FEASIBILITY STUDY

Proposed New Aquatic Center Half Moon Bay High School

1 Lewis Foster Drive Half Moon Bay, California 94019

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Prepared for

Friends of Half Moon Bay Parks & Recreation

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Executive Summary

The Friends of Half Moon Bay Parks and Recreation (Client) seeks to improve the aquatics facilities for Half Moon Bay High School and the Half Moon Bay community. The existing Half Moon Bay High School pool has served the high school and community for the past several decades, but the pool is now considered substandard with respect to high school aquatics competition, event functionality, community needs, and various aspects of competition rules and code compliance.

Meetings with the Client and Cabrillo Unified School District have produced a stated objective for the new aquatic center to consist of a 25 yard x 40 meter (16 lanes) competition swimming pool, a separate 2,500 sf warm water teaching pool, and appropriate support facilities for high school and community aquatic programs.

This Feasibility Study compares two sites on the Half Moon Bay High School campus:

Option 1: the existing pool location.

Option 2: the lower student parking lot.

General Design Considerations

- A. Aquatic Programming: The new aquatic center is intended to host:
 - CIF/NFHS high school water polo and swimming training and competitive events, including multi-team tournaments and meets.
 - High school physical education curriculum (swimming).
 - Community water safety instruction (swimming lessons and lifeguard training).
 - Community recreational swim team training and events (e.g., HMB Mavericks).
- B. Support Facilities:
 - Pool circulation, sanitation, and heating equipment.
 - Pool office, classroom, and general aquatic equipment storage.
 - Locker rooms (toilet/shower facilities).
 - Water, electric, gas, and sanitary sewer utilities.
 - Pedestrian access and egress.
 - Vehicular access, parking, and circulation.
- C. Code Compliance. The design of the new aquatic facility will be in compliance with:
 - 2025 California Building, Fire, Electrical, Mechanical, Green, and Energy Efficiency codes.
 - Review and approval of the California Department of State Architect (DSA).
 - San Mateo County Environmental Health Department.
 - San Mateo County Department of Public Works.
 - NFHS rules, as applicable and feasible.
 - USA Swimming rules and regulations, as applicable and feasible.
 - other municipal codes, as applicable.
- D. School Campus Considerations. The location of the proposed aquatic center can consider the following campus conditions:
 - Mitigated public access to the interior of the campus during school hours.
 - Student loitering at the lower student parking lot during school hours.

Aquatic Center Business Plan

To be co-developed by Half Moon Bay Parks & Recreation District and Cabrillo Unified School District.

Pool Sites Considered

Option 1 – Existing Swimming Pool Location:

- 1. Option 1 utilizes the existing swimming pool location for the proposed pools and support building. This location utilizes existing support infrastructure:
 - Adjacent locker room facilities.
 - Water service.
 - Gas service.
 - Sanitary sewer service.
- 2. Support Building: The support building, given its proximity to the existing locker rooms will house the following functions:
 - Entry control point.
 - Pool equipment room.
 - Chemical storage.
 - Aquatics office.
 - Aquatic equipment (electronic scoring/timing) indoor storage.
 - Deck access single occupant toilet rooms.
 - Deck access showers.
- 3. Topography: The existing topography at this location requires a minimum of alterations to achieve code compliance with accessibility and egress code requirements.
- 4. Associated Site Alterations:
 - Removal of two portable classroom buildings P1 and P2.
 - Relocation of existing gas meter.
 - Extension of east side access road for facilitation of chemical delivery.
- 5. Opinion of Probable Construction Cost:

Site Improvements	\$ 938,000
Pools and Equipment	6,060,200
Support Building	2,100,000
Existing Pool Site Remediation	0
Contractor OH&P	2,183,600
Soft Costs	4,161,400
Total	\$ 15,517,700

Option 2 – Lower Student Parking Lot:

- 1. Option 2 utilizes the lower student parking lot. Option 2 requires additional site improvements costs vs. Option 1:
 - Grading and retaining walls adjacent to the existing softball field.
 - Extension of water service to this location.
 - Extension of gas service to this location.
 - Extension of sanitary sewer service to this location
- 2. Support Building: The support building, given the pools' distance from the existing locker rooms, would include all functions of a support building in Option 1, plus:
 - Additional toilet and shower facilities.
- 3. Topography: The existing topography holds an approximate 15 foot elevation change from east (softball field) to west (Lewis Foster Drive). Retaining walls at the east side of this location will be required to provide the required level pool area. More substantial site alterations to achieve code compliance with accessibility and egress requirements will also be required.

- 4. Associated Site Alterations:
 - Removal of several trees.
- 5. Replacement of Lost Parking: Development of the new Aquatic Center at this location will eliminate approximately 70 (net) parking stalls. It is proposed to offset this loss by providing additional parking by enlarging the existing east parking area to include the existing unimproved area adjacent to the north side of the tennis courts.
- 6. Opinion of Probable Construction Cost:

Site Improvements	\$ 3,979,500
Pools and Equipment	5,647,200
Support Building	5,600,000
Existing Pool Site Remediation / Parking	1,745,800
Additional Parking Adjacent to Tennis Court	500,000
Contractor OH&P	4,193,400
Soft Costs	7,610,900
Total	\$ 29,276,800

Comparative Advantages / Disadvantages of Options 1 through 4

Option 1 – Existing Pool Location:

Advantages: 1. Utilizes existing locker room facilities.

2. Utilizes existing water, power, gas, and sewer utilities.

3. Lowest estimated cost of presented options.

Disadvantages: 1. Does not mitigate the concern of general public access to the interior of campus during school hours without further evaluation.

2. Does not mitigate the student loitering concern at the lower student parking lot.

Option 2 – Lower Student Parking Lot:

Advantages:

- 1. Mitigates the concern of general public access to the interior of campus during school hours.
- 2. Mitigates the student loitering concern at the lower student parking lot.

Disadvantages:

- 1. Substantial earthwork/grade modification required to accommodate desired facility.
- 2. Requires new locker room dedicated to the facility.
- 3. Second highest estimated cost of presented options.

Utilities Disclaimer

The scope of utilities extensions and associated estimated costs for each of the Options above is provided without information about the locations or capacities of the existing utilities. RSM reserves the right to revise the scope descriptions and associated cost estimates once such information is provided.

continued

Locker Room Facility Requirements

For Option 1 above, it is assumed that the existing locker rooms provide the required quantity of toilet/shower facilities to accommodate the proposed pools.

For Options 2, given the pools' distance from the existing locker rooms, additional toilet/shower facilities will be required, generally as follows:

Chapter 31B of the California Building Code (for public pools) requires a specified quantity of toilets, urinals, sinks and showers based on the pool occupant load, which is based on the pools combined water surface area. The number of bathers is calculated at 15 sq. ft. per bather. For the purpose of this feasibility study, the approximate bather count is estimated as follows:

Pools: 12,400 sq. ft. / 15 = 826 occ. (413 male, 413 female)

For the calculated bather count, the required quantity of plumbing fixtures would be:

<u>Fixture</u>	<u>Men</u>	<u>Women</u>
Toilets	6	7
Urinals	6	
Sinks	4	4
Showers	8	8

Egress Requirements

Chapter 10 of the California Building Code establishes the facility egress requirements, based on a calculated occupant load of the pool and the pool deck. For the purposes of this feasibility study, the estimated areas of the new pool and pool deck are as follows:

Pools: 12,400 sq. ft. Pool Deck: 20,000 sq. ft.

The occupant loads are calculated at 50 sq. ft. per person for the pools and 15 sq. ft. per person for the pool deck. Thus, the occupant loads for the existing facility are approximately as follows:

Pool: 248 occ.
Pool Deck: 1,333 occ.
Total 1,581 occ.

For an occupant load over 1,000, there shall be a minimum of four points of egress. This requirement can be readily met at either of the proposed locations.

Storm Water Treatment

It is assumed that the proposed project, regardless of location selected, will be required to incorporate a storm water management element. As of this writing, storm water management requirements have yet to be reviewed with San Mateo County Department of Public Works.

Opinion of Probable Construction Cost Disclaimer

Rogers Stringer & McClelland Inc. has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions. Opinions of probable construction costs are representative only of RSM's judgment as a design professional familiar with the aquatics construction industry. RSM cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable construction costs.

END OF FEASIBILITY STUDY NARRATIVE

Proposed New Aquatic Center Half Moon Bay High School Option 1 – Existing Pool Location



Advantages / Disadvantages

Advantages:

- 1. Utilizes existing locker room facilities.
- 2. Utilizes existing water, power, gas, and sewer utilities.
- 3. Lower estimated cost vs. Option 2.

Disadvantages:

- 1. Does not mitigate the concern of general public access to the interior of campus during school hours without further evaluation.
- 2. Does not mitigate the student loitering concern at the lower student parking lot.

Opinion of Probable Construction Cost

Site Improvements	\$ 938,000
Pools and Equipment	6,060,200
Support Building	2,100,000
Existing Pool Site Remediation	0
Additional Parking Adjacent to Tennis Court	0
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Disadvantages:

- 1. Substantial earthwork/grade modification required to accommodate desired facility.
- 2. Requires new locker room dedicated to the facility.
- 3. Higher estimated cost vs. Option 1.

Opinion of Probable Construction Cost

Site Improvements	\$ 3,979,500
Pools and Equipment	5,647,200
Support Building	5,600,000
Existing Pool Site Remediation / Parking	1,745,800
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