TABLE OF CONTENTS

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INTRODUCTION

The city of Lake Park's Community Pool and Bathhouse facility has provided swimming and recreation opportunities to the residents of Lake Park and their neighboring communities since 1976. As a result of natural wear and tear over the past 47 years of operations, new building code regulations and ADA accessibility standards, the pool and bathhouse facility is in need of repairs and renovations/enhancements.

Swimming pool patrons have also been requesting greater diversity of swimming pool related amenities / activities for a broader range of ages. They have asked for these amenities / activities be incorporated into a new or renovated facility. Some of the amenities requested include: diving board, expanded pool deck, slides, lap lanes, shade structures, zero entrance, concessions, lazy river, etc.

The City of Lake Park has expressed interest in exploring options of renovating the existing aquatic center, replacement of the existing aquatic center using the facilities footprint as a pattern for new construction, or develop a complete new modern designed aquatic center. The goal of this study is to aid the City Council in the making of important decisions regarding aquatic upgrades. City has requested the Design Intent Architects Team to:

- Assess the nature, scale and physical issues associated with the existing bathhouse building, community swimming pool area and other site related conditions.
- Evaluate the economic impacts associated with the renovation/enhancement of the existing bathhouse building, community swimming pool area and other site related enhancements.
- Outline the associated goals/recommendations needed for code compliance, accessibility, maintenance, and operation associated with the bathhouse and pool facility construction and programming.
- Provide pool layout options; depicting renovated / expansion of existing facility on existing site.

The design team's findings are contained in the following pages.

DEMOGRAPHIC CONTEXT

2024 Demographic Analysis for the City of Lake Park, MN					
				Percent of Total	
	Median Family Income	$41,250			
	Total Households (2024)	353			
	Per Capita Income	$14,307			
	Average House Value	$299,000			
	Gender Population (725 total 2024)	M	F	M	F
		383	342	52.82%	47.18%
PERSONS	Age 0-9	74		10.20%	
	Age 10-19	130		17.99%	
	Age 20-39	67		9.28%	
	Age 40-59	216		29.68%	
	Age 60-69	121		16.70%	
	Age 70+	117		16.14%	
ETHNICITY	White alone	626		86.40%	
	Hispanic	57		7.81%	
	American Indian	10		1.33%	
	Asian alone	29		3.99%	
	Other	4		0.50%	
	Black / African	3		0.00%	
	Hawaiian	3		0.00%	

When analyzing the demographics, the following was determined:

Between the years 2020 and 2024, Lake Park's population decreased 1.65%.

There are 353 households averaging 2.88 persons per household

28.1% of the population is 18 years or less.

This suggests an aquatic facility with added amenities that focus on younger families but yet captures the teenage age range as well.

BATHHOUSE ASSESSMENT

The existing bathhouse facility has provided many years of service for the residents of Lake Park. As the results of natural wear and tear over the years, as well as, new building code regulations and accessibility standards, the bathhouse facility is in need of repairs and renovations.

Image 1: *Exterior view of existing bathhouse*

Pump room was a later addition to the original bath house during the 1990's renovation which filled in the kiddie pool.

Image 2, 3 & 4: *Interior views of existing pool filter room*

Drawing 1: *Existing Floor Plan of Bathhouse*

Given the building's age, it was found to be in fair condition. Investigation of the interior found minor cracking at wall intersections and floor penetrations which is common for a building of this age.

Image 5: Women's *Interior Shower View with cracking on wall.*

Image 6: Men's *Interior Shower View Minor cracking on wall*

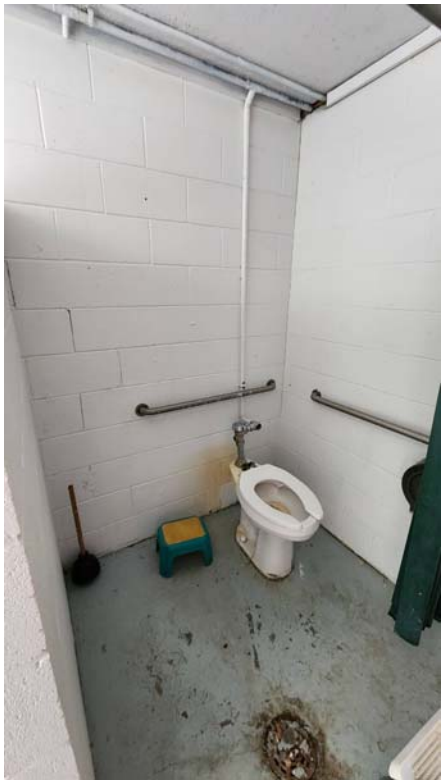


Image 7: Women's *Interior Toilet View Minor cracking on wall and curtain as door*
Image 8: Women's *Interior Ceiling View showing painted chip board and sealed vent/light well with plastic.*

Image 9: Women's *Interior "locker/changing area" showing personal basket storage along with masonry shear wall movement.*

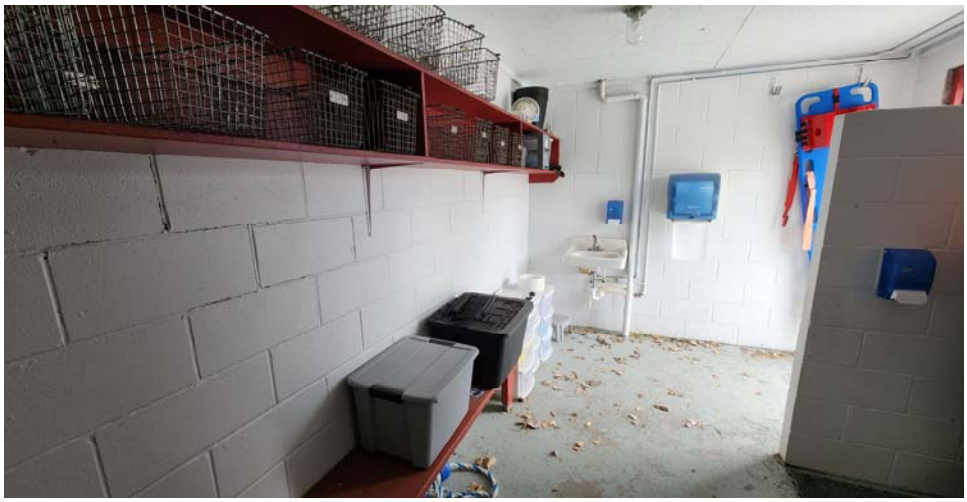


Image 10: Women's *Interior "locker/changing area" showing personal basket storage along with hand sink and exposed plumbing.*

Image 11: Pool Mechanical *Interior showing outdated pool mechanical and heating systems.*

Image 12: Pool Mechanical *Interior showing outdated pool mechanical and heating systems.*

Investigation of the exterior discovered multiple cracks in the masonry walls, indicating differential movement of the foundation.

Image 13: South exterior wall of pool mechanical room showing masonry cracking due to differential shifting of the wall as there are two different substrates the current wall sits on.
Image 14: South wall between admissions and boy's locker room showing cracking due to differential foundation movement.

Image 15: *Exterior view of Pool House showing the west addition sitting on top of The old kiddie pool resulting in differential movement of the building shell witch in turn has caused the masonry wall to crack. Refer to image 13*.

ACCESSIBILITY SURVEY

The following is a list of accessibility deficiencies with the Lake Park bathhouse building. Deficiencies are based on compliance with Title III regulations at 28 CFR part 36, subpart D; and the 2004 ADAAG at 36 CFR part 1191, appendices B and D which equal the 2010 ADA Standards for Accessible Design. In the few places where requirements between the two differ, the requirements of 28 CFR part 36, subpart D, prevail.

Parking and Drop-off Areas

Off street parking for the pool facility is not provided on site, there is however, space for two accessible parking stalls directly to the east of the picnic shelter along the property's south boundary. This space will be required to be striped to show 2 identifiable accessible parking stalls, one being Van Accessible and posted with signs. Currently, pool patrons are utilizing the diagonal on-street parking along the south property line of the existing pool facility. This parking is not striped and appears to accommodate around 25 vehicles.

Image 16: *2019 Site image taken from google earth*

Accessible Route of Travel

The existing route from the accessible parking stalls to the front of the bathhouse is a firm, stable and slip resistant concrete surface with minor to moderate cracking and slab uplift at control joints that will need to be addressed by either removal of damaged concrete or grinding to level off uneven control joints.

Image 17: Existing accessible path to pool entry showing cracking. Note: current path does not meet approved ramping from street parking to accessible sidewalk.
Image 18: Existing sidewalk showing control joint transition along accessible route.

Accessible Parking Signage

Appropriate signage with the international symbol of accessibility is required to be posted either on a sign post / building / or fence directly in front of the parking stall, centered on said stall at a height of 6 feet from pavement to bottom of sign.

Image 19: *view of accessible parking stalls with signage. relocate bike rack to make room for wheelchair accessible route.*

Building Entrances

There are six (6) entrances/exits to the building. The East Entrance is the "main" entrance and is for the admission of pool patrons. This door/gate is a chain-link, four-foot-wide panel held open during operating hours. The other east facing door enters the chemical room and is not required to be accessible. The West and South facing doors are for the girl's and boy's changing room and the South facing door is for the pool pump room.

Image 20: *view of front entrance entering pool facility.*
Image 21: *view of front entrance leaving pool facility.*

Image 22: Boys Changing Exit

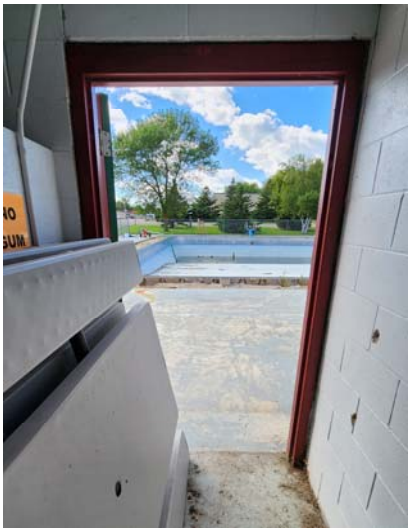


Image 23: Girls Changing Exit

Horizontal Accessible Circulation

The minimum requirement for an accessible route is 36" wide with minimum clearances of 12" push side and 18" pull side at doors. Currently only the boys changing room has an accessible route meeting both entering and exiting of the room.

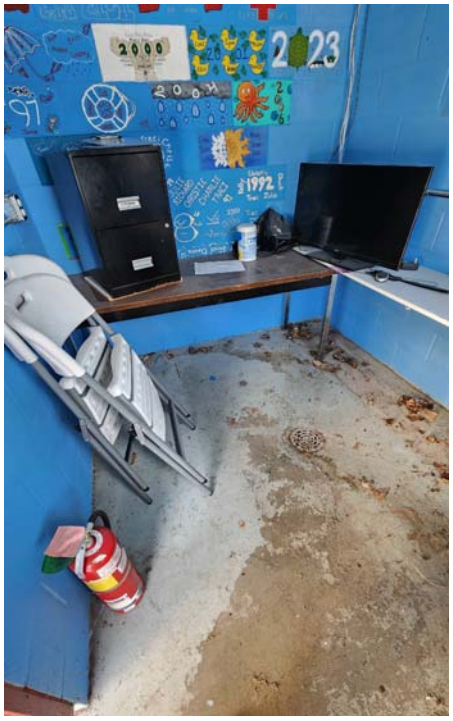


Image 24: View of admissions at entrance corridor.
Image 25: View of the interior of admissions.

Image 26: View of the interior of the Girl's changing room.

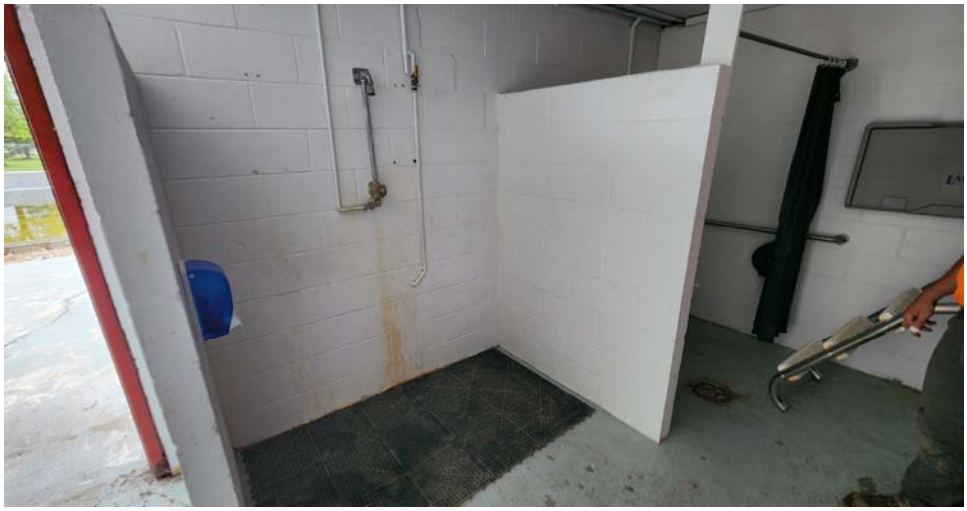


Image 27: View of Boy's changing room

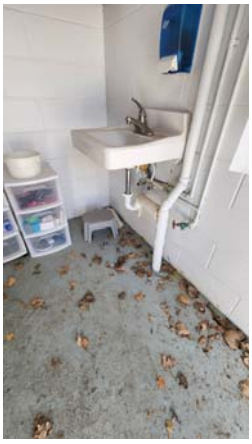
Incandescent Lighting

The Incandescent lighting with the vapor proof fixtures should be replaced with more efficient fluorescent or LED style lighting. A cost conscience option is to replace the incandescent lamp with a screw-in compact fluorescent lamp.

Doors

All doorways meet the minimum clearance requirement of 32 inches wide when fully opened. However, the doors exiting the girl's changing rooms from the changing room side does not meet the required 12/18-inch push/pull clearance requirements. The Front entrance (east side) meets width requirements. Doors entering/exiting the chemical room and the filter room are not required to be accessible. The door exiting/entering the office (admissions) area from the pool does meet accessible guidelines.

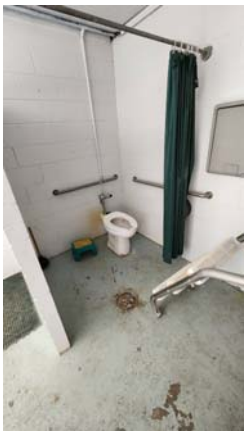
Image 28: View of pool pump room door (south facing), Boy's and Girl's changing room doors (boy's on left) and front entry corridor between changing room doors.



Rooms and Spaces

<u>*Men's & Women's Changing Room:*</u>

Lav's: *Countertop height met accessible requirements along with knee and toe clearances. Fixture controls are of the lever style which does meet accessibility requirements. Dispensers are within accessible parameters. The exposed plumbing under the sink is required to have insulation boots.*



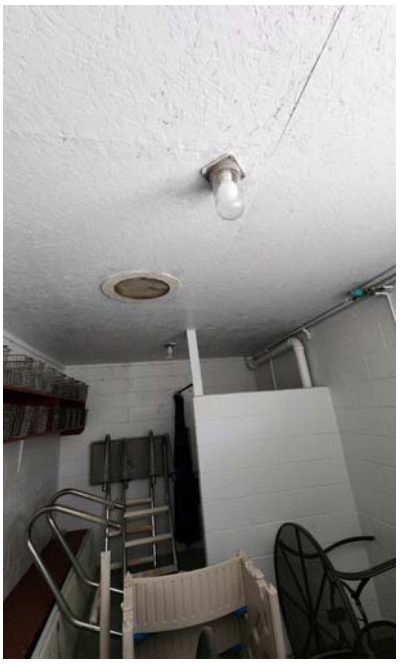
Toilets: *Grab bar's Do not meet accessible clearances to accommodate a wheelchair.*

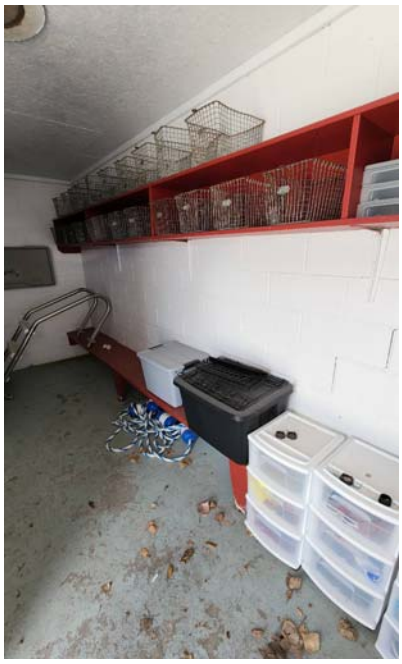
Toilet Stall: *length of stall is too short to accommodate a wheelchair according to the accessibility guidelines.*

Showers: *Do not meet accessible clearances to accommodate a wheelchair. The shower controls present a burn hazard.*

Urinals: *N/A*

Routes: *Only the boy's changing room has an accessible route to or from the pool and/or entrance.*





Images 29-33 Interior views of changing rooms

Office & Admissions:

Admissions Counter:
Height of counter top is approx. 3'-6". A portion of the counter is required to be at 36" high for a minimum of 3 feet long. Clear floor area in front of counter is insufficient to meet accessibility requirements.

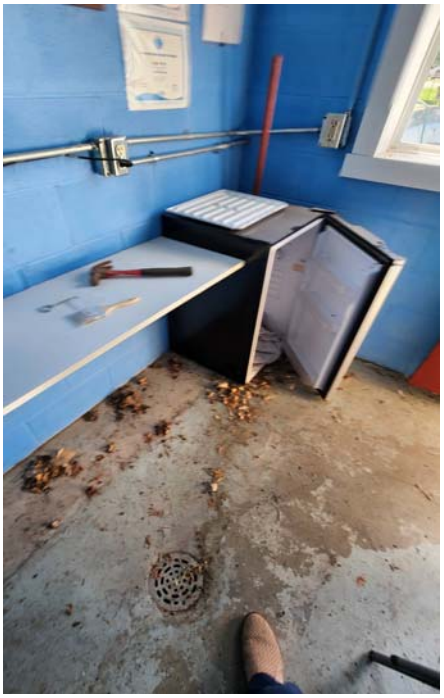


Image 34: Interior view of admissions counter
Image 35: Interior view of admissions back counter

Filter Room:

Chemical area:	*not required to be accessible.*
Filter area:	*not required to be accessible.*
Plumbing:	*Plumbing systems in this area appear to be adequate for the existing pool system and facility's needs, however, these systems appear to be in below average condition.*
Natural Gas:	*Natural gas service and piping appear to be in operable condition and meet current needs.*
Water Heaters:	*Water heaters are residential tank type heaters and should be replaced with commercial style water tanks.*
Electrical Panel:	*Poor condition, inadequate and should be replaced.*


Image 36 & 37: Interior views of the filter room

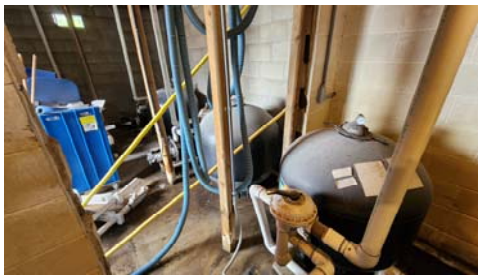



Image 38 & 39: Interior views of the filter room


Image 40 & 41: Views of Electrical Panel and one of the pool pumps.

Pool Deck

An approximate 4-foot-wide ring of the concrete pool deck has been removed to inspect the pools surrounding plumbing, grounding grid and structural integrity. The remaining concrete deck is a firm, stable and slip resistant surface with minor to moderate cracking with some slab uplift at control joints that will need to be addressed by either removal of damaged concrete or grinding to level off uneven control joints. At this time there are many areas around the pool deck that could possibly contribute to physical injury of users by uneven slabs becoming tripping hazards and toe stubbers. Pool deck will need to be removed if the city decides to repair the underground piping and pool perimeter coping. This last spring the City of Lake Park decided to close the pool due to the facilities aging infrastructure, outdated and failing mechanical systems.

Image 42: Perimeter edge of Pool

Image 43: Kiddie pool infill

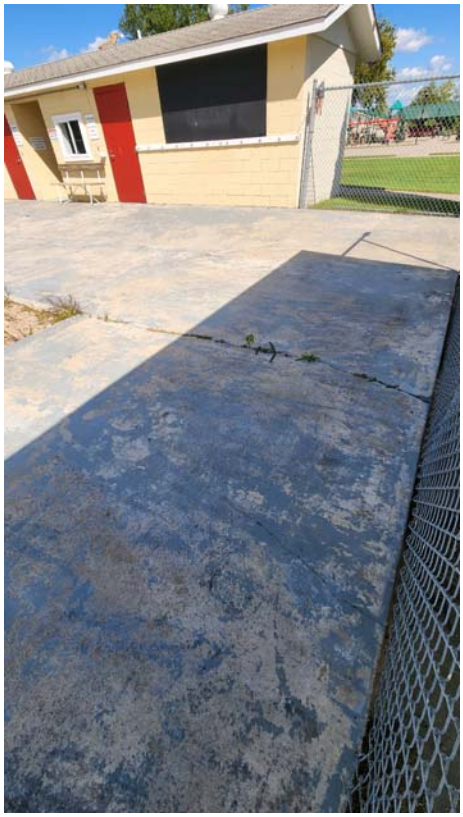


Image 44: Deck crack and weeds

Image 45: Pool deck crack

Image 46: Pool deck crack

POOL ASSESSMENT

The pool was built in 1976 and is approximately 48 years old. The standard life expectancy of a stainless-steel wall panel pool, which is how the Lake Park pool is constructed, is 30 to 40 years. The City of Lake Park has been experiencing difficulties with the pool as of late. The city asked the Design Intent Architects team to inspect the pool and develop recommendations to rectify the reoccurring difficulties. Our inspections uncovered a multitude of concerns, these concerns being:

a. Age of the stainless-steel wall panel system and integrity of its structural tieback system.

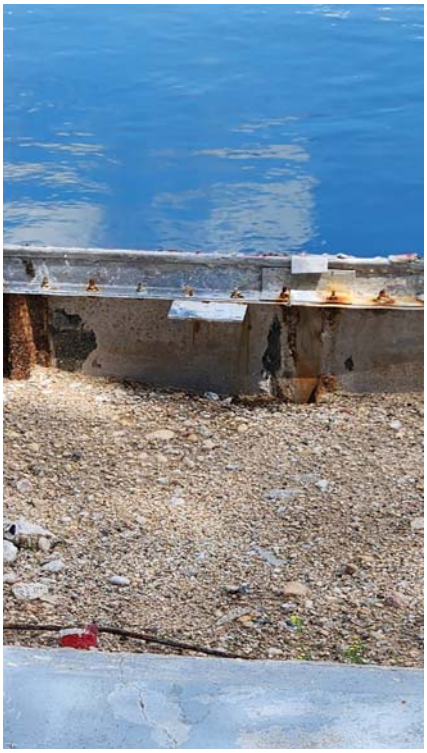


Image 47: view looking straight down showing damage to top of stainless-steel pool wall.
Image 48: view looking at warped stainless pool corner.
Image 49: view of back side of stainless-steel pool panels missing vertical bracing and horizontal tie rods.

b. Poor condition of the pool floor structure with extensive cracking.

Image 50,51 & 52: different views of the pool floor structure

Image 53: View of skimmer and associated plumbing
Image 54: View of West side of pool by diving board

c. Pool is not in compliance with industry safety standards, Americans with Disabilities Act (ADA), Pool and Spa Safety Act – Anti Entrapment (VGB), Minnesota State Health Code and 10 State Aquatic Design Standards.

Image 55: View of existing conditions of pool

d. The existing pool is outdated and does not meet today's construction standards or leisure water amenities / components that communities are expecting from swimming pools.

Image 56 & 57: View of current pool facility and diving board

e. Increased costs associated with current operation and maintenance under existing conditions.

Image 58: View of one of the many pool pumps.

Below are the proposed recommended renovations to the pool, bath house and accessible parking area with accessible route having been developed upon community "base" needs and building code / ADA accessibility compliance standards. Costs have been computed based on upgrades to the existing building, pool, as well as providing accessible circulation routes in the building and to the accessible parking area. Detailed costs of these renovations have been provided below:

Recommended "base" renovations to existing pool (option A)

1. Cover existing stainless steel wall panels and concrete floor with 8 inches of shotcrete while using the existing stainless steel wall panels and concrete floor as a back form. (overall pool size will be reduced)
   Estimated Cost: $400,000
2. Replace existing skimmers with new skimmer inlet recirculation system along with piping / wall inlets to filter room. Install new mortex formed coping edge / waterline tile to tie in with new concrete perimeter deck construction.
   Estimated Cost: $275,000
3. Apply an epoxy paint finish to the floors and walls.
   Estimated Cost: $110,000
4. Replace existing main drains with Anti Entrapment VGB compliant sumps, grating and underground piping to filter room.
   Estimated Cost: $70,000
5. Remove existing pool mechanical equipment and replace with new recirculation pump, disinfection system, chemical controller and water level controller with piping and valves.
   Estimated Cost: $103,000
6. Install battery operated ADA access lift and one set of walk-in-steps in corner of shallow end of pool.
   Estimated Cost: $48,000
7. Install four new ladders, two new life guard chairs, dive tower with board and anchors as required.
   Estimated Cost: $60,000
8. Aquatic Design / engineering / permits and contingency.
   Estimated Cost: $120,000
9. Mobilization, taxes, warranty, and Owner training.
   Estimated Cost: $52,000

Total estimated cost of pool renovations **$1,238,000**

A new pool of similar size and shape to the existing swimming pool (3,700s.f.) would have an estimated cost of $1,300,000 and would

come with a new warranty. A renovated pool would only have a warranty on new equipment.

Recommended "base" renovations to existing bath house (option A)

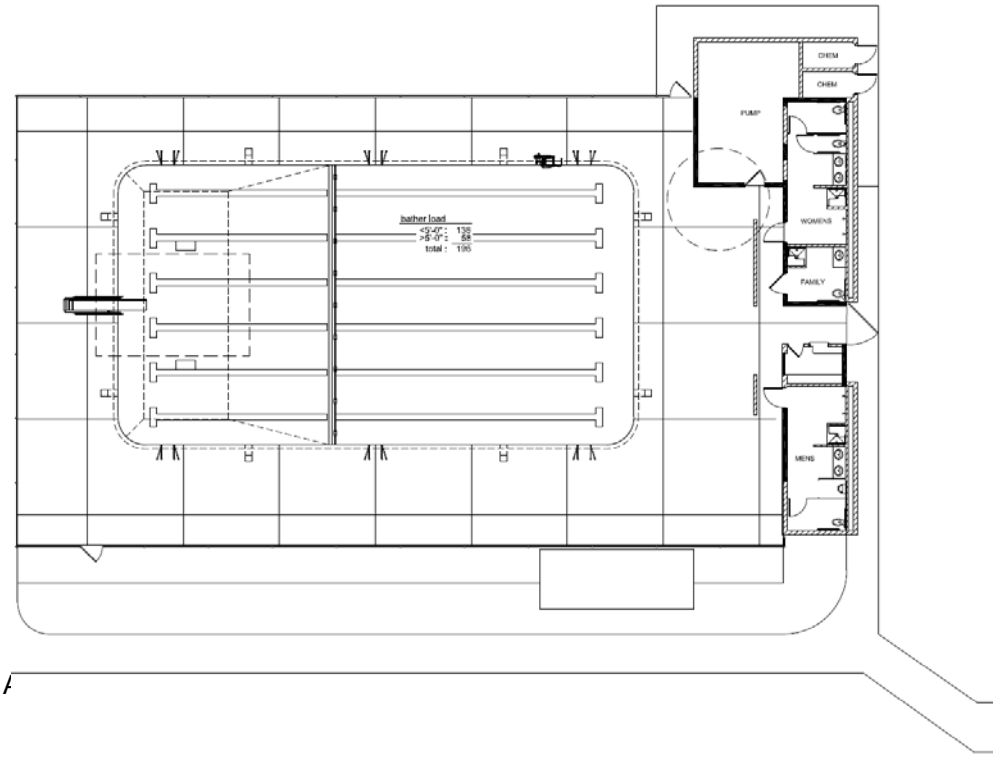
1. Enlarge Boy's and Girls Changing rooms to include a minimum of two toilets, two showers and two sinks with clearances of each item to meet accessibility requirements.
   Estimated Cost: $271,800
2. Enlarge admissions office to include accessible counter per building code.
   Estimated Cost: $ 32,500
3. Increase entry hall width to a minimum of six feet wide to accommodate two-way traffic
   Estimated Cost: $ 10,000
4. Add family changing room to accommodate families with small children needing parental guidance.
   Estimated Cost: $ 44,500
5. Enlarge pool pump/mechanical room to house separate rooms for chemicals and pool equipment.
   Estimated Cost: $177,300
6. Apply a new building façade wrap over concrete masonry unit walls.
   Estimated Cost: $ 43,000
7. Install aluminum fascia, trim and gutters.
   Estimated Cost: $ 14,000
8. Install new shingles.
   Estimated Cost: $ 19,500
9. Install new chain-link fence enclosure around pool deck.
   Estimated Cost: $ 12,600
10. Install new 4-inch concrete pool deck.
    Estimated Cost: $111,800
11. Install accessible sidewalls from accessible parking to pool facility.
    Estimated Cost: $ 6,500

Estimated cost of bath house renovations **$ 743,500**

Because of the needed in-depth pool renovation, the State will require us to conform to the new building code. The current bath house is not sufficiently large enough to house the required toilets and showers and/or to meet the current accessibility codes. A new bath house of similar size (1,235 s.f.) to the existing bath house needing to be enlarged to accommodate the current accessibility code would have an estimated cost of $825,000.

Bathhouse Design, Costs & Options

Renovated Aquatic *Center Option* "A.1 & A.2"
Renovated existing pool (3,500s.f.); renovated bathhouse (1,235 s.f.). Total estimated "base" renovated Cost: $1,981,500 – A.1
Total Estimated new Cost: $2,125,000 – A.2

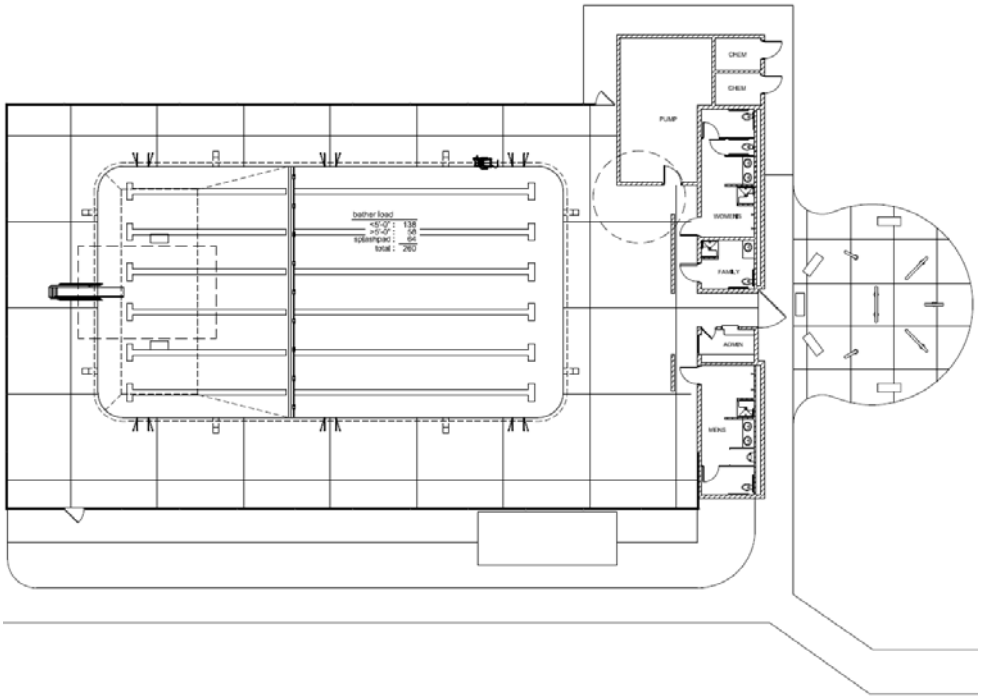


Drawing 1: Proposed site layout for renovated pool and bathhouse – option "A"

New Aquatic *Center Option* "B.1"

New pool (3,500s.f.), new bathhouse (1,300 s.f.) and new splash-pad.

estimated pool cost:	*$1,300,000*
estimated potable splashpad cost:	*$200,000*
estimated recirculating splashpad cost:	*$400,000*
estimated bath house cost:	*$925,000*
Total estimated new Cost:	*$2,425,000 – 2,625,000*

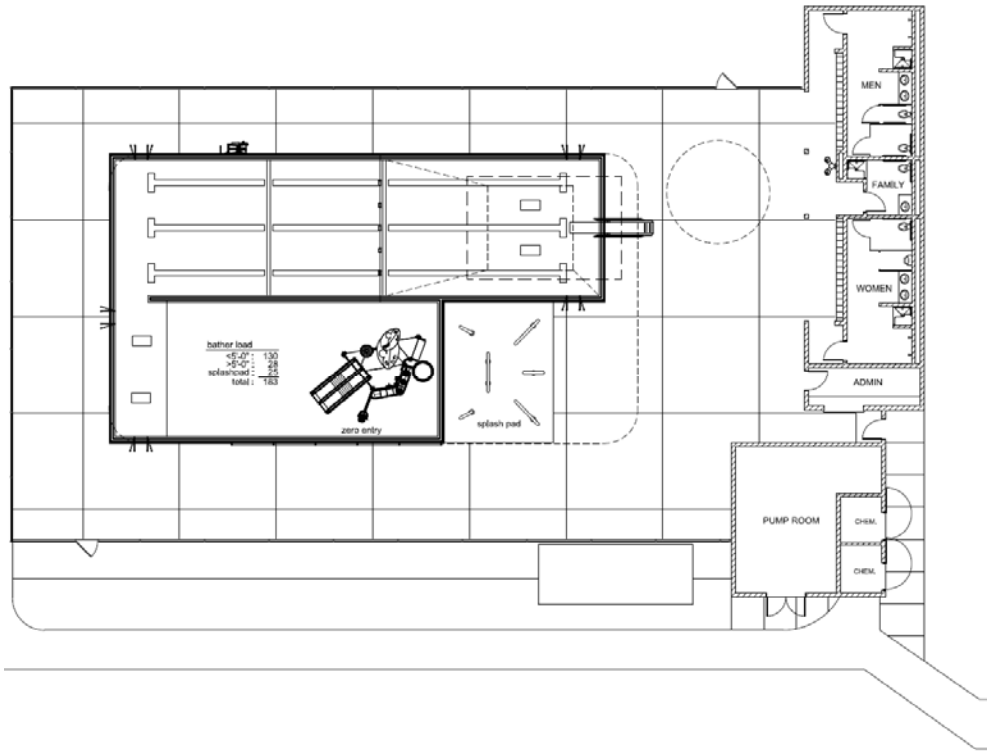


Drawing 2: Proposed site layout for new pool / bath house and splashpad.

New Aquatic *Center Option* "C.1"

New zero entry pool with 3 lane lap pool, diving board and integrated splashpad (2,650s.f.), new bathhouse (1,800 s.f.)

estimated pool cost:	*$1,500,000*
estimated bath house cost:	*$1,275,000*
Total estimated new Cost:	*$2,775,000*

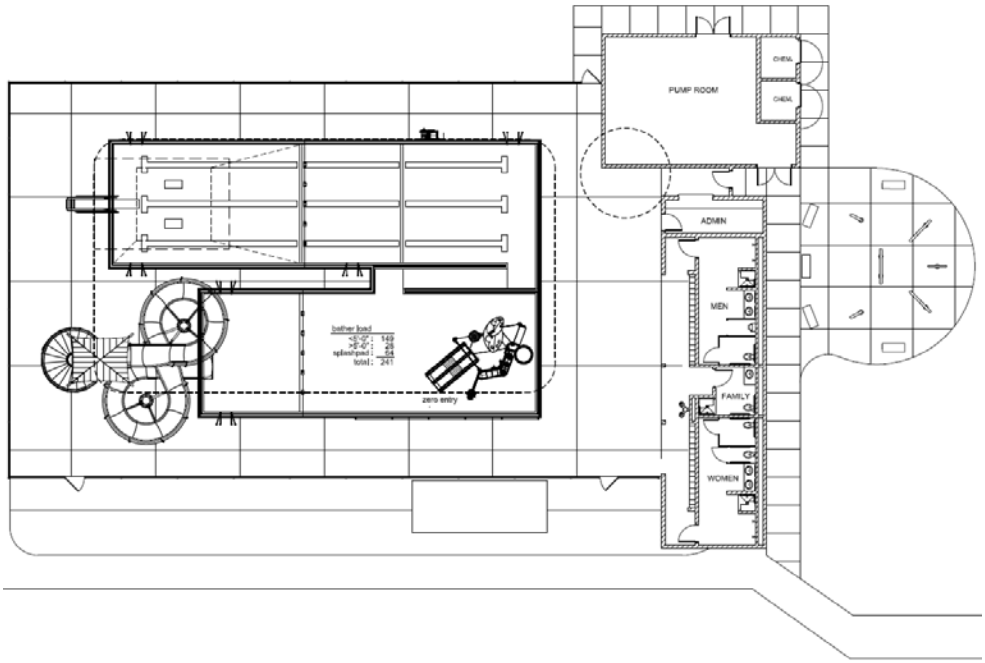


Drawing 3: Proposed site layout for new zero entry pool / bath house and splashpad.

New Aquatic *Center Option* "D.1"

New pool with zero entry, water slide, plunge pool, 3 lap lane pool, diving board. (2,925s.f.), new bathhouse (2,100 s.f.), new splash-pad. (1,000 s.f.)

estimated pool cost:	*$1,900,000*
estimated potable splashpad cost:	*$200,000*
estimated recirculating splashpad cost:	*$400,000*
estimated bath house cost:	*$1,500,000*
Total estimated new Cost:	*$3,600,000 – 3,800,000*



Drawing 4: Proposed site layout for new pool / slide / bath house and splashpad.

Preliminary Project Costs Projections:

Description	Aquatic Faclity - Option A.1 (Renovation)		
Aquatics			
	Estimated Costs		
	POOL	SPLASHPAD POTABLE	SPLASHPAD RECIRCULATING
Option A.1 (renovation)	$1,180,000.00		
Building			
Option A.1 (renovation)	$476,600.00		
Site Work			
Demolition	65,000.00		
Utility	20,000.00		
Site Lighting	2,500.00		
Security / PA	4,000.00		
Sun Shelter	12,000.00		
Pool Deck	111,800.00		
Fencing	12,600.00		
Sub Total Construction Costs	**$1,884,500.00**		
Owner Direct Costs			
General Conditions	80,000.00		
Site Survey	3,000.00		
Soils Testing	6,500.00		
State Health Plan Review	7,500.00		
Sub Total Owner Direct Costs	**97,000.00**		
Construction Costs (Including Owner Direct Costs)	**1,981,500.00**		
Professional Fees thru Bidding - 7%	138,500.00		
Construction and Startup - 3%	60,000.00		
Sub Total Professional Fees	198,500.00		
Project Contingency - 3%	60,000.00		
TOTAL PROJECT COSTS	**2,240,000.00**		

Description	Aquatic Faclity - Option A.2 (NEW)		
Aquatics			
	Estimated Costs		
	POOL	SPLASHPAD POTABLE	SPLASHPAD RECIRCULATING
Option A.1 (New Construction)	$1,242,000.00		
Building			
Option A.1 (New Construction)	$563,100.00		
Site Work			
Demolition	60,000.00		
Utility	20,000.00		
Site Lighting	2,500.00		
Security / PA	4,000.00		
Sun Shelter	12,000.00		
Pool Deck	111,800.00		
Fencing	12,600.00		
Sub Total Construction Costs	**$2,028,000.00**		
Owner Direct Costs			
General Conditions	80,000.00		
Site Survey	3,000.00		
Soils Testing	6,500.00		
State Health Plan Review	7,500.00		
Sub Total Owner Direct Costs	**97,000.00**		
Construction Costs (Including Owner Direct Costs)	**2,125,000.00**		
Professional Fees thru Bidding - 7%	148,500.00		
Construction and Startup - 3%	63,500.00		
Sub Total Professional Fees	212,000.00		
Project Contingency - 3%	63,500.00		
TOTAL PROJECT COSTS	**2,400,500.00**		

Description	Aquatic Faclity - Option B.1A		
Aquatics			
	Estimated Costs		
	POOL	SPLASHPAD POTABLE	SPLASHPAD RECIRCULATING
Option B.1A - Potable Splashpad	$1,230,500.00	$200,000.00	
Building			
Option B.1A	$656,100.00		
Site Work			
Demolition	60,000.00		
Utility	20,000.00		
Site Lighting	2,500.00		
Security / PA	4,000.00		
Sun Shelter	12,000.00		
Pool Deck	111,800.00		
Fencing	12,600.00		
Sub Total Construction Costs		**$2,309,500.00**	
Owner Direct Costs			
General Conditions	97,000.00		
Site Survey	3,000.00		
Soils Testing	6,500.00		
State Health Plan Review	9,000.00		
Sub Total Owner Direct Costs	**115,500.00**		
Construction Costs (Including Owner Direct Costs)	**2,425,000.00**		
Professional Fees thru Bidding - 7%	161,000.00		
Construction and Startup - 3%	69,250.00		
Sub Total Professional Fees	230,250.00		
Project Contingency - 3%	69,250.00		
TOTAL PROJECT COSTS	**2,724,500.00**		

Description	Aquatic Faclity - Option B.1B		
Aquatics			
	Estimated Costs		
	POOL	SPLASHPAD POTABLE	SPLASHPAD RECIRCULATING
Option B.1B - Recirculating Splashpad	$1,225,900.00		$400,000.00
Building			
Option B.1A	$652,700.00		
Site Work			
Demolition	60,000.00		
Utility	20,000.00		
Site Lighting	2,500.00		
Security / PA	4,000.00		
Sun Shelter	12,000.00		
Pool Deck	111,800.00		
Fencing	12,600.00		
Sub Total Construction Costs			**$2,501,500.00**
Owner Direct Costs			
General Conditions	105,000.00		
Site Survey	3,000.00		
Soils Testing	6,500.00		
State Health Plan Review	9,000.00		
Sub Total Owner Direct Costs	**123,500.00**		
Construction Costs (Including Owner Direct Costs)	**2,625,000.00**		
Professional Fees thru Bidding - 7%	175,100.00		
Construction and Startup - 3%	75,000.00		
Sub Total Professional Fees	250,100.00		
Project Contingency - 3%	75,000.00		
TOTAL PROJECT COSTS	**2,950,100.00**		

Description	Aquatic Facility - Option C.1		
Aquatics			
	Estimated Costs		
	POOL	SPLASHPAD POTABLE	SPLASHPAD RECIRCULATING
Option C.1	$1,421,700.00		
Building			
Option C.1	$990,900.00		
Site Work			
Demolition	60,000.00		
Utility	25,000.00		
Site Lighting	2,500.00		
Security / PA	4,000.00		
Sun Shelter	12,000.00		
Pool Deck	115,800.00		
Fencing	12,600.00		
Sub Total Construction Costs	**$2,644,500.00**		
Owner Direct Costs			
General Conditions	111,000.00		
Site Survey	3,000.00		
Soils Testing	6,500.00		
State Health Plan Review	10,000.00		
Sub Total Owner Direct Costs	**130,500.00**		
Construction Costs (Including Owner Direct Costs)	**2,775,000.00**		
Professional Fees thru Bidding - 7%	194,250.00		
Construction and Startup - 3%	83,250.00		
Sub Total Professional Fees	277,500.00		
Project Contingency - 3%	83,250.00		
TOTAL PROJECT COSTS	**3,135,750.00**		

Description	Aquatic Facility - Option D.1A		
Aquatics			
	Estimated Costs		
	POOL	SPLASHPAD POTABLE	SPLASHPAD RECIRCULATING
Option D.1A	$1,811,500.00	$200,000.00	
Building			
Option D.1A	$1,209,700.00		
Site Work			
Demolition	60,000.00		
Utility	25,000.00		
Site Lighting	2,500.00		
Security / PA	4,000.00		
Sun Shelter	12,000.00		
Pool Deck	115,800.00		
Fencing	12,000.00		
Sub Total Construction Costs		**$3,452,500.00**	
Owner Direct Costs			
General Conditions	126,000.00		
Site Survey	3,000.00		
Soils Testing	6,500.00		
State Health Plan Review	12,000.00		
Sub Total Owner Direct Costs	**147,500.00**		
Construction Costs (Including Owner Direct Costs)	**3,600,000.00**		
Professional Fees thru Bidding - 6.5%	234,000.00		
Construction and Startup - 2.5%	90,000.00		
Sub Total Professional Fees	324,000.00		
Project Contingency - 3%	108,000.00		
TOTAL PROJECT COSTS	**4,032,000.00**		

Description	Aquatic Faclity - Option D.1B		
Aquatics			
	Estimated Costs		
	POOL	SPLASHPAD POTABLE	SPLASHPAD RECIRCULATING
Option D.1B	$1,807,000.00		$400,000.00
Building			
Option D.1A	$1,206,700.00		
Site Work			
Demolition	60,000.00		
Utility	25,000.00		
Site Lighting	2,500.00		
Security / PA	4,000.00		
Sun Shelter	12,000.00		
Pool Deck	115,800.00		
Fencing	12,000.00		
Sub Total Construction Costs			**$3,645,000.00**
Owner Direct Costs			
General Conditions	133,000.00		
Site Survey	3,000.00		
Soils Testing	6,500.00		
State Health Plan Review	12,500.00		
Sub Total Owner Direct Costs	**155,000.00**		
Construction Costs (Including Owner Direct Costs)	**3,800,000.00**		
Professional Fees thru Bidding - 6.5%	247,000.00		
Construction and Startup - 2.5%	95,000.00		
Sub Total Professional Fees	342,000.00		
Project Contingency - 3%	114,000.00		
TOTAL PROJECT COSTS	**4,256,000.00**		

Preliminary Staffing Plan

Employee ID	Employee Type	Hourly Rate	Hours worked per week	Number of Staff	Gross Pay	Pay Total	Season by Weeks	Season Total
1	Aquatics Manager	$17.50	40.00	1.00	$700.00	$700.00	16.00	$11,200.00
2	Assistant Manager	$15.50	32.00	1.00	$496.00	$496.00	15.00	$7,440.00
3	Shift Leads	$12.50	28.00	2.00	$350.00	$700.00	14.00	$9,800.00
4	Certified Lifeguard (WSA)	$11.00	24.00	4.00	$264.00	$1,056.00	13.50	$14,256.00
5	Lifeguard	$10.25	24.00	1.00	$246.00	$246.00	13.50	$3,321.00
							Labor Total	**$46,017.00**

Staffing projections are based on an operating swim season of 13 weeks. Open swim hours were estimated at 11am-8pm for 11 weeks, and 11am-5pm for two weeks. Swim lessons and lap swim times were estimated at 9am-11am. The above chart takes into consideration staff training time, swim lessons and open swim. Projections are based on 3 Lifeguards required for coverage, with 1 additional assigned to provide breaks. Special care should be taken to avoid over staffing, which quickly adds to operational costs.

Proposed Facility Projections:

Bather load projections are determined using historical information regarding average daily attendance usage by percentage. This number factors in aquatic amenities that drive attendance. The average daily bather loads are as follows: Sunday 1.5x; Monday-Wednesday x .4 each day; Thursday x .5; Friday x .8; Saturday x 2

Current daily Admission fees of nearby pool facilities:

Facility	Rates	Hours	Dates Open
Parkers Prairie	$6.00	1:00-8:00pm	6/1-8/31
Breckenridge	$5.00/6.00	1:00-8:00pm	6/10-8/11
Wahpeton, ND	$4.00/8.00	12:30-8:30pm	6/1-8/10
Hawley	$3.00	1:00-5-00pm	6/1-8/10
Dilworth	$3.00	1:00-8:00pm	6/4-8/16
Lake Park	$5.00	1:00-8:00pm	Closed

After analyzing nearby facilities, we have chosen to remain conservative by basing projections on a 78-day season out of the possible 105 days between Memorial Day and Labor Day. Admission rates are based on the current admission fee of $5.00.

Based on Bather Load:

	Bather load	% of Avg. Daily Users	Avg. Number Daily Users
Existing Lap Area 3’ to 5’	137	60%	82
Existing Lap Area >5’	58	35%	21
New Lap Area 3’ to 5’	58	60%	35
Multi-Use Area >5’	28	35%	10
Multi-Use Area <3’-6”	70	80%	56
Splashpad-Integral	25	125%	32
Splashpad-Separated	67	125%	84
Plunge Pool	24	60%	15

Totals:		
Option A.1 & A.2	196	103
Option B.1A & B.1B	263	187
Option C.1	181	133
Option D.1A & D.1B	247	200

Projected revenue based on Bather Load:

Option A.1 & A.2:	$52,221
Option B.1A & B.1B	$84,981
Option C.1	$63,921
Option D.1A & D.1B	$90,051

Note: Revenue totals are based on a $5.00 per day, 78 day season with $1.50 average per bather in concessions.

Several features are integral for a facility to be profitable is to entice families to stay longer and return often. Features such as providing ample shade, concessions and entertainment. Entertainment is achieved by placing aquatic play elements in and around the pool. Shade can be provided permanent structures, trees and umbrellas. Partnering or sponsorships for concessions stands, play features and shade structures are a great way to reduce costs.

Financing pro forma:

Option A.1

$2,240,000	Pool and Bath house renovation
20	Year Bond @ 3.5%
$1,568,000	total Interest
$3,808,000	Total Financed over 20 years
353	Total Households
$540	Total annual household cost w/o bond
$1,500,000	State Bond reduction of principle
$178	Total annual household cost

Option A.2

$2,450,000	Pool and Bath house renovation
20	Year Bond @ 3.5%
$1,715,000	total Interest
$4,165,000	Total Financed over 20 years
353	Total Households
$590	Total annual household cost w/o bond
$1,500,000	State Bond reduction of principle
$229	Total annual household cost

Option B.1A

$2,724,000	Pool and Bath house renovation
20	Year Bond @ 3.5%
$1,906,800	total Interest
$4,630,800	Total Financed over 20 years
353	Total Households
$656	Total annual household cost w/o bond
$1,500,000	State Bond reduction of principle
$292	Total annual household cost

Option B.1B

$2,950,100	Pool and Bath house renovation
20	Year Bond @ 3.5%
$2,065,070	total Interest
$5,015,170	Total Financed over 20 years
353	Total Households
$710	Total annual household cost w/o bond
$1,500,000	State Bond reduction of principle
$349	Total annual household cost

Option C.1

$3,135,750	Pool and Bath house renovation
20	Year Bond @ 3.5%
$2,195,025	total Interest
$5,330,775	Total Financed over 20 years
353	Total Households
$755	Total annual household cost w/o bond
$1,500,000	State Bond reduction of principle
$394	Total annual household cost

Option D.1A

$4,032,000	Pool and Bath house renovation
20	Year Bond @ 3.5%
$2,822,400	total Interest
$6,854,400	Total Financed over 20 years
353	Total Households
$971	Total annual household cost w/o bond
$1,500,000	State Bond reduction of principle
$610	Total annual household cost

Option D.1B

$4,256,000	Pool and Bath house renovation
20	Year Bond @ 3.5%
$2,979,200	total Interest
$7,235,200	Total Financed over 20 years
353	Total Households
$1,025	Total annual household cost w/o bond
$1,500,000	State Bond reduction of principle
$663	Total annual household cost

Final Recommendations

Bathhouse and Pool:

1. Provide ADA compliant parking spaces.
2. All path of travel openings (doorway) shall have a minimum of thirty-two (32) inches side to side clearance.
3. All path of travel surfaces (isle) shall have a minimum of forty-two (42) inches of side-to-side clearance (60 inches is necessary at pull side of doorways) and a vertical slope no greater than one to twenty throughout complex.
4. Provide ADA compliant drinking fountains.
5. Changing rooms must meet all ADA requirements, this includes upgrades to water closets, urinals, lavatories, mirrors, shower stalls, grab bars, shower seats, bench seats and lockers.
6. ADA compliant interior and exterior signage.
7. Based upon initial observations, the current bathhouse configuration does not meet required accessibility standards. The entire interior of the current bathhouse will need to be reconfigured per “option A.1” to meet Accessibility requirements, additional square footage will also need to be constructed to accommodate needed space.
8. Core boring analysis of the pool basin is recommended to assess the integrity of the concrete structure to help identify extent of necessary repairs / replacements if renovation of pool is desired.
9. Based upon initial observations, the concrete / stainless steel structure of the pool along with its recirculation system looks to be in a state of advanced structural and mechanical decay. Although a rehabilitation of the pool is possible, Design Intent Architects recommends the replacement of the main pool, pool decking and recirculation systems.

10. Based upon initial observations, the current pool configurations do not meet required accessibility standards. Substantial modifications to the main pool are required to meet accessibility standards.
11. A new pool design such as option “C.1” would provide equal opportunities for educational, social, and recreational types of programs for all age groups and activity levels.

Again, thank you for allowing us this opportunity. We look forward to partnering with the City of Lake Park. We can assure you that we will respectfully lead you through this exciting project while responding to your needs.

Feel free to contact us for any additional information needed. “Let us make your project worry-free”.

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DESIGN INTENT ARCHITECTS

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