

Lake Oswego Pool Program & Cost Analysis

LOSD School Board Working Session
December 2, 2019



**LOSD
2021**

Building our future,
together

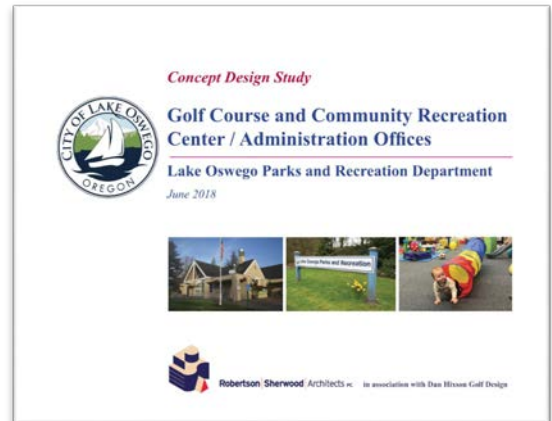
Meeting Objectives

- **Review and Discuss Needs / Cost Assessments:**
 - Competitive Pool Options, Supporting Amenities and Properties
- **Discuss Options for Moving Forward with Planning / Development**
- **Historical Context**
 - Existing Pool Assessment and Independent Study
- **Current Assessments**
 - Needs, Cost Analysis and Site Options
- **Current Funding**
- **Next Steps**



1990-2019: LOSD / Community Athletic Facility Studies

- LOP&R 1990 *Capital Improvements Bond*
- LOSD 2015 *Facility Conditions Assessment Report*
- Terracon 2015 *Facility Conditions Assessment Report*
- LOSD 2017 *Capital Improvements Bond*
- LOP&R 2017 *Golf Course and Community Recreation Center Concept Design Study*
- LOSD 2018 *Athletic Facilities Advisory Task Force Recommendations*
- LOSD Pool Taskforce 2018 *General Guidelines / Facts of the Work*
- LOP&R 2019 *Athletic Field Requirements Report*
- LOSD 2019 *Lakeridge Junior High School Masterplan*
- B*K 2019 *LOSD Aquatic Center Feasibility Study*
- LOP&R 2019 *Capital Improvements Bond*
- 2019 *Lake Oswego Parks Bond Final Report*

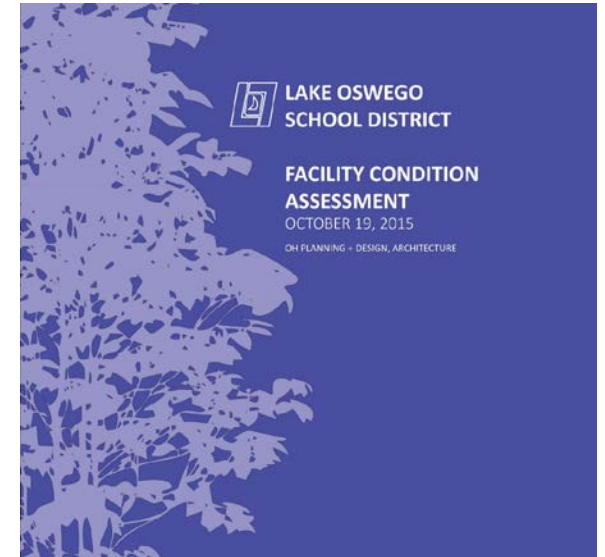


Existing Pool Assessment 2015

- 50-year old pool
- Critical Condition Index: 2nd lowest score of 19 District Buildings
- Minimal preventative maintenance
- Repairs or replacement often at point of failure
- District incurs operational losses of approx. \$150,000/year
- Non-compliant to current codes/industry standards
- Replacement cost could be comparable to renovation cost
- Recommend total replacement be considered

2017 LOSD Bond

- Allocated \$7M to repair or replace pool



2019 B*K Feasibility Study Tasks

Market Analysis

- Demographics
- Other Providers

User Group Input

- Task Force Meetings (4)
- User Group Interviews

Aquatic Facility Options

- Preferred Options

Operations Analysis

- Expenses/Revenues

Partnerships/Funding



LOSD & Community Priorities

LOSD Pool Facility:

- Priority: Address Needs of HS Athletic Programs
- Secondary: Support Community Partners Needs

Operational Model:

- Create an Operationally Efficient Model
- Recommend Possible Partnerships
 - Reduce costs borne by one entity
- Consider Possible Alternative Funding Models



Needs Assessment

Demand

User Group	Hrs/Day	# Lanes	Days/WK	Weeks	Total Ln Hrs/Yr
Tier 1					
Lake Oswego HS Swimming	2	8	5	14	1,120
Lakeridge HS Swimming	2	8	5	14	1,120
Lake Oswego HS Water Polo	2	8	5	14	1,120
Lakeridge HS Water Polo	2	8	5	14	1,120
Total					4,480
Tier 2					
LOWPO M-F	3	8	5	52	6,240
Sun	4	8	1	52	1,664
Total					7,904
Tier 3					
LOSC - Youth Swimming M-F	5	12	5	52	15,600
Sat	4	12	1	52	2,496
LOSC - Masters	1	6	3	52	936
LOSC - Pre-Swim Team	2	6	3	10	360
Total					19,392
Tier 4					
Swim for Fun - Swim Lessons	2	4	6	46	2,208
Swim for Fun - Cascadia Swim Tm	2	8	7	52	5,824
Other Private Lessons	1	2	6	46	552
Total					8,584
Tier 5					
Lap Swimming	3	6	7	52	6,552
Grand Total					46,912

Availability

Lanes	Existing 8	Option 1 10	Option 2 16	Option 3 22
Prime Time Hours				
Weekdays				
AM - 5am-8am - 3 hrs x 5 Days	15			
PM - 3pm-9pm - 6 hrs x 5 days	30			
Weekends				
Sat. - 6:30am-6pm - 11.5 hrs	11.5			
Sun. - 9am-6pm - 9 hrs	9			
Hours a Week	65.5			
Weeks	52			
Total Lane Hours Available	27,248	34,060	54,496	74,932

Total Annual Available Lane Hours:

Option 0: Existing - **19,664** lane hours

Option 1: 25-Meter x 25-Yard: **-12,852** lane hours

Option 2: Stretch 25-Yard: **7,584** lane hours

Option 3: 50-Meter x 25-Yard: **28,020** lane hours

Note: This is a reasonably conservative estimate of demand.

Aquatic Center Pool Options

Option 0: Renovate Current 8-Lane Pool

- School District Program Focus

Option 1: 25-meter x 25-Yard 10-lane Pool

- School District Program Focus

Option 2: Stretch 25-Yard Pool 12-16 Lane (35-40M length) Pool

- School District and Support Programs

Option 3: 50-Meter x 25 yard 20-22 Lane Pool

- School District, Support and Community Groups

Option 4: General Community Use

- Addition of warm water program pool



Aquatic Center Operations Analysis

Stretch 25-Yard (30-40 Meter) Pool

Category	Stretch 25 Meter	With Program Pool
Expenses		
Personnel	\$ 737,664	\$ 1,139,007
Commodities	\$ 98,000	\$ 145,500
Contractual	\$ 208,163	\$ 272,862
Capital Replacement	\$ 40,000	\$ 55,000
Total	\$ 1,083,826	\$ 1,612,369
Revenues		
Admissions	\$ 476,270	\$ 640,058
Programs	\$ 116,402	\$ 250,191
Other	\$ 153,375	\$ 247,625
Total	\$ 746,047	\$ 1,137,874
Difference	\$ (337,779)	\$ (474,495)
Recovery %	69%	71%

Operational estimates from B*K based on similar facilities. These projections will change with addition of warm water program pool.

50-Meter x 25-Yard Pool

Category	50 Meter	With Program Pool
Expenses		
Personnel	\$ 831,441	\$ 1,232,784
Commodities	\$ 112,000	\$ 159,500
Contractual	\$ 273,062	\$ 337,779
Capital Replacement	\$ 50,000	\$ 65,000
Total	\$ 1,266,503	\$ 1,795,063
Revenues		
Admissions	\$ 533,073	\$ 694,620
Programs	\$ 116,402	\$ 250,191
Other	\$ 160,500	\$ 259,750
Total	\$ 809,975	\$ 1,204,561
Difference	\$ (456,528)	\$ (590,502)
Recovery %	64%	67%

50-Meter Pool cost +\$100,000 more annually to operate compared to Stretch 25-Yard Pool

Pool Options & Updated Reduced Program

Aquatic Feasibility Study Program

	Option 1	Option 2	Option 3	Option 4
Pool				
25 x 25 - 6,000 pool/3,240 Deck	9,200			
Seating 300 x 6= 1,800	1,800			
Stretch 25 x 25 10,000pool/5,400 Deck		15,400		
Seating 500 x 6 = 3,000		3,000		
50 x 25 13,000 pool/7,000 Deck			20,000	
Seating 750 x 6=3,750			4,500	
Program Pool 2,800 pool/3,000 Deck				5,800
Support				
Lobby	1,000	1,500	2,000	
Facility Offices (2-3)	500	500	500	
Guard Room	300	300	300	
First-Aid Room	300	300	300	
Aquatic Offices (2)	400	400	400	
Coaches Offices (2-3)	240	240	360	
Meet Management	500	750	1,000	
Dryland Training	1,500	1,500	1,500	
Meeting/Party Rooms (1)	500	500	500	500
Locker Rooms (2)	2,000	3,000	4,000	1,000
Universal Change (6)	600	600	800	400
Team Locker Rooms (2)	1,500	1,500	1,500	
Spectator Locker Rooms (2)	800	1,200	1,400	
Concessions	0	800	1,000	
Storage	1,000	1,250	1,500	
Mechanical	2,000	2,500	3,000	1,300
Maintenance Office	400	400	500	
Custodial	200	200	400	
Sub-Total	24,740	35,840	45,460	9,000
Circulation 25%	6,185	8,960	11,365	2,250
Total	30,925	44,800	56,825	11,250

Updated Program Reductions

	Option 1	Option 2	Option 3	Option 4
Pool				
25 x 25 - 6,000 pool/3,240 Deck	9,200			
Seating 300 x 6= 1,800	1,800			
Stretch 25 x 25 10,000pool/5,400 Deck		15,400		
Seating 500 x 6 = 3,000		3,000		
50 x 25 13,000 pool/7,000 Deck			20,000	
Seating 750 x 6=3,750			4,500	
Program Pool 2,800 pool/3,000 Deck				5,800
Support				
Lobby	1,000	1,500	2,000	
Facility Offices (2-3)	500	500	500	
Guard Room	300	300	300	
First-Aid Room	300	300	300	
Aquatic Offices (2)	400	400	400	
Coaches Offices (2-3)	240	240	360	
Meet Management	500	750	1,000	
Dryland Training	1,500	1,500	1,500	
Meeting/Party Rooms (1)	500	500	500	500
Locker Rooms (2)	2,000	3,000	4,000	1,000
Universal Change (6)	600	600	800	400
Team Locker Rooms (2)	1,500	1,500	1,500	
Spectator Locker Rooms (2)	800	1,200	1,400	
Concessions	0	800	1,000	
Storage	1,000	1,250	1,500	
Mechanical	2,000	2,500	3,000	1,300
Maintenance Office	400	400	500	
Custodial	200	200	400	
Sub-Total	18,800	26,900	36,400	7,900
Circulation 25%	4,700	6,725	9,100	1,975
Total	23,500	33,625	45,500	9,875

Pool Options: Capital Cost Comparison

Pool Size	*Estimated Square Footage of Facility	**Estimated Range of Total Capital Costs	***Estimated Range of Annual Net Operating Loss
Option 1 : 25 Meter x 25 Yard Pool (10 Lanes)	23,500sf	\$18.3M - \$21.4M	\$200,000 - \$250,000
Option 2 : Stretch 25 Yard Pool (16 Lanes)	33,625sf	\$25.9M - \$29.4M	\$350,000 - \$475,000
Option 3 : 50 Meter x 25 Yard Pool (22 Lanes)	45,500sf	\$34.3M - \$38.0M	\$450,000 - \$600,000
Option 4 : Add Warm Water Program Pool	9,875sf	\$6.6M - \$8.4M	\$125,000 - \$150,000

** Based on current recommended aquatics program*

*** Includes:*

- Allowance for on-site improvements*
- 30% Indirect Costs*
- 8% Escalation (Q1 2021 Construction Start)*

*** Does Not Include:*

- Allowance for off-site improvements*

**** Top end of range if warm water pool is included*

Chehalem Aquatic Center Construction Cost

- Stretch 25-Yard Pool and Warm Water Pool
- 43,500gsf Aquatic Addition @ \$421/sf = \$18.3M start-of-construction 2017
- Escalated @ 8% / year @ **\$589/sf = \$25.6M (construction start Q1 2021)**
- **Total Capital Cost: \$36.5M**
- 21,700gsf remodel (dryland program) x \$217/sf = \$4.71M (construction start 2017)

Cost information supplied by Triplett Wellman Construction



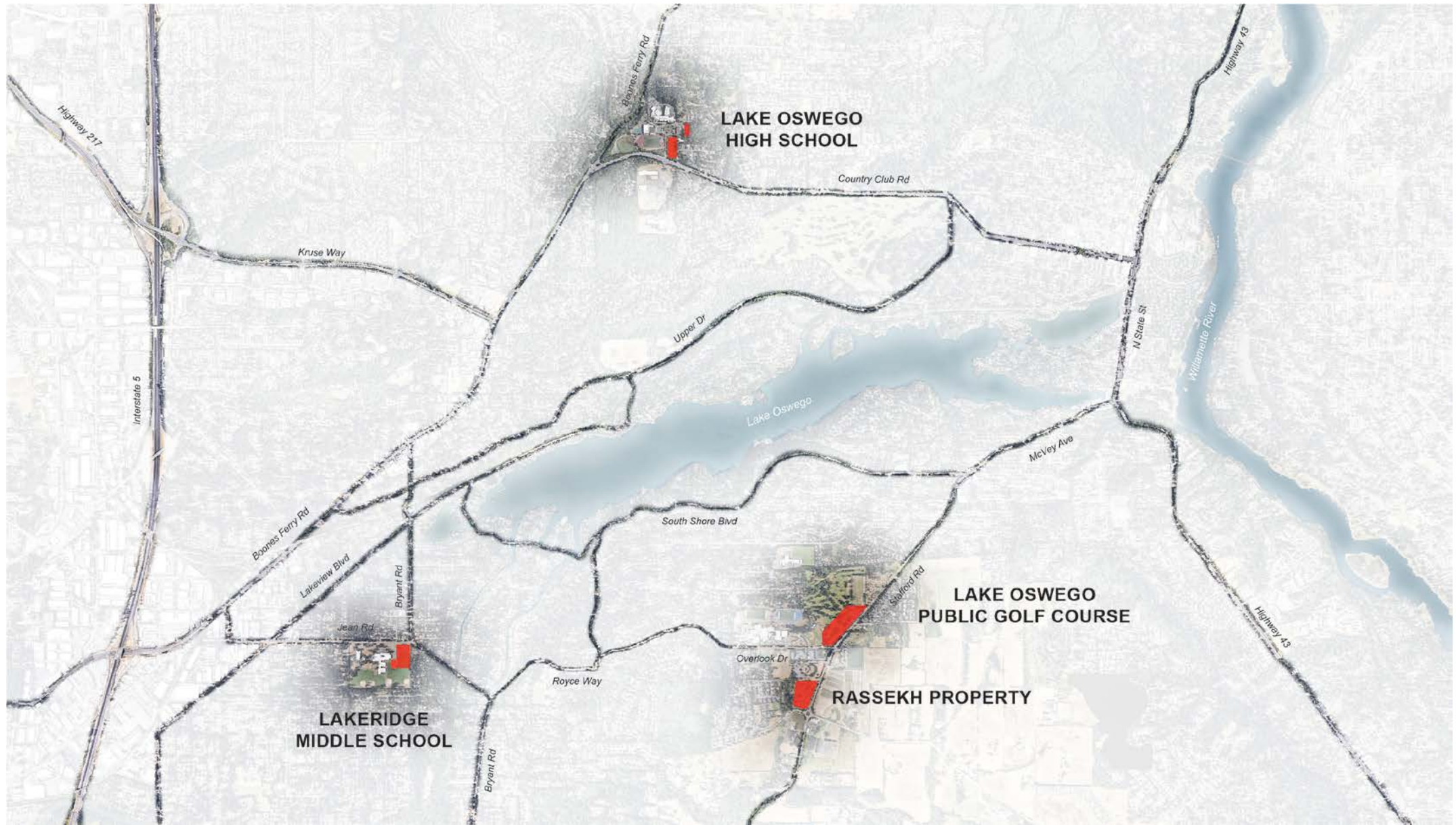
Estimated LO Aquatic Center Total Capital Cost

Stretch 25-Yard Facility	33,625sf	\$25.9M - \$29.4M
Warm Water Program Pool	9,875sf	\$6.6M - \$8.4M
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Total:	43,500sf	\$32.5M - \$37.8M

Includes: allowance for on-site improvements, 30% indirect costs,
8% escalation (Q1 2021 construction start)

Does Not Include: allowance for off-site improvements

Site Evaluation & Test Fit



Pros

- Accommodates full build-out of program
- Capacity for future expansion
- High visibility
- Adjacency to existing outdoor recreation
- Potential for multiple access points
- Shared parking potential
- Pedestrian paths linkage

Cons

- Reduces golf course size
- Impact to existing trees
- Poor subsurface conditions
- Heavy traffic @ peak hours
- Potential off-site traffic mitigation
- May require 2nd vehicular access point
- No existing bus route/bike paths



Pros

- Accommodates full build-out of program
- Capacity for future expansion
- High visibility
- Adjacency to existing outdoor recreation
- Potential for multiple access points
- Shared parking potential
- Pedestrian paths linkage

Cons

- Slight golf course reduction
- Impact to existing trees
- Removes baseball field
- Poor subsurface conditions
- Heavy traffic @ peak hours
- Potential off-site traffic mitigation
- May require 2nd vehicular access point
- No existing bus route/bike paths

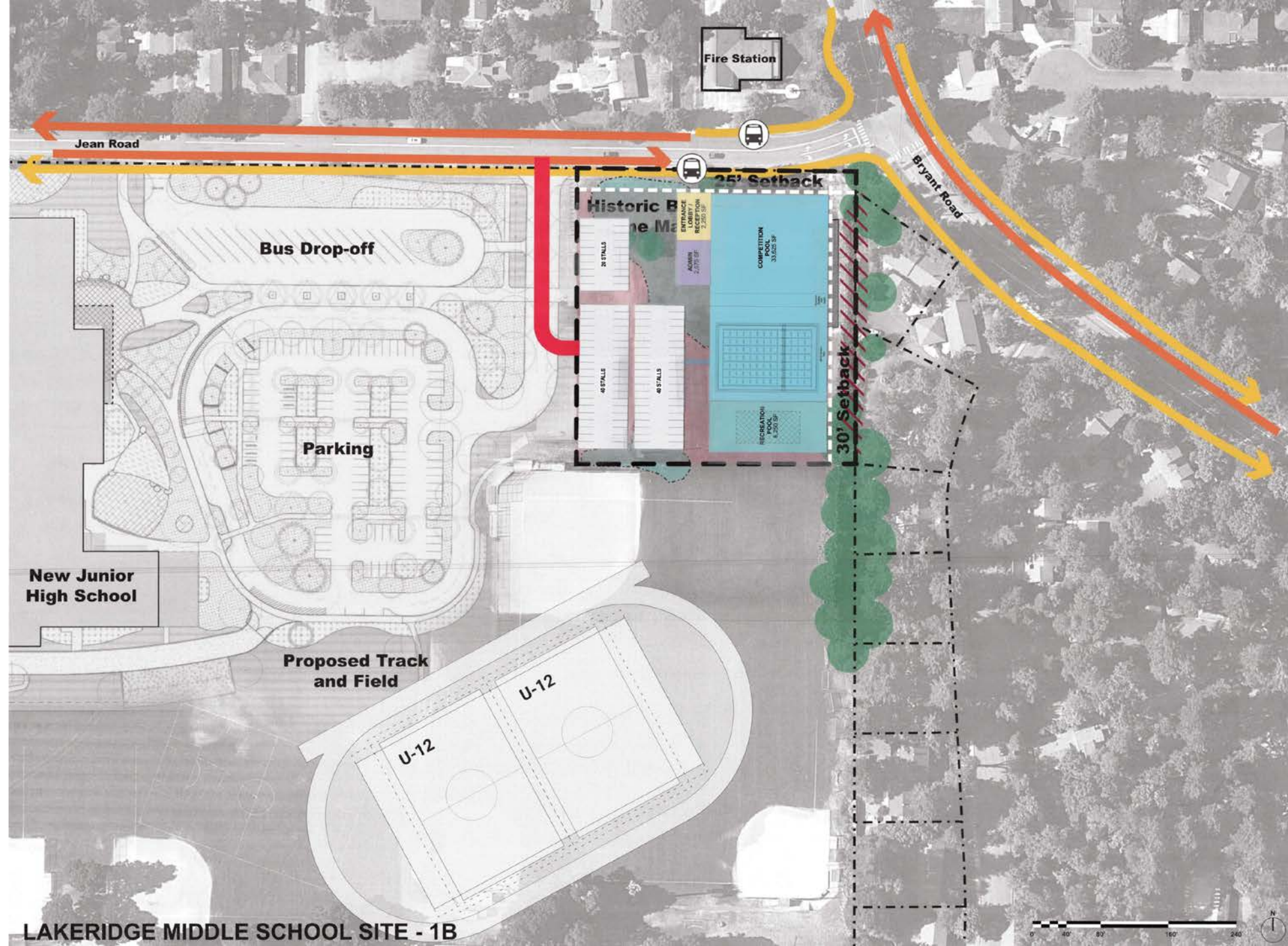


Pros

- Accommodates aquatics
- Generally flat, open site
- Flat site adjacent to outdoor recreation
- Central location
- Adjacent to bus stops
- Pedestrian / bike trails
- Shared parking potential

Cons

- Limited to aquatics facility
- Replaces tennis courts
- Impact to existing recreation fields
- Poor subsurface conditions
- On-site wetlands
- Shared single access point
- Heavy traffic congestion during school activities
- May require off-site traffic mitigation development
- LOMS security concerns



LAKERIDGE MIDDLE SCHOOL SITE - 1B

Sites Recommended

- **Golf Course Site**
 - Accommodates Full Program and Expansion
 - Reduces size of Golf Course
- **Golf Course / Lakeridge HS Baseball Field Site**
 - Accommodates Full Program and Expansion
 - Minimal impact on Golf Course
 - Removes baseball field
- **Lakeridge Middle School Site**
 - Accommodates Aquatics
 - Impact on recreation ballfields

LOSD Project Funding

- \$7M funded through LOSD Bond
- Possible LOP&R Partnership Funds
- \$6-8M from bond premium
 - \$27M first available in premium
 - \$12M used to complete bond projects
 - \$7-8M needed to complete remaining bond projects
 - Hallinan \$3M-4M
 - Palisades \$2.1-2.5M
 - Westridge p2 \$2M

Next Steps

- LO School Board Presentation (12.16.19 Pending)
- User group outreach in January (City/LOSD)
- Select Preferred Site
- Develop Concept On Preferred Site
- Refine Concept Design
- Finalize Funding
- Develop Capital Cost and Operational Estimates (Separate vs. Combined Facilities)

Slides Below are additional backup info

2017 Swim Club Aquatic Study (independent study)

Commissioned by Lake Oswego Swim Club

Space Program

- 50-Meter x 25-Yard Pool
- Teaching Pool
- Lobby
- Changing Rooms and Public Restrooms
- Offices & Multipurpose Space

Design Assumptions

- Bare bones approach
- Stretched fabric structure over pools
- Consider modular stainless-steel pool



2017 Swim Club Study (independent study)

Systems Assumptions

Fabric Structure

- Not Permanent (15 years)
- Verify if Planning Allows
- Compromised Durability
- Life-Cycle / Replacement Cost
- Limited Thermal Control
- Compromised Air Quality

Modular Myrtha Pool

- Increased Capital Cost
- Durability Depends on Use



2017 Swim Club Study (independent study) & 2019 Area / Cost Analysis

2017 Study Project Cost

Description	Councilman Hunsaker 2017 Study		
	sq.ft.	Cost	Subtotal
Natatorium	30,000 gsf	\$244	\$7,305,400
Competition Pool (50 Meter x 25 Yard)	13,000 gsf	\$225	\$2,925,000
Movable Bulkheads (2)			\$350,000
Teaching Pool	2,000 gsf	\$225	\$450,000
Storage / Raised Spectator Area	3,700 gsf	\$100	\$370,000
Pool Deck (15')	11,300 gsf	\$8	\$90,400
Fabric Enclosure	30,000 gsf	\$104	\$3,120,000
Support Building*	9,600 gsf	\$185	\$1,776,000
Mechanical Room*	1,800 gsf	\$154	\$277,200
Changing Room*	2,200 gsf	\$234	\$514,800
Lobby*	800 gsf	\$186	\$148,800
Offices & Multipurpose Space*	4,500 gsf	\$170	\$765,000
Public Bathrooms*	300 gsf	\$234	\$70,200
<i>* includes 20% grossing factor</i>			
Building Cost	39,600 gsf	\$229	\$9,081,400
Site (Utilities, Parking, Landscaping, etc.)			\$1,000,000
Furniture, Fixtures, Equipment			\$256,000
Total Construction Cost			\$10,337,400
Escalation (1 Year -2018)		5%	\$516,870
Contingency		10%	\$1,085,427
Indirect Costs		10%	\$1,193,970
Total Project Cost	39,600 gsf	\$332	\$13,133,667

** escalate 2 years @ 8%/year = \$1,720,143

2019 Comparative Cost Analysis

Description	Current Recommended Program				Comments
	sq.ft.	Cost	Subtotal	Delta	
Natatorium	24,500 nsf	\$285	\$6,982,500	-\$322,900	Excludes teaching pool Bleacher seating cost included in pool deck Smaller deck area
Competition Pool (50 Meter x 25 Yard)	13,000 nsf				
Movable Bulkheads (2)					
Teaching Pool	0				
Storage / Raised Spectator Area	4,500 nsf				
Pool Deck	7,000 nsf				
Fabric Enclosure	24,500 nsf	\$140	\$3,430,000		
Support Building	11,900 nsf	\$475	\$5,652,500	\$3,876,500	Included within Indirect Cost
Mechanical Room	3,000 nsf				
Changing Room	4,000 nsf				
Lobby	1,000 nsf				
Offices & Multipurpose Space ***	2,900 nsf				
Public Bathrooms	1,000 nsf				
Subtotal	36,400 nsf		\$12,635,000		
25% Grossing factor	9,100 sf	\$350	\$3,185,000	\$3,185,000	
Building Cost	45,500 gsf	\$348	\$15,820,000	\$6,738,600	Includes Contingency & FF&E
Site (Utilities, Parking, Landscaping, etc.)			\$3,500,000	\$2,500,000	
Furniture, Fixtures, Equipment			\$0		
Total Construction Cost			\$19,320,000	\$8,982,600	
Escalation (1 Year - Q1 2021)		8.00%	\$1,545,600		
Contingency		0%	\$0		
Indirect Costs		30%	\$6,259,680	\$3,980,283	
Total Project Cost	45,500 gsf	\$596	\$27,125,280	\$13,991,613	

*** Includes: concessions/vending, general storage, pool storage, custodial, guardroom