

**THE
CHESAPEAKE CLUB
FOR BALTIMORE'S INNER HARBOR**

P378
.H7475



LIBRARY
Montana State University
Bozeman



THE CHESAPEAKE CLUB
FOR
BALTIMORE'S INNER HARBOR

By Ann Elizabeth Holubec

MONTANA STATE UNIVERSITY
Bozeman, Montana

June 8, 1987

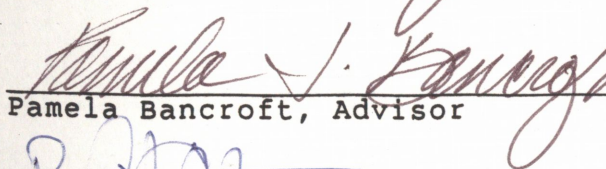
A thesis paper submitted in partial fulfillment
of the requirements for the degree

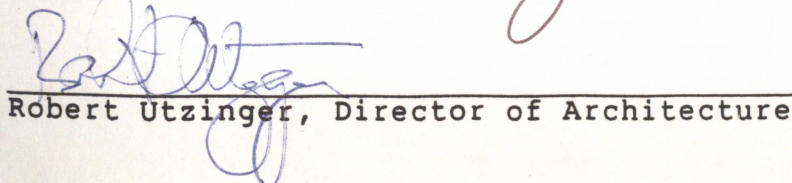
of

BACHELOR OF ARCHITECTURE

Approved:


Jerry Bancroft, Advisor


Pamela Bancroft, Advisor


Robert Utzinger, Director of Architecture

~~NA 2570~~
cal
720.6
m76
~~H7475~~

P375
H7475

STATEMENT OF PERMISSION TO COPY

In presenting this thesis in partial fulfillment of the requirements for an advanced degree at Montana State University, I agree that the Library shall make it freely available for inspection. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by my major professors, or, in their absence, by the Director of Libraries. It is understood that any copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Signature Ann E. Holubea

Date June 2, 1987

ACKNOWLEDGEMENT

I would like to acknowledge a few people who were supportive of my architectural degree. First and foremost, my parents who gave their continued love and support both financially and mentally throughout my college career; my brother Allen who always was interested in my work whether I was or not; my roommates Carol, Laura, and Nancy who were understanding and always able to boost my morale no matter what the circumstances were; my personal computer consultant, Tom Adams, whose help with the computers for this thesis project can not go without mention; last but not least, my advisors Pam and Jerry Bancroft, who without their guidance and friendship this thesis would not have been possible.

To each of you, a special thank you is deserved. I could not have done it without you.

TABLE OF CONTENTS

Introduction.....	1
Educational Goals.....	4
1. Baltimore Harbor.....	5
A. History of Redevelopment Program	
B. Baltimore Inner Harbor East	
C. Pier 5 and the Inner Harbor East	
2. Site Analysis.....	14
3. Climate Analysis.....	23
A. Percent Cloud Cover Chart	
B. Temperature and Wind Chart	
C. Bio-climatic Charts	
4. Project Goals.....	32
5. Users of the Chesapeake Club.....	34
6. Rowing.....	37
A. An Introduction	
B. The History of Rowing	
C. The History of Rowing in Baltimore	
D. The Baltimore Rowing Club	
E. Proposal for a New Boat House by Ayers-Saint, Inc.	
F. A New Location for the Boat House	
7. Athletic Facility.....	49
A. Athletic Clubs in Baltimore	
B. Case Studies	
8. Restaurants (Public and Private) and Shops.....	64
A. Restaurants of the Inner Harbor	
B. A Private Restaurant on Pier 5	
C. A Public Restaurant and Shops on Pier 5	
9. Individual Space Analyses.....	69
A. Baltimore Rowing Club.....	70
B. Athletic Club.....	82
C. Restaurants and Shops.....	95

10.	Spatial Relationships.....	109
	A. Baltimore Rowing Club	
	B. Athletic Club	
	C. Restaurants	
	D. All Facilities	
11.	Design Approach.....	114
12.	Code Information.....	118
	A. Zoning Code Summary.....	119
	B. Building Code Summary.....	123
13.	Bibliography.....	129
14.	Appendices.....	133
	A. Boat Classification.....	134
	B. Baltimore Rowing Club - Ayers-Saint, Inc....	135
	C. Boat Houses.....	139
	D. Images of Baltimore.....	142
	E. Design Solution.....	147

INTRODUCTION

I have chosen to design a multi-purpose facility named "The Chesapeake Club" to be located on Pier 5 of the Inner Harbor East in Baltimore, Maryland. The club will incorporate the new headquarters for the Baltimore Rowing Club, an athletic facility, two restaurants, public shops, and small offices.

The Inner Harbor East Redevelopment Program was designed by Cooper Eckstut Associates of New York, and Cho Wilks and Benn of Baltimore in 1964. The basic concept of the plan is to give the shoreline back to the public by providing land on the water's edge for recreational, educational, and cultural facilities. The Inner Harbor is extensively used by the public and has become a successful node for the city of Baltimore. The redevelopment of the harbor area is flourishing and expanding due to the long range goals established by the city of Baltimore and Cooper Eckstut Associates (see Chapter 1, page 5).

In concurrence with the Inner Harbor Redevelopment program, my notion is to extend the very popular "Harbor Walk" through my site and locate my public facilities along this pathway. The restaurant will take advantage of the interaction and activities of the harbor as well as the pathway.

The inclusion of the Baltimore Rowing Club (BRC) in the Chesapeake Club should become an asset to the land-water rela-

tionship that is unique to the Inner Harbor. The BRC, presently stationed in a yet undeveloped section of the harbor, holds practices throughout the harbor area. The club's favorite practice area is the Inner Harbor, especially during the tourist season. When practice is held in the newly developed Inner Harbor, the tourists feel as if they are getting a free show and begin to shout commands along with the coxswain. The members of the BRC enjoy this interaction because they are given the opportunity to perform. This mutual exchange of activity and stimulation provide the basis for the location of the proposed boat house for the Baltimore Rowing Club.

Along with the desire for public interaction for some of the proposed functions is the need for an area of privacy for the professionals of the Inner Harbor. Many of the buildings that surround the harbor house businesses and office facilities. During the off tourist season it is common during the lunch hour for business people to find a bench around the harbor and enjoy their meal while looking at the sites. However, when the tourist season is at its fullest, these professionals feel as if "their" harbor is being threatened, so they go into hiding during the three busiest months of the year until the "intruders" go home. A private restaurant designed especially for business people would be desirable, and advantageous for those who wish to take a client to a luxurious restaurant on the Inner Harbor without having to fight the crowds. The permitted users of this res-

restaurant will be those who have become members of the Baltimore Rowing Club, members of the athletic club, and those who desire to buy a membership into the restaurant. The restaurant will have direct visual contact with the activity of the BRC. The athletic club will provide a second retreat for professionals during the lunch hour as well.

Presently there is not a health facility in close proximity to the Inner Harbor. With the creation of such a facility, the convenience of the club should appeal to these professionals and allow them to come out of hiding not only during the lunch hour, but before and after work.

In summary, I feel the Chesapeake Club will enhance the Baltimore Inner Harbor in three ways:

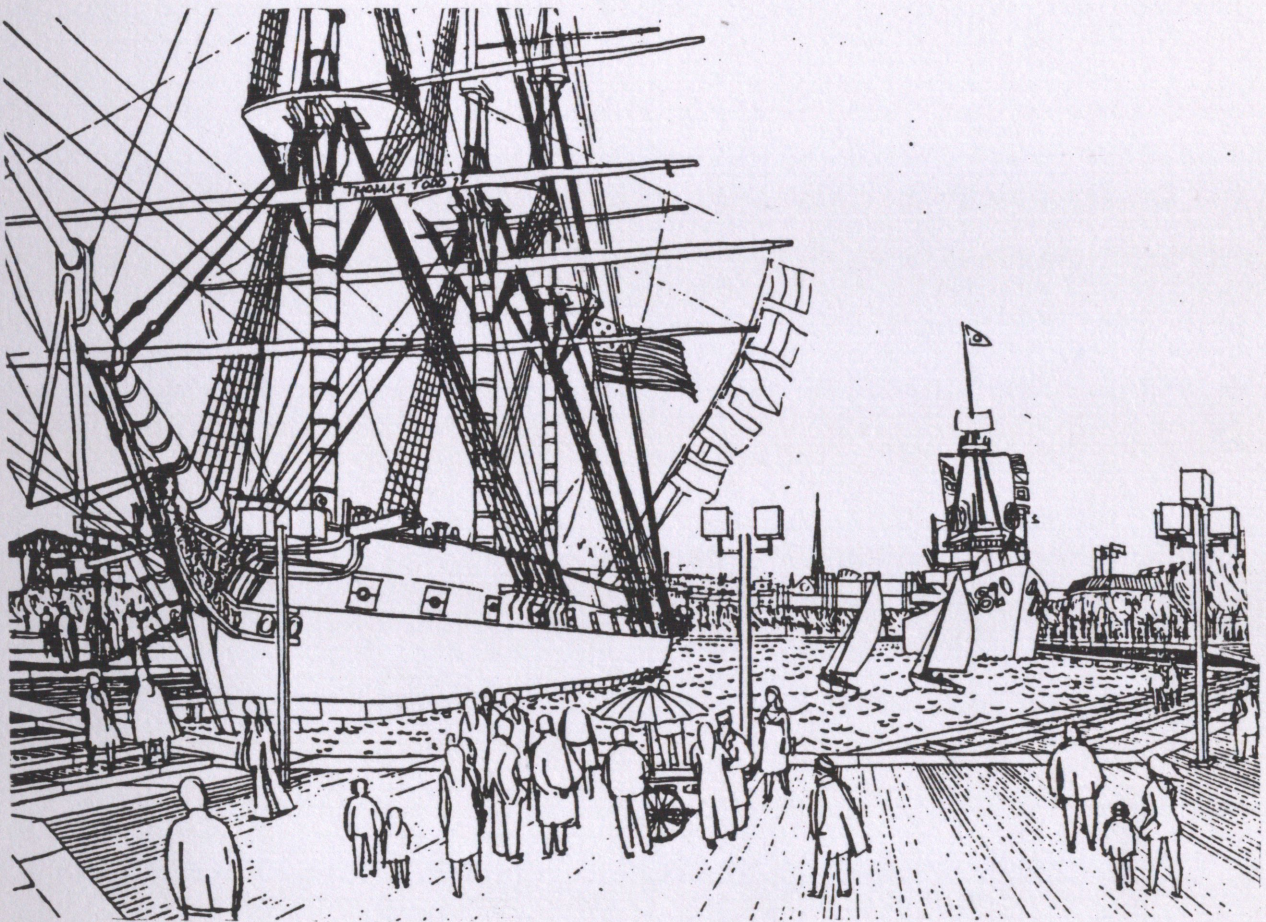
1. By providing the necessary public interaction required of the Harbor Redevelopment Plan and the City with the continuation of the Harbor Walk into an outdoor shopping plaza and a restaurant.
2. By supplying a direct land-water contact to the harbor with the Baltimore Rowing Club.
3. By providing the professionals of the Inner Harbor with a private restaurant and athletic club that is truly "their own".

The combination of these specific facilities should make the Chesapeake Club a successful club designed for the use of all participants of the Baltimore Inner Harbor.

EDUCATIONAL GOALS

1. To have a strong educational relationship with advisors.
2. To have my time and schedule clearly organized throughout the quarter.
3. To present a clearly written program document that has been well researched and documented.
4. To present a well researched and documented site.
5. To concentrate research and design on the rowing and athletic facilities.
6. To become an "expert" in the designing of rowing clubs and athletic facilities.
7. To understand how far and advantageous the computer can be used in the design phase.
8. To develop an oral presentation that is unique.
9. To present a program document and final graphic presentation that compliment each other.
10. To present the final design that is strong graphically.

BALTIMORE HARBOR



BALTIMORE HARBOR

HISTORY OF THE REDEVELOPMENT PLAN:

In 1959, the revitalization of the downtown area of Baltimore began with the award-winning solution for Charles Center, a 33-acre development in the center of the business district (see map page 11). With the momentum going, public and private partners were convinced to expand their redevelopment efforts to the 250-acre Inner Harbor area adjacent to Charles Center.¹

In 1964, a 30-year program for the redevelopment of the Baltimore Inner Harbor was unveiled. The plan stretched from the south and east of Charles Center. With this plan, the city envisioned new residential, social, and cultural facilities as well as major hotel and office buildings.² The master plan was tied into a general redevelopment scheme that encompassed four basic goals:

1. A reconstruction of the Municipal Center. The plan called for new and rehabilitated government buildings to line a stately mall 150 feet wide linking City Hall with the Inner Harbor.
2. Offices to be built as an extension of Charles Center southward to the Inner Harbor.
3. Residential development with a broad spectrum of costs in high-rise and low-rise buildings, bracketing the harbor to the east and west.
4. Regional "playground" comprised of recreation, cultural, and entertainment facilities centering on the piers and around the shoreline of the basin itself.

The Municipal Center was voted down in 1964. The restoration of

the old buildings in the financial district became viable. This eventually included the award winning restoration of City Hall in 1974.³

With the approval of the 30-year plan, the redevelopment began. The first critical step was to capture the water as a public amenity by returning the shoreline to public ownership, and creating a permanent circle of parkland. In 1968, construction began with a wide promenade that connected a series of public shelters, play sculpture, and open parks. Four existing structures in the immediate Inner Harbor area were preserved: The News American building, the McCormick spice plant, the Christ Lutheran Church and the Bethlehem Steel Corporation. In 1972, the visual focal point in the Harbor became the U.S. frigate Constellation, the oldest fighting warship in the United States Navy.⁴

In the early 1970's, office spaces moved towards the harbor, and in 1976 the Maryland Science Center opened.⁵ Soon after that four major projects moved in: The Convention Center, the Rouse Companies Harborplace, the National Aquarium, and the Hyatt Regency Hotel. By 1981, the Inner Harbor was established as a strong market for all types of urban development.⁶ By 1982, more than 25 attractions had been added in the "parkland" and in the water, including a marina and piers for visiting charter and pleasure crafts, tour boats, a small boat rental dock with a water taxi, and an outdoor maritime museum.⁷

BALTIMORE INNER HARBOR EAST:

The redevelopment of the Inner Harbor East is currently being planned by Cooper Eckstut Associates of New York, and Cho Wilks and Benn of Baltimore.⁸ Objectives of the Inner Harbor East Renewal area have been determined by the Mayor and City Council of Baltimore as follows:

1. To eliminate unhealthy, unsafe and unsanitary conditions such as the dangers caused by flooding, the causes of noxious fumes or noisome odors, hazardous traffic conditions, and structurally unsound buildings.
2. To eliminate obsolete or other uses detrimental to the public welfare such as incompatible mixed land uses, excessive land coverage, conversion of buildings for other than their intended uses, and inefficient and uneconomical subdivision of the land resulting in irregular lot layouts inappropriate for modern uses.
3. To remove substandard buildings and to eliminate and prevent the recurrence of slums, deteriorated conditions and blighting influences.
4. To provide land for needed public improvements such as open space, access to the water's edge, active recreation areas, and pedestrian and vehicular circulation.
5. To provide for expansion and establishment of commercial, recreational, and residential uses by assembling land, by establishing adequate circulation, service, light, and air to the area, and by encouraging private investment and participation in new construction of modern and efficient facilities.
6. To improve traffic movement and facilities by realigning and redesigning existing streets, removing causes of congestion, providing land for off-street parking and servicing, and separating pedestrian and vehicular traffic.
7. To stimulate economic activity in the site area and downtown Baltimore generally, in the context of the metropolitan region, by providing an amicable and harmonious environment to stimulate economic growth.
8. To development an urban residential community in the Central City, with convenient shopping facilities.

9. To take maximum advantage of the close physical proximity of Inner Harbor East to Charles Center, Inner Harbor Project I, Inner Harbor West and the Harbor Campus Project development by locating activities, pedestrian connections, and vehicular access in such a way as to complement these adjacent areas.

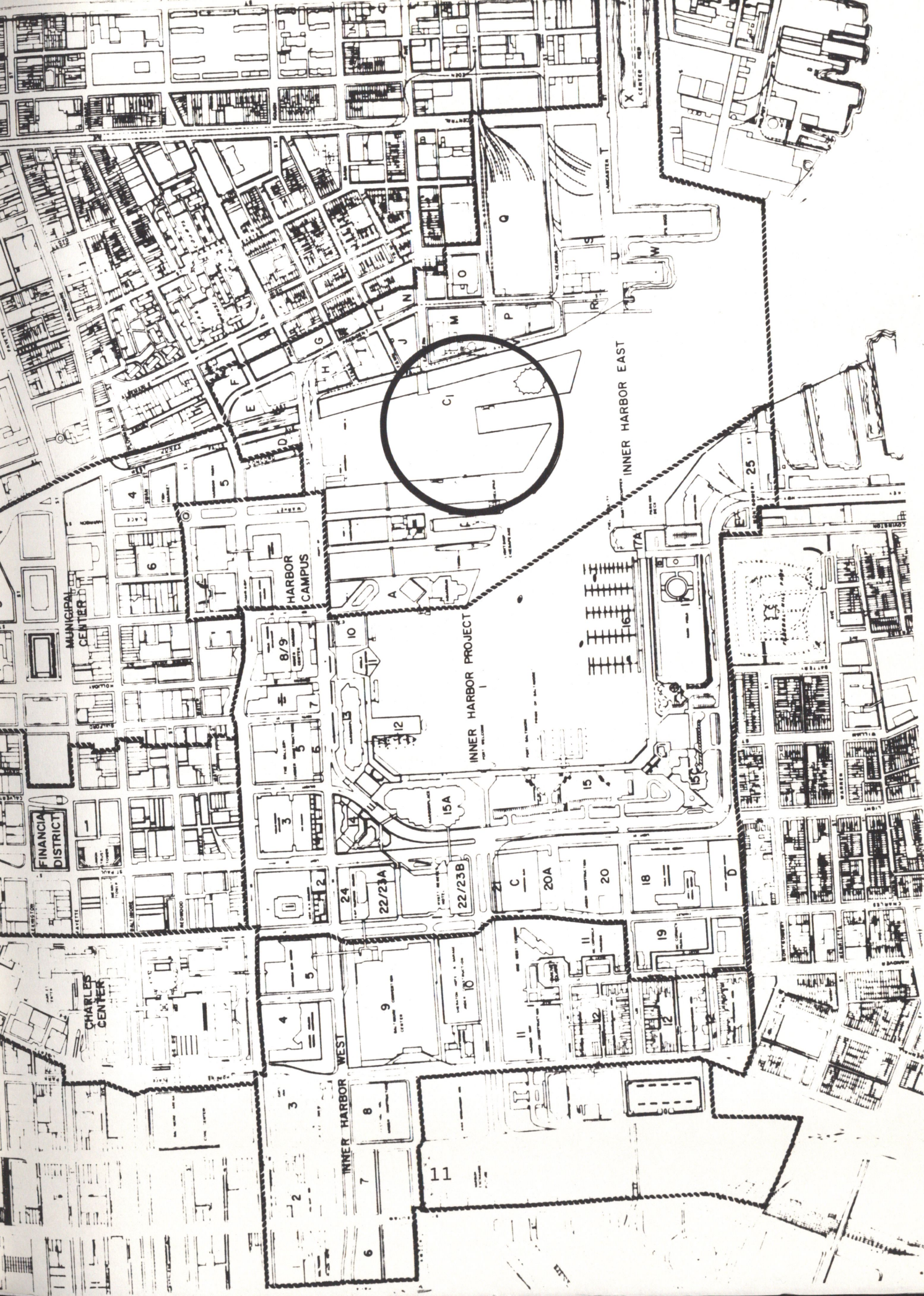
With these objectives in mind, the consultants have recommended that the Inner Harbor promenade be continued around the harbor's edge as a means for providing public access along the waterfront. The consultants also feel that boat-related uses should surround the water's edge so that boating becomes a visual element from Harborplace to the outer harbor.⁹

PIER 5 AND THE INNER HARBOR EAST RENEWAL PLAN:

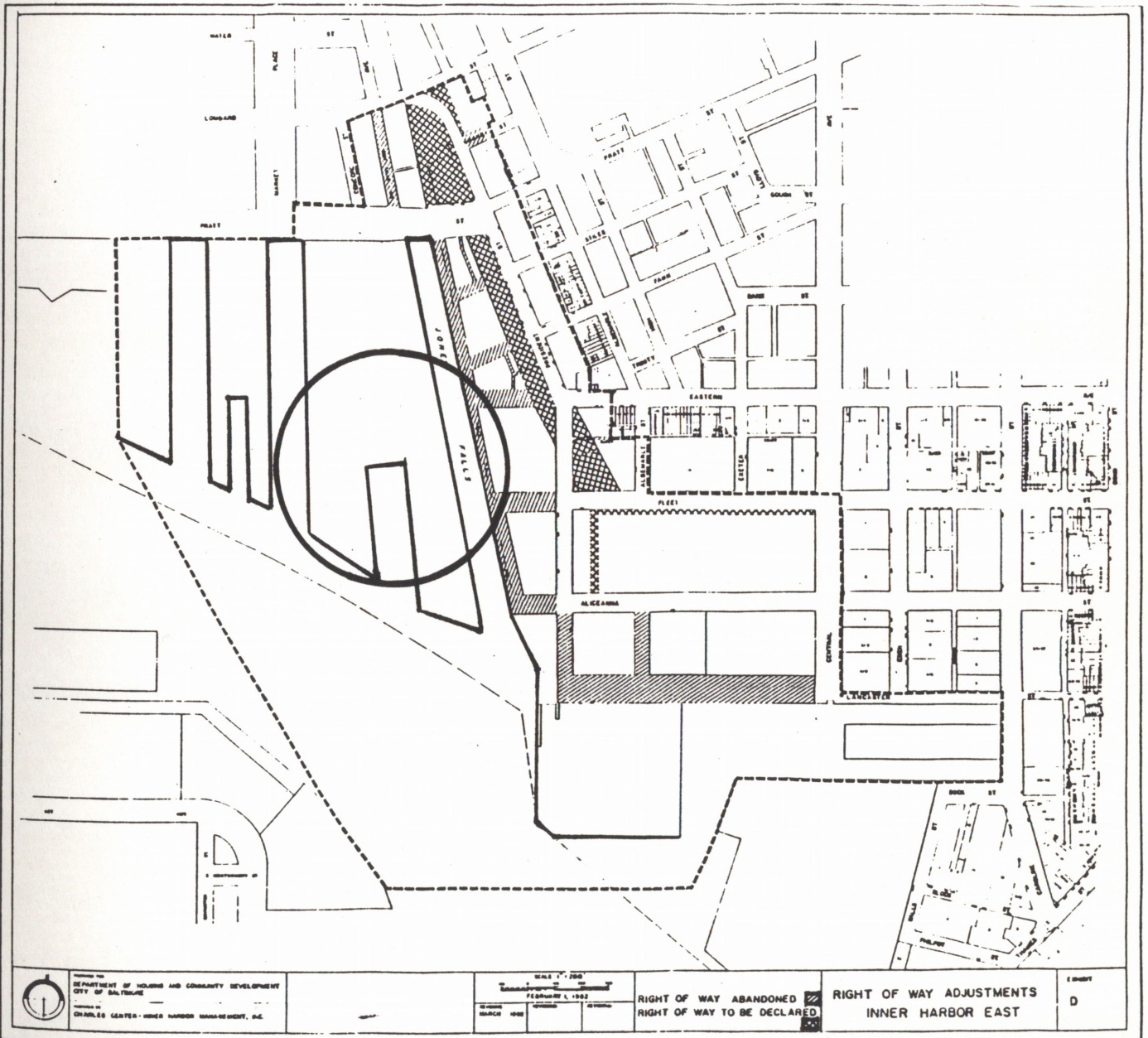
The first plan of the Inner Harbor East designed by Cooper Eckstut Associates, and Cho Wilks and Benn, included the property west of the Lower Jones Falls, and south of Pratt Street, including Piers 3,4,5 and 6. It was designated for entertainment-oriented uses.¹⁰ The consultants later recommended filling in part of the inlet between Piers 5 and 6, in order to make it available for maritime and entertainment-oriented uses rather than residences as originally proposed. The consultants have also proposed the closure of some streets in order to develop this area for the public (see map page 12).

Today, the portion of the inlet between Piers 5 and 6 has been filled in. The tip of Pier 5 calls for the construction of Harrison's, a small inn and restaurant complex with related maritime uses, such as a museum.¹¹

For the purposes of this thesis project, the proposed plan will not be used, but will have similar attributes. The public restaurant, shops and open plaza of the renewal plan as developed by Cooper Eckstut Associates, and Cho Wilks and Benn will be incorporated along with the complimentary auxiliary uses previously described.



RIGHTS OF WAY



CHAPTER NOTES

1. Douglas Wrenn, "Inner Harbor, Baltimore, Maryland," Urban Waterfront Development (1983): 146-155.

2. Ibid., p. 14.

3. Ibid., p. 147.

4. Ibid., p. 149.

5. Ibid., p. 146

6. Ibid., p. 150.

7. Ibid., p. 149-50.

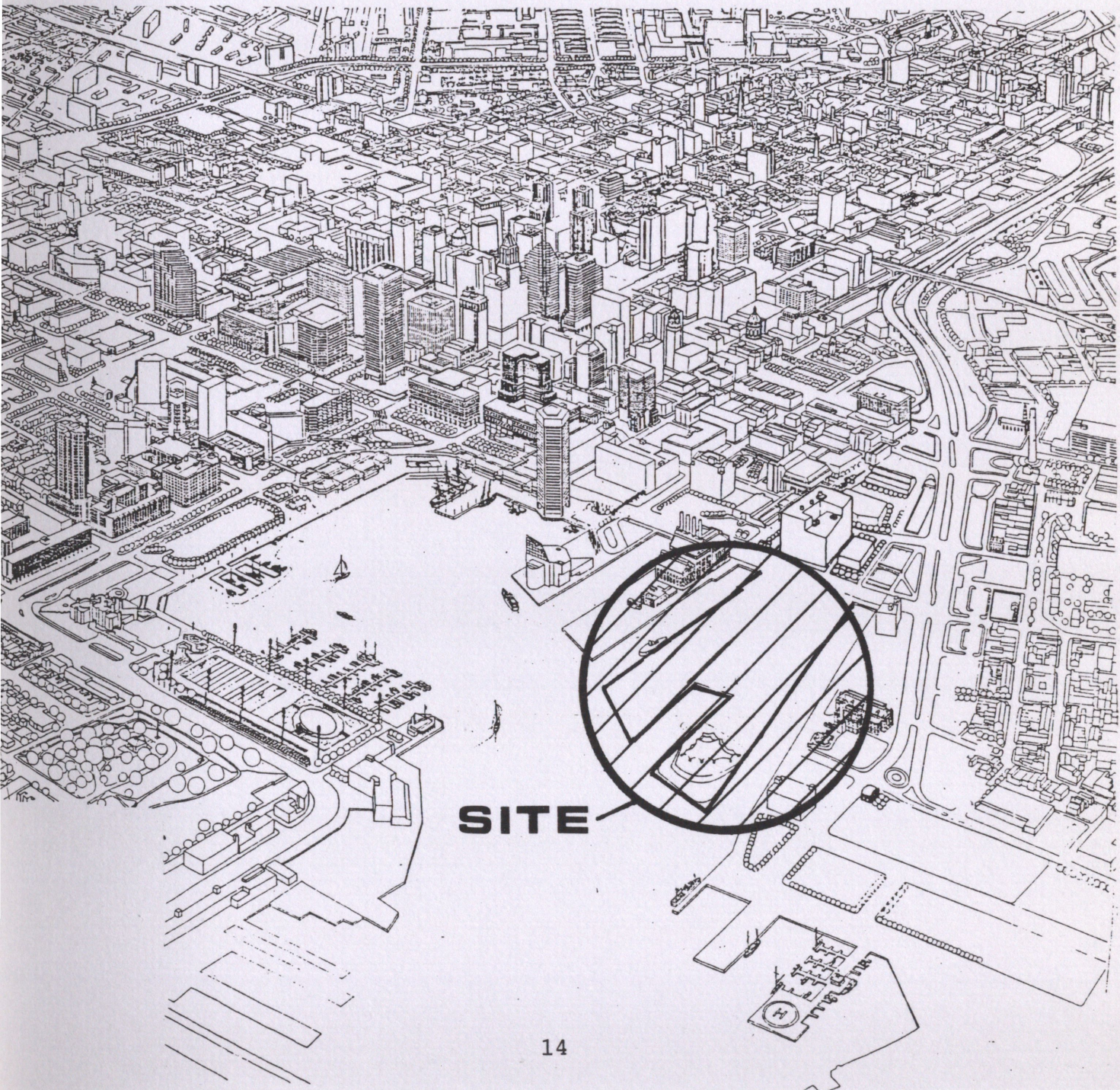
8. "Inner Harbor East Plan Aims at Harmony of New, Old," Baltimore Sun, 23 March 1986, sec L, p. 1.

9. Ibid., p. 8L.

10. Ibid., p. 1L.

11. "East of the Harbor," Baltimore Sun, 23 March 1986, page unknown.

SITE ANALYSIS



SITE

SITE ANALYSIS OF PIER 5 OF THE BALTIMORE INNER HARBOR EAST

The site I have chosen for the Chesapeake Club is currently an on-grade parking lot. The entry onto the site is from Pratt Street, the main east-west street surrounding the Inner Harbor (see page 17).

Major pedestrian traffic comes from a bridge that is an extension of the Harbor Walk currently surrounding the newly developed harbor. In this proposed project, the Harbor Walk will continue through out the site.

Boat traffic on the harbor is two-fold. There is tourist boat traffic that passes in front of the site to its final destination of Harbor Place and Pier 2. There is also private boat traffic whose final destination is the slips adjacent to the Rusty Scupper Restaurant (see page 18).

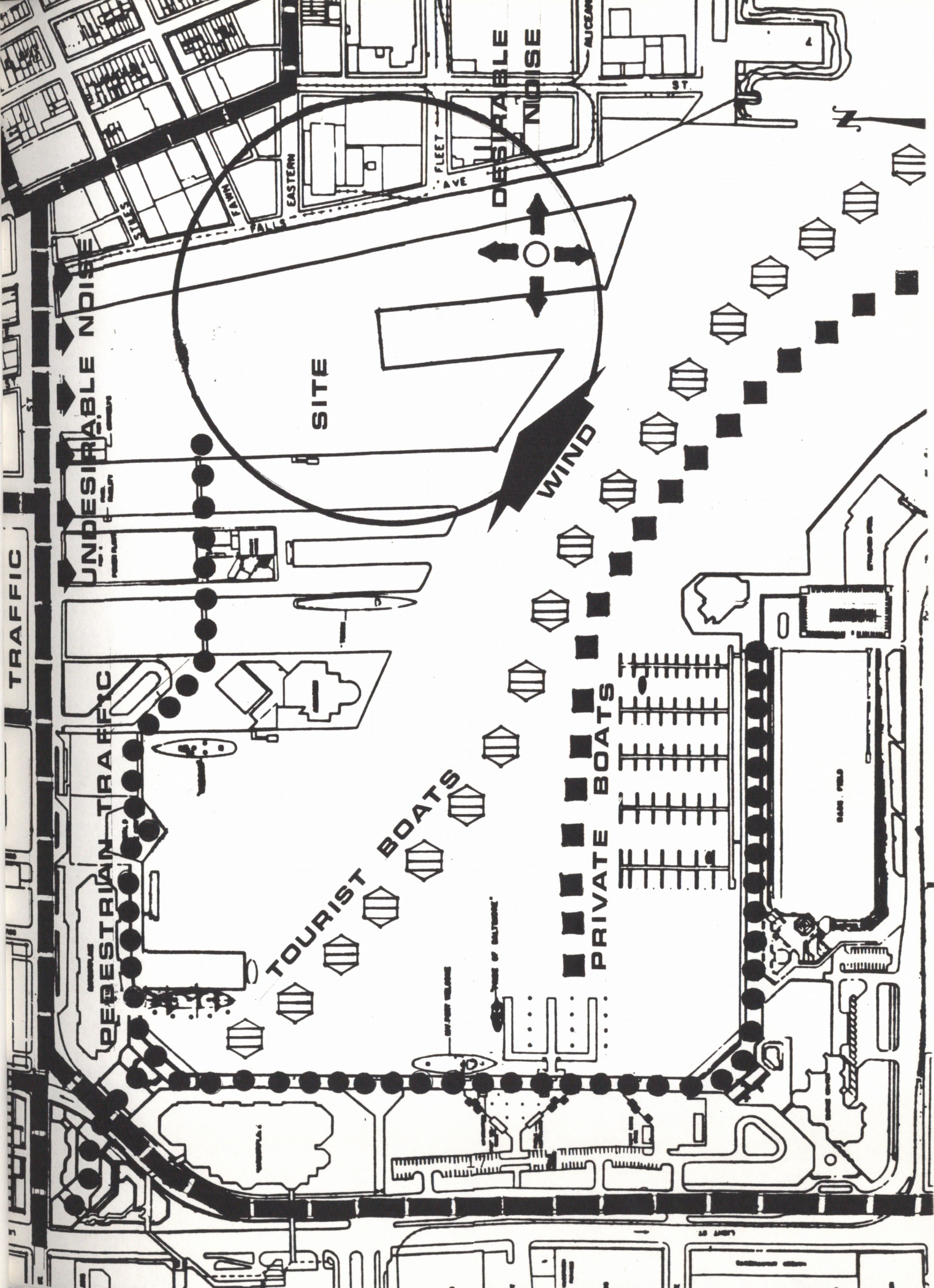
Undesirable vehicular noise onto the site comes from Pratt Street. Desirable noise that should be permitted on the site comes from performances at the Concert Pavilion which is located on Pier 6. These performances are typically held in the spring and summer.

The site is open and clear enough from other buildings that it will allow for advantageous design considerations of sun angles (see page 19) and winds. The winds predominately come from the southwest with an average speed of 9.9 mph.

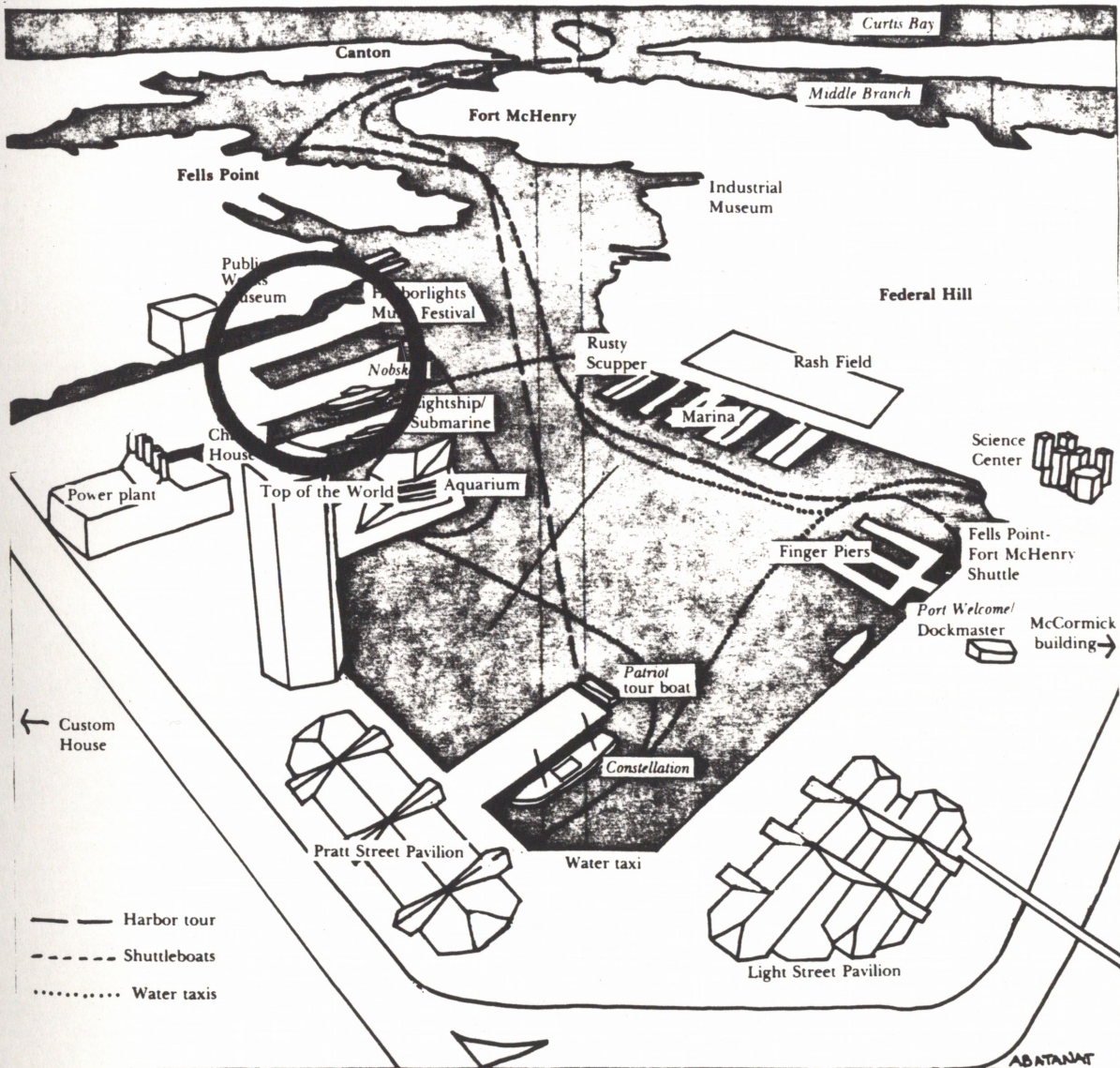
There are height limitations around the immediate vicinity of the city surrounding the harbor (see page 20). These limitations have been established by the City of Baltimore and developers. This is a successful attempt to focus the entire city on the harbor by allowing the buildings in the city to step down to the harbor. The most recent development for the Inner Harbor East Urban Renewal calls for buildings around the waters edge to be three to four stories in height, and most of the buildings behind those on the waterfront to be six stories in height.¹

The implications of the site analysis are as follows (see page 21):

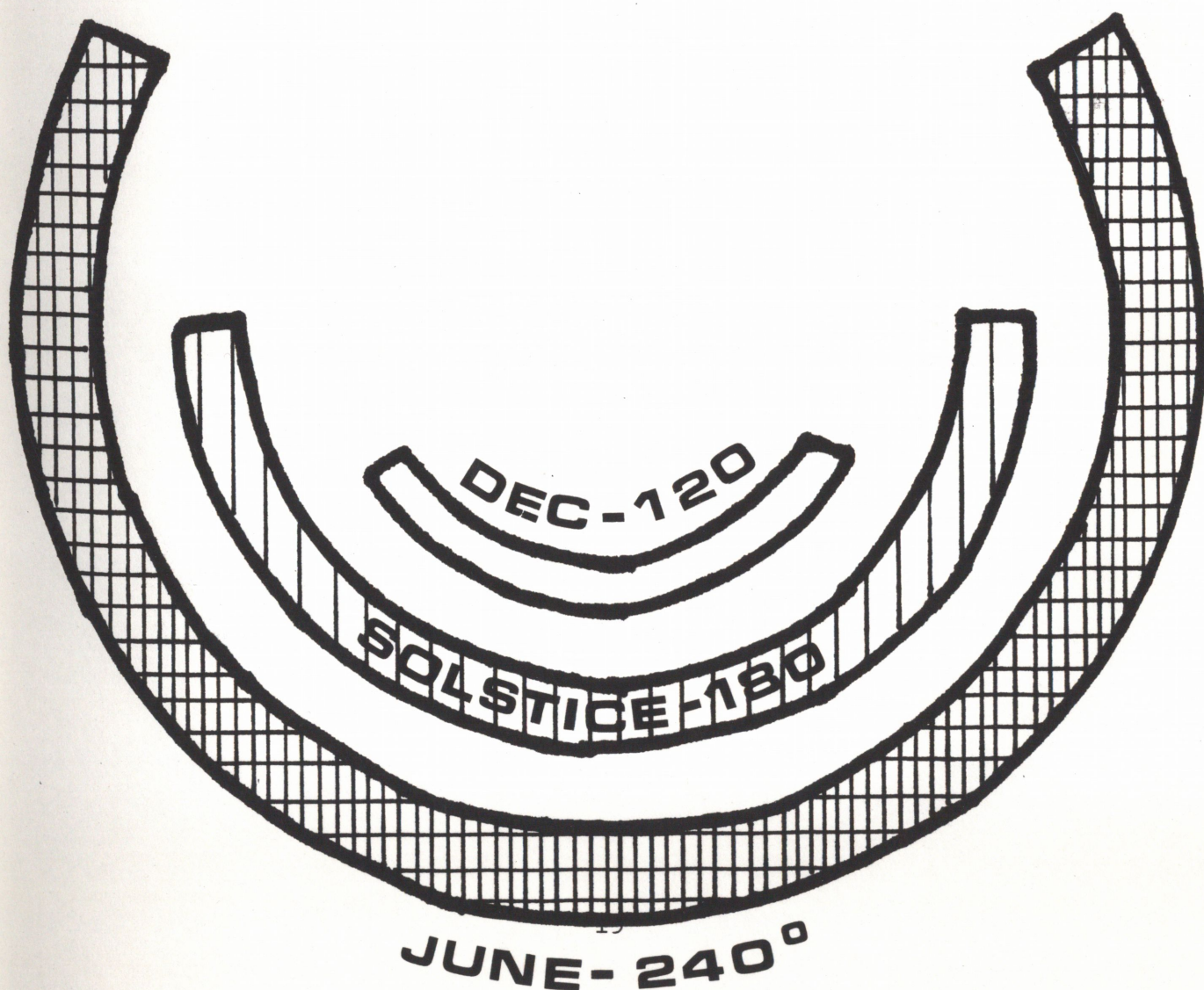
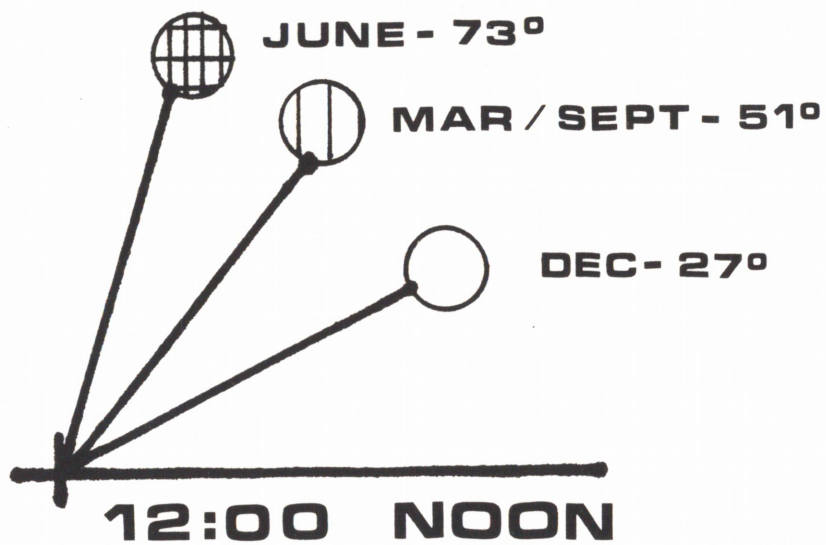
1. The southwest winds must be buffered around the boat dock area so as not to cause problems when the shells are departing or arriving on the dock.
2. Noise from Pratt Street must be buffered from vehicular noise.
3. The pedestrian entry onto the site needs a focal area to block the view of the existing parking lot.
4. Outdoor seating areas should take advantage of the sun angles and should avoid the northern exposures.



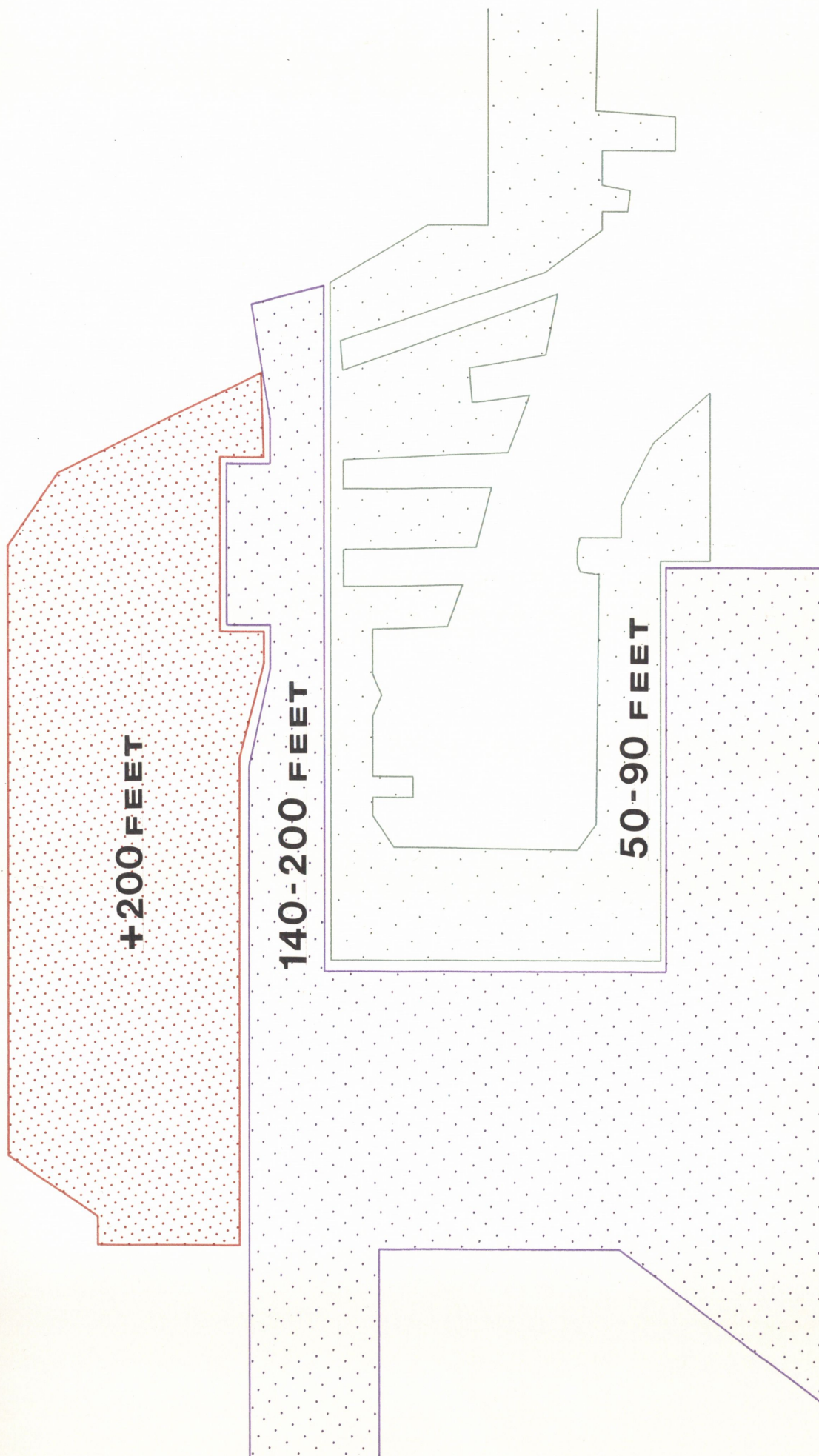
BOAT TRAFFIC



SUN ANGLES



BUILDING HEIGHT ZONES



CHAPTER NOTES

1. "Inner Harbor East Plan Aims at harmony of New, Old,"
Baltimore Sun, 23 March 1986, sec L, p. 1.

CLIMATE ANALYSIS

CLIMATE ANALYSIS AND DESIGN DATA FOR BALTIMORE, MARYLAND

While doing a climate analysis of Baltimore, it is useful to compare it to an environment that may be more familiar to the reader. Great Falls, Montana was chosen as a comparison to Baltimore due to lack of data for Bozeman, Montana.

In the analysis of Baltimore versus Great Falls, one can find similarities in cloud cover and temperature. The major differences between the two cities are the amount of humidity found in Baltimore and the amount of wind in Great Falls.

The percentage of annual cloud cover in Baltimore consists of 33 percent clear days, 34 percent partly cloudy days, and 33 percent cloudy. In Great Falls, clear days are 30 percent, partly cloudy days are 26 percent, and cloudy days are 44 percent¹ (see page 28).

The average temperatures in Baltimore range from 64 degrees to 48 degrees Fahrenheit with the extremes sweeping from 107 to -7 degrees. Temperatures in Great Falls average from 57 degrees to 35 degrees, with the extremes extending from 105 to -37 degrees Fahrenheit² (see page 29).

Wind in both cities prevails from the southwest. Baltimore enjoys light breezes of 9.9 mph compared with the gusty winds found in Great Falls of 14.2 mph.

The wide range of climate conditions found in Baltimore

Humidity is an uncomfortable characteristic of Baltimore. The average humidity is at 71 percent compared with 52 percent in Great Falls. In the winter months, the humidity added to the cold temperatures can result in bitter cold (see page 30 and 31). In the summers, the humidity adds a damp moisture in the air to the already hot, dry bulb air temperature, resulting in extreme discomfort. In Great Falls the discomfort is not felt as severely because of the low or high ratio of humidity verses temperature.³

It is necessary to relate this information to the design of a structure in Baltimore. For a hot humid zone which Baltimore falls into, precautions should be taken to minimize the solar gain (especially from 4:30 A.M. until 7:30 P.M.), yet promote radiant cooling, conductive cooling, and ventilation in the summer months.⁴ To encourage the movement of air, a site near a high airstream (ie: crest of a hill) or near a ridge on the windward side of the site is best. The preferable orientation is an elongated building form on a East-West axis to allow for penetration of air movement to counteract vapor pressure.⁵ Solar heating and winter windbreaks are effective during the colder months. The critical time period to maximize solar gain is from 7:30 A.M. to 4:30 P.M..⁶

The wide range of climate conditions found in Baltimore suggest that climate control will have to be flexible throughout the year, perhaps involving a variety of architectural techniques to allow for comfortable living.

4. Dorn, J. B.

Mc Graw-Hill

5. Ibid.

6. Ibid.

CHAPTER NOTES

1.U.S. Department of Commerce and Local Climatological Summary.

2.Ibid., p. .

3.Ibid., p. .

4.Donald Watson and Kenneth Labs, Climate Design, (New York: Mc Graw-Hill Book Company, 1983), p. .

5.Ibid., p. .

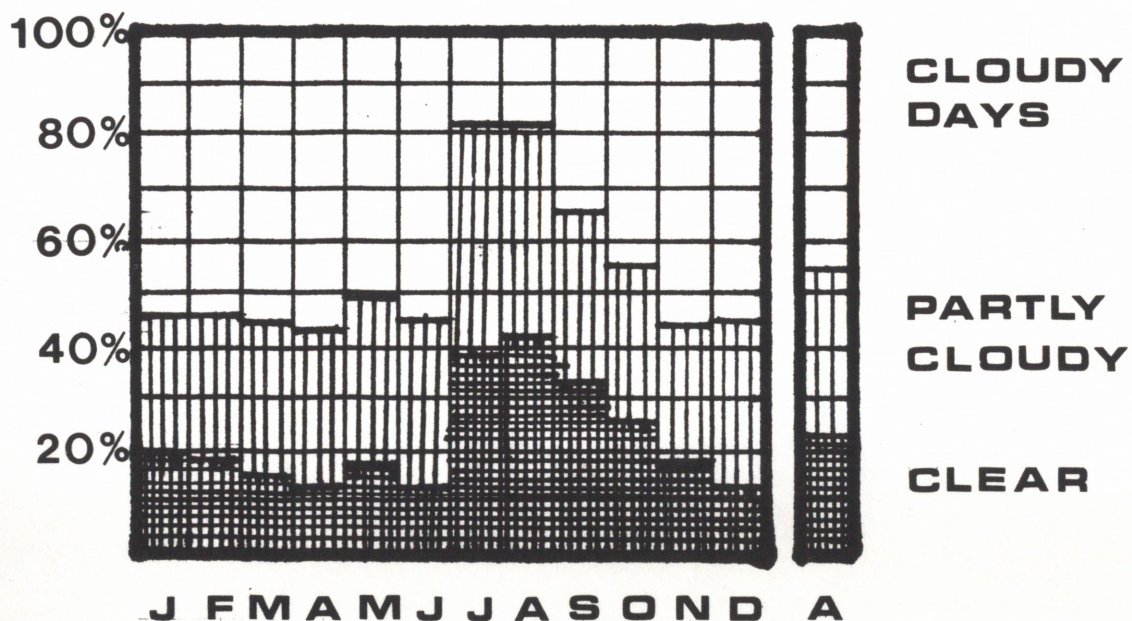
6.Ibid., p. .

PERCENT CLOUD COVER

BALTIMORE

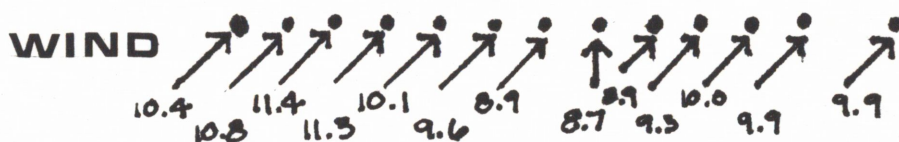
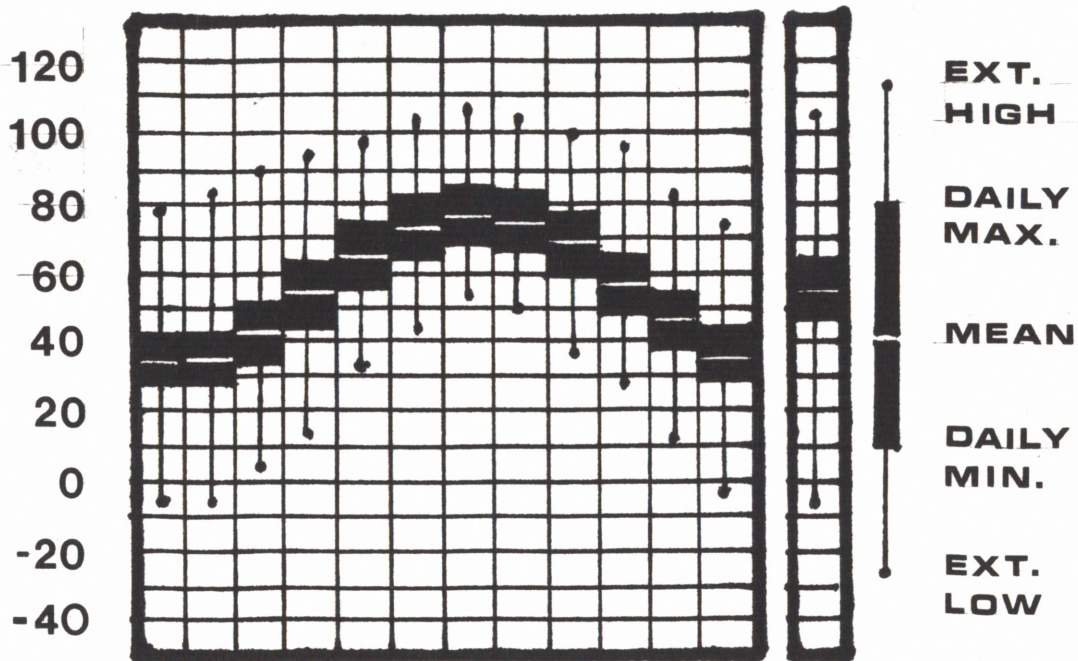


GREAT FALLS

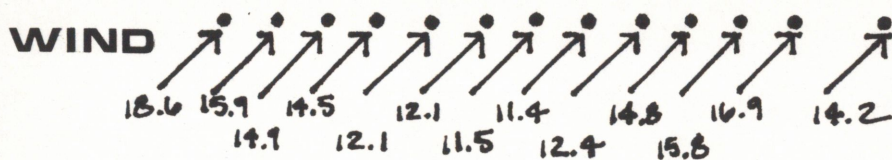
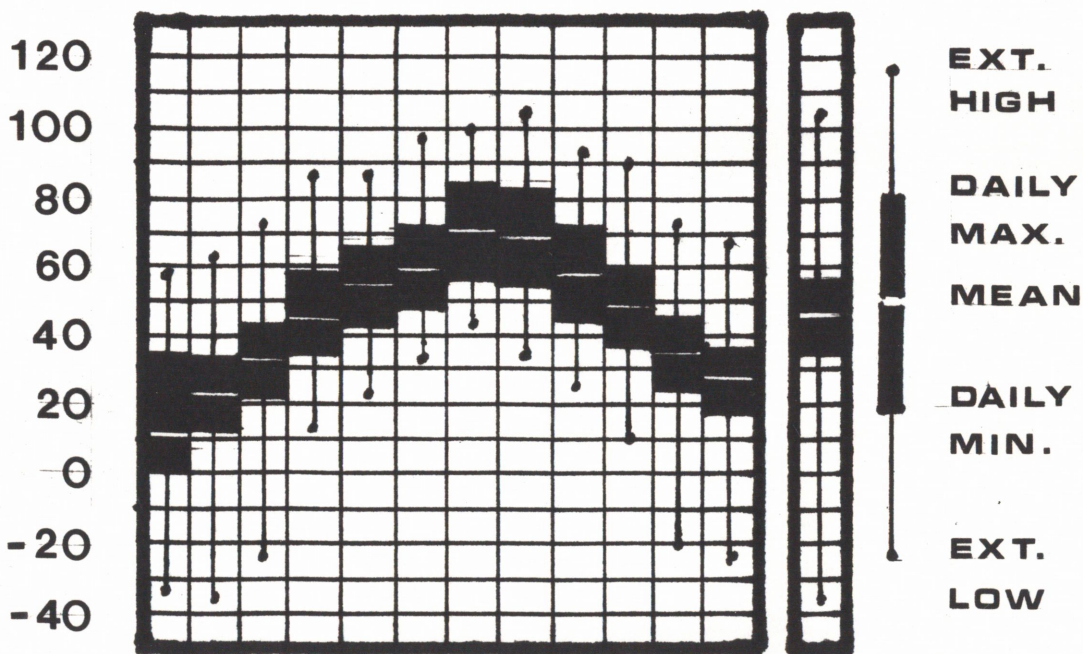


TEMPERATURE CHART

BALTIMORE

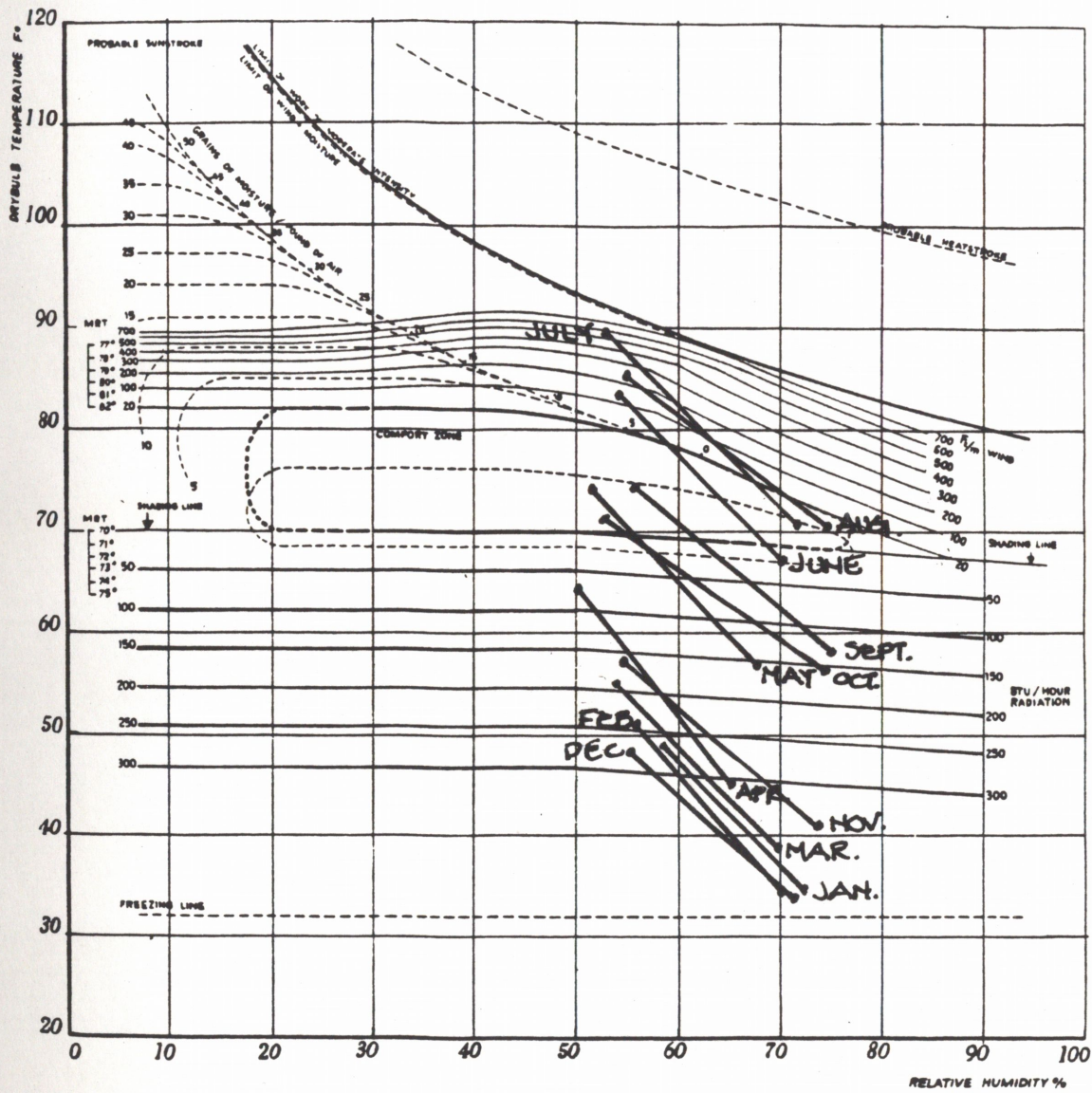


GREAT FALLS



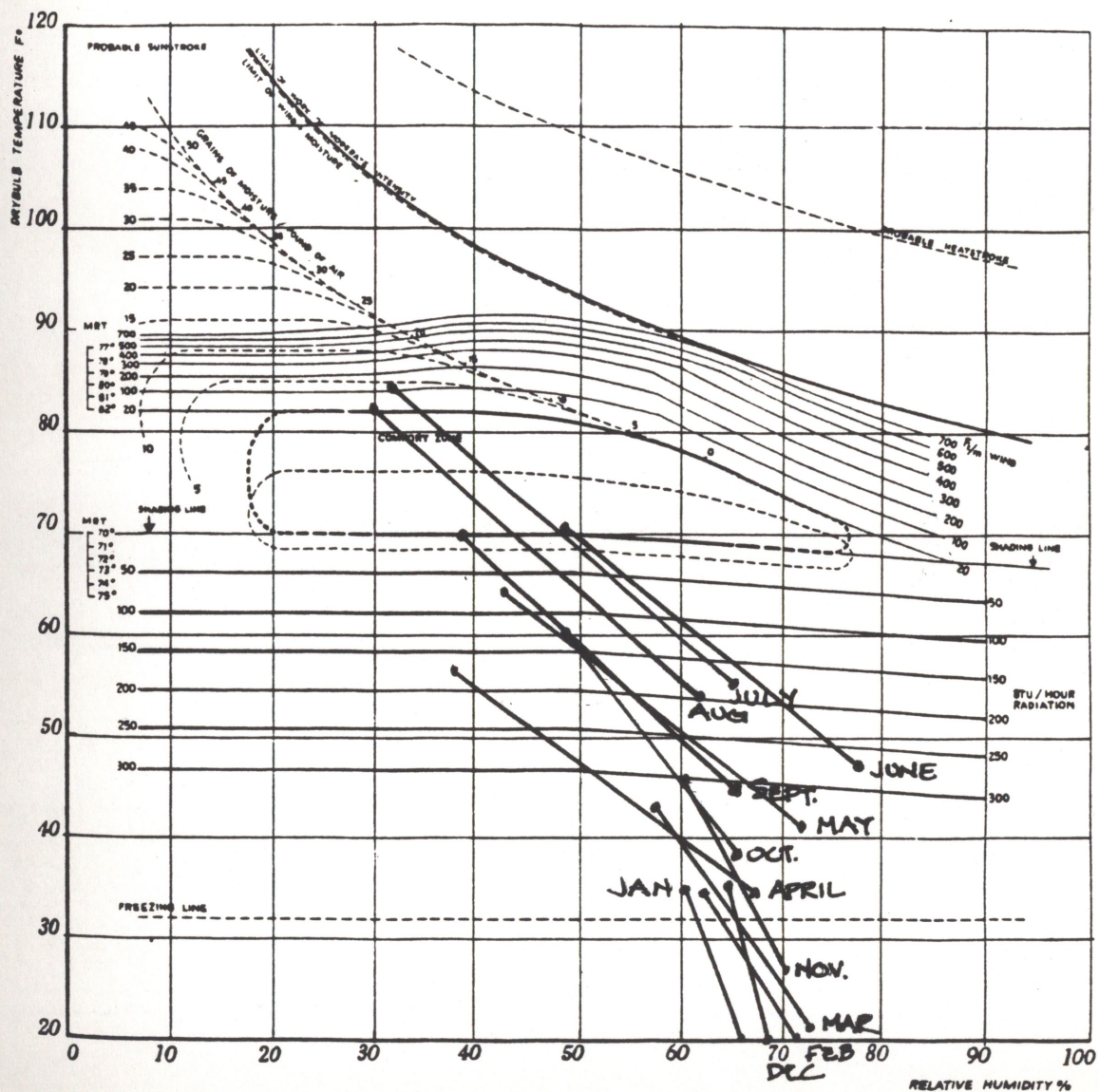
BIOCLIMATIC CHART

BALTIMORE



BIOCLIMATIC CHART

GREAT FALLS



PROJECT GOALS

PROJECT GOALS

1. To contextually fit the entire facility into the environment found around the Inner Harbor.
2. To have a connection between the harbor, site, and the proposed facilities.
3. To encourage public interaction throughout the site.
4. To dedicate an obvious section of the site to the public.
5. To allow excitement of exterior spaces that is complimentary to the present activity found in the Inner Harbor.
6. To strengthen further interaction of the public with an open plaza.
7. To integrate water into the design in order to intensify the land-water relationship.
8. To have the building make a statement on the harbor.
9. To have the imagery of the project be a stepping stone between the strong geometric shapes of the National Aquarium and the playfulness of the concert pavilion.
10. To provide an exterior imagery that will appeal to the white-collar workers and "yuppies".
11. To create a hierarchy of entries for the different facilities proportional to the amount of privacy or openness desired.
12. To reflect the exterior imagery of the rowing club to the "old boat clubs" of Boston and Philadelphia (see Appendix C).
13. To incorporate a professional imagery into the athletic club.
14. To relate the activity of the athletic club to the harbor.
15. To encourage public interaction to the shops.
16. To create an elegant environment throughout the restaurant.

USERS OF THE CHESAPEAKE CLUB

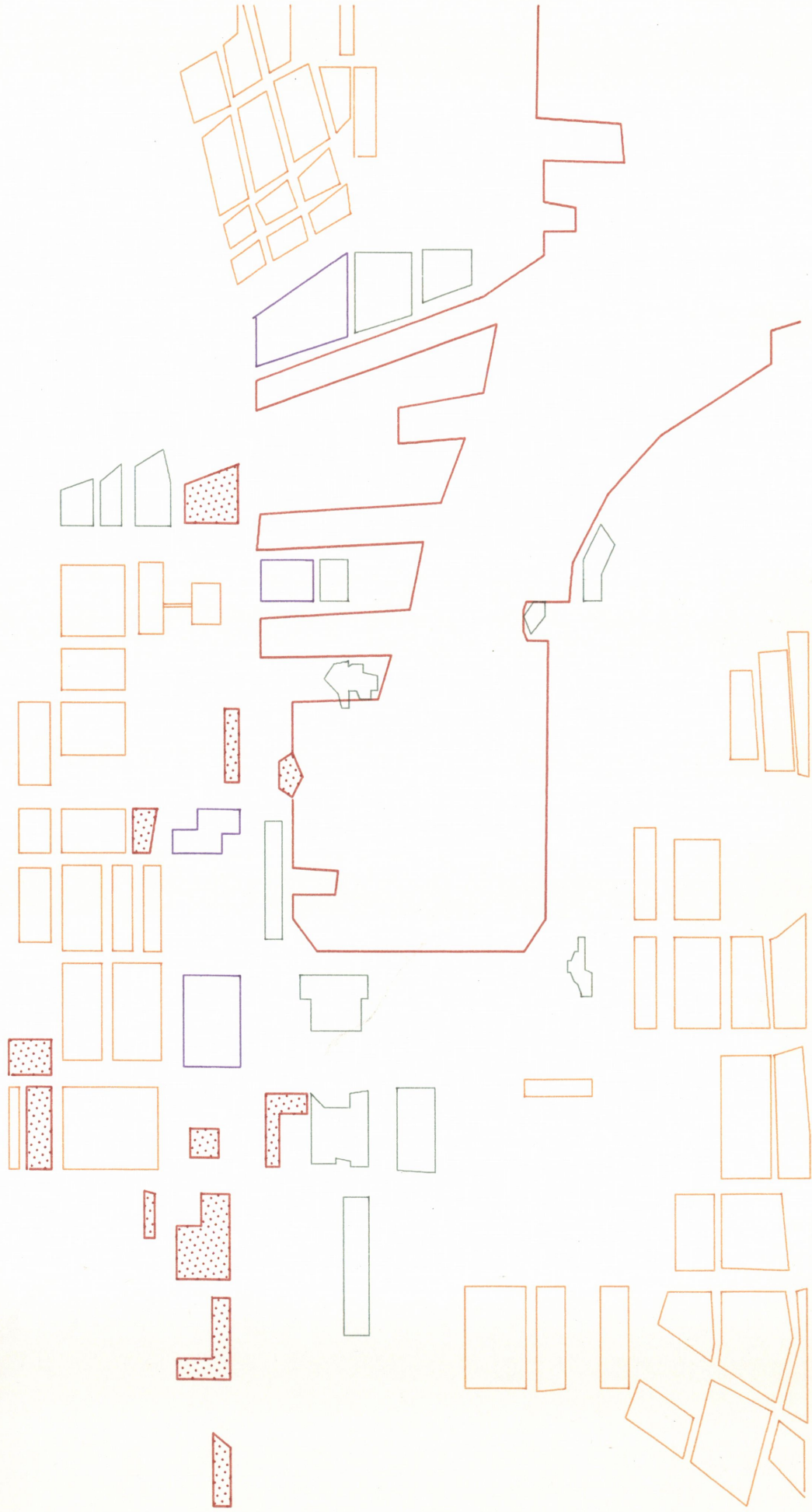
USERS OF THE CHESAPEAKE CLUB

The predominate future users of the Chesapeake Club will come from the surrounding office buildings, places of work (restaurants, shops, hotels...) and the residential areas (see page 36). This diversity of user groups should make the club successful. The following three chapters:

Ch. 6	Rowing
Ch. 7	Athletic Club
Ch. 8	Restaurants

are intended to introduce the proposed facilities in the Chesapeake Club and how they relate to Baltimore and its prospective users.

MAJOR USERS
INTERMEDIATE USERS
MINOR USERS
FUTURE USERS



USERS OF THE CHESAPEAKE CLUB

ROWING

They begin to gather about 45 minutes before the race. The boats have been washed, the tracks cleaned, the wheels of the seats oiled... The rigging is adjusted, the oars are down by the dock. The stretching, the planning, the waiting are over. There is only one thing left: the race. The boat is carried down to the dock and gently placed into the water. Oars are inserted and the oarlocks closed. One foot in the boat, one foot on the dock, ready, shove. Out on the water, feet are laced into the shoes in the boat, shirts are tucked in, nuts and bolts are checked one last time, you begin your warm-up with quick, light strokes, perfecting your timing and balance despite your nerves. Soon you are taking short pieces at full pressure, listening to the water hiss as it runs under the boat, feeling both strong and weak at the same time. When you stop rowing, you carefully balance your oars off the water while the boat glides to a rest. You take a few longer power pieces, a few practice starts, and then it's time for the start of the race.

ROWING

AN INTRODUCTION TO ROWING:

There are two categories in rowing: sweeps and sculls. In a sweep boat each rower has one oar measuring 12'-6". In sculling each rower handles two oars (or sculls) which are 10'-0" in length. Each type of rowing can have two or four crew members in the shell (the boat). In the sweep boats there is also an "eight man" boat. The scull boats also have a boat designed for one rower (see Appendix A).

Coxswains are generally used in the four and eight man boats for sweep boats. Typically they are not used in a sculling boat. A coxswain (pronounced cox'n) is responsible for the steering of the shell and is also a tactician, motivator, and a coach. He/she generally sits at the stern of the boat and gives orders to his/her crew.²

ROWING TERMS:

The following definitions are taken from the program for the 1986 U.S. National Championship Regatta:

Regatta: The term used for a boat race.

Catch: The entrance of the oar blade into the water at the beginning of the stroke.

- Crab:** A stroke that goes bad. The oar blade slices into the water at an angle and gets caught under the surface. A bad crab can catapult you out of the boat.
- Feathering:** Turning the oar blade flat during the recovery, to lessen wind resistance.
- Power Ten:** (Or twenty) A tactical burst of speed of ten or twenty strokes. Frequently the stroke rate comes up during a power ten.
- Release:** The oar blade leaving the water at the finish, or end, of the stroke.
- Recovery:** The time between strokes while the oar blade is traveling through air.
- Rigging:** The relationship between the oar, the rigger, and the position of each rower. Changing the rigging means changing the leverage, just as a bicycle rider changes gears. Most crews have an optimum number of strokes per minute (usually 32-36), depending on their size, strength, and experience. The rigging is adjusted to keep them rowing at that rating whether they have a headwind or a tailwind.
- Rigger:** Either an outrigger, the device which allows the oarlock to be outside of the shell, permitting longer oars and better leverage, or a person who rigs boats, a "rowing mechanic."
- Sculling:** Rowing with two oars (usually called sculls).
- Shell:** A racing boat.
- Stroke:** Apart from the rowing action, this can also mean the rower who sets the pace for the rest of the crew. He or she sits nearest the stern.
- Stroke rate:** The number of strokes per minute.
- Stroke watch:** Stop watch specially calibrated to give stroke ratings over three or four strokes.
- Sweep:** Rowing with* one oar per person, as distinct from sculling.

THE HISTORY OF ROWING:

Today there is evidence that people traveled by boat as long ago as the time of Alfred the Great. Even in the years before Christ there are accounts of rowing festivals.³ It was an efficient means of transportation. From the beginning, anytime there was a form of transportation, there was a desire to race.⁴

Rowing developed as a sport in the 19th century. In England, boys at Eton were racing in eights by 1811 and the first boat race between Oxford and Cambridge was held in 1829.⁵ The first boat club in the United States appeared in New York harbor in 1834. The Detroit Boat Club, established in 1839, is the oldest club in the country that is still active in rowing.⁶



After the Civil War people moved to the cities and soon took up sports and outdoor activities to fill their free time. The more popular sports were horse racing and boat racing. Boat racing involved amateurs, professionals, and college students. The number of regattas (races) held during a year increased from ten to twelve before the Civil War, to over 150 in 1872.⁷

Professional Rowing was popular in the 19th century but by the 1900's it virtually ended due to heavy gambling. Gamblers were responsible for rigging races, and even sawing boats in half.⁸ For this reason both amateur and collegic rowing clubs wanted to separate themselves from the professionals. In 1872, the National Association of Amateur Oarsmen (now the United States Rowing Association) was established. It was the first national sports governing body and the first to define amateur. This early separation of professional from amateur is unique to the sport of rowing and has continued to this day.⁹

In the past twenty-five years there have been other changes. By the early 20th century, amateur rowing clubs were beginning to diminish. The stronger clubs survived due mainly to the emphasis on the smaller boats. Because a working person could only row as it fit their schedule, the larger eight boats were harder to coordinate. The individual boats allowed the flexibility needed to fit a working person's schedule.¹⁰

The early college races consisted of sixes with no coxswain. The lack of a coxswain caused many accidents because no one was

able to steer the shell during the race. Soon, racing switched to eights with a coxswain. The first intercollegiate race was in 1852 on Lake Winnepesaukee, New Hampshire, between Harvard and Yale. By 1875, thirteen other colleges were rowing. In 1895, the formation of the Intercollegiate Rowing Association was established in Poughkeepsie. The Intercollegiate Rowing Association consisted initially of eastern schools, but soon allowed West coast schools to participate. Very few college oarsmen rowed with clubs after graduation.¹¹

Olympic rowing was dominated by the Americans beginning in 1920 when the collegic Naval Academy team of eights won eight successive Olympic gold medals. In 1960, that domination ended when the West Germans developed changes in style, training methods, and rigging.¹²

In the past twenty-five years there have been other changes in the sport. Women began to row and by 1962 the National Women's Rowing Association was founded. Today the American women rowers are among the best in the world.¹³

The sport of rowing is quickly becoming a phenomenon.

Olympic athletes, homemakers, business people, youth, senior citizens, disabled individuals, athletes from other sports and those discovering sport for the first time, those who wish to race and those who row for fitness are¹⁴ finding that rowing can meet almost any need and interest.

If rowing is to be the "sport of the 90's", it certainly is easy to see why.¹⁵

THE HISTORY OF ROWING IN BALTIMORE:

The first organized rowing club in Baltimore was established in 1864, known as the Ariel Rowing Club. The club competed with other crews in Maryland, including the Arundels and the Naval Academy in the single and double scull, the four and eight oared shells and a six oared barge.¹⁶



The Ariel Club was last heard of in 1927. In 1982, another club was organized, but under a different name: the Baltimore Rowing Club.



Presently the club shares it's boat house with three colleges surrounding Baltimore.

BALTIMORE ROWING CLUB:

Throughout the Baltimore harbor there is a wide variety of old ship docks and abandoned buildings as well as new and renovated buildings. The current headquarters for the rowing club is stationed in an old, run down, rusted metal shed.



A new facility is not hard to justify. The leaky roof, unstable walls, and unsightly appearance of the existing facility are but a few of the problems that indicate the need for a new boat house.

PROPOSAL FOR A NEW BOAT HOUSE BY AYERS-SAINT, INC.:

1. The need for a new facility has been recognized by the Baltimore Rowing Club.
2. Ayers-Saint, Inc., a Baltimore based architectural firm, was retained in 1984 to design the club's new boat house. The boat house is currently in the construction phase, and completion is scheduled for June of 1987. Appendix B shows Ayers-Saint's proposal for the new boat house.
3. The location of the new boat house is in the Middle Branch of the harbor.

The goal used by Ayers-Saint for the exterior imagery of the new club house was to be reminiscent of boat houses in Pennsylvania and Boston (see Appendix C). Classic appeal with a touch of the "old school past" was the goal for the interior imagery.¹⁷

A NEW LOCATION FOR THE BOAT HOUSE:

For this thesis, the location of the boat house is different from the Ayers-Saint project. I was a member of the Baltimore Rowing Club during the summer of 1986, and have chosen an Inner Harbor site because of the crews preference to row there over other harbor locations. The most successful practices are held when there is an audience for which to perform. This audience is not present in such numbers in any other harbor location. The continuous participation of the rowing club in the Inner Harbor Area contributes activity to the harbor's growing success.

CHAPTER NOTES

1. Thomas C. Mendenhall, "The Race," Program for U.S. Rowing National Championship Regatta, 1986, p. 4.

2. Ibid., p. 8.

3. Hylton Cleaver, A History of Rowing, (London: Herbert Jenkins, 1957), p. 15.

4. Ibid., p. 15.

5. Thomas C. Mendenhall, "The History of Rowing," Program for U.S. National Championship Regatta 1986, p. 10.

6. Ibid., p. 10.

7. Ibid., p. 10.

8. Ibid., p. 10.

9. Ibid., p. 10.

10. Ibid., p. 10.

11. Ibid., p. 10.

12. Ibid., p. 11.

13. Ibid., p. 11.

14. Ibid., p. 11.

15. Ibid., p. 11.

16. Richard Walsh and William Lloyd, Maryland, A History, (Baltimore, Maryland: Schneidereith and Sons, 1983), p. 89.

17. Peter Gentry, President of the Baltimore Rowing club, Interview held in Baltimore, Maryland, 13 February 1987.

ATHLETIC FACILITY

ATHLETIC FACILITY

Sport and recreational activities are now widely accepted as a fundamental part of everyday life, and are essential to the mental and physical well being of the individual.¹ A comprehensive recreational program affords people of all ages, backgrounds, and interests the opportunity to engage in a variety of activities.² Physical workouts are harder today than ever before. For the professional, the persistent compulsion toward technical supremacy induces harder work. For the amateur, physical ambitions range from fashion to personal perfection and drive the individual to work harder.³ Children are brought into a sports facility at their most impressionable age,⁴ thus laying the foundations for the future users.⁵

The modern Olympic movement is believed to have played an important role in shaping design trends in sport facilities.⁶ New facilities are increasingly reflecting the greater sophistication looked for by players and spectators (ie: air-conditioning systems for better comfort conditions, lighting systems, etc...⁷).

The aim of athletics is to help people live healthy, satisfying, and energetic lives by developing and maintaining optimum physical efficiency, by developing useful knowledge and physical skills, by acting in socially useful ways, and by enjoying wholesome physical recreation.⁸

ATHLETICS IN BALTIMORE:

Exercise is becoming an obsession throughout the United States. People are running everywhere, whenever they can. Memberships of health clubs are sky-rocketing all over the country. In Baltimore this trend is apparent, although the effect is little in the downtown section of the city due to lack of facilities. There are only thirteen facilities that are scattered throughout the city, and only one, the Downtown Athletic Club, has a complete facility (see Case Study 3, page 60) (a complete facility being one with all forms of exercise imaginable: gymnasium, racquetball, squash, and tennis courts, locker rooms, weight room, aerobics, etc...). Professionals around the Inner Harbor are looking for an athletic club that has complete facilities and that will cater to their individual needs. These business people want to be able to exercise before work, during the lunch hour, and after work, without having to disrupt their schedules by driving or walking great distances.

The facilities in the proposed club will include: squash, racquetball and tennis courts; a weight room with Nautilus and free weights; a small gymnasium for basketball, volleyball and badminton; a pool; an aerobics room; complete locker facilities; a Wellness Fitness Clinic; a small restaurant and bar; a nursery and day care center; and pro shops. A club of this caliber should be attractive to the professionals of the Inner Harbor and the surrounding residential areas, and should become successful.

The following
ties found the
features. The
Roswell, New
Money is bro

CASE STUDY #1

ROSWELL RACQUET CLUB AND SPA

ROSWELL, NEW MEXICO

PERSON INTERVIEWED: MR. DERRY MOORE, MANAGER

Roswell is located in the southeastern part of New Mexico. Money is brought into the town through the New Mexico Military Institute (a junior prep-school) and through wealthy oilmen. The Roswell Racquet Club and Spa (RRC & S) caters to these groups and recently has begun to market to corporate companies. Besides focusing on the professionals, the club also caters to senior citizens during non-peak hours of the day. The average income of a typical club member is \$25,000-\$30,000.

An advantageous feature of the RRC & S is the location of the racquetball courts (see page 56). They are separated from the other facilities, thus reducing the noise to others using the club. The locker rooms are another benefit that RRC & S members enjoy. The interior image of the space and locker room equipment (the steam rooms, saunas, and whirlpools) are attracting features to the club's clientele. On the whole, the RRC & S is satisfied that their entire facility is more than adequate for the area of the country in which they are located.

Recently, a free weight section has been incorporated into the existing weight room, making the entire room overcrowded. Previously, there were only Natilus weights and exercise bicycles. Mr. Derry Moore, manager of the club, expressed his

desire to see an addition built especially for these bicycles.

A new aspect that is becoming popular in health clubs throughout the country is the Wellness Care Group. This includes making the public more aware of becoming fit by controlling weight, checking blood pressure, providing fitness testing and giving nutritional information. The RRC & S has followed this trend. The club presently holds this activity in the aerobics room and would prefer to hold this activity in a special room.

An expressed desire of Moore's was to incorporate a small gymnasium. Many members have expressed a desire for basketball and volleyball courts. A gymnasium would allow these activities along with others within the club.

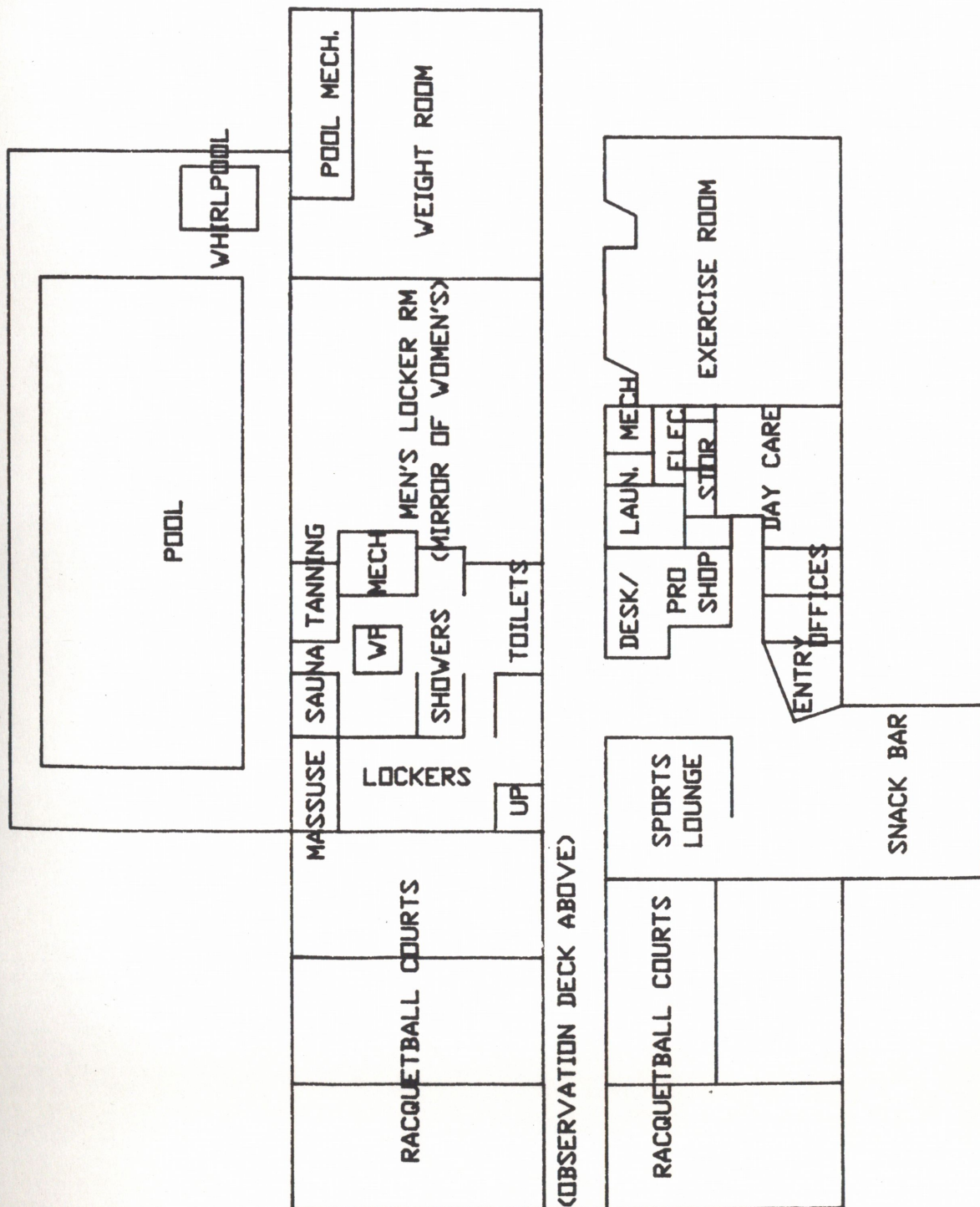
The aerobics room is the most popular space in the facility, being used constantly through the day. The nursery is used quite frequently, especially from 4 o'clock until closing. The tanning bed remains a popular function for members. An area that is not used frequently and according to Moore, a waste of space, is the pool. Moore feels that the decks surrounding the pool are too large and are not properly utilized. He also feels that the length of the pool (25 m) was perhaps too long. The pro shop is another area of concern. The shop currently shares a space with the front desk. There is no barrier separating the two functions. This is confusing to a customer walking into the shop.

He/she feels as if he/she is intruding into the operations of the front desk and does not belong there. Consequently, the pro shop is not utilized as extensively as it could be.

According to Moore, the exterior image of the club is not important to the members of the RRC & S. However, a note must be made to the fact that the surrounding architecture in Roswell is poor and the general public has not been educated to recognize good architecture when they see it. The members take pride in the interior imagery of the club, which has been well thought out through the use of finish materials and plants.

Overall, the Roswell Racquet Club & Spa has been simply organized with the clear arrangement of spaces. This club is a good example of interior imagery of an athletic club.

ROSWELL RACQUET CLUB AND SPA ROSWELL, NEW MEXICO



CASE STUDY #2

BROADWATER ATHLETIC CLUB

HELENA, MONTANA

PERSON INTERVIEWED: MRS. IRENE NEWTON, PROGRAM MANAGER

The Broadwater Athletic Club (BAC) is located two miles from Helena, Montana, on Ten Mile Creek. The original club (The Broadwater Natatorium) was located on the same natural hot springs one mile away from the present location. An earthquake occurred that changed the location of the hot springs, and the earlier club failed and was abandoned. Today, the Broadwater Athletic Club takes advantage of these natural hot springs. The steam from the pools add interest and arouse the curiosity of those who pass by. The club is located near the state capital building, and caters to those state employees and white collar workers with a middle income. This particular club is oriented towards the family and encourages members to bring their children along.

An advantage of the BAC is its Wellness Clinic. As previously mentioned, this new nationwide health attitude is being implemented into clubs today because people are specifically looking for this fitness program. This clinic involves an overall fitness profile of a person. It consists of: blood screening, taking of blood pressure, fitness tests, measurements and nutrition. It gives the user the result of his/her mental, physical and spiritual balance.

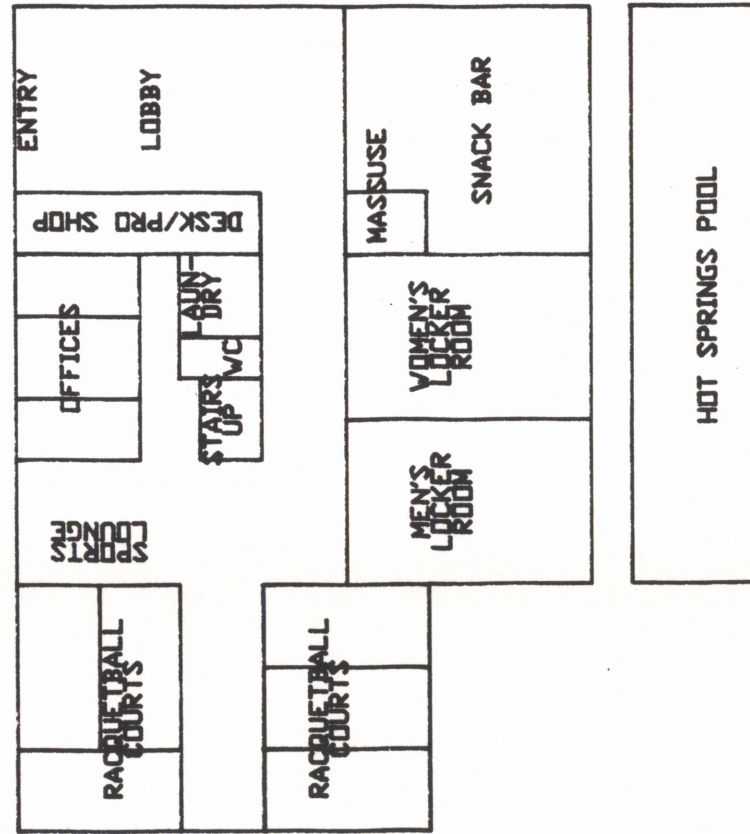
New benefits of the club are the two year-around natural hot pools (a lap pool and a recreational pool), the aerobics room, the Nautilus weight room, the free weights, and the nursery (see page 59).

A major area of concern for the club is the size of the nursery. Since the club is a family-oriented facility, the nursery is used quite often and is not adequate in size for its demand. The least used areas in the club are the tanning beds, the game/snack bar, and the masseuse room. Mrs. Irene Newton, program manager for the club, feels these spaces could be eliminated without hurting the club. A desired function according to Newton would be a small gymnasium to hold basketball and volleyball games. A conference room for the employees would also be desired.

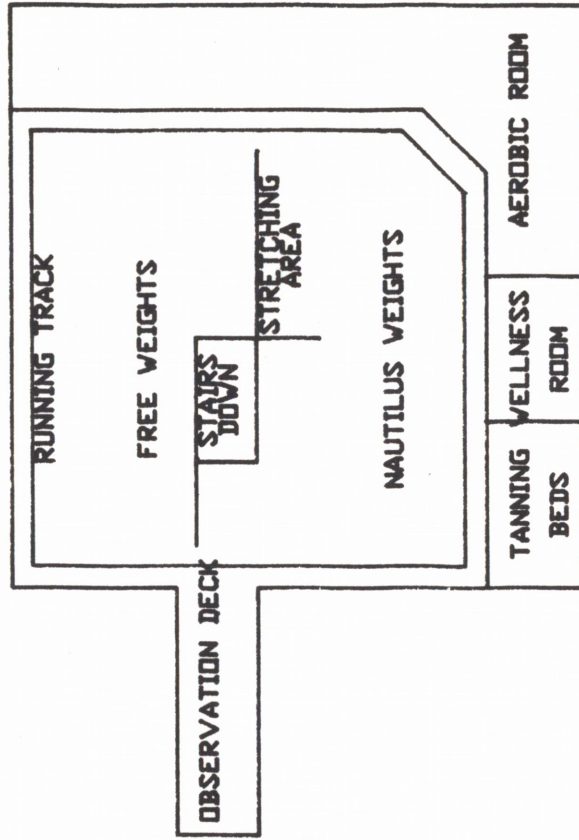
The exterior image of the club house itself does not seem to be important to Newton. She feels that the steam rising from the hot springs adds an excitement that makes the club special to their members.

In summary, the club seemed complicated in terms of the layout of the various spaces, but the strong relationship of the club to the natural hot springs is an important and definitely desirable asset to club members.

BROADWATER ATHLETIC CLUB - HELENA, MONTANA



FIRST LEVEL



SECOND LEVEL

CASE STUDY #3

DOWNTOWN ATHLETIC CLUB
BALTIMORE, MARYLAND

PERSON INTERVIEWED: STACEY HERSTLET, MEMBERSHIP DIRECTOR

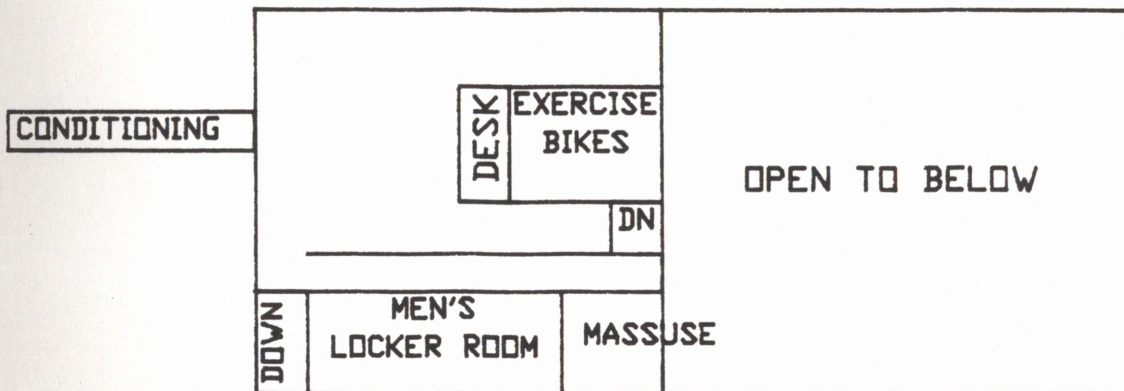
The Downtown Athletic Club (DAC) is located in the mid-downtown section of Baltimore in what used to be an old warehouse. This club caters to the "yuppies" and corporate groups, with the average age of members between 25-35. Because the membership is large (3500 members) the DAC is able to enjoy a wide variety of activities, typically not found in smaller clubs. Some atypical spaces in the club include two small basketball courts, one of which doubles as a volleyball area and badminton court; a large weight area with three different types of weight equipment; a physical therapy area; and a mid-sized restaurant; all of which are used quite frequently (see page 62). An additional benefit the club offers is free parking to its members throughout the day, evening, and weekend.

A problem that the club faces due to its large facility is that some members wish to buy into only one activity. It is difficult to control who is using which activity, thus members must be charged for the entire facility (an individual membership consists of a \$400 initiation fee plus \$708 annual membership dues).

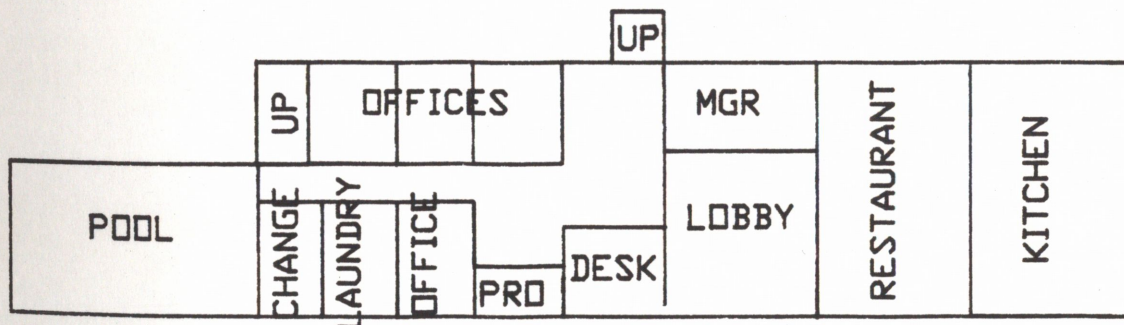
This club, although geared towards individual membership, does not have facilities for small children. The club expressed interest in an outdoor pool, but because of space limitations, it is not feasible.

The size and participation within the club is impressive. The space planning is very well thought out and is acceptable to the members. The interior imagery is one of modern taste and up-to-date equipment, which is expected for a club catering to this clientele.

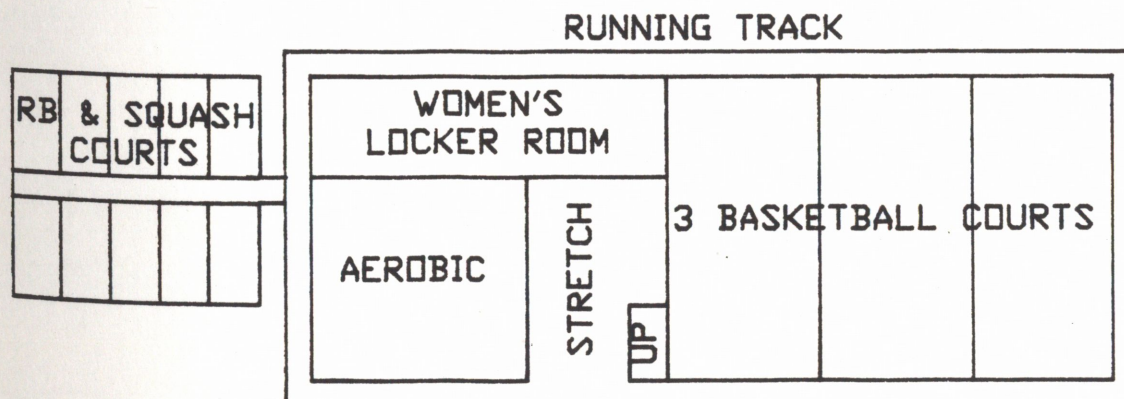
DOWNTOWN ATHLETIC CLUB BALTIMORE, MARYLAND



UPPER LEVEL



MAIN LEVEL



LOWER LEVEL

CHAPTER NOTES

1. Gerald A. Perrin, Design for Sport, (London, Boston: Butterworths, 1981), p. 1.

2. Richard B. Flynn, Planning Facilities for Athletics, Physical Education and Recreation. (The Athletic Institute of America, 1985), p. 2.

3. Grace Anderson, "Physical Fitness," Architectural Record, September 1985, p. 87.

4. Gerald A. Perrin, Design for Sport, (London, Boston: Butterworths, 1981), p. 4.

5. Ibid., p. 4.

6. Ibid., p. 3.

7. Ibid., p. 20.

8. Richard B. Flynn, Planning Facilities for Athletics, Physical Education and Recreation, (The Athletic Institute of America, 1985), p. 1-2.

RESTAURANTS & SHOPS

RESTAURANTS (PUBLIC AND PRIVATE) AND SHOPS

RESTAURANTS:

Eating out today is a big business, yet restaurants have one of the highest mortality rates in the country. A restaurant needs more than gut intuition, good taste, and a developed palette to become successful.¹ There are no magic formulas, but guidelines can be used to help a designer. One of the designer's major roles in creating a flourishing restaurant is to provide an ambience. The combination of a mood and atmosphere can make the difference between a place to "eat out" and one that is to "dine out". Dining out is not thought of as going to a place to eat, but going to a place that provides entertainment through the atmosphere. Dining out has become a social phenomenon.²

There are several factors that lead to a successful restaurant: design, service and food. The restaurants that have prospered the most are the ones that have taken risks. These risks need not be outrageous or flamboyant, but enough that the particular restaurant does not fit an expected role.³

RESTAURANTS OF THE INNER HARBOR:

A wide variety of food and eating establishments can be found around the harbor. The Harbor Pavilion that runs north to south has been dedicated to the food consumers that flock the Inner Harbor. The restaurants found in the pavilion range from a

stand-up submarine sandwich bar to a sit-down seafood dinner. The second Harborplace pavilion that runs east to west, although mainly full of shops, has four restaurants of the "dining" type.

A PUB Restaurants for all tastes and budgets can be found around the harbor. It seems as if all restaurants are crowded and generally have a wait either to be seated or to get food during the summer months. Another restaurant would be welcome.

A PRIVATE RESTAURANT ON PIER 5:

When traffic is high around the harbor during June through September, the food pavilion is overcrowded and extremely unpleasant for the business person who is wanting to grab a quick bite to eat during his/her lunch hour. Obviously there are not any public restaurants that are within walking distance that the tourist can not go to and for that matter, there are not any private restaurants. Thus, the proposed private restaurant open to those who buy a membership into the restaurant as well as members of the Baltimore Rowing Club and athletic club, would allow members to enjoy a lunch or dinner away from the tourists.

The proposed restaurant would be directed towards a wealthy clientele and would receive its members and guests as professionals. Since the restaurant would also be shared with the other private facilities in the Chesapeake Club, the decor of the interior should reflect the dignity and pride found in rowing

clubs through out the country. Visual contact with the Baltimore Rowing Club will be provided through outdoor dining areas and large areas of glazing.

A PUBLIC RESTAURANT AND SHOPS ON PIER 5:

In order to continue the public interaction of the land surrounding the harbor of Baltimore, it is necessary to design facilities for the public. The Chesapeake Club will provide a public restaurant and an open shopping plaza in response to this criteria. The success of the two Harborplace pavilions has been phenomenal. Due to the overcrowded conditions found during the tourist season, an expansion of the like facilities is necessary. An addition of shops and another public restaurant seems logical on Pier 5 to continue the public participation to the water's edge.

CHAPTER NOTES

1. Edie Lee Cohen and Sherman R. Emery, Dining for Design,
(New York: Cahners Publishing Company, 1984), p. 5.

2. Ibid., p. 5.

3. Ibid., p. 5

INDIVIDUAL SPACE ANALYSES

BALTIMORE ROWING CLUB.....	16,175 SQ FT
ATHLETIC CLUB.....	58,775 SQ FT
RESTAURANTS (TOTAL).....	23,190 SQ FT
PUBLIC SHOPS.....	30,000 SQ FT
OFFICES.....	10,000 SQ FT
MULTI-PURPOSE HALL.....	5,000 SQ FT
TOTAL SQUARE FOOTAGE.....	143,140 SQ FT

PROGRAM FOR THE BALTIMORE ROWING CLUB

BOAT STORAGE.....8000 SQ FT

Shells: 16 eights
12 fours
12 doubles
20 singles

Launch Boats: 4-6 Boston Whalers (16'-0")

Oar storage: 8 sets of sculls for eights
8 sets of sweep for eights
10 sets of individual scull
10 sets of individual sweep

ROWING TANK.....1500 SQ FT

CONDITIONING AREA.....500 SQ FT

WEIGHT ROOM.....800 SQ FT

LOCKER ROOMS (MEN AND WOMEN).....2000 SQ FT

MEETING/LAB.....900 SQ FT

STARTERS TOWER.....100 SQ FT

FINISHING AREA.....1000 SQ FT

OBSERVATION DECK.....1250 SQ FT

ADDITIONAL STORAGE.....350 SQ FT

FOYER.....225 SQ FT

DISPLAY AREA.....180 SQ FT

TROPHY HALL.....100 SQ FT

COACHES OFFICE.....120 SQ FT

MANAGERS OFFICE.....200 SQ FT

PUBLIC TOILETS (MEN AND WOMEN).....300 SQ FT

MECHANICAL AND ELECTRICAL CLOSET.....550 SQ FT

FOOD PREPARATION.....	200 SQ FT
OUTDOOR BOAT PREP AND DOCK.....	3500 SQ FT
SUB TOTAL.....	14,575 SQ FT
CIRCULATION (10 %).....	1600 SQ FT
TOTAL.....	16,175 SQ FT

SPACE: Boat storage

FUNCTION: The storage of racing shells and oars when not in use.

AREA: 8000 square feet

HARD REQUIREMENTS: Water-resistant and non-slip floors and walls, Boat racks

SOFT REQUIREMENTS: Proud and dignified area

ADDITIONAL COMMENTS:

SPACE: Oar storage

FUNCTION: The upright storage and protection of oars when not in use.

AREA: In boat storage area

HARD REQUIREMENTS: Oar racks

SOFT REQUIREMENTS: NA

ADDITIONAL COMMENTS: Clearance for a 12'-6" oar must be provided

SPACE: Rowing Tank

FUNCTION: For the practice of the rowing stroke

AREA: 1500 square feet

HARD REQUIREMENTS: Pool of water, simulation of a shell with riggers to hold the oar.

SOFT REQUIREMENTS:

ADDITIONAL COMMENTS:

SPACE: Conditioning Area

FUNCTION: A stretching and fitness area.

AREA: 500 square feet

HARD REQUIREMENTS: A rubberized athletic floor material, full length mirrors, 4 ergometers, 4 rowing machines

SOFT REQUIREMENTS: An inspirational, uplifting environment

ADDITIONAL COMMENTS:

SPACE: Weight Room

FUNCTION: Provide for muscular development

AREA: 800 square feet

HARD REQUIREMENTS: Free weights, full length mirrors, exercise bicycles, flooring of hard impact resistant material.

SOFT REQUIREMENTS: Spiritual and uplifting space.

ADDITIONAL COMMENTS:

SPACE: Locker Rooms (men and women)

FUNCTION: Provide a changing area, shower, and toilet area for crew members.

AREA: 2000 square feet

HARD REQUIREMENTS: Toilet stalls, lockers, lavatories, non-slip and water resistant surfaces for shower and toilet area. Industrial carpet in locker room.

SOFT REQUIREMENTS: Clean and sanitary area.

ADDITIONAL COMMENTS:

SPACE: Meeting/Lab

FUNCTION: Used for group discussion and instruction

AREA: 900 square feet

HARD REQUIREMENTS: Carpet, write-on projection board, movable furniture and tables.

SOFT REQUIREMENTS: Comfortable

ADDITIONAL COMMENTS:

SPACE: Observation Deck

FUNCTION: To provide exterior viewing of practices and regattas. Also may be used for outdoor barbecues.

AREA: 1250 square feet

HARD REQUIREMENTS: Barbecue grill, some permanent seating as well as movable furniture. Exterior flooring.

SOFT REQUIREMENTS: Should provide sun protection, and allow excitement.

ADDITIONAL COMMENTS:

SPACE: Additional storage

FUNCTION: Storage of seats, repair equipment, drying towels, and furniture.

AREA: 350 square feet

HARD REQUIREMENTS: Adjustable shelves

SOFT REQUIREMENTS:

ADDITIONAL COMMENTS:

SPACE: Foyer

FUNCTION: The transition area from entry into the club.

AREA: 225 square feet

HARD REQUIREMENTS: Non-slip floor surface, durable wall material.

SOFT REQUIREMENTS: Warm and inviting

ADDITIONAL COMMENTS:

SPACE: Display

FUNCTION: An area to tack up general information pertinent to club members. This is the location of the secretary.

AREA: 180 square feet

HARD REQUIREMENTS: An office desk, bulletin boards, carpeted floor.

SOFT REQUIREMENTS: Warm and welcoming

ADDITIONAL COMMENTS:

SPACE: Trophy Hall

FUNCTION: The display of trophies

AREA: 100 square feet of display

HARD REQUIREMENTS: Built-in cabinets with glass panels

SOFT REQUIREMENTS: NA

ADDITIONAL COMMENTS:

SPACE: Coaches office

FUNCTION: To supervise the stretching and conditioning of crew members.

AREA: 120 square feet

HARD REQUIREMENTS: An office desk, file cabinets, shelves, soft durable floor material.

SOFT REQUIREMENTS: Should show authority

ADDITIONAL COMMENTS:

SPACE: Managers office

FUNCTION: Should interact with interested parties, oversee the entire club.

AREA: 200 square feet

HARD REQUIREMENTS: An office desk, file cabinets, shelves, carpeted floor.

SOFT REQUIREMENTS: Should show authority and dignity. It should show overall imagery of the BRC.

ADDITIONAL COMMENTS:

SPACE: Multi-Purpose Hall

FUNCTION: An enclosed area that would be rented out to various functions (wedding receptions, regatta parties, Christmas parties...)

AREA: 1400 square feet

HARD REQUIREMENTS: Fireplace, movable tables and chairs, skylights, hard, non-slip floor surface.

SOFT REQUIREMENTS: Warm and inviting atmosphere

ADDITIONAL COMMENTS: Hall to be shared with other facilities in the Chesapeake Club.

SPACE: Public Toilets (men and women)

FUNCTION: Toilet facilities for all occupants of the club.

AREA: 300 square feet (150 each)

HARD REQUIREMENTS: Toilet stalls, urinals, water closets, lavatories. Non-slip, water resistant floor surfaces.

SOFT REQUIREMENTS: Clean and private

ADDITIONAL COMMENTS:

SPACE: Food preparation

FUNCTION: The preparation of food that may be served during a regatta.

AREA: 200 square feet

HARD REQUIREMENTS: Microwaves, dishwasher, stove, oven, built-in cabinets, sink. Non-slip floor material.

SOFT REQUIREMENTS: Clean

ADDITIONAL COMMENTS:

SPACE: Outdoor boat prep and dock

FUNCTION: the preparation of the boats before a regatta or the repair of boats.

AREA: 3500 square feet

HARD REQUIREMENTS: NA

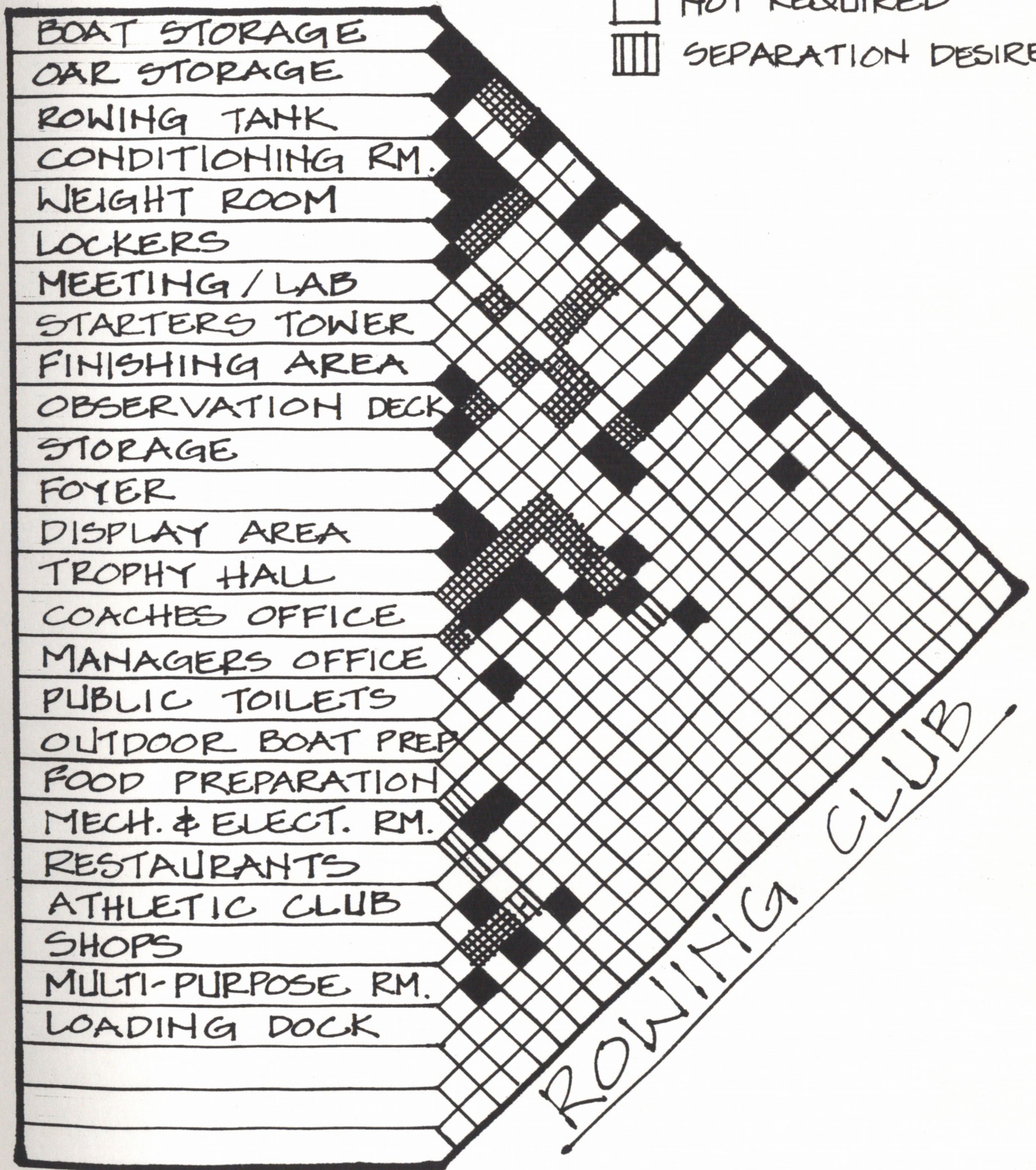
SOFT REQUIREMENTS: NA

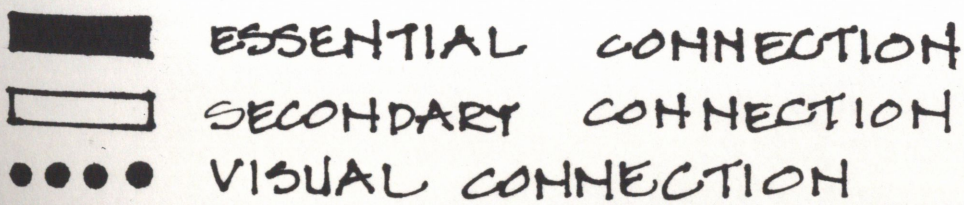
ADDITIONAL COMMENTS: Surface should be relatively flat but still allow for water drainage.

CHAPTER NOTES

1. Thomas C. Mendenhall, "The Race," Program for the U.S. Rowing National Championship Regatta, 1986, p. 6

- ADJACENCY REQUIRE
- ▣ PROXIMITY DESIRED
- NOT REQUIRED
- ▤ SEPARATION DESIRED





SPACE ANALYSIS FOR THE ATHLETIC CLUB

PROGRAM FOR ATHLETIC CLUB

1.	8 RACQUETBALL COURTS.....	6400	SQ FT
2.	5 SQUASH COURTS.....	4050	SQ FT
3.	SPORTS LOUNGE.....	1000	SQ FT
4.	OBSERVATION DECK.....	1200	SQ FT
5.	WEIGHT ROOM.....	4000	SQ FT
6.	EXERCISE BICYCLES.....	200	SQ FT
7.	SMALL GYMNASIUM.....	9000	SQ FT
8.	AEROBIC ROOM.....	2000	SQ FT
9.	INDOOR POOL.....	8800	SQ FT
10.	LOCKER ROOM (MEN AND WOMEN).....	4610	SQ FT
	A. Sauna.....	100	sq ft
	B. Steam room.....	100	sq ft
	C. Whirlpool.....	125	sq ft
	D. Lockers.....	550	sq ft
	E. Make-up area.....	200	sq ft
	F. Showers.....	450	sq ft
	G. Toweling area.....	400	sq ft
	H. Toilets (women).....	300	sq ft
	(men).....	220	sq ft
	I. Lavatories.....	120	sq ft
11.	NURSERY/DAY CARE.....	450	SQ FT
12.	TENNIS COURTS.....	8000	SQ FT
13.	KITCHEN.....	500	SQ FT
14.	SNACK BAR/BAR.....	2500	SQ FT
15.	RECEPTION.....	200	SQ FT
16.	PRO SHOP.....	150	SQ FT
17.	3 TANNING ROOMS.....	360	SQ FT
18.	WELLNESS CLINIC ROOM.....	300	SQ FT

19. OFFICES.....540 SQ FT

2 offices at 120 sq ft

2 offices at 150 sq ft

20. 2 SECRETARIES.....300 SQ FT

21. CONFERENCE ROOM.....325 SQ FT

22. LAUNDRY.....200 SQ FT

23. STORAGE.....300 SQ FT

24. POOL ROOM.....200 SQ FT

25. 5 JANITOR CLOSETS.....250 SQ FT

SUB-TOTAL.....50,835 SQ FT

25. HVAC AND ELECTRICAL (5 %).....2540 SQ FT

SUB-TOTAL.....53,375 SQ FT

26. CIRCULATION.....5400 SQ FT

TOTAL SQ FT.....58,775 SQ FT

SPACE: Racquetball courts

FUNCTION: NA

AREA: 6400 square feet (eight courts at 800 sq ft each).

HARD REQUIREMENTS: Walls of laminated panels and shatterproof glass. Floors of hardwood.

SOFT REQUIREMENTS: NA

ADDITIONAL COMMENTS: Ceiling height is 20'-0"

SPACE: Squash courts

FUNCTION: NA

AREA: 4050 square feet (three single courts at 600 sq ft each and two double courts at 1125 sq ft each).

HARD REQUIREMENTS: Walls of laminated panels and shatterproof glass. Floors of hardwood.

SOFT REQUIREMENTS: NA

ADDITIONAL COMMENTS: Ceiling height for single courts--16'-0"
Ceiling height for double courts--20'-0"

SPACE: Sports Lounge

FUNCTION: For the view of court activities

AREA: 1000 square feet

HARD REQUIREMENTS: Carpeted area, durable wall surfaces, temporary bleachers

SOFT REQUIREMENTS: Should encourage participation of court activities.

ADDITIONAL COMMENTS:

SPACE: Observation Deck

FUNCTION: The observation of court activities from above the courts.

AREA: 1200 square feet

HARD REQUIREMENTS: Carpeted area, durable surfaces.

SOFT REQUIREMENTS: NA

ADDITIONAL COMMENTS:

SPACE: Weight room

FUNCTION: Promote muscular development

AREA: 4000 square feet

HARD REQUIREMENTS: Impact resistant flooring, full length mirrors, barbell and weight racks.

SOFT REQUIREMENTS: Clean and uplifting space.

ADDITIONAL COMMENTS: Minimum ceiling height of 15'-0". Provisions for 37 Nautilus machines, free weights.

SPACE: Exercise Bicycles

FUNCTION: To allow a separate space for the riding of exercise bicycles.

AREA: 200 square feet

HARD REQUIREMENTS: Bicycles, provisions for magazines and books. Carpeted area.

SOFT REQUIREMENTS: Clean and encouraging space

ADDITIONAL COMMENTS:

SPACE: Small gymnasium

FUNCTION: To allow activities such as basketball, volleyball and badmitten.

AREA: 9000 square feet

HARD REQUIREMENTS: Hard wood floors, durable walls, basketball hoops, provisions for volleyball nets.

SOFT REQUIREMENTS: Promote excitement

ADDITIONAL COMMENTS: Minimum ceiling height 24'-0"

SPACE: Aerobic room

FUNCTION: Promote cardiovascular activity

AREA: 2000 square feet

HARD REQUIREMENTS: Rubberized athletic mat underneath carpet, full lenght mirrors, ballet bar, stereo sound system.

SOFT REQUIREMENTS: A spiritual, uplifting space

ADDITIONAL COMMENTS:

SPACE: Indoor pool

FUNCTION: Promote cardiovascular activity

AREA: 8800 square feet

HARD REQUIREMENTS: Swimming pool facility. Non-slip, water resistant surface, skylight.

SOFT REQUIREMENTS: Warm, inviting, greenhouse atmosphere

ADDITIONAL COMMENTS: Adjustable panels in the ceiling to allow natural sunlight. Minimum ceiling heighth--20'-0".

SPACE: Locker room (men and women)
FUNCTION: To provide shower and toilet facilities
AREA: 4610 square feet
HARD REQUIREMENTS: Sauna, steam room, whirlpool, lockers, make-up area, toilet, lavatories, showers, towel rooms, changing stalls. Water-resistant, non-slip floor in showers, carpeted area around lockers.
SOFT REQUIREMENTS: A clean environment
ADDITIONAL COMMENTS:

SPACE: Nursery/Day care
FUNCTION: To provide the care of children during peak hours.
AREA: 450 square feet
HARD REQUIREMENTS: Children's play equipment, cribs, play pens, changing tables
SOFT REQUIREMENTS: Warm and playful environment
ADDITIONAL COMMENTS:

SPACE: Tennis courts
FUNCTION: Outdoor court play to provide cardiovascular activity.
AREA: 8000 square feet (two courts)
HARD REQUIREMENTS: Durable surface materials
SOFT REQUIREMENTS: NA
ADDITIONAL COMMENTS: Courts require 12'-0" between adjacent sidelines.

SPACE: Kitchen

FUNCTION: Provide a cooking area for the snack bar

AREA: 500 square feet

HARD REQUIREMENTS: Tables, chairs, kitchen and bar facilities, mirrors, vinyl wall coverings, carpeted floors.

SOFT REQUIREMENTS: Relaxing area, full of excitement.

ADDITIONAL COMMENTS:

SPACE: Reception

FUNCTION: To provide members with a control point in the facility.

AREA: 200 square feet

HARD REQUIREMENTS: Counter, cash register area. Carpeted floor.

SOFT REQUIREMENTS: Friendly and inviting area

ADDITIONAL COMMENTS:

SPACE: Pro Shop

FUNCTION: For the sale of goods

AREA: 150 square feet

HARD REQUIREMENTS: Display cases and shelves and cash register.

SOFT REQUIREMENTS: Promotional space

ADDITIONAL COMMENTS:

SPACE: Tanning Rooms
FUNCTION: Tanning of the skin
AREA: 360 square feet (120 sq ft per room)
HARD REQUIREMENTS: Tanning beds, clothes hook, fan, stereo.
Easily cleanable surfaces.
SOFT REQUIREMENTS: NA
ADDITIONAL COMMENTS:

SPACE: Wellness clinic rooms
FUNCTION: To promote the understanding of fitness by
careful study of oneself.
AREA: 300 square feet
HARD REQUIREMENTS: Desk, furniture, blood drawing area,
instructional area. Carpeted area.
SOFT REQUIREMENTS: Provide a warm, comforting area.
ADDITIONAL COMMENTS:

SPACE: Offices (4)
FUNCTION: Management of the club
AREA: 540 square feet (two at 120 sq ft each, two
at 150 sq ft each)
HARD REQUIREMENTS: Desk area, file cabinets, vinyl wall
covering, carpeted floors.
SOFT REQUIREMENTS: Friendly, pleasant environment.
ADDITIONAL COMMENTS:

SPACE: 2 Secretaries

FUNCTION: Aid in the production of the club

AREA: 300 square feet

HARD REQUIREMENTS: Office desks, file cabinets, computers.
Vinyl wall covering, carpeted floor.

SOFT REQUIREMENTS: Friendly, pleasant environment.

ADDITIONAL COMMENTS:

SPACE: Conference room

FUNCTION: For employee meetings

AREA: 325 square feet

HARD REQUIREMENTS: Conference tables, chairs, coffee bar. Vinyl
wall covering and carpeted floor.

SOFT REQUIREMENTS: pleasant atmosphere

SPACE: Laundry

FUNCTION: Cleaning of towels

AREA: 200 square feet

HARD REQUIREMENTS: Washing and drying machines (commercial),
folding tables, hamper area. Non-slip, water
resistant floor surface.

SOFT REQUIREMENTS:

ADDITIONAL COMMENTS:

SPACE: Storage

FUNCTION: Storage of various equipment throughout the athletic club.

AREA: 300 square feet

HARD REQUIREMENTS: Adjustable shelves, storage bins. Non-slip, water resistant surfaces.

SOFT REQUIREMENTS: NA

ADDITIONAL COMMENTS:

SPACE: Pool room

FUNCTION: Shelter of pool equipment

AREA: 200 square feet

HARD REQUIREMENTS: Mechanical equipment necessary for the operation of the pool.

SOFT REQUIREMENTS: NA

ADDITIONAL COMMENTS:

SPACE: Janitor closets (5)

FUNCTION: Provide the storage of cleaning equipment.

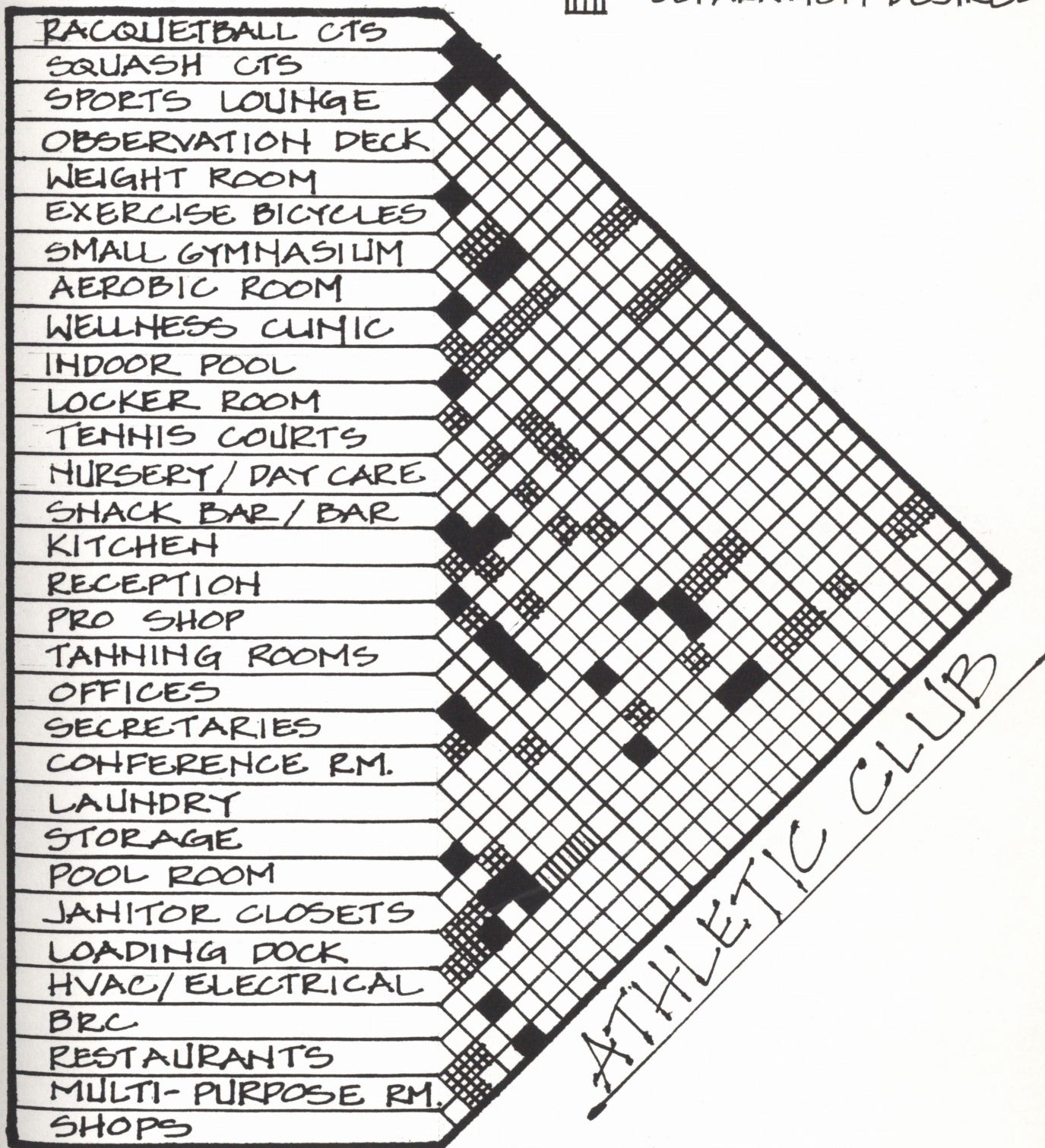
AREA: 250 (five closets at 50 sq ft each)

HARD REQUIREMENTS: Mop sink. Non-slip, water-resistant floor surface.

SOFT REQUIREMENTS: NA

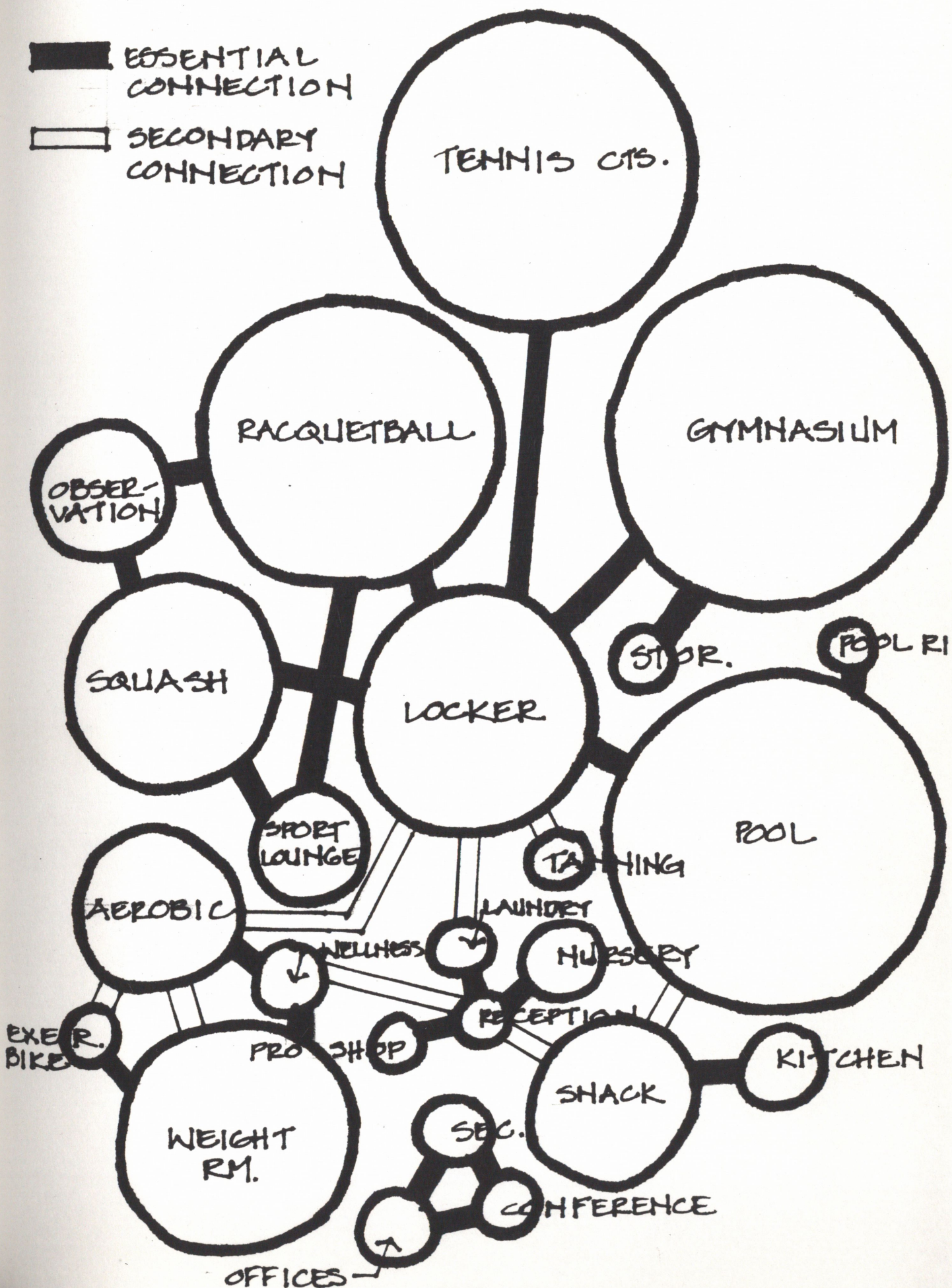
ADDITIONAL COMMENTS:

-  ADJACENCY REQUIRED
-  PROXIMITY DESIRED
-  NOT REQUIRED
-  SEPARATION DESIRED



■ ESSENTIAL CONNECTION

□ SECONDARY CONNECTION



SPACE ANALYSIS FOR THE RESTAURANTS AND SHOPS

TOTAL RESTAURANT SQUARE FOOTAGE

PRIVATE RESTAURANT.....	8605 SQ FT
PUBLIC RESTAURANT.....	4785 SQ FT
SHARED FACILITIES.....	7700 SQ FT
SUB-TOTAL.....	21,090 SQ FT
5% MECHANICAL.....	2100 SQ FT
TOTAL SQ FT.....	23,190 SQ FT

PROGRAM FOR PRIVATE RESTAURANT

1. ENTRY.....	200 SQ FT
2. COAT ROOM.....	125 SQ FT
3. LOUNGE.....	100 SQ FT
4. CASHIER.....	50 SQ FT
5. WASHROOMS.....	500 SQ FT
6. MAIN DINING.....	4000 SQ FT
7. BAR WITH LOUNGE.....	1500 SQ FT
8. BAR STORAGE.....	500 SQ FT
9. EMPLOYEE LOCKER.....	800 SQ FT
10. JANITOR CLOSET.....	50 SQ FT
SUB-TOTAL.....	7825 SQ FT
10. CIRCULATION (10 %).....	780 SQ FT
TOTAL.....	8605 SQ FT

PUBLIC SHOPS

SHOPS OF DIFFERENT SIZES.....30,000 SQ FT

OFFICES

OFFICES OF DIFFERENT SIZES.....10,000 SQ FT

MULTI-PURPOSE HALL

MULTI-PURPOSE HALL.....5,000 SQ FT

PUBLIC RESTAURANTS

1.	ENTRY.....	200 SQ FT
2.	LOUNGE.....	75 SQ FT
3.	CASHIER.....	50 SQ FT
4.	WASHROOMS.....	350 SQ FT
5.	MAIN DINING.....	1600 SQ FT
6.	BAR WITH LOUNGE.....	1000 SQ FT
7.	BAR STORAGE.....	400 SQ FT
8.	EMPLOYEES LOCKERS.....	625 SQ FT
9.	JANITOR CLOSET.....	50 SQ FT
10.	KITCHEN.....	*

SUB-TOTAL.....4350 SQ FT

11. CIRCULATION (10 %).....435 SQ FT

TOTAL SQ FT.....4785 SQ FT

* Kitchen to be shared with private restaurant. Provisions in the design stage may require the kitchen facilities to eventually be separated.

SHARED RESTAURANT FACILITIES

1.	LINEN STORAGE.....	200	SQ	FT
2.	LAUNDRY.....	200	SQ	FT
3.	TRASH COMPACTOR.....	150	SQ	FT
4.	KITCHEN FACILITIES.....	6450	SQ	FT
A.	Chefs office.....	300	sq	ft
B.	Managers office.....	200	sq	ft
C.	Dry Storage.....	700	sq	ft
D.	Food prep and cooking....	3000	sq	ft
E.	Dish washing.....	350	sq	ft
F.	Storage.....	1000	sq	ft
G.	Walk-in freezer.....	300	sq	ft
H.	Walk-in refrigerator.....	300	sq	ft
I.	Walk-in meat storage.....	300	sq	ft

5. JANITOR CLOSET.....50 SQ FT

SUB-TOTAL.....7000 SQ FT

6. CIRCULATION.....700 SQ FT

TOTAL SQ FT.....7700 SQ FT

PRIVATE RESTAURANT

SPACE: Entry

FUNCTION: Provide a transition from outside to the interior.

AREA: 200 square feet

HARD REQUIREMENTS: Floor surface resistant to water and non-slip. Skylights.

SOFT REQUIREMENTS: Warm and inviting

ADDITIONAL COMMENTS:

SPACE: Coat room

FUNCTION: Storage of coats and hats

AREA: 125 square feet

HARD REQUIREMENTS: Coat racks and hat storage

SOFT REQUIREMENTS: NA

ADDITIONAL COMMENTS:

SPACE: Lounge

FUNCTION: Provide a separate space to wait to be seated.

AREA: 100 square feet

HARD REQUIREMENTS: Soft, comfortable chairs. Non-slip and water-resistant floors.

SOFT REQUIREMENTS: Warm, friendly, and pleasant.

ADDITIONAL COMMENTS:

SPACE: Cashier

FUNCTION: Provide a place to pay for meals and buy cigarettes, gum, and mints.

AREA: 50 square feet

HARD REQUIREMENTS: Cash register, display case.

SOFT REQUIREMENTS: Distinguishable space

ADDITIONAL COMMENTS:

SPACE: Main Dining

FUNCTION: Provide for the necessary daily function of eating.

AREA: 4000 square feet

HARD REQUIREMENTS: Movable tables and chairs, water fountain, skylights, mirrors.

SOFT REQUIREMENTS: Ambience of the Rowing Club. Warm, exciting place.

ADDITIONAL COMMENTS: Provisions for a seating capacity of 200 should provide outdoor dining facilities over-looking the rowing club.

SPACE: Washrooms

FUNCTION: Provide toilet facilities to the users.

AREA: 500 square feet

HARD REQUIREMENTS: Non-slip water resistant floor surfaces, water closets, lavatories. Couches and counter space for a lounge located in the washroom.

SOFT REQUIREMENTS: Clean environment

ADDITIONAL REQUIREMENTS:

SPACE: Bar with lounge

FUNCTION: Provide members with a drinking establishment for social purposes.

AREA: 1500 square feet

HARD REQUIREMENTS: Bar counter, stools, movable tables, chairs, planters, proper storage of liquor behind bar, mirrors, skylights.

SOFT REQUIREMENTS: Ambience of rowing club, warm pleasant atmosphere.

ADDITIONAL COMMENTS: Should provide enough seating for 50 people.

SPACE: Bar storage

FUNCTION: Provide the storage of liquor, glasses, and allow for washing of glasses.

AREA: 500 square feet

HARD REQUIREMENTS: Dishwashers, glass storage racks, storage shelves for liquor, walk-in refrigerator, small freezer, ice machine.

SOFT REQUIREMENTS: NA

ADDITIONAL COMMENTS:

SPACE: Employee locker

FUNCTION: Provide an area for employees to change into work clothes.

AREA: 800 square feet

HARD REQUIREMENTS: Locker and toilet facilities. Non-slip floor surface.

SOFT REQUIREMENTS: Clean environment

ADDITIONAL COMMENTS:

PUBLIC RESTAURANT

SPACE: Entry

FUNCTION: Provide a place of beginning

AREA: 100 square feet

HARD REQUIREMENTS: Non-slip and water-resistant floor surface.
Skylights

SOFT REQUIREMENTS: Cheerful and warm space.

ADDITIONAL COMMENTS:

SPACE: Lounge

FUNCTION: To provide a place to sit while waiting to be seated.

AREA: 75 square feet

HARD REQUIREMENTS: Soft, comfortable chairs, non-slip surface, water-resistant floors.

SOFT REQUIREMENTS: Warm, pleasant and friendly space.

ADDITIONAL COMMENTS:

SPACE: Cashier

FUNCTION: Provide a place to pay for meals, and buy cigarettes, gum, and mints.

AREA: 50 square feet

HARD REQUIREMENTS: Cash register and display case.

SOFT REQUIREMENTS: Distinguishable space

ADDITIONAL COMMENTS:

SPACE: Washrooms

FUNCTION: Provide toilet facilities to the users.

AREA: 350 square feet

HARD REQUIREMENTS: Non-slip and water-resistant floor surface. Water closets, lavatories, couches, and counters for the lounge area.

SOFT REQUIREMENTS: Clean environment

ADDITIONAL COMMENTS:

SPACE: Main dining

FUNCTION: Provide the necessary daily function of eating

AREA: 1600 square feet

HARD REQUIREMENTS: Movable tables and chairs, water fountain, skylights, mirrors. Carpeted floor.

SOFT REQUIREMENTS: Pleasant ambience. Warm and exciting place.

ADDITIONAL COMMENTS: Provisions for a seating capacity of 100 should be provided. Outdoor eating is also desired.

SPACE: Bar with lounge

FUNCTION: To serve as a drinking facility.

AREA: 1000 square feet

HARD REQUIREMENTS: Bar counter, stools, movable tables, chairs, planters, proper storage of liquor behind bar, mirrors, skylights.

SOFT REQUIREMENTS: Warm and pleasant ambience.

ADDITIONAL COMMENTS: Should provide enough seating for 50 people.

SPACE: Bar storage

FUNCTION: Provide the storage of liquor, glasses and allow for washing of glasses.

AREA: 400 square feet

HARD REQUIREMENTS: Dishwashers, glass storage, racks, storage shelves for liquor, walk-in refrigerator, small freezer, ice machine.

SOFT REQUIREMENTS:

ADDITIONAL COMMENTS:

SPACE: Employees lockers

FUNCTION: Provide places to change as well as toilet facilities.

AREA: 625 square feet

HARD REQUIREMENTS: Lockers, carpeted floor, lavatories, toilets. Non-slip floor surface.

SOFT REQUIREMENTS: Clean environment

ADDITIONAL COMMENTS: Provide facilities for 25 employees.

SPACE:

SHARED RESTAURANT FACILITIES

FUNCTION:

SPACE:

Linen storage

AREA:

FUNCTION:

Provide the storage of linen for both restaurants.

HARD REQUIREMENTS:

AREA:

200 square feet

SOFT REQUIREMENTS:

HARD REQUIREMENTS:

Storage shelves

ADDITIONAL:

SOFT REQUIREMENTS:

Clean space

ADDITIONAL COMMENTS:

SPACE:

Laundry

FUNCTION:

Provide temporary storage of dirty linen

AREA:

200 square feet

HARD REQUIREMENTS:

Laundry bins (separate bins for each restaurant).

ADDITIONAL COMMENTS:

SPACE:

Trash compactor room

FUNCTION:

Disposal of garbage

AREA:

150 square feet

HARD REQUIREMENTS:

Trash compactor

SOFT REQUIREMENTS:

NA

ADDITIONAL COMMENTS:

SPACE: Kitchen facilities

FUNCTION: Provide the preparation of food.

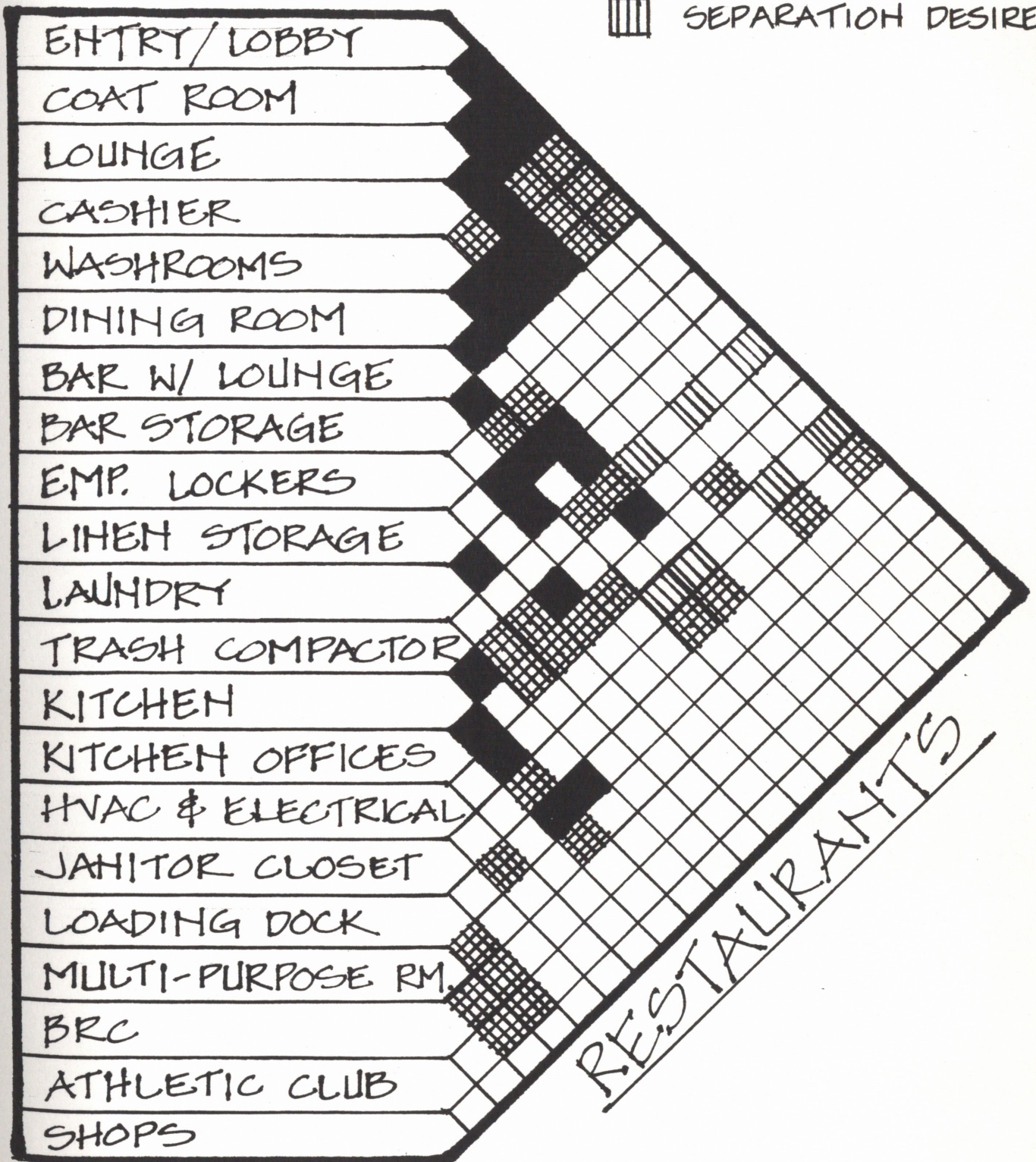
AREA: 6450 square feet

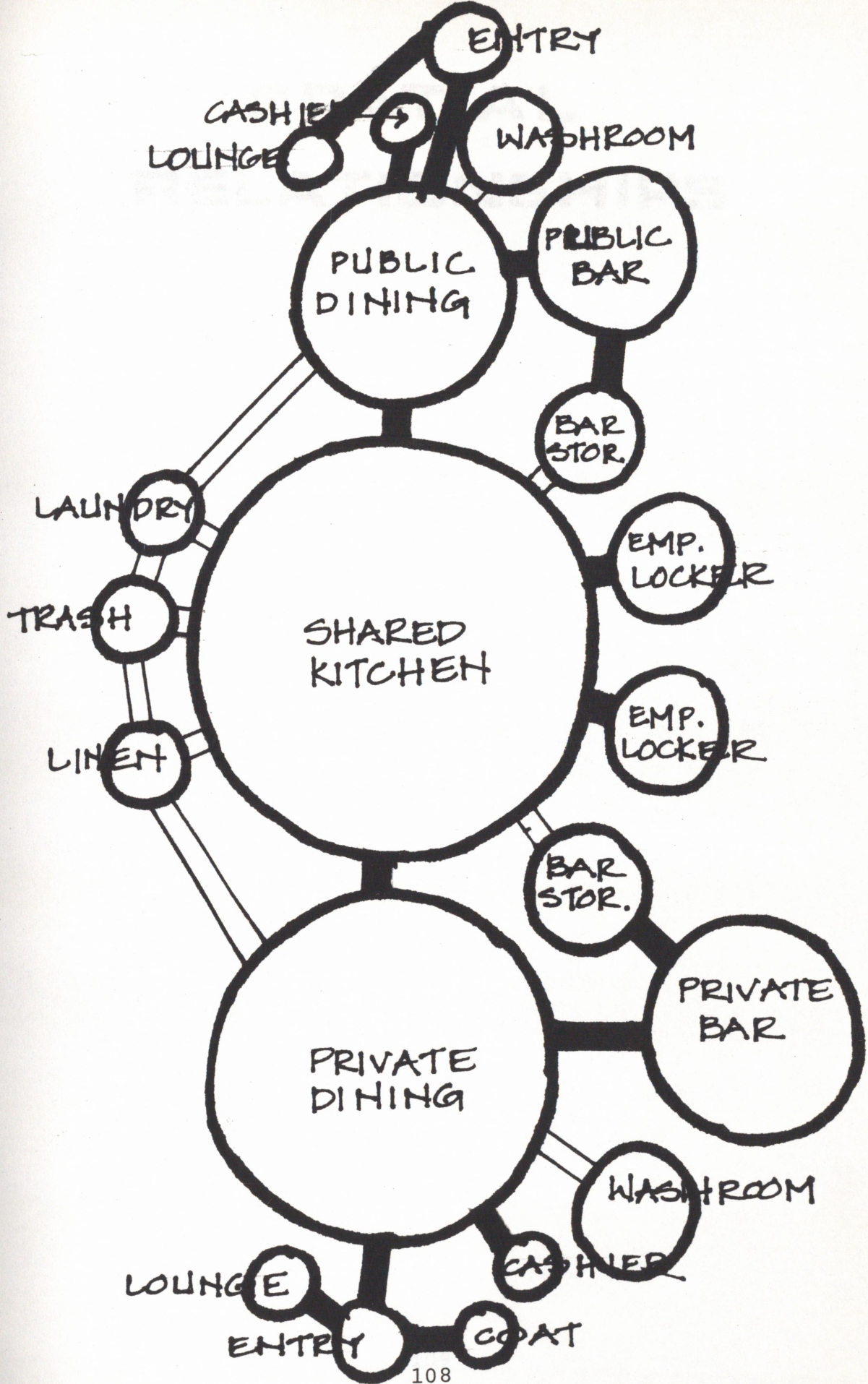
HARD REQUIREMENTS: Kitchen equipment (stoves, ovens, counters...). Non-slip floor surface.

SOFT REQUIREMENTS: Clean environment

ADDITIONAL COMMENTS:

- ADJACENCY REQUIRE
- ▣ PROXIMITY DESIRED
- NOT REQUIRED
- ▤ SEPARATION DESIRED





SPATIAL RELATIONSHIPS

SPATIAL RELATIONSHIPS

The relationships of the various building types are essential to the success of the Chesapeake Club (see page 113 and 114). Important considerations must be given to the placement of facilities and the impact of its location to the public and private users of the club.

THE BALTIMORE ROWING CLUB (BRC):

The location of the rowing club to the water is essential and necessary. Thought must be given to the southwesterly winds and the placement of the club house. Other factors influencing the location of the club is accessibility to the multi-purpose hall for social functions. The public should be allowed to watch the procession that takes place from the boat house to the launch of the shells and vice-versa. The restaurants and their important visual connection are also considerations in the placement of the club.

THE ATHLETIC CLUB (A):

The athletic club, although important for the professionals of the harbor, has no direct need for visual connection to the harbor itself. A connection to the Multi-Purpose Hall is necessary for social functions the club may have. Similarities in the athletic club and the rowing club suggest that there may be a desire for a relationship, although this is not necessary.

RESTAURANTS (R):

The connection of the restaurants to the site is important. The restaurants want to take advantage of the harbor views. The private restaurant needs a visual contact to the rowing club. The location of the multi-purpose hall to the restaurants is desirable in terms of sharing the kitchen facilities.

MULTI-PURPOSE HALL (M):

The placement of the Multi-Purpose Hall is best centrally located to the restaurants, Baltimore Rowing Club and the athletic club. The latter two occasionally will hold social functions where the hall will be used. The kitchen in the restaurants will be used to prepare the food, suggesting a possible direct link between the facilities; however, a separate kitchen facility may be needed as determined by the final design outcome.

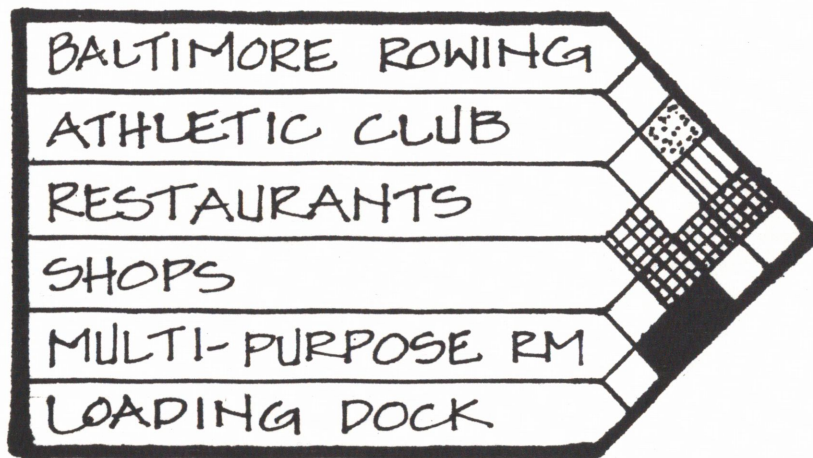
SHOP (S):

The location of the shops should be strategically located where public participation is desired. Relationship to the restaurants is possible and would help add excitement to the restaurant facilities.

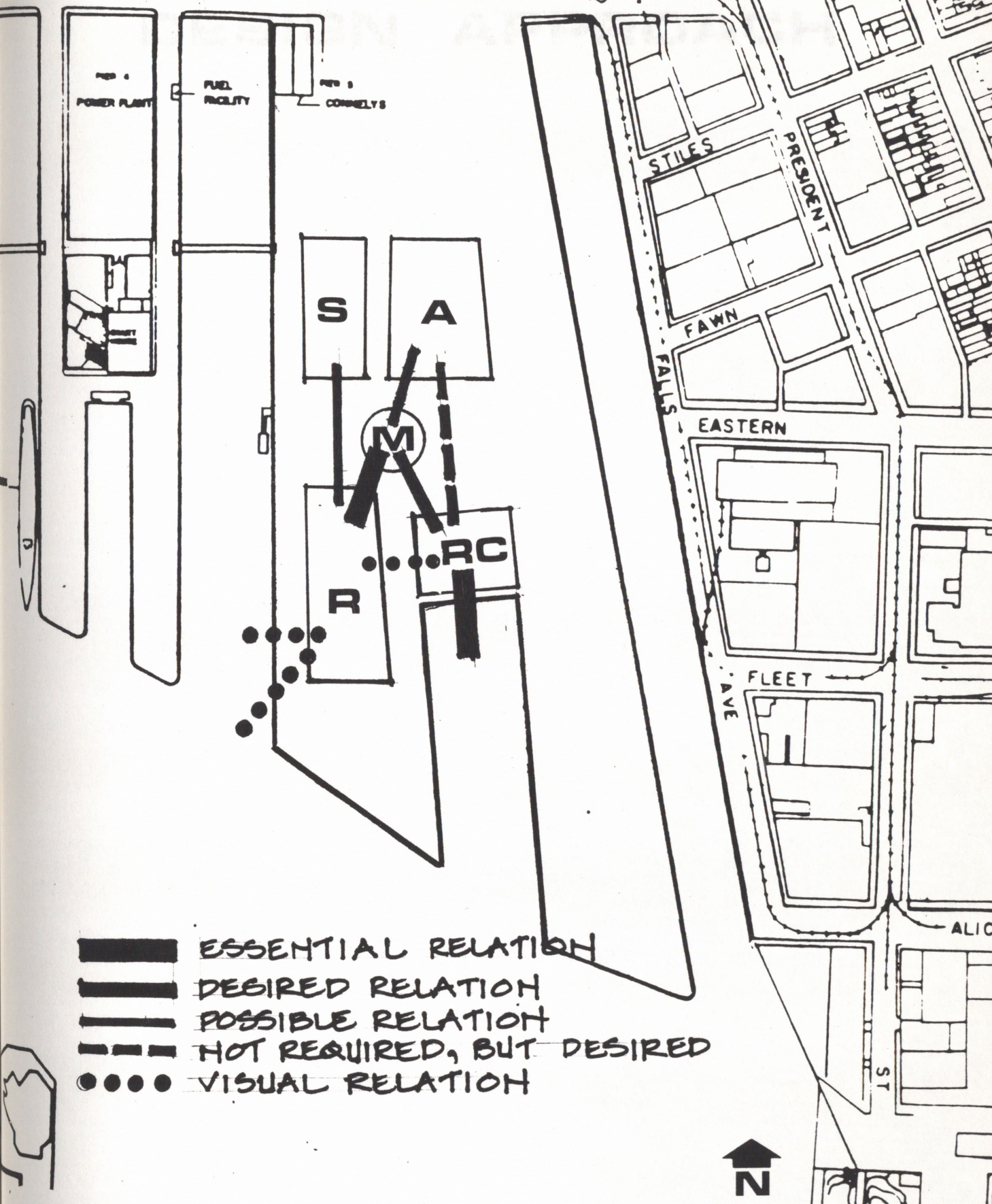
OFFICES:

Private office spaces will be incorporated into the club as desired. There is no special relationship to the other facilities of the Chesapeake Club.

	ADJACENCY REQUIRED
	PROXIMITY DESIRED
	NOT REQUIRED
	SEPARATION DESIRED
	VISUAL PROXIMITY



ALL FACILITIES



DESIGN APPROACH

DESIGN APPROACH

A contextual design approach is intended to be taken with the Chesapeake Club. It is important to relate the imagery of the surrounding harbor buildings to the proposed club in order to continue the excitement and ambience currently found around the Inner Harbor (see Appendix D).

The citizens of Baltimore are proud of the Inner Harbor area. The proposal for a new building on a prominent site of the Baltimore harbor would be expected by the people to be as exciting and stimulating as those buildings found throughout the harbor.

The two buildings adjacent to the proposed Chesapeake Club make strong statements of their own, yet are contrasting in style. To the east of the site is the Concert Pavilion (see Appendix D). This is a permanent free-form structure that is the home of many spring and summer concerts. The "tent-like" structure serves as protection from the elements. The building to the west of the site is the National Aquarium (see Appendix D). The design of the aquarium is based on geometric shapes. Pier 4, immediately adjacent to the proposed site is currently being planned as an expansion for the aquarium. It is assumed in this thesis project, that the expansion will also use strong geometric shapes.

The intended design solution for the Chesapeake Club is to relate the "free-form" Concert Pavilion and the geometric shapes found in the National Aquarium into a structure that would become the "stepping stone" from one building to another. The emphasis of the Baltimore Rowing Club in this project suggests that perhaps the rowing club stands alone having its own identity, while the rest of the Chesapeake Club takes on another. The thought of a racing shell as a light and delicate piece of art will become the metaphor used for the rowing club. An appropriate conceptual word relating to the rest of the facilities is **connection**. Connection throughout is necessary in relating the buildings to the site. The following is a list of connections that could be used in the design phase of the Chesapeake Club.

1. Connection to the water
2. Connection of public domain to the site
3. Connection of buildings by bridging
4. Connection of the "Harbor Walk"
5. Pedestrian connection throughout the site
6. Visual connection from the entry onto the site to the harbor water
7. Connection to the parking structure
8. Connection of public shops to the public restaurant
9. Connection of the rowing club to the harbor
10. Connection of the rowing club to the multi-purpose hall
11. Connection of the rowing club to the private restaurant

12. Connection of the rowing club to the athletic club
13. Connection of the offices to the private restaurant
14. Connection of the athletic club to the multi-purpose hall
15. Connection of the athletic club to the private restaurant
16. Connection of public spaces to the harbor
17. Visual connection of the private restaurant to the rowing club
18. Visual connection of the private restaurant to the harbor
19. Visual connection of the public restaurant to the harbor

The combination of a "light and delicate" structure and "connection" as metaphors should provide a challenging yet intriguing solution for the Chesapeake Club.

Note: The final design solution is documented through slides in Appendix E.

CODE INFORMATION

ZONING CODE SUMMARY

The following zoning code information is a summary of the Zoning Ordinance of Baltimore City published in 1984 (with amendments to February 1986).

FLOOR AREA RATIO:

The proposed site sits in a B-5-2 zoning district in Baltimore City (see zoning map, page 124). The maximum floor area ratio allowed is 8.0. However, premiums are allowed to alter this figure.

1. On a lot where the first story above grade is set back at least 20 feet from the lot line for the entire frontage of the lot on a public street, a premium of 2.0 for each such street setback may be added to the basic floor area ratio--provided that the lot area within such 20-foot setback shall be suitably paved or landscaped, or both, and supporting upper stories or a roof. However, if in addition to the first story, all other stories above grade shall be so set back for at least 20 feet, such premium may be increased to 2.5 for such setback.
2. On a lot where the structure from ground level up is set back from one or more lot lines, a premium equal to three times the open area of the lot at ground level divided by the gross lot area may be added to the basic floor area ratio; such open area shall include all lot area at ground level open directly to the sky and extending between exterior structure walls and lot lines for a distance of at least eight feet.
3. On a lot, for each floor above the ground floor which is set back from one or more lot lines, a premium of equal to 0.4 times the open area of the lot at the level of such floor divided by the gross lot area may be added to the basic floor area ratio; such open area shall include all area open directly to the sky and extending between exterior structure walls and lot lines in a horizontal plane containing the subject floor for a distance of at least eight feet.

- *. No floors exceeding the basic floor area ratio limits established and added to a structure by virtue of unused basic floor area ratio of by virtue of floor area ratio premiums shall in turn serve as a basis for creating additional premiums.

PARKING:

There is no additional parking required for the building types proposed in this facility.

SIGNAGE:

No sign or advertising structure may be erected that it may interfere with traffic. The words, "Stop," "Look," "Danger," or any other word, phrase, symbol, or character may be used so that confusion could be created. No sign can project beyond the street line.

No sign can have a flashing, blinking, fluctuating sign (with the exception of theatre marquees, newscast screens, and signs which show the time of day, temperature and weather forecast. Business, identification, and nameplate signs should use the following requirements for signage:

Area factor:	5
Maximum Projection:	4 feet*
Height extension above roof line attached to building:	20 feet
Height for free standing:	36 feet

* Except a canopy or awning, provided it contains no sign other than an identification sign placed flat against a face of such a canopy or awning, and shall not extended beyond any edge of such face. Signs designating public parking facilities shall not project more than five feet across a street line.

The building height requirements of the district in which the development is located may be inapplicable when specifically approved as part of the development plan. The floor area ratio requirements of the district are applicable to the entire planned development and not to specific uses which may be located within the planned development--except that qualifications for a gross density premium shall increase the floor area ratio by an equal percentage. For this purpose, the net site area of the planned development shall be used in the computation. Further, the net site area shall be deemed to include fountains, reflecting pools, lakes, and similar water areas within such planned development.

NOTE ON BUILDING HEIGHT:

The site for the Chesapeake Club is located in the Inner Harbor East. Currently the development of the area is in the planning stages. The most recent studies for the plan calls for the buildings around the water's edge to be three to four stories in height, and most of the buildings behind those on the waterfront to be six stories in height¹ (see page 125).

FLOOD PLAIN REGULATION BUILDING CODE SUMMARY

Construction for possible floods must be considered. The Baltimore City has adopted BOCA Basic/National Building Code, 9th Edition, 1984 to set the standards for construction. There are certain amendments, deletions, and additions throughout the BOCA Code that have been necessary. They have been acknowledged in the Building Code of Baltimore City. The following information is a summary of pertinent information of the code as it relates to the proposed project on Pier 5.

FIRE LIMITS (see map, page 126):

All buildings and structures erected in the fire zone (including Pier 5) must be of fireproof (Type 1), protected non-combustible (Types 2A and 2B), heavy timber (Type 4), or ordinary protected (Type 3A).

Unprotected noncombustible (Type 2C), ordinary unprotected (Type 3B), or protected frame (Type 4) construction is permitted when the following requirements are met.

NATURAL LIGHT AND NATURAL VENTILATION:

The amount of aggregate glass should not be less than 10% of the floor area served. At least half of this required area is to be available for unobstructed ventilation.

FLOOD PLAIN REGULATIONS:

Construction for possible floods must be considered. The following improvements or constructions are prohibited:

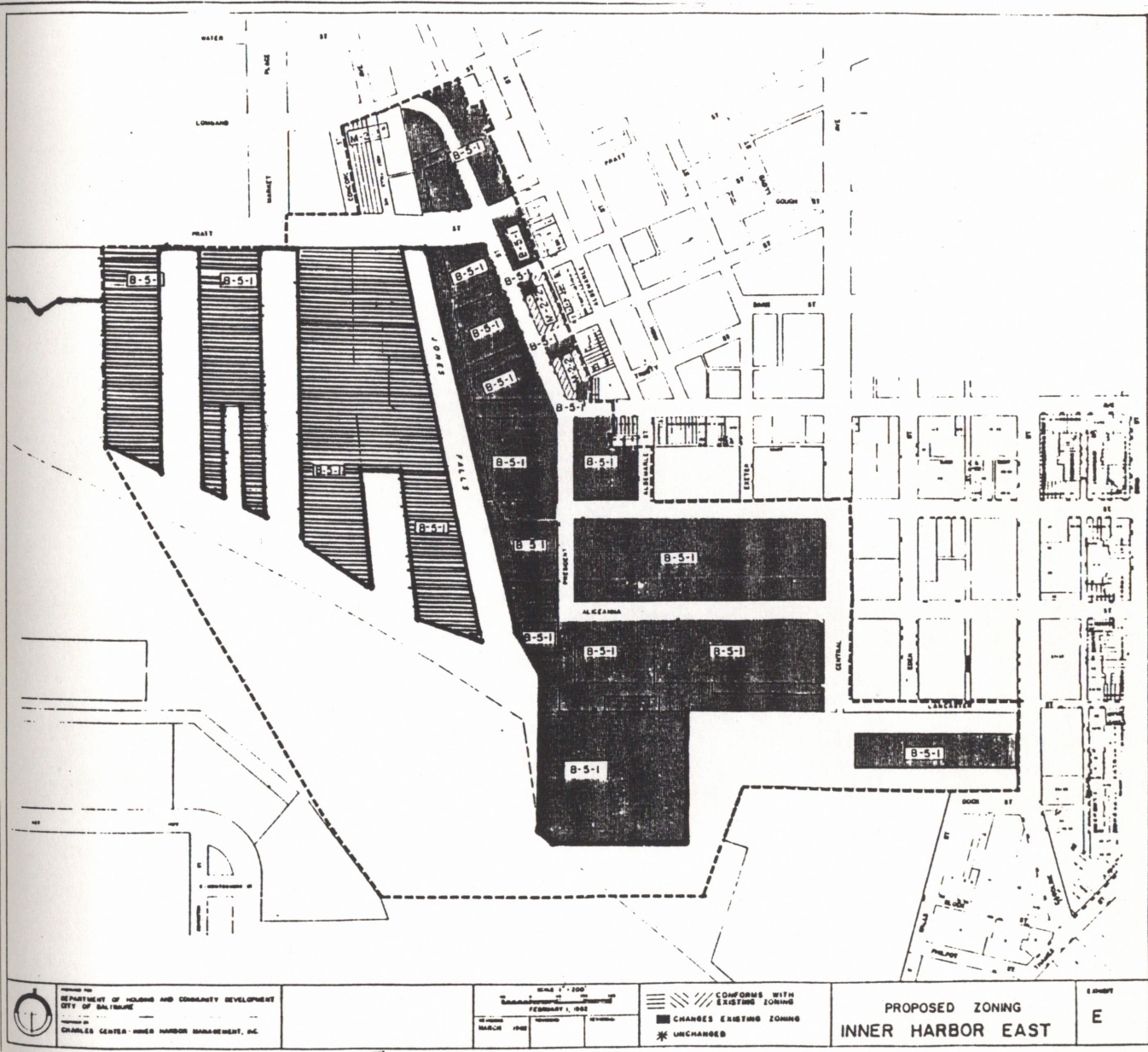
1. Fill, buildings, development or other encroachments which would result in any increase in flood levels during the occurrence of the base flood discharge.
2. Substantial improvements to existing non-conforming structures and/or uses.
3. Fences or walls.
4. Other construction, temporary or permanent, including landscaping, which may impede, retard or change the direction of the flow of water of that will catch or collect debris carried by such water, or that is placed where the natural flow of the stream or flood waters would carry the same downstream to the damaged or detriment of public or private property adjacent to the flood plain.
5. Cesspools, septic tanks, seepage pits and any private waste disposal system.
6. Any new development, except stream bank stabilization work and utility installation and reconstruction subject to the requirements of the code.

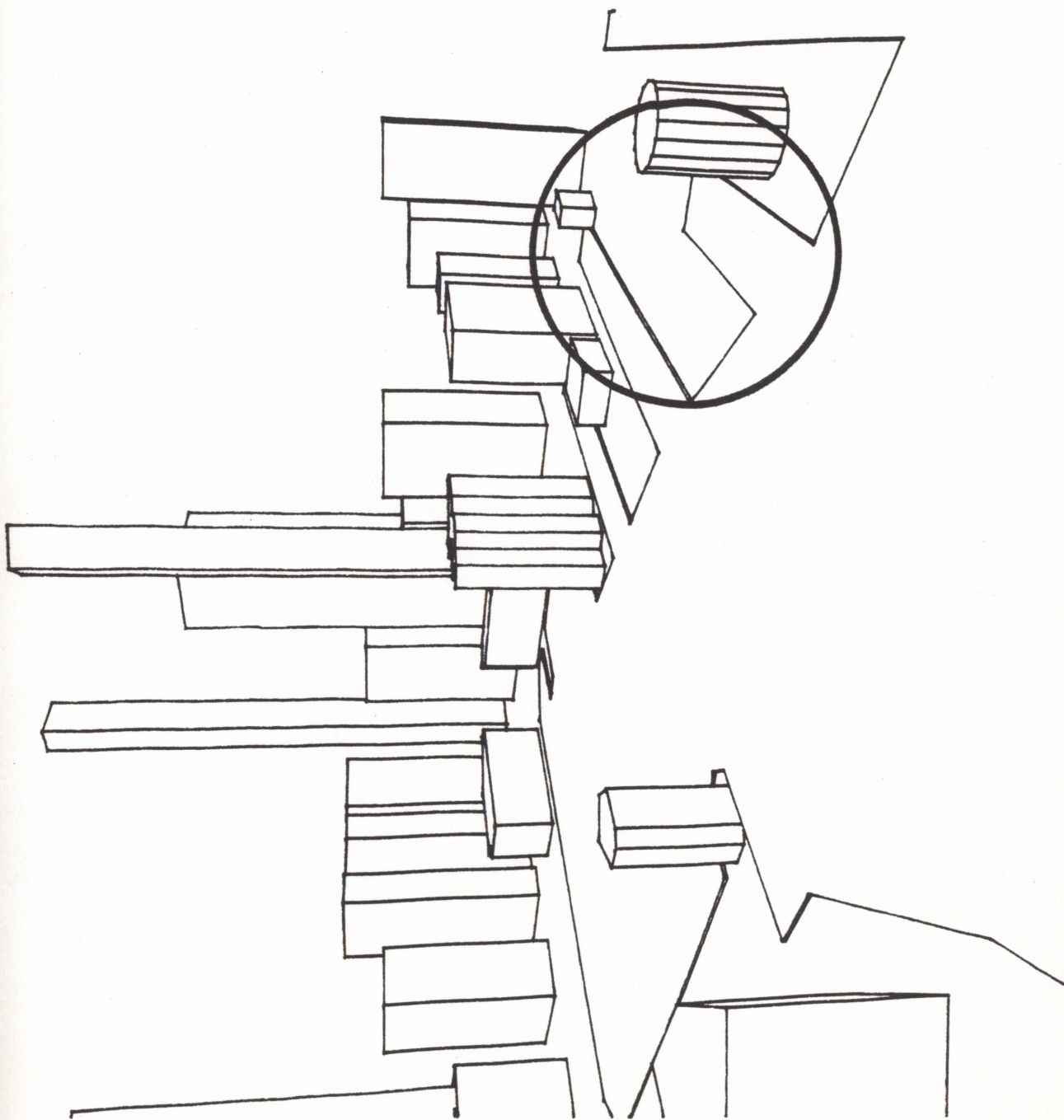
Precautions should be taken with the placement of buildings and structures so to offer minimum obstruction to the flow and height of the flood water, to the fill and landscape design, to development requirements, and construction methods and materials.

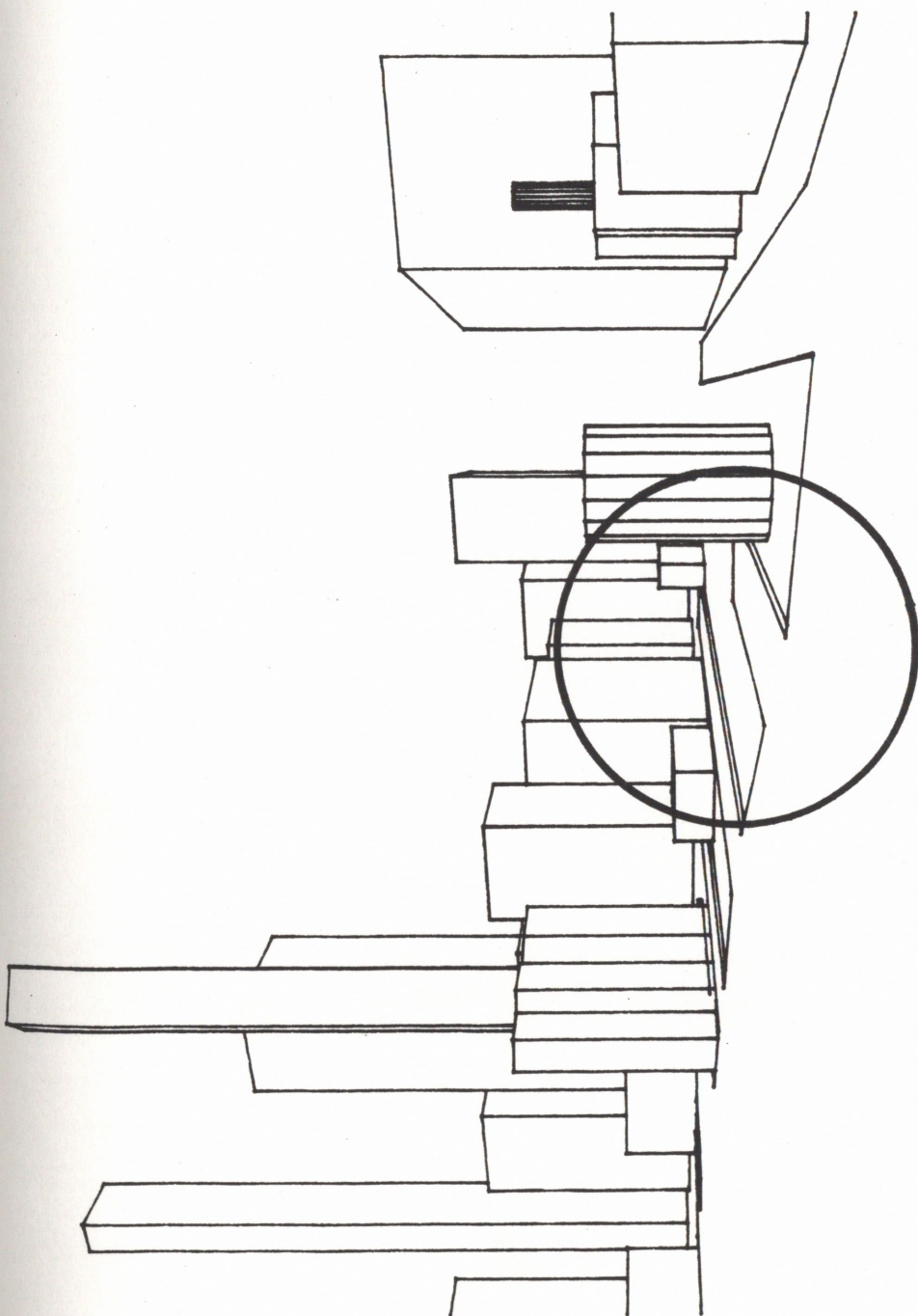
CHAPTER NOTES

1."Inner Harbor East Plan Aims at Harmony of New,
Old,"Baltimore Sun, 23 March 1986, sec. L, p.7L.

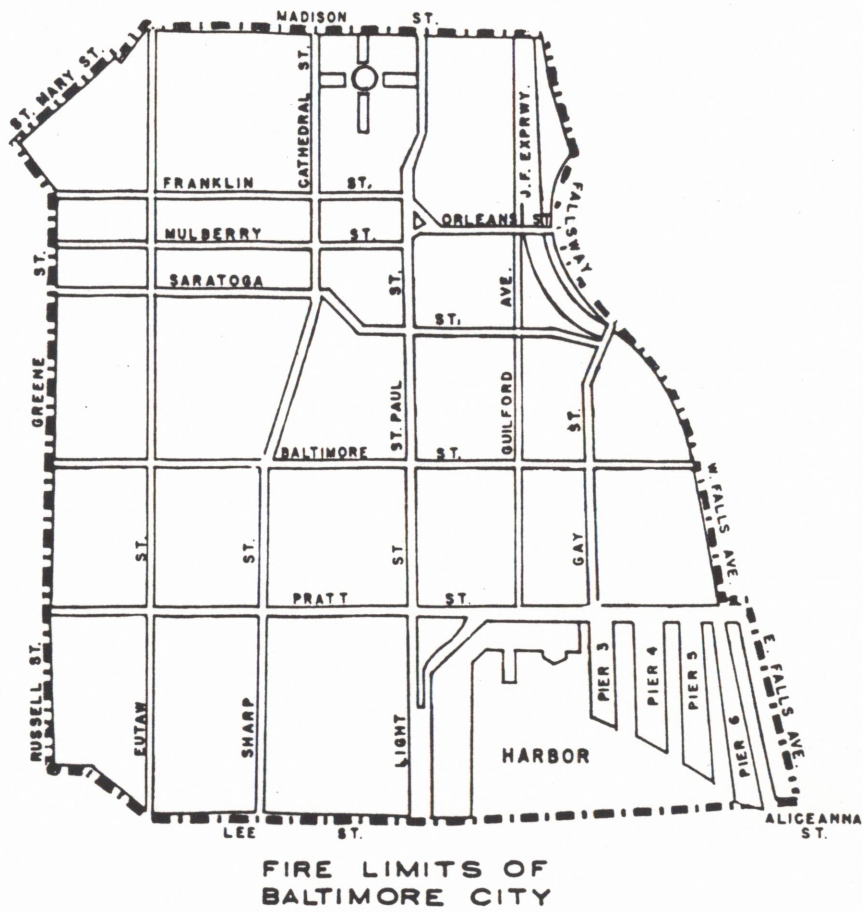
ZONING







FIRE LIMITS



BIBLIOGRAPHY

BIBLIOGRAPHY

- Anderson, Grace. "Physical Fitness," Architectural Record, September 1985, p. 89-103.
- Architectural Graphic Standards. New York: John Wiley and Sons, 1981.
- "Athletic Promise," Interior Design, March 1984, pp. 236-9.
- Baltimore City Building Code, Department of Legislative Reference. Baltimore, Maryland, 1985.
- Baltimore a Picture History, Maryland Historical Society. Baltimore: Bodine and Association, Inc., 1982.
- Cleaver, Hylton. A History of Rowing. London: Herbert Jenkins, 1957.
- Cohen, Edie Lee and Emery, Sherman R. Dining by Design. New York: Cahners Publishing Company, 1984.
- De Chiara, Joseph. Time Savers Standards for Building Types. New York: McGraw-Hill Book Company, 1973.
- "East of the Harbor," The Baltimore Sun. March 23, 1986.
- Flynn, Richard B. Planning Facilities for Athletics, Physical Education and Recreation. The Athletic Institute of America, 1985.
- "Inner Harbor East," Charles Center Inner Harbor Management, Inc.
- "Inner Harbor East Plan Aims at Harmony of Old, New," Baltimore Sun, March 23, 1986, pp. 7L-8L.
- Kaplan, Jim. "For the inventor of Racquetball, Fame is not the name of the Game," Sports Illustrated, vol. 60 issue 7, February 13, 1984. pp. 27-29.,
- Keith, Robert C. Baltimore Harbor. Baltimore: Ocean World Publishing Co., Inc., 1985.
- Kelley, Robert F. American Rowing. New York, London: G.P. Putnam's Sons, 1932.
- Local Climatological Summary With Comparative Data. U.S. Department of Commerce - Weather Bureau, 1949.

- Mazria, Edward. The Passive Solar Energy Book. Emmaus, Pennsylvania: Rodale Press, 1979.
- Mendenhall, Thomas C. "The History of Rowing," Program for U.S. Rowing National Championship Regatta, 1986, pp. 10-11.
- Perrin, Gerald A. Design for Sport, London, Boston: Butterworths, 1981.
- Regional Climate Analysis and Design Data IX, Washington D.C., Area. Bulletin of the AIA, September 1947, pp. 9-21.
- Reznikoff, S.C. Interior Graphic and Design Standards. New York: Witney Library of Design, 1986.
- Walsh, Richard and Fox, William Lloyd. Maryland, A History. Baltimore, Maryland: Schneidereith and Sons, 1983.
- Watson, Donald, and Labs, Kenneth. Climatic Design. New York: McGraw-Hill Book Company, 1983.
- White, Edward T. Space Adjacency Analysis. Tucson: Architectural Media, Ltd., 1986.
- Wrenn, Douglas M. "Inner Harbor, Baltimore, Maryland," Urban Waterfront Development. Urban Land Institute, Washington D.C., 1983, pp. 146-155.
- Zoning Ordinance of Baltimore City. Baltimore: Ed Early Printing Co., 1984.

Correspondences:

American Amateur Racquetball Association

Intercollegiate Rowing Association

National Rowing Association

U.S. Rowing Association

United States Squash Racquets Association

Interviews:

Bonnell, Mrs. Robert O., Director of Information Inner Harbor Management, Inc.. Baltimore, Maryland. February 13, 1987.

Gentry, Peter, President of the Baltimore Rowing Club. Baltimore, Maryland. Baltimore, Maryland. February 15, 1987.

Herstlet, Stacey, Assistant Director, Downtown Athletic Club.
Baltimore, Maryland. February 15, 1987.

Moore, Derry, Manager of Roswell Racquet Club and Spa. Roswell,
New Mexico. February 9, 1987.

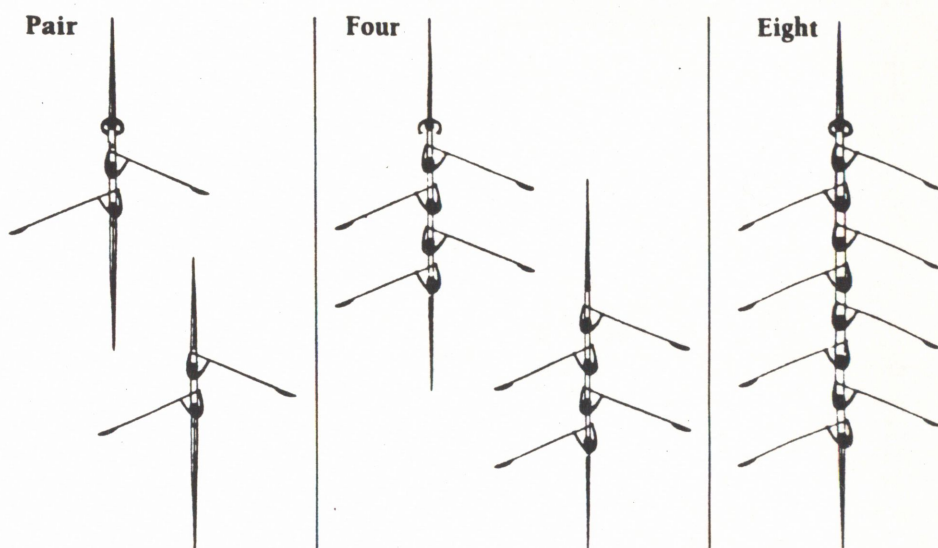
Nadolney, Marla, Project architect for proposed headquarters for
the Baltimore Rowing Club. Ayers-Saint, Inc. Baltimore,
Maryland. February 15, 1987.

Newton, Irene, Program manager for Broadwater Athletic Club.
Helena, Montana. January 17, 1987.

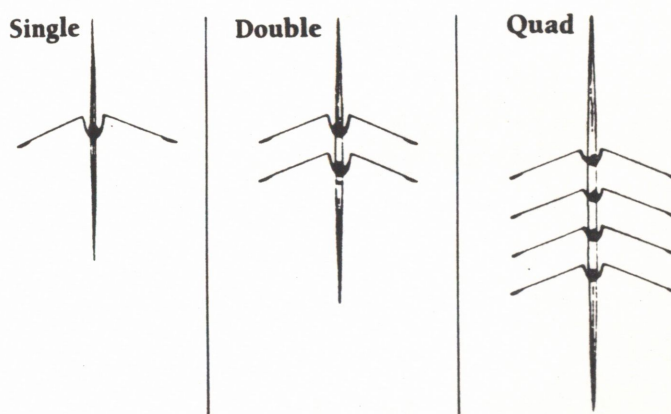
APPENDICES

APPENDIX A

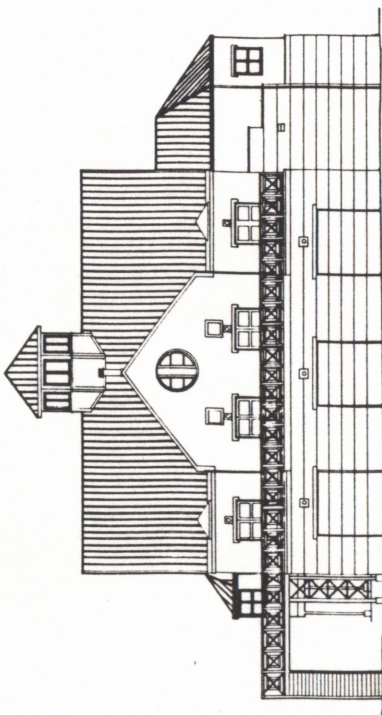
SWEEP



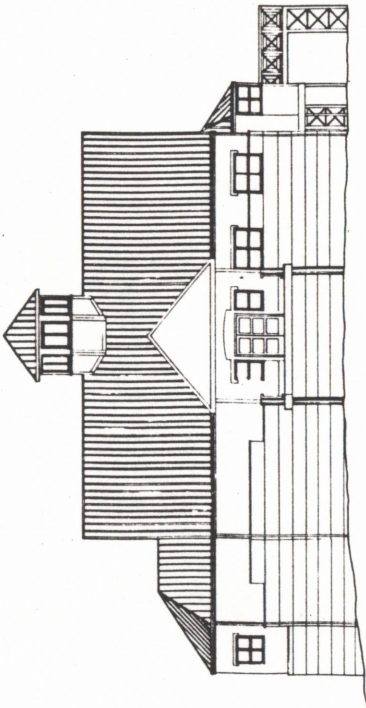
SCULL



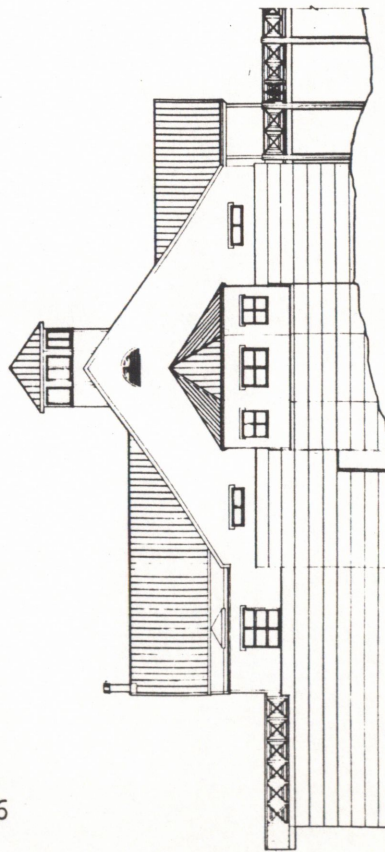
APPENDIX B



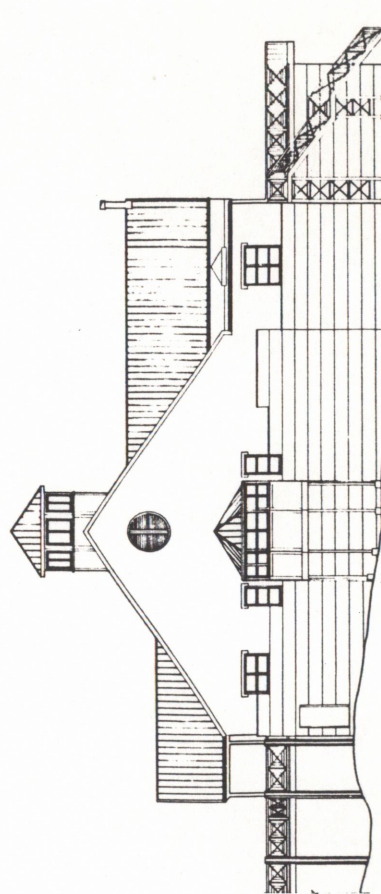
NORTH ELEVATION



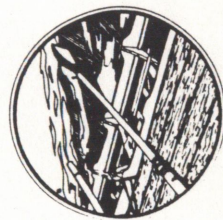
SOUTH ELEVATION

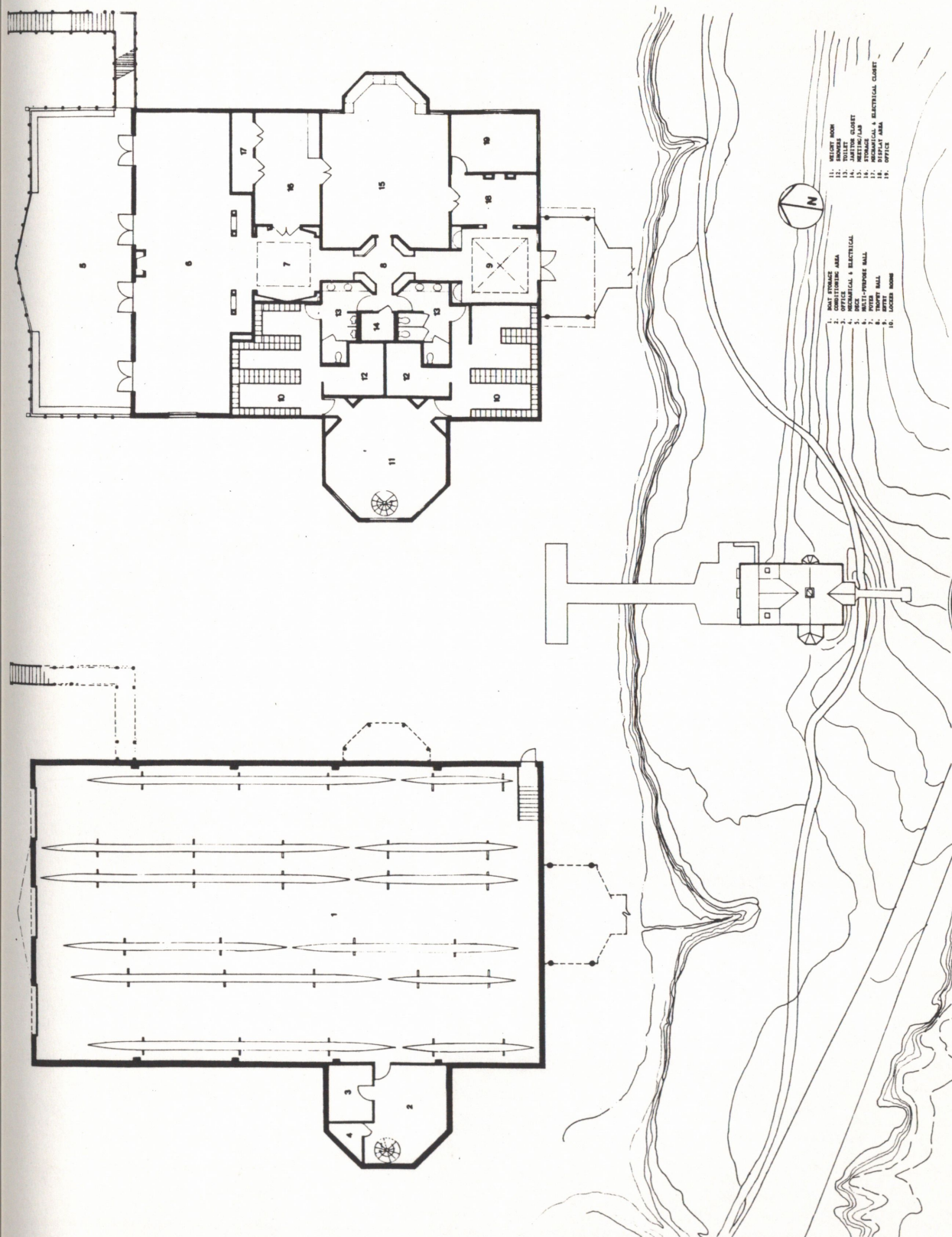


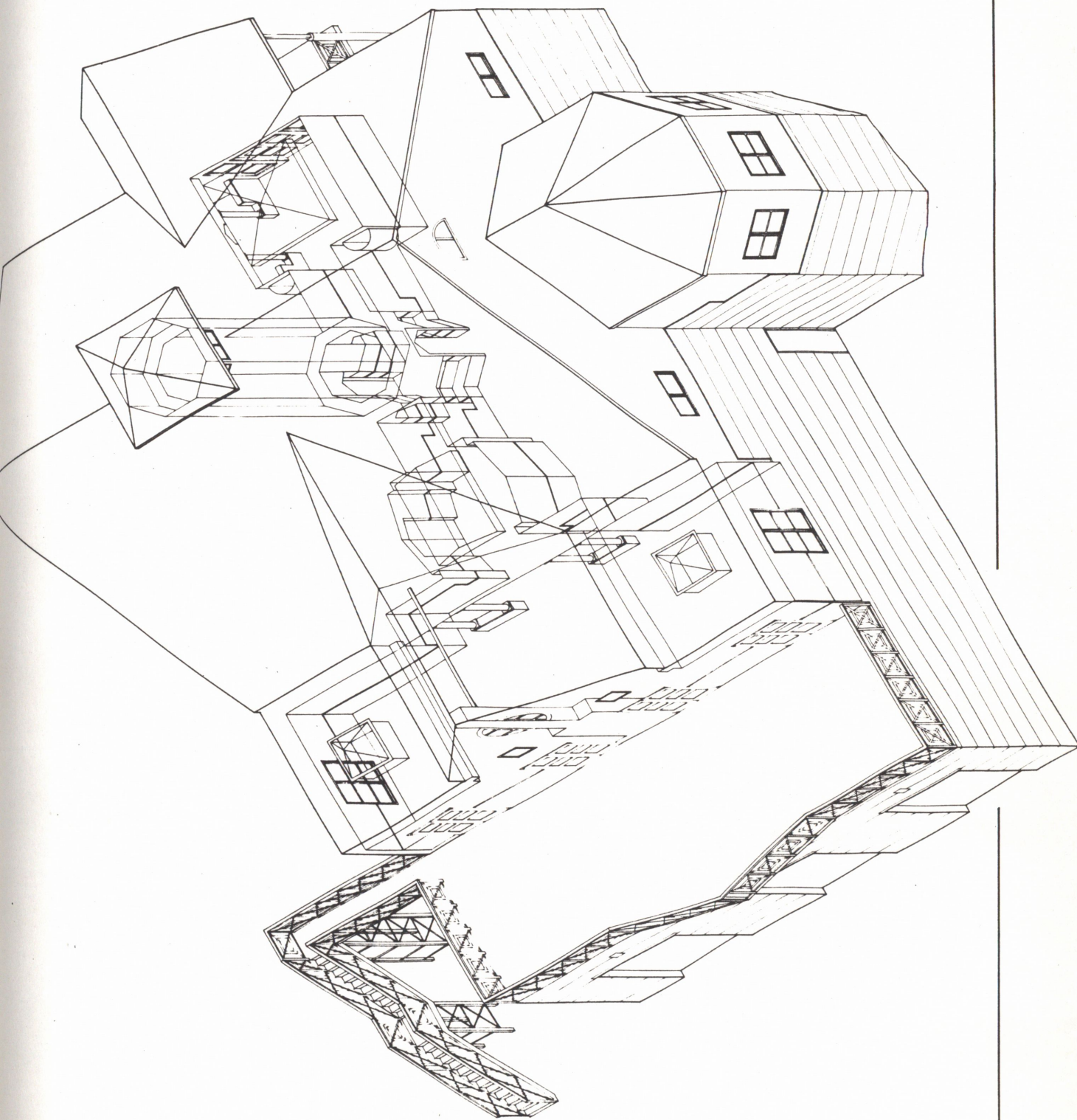
WEST ELEVATION



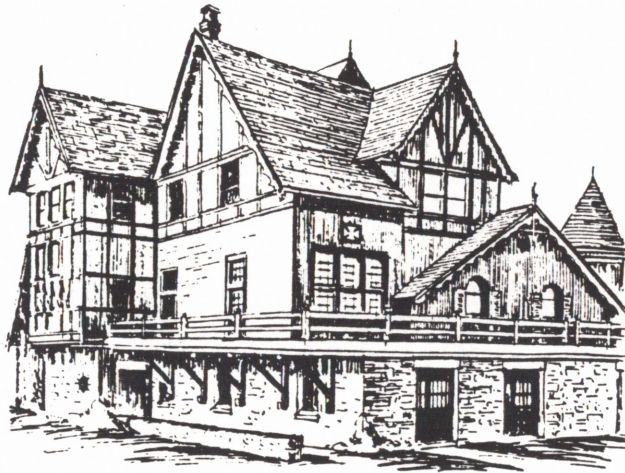
EAST ELEVATION







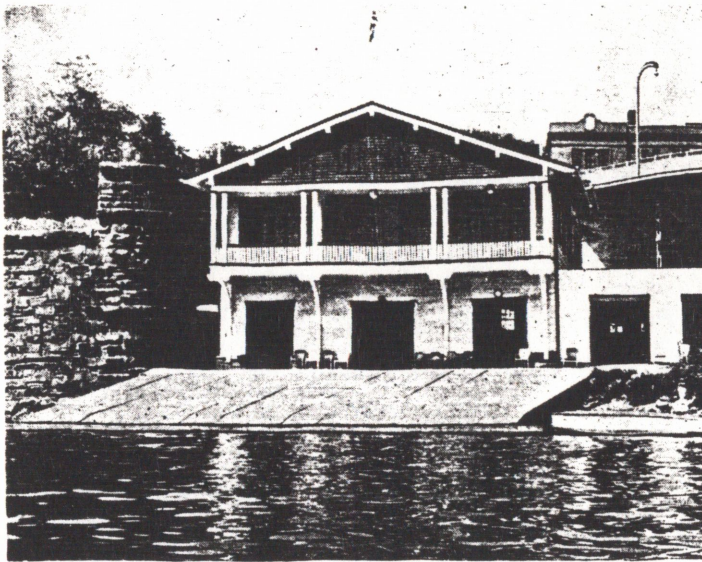
APPENDIX C



MALTA BOAT CLUB
Philadelphia, Pennsylvania



BALTIMORE ROWING CLUB
Baltimore, Maryland

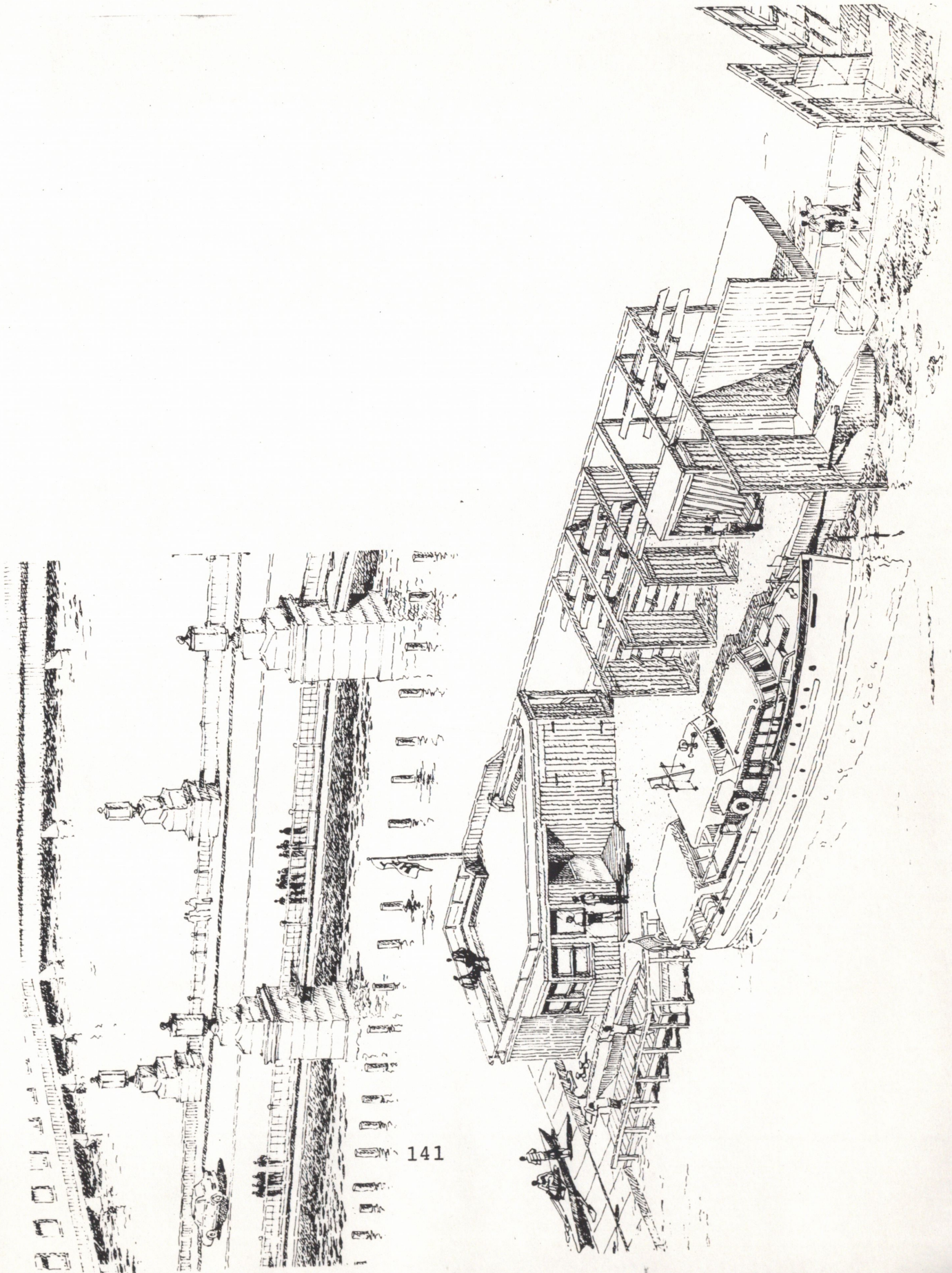


POTOMAC BOAT CLUB
Washington D.C.



FAIRMOUNT ROWING ASSOCIATION
Fairmount Park, Philadelphia
140

NEWPORT ROWING CLUB



APPENDIX D



HARBORPLACE (FOOD PAVILION)



HARBORPLACE (RETAIL PAVILION)



NATIONAL AQUARIUM



WORLD TRADE CENTER



POWER PLANT



USF & G BUILDING



PUMPING STATION



CONCERT PAVILION

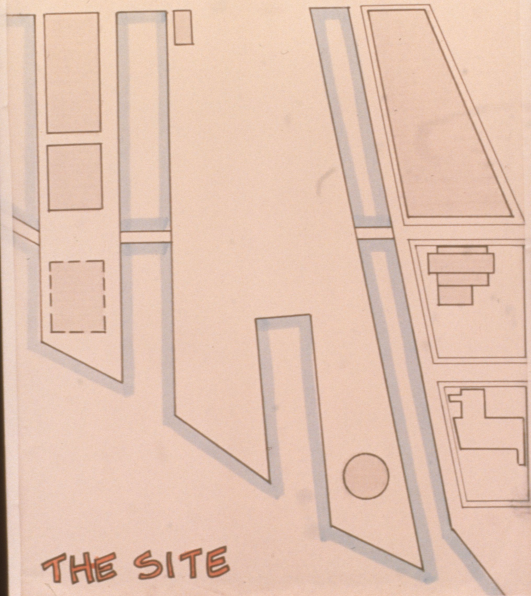


RUSTY SCUPPER RESTAURANT

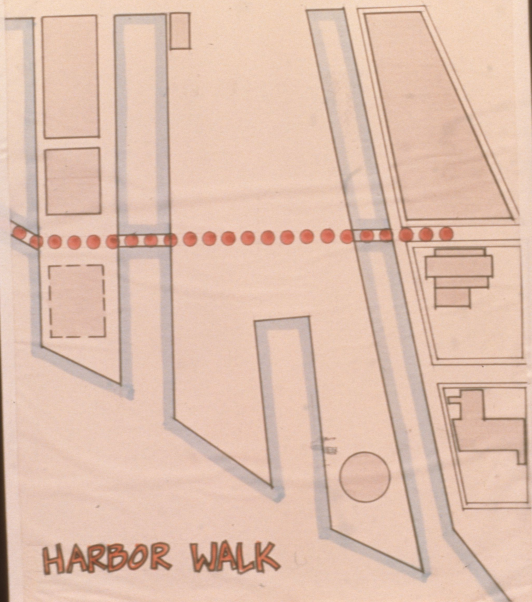


MARYLAND SCIENCE CENTER

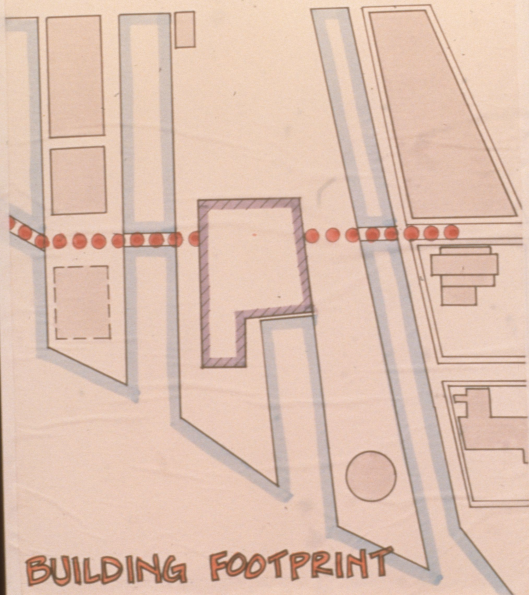
APPENDIX E



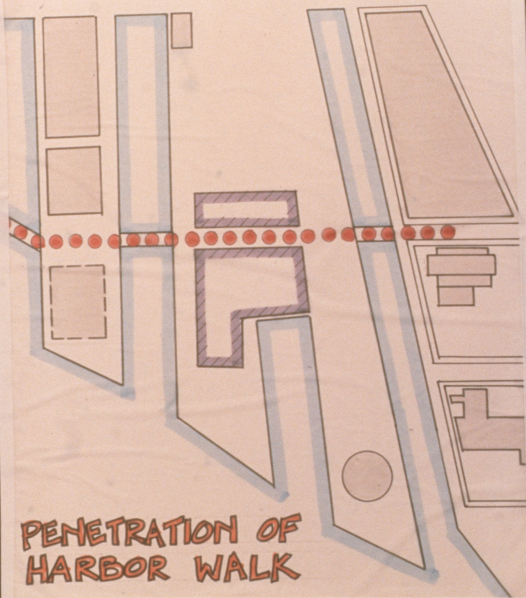
THE SITE



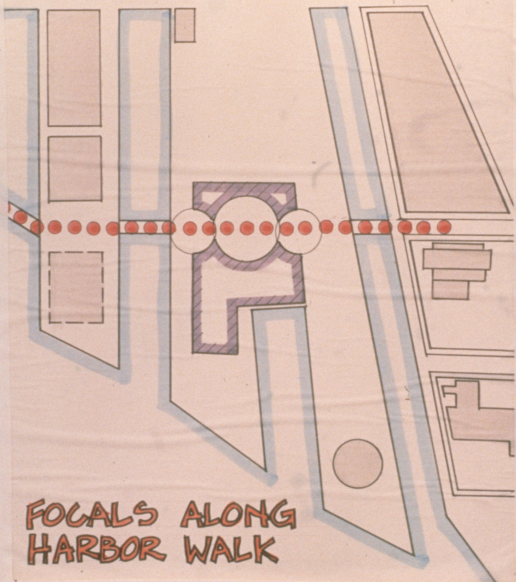
HARBOR WALK



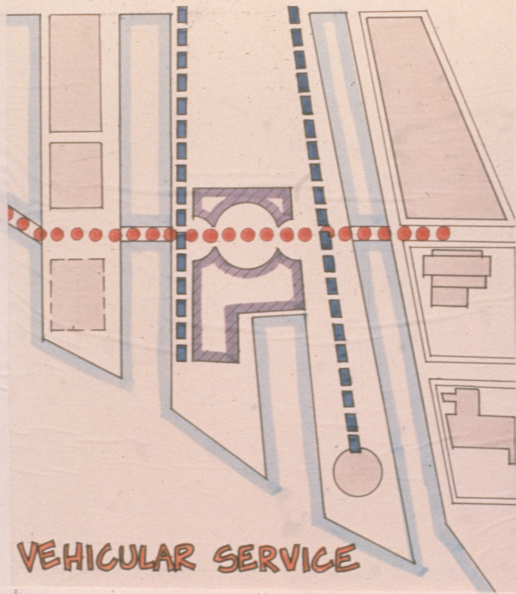
BUILDING FOOTPRINT



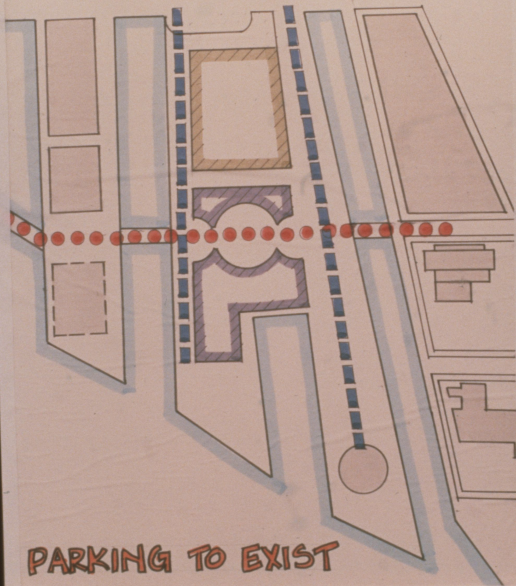
PENETRATION OF
HARBOR WALK

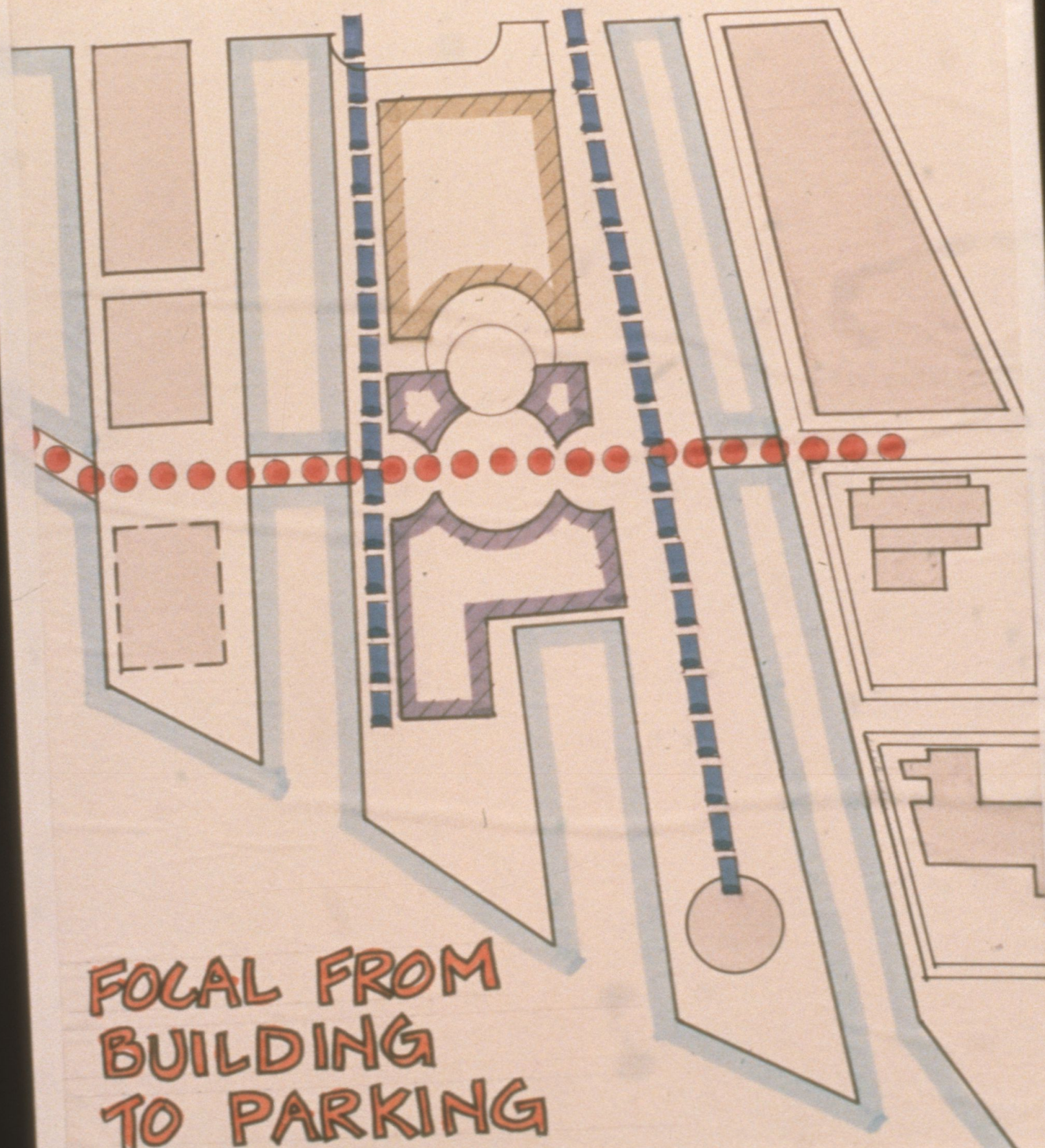


FOCALS ALONG
HARBOR WALK

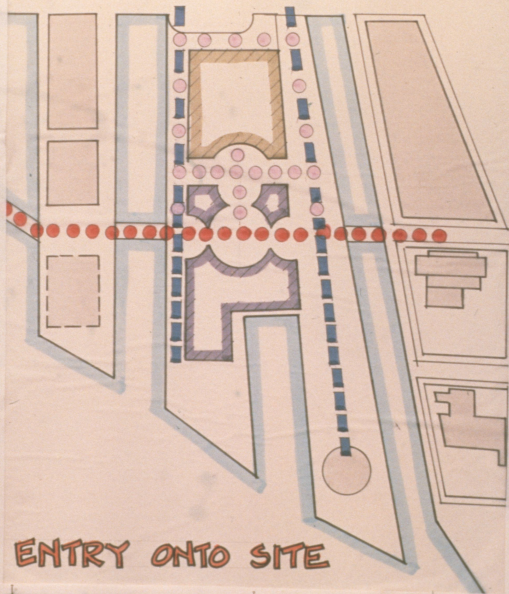


VEHICULAR SERVICE

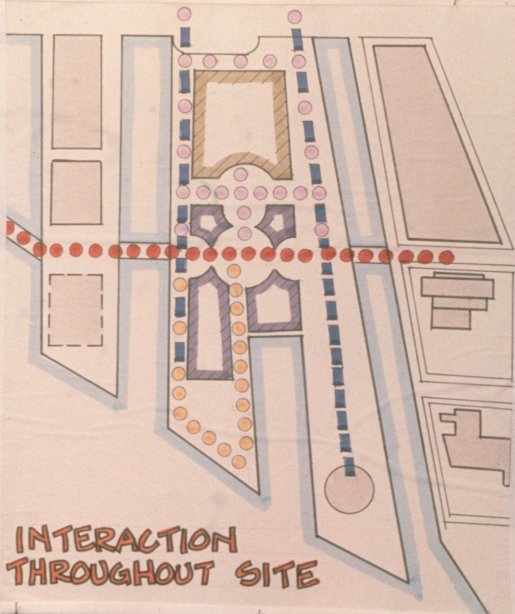


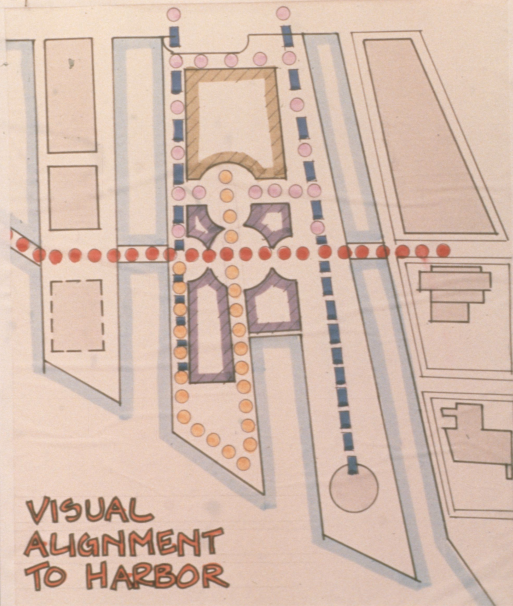


FOCAL FROM
BUILDING
TO PARKING

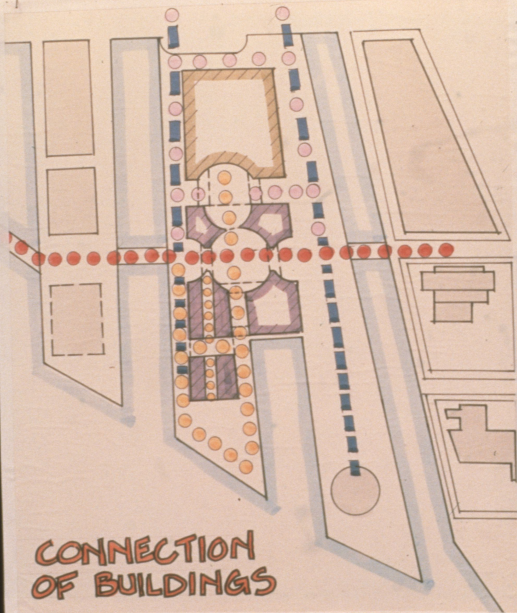


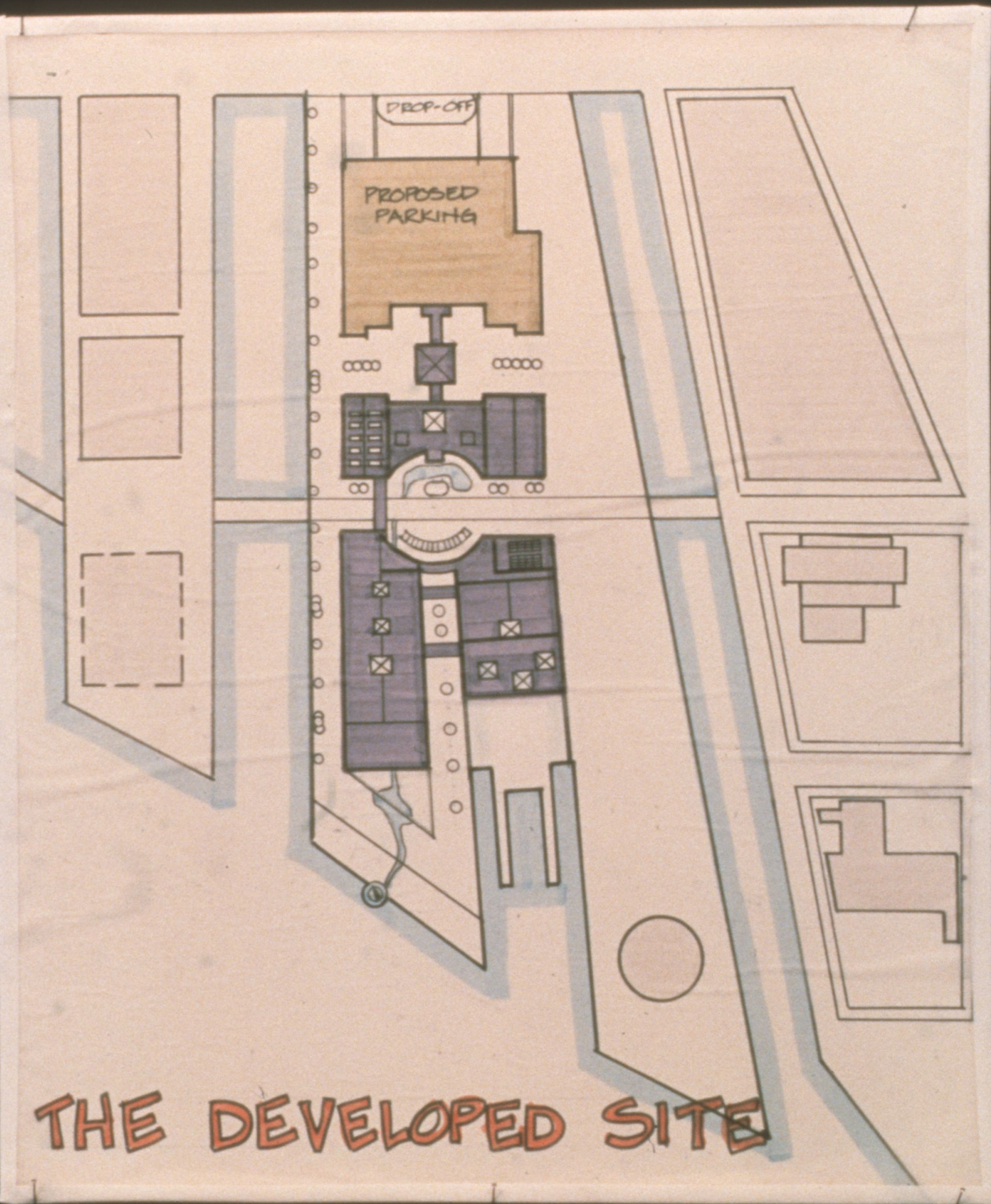
ENTRY ONTO SITE

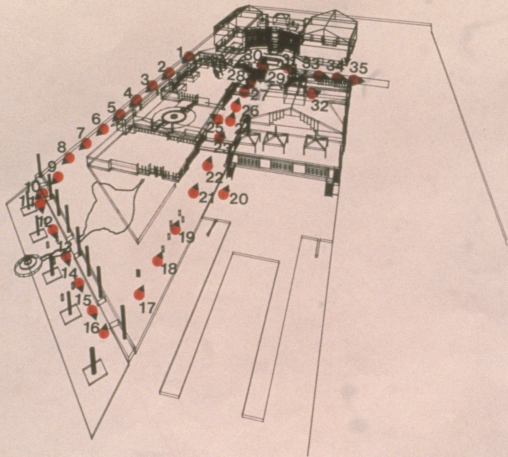


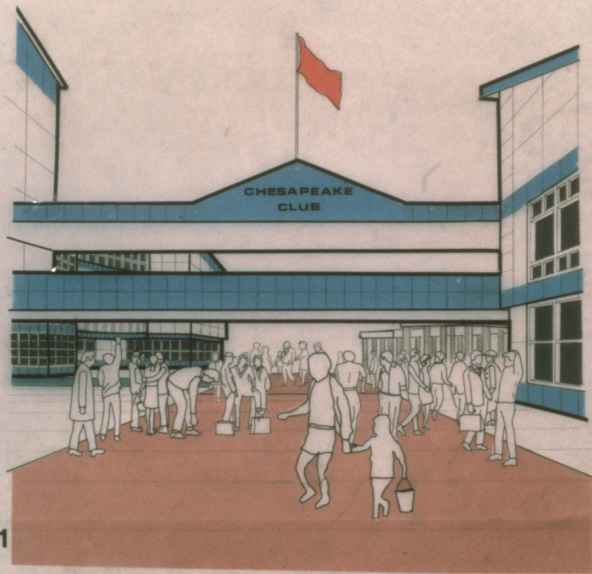


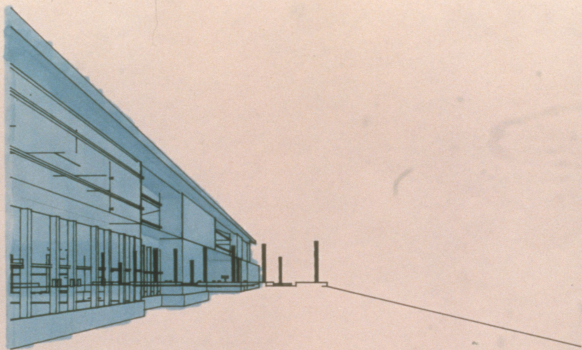


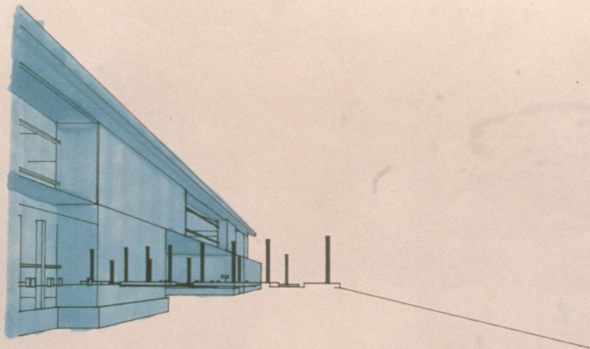


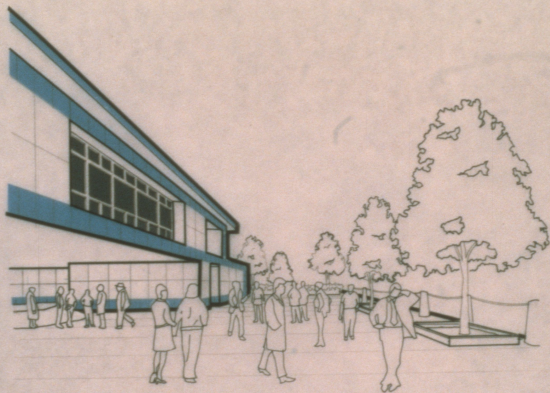


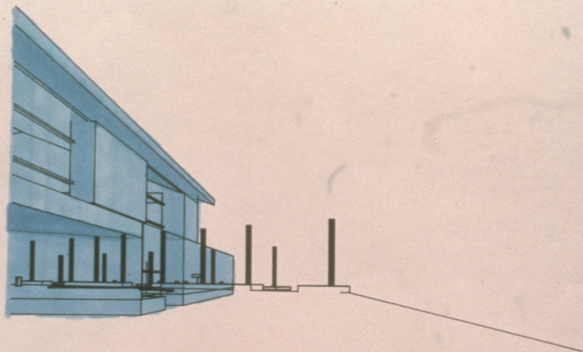








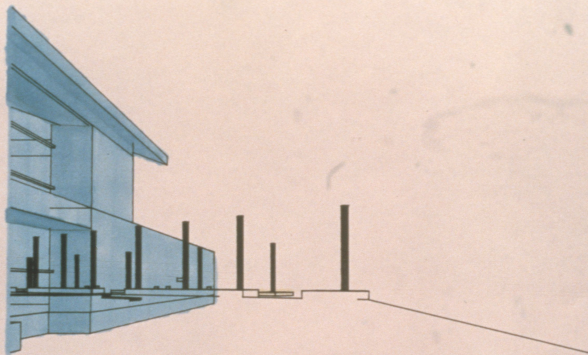


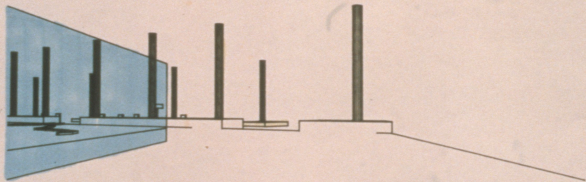


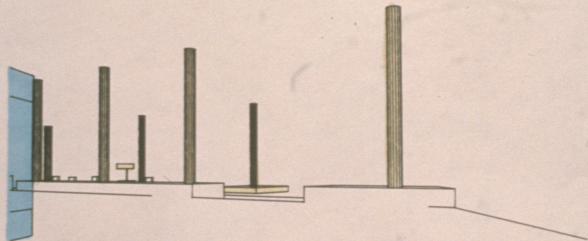
◀5

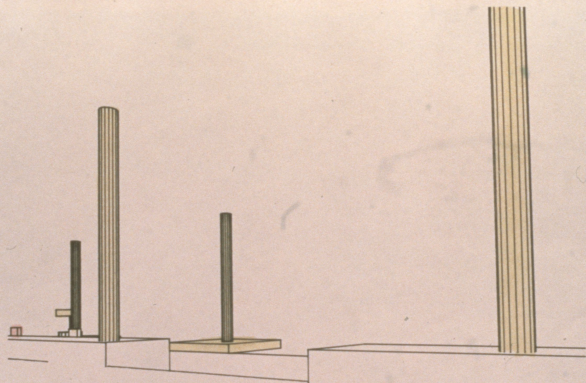
2

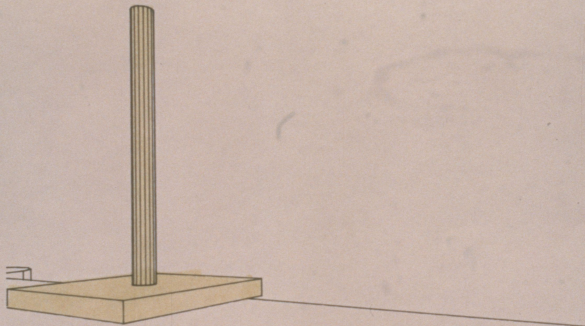
1



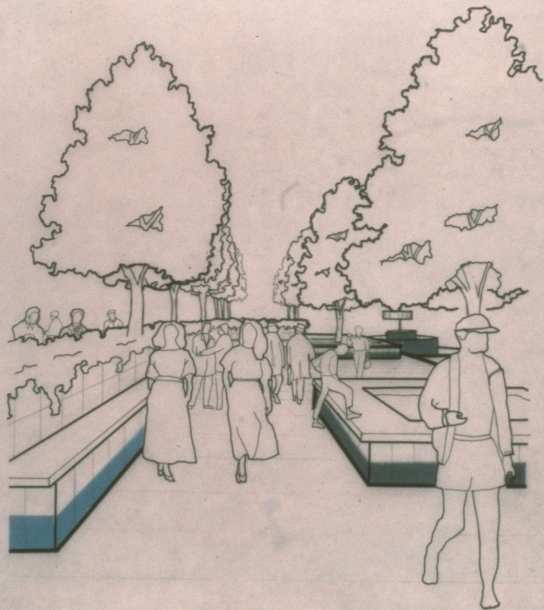


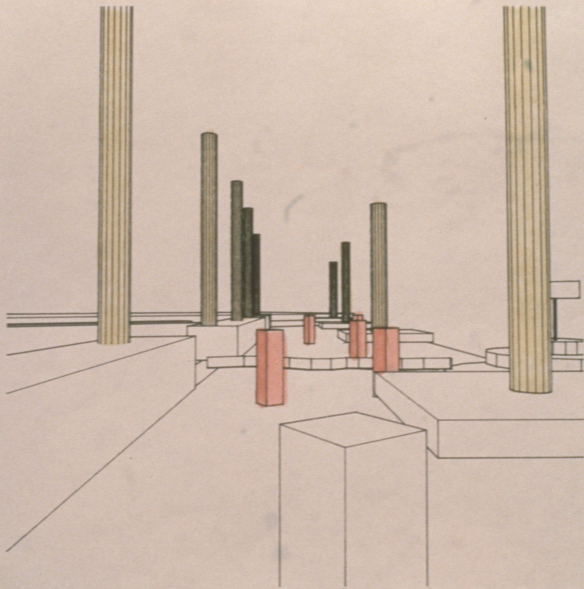


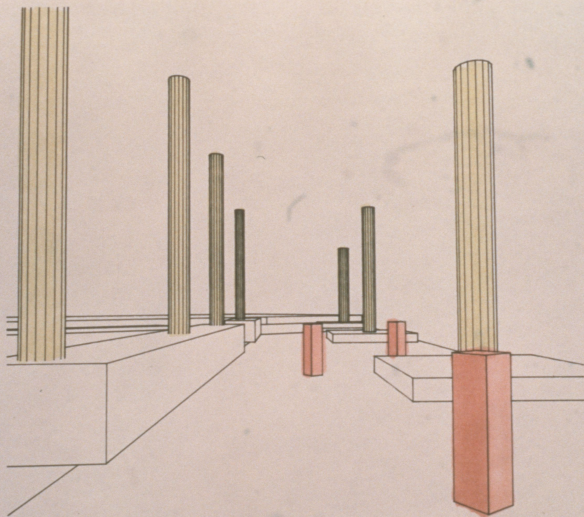




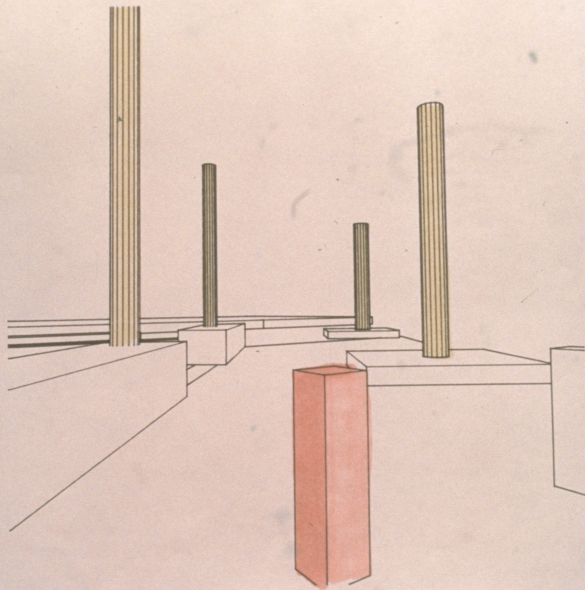
◀10



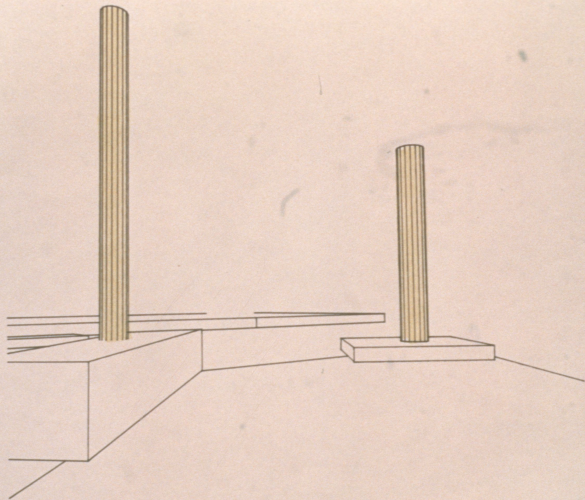




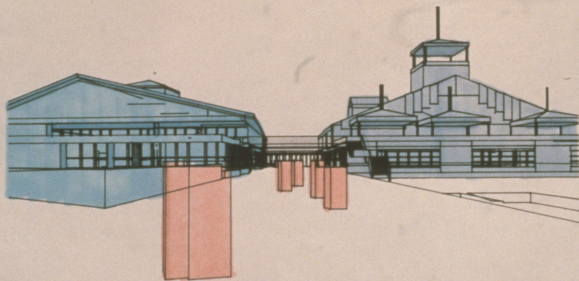
◀ 13

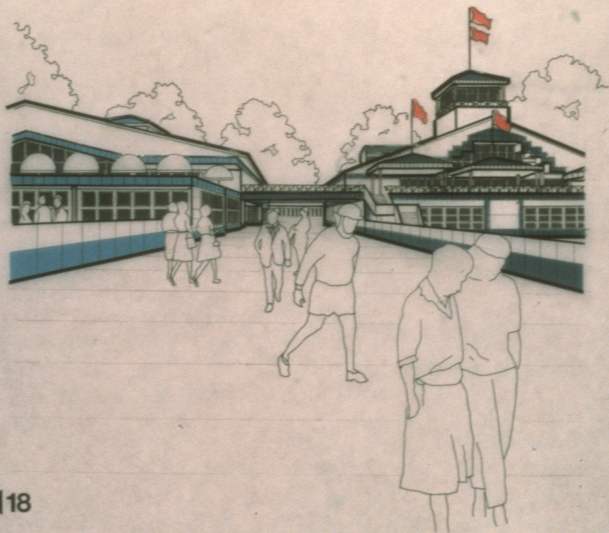


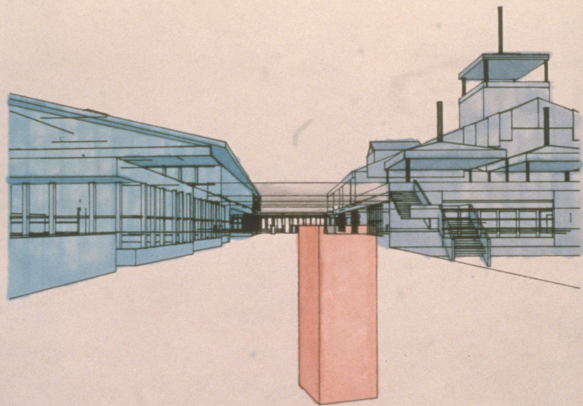
◀ 14

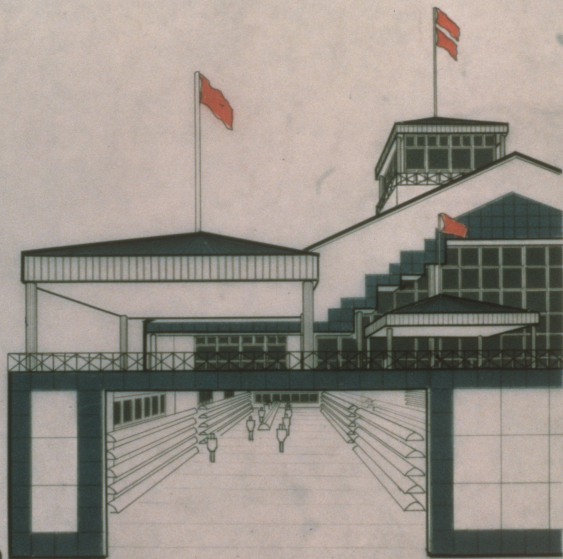




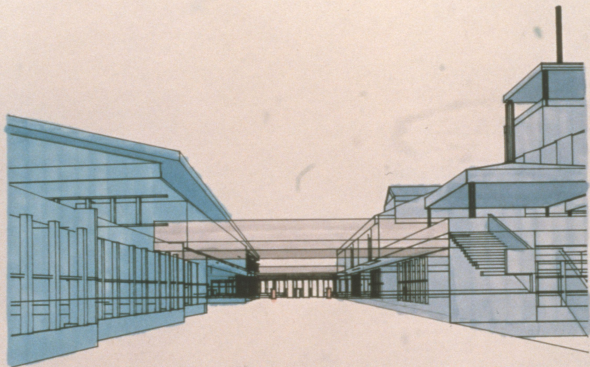


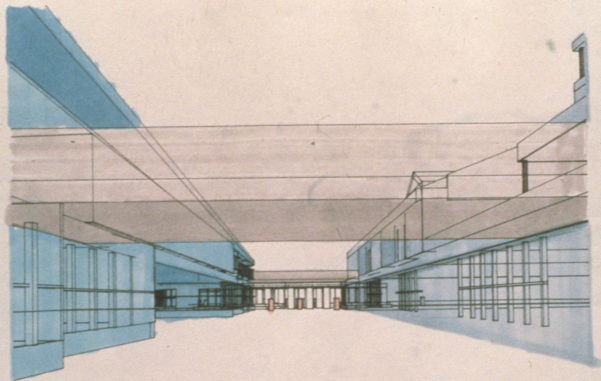


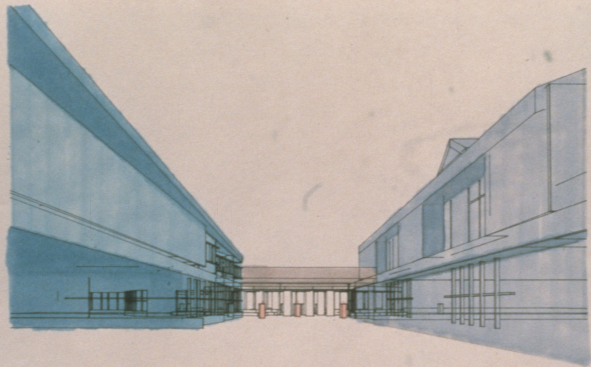


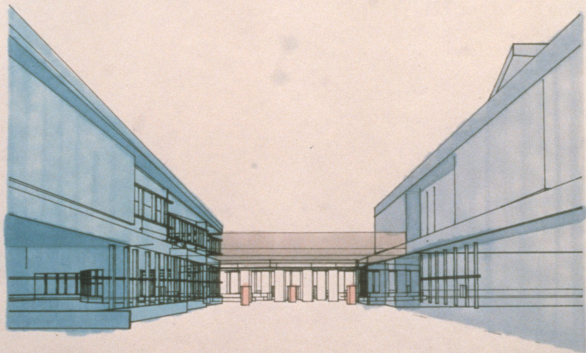


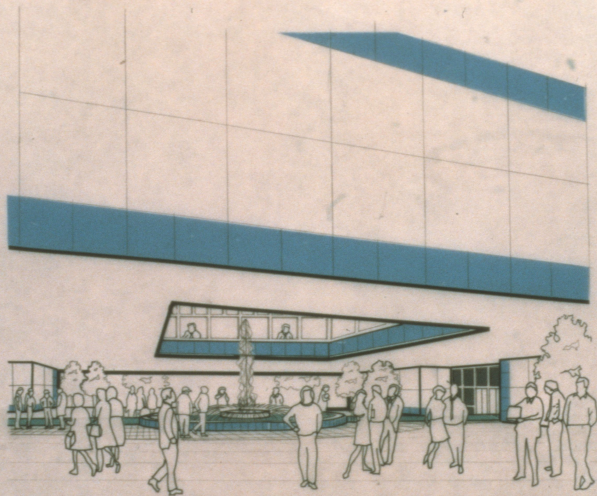
◀ 20

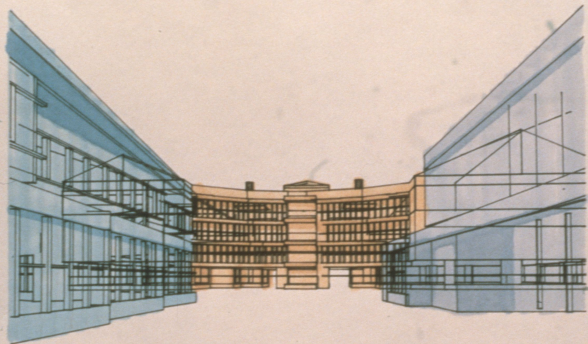


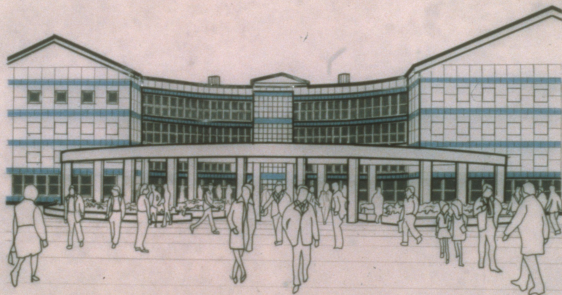


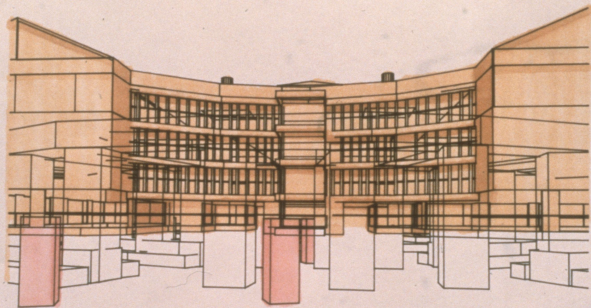


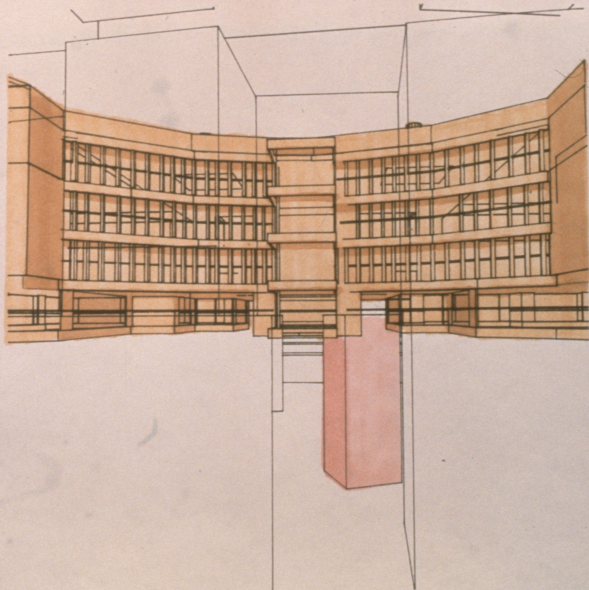


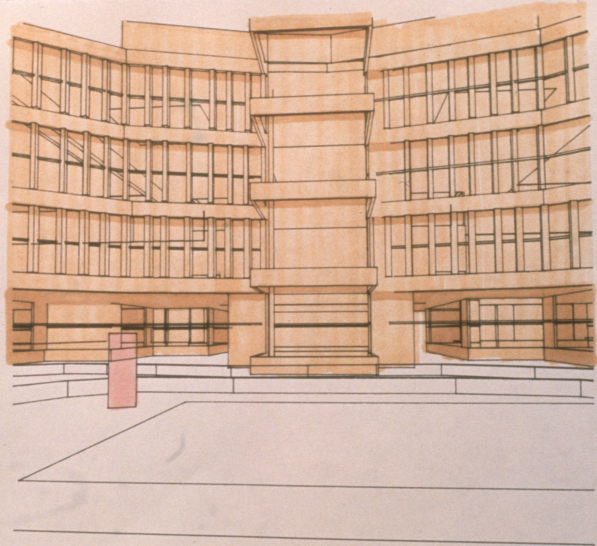


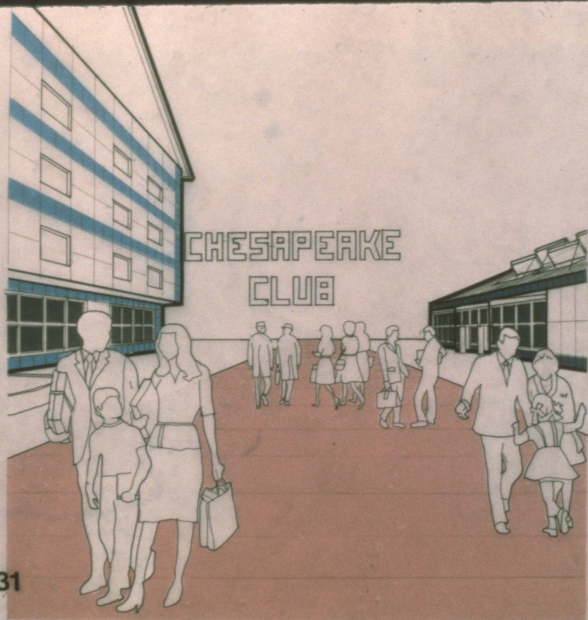


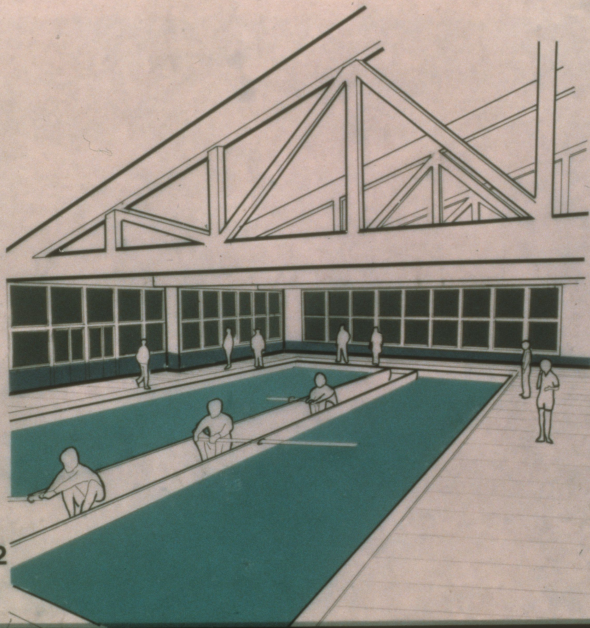




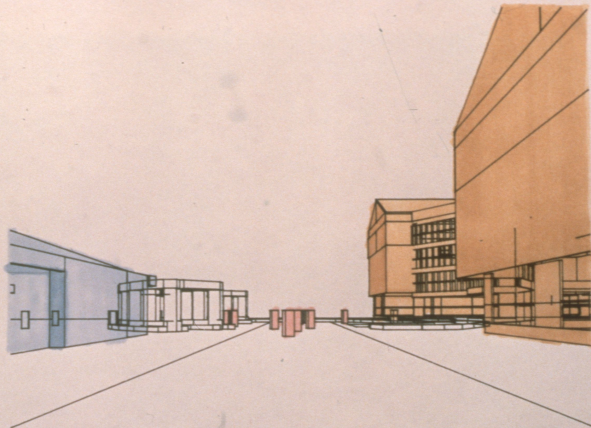




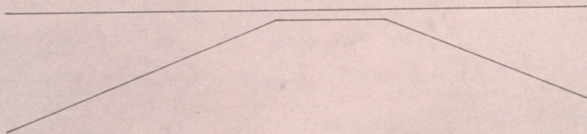


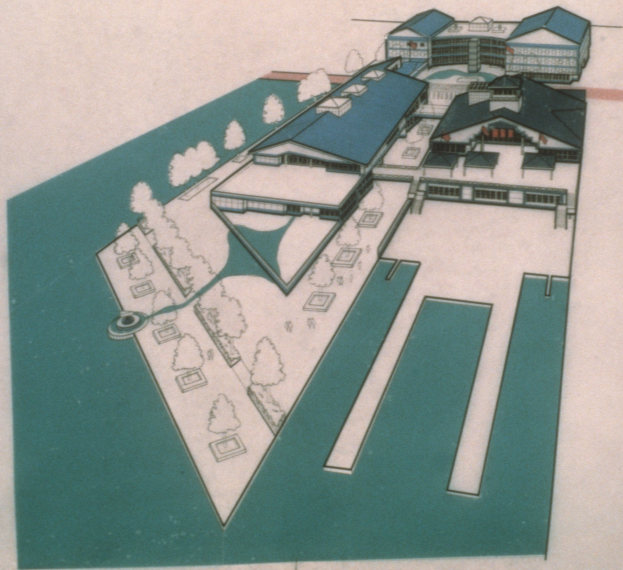


CHESAPEAKE
CLUB

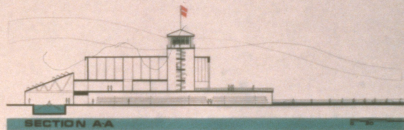
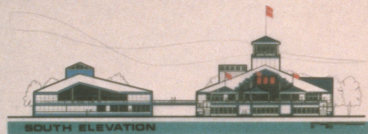


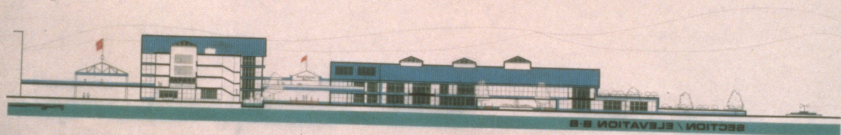
CHESAPEAKE CLUB

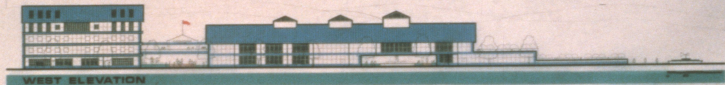


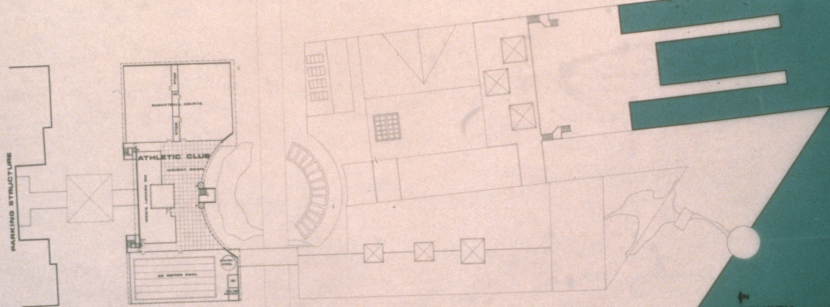










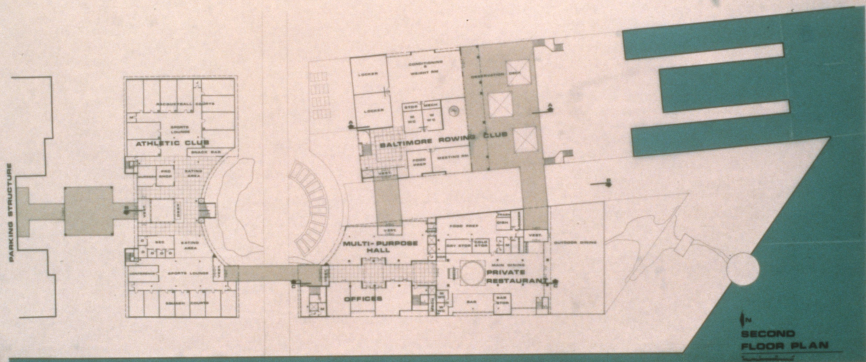


IN
FOURTH
FLOOR PLAN

MAIN RING STRUCTURE

ATHLETIC CLUB

THIRD
FLOOR PLAN





3 1762 10080979 5

[illegible]

Demco, Inc. 38-293

