

A NEW PEABODY MUSEUM FOR SALEM MASSACHUSETTS

by Donald H. Panushka

SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARCHITECTURE ON AUGUST 29, 1951

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## ABSTRACT

### A NEW PEABODY MUSEUM FOR SALEM MASSACHUSETTS

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Submitted for the degree of Master of Architecture in  
the Department of Architecture on August 29, 1951.

The Peabody Museum of Salem, at present, is the oldest museum in existence in this country. Its collections are divided into three different categories: Maritime History, Ethnology, and Natural History of Essex County.

Preliminary study for this thesis consisted of a study of the Museum's Historical background and an analysis of its present site, buildings, and exhibition technique. As a result of this study and analysis certain basic requirements were evolved in addition to the program proper. These were: to retain the Salem East India Marine Society Hall, integration with the Salem harbor and the moving to a new site. The last requirement of course necessitated moving the East India Hall, which proved to be economically sound.

A site adjoining the National Maritime Historic site was chosen as the location of the new museum. This site is also close to the House of the Seven Gables and is in a thickly settled residential neighborhood.

An attempt was made to recapture the maritime character which the museum possessed externally in the early nineteenth century and to coordinate the museum with the Maritime Historic site and the House of the Seven Gables, to form a unified whole. At the same time it was necessary to retain the visual contrast between narrow crowded streets and the open harbor that the neighborhood has at present.

In the design of the buildings an improved exhibition technique was developed which has lighting, acoustic and installation techniques coordinated within a four foot square module.

The Salem East India Marine Hall was separated from the new building because of the necessity for including the building itself as part of the maritime exhibition and other visual requirements.

August 29, 1951

Cambridge, Mass.

Dean Pietro Belluschi  
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Dear Sir:

As partial fulfillment of the requirements for the degree, Master of Architecture, I would like to submit my thesis entitled, "A New Peabody Museum for Salem, Massachusetts".

Respectfully submitted,

Donald H. Panushka

DHP:khr

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## INTRODUCTION

When this thesis study was begun it was my original intention to place the emphasis on the visual problems involved in an exhibition of the Museum's Maritime History collections. This exhibit would have been housed in a theoretical space. This type of approach was chosen because of my interest in the visual aspects of Architecture and City Planning and the belief that the study of the basic premises of visual fundamentals could more easily be achieved with the above limitation.

Upon analysis and further study it became evident that if the thesis was to be limited as stated above, that only one of the museum's many problems would be solved, which would not be a completely realistic approach.

The problem of this thesis than, has progressed from the study of one problem to the analysis and study of the museum as a whole. The history of the Peabody Museum contains a wealth of extremely interesting maritime history. This fact is of major importance whenever the museum is concerned and full cognizance should be given to it in the study of all three factors: site, buildings, and exhibition technique.

The following report and drawings which comprise my thesis attempt to do this as well as to provide a visual and architectonic solution to the problem.

## HISTORICAL BACKGROUND\*

History of Salem Commerce

The Maritime History collection of the Peabody Museum dates chiefly from the Revolutionary War. The reason for this is that very little is known about Salem trade before the Revolution. It is known, however, that a fair amount of trade was carried on with the West Indies and countries bordering on the Mediterranean. Exports were mainly fish and lumber; imports were salt, sugar, wine and rum. The vessels used for this trade were small and little is known about them.

The Revolutionary War brought about a sudden change in Salem trade. Many of the old established merchants were loyal to Britian and were forced out of the country. Their place was taken by younger men who took over the vessels and turned to privateering with great success. At the conclusion of the war they set themselves up as merchants; however, by 1785 trade was in a period of depression due to the cost of the war and British and French laws which excluded American vessels from West Indian islands.

It became imperative to find new markets and new sources of raw materials. This resulted in Mr. Elias Hasket Derby fitting out his ship, "Grand Turk" for a voyage to parts unknown. As a result of this voyage a lively trade sprang up between Salem and China that lasted until well into the nineteenth century.

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\* This brief history is a condensation of the "Handbook to the Collections of the Peabody Museum of Salem", by E. S. Dodge and C. H. P. Copeland. Anthoensen Press, Portland.

Post-Revolutionary trade was also conducted with other countries; such as the pepper trade with Sumatra and ivory and gum copal from Zanzibar.

Salem trade therefore rose quickly after the war and disappeared entirely in the middle of the nineteenth century. The main reason for this was the smallness and shallowness of the harbor which could not accomodate the larger vessels that were built as the clipper ship era approached. Even the smallest clipper ship was too large to enter the Salem harbor when fully loaded.

#### History of Museum

The Peabody Museum of Salem had its beginning in September 1799 when Captain Jonathan Carnes presented the first gift to the newly instituted Museum of the Salem East India Marine Society. This Museum was begun for the expressed purpose of housing the "natural and artificial curiosities" that the Society members had been collecting.

In 1824 the Society erected a new building, which is known as "The East India Marine Hall". The Hall proper which was used for meetings of the Society and for exhibition of their "curiosities" was on the second floor while the first floor housed the Salem Post Office, Asiatic Bank and Oriental Insurance Office.

The collections of the East India Marine Society remained in their care until 1867, when with a gift from George Peabody, The Peabody Academy of Science was established. At this time the Trustees of the Peabody Academy purchased and refitted the India Marine Hall and received the Museum of the East India Marine Society and the Natural History collections of the Essex Institute (begun in 1824) as permanent deposits.



To these two collections have been added many valuable collections in the Marine and Ethnology departments and as complete a series of Natural History specimens from Essex County as can be found for any similar area in the United States.

Two large additions to the original East India Marine Hall have been built and gone through numerous conversions. The first addition originally housed the old Academy Hall on the first floor and exhibition space on the second floor. The second addition was erected through the generosity of Mr. Charles Weld and at the present time houses the Japanese Ethnological collections on the second floor and the Museum offices on the first. By 1904 the Marine History collections had increased to such an extent that the offices and stores on the north end of the ground floor were remodeled to form the present Marine Room. At the same time the present entrance corridor was built and is likewise used for exhibition purposes. In 1930 the south end of the ground floor which had originally housed the Post Office was also converted to house additional exhibition space for the Maritime collections. At this time a corridor was built from Essex Street to the now defunct Academy Hall and this too was used to house the Marine collection. In 1942 a tremendous house-cleaning took place. Up to this time the very large and weary Natural History collection had been housed in the original East India Hall. At this time the collection was restricted to Essex County with the exception of a few fine specimens from other sections. East India Hall was restored to its original state and the Natural History collections were moved to the space which Academy Hall had occupied previously.

From an architectural point of view the important observation

to be made from this short history is that numerous additions and alterations have resulted in poor circulation in and to the various exhibition areas.

### Maritime History

In 1799 when the East India Society began its collections the founders certainly had no idea of establishing a maritime history collection specifically. Few of the objects making up the various collections in the present museum would have been considered appropriate or interesting, because many of these items were in daily use and were not thought of as being out of the ordinary.

It was not until after the decline of Salem's prosperity that interest was shown in the record of her former maritime activity. The first organized exhibit of maritime objects was in 1890 when John Robinson brought together a collection of ship portraits, models and relics in the north end of East Hall. This exhibition stimulated enough interest to require greatly increased exhibition space for the maritime history collection.

The collection has grown steadily until at the present time it requires the complete area of both the first and second floors of the East India Marine Hall. The collection is limited largely to New England commercial maritime activity under sail, with emphasis on Salem trade. Little effort has been made, either to extend it beyond New England or into the field of steamships.

The Maritime History collections contained in the museum may be divided into the following six different categories: navigation; ship models; ship portraits; portraits; figure heads; and life at sea.

A prominent place in the museum's navigation collection is given to Nathaniel Bowditch, early President of the East India Marine Society, who was the author of "The New American Practical Navigator", first published in 1802. The Navigator is still issued in revised form by the United States Government. The museum possesses an almost complete set of the numerous editions of the "Navigator" as well as Bowditch's desk, spyglass, quadrant, sextant and various other items. In addition to the objects concerning Nathaniel Bowditch the museum has on exhibition nautical instruments used at various periods in the history of navigation.

The ship models on exhibition in the museum are of two types, rigged models and half models. The rigged models range from the famous original model of the "Constitution", presented to the museum by Captain Isaac Hull in 1813 to excellent models executed by modern craftsmen. The collection of builders half models range from the earliest known lift model, that of the hetch "Eliza" built in 1793, through merchant and clipper ships to Essex County schooners of the late nineteenth century.

Ship portraiture of a century or more ago was dominated by obscure artists, who frequently to this day are still unknown. It was practiced chiefly in Mediterranean ports although every part of any consequence usually had it's artist. The museum collection contains over 800 water colors and oils, mostly ship portraits, in addition to 850 prints and engravings of maritime subjects and a photographic file of approximately 30,000 prints and negatives.

The portraits on exhibition in the museum total approximately 200 and are of members of the Salem East India Society, merchants of Salem

and officials of the museum. They do not have any importance as works of art, but are of importance rather, as likenesses and for their historical association.

The museum has on exhibition a variety of different types of carving. They range from a large number of figureheads, of various types, down to stern boards and a single paddle-box carving taken from an early steamboat.

Contrary to popular opinion, life at sea a century or more ago was rarely brutal because the captain and crew were almost always from the same town and any brutality would have had its quick reaction against the captain and his family. In addition to this factor, it was imperative that the captain secure the cooperation of the crew to insure the success of the voyage. The above did not mean that life abroad was easy, in fact it was a hard and dangerous life. The Museum has on exhibition various objects which give a good illustration of this life such as ship furnishings, chests, tools of the various trades and over 700 examples of scrimshaw work, which is the name given to sailors' handicraft in wood, rope, or bone.

### History Ethnology

When Captain Carnes presented the first gift to the newly instituted Museum of the Salem East India Marine Society a "Batta" pipe from Sumatra was included among the "curiosities", thus this youngest of sciences, ethnology, was represented among the collections from its original beginning although early specimens were merely regarded as curiosities along with the rest of the specimens.

The ethnology specimens remained scattered among the various collections until 1867 when the Trustees of the Peabody Academy of Science took over the Society museum. At this time Fredrick Ward Putnam, the Director of the Museum from 1868 to 1875 organized and exhibited the non-European material in a scientific manner. These first exhibitions probably took place in East India Hall, but after the construction of Academy Hall in 1885 the ethnological collections were moved to the second floor and they have largely remained there ever since.

Historically, the ethnological collections may be divided into two groups - those based on the original material of the East India Marine Society and the Japanese collection.

The best collections of the Society were from these regions where Salem vessels had been most frequently, mainly the islands of the Pacific and the East Indies, China, India, the east and west coasts of Africa, mainly Zanzibar, the Mediterranean shores and the northwest coast of North America. Generally speaking the quality of objects collected varied according to the cultural level of the people. For instance most of the material collected from China was of a souvenir or trade value, but the material from regions that were quite uncivilized, such as the Pacific Islands is quite good judged by today's standards of ethnology. This material then forms the sound base upon which the ethnological collections of the museum rest today. The most important of these are the Polynesia, Micronesia, and Melanesia collections. Excluding the Japanese collection these three are by far the most important collections of the ethnological section of the Museum with the Polynesian collection being the largest of the three. The reason for this is that

the early Polynesian material was collected before the native culture was greatly affected by contact with American and European traders.

The collections from other parts of the world, excluding Japan, usually have a nucleus of old material, usually good, and sometimes quite rare and important.

It has been said that the Japanese collection is the best of its kind in the world. This is largely due to Edward S. Morse and Dr. Charles Weld who collected all the early material at a time just before the Japanese feudal system was being broken down by Western culture.

At the present time the ethnology collection is made up of an estimated 40,000 specimens, of which only one third to one quarter are in exhibition at one time. Generally speaking, they cover most of the non-European world but it is the collections from the South Seas and Japan that are unique and scientifically important.

### Natural History

From the time of its establishment in 1799, the Museum has had on display Natural History specimens. Captain Carnes again has the honor of giving the first natural history specimen, a large elephant's tooth. From this small beginning the collection grew rapidly as other objects were rapidly acquired.

A few of these early specimens have survived the years, for any number of reasons, but largely they have been disposed of either to reduce the size of the collections or because of deterioration.

Over a period of years several tremendous house-cleaning

operations have taken place, as mentioned elsewhere in this report. The first was in 1875 and the second in 1942. At the time of the latter it was decided to restrict the collection to Essex County, with a few notable exceptions such as the bison, ostrich, and galapagos turtle. Some thought was given to disposing of the Natural History collections all together, but several very good reasons prevented this. The Essex County collection is unusually complete for one small section of the country as well as being used and cherished locally. The great interest in Natural History shown locally in the past century has not entirely died out so the collection is also used by the local residents for identification purposes. The Museum also conducts weekly classes in Natural History for the local school children.

## GENERAL ANALYSIS OF PRESENT CONDITIONS

Site

The present site of the museum is in the heart of the Salem central commercial district, which runs along Essex Street between Hawthorne Boulevard and Summer Street. The site includes a large section of the block bordered by Essex, Liberty, Charter, and Central Streets. (Fig. 1) The museum frontage on Essex Street contains the main entrance and is situated in the midst of Salem's better shops.

In 1824 when East India Marine Hall was constructed it was possible to tie up a boat at the rear entrance to the building. Unfortunately this is no longer true because of the great changes that have taken place in Salem. Extensive filling operations have taken place to accomodate additional commerce. Undoubtedly, being situated on the water front originally added a great deal of atmosphere to the Hall, which is very noticeable in its absence today. This nautical atmosphere was not the only loss, in addition many desirable factors of museum site location disappeared too. (Fig. 2)

Essex Street is approximately thirty feet wide, and because of this limited width, metered parking is restricted to the north side of the street with one way traffic moving in a northwesterly direction. (Fig. 1) Restricting traffic to one way makes it necessary for the out of town visitor to travel in a round about way to reach the museum from the heavily trafficed through fares. This factor coupled with the lack of visitor parking and the crowded surroundings makes access to the museum for the stranger very difficult. There is a small staff parking lot at the rear of the museum but this is only sufficient to take care of staff



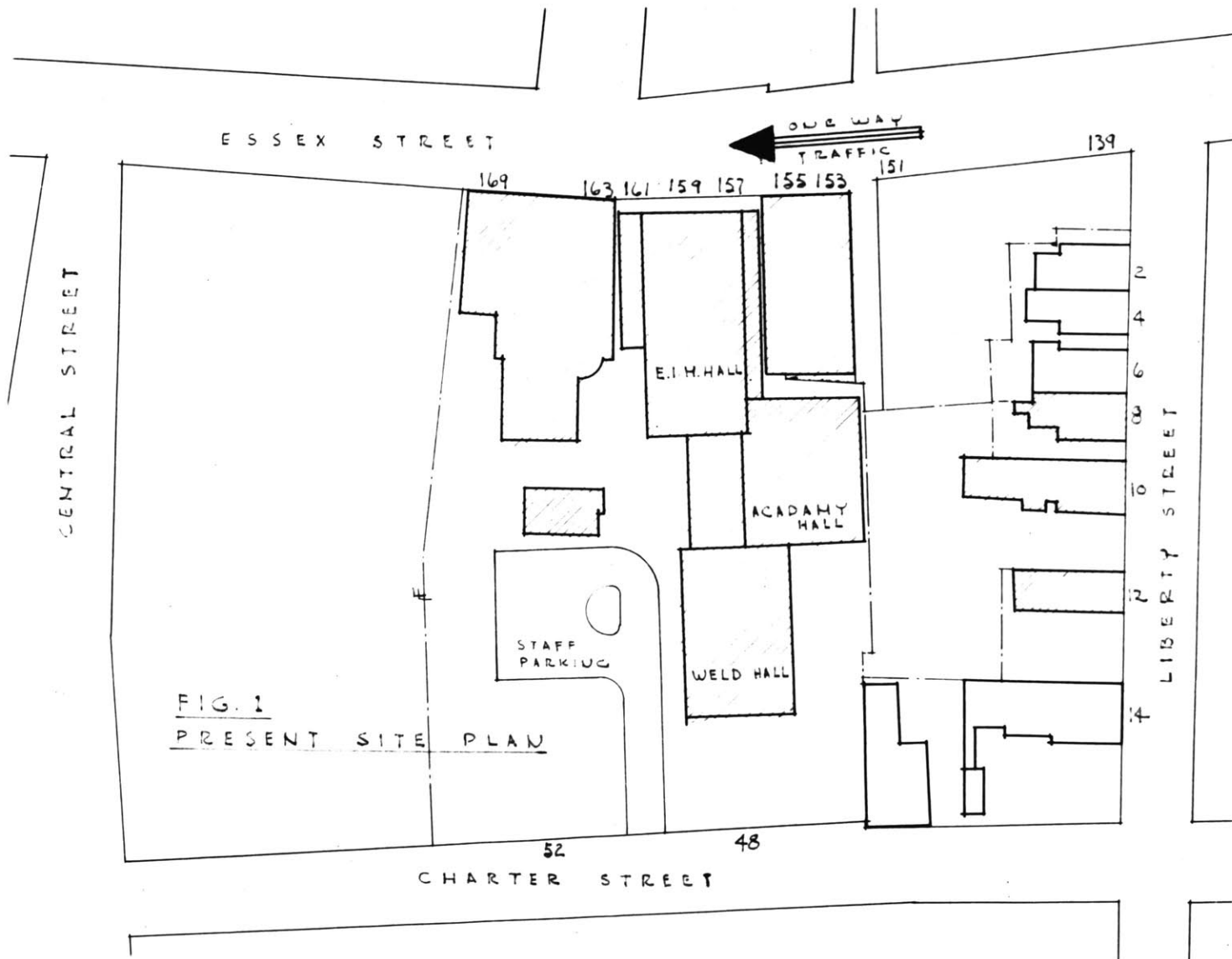


FIG. 1  
PRESENT SITE PLAN

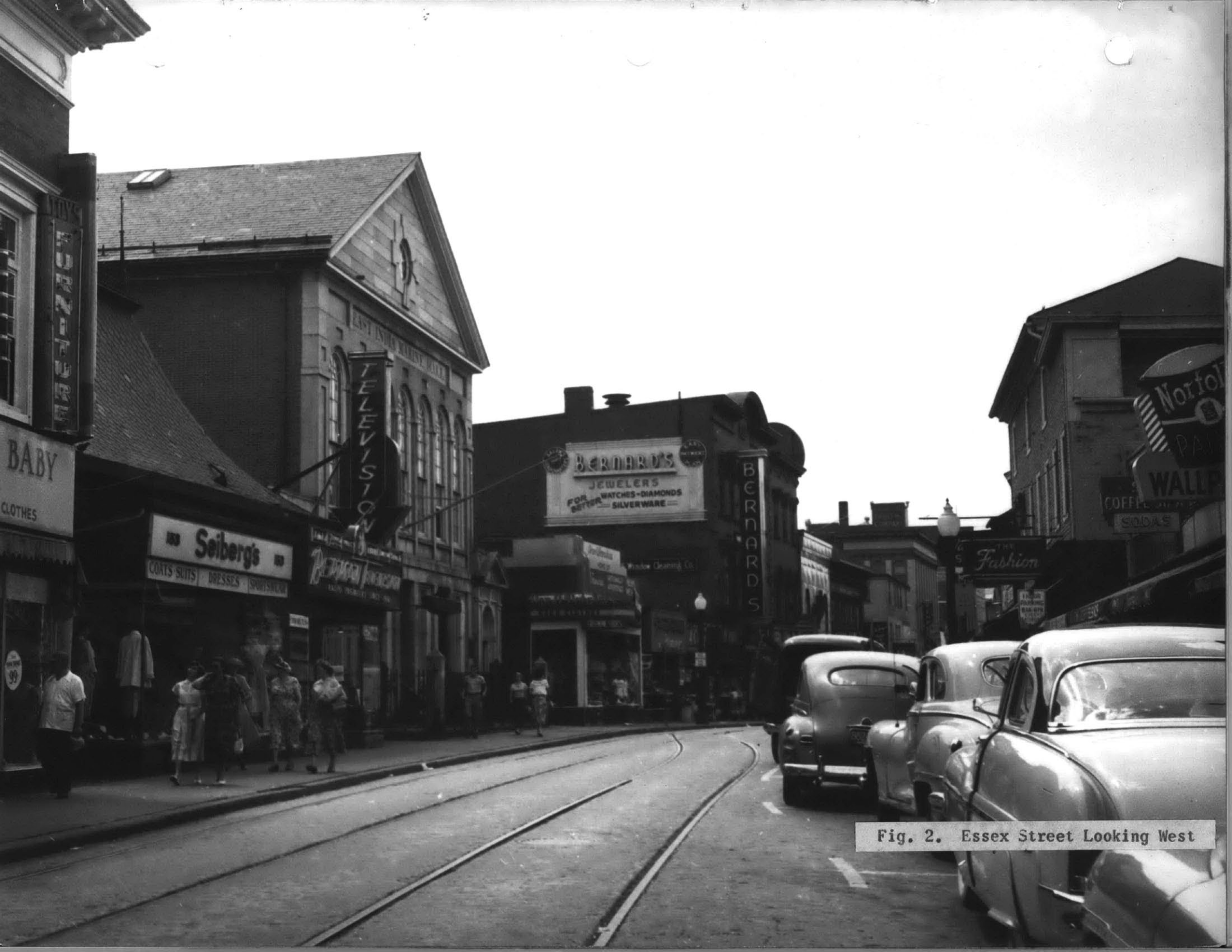


Fig. 2. Essex Street Looking West

requirements (Fig. 1).

Being situated in the center of Salem's commercial district has resulted in the high land values as shown in the table on page 14

### Existing Buildings

As stated in the previous historical summary, the museum building group is made up of the original East India Marine Hall and from additions of various size that were built as the collections increased in size. (Fig. 3) These additions and the original hall have been remodeled at different times to satisfy the need for additional exhibition and storage space as the collections became larger. As a result of the remodeling and the allocation of a very large percentage of the total space to exhibition and storage other museum functions have been greatly restricted in the amount of space allotted to them.

This inadequacy of space for other functions is readily apparent upon analysis, but even yet the exhibition and storage areas are not sufficient to satisfactorily house the collections. Working under this disadvantage the museum staff has shown great ingenuity in order to add storage space. An interesting example of this is the use of objects in the collections such as sea chests, desks, lockers, etc., which are on exhibition, for the storage of many small items. Circulation areas such as the main entrance corridor, which is only 10' 0" wide, have been converted to exhibition space with the use of continuous cases along the wall. With the exception of the office, work space is either inadequate or nonexistent. The museum used to have facilities for photographic work but the studio has been converted to storage to try and satisfy the

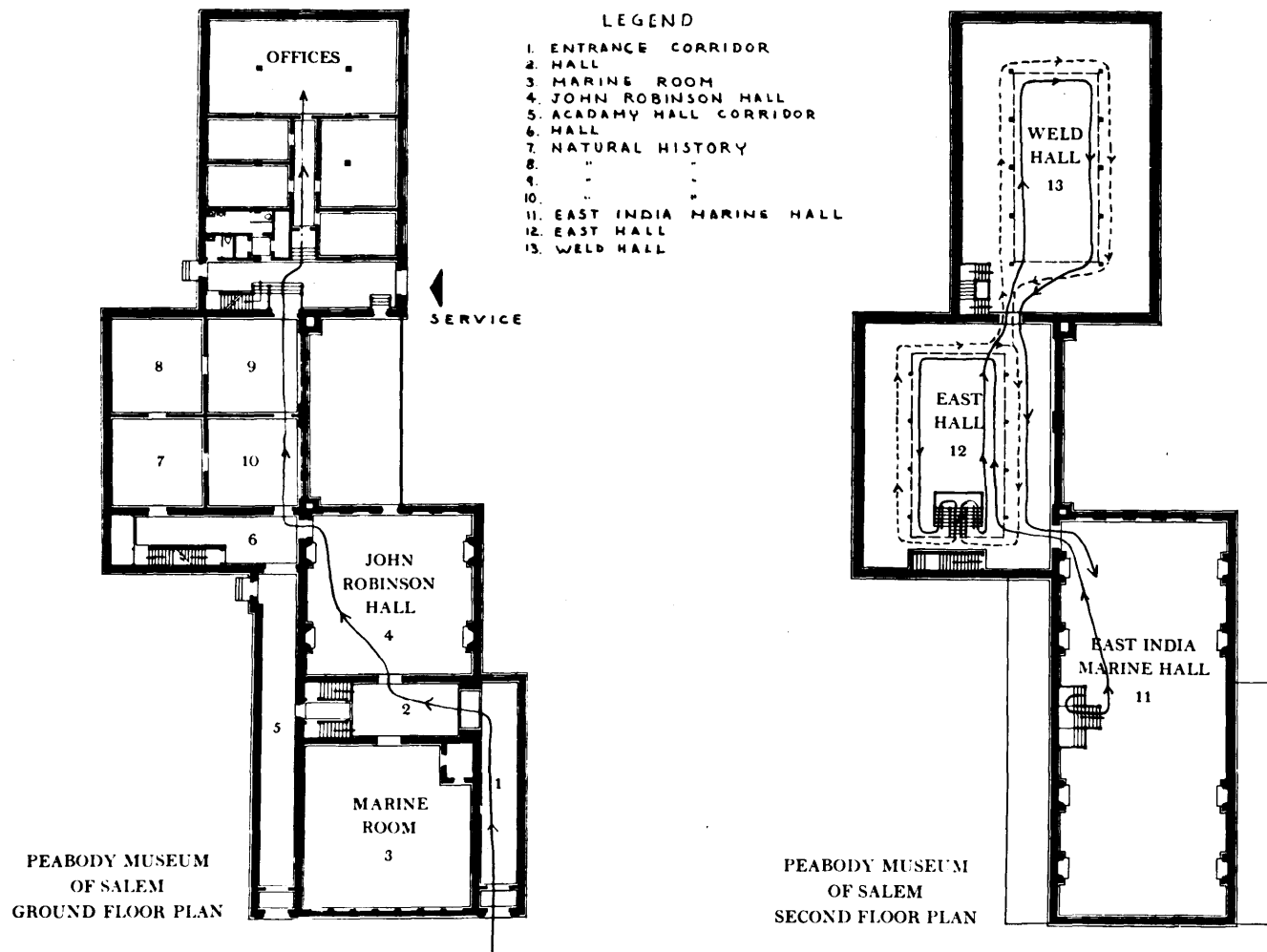


FIG. 3  
PLAN OF PRESENT BLDGS.

demand. The former Academy Hall (Auditorium) which was too large for the purpose of the museum was remodeled to provide exhibition and storage space. It has never been adequately replaced, so the office work room serves as a small meeting area when needed.

The results of the above inadequacies are also apparent in the circulation between functions within the building. It is impossible to reach the museum's office from the main entrance without going through several exhibition areas (Fig. 3). Of necessity, the use of main exhibition areas for major circulation is the rule rather than the exception. Rest room facilities are at a minimum, with the toilets originally intended for staff use also serving the public. These are located in the office wing which is locked on Saturdays and Sundays, thus requiring the museum constable to unlock the door whenever the public wants to use the facilities.

Inadequate planning when Academy Hall and Weld Hall were erected has also contributed to the poor circulation. It is impossible to move through these two buildings and view the total Ethnology collection without many retraced steps (Fig. 3).

Service access to the museum is on the side of the building directly off of the staff parking lot (Fig. 3). This is not the best location as far as being centrally located is concerned, but as there is no definite service circulation within the building, its location is of no serious consequence. The lack of an elevator within the museum has had a static effect on the exhibition technique with the result that heavy or bulky objects once in place have a strong tendency to become permanent because of the difficulty of moving.

Even with all the above disadvantages the staff has succeeded in making the museum a very interesting place. The objects on exhibition are extremely interesting and the East India Marine Society Hall possesses a wonderful character which would be impossible to attain in a new building (Figs. 4 & 5).

The Marine Hall itself plays a major part in the history of the museum and would have to be given major consideration in any proposal to solve the museum's problems.

Besides the museum buildings proper and the land that they are on, the museum owns several houses on Liberty and a large building adjoining the museum on Essex Street. The following cost table shows the assessed values for all of the museum properties and are shown on the map of museum properties (Fig. 1).

Taxed Land	Bldg. Value	Sq.Ft.	Land Value	Total Value
163-169 Essex St. - Bldg.	\$ 15,000	9,755	\$ 53,260	\$ 68,260
153-155 Essex St. - Bldg.	12,000	3,000	16,880	28,880
12 Liberty Street - House	3,000	2,850	1,210	4,210
<hr/>				
Tax Exempt				
48-52 Charter Weld Hall & Storehouse	40,000 200	80,320	24,460	64,660
44-46 Charter	---	3,680	1,460	1,460
157-59 Essex St.-E. India Hall & Academy Hall	20,000 4,000	5,000	36,300	60,300
163-169 Essex Street	---	2,045	2,050	2,050
10 Liberty St. - House	6,500	3,716	2,060	8,560
8 Liberty St. - House	5,700	3,028	1,480	7,180
<hr/>				
TOTALS (Taxed & Tax-exempt)	\$106,400		\$139,160	\$245,560



FIG 4 EAST INDIA MARINE HALL



FIG. 5. - JOHN ROBINSON HALL



### Exhibition Technique

The exhibition technique of the museum has certain faults. Some of these are not correctable with the situation at present. As with other functions of the museum the exhibition technique suffers due to lack of space. The Ethnology collection in particular is extremely crowded in its cases due to lack of space. Two hours is the general estimate of the maximum time a visitor can spend in a museum and continue to absorb what he sees. This museum is in the fortunate position of containing two nationally known collections. In fact the Ethnology collection is considered one of the four best in the world. Certainly all the objects in all three collections should be available to all persons interested, but to the casual museum visitor a smaller exhibition will provide greater enjoyment. This is impossible at present because of the storage situation and the small size of the staff which makes frequent changes impossible.

The heating and ventilation problem at present is taken care of by a steam system. Lack of air conditioning and humidity control makes it necessary to exhibit most of the objects in the collections under glass.

Lighting in the museum at present is not good. Over all general lighting is quite low and only a few of the cases contain their own lighting. There is no provision for special lighting effects of any kind.

### Conclusions

From the preceding analysis it was found that the museum had certain basic faults. Perhaps the most important of all, is the lack of character and the exterior of the museum, which has disappeared as the Salem waterfront was filled in. This is important because of the historical background of the museum and to prepare the visitor for the exhibitions he will see inside. The site is located in a section where it would be very hard to alleviate the parking and ease of access problems.

The present building though well maintained does not work well where circulation is concerned. Although additional storage space would help to correct the exhibition problem, the present building complex is such that in all probability the circulation could not be made to work.

All the factors concerning both the site and building point to a change in site, except the requirement that the East India Marine Hall be given major consideration in any future program of the museum. The assessed value of the museum holdings totals \$225,500, excluding East India Marine Hall. Upon investigation it was estimated that it would cost \$90,000 - 100,000 to move the old building to the new site selected which would leave the museum \$125,000-135,000 to start a comprehensive building program.

Being economically feasible to move, a new site should be considered, preferably somewhere on Salem harbor.

**PROGRAM****Public Spaces****Lobby:**

The following facilities shall be provided:

1. Counting of visitors
2. Checking of coats, cameras, umbrellas, and parcels
3. Sale of books, photographs, and prints.

**Lounge:**

The lounge is for the use of the museum visitor and also for use in conjunction with the meeting area.

It shall provide the following facilities:

1. Seating for approximately 25 people
2. Public telephones
3. Public toilets

**Temporary Exhibition Space (Approximately 2000 sq. ft.):**

Shall be used for exhibitions of a temporary nature extracted from museum's own collections or those on loan from other museums and institutions.

**Maritime History Collection (Approximately 10,000 sq. ft.):**

Using improved exhibition technique this collection can be housed in East India Marine Hall and a reconstructed vessel.

The collection includes the following sections:

1. Models

This includes both rigged and builders half models.

Only five to ten half models are on display at one time, because of their repetitious nature. Generally a major portion of the rigged models is always on exhibition.

2. Portraits of Vessels

The museum contains approximately 1800 portraits, of which 700 are either oil or water color. The rest are prints. It is proposed that only 200 of these be on exhibition at one time with frequent changes being made.

3. Nautical Instruments

These will be exhibited on the reconstructed brig to illustrate navigation procedure.

4. Life at Sea

Objects in this section will be exhibited on the reconstructed brig, to illustrate the way of life on board ship and include the following: tools of the ship wright, copper, rigger and sailmaker, weapons, lighting devices, and various other objects associated with the sailor's life.

5. Figureheads

Because of their weight and fragility these are fairly permanent installations. They vary in size from eighteen inches to seven feet.

## 6. Portraits

This section is made up of approximately 200 portraits of members of the East India Society, Salem merchants, and officials of the museum.

### Ethnology Collections (Approximately 8,000-10,000 sq. ft.):

These collections include various utensils, implements of war, articles of dress, religious articles, art, etc., which illustrate the living habits and culture of people in various parts of the world.

These are divided into the following sections:

#### 1. Oceanic

Polynesia

Micronesia

Melanesia

#### 2. Japanese

#### 3. Indonesia

#### 4. China, Siam, India, Tibet and Korea

### Natural History (Approximately 2,000-3,000 sq. ft.):

This collection is restricted to Essex County with the exception of a few important specimens. It is used by the schools and by local residents for purposes of identification.

**Meeting Area:**

The museum does not have a membership as such, but does sponsor a group known as "The Marine Associates", which holds monthly meetings. Other activities are a weekly children's class in Natural History and infrequent dinners. It is proposed that these activities can all be taken care of in one flexible area.

The meeting area shall provide the following facilities:

1. Seating for 150 people
2. Lecture facilities
3. Motion picture equipment
4. Kitchen facilities (small)

**Library:**

The following facilities shall be provided:

1. Control desk
2. Card catalog
3. Librarian's office and small work room
4. Reading room with seating for approximately ten-fifteen people
5. Book shelving -- 1500 linear feet
6. Photographic negative storage --- 300 linear feet of shelving
7. Charts, 3' x 6' cases --- 30 linear feet
8. Ship plans, 3' x 6' cases --- 50 linear feet
9. Dumb waiter

Staff Areas

Museum Office (Approximately 2,000 sq. ft.):

Shall include space for the following personnel:

1. Museum Director
2. Board room - seating for twelve people
3. Curator of Ethnology
4. Curator of Maritime History
5. Curator of Natural History
6. Four Secretaries

Preparator's Workshop:

The preparator has charge of installing the museum's exhibits and doing the fine handwork that is required with taxidermy and the mending of pottery, paintings, models, etc.

The preparator's area shall provide the following facilities:

1. Preparator's office
2. Workshop
3. Taxidermy
4. Fumigation room

Carpenter Shop:

The carpenter shop is used mainly for the rough work done in the preparation of exhibits and for minor repairs in the museum.

The shop should have complete facilities as shown below:

1. Work bench
2. Lathe
3. Drill press
4. Circular saw
5. Jointer
6. Paint booth
7. Gluing
8. Storage of wood and installation supplies

**Photographic Studio:**

The photographic work done at the museum is limited generally to the photographing of objects in the collections and copy work for recording purposes.

The following processes shall be provided for:

1. Copy work
2. Photographing of small objects
3. Negative processing
4. Contact printing
5. Enlarging

**Lounge:**

In addition to the paid employees of the museum there are a number of interested and devoted people who do a great deal of work at the museum. The lounge area is to take care of these people as well as the museum staff. Besides space for



conversation and resting, facilities are required for making light lunches and coffee.

**Locker Room:**

Facilities shall be provided for the storage of the staff's personal belongings. Because of the great amount of dirty work that is done showers should be provided.

This area shall provide the following facilities;

1. Ten lockers
2. Shower room
3. Toilets

Storage Areas

All storage areas with the exception of dead storage are open to all interested persons and are known as reserve exhibition.

The areas listed below are required:

**Maritime History:**

1. Rigged models (approximately 450 sq. ft.):

Facilities are shelving, ones or two tiers in height

2. Half models (approximately 600 sq. ft.):

Facilities are stanchions 6' o.c. from which the models are hung

3. Bin and case storage (approximately 1200 sq. ft.)
4. Pictures (approximately 1350 sq. ft.)

**5. Print Storage**

Facilities required are 35 linear feet of case storage  
10" deep and 3' - 6" high.

**6. Dead Storage (approximately 600 sq. ft.)**

**Ethnology: (Approximately 4000 sq. ft.)**

Storage facilities include trays, bins, and cabinets which  
are based on a tray size of 36" x 36" x 4".

**Natural History: (Approximately 1200 sq. ft.)**

Storage facilities include trays, bins, and cabinets which  
are based on a tray size of 30" x 30" x 4".

**Services****Mechanical Equipment:**

In addition to the standard equipment which is necessary in  
all building the following equipment is required:

1. Air conditioning
2. Humidity control
3. Freight elevator
4. Passenger elevator

**Parking:**

The following parking is required:

1. Visitor's - 50 cars
2. Staff - 7 cars

## SITE SELECTION

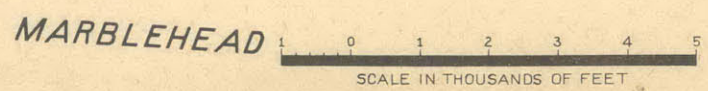
Three different sites were given consideration as the new location of the museum. These were Forrest River Park, Winter Island, and a site adjoining Derby Wharf (Fig. 6). The main requirements to be met were: integration with Salem Harbor for reasons already stated, parking, ease of access, close proximity to public transportation, and the cost of moving East India Hall. All three locations are close to or adjacent to some other point of interest.

Forrest River Park was ruled out because of its distance from town, high moving cost, and the failure of the Indian Village, at the Park, to have some relation to the museum.

The Winter Island site was again ruled out because of the distance from town and prohibitive moving cost. Also it is out of the way for the out of town visitor even though it's adjacent to Salem Willows Park.

The site which was selected and met most of the above requirements was the Derby wharf location (Figs. 7, 8, & 9). Besides these requirements the site offered tremendous possibilities for the integration of the museum, Derby Wharf, which is a National Maritime Historic Site, and the House of the Seven Gables into a coordinated whole. (Fig.9). This was an advantage because of the desirability of keeping locations of historic interest in Salem to as few as possible. Derby Wharf and The House of The Seven Gables have approximately 40,000 visitors a year which would help to increase the museums attendance. Derby Wharf is approximately four blocks from the old museum site and shopping district

**SALEM**  
ESSEX COUNTY



- 1. DERBY ST. SITE
- 2. WINTER IS. "
- 3. FORREST RIVER PARK SITE
- 4. PRESENT SITE

FIG. 6

SALEM: 8.18 Sq. Mi.

SALEM



Fig. 7. View of Proposed Site and Derby Wharf from Custom's House Tower



Fig. 8. View of Proposed Site From Derby Street

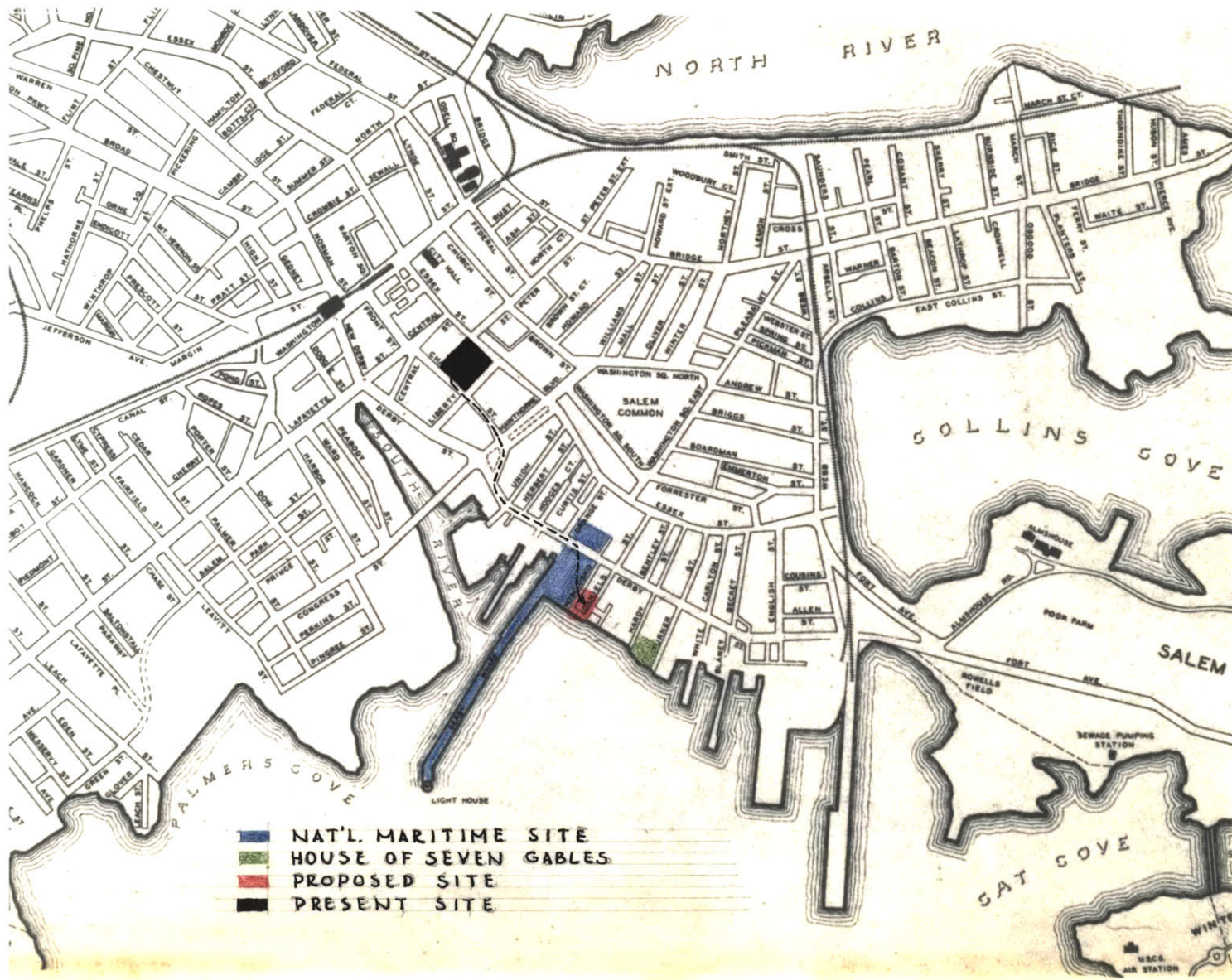


FIG. 9

of Salem. This gives the museum a good central location without all the disadvantages of the present site.

No test borings, in the vicinity of the site, were available, but from the experience of persons interviewed it was learned that the immediate area of the new site is covered with a layer of clay 3-13 feet in depth with sand to undetermined depths underneath. The clay apparently acts, as a layer of waterproofing because the residents in the vicinity do not have any trouble with flooded basements.

The assessed value of the land and buildings on the new site is \$57,440; \$7,040 of this is cost of the land. Some of these houses which are either in good condition or of historical value could undoubtedly be moved to other locations, further reducing the above figure.

There was some question about the industrial areas, which are on both sides of the residential district, eventually expanding into the immediate area of the site. This will never happen because of the definite boundaries formed by the National Maritime Historic Site and the House of the Seven Gables. These two areas are of so much interest historically that industry would never be able to encroach upon them.



## DEVELOPMENT AND CONCLUSIONS

The first problem to be given consideration after the basic decision as to site had been reached was to solve the problem of how the Marine Hall could be moved and what the most economical route would be. It was found that the old building could be moved, if cut into sections, the size of which would be determined by the route of moving, using standard building movers' techniques. The route with the widest streets was found to be Charter Street to Hawthorne Boulevard to Derby Street and into the site (Fig. 9). Using this route the building could be moved in sections of twenty-five feet each.

Upon development the original idea of coordinating the museum with both Derby wharf and the House of the Seven Gables proved impractical. A scheme attempting to do this was done, but all three units broke down into individual parts which was not desired. Historically, The House of Seven Gables only has a very slight connection with either the museum or Derby wharf, besides having a different sort of interest for the visitor. However, the museum and Derby wharf, are both important to Salem's maritime history and have a definite relationship. It was then decided to only provide a system of walks to link the House of The Seven Gables with the other two.

Because of the great importance, historically, that East India Hall has in it's own right, it was felt that it should be situated in such a way as to become part of the Maritime History exhibition. Any definite connection with the new part of the museum nullified this idea to some extent so it was decided not to have a connection above ground

but only have a service connection at the basement level.

The requirement to try and regain the original atmosphere of the museum immediately brought to mind the idea of using a reconstructed ship of the proper period. This helps to achieve an integration with the harbor as well as to provide interest for the exhibition. A slip was provided for the vessel. The area used for the slip is fill because the original shore line (approximately 1824) is approximately 150 feet back from the present sea wall. By doing this the site becomes surrounded on three sides with water, which also helped to regain this atmosphere that is so desired.

In relation to the houses which surround the site, East India Hall dominates everything because of its height. Because of this, it is easily visible from the street and of course from Derby wharf. The first schemes cleared all the residences away between the site and Derby Street (Fig. 10). This was not desirable for two reasons. It was not necessary for ease of location because East India Hall already dominated the area and is easily visible from Derby Street. In addition there exists a very interesting visual contrast between the visual tightness of narrow streets and crowded homes and the sudden openness of the harbor (Figs. 11, 12, & 13). It was felt that it would be a great mistake to do away with this visual interest. This proved to be one of the major factors in the overall planning with variations of the same effect incorporated into the museum approach and court yard.

Parking was another major problem to be considered. A separate parking lot was provided for the House of the Seven Gables because of the basic differences between it and the maritime sites. One large lot

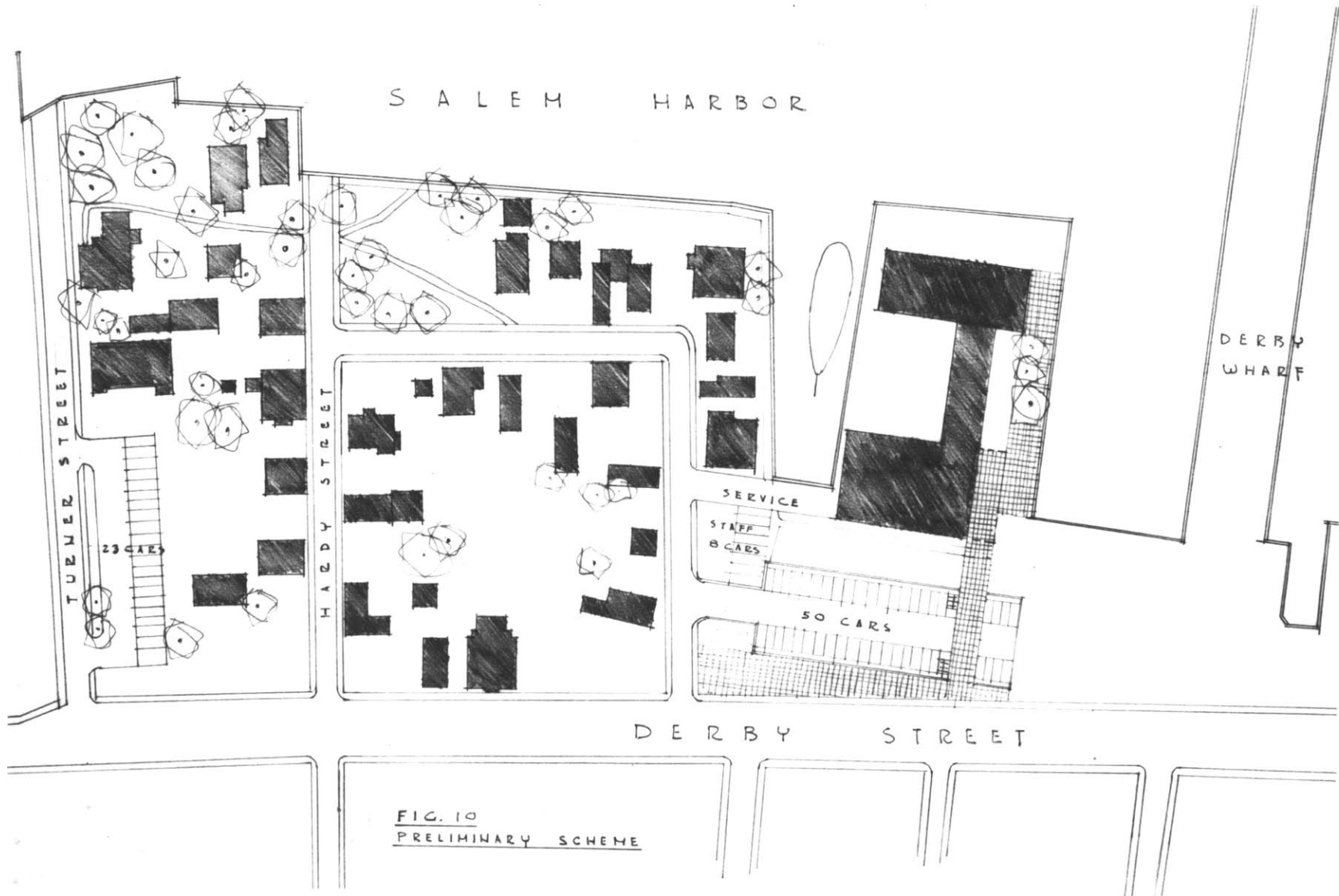


FIG. 10  
PRELIMINARY SCHEME



Fig. 11. Koscuisko Street



Fig. 12. Daniels Street

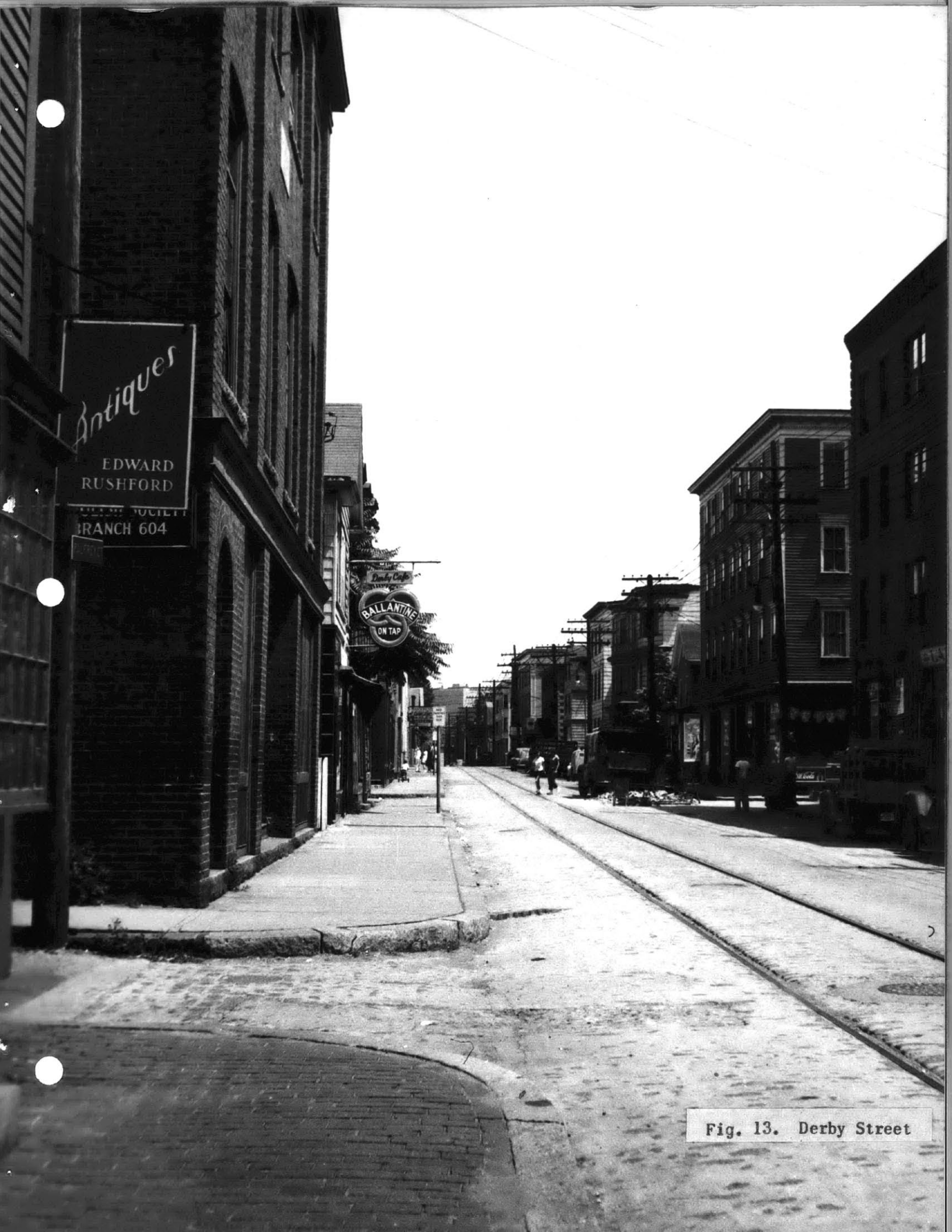
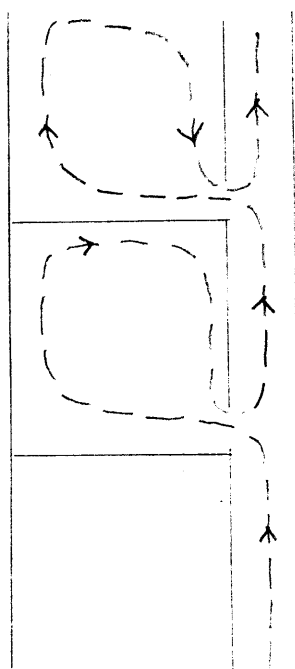


Fig. 13. Derby Street

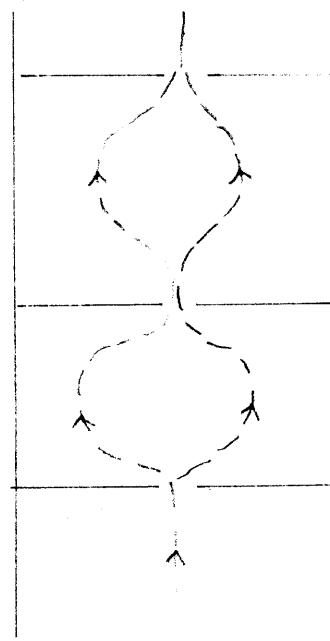
takes care of both the museum and the National Maritime Historic Site and is located on the north side of Derby Street. This was done because of the desire not to open up, in any way, the area between Derby Street and the Harbor, retaining the visual tightness of the area. In addition by placing the parking lot on the fringe of the area the visitor walks through these same narrow streets to the museum allowing this visual contrast to have its effect upon him and making the museum court doubly effective.

The achievement of harmony between East India Hall and the new structure was given major consideration. Because the two structures are visually separate the task was much easier than expected. It was thought that a large part of this unity could be achieved by the use of common exterior materials and a unified exhibition technique on the interior.

The major faults of the old museum technique were also given full consideration. Generally there are two major types of museum circulation as shown below.



1.



2.

In the first type the exhibition areas are entered from a common circulation area. In the second type circulation passes through the exhibition areas with no common circulation area. Obviously the first type is much the better of the two because it allows a visitor to come and see any one of the collections without being subjected to the others. This is the general type of circulation that is used in the new museum. Along with the proposal that the staff should be increased the exhibition areas were generally reduced in size with a corresponding increase in storage space. The Maritime section is emphasized because the majority of visitors come to the museum to see this collection even though the Ethnology collection is internationally famous among professionals.

The reconstructed brig was incorporated with the Maritime History for any number of reasons. As stated before it is obviously a great help in recapturing the atmosphere of the sea and the objects which would be on exhibition on the brig would be shown in their original environment making them doubly effective. These objects would be selected from the Nautical Instrument and Life at Sea sections of the Maritime collection and exhibited in such a way as to illustrate how they were used by the men at sea. The reconstructed brig would remain in the slip permanently. A concrete cradle in the bottom of the slip is provided to hold the brig when necessary cleaning and repairs take place. The slip would be closed on the harbor end with a sea wall which has a valve system incorporated in it. This allows the slip to be emptied when necessary.

It was felt that the exhibition technique should be standardized so to do this a four foot module was employed. A standard steel



pipe with electrical outlets at the ceiling fits into plugs in the floor and ceiling. It is then possible to attach panels, cases, etc. to these. The general lighting and acoustics were also incorporated in the module. The inclusion of air conditioning and humidity control with the mechanical equipment enables the staff to exhibit an increased number of objects out in the open and not under glass as was true previously.

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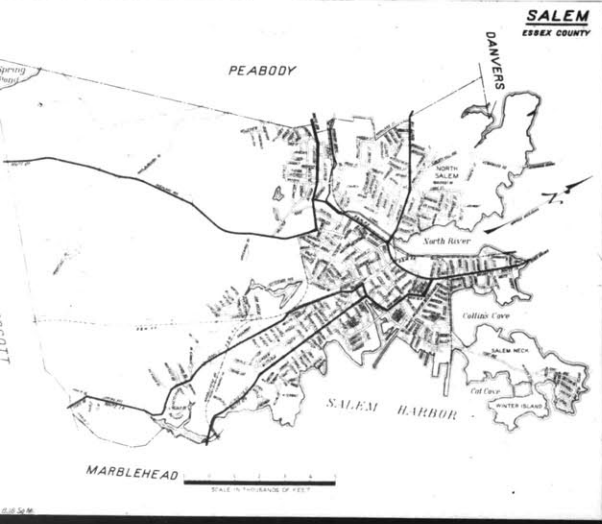
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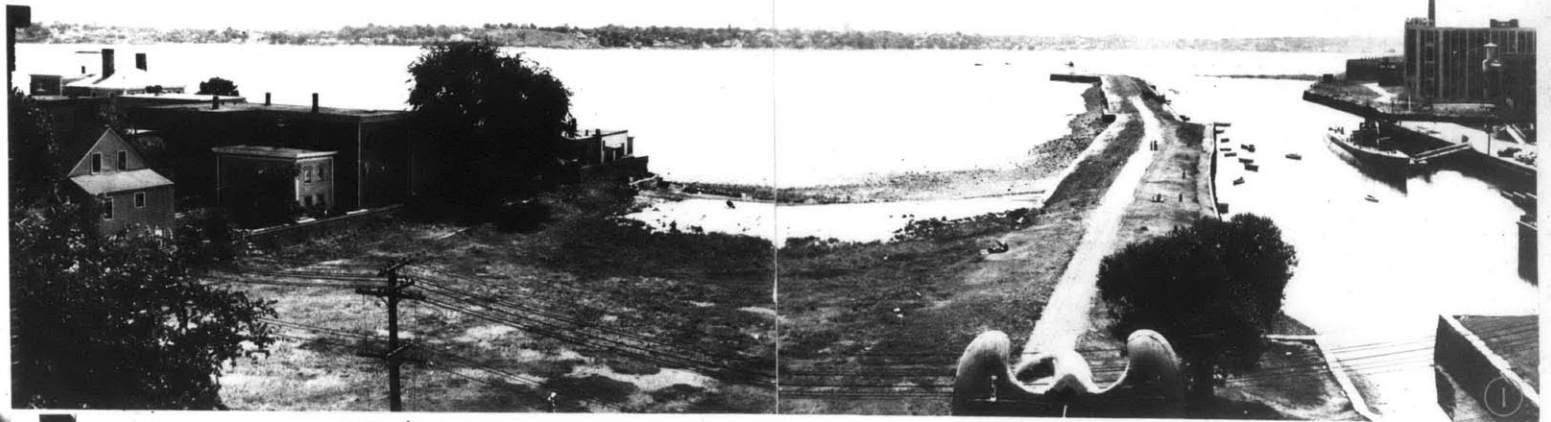
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A NEW PEABODY MUSEUM FOR SALEM MASS.

MASTER OF ARCHITECTURE  
THESIS M.I.T. 1951  
DONALD H. PANUSHKA



2 DONALD H. PANUSHKA  
M.ARCH. THESIS

PLOT PLAN  
SCALE: 1" = 50'

SALEM HARBOR



DERBY WHARF

HOUSE OF SEVEN GABLES

NAVAL RESERVE BASE

NATIONAL HISTORIC  
MARITIME SITE

DERBY STREET

TURNER STREET

HARDY STREET

DANIELS COURT

EDSCLIPPO ST

BENTLEY STREET

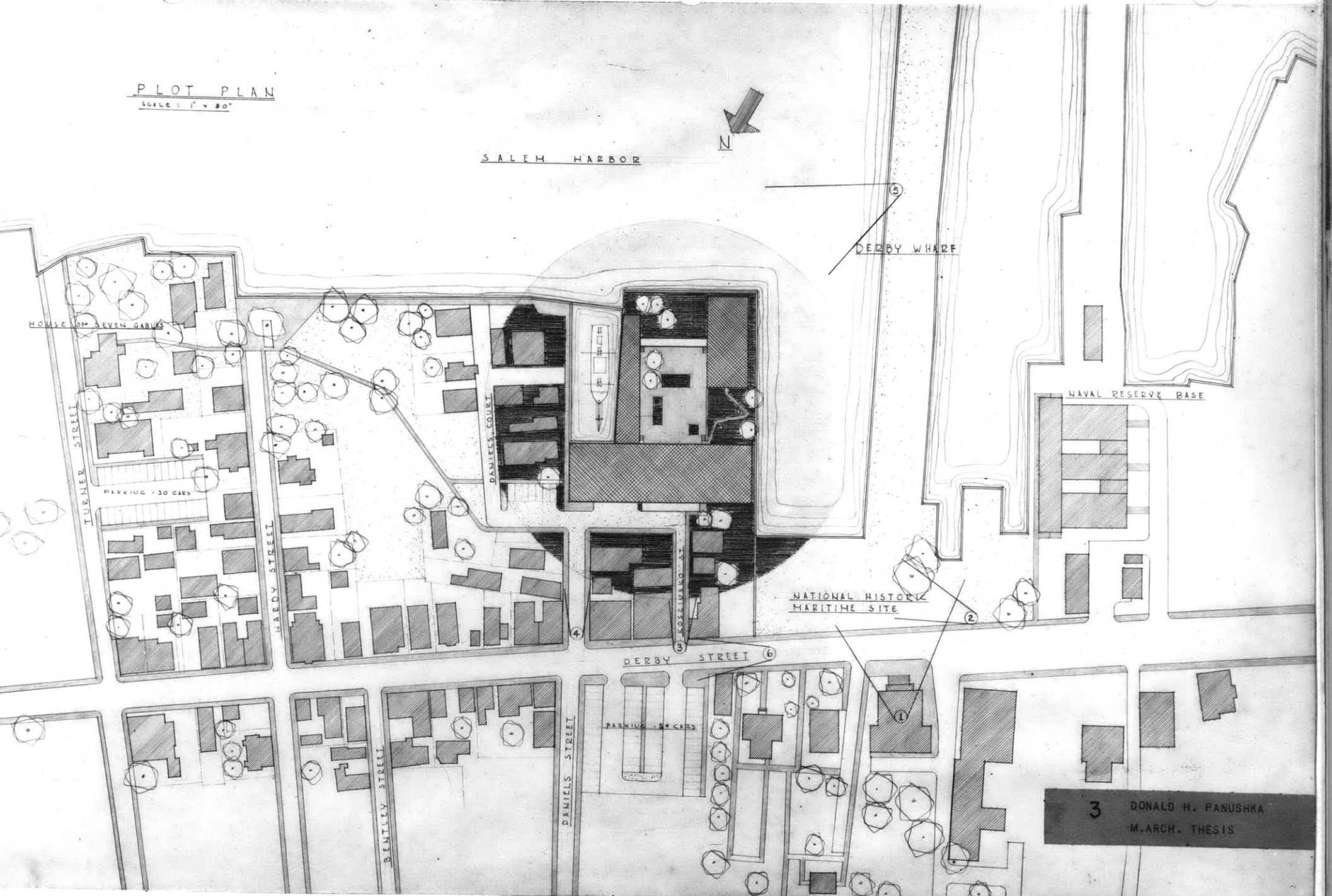
DANIELS STREET

PARKING - 30 CARS

PARKING - 24 CARS

3

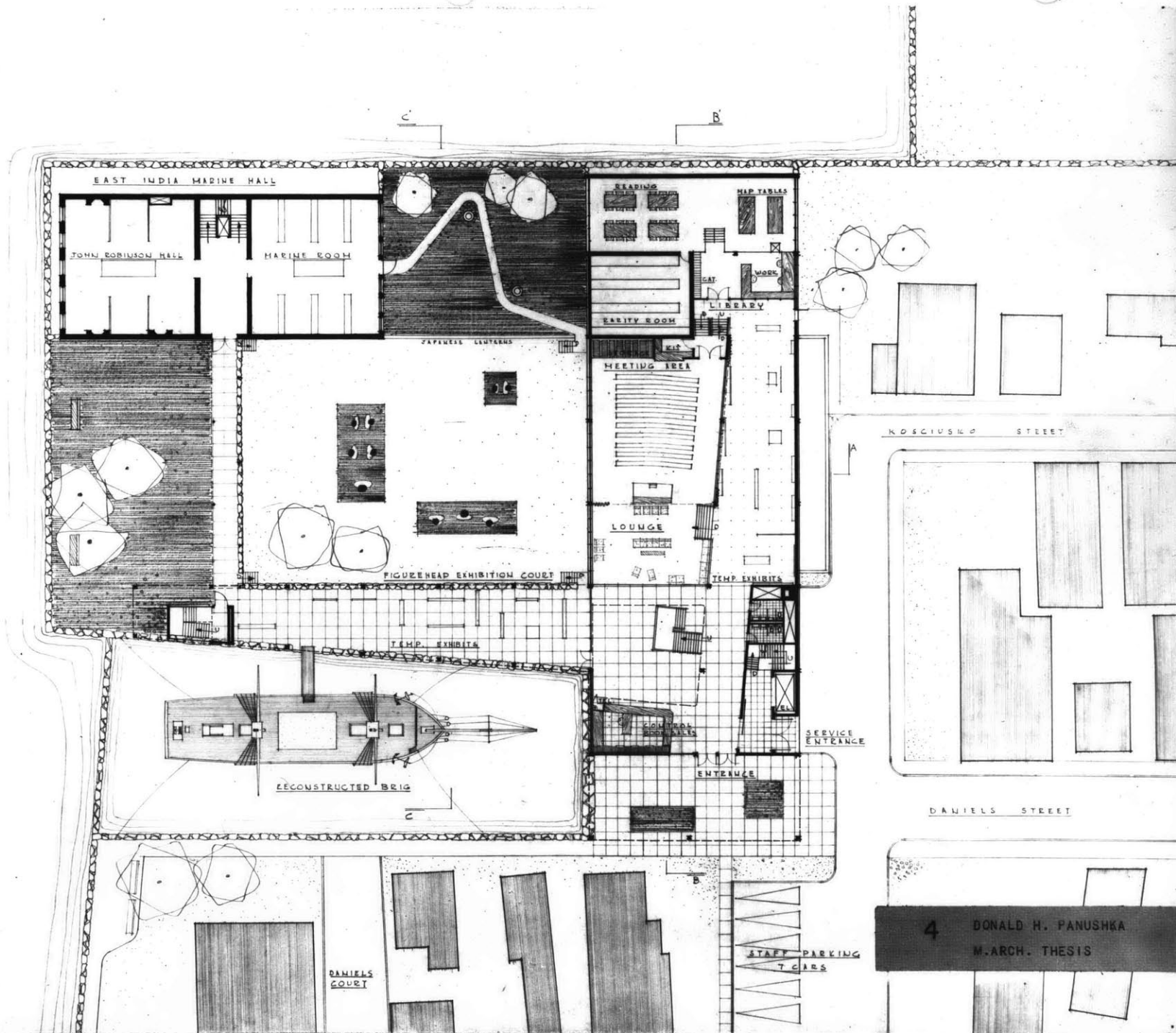
DONALD H. PANUSHKA  
M.Arch. THESIS



SALEM HARBOR

FIRST FLOOR PLAN

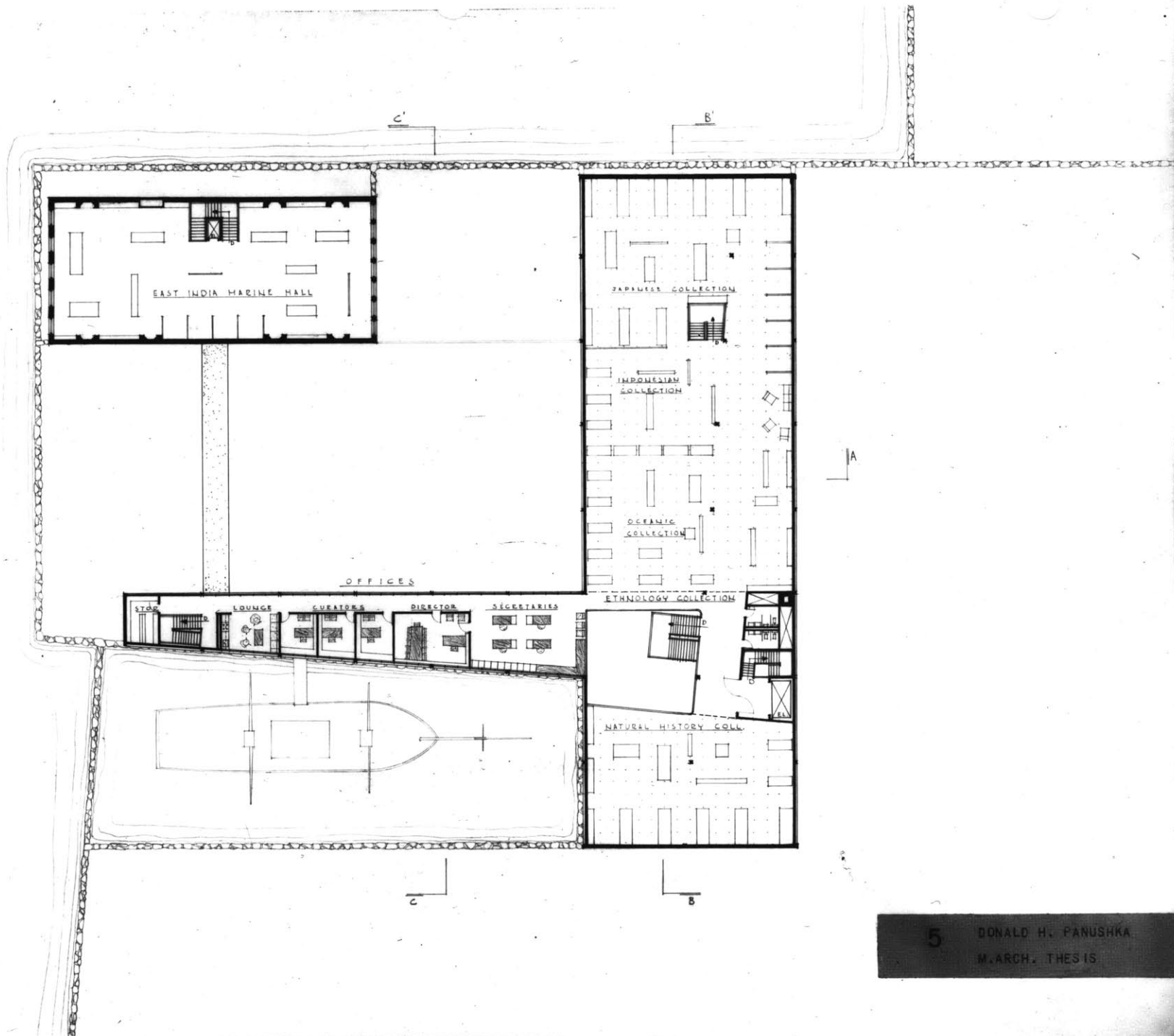
SCALE: 1/8" = 1'-0"

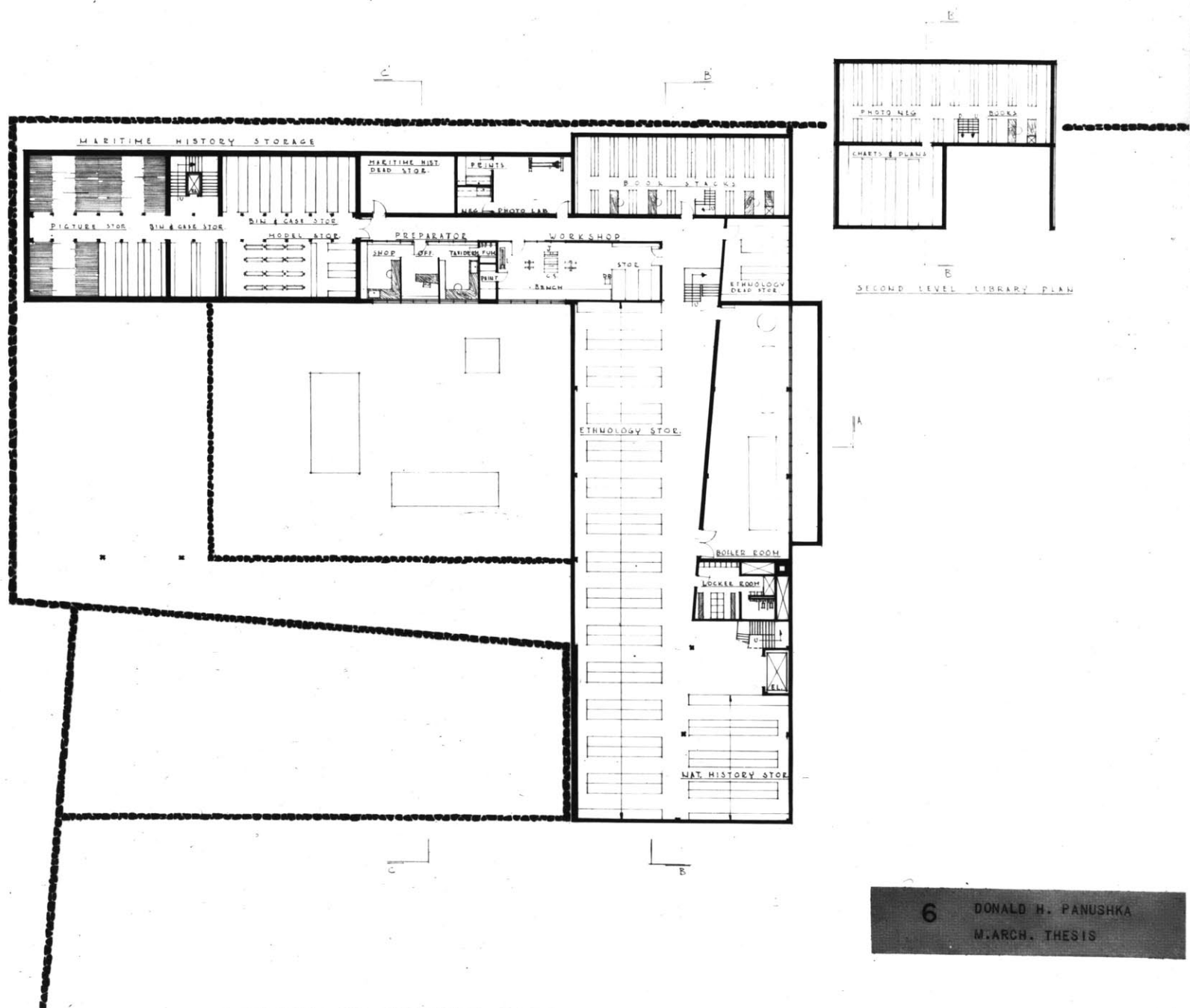




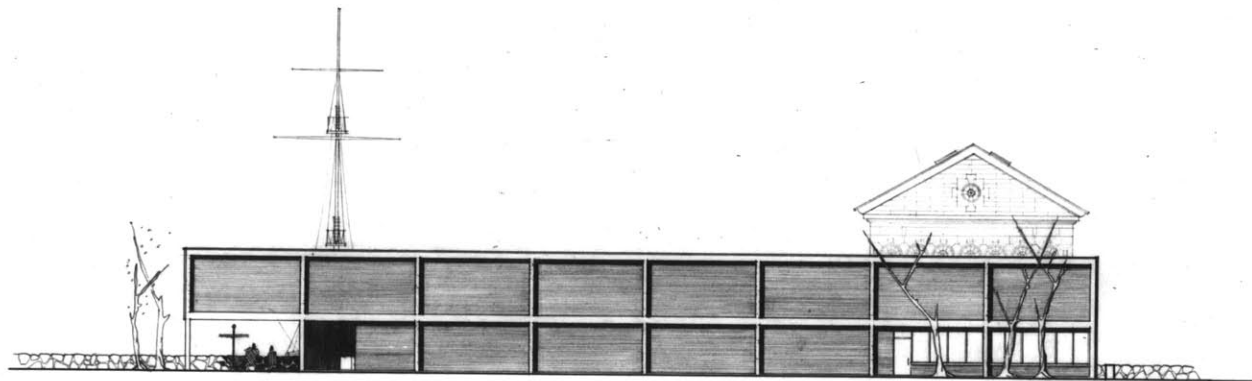
SALEM HARBOR

SECOND FLOOR PLAN  
SCALE: 1/16" = 1'-0"

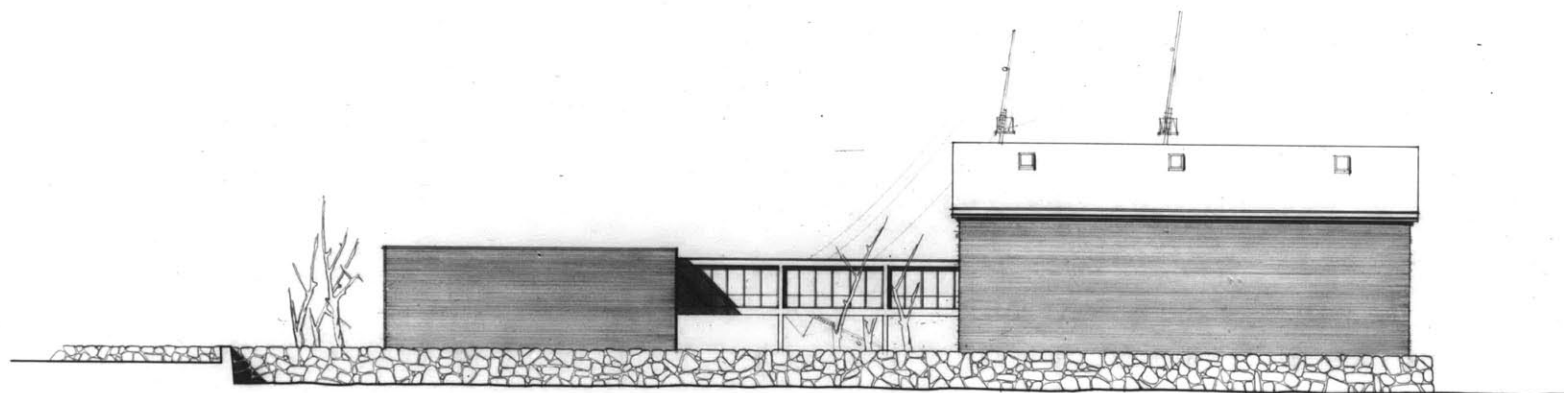




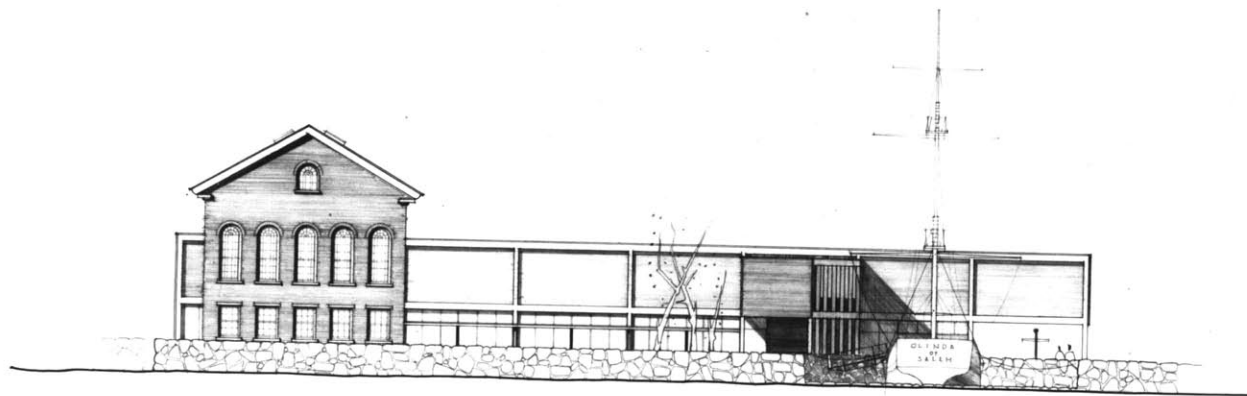
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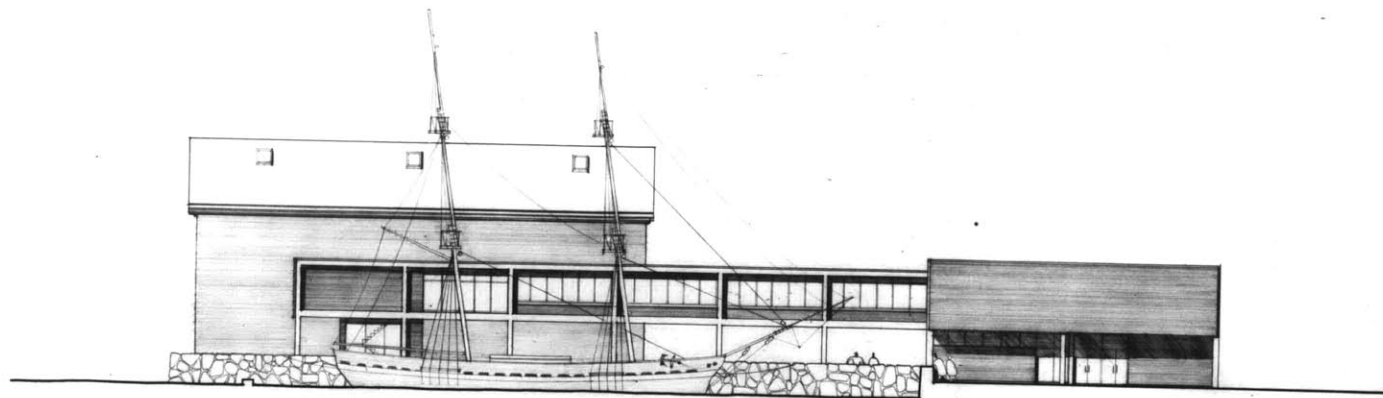
NORTHWEST ELEVATION  
SCALE 1/16" = 1'-0"



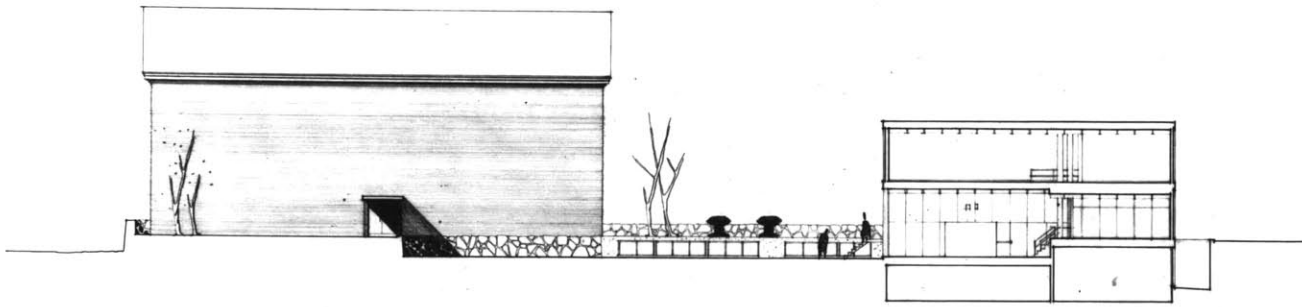
SOUTHWEST ELEVATION  
SCALE 1/16" = 1'-0"



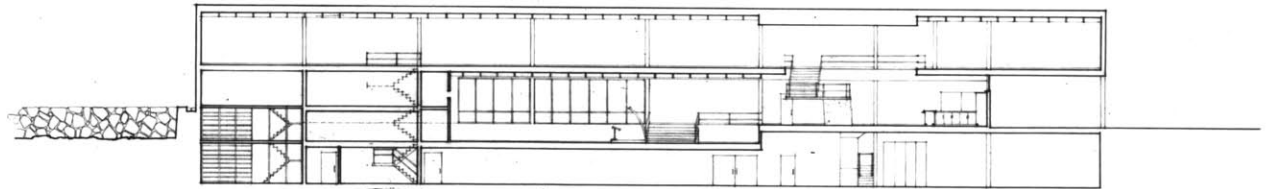
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SCALE:  $\frac{1}{16}'' = 1'-0''$



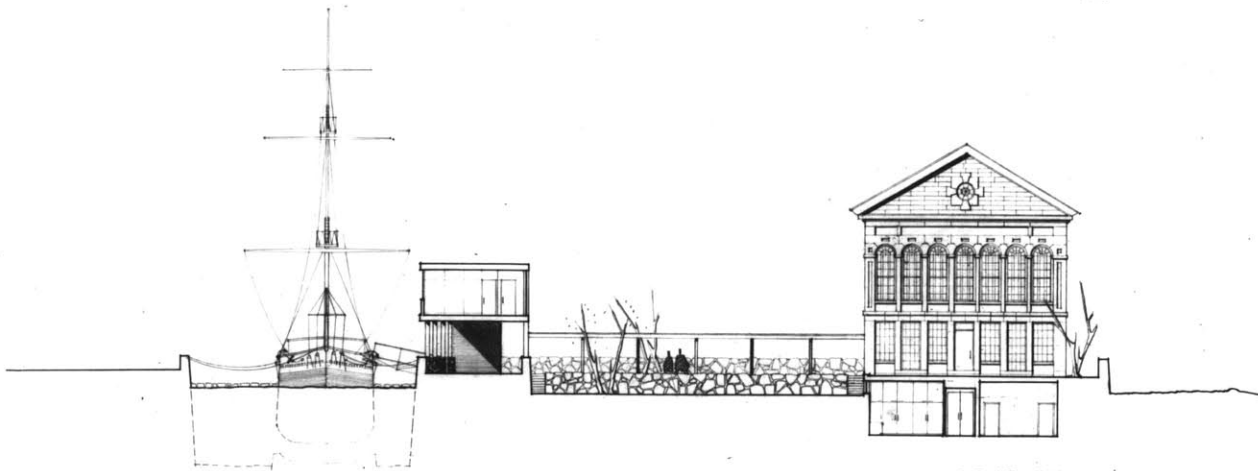
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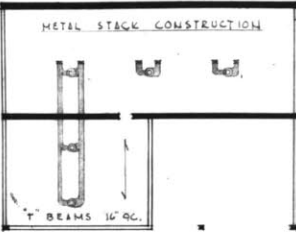
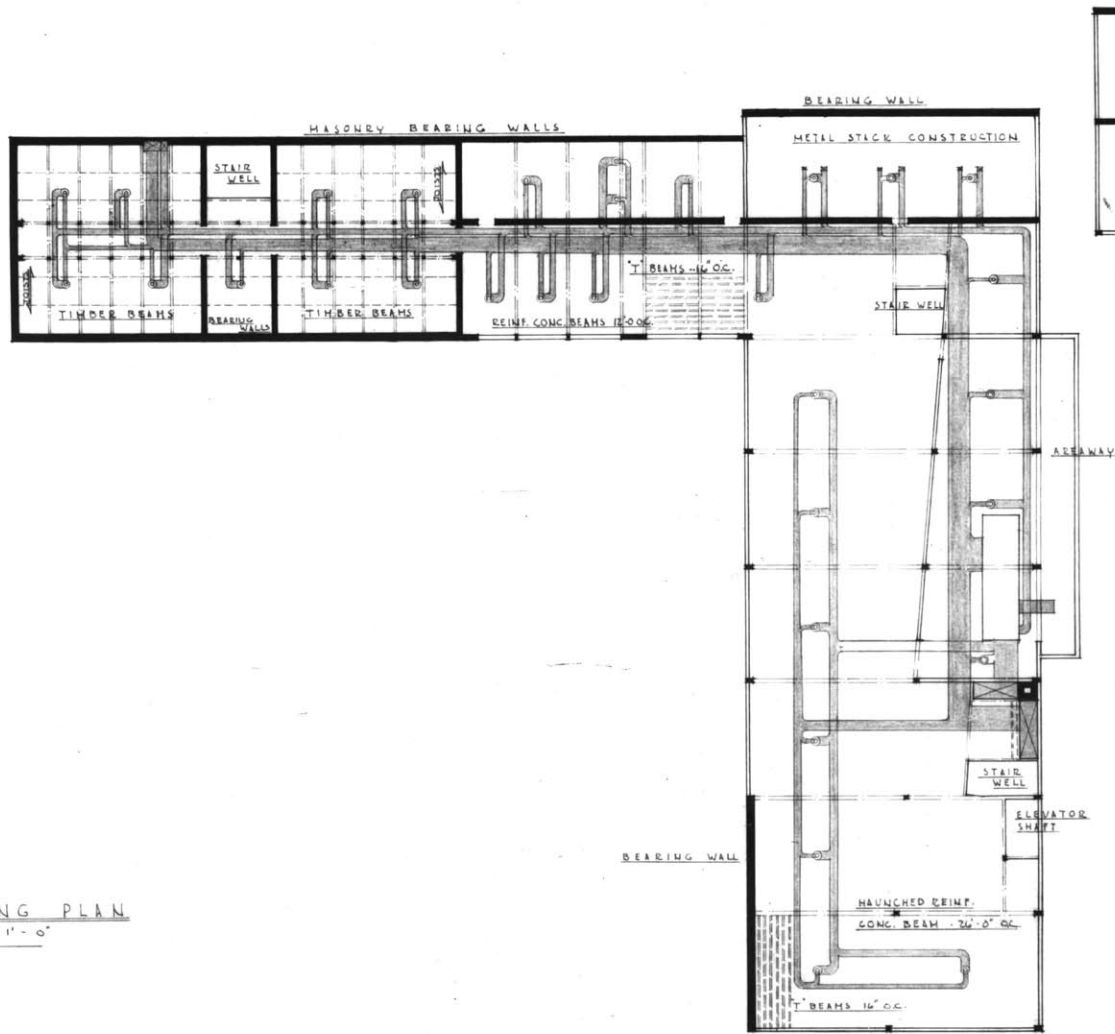
SECTION A-A  
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SECTION B-B  
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SECTION C-C  
SCALE: 1/8" = 1'-0"

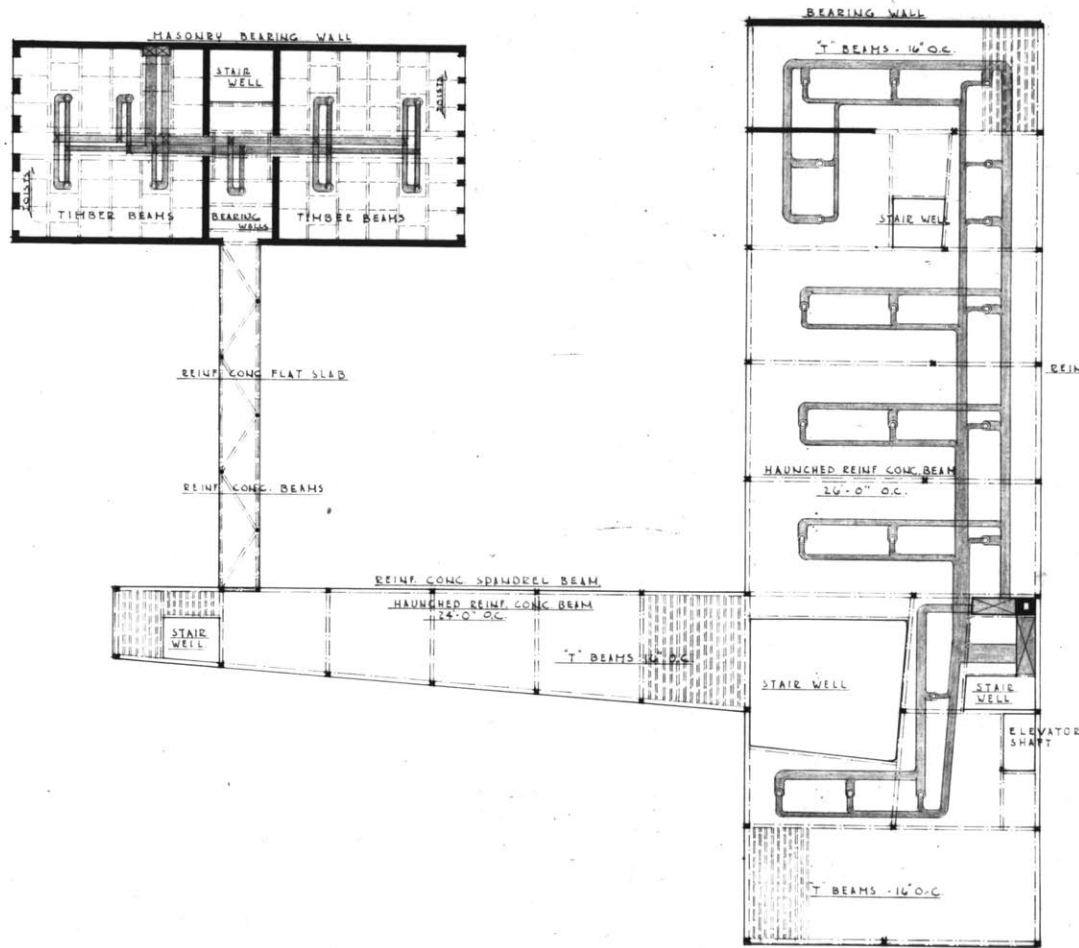


SECOND LEVEL LIBRARY FRAMING

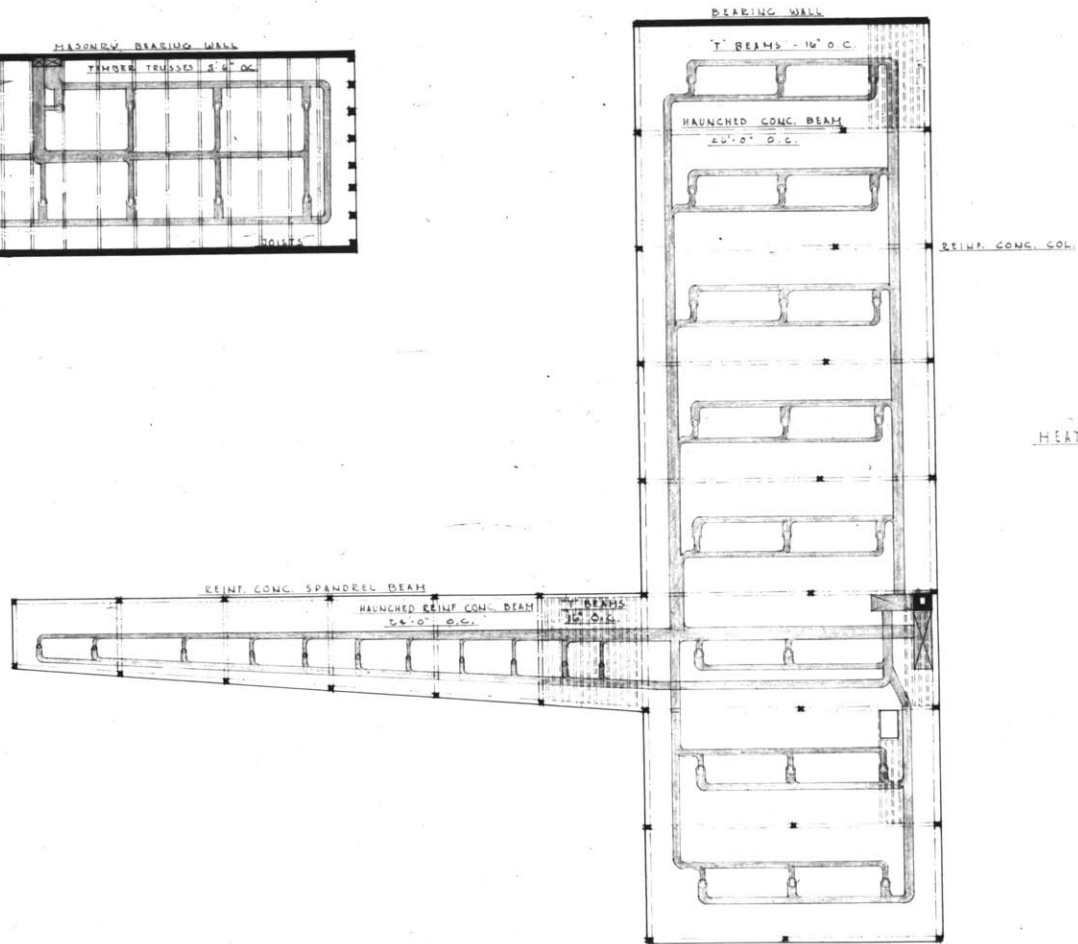
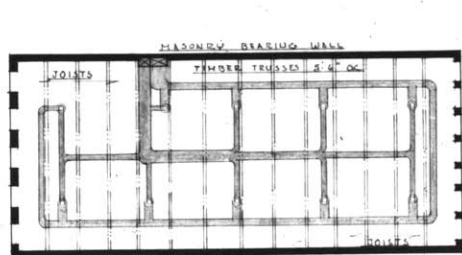
HEATING & AIR CONDITIONING LEGEND

- SUPPLY
- RETURN
- FRESH AIR

FIRST FLOOR FRAMING PLAN  
SCALE:  $\frac{1}{16}'' = 1'-0''$



SECOND FLOOR FRAMING PLAN  
 SCALE: 1/8" = 1'-0"



HEATING & AIR CONDITIONING LEGEND

■ SUPPLY  
 ■ RETURN

ROOF FRAMING PLAN  
 SCALE: 1/4" = 1'-0"



5 PLY ROOF  
CANT STRIP  
FLASHING  
2" RIGID INSUL.

REINF. CONC. SPANDREL BEAM  
REINF. CONC. T BEAMS 10' O.C.  
REINF. CONC. HAUNCH BEAM  
20' O.C.

HUNG MET. LATHE & PLASTER  
LUMINOUS CEILING  
PERFORATED METL. ACOUSTICAL FINS  
6" O.C. BOTH WAYS

8" BRICK WALL  
1 1/2" RIGID INSUL.  
VAPOR BARRIER  
3/4" PLYWOOD  
WALL-DUS. PROCESSED FABRIC  
WATER-BAR.

CORK TILE FLOORING  
3/4" PLYWOOD  
INTERMITTANT WOOD SLEEPERS

FIXED METAL SASH

HEAD

MULLION AT COL.

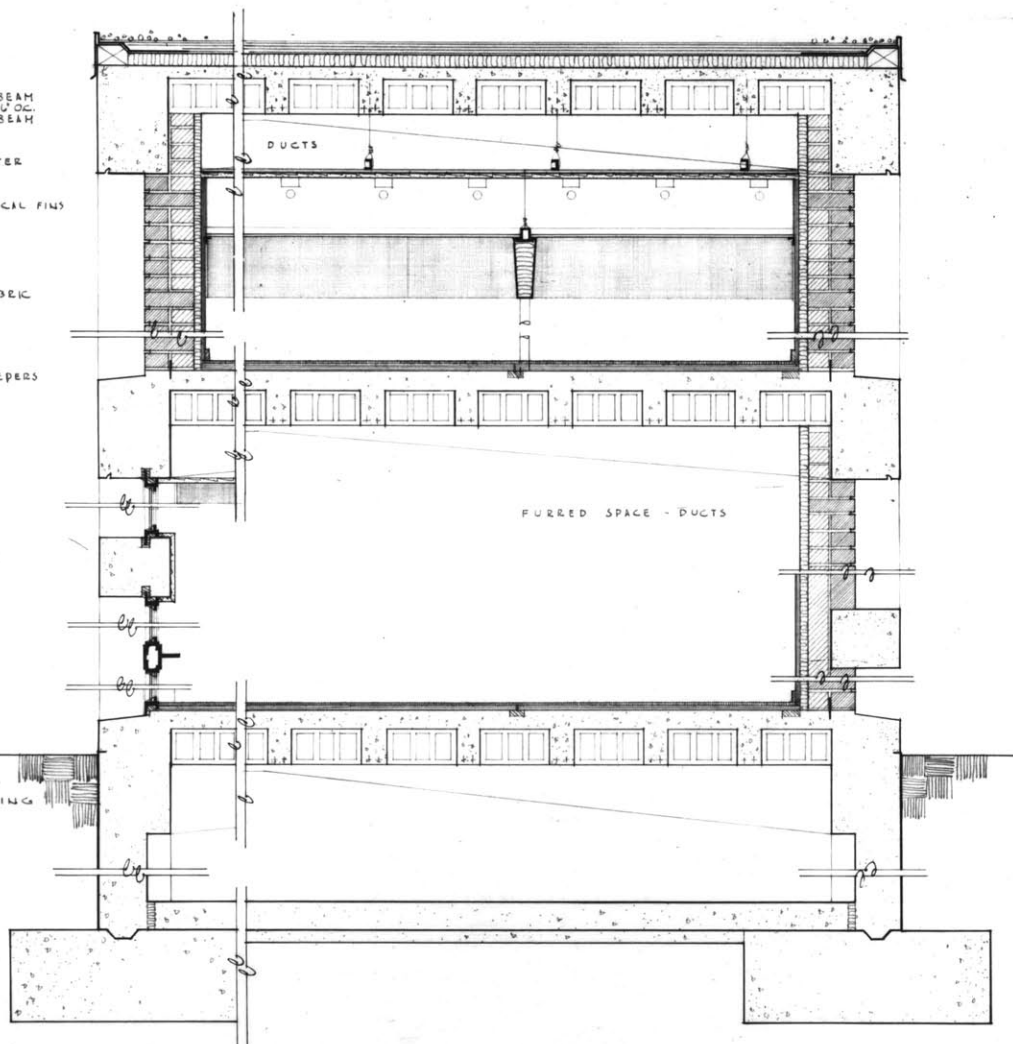
MULLION

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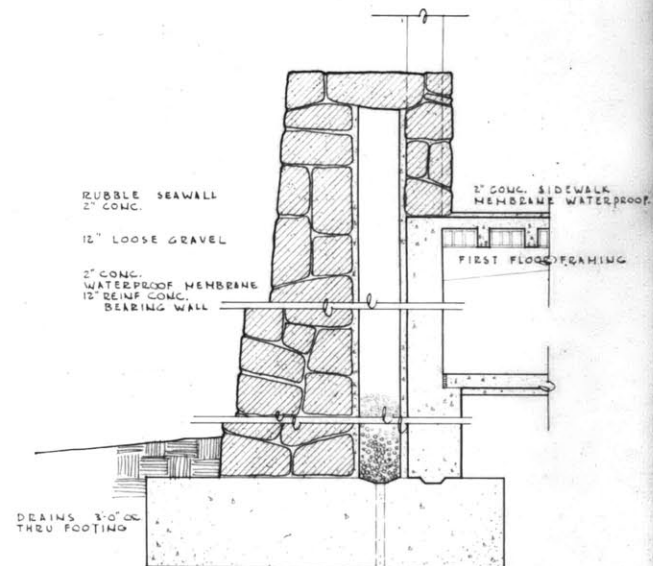
GRADE

MEMBRANE WATERPROOFING

EXPANSION STRIP



TYPICAL WALL SECTIONS  
SCALE: 1" = 1'-0"



SECTION THRU SEAWALL & MUSEUM BASEM'T  
SCALE: 1/2" = 1'-0"



PERSPECTIVE FROM  
HARBOR SIDE