



# Oak Park and River Forest High School

## Swimming Pool Feasibility Study

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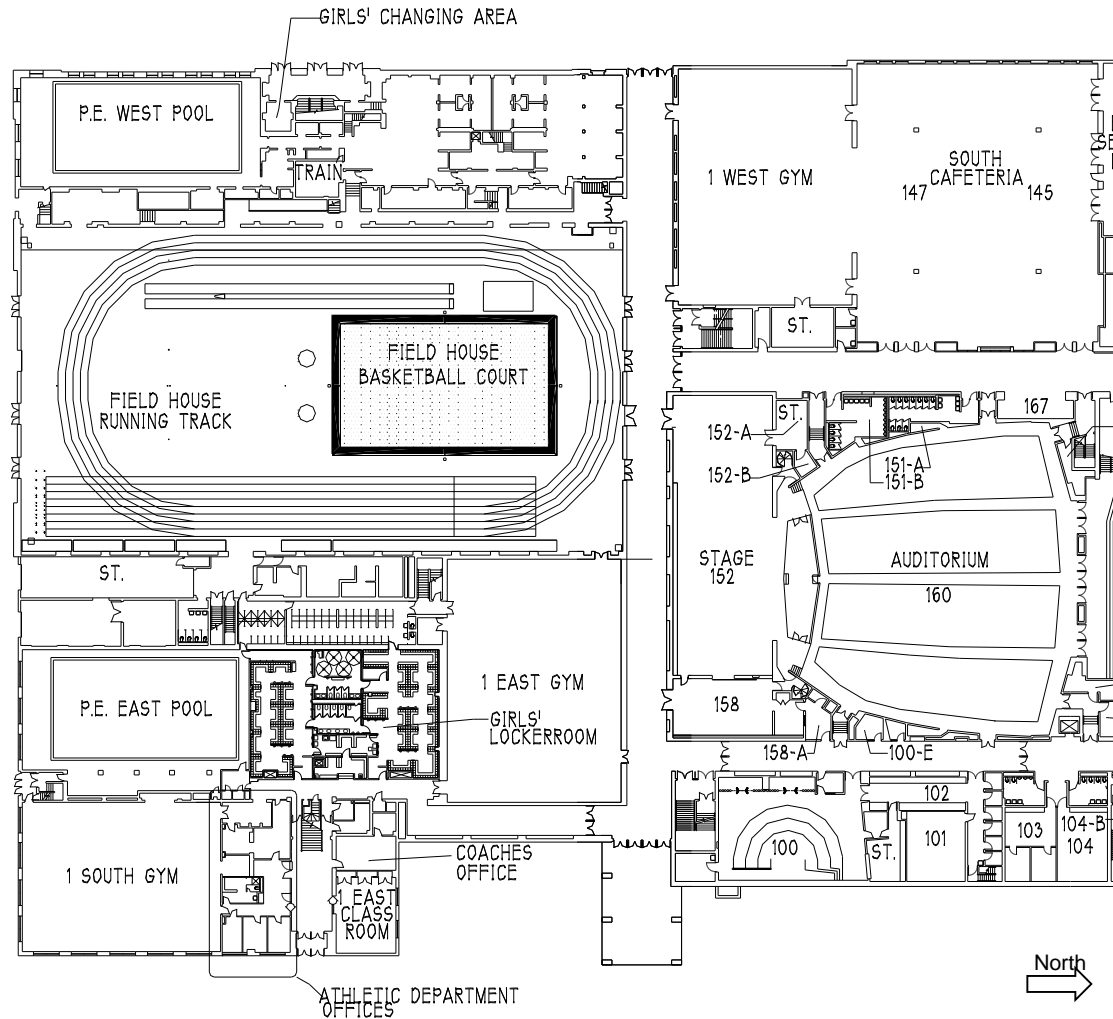
This is a study for Oak Park River Forest High School to investigate the feasibility of enlarging the existing swimming pools or adding a new pool that would better meet the requirements of the school for competition and instruction.

The study investigates four locations to determine how each would affect the school programs and the cost of construction.

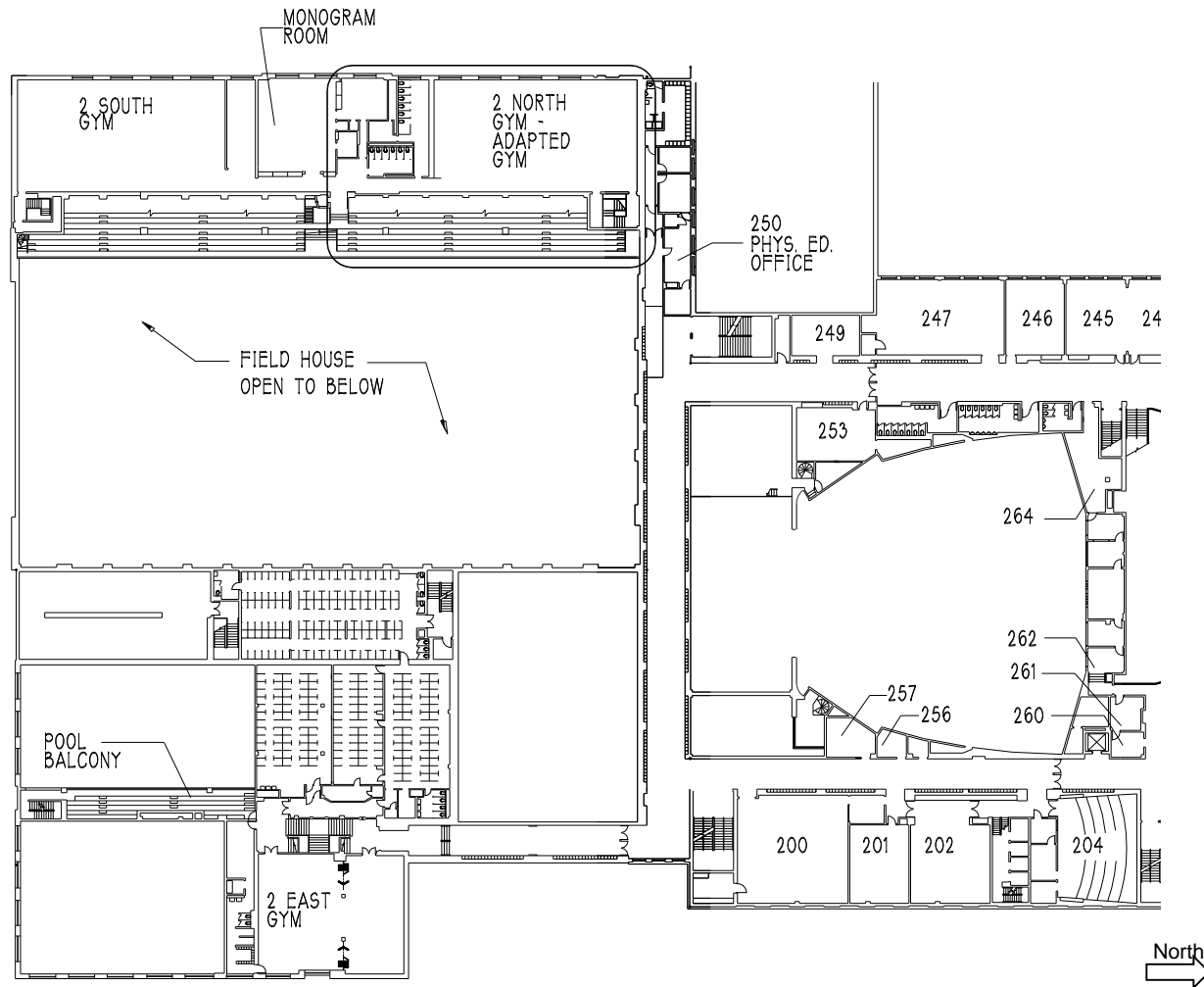


# Existing Conditions

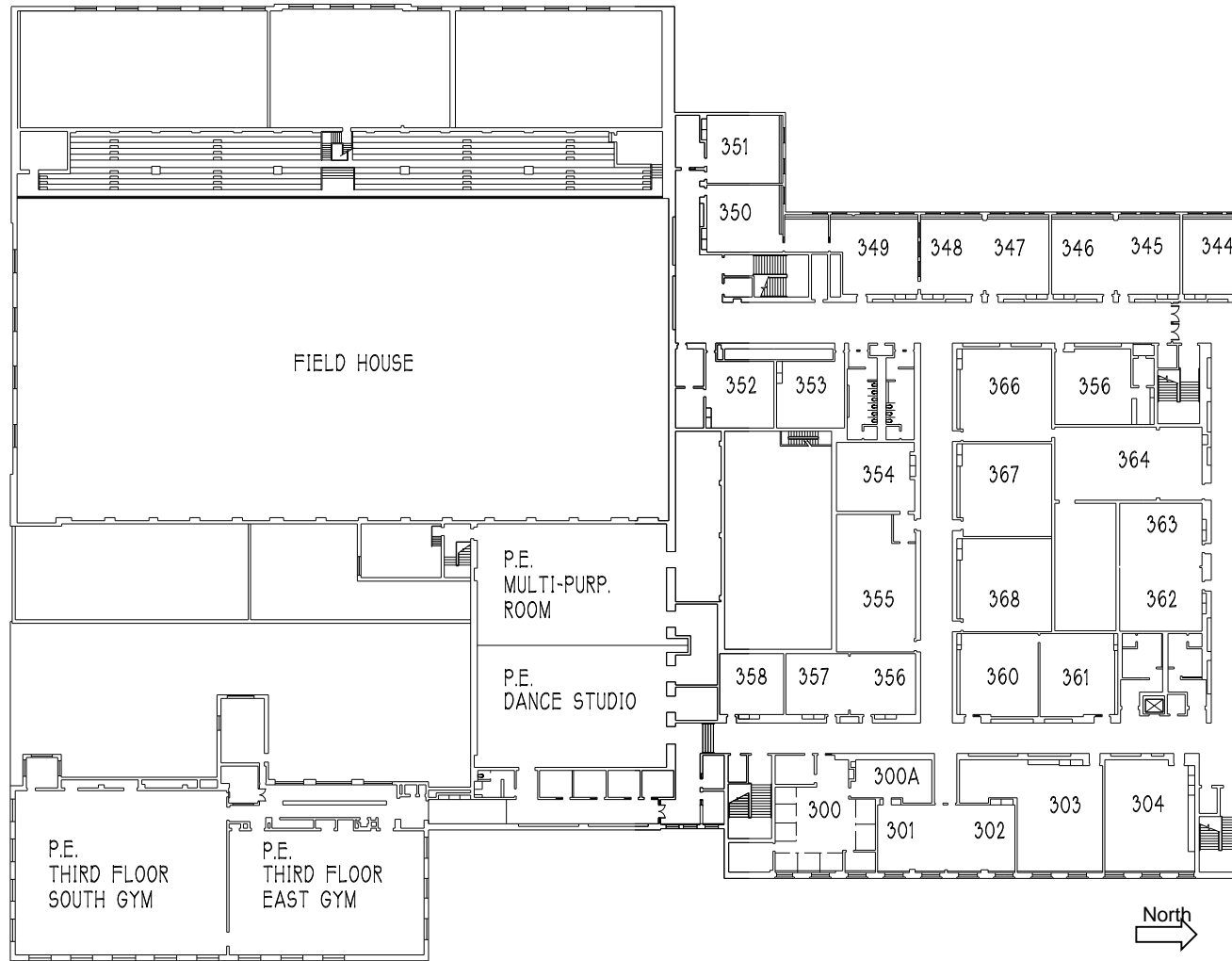
# Existing Conditions (1<sup>st</sup> Floor Plan)



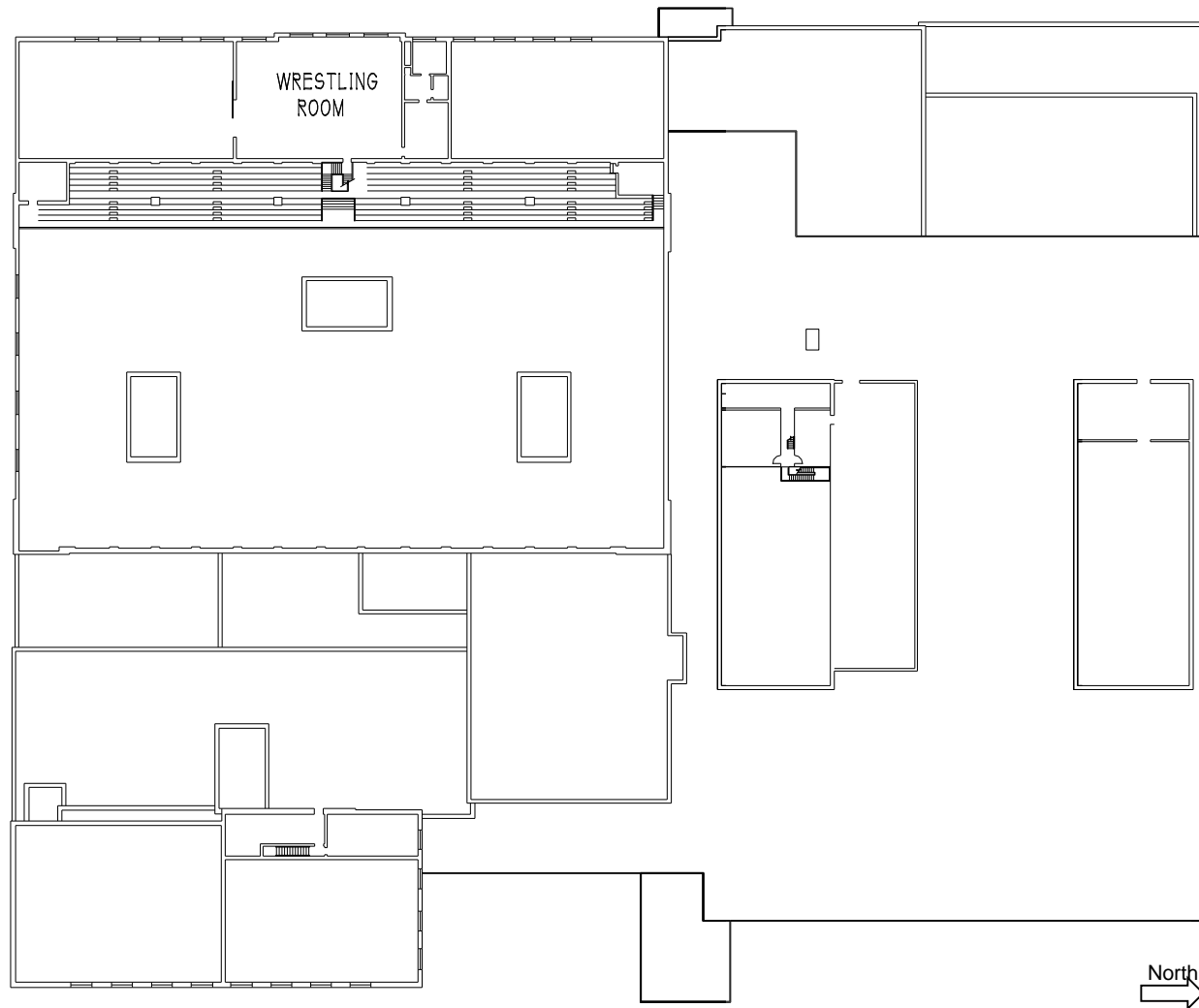
## Existing Conditions (2<sup>nd</sup> Floor Plan)



## Existing Conditions (3<sup>rd</sup> Floor Plan)



## Existing Conditions (4<sup>th</sup> Floor Plan)





# **Scheme 'A'**

## **Southeast Pool**



## Scheme 'A' - Southeast Pool

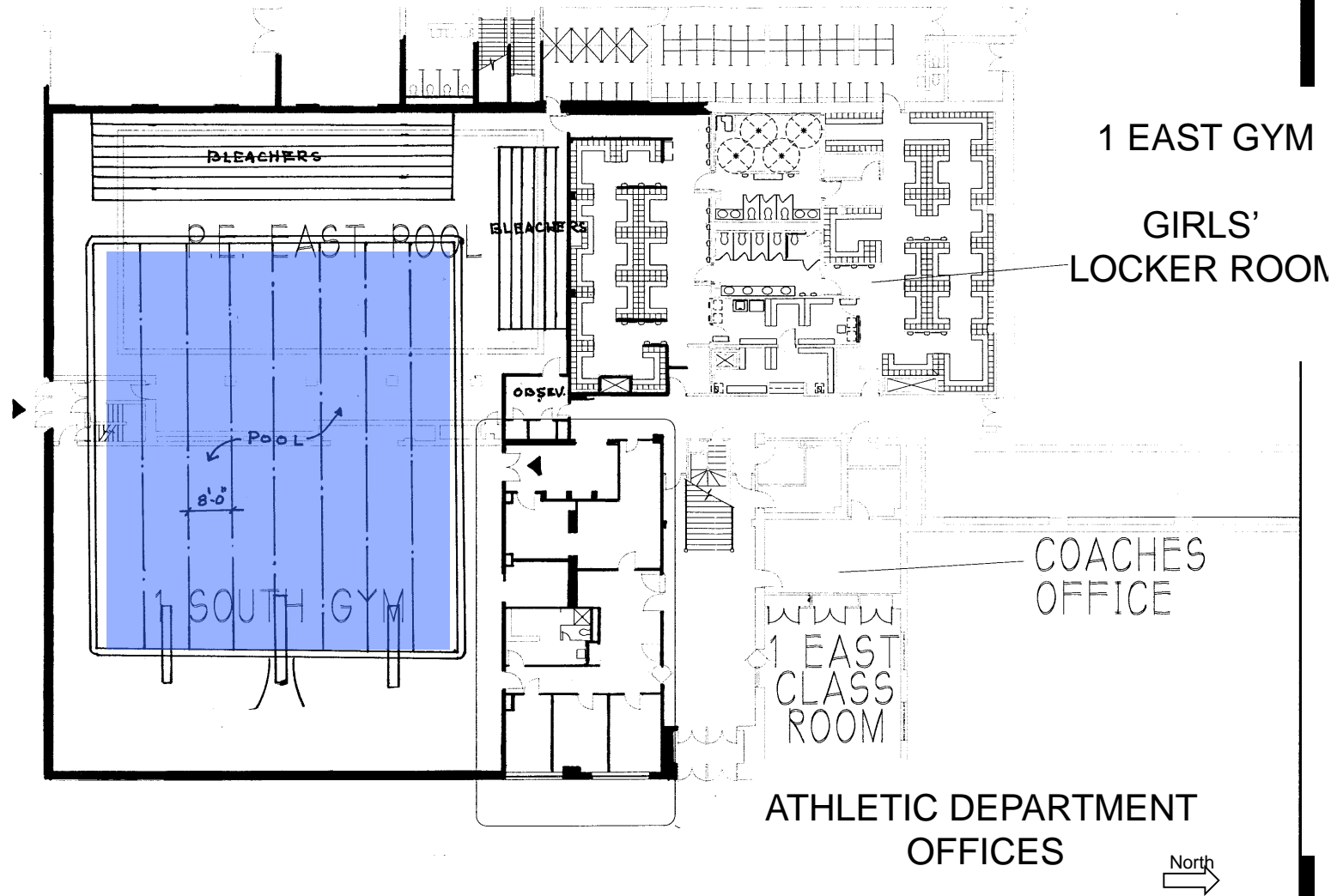
This pool would be located in the southeast corner of the building in the place presently occupied by the East Pool and the South Gym. This area allows the largest single pool to be built in the school. It could have eight lanes, 8'-0" wide with a deep end for diving. Telescoping bleachers could be located 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.

## Scheme 'A' - Southeast Pool (continued)

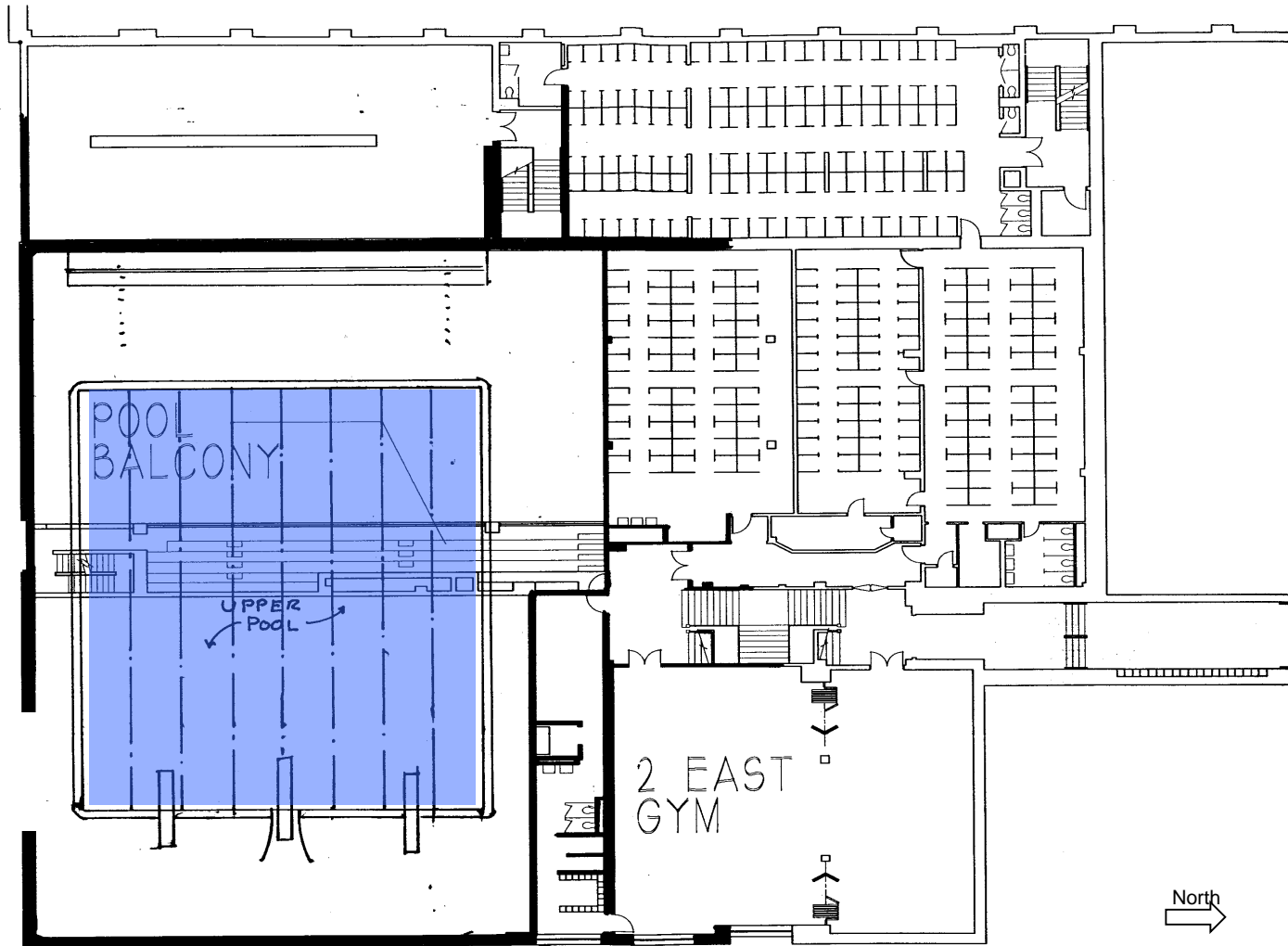
Due to the complicated structural modifications, this represents a costly remodeling of the school. The school teaching spaces would also be affected with the loss of a gym (the South Gym). The southwest pool could remain in operation or it could be converted to a gymnasium at additional cost.

This scheme could cost approximately \$\_\_\_\_\_

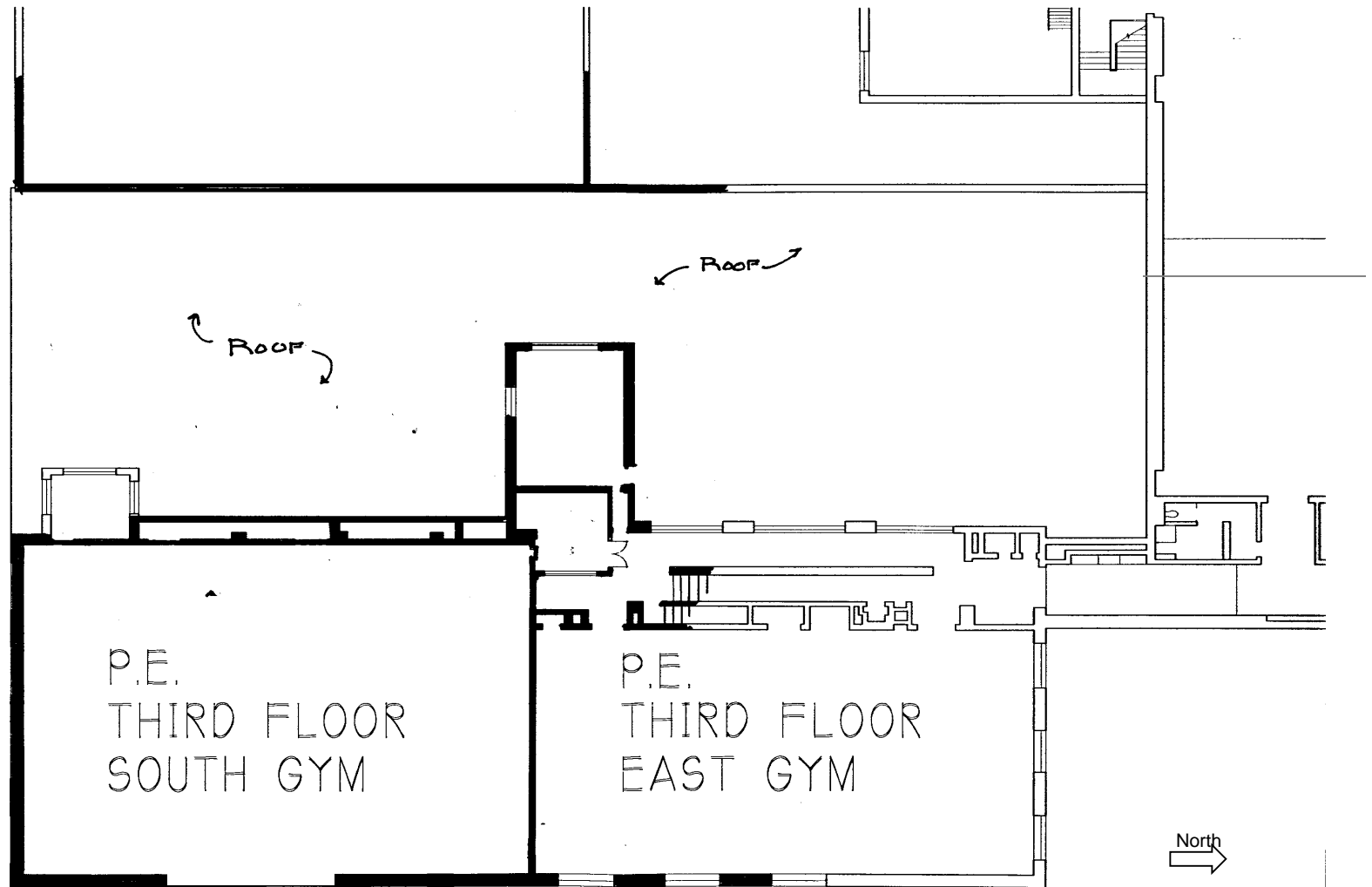
## Scheme 'A' - Southeast Pool (1<sup>st</sup> Floor)



## Scheme 'A' - Southeast Pool (2<sup>nd</sup> Floor)



## Scheme 'A' - Southeast Pool (3<sup>rd</sup> Floor)





# **Scheme 'B'**

## **Southwest Pool**

## 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.

## Scheme 'B' - Southwest Pool (continued)

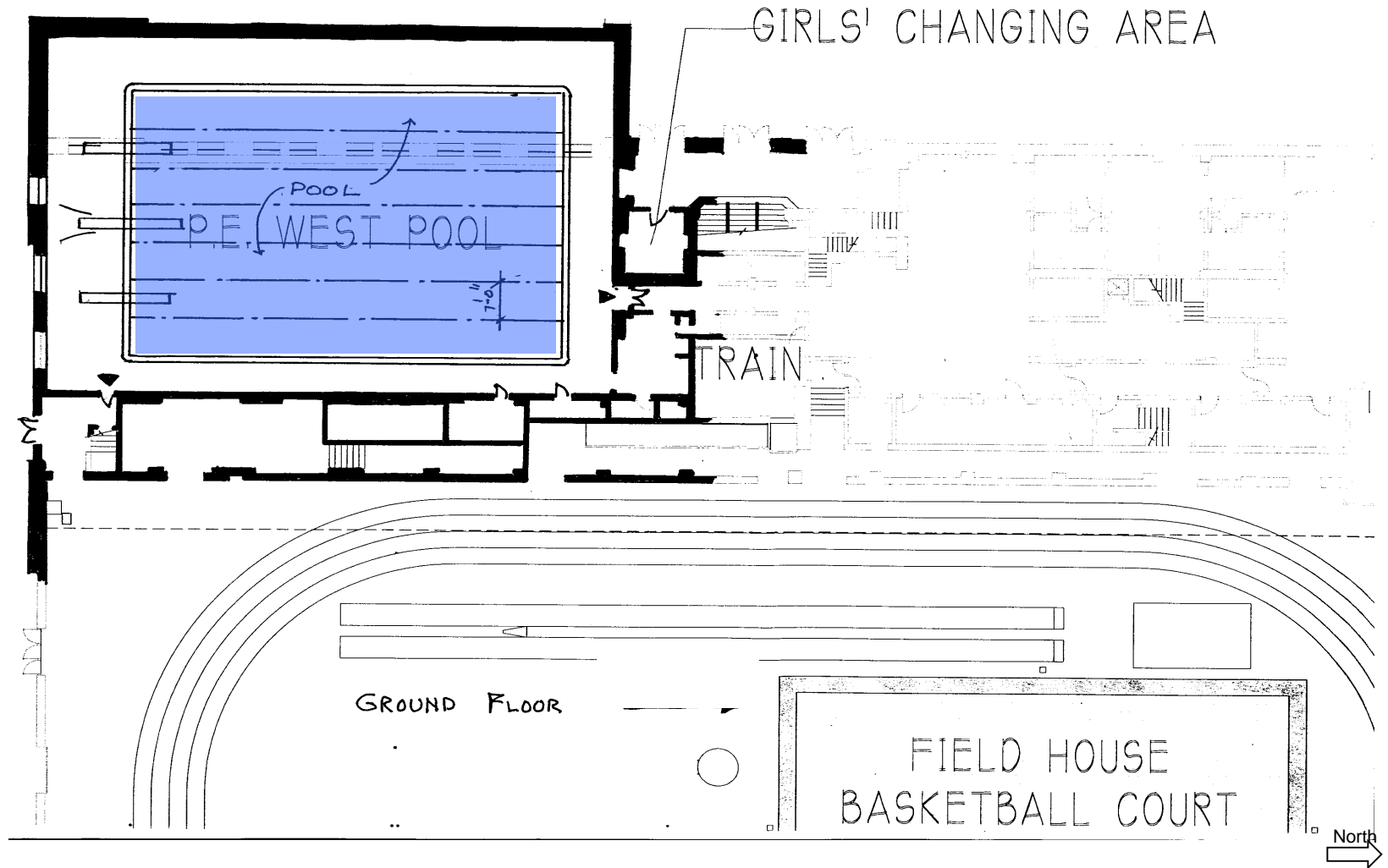
The size of the existing Wrestling Room would also decrease. The southeast pool could remain as it is or be converted into a larger gym area at an additional cost. This solution will also affect the design of the "Mall Area" that is being planned for the area west of the school. The mall would be narrower 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.

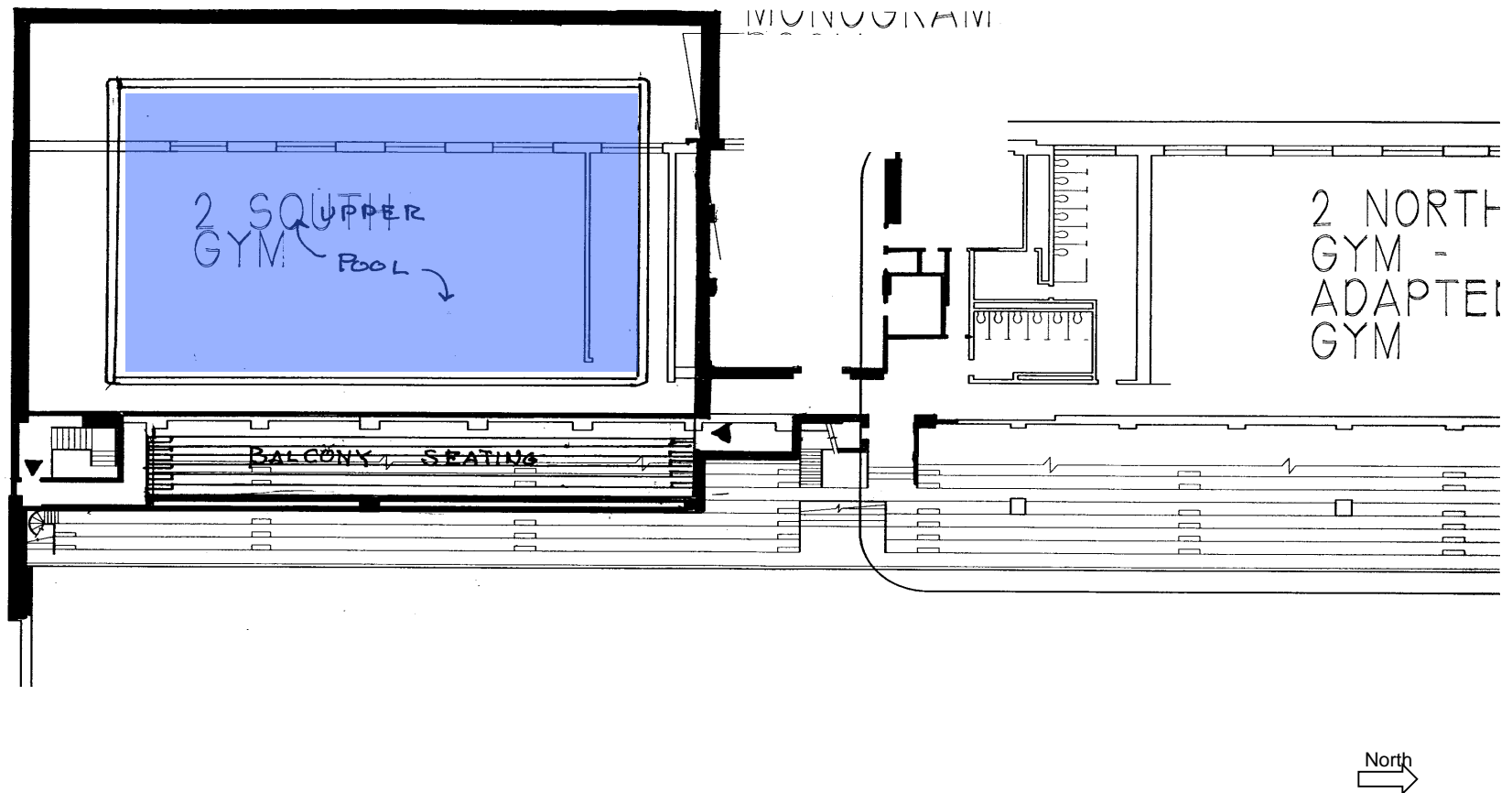
This            scheme            could            cost            approximately  
\$ \_\_\_\_\_



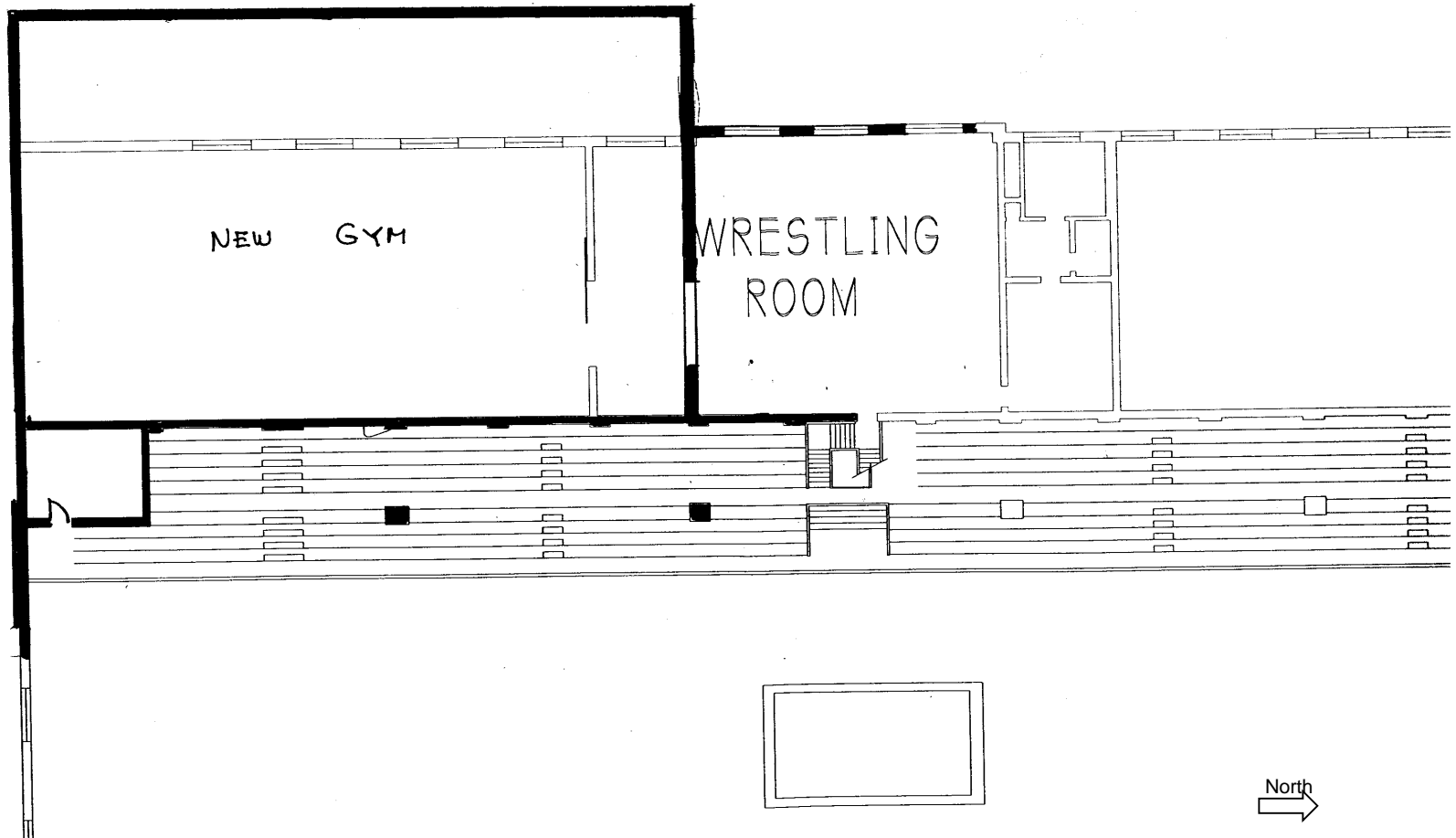
## Scheme 'B' - Southwest Pool (1st Floor)



## Scheme 'B' - Southwest Pool (2nd Floor)



## Scheme 'B' - Southwest Pool (3rdFloor)





# **Scheme 'C'**

## **Northeast Pool**

## **Scheme 'C' - Northeast Pool**

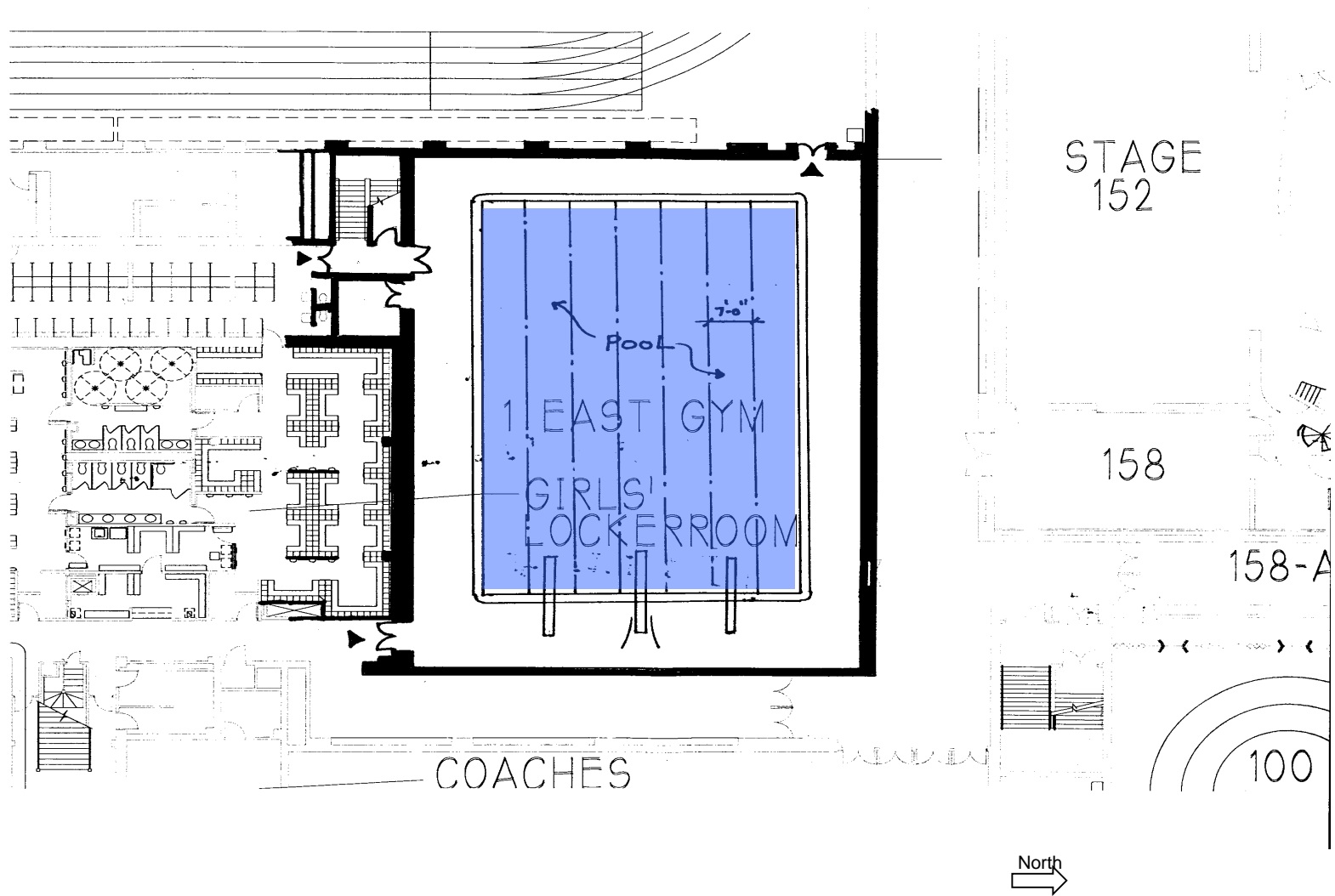
This pool would be located in the East gym immediately south of the fieldhouse corridor. This area is centrally located in the school and easily accessible to students and spectators. This room allows a pool with seven 7'-0" lanes and a deep end for diving. Since this is a new pool, it will require a 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.

## Scheme 'C' - Northeast Pool (continued)

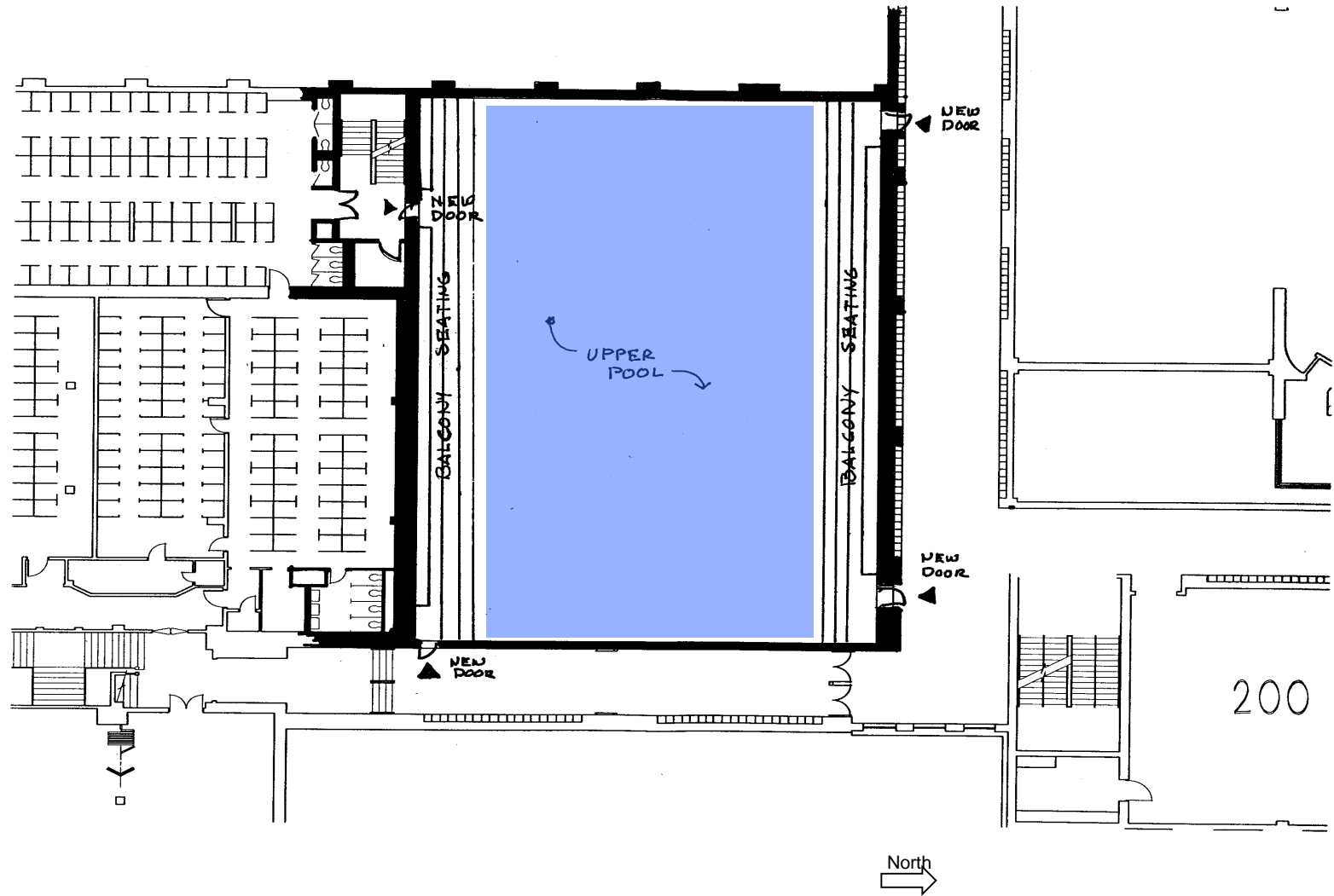
This pool location is the only one of three that does not require major structural revisions to the existing building. It would require construction of the observation balconies. With the pool in this location, the southwest pool could remain in operation. The southeast pool could be converted to a new 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 (1<sup>st</sup> Floor)

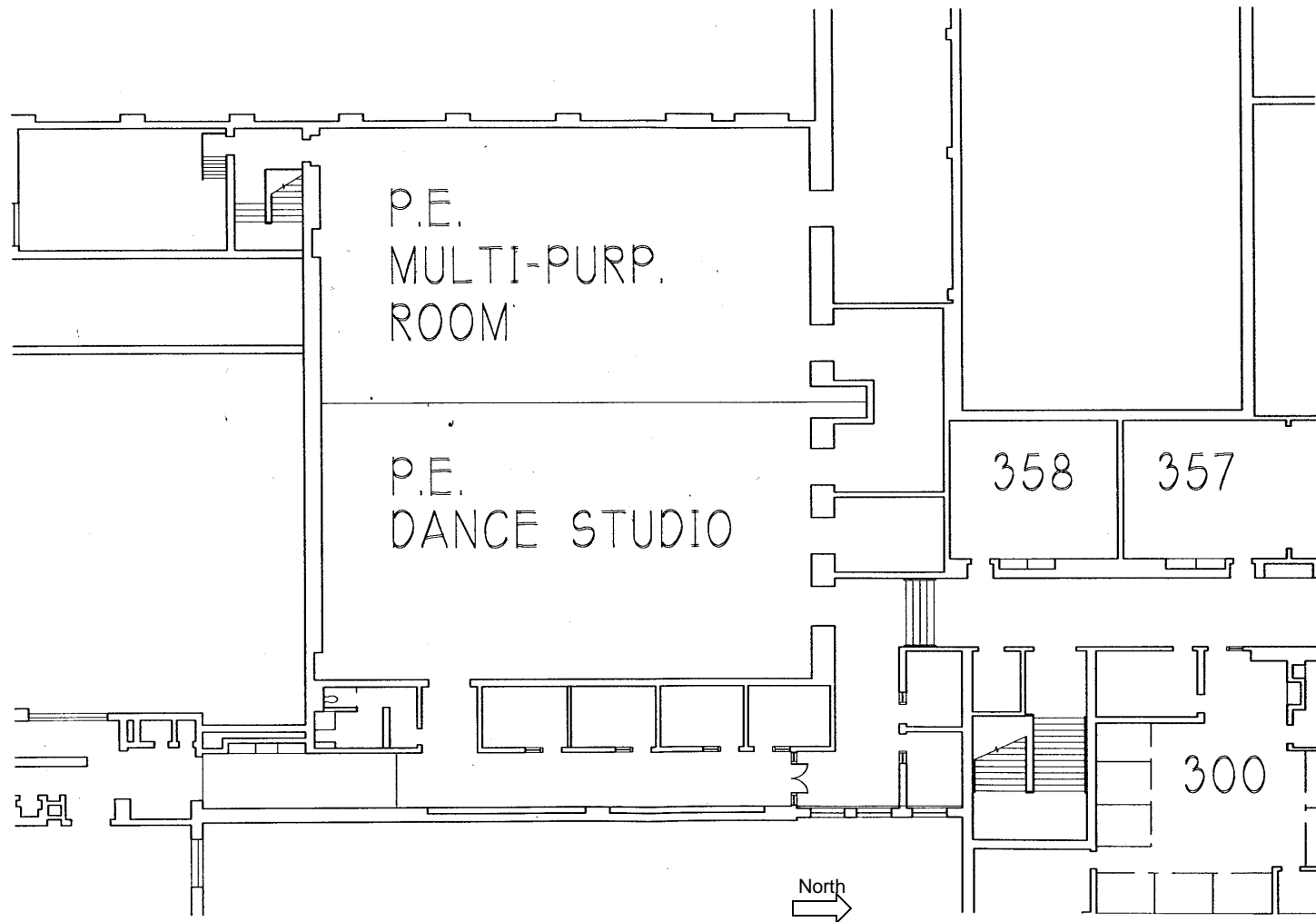


## Scheme 'C' - Northeast Pool (2<sup>nd</sup> Floor)





## Scheme 'C' - Northeast Pool (3rd Floor)





# **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.

## **Scheme 'D' - Remote Location Pool (continued)**

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.

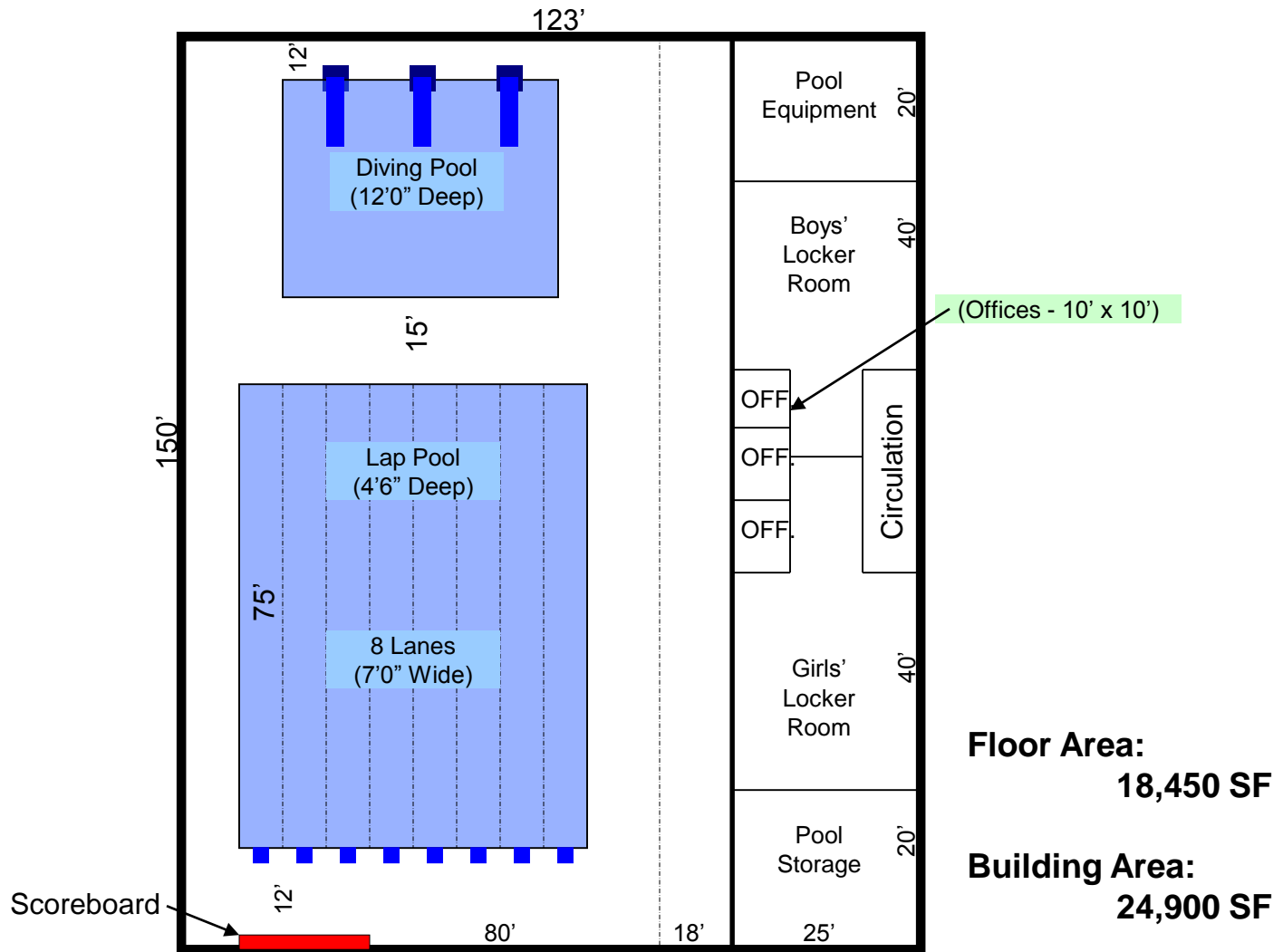
As a completely new facility, this Scheme would eliminate the conflicts with school operations and programs that might be caused by a construction of a pool within the walls of the existing building. Some areas would probably have to be dedicated for parking at this site.

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 .

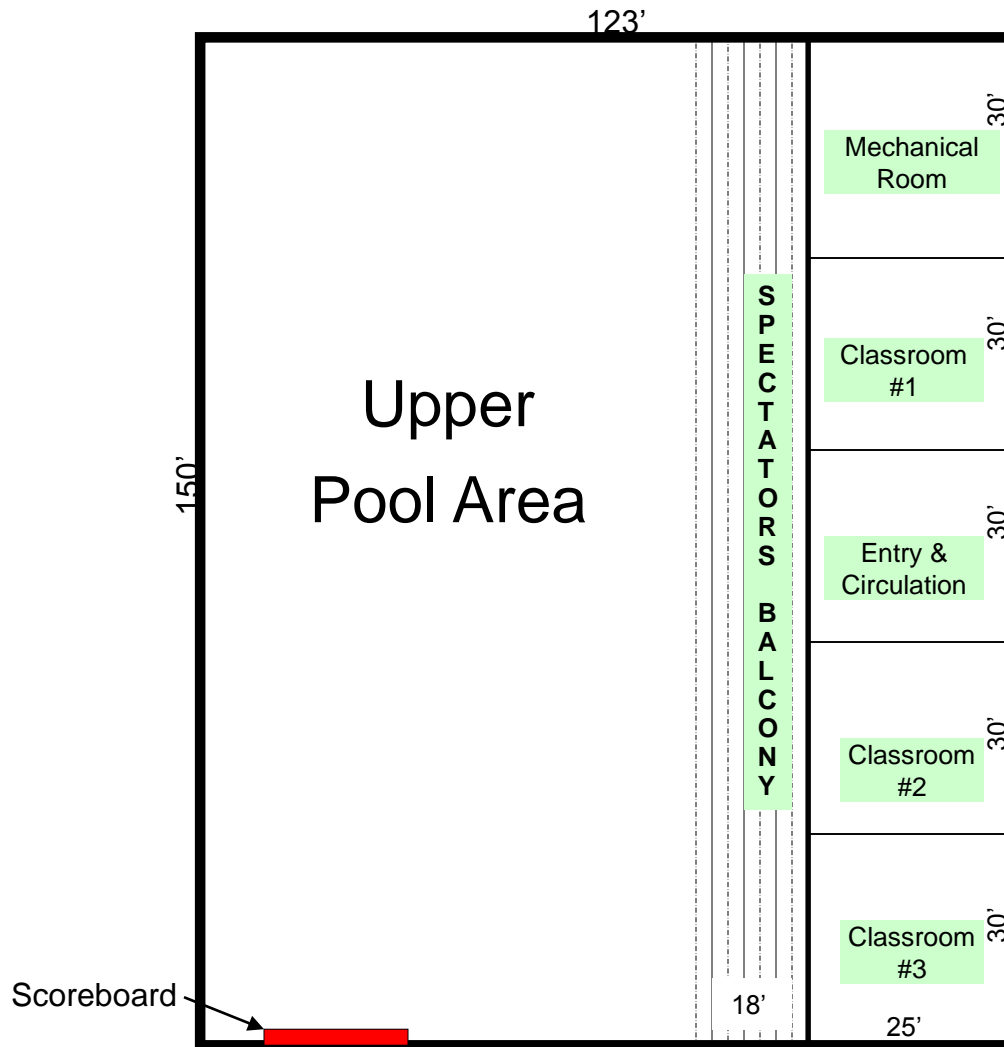
## Scheme 'D' – New Remote Pool Concept



# New Remote Pool Concept Lower Level



## New Remote Pool Concept Upper Level



(Not to Scale)

**Floor Area:**  
**6,450 SF**

**Building Area:**  
**24,900 SF**

# 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)	=	<u>1,650 SF</u>
<b>Sub Total</b>	<b>=</b>	<b>18,450 SF</b>

## Upper Level

Spectator Area	=	2,700 SF
Classrooms (3 @ 800 SF each)	=	2,400 SF
Circulation & Entry	=	750 SF
Mechanical Room	=	<u>750 SF</u>
<b>Sub Total</b>	<b>=</b>	<b><u>6,600 SF</u></b>
<b>TOTAL</b>	<b>=</b>	<b><u>25,050 SF</u></b>

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

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

## Pool Design Summary - Disadvantages

Scheme 'A' Southeast Pool	Scheme 'B' Southwest Pool	Scheme 'C' Northeast Pool	Scheme 'D' New Remote Location Pool
<ol style="list-style-type: none"> <li>1. Loss of south gymnasium</li> <li>2. Expensive construction cost</li> </ol>	<ol style="list-style-type: none"> <li>1. Building must be enlarged approximately twenty feet</li> <li>2. Wrestling room is smaller</li> <li>3. Complicated construction</li> <li>4. Expensive construction costs</li> <li>5. Affects planned "mall" design</li> </ol>	<ol style="list-style-type: none"> <li>1. A large gymnasium is changed and must be replaced</li> <li>2. Pool odors possible in center of building</li> <li>3. Southeast pool to be converted to new gymnasium at additional structural cost</li> </ol>	<ol style="list-style-type: none"> <li>1. Land must be acquired</li> <li>2. Remote location will cause Passing Periods to be lengthened</li> <li>3. Must build locker and shower rooms</li> <li>4. Additional parking may be needed</li> </ol>