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The Port of New York Authority
World Trade Department
World Trade Center
Planning Division

(Complete Copy)

planning program for
THE WORLD TRADE CENTER

issue number 1
September 18, 1962

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THE WORLD TRADE CENTER
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SECTION I
INTRODUCTION

WORLD TRADE CENTER

PLANNING PROGRAM

The Planning Program is to be used as the basis for Phase I architectural and engineering studies consisting of the preparation of the World Trade Center master plan, preliminary design for the portion of the Center designated Stage "A" together with definitive estimates for Stage "A" and preliminary estimates for the remainder of the complex.

Due to the preliminary nature of the information upon which the program is based, it is to be expected that changes and additions will be made from time to time. The program will be reissued to accommodate significant changes.

The information contained in the program is to be treated as confidential and must not be disclosed to personnel or organizations not directly connected with Phase I studies. The consulting architects and engineers shall not communicate with any governmental board, agency, commission or other organization in connection with this work except upon prior written approval and instruction by the Port Authority.

A. Background

The proposal for a World Trade Center in the Port of New York was made in a report published on January 27, 1960 by the Downtown-Lower Manhattan Association. In its report, the Association stressed the importance of foreign trade to the economic health of the Port District and proposed a facility which would stimulate commerce by bringing together the offices of government and industry in this field.

B. Purpose of the World Trade Center

A World Trade Center in the Port of New York will provide a focal point for a large representation of the world trade community and of its many and varied functions--consolidated in an efficient working relationship. A World Trade Center should provide for:

1. The marketing activities of international trade.
2. The multitude of administrative services essential to the movement of goods in international trade including Custom House services.
3. A concentration of the various exchanges for commodities and of the banking institutions which serve international trade.
4. A concentration of informational facilities to enable world traders to transact business more efficiently and expeditiously.
5. A focal point for the world trade community leading to more extensive exchange of ideas and more direct action in the solution of problems in the international trade field.

C. The Role of The Port of New York Authority

Legislation jointly enacted by the States of New York and New Jersey has designated The Port of New York Authority as the agency charged with the responsibility of planning and building the World Trade Center. in conjunction with the redevelopment of the area

SECTION II

SITE

A. Description

The site is bounded on the north by Barclay Street (from West Broadway to Washington Street) and Vesey Street (from West Street to Washington Street and from West Broadway to Church Street), it is bounded on the west by West Street and the Hudson River, on the east by Church Street and on the south by Liberty Street (see Figures 1--9). The total area of the site including interior and peripheral streets (exclusive of West Street) is 24.8 acres. This acreage is distributed as follows:

Area within existing blocks	12.9 acres
Area in existing streets	<u>11.9</u> acres
Total	24.8 acres

The Hudson Tubes-World Trade Center site is presently used mainly for commercial and industrial purposes. It contains many small retail stores. Included on the site are two firehouses (comprising less than 1% of gross area), for which provisions must be made.

B. Zoning

The site is presently zoned in two categories: C6-4 and C5-3. The New York City Zoning Regulations must be used as a guide for architectural studies and any deviation from these regulations must be brought to the attention of the Port Authority.

C. Traffic

At present three alternate traffic solutions and street configurations are being studied (see Appendix "A"). The consulting architect shall evaluate the three schemes in relation to the overall project and make appropriate recommendations.

D. Topography, Utilities & Subway Structures

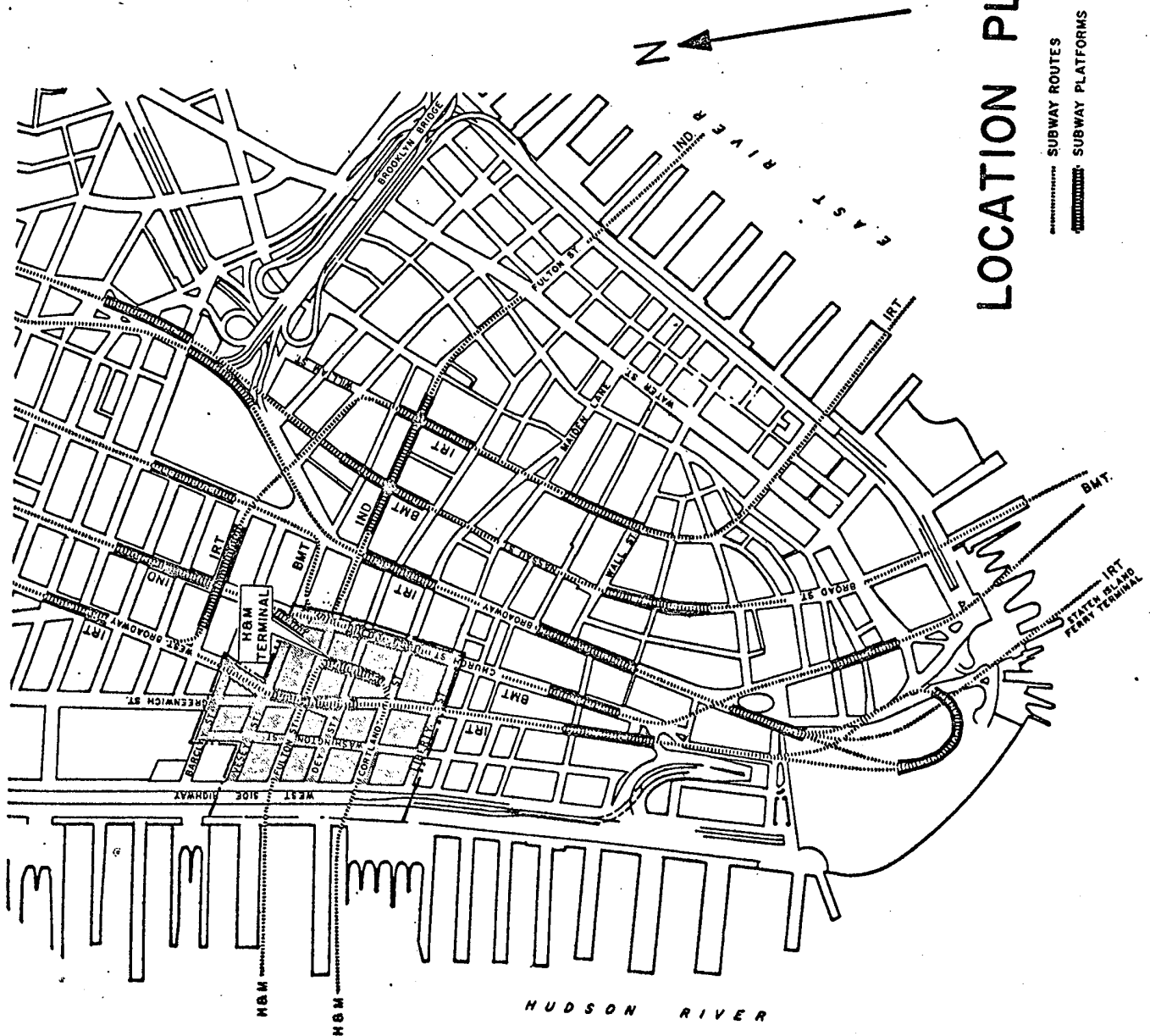
See Appendix "E".

1. Topography - Refer to Drawings NYF 1T to 12T (excluding 6T & 9T)
2. Utilities - Refer to Drawings NYF 1U to 12U
3. Subway Structures - Refer to Drawings NYA 1S to 7S

E. Subsurface Conditions

See Appendix "B" for a preliminary report on subsurface conditions prepared by the Port Authority Engineering Department.

SUBWAY ROUTES
SUBWAY PLATFORMS



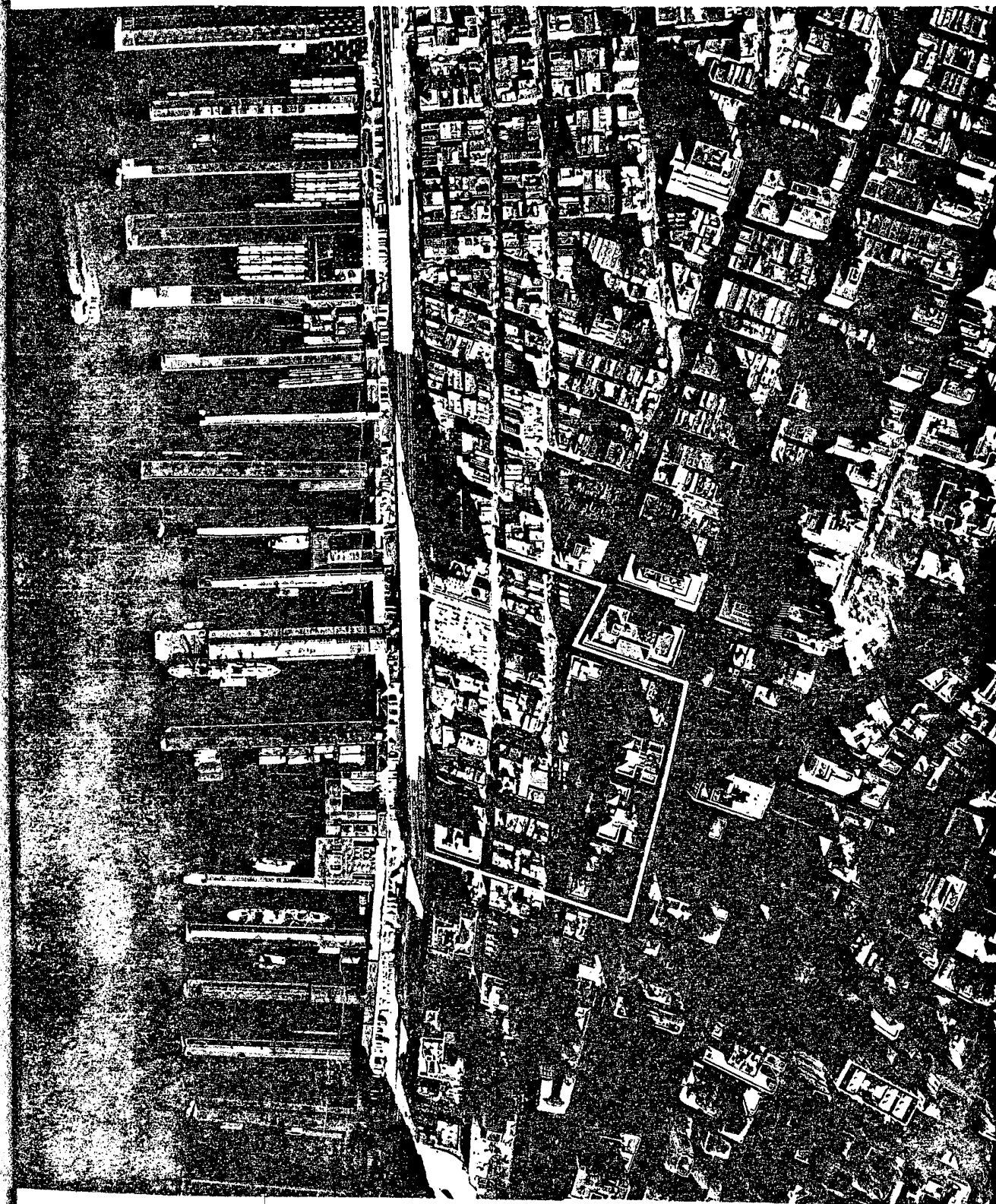


Figure 2

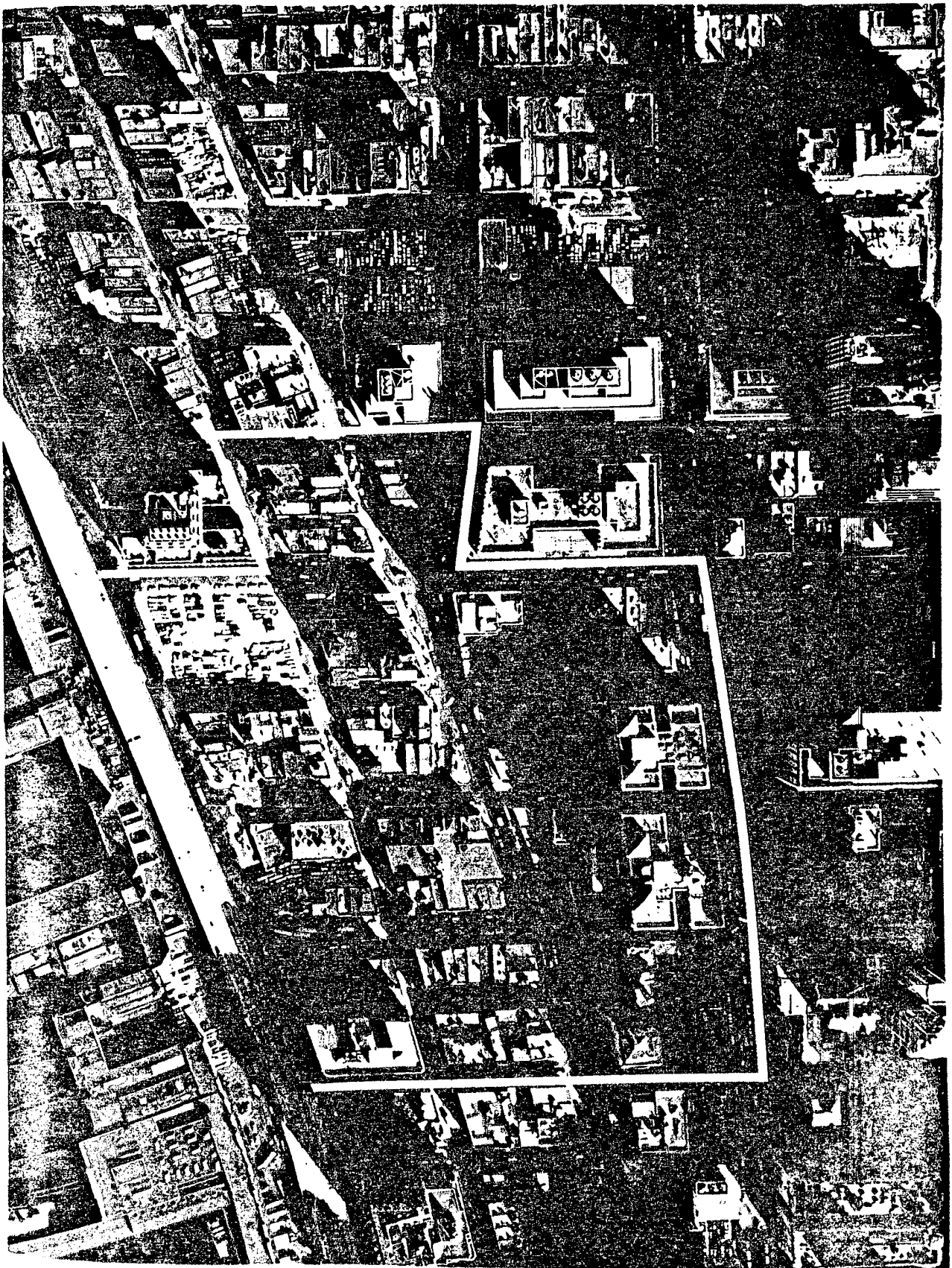


Figure 3

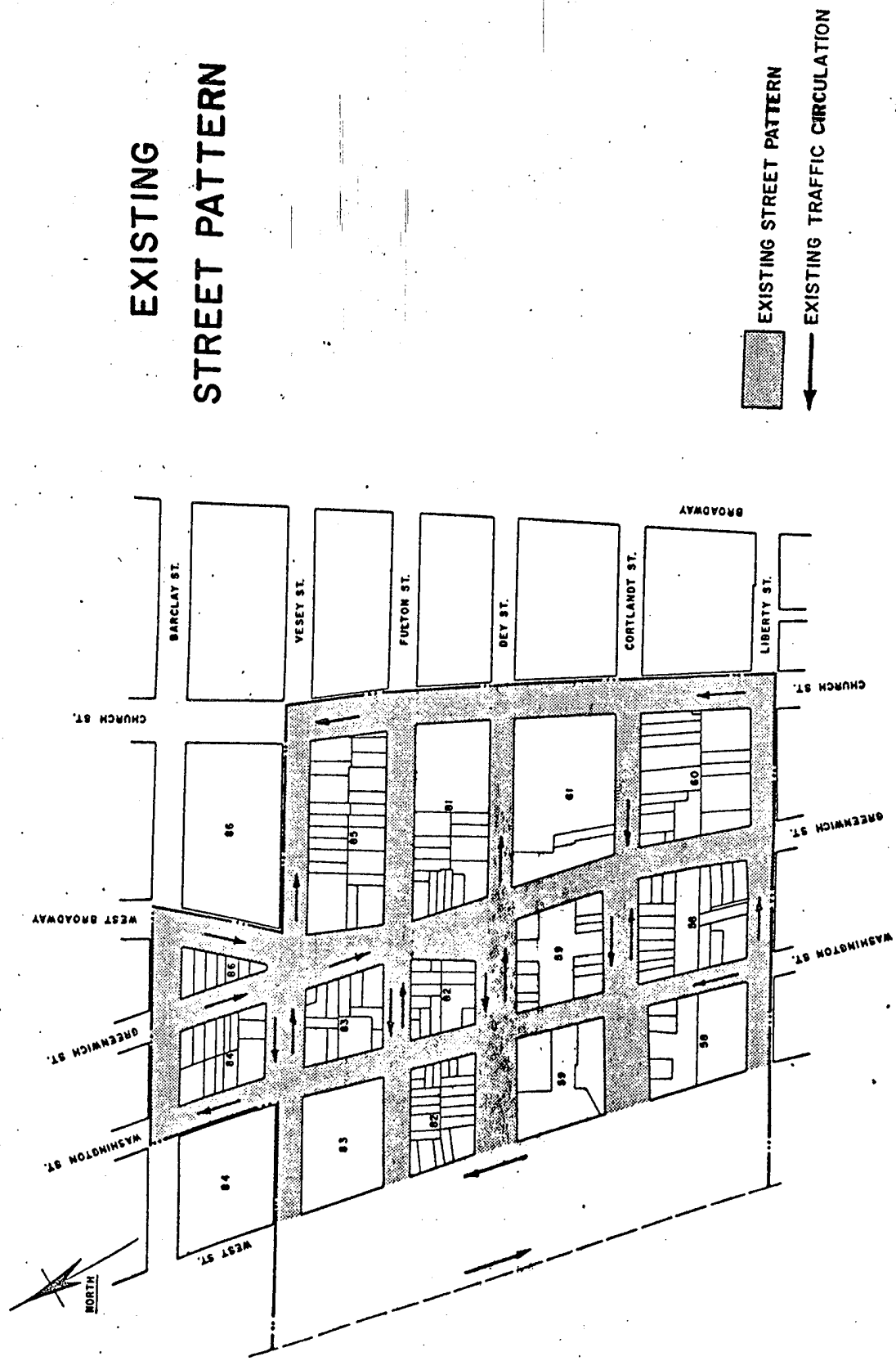
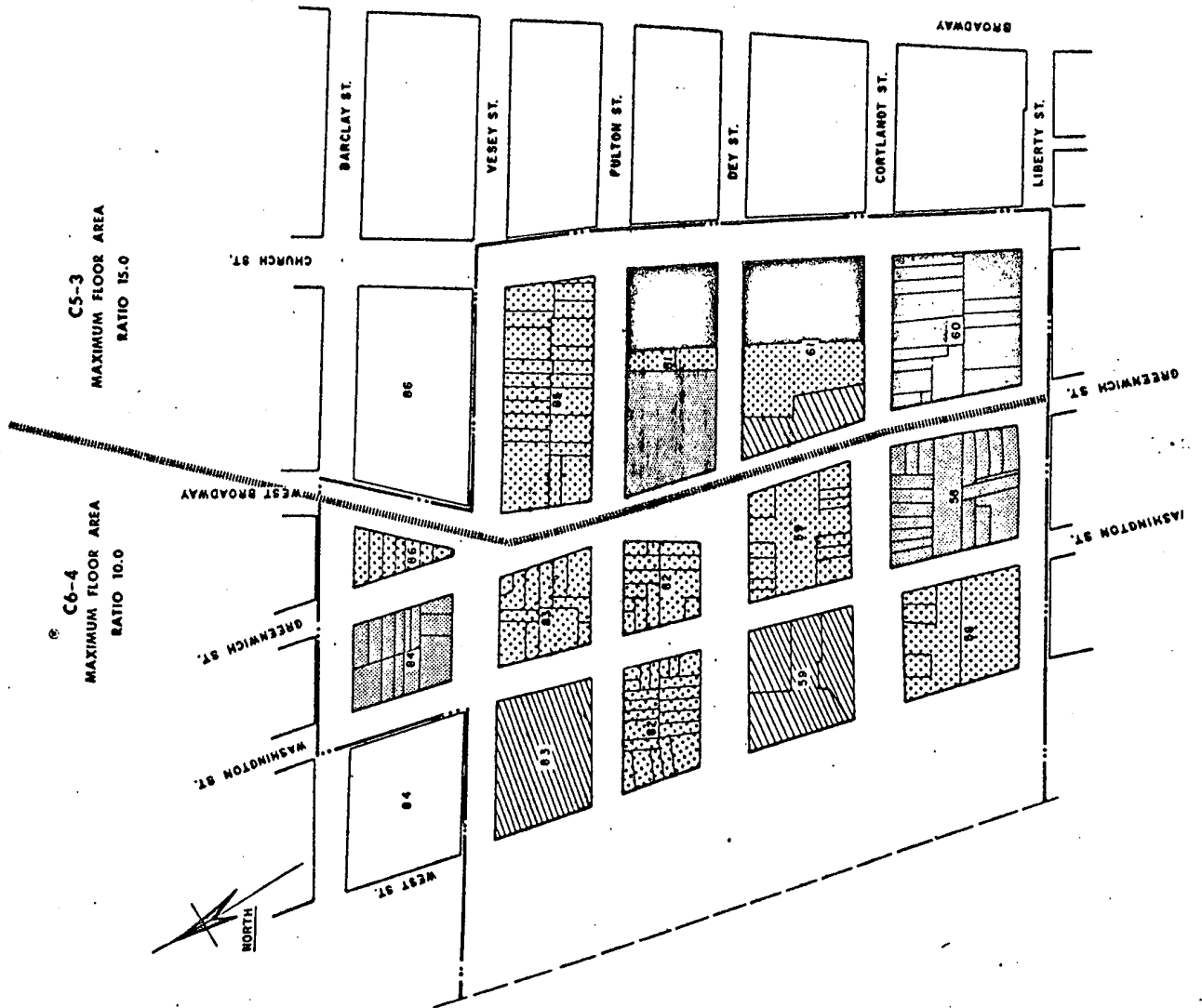


Figure 4

EXISTING ZONING AND BULK OF BUILDINGS*



LAND USE

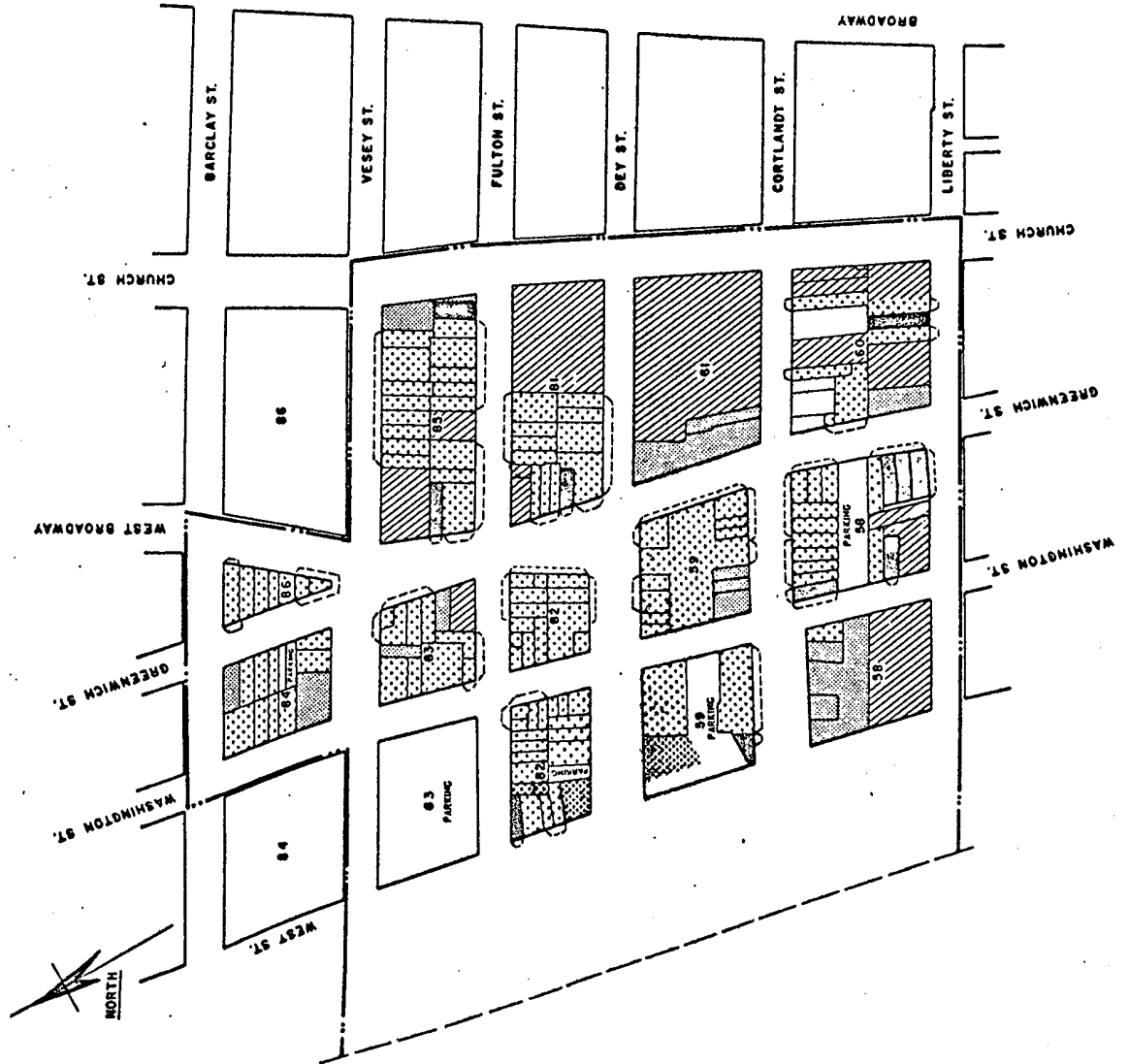
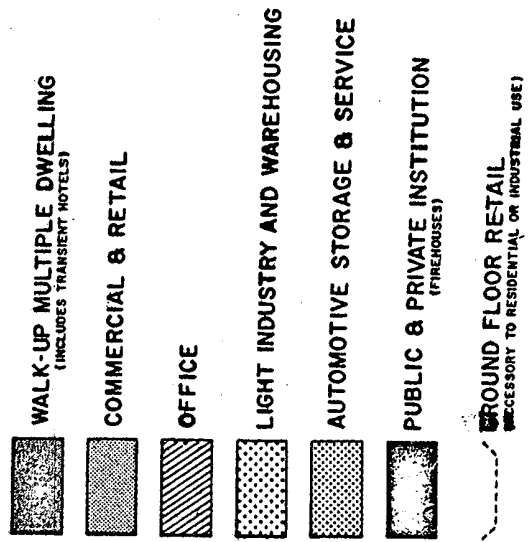
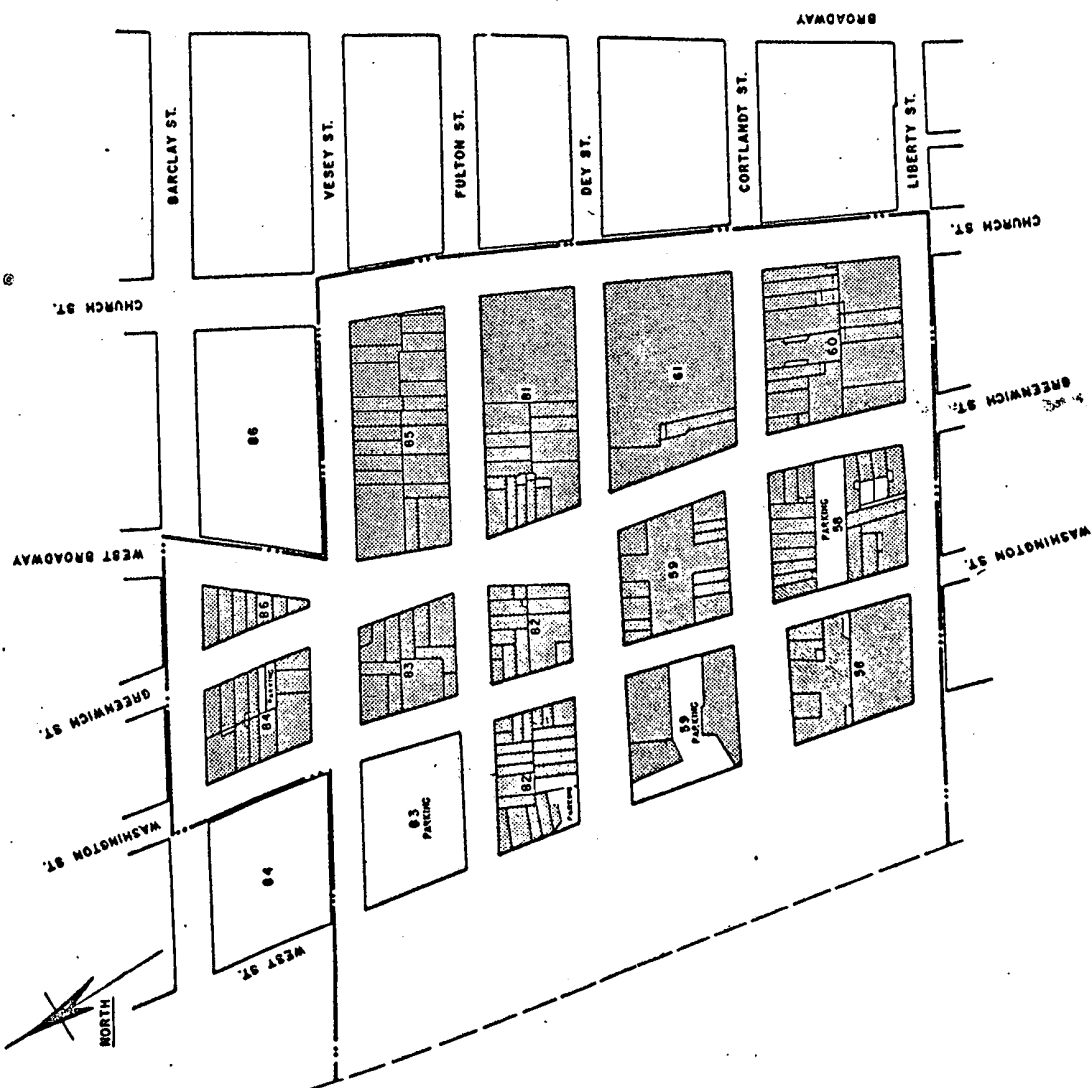
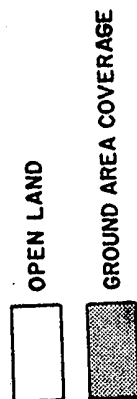


Figure 6

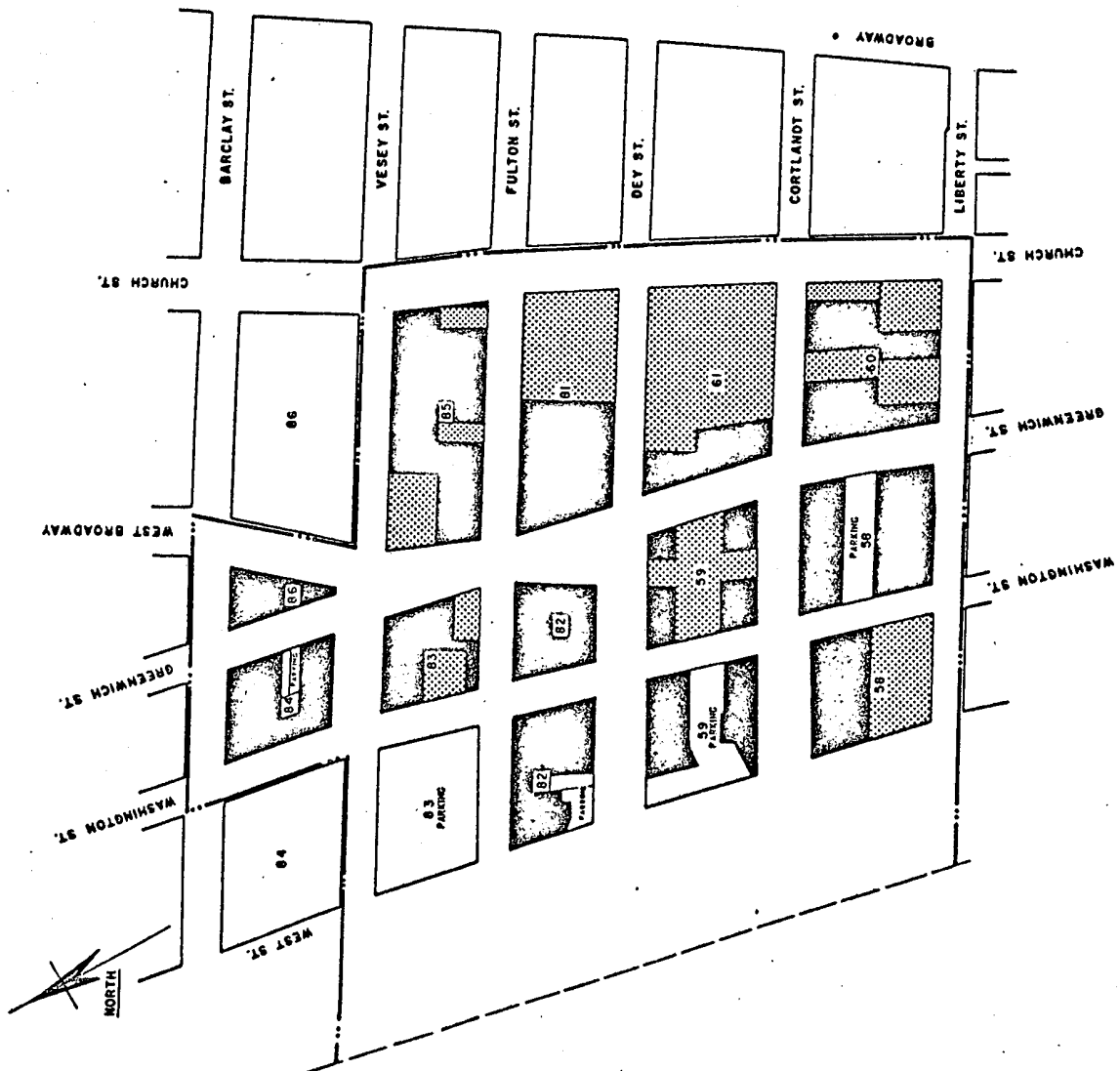
LAND COVERAGE



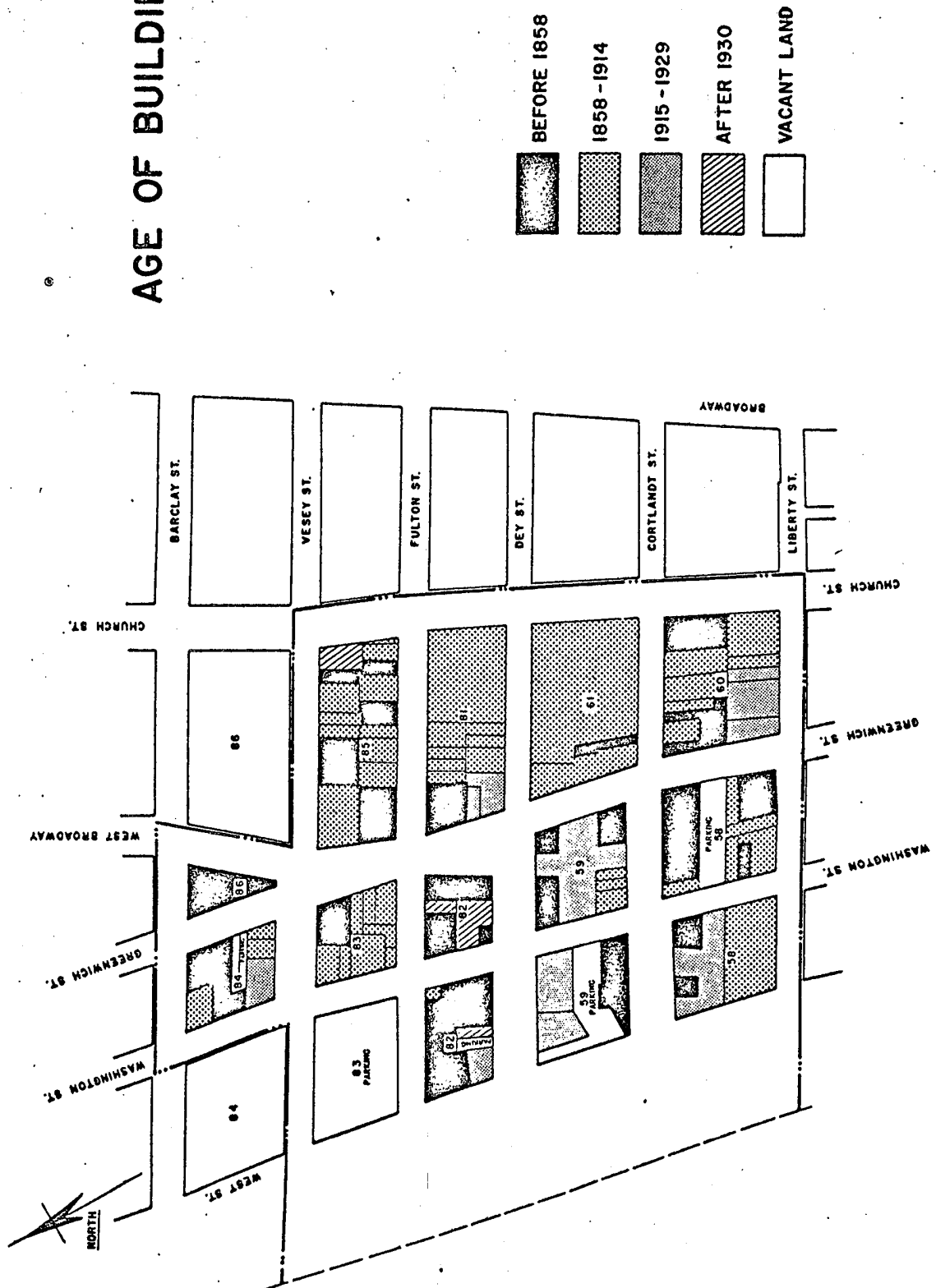
TYPE OF BUILDING CONSTRUCTION

FIREPROOF (Steel Construction)
CONCRETE FLOORS AND ROOF

NON-FIREPROOF



AGE OF BUILDINGS



SECTION III
CONSTRUCTION STAGING
FUNCTIONAL AND SPACE REQUIREMENTS

Note:

It is not considered practical to construct a complex as large as the World Trade Center as a single unit. It may, therefore, be assumed that the project will be built in a minimum of three stages identified as A, B, & C. Stage A represents the first stage of construction which would be undertaken after project approval. Stage A should be planned to be constructed independently of the Hudson Terminal Reconstruction described in Appendix "D". Stage B is essentially a single tenant office building of 3,000,000 square feet (gross) and might be constructed simultaneously with Stage A. Stage C would be constructed after Stages A & B have been completed and may be divided into several smaller stages. Estimated construction times are to be furnished by the consultants.

This section contains a tabulation by function of the space requirements for each stage and a description of its use.

SPACE REQUIREMENTS

In Thousands of Square Feet (Net Areas)

	STAGE A			STAGE B			STAGE C			GRAND TOTAL
	OFFICE	DISPLAY	OTHER	OFFICE	DISPLAY	OTHER	OFFICE	DISPLAY	OTHER	
1. EXPORT ACTIVITIES										
1. U.S. Manufacturers	50	35	15*	100	--	--	550	460	90	1,200
2. Combination Export Managers	25	--	--	25	--	--	125	--	--	150
3. General Exporters	25	--	--	25	--	--	75	--	--	100
2. IMPORT ACTIVITIES										
1. Foreign Manufacturers	25	25	--	50	--	--	50	35	15*	150
2. Import Agents	--	--	--	--	--	--	50	--	--	50
3. CUSTOMS BROKERS & FREIGHT FORWARDERS	225	--	--	225	--	--	--	--	--	225
4. TRADE DEVELOPMENT GROUPS										
1. Foreign Consulates & Missions	25	15	10*	50	--	--	50	145	30*	275
2. State & Regional Offices	--	--	--	--	--	--	5	20	--	25
3. Industrial Associations	--	--	--	--	--	--	25	60	15*	100
5. U.S. GOVERNMENT AGENCIES										
1. U.S. Customs	261	--	356	617	--	--	--	--	--	617
2. Department of Commerce	23	--	--	23	--	--	--	--	--	23
3. Department of Health, Education & Welfare										
4. Federal Trade Commission	35	--	--	35	--	--	--	--	--	35
5. Department of Agriculture										
6. THE PORT OF NEW YORK AUTHORITY	431	--	--	431	--	--	--	--	--	431
7. RAILROAD OPERATIONS										
1. Track Level	--	--	--	--	--	--	--	--	--	--
2. Concourse - Consumer Services	--	--	--	--	--	--	--	--	--	47

SPACE REQUIREMENTS (cont.)

In Thousands of Square Feet (Net Area)

	STAGE A			STAGE B			STAGE C			GRAND TOTALS
	OFFICE	DISPLAY	OTHER	TOTAL	OFFICE	DISPLAY	OTHER	TOTAL		
<u>WORLD TRADE SERVICES</u>										
1. World Trade Institute	10	--	--	10	--	--	50	50	60	
2. World Trade Information Center	10	--	--	10	--	--	10	10	20	
3. Commodity Exchanges *	--	--	--	--	--	--	80	80	80	
4. Commodity Brokers	--	--	--	--	--	150	--	150	150	
5. Transportation, Trade Publication Agencies, Consultants, International Banks, Marine Insurance, Admiralty Law, Public Accounting & Other Professional Services	--	--	--	--	--	500	--	500	500	
<u>BUILDING & TENANT SERVICES</u>										
1. Consumer Services	--	--	100	100	--	--	350	350	450	
2. New York Telephone Company	--	--	50	50	--	--	--	--	50	
3. Auto Parking	--	--	300	300	--	--	560	560	860	
4. Hotel & Meeting Rooms	--	--	--	--	--	--	165	165	165	
5. Building Storage	--	--	30	30	--	--	90	90	120	
<u>MISCELLANEOUS</u>										
1. Related Offices	150	--	--	150	--	850	--	850	1,000	
2. N.Y.C. Police & Fire Station	--	--	12	12	--	--	12	12	24	
3. Central Heating & Refrigeration Plant	--	--	--	--	--	--	--	--	--	
4. Heliport	--	--	--	--	--	--	--	--	--	
<u>ALLOWANCE FOR EXPANSION</u>	100	--	--	100	--	325	100	30*	455	555
<u>OTHERS</u>										
Special Purpose Office Building	--	--	--	--	--	--	--	--	--	2,400
TOTALS	1,395	75	873	2,343	2,400	2,755	820	1,544	5,119	9,862

Exhibit Area - See Section IV for Definition

Rentals & Development Division
9-13-62

WORLD TRADE CENTER

SPACE REQUIREMENTS
FUNCTIONAL DESCRIPTION

A. EXPORT ACTIVITIES

1. U. S. Manufacturers	
Office area	600,000 Sq. Ft.
Display area	600,000 Sq. Ft.
2. Combination Export Managers	
Office area	150,000 Sq. Ft.
3. General Exporters	
Office area	<u>100,000</u> Sq. Ft.
Total	1,450,000 Sq. Ft.

Office and display areas shall be standard finish.*

These areas will be used by American manufacturers who wish to establish sales and display areas for foreign businessmen arriving in New York and agents who are involved in actual exporting and selling transactions.

B. IMPORT ACTIVITIES

1. Foreign Manufacturers	
Office area	75,000 Sq. Ft.
Display area	75,000 Sq. Ft.
2. Import Agents	
Office area	<u>50,000</u> Sq. Ft.
Total	200,000 Sq. Ft.

Office and display areas shall be standard finish.*

These areas will be used by foreign manufacturers who wish to establish sales and display areas in the United States and agents who are involved in actual importing and buying transactions.

C. CUSTOMS BROKERS & FREIGHT FORWARDERS

Office area	225,000 Sq. Ft.
-------------	-----------------

Office area shall be standard finish.*

The customs broker is concerned with the clearance of imported goods through Customs. The licensed brokers at the Port of New York prepare and follow through the customs operation most of the formal entries filed here annually, prepare and file documents for goods in transit to

* See Section IV for Definition

other ports, post bonds which permit the release of the goods before final determination has been made of the duties to be paid and perform many other services for their principals. The broker must not only follow the movement of his entry documents through the Custom House and the Appraisers Stores but must also consult the Appraiser's examiners before action is taken on the vital matters of rate, value or marking of goods and other factors affecting landed costs.

Most licensed customs brokers are also registered as freight forwarders and engage to some extent in export forwarding.

The primary function of the international freight forwarder is to arrange for the movement of the goods from point of production or sale to port of export, thence by the carrier and routes best suited to the needs of the exporter, to foreign port of discharge, and beyond that, through his counterpart abroad, to the ultimate destination.

D. TRADE DEVELOPMENT GROUPS

1. Foreign Consulates & Missions	
Office area	75,000 Sq. Ft.
Display area	200,000 Sq. Ft.
2. State & Regional Offices	
Office area	5,000 Sq. Ft.
Display area	20,000 Sq. Ft.
3. Industrial Associations	
Office area	25,000 Sq. Ft.
Display area	<u>75,000</u> Sq. Ft.
Total	400,000 Sq. Ft.

Office and display areas shall be standard finish.*

The function of these groups is to promote the international exchange of goods. Typical agencies involved in such promotional efforts are the foreign consulates, foreign trade commissions and foreign chambers of commerce. The complex might contain areas set aside for the consulate (or at least the commercial section), trade commission, chamber of commerce and sales offices of major corporations or a combination of two or more of these activities for all participating foreign countries.

It can be expected that other regional groups of the United States will locate exhibit areas in the World Trade Center. No attempt has been made to evaluate the possibility of such participation on a regional basis, although informal expressions of interest have been received from several sources.

* See Section IV for Definition

E. U. S. GOVERNMENT AGENCIES

1. U. S. Customs

Due to Customs' specialized operation, a detailed description of this space is included in Appendix C.

The U. S. Bureau of Customs is a service of the Treasury Department. It is primarily concerned with collection of tariffs on imports. The Bureau of Customs regulates exports and collects tonnage taxes on entering vessels.

Customs activities at the Port of New York are now performed primarily at two locations in Manhattan; the Custom House at Bowling Green and the Appraisers Stores at Varick Street. Most documents necessary for the clearance of each shipment passing through the Port of New York are filed at the Custom House and duties and charges are paid there. A portion of each commercial shipment is physically examined by the Appraiser's staff at the Appraisers Stores. In addition, international mail believed to be liable to duties is also examined at the Appraisers Stores. There is a continuous and heavy flow of papers between the Custom House and the Appraisers Stores as well as a great deal of telephone and personal contact between the two offices. It is anticipated that the consolidation of these activities within the World Trade Center would provide a more efficient operation and improve service to the world trade community. The activities of the U. S. Bureau of Customs are divided into eight divisions:

a. Collector's Office

206,000 Sq. Ft.

This office is essentially a paper and money handling organization. It provides final entrance and clearance of vessels on their arrival and departure. An "entry" for each item that is imported is presented by the importer or his agent. This "entry" is a declaration of the importer's estimate of its value and the estimated duty. The Collector receives and checks the customs duties and Internal Revenue taxes due and designates parts of the cargo for physical examination. He also determines the final duties and adjusts the payments as required.

b. The Appraiser of Merchandise

266,500 Sq. Ft.

This office performs the physical examination of the cargo and determines its value.

c. The Customs Laboratory

32,000 Sq. Ft.

The laboratory analyzes goods to establish the tariff classification where visual examination is inadequate.

- d. The Customs Agents 43,500 Sq. Ft.

The agents investigate infractions of the laws and enforce all Customs regulations.

- e. The Comptroller of Customs 6,000 Sq. Ft.

This division is an audit office which insures compliance by the Collector of all laws governing duties and taxes.

- f. The Solicitor 8,500 Sq. Ft.

Legal counsel is provided by this division to the other offices in the interpretation and enforcement of the laws.

- g. The Surveyor 18,500 Sq. Ft.

Outside inspections of baggage and cargo is performed by this group.

- h. The Customs Information Exchange 36,000 Sq. Ft.

This is essentially a service office which furnishes books and printed material to all other Customs offices.

Total - U. S. Customs 617,000 Sq. Ft.

2. Department of Commerce 23,000 Sq. Ft.

Office area shall be standard finish*

The Bureau of Census of the Department of Commerce records the import and export statistics of cargo moving through the Port of New York. In addition, the field office of the Department of Commerce provides information on imports and exports and also provides information on the control program whose administration is the department's responsibility.

3. Department of Health, Education and Welfare - Space Requirements Unknown

The Food and Drug Administration of this department is charged with the responsibility of checking foods and drugs imported into the United States. A laboratory must be included to perform tests on samples of imports to insure their purity.

* See Section IV for Definition

4. Federal Trade Commission

Space Requirements Unknown

The Presidential Commission's New York office is responsible for disseminating tariff information to importers and exporters.

5. Department of Agriculture

Space Requirements Unknown

The Bureau of Animal Husbandry & Plant Quarantine checks food and meat imports to ascertain whether they may enter the United States. Any entry of this type of material must be approved by a representative of this bureau.

F. THE PORT OF NEW YORK AUTHORITY

431,000 Sq. Ft.

A detailed breakdown of requirements is being prepared which will be forwarded as soon as it is completed.

G. PATH OPERATION

Railroad planning, construction and operation is the responsibility of the Port Authority Rail Transportation Department and the Port Authority-Trans Hudson Corporation (PATH). Planning for the World Trade Center must be coordinated with planning for Hudson Terminal Reconstruction. Consumer service areas in the passenger concourse of the terminal are to be considered as part of the World Trade Center for the purpose of this study. The location and configuration of the concourse will be determined in conjunction with the Rail Transportation Department. Preliminary plans for the reconstruction of this terminal are included in Appendix D. The cost of facilities provided for Hudson Terminal, including concourse, consumer service areas, vertical transportation, entrances and exits shall be listed separately in World Trade Center cost estimates.

H. WORLD TRADE SERVICES

1. World Trade Institute

60,000 Sq. Ft.

The World Trade Institute is planned as a businessmen's club dedicated to trade education and promotion. Membership will be composed of organizations and individuals (who may or may not occupy space in the World Trade Center) who wish to be identified with the world trade community and keep abreast of trade developments. The program of activities is expected to include lectures, seminars, meetings, formal assemblages for the conferring of honorary awards and catered receptions. Much of the daily routine will be informal gatherings of businessmen in the club lounges. The World Trade Institute will publish trade journals and periodicals and will furnish personal services to its members.

Exact space requirements are not available at this time but it may be assumed that interior spaces will include administrative offices, meeting rooms, reception areas, cocktail lounge, pantry for catering purposes and stockrooms for trade literature.

The location of the World Trade Institute should be away from the main stream of public activities and at a point which will afford panoramic views of the World Trade Center area. The World Trade Institute shall also be located near the proposed World Trade Center Hotel. Such proximity to the hotel will provide for the convenience of those members who would be staying at the hotel and would permit the use of the hotel banquet and meeting room facilities.

2. World Trade Information Center

20,000 Sq. Ft.

Informational organizations at the Port of New York are not centered in any particular location but are scattered throughout the downtown and midtown Manhattan area. A centralized information service is imperative as a basic function of a World Trade Center.

The information service must be located at a focal point with easy and direct access by the public. It should be near a main pedestrian area and adjacent to or part of a lounge or lobby area. It will carry out its functions by direct contact with the public and by mail and telephone. As presently planned, it will contain a public information desk, data processing equipment, trade specialists' offices and library facilities. Communications will be provided for direct contact with all facilities in the Center. Tourist information and guided tours may also be included in this area.

3. Commodity Exchanges

80,000 Sq. Ft.

Six commodity exchanges, handling nine of the nation's most important commodities, are located in New York City. These exchanges, which presently occupy separate quarters in the Wall Street area, may be relocated in the World Trade Center. The benefits of such an arrangement would be reduced costs achieved by the consolidation of administrative functions, improved efficiency through the utilization of modern facilities, improved public relations due to a greater degree of public exposure and increased business because of easier broker access.

Each of the exchanges will have its own trading floor, Brokers' area, Director's office and general offices, while sharing dining area, lounge, board rooms, etc. in common with the other exchanges. Drawing No. M-105.001 shows a functional flow plan and indicates a suitable arrangement of the space functions. The main trading floor must be designed to maintain the identity of the individual exchanges and permit easy passage from one exchange to the other. The arrangement should be such that it will be possible to view the level of activities in each of the exchanges from a central lobby area. The following table indicates the individual and common area requirements for a consolidated commodity exchange in the World Trade Center.

CONSOLIDATED COMMODITY EXCHANGE

INDIVIDUAL EXCHANGE AREAS

<u>Exchange</u>	<u>Trading & Brokers</u>	<u>Director's Office</u>	<u>Secretary's Office</u>	<u>General Offices</u>	<u>Total</u>
Mercantile	8000	400	---	200	8600
Produce	8000	200	---	700	8900
Commodity	5000	250	250	1400	5900
Cotton	8000	300	---	800	9100
Coffee & Sugar	8000*	200	---	2000	10200
Cocoa	5000*	250	250	1000	6500
* Includes space used for sampling. Office space shall be standard finish				Total	<u>49,200</u>

AREAS USED IN COMMON

Dining area * (not including kitchen)	2,000 sq. ft
Lounge *	2,000 sq. ft
Lockers	1,400 sq. ft
Gallery	2,600 sq. ft
Board rooms *	1,800 sq. ft
Committee rooms *	1,000 sq. ft
Clearing House	2,500 sq. ft
Communications Room	800 sq. ft
Mail Room & Reproduction	1,000 sq. ft
Total areas used in common	15,100 sq. ft
Miscellaneous and expansion	15,700 sq. ft
Total Commodity Exchange	<u>80,000 sq. ft</u>

(* To be provided with movable partitions for subdivision.)

4. Commodity Brokers

150,000 Sq. Ft.

If the commodity exchanges are located in the World Trade Center, it is expected that brokers associated with the exchanges will require space in the Center near the exchanges. This will be standard finish office space.

5. Transportation, Trade Publication Agencies,
Consultants, International Banks, Marine
Insurance, Admiralty Law, Public Accounting
and Other Professional Services

500,000 Sq. Ft.

These activities closely associated with international trade will, in general, require standard finish office space.*

* See Section IV for Definition

J. BUILDING AND TENANT SERVICES

1. Consumer Services

In planning consumer service facilities, these factors must be considered:

- a. To develop maximum patronage, stores should be located in the main pedestrian traffic arteries and concourses of the World Trade Center complex.
- b. For patronage from neighboring areas, there should be easy access to shops in the World Trade Center. The principal streets bordering the Center should be considered as possible locations (e.g, the Church Street side as opposed to the Hudson River side). It should be noted that multi-level arcades necessitating travelling up stairs could conceivably serve as a barrier to potential customers outside the World Trade Center.
- c. Proximity to public transportation facilities such as subways should be considered since office and homebound population will develop maximum revenue potential.
- d. Shops should be about 100 feet in depth and allow for flexibility in width from 20 to 50 feet, except those specialized operations such as department stores, restaurants and food markets.
- e. There should be ready access from public transportation and private car parking in order that prospective patronage outside the World Trade Center and immediate area be attracted.
- f. Provisions should be made for adequate and easy delivery for all consumer services. Truck traffic should be segregated and, if possible, special provisions be made for handling trash, especially in the case of food establishments.
- g. Pedestrian traffic walkways and concourses should be sufficiently sized to accommodate peak volumes, however, such walkways should not be too wide or meandering and loss of traffic channelization will result.
- h. It is desirable that there be allowance for distinctive store-front development for various tenants and locations, rather than complete uniformity of design. A "Fifth Avenue" approach allowing for shop variations can serve to maximize revenue potentials.
- i. Stores and shops planned for the first stages should be occupied by food and beverage establishments and tenants featuring convenience items.
- j. Provisions should be made for display areas, dioramas and advertising kiosks in order that advertising revenues may be

developed. Telephones should be located in open areas and not in secluded nooks so that revenue potential will be maximized and security problems minimized.

1. Food and Beverage Establishments

	<u>Sq. Ft.</u>
a. Two specialized restaurants - 3,000 sq. ft. each (de luxe)	6,000
b. Five gourmet restaurants - 5,000 sq. ft. each (luxury)	25,000
c. Three medium priced restaurants - 20,000 sq. ft. each	60,000
d. Three cafeterias - 15,000 sq. ft. each	45,000
e. Four coffee shops - 5,000 sq. ft. each	20,000
f. Six snack bars - 2,000 sq. ft. each	<u>12,000</u>

Total - Food and Beverage

168,000 Sq. Ft.

The Food and Beverage Establishments should be close to but not necessarily in the main traffic flow. They should induce pedestrian traffic past other stores in the consumer service areas. These accommodations are exclusive of the facilities located in the hotel. It is desirable that some of these establishments (particularly those of different price brackets) be grouped around a central service core to permit single owner operation. The de luxe restaurants must be convenient to taxi and auto parking. Limited use of roof top areas should be considered for the luxury restaurants.

2. Main Shopping Area

	<u>Sq. Ft.</u>
a. Department store (may be on several floors)	84,500
b. Drug store and soda fountain including storage of 6,000 sq. ft.	18,000
c. "Five and Ten" including storage of 10,000 sq. ft.	20,000
d. Stationery store and business supplies including 2,000 sq. ft. of storage	4,000
e. Card shops, two - 1,500 sq. ft. each	3,000
f. Music store	1,000
g. Florist	1,500

	<u>Sq. Ft.</u>
h. Camera and photo supplies including 1,000 sq. ft. of storage	2,000
i. Optician	1,000
j. Hobby and toy shop including 2,000 sq. ft. of storage	4,000
k. Sporting goods including 2,000 sq. ft. of storage	4,000
l. Cutlery	2,000
m. Theatre ticket agency	500
n. Millinery and hosiery, two - 1,000 sq. ft. each	2,000
o. Men's shoe stores, two - 2,000 sq. ft. each	4,000
p. Women's shoe stores, two - 2,000 sq. ft. each	4,000
q. Haberdashery including 1,000 sq. ft. of storage	3,000
r. Jewelry	1,000
s. Dress shops, three - 2,000 sq. ft. each	6,000
t. Luggage store including 2,000 sq. ft. of storage	4,000
u. Book store	1,000
v. Children's clothes store	2,000
w. Gift shops, two - 2,000 sq. ft. plus 1,000 sq. ft. storage each	6,000
x. Stamp and coin store	500
y. Barber shop	2,000
z. Beauty shop	2,000
aa. Dry cleaning store	1,000
bb. Shoe repair	2,000
cc. Religious articles including 1,000 sq. ft. storage	2,000
dd. Business forms (printing and blueprinting)	4,000
ee. Men's wear including 2,500 sq. ft. of storage	7,500
ff. Lingerie	2,000
gg. Health foods including 1,000 sq. ft. of storage	3,000
hh. Candy store	<u>1,500</u>

Total - Main Shopping Area

206,000 Sq. Ft.

In addition to the above and located in the vicinity of the hotel, trade club and banquet rooms, or as part of the hotel if located in a separate building, the following should be provided:

3. "Hotel Lobby"

	<u>Sq. Ft.</u>
a. Drug store including fountain and 6,000 sq. ft. storage	18,000
b. Florist	1,500
c. Jewelry store	1,000
d. Haberdashery including 1,000 sq. ft. storage	3,000
e. Gift shop including 1,000 sq. ft. storage	3,000
f. Candy store	1,500
g. Book store	1,000
h. Theatre ticket agency	500
i. Epicure or Bon Voyage store including 1,000 sq. ft. storage	<u>3,000</u>

Total - "Hotel Lobby"

32,500 Sq. Ft.

Adjacent to or convenient to homebound population, or combined with the main shopping area, provide the following:

4. "Commuter Shopping"

	<u>Sq. Ft.</u>
a. Delicatessen including 1,500 sq. ft. storage	3,000
b. Liquor store including 1,000 sq. ft. storage	2,000
c. Supermarket including 10,000 sq. ft. storage	30,000
d. Hardware store including 2,000 sq. ft. storage	4,000
e. Bakery	1,500
f. Candy store	1,500
g. Florist	<u>1,500</u>

Total - "Commuter Shopping"

43,500 Sq. Ft.

Total - All Shopping Areas

282,000 Sq. Ft.

Grand Total - Consumer Services
(including Shopping Areas and
Food and Beverages)

450,000 Sq. Ft.

2. New York Telephone Company

50,000 Sq. Ft.

This space should be near street level. No windows will be required. Personnel traffic to the telephone area will be at a minimum consisting primarily of maintenance, repair and testing personnel. The equipment installed in the area will be primarily terminal equipment for centrex system.

3. Automobile Parking (2400 car spaces) 860,000 Sq. Ft.

This area should be convenient to all major activities in the Center and should have easily accessible entrances and exits. The feasibility of providing either ramp-type (self-park) or mechanical (eliminating public from parking floors) garages should be studied.

4. Hotel and Meeting Rooms 165,000 Sq. Ft.

A hotel of approximately 350 rooms shall be provided and shall include such facilities as meeting rooms, health club (20,000 square feet), ballroom for 1,500 persons and an auditorium of the World Trade Institute. The hotel operator could then provide services for educational and business conference activities in the Center.

5. Building Storage 120,000 Sq. Ft.

This area provides storage space for office tenants. It should be served by truck loading docks and be near the building freight elevators.

TOTAL BUILDING, TENANT AND CONSUMER SERVICES 1,545,000 Sq. Ft.

K. MISCELLANEOUS

1. Related Offices 1,000,000 Sq. Ft.

This area has been provided for major tenants who have not been identified in the preceding listings.

2. New York City Police and Fire Station 24,000 Sq. Ft.

This area shall include sleeping quarters, office space, cells and parking areas as required by N.Y.C. Police and Fire Departments.

3. Central Heating and Refrigeration Plant

Consideration should be given to the feasibility of providing a central heating and refrigeration plant for the entire complex.

4. Heliport

This may be a commercial or private facility. Present planning favors a roof top installation. More information will be made available as it is developed.

L. ALLOWANCE FOR EXPANSION

Standard Finish Office Area* 425,000 Sq. Ft.

Standard Finish Display Area* 130,000 Sq. Ft.

* See Section IV for definition.

M. OTHERS

1. Special Purpose Office Building

2,400,000 Sq. Ft.

A separate building is to be provided for a single tenant. This building will be primarily general office space and will also provide for the following activities:

1. Mail and messenger service
2. Office supplies
3. Reproduction service
4. Garage and chauffeur service
5. Records, storage and maintenance
6. Employees Health Service
7. Cafeteria to serve the building's population
8. Auditorium of 500 seat capacity, capable of being subdivided for smaller groups.
9. Fall-out shelter for the total building population. Requirements for fall-out shelter shall be as described in New York State Civil Defense Commission - Regulation No. 11 - May 1, 1962 - Regulations Governing Construction, Maintenance and Use of Fallout Shelters - applicable to Group Fallout Shelters, and Report titled "Shelter Designs for Protection Against Radioactive Fallout" by Voorhees, Walker, Smith, Smith & Haines.

SECTION IV
CONSTRUCTION COSTS

The following chart indicates the maximum allowable construction costs per square foot for various project gross areas and for varying ratios of net to gross areas and is to be used as a guide in designing the World Trade Center. The costs indicated are payments to contractors and do not include allowances for extra work, financial charges, administrative expenses, engineering and architectural fees, property acquisition or demolition. They do include, however, foundations, lobbies, structural, electrical, mechanical, utility, vertical transportation and all other costs associated with producing a complete and usable building. It should be assumed that these costs include the following items in all "standard finish" office and display areas:

- Air conditioning
- Heating
- Hung acoustical ceiling
- Asphalt tile floors
- Venetian blinds
- Lighting (50 foot candles - initial)
- Floor live load in accordance with N.Y.C. Building Code
- Convenience outlets in permanent walls
- Permanent walls separating individual tenant areas

"Exhibit areas" are to include the following items:

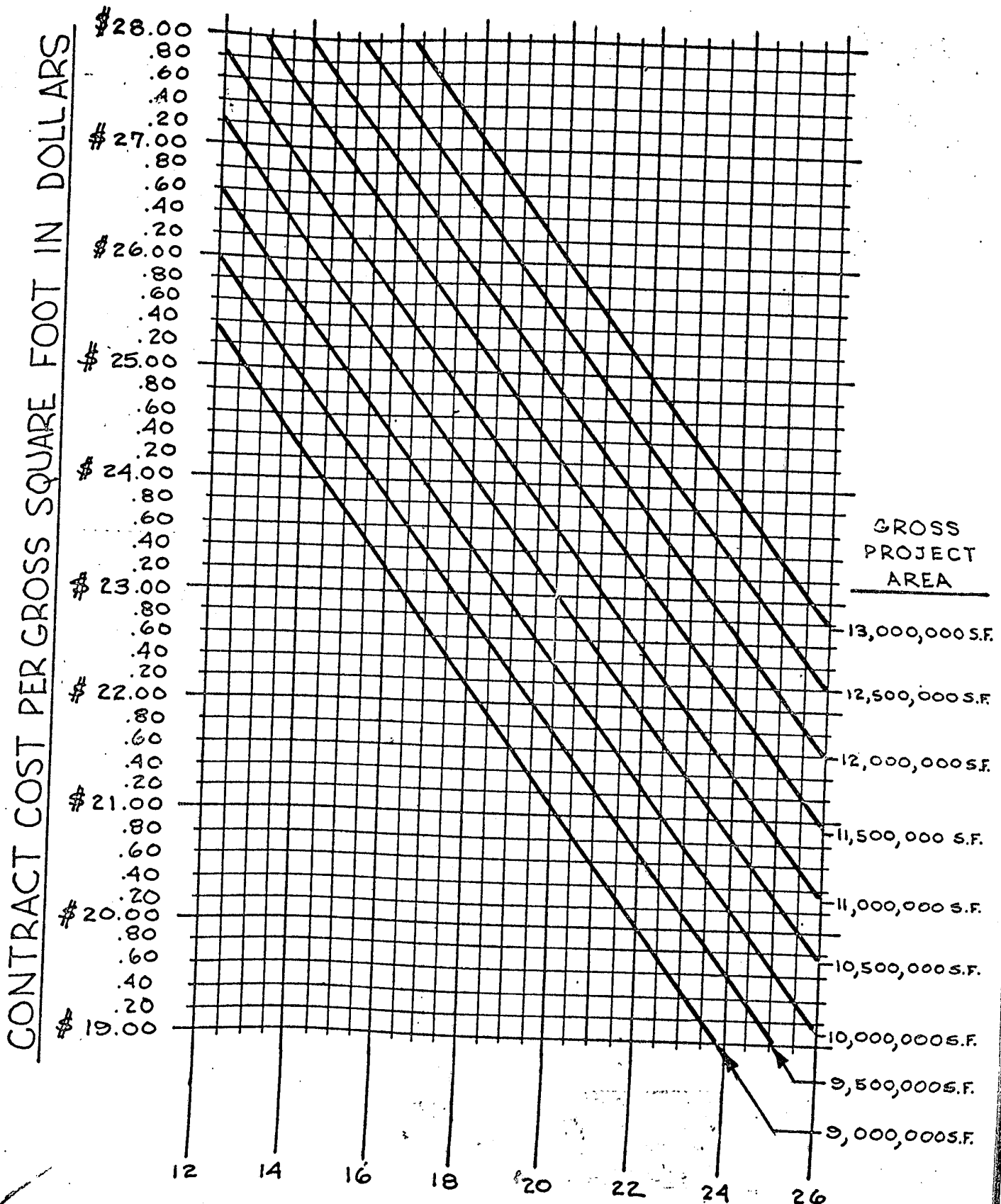
- Clear ceiling height 20' approximately
- Floor live load 250 lbs. per square foot
- Lighting (100 foot candles - initial)
- Provision for electrical power 4 watts per square foot
- Air conditioning
- Heating
- Convenience outlets in permanent walls
- Perimeter walls plastered and painted

In consumer service areas the costs are for rough finishing only and are not to include any of the work necessary to complete the area for stores, restaurants or other specific uses.

Note: The gross area to be used in computing the allowable construction cost is the total project gross area minus the area of the Special Purpose Office Building. The allowable cost range for this building will be determined when more complete design details have been established.

FUNDS AVAILABLE FOR CAPITAL EXPENDITURES

CONTRACT COST PER GROSS SQUARE FOOT



SECTION V

General

The schedule which forms a part of this section indicates the periods of time allotted for the various portions of the Phase I architectural and engineering studies. Dates for the review of study segments have also been indicated on the schedule. In addition to these dates, a schedule of coordination meetings will be established to maintain close control over the progress of the studies.

Building Code

The N. Y. C. Administrative Code shall be used as a guide in the design of the World Trade Center. Any deviation from the Code shall be called to the attention of The Port of New York Authority.

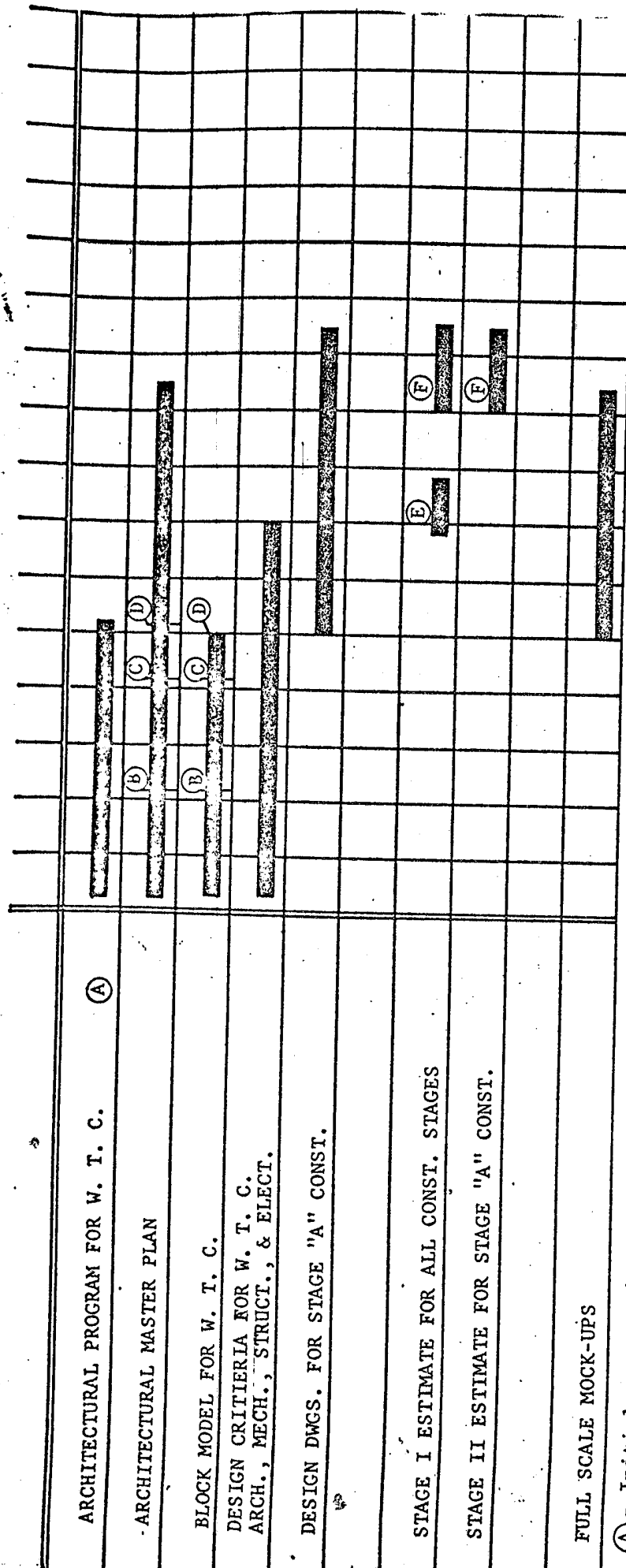
Foundations

The Engineering Department of The Port of New York Authority will be responsible for the design of all foundations involved in the construction of the World Trade Center. The integration of the foundations with the superstructures will, however, be the responsibility of the project architect.

DECEMBER
NOVEMBER
OCTOBER
SEPTEMBER
AUGUST
JULY
JUNE
MAY
APRIL
MARCH
FEBRUARY
JANUARY 1963
DECEMBER
NOVEMBER
OCTOBER
SEPTEMBER 1962

PHASE I

DESIGN SCHEDULE



(A) - Initial program issued September 18, 1962 - Revision will be issued as required due to changes in scope or additional information made available.

- (B) - First Formal Review
- (C) - Final Concept Reviewed
- (D) - Approval of Overall Master Plan
- (E) - Preliminary Estimate Based on Gross Area
- (F) - Final Estimates