



Counsilman Hunsaker
AQUATICS FOR LIFE



SOUTH PARK POOL FEASIBILITY STUDY

BILLINGS, MT

MAY 2024

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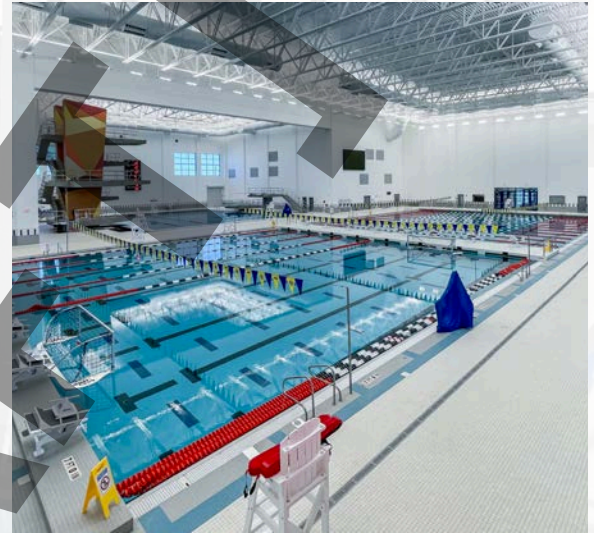
SUMMARY

This study was used to analyze South Park Pool. Additionally, it explored how South Park Pool will perform against the existing Rose Park Pool. It also evaluated resident needs and usage patterns to develop a data-driven plan for renovation, replacement, or addition of these features.

This is an order of magnitude study to show scale of facility and corresponding costs. It is not intended to show specific design solutions at this time.

Current Conditions

The study found that existing aquatic play features vary in condition. Notably, South Park Pool has reached its useful life. South Park, however, presents an opportunity to add a new operations building for year-round programming.



Resident Needs and Usage Patterns:

The study considered resident needs and demographics to determine optimal placement and types of aquatic features.

Knowing that 70% of residents around the country prioritize nearby parks, the plan prioritizes facilities within walking distance. The city has decided to retain South Park Pool at its current location. Additionally, understanding the number of children in specific areas informed the need for improvements or replacements to better serve younger demographics.

Consultant Recommendations:

Modernizing South Park Pool while expanding the operations building and exploring integration of the existing sprayground into the new pool concept.

Additionally, the chart below compares potential options and their projected revenue against the current performance of the Rose Park Pool. Projections show that Rose Park would outperform two of the options. The third, and most ambitious option would outperform Rose Park Pool.

	Option 1 Revenue	Option 2 Revenue	Option 3 Revenue	Rose Park Pool
Admissions / Memberships	76,449	174,823	233,098	149,386
Summer League	0	0	7,150	0
Aquatic Programs	21,600	32,400	15,000	41,479
Food and Beverage	15,290	22,935	30,580	100,837
Rentals	7,750	17,250	19,500	3,450
Total	\$ 121,089	\$ 247,408	\$ 305,328	\$ 295,152
<i>Difference from Rose Park</i>	<i>\$ (174,063)</i>	<i>\$ (47,744)</i>	<i>\$ 10,176</i>	

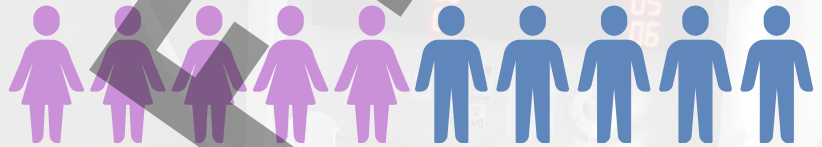
MARKET DEMOGRAPHICS

Billings Demographic Overview (2022)

7 in 10 U.S. residents have at least one local park, playground, open space or recreation center within walking distance of their homes.*

The draw radius for pools depends on their features and target audience. Lap pools and competitive facilities might attract users from further afield, potentially 20-30 minutes (around 3-5 miles) or more.

TOTAL POPULATION: 115,000

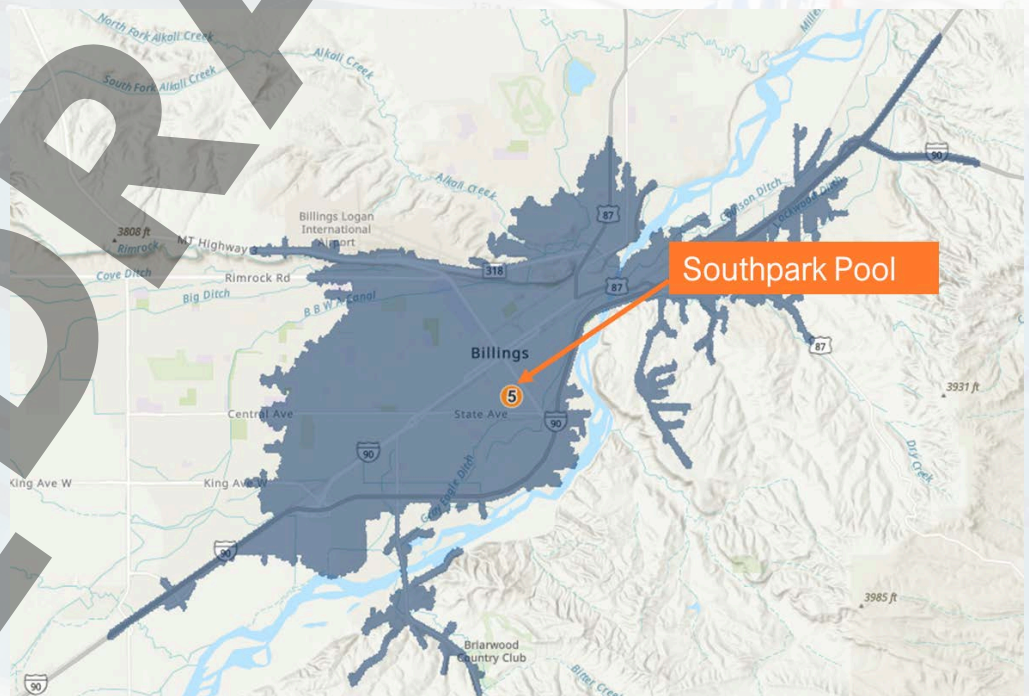


Billings Overview

- Currently there are ~115,000 residents in Billings
- 74% of residents have a park within a 10-minute walk meeting national benchmarks

Recommendations

- Renovations to South Park Pool will rejuvenate the bathhouse and pool.

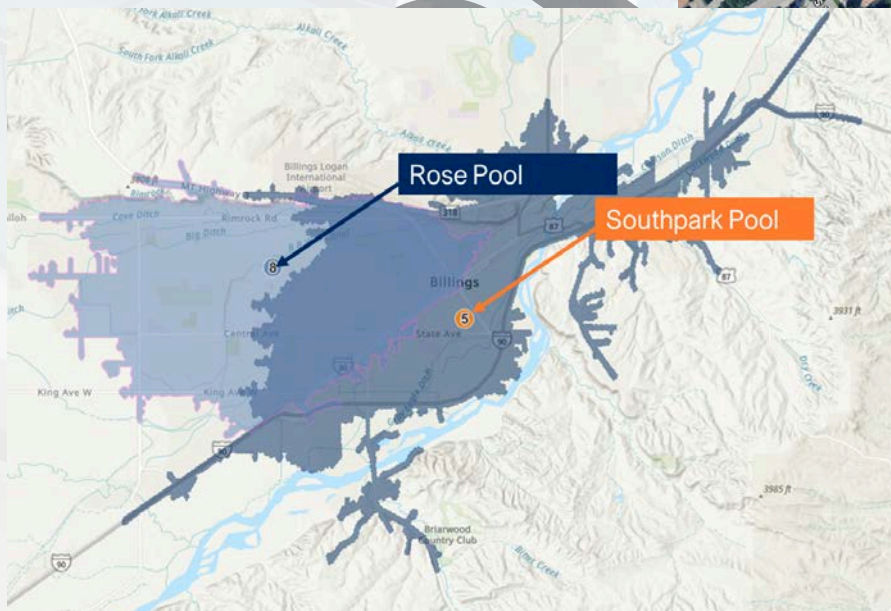


CONDITIONS ANALYSIS

South Park Pool

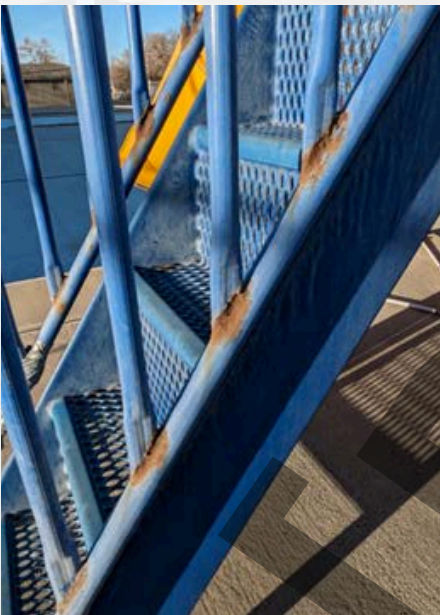
- The current pool and bathhouse are past their useful life and should be renovated or replaced. The current sprayground does not require any renovations, but equipment will need to be moved.
- Given South Park Pool's location, Billings will have an opportunity to serve ~54,000 residents, ~13,000 will be school aged which will be appropriate for the facility type in all three options.
- Increasing the size of the bathhouse to a support space will increase programming ability year-round as well as provide additional space for pool programming (parties, rentals, etc.)

Park Names	Population within a 5-min walk
Terry Park Sprayground	21,115
Pioneer Park Sprayground	19,143
Highland Sprayground	14,774
Castle Rock Park Sprayground	12,439
North Park Splash Pad	10,799
South Park Splash Pad	9,895
Amend Park	7,536
Hawthorne Park Sprayground	7,055
Grand Total	102,756



CONDITIONS ANALYSIS

South Park Pool



OPTIONS SUMMARY



Concept 1

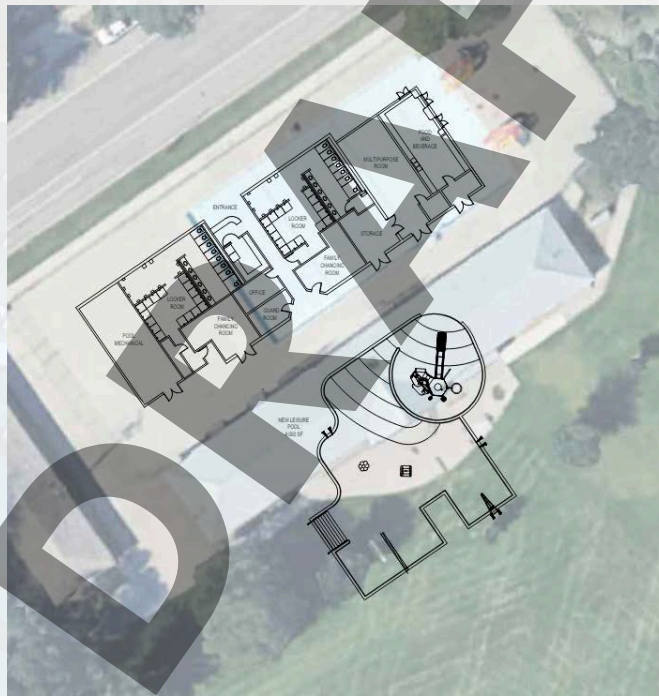


Concept 2



Concept 3

Concept 1

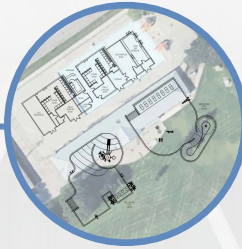


This leisure pool design includes different depths, a multi-level play area, deep water attractions such as a zip line and climbing wall, and spray features. It is designed to accommodate families and groups of friends with areas suitable for various age groups, featuring interactive elements and water cannons. The pool's layout prioritizes ease of access with a gradual slope into the water. Adjacent lounge areas offer a place to unwind, with trained lifeguards on duty to prioritize safety. Overall, this concept aims to deliver an enjoyable and welcoming aquatic experience for everyone.

OPTIONS SUMMARY



Concept 1

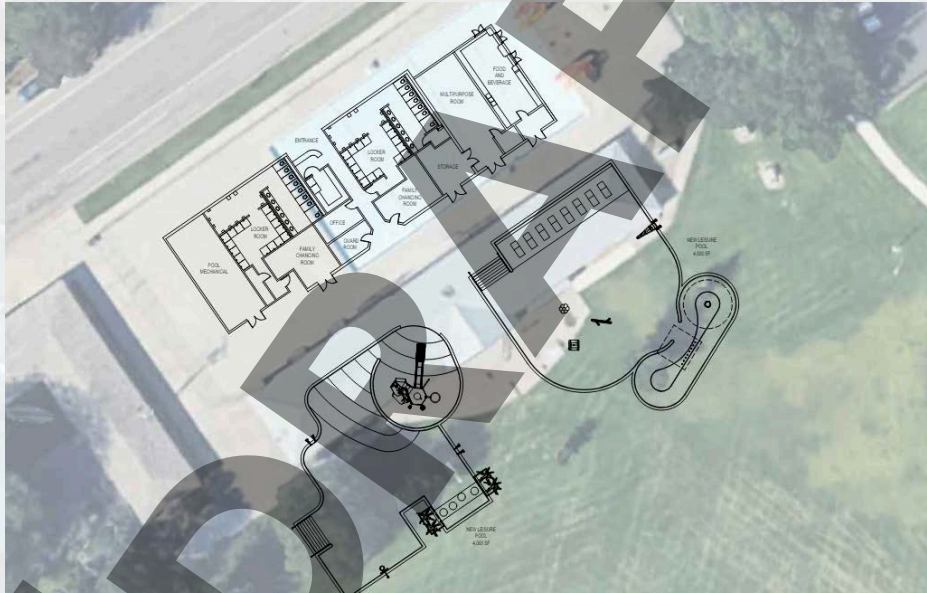


Concept 2



Concept 3

Concept 2



In Concept 2, the first leisure pool offers a zero-beach entry, suitable for easy access into the water. Additionally, the multi-level play structure provides an interactive element for visitors to enjoy. The inclusion of a floatable crossing activity adds a challenging aspect for those seeking adventure, while water basketball offers a competitive option for guests. Moving on to the second pool in this concept, the presence of a current channel adds movement to the pool area. The spray features contribute to a playful atmosphere, while the zip line offers an experience for thrill-seekers. Lastly, the sunshelf provides a spot for sunbathing and unwinding by the water's edge, complementing the diverse offerings of this concept's leisure pools.

OPTIONS SUMMARY



Concept 1

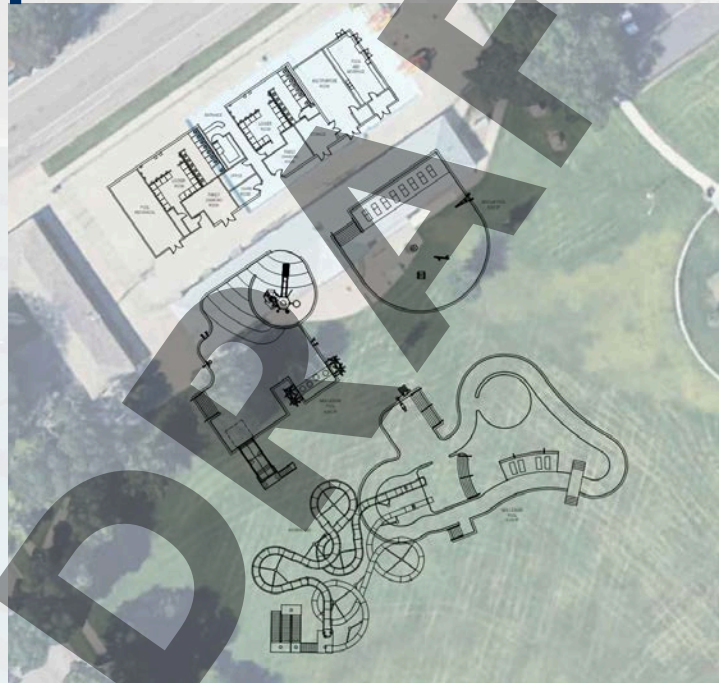


Concept 2



Concept 3

Concept 3



Concept 3 creates a waterpark atmosphere in the pool area. Pool 1 has a recreation pool with a zero-beach entry, a play structure, a crossing structure, and a drop slide. Pool 2 offers amenities like a zip line, spray features, and a sunshelf. The third section includes a lazy river, a bridge to an island, a vortex, and waterslides for all ages. Overall, Concept 3 offers an new aquatic experience for visitors.

AQUATIC CENTER SPACE PROGRAMS

Overview

Based upon the initial input from Billings, MT and the market demographics, three space programs have been developed. The following charts detail a preliminary space program for aquatic centers in Billings.

- Concept 1 with varying depths, play structures, deep water activities, and spray features for families and friends of all ages. Accessible design, lounges for relaxation, and lifeguards for safety ensure a fun and inclusive aquatic experience.
- Concept 2 features a leisure pool with a zero-beach entry and a multi-level play structure, offering interactive elements for visitors. The second pool includes a current channel, spray features, and a zip line, along with a sunshelf for relaxation by the water.
- Concept 3 creates a waterpark atmosphere in the pool area with Pool 1 having various features like a recreation pool, play structure, and slides. Pool 2 offers a zip line, spray features, and a sunshelf, while the third section includes a lazy river, island, vortex, and waterslides.

The sizes of the three options range from 19,476 to 46,203 square feet. In addition to the pools, support spaces have been programmed to include entry areas, staff offices, locker rooms, universal/family changing rooms, a multi-purpose room, and pool storage/mechanical.

Opinion of Probable Cost

Counsillman-Hunsaker has prepared an Opinion of Probable Construction Cost for the studied aquatic center concepts. A budget for site construction costs and furniture, fixtures and equipment (FF&E) has also been calculated and included in the estimates. Recent project bid figures of similar projects have been used as well as national estimating guides and local cost adjustment factors. The hard construction cost figures have been supplemented by a development cost factor of 12%, which includes such "soft" costs as professional fees, survey, geotechnical report, document reproduction, advertisement for bids and all anticipated expenses related to the administration of the project. A 10% contingency allowance and 5% escalation allowance have also been included in the estimates. The sum of these two cost figures calculate the total project cost. The cost estimates on the following pages are current as of June 2024.

AQUATIC CENTER SPACE PROGRAMS

Concept 1

A leisure pool with varying depths, play structures, deep water activities, and spray features for families and friends of all ages. Accessible design, lounges for relaxation, and lifeguards for safety ensure a fun and inclusive aquatic experience.

CHART OPINION OF PROJECT COST: South Park Pool Option 1			
Description	Unit	Amount	Opinion of Cost
Ops Building		8,220	\$3,742,101
Entrance	Sq. Ft.	100	
Managers Office	Sq. Ft.	150	
Guard Room	Sq. Ft.	200	
Multipurpose Room	Sq. Ft.	2,400	
Pool Mechanical	Sq. Ft.	1,300	
Storage	Sq. Ft.	500	
Food and Beverage	Sq. Ft.	600	
Locker Rooms	Sq. Ft.	1,400	
Family Changing Rooms (2)	Sq. Ft.	200	
Circulation and Walls (20%)	Sq. Ft.	1,370	
Aquatic Center		4,232	\$2,169,400
1M Diving	Quantity	1	
Leisure Pool	Sq. Ft.	4,232	
Play structure	Allowance	1	
Support		12,696	\$471,850
Outdoor Deck	Sq. Ft.	8,464	
Fence	Ln. Ft.	451	
Overhead Lighting	Sq. Ft.	12,696	
Shade Structures	Quantity	6	
Total Construction Costs	Sq. Ft.	25,148	6,383,351
Site Construction Costs (landscaping, utilities, walks)			\$377,220
Furniture, Fixtures, Equipment			\$151,000
Subtotal			\$6,911,571
Inflation (1 year)	5.0%		\$345,579
Contingency	10.0%		\$725,715
Indirect Costs	10.0%		\$798,286
Total Estimated Project Costs:			\$8,781,151
Rounded			\$8,800,000

Source: Counsilman-Hunsaker



AQUATIC CENTER SPACE PROGRAMS

Concept 2

Concept 2 features a leisure pool with a zero-beach entry and a multi-level play structure, offering interactive elements for visitors. The second pool includes a current channel, spray features, and a zip line, along with a sunshelf for relaxation by the water.

CHART OPINION OF PROJECT COST: South Park Pool Option 2			
Description	Unit	Amount	Opinion of Cost
Ops Building		8,220	\$3,742,101
Entrance	Sq. Ft.	100	
Managers Office	Sq. Ft.	150	
Guard Room	Sq. Ft.	200	
Multipurpose Room	Sq. Ft.	2,400	
Pool Mechanical	Sq. Ft.	1,300	
Storage	Sq. Ft.	500	
Food and Beverage	Sq. Ft.	600	
Locker Rooms	Sq. Ft.	1,400	
Family Changing Rooms (2)	Sq. Ft.	200	
Circulation and Walls (20%)	Sq. Ft.	1,370	
Aquatic Center		8,732	\$4,158,150
Lap Pool	Sq. Ft.	4,500	
1M Diving	Quantity	1	
Drop Slide	Quantity	1	
Leisure Pool	Sq. Ft.	4,232	
Play structure	Allowance	1	
Support		26,196	\$849,331
Outdoor Deck	Sq. Ft.	17,464	
Fence	Ln. Ft.	647	
Overhead Lighting	Sq. Ft.	26,196	
Shade Structures	Quantity	6	
Total Construction Costs	Sq. Ft.	43,148	8,749,581
Site Construction Costs (landscaping, utilities, walks)			\$647,220
Furniture, Fixtures, Equipment			\$259,000
Subtotal			\$9,655,801
Inflation (1 year)	5.0%		\$482,790
Contingency	10.0%		\$1,013,859
Indirect Costs	10.0%		\$1,115,245
Total Estimated Project Costs:			\$12,267,696
Rounded			\$12,300,000

Source: Counsilman-Hunsaker



AQUATIC CENTER SPACE PROGRAMS

Concept 3

Concept 3 creates a waterpark atmosphere in the pool area with Pool 1 having various features like a recreation pool, play structure, and slides. Pool 2 offers a zip line, spray features, and a sunshelf, while the third section includes a lazy river, island, vortex, and waterslides.

CHART OPINION OF PROJECT COST: South Park Pool			
Description	Unit	Amount	Opinion of Cost
Ops Building		8,220	\$3,742,101
Entrance	Sq. Ft.	100	
Managers Office	Sq. Ft.	150	
Guard Room	Sq. Ft.	200	
Multipurpose Room	Sq. Ft.	2,400	
Pool Mechanical	Sq. Ft.	1,300	
Storage	Sq. Ft.	500	
Food and Beverage	Sq. Ft.	600	
Locker Rooms	Sq. Ft.	1,400	
Family Changing Rooms (2)	Sq. Ft.	200	
Circulation and Walls (20%)	Sq. Ft.	1,370	
Aquatic Center		13,141	\$6,647,200
Lap Pool	Sq. Ft.	4,500	
1M Diving	Quantity	1	
Leisure Pool	Sq. Ft.	4,409	
Vortex	Add Cost	1	
River Mechanical	Allowance	1	
Play features	Allowance	1	
Waterslide w/ Tower	Allowance	1	
Second Slide	Allowance	1	
Leisure Pool 2	Sq. Ft.	4,232	
Play structure	Allowance	1	
Support		39,423	\$1,211,945
Outdoor Deck	Sq. Ft.	26,282	
Fence	Ln. Ft.	794	
Overhead Lighting	Sq. Ft.	39,423	
Shade Structures	Quantity	6	
Total Construction Costs	Sq. Ft.	60,784	11,601,246
Site Construction Costs (landscaping, utilities, walks)			\$911,760
Furniture, Fixtures, Equipment			\$365,000
Subtotal			\$12,878,006
Inflation (1 year)	5.0%		\$643,900
Contingency	10.0%		\$1,352,191
Indirect Costs	10.0%		\$1,487,410
Total Estimated Project Costs:			\$16,361,506
Rounded			\$16,400,000

Source: Counsilman-Hunsaker



OPERATION CONCEPT

Expense Analysis

The following information details operating expenses for the aquatic center, focusing on major cost categories and estimation methodologies. Projections are made through a combination of historical data, industry benchmarks, and relevant factors like local conditions and user projections.

Key Expense Areas:

- **Facility Staff:** Annual payroll considers benefits, taxes, and scheduling based on user demand and established procedures. Pay rates align with existing job classifications and wage scales. Costs associated with staff dedicated to program delivery are factored into the expense table.
- **Commodities:** This category encompasses day-to-day operational supplies, including office, program, custodial, repair, and chemical needs. Chemical costs consider the use of liquid chlorine and muriatic acid, adjusted based on projected bather load and water balance. Medium bather load is used for cost estimation purposes.
- **Utilities:** Utility costs are determined by reviewing current rates from comparable facilities in the region. Total costs include energy, demand charges, and delivery fees. It is crucial to exercise caution when comparing these costs with facilities outside the immediate area due to potential regional variations.
- **Electricity:** Calculations are based on both demand and energy costs obtained from utility rate information provided by the project committee. The table outlines the estimated electricity costs for various operational scenarios.
- **Water & Sewer:** Water and sewer services are required for domestic use, compensating for evaporation and backwashing purposes. Backwash and domestic water are released into the sanitary system, excluding landscape irrigation.
- **Repair & Maintenance:** This budget allocation covers facility repairs and general maintenance for the building and pool mechanical systems.
- **Capital Replacement Fund:** Certain equipment manufacturers recommend annual maintenance programs to ensure optimal performance, often requiring contractors. Additionally, unforeseen repairs throughout the year may also necessitate external services. This fund reserves money for such maintenance and replacement needs.



OPERATION CONCEPT

Expense Analysis

The following tables reflect a summary of all operating expenses, assumptions, and estimates detailed by the expense category.

Direct Facility Expense Budget			
	Option 1	Option 2	Option 3
Facility Staff			
Full Time Employment	Not Included	Not Included	Not Included
Part-Time Management	\$10,080	\$11,520	\$12,960
Lifeguard Personnel	\$37,800	\$69,120	\$116,640
Front Desk Personnel	\$8,820	\$20,160	\$22,680
Part-Time Maintenance	\$13,200	\$13,200	\$13,200
Personnel Equipment Cost	\$1,101	\$1,776	\$2,589
Training	\$2,000	\$4,000	\$5,000
Total Labor	\$73,001	\$119,776	\$173,069
Direct Facility Expenses			
Insurance	\$65,262	\$65,262	\$87,461
Repair and Maintenance	\$22,000	\$30,800	\$41,000
Credit Card Fees	\$0	\$0	\$7,251
Operating Supplies	\$18,480	\$18,480	\$24,600
Chemicals	\$4,202	\$0	\$14,660
Advertising	\$15,000	\$15,000	\$15,000
Direct Expenses	\$124,944	\$129,542	\$189,972
Utilities			
HVAC	\$0	\$0	\$12,823
Electricity	\$63,613	\$115,478	\$35,664
Pool Heating	\$0	\$0	\$143,297
Data/Communications	\$0	\$0	\$2,160
Trash Service	\$0	\$0	\$720
Water & Sewer	\$4,619	\$174,342	\$8,722
Total Utilities	\$68,232	\$289,820	\$203,386
Programs			
Program Supplies	\$0	\$0	\$1,735
LG Class Materials	\$0	\$0	\$0
Food and Beverage	\$9,174	\$9,174	\$9,174
Part-Time Program Staff	\$0	\$0	\$11,075
Total Programs	\$9,174	\$9,174	\$21,984
Total Operating Expenses	\$275,351	\$548,312	\$588,411
Capital Replacement Fund	\$44,000	\$61,500	\$82,000
Total Expense	\$319,351	\$609,812	\$670,411
Estimate Current as of: 7/22/2024			
Source: Counsilman-Hunsaker			



OPERATION CONCEPT

Revenue Analysis

Revenue analysis reviews facility capacity analysis, per capita spending trends, and special user group usage. Developing an opinion of financial impact is an important component in evaluating facility opportunities. Projected attendance is based on population trends. Fee structure is based on fees from season pass holders and other users to project per capita income. Revenue is estimated, taking recommended fee schedules into account. All revenue assumptions reflect multiplying attendance by per capita.

Fee Structure

In order to project revenue, fee schedules are established. Three general approaches to evaluating the fee structure of an aquatic center include the following:

1. Maximize revenue by charging what the market will support. Programs and facilities operate with positive cash flow. If excess funds are available at season's end, they can be used to support under-funded programs.
2. Break-even in the operation of the facility. This approach is increasing in popularity as funding is becoming limited to organizations that use the facility. Capital funds are used to create the facility; operational funds are generated from the user on a break-even basis.
3. Subsidy pricing historically has been the policy of many community facilities.

Program Revenue

The following charts detail a summary of the revenue opportunities for the studied aquatic center options. The expenses for each program are detailed on the charts in this section. The programming model is based on annual growth in program participants and a price hike of 10% in year 3 and 5% in year 5. The primary revenue generators for the options will be revenue from daily admissions and memberships, along with swim lessons, water fitness classes, food and beverage, and facility rentals.

OPERATION CONCEPT

Concept 1

CHART Option 1 A QUANTUM REPORT 2018						
Revenue		Year 1	Year 2	Year 3	Year 4	Year 5
Daily Admissions / Memberships						
Admissions / Memberships (Outdoor)		\$76,449	\$76,986	\$84,956	\$85,546	\$90,443
Swim Team Revenue						
Aquatic Programs						
Swim Lessons		\$21,600	\$23,760	\$27,443	\$28,815	\$31,768
Food and Beverage						
Food and Beverage		\$15,290	\$15,397	\$16,991	\$17,109	\$18,089
Rentals						
Birthday Party		\$6,000	\$6,600	\$7,623	\$8,004	\$8,825
Private (Full Pool)		\$1,750	\$1,925	\$2,223	\$2,335	\$2,574
Area Revenue		\$121,089	\$124,668	\$139,236	\$141,809	\$151,699
Expense		Year 1	Year 2	Year 3	Year 4	Year 5
Program Supplies		\$1,211	\$1,247	\$1,392	\$1,418	\$1,517
LG Class Materials		\$0	\$0	\$0	\$0	\$0
Food and Beverage		\$9,174	\$9,238	\$10,195	\$10,266	\$10,853
Competitive Events		\$0				
In-House Swim Team		\$68,700				
Part-Time Program Staff		\$10,800	\$11,880	\$13,721	\$14,407	\$15,884
Area Expense		\$89,885	\$22,365	\$25,308	\$26,091	\$28,254
Net Revenue		\$31,204	\$102,303	\$113,927	\$115,718	\$123,444

OPERATION CONCEPT

Concept 2

CHART Option 2					
Revenue	Year 1	Year 2	Year 3	Year 4	Year 5
Daily Admissions / Memberships					
Admissions / Memberships (Outdoor)	\$174,823	\$176,051	\$194,276	\$195,626	\$206,825
Aquatic Programs					
Swim Lessons	\$32,400	\$35,640	\$41,164	\$43,222	\$47,653
Food and Beverage					
Food and Beverage	\$22,935	\$23,096	\$25,487	\$25,664	\$27,133
Rentals					
Birthday Party	\$12,000	\$13,200	\$15,246	\$16,008	\$17,649
Private (Full Pool)	\$5,250	\$5,775	\$6,670	\$7,004	\$7,722
Area Revenue	\$247,408	\$253,761	\$282,843	\$287,525	\$306,982
Expense	Year 1	Year 2	Year 3	Year 4	Year 5
Program Supplies	\$2,474	\$2,538	\$2,828	\$2,875	\$3,070
LG Class Materials	\$0	\$0	\$0	\$0	\$0
Food and Beverage	\$13,761	\$13,857	\$15,292	\$15,398	\$16,280
Competitive Events	\$0				
In-House Swim Team	\$68,700				
Part-Time Program Staff	\$16,200	\$17,820	\$20,582	\$21,611	\$23,826
Area Expense	\$101,135	\$34,215	\$38,703	\$39,885	\$43,176
Net Revenue	\$146,273	\$219,546	\$244,141	\$247,640	\$263,806

OPERATION CONCEPT

Concept 3

CHART Option 3					
Revenue	Year 1	Year 2	Year 3	Year 4	Year 5
Daily Admissions / Memberships					
Admissions / Memberships	\$233,098	\$234,734	\$259,035	\$260,835	\$275,767
Summer League	\$7,150	\$7,865	\$9,084	\$9,538	\$10,516
Aquatic Programs					
Swim Lessons	\$15,000	\$16,500	\$19,058	\$20,010	\$22,061
Food and Beverage					
Food and Beverage	\$30,580	\$30,794	\$33,982	\$34,218	\$36,177
Rentals					
Birthday Party	\$16,000	\$17,600	\$20,328	\$21,344	\$23,532
Private (Full Pool)	\$3,500	\$3,850	\$4,447	\$4,669	\$5,148
Area Revenue	\$305,328	\$311,344	\$345,934	\$350,616	\$373,202
Expense	Year 1	Year 2	Year 3	Year 4	Year 5
Program Supplies	\$3,053	\$3,113	\$3,459	\$3,506	\$3,732
LG Class Materials	\$0	\$0	\$0	\$0	\$0
Food and Beverage	\$18,348	\$18,477	\$20,389	\$20,531	\$21,706
Competitive Events	\$0				
Part-Time Program Staff	\$11,075	\$12,183	\$14,071	\$14,774	\$16,289
Area Expense	\$32,476	\$33,772	\$37,919	\$38,812	\$41,727
Net Revenue	\$272,852	\$277,571	\$308,014	\$311,804	\$331,475

OPERATION CONCEPT

Operational Summary

The following projections details the pro forma for the Aquatic Center and the recapture rate of operating expenses recouped by revenue. The options show a cost recovery rate for year one in the 39.83% - 53.38% range depending on the option. These rates assume a City owned and operated aquatic center.

	Option 1	Option 2	Option 3
Construction Cost	\$0	\$0	\$0
Project Cost	\$8,800,000	\$12,300,000	\$16,400,000
Total Size (Sq.Ft.)	20,916	34,416	47,643
Capacity	177.932	343.084	496.5055
Site Size	2.58	4.56	6.46
Total Attendance	15,290	22,935	35,435
Expense Budget	\$304,024	\$463,495	\$593,096
Revenue Projection	\$121,089	\$247,408	\$305,328
Cashflow	(\$182,936)	(\$216,087)	(\$287,769)
Cost Recovery	39.83%	53.38%	51.48%

OPERATION CONCEPT

Rose Park Pool

	Option 1 Revenue		Option 2 Revenue		Option 3 Revenue		Rose Park Pool
Admissions / Memberships		76,449		174,823		233,098	149,386
Summer League		0		0		7,150	0
Aquatic Programs		21,600		32,400		15,000	41,479
Food and Beverage		15,290		22,935		30,580	100,837
Rentals		7,750		17,250		19,500	3,450
Total	\$	121,089	\$	247,408	\$	305,328	\$ 295,152
<i>Difference from Rose Park</i>	<i>\$</i>	<i>(174,063)</i>	<i>\$</i>	<i>(47,744)</i>	<i>\$</i>	<i>10,176</i>	



APPENDIX A:

General Limiting Conditions

This study is based on information that was current as of May 2024. Every reasonable effort has been made in order that the data reflects the most timely and current information possible and is believed to be reliable. This study is based on estimates, assumptions, and other information developed by the consultant from independent research.

No warranty or representation is made by the consultant that any of the projected values or results contained in this study will actually be achieved. No responsibility is assumed for inaccuracies in reporting by the client, its agents, and representatives or any other data source used in preparing or presenting this study. This entire report is qualified and should be considered in light of the above conditions and limitations.

DRAFT



APPENDIX B: AQUATIC TRENDS

Aquatic Trends

When developing tomorrow's vision for aquatic programming, it is important to understand traditional uses and trends in aquatic programs. Trends evolve in the aquatic industry as swimming expectations evolve. While national surveys continually rank swimming as a favorite recreational sport, today's aquatic centers incorporate recreation swimming and wellness pools to augment revenue of competitive swimming, thereby creating multi-generational facilities through shared expenses.

Contemporary aquatic centers are fully ADA accessible, allowing everyone to benefit from aquatic activities. Compliance with the 2010 Standards for Accessible Design specifically states that all pools larger than 300 linear feet of pool wall perimeter need at least two accessible means of entry, one of which needs to be either a pool lift or a sloped entry. The secondary means of entry can be either a lift or sloped entry, or pool access stairs, transfer system, or transfer wall. Pools with less than 300 linear feet of pool wall perimeter need one accessible means of entry, either a pool lift or sloped entry. Spas need one entry, which can be either a pool lift, transfer system or a transfer wall. As more athletes cross train with water fitness components and more doctors recommend water rehabilitation for injured, overweight diabetic, and aging patients, multi-generational aquatic centers are inclusive of the entire community.

The following describes national trends for four aquatic user groups: lessons and fitness, water wellness, recreation, and competitive swimmers. The descriptions make evident the very different requirements for each of these aquatic user groups when planning and designing an aquatic facility

Swim Lessons

According to the Centers for Disease Control, more than one in five people who die from drowning are children ages 14 and younger. For every child who dies from drowning, another four receive emergency care for nonfatal submersion injuries, which can cause brain damage that may result in long-term disabilities, including memory problems, learning disabilities, and permanent loss of basic functioning.¹



APPENDIX B:

AQUATIC TRENDS

Drowning Prevention is essential for children and adults, whether living in areas with natural bodies of water or simply being invited to pool parties. With more than one available pool in an aquatic center, lessons can be maximized so that a large number of residents can be taught to swim. Ideally, water depth for instruction should accommodate young participants to stand comfortably in the water.

Recreation pools easily provide this preference. Deeper competition pools offer moveable floors or other means of altering water depth for instructional purposes.

A well-run water lesson program is essential in introducing young swimmers to safe aquatic skills that can be used throughout their lives. By offering the community a comfortable, controlled aquatic environment, swimming and diving lessons can become an enjoyable learning experience. There are many different types of water safety lessons that can teach children not only how to swim and dive but how to survive in adverse water conditions. From small watercraft instruction to learn to swim, water safety is an integral part of any community. Many will go on to formal competitive aquatic programs in school or age-group swimming programs. Some will excel to become state champions. Benefits such as scholarship offers may occur when a swimmer or diver selects a college, which could lead to national-level competition.

Lifeguarding and CPR

Water rescue skills and CPR are typically taught to all lifeguards. However, water rescue and CPR skill education is integral to the community because families are the true lifeguards of one another whether at the beach or a backyard pool. Often, such courses are sponsored by the Red Cross, Ellis and Associates, and other providers of safety training.

Community Lesson Users

Partnerships with local schools are often valuable contributors to help efficiently program aquatic facilities. Potential programming might embrace swim lessons for elementary students, lifeguarding classes, physical education classes, therapy for high school athletes, and other joint-partnership agreements to aid in directing area children to learn to swim. Aquatic sports (diving, water polo, synchronized swimming, underwater hockey, etc.) can contribute to the overall use of the facility as well as fitness use by faculty, special education therapy, and recreation. In addition, an aquatic facility may provide aquatic opportunities to pre-school children cared for by private daycare providers.



APPENDIX B: AQUATIC TRENDS

Recreation Swimmers

Successful aquatic centers combine creative water play areas for various age groups in a safe, friendly atmosphere. While aquatic recreation has become much more age-defined, attractions have age limitations and appropriateness due to elements of thrill and capabilities. Tots enjoy shallow pools with gentle water features and play areas tucked securely out of the way of the more active areas.



Once children grow out of the tot stage, they enjoy romping in zero-depth recreation pools, making their adventurous way across lily pad walks, and climbing on participatory play features with “just-their-size” waterslides. Older children speed down flume and drop slides and enjoy larger water play structures. Teens enjoy gathering spots like action islands with access to deep water pools and more adventurous waterslides. Lazy rivers and current channels cater to most demographics while spas and lap lanes are geared towards adults.

Recreational Aquatic National Trends by Age Group	
Age Group	Recreational Aquatic Age-Group National Trends
Age 0 - 3	Tot pool, tot slides, gentle spray features
Age 4 - 7	Water sprayground, zero-depth pool, participatory play features, sand play
Age 8 - 11	Water walks, large play structures, full-size waterslides, open water
Age 12 - 16	Water walks, large waterslides, open water, lazy river, gathering places, sand volleyball, mat racer, diving boards
Age 17 - 22	Action island, intense waterslides, flow rider, mat racer, climbing wall, open water, sand volleyball, drop slides, diving boards
Age 23 - 45	Zero-depth pool (to be w/children), open water, spa, sun deck, lap lanes, lazy river, waterslides, diving boards
Age 46+	Spa, sun deck, lap lanes, lazy river, family-friendly waterslides
Source: Counsilman-Hunsaker	



APPENDIX B: AQUATIC TRENDS

Recreation Pool Features



Leisure Pool

The free-form leisure pool provides an inviting atmosphere with plenty of shallow water from zero-depth to four feet, allowing adults and children to interact for hours of splash and play entertainment. With opportunity for many different sizes and designs, the leisure pool is a desirable amenity for all age and skill levels where various attractions may be incorporated to increase the experience factor, which increases attendance, the amount of time spent at the facility, and return visits.

Participatory Play Feature

Located within the leisure pool, play features are multi-level, interactive structures where children can scamper through spraying water, climb across bridges, scurry over and under tunnels, and slide down just-their-size waterslides. As children manipulate valves and chains, they control where and when the water sprays will occur—all within sight of parents and lifeguards.



APPENDIX B: AQUATIC TRENDS

Recreation Pool Features

Waterslides

The thrill of mounting the stairs to the exhilaration of sliding down into the water makes waterslides a desired attraction. While some slides are straight with a steep or gentle gradient, others wind down with sharp enclosed curves or high walls on the outside of the curves. Slides can be a long tube or alternate between an open chute and closed tube. Experiences can range from family-friendly to surprisingly intense



APPENDIX B: AQUATIC TRENDS

Recreation Pool Features

Lap Lanes

Fitness lap swimming and water walking are important to many adults and seniors. Opportunities for limited practice and training exist in a two, three or four lane 25-yard lap pool adjacent to the leisure pool. Additionally, programming can be incorporated for lessons and activities.



Climbing Wall

A kids' climbing wall offers the experience, physical activity, and challenge of climbing with the water underneath to cushion the fall.



Additional Support Amenities

Community pools have bathhouses that provide lockers/ showers/changing/restrooms for their guests. Snack / concession areas provide food for hungry appetites, thus offering a day-long experience. Birthday party shade pavilions can increase revenue by offering swim parties with games and food.



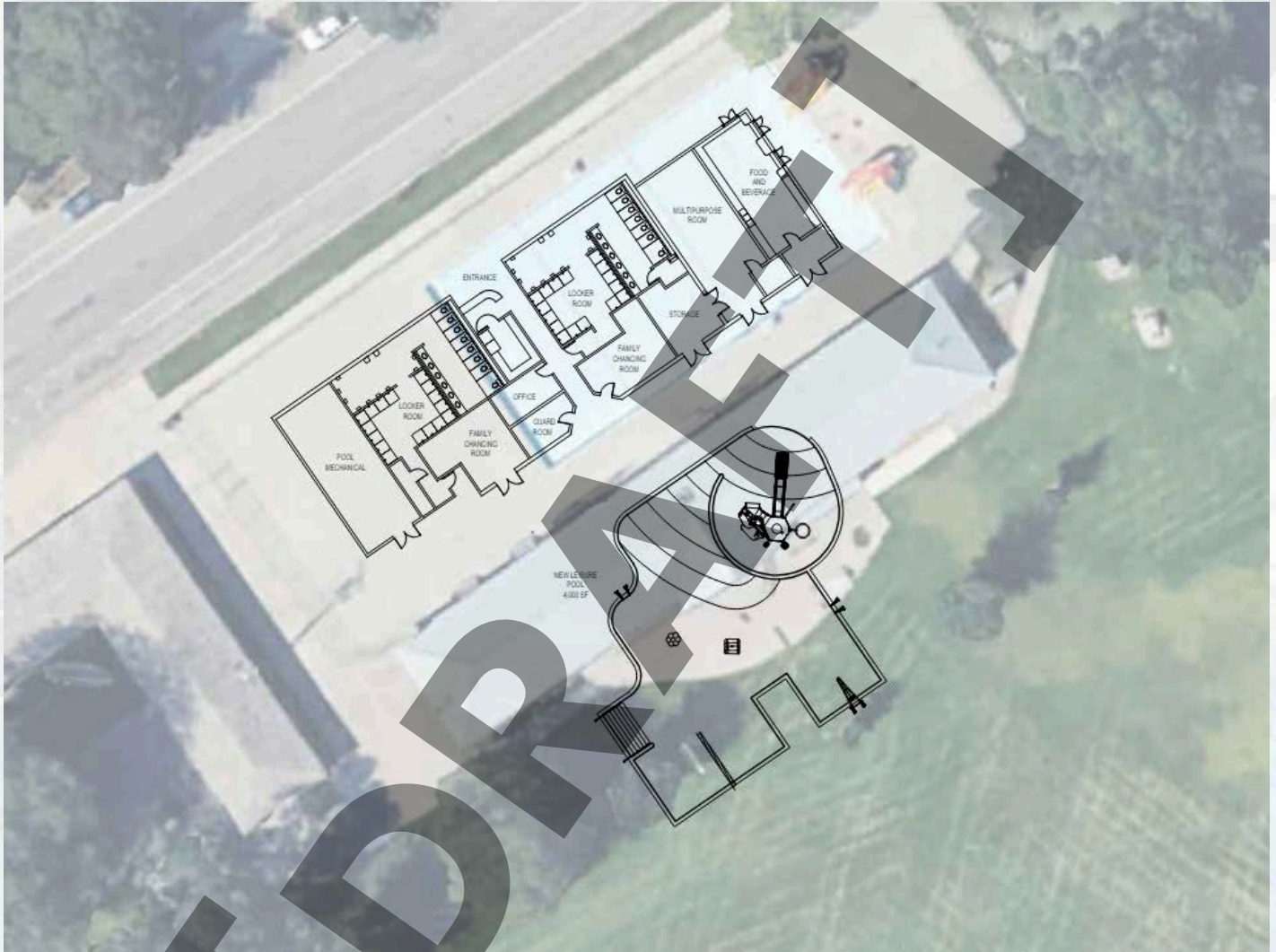
APPENDIX C: FOOTNOTES

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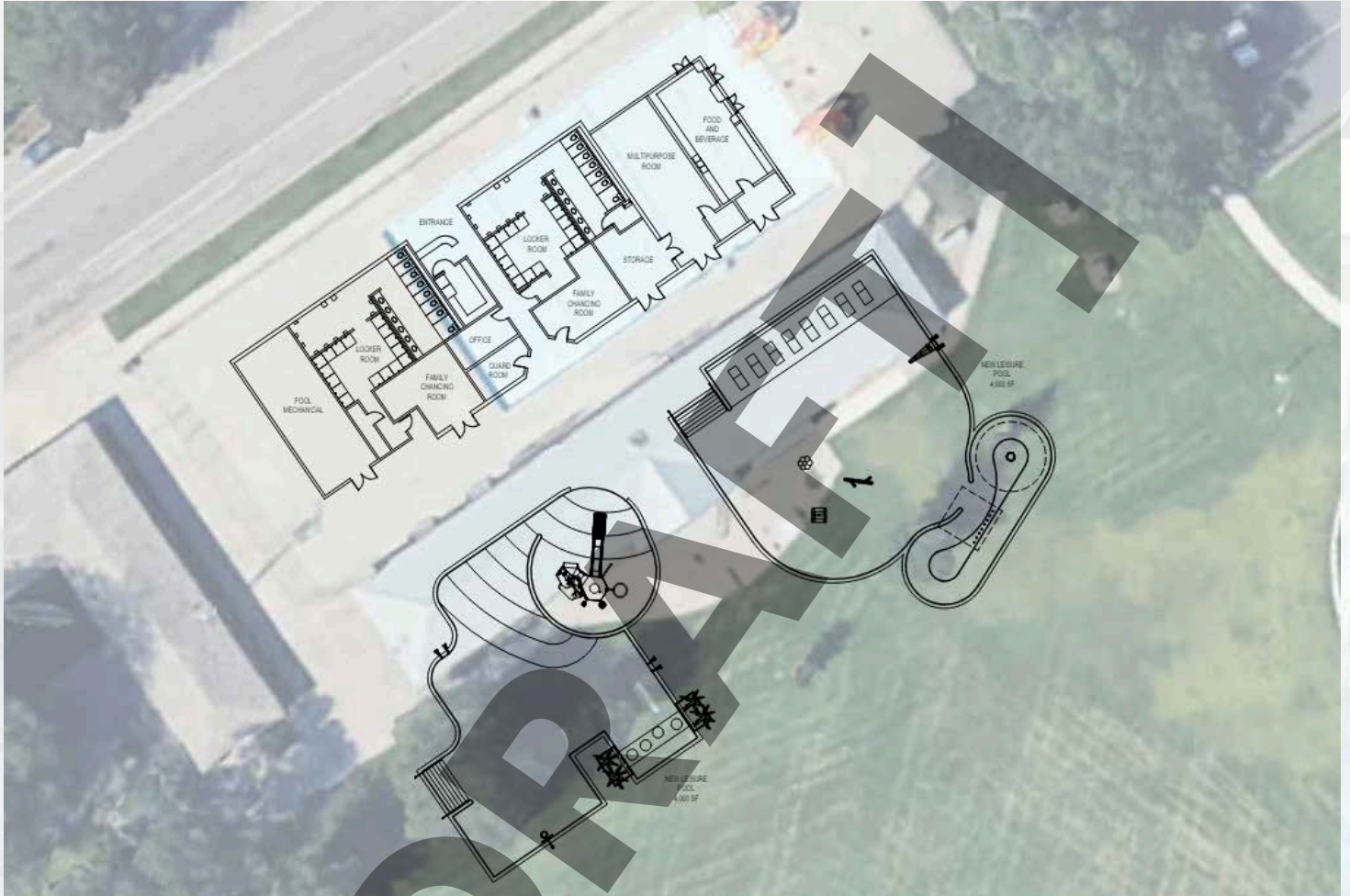
APPENDIX D: CONCEPTS

Concept 1 – Recreation Pool



APPENDIX D: CONCEPTS

Concept 2 – Recreation Pool and Lap Pool



APPENDIX D: CONCEPTS

Concept 3 – Recreation Pool, Lap Pool, and Lazy River/Waterslide

