



# BAINBRIDGE ISLAND AQUATICS

FEASIBILITY STUDY 01/17/2019



Bainbridge Island  
Metro Park & Recreation District

COATES DESIGN  
ARCHITECTS  
Responsible Architecture.



# Outline

Public Outreach

Jurisdiction Requirements

Site Analysis

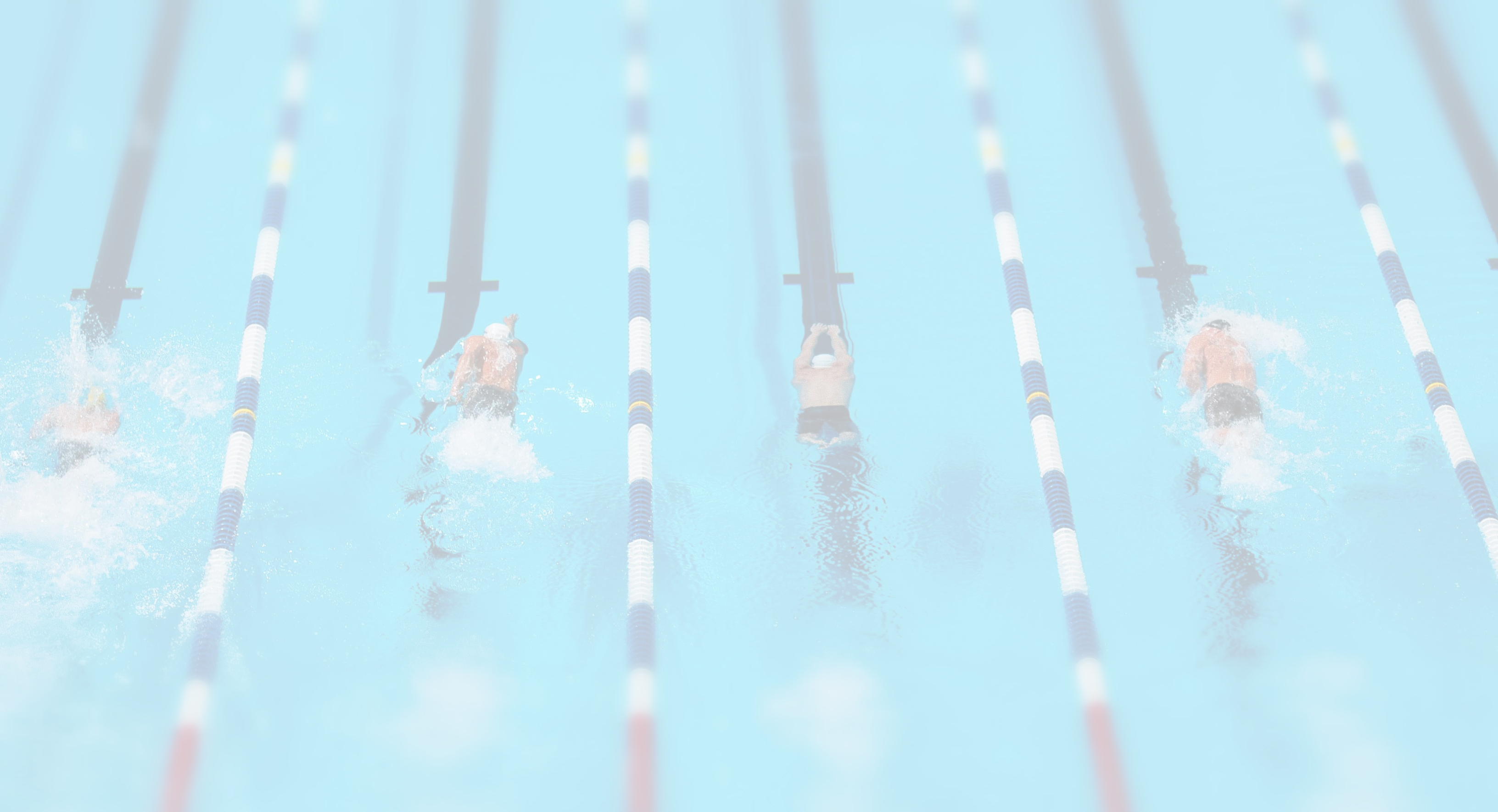
Site Design

Plans

Pricing

Operational Study





# PUBLIC OUTREACH



Bainbridge Island  
Metro Park & Recreation District

COATES DESIGN  
ARCHITECTS  
Responsible Architecture.



# Primary Users

- Public Swimmers
- Swimming Organizations
  - BISC, Bainbridge Island Swim Club,  
Youth swim team
  - BAM, Bainbridge Aquatics Masters,  
Adult swim team
  - Bainbridge High School Swimming and  
Diving Teams
  - BWPC, Bainbridge Water Polo Club
  - Bainbridge High School Water Polo  
Teams
- Bainbridge Island Metro Parks and  
Recreation District

# Primary Activities

- Lap Swimming, Health, and Wellness
- Aquatic Education- Learn to Swim, Life  
Saving, and others
- Swim Team and Club Training
- Water Polo Team and Club Training
- Competitive Events
  - High School Swimming
  - High School Water Polo
  - Club Swimming
  - Club Water Polo





# Identified Critical Lap Pool Facility Components

*Critical facility components were identified through focus group meetings with representatives from primary user groups.*

1. Lap Pool

2. Pool Deck and Adjacent

3. Dryland Areas

4. General

5. Open During Construction





# Identified Critical Lap Pool Facility Components

## 1. Lap Pool

- Maximize Lane Count to Meet Programming Demand
- 50-meter X 25-yard Pool would be ideal
  - 20, 25-yard lanes would allow simultaneous club and public lap use
  - Increase Participation in USA Swim Age Group, USA Masters Swim Program
  - Increase Participation and Development of Water Polo Program
  - Increase Specialty Classes
  - Competition Venue, Economic Impact
- Meet Governing Body Requirements for Competition Swimming and Water Polo
  - Lane Size, Water Depth, Starting Platform Height, and Field of Play
- Moveable Bulkhead to allow separation of use and program diversity





# Critical Lap Pool Facility Components (cont.)

## 2. Pool Deck and Adjacent

- Large Deck Area to Minimize Overcrowding, Safety
- Maximize Pool Equipment Storage Areas
- Team, Club, Public Gear Storage Areas
- Separate Spectator Area, Safety
- Timing, Score Board, and Spirit Display
- Accessibility

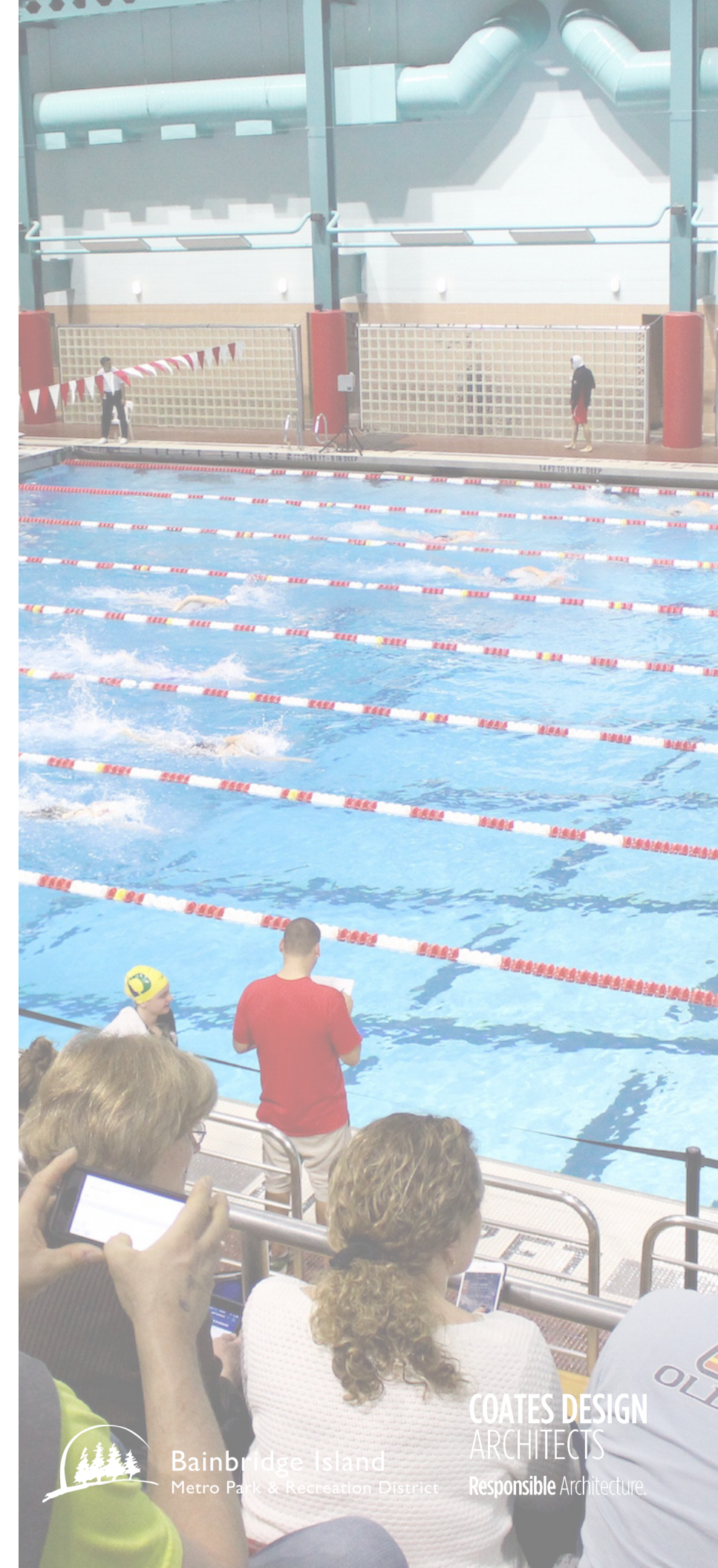




# Critical Lap Pool Facility Components (cont.)

## 3. Dryland Areas

- Dryland Training Area. CrossFit, Yoga, Weights, and Other
- “Wet Room” Meeting Room, to accommodate coaching, teaching and other
- Event Management Room
- Additional Locker Room
  - Visual control of Entry and Exit
- Multi-Room deck adjacent
- Offices - Maintenance, Staff, and Coaches
- Guard Room w/ Bathroom, visual control, central to facility





# Critical Lap Pool Facility Components (cont.)

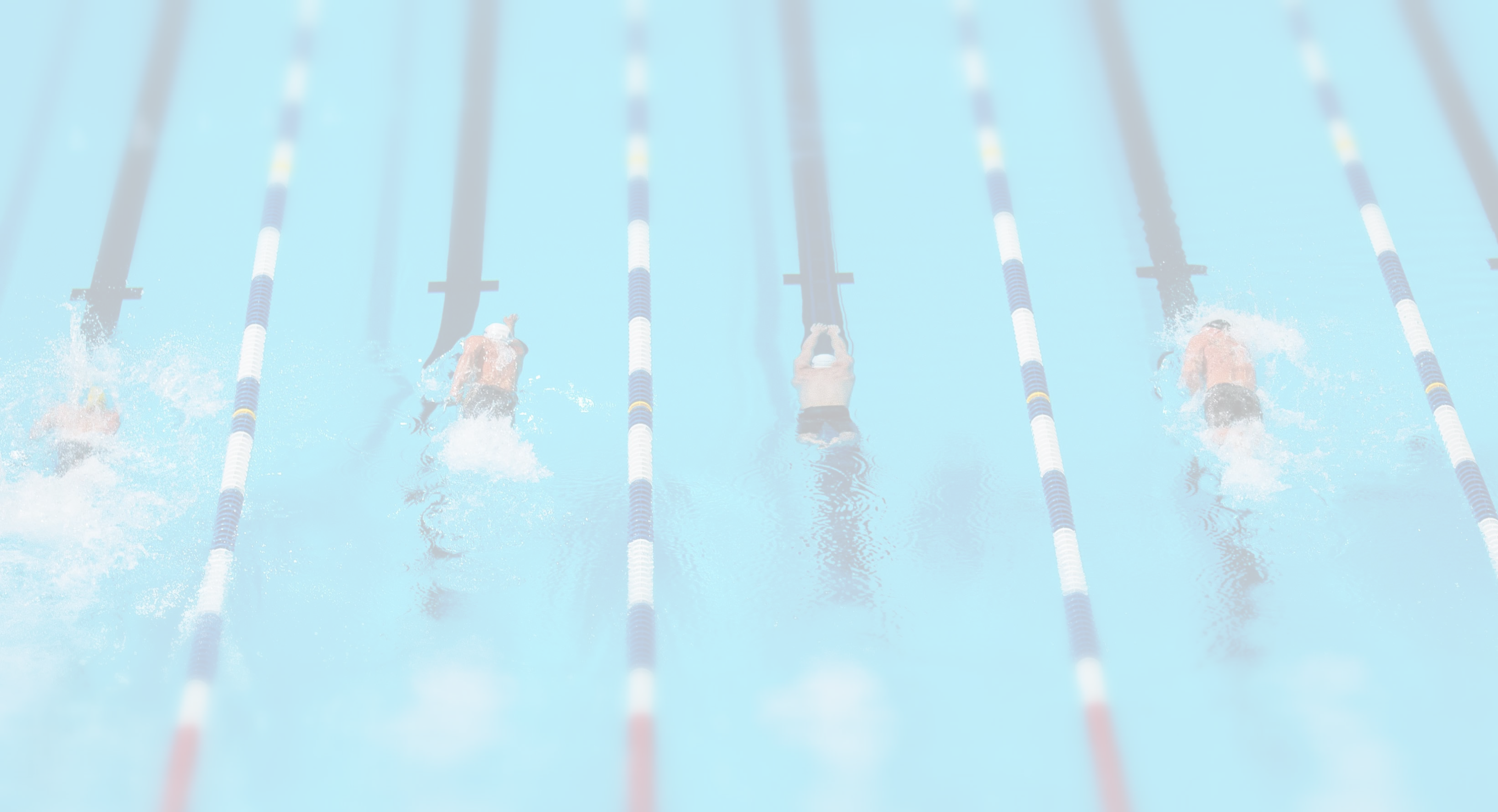
## 4. General Upgrades

- Central Shared Access to Existing Nakata Lap Pools
- Accommodate Simultaneous Pool Use, Event (Lap Pool) and Recreation (Nakata Pool)
- Space to Accommodate Large Events: swimming, water polo and other
- Acoustic Buffering
- Lighting Design
- Accommodate Diversity of use, Promoting Community

## 5. Current Facilities Needs to Operate During Construction

- Closing the Ray Williams Lap Pool during construction would have significant impact on Swim Clubs and Public Swimmers
- Cause financial burden due to loss of facility revenue.





# JURISDICTIONAL REQUIREMENTS



Bainbridge Island  
Metro Park & Recreation District

COATES DESIGN  
ARCHITECTS  
Responsible Architecture.



# Jurisdiction Requirements

## **Planning/Permit Approval Required:**

- Preapplication Conference
- Conditional Use Permit or Amendment to Existing
- SPR, Site Plan and Design Review
- Health District Review
- Design Review Board Review
- Public Participation Meeting

## **Site Assessment Review (SAR) Key Points:**

- Project Must Demonstrate Compliance with Minimum Requirements (MR's) #1 through #9 of City Stormwater Manual.
  - Consulting Engineers are required to determine Design and Compliance
  - Existing Stormwater Facilities shall be Fully Integrated or Upgraded
- Any proposal for Leased Site Development needs to account for Cumulative Impact on BISD Site as a Whole.
- International Swimming Pool and Spa Code.
  - Discharge and Dechlorination Requirements
- Traffic Impact Analysis Required
  - On Site Traffic Shall Conform to NFPA (National Fire Protection Association)



# Jurisdiction Requirements

## Zoning Standards:

- Lot Coverage, lot area covered by buildings . . . . . 25% max
- Setback, Front . . . . . 25'
- Setback, Side . . . . . 5'/10'
- Setback, Rear . . . . . 15'
- Building Height . . . . . 25' or 30' w/ conditional use permit





# Jurisdiction Requirements

## Parking:

- Per Municipal Code, Recreational Facilities not Part of School
  - parking requirements shall be established by the director
  - technical studies prepared by a qualified professional
- Additional Parking Requirements
  - BISD parking requirements TBD per Master Plan
- Total Parking Spaces Required
  - To-Be-Determined. Additional study/information needed.



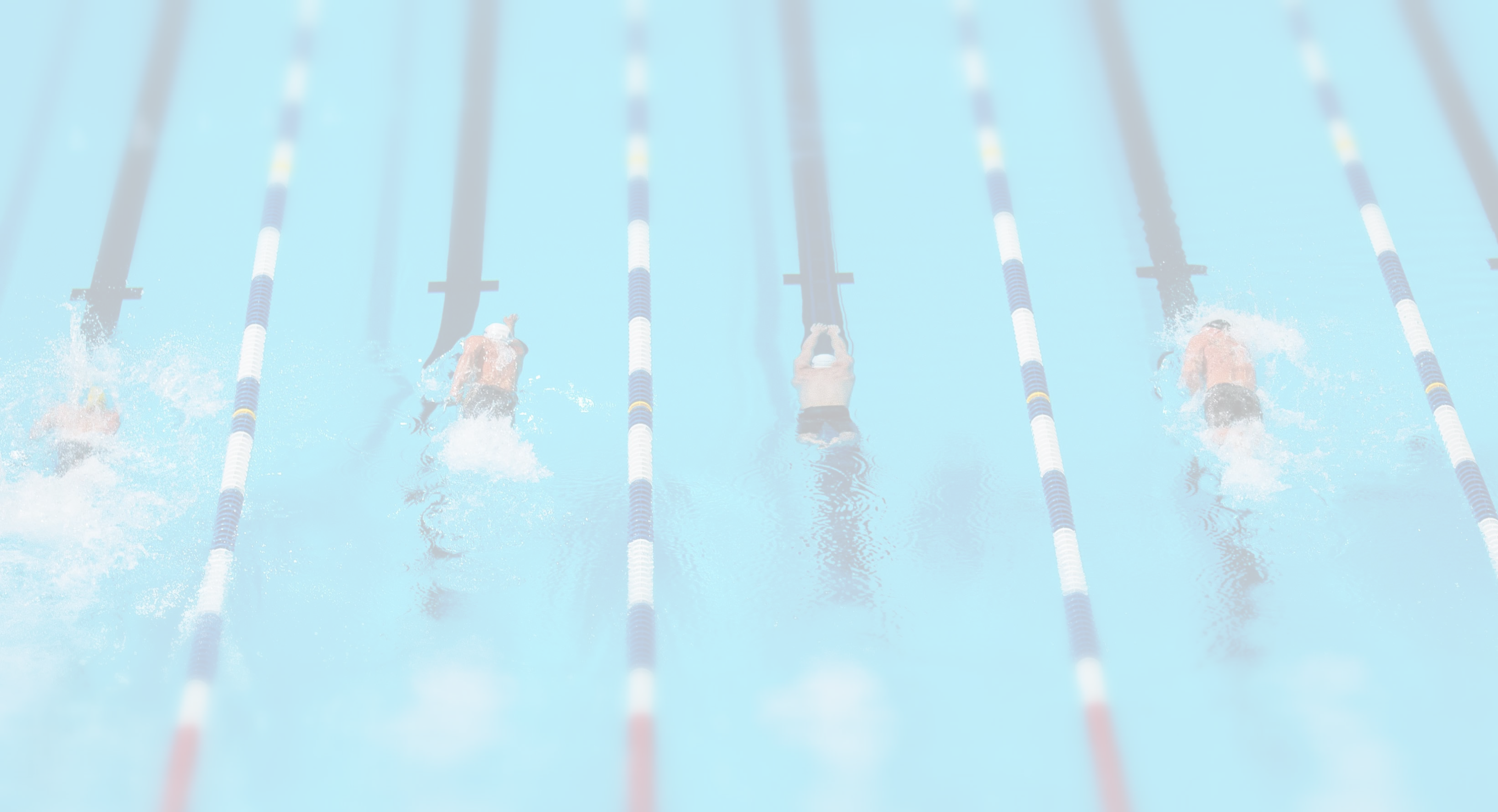
# Jurisdiction Requirements

## **Landscaping, Tree Retention/Replacement/Protection:**

- Perimeter Buffer - 20' partial
- Roadside Buffer - 25' partial
- Parking Lot Landscape
  - Additional perimeter landscaping required
- Site Specific Evaluation of Total Impact on Tree Coverage
  - Demonstration of Meeting Tree Unit Requirements
- Total Site Tree Unit Requirements - 40 units / acre







# SITE ANALYSIS

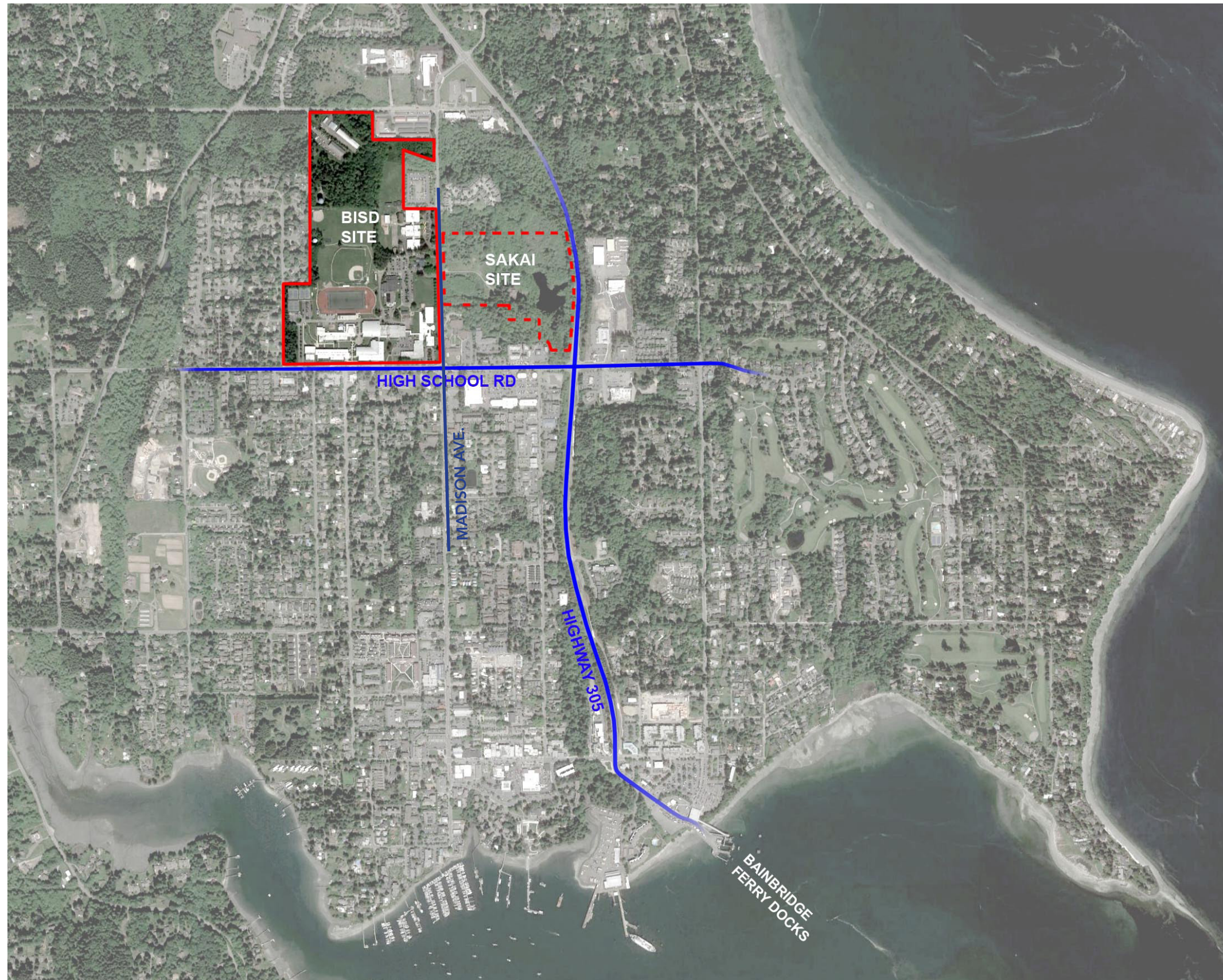


Bainbridge Island  
Metro Park & Recreation District

COATES DESIGN  
ARCHITECTS  
Responsible Architecture.



# BISD Site Location



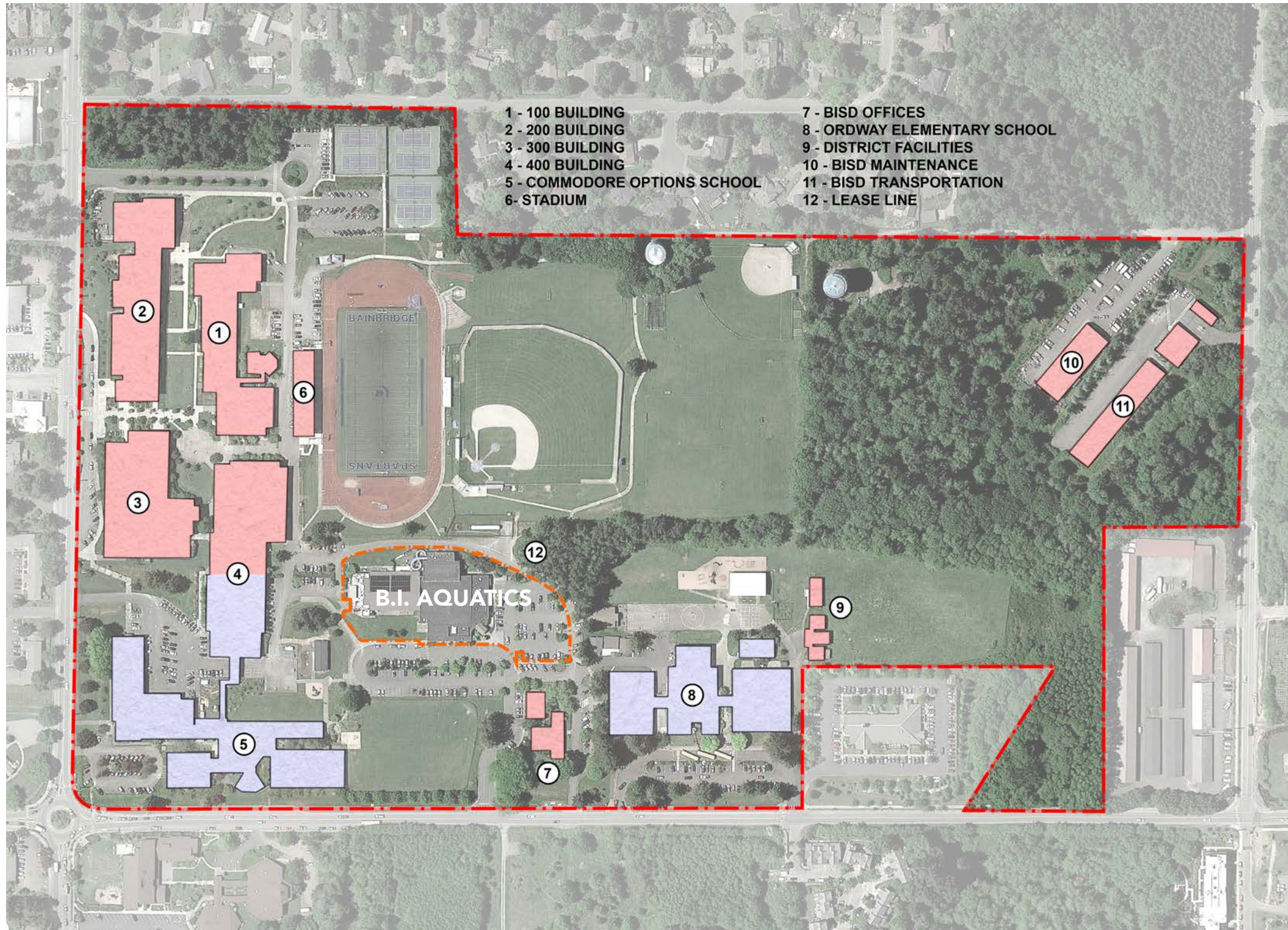
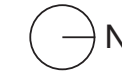
## Site Location

- BISD Site Located
  - West of HWY 305
  - High School Rd. and Madison Ave.





# BISD Site

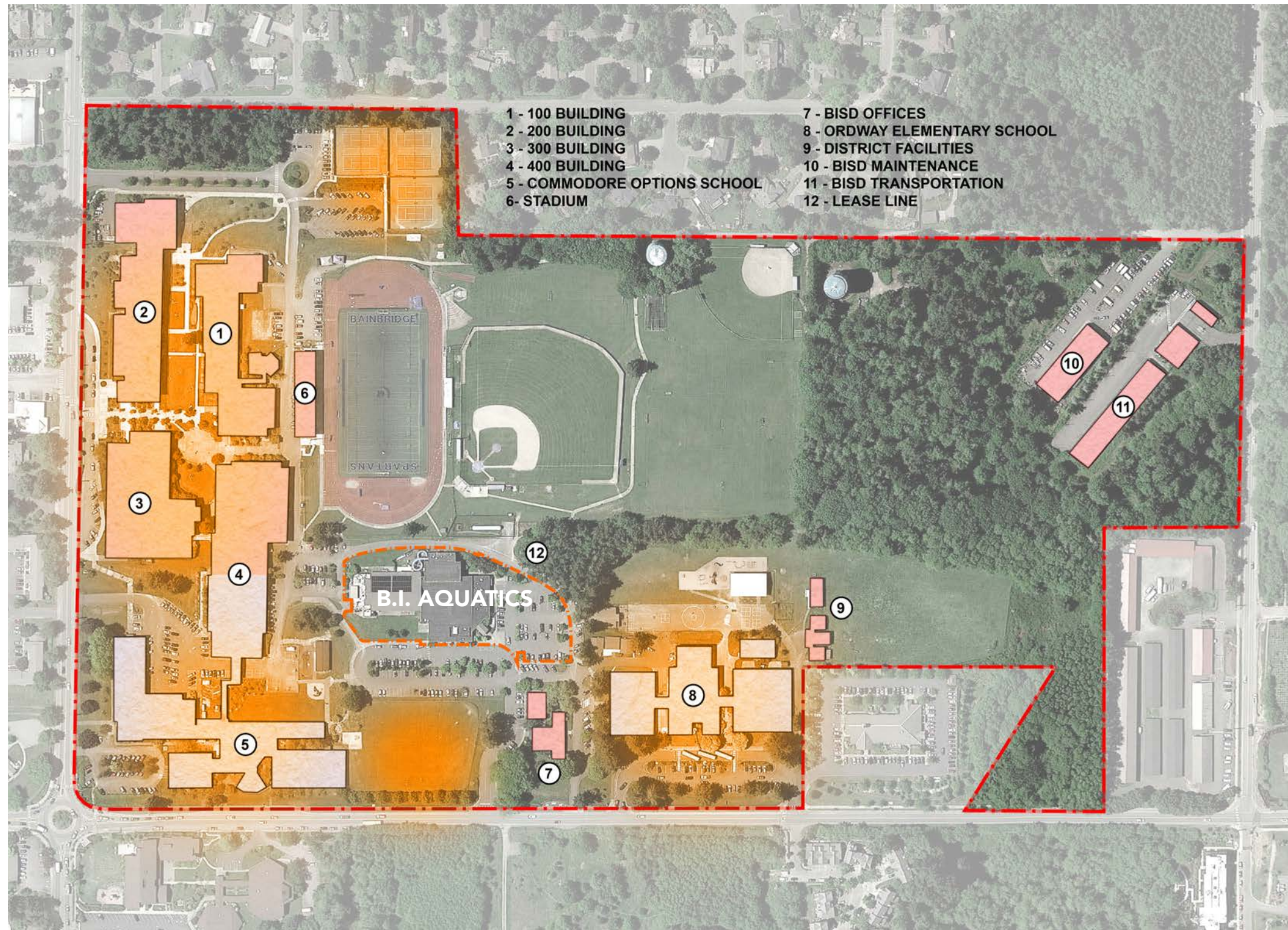
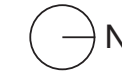


- Approx. 73 acres
- BISD Facilities Including;
  - District Offices
  - High School Campus
  - Commodore Options School
  - Ordway Elementary School
  - Maintenance
  - Transportation
  - Sports Fields
- Bainbridge Aquatics Center
  - BI Metro Parks and Recreation Department Leases Site from BISD
  - Current "Lease Line" Will Require Modification for Development
  - Current Lease Agreement Will Require Modification for Development





# BISD Future Master Planning



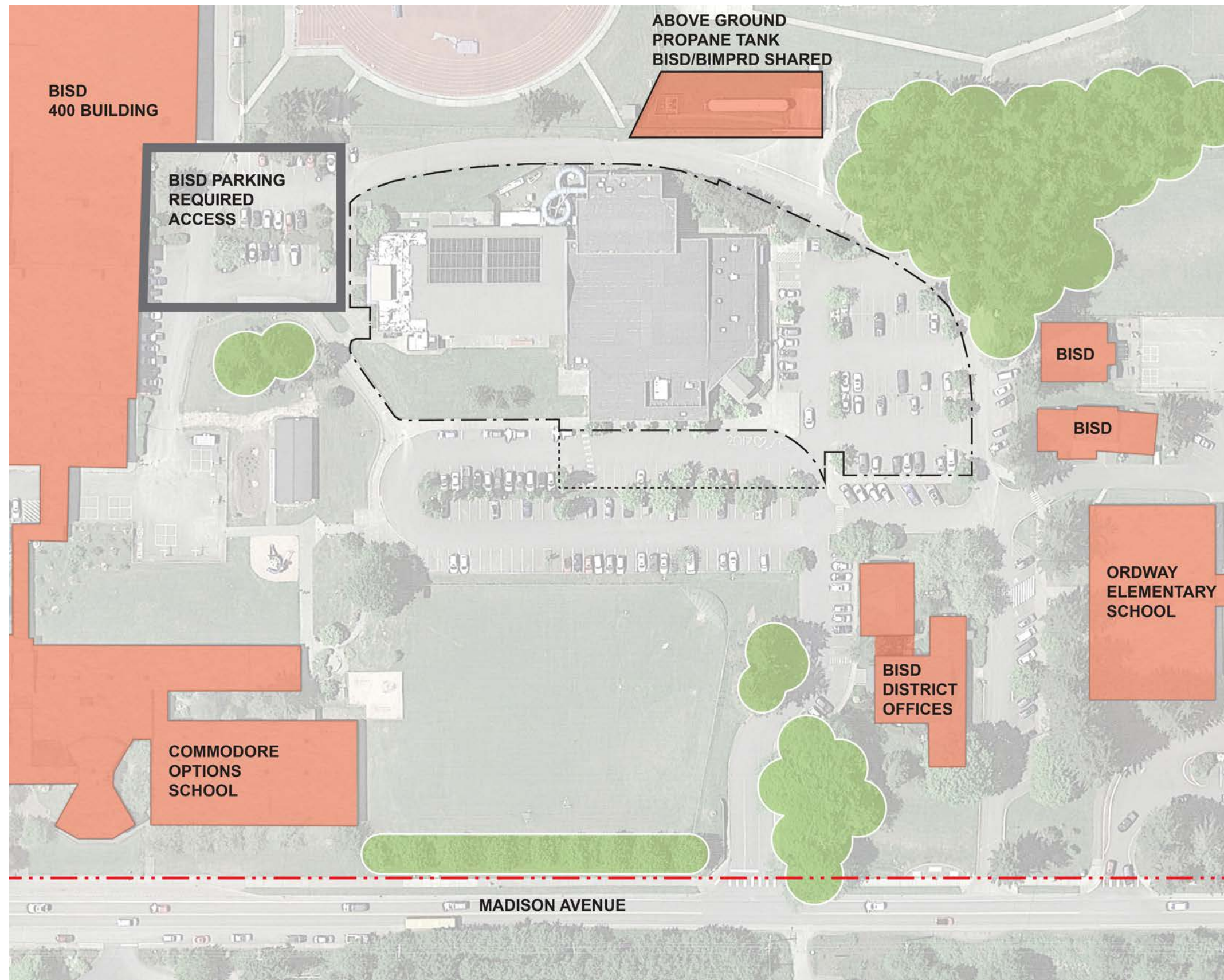
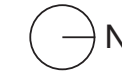
## BISD Future Master Plan:

- BISD is planning to develop/revise a Site Master Plan in the near future
- Master Plan to address BISD Current and Future Needs and Site Requirements:
  - High School Campus
  - Commodore Campus
  - Ordway Campus
  - Sports Fields
  - Parking Needs
  - Other
- BIMPRD Aquatics Facility Improvements will need to Coordinate into this BISD Master Plan
  - BISD and BIMPRD are beginning this discussion
- Final Master Plan is Critical to Determining COBI Site Development Requirements:
  - Low Impact Development
  - Lot Coverage
  - Tree Count
  - Access
  - Storm Water Management
  - Parking
  - Other





# Site Constraints - School Buildings

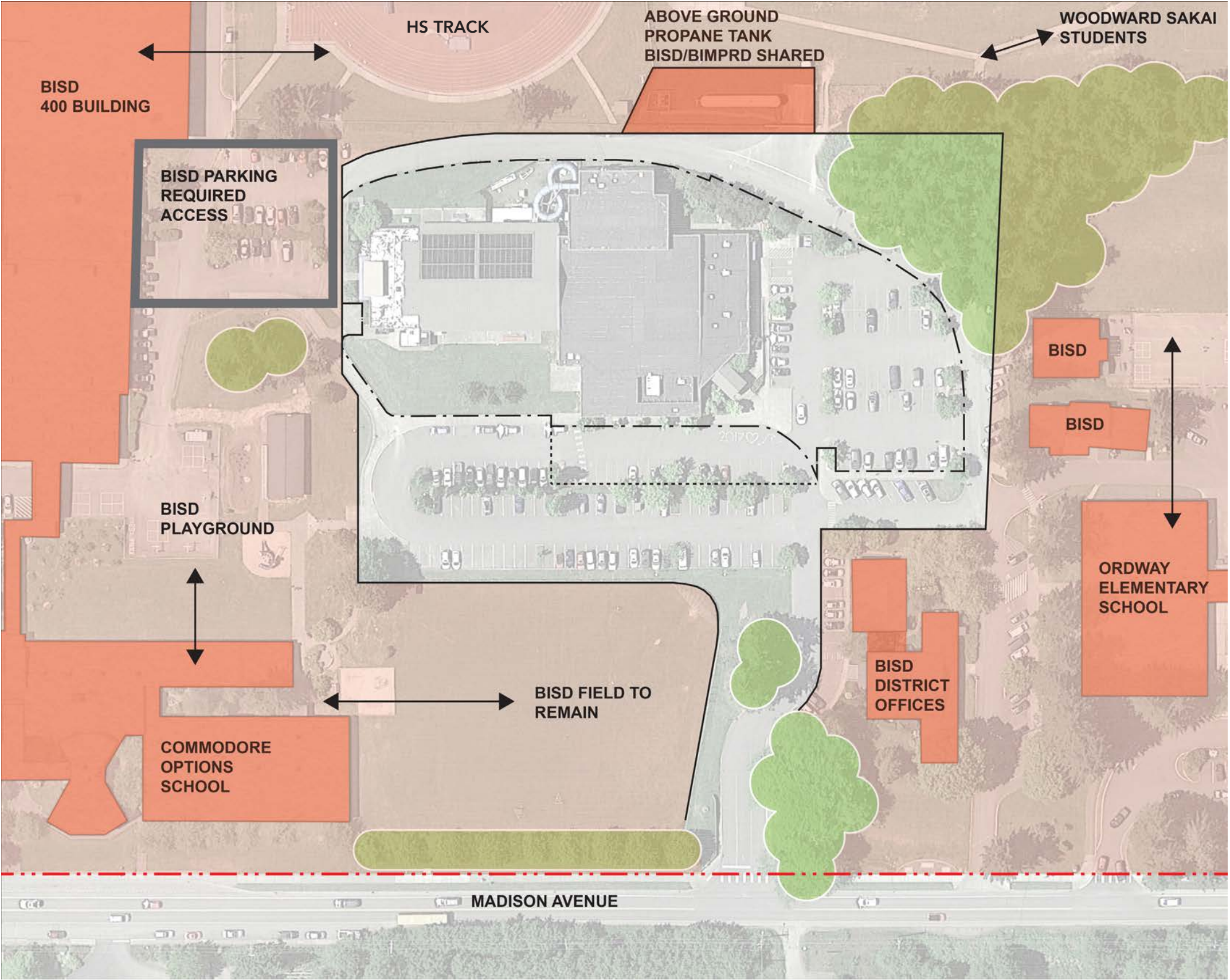


- High School
- Commodore Options School
- BISD Offices
- Ordway Elementary School
- Propane Tank
- BISD Parking





# Site Constraints - Schoolyards

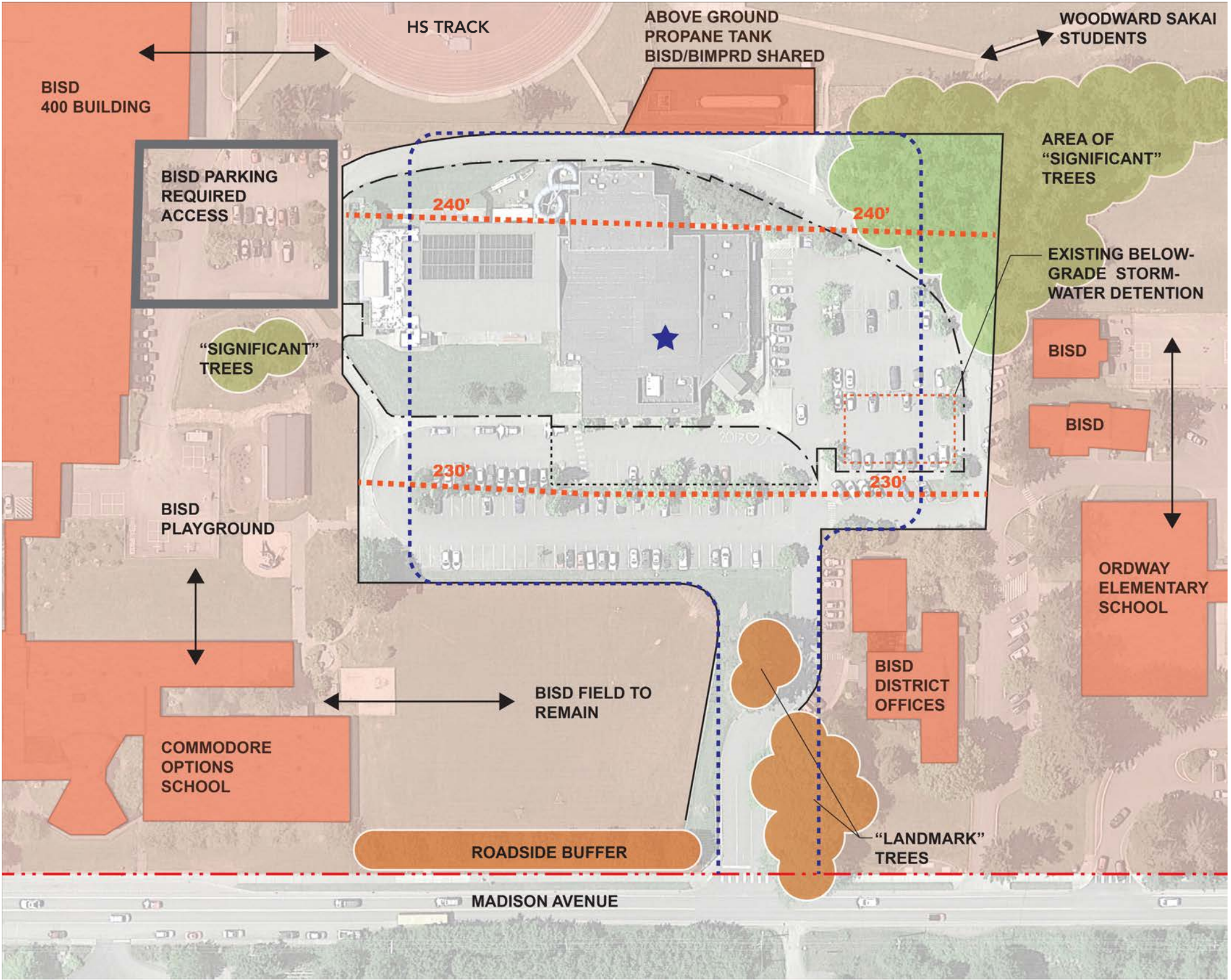


- Adjacent School Play Area
- Sports Fields
- Paths





# Site Constraints - Landscape and Other

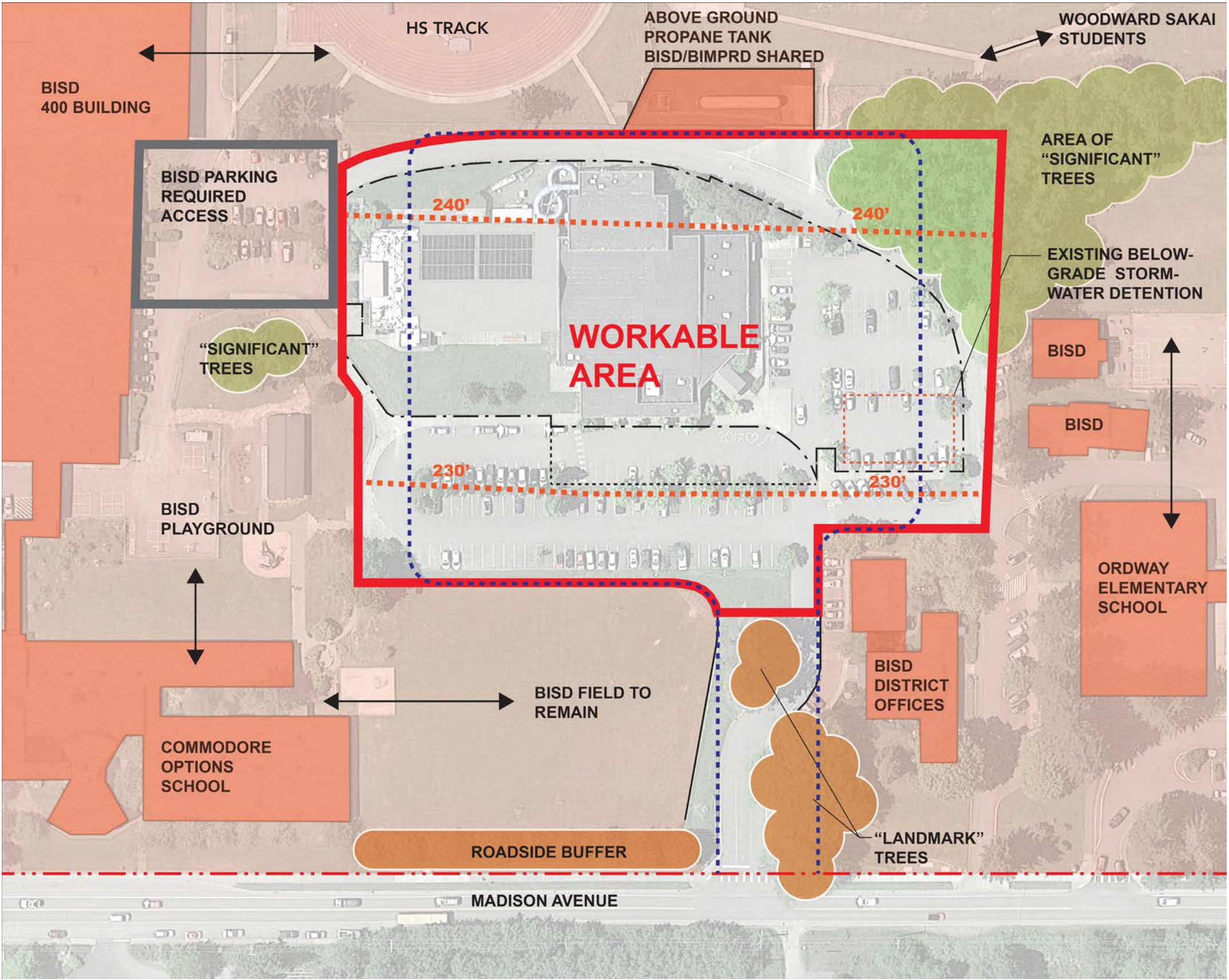


- "Landmark Trees"
- "Significant Trees"
- Grade, Slope to Madison
- Existing Storm Water Facilities
- Site Security





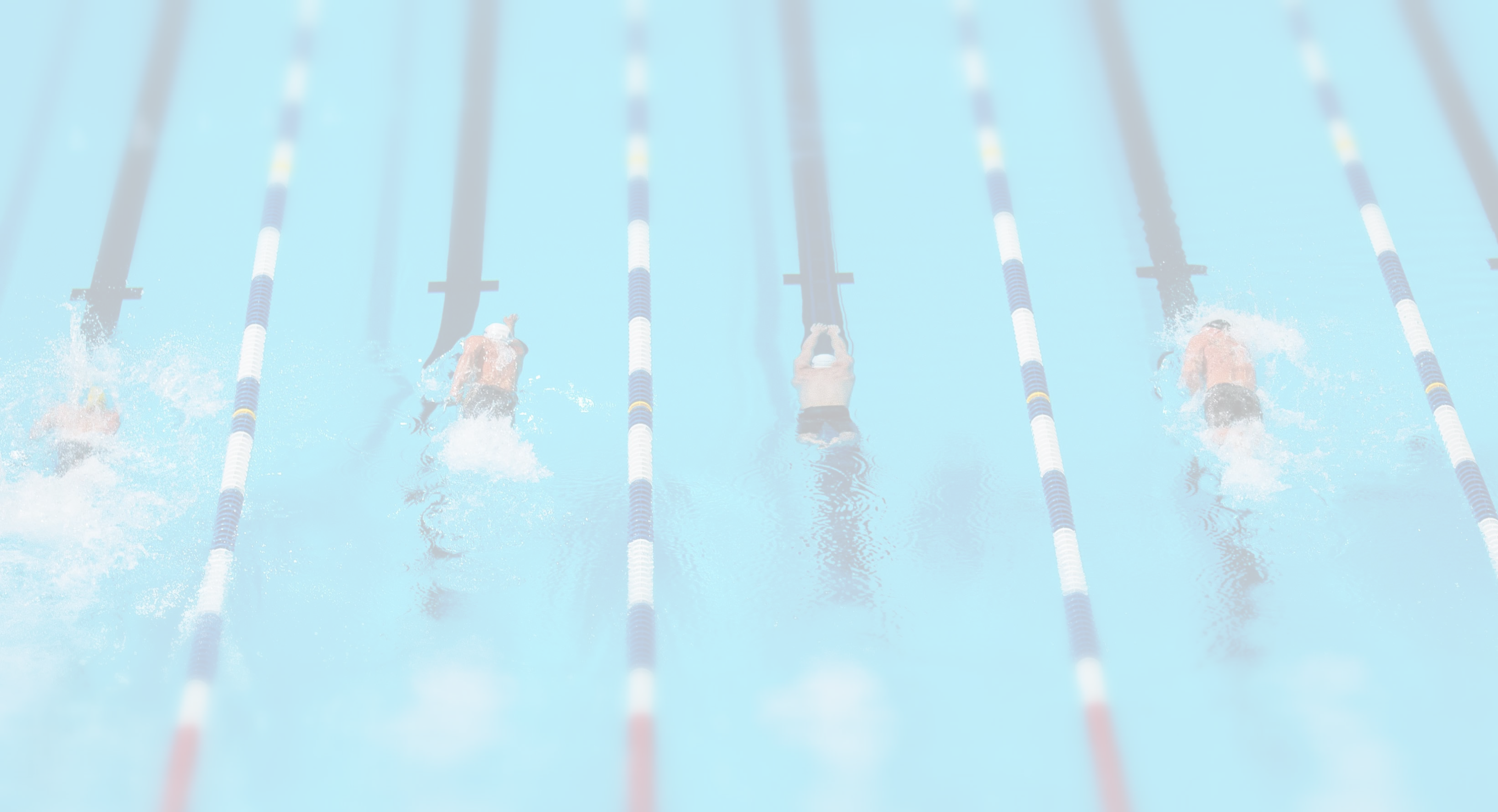
# Site Constraints - Workable Area



Maximum Workable Area as Defined by  
Assumed Constraints







# SITE DESIGN OPTIONS

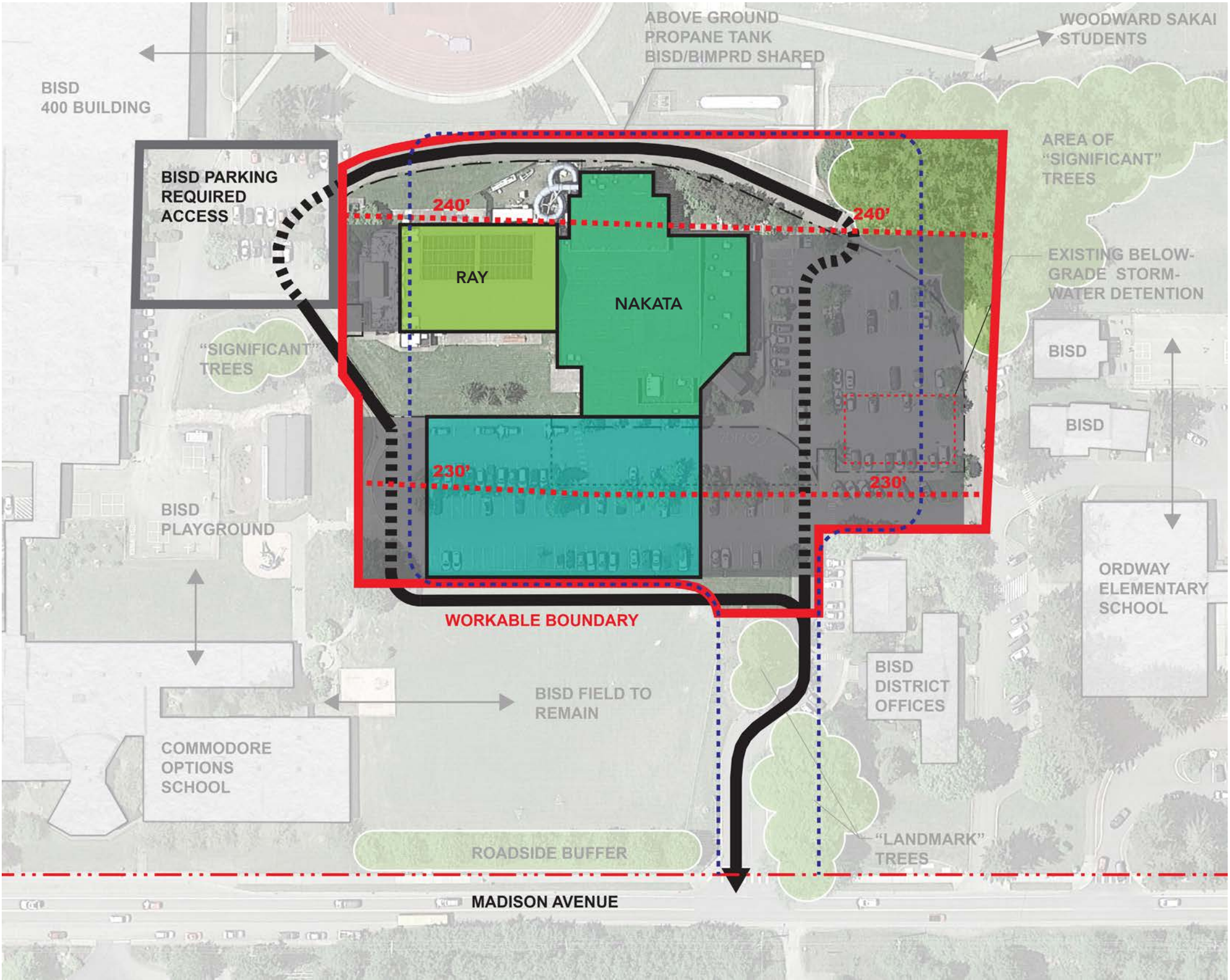


Bainbridge Island  
Metro Park & Recreation District

COATES DESIGN  
ARCHITECTS  
Responsible Architecture.



# Option 1

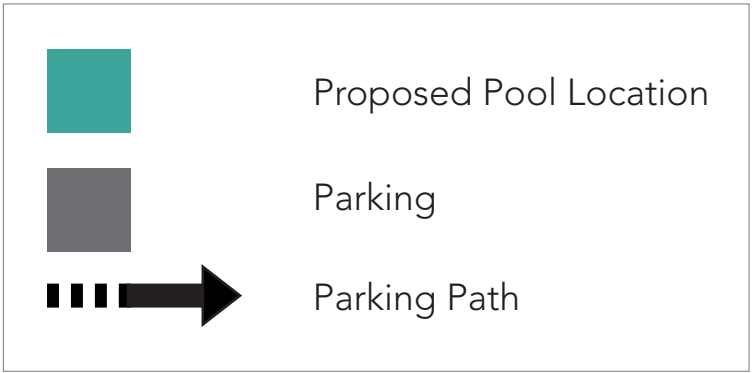


## Lot Coverage (in ft<sup>2</sup>):

Building .....	62,000
(Existing) .....	33,500
(New) .....	28,500
Parking .....	42,000
Road .....	8,000
<b>Total .....</b>	<b>112,000</b>

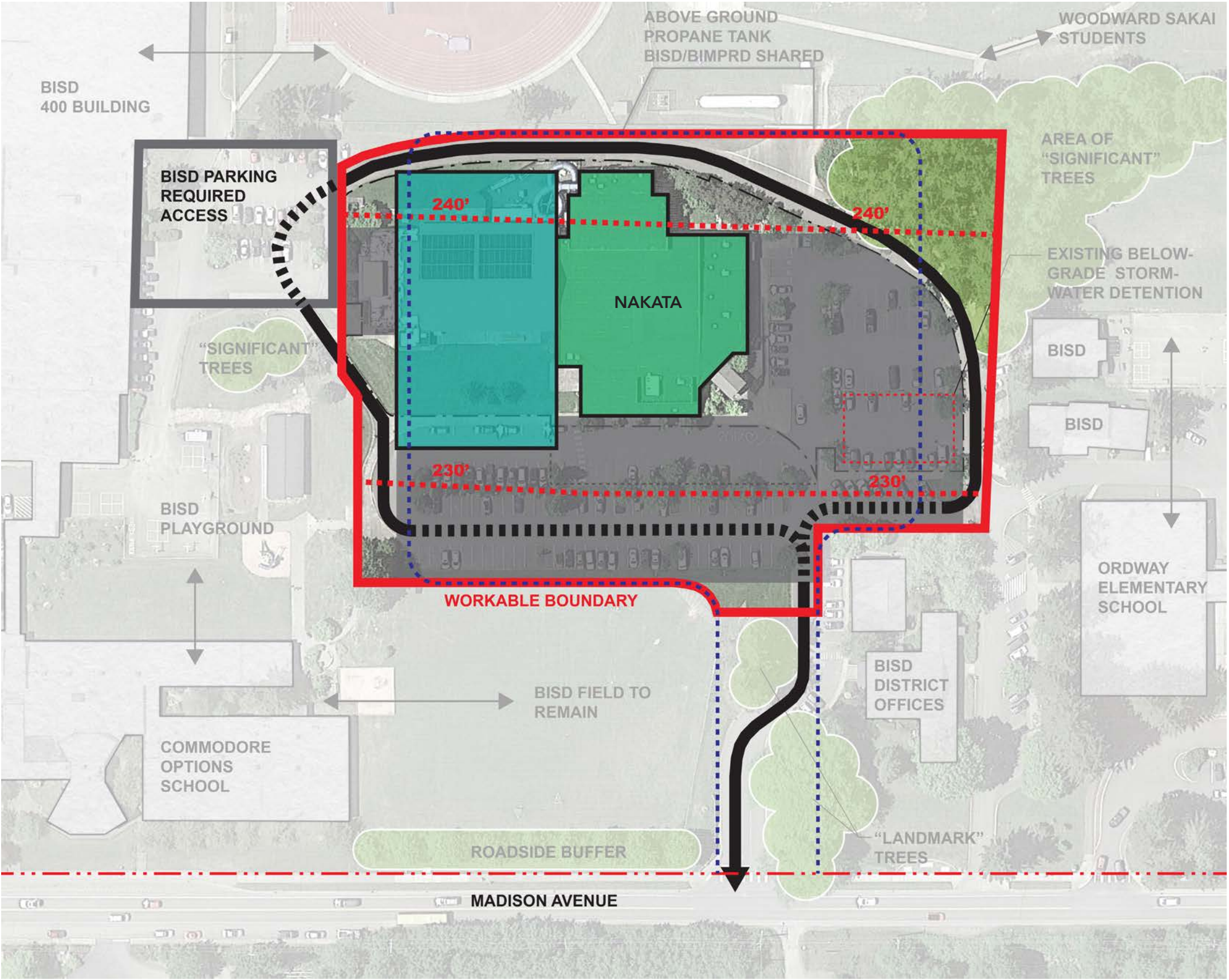
## Parking Count (300 ft<sup>2</sup> per stall):

Existing .....	149
Proposed .....	140
<b>Delta .....</b>	<b>-9</b>





# Option 2



**Lot Coverage (in ft<sup>2</sup>):**

Building .....	52,500
(Existing) .....	24,000
(New) .....	28,500
Parking .....	51,500
Road .....	4,500
<b>Total .....</b>	<b>108,500</b>

**Parking Count (300 ft<sup>2</sup> per stall):**

Existing .....	149
Proposed .....	172
<b>Delta .....</b>	<b>+23</b>

Proposed Pool Location

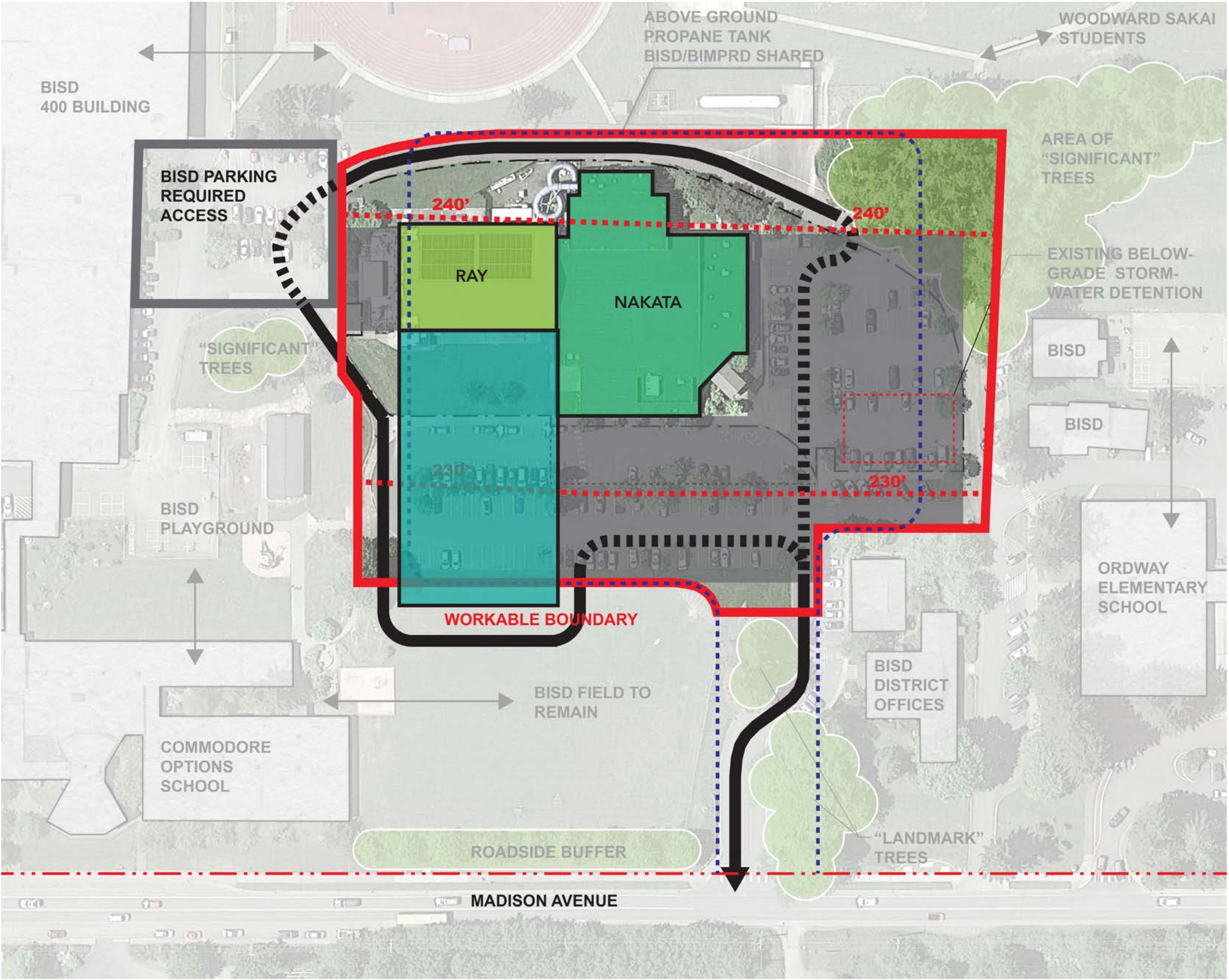
Parking

Parking Path





# Option 3

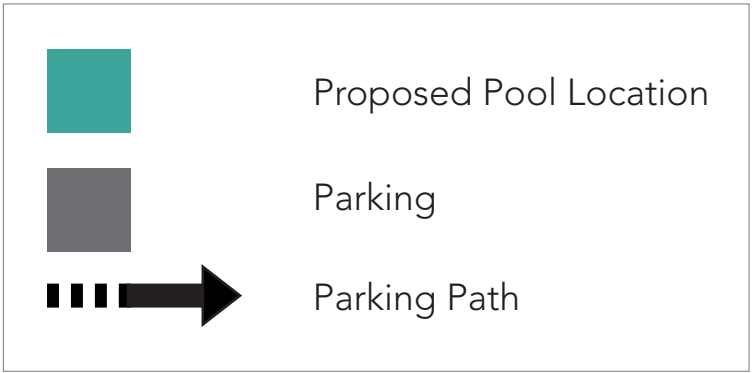


## Lot Coverage (in ft<sup>2</sup>):

Building .....	62,000
(Existing) .....	33,500
(New) .....	28,500
Parking .....	48,000
Road .....	12,000
<b>Total .....</b>	<b>122,000</b>

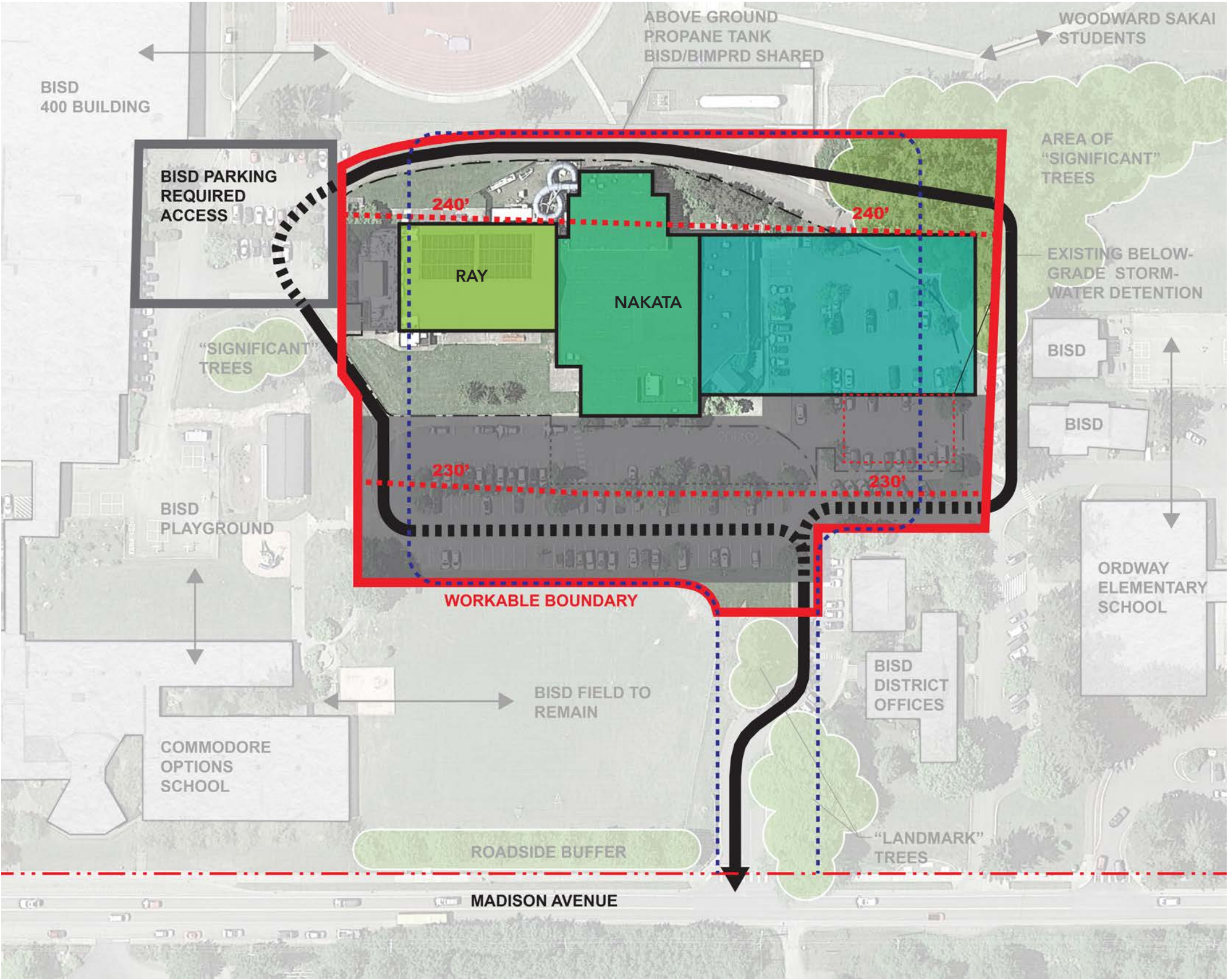
## Parking Count (300 ft<sup>2</sup> per stall):

Existing .....	149
Proposed .....	160
<b>Delta .....</b>	<b>+11</b>





# Option 4



## Lot Coverage (in ft<sup>2</sup>):

Building .....	62,000
(Existing) .....	33,500
(New) .....	28,500
Parking .....	43,300
Road .....	10,500
<b>Total .....</b>	<b>115,800</b>

## Parking Count (300 ft<sup>2</sup> per stall):

Existing .....	149
Proposed .....	144
<b>Delta .....</b>	<b>-5</b>

Proposed Pool Location

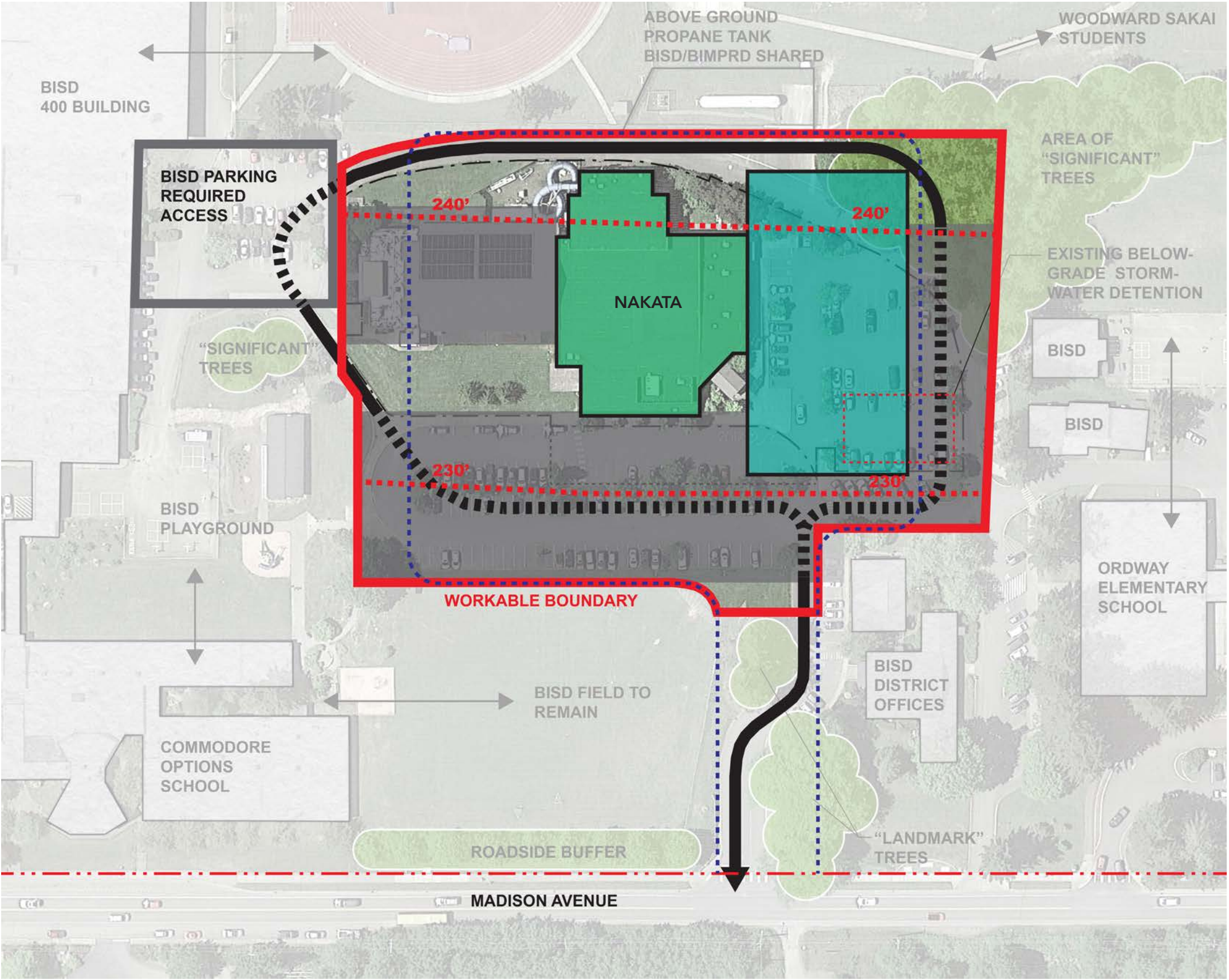
Parking

Parking Path





# Option 5

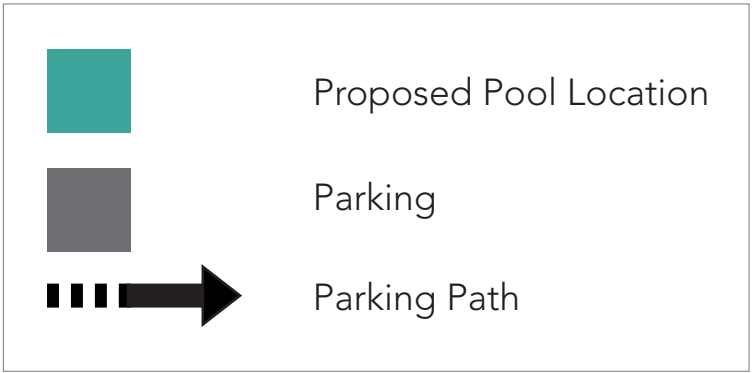


## Lot Coverage (in ft<sup>2</sup>):

Building .....	52,500
(Existing) .....	24,000
(New) .....	28,500
Parking .....	64,200
Road .....	7,700
<b>Total .....</b>	<b>124,400</b>

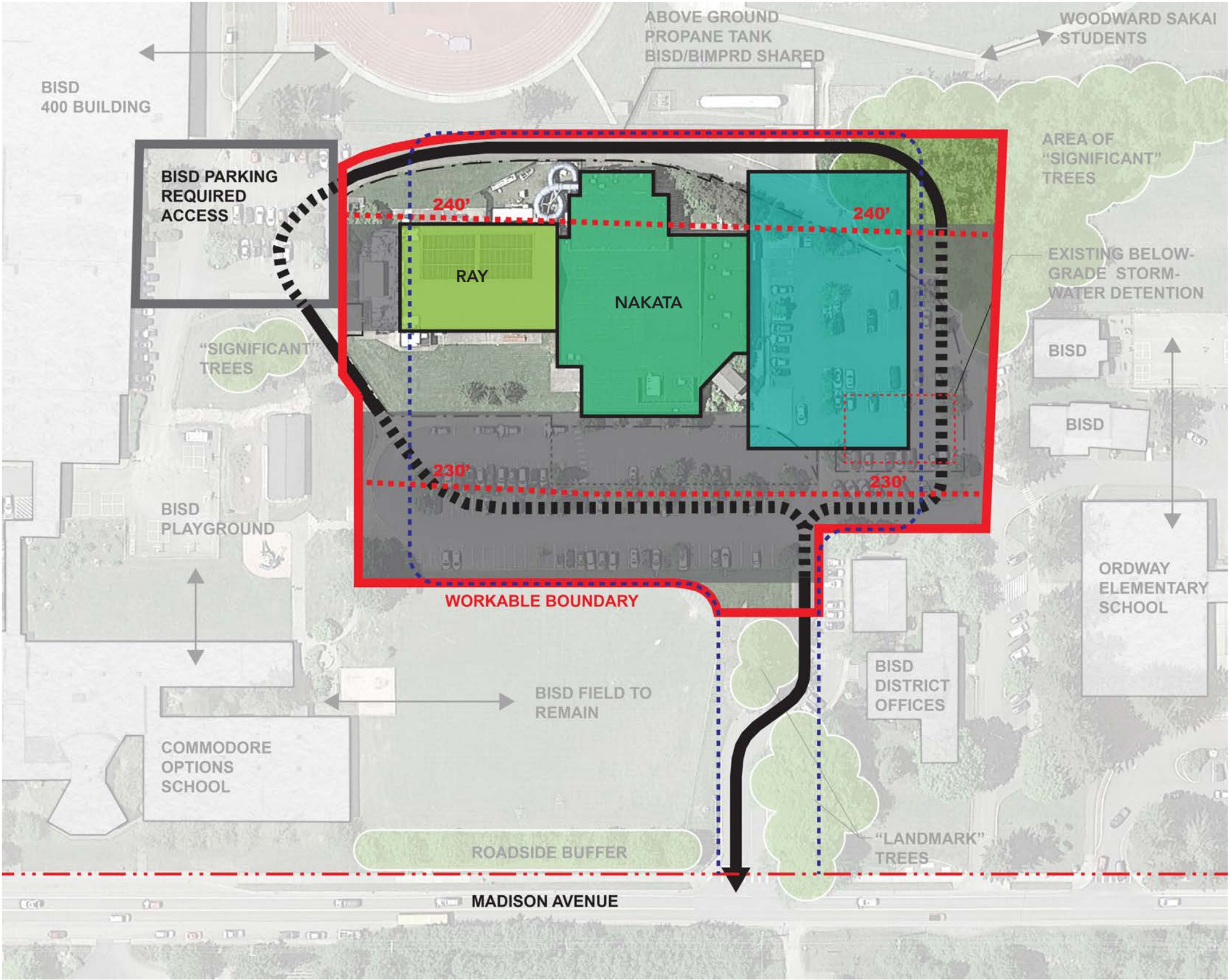
## Parking Count (300 ft<sup>2</sup> per stall):

Existing .....	149
Proposed .....	214
<b>Delta .....</b>	<b>+65</b>





# Option 6



**Lot Coverage (in ft<sup>2</sup>):**

Building .....	62,000
(Existing) .....	33,500
(New).....	28,500
Parking.....	51,000
Road.....	7,700
<b>Total.....</b>	<b>120,700</b>

**Parking Count (300 ft<sup>2</sup> per stall):**

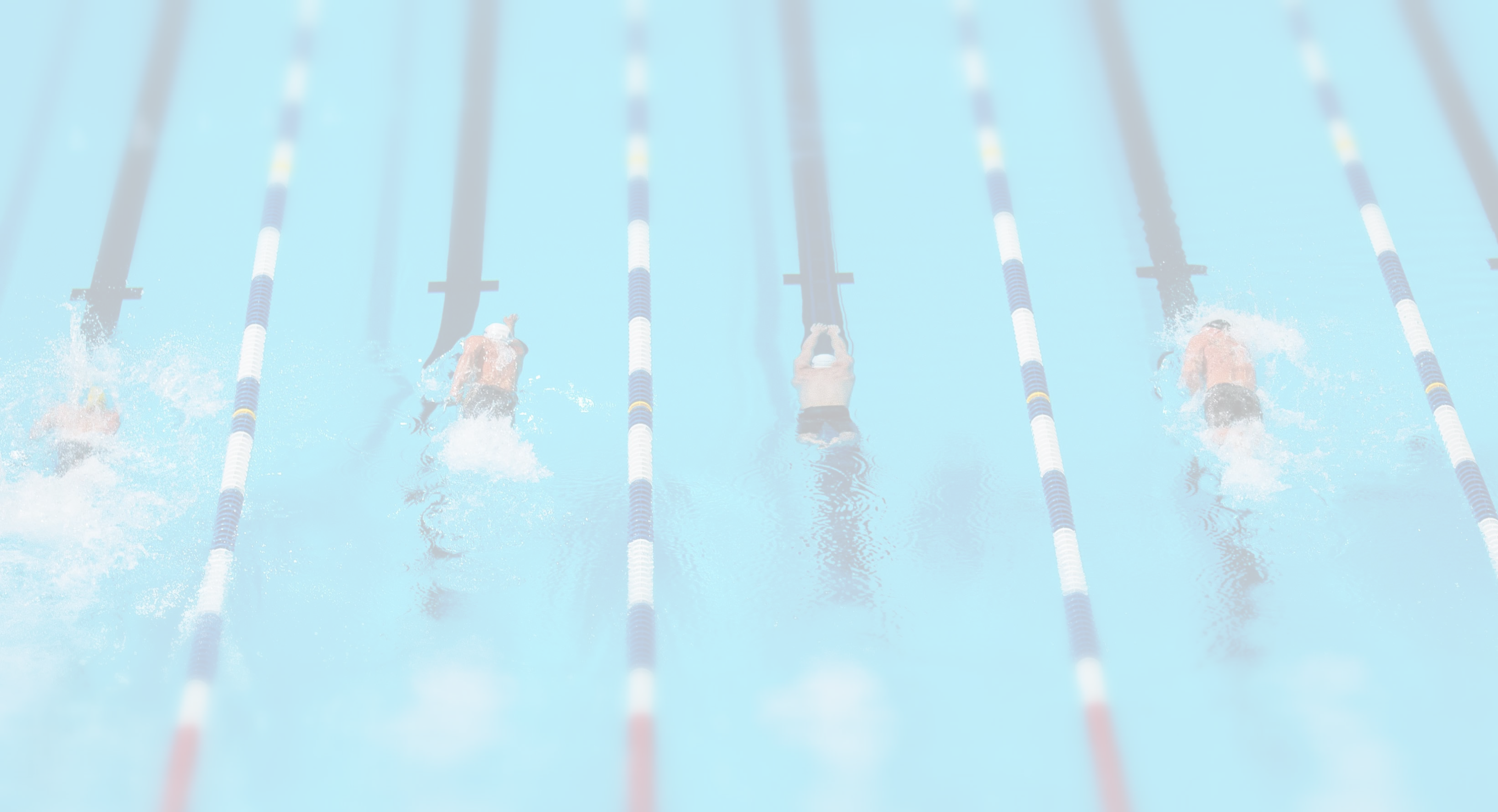
Existing .....	149
Proposed .....	170
<b>Delta .....</b>	<b>+21</b>

Proposed Pool Location

Parking

Parking Path





# PLANS



Bainbridge Island  
Metro Park & Recreation District

**COATES DESIGN**  
**ARCHITECTS**  
Responsible Architecture.



BAINBRIDGE  
HIGH  
SCHOOL

BISD  
EXISTING PARKING

(E) POOL SLIDE TO REMAIN  
EXISTING ROAD  
DELIVERY AT STREET LEVEL (2ND STORY)

NAKATA  
RECREATION  
POOL

NEW  
COMPETITION  
POOL

RAY  
POOL

RAIN GARDEN

DROPOFF

ENTRY w/ ADA RAMP

NEW STORM WATER  
VAULT

BISD

ORDWAY ELEMENTARY

COMMODORE  
OPTIONS SCHOOL

EXISTING BISD PARKING

BISD

EXISTING BISD ACCESS

EXISTING SITE ENTRY

WIDEN EXISTING ROAD  
AT TURNS

Madison Ave N

Madison Ave N

COATES DESIGN  
ARCHITECTS

Responsible Architecture

900 WINSLOW WAY E SUITE 210  
BAINBRIDGE ISLAND WA 98110  
P 206.780.0876

BIMPRD  
NATATORIUM  
FEASIBILITY STUDY

12/19/2018

- (N) NEW AQUATICS ADDITION:  
POOL OPTIONS- 52M, 33M, AND 25M
- (R) REMODEL PORTION OF NAKATA FACILITY
- (E) EXISTING NAKATA POOL TO REMAIN
- (RP) REPURPOSE EXISTING RAY POOL
- (P-1) OVERLAY PARKING- 41,250 SQ.FT.
- (P-2) NEW PARKING- 9,200 SQ.FT.
- (H-1) NEW ROAD SECTION- 7,700 SQ.FT.
- (H-2) NEW SIDEWALK- 12,400 SQ.FT.

LOT COVERAGE:

EXISTING-	
RAY-	12,500 SQ.FT.
NAKATA-	24,000 SQ.FT.
	36,500 SQ.FT.

PROPOSED 52M POOL-

RAY-	(-3,000 SQ.FT.)
52M POOL-	28,500 SQ.FT.
TOTAL-	62,000 SQ.FT.
ADDITIONAL-	25,500 SQ.FT.

PROPOSED 33M POOL-

RAY-	(-3,000 SQ.FT.)
33M POOL-	24,000 SQ.FT.
TOTAL-	57,500 SQ.FT.
ADDITIONAL-	21,000 SQ.FT.

PROPOSED 25M POOL-

RAY-	(-3,000 SQ.FT.)
25M POOL-	21,500 SQ.FT.
TOTAL-	55,500 SQ.FT.
ADDITIONAL-	18,500 SQ.FT.

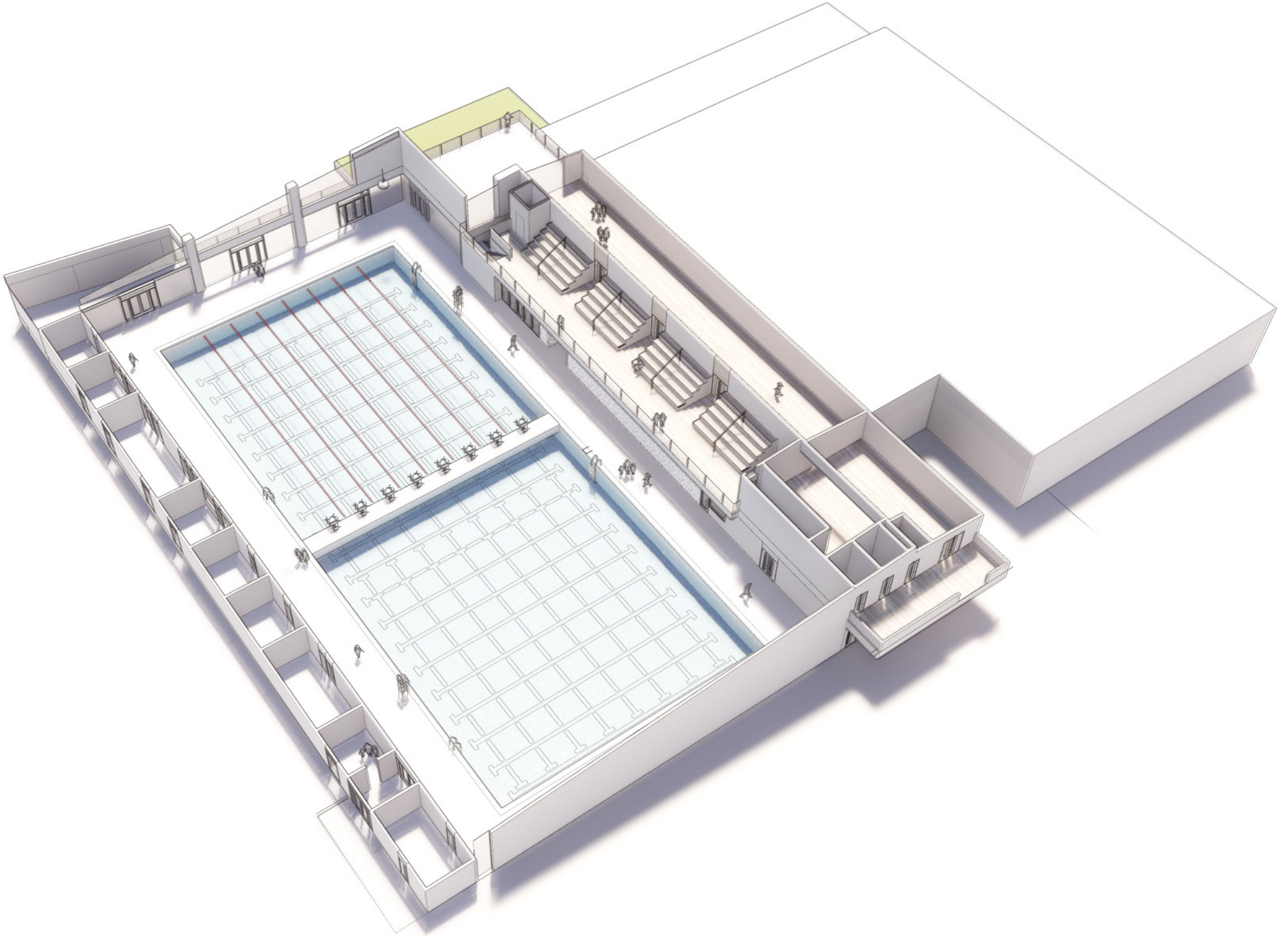
PARKING COUNT:

EXISTING SPACES-	149
PROPOSED SPACES-	170
ADDITIONAL SPACES-	21





# 52 M Pool Facility





BIMPRD  
NATATORIUM  
FEASIBILITY STUDY

12/19/2018



POOL-	12,800 SQ.FT.
/50 =	256 OL.
POOL DECK-	8,100 SQ.FT.
/15 =	540 OL.
LOCKER-	2,200 SQ.FT.
/50 =	44 OL.
FACILITIES-	
Office-	2,000 SQ.FT.
/15 =	133 OL.
Lobby-	1,500 SQ.FT.
/15 =	100 OL.
Storage-	750 SQ.FT.
/300 =	3 OL.
MECHANICAL-	1,400 SQ.FT.
/300 =	5 OL.
CIRCULATION-	500 SQ.FT.
NA	
MULTI-PUR.-	2,400 SQ.FT.
/15 =	160 OL.

ENTRY LEVEL TOTALS:  
31,650 SQ.FT.  
1,241 OL.

UPPER LEVEL TOTALS:  
8,450 SQ.FT.  
499 OL. MAX.

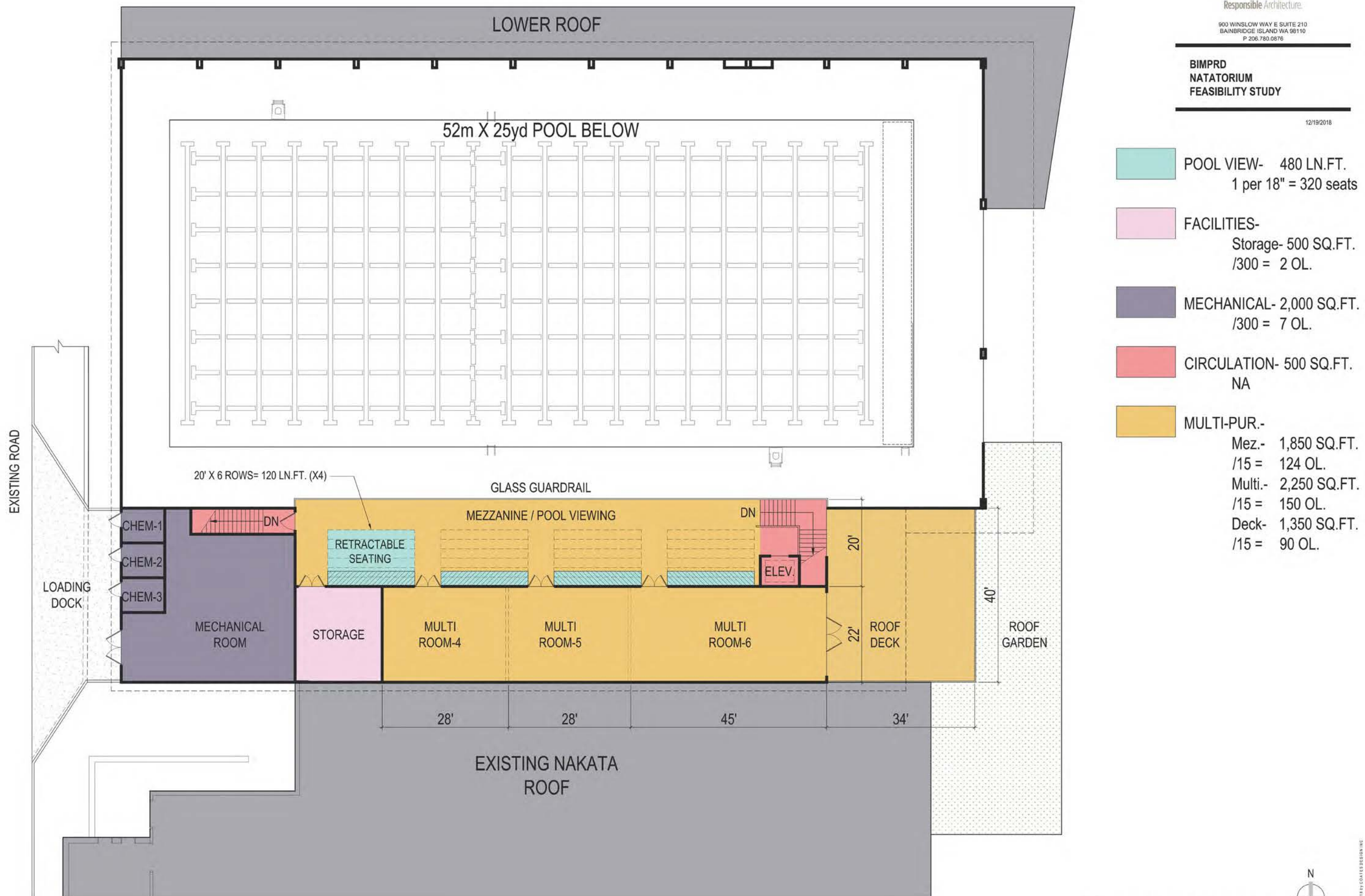
BUILDING TOTALS:  
40,100 SQ.FT.  
1,740 OL.





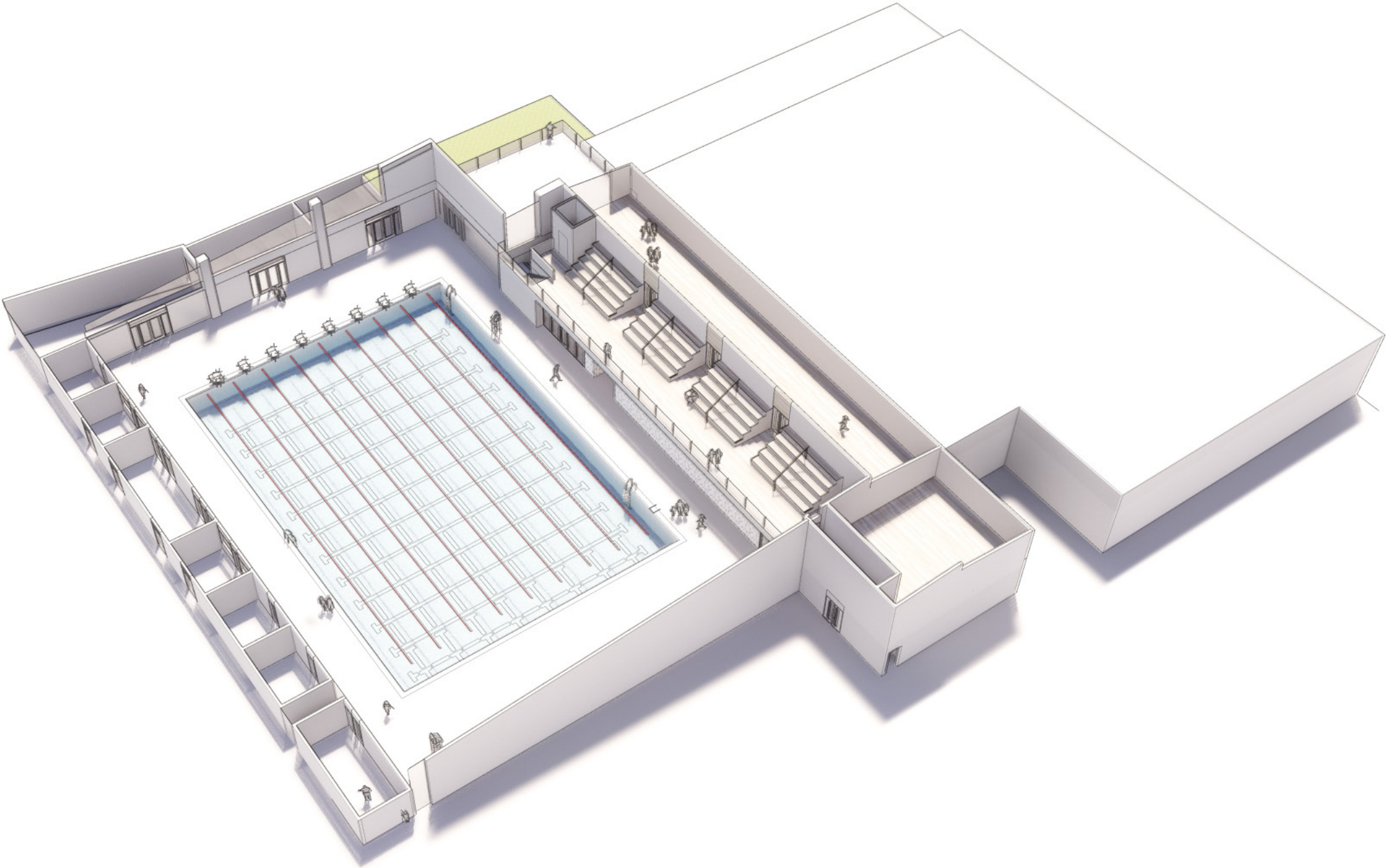
BIMPRD  
NATATORIUM  
FEASIBILITY STUDY

12/19/2018





# 33 M Pool Facility





BIMPRD  
NATATORIUM  
FEASIBILITY STUDY

12/19/2018



POOL-	8,500 SQ.FT.
/50 =	170 OL.
POOL DECK-	6,800 SQ.FT.
/15 =	454 OL.
LOCKER-	2,200 SQ.FT.
/50 =	44 OL.
FACILITIES-	
Office-	1,800 SQ.FT.
/15 =	120 OL.
Lobby-	1,500 SQ.FT.
/15 =	100 OL.
Storage-	700 SQ.FT.
/300 =	3 OL.
MECHANICAL-	1,400 SQ.FT.
/300 =	5 OL.
CIRCULATION-	500 SQ.FT.
NA	
MULTI-PUR.-	3,500 SQ.FT.
/15 =	234 OL.

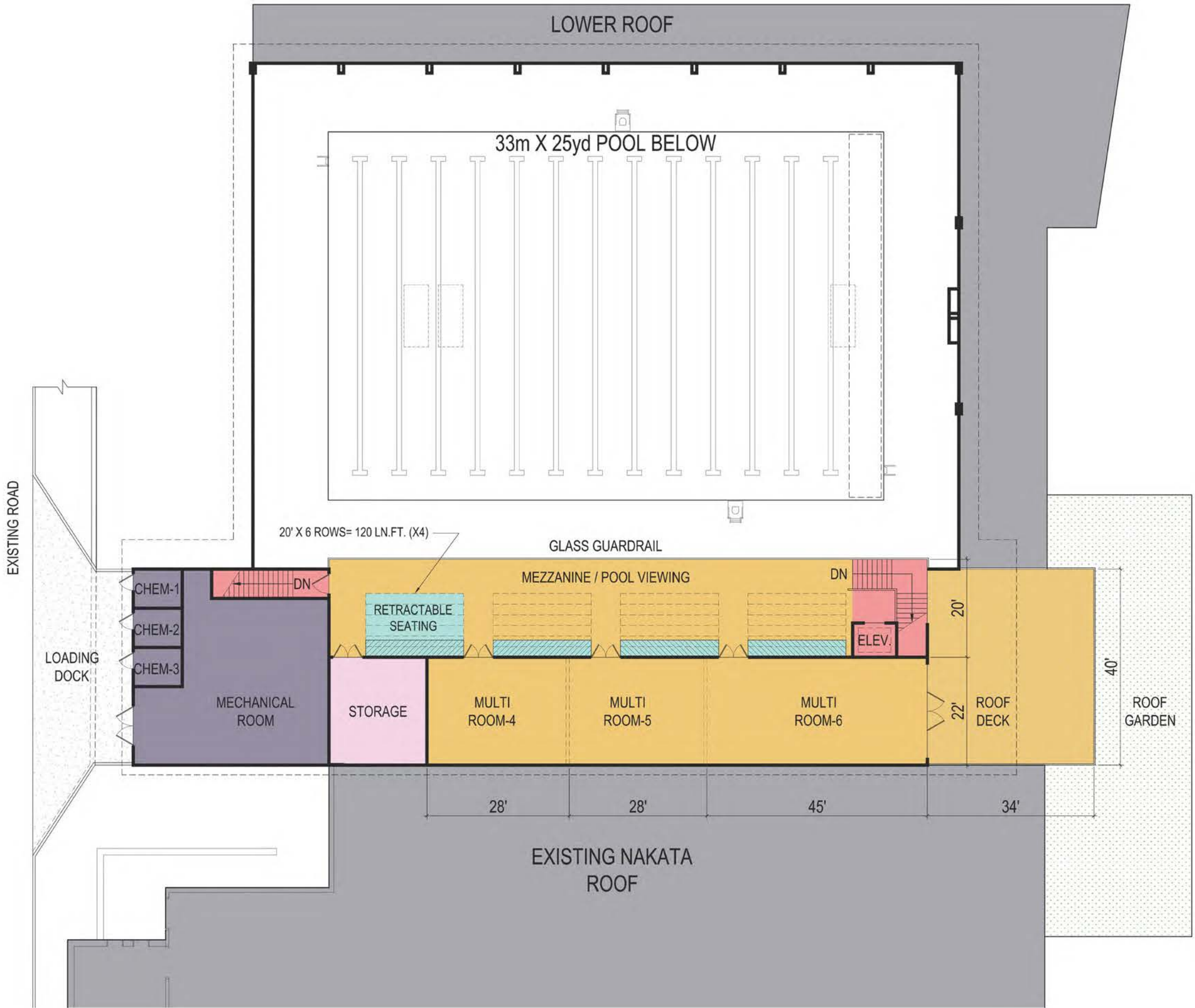
ENTRY LEVEL TOTALS:	
	26,900 SQ.FT.
	1,130 OL.
UPPER LEVEL TOTALS:	
	8,450 SQ.FT.
	499 OL. MAX.
BUILDING TOTALS:	
	35,350 SQ.FT.
	1,629 OL.





BIMPRD  
NATATORIUM  
FEASIBILITY STUDY

12/19/2018

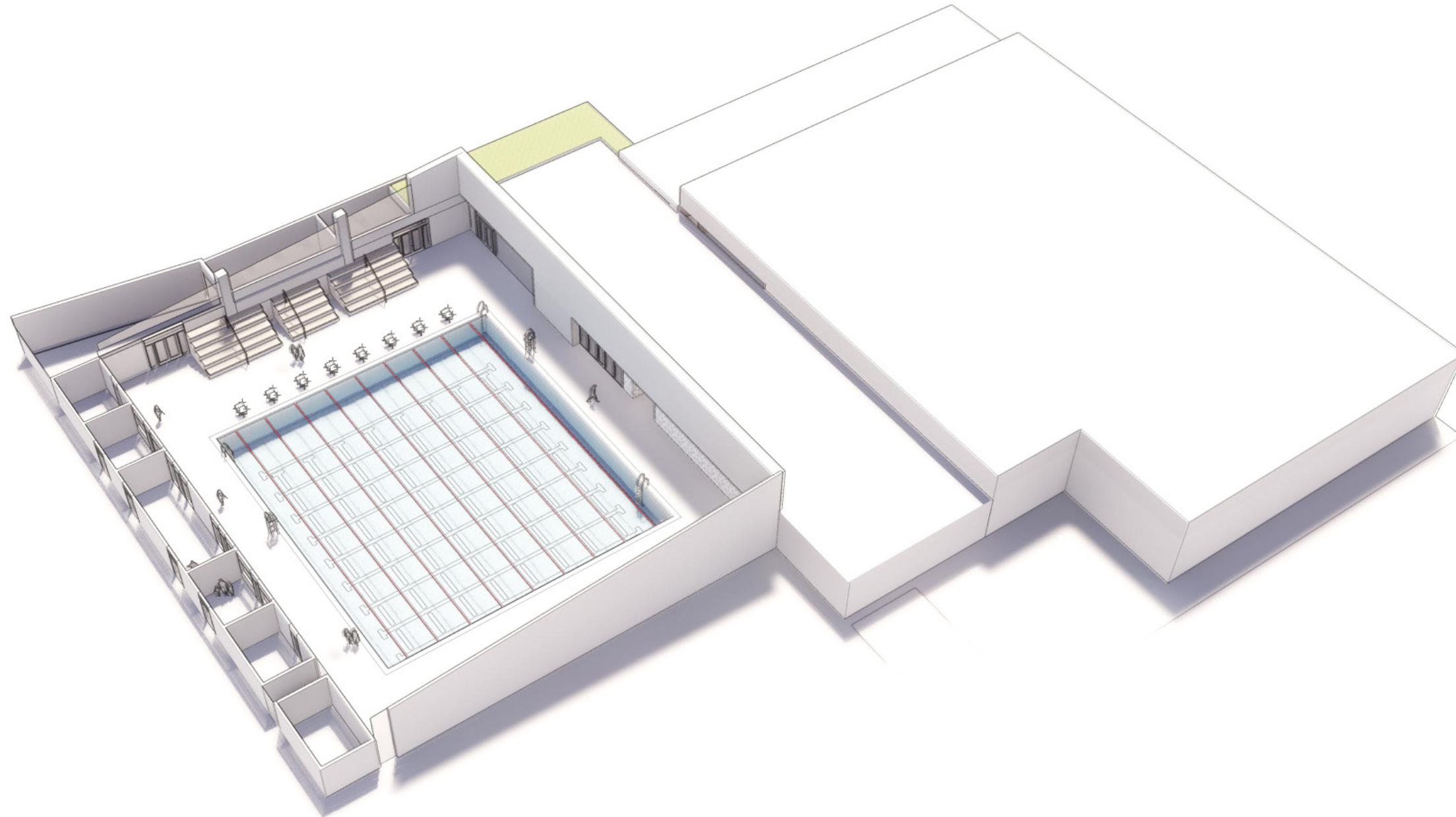


- POOL VIEW-** 480 LN.FT.  
1 per 18" = 320 seats
- FACILITIES-**  
Storage- 500 SQ.FT.  
/300 = 2 OL.
- MECHANICAL-** 2,000 SQ.FT.  
/300 = 7 OL.
- CIRCULATION-** 500 SQ.FT.  
NA
- MULTI-PUR.-**  
Mez.- 1,850 SQ.FT.  
/15 = 124 OL.  
Multi.- 2,250 SQ.FT.  
/15 = 150 OL.  
Deck- 1,350 SQ.FT.  
/15 = 90 OL.





# 25 M Pool Facility





BIMPRD  
NATATORIUM  
FEASIBILITY STUDY

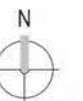
12/19/2018



POOL-	6,200 SQ.FT.
/50 =	124 OL.
POOL DECK-	7,300 SQ.FT.
/15 =	487 OL.
POOL VIEW-	360 LN.FT.
1 per 18" =	240 seats
LOCKER-	2,200 SQ.FT.
/50 =	44 OL.
FACILITIES-	
Office-	1,500 SQ.FT.
/15 =	100 OL.
Lobby-	1,500 SQ.FT.
/15 =	100 OL.
Storage-	700 SQ.FT.
/300 =	3 OL.
MECHANICAL-	1,400 SQ.FT.
/300 =	5 OL.
MULTI-PUR.-	3,500 SQ.FT.
/15 =	234 OL.

BUILDING TOTALS:

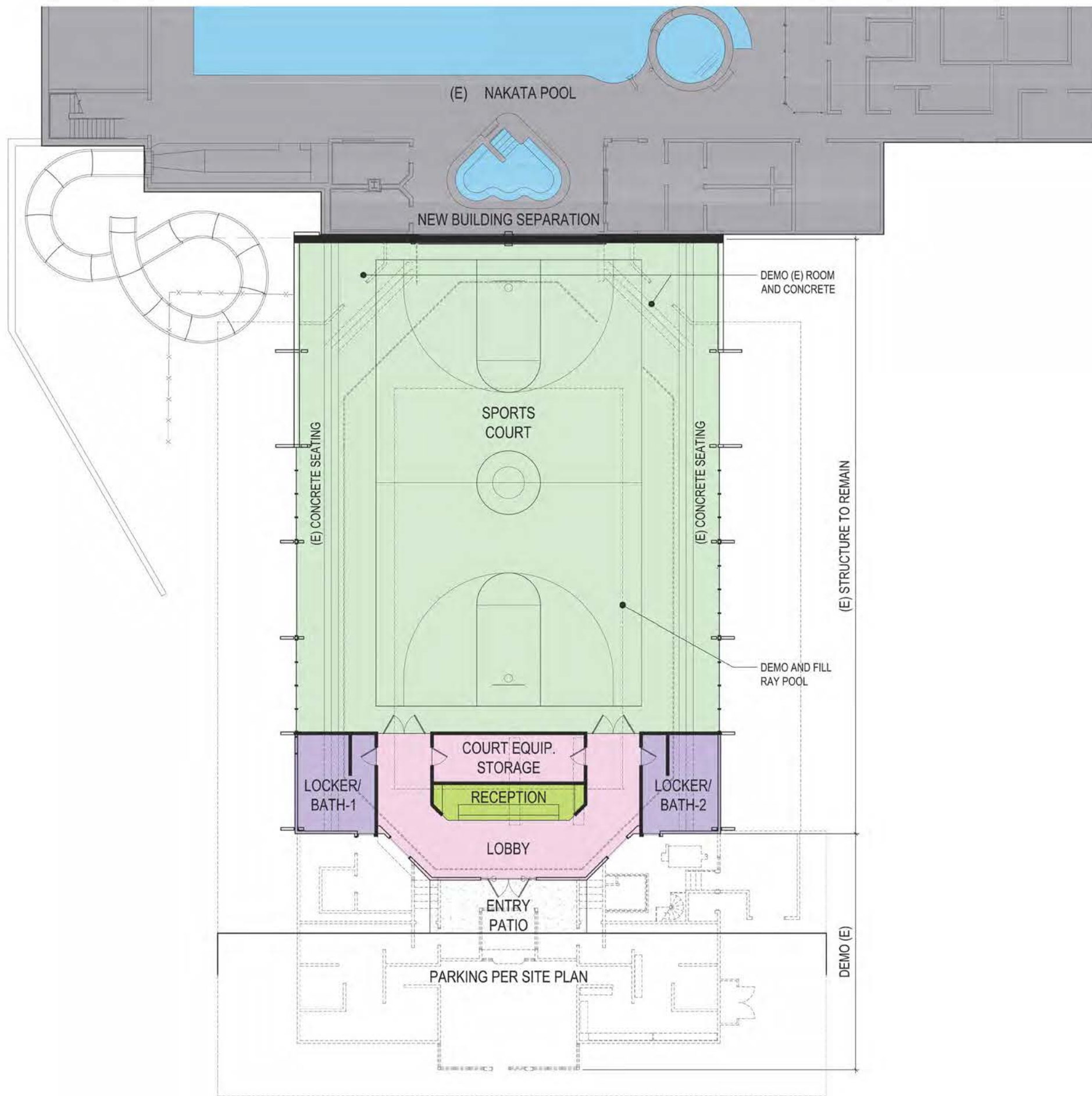
24,300 SQ.FT.  
1,097 OL.





BIMPRD  
NATATORIUM  
FEASIBILITY STUDY

12/19/2018

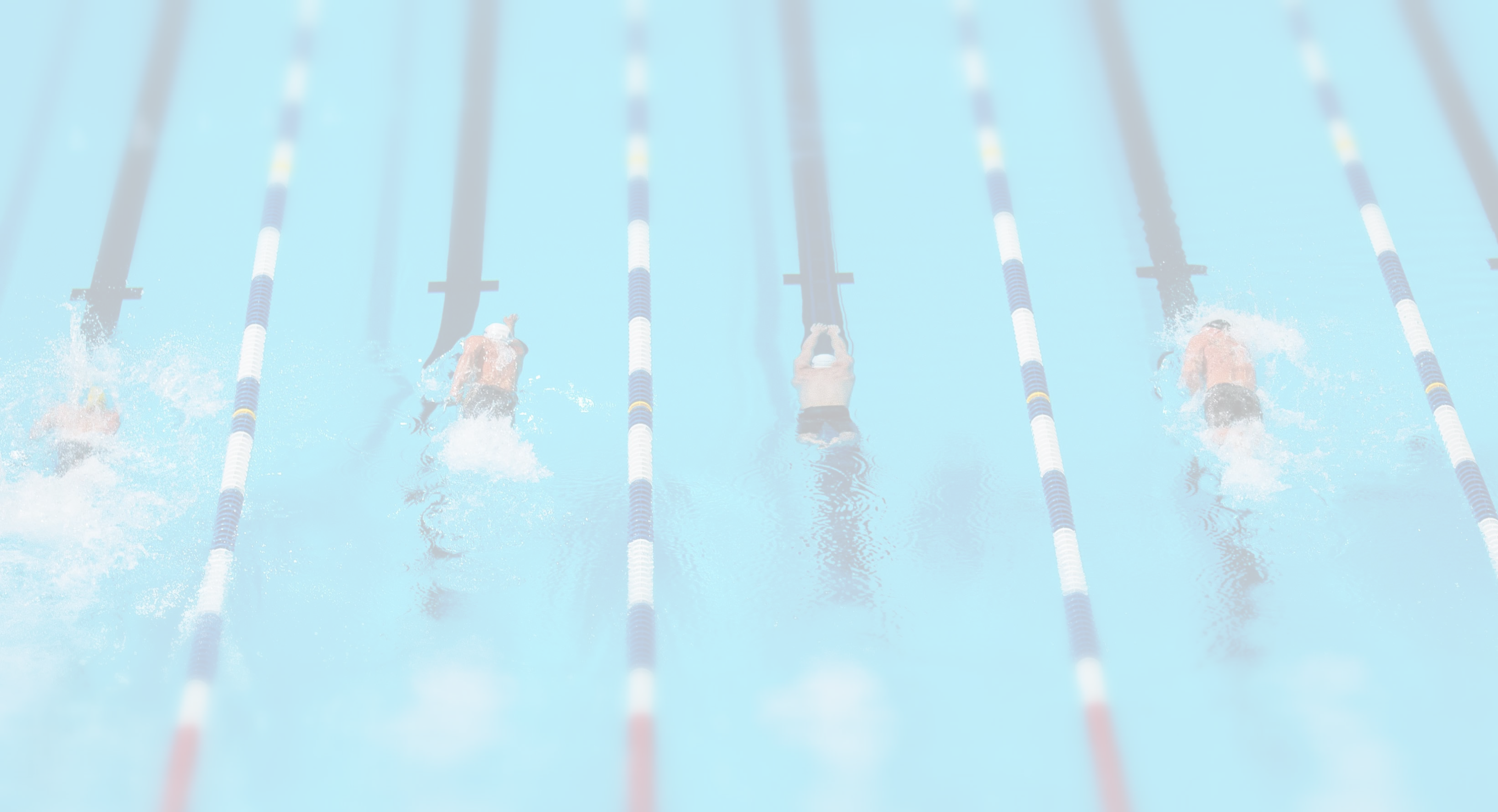


SPORTS COURT-	7,400 SQ.FT.
/50 =	148 OL.
LOCKER-	600 SQ.FT.
/50 =	12 OL.
FACILITIES-	
Lobby-	800 SQ.FT.
/15 =	54 OL.
Storage-	300 SQ.FT.
/300 =	1 OL.
RECEPTION-	200 SQ.FT.
/50 =	4 OL.

BUILDING TOTALS:  
9,300 SQ.FT.  
219 OL.







# PRICING



Bainbridge Island  
Metro Park & Recreation District

COATES DESIGN  
ARCHITECTS  
Responsible Architecture.



# Pricing

## Project conceptual cost estimates provided by the Robinson Company

- Estimates for each new building option and site development
- Estimate for repurposed Ray Pool



### Construction Cost

- Cost Incurred by Construction Contractor to Build Project
- Estimating Methodology:
  - Square Foot Estimating based on Historical Data
  - Unit Cost per Sq.Ft.
  - Higher Contingency
    - 10%
  - Escalation Factor
    - July 2020 (5% year)

+

### Soft Cost

- Costs that are Not Direct Construction Costs
  - WA State Sales Tax
  - Architectural, Engineering, and Consultants
  - Permits
  - Testing and Inspection
  - Outside Construction Management Team
  - Legal
  - Other
- Estimates based on % Range of Construction Cost
  - 46% to 57%

## Total Project Cost





# Cost Estimate - 52 M Pool

Construction Cost			
New Building for 52 M Pool		\$	19,954,524
Remodel Portion of Nakata		\$	1,649,941
Site Development		\$	5,307,261
Total Construction Cost		\$	26,911,726
Soft Cost			
Percentage Range Based on Construction Cost		46%	57%
Total Soft Cost (Range)	\$	12,379,394	\$ 15,339,684
Total Project Cost (Range)	\$	39,291,120	\$ 42,251,410





# Cost Estimate - 33 M Pool

Construction Cost			
New Building for 33 M Pool		\$	16,913,876
Remodel Portion of Nakata		\$	1,649,941
Site Development		\$	5,307,261
Total Construction Cost		\$	23,871,078
Soft Cost			
Percentage Range Based on Construction Cost		46%	57%
Total Soft Cost (Range)	\$	10,980,696	\$ 13,606,514
Total Project Cost (Range)	\$	34,851,774	\$ 37,477,592





# Cost Estimate - 25 M Pool

Construction Cost			
New Building for 25 M Pool		\$	11,957,344
Remodel Portion of Nakata		\$	1,649,941
Site Development		\$	5,307,261
Total Construction Cost		\$	18,914,546
Soft Cost			
Percentage Range Based on Construction Cost		46%	57%
Total Soft Cost (Range)	\$	8,700,691	\$ 10,781,291
Total Project Cost (Range)	\$	27,615,237	\$ 29,695,837





# Cost Estimate - Repurposed Ray Pool

Construction Cost			
Repurpose Ray Pool		\$	3,372,113
Soft Cost			
Percentage Range Based on Construction Cost		46%	57%
Total Soft Cost (Range)	\$	1,551,172	\$ 1,922,104
Total Project Cost (Range)	\$	4,923,285	\$ 5,294,217



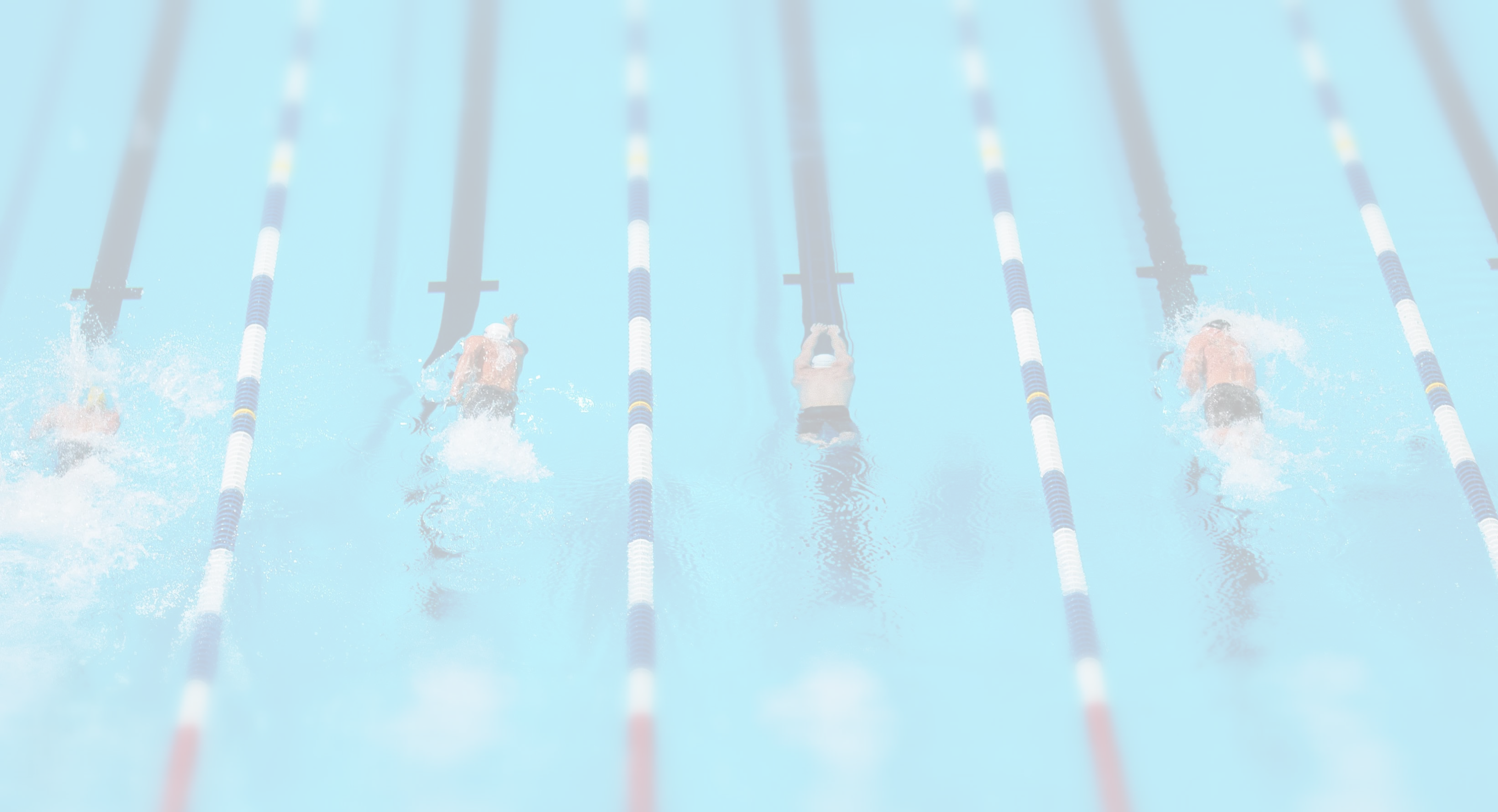


# Total Project Cost Comparison



52 M Facility		33 M Facility		25 M Facility		Ray Pool	
\$	39,291,120	\$	34,851,774	\$	27,615,237	\$	4,923,285
\$	42,251,410	\$	37,477,592	\$	29,695,837	\$	5,294,217





# OPERATIONAL STUDY



Bainbridge Island  
Metro Park & Recreation District

COATES DESIGN  
ARCHITECTS  
Responsible Architecture.



# Operational Study

## Operational Projections and Economic Impact for each Proposed Pool, Provided by Ballard King & Associates

- Projections Compare Existing and Each Proposed Facility:
  - Existing= Existing Ray and Nakata
  - 25Y x 25M= Existing Nakata Pool with New 25Y x 25M Pool
  - 25Y x 33M= Existing Nakata Pool with New 25Y x 33M Pool
  - 25Y x 52M= Existing Nakata Pool with New 25Y x 52M Pool
- Operational Expenses / Revenue Generation Projections

	Existing	25Y X 25M	25Y X 33M	25Y X 52M
Revenue	\$1,249,560	\$1,276,334	\$1,295,661	\$1,346,031
Expense	\$1,921,172	\$2,051,663	\$2,191,686	\$2,245,802
	<b>\$671,612</b>	<b>\$775,330</b>	<b>\$896,024</b>	<b>\$899,771</b>





# Operational Study

## Economic Impact of 52M Pool (50M) Provided for KPFD Funding



### Year One:

- 4 25Y Age Group Swim Meets
- 1 50M Age Group Swim Meet
- 2 25Y Master Swim Meets
- 3 Water Polo Club Tournaments

Spending Impact:	\$2,338,800
Hotel Impact:	\$1,066,500
<hr/>	
<b>Total Impact:</b>	<b>\$3,405,300</b>

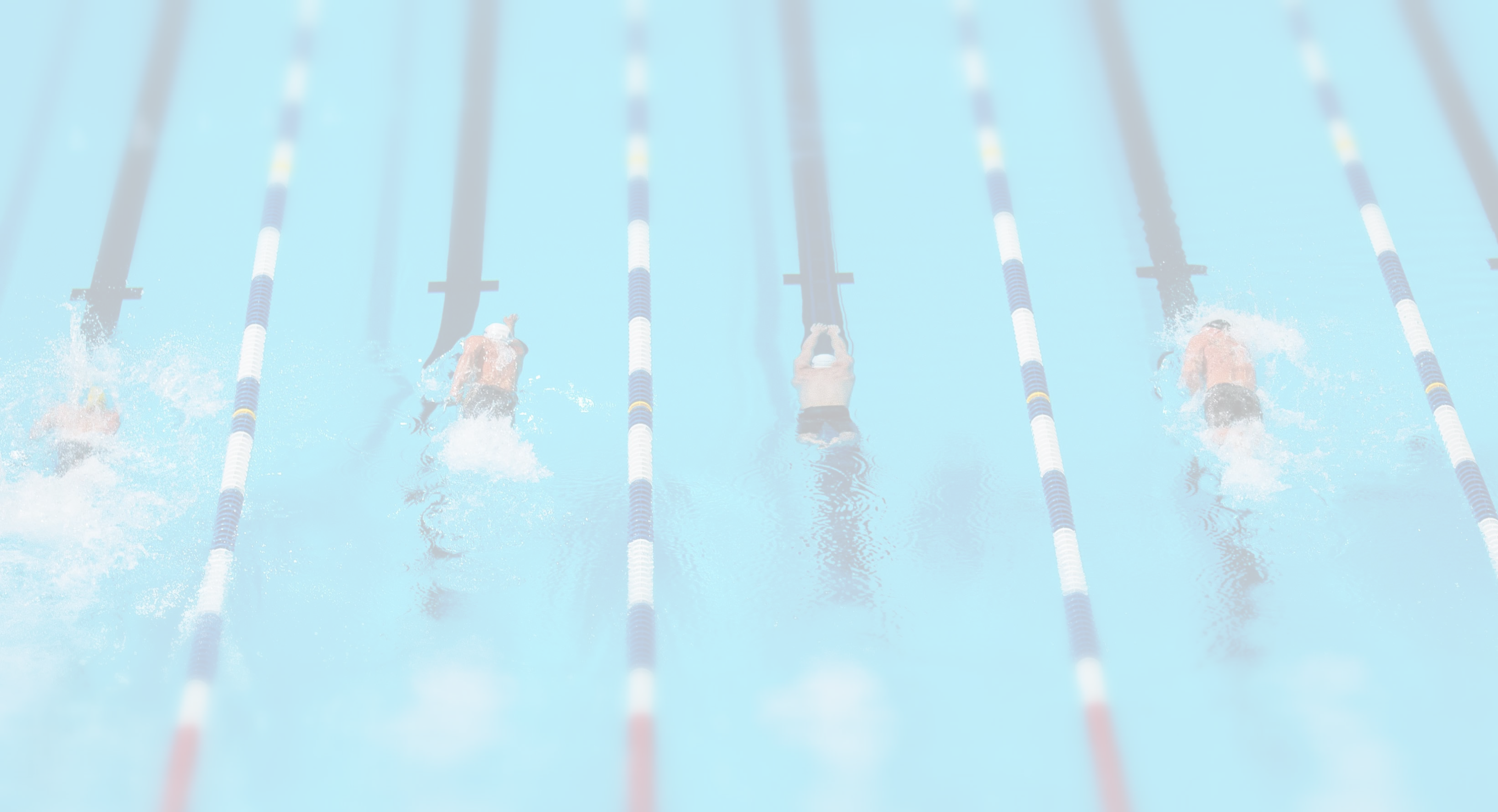
### Potential Increases:

- 8 25Y Age Group Swim Meets
- 3 50M Age Group Swim Meets
- 4 25Y Master Swim Meets
- 6 Water Polo Club Tournaments

Spending Impact:	\$5,127,600
Hotel Impact:	\$2,335,500
<hr/>	
<b>Total Impact:</b>	<b>\$7,463,100</b>







THANK YOU



Bainbridge Island  
Metro Park & Recreation District

COATES DESIGN  
ARCHITECTS  
Responsible Architecture.