Oak Park and River Forest High School

Swimming Pool Feasibility Study
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This is a study for Oak Park River Forest High School to investigate the feasibility of enlarging the existing swimming pools or adding a new pool that would better meet the requirements of the school for competition and instruction.

The study investigates four locations to determine how each would affect the school programs and the cost of construction.
Existing Conditions
Existing Conditions (1st Floor Plan)
Existing Conditions (2\textsuperscript{nd} Floor Plan)
Existing Conditions (3<sup>rd</sup> Floor Plan)
Existing Conditions (4th Floor Plan)
Scheme ‘A’
Southeast Pool
Scheme ‘A’ - Southeast Pool

This pool would be located in the southeast corner of the building in the place presently occupied by the East Pool and the South Gym. This area allows the largest single pool to be built in the school. It could have eight lanes, 8’-0” wide with a deep end for diving. Telescoping bleachers could be located on the deck for spectator viewing. The pool is adjacent to the locker room. Access is directly on to the pool deck through the existing pool entry. A major structural system would have to be modified to support the upper floors and roofs. The existing pool seating would need to be eliminated. Student access to the pool is through the main corridor on the east side of the building.
Due to the complicated structural modifications, this represents a costly remodeling of the school. The school teaching spaces would also be affected with the loss of a gym (the South Gym). The southwest pool could remain in operation or it could be converted to a gymnasium at additional cost.

This scheme could cost approximately $______________
Scheme ‘A’ - Southeast Pool (1st Floor)
Scheme ‘A’ - Southeast Pool (2nd Floor)
Scheme ‘A’ - Southeast Pool (3rd Floor)
Scheme ‘B’
Southwest Pool
This pool would be an enlargement of the existing Southwest pool. The building is enlarged approximately 20-feet to the west and the pool enlarged to seven lanes that are 7’-0” wide with a deep end for diving. The existing balcony seating would be remodeled but the seating structure would remain the same. The pool would use the existing adjacent locker facilities and access to the pool would remain essential as it presently exists. The relocation of the west exterior wall involves a complicated reworking of the existing structure for the upper floors and roof, but this will allow the addition of an enlarged new gym over the pool.
The size of the existing Wrestling Room would also decrease. The southeast pool could remain as it is or be converted into a larger gym area at an additional cost. This solution will also affect the design of the “Mall Area” that is being planned for the area west of the school. The mall would be narrower than is currently planned.

Due to the complicated structural modifications, this represents a costly remodeling of the school building. The school teaching spaces affected will be the Wrestling Pool and any modification required in the Southeast Pool and Gym.

This scheme could cost approximately $___________________
Scheme ‘B’ - Southwest Pool (1st Floor)
Scheme ‘B’ - Southwest Pool (2nd Floor)
Scheme ‘C’
Northeast Pool
Scheme ‘C’ - Northeast Pool

This pool would be located in the East gym immediately south of the fieldhouse corridor. This area is centrally located in the school and easily accessible to students and spectators. This room allows a pool with seven 7’-0” lanes and a deep end for diving. Since this is a new pool, it will require a new pool equipment room. Spectators could view the pool from balcony seating located on the second floor on both sides of the pool. This location also puts it adjacent to the Locker Room. Access to the pool is from the east corridor and the fieldhouse stairway.
This pool location is the only one of three that does not require major structural revisions to the existing building. It would require construction of the observation balconies. With the pool in this location, the southwest pool could remain in operation. The southeast pool could be converted to a new gymnasium. However, a large gym would be lost and hopefully the gym conversion of the southeast pool could compensate for this. It is possible because of this pool’s central location, pool chlorine odors could work their way through the school.

This scheme could cost approximately $_________________
Scheme ‘C’ - Northeast Pool (1st Floor)
Scheme ‘C’ - Northeast Pool (2nd Floor)
Scheme ‘C’ - Northeast Pool (3rd Floor)

P.E. MULTI-PURP. ROOM

P.E. DANCE STUDIO

358 357

300

North
Scheme ‘D’
Remote Location Pool
Scheme ‘D’ - Remote Location Pool

This Scheme would be a new “Aquatic Center” that could be located at a remote site; an open piece of property that is currently owned by the School District, or a site that could be created by the purchase and demolition of adjacent residential properties.

This “Aquatic Center” could be constructed with two pools, a deep diving well and a shallow racing well. The racing well could be designed with seven or eight lanes. Locker and shower facilities would have to be incorporated in the plan. Spectator seating could be designed to utilize the long side of both pools, therefore permitting the best possible viewing.
The Aquatic Center could also incorporate offices and classrooms that may be required by the teaching staff. Mechanical equipment spaces and pool filtration equipment spaces would also need to be included.

As a completely new facility, this Scheme would eliminate the conflicts with school operations and programs that might be caused by a construction of a pool within the walls of the existing building. Some areas would probably have to be dedicated for parking at this site.

This scheme would require the purchase of land which cannot be determined at this time, and construction of an “Aquatic Center” could cost approximately $4.5M to 5.0M.
Scheme ‘D’ – New Remote Pool Concept
New Remote Pool Concept Lower Level

- Diving Pool (12’0” Deep)
- Lap Pool (4’6” Deep)
- 8 Lanes (7’0” Wide)

Floor Area: 18,450 SF
Building Area: 24,900 SF
New Remote Pool Concept Upper Level

Upper Pool Area

Floor Area: 6,450 SF
Building Area: 24,900 SF

Scoreboard

Mechanical Room
Classroom #1
Entry & Circulation
Classroom #2
Classroom #3

(Not to Scale)
New Remote Pool Concept

**Lower Level**
- Pools & Deck (93’ x 150’)
  - 14,000 SF
- Lockers & Showers (25’ x 60’)
  - 1,500 SF
- Offices (3 @ 100 SF)
  - 300 SF
- Pool Equipment Room (25’ x 20’)
  - 500 SF
- Pool Storage (25’ x 20’)
  - 500 SF
- Entry & Circulation 15% x (1/2 Pool → Remainder)
  - 1,650 SF

Sub Total = 18,450 SF

**Upper Level**
- Spectator Area
  - 2,700 SF
- Classrooms (3 @ 800 SF each)
  - 2,400 SF
- Circulation & Entry
  - 750 SF
- Mechanical Room
  - 750 SF

Sub Total = 6,600 SF

TOTAL = 25,050 SF

Estimated Cost $4.5M to $5.0M, at $180.20/SF.
(Cost is for construction only, and does not include property costs, Architect’s fees, and any other “soft” costs.)
Design Summary
(Advantages/Disadvantages)
# Pool Design Summary - Advantages

<table>
<thead>
<tr>
<th>Scheme ‘A’</th>
<th>Scheme ‘B’</th>
<th>Scheme ‘C’</th>
<th>Scheme ‘D’</th>
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</thead>
<tbody>
<tr>
<td>Southeast Pool</td>
<td>Southwest Pool</td>
<td>Northeast Pool</td>
<td>New Remote Location Pool</td>
</tr>
<tr>
<td>1. Largest pool</td>
<td>1. Re-uses pool equipment room</td>
<td>1. Central location</td>
<td>1. New building that does not affect existing spaces</td>
</tr>
<tr>
<td>2. Adjacent to newest locker rooms</td>
<td>2. Adjacent to existing pool locker rooms</td>
<td>2. Adjacent to newest locker rooms</td>
<td>2. Can be designed to include a diving well and a separate racing well</td>
</tr>
<tr>
<td>3. Easy access</td>
<td>3. Familiar location</td>
<td>3. Easy access</td>
<td>3. No changes to existing gyms</td>
</tr>
<tr>
<td>4. Southwest pool will remain or be converted to new gymnasium</td>
<td>4. Southeast pool will remain or be converted to new gymnasium</td>
<td>4. Spectator entry on second floor</td>
<td>4. Existing pools could be devoted to new teaching areas</td>
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<td>5. Least expensive construction</td>
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<td>6. Southwest pool will remain or be converted to new gymnasium</td>
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# Pool Design Summary - Disadvantages

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<td>New Remote Location Pool</td>
</tr>
<tr>
<td>1. Loss of south gymnasium</td>
<td>1. Building must be enlarged approximately twenty feet</td>
<td>1. A large gymnasium is changed and must be replaced</td>
<td>1. Land must be acquired</td>
</tr>
<tr>
<td>2. Expensive construction cost</td>
<td>2. Wrestling room is smaller</td>
<td>2. Pool odors possible in center of building</td>
<td>2. Remote location will cause Passing Periods to be lengthened</td>
</tr>
<tr>
<td></td>
<td>3. Complicated construction</td>
<td>3. Southeast pool to be converted to new gymnasium at additional structural cost</td>
<td>3. Must build locker and shower rooms</td>
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<td>4. Expensive construction costs</td>
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<td>4. Additional parking may be needed</td>
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<td>5. Affects planned “mall” design</td>
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