- After **extensive engineering evaluation** of the facility's aging aquatic infrastructure, several major mechanical systems supporting the pools and whirlpools are **nearing the end of their useful life and are at increasing risk of failure**.
- Many of the systems serving the lap pool, therapy pool and whirlpools are **original equipment** installed in the facility decades ago. Engineering evaluations have identified the pool filtration systems, heaters and supporting mechanical infrastructure as critical components requiring replacement to ensure the long-term reliability and safe operation of the aquatic area.
- While these systems are currently operational, aquatic facilities are heavily **regulated** by the Illinois Department of Public Health (IDPH). Unlike many building repairs, a **major failure involving filtration, circulation or water treatment systems would require immediate closure of the pools for public health and safety reasons** until repairs, inspections and regulatory approvals are completed.
- IDPH view the mechanical systems as an operating unit so we can't piece meal replacement of equipment.

OPH&FC and CPAC Modernization Projects

Proactive versus Reactive Solution

- If replacement of this infrastructure were delayed until a major failure occurred, the facility could face a significantly longer and less predictable shutdown. In an emergency failure scenario, engineering, permitting, IDPH approvals and procurement of specialized aquatic equipment would all need to occur before construction could even begin. Given current lead times for specialized aquatic equipment, that process could **substantially extend the closure period** beyond what is currently anticipated.
- By proactively planning and completing this work now, the Village can coordinate engineering, permitting, regulatory approvals and equipment procurement in advance, ultimately **reducing the total downtime compared to an emergency closure caused by equipment failure**. This proactive approach also helps reduce the likelihood of unexpected service interruptions in the future.

OPH&FC Modernization Project

OPH&FC Purpose and Maximizing construction period

- **Primary purpose: Replace critical aquatic infrastructure and modernize aging mechanical systems necessary for continued operation of the Center's aquatic features.**
- **Critical infrastructure improvements include:**
 - Expansion and renovation of the pool pump room
 - Construction of a new underground surge tank
 - New chlorine room and storage room
 - Replacement of aging filtration systems and heaters
 - New filters and heaters for the men's and women's whirlpools
- **While the pools are already closed, the project will also complete several additional improvements to help avoid future closures including:**
 - Resurfacing of the lap and therapy pools
 - Repair and replacement of all pool lighting
 - Installation of new chair lifts
 - Painting of the pool area ceiling
 - Repair and retiling of the floor drains and flooring from the men's locker room to the pool area
 - Retiling of the men's and women's whirlpools

CPAC Modernization Project

CPAC Purpose

- **Primary purpose:** Replace critical aquatic infrastructure and modernize aging mechanical systems necessary for continued operation of the Center's aquatic features.
- Critical infrastructure improvements include:
 - The modernization technology for quality of water filtration for 1,700 visitors a day.
 - The project expands a sump pit and surge tank
 - The mechanical room will also be expanded with new walls, floor, and roof to accommodate new energy efficient equipment like pumps, water heaters, filter tanks, strainers, backwash tanks, and halo control units to all equipment. Equipment outside will be moved into the building so out of the weather.
 - All the electric piping, wiring, and panels will be replaced, and main panels will be consolidated to a single electrical room.
 - A dedicated separate chlorine room will be constructed next to mechanical room for easy access and safe filling of liquid chlorine in a spill containment room.
 - A storage room for pool maintenance equipment is also planned next to mechanical room for annual maintenance at pool.

CPAC Modernization Project

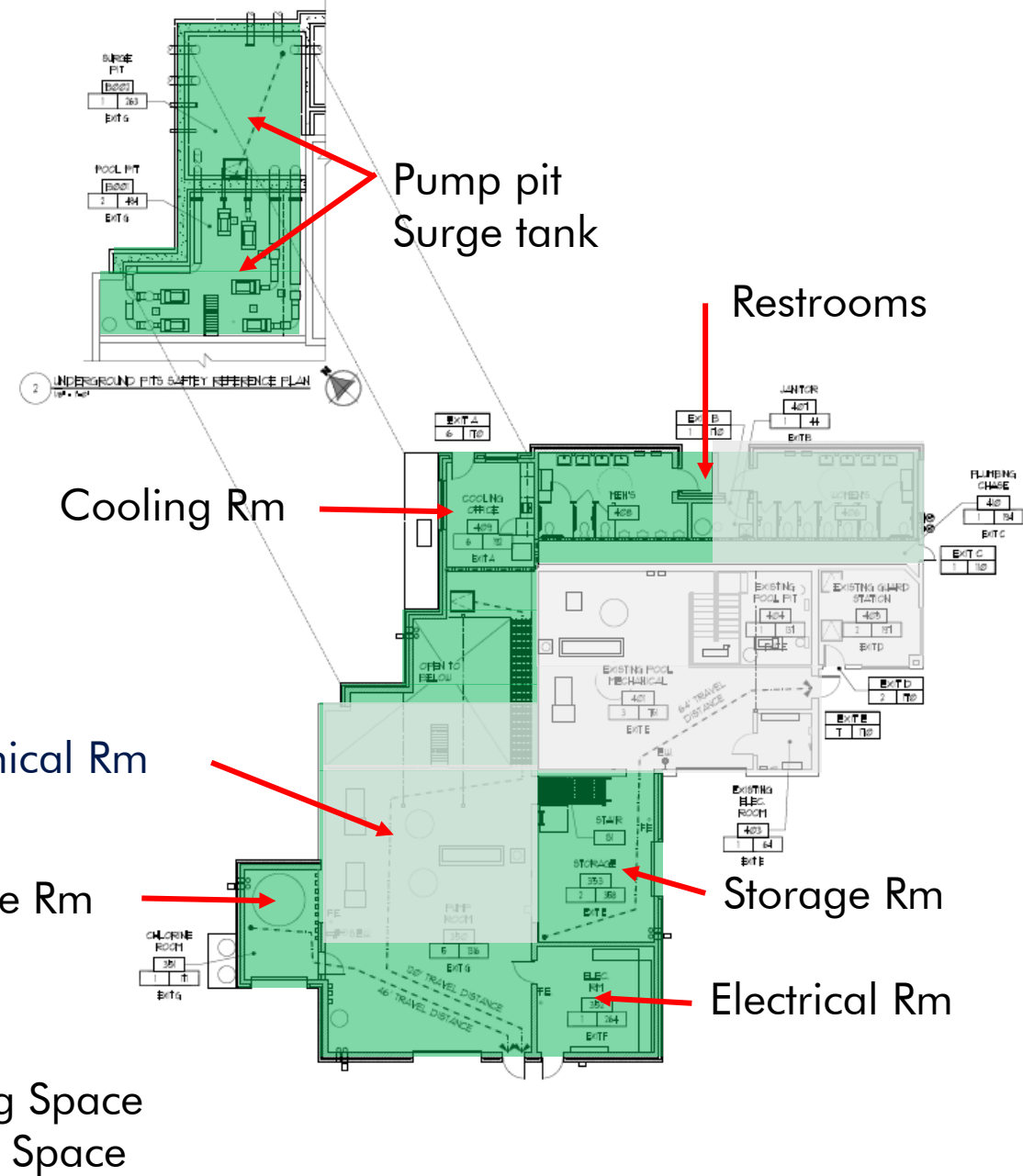
What is else in the scope?

- While the pools are already closed, the project will also complete several **additional improvements** including:
 - The existing restrooms are undersized and will be demoed. The restrooms will be enlarged to meet IDPH guidelines and ADA requirements for allowed pool operation population. In addition, restrooms should encourage more usage instead of in the pool. Design accommodates maintenance staff access to plumbing chase for future maintenance and repairs.
 - A cooling room is also planned for heat exhaustion for pool visitors and lifeguard staff.

CPAC Modernization Project

Scope of Work CPAC:

- Expansion of the pool pump building and replacement of pool operating equipment
- Expansion of the pump pit, underground surge tank, and mechanical room
- Construction of chlorine room, electrical room, and storage room
- Demolition of existing restrooms and construction of enlarged restroom facilities
- Installation of a new cooling room for swimmers and lifeguards



OPH&FC and CPAC Modernization Projects

Stuckey Construction

- **Stuckey Construction Inc Awarded project**
 - Positive previous experience with them.
 - High level of organization, professionalism, and efficiency
 - Completed work ahead of schedule
 - No cost-related change orders were required
 - Quality control was consistently maintained
 - Pre-qualified general contractor with the IDPH
- **Contract Awarded Amount**

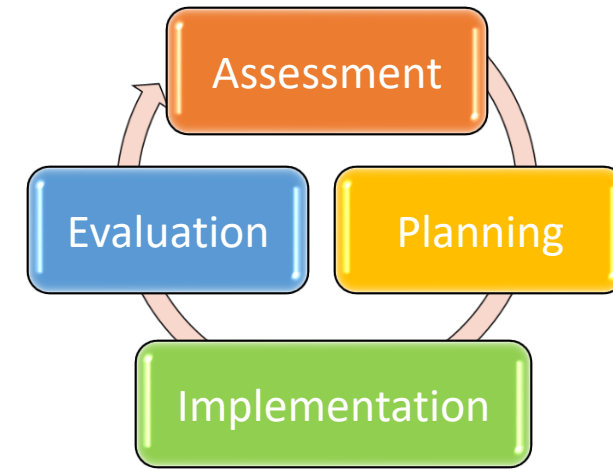
Work:	\$12,160,000	(\$8,140,000 CPAC/\$4,020,000 OPH&FC)
5% Contingency:	<u>\$ 608,000</u>	
Total:	\$12,768,000	
- **Funding:** Crosses FY26/27 Budgets
- **Schedule:**
 - Currently, final IDPH approvals are pending. Other submittal items have been approved for purchase.
 - Work will begin near Labor Day with the shut down of CPAC for both locations.
 - 8 month construction period

Questions

OPH&FC and CPAC Modernization Projects

Approval of contract for work to commence

- **Assessments:** In 2021, OPH&FC facility assessment was completed but did not include pool area as equipment was already in advanced age and in dilapidated conditions. It was on Public Works/Recreation and Parks repair list already. In 2023, CPAC assessment was completed.
- **Planning/Design:**
 - In 2019, OPH&FC pool & whirlpool refinishing planned but was postponed. Pool equipment was to follow those projects.
 - In 2022, Village explored if OPH&FC would be purchased by others. No offers. Decision made to invest major renovation projects in building.
 - In 2023, preliminary estimates were included in Capital Planning/Financial planning.
 - In 2024/2025, designs were completed and sent to IDPH for review.
 - In 2025, Recreation & Parks and Village leadership discussions were held, and construction period was determined to keep CPAC pool open in 2026 and 2027. To align projects, OPH&FC pool would also be same period.
 - In winter 2025, project was bid so that materials could be procured ahead of construction window after Labor Day to minimize possible closure of CPAC.
 - Construction window is short period and funding crosses fiscal years of 2026/2027.



OPH&FC and CPAC Modernization Projects

Why are the projects needed?

- **Life Expectancy of Equipment:**
 - Each piece of equipment has different life expectancy, but the larger filter system is 20 years. While the bell was rung 10 years ago for replacement, with our certified pool operator's maintenance we have extended the equipment life. Today, parts are no longer available, and equipment could break at any point. This would shut down all or one of pools, lazy river, or slides depending on what equipment fails.
 - When we got OPH&FC from Palos Hospital, the assessment of equipment was they were at end of life, were not maintained well like CPAC, and were band-aided with tape in some locations. Recently, a pump failed so we borrowed from CPAC after the pool was shut down for summer. We have been welding metal patches to paper thin outer skin sand filters. Leaks are common on the system. We extended the equipment life out another 7 years, but the equipment must be replaced. The pools (lap pool/therapy pool) either needs to be shut down or equipment needs to be replaced.

OPH&FC and CPAC Modernization Projects

Are there other options to consider?

- **Is complete replacement of equipment necessary for each of these pools?** Yes. These are a commercial sized equipment components that are designed to meet IDPH standards since public pools. For both buildings, they are well past life expectancy and have been postponed for over 10 years already and at risk of abrupt termination of pool operations.
- **Could repairs of the most problematic equipment be an alternative approach?** No. IDPH requires the equipment to be a defined system so equipment can't be individually swapped for a different kind of water filtration or piece-by-piece replacements. The equipment is much larger than residential pools. CPAC has slides, a lazy river, an several types of pools and features.

OPH&FC Modernization Project

What are the details of scope of equipment?

- The modernization technology for quality of water filtration specified is the future for pool operations. It will match our outdoor pools' equipment, so we have common parts for maintenance. The pools have classes daily for leased Northwestern and OPH&FC activities.
- In the equipment space in basement, two pumps and surge tanks will be construction in an existing access well that expands the room; while on ground level, the upper area will be expanded out with new walls and roof to provide room for equipment. The floor decking will be replaced due to historical leaks that have deteriorated the flooring system. Equipment replacement includes water heaters, pumps, filter tanks, strainers, water blowers, backwash tanks, halo control units, piping, and electrical to equipment.



OPH&FC Modernization Project

What else is in the scope?

- Pool repairs include the therapy pool and lap pool refinishing that was supposed to be done in 2019 along with the replacement of rusted old ADA chairs.
- The lighting in the pool does not function and upgrade to pool space LED lighting is required.
- In addition, alternative 1 in bid is to repaint ceiling that is peeling and can be done when pool is drained.



OPH&FC Modernization Project

What else is in the scope?

- The men's corridor to pool has had numerous repairs for leaks on floor drains, buckling tile, and damage floor drains. Floor drains, pipe, and tile to be replaced.
- In early 2025, we received a request to repair a portion of woman's whirlpool. Because this was on in the scope of the larger project, we didn't pursue the repair as a separate project. This includes demo and resurface tile, install waterproof membrane behind tile, replace VGA grates, and refinish stainless grab bars.

