5-1984

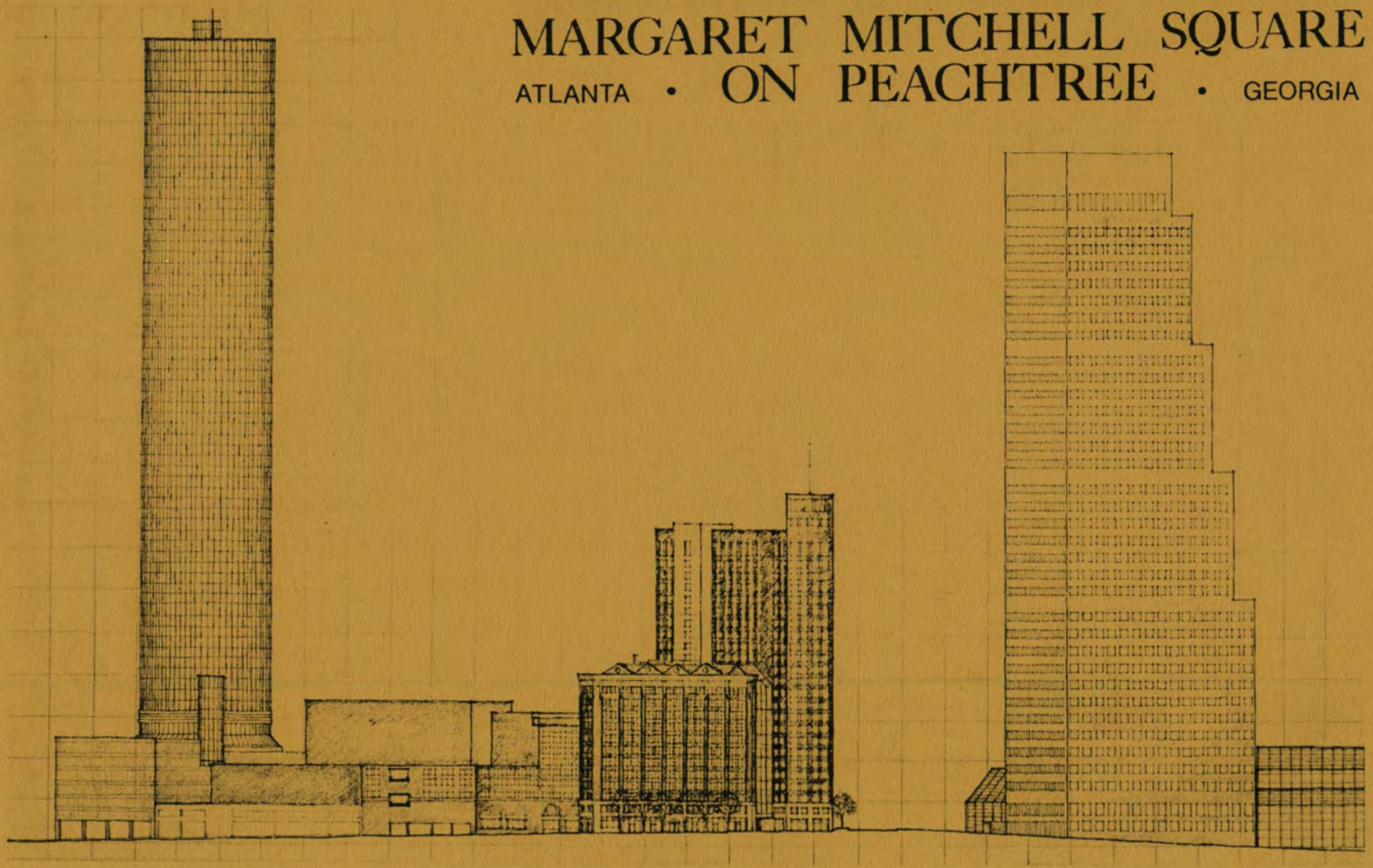
Carnegie Plaza

Stephen M. Born
Clemson University

CARNEGIE PLAZA

MARGARET MITCHELL SQUARE

ATLANTA • ON PEACHTREE • GEORGIA



CARNEGIE PLAZA

MARGARET MITCHELL SQUARE

ATLANTA • ON PEACHTREE • GEORGIA

A TERMINAL PROJECT SUBMITTED TO THE FACULTY OF THE COLLEGE OF ARCHITECTURE, CLEMSON UNIVERSITY, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF ARCHITECTURE.

Stephen.M..Born

Spring.1984

[redacted]

Dean, College of Architecture

[redacted]

Committee Member

[redacted]

Head, Dept. of Arch. Studies

[redacted]

Committee Member

[redacted]

Committee Chairman

[redacted]

Committee Member

DEDICATION

To my parents whose constant support and encouragement made it possible; and

To Suzy who gave me inspiration to reach higher.

ACKNOWL'DGMTS

I wish to acknowledge and thank the following students for their magnificent help in the final days:

David Hawke
Erik Reitz
Nick Stork
Warren Smith
Marlene Shade
Chris Quick

A very special thanks goes out to ;

Brian Ridgeway, whose unique talents helped me pull it all together in the Final Hours; and,

David Reilly, whose many days of effort were above and beyond the call of duty.

I wish to express my deepest thanks and gratitude to the following individuals for their participation:

Mr. Rob Miller of Rabun, Hatch, Dendy-Architects: Atlanta for help in leading me to this project and supplying the necessary background information and documents.

Mr. Paul Query of Ackerman Associates-Atlanta, for allowing the Carnegie Building survey, and for providing valuable expertise in urban developments.

Mr. Larry Fonts of Central Atlanta Progress (CAP) for allowing me the use of agency slides, information, and model during the course of the project.

Mr. Earl Nelson of Metropolitan Atlanta Rapid Transit Authority (MARTA) for providing me with background and maps of the Peachtree Center subway station.

Professor Rodger Liska, Clemson Univ., for his help in matters dealing with structure and construction.

TABLE OF CONTENTS

The Carnegie Building and the Winecoff Building presently occupy the major portion of a triangular site in the Central Business District of Atlanta. Both were built in the early 1900's and are included in the National Register of Historic Places. The Winecoff Building was fire-damaged in the past, when it functioned as a hotel. The Carnegie Building which was designed as an office building, is in need of repair. A large developing company which owns both buildings wishes to develop this site as an office complex which would be competitive in an unpredictable office lease space market in which the quality of rental space must be weighed against initial construction costs.

Preliminary studies revealed great difficulty and inefficiency in reusing the Winecoff Building. It was also discovered that air-rights could be obtained from MARTA (Metropolitan Atlanta Rapid Transit Authority) to build over the site and station that presently occupies the remainder of the triangular site. Therefore, a decision was made to remove this building and develop a new structure on its site and above the existing MARTA station. This building, which would contain approximately 200,000 sq.ft. of leasable space, would be linked to the existing Carnegie Building which would be adapted to meet contemporary office space needs.

The site fronts on an area of the CBD designated to be to be known as Margaret Mitchell Square. Other buildings defining this space include the new Central Atlanta Public Library, the historic Chandler Building, and the towering Georgia-Pacific Building. The building development shall be considered in context of this square which has the potential of developing into a major activity node within the city.

My terminal project shall be concerned with the design of this proposed office building which must relate both to its city setting as well as the adjoining Carnegie Building.

GENERAL

LOCATION

Atlanta, Georgia is one of the largest and fastest growing cities in the Sunbelt region. Located in the north-central region of the state, Atlanta serves as an excellent distribution and transportation center. The city joins highways and railroads from the Atlantic Coast region, Florida, the Carribean coast, Mississippi Valley region, and the Appalachian Mountain region. the recently completed Hartsfield International Airport is among the nation's largest and busiest. MAP 1

CLIMATE

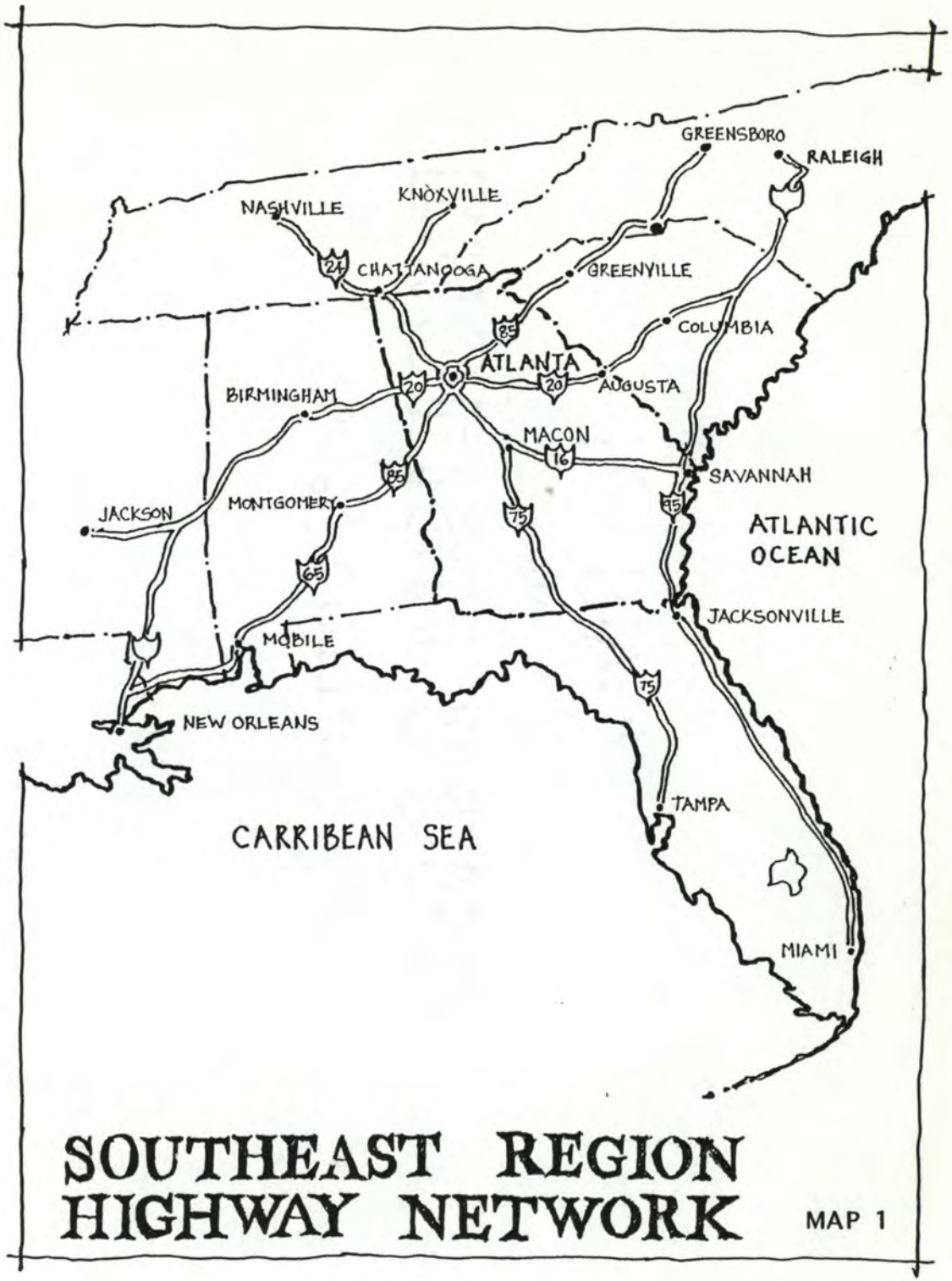
The climate is moderate with all four seasons. Summers are long and hot while winters are relatively short and mild. The terrain in and around Atlanta is one of gently rolling hills and thick forests. Common to this region is the red clay soil and tall pine trees. The lumber industry has long been an important factor in northern Georgia's economy, however the city's industrial, commercial, and financial base is generaly broad and diverse and its future doesn't depend solely upon the success and health of one catagory of business.

ACTIVITIES

Atlanta is the capitol city of Georgia and also contains City, County, and Federal agencies. The arts are well represented, including the Atlanta Symphony and the new High Museum. It has become a home of professional baseball, football, and basketball teams. And it is one of the fastest growing convention centers in the nation.

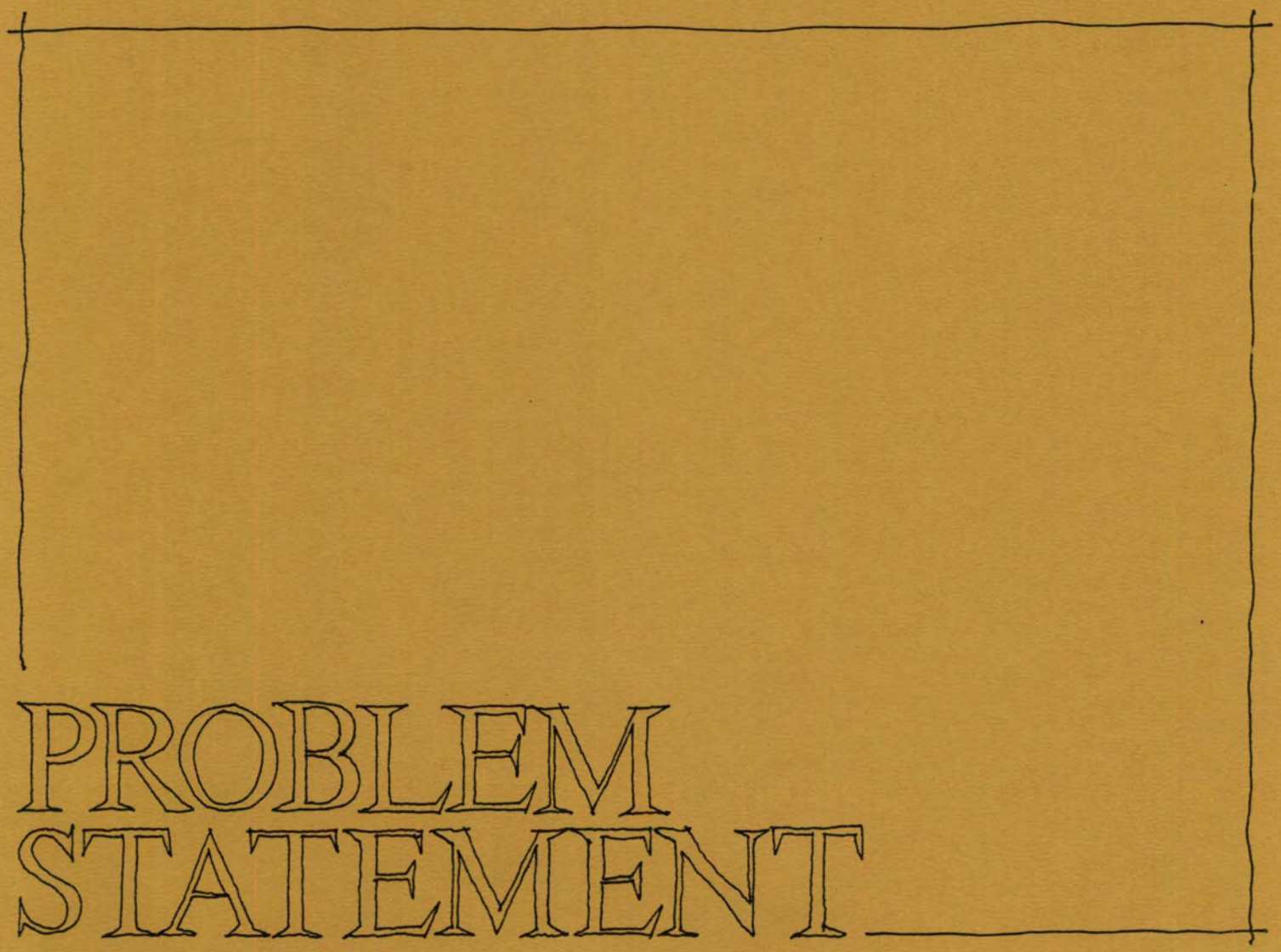
POPULATION

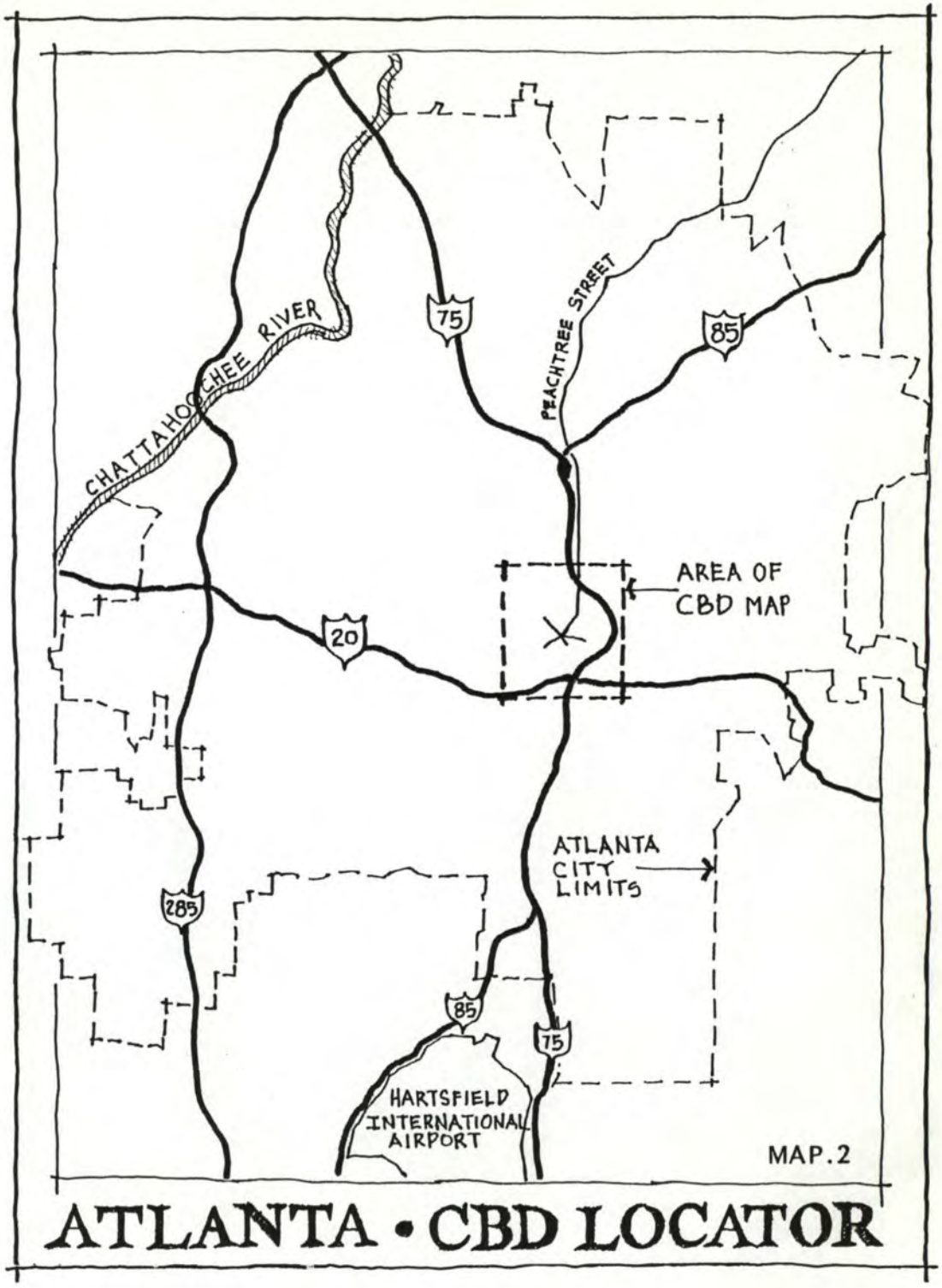
The city's population has grown to over 600,000 in an area of 136 sq. miles. Exclusive of Atlanta, its seven-county, almost 2,000 sq. mile region has a population of 1,800,000. Over 2/3 of the city's residents are Black, while they make up less than 1/3 of the regional population. Growth of the city and its suburbs have risen steadily for decades. This trend is expected to continue in the coming years. [1]



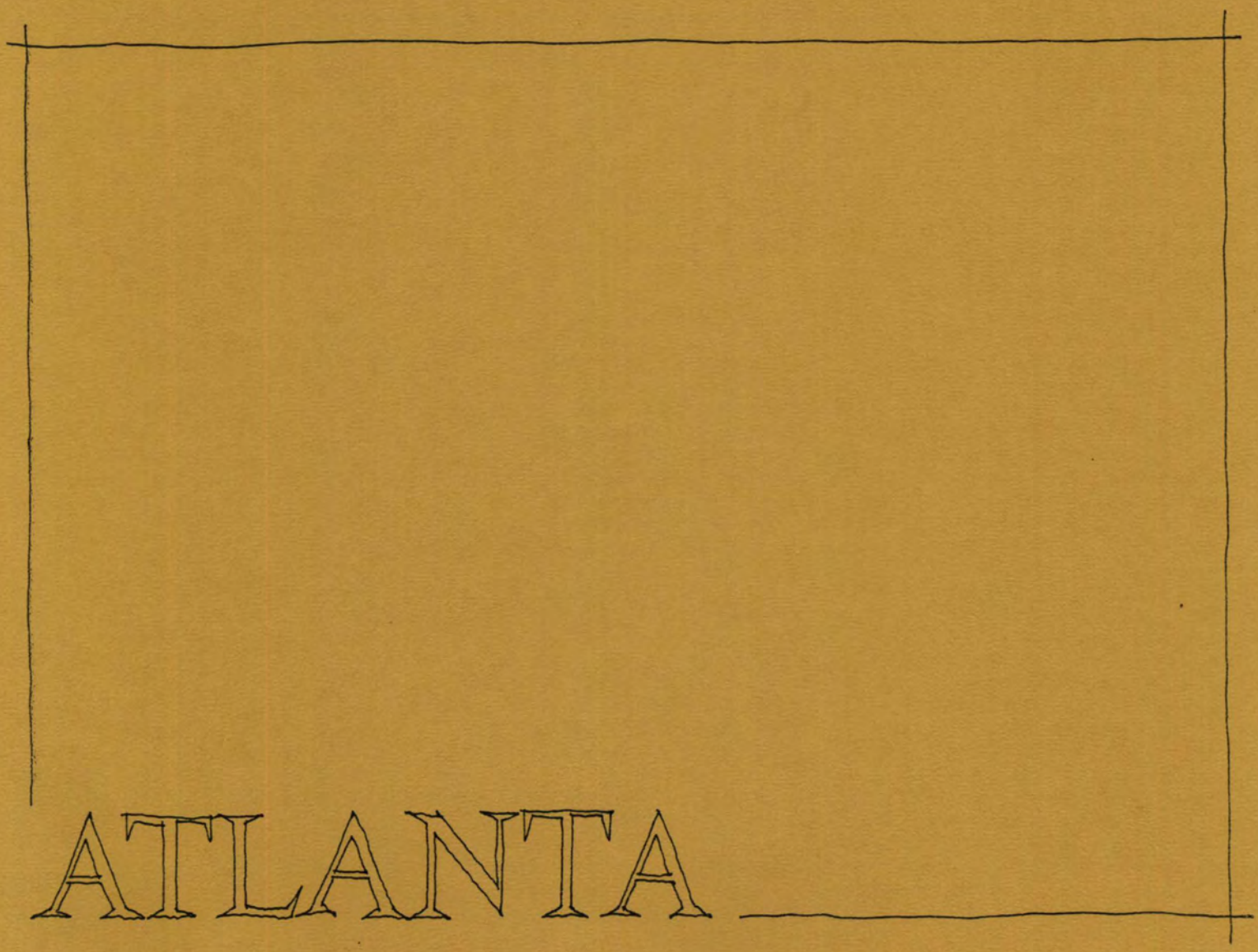
SOUTHEAST REGION HIGHWAY NETWORK

MAP 1


PROBLEM
STATEMENT



ATLANTA • CBD LOCATOR


ATLANTA

HISTORY

BEGINNINGS

In the early 1800's, the region which is now Atlanta was occupied by the Creek and Cherokee Indian tribes. Their reservations were separated only by the Chattahoochee River. Savannah, located on the east coast, was then Georgia's principal city. However, there was pressure on the state legislature to open up the interior regions of the state for farming purposes. This was initially prevented by the federally established sovereignty of the Indian settlements. But, by 1827 the collective pressures by the Southern states was sufficient for Congress to pass a law providing for removal of all Indians not only from Georgia's western border, but 700 miles west to the new all-Indian territory. The eviction of the Indians took 10 years to complete. [2]

TERMINUS

The new settlers soon began to mine the region's gold and to grow cotton. These activities influenced railroad construction and further settlement. In 1836, a survey established a point between a series of ridges 7 miles southeast of the Chattahoochee River as the ideal termination of two railroads within Georgia; one from Augusta, the other from Macon. Several others would soon converge on this point , making it the distribution center of the southeastern United States. This center was appropriately called Terminus. [3]

MARTHASVILLE/ATLANTA

As it grew to be a town, the name Terminus was changed to Marthasville in honor of the daughter of one of the states favorite sons. But by 1845, Marthasville was renamed Atlanta. The reason was to reflect the city's new importance as a regional trade and transportation center. The new name was derived as a feminine version of Atlantic, thereby implying connection with the cities and commerce along the Atlantic Coast. The new city of Atlanta grew rapidly, but not with any predetermined plan. The early inhibitants refused to allow the city administrators to survey the land in any ordered way, fearing the cost of this procedure would increase taxes. Instead, they built along old Indian trails and cowpaths. The major trails and cowpaths met at a spring adjacent to an area called "Five Points", which even today is a major intersection in downtown Atlanta. [4]

ZONING

The adoption of zoning in Atlanta in 1922 was primarily to separate or zone incompatible uses. In Atlanta in 1922, this meant separating Blacks from Whites. Residential districts fell into 3

catagories: white, colored, and undetermined. Large areas of land were zoned as commercial districts. There was no need for so much commercial area, but it served as a buffer between the different residential "uses". Railroad tracks also provided ideal barriers. Where tracks did not exist, streets were dead-ended, and the few streets which did connect Black and White areas changed names as they changed districts. [5]

RECENT DEVELOPMENTS

CITY GROWTH

Starting in the 1960's, Atlanta began to experience a resurgence in business and growth, especially in the tourist and convention industries. This growth continues today as Atlanta has become a city with many special attractions and favorable weather. While the outer areas and suburbs have grown at a rapid rate, the inner city has worked on improving its image and attractivness to compete as an important international city. The recently completed Hartsfield International Airport is among the worlds largest and is linked to the CBD via Interstate Highways and a proposed subway line. The form of the downtown can be seen for many miles, with the cylindrical glass tower of the Peachtree Plaza Hotel and the stepped high-rise of the Georgia-Pacific dominating the skyline. Many companies have committed theirselves to the city by moving their operations and building new structures in Atlanta. In the past two decades, the CBD has experienced steady growth with the addition of high-rises and large scaled projects. More of these projects are planned for the near future. MAP 2

CBD GROWTH

It is in the CBD where most of the dramatic commercial growth and planned improvments have taken place. And it has been mainly private initiative in Atlanta rather than public response that created plans for the downtown area. Through the works of Central Atlanta Progress (CAP), the non-profit planning agency of the private business community of the CBD, and the downtown work of the Atlanta architect/developer John Portman, designs and projects have been submitted which promoted and enhanced the business community of the CBD. Through their efforts and examples the central city area has not only experienced growth but an increase in the humane quality of buildings and space. The public has benefited from the creation of buildings, parks, and pedestrian corridors which are comfortable and attractive. [6]

ZONES and DISTRICTS

GENERAL

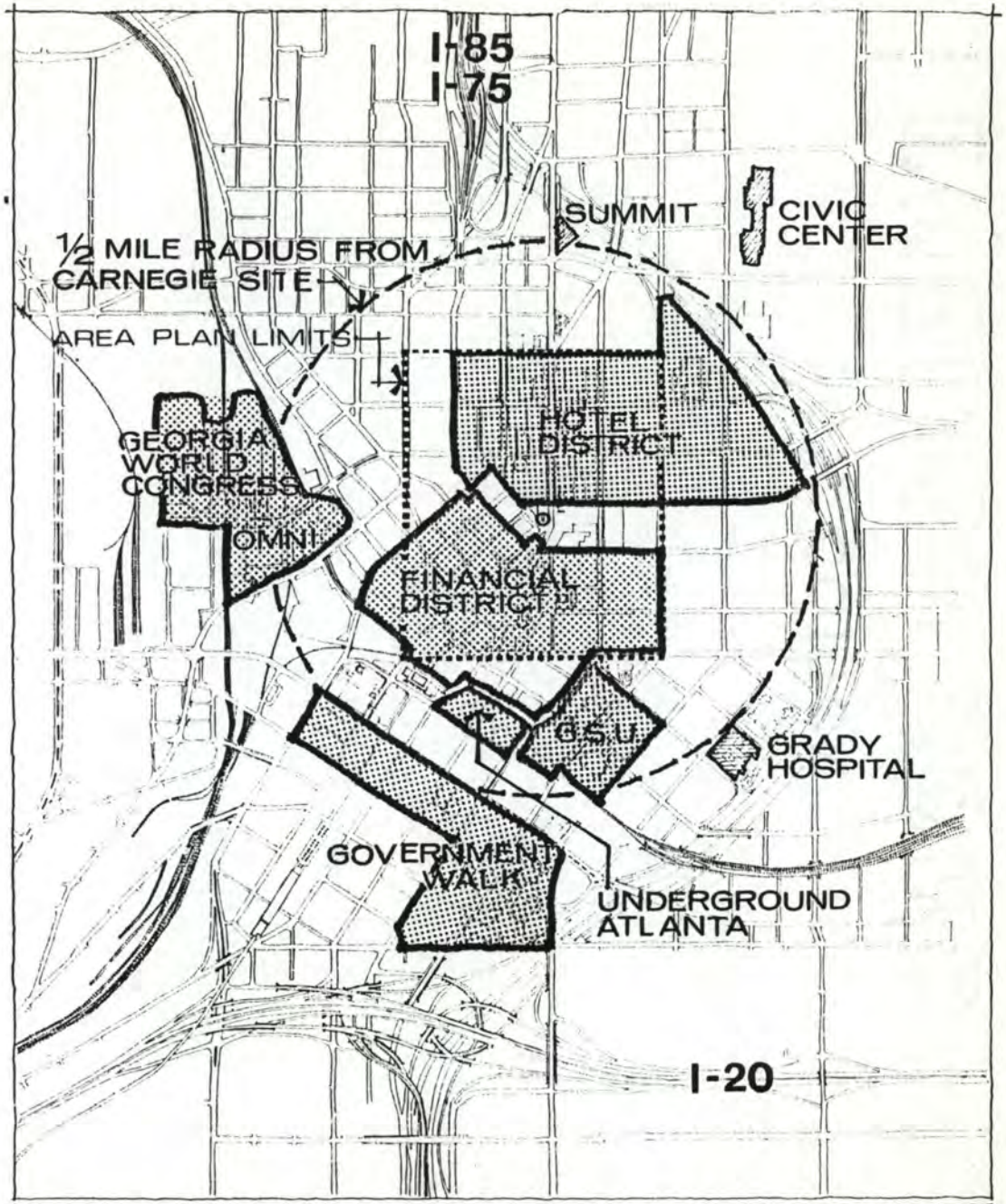
The Carnegie Plaza site is centrally located within the Central Business District of Atlanta. This district is roughly defined by the Interstate I-75/I-85 on the east, railroad tracks and easments to the west, Baker St. to the north, and Memorial Dr. to the south. Within this district there are several important and identifiable sub-districts, landmark buildings, and public open spaces. MAP 3

FIVE-POINTS

Traditionally, the center of downtown Atlanta has been the Five Points area. Its name is derived from the fact that 5 major streets which were important in the early development of the city meet at an intersection. This intersection was conveniently located adjacent to the Terminus railroad terminal, and became the nucleus for future growth in the region. Stores, banks, and office buildings sprang up along the five principal streets as Five Points became a major trade and commerce zone to Atlanta and the northern region of Georgia. This area maintains great importance today, although some of its prominence has been lost to newer developments within the CBD. Still, it acts as a link for several surrounding sub-districts and zones which have developed over the years. The city's two new MARTA subway lines intersect at the Five Points Station, one block southwest of the Five Points intersection. This major connecting station helps to reinforce the zone's accessibility and importance as a central link. [7]

UNDERGROUND ATLANTA

To the south of Five Points is a small zone known as Underground Atlanta, one of the oldest sub-districts in the city. At the turn of the 20th century, this area experienced increased traffic which was beginning to conflict with other surface traffic. The architect, Haralson Bleckley, having studied in Paris, produced a scheme in the Beaux Arts-City Beautiful tradition which showed how the city could alliviate this problem by establishing a new level above the railroad tracks; much as the New York Central Railroad did in New York when it decked over them to create Park Avenue. Bleckley's proposed concrete platform would also have provided tree-lined walkways, boulevards, and fountains. In 1928, a partial realization of his scheme came to be. A system of viaducts creating a new street level was built, but without all the proposed landscaping and open space. New buildings went where the open space was to be and older buildings closed their lower levels , thus opening second level shops. In 1968, a four-block section of the lower


I-85
I-75
SUMMIT
CIVIC CENTER
½ MILE RADIUS FROM CARNEGIE SITE
AREA PLAN LIMITS
HOTEL DISTRICT
GEORGIA WORLD CONGRESS
OMNI
FINANCIAL DISTRICT
G.S.U.
GRADY HOSPITAL
GOVERNMENT WALK
UNDERGROUND ATLANTA
I-20
CBD PLAN
SUB-DISTRICTS
3

level was reopened and called Underground Atlanta. It quickly became a tourist attraction, providing needed nightlife activity for the downtown. Although the past decade has seen this four block underground section vacated once again, a major urban renewal project is presently being planned to revitalize the area and reactivate the historic lower levels. Designated as an historic district, Underground Atlanta also contains 3 buildings distinguished with National Register status. [8]

GOVERNMENT DISTRICT

To the immediate south of the Underground Atlanta Historic District is the Government District. Also called Government Walk, this area contains City, County, State, and Federal buildings. The Georgia State Capitol, a National Landmark site built in 1884, is the dominant building of this district. It is Neo-Classical /Renaissance Revival in style and capped with a gold colored dome. The area is also receiving public improvements to revitalize old structures and to connect the separate government entities. It will also provide a pedestrian link to other parts of downtown Atlanta.

GEORGIA STATE UNIVERSITY

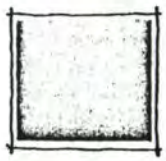
East of Five Points and Underground Atlanta is the campus of Georgia State University. There are several other colleges close to downtown, but G.S.U. is the only one located within the CBD. It is a relatively small, compact urban campus with several modern high-rise structures. A MARTA station is incorporated into the campus structure, and serves as excellent transportation for commuting students, reducing the need for parking.

CENTRAL CITY PARK

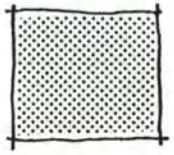
To the northeast and adjacent to the Five Points intersection is one of Atlanta's few public open spaces, Central City Park. Comprising about 4 acres, the park serves as the major open space in the CBD. In response to an anonymous $13 million gift intended for development of parks in the downtown sector, the City bought and cleared a group of buildings adjacent to Five Points. The original design by the City's own Parks Department was done to discourage loitering by vagrants and trouble-makers. Unfortunately, this also discouraged use by local workers, shoppers, and tourists. The quality of the park was further weakened by the nature of the surrounding buildings which for the most part create a poorly defined edge and do little to relate to the open space. Recently, new construction has begun on a redesign of the park which would make it more condusive to human enjoyment. The plans call for amenities such as fountains, landscaping, seating, and an amphitheatre; all of which are

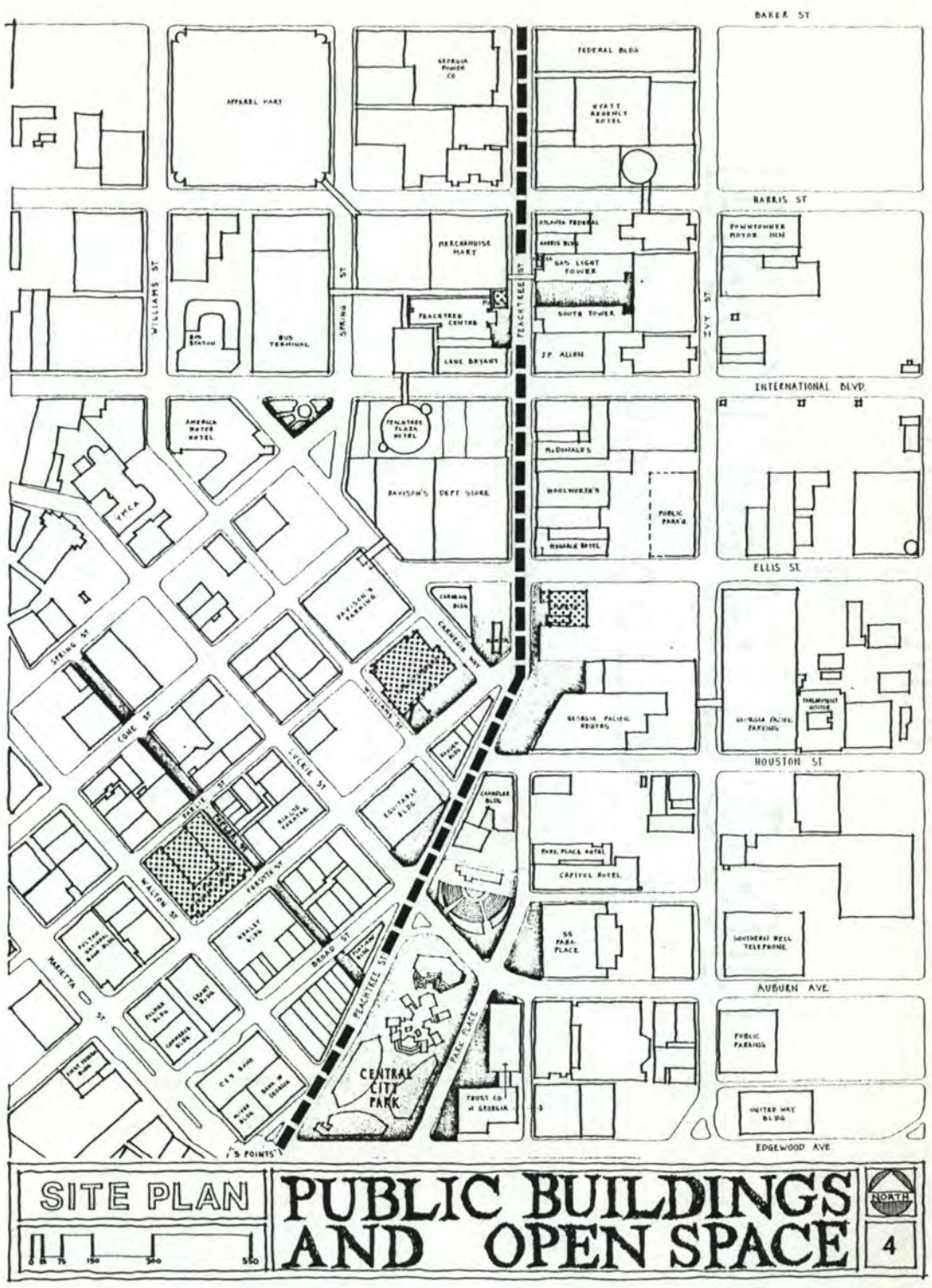
CENTRAL BUSINESS DISTRICT

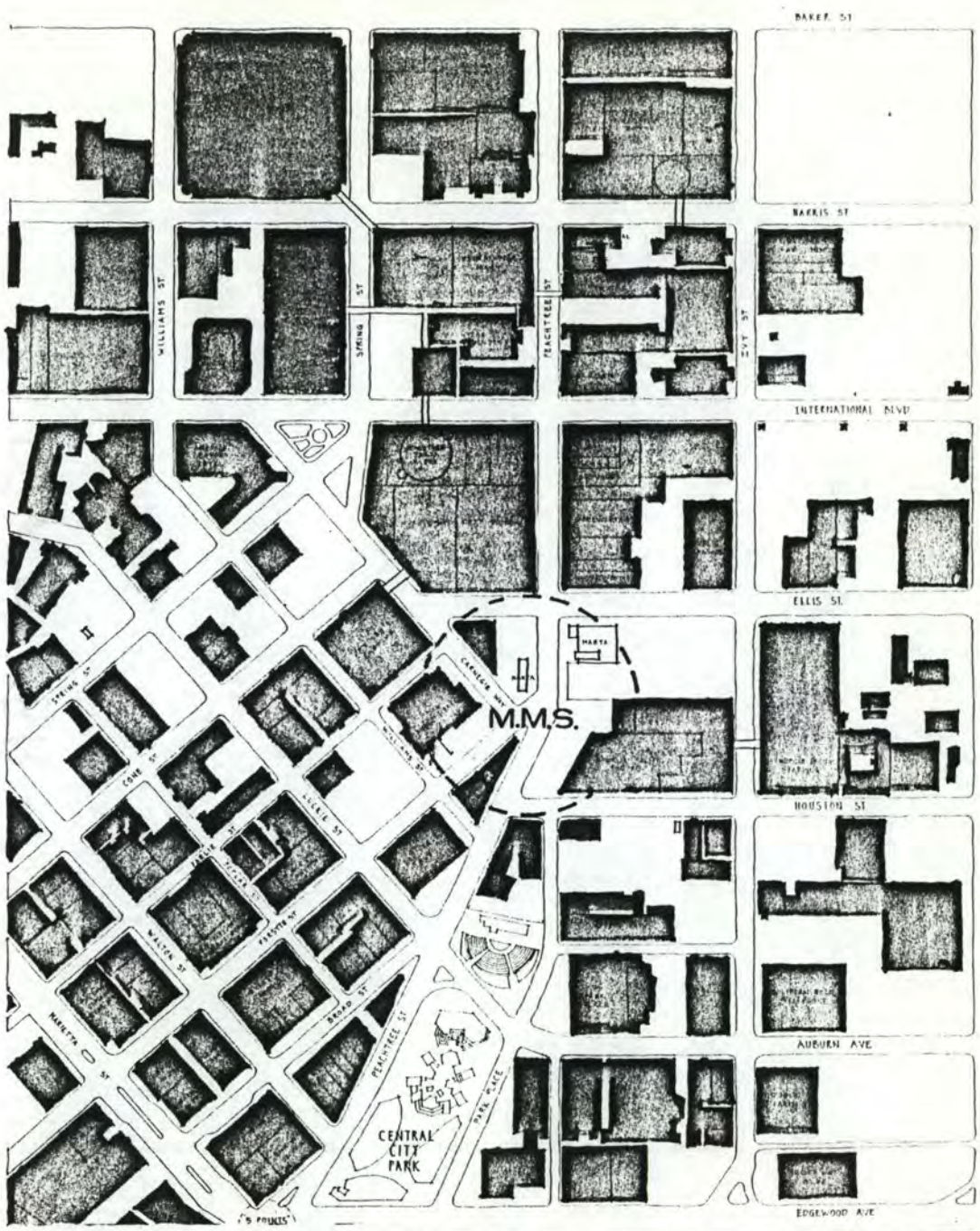
OPEN.SPACE

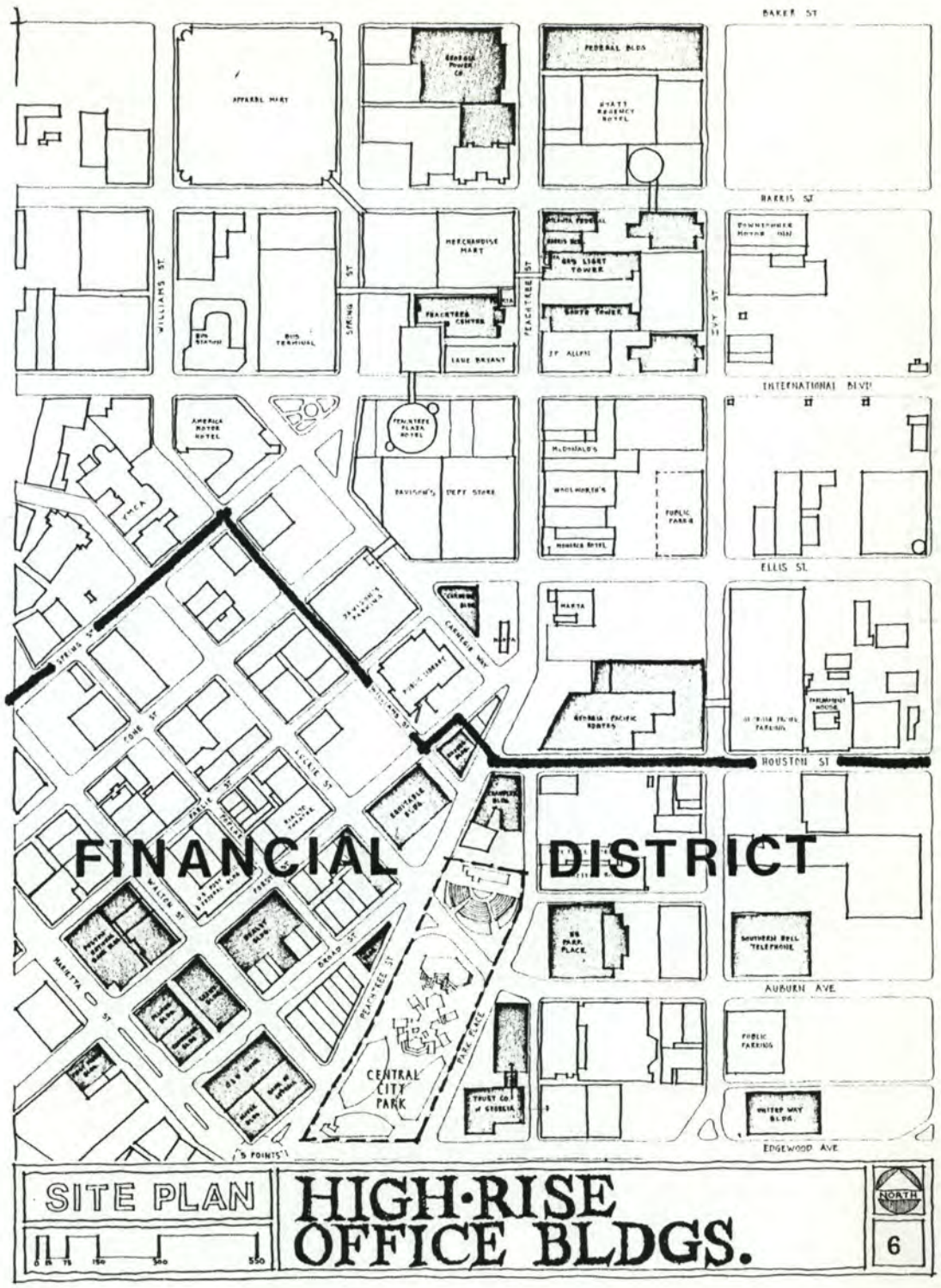


PUBLIC.BUILDINGS



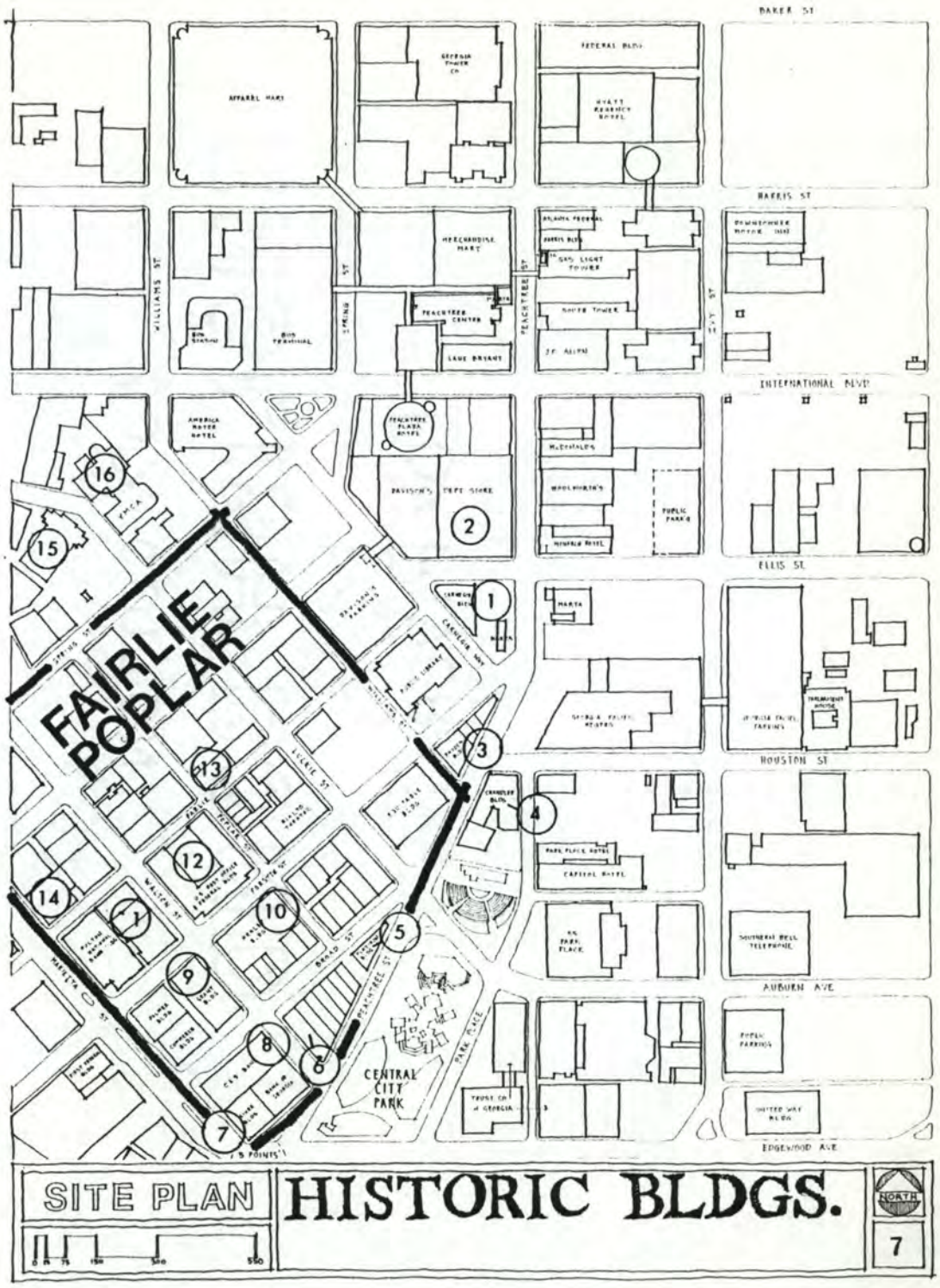



BAKER ST
BAKRIS ST
WILLIAMS ST
SPRING ST
PEACHTREE ST
EVT ST
INTERNATIONAL BLVD
ELLIS ST
HARTA
M.M.S.
HOUSTON ST
CAIN ST
WALTON ST
BROAD ST
MARIETTA ST
AUBURN AVE
CENTRAL CITY PARK
PARK PLACE
EDGEWOOD AVE
SITE PLAN
STUDY:
SOLID · VOID
NORTH
5


BAKER ST
APPAREL MART
FEDERAL BLDG
HYATT REGENCY HOTEL
BARRIS ST
MERCHANDISE MART
WILLIAMS ST
PEACHTREE ST
INTERNATIONAL BLVD
AMERICA MOTOR HOTEL
PEACHTREE PLAZA HOTEL
DAVISON'S DEPT STORE
McDONALD'S
WOOLWORTH'S
PUBLIC PARKING
ELLIS ST
YMCA
CARNEGIE WAY
MARTA
GEORGIA PACIFIC
HOUSTON ST
FINANCIAL DISTRICT
WALKER ST
MARIETTA ST
BROAD ST
CENTRAL CITY PARK
PARK PLACE
55 PARK PLACE
SOUTHERN BELL TELEPHONE
AUBURN AVE
PUBLIC PARKING
TRUST CO OF GEORGIA
UNITED WAY BLDG.
EDGEWOOD AVE
'5 POINTS'
SITE PLAN
0 75 150 300 550
HIGH-RISE OFFICE BLDGS.
NORTH
6

NATIONAL REGISTER BUILDINGS

1) Carnegie Building
2) Davison's Department Store
3) Rhodes-Haverty Building
4) Chandler Building
5) Flatiron Building
6) Muse's
7) William-Oliver Building
8) C&S Bank Building
9) Grant Building
10) Healy Building
11) Western Supermarket
12) Old U.S. Post Office
13) Georgia Railway and Power
14) Retail Credit Building
15) Y.M.C.A.
16) Baptist Tabernacle



intended to create a more attractive and comfortable environment. The park's central location makes it easily accessible to most areas of the CBD. The space is also linked to other parks and zones by Peachtree Street which borders its west side. [9] MAP.4

FINANCIAL DISTRICT

Central City Park is generally located in the center of the Financial District. This district serves as the location for many of Atlanta's largest and most prominent banking institutions. Until recently, most of the office lease space was located within its boundries. The majority of the important buildings in this area are either grouped around Five Points to the south, or lined along Peachtree Street which bisects the district. MAP 6

FAIRLIE POPLAR

The western portion of the Financial District is a sub-district called Fairlie-Poplar. This 22 sq. block area is part of the original city grid plan and still contains many fine old buildings. Ten of these buildings are listed on the National Register of Historic Sites. But the zone also contains many newer high-rises. It is this dense mixture of new and old, large and small which makes Fairlie-Poplar one of Atlanta's most interesting sections. Although it is part of the Financial District, the area contains a variety of activities. Shops, snack bars, and restaurants line the street levels. Consistent with 19th century street planning, its blocks are smaller in scale and narrower than the more recently developed grids planned for automobile traffic. MAP 7

PUBLIC IMPROVEMENTS

Recently, Fairlie-Poplar has been the recipient of public improvements. These improvements were planned and promoted by both public and private agencies. CAP (Central Atlanta Progress), the planning agency for the private sector of the CBD, worked with the City Planning Department to develop methods which would revitalize and beautify the 22 sq. block section of Fairlie-Poplar. The improvements involved alterations to the streetscape and existing traffic patterns. Several of the streets were narrowed to increase sidewalk area. Street furniture was added along with trees and planting. Three of the streets abut the park. The center street, Fairlie, is restricted to automobile traffic and becomes an inviting pedestrian corridor that links the inner blocks of the zone with the public park. Essentially, the improvements are an extension of the Central City Park environment and designed to create an enjoyable shopping atmosphere. [10]

HOTEL/CONVENTION DISTRICT

Several blocks north of the Financial District and Fairlie-Poplar, and centered along the Peachtree St. corridor, is one of Atlanta's relatively new districts, the Hotel/Convention District. This area contains 13 hotels, an Apparel and Merchandise Mart, several convention facilities, and a large mixed-use complex containing office buildings. The district also contains many large-scaled projects under construction and surface-level parking areas. Most of the major construction in the CBD in recent years has taken place in this district. It not only has ample space in which to build but is close to major transportation systems and a concentration of the tourist and convention trade. Restaurants and shops tend to focus location more on Peachtree Street. Few older buildings in this area have escaped demolition in the face of progress. Other than the buildings and spaces along Peachtree St. the fabric is loosely defined, and lacks pedestrian quality.

PEACHTREE CENTER

Approximately four blocks of area surrounding Peachtree St. , in the middle of the Hotel/Convention District, consists of a mixed-use complex called Peachtree Center. Started in 1966, and designed and developed by the Atlanta architect, John Portman, this complex has become the nucleus of the development and activity in the Hotel District. Peachtree Center and several of its individual buildings have also been influential nationwide, both in concept and form. Planned as a high concentration of building types and activities, interconnected and self-sustaining, the complex has benefited Atlanta both in the tourist/convention trade and in the office lease space market. [11] Peachtree Center is a collection of buildings which includes five major office high-rises ranging in size from 25 to 31 stories. Their irregular setback arrangement along Peachtree St. creates a rhythm of pocket spaces which are filled with amenities intended for public enjoyment. Also part of the center are two hotels. One, the 70-story Peachtree Center Plaza, is billed as the tallest hotel in the world, and its form is unmistakable on the skyline. The other is the Hyatt Regency Hotel. To complete the center there is: a 22-story Merchandise Mart, a 4-story Apparel Mart, a 6-story glass-enclosed shopping galleria, a 475-seat dinner theater, and a transportation center with parking spaces for 1,000 cars. All the buildings are connected by underground concourses or overhead bridges. Approximately 15,000 people work in this "city-within-a-city". [12] MAP 9

OMNI INTERNATIONAL

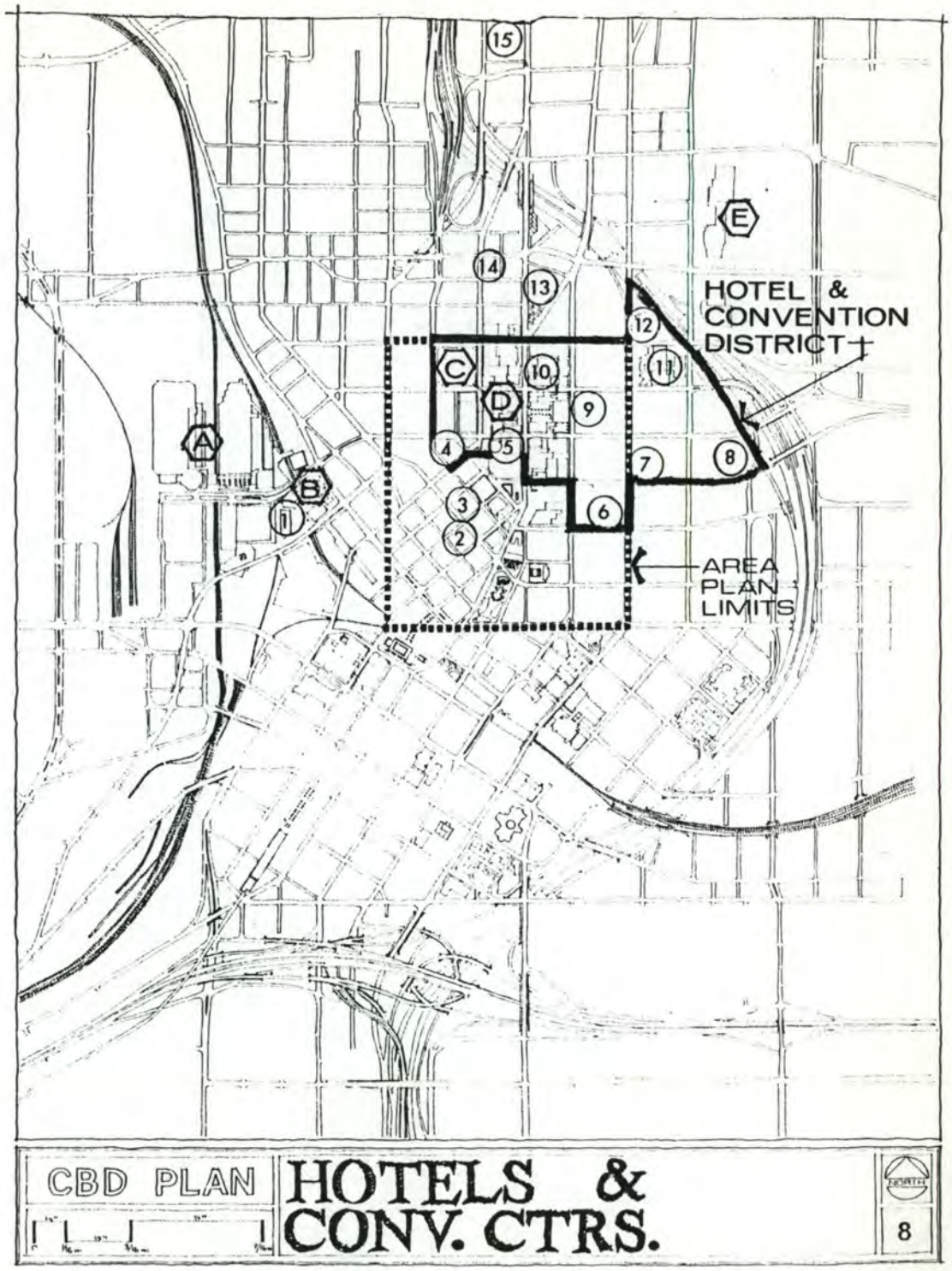
Five blocks west of Peachtree Center is Omni International. Designed by Thompson, Ventulett, Stainback, this 14-story multi-

LIST OF HOTELS

1) Peachtree Plaza Hotel
2) American Motor Inn
3) Atlanta Marriot Hotel
4) Holiday Inn-Downtowner
5) Downtowner Motor Inn
6) Atlanta Hilton Hotel
7) Atlanta Travel Lodge
8) Atlanta Hyatt Regency
9) Habersham Hotel
10) Atlanta Downtown Motel
11) Atlanta Hotel
12) The Barclay Hotel
13) Comfort Inn
14) Sheraton- Atlanta Hotel
15) Omni International Hotel
16) Monarch Hotel

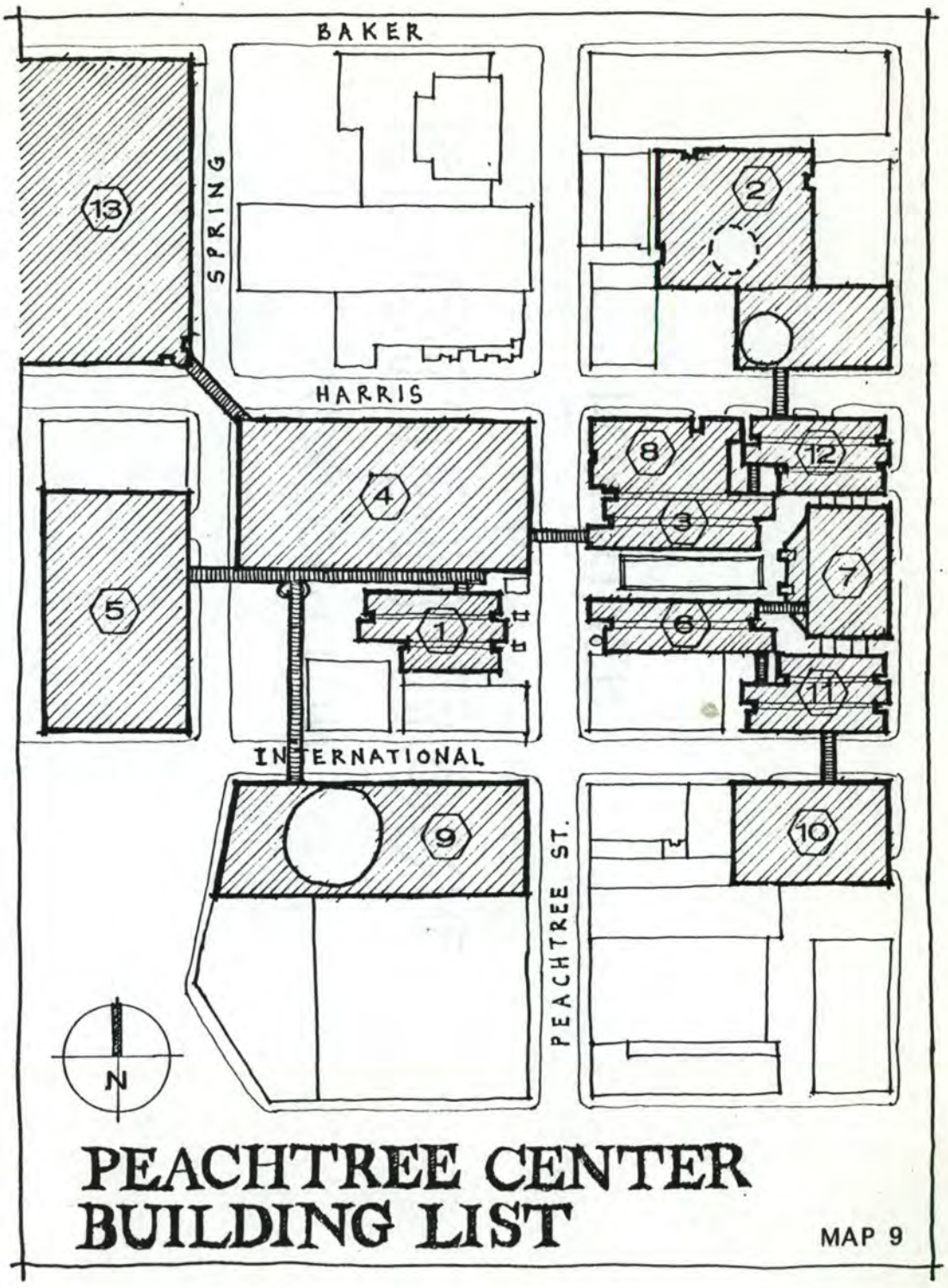
CONVENTION CENTERS

A) Apparel Mart
B) Merchandise Mart
C) Civic Center
D) Omni Arena
E) Georgia World Congress



BUILDING LIST

1) One Peachtree Center
2) Hyatt Regency Hotel
3) Atlanta Gas Light Tower
4) Atlanta Merchandise Mart
5) Trailways Garage
6) Peachtree Center South
7) Dinner Theater/ Shopping Gallery
8) Atlanta Federal Building
9) Peachtree Center Plaza Hotel
10) Parking Garage
11) Cain Tower
12) Harris Tower
13) Apparel Mart



use megastructure sits on a 34 acre air-rights site above railroad tracks. The complex also has a 2,000-car parking garage, the 18,000-seat Omni Sports Coliseum, and the Georgia World Congress Center used for fairs and conventions. Omni International is a grouping of four major buildings around an enclosed atrium. The buildings consist of two office structures, a 472-room hotel, and the 8-story fantasy "World of Sid and Marty Krofft" amusement park. They are interconnected at the base by several levels of shops occupying 200,000 sq. ft. of space overlooking what was originally an olympic-size ice-skating rink. The rink has since been removed. Like Portman's schemes, it is very much internally orientated. Little activity is opened to the exterior. The nature of the area must have played a role in this concept. The zone is rather rundown and situated along railroad tracks. Although it is relatively close to other activities in the CBD, the Omni complex seems much further because it is not directly linked or easily accessible to other districts. It is like an island drifting at the edges of the CBD. Its best pedestrian link is through the MARTA station and line which is incorporated into the complex. The development has become a financial failure due to its inability to lease enough office space. The recent recession in the local and national economy, and overestimating market needs were blamed for its failure. Another reason may be its poor physical relationship to its outer environment and the CBD as a whole. [13]

PEACHTREE SUMMIT

Three blocks north of Peachtree Center and at the edge of the Interstate Highway, is Peachtree Summit, an ambitious office project. Only one of the three originally planned towers is complete. This tower, designed by Toombs, Amisano, Wells conforms to its triangular site along West Peachtree St. Described as a piece of sleek, urban sculpture, its overall urban design aspects makes it worthy of mention here. With a 3-story glass-enclosed garden at its base, the building was designed to connect directly to the new MARTA subway stop. At this particular location, the transit line is constructed on-grade along West Peachtree St. A people-mover is planned to connect the Peachtree Summit to the existing Civic Center several blocks further east. The pedestrian connection between these two transit facilities will be through a 3-level glass-enclosed shopping area built above the air-rights of the freeway. The shopping area will also serve as a link between the existing office tower and the future tower on the northern side of the freeway. [14]

MOVEMENT SYSTEMS

VEHICULAR

STREETS

Many of the early, major streets conformed to the natural geography of the area with gridlike patterns of secondary streets branching in between. The variety and irregularity of these patterns creates a confusing but sometimes interesting circulatory network. The nucleus of the original street network is the Five Points intersection. One of these five streets is the historic Peachtree Street. It is said to have gotten its name from a very large, noticable peach tree which stood alone on the ridge. Peachtree Street was built on this ridge and conformed to its direction as it twisted northward. Even today, natural grade slopes away from Peachtree on both sides. [15]

PEACHTREE STREET

Peachtree Street's importance in the development of the city is undeniable. It became an organizing element along which many important developments took place. From the core of downtown it was a connecting link to parks, campuses, and housing to the north. Many fine historic homes were built along Peachtree to the near north. And even today, several prominent residential neighborhoods are located adjacent to it. In the CBD, most of the important office towers and hotels face on or link to this famous thoroughfare. [16] MAP 10

INTERSTATE HIGHWAYS

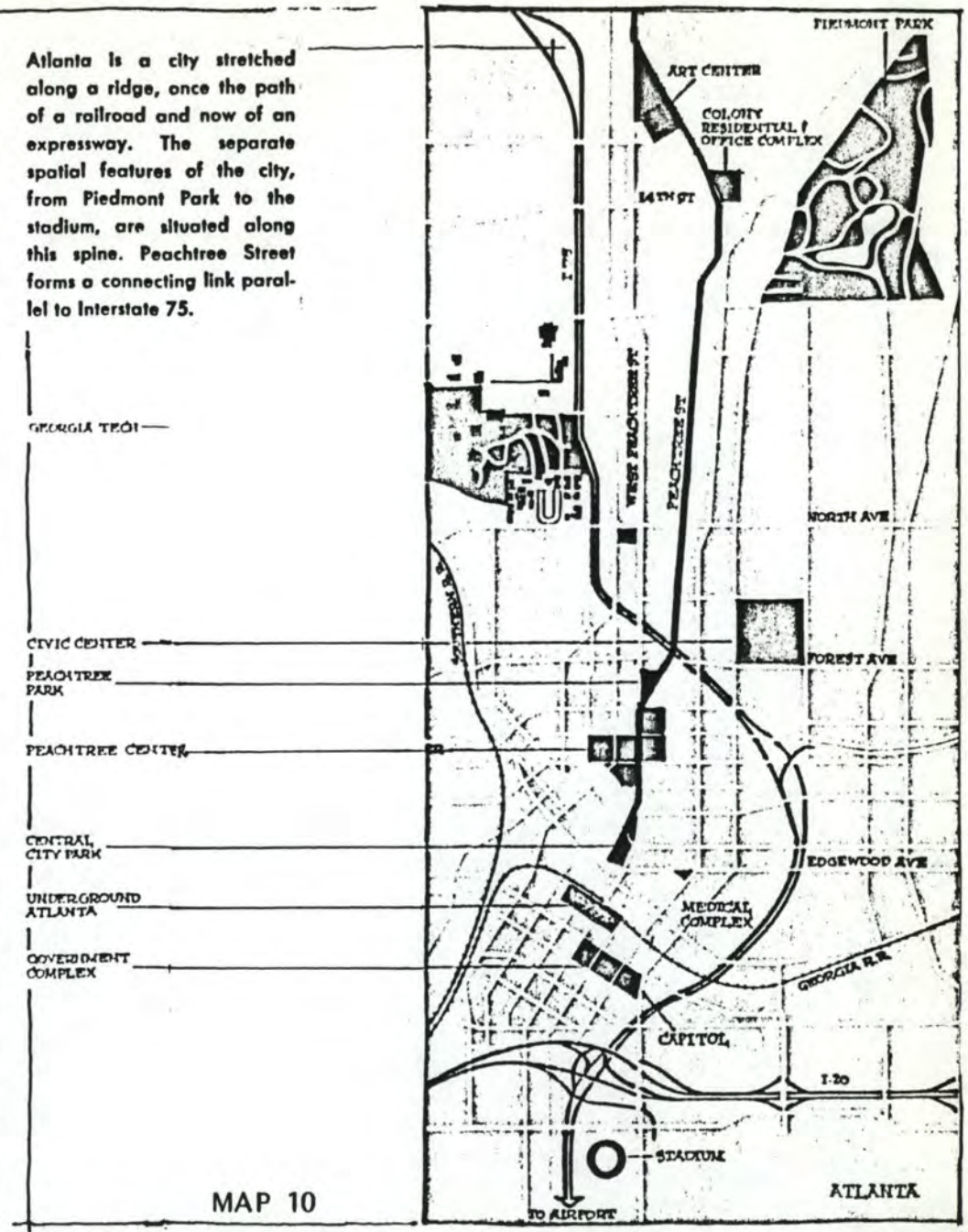
At one time, Peachtree St. served as the major road for commuters north of the CBD. Although still heavily traveled, Peachtree has been replaced in this respect by I-75/I-85 ; the two interstate highways which merge as they loop around the eastern sphere of the CBD. I-20, which runs east-west, crosses this loop at the south end of the CBD. These multi-lane highways serve not only as a border to the CBD, but also form a physical barrier and division from growth and activities outside its perimeter.

MAJOR ARTERIALS

Several streets within the sphere of the highway loop are directly linked to it via access ramps. During business hours, these become heavily traveled commuter access roads. Typically, they are lined with parking facilities concentrated near the perimeters of the CBD. Other major downtown streets cross over or beneath the Interstate and connect with local neighborhoods. Peachtree Street is one of these roads. Many of the streets in the CBD are single-directional as to facilitate smoother and quicker

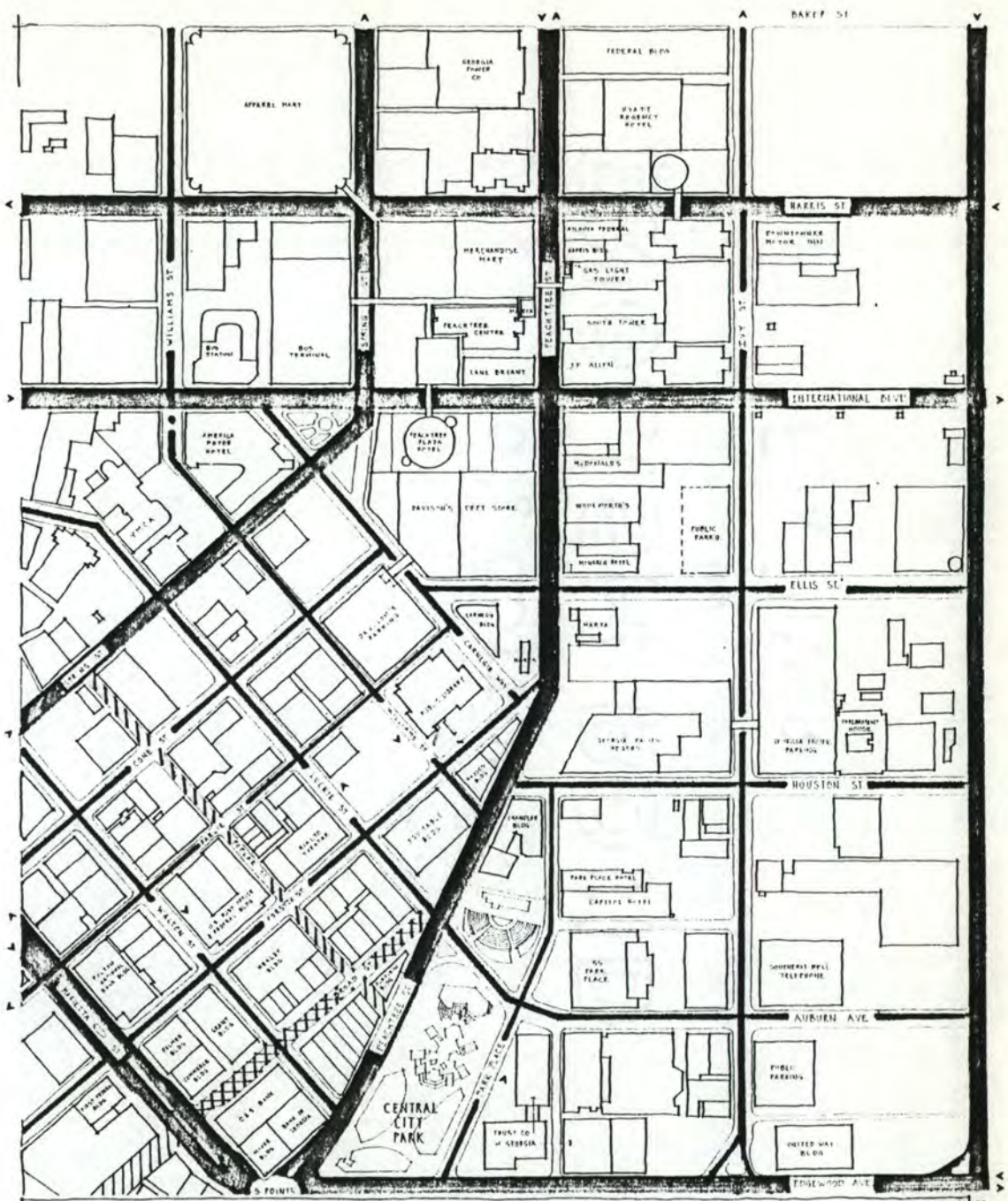
MARGARET MITCHELL SQUARE

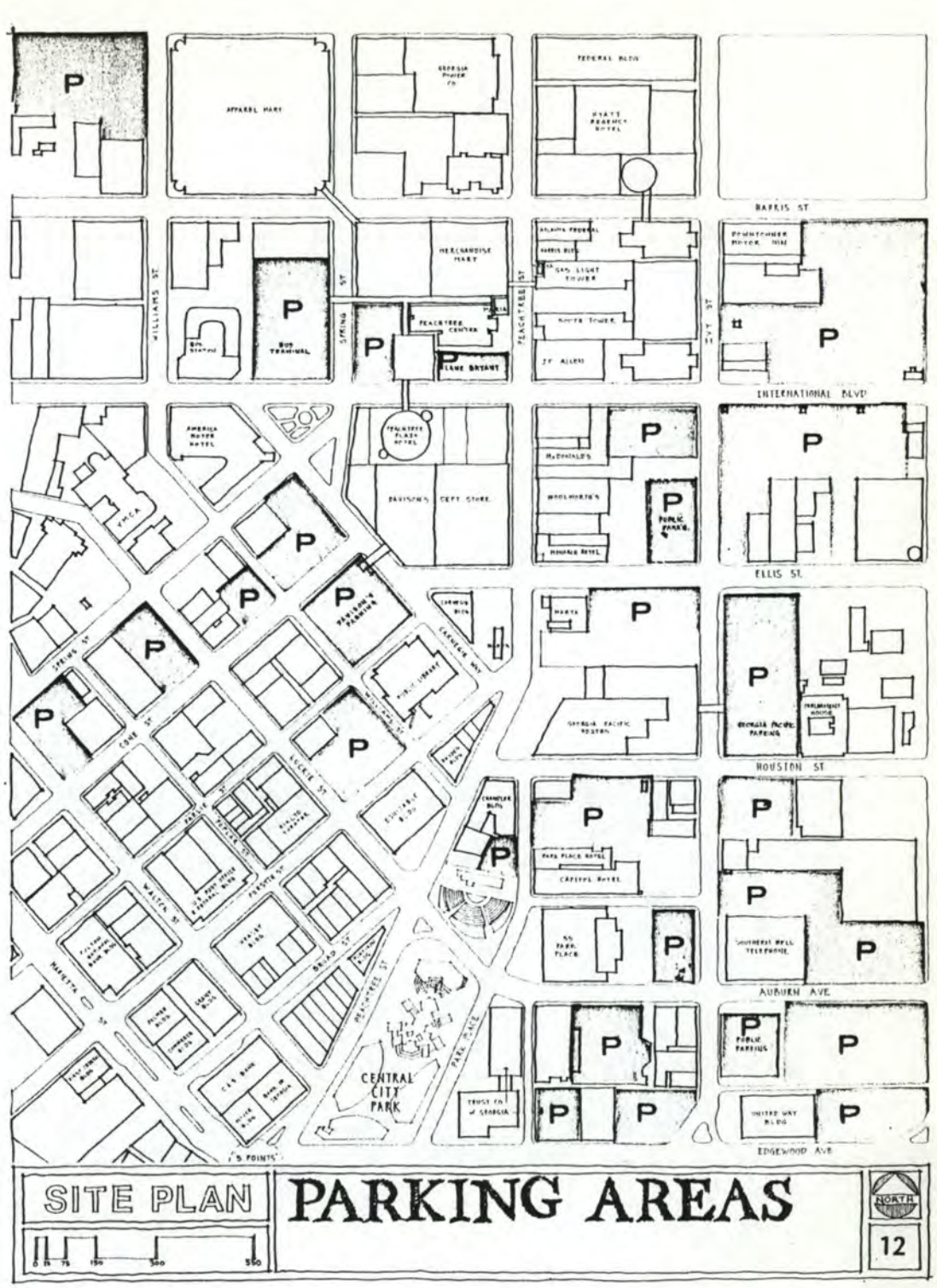
Atlanta is a city stretched along a ridge, once the path of a railroad and now of an expressway. The separate spatial features of the city, from Piedmont Park to the stadium, are situated along this spine. Peachtree Street forms a connecting link parallel to Interstate 75.



MAP 10

PEACHTREE STREET SPINE


BAKER ST
BARRIS ST
INTERNATIONAL BLVD
ELLIS ST
HOUSTON ST
AUBURN AVE
EDGEWOOD AVE
WILLIAMS ST
PEACHTREE ST
CENTRAL CITY PARK
5 POINTS
SITE PLAN
0 75 150 300 550
VEHICULAR SYSTEMS
NORTH
11


APPAREL MART
MERCHANDISE MART
PEACHTREE CENTER
BUS TERMINAL
HYATT REGENCY HOTEL
FEDERAL BLDG
GAS LIGHT TOWER
SUTTER TOWER
J.P. ALLEN
WILLIAMS ST
SPRING ST
PEACHTREE ST
CITY ST
HARRIS ST
INTERNATIONAL BLVD
ELLIS ST
HOUSTON ST
AUBURN AVE
EDGEWOOD AVE
CENTRAL CITY PARK
PARK PLACE
MARIETTA ST
'5 POINTS'
SITE PLAN
PARKING AREAS
NORTH
12

traffic flow. The 5 major streets which make up Five Points are left bi-directional, but major highway access roads such as International, Harris, Ellis, and Courtland have been changed to one-way traffic. Vehicular traffic within the CBD is heavy but not overly congested. Atlanta's CBD is relatively small compared to many large cities, and therefore there is not a great deal of cross or through traffic. The major problem lies in the overburdened Interstate Highway and in some secondary commuter corridors, such as Peachtree, Piedmont, and Spring Streets. MAP 11

PARKING

With the increased highway capacity to bring in commuters, the fabric and density of the CBD has been altered to provide more parking. The demolition of many fine, old buildings has been performed to make way for single-level, on-grade parking. Few downtown areas have survived this "cancer". It is surprising, even alarming to see such poor, inefficient land use in the core of a thriving and properous city. Fortunately, the attempts by MARTA are to reverse this trend; to provide an inexpensive alternative which will prevent the further decay of the city's core. MAP 12

PUBLIC TRANSPORTATION

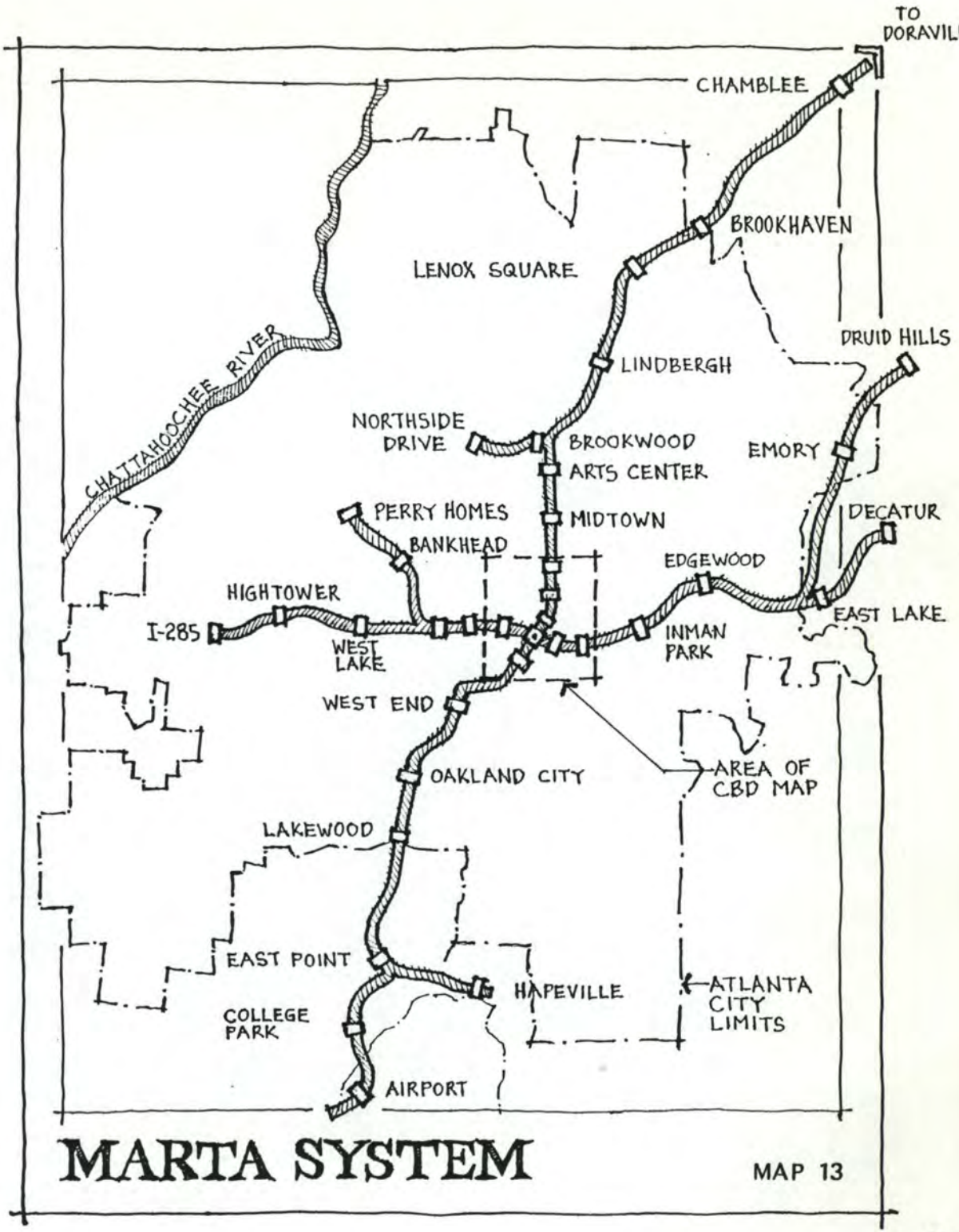
BEGINNINGS

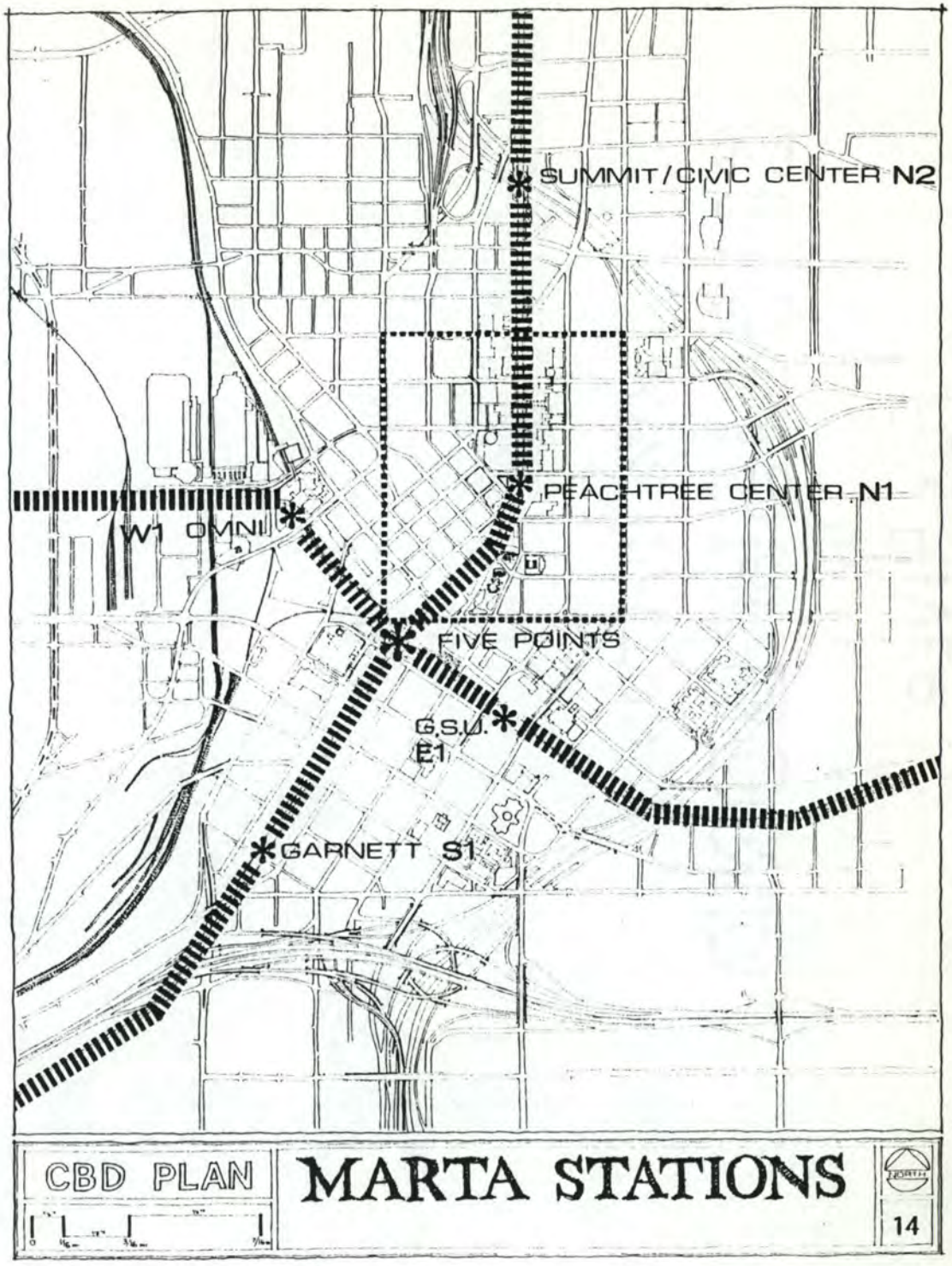
MARTA (Metropolitan Atlanta Rapid Transit Authority) came into being in 1971 by approval of a two-county referendum. It called for metropolitan-wide bus and subway service. The voters approved a 1% sales tax increase, half of which enabled MARTA to purchase the privately owned and operated bus company, buy new buses, build park-and-ride facilities, reorganize bus routes, and lower existing fares. The other half of the revenues went towards the city's share of the construction costs of the rapid transit system. [17]

OVERALL SYSTEM

The MARTA system consists of two lines: one which runs east from Avondale to Hightower in the west, and the second line which will run from Doraville in the north to College Park and Hartsfield International Airport in the south. The two lines cross in downtown at Five Points. Although the 11.8 mile East-West line is complete, only 4.4 miles of the proposed 41 miles of North-South track is complete. A total 53 miles of track and 40 stations will comprise the system. Parking is provided at all stops except those within the CBD. Together with the extensive bus service, this system is expected to lessen the congestion on commuter streets and reduce the need for additional commuter parking.

MAP 13


TO DORAVILLE
CHAMBLEE
BROOKHAVEN
LENOX SQUARE
DRUID HILLS
CHATTAHOOCHEE RIVER
LINDBERGH
NORTHSIDE DRIVE
BROOKWOOD
ARTS CENTER
EMORY
PERRY HOMES
MIDTOWN
DECATUR
BANKHEAD
EDGEWOOD
HIGHTOWER
I-285
WEST LAKE
INMAN PARK
EAST LAKE
WEST END
AREA OF CBD MAP
OAKLAND CITY
LAKEWOOD
EAST POINT
HAPEVILLE
ATLANTA CITY LIMITS
COLLEGE PARK
AIRPORT
MARTA SYSTEM
MAP 13


SUMMIT / CIVIC CENTER N2
PEACHTREE CENTER N1
W1 OMNI
FIVE POINTS
G.S.U.
E1
GARNETT S1
CBD PLAN
MARTA STATIONS
14

CBD STATIONS

Within the limits of the CBD, there are at present six MARTA stations; the Garnett Station serving the Government District to the south; Omni Station serving the Omni International Complex and Georgia World Congress Center to the west; Georgia State Station serving the university and the nearby Grady Memorial Hospital in the east; the Civic Center Station serving the Civic Center and the Atlanta Summit Buildings to the extreme north; the Peachtree Center Station which serves the Hotel/Convention District and the Financial District, and is roughly located between the two; and the Five Points Station which serves the surrounding districts of Five Points, mostly the Financial District, is located in the heart of the CBD, and also serves as a transfer station for the two crossing MARTA lines. Once completed, the MARTA system will allow easy, quick access to the CBD from distant areas and can provide a tremendous boost to the business community of downtown. MAP 14

PEDESTRIAN

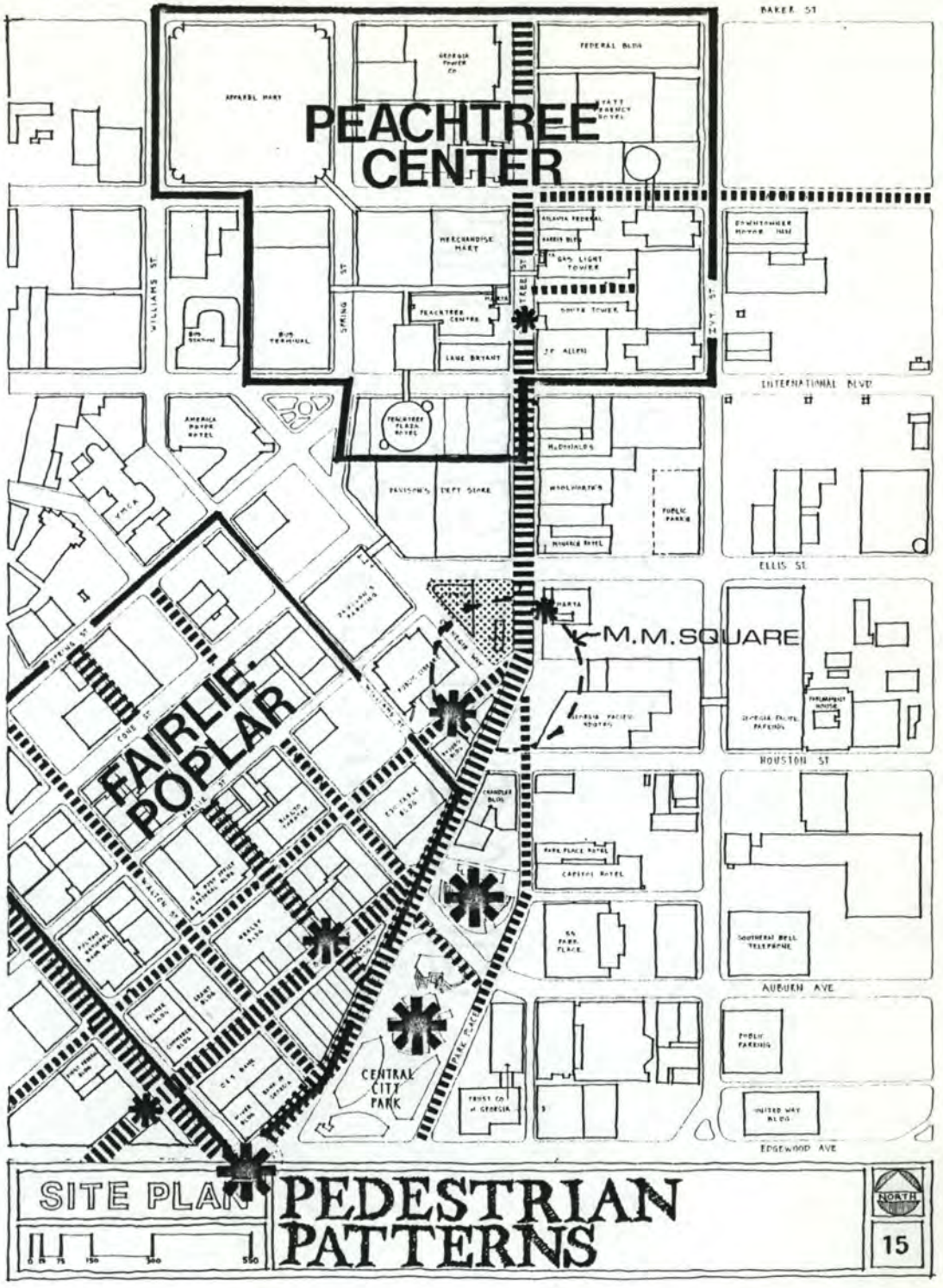
MAJOR SPINES

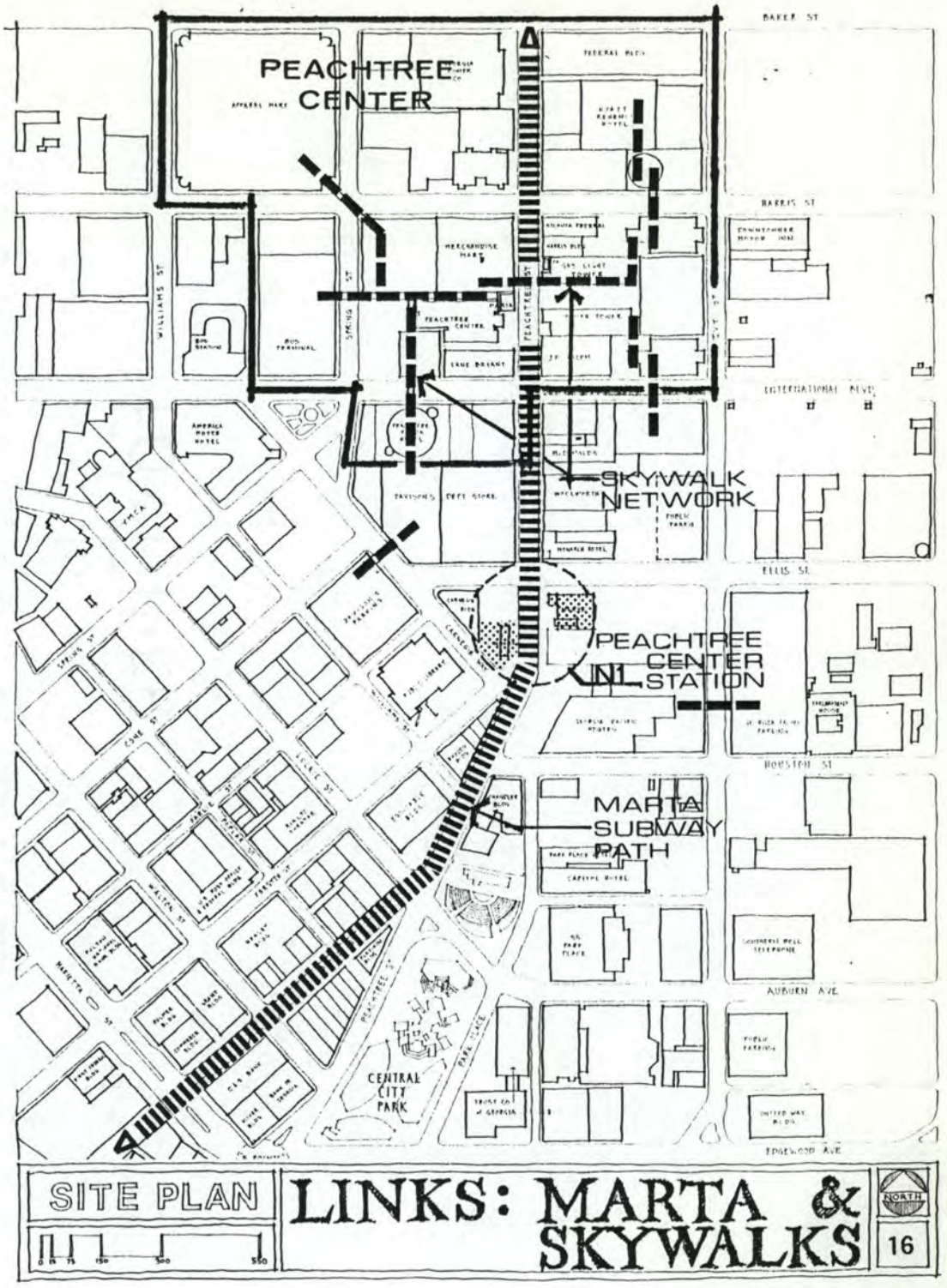
Presently, Peachtree Street acts as the major pedestrian spine north of Five Points. With the addition of new projects and improvements, other secondary spines have opened up. The Fairlie-Poplar improvements created Broad and Poplar Streets as strong pedestrian routes. The new hotels built in the northeast part of the Hotel District are turning Harris and International Blvds. into connector paths for visitors. It is anticipated that with the addition and growth of the MARTA system, these pedestrian routes located near and along MARTA stations will strengthen. The Peachtree Street corridor stands to benefit most as 3 of the CBD MARTA stations are located along its path and the corridor passes through 4 of the sub-districts previously mentioned. It also borders the major open space of the downtown area, Central City Park. MAP 15

CARNEGIE. PLAZA. SITE

MAJOR. PEDESTRIAN. ROUTES

ACTIVITY. NODE




PEACHTREE CENTER
SKYWALK NETWORK
PEACHTREE CENTER MARTA STATION
MARTA SUBWAY PATH
CENTRAL CITY PARK
BAKER ST
BARRIS ST
INTERNATIONAL BLVD
ELLIS ST
HOUSTON ST
AUBURN AVE
EDGEWOOD AVE
WILLIAMS ST
SPRING ST
PEACHTREE ST
MARIETTA ST
SITE PLAN
LINKS: MARTA & SKYWALKS
NORTH
16

SKYWALKS

Although most pedestrian movement is at street level, a skywalk system has developed along the Peachtree Street corridor over the past two decades. Starting with and concentrated in the Peachtree Center grouping of buildings, the system has expanded outside the Peachtree Center complex. Examples of this include the two bridges connecting Davison's Department Store with its parking garage accross Ellis St., and the bridge connecting the new Georgia-Pacific high-rise with its parking garage accross Ivy St. Although the Georgia-Pacific example is relatively isolated from the existing skywalk system, the Davison's example is an expansion of the Peachtree Center circulation. The interior of the store opens into the atrium of the Peachtree Center Hotel which is adjacent. In turn, the hotel has a bridge connecting it to the remaining network of bridges. This system presently links 7 city blocks above street level with a total of 10 enclosed skywalks.

MAP 16

RECENT DEVELOPMENTS

PEACHTREE ST. CORRIDOR

The majority of current growth in the CBD is occuring along the Peachtree corridor north of the Financial District. There are several reasons for this. The first is that much of downtown's available open space is located in this district. Secondly, with the increase in the tourist and convention industries, many hotel, restaurant, and store chains are ready to invest in this area to capture a portion of those markets. Many existing facilities are either renovating or expanding operations. Third, this is becoming the most fashionable and prestigious area of the city in which to locate. The rental rates of office buildings on Peachtree Street are generally higher than those that are not. Lastly, this area is conveniently located near major connector roads, the Interstate Highway, and two MARTA stations. The proposed Civic Center Station Plaza, which will provide a covered pedestrian galleria spanning the Interstate, should encourage future development to the north accross the highway and along the Peachtree corridor. [18]

BUILDINGS

The more recent buildings in the CBD have followed the examples set forth in the Peachtree Center complex. The Omni, Summit, 55 Park Place, and others have large interior spaces and provide amenities at lower levels. The ones located on or near MARTA stations are taking advantage of their position to incorporate the system into the building's circulation. In the competition for tenants and shoppers, it is expected that these building trends will continue and even expand to improve the quality of the pedestrian environment.

PUBLIC-IMPROVEMENTS

New proposals are planned for the continuation and extension of the Fairlie-Poplar improvements. The loosely defined open space located at the intersections of Peachtree and Forsyth Streets, and designated to be known as Margaret Mitchell Square, is the next planned recipient of these improvements. The City Planning Department intends to include Margaret Mitchell Square into this system of pedestrian orientated streets and thereby create a link between Fairlie-Poplar to the south and the Hotel District and Peachtree Center to the north. The improvements are intended to be similar in character and an extension of the ones performed for Central City Park and Fairlie-Poplar. Using the existing plaza in front of the Public Library, the plan is to create a space that would serve not only as a link of the two districts, but also a major, well-defined pedestrian node within the CBD. [19]

CBD BUSINESS

Once complete, the MARTA system will allow easy, quick access to the CBD from distant areas. It is expected that this will increase business in the downtown sectors reversing earlier trends of business flight. However, with the public's fear of downtown crime and the belief that goods cost more in the CBD, the downtown sector has suffered the loss of many customers. Recently, the business community has combined efforts to produce solutions and promote the CBD as a safe, exciting, and reasonable place to shop. Some solutions have been to arrange increased police patrols and to place information kiosks throughout downtown. There is belief that more night activities and longer commercial business hours would help draw people downtown. To promote this, the City has sponsered the first of a proposed annual inner-city celebration called "Light-Up-Atlanta". It was deemed a success in its first year as many merchants stayed open into the evening with free music and other activties provided outdoors for visitors. At a synchronized hour, all of the downtown buildings turned their lights on to the delight of the 100,000-plus crowd. The ultimate purpose of the event was to demonstrate to the public the safe and exciting nightime environment of the CBD. Efforts are being made to provide enough activities and variety in the downtown area to draw the public into the inner city on a daily basis rather than a yearly basis. [20]

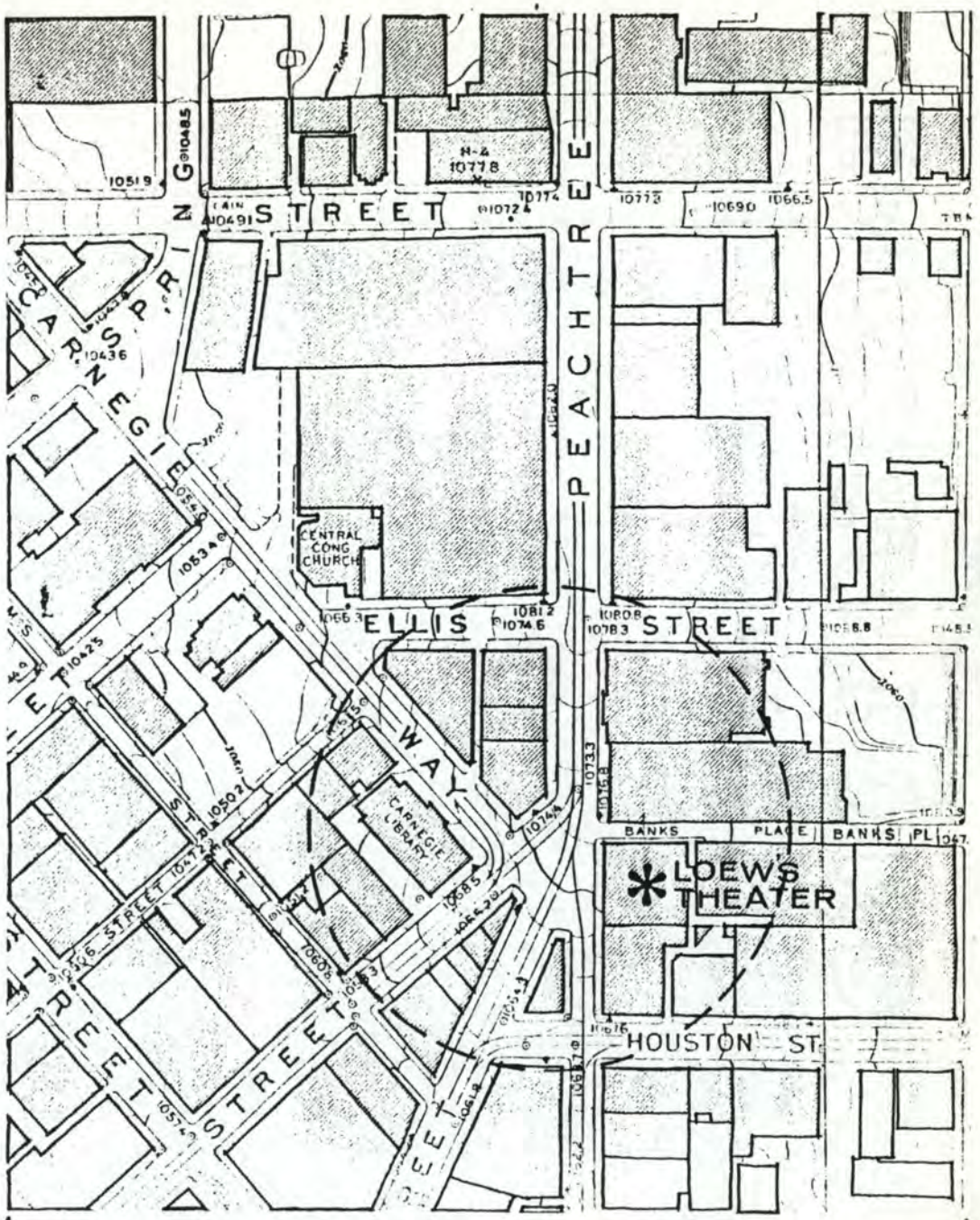
BACKGROUND

BACKGROUND

Margaret Mitchell Square is a loosely defined space located at the intersection of Peachtree and Forsyth Streets. The space has been under intensive study in recent years to develop as a major activity node of the CBD. The City recognizes the need to create a link between the more traditional activity nodes near the Five Point region and the newer activities north along Peachtree Street in the Hotel/Convention District. Future efforts by the City are directed to coordinate public and private developments in this area with the intention of molding Margaret Mitchell Square into a well-defined and supported activity node which would serve as this link. Slowly, M.M.Square is becoming the new center of downtown, the reasons for this are threefold. First, as new development and activity occurs in the northern portion of the CBD, tendency is for the center of activity to move away from Five Points. Secondly, the Square's location within the city is at a point where a variety of grid plans and sub-districts meet. Lastly, because of the character, function, and scale of the buildings presently located on the Square, there is a mixture of activities and structures not found elsewhere within the CBD. Represented are old and new buildings supporting both public and private functions. The size and form of its structures lends a visual dominance within the city's skyline. And the history of the location adds to the interest and character of the space. [21]

HISTORY

The square is named in honor of Margaret Mitchell, the author of the novel "Gone With the Wind". Margaret Mitchell and her family was part of high-society Atlanta in the early 1900's. She was born on Peachtree Street and spent much of her life living and working in Atlanta. Her grand, historic novel gave the South's viewpoint of the Cival War years, and was well received by Southern readers. Although trained as a journalist, the novel won her world acclaim and, in turn, gave Atlanta a sense of pride in calling Margaret Mitchell their own. The motion picture was equally sucessful. The world premiere took place in 1938 at the Loew's Theatre, which was then located on the present site of the Georgia-Pacific building. At that time, this area was a very active theater and entertainment district. Ironically, Margaret Mitchell was killed in an auto accident on Peachtree St. near this district while returning home from a show. The Loew's, along with other buildings, was demolished to make way for the Georgia-Pacific high-rise. [22] MAP 17



M.M. SQUARE IN 1929

MAP 17

FUTURE

The Georgia-Pacific Corporation, in choosing their present location on M.M.Square, gave indication of their recognition and support of this area as an important space within Atlanta and the CBD. Public agencies have also committed theirselves to the future of this space by building a new library and a major MARTA entrance within its boundries. These commitments should ensure stability and future activity for Margaret Mitchell Square.

BUILDINGS and ACTIVITIES

CHANDLER BUILDING

A number of impressive structures, new andold are located in the vicinity of Margaret Mitchell Square. The Chandler Building is the oldest "resident". It is a beautiful , white, 16-story structure built in 1906, and originally served as headquarters for the Coca-Cola Company. Built by the founder of the company, Asa Chandler, it is one of two buildings on the square which are on the National Register of Historic Sites, the other being the Carnegie Building. It is a wonderfully detailed Neo-Classical style design which is irregular in plan to fit its site. [23] MAP.18

CARNEGIE BUILDING

The Carnegie Building is part of the Carnegie Plaza site and presently defines the Western edge of Margaret Mitchell Square. It is a 12-story office building constructed in 1926 and is currently in need of improvements. A more detailed discussion of the entire Carnegie Plaza site is covered in a later chapter on Site Analysis.

DAVISON'S DEPT.STORE

Davison's, a fine Neo-Classical, mid-20's, 6-story department store, is a half block off the square. This is the store's main location, containing executive offices in upper levels. The store does a brisk business and is connected internally with the Peachtree Plaza Hotel lobby next door. Davison's also owns and operates a 6-story parking garage located accross Carnegie Way. Bridges at the 4th and 6th floors connect to the main store circulation. [24]

PEACHTREE PLAZA HOTEL

The 70-story, 1,050 room Peachtree Plaza Hotel with its reflective glass, cylindrical tower, is easily seen from street level in the Square. Peachtree Plaza is a Portman design and development, and is part of the large, mixed-use Peachtree Center complex. Reaching over 700 ft., the hotel is the tallest building in Atlanta. A great deal of activity in the area is generated by the visitors of the hotel. Recreation, dining, shopping, and convention facilities are contained within the building.

MONARCH HOTEL

The 22-story, 471 room, Monarch Hotel, which will be completed in 1984, sits at the corner site across from Davison's on Peachtree St. Because of its size and the activity it will generate, it should play an important role in relation to the Square. Many of its faceted, glass-wall hotel rooms will look onto the Square below.

1) CARNEGIE BUILDING

2) SOUTHBOUND MARTA CANOPY

3) NORTHBOUND MARTA CANOPY

4) GEORGIA-PACIFIC BUILDING

5) CHANDLER BUILDING

6) EQUITABLE BUILDING

7) VACANT BUILDINGS

8) RHODES-HAVERTY BUILDING

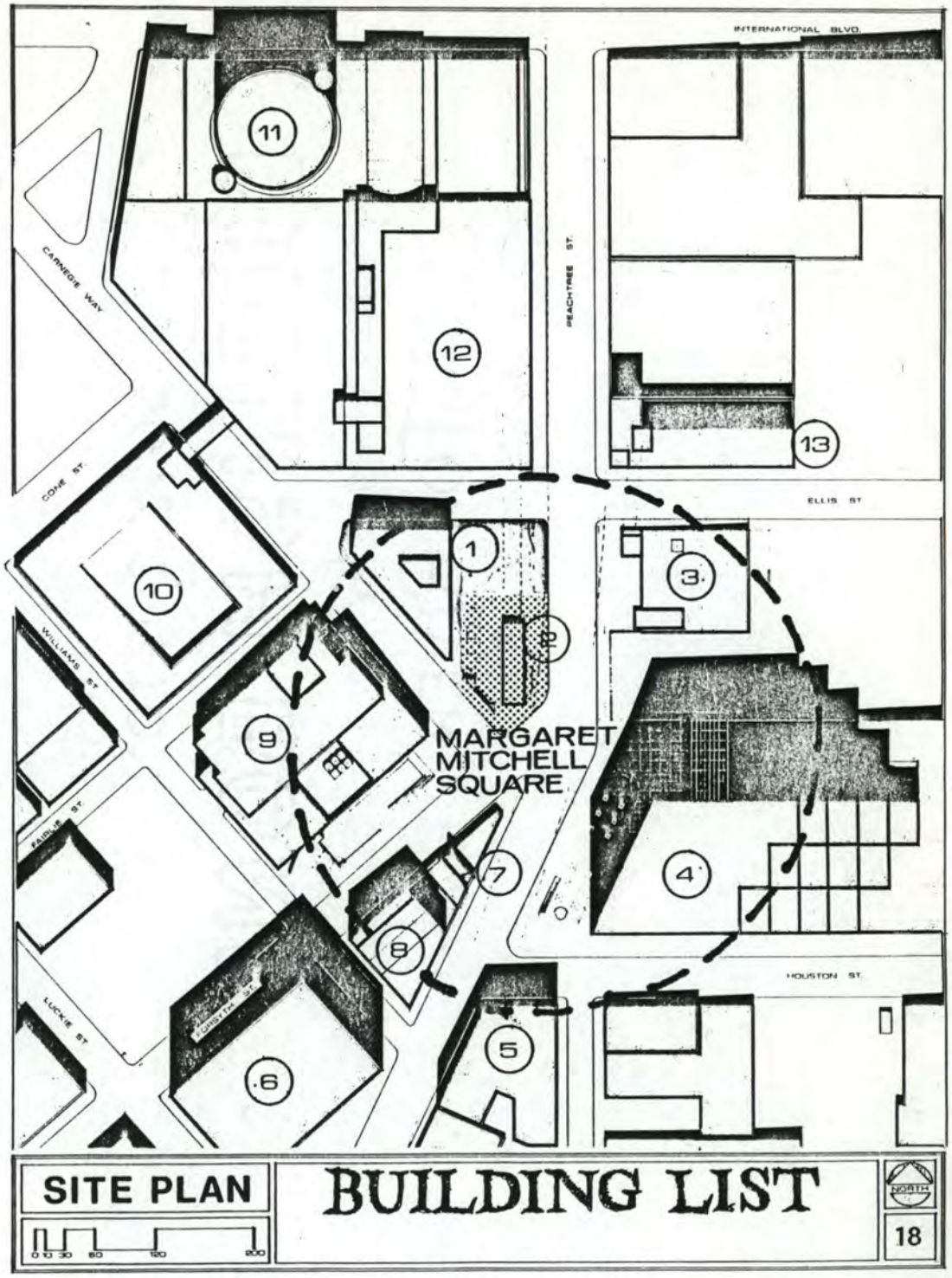
9) CENTRAL ATLANTA PUBLIC LIBRARY

10) DAVISON'S PARKING GARAGE

11) PEACHTREE PLAZA HOTEL

12) DAVISON'S DEPT. STORE

13) MONARCH HOTEL



GEORGIA PACIFIC BLDG.

BLDG. PLAN & SECTION 1

The Georgia-Pacific Building, was designed by Bruce Graham, of Skidmore,Owings,Merrill-Architects. The 52-story high-rise has 1,100,000 sq.ft. of lease space of which approximately one-third is used by G.P. , while the other two-thirds are leased to other tenants. These tenants are mostly large, professional groups such as accountants, lawyers, and investment firms. The building has one of the highest rental rates in the city. Around its base on two sides is a low-rise extension containing meeting rooms, restaurants, banks, and storage. A skywalk connects the building to a private 5-level parking garage. A simple, geometric plaza is in front of the building. It contains some step seating, flowers, and trees. Although modest, it is not out of character with the intentions of the City for the Square. [25]

VACANT LOT

Georgia-Pacific also owns the land adjacent to the north, which at present is a vacant lot. Their intention is to hold the land for future expansion or sell it for a controlled development. The company's wish is to make certain that whatever is built on the vacant site in the future will not compete with their World Headquarters structure. They presently hold a dominant position in the economy and skyline of Atlanta, and they wish to see neither diminished.

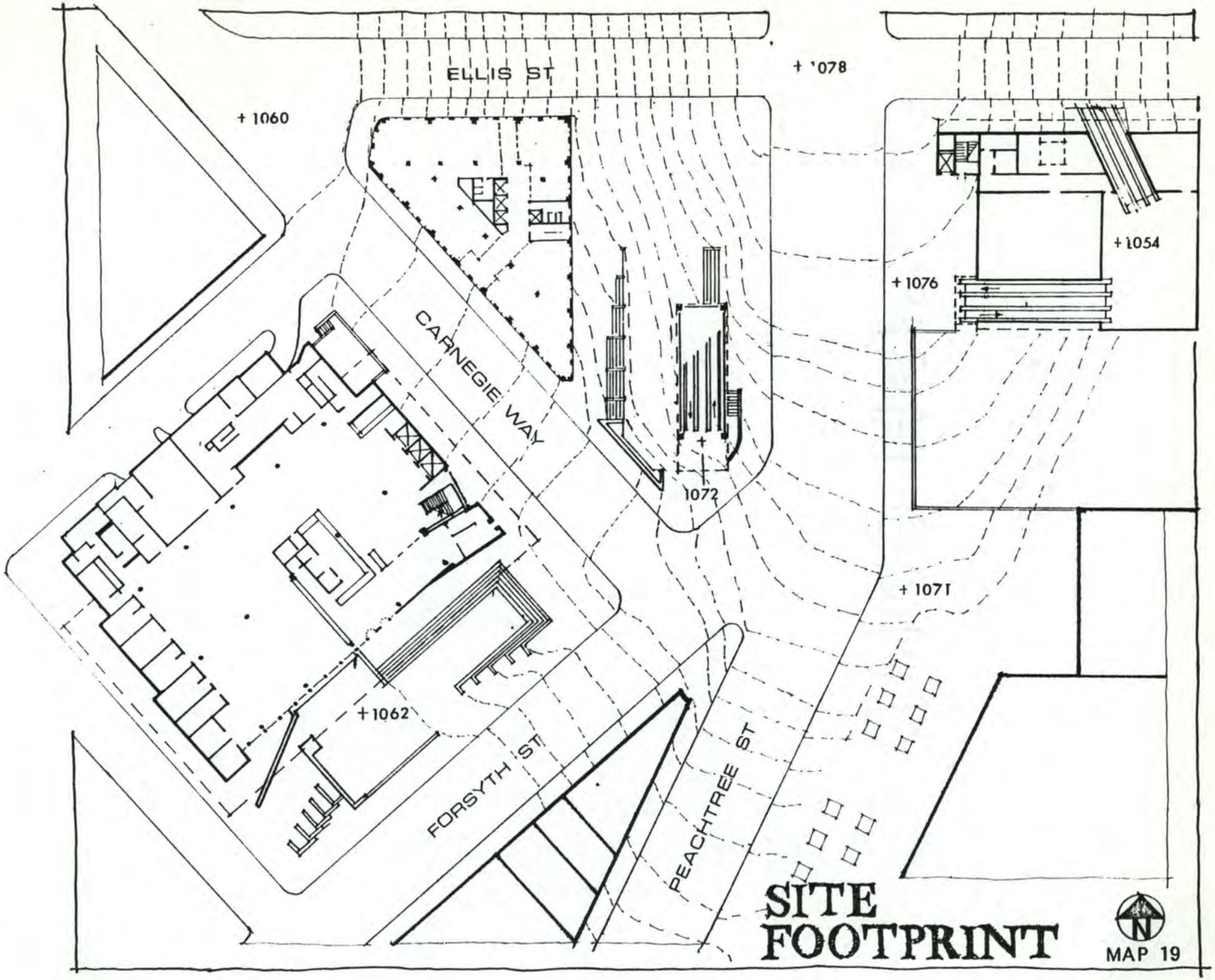
PUBLIC LIBRARY

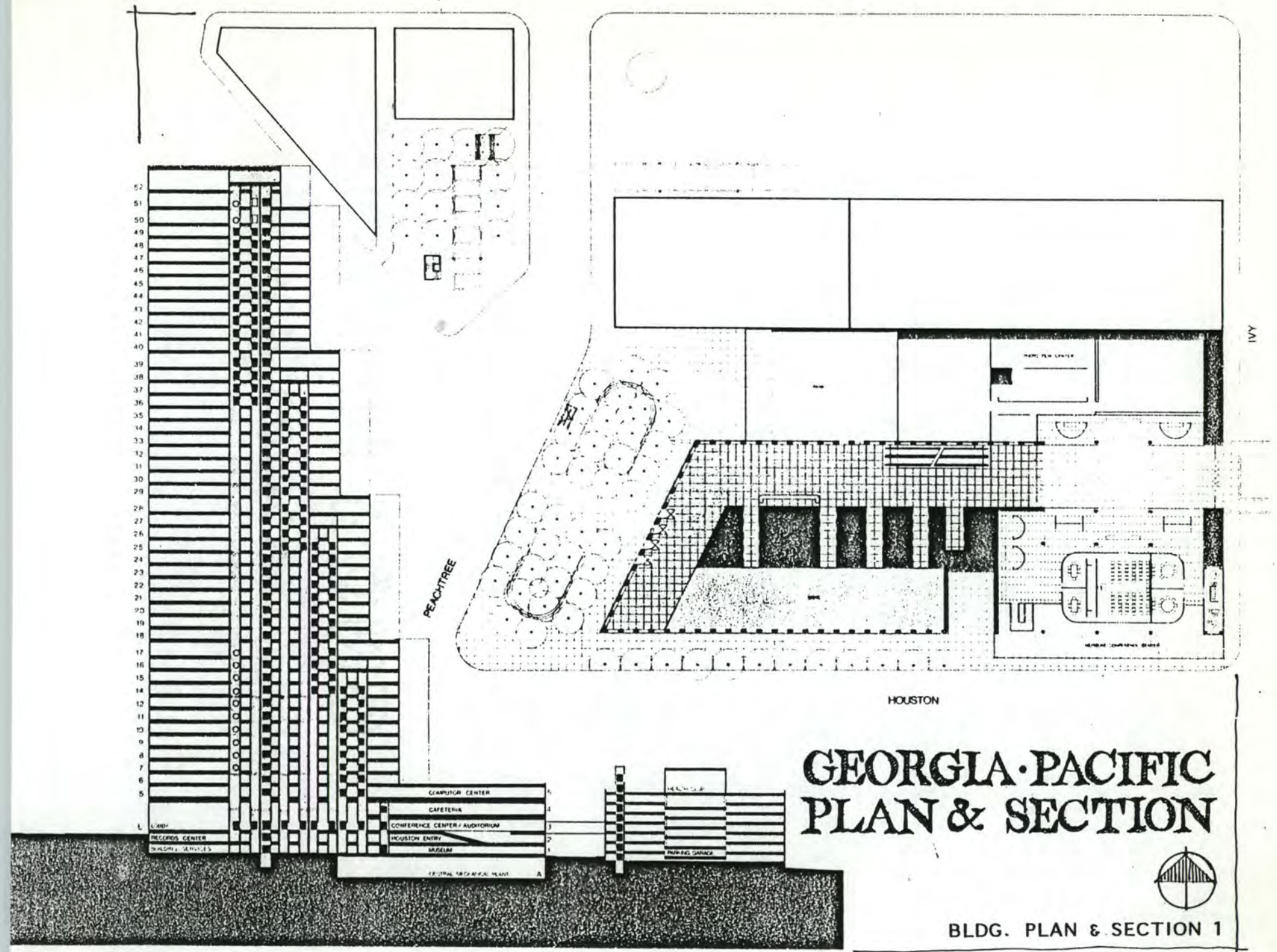
BLDG..PLAN & SECTION 2

The smallest, but perhaps the most important structure on Margaret Mitchell Square is the Central Atlanta Public Library. It is the main branch of the city's library system. The 6-story building is a striking, sculptural shape designed by Marcel Breuer and Hamilton Smith of New York. A concrete structure clad with striated concrete pre-cast panels, it represents the only public building on Margaret Mitchell Square. The Library is set back from its Forsyth St. frontage creating a small, hardscaped plaza. Beneath the plaza is an underground auditorium. The back side of the library has a drive-thru bookdrop along with various service entrances. The southeast elevation off Williams St. has an entry to sub-grade parking for employees. A private rooftop terrace for employees is sheltered from the street with only a single, large, framed opening onto Forsyth St. A large window in the public stairwell is angled to give a directed view from the interior to Margaret Mitchell Square. [26]

PUBLIC PLAZA

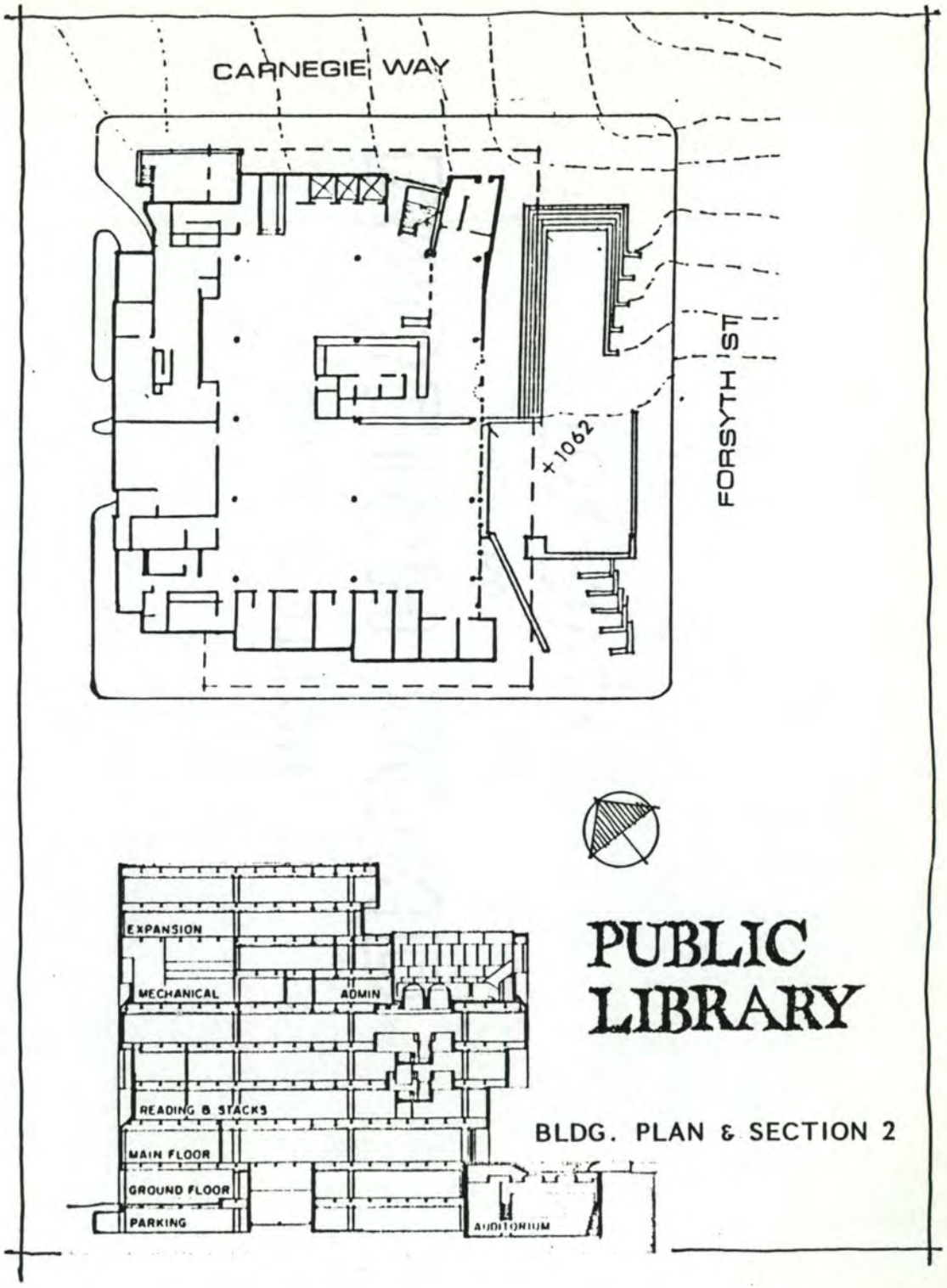
The public plaza is very simple in its design but provides the possibility for more elaborate development. Although the form, material, and style of the library seems out of character in relation to the other buildings on the Square, its contrast may be


ELLIS ST
+ 1078
+ 1060
+ 1054
+ 1076
CARNEGIE WAY
1072
+ 1071
+ 1062
FORSYTH ST
PEACHTREE ST
SITE FOOTPRINT
N
MAP 19



GEORGIA·PACIFIC PLAN & SECTION

BLDG. PLAN & SECTION 1



PUBLIC LIBRARY

BLDG. PLAN & SECTION 2

MAP 20

DETAIL - PEACHTREE CENTER STATION - N1

considered appropriate. It is a sculptural work, different in function from the other buildings surrounding it. At its reduced scale, it must compete for attention in a different manner. From an urban design standpoint, the library shows a human sensitivity to its environment; creating a plaza and being comfortable to approach and be next to.

RHODES HAVERTY BLDG.

Across Forsyth St. from the library is a triangular site containing several small, vacant buildings which seem lost against the dominant 16-story Rhodes-Haverty Building. The Rhodes is an office building in an eclectic style with classical motifs. Its tenants are generally established professional groups. The lobby level contains a high-priced men's shop. Recently, the interior of the building has undergone improvements leaving it elaborately decorated. One of its relatively blank exterior facadés faces Margaret Mitchell Square, while its more decorated facades face Forsyth and Peachtree Streets. As one approaches the Square traveling south on Peachtree, the Rhodes-Haverty acts as a backdrop for the signage presently in front of it, and also gives strong definition between the Forsyth St. corridor leading down to the Fairlie-Poplar district , and the Peachtree St. corridor continuing to Five Points.

VACANT BUILDINGS

In its plans to improve Margaret Mitchell Square, the City intends to buy and remove the smaller buildings on the triangular site. Extension of the library's plaza is envisioned for this site which would include trees, planting, seating, and a fountain. There is also a proposal by the City Planning Department for a series of underpassages linking the four separate blocks that make up the Square in order to provide safe, unobstructed pedestrian flow. The Rhodes-Haverty will continue to act as a backdrop for this activity. And thru-traffic will still exist on Forsyth. But removal of the vacant structures will allow the library to become more a part of the Square. [27]

MARTA STATION N1

Two related structures are the entry canopies which lead to the MARTA station and tracks below Peachtree St. One canopy is situated on the Carnegie Plaza site, while the other is located opposite across Peachtree Street. Both of these entrances constitute the Peachtree Center MARTA Station (N1), which is one of the busiest stations in the system, carrying over 20,000 passenger-trips in a single workday. It is estimated that by 1990, this station will handle 34,000 trips per workday. Some meager attempts to landscape the plazas of these entrances have been

made, but the single-level structures are not well integrated into the urban fabric. They seem to impose on the space, taking up valuable building area and preventing construction which would better define the Square's limits. [28] MAP.20

SOUTHBOUND CANOPY

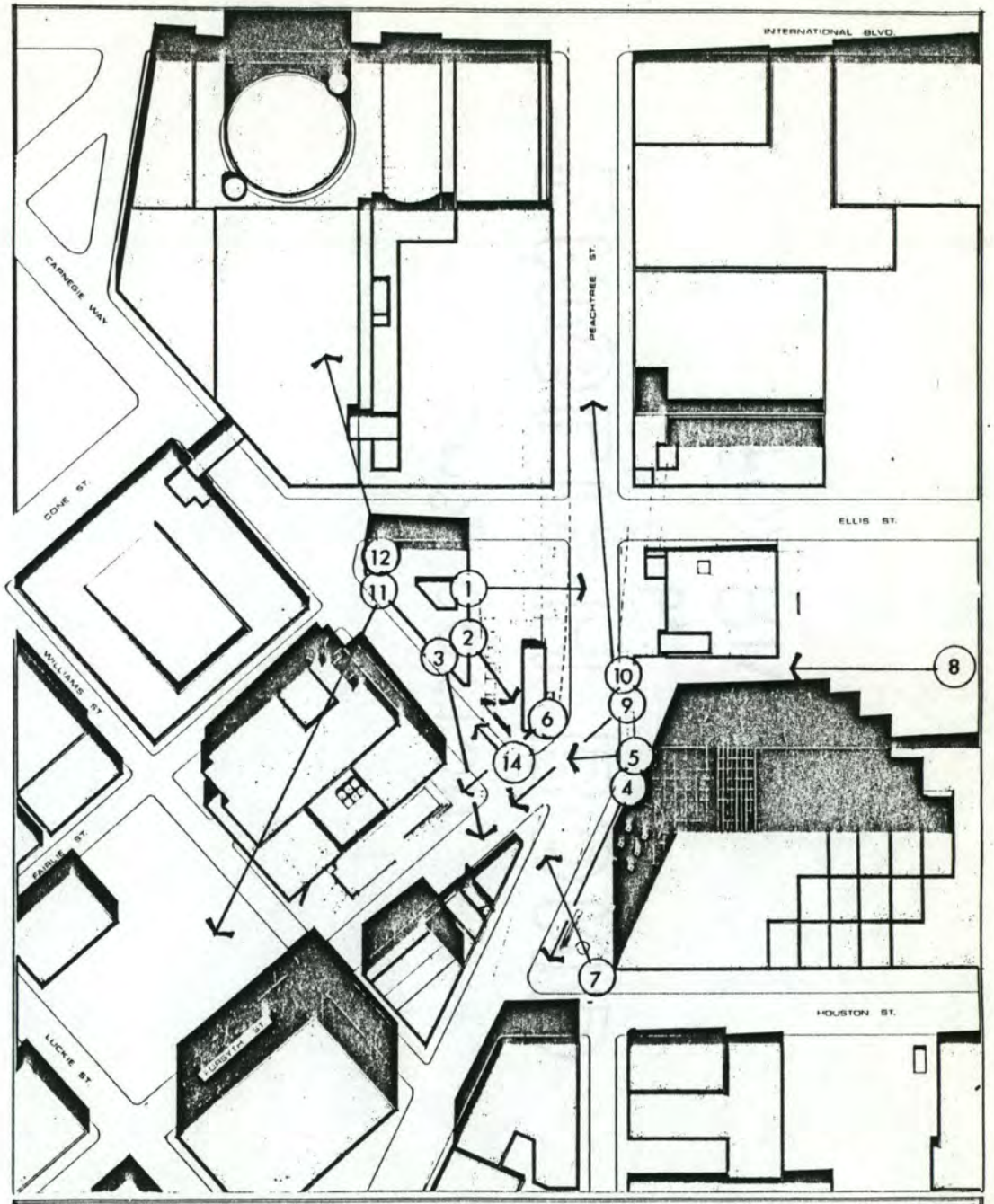
The southbound entrance on the Carnegie Plaza site is a simple, unbroken escalator track which runs parallel to the tracks below. The drop of this escalator is approximately 90 ft. from the street to the station platform below. Studies have shown the long, continuous ride on this escalator creates a feeling of vertigo in many passengers. Its street plaza is relatively large with some planting and seating. This side serves southbound traffic while the entrance on the opposite side serves northbound traffic. [29]

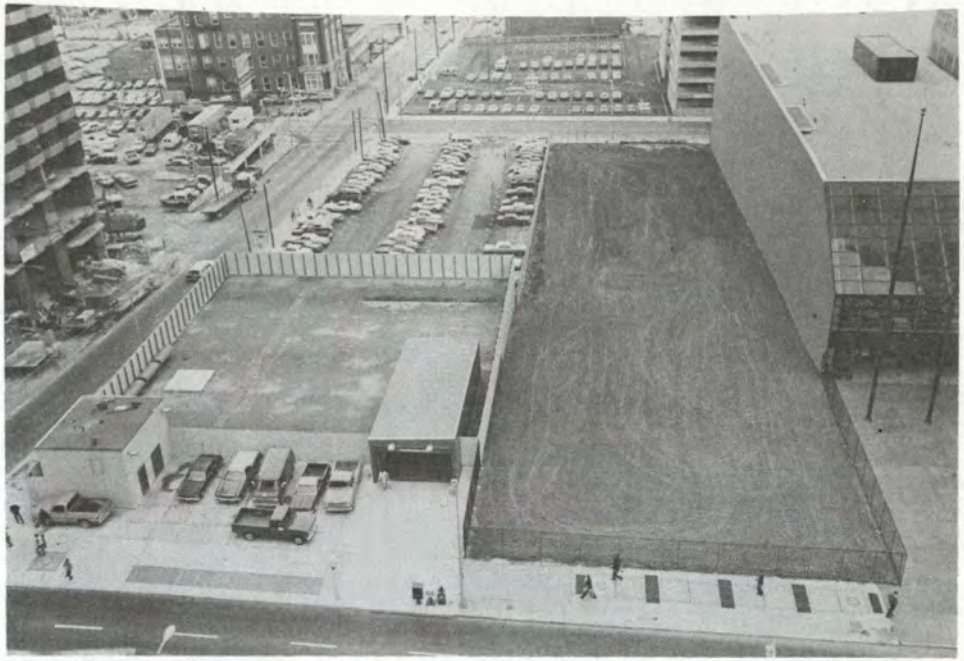
NORTHBOUND CANOPY

The northbound entrance canopy is a larger structure which contains escalators, stairs, fire stairs, public elevator, and mechanical rooms which power and regulate the subway system. Most of these elements are below street level leaving the structure as a single level building above ground. The building has an intermediate level 24 ft. below street grade, where the mechanical rooms are located. At this level, one must switch escalators to continue down to the tracks or up to the street. Knockout panels are provided at this intermediate stage for future expansion and connection. Georgia-Pacific has plans to connect their building directly into the MARTA station at this level. [30]

AIR-RIGHTS

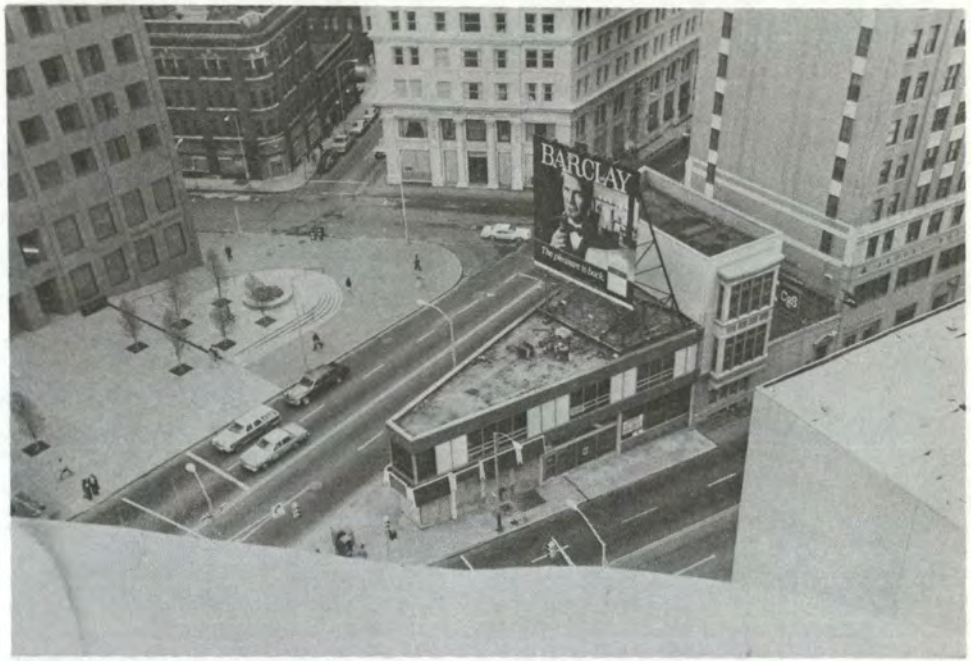
Air-rights are obtainable from MARTA. As shown earlier, there are several private developments in the CBD which incorporate MARTA stations into the design of their buildings. The Omni International and Peachtree Summit are two examples. Georgia State University, although not private, also incorporates a station into its scheme. As opposed to the Peachtree Center station, most of the completed stations have either a well designed entry at street level or are incorporated into other structures. Presumably, MARTA is awaiting private development to integrate and redesign these entrances. The present canopies seem temporary in their design and construction.


INTERNATIONAL BLVD.
CARNEGIE WAY
COKE ST.
PEACHTREE ST.
ELLIS ST.
WILLIAMS ST.
FAIRLIE ST.
LUCKIE ST.
HOUSTON ST.
1
2
3
4
5
6
7
8
9
10
11
12
14
SITE PLAN
0 15 30 60 120 200
PHOTOGRAPH VIEWS
NORTH
21



VIEW 1

VIEW 2

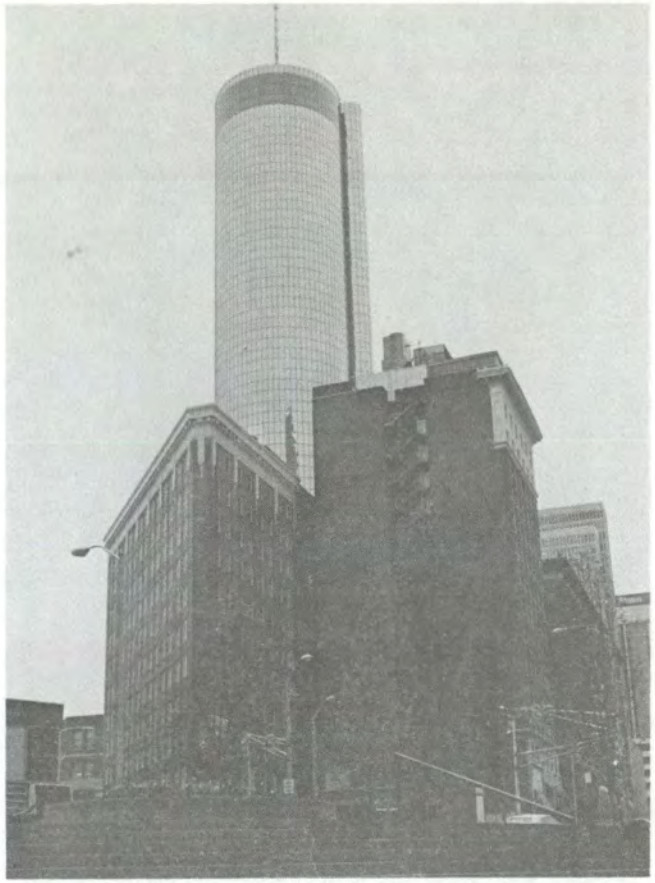


VIEW 3

VIEW 4

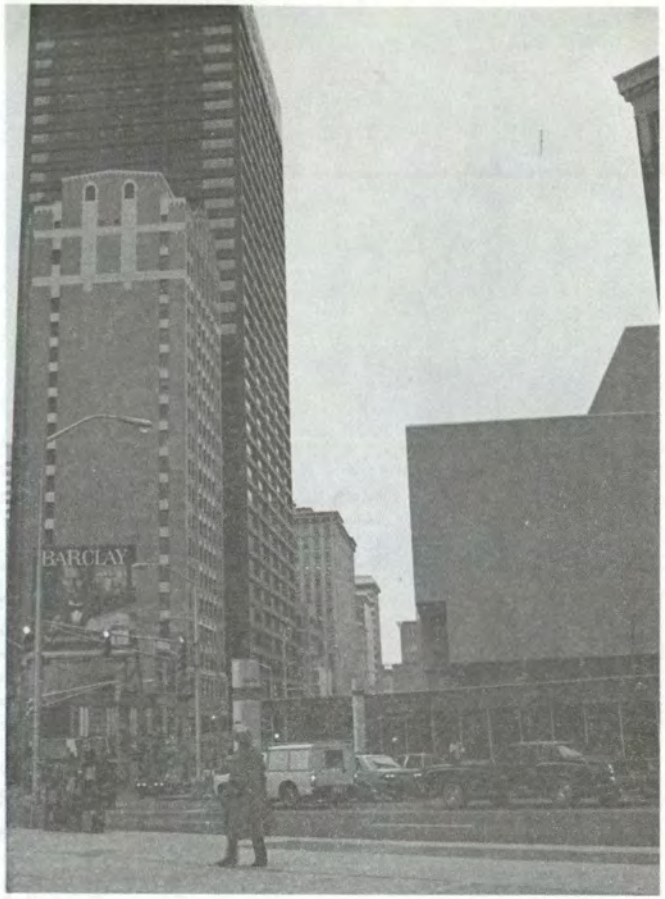
VIEW 5

VIEW 6



VIEW 7

VIEW 8

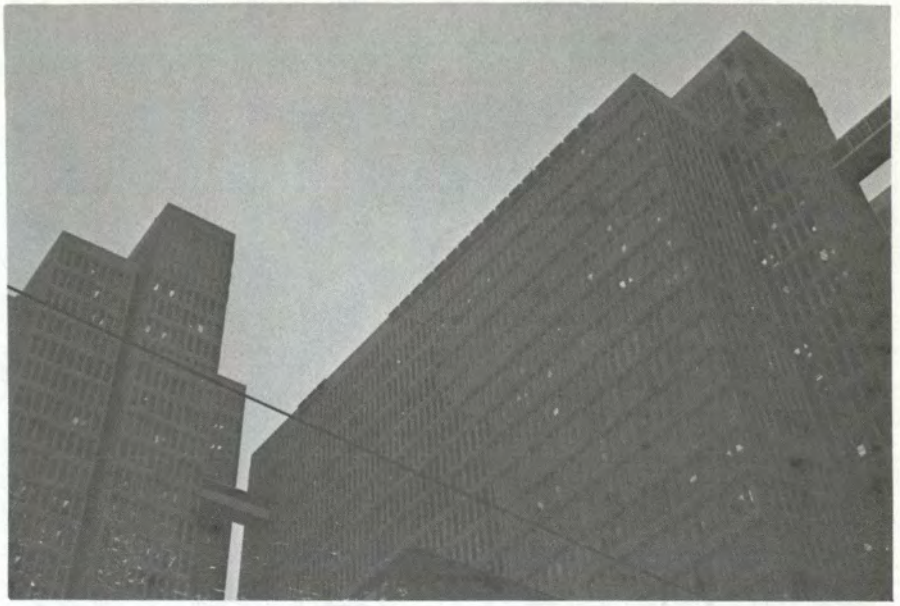


VIEW 9

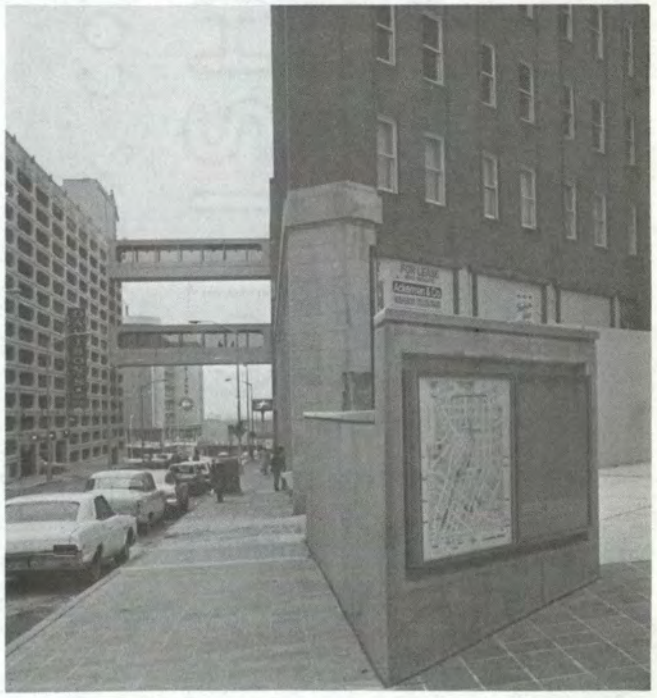
VIEW 10

VIEW 11

VIEW 12



VIEW 14



VIEW 13

MOVEMENT PATTERNS

GENERAL

Four general catagories of movement patterns were discussed in the chapter on the CBD. Of the four systems, three relate directly to Margaret Mitchell Square. These are vehicular, pedestrian, and the MARTA subway system. The fourth system, skywalks, does not occur within the boundries of the Square, but the extensive network is very close and may eventually extend into its spatial boundries.

VEHICULAR

PEACHTREE STREET

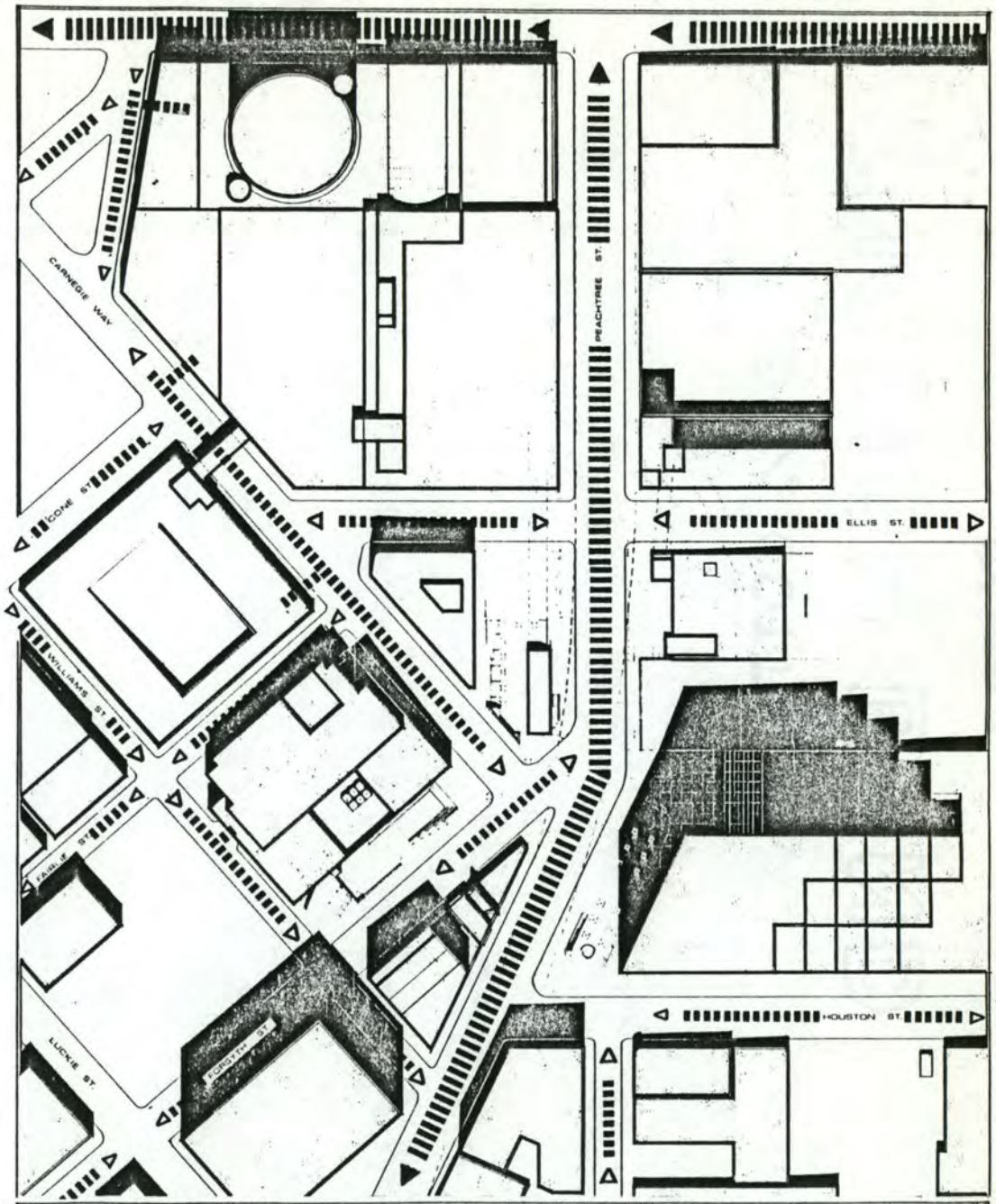
Three streets presently pass through M.M.S. : Peachtree, Forsyth, and Carnegie Way. All are two-way streets. They meet at an awkward 3-way intersection with a traffic light to regulate vehicular flow. Of the three, Peachtree St. carries the heaviest traffic load. However, there are traffic lights at every block along Peachtree to slow and regulate this traffic. It is a 4-lane street without curb parking. There is a steady flow of traffic throughout a normal workday without much congestion or backup. On weekends and nights, it still maintains a high degree of use. Because of this steady traffic flow and its location, Peachtree Street acts as a divider of activity in M.M.S. At the center of the Square, Peachtree bends as it changes direction. To the north of this bend, the grade is relatively level. However, to the south of this point, the grade drops quickly. MAP 22 MAP 23

FORSYTH STREET

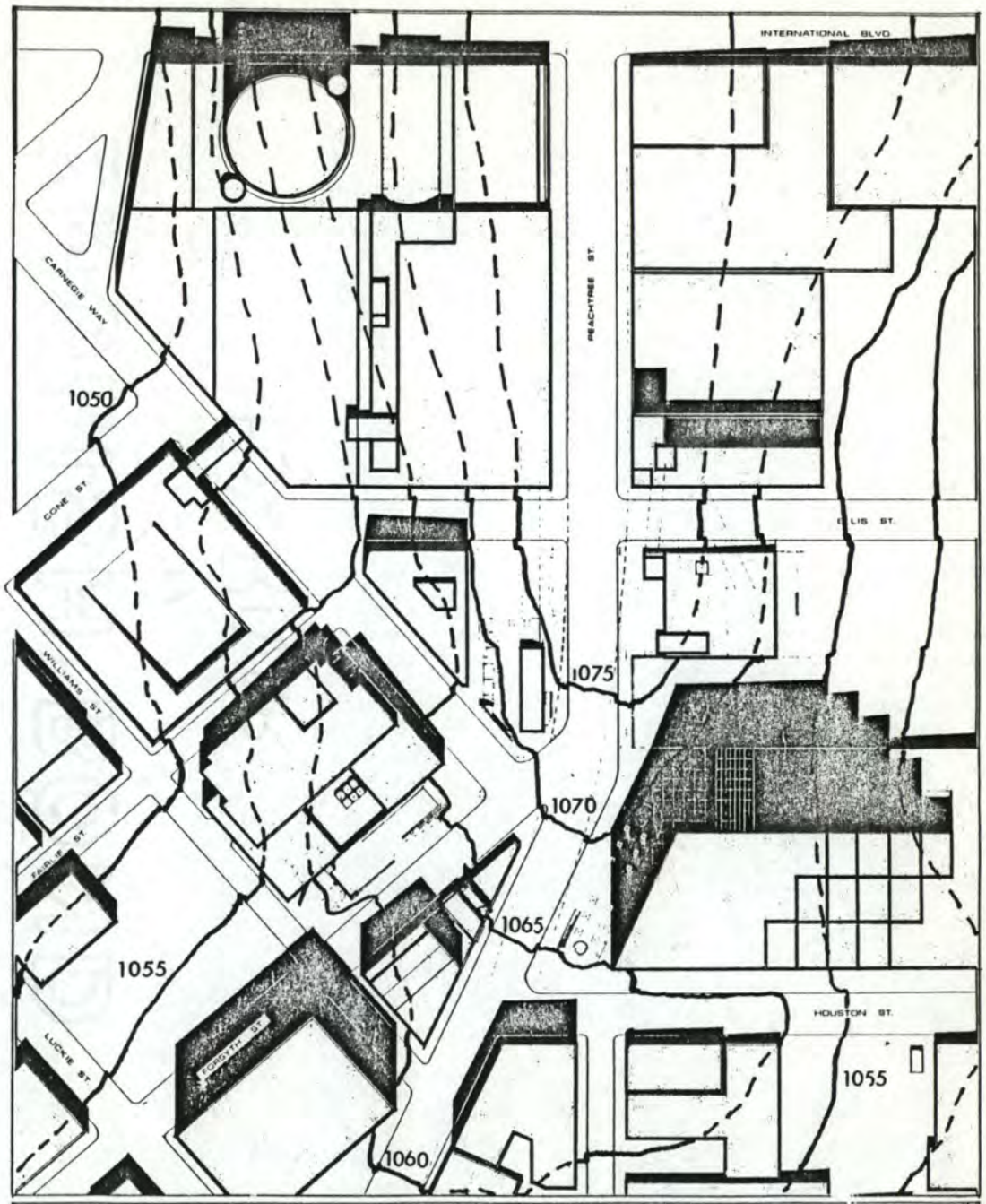
Merging into Peachtree at the center of M.M.S. is Forsyth Street. Forsyth is one of the Fairlie-Poplar streets which recently recieved public improvements. The City's expansion proposal is to use Forsyth as a connecting street to M.M.S. and the Hotel District. The street has curb parking on its east side, opposite the library plaza. Like Peachtree, the grade slopes down as the road moves south from the intersection. Forsyth experiences light traffic volume throughout a normal workday. Its heaviest use occurs during evening rush hour as commutors parked in the Fairlie- -Poplar District attempt to enter Peachtree St. going north. [31]

CARNEGIE WAY

Carnegie Way meets Forsyth immediately before it intersect Peachtree. Carnegie doesn't flow directly into Peachtree but must first turn onto Forsyth. Timed curb parking is allowed on the northeast side of the street, opposite the library. Normally, there is very little traffic flow on Carnegie Way. It is used mostly for


CARNEGIE WAY
PEACHTREE ST.
ELLIS ST.
HOUSTON ST.
WILLIAMS ST.
LUCKIE ST.
FORSYTH ST.
0 10 30 60 120 200
SITE PLAN
VEHICULAR SYSTEMS
22

SITE ANALYSIS


INTERNATIONAL BLVD
CARNEGIE WAY
PEACHTREE ST.
1050
COVE ST.
ELLIS ST.
WILLIAMS ST.
1075
1070
FAIRLIE ST.
1065
1055
HOUSTON ST.
FORSYTH ST.
LUCKIE ST.
1055
1060
SITE PLAN
0 10 30 60 120 600
AREA CONTOURS
NORTH
23

service and short visit parking. Like Forsyth and Peachtree, Carnegie Way slopes downward traveling away from M.M.S. [32]

HOUSTON STREET

ELLIS STREET

Houston and Ellis Streets are both at the edges of M.M.S. and connect the space with the Interstate Highway several blocks east. Ellis passes by the north end of M.M.S., edges the Carnegie Plaza site, and dead-ends into Carnegie Way. Houston runs in front of the Chandler Building and dead-ends into Peachtree Street. Both slope down traveling away from Peachtree St., which was built along a ridge. Houston is a two-way street while Ellis is one-way going east. Generally, Ellis serves commuters leaving the inner-city, while Houston brings commuters into the CBD from the highway. They are M.M.S.'s quickest link to the Interstate Highway system. [33]

PEDESTRIAN

PEACHTREE STREET

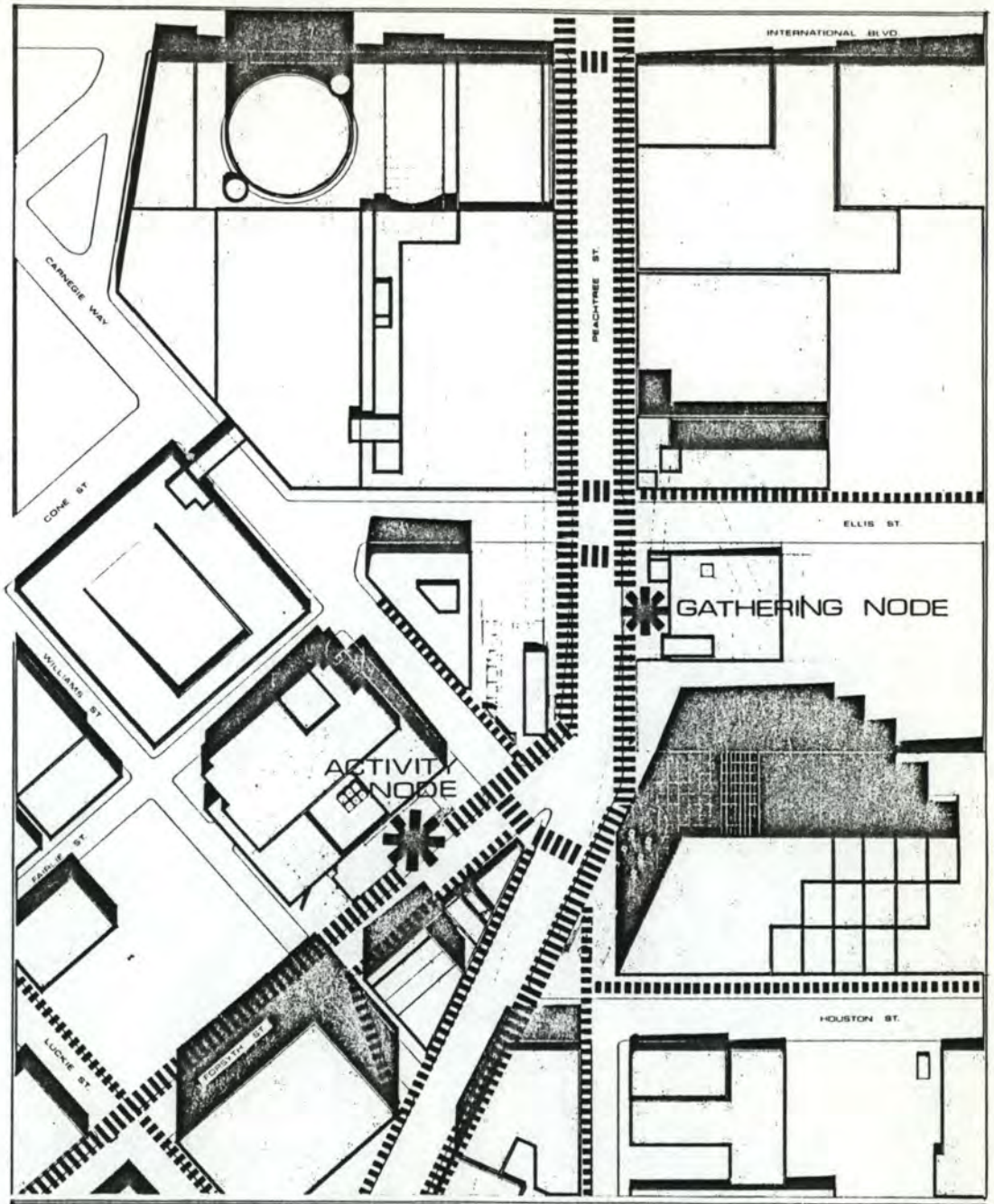
The prevailing pedestrian routes through M.M.S. are very similar to the vehicular patterns which occur there. The Peachtree St. corridor is the main pedestrian spine of M.M.S. and the CBD. All the buildings directly on M.M.S. , with the exception of the Library and the Carnegie Bldg. , have major entrances on Peachtree Street. The two separate MARTA entrances opposite each other help to reinforce this spine. The southbound entrance on the Carnegie Plaza site is orientated so that pedestrian flow occurs near the public plaza in front of the library. But the northbound entrance accross the street is relatively isolated from both the public plaza and the plaza in front of Georgia-Pacific. MAP 24 MAP 25

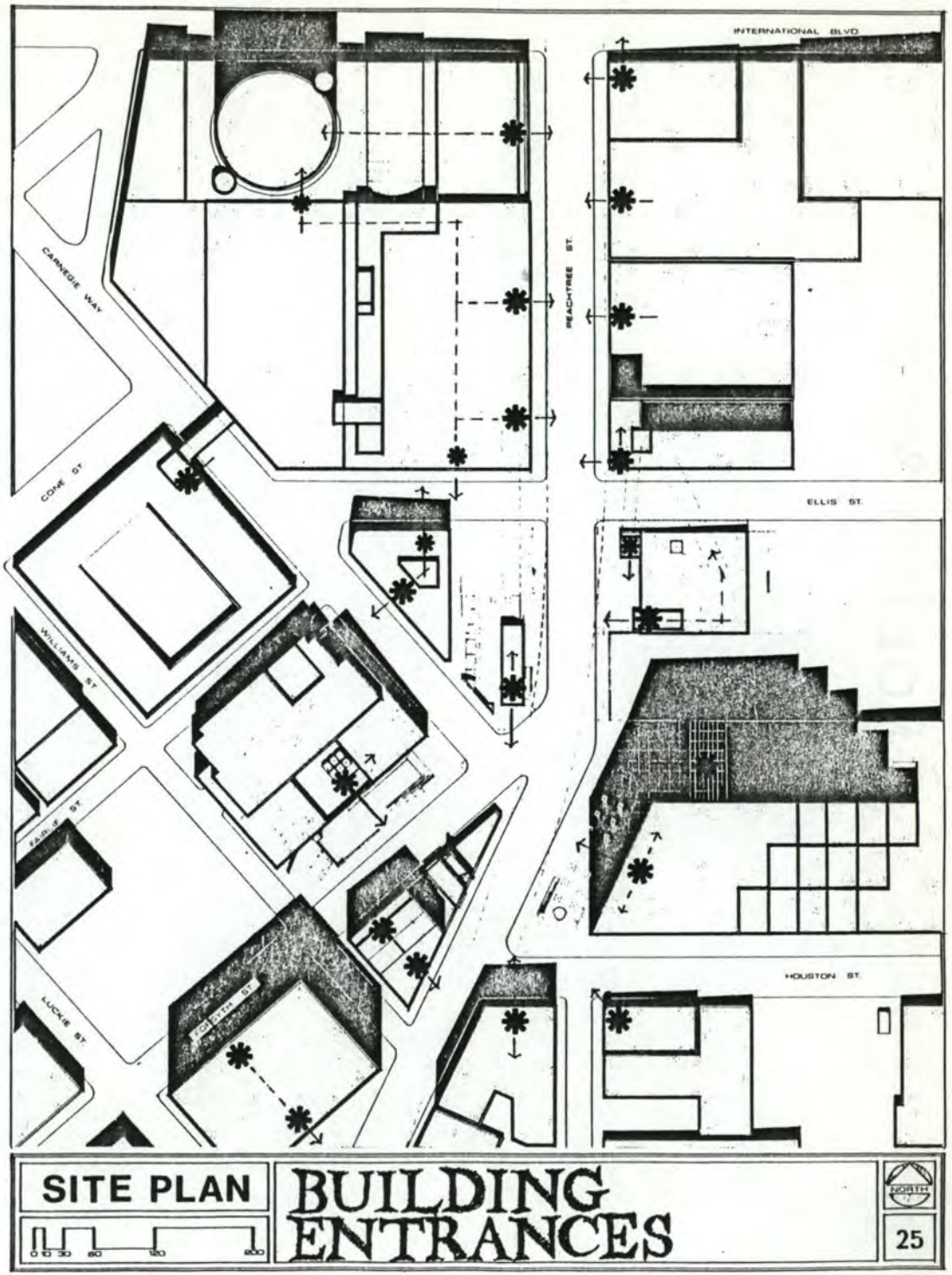
FORSYTH STREET

The Forsyth pedestrian route is developing as a link between Fairlie-Poplar and the Hotel District. It is the quickest route between the two. Peachtree is more attractive and active than Forsyth. But Forsyth has the advantage of the public plaza along its path. This plaza is the major pedestrian node of M.M.S.

PARK PLACE

Park Place, which dead-ends into Houston St. and M.M.S., is developing into a strong pedestrian path linking the space with the Central City Park and several high-rise office complexes to the south. It is a narrow one-way street with very little traffic, so it can be more pleasant than the noisier Peachtree route.


INTERNATIONAL BLVD.
CARNEGIE WAY
PEACHTREE ST.
COKE ST.
ELLIS ST.
GATHERING NODE
WILLIAMS ST.
ACTIVITY NODE
FAIN ST.
FORSYTH ST.
LUCKIE ST.
HOUSTON ST.
SITE PLAN
PEDESTRIAN PATTERNS
NORTH
24


INTERNATIONAL BLVD.
CARNEGIE WAY
PEACHTREE ST.
COVE ST.
ELLIS ST.
WILLIAMS ST.
EARLE ST.
HOUSTON ST.
LUCKIE ST.
FORSYTH ST.
SITE PLAN
0 30 80 180 400
BUILDING ENTRANCES
NORTH
25

SPATIAL CHARACTER

DEFINITION

Currently, Margaret Mitchell Square lacks total containment and strong definition. The edges of the Georgia-Pacific, Rhodes-Haverty, and Carnegie Bldg. provide its strongest edges. The library is removed slightly from this defining role by the small, vacant buildings on the triangular corner. These buildings work with Peachtree St. to divide the space and its activities. The City plans to buy and remove these buildings, thereby allowing the library and the Rhodes-Haverty to both have a stronger relationship with the space and to give it greater definition. The Carnegie edge is the undecorated back side of the original design. It is without entry and lacks the attractivness of its other two facades. This edge is subject to change with the proposals of this project. The facades of the Georgia-Pacific and the ChandlerBuilding act as strong defining edges to the Square. However, the MARTA stations are single-level and do little to define space or enhance its quality. This is also true for the lower portion of the Georgia-Pacific Bldg. which is set back off the square and does little to relate to the space. [34] MAP 26

VACANT LOT

The area which does the least to enhance the Square is the vacant lot owned by Georgia-Pacific,for which a simple, geometric landscaped park is presently planned. Although the greenery may be a welcome addition to the space, it will do nothing to help define its edges, especially in relation to the surrounding high-rises. [35]

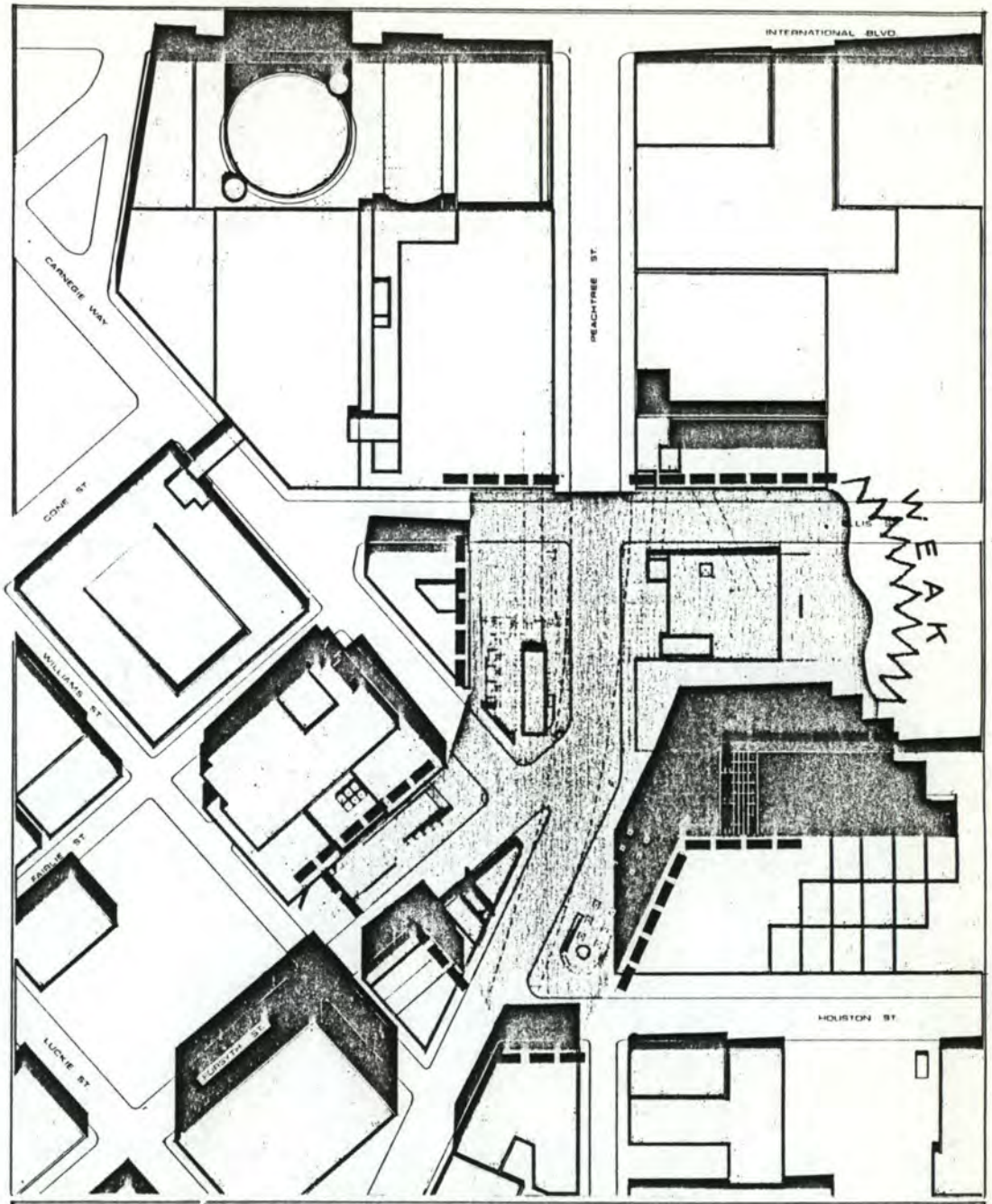
With the openess of this space to the northeast, there is a relatively unobstructed vista of the eastern Hotel District. This is not an attractive view as it reveals rundown structures, parking lots, and the Interstate Highway. The terrain slopes down as it moves away from the Square, and this heightens the vista. The remaining views from within the square are along 5 street corridors. The two strongest visual axes are along Peachtree to the north and Forsyth to the southwest. Peachtree St. bends as it travels south to an angle that is visible only from certain points of the Square. While Forsyth in this direction has more visual activity, Carnegie Way offers a short visual corridor without significant focus. The bridges crossing the street and connecting the two Davison's structures tends to terminate this view. The corridor north along Peachtree provides a most interesting view. The activity and forms of Peachtree Center, along with the skywalk crossing the street at the 20th floor, offer an exciting vista.

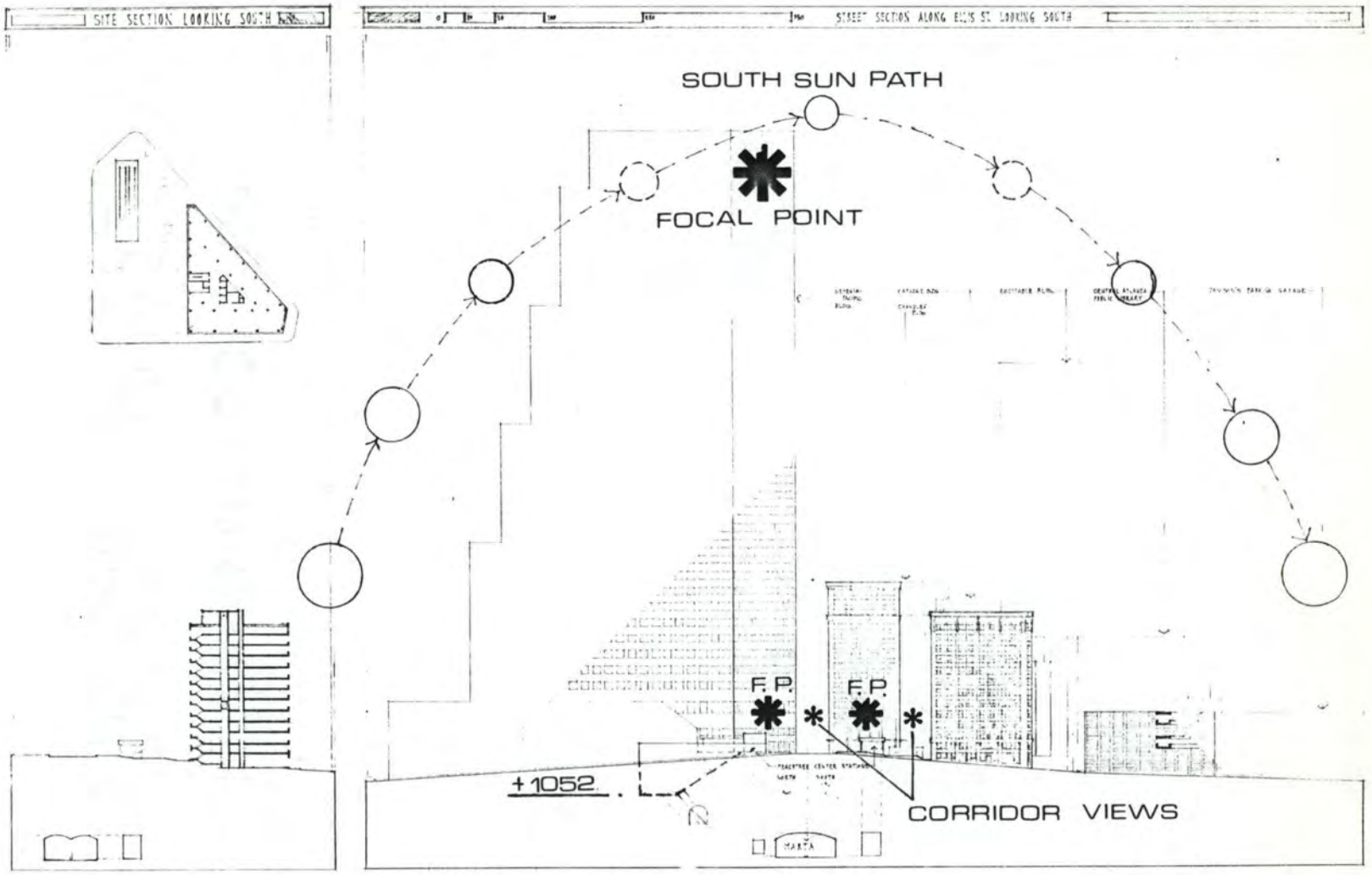
BUILDING VIEWS
STREET VIEWS

From the interiors of buildings on Margaret Mitchell Square, views are towards the 3-way intersection and the vacant structures on the triangular corner. One of the strongest focal points within the Square is an advertising sign located above the vacant structures, in front of the blank Rhodes-Haverty facade. As one travels south along Peachtree and enters M.M.S., this sign is centered at the division point between the two visual axes of Forsyth and Peachtree. It is about 3 floors above street level and stands out against the Rhodes background.

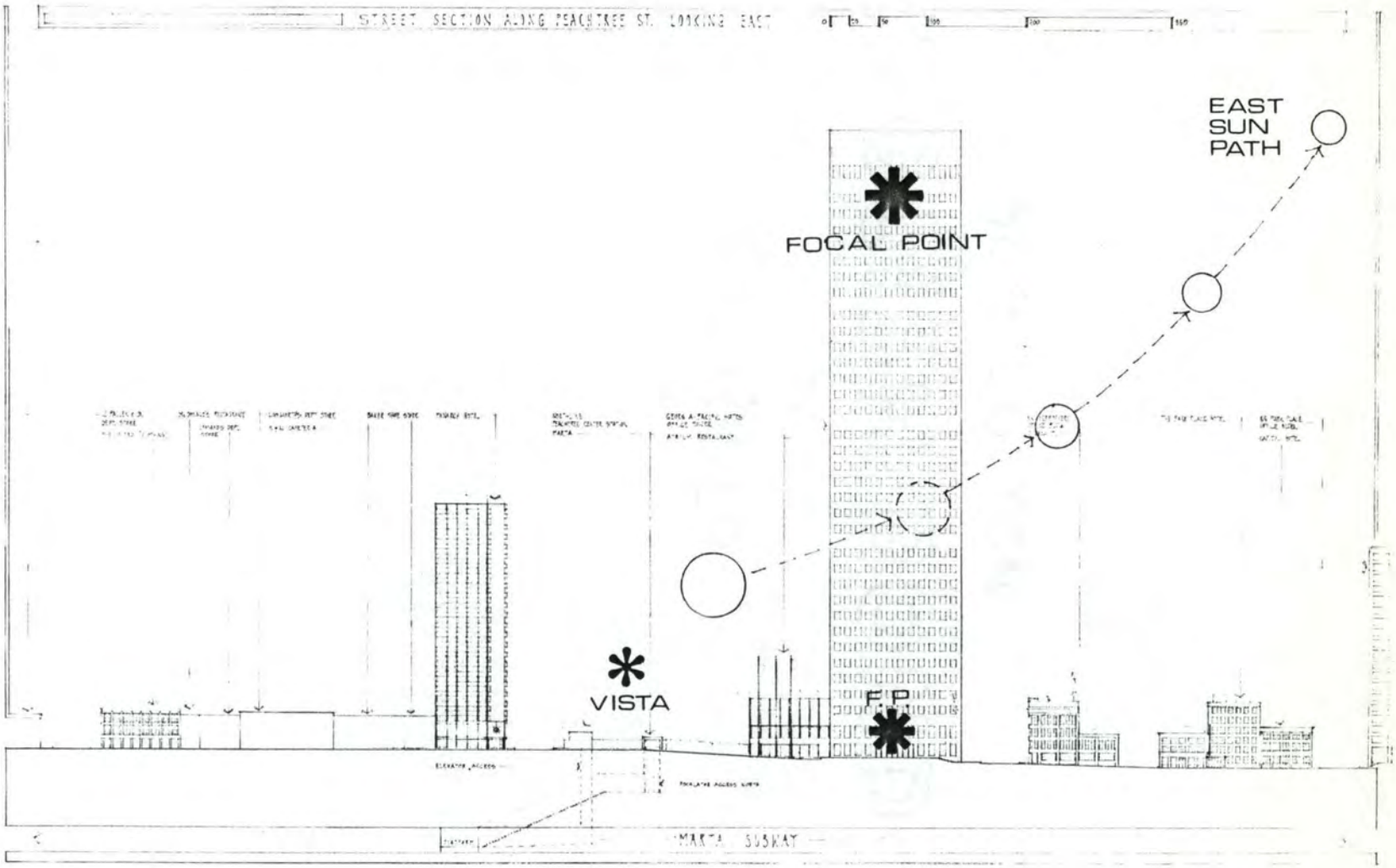
CHARACTER

The character of the Square as a whole is only beginning to develop. Most of the area is paved with some planting. It will likely remain an active vehicular zone as well as pedestrian. With the variety of building sizes, styles, and functions, and the space's location at the merging of several districts and street geometries, this Square is a microcosm of the city itself. One can find elements of Atlanta's history here as well as examples leading towards its future.

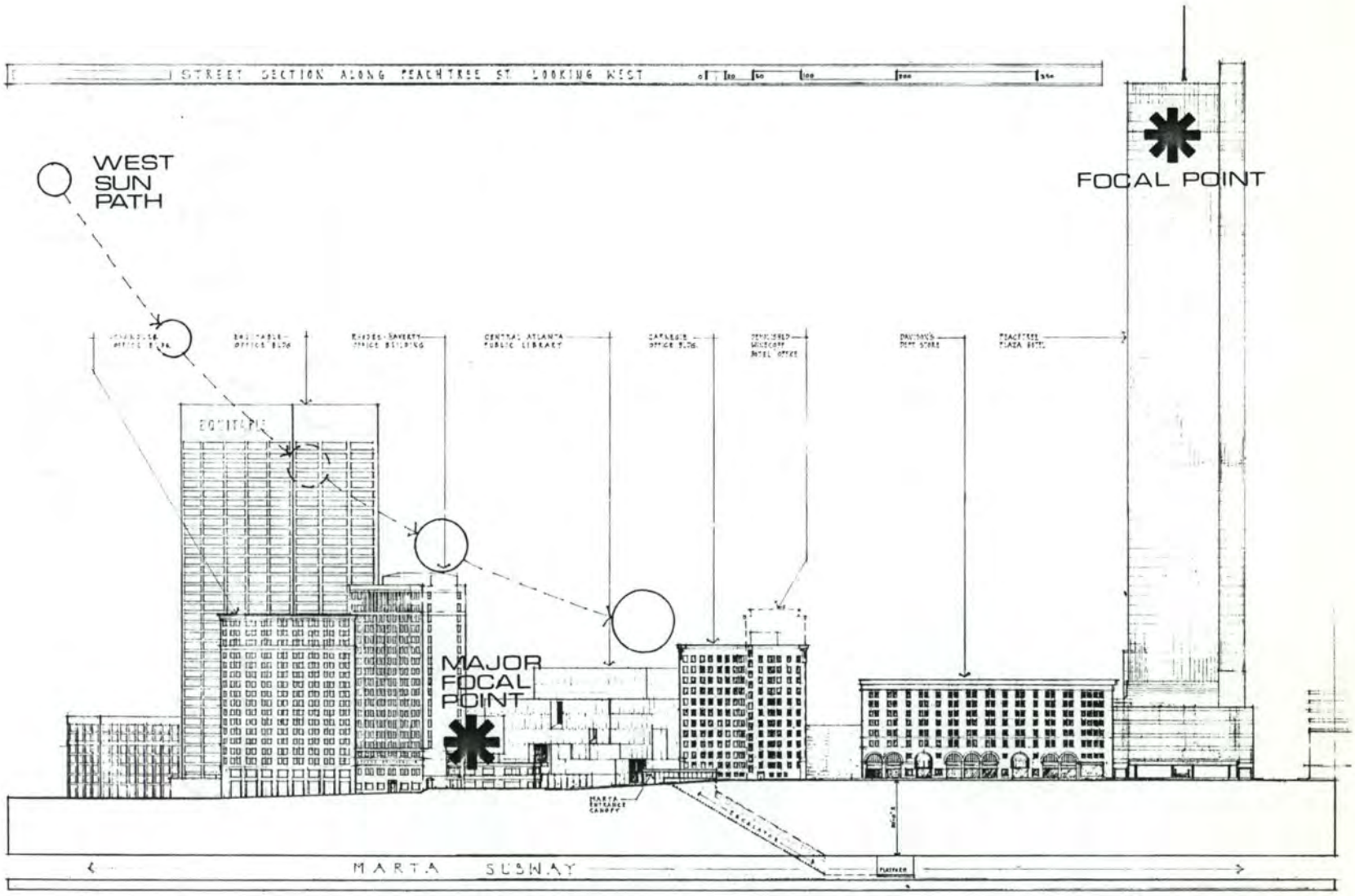

INTERNATIONAL BLVD.
CARNEGIE WAY
PEACHTREE ST.
COVE ST.
WILLIAMS ST.
FAIRLIE ST.
LUCKIE ST.
HOUSTON ST.
WEAK
SITE PLAN
M.M. SQUARE
DEFINITION
NORTH
26



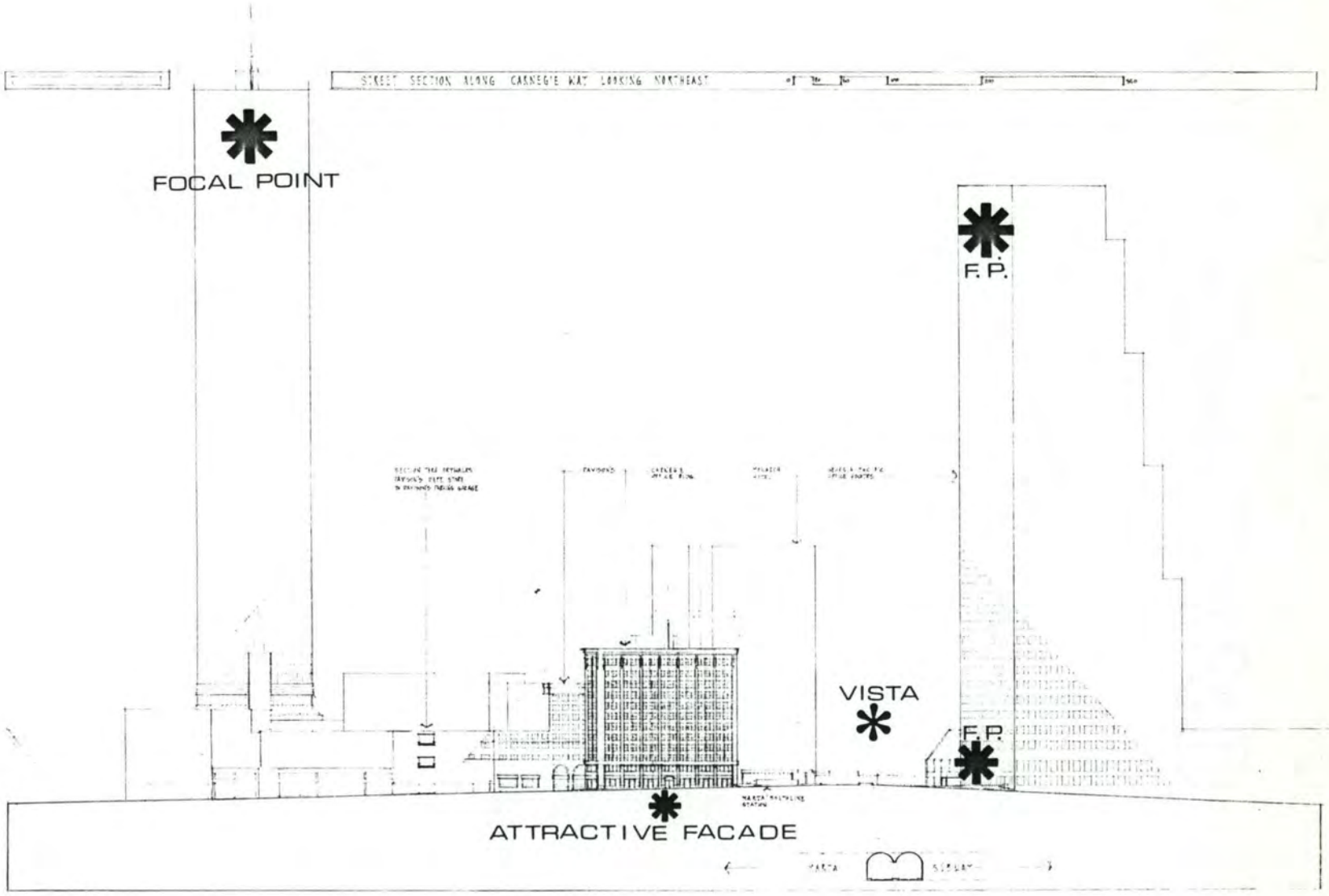
STREET ELEVATION 1



STREET ELEVATION 2



STREET ELEVATION 3

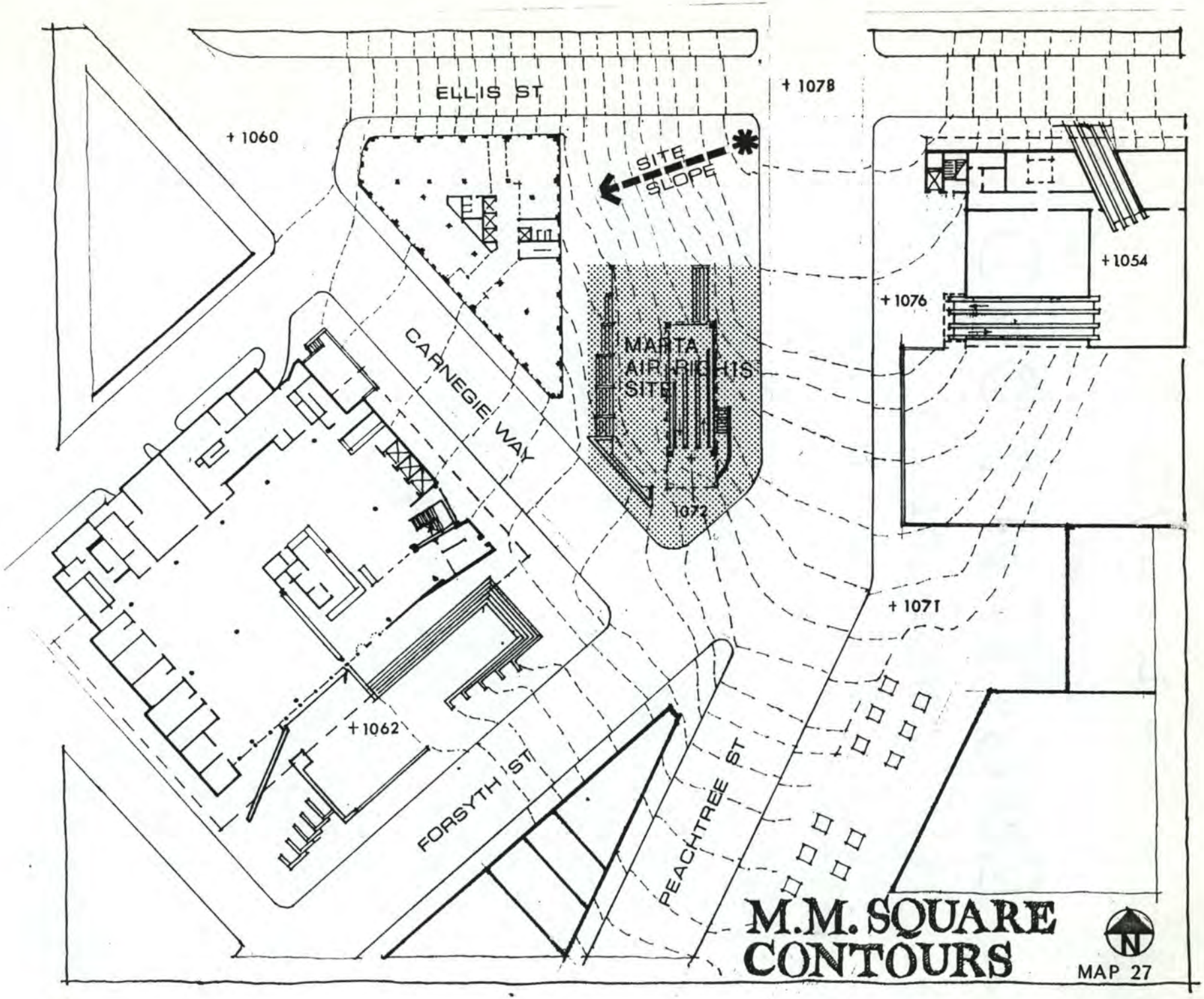


STREET ELEVATION 4

GEOGRAPHY

GRADE

The Carnegie Plaza site is a triangular lot of approximately 30,500 sq. ft. (.7 acres) , of which 7,850 is occupied by an existing structure, the Carnegie Building. Its three sides are bordered by Ellis St. on the north, Carnegie Way on the southwest, and Peachtree St. on the east. Its northwest corner, where Ellis and Peachtree intersect, is the high point of the site. The grade slopes gently down as one goes south on Peachtree St. The site drops about 6 feet in 200 feet of length from the corner. However, the change in grade traveling west on Ellis from the corner is much more dramatic. There the site drops 18 feet in 200 feet of length from the corner. As mentioned previously, Peachtree St. is built on a ridge and the land slopes down sharply on both sides. The Carnegie Plaza site is located at the end of the ridge, so it actually slopes down in three directions. The lowest point on the site is on the west corner where Ellis and Carnegie Way meet. MAP 27


ELLIS ST
+ 1078
+ 1060
SITE SLOPE
+ 1054
+ 1076
MARTA AIR RIGHTS SITE
CARNEGIE WAY
1072
+ 1071
+ 1062
FORSYTH ST
PEACHTREE ST
M.M. SQUARE
CONTOURS
N
MAP 27

CARNEGIE BUILDING

HISTORY

BLDG. PLAN & SECTION 3

Until recently, this entire triangular block was occupied by buildings. Only one of the original structures still stands, the 12-story Carnegie Building designed in 1926 by G. Lloyd Preacher, an Atlanta architect. Its typical floor area is about 7,850 sq. ft. Originally named the Wynne-Claughton Building after the men who commissioned the project, the building is a good example of a late Commercial style office building with pre-modern elements as well as some applied ornament in the Beaux-Arts style. The date and reason of the change in name is unclear, but perhaps it was done to better identify its location within the city. The street bordering its one side is Carnegie Way, undoubtedly named after the old Carnegie Library which stood across this street where the new library stands today.

DESCRIPTION

The Carnegie Building is of dark, reddish-brown brick common to many old buildings in the area. It has a highly decorative, white cornice and a 2-story base of white masonry. The building responds well to its difficult triangular site with a curved corner. Grade is adjustedto in a comfortable manner with the base and ground floor stepping with changes in the site.

STRUCTURE\
UTILITY CORE

The Carnegie Building has a steel structure with an irregular placement of columns. These columns are spaced roughly between 17' to 20' o.c. The utility core, also triangular in plan, is located in the center of this structure. This leaves virtually the entire perimeter open for office leasing. Only on the east side is this leasable space interrupted by a fire-stair and a toilet.

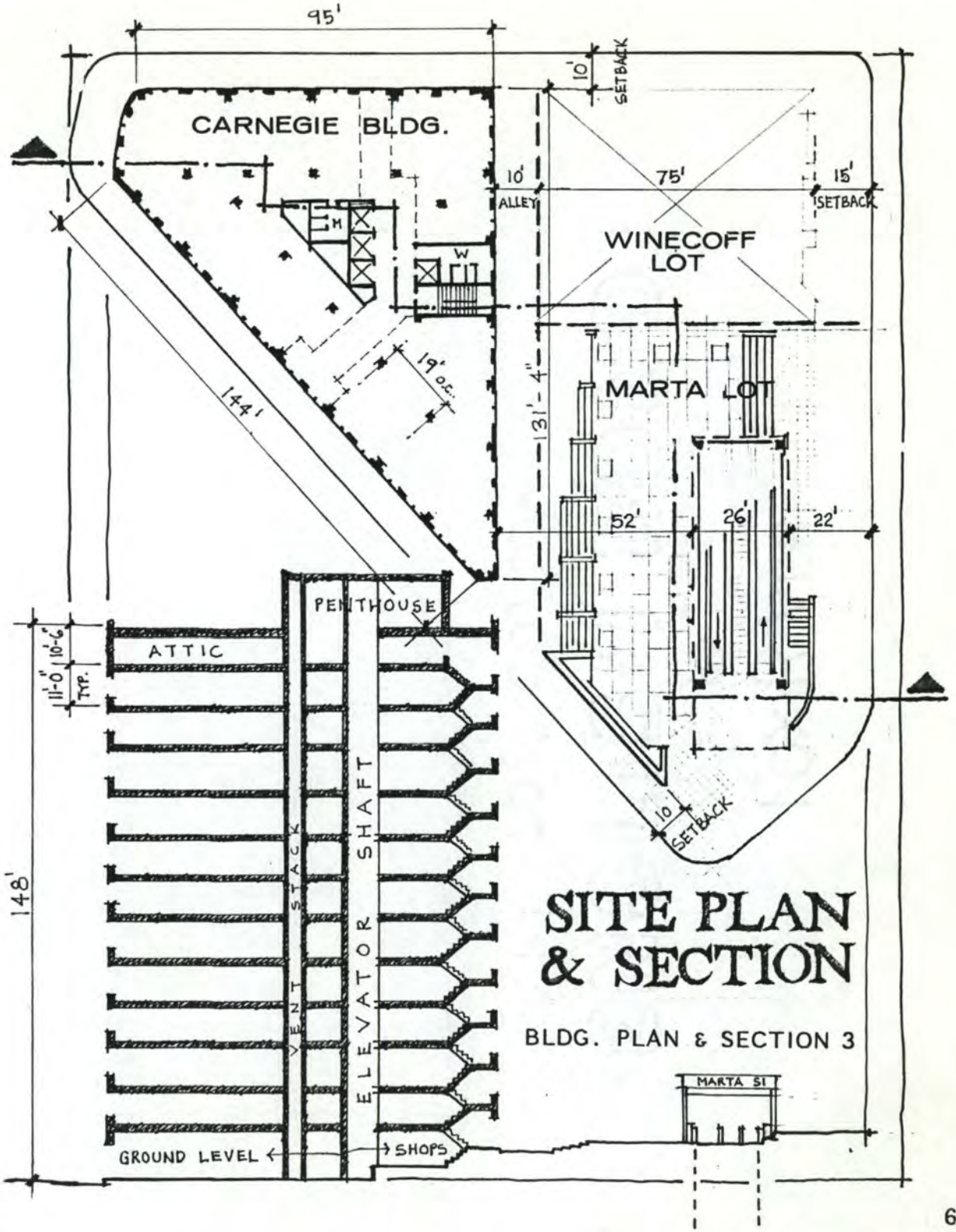
EAST FACADE

When the Carnegie was first built, a 16-story hotel on the northeast corner of the site covered up most of its east facade. Only a 10-foot easement separated the two structures. For this reason, the Carnegie lacks ornamentation and detail here that it displays on the other two facades. The cornice and base turn the corner for 10 ft. and then stop. Window placement on this east elevation is irregular as compared to the southwest and north elevations. Those sides demonstrate a classical rhythm and division of form and fenestration.

BUILDING ENTRANCES

The main entrance to the Carnegie is off Carnegie Way, perpendicular to the street and in the middle division of the elevation. A secondary entrance to the lobby branches off Ellis St. It is smaller and less ornate, perhaps intended as a service

CASE STUDIES



SITE PLAN & SECTION

BLDG. PLAN & SECTION 3

entrance. The only entrance on the east side is into the firestairs. Retail space is located around the base on both exposed facades. They each have individual entrances, unrelated to the lobby. However, each ground floor division has an entrance off the inner corridor or lobby. The ground floor level fluctuates with the change in grade of the site. This allows for comfortable entrance into most of the levels from street grade. Only on the east side off Ellis Street are there stairs needed to enter the building.

SERVICES

The building presently has 3 passenger elevators and one service elevator, one firestair, vent and service stacks, and two toilets per floor. Relying originally on natural ventilation, all windows are operable. There is a basement for mechanical equiptment and storage, and a rooftop structure for elevator equiptment. The broad entablature which caps the building also marks the attic space within. While the typical floor to floor measurement is 11'-0" , the attic is only 10'-6" to the roof level. The building has a flat, built-up roof with virtually no parapet. Typical gross floor area is 7,850 sq. ft. The 12 lease floors total 94,200 sq. ft. gross. Only about 6,000 sq.ft. of the ground floor used for retail activity.

VIEWS

The office floors are flexible in their division of lease space. Excellent views are afforded by the many large windows. The southwest windows look onto the new Central Atlanta City Library and the Fairlie-Poplar district in the distance. Views from the east windows focus on the historic Davison's Department Store and the reflective glass tower of the Peachtree Plaza Hotel in the background. The east elevation presents a spetacular view of Margaret Mitchell Square and Peachtree St. below. The new Georgia-Pacific high-rise becomes a strong focal point. Views past the vacant lot across the street reveal a panorama of the eastern sector of the CBD. This is not an altogether attractive view as it reveals the dilemma of urban decay: asphalt parking, spotty building location, industrial eyesores, and vacant structures.

PARKING

No parking exists on the Carnegie Plaza site. However, there are many on grade parking lots close to the site, as well as the Davison's parking garage behind the new library, across the street from the Carnegie Building. Monthly rental rates are availible to occupants of local buildings.

HISTORICAL VALUE

Since the Carnegie Building is on the National Register of Historic Sites, demolition and renovations are regulated. Approval must be given to alter the original or present condition of the structure. There are, however, tax benefits open to those who properly renovate qualifying structures, such as the Carnegie. The Tax Act of 1976 allows a credit on investment towards urban improvements. [37] [38]

WINECOFF LOT

The remainder of the triangular site is divided into two parts. The first is the lot that was once occupied by the Winecoff Hotel. The Winecoff Hotel was a 16-story, Commercial style , Beaux Arts building designed in 1913 by W.L.Stoddard. The hotel was gutted by a fire in 1946, which killed 119 people, including the owner and his wife. It was later reopened as a middle price-ranged hotel and served this function until 1967, when it was purchased by the Georgia Baptist Convention for use as a Senior Citizens home. It was recently purchased by the Carnegie Plaza developers and was slated for remodeling into office space. However, the inefficiency of the floor plan and its awkward floor to floor relationship with the Carnegie caused the developer to decide to demolish it instead. This area represents roughly one-third of the triangular Carnegie Plaza block. [39]

MARTA LOT

AIR-RIGHTS

The remaining third of the site is owned and maintained by MARTA. As mentioned earlier, the developer/owner has expressed interest in obtaining full air-rights to this tract and to use it to enhance both MARTA and the Carnegie Plaza project. The additional site coverage available through air-rights would allow greater building volume as well as increased design opportunities. Therefore, the Carnegie Building, the vacant Winecoff lot, and the MARTA air-rights are collectively considered as the building site. The combined open, buildable area totals approximately 13,800 sq.ft.

DESCRIPTION

The location and orientation of the MARTA escalator canopy seems unplanned and awkward, and the lot is much larger than what is needed for the canopy and entrance. Below grade, the single run escalator carries passengers non-stop to a platform 90 ft. below street level. The escalator shaft runs a straight path north-south , parallel with Peachtree St. , to a point in plan below Davison's Department Store. This is one of the longest runs of escalator in North America. Its street level plaza is hardscaped with some planting and seating. It does not appear to recieve much use as the plaza is separated from the street activity by its own canopy.

LEVEL RELATIONSHIPS

The northbound entrance accross the street has an intermediate level with an elevation datum of 1054.0 . The basement of the Carnegie is at datum 1056.0 . As noted earlier, this platform is built with knock-out panels for easy future connection or expansion. Enough depth exists between this platform level and the street level of Peachtree (datum 1076.0) that connection could be achieved between the two sides. The city already has proposals for the underground connection of the separate blocks which make up Margaret Mitchell Square. [40]

VISUAL CONTEXT

GOALS

In order to design a building which will fit its context and express a feeling of belonging to that area, it becomes necessary to study the context in terms of its visual characteristics. Common patterns may be discovered which will ultimatly help give the new design formal guidelines and aesthetic direction. Because of the nature of this project, the visual characteristics of the Carnegie Building are especially important. Visual continuity plays an important role in any project dealing with an existing historic structure. This isn't to say that the new must copy the appearance of the old. In fact, if the old building has some exceptional element about it such as decorative mouldings or masonry, then the new structure should not compete by applying the same. Some continuity needs to exist, but only as a backdrop. Conversly, the new building may have special elements or characteristics which the old doesn't. The two should allow each other to express their own unique personalities. Too much continuity can result in monotony. But lack of visual continuity denotes chaos and ill-respect.

CONSIDERATIONS

A list of visual considerations is arranged below. Of greatest interest are those taken from the Carnegie Building, but elements from other buildings on Margaret Mitchell Square are also included.

HEIGHT

There is a great variety to the heights of the buildings in and around M.M.S. Most fall into a medium-rise catagory, around 9 to 18 floors. The extremes are represented by Atlanta's two tallest buildings, the 673-foot Georgia-Pacific and the 700-foot Peachtree Plaza Hotel, and the two story vacant structures adjacent to the Rhodes-Haverty. The Carnegie Building, at 12-floors, represents a medium within this context. Other than the Public Library, which is 8-floors above ground, the newer buildings in this area are no less than 20-floors. This is especially true along Peachtree Street. The following is a partial list of local building floor heights:

A) Vacant Structures ---------- 2 flrs.
B) Vacant Knickerbocker's ------- 4 flrs.
C) Davison's Garage ---------- 6 flrs.
D) Public LIbrary ---------- 8 flrs.
E) Davison's ---------- 9 flrs.
F) Carnegie Building ---------- 12 flrs.
G) Chandler Building ---------- 18 flrs.
H) Rhodes-Haverty Bldg. -------- 20 flrs.
I) Monarch Hotel ---------- 24 flrs.
J) Equitable Building ---------- 40 flrs.
K) Georgia-Pacific Bldg. --------- 52 flrs.
L) Peachtree Plaza Hotel ---------- 70 flrs.

PROPORTION

Many of the buildings along M.M.S. are of unusual shape in plan and have elevations of various shapes and proportions. However, the elevations that face the Square tend to have tall and slender proportions. The Chandler, Rhodes, and Georgia-Pacific all have their most narrow side facing the Square. Two other structures visually percieved from the Square, the Peachtree Plaza and the Equitable, are also tall and slender in their elevations which face the Square. However, the three elevations of the Carnegie are "squarish" in their proportions.

FENESTRATION

The older buildings on the Square are relatively similar in their fenestration, proportion, and division. The Carnegie, Rhodes, Chandler, and Davison's all show two windows grouped between column bays. These patterns are very regular vertically and horizontally. The new Georgia-Pacific attempts to abstract this pattern at an enlarged scale to match the larger scale of the building. The openings of the Equitable are horizontal glass voids between the building frame. There is relatively little fenestration on the Public Library. Its few windows are all different in size and location. They appear sculpted from the monolithic form. The Monarch displays faceted bay window bands of glass which are unique to this area. And the Peachtree Plaza Hotel's reflective glass cylinder is a scaleless form absent of fenestration.

SOLID-VOID RHYTHM

The buildings around M.M.S. create a rather consistent solid-void rhythm. Each building appears to stand alone with void space in between. This pattern changes as one travels up and down Peachtree Street.

ENTRANCES

The Carnegie Building has its main entrance centered along its Carnegie Way facade. Most of the other buildings have their entrances orientated to Peachtree Street. They are also generally located at the center of the facade. The Chandler, Rhodes, and Equitable all have two main entrances which cut through the center of their buildings. The Monarch is the only close building with its main entrance on the corner.

MATERIALS

The Carnegie Building has a veneer skin of brick with a two-story base of ashlar stone. Its cornice appears to be constructed of either terra cotta or wood. The other older buildings on the Square are similar in materials used. The Chandler, however, uses a larger, broader stone facing for its veneer and decoration. Striated precast concrete panels are used on the Public Library. The Georgia-Pacific has sarge, polished granite panels as its exterior covering. Panels used on the new Monarch appear of the same granite construction, but much smaller in dimension. The

Peachtree Plaza Hotel has a reflective glass tower with a formed concrete, 5-story base.

TEXTURE

The exterior of the Carnegie has a relatively smooth masonry texture. Its bays are slightly expressed on the facade with some relief. The Rhodes and Davison's are similar in this manner. Greater expression is found in the Chandler's facades. Its texture has more relief and sculpted decoration. A very smooth, slick surface is expressed by the Georgia-Pacific, Monarch Hotel, and Peachtree Plaza Hotel. But the concrete panels of the Public Library are coarse with a deep corduroy pattern.

COLOR

The Carnegie Building has a dark reddish-brown color to its brick and a grayish-white color to its stone base and cornice. This brick is common to many local buildings. Davison's is very similar but perhaps a little darker. The concrete panels of the Public Library are a monolithic light gray. Both the Georgia-Pacific and the Monarch Hotel have a pink to reddish appearance from the granite panels used. But their large glass areas display a dark, smoked tint. The color of the Chandler is entirely greyish-white while the Equitable is entirely dark grey to black. The Rhodes is a yellowish-beige with a greyish-white base and decoration.

DECORATION

The Carnegie has a large, decorative cornice which is fairly elaborate in its detailing. This is the case for the other older structures on the Square: Davison's, Chandler, and Rhodes. The Carnegie also has some modest decoration above the entrances at its base. Davison's has several decorative stone arched doorways and display windows. It also has a stone string course. The Chandler is highly decorative with sculpted statues and details. The Rhodes has some decoration at its base, but very little for the remainder of the building. The top of its two main elevations have decorative parapets which are gothic in style. The newer buildings, the Public Library, Equitable, Peachtree Plaza, and Georgia-Pacific all are without traditional decoration. But the Monarch has a large, round, window above its entrance which is decorative in nature.

ROOF SHAPE

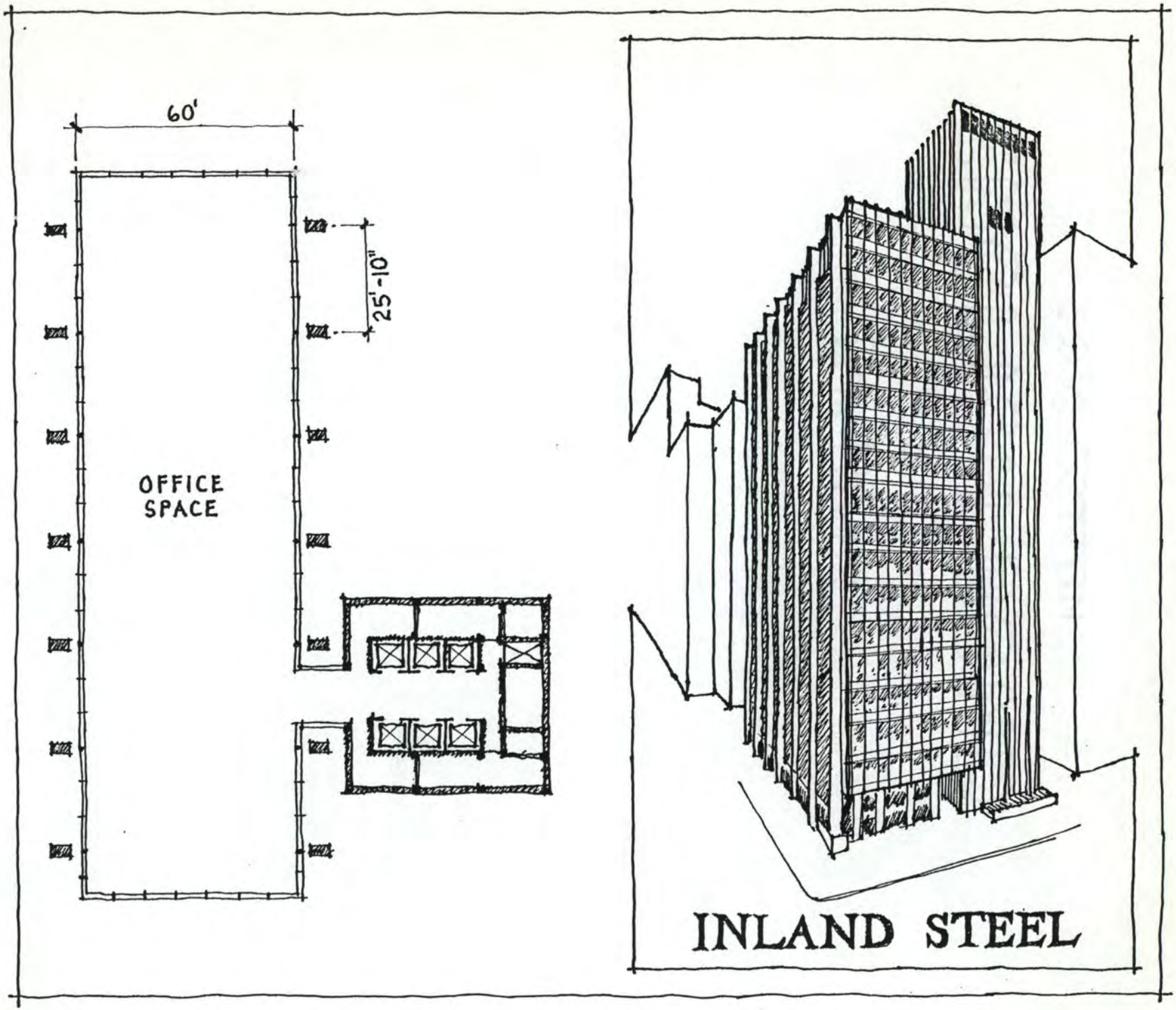
The Carnegie and all of the surrounding buildings have flat roofs. But some, like the Carnegie, have small penthouses on the roof. Most of these are mechanical rooms and are not designed into the buildings facade. The Public Library steps back from the street and has a roof terrace on its lower portion. There is a large amount of stepped form on the roof of Davison's, which is unpercievable from street level, but noticable from the upper levels of the Carnegie Building. Davison's parking garage has an exposed upper level with parking. This level can also be seen from the upper offices of the Carnegie.

LANDSCAPING

At present, the Carnegie has no landscaping. The MARTA lot adjacent is modestly landscaped with some seating and planting. It is paved with a greyish stone common to the Public Library plaza accross the street. The Library plaza is also modest in its design and details. There is some seating, but it is mostly a paved, stepped open space serving as a foreground to the Library entrance. This space has no planting at present, but does display three large flag poles and a covered seating bench. The plaza in front of the Georgia-Pacific is similar in paving material and details. It has a geometric plan which helps to reinforce its entrance axis. Rows of trees have been planted along with circular flower beds. The steps act as seating. They too have three flag poles in front of their building.

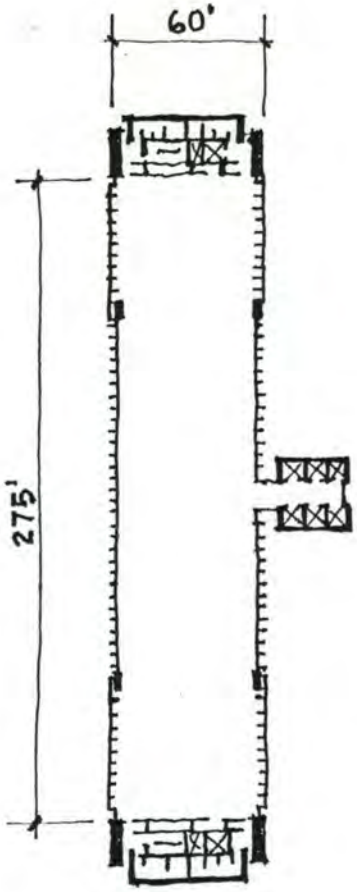
INLAND STEEL

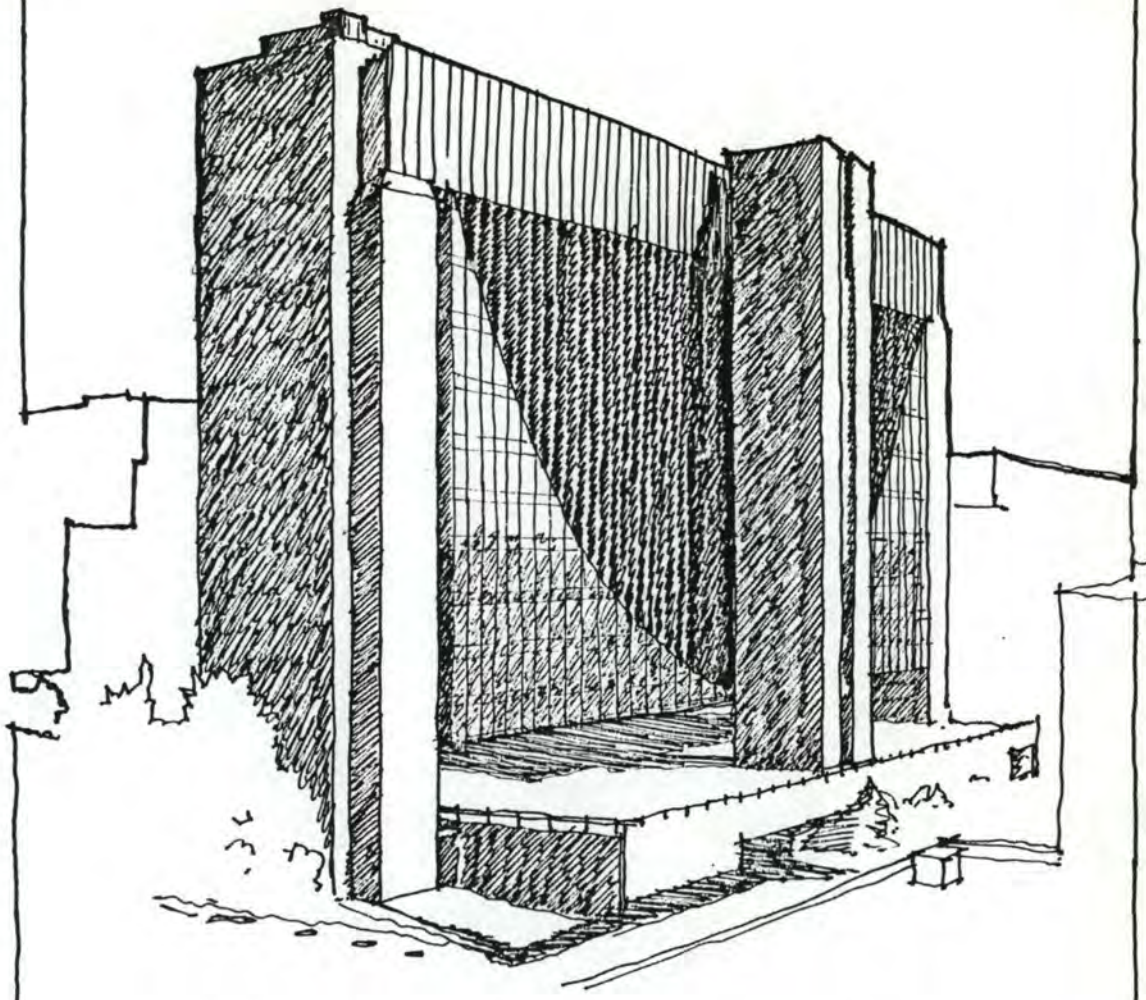
The 19-story Inland Steel Building was designed by Skidmore,Owings,Merrill in 1958 for a downtown site in Chicago. It was to serve as corporate headquarters and be solely occupied by the steel corporation. The program called for maximum flexibility of office space, minimum floor to floor heights, and ample glass with 4 orientations. To achieve this, the architects chose to remove all service functions into a separate tower, and by supporting the building floors of the office space with columns placed outside the perimeter skin. This 60-foot span was considered the longest clear span for an office building at that time. Using these exposed structural elements on the exterior resulted in greater economy of their fabrication and placement. It also left the interior absent of columns allowing total flexibility for open planned arrangements of office space. The 19 office floors create a facade which is expressed in one-third stainless steel panels and two-thirds solar-reducing, insulated glass. The 25-story service tower is clad totally in stainless steel. The tower contains all stairs, elevators, toilets, and vertical service stacks. Services are then fed into the spaces between floors. The 60-foot plate girders have openings for ductwork. Air is furnished to sill boxes by cellular metal decking. The 4'x 2 1/2' columns are spaced 25'-10"o.c. Intermediate mullion placement resulted in a 5'-2" module. The skin of the office tower is 2" wide, while the service tower has a skin of 5".


60'
25'-10"
OFFICE
SPACE
INLAND STEEL

FEDERAL RESERVE BANK of MINNEAPOLIS

Designed by Gunnar Birkert & Assoc., this building has 60% of its area hidden underground, beneath a sloping plaza. This is a result of a complex program which required protected facilities for security of operations. Clerical and administrative operations are housed in an 11-story office block suspended from concrete towers by two cantenary tension cables, 60-feet apart. The structural concept is the same used in suspension bridges with floor loads transfered to the concrete towers, and then to the foundations below. Since there are no columns between the towers, the space below is unobstructed and therefore more flexible. In order to prevent the piers from toppling inward, two 28-foot deep trusses span and brace them at the top. The space between is used for mechanical equiptment. On the back side, an elevator tower stands at the mid-span of the piers. It serves as general vertical circulation to the office floors which have total flexibility in an area measuring 275'x60'. A large, 2.5 acre , hardscaped public plaza passes 20' beneath the bottom floor.

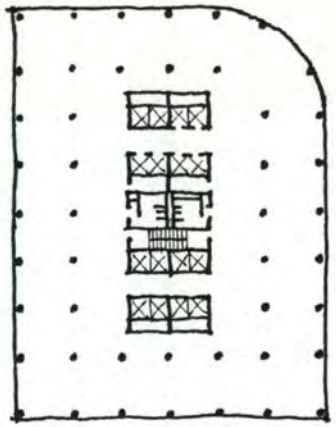




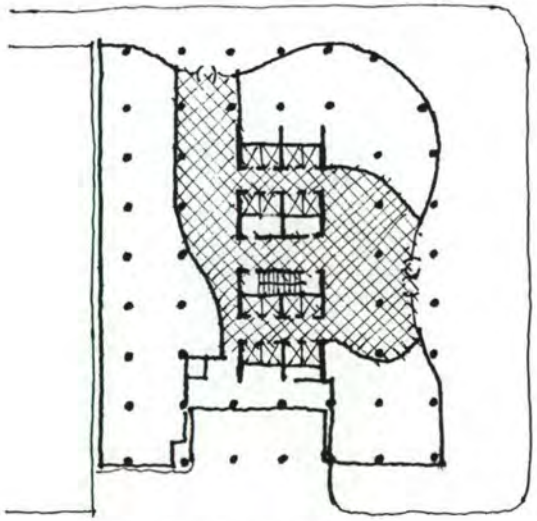
FEDERAL RESERVE BANK

ZEROX CENTER

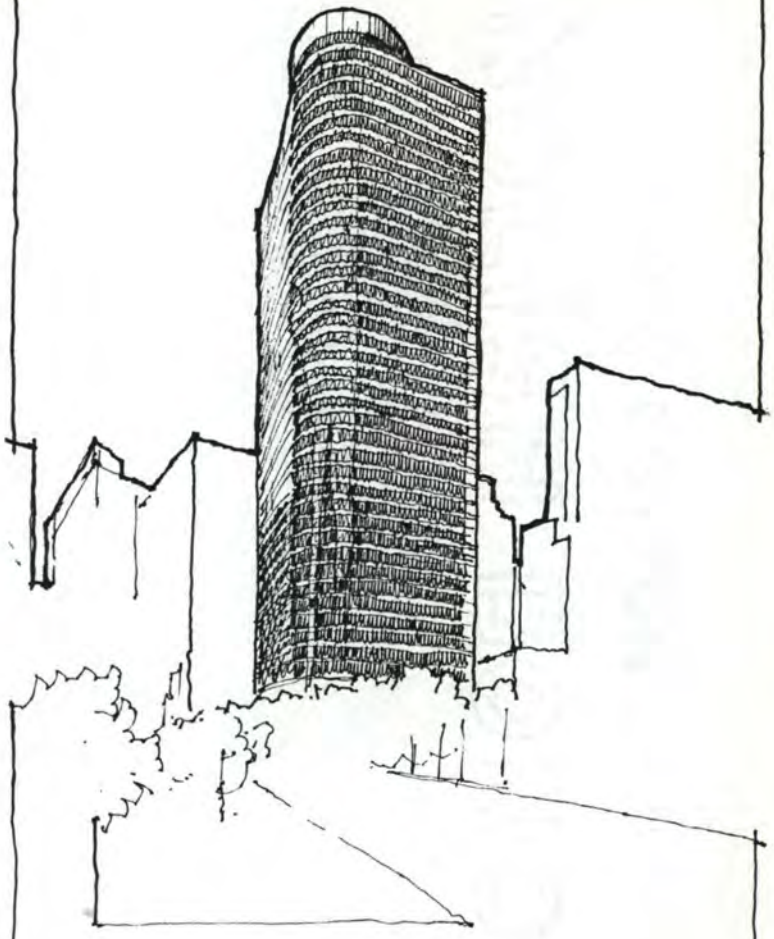
This office building, built for a downtown site in Chicago, was designed by C.F.Murphy Assoc., Helmut Jahn partner-in-charge. The program called for maximum floor area permited by zoning, 800,000 sq.ft., maximum flexibility of rental office space, and the ground floor allocated for commercial leasing. The structure used was a reinforced concrete flat-slab system with 20'x20' column bays. Notable in this design is the building's response to the corner site as well as its glass and aluminum skin. The corner of the building is curved for its entire height. This curve is accented further at the street level as it continues inward along the facade, creating inviting concave entrances on the two street sides. At roof level, the service core and cooling units are incorporated into a penthouse which blends its form into that of the curved end. And at street level, the soft edge proves more comfortable, visually and psychologically, than a right-angled corner. The skin changes in relation to the building's solarorientation. On the north elevation and the curved corner, the skin is 75% glass and 25% stailess steel. But the east, south, and west facades use 50% glass to reduce solar heat gain.



TYP. OFFICE FLOOR



GROUND FLOOR

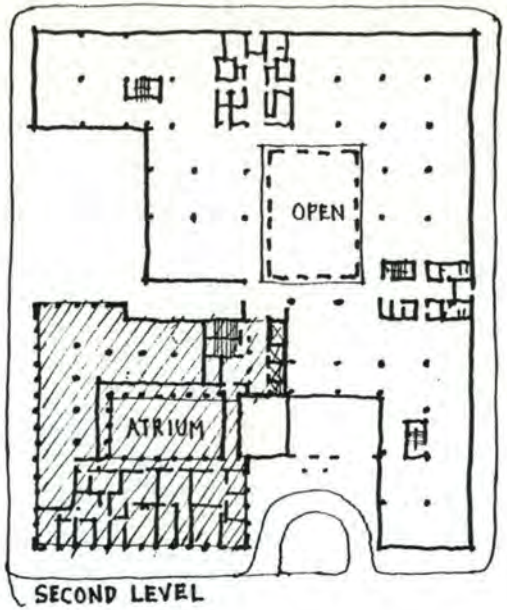


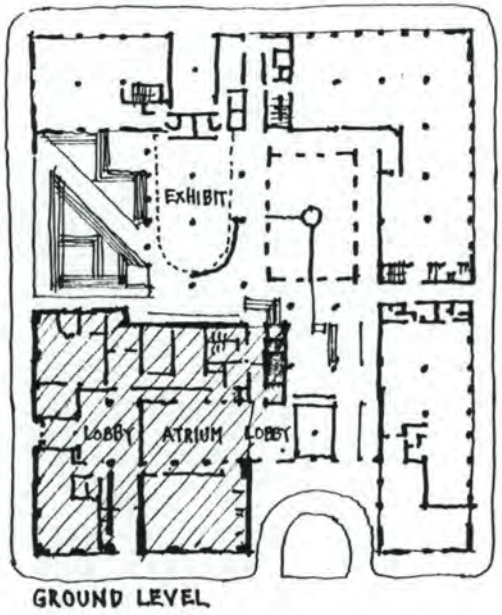
ZEROX CENTER

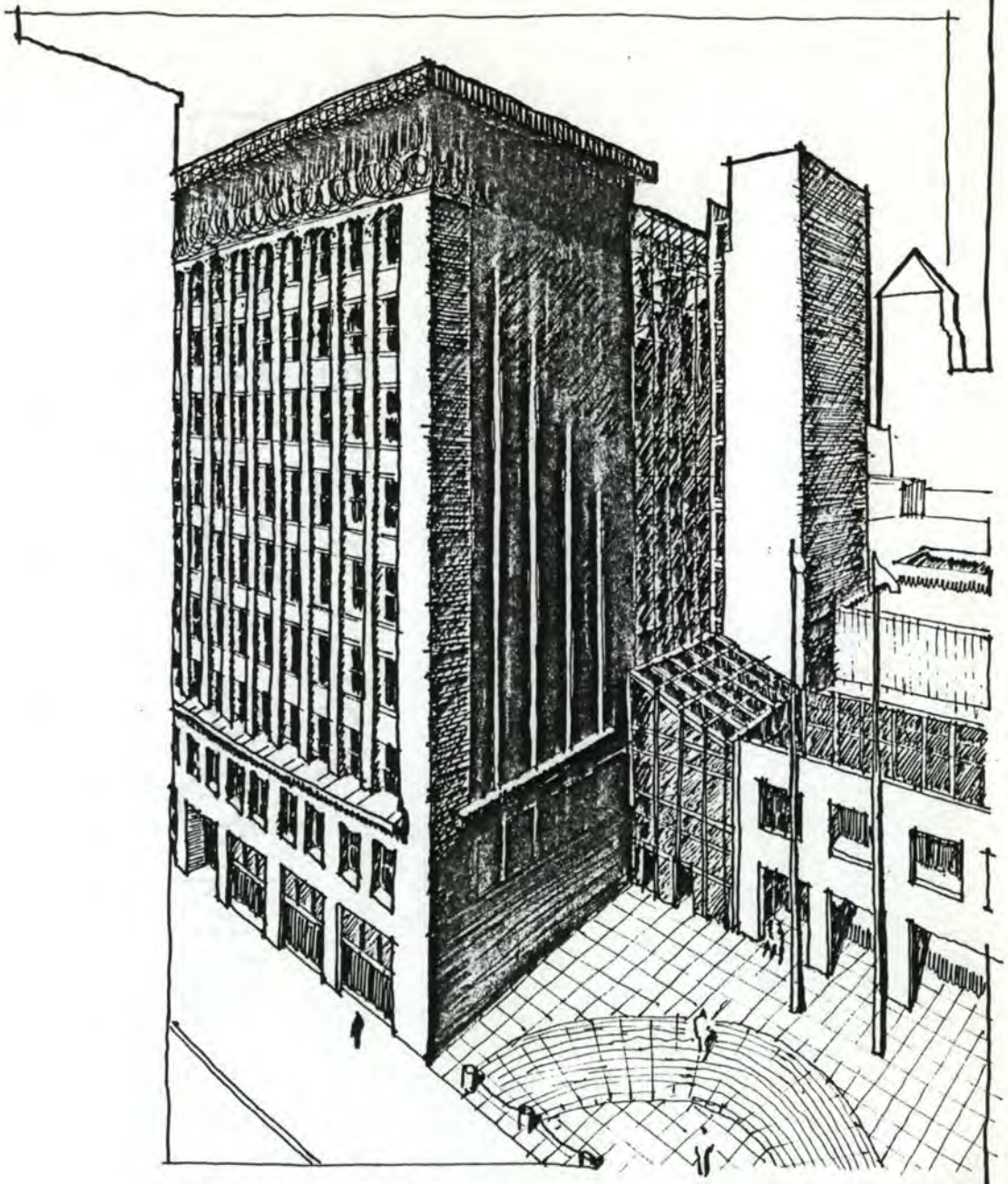
DESIGN PROGRAM

WAINWRIGHT ADDITION/RENNOVATION

The restoration and addition to Louis Sullivan's Wainwright Building in St.Louis was a project begun in 1974 by Mitchell-Girgola, Architects. The Wainwright, then owned by the National Trust for Historic Preservation, became the focus of the State's need for consolidated offices for 18 government agencies. In the process, a valuble landmark was not only saved from demolition, but restored to its original purpose as a prominent office building. The Waiwright was originally a U-shaped, 9-story office building, with an interior lightwell serving interior office space. The new design adds a glass roof to the lightwell, making it an enclosed atrium. Glass was removed from the offices looking into the atrium and bridges were added, connecting floors at the open end of the "U". Three low-rise structures were added which fill the rest of the block and enclose courtyards. Former alleyways and circulation paths are reflected in the new design, thereby connecting with existing circulation patterns accross the streets. The new atrium glass and service core attached to the Wainwright become good transition elements within the complex which allows a comfortable merger of old and new.



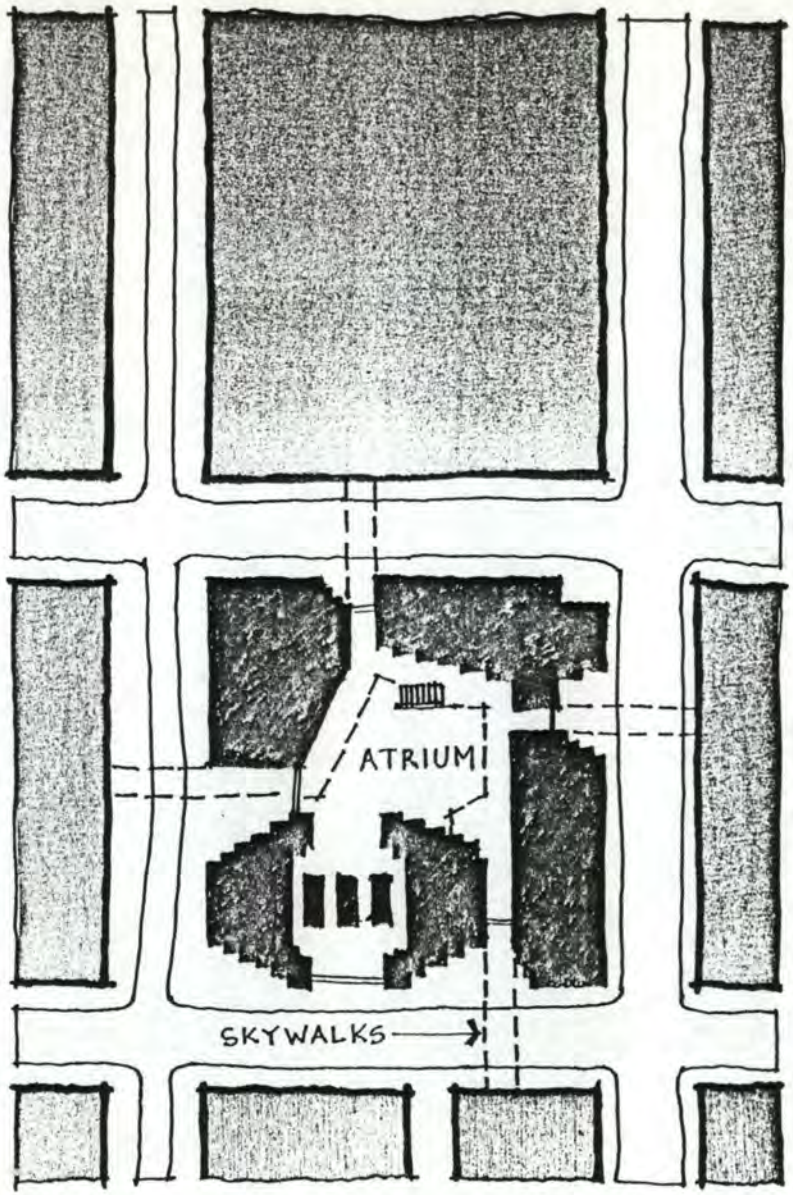


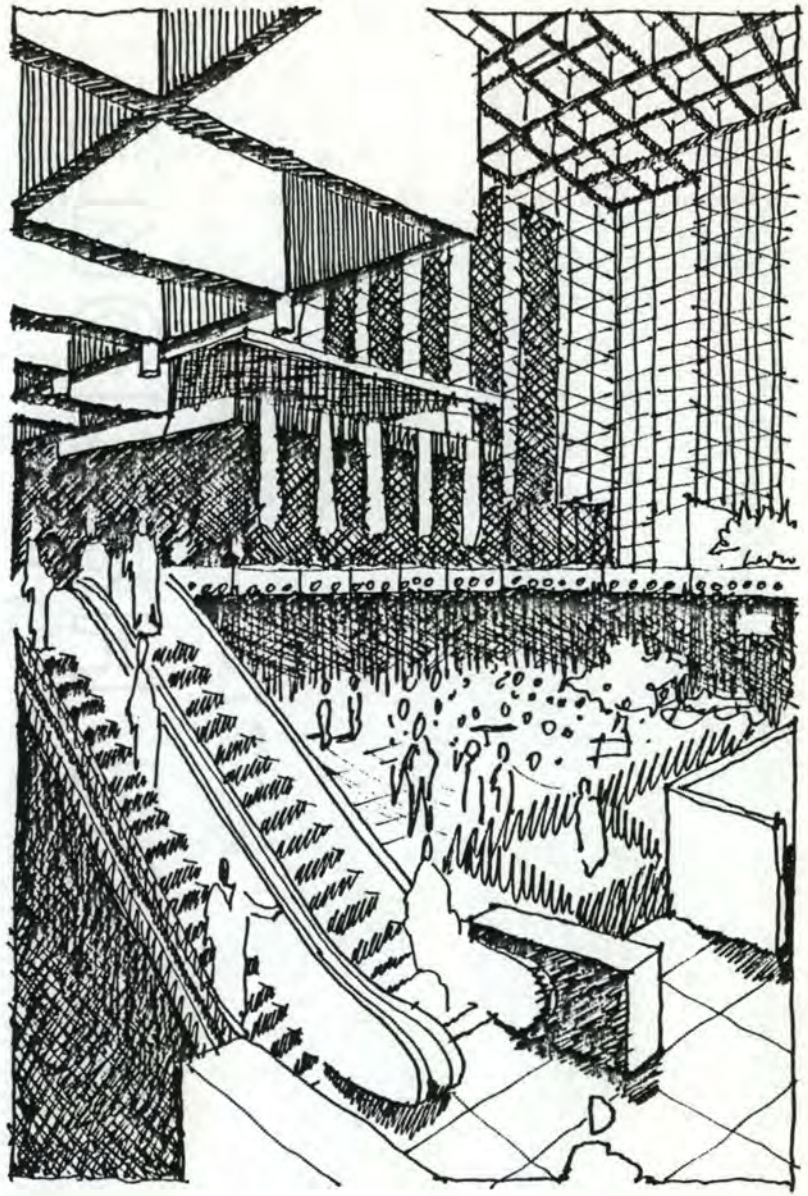


WAINWRIGHT ADDITION

I.D.S. CENTER (PUBLIC ATRIUM)

The I.D.S. Center is a project designed by Phillip Johnson (Johnson-Burgee), for a downtown site in Minneapolis. Of particular interest here is the public atrium at its center. Four buildings outline the edges of the city block and define this central space. These are the 56-story I.D.S. tower, a 19-story hotel, an 8-story office building, and an existing 2-story Woolworth's Store. The atrium is a glass enclosed refuge against the harsh Minnesota climate. This "crystal court", as it is called, is fed by a network of skywalks and street entrances, and remains filled with activity during business hours. It functions as a center, not just for the I.D.S. complex, but for much of downtown Minneapolis and its extensive skywalk system.





I.D.S. CENTER ATRIUM

GALLERIAS

There are many gallerias which exist throughout the world. The majority of examples are found on the European Continent where their popularity flourished in the 19th century. Some were planned with the original buildings, but many were later additions to existing structures and streets.

GALLERIA VITTORIO EMANUELE II - MILANO

One of the largest and most famous of gallerias is the Galleria Vittorio Emanuele II in Milano, Italy. Designed by Giuseppe Mengoni for an urban renewal competition, the project was finished in 1867 and provided covered shopping in the plan of a Latin cross. The arched covering is constructed of cast iron and glass with a dome at the crossing. The 4-story open-air arcade linked two important piazzas and provided a grand, formal arcade along one of these piazzas, Piazza del Duomo, the major open space of Milano. The grandness and beauty of this elaborately detailed project became influential world-wide. The interior facades are constructed as street facades along with intricate outdoor lighting. The floor is laid with tiles similar in pattern to the Piazza del Duomo pattern. Interior shops and restaurants extend out into this interior street with tables and displays. The grandness of the galleria space relates well to the large piazza in front of the Duomo.

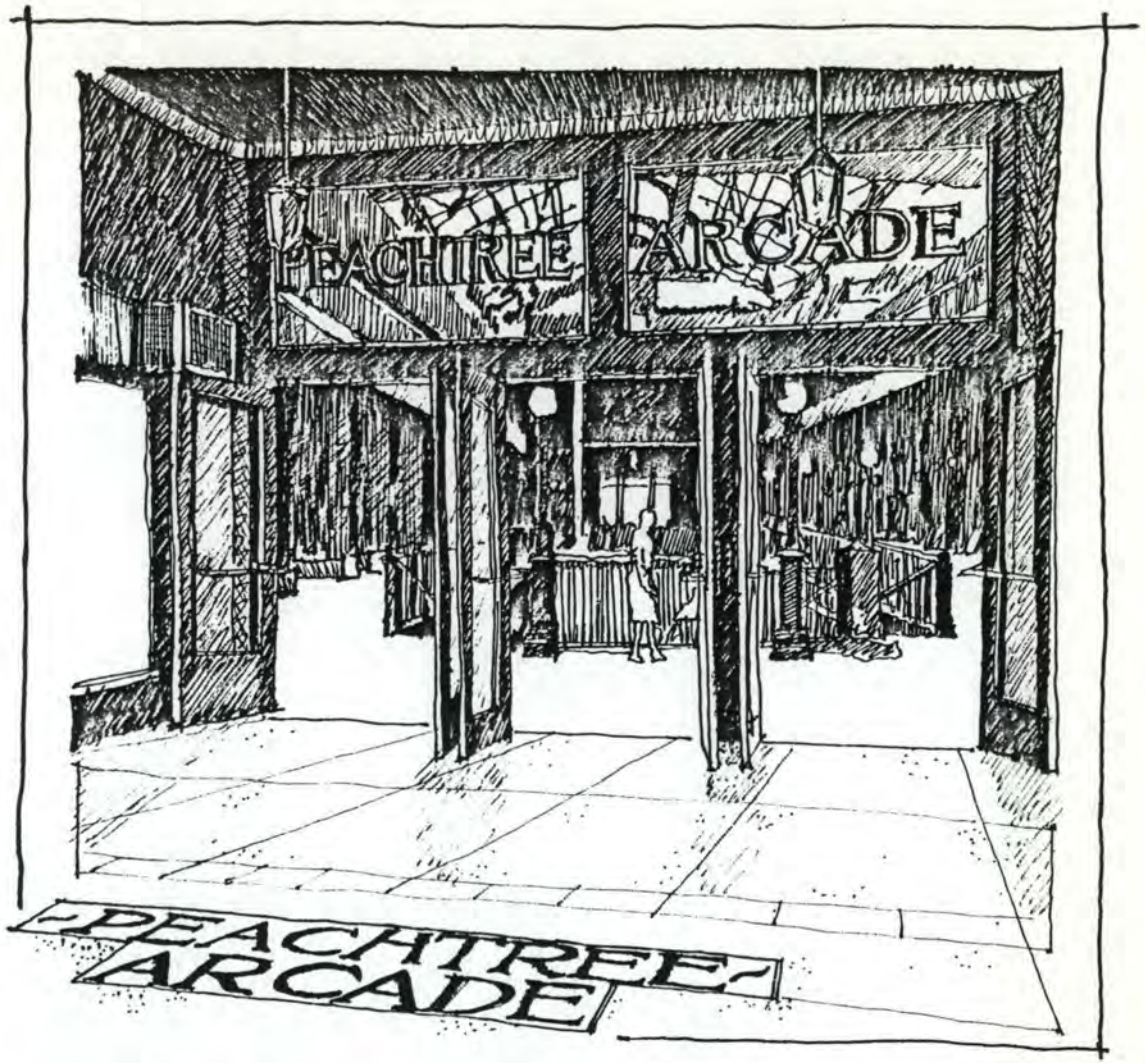
GALLERIA VITTORIO EMANUEL

DESIGN CRITERIA

GALLERIA MAZZINI - GENOVA

Galleria Mazzini, completed in 1875, was integrated into a continually covered arcade plan streaching for one kilometer. Starting along Via XX Septembre, the major street of Genova, the arcade continues through the grand Piazza Ferrari, around the adjacent Teatro Comunale dell' Opere, the Academia, and then culminating in Galleria Mazzini which extends down to Piazza Corvetto. Unique in this design is that the galleria runs parallel to the street with exits at regular intervals. Modeled after the galleria in Milano, but smaller in size and scale, Galleria Mazzini is a beautifully detailed and decorated interior street.


PIAZZA
CORVETTO
VIA ROMA
TEATRO
ACA.
PIAZZA
FERRARI
VIA XX SETTEMBRE
GALLERIA MAZZINI



PEACHTREE ARCADE - ATLANTA

The architect Ten Eyck Brown designed and built the Peachtree Arcade in 1916 on the site of the old National Hotel. The arcade was built in the tradition of the Cleveland Arcade. It was divided into numerous levels, the lower level set below street level with elegant iron staircases connecting floors. A wide glass roof spanned the hall-like interior. The Arcade was destroyed in 1964, against protests of citizens, to make way for construction of a high-rise office building.

OBJECTIVES

BACKGROUND

The present office lease space market in the CBD is very competitive and unpredictable. Most of the newer office buildings in the CBD have high rental rates which makes full leasing difficult to achieve. This is especially true of the Georgia-Pacific Building which is presently at 20% occupancy. Many smaller businesses which desire a Peachtree Street location, cannot afford the higher rates that most of these Peachtree address buildings command. However, the older structures have the marketing advantage of being able to lease at lesser rates and still be profitable. [41]

CONCEPT

It is the objective of the Carnegie Plaza owner to develop an office building which would be able to compete with its expensive neighbors by offering efficient lease space at a lower rate. The client believes this is possible by rennovating the Carnegie Building, constructinga new addition, and providing the new complex with a Peachtree Street address. The size and height of the addition would be the result of design studies aimed at determining the optimum arrangement. Therefore, no predetermined program of spaces and activities have been developed.

OBJECTIVES

To reach maximum efficiency, both buildings must reduce core sizes and strive for maximum leasable space. The spaces provided should have maximum flexibility to relate to individual tenant needs. The spaces should have ample glass for natural light and views as this normally brings higher rental rates. Floors should be planned with minimum circulation area.

GUIDELINES

For this site and project, the client has estimated the most advantageous height of the building addition would be 20 to 22 levels above ground. Since the buildable area of the site is 13,800 sq. ft. , the gross area of the new structure would be 276,000 sq.ft. to 303,600 sq.ft. However, code restrictions for this site, (FAR 20), will allow only a maximum of 276,000 sq.ft. to be constructed. Therefore, if the entire area of the site is used, a limit of 20 floors would result. But if a lesser portion of the site area is used, then the number of floors can increase.However, Adding more area vertically is typically more expensive than increasing floor area. At this point, additional information is needed to determine the best height and area limitations.

ACTIVITIES

RENTAL RATES

Typically, retail space rents for more money than office space. The more accessible it is to shoppers, the higher will be the lease rates. For a building with office lease space at $15/sq.ft. , its ground level retail space may lease for $60/sq.ft. Mezzanine level or subgrade retail space may command $20-$30/sq.ft. Therefore, it is sound economics to provide as much retail lease space as the site and function of the building can support. At present, there are no retail activites within or facing Margaret Mitchell Square. With the large concentration of workers, commuters, and tourists passing daily trhrough the Square, the Carnegie Plaza project should be able to provide and support a great deal of retail activity. The ground level of the Carnegie is already designed for retail space, and therefore to benefit the owner and also to enhancethis Square, multi-level retail space should be given high priority. [43]

RESTAURANTS

Many large office buildings provide executive restaurants, supported mainly by the buildings users. The CBD of Atlanta is in short supply of restaurants and snack bars. A 1981 listing of eating places within the CBD revealed the net loss of 4 such places since the previous year. Most of the restaurants within easy walking distance are on Peachtree Street in the Hotel District or down Forsyth into the Fairlie-Poplar District. Theonly present eating place on Margaret Mitchell Square is an atrium restaurant above the plaza level in the Georgia-Pacific Building, and it is intended for the convenience of those who work in that building. As an added service to the tenants of the Carnegie Plaza project , one or more restaurants should be considered in the program. [44]

SUMMATION

In summation, the program should be based upon an estimate of 180,000+ sq.ft. of office lease space. The lower levels of both buildings should be designed for commercial lease space totaling approximately 20,000 to 30,000 sq.ft. This may result in more than one or two levels. Atleast one large executive dining facility should be provided in an area with favorable atmosphere.

FORMATION and REQUIREMENTS

SITE-FACTORS

Several site factors exist which may help to more clearly determine the program. First, the Carnegie Building is an integral part of this design process. Rennovation of the structure was decided on because of its relatively good condition , flexible arrangement of interior space, attractive character, and the tax benefits which could be taken as a result of its improvements. In the Problem Statement, it was mentioned that the owner wishes to integrate the Carnegie and the new structure so that they work as one. This is a marketing strategy designed to give the new structure character and a sense of belonging to this site; an extension of the Carnegie rather than a characterless new building pushing aside Atlanta's past. In turn, the Carnegie Building is permitted to reorientate itself to the prestigious Peachtree St. corridor.

ELEVATORS

Both buildings may share certain amenities while floor levels and vertical circulation work together as a complete system. Elevatorswould necessarily be shared for greater efficiency. There are various guidelines to use in determining the number of elevators needed in a building. One rule ofthumb is one elevator per 30,000 sq.ft. gross. The Carnegie Building has 12 floors at 7,850 sq.ft. per floor , which equals 94,200 sq.ft. gross. Using the 30,000 per elevator ratio , we find the Carnegie would require 3.14 elevators. It presently has 3 passenger elevators and one service elevator. Of course, other factors enter in such as: weight capacity and speed of the elevator, cab size, and expected user loads. The Architectural Graphic Standards gives a detailed process including these factors. Early rough estimates of floor area and core size and location gave an indication of 8 elevators needed for a building 242 feet in height. This measurement was determined by using 11'-0" flr. to flr. for 22 floors. Although 11'-0" is a limiting floor to floor height compared to present day standards, the building must relate to the Carnegie floor levels. Therefore, the new addition must develop a building system which will meet this height limitation while meeting current structural, mechanical, and spatial needs.

ESCALATOR SHAFT

Another building influence is the MARTA escalator running beneath the site. Its position will determine column and core placement. Because of the non-load bearing construction and delicate operation of the escalator, any major building loads may cause structural and/or mechanical failure.

CORE RATIO

One of the major determinants of building size of this project is the number of elevators required to service the floors. As more are added to reach greater heights, the core increases in plan and begins to "swallow up" valuable lease space. From early studies, it was decided to continue the design process using six elevators and 22 floors as program guidelines. This means reducing the typical floor area from the maximum 13,800 sq.ft. to an area of approximately 10,000 sq.ft. which could be serviced by six elevators. For 22 floors, this area would total 220,000 sq.ft. gross, or 2 1/3 times the gross area of the Carnegie Building.

SPACES

TENTATIVE PROGRAM

The site factors and the client's needs have been studied in an effort to formulate a basic program. Although the design process may reveal needs for addition or reduction of quantities, the guidelines of a cohesive program can now be formulated. This tentative program calls for:

A) A new structure of approximately 220,000 sq.ft. gross area 22 floors above grade on the lots adjacent to the Carnegie Building.
B) Reuse and remodel of the Carnegie Building to link and integrate functions with the new structure. Floors shall match up directly. The historic character of the Carnegie is to be preserved.
C) Both buildings are to provide flexible, speculative office lease space as its major function. Lower levels are to provide retail lease space which could be supported by outside street activity. A restaurant is to be provided that would cater mainly to tenants of the Carnegie Plaza complex, but would also be accessible to the public.
D) The finished complex should relate very strongly and openly with Margaret Mitchell Square and help to define the role of the space as the City envisioned it.
E) The finished complex should have its main entry off Peachtree Street.
F) The MARTA station existing on the site should be integrated into the building design without disrupting its traffic flow. Incorporation of this element should be beneficial to the function of the building as a whole.

INTRODUCTION

BACKGROUND

Many standards exist for the optimum size, location, and orientation of a high-rise building and its components. Examples referred to in this chapter include module sizes, structural bay sizes, core types, and mechanical systems. However, in addition to these building criteria, the Carnegie Plaza site introduces various contextual constraints. The problem is made more complex by the requirement of connecting the new structure with the existing Carnegie, almost 60 years its senior. Not only will this requirement play a role in determining the location, arrangement, and dimensioning of many components of the new structure, it will also help generate its character and expression. The new building cannot be considered alone in any phase of the design process if it is to sucessfully relate to the entire Carnegie Plaza. Therefore, in considering the systems and components described in this chapter, they must be considered in context of the total development.

SPECULATIVE OFFICE PLANNING STANDARDS

FLOOR LAYOUT

CONCEPT

The speculative office building owner plans for maximumincome with minimal investment. Space must be designed for an ever-changing occupancy and thus cannot adhere to individual tenants needs to the degree of tenant-owned buildings. The building must be efficient while attempting to provide flexibility and equality of space. [45]

MODULE

Space planning and building systems are controlled by a module which is a common denominator of both. The module generates a grid plan for the entire floor plan. It controls the spacing and placement of building systems and components. The basic building module is usually based on the amount of space required for an individual worker seated in a chair at a desk. Column spacings are often set by moduledimensions. However, site conditions may be the controling factor to column placement as opposed to a predetermined module size generating column placement.

OPEN-PLANNING

Most of todays office buildings are constantly changing with respect to their interiors, layout, and partitioning. To cope with constant change in space requirements, some offices have used "open planning" without partitions. However, large open interior spaces create new problems in worker activities, including the loss of individual identity and privacy. [47]

The plan layout of an office building is strongly dependent on location of the service core and circulation pattern from that core. Four basic core locations are: 1) Central core 2) Off-center core 3) Split core 4) Exterior core.

CENTRAL-CORE

Central core location is the most common type and has several advantages. First, all exterior walls can be used for rentable office space. Secondly, it provides easy and equal access to all parts of the building. This is also true for branching of utilities. If the core helps in the structure of the building, then a central, symetrical location may be most beneficial. Disadvantage include the fact that space consuming circulation may be needed around its perimeter, and the degree of variation in office space layout is limited.

DESIGN DESCRIPTION

OFF-CENTER CORE

The off-center core offers the advantages of all perimeter spaces being rented, and in providing more flexibility and variation in the depth of offices than in central core arrangements. Large open plan offices can be located on one side of the core while small, private offices occupy the other side. The disadvantage is one of unequal access to core facilities.

SPLIT CORE

Split core arrangements do not usually require a peripheral corridor around the core. Access is from the space created between the cores, thus allowing more space to be used as office space. At ground level, this space between cores can act as an elevator lobby. However, this arrangement is usually limited to the offices with larger operations which have inner circulation to reach distant floor areas.

EXTERIOR CORE

Least common is the exterior core location. It provides maximum flexibility in arrangement of floor space. The core does not interfere with the plans either structurally or functionally. Outside cores can be used as transition elements between other buildings or future expansion. The major disadvantage to this type core is that with multiple tenant floors, long corridors are necessary. This type is more suited to tenant-owned buildings with open plan offices.

BUILDING SERVICES

DEFINITION

Building services are those elements that support the functions of the leased space. They are generally of permanant nature and are best grouped together.

PASSENGER ELEVATOR

In multi-storied buildings, automatic self-service elevators are used. In tall structures of 30 or more floors, elevators are usually zoned and skylobbies provided. Double-decker elevators are also used to bring more passengers within the same core. However, this project will be limited to under 30 floors and conventional elevator practices will apply.

SERVICE ELEVATOR

A freight elevator should be located near the passenger elevators and also near loading platforms and docks. Operation should be controlled by management. It is possible for freight elevators to serve also as passenger elevators during peak hours. However, it may have greater size and carrying capacity in order to easily transport heavy equipment and furniture.

ESCALATORS

Escalators can be used along with elevators for limited vertical movement. When used in large-volumed spaces, the movement on an escalator can be more enjoyable and relaxing than a short elevator ride. Escalators can handle a large number of short level trips that otherwise would tie up elevators. The slow ride on an escalator allows a person to view events and places from an elevated position. This is especially good in a retail area where the added exposure may prompt sales. Escalator direction can be reversed depending on time of day and flow of traffic. There are no code restrictions on lengths of escalators. An 8-story escalator exists in the Omni atrium, while the MARTA escalator on the site extends down for 90 feet. However, the maximum angle is limited to 30 degrees. A typical escalator requires 6'-0" of width for installation, but other sizes can be developed. [49]

FIRESTAIRS

Building codes set strict controls on firestairs with respect to fire ratings, door, stair dimensions, signage, and egress patterns. For an 11'-0" flr.to flr. distance, a stairwell 9'-0" by 18'-0" works well. For Atlanta, a firestair must have a fire rating of 2 hrs. An additional firestair may be needed in the existing Carnegie Building to bring it up to code standards. [50]

BRIDGES

Bridges from one floor to another can exist without enclosure if located in an interior space. Exterior bridges, such as the skywalks found in Atlanta, should be enclosed to ensure user safety and comfort.

TOILETS

Each floor should have both a Men's and a Women's toilet room. These should both be designed for handicap use and should be located near plumbing and ventilation stacks. A janitor's closet that contains room for cleaning equiptment, supplies, and a slop sink should be located within the building services area and close to plumbing or toilet areas.

FIRESAFETY

Fire hoses must be provided for each new floor near firestairs. These hoses should be supplemented with portable fire extinguishers. An integrated sprinkler system is optional but recommended.

BUILDING SYSTEMS and COMPONENTS

GENERAL

CONCEPT

Major technological advancements have been made in the area of building systems systems in high-rise office buildings. The building is a container for human activity. To support these activities and to create an optimum working environment, the container must provide light, warm and chilled air, proper acoustics, and flexible partitioning. In addition, its structure should not interfere with circulation or worker activities. In order to organizethe various requirements of a building, a building system which integrates human activities with mechanical and structural systems must be developed. [51]

MECHANICAL SYSTEMS

ELECTRICAL

Modern office functions rely heavily on communication equiptment including computers. Open space planning with free-standing partitions make electrical systems difficult to supply to "island" work stations. Typically, wiring is supplied from floor mountings. There are basically 3 ways power can be supplied from the floor: 1) Cellular raceway system 2) Electrical floor assembly 3) Unlimited access raised floor assembly. The raised floor assembly adds several inches to floor thickness and thus reduces ceiling height. The 11'-0" flr.to flr. limitations of this building will most likely eliminate that option. Power can be brought down from the ceiling, thereby eliminating the need to drill through the floor. But the wire poles are not very attractive and can interfere with office functions. Power and communication cables are quite different, both in function and design. Electrical codes dictate that they must be contained separatly. Yet both demand flexibility in supplying floor area. [52]

LİGHTING

There is a large variety of lighting fixtures available for office application. Most common is the flush mounted flourescent fixture used in an acoustic ceiling framework. This system is as flexible in arrangement as the grid of the framework allows, and their servicing is very simple. Fixtures are generally in multiples of 2'x4'.

HVAC ALL-AIR

Heating and cooling in large office buildings may be either all-air or all-water All-air systems include supplying conditioned air from a single source to individual floors where it is distributed

by one of the following systems: 1) Multi-zone central units with single duct distribution 2) Single duct terminal reheat 3) Single duct variable air volume 4) Double duct system.

AIR-WATER

Air-water systems furnish conditioned air by passing it over coils containing heated or chilled water which is supplied to individual floors or spaces. Examples are: 1) Introduction systems 2) Radiant cooling systems 3) Fan coil units with primary supply.

FAN ROOMS

Individual fan rooms are often provided for each floor. Although the total amount of usable space per floor is reduced, the fan room may be divided among tenants as rentable space.

STRUCTURAL SYSTEMS

CONCEPTS

A proper structural system must be chosen that is A) economical B) lends a proper character to the project C) allows for easy construction for the chosen site, and D) works well within the functional and spatial constraints of the project.

STEEL

The two basic materials used in high-rise office construction are steel and concrete. Steel is used more extensively in the U.S. due to its lower cost, quick assembly, and design flexibility. Steel buildings are generally lighter then concrete structures, which may make a difference depending on sub-soil conditions. Interior fireproofing must be provided for steel structures.

CONCRETE

Concrete structures generally take longer to construct because of the lengthy form-work involved. However, concrete structures are fire-resistant and can be exposed as a finished material. If handled well, it can become an attractive and decorative material. Concrete's advantage lies in its plastic quality and its ability to mold to unusual shapes. Special dyes, additives, and aggregates can be used to give unique finishes. Formwork can also be used to provide a texture for the concrete. Concrete members can be pre-stressed to give them increased load and span capacity. These can be poured-in-place post-tensioned members or pre-tensioned factory-made units.

COMPOSITE SYSTEMS

Many buildings are a combination of steel and concrete. In downtown Atlanta, many buildings have used a concrete core within a steel frame to help resist lateral wind forces. These cores are usually easy to form compared to a typical concrete

frame. Slipforms are generally used which help quicken the pouring process and allow the concrete pours to advance at the same rate as the steel framework.

CODES and RESTRICTIONS

HISTORY

Atlanta zoning has focused mainly on separation of "incompatible" uses and does little to limit very large developments, reflecting an intent to let market demand exert its influence. Atlanta and Houston are but two of several southern cities in the midst of dramatic growth in inner city construction. But, unlike Houston, Atlanta does use zoning as a regulatory tool. [55]

F.A.R

Those parts of zoning that dealt with buildings do not restrict a developer from developing as much as he wishes of a permitted use on a particular downtown site. The 1954 zoning change did limit the total sq. footage of a downtown building to 25 times the land area of the site (FAR 25). Presently, the city is proposing a new ordinance to reduce the FAR from 25 to 20 at the center of downtown around Five Points and down to FAR 16 in a surrounding zone serviced by subway stops. The Carnegie Plaza site is zoned FAR 20.

CARNEGIE PLAZA SITE

Using a ratio of FAR 20 zoned for this site and a net area of 13,800 sq.ft. , not including setbacks, the allowable sq. footage to be built is 276,000 sq.ft. A setback of 15 ft. must be maintained off Peachtree St. , while 10 ft. setbacks exist on all other sides. Since the same owner has control of the entire block and the addition will relate strongly to the existing Carnegie Building, the present 10 ft. alley easement is no longer necessary. Its purpose was for service and fire control access. As long as these requirements are met or maintainedby other means, the new addition can abut the Carnegie Building.

SETBACKS

In certain cases, the zoning ordinance insists that developers either set back proposed buildings or provide an arcade at the base of the building to increase pedestrian space. The plan allows developers to connect to adjacent buildings at various levels, by means of "skywalk" bridges, tunnels, or direct interior passageways.

STREETS

Carnegie Way and Forsyth St. , both two-way streets, are open by the City to inprovement proposals. However, the intersection of Fairlie St. and Carnegie Way must remain open to vehicular traffic. Davison's garage entrance and the library's book-drop drive-thru exist near this intersection. Their function could be affected by any change in the design of this

intersection. Present traffic patterns on Peachtree St. and Ellis St. are essential and must remain. However, patterns on Forsyth and Carnegie Way have been under study and may be subject to change along City guidelines for the Margaret Mitchell Square improvements. [56] One such study proposes the turning a portion of Carnegie Way into a single-lane, single-direction street. Traffic along this one block is relatively light. The intention of this proposal is to give more sidewalk area to pedestrians and vendors and to discourage thru-traffic which would disrupt pedestrian activity.

FIRE EGRESS

City Fire Codes call for fire stairs every 100 ft. and for no area to be shut off from a fire exit in case of a "worst possible" situation. Therefore, the Carnegie may require an additional fire stair to bring it up to code requiements. [57]

BUILDING ORGANIZATION

CONCEPT

The program calls for the old and new structure to work harmoniously in function. An initial concern dealt with the method of connecting the two masses, both functionally and aesthetically. Another concern was providing all office zones, whether in the new or old building, with adequate access to natural light. This led to the basic concept used which involves creating a transitory zone between the two structures. This zone becomes a public atrium or galleria which shares similarities with several projects in Atlanta. Like the Omni and Hyatt, but on a smaller scale, this space becomes an interior urban street filled with various activities and functions. In essence, it becomes a widened version of the existing alleyway,increased from 10 ft. to 24 ft. This transitory element allows each building to be different, to solve separate problems. It also allows for ample sunlight to filter into the space and furnish inside perimeter offices with natural light. At lower levels, retail space becomes availible. It also acts as lobby space for both buildings.

FLOOR PLAN

The footprint of the new structure extends to existing building lines, completing the triangular shape of the site. This is in response to several needs. First, the floor area was needed to create workable, efficient office spaces. A double-loaded corridor down the center of the floor plan produces office spaces of adequate leasing size. The form of this thin, rectangular floor tower gives definition to the Peachtree St. corridor and also helps to define a more cenralized Margaret Mitchell Square. The diamond shaped end of the building orientates itself to the Square much as the irregular ends of the Rhodes-Haverty, Chandler, and Georgia-Pacific. They appear to be suggesting a radial arrangement, giving M.M.S. a circular or oval definition, which is located generally in front of the library and Rhodes-Haverty triangle.

DESIGN SKETCHES

PLAZA/STREET ORGANIZATION

CONCEPT

The City has several proposals for redesign of this urban space and surrounding streets. The Carnegie Plaza proposal has Forsyth St., in front of the Library and Carnegie Buiding, closed off to thru-traffic. The streets are shortened, no longer intersecting. The Forsyth-Peachtree intersection becomes closed and curbed. The concept used here is one which will reinforce M.M.S.'s role as a pedestrian space and as a link between Fairlie-Poplar and the Hotel District. Appropriately, this all-pedestrian zone is located in front of the Public Library, thereby reinforcing its position and role in the urban fabric. As the City envisioned, the space is filled with trees, planting, and a water fountain.

MARTA

ESCALATOR

Taking advantage of the dramatic change in site grade, several levels of retail space are provided. withseveral street entrances. The MARTA escalator is shortened slightly and its entrance is altered to open in front of the Carnegie Plaza atrium entrance. This directs pedestrian traffic past the retail zones, thereby reinforcing their access and visability.

SOTTOPASSAGIO

Another scheme by City Planners suggests building underpassages to connect the sites divided by Peachtree and Forsyth St. The new propsal accomplishes this by linking the two MARTA stations via an underpassage some 20 feet below Peachtree. The east side connects with the existing platform, while the west side continues through the elevator core of the new structure, passes perpendicularly through the transitory atrium, and stops dead-end into the elevator core of the Carnegie Building. This directly links the movement systems of four urban elements: both buildings of the Carnegie Plaza, the atrium street, and the MARTA stations. The underground connection is lined by retail lease space, as found in many European cities. Two skylights have been added which provide natural light to the underpassage, and function as bus stop seating at street level on Peachtree Street.

STRUCTURE

MATERIAL

The structure and bay spacing of the new high-rise resulted much from the east Carnegie Building facade dimensions and the MARTA escalator tunnel below. Steel is the chosen material; the reasons shall become apparent in the folowing paragraphs.

SPACINGS

Columns are spaced 20'-3" o.c. north-south to set up a compatible rhythm with the structure and openings of the east facade of the Carnegie. In the east-west direction, the columns straddle the escalator for the entire width of the the building, 57'-9" o.c. Although steel beams can span 60 ft. clear, their depth becomes a critical factor. Since the new structure has to match the 11'-0" flr.to flr. height of the Carnegie, use of 60 ft. clear span beams would result in a floor to ceiling height of less than 8'-0". Mid-span support would be needed to reduce the span, and therefore the depth of such beams. But, with the escalator tunnel situated below the central axis of the building, columns are restricted from transfering loads directly to this area. Transfer beams could be used, but their large size would conflict with circulation and flexibility at lower levels.

SOLUTION

The solution used was to locate a transfer truss at the top of the structure and then hang floors from their mid-span with tension members the entire length of the building. Structurally, this location worked better because it braced the frame at the top where wind force is most prevalent. And aesthetically, it provided the top of the form with a cap which was a pleasing proportion as related to the Carnegie. Functionally, it formed space to house elevator mechanics and other utilitarian functions.

TENSION MEMBERS

Instead of hanging one center row of tension members it was decided to use a double row. The 6'-9" dimension between the two rows define the walls of a single corridor along the mid-axis of the building. With the floors on either side of the corridor properly supported, the structure of the corridor floor doesn't need deep beams. A thin, pre-cast unit can be put in place thereby creating a large, unobstructed shaft the length of the corridor, which is used as a mechanical spine. Smaller ducts branch off this main spine to feed individual offices or an entire floor.

FLOORS

A mid-span joist runs parallel to the spine in each bay, reducing the clear span of the bay to approximately 12 ft. This is

spanned with pre-fabricated, composite hollow core floor panels. These are structural C-channel decking sheets, welded together to form hollow cores, and then covered with lightweight concrete. They are highly economical as they serve as structure, sub-floor finish, and also carry electrical and communication lines with great flexibility. The core openings run into the spine shaft to carry the wiring.

SPANDRELS

Spandrels are thin steel plates, approximately 4 ft. deep. Window openings are regularly spaced, but kept to 6'-9" square dimensions. The deep spandral plates between window rows give added bracing to the steel frame. In fact, the steel plates coupled with the columns begin to act as a perforated shell structure, similar to the Georgia-Pacific building.

VERTICAL CORES

Three free-standing vertical cores carry the elevators, firestairs, and mechanical ducts. Their locations are a result of building functions, relation to the Carnegie circulation, and building codes. These concrete cores are poured with slipforms and generally would progress faster than the steel erection. Ultimately, the cores add inner stability to the frame. The roof level transfer truss ties into these cores for additional bracing.

CHARACTER

The resulting structure is very economical, flexible, and quick to erect. Yet, the exterior expression responds to its contextual situation. Window perforations of the new building match closely the rhythm, size and spacing of the Carnegie Building. The double-insulated windows are set flush with the facade. Its smooth-skin appearance matches that of the Georgia-Pacific. Base and cornice lines are carried over from the Carnegie. The rhythm and size of the arcade along Peachtree St. responds to the pedestrian activity along that corridor.

FINISH

SKIN

The material chosen as a veneer skin is thin, clay tile; each unit of a 2'-3" square area. This tile acts as a fireproofing for the steel plates and will blend well with the masonry of the Carnegie. Tiles can be glazed with various colors and weather well. Their somewhat slick and gridded appearance recalls the skin of the Georgia-Pacific and the Monarch Hotel.

ACTIVITIES and FUNCTIONS

ATRIUM

As the unifying space of the complex, the atrium contains a variety of activities. Besides retail space and elevator banks, there are escalators at lower levels to quickly move people along 3 levels, bridges connecting the two buidings at every possible level, and a skywalk bridge linking the Carnegie Plaza with Davison's Department Store and Peachtree Plaza Hotel. This extends the interior circulation link, which is well developed in the Hotel District.

MEZZANINE LEVEL

The Mezzanine level contains open space for a cafe or dining area supported by a group of snack bars. The attic space of the Carnegie has been converted into an executive restaurant. Covered by gabled skylights, this restaurant caters mainly to tenants of Carnegie Plaza. Its mid-level location makes a convenient, but secluded choice.

MECHANICAL ROOM

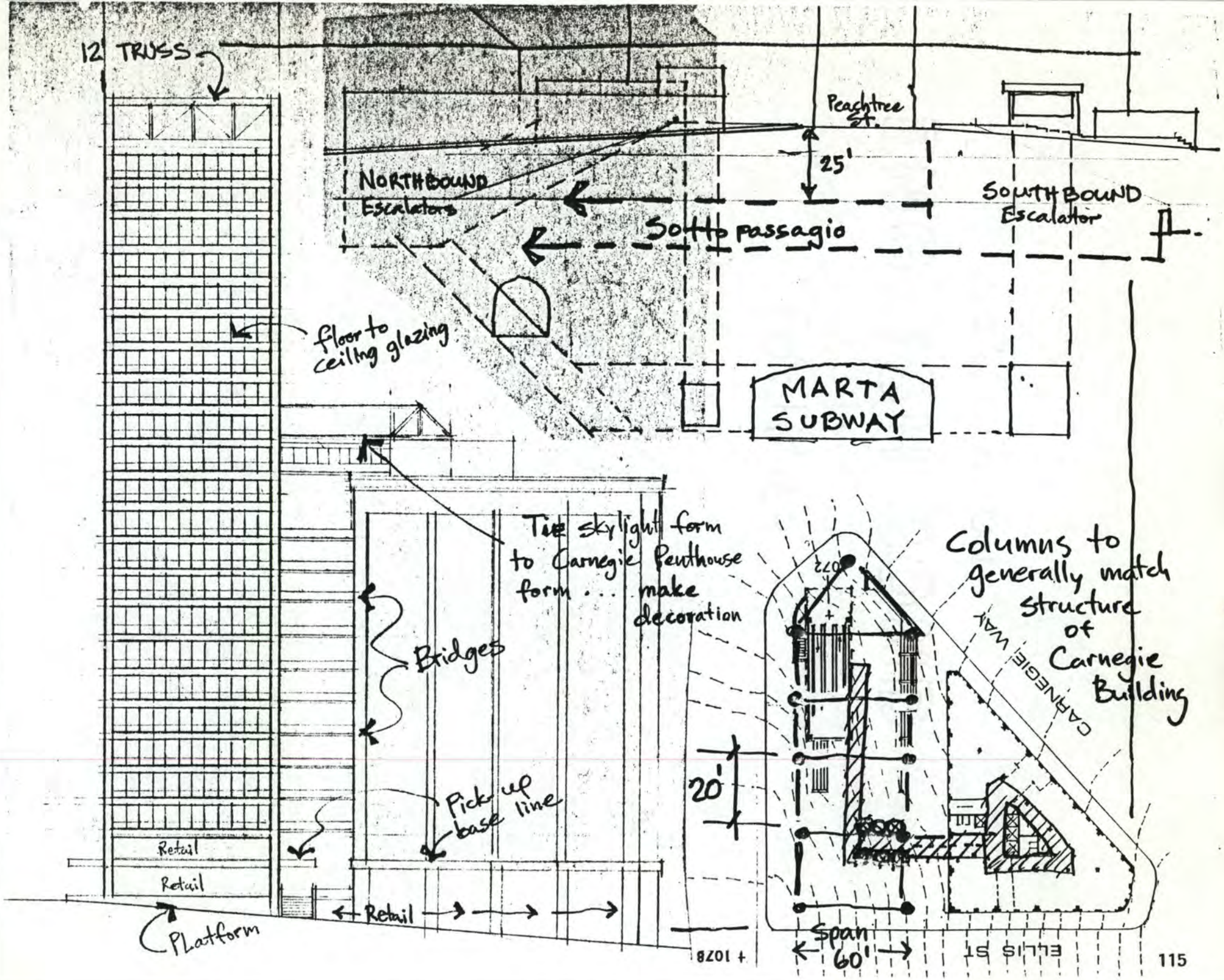
Opposite the restaurant in the new building is the mid-level mechanical room. This area works well as mechanical space because; A) of its proximity to the vertical shaft and mechanical spine B) the skylights meet the exterior facade at this point, so normal window placement cannot occur, ruling out office lease space, and C) its central location serves all parts of the building equally well. Of course, the room will need special buffering for acoustical purposes.

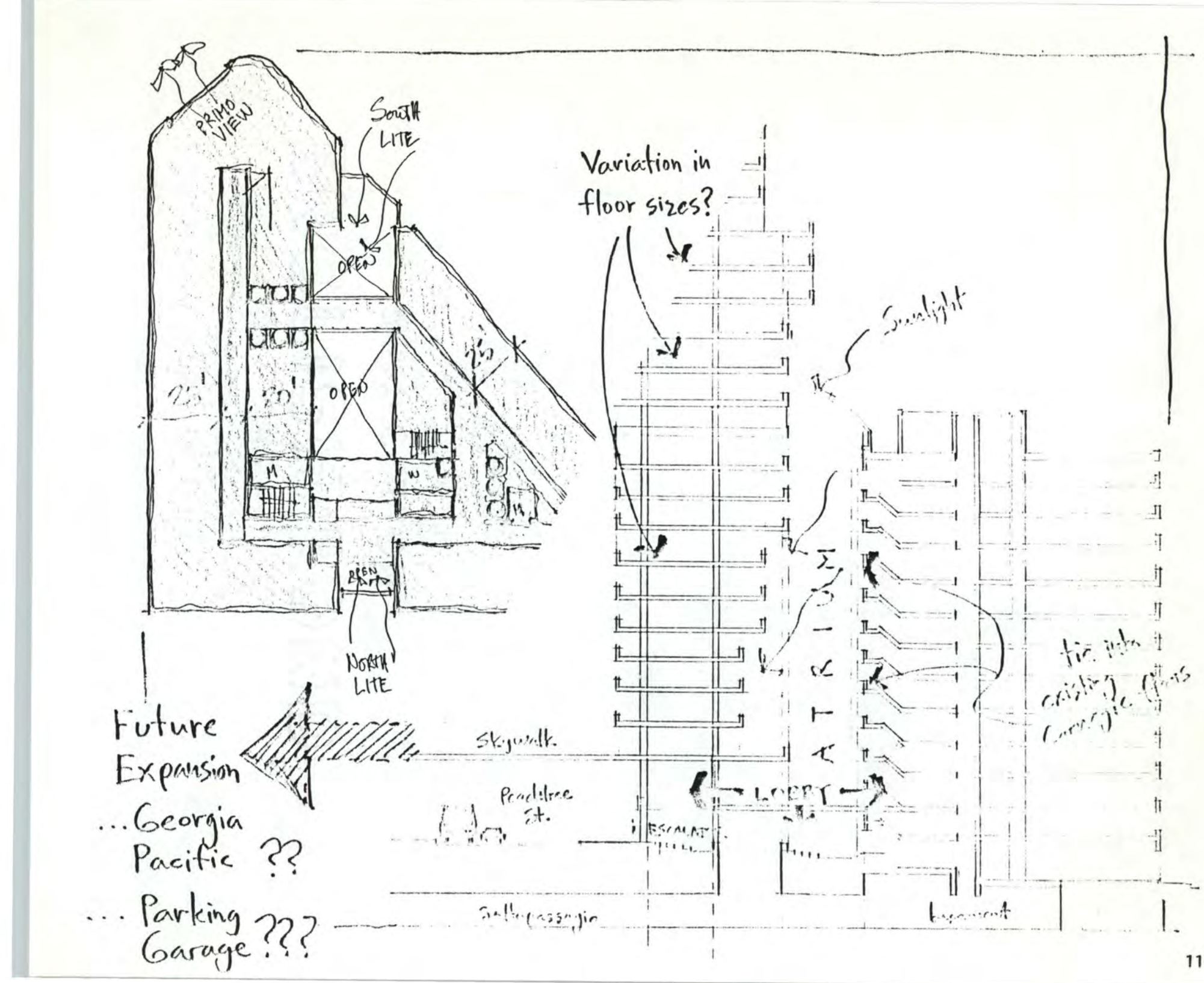
TOILETS

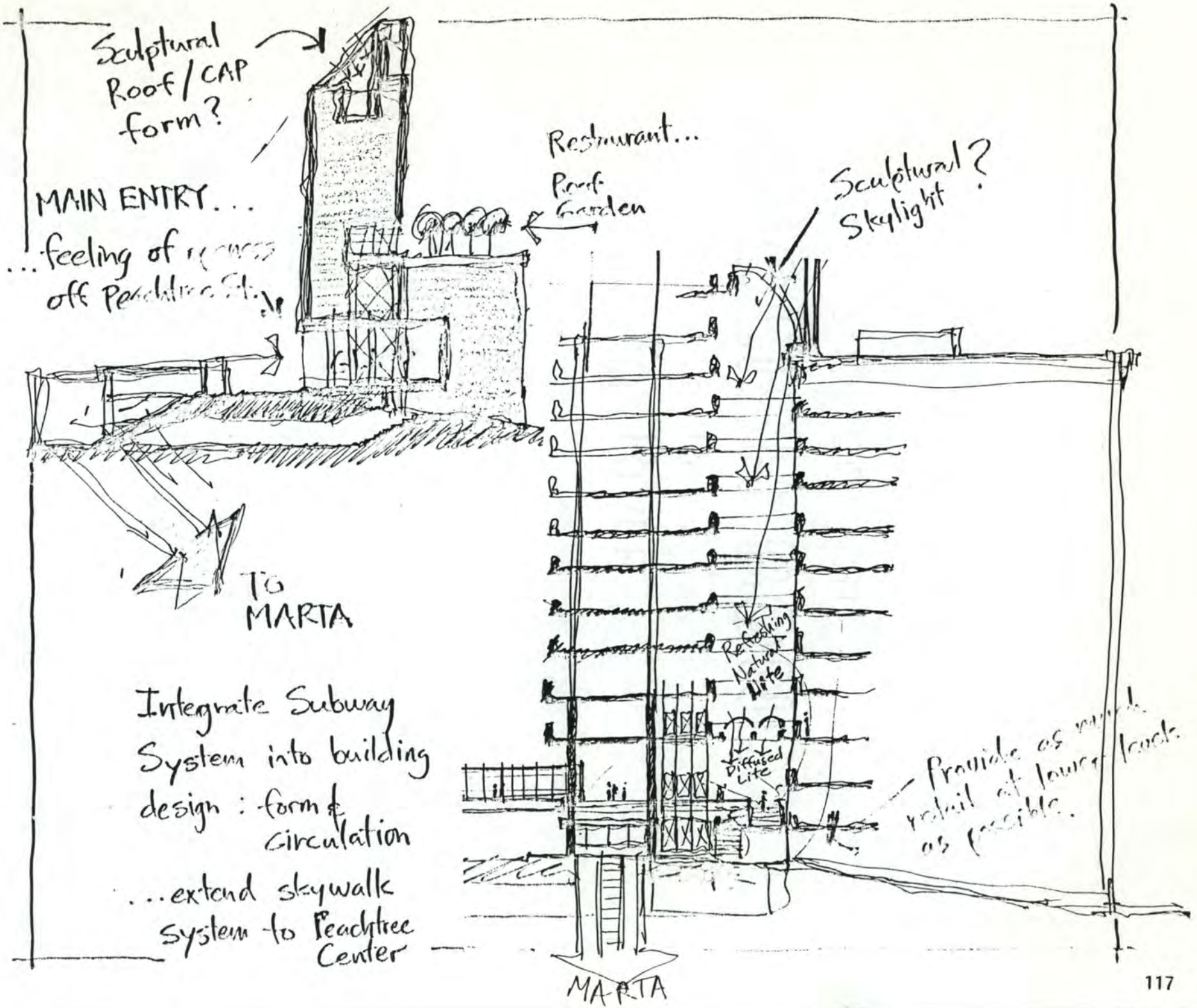
At matched levels, both buildings share toilet rooms located in the Carnegie Building. This choice is done for economy of space. However, when the new building rises above the old, a problem exists of where to locate new toilets. The solution is in a cantilevered vertical tower abutting the new elevator core. As a visual element, this "column" actually helps in the composition of the joined masses. It interlocks the high-rise form into that of the lower, stable mass of the Carnegie.

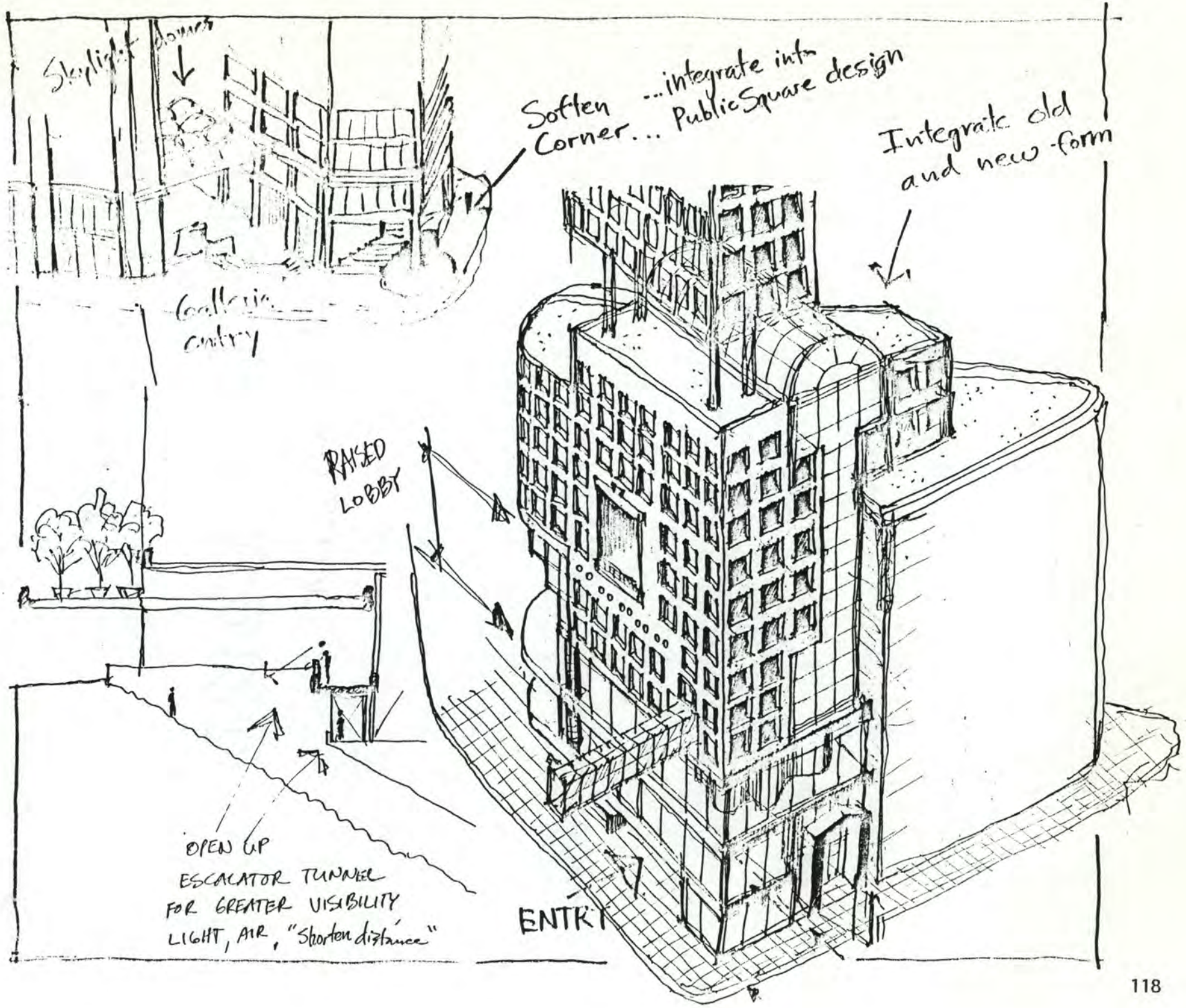
ROOF LEVEL

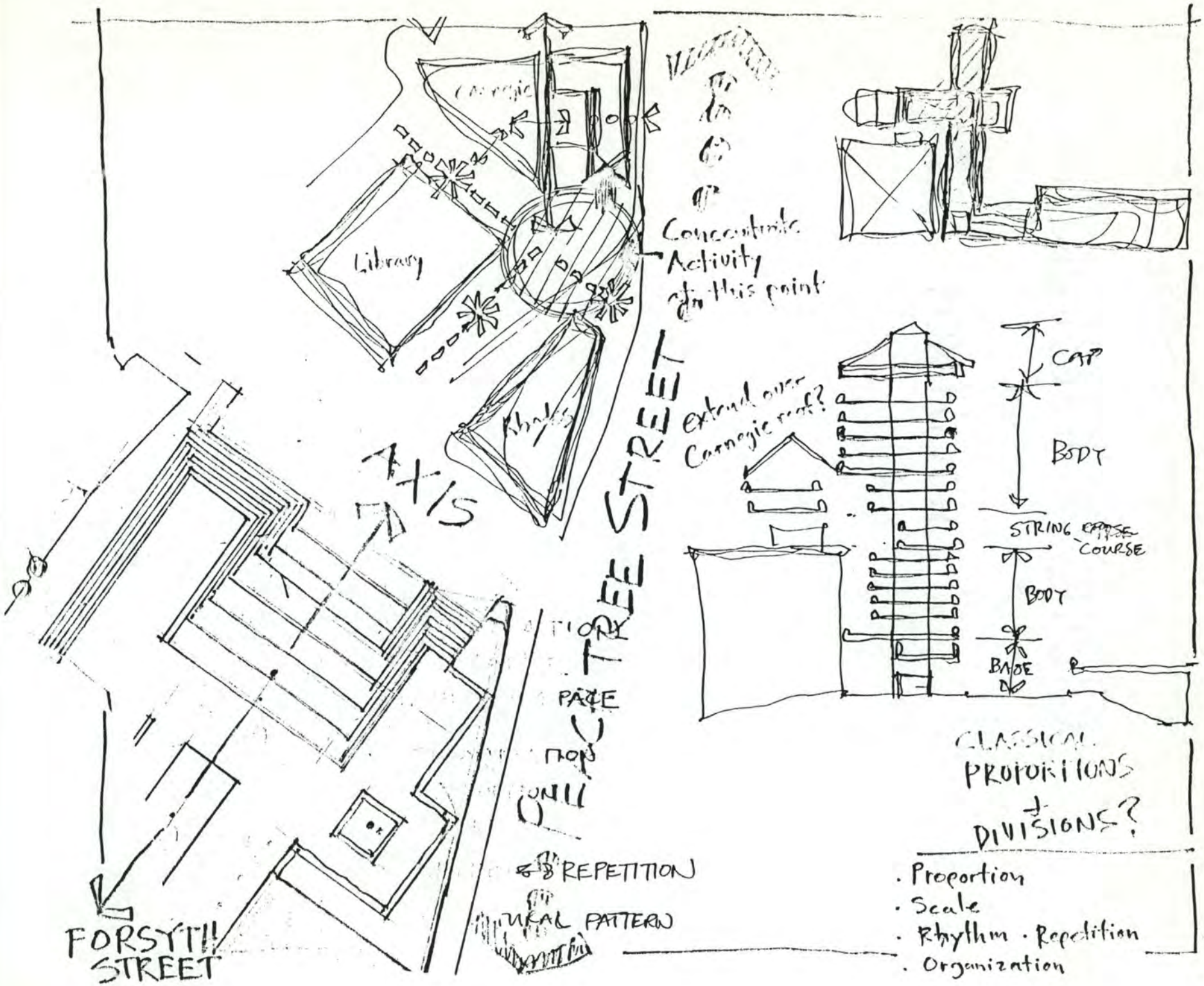
Lastly, the facades facing Margaret Mitchell Square rise above the rest of the building, forming a diamond-shaped parapet. Functionally, this screens the cooling units of the HVAC system; but more importantly, it is a design motif, an aesthetic solution to giving prominance to the facade. The building's main entry is off Peachtree St. to the north, but its main response should be to Margaret Mitchell Square, to reinforce the importance of the space to the building and the City. The raised facade/tower acts as a signal on the skyline declaring a special event and location.


12' TRUSS
Peachtree St.
25'
NORTHBOUND Escalators
SOUTHBOUND Escalator
Sotto Passagio
floor to ceiling glazing
MARTA SUBWAY
Tie skylight form to Carnegie Penthouse form . . . make decoration
Columns to generally match structure of Carnegie Building
CARNEGIE WAY
Bridges
20'
Pick up base line
Retail
Retail
Retail
Platform
Span 60'
ELLIS ST
+1078
+1072

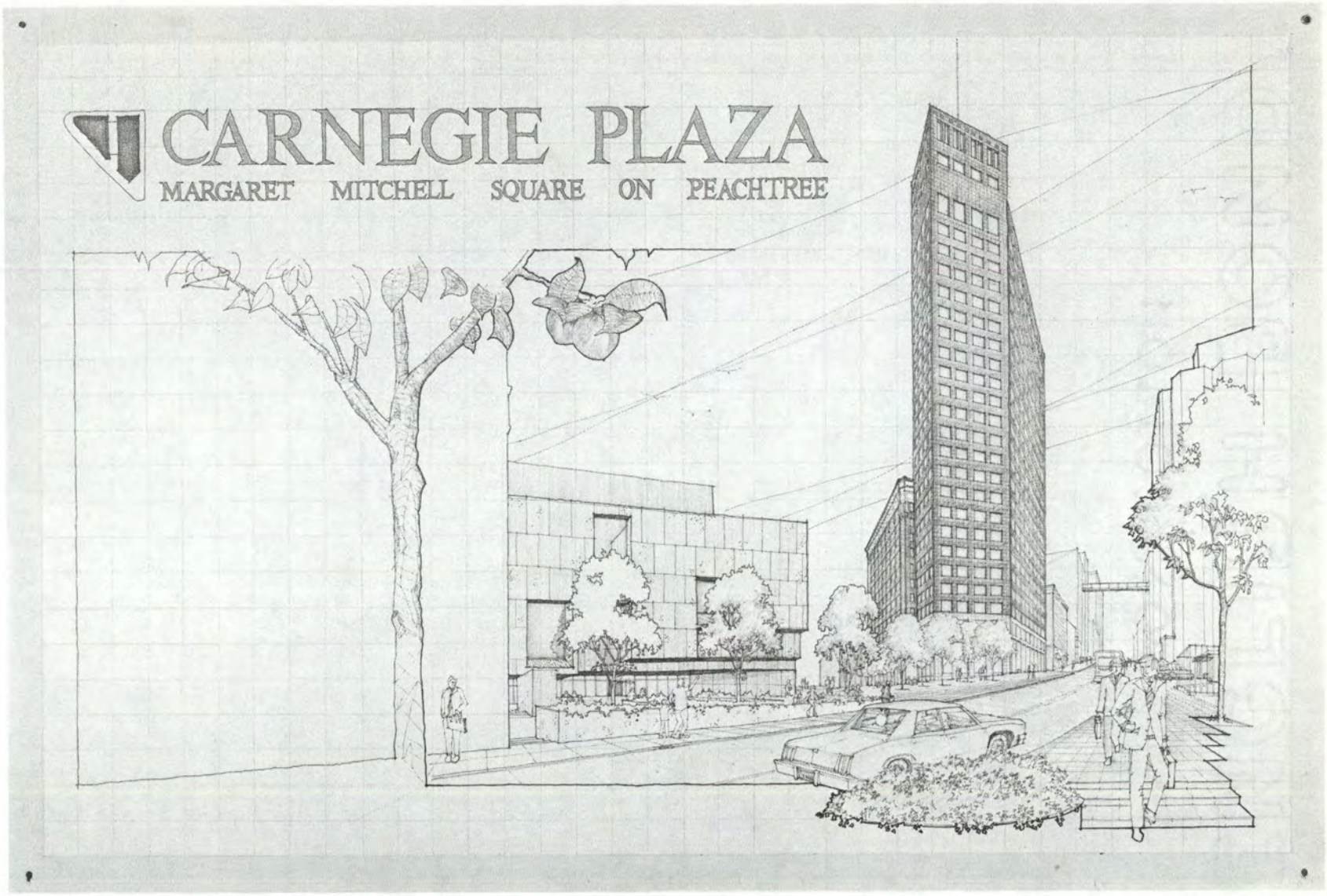

PRIMO VIEW
SOUTH LITE
OPEN
OPEN
M
W
M
OPEN
NORTH LITE
Variation in floor sizes?
Skylight
Skywalk
Peachtree St.
LOBBY
ESCALATOR
basement
Future Expansion
...Georgia Pacific ??
... Parking Garage???

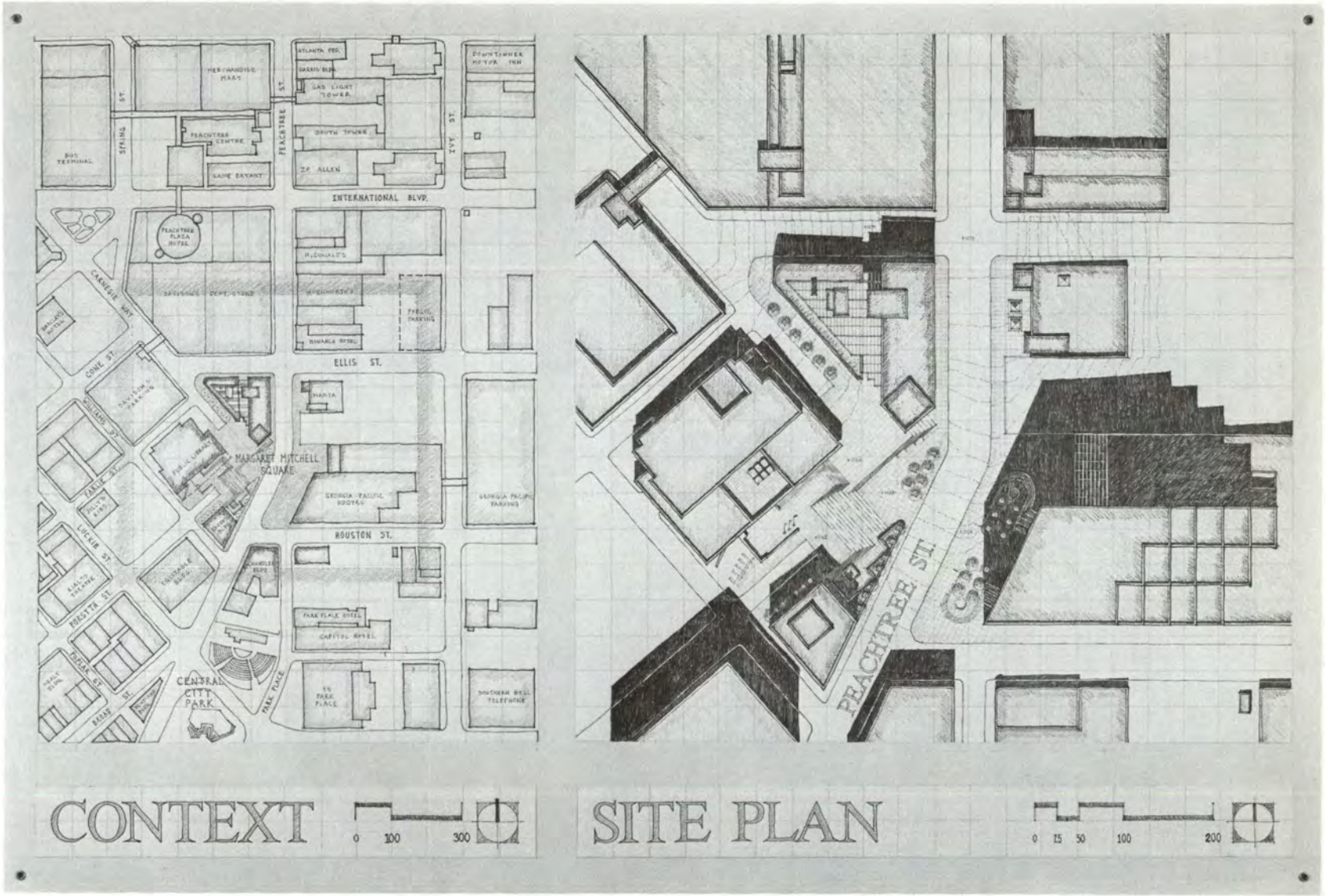

Sculptural Roof / CAP form?
MAIN ENTRY...
...feeling of
off Peachtree St.
Restaurant...
Roof Garden
Sculptural Skylight?
TO MARTA
Reflecting Natural Light
Diffused Lite
Integrate Subway System into building design: form & circulation
...extend skywalk system to Peachtree Center
MARTA

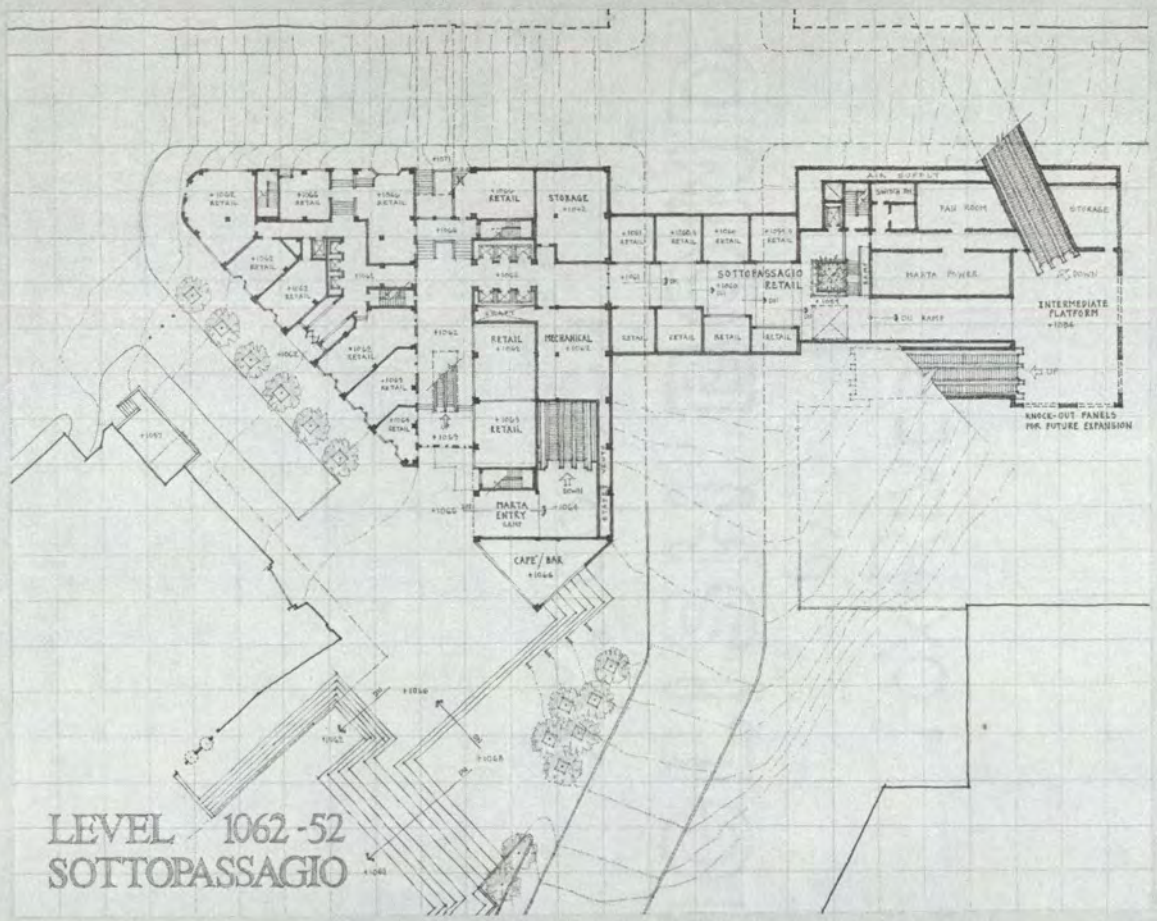

Skylight
Soften ...integrate into
Corner... Public Square design
Integrate old
and new form
RAISED
LOBBY
OPEN UP
ESCALATOR TUNNEL
FOR GREATER VISIBILITY
LIGHT, AIR, "Shorten distance"
ENTRY


Carnegie
Library
Rhodes
AXIS
Concentrate Activity at this point
extend over Carnegie roof?
CAP
BODY
STRING COURSE
BODY
BASE
CLASSICAL PROPORTIONS + DIVISIONS?
. Proportion
. Scale
. Rhythm . Repetition
. Organization
REPETITION
FORSYTH STREET

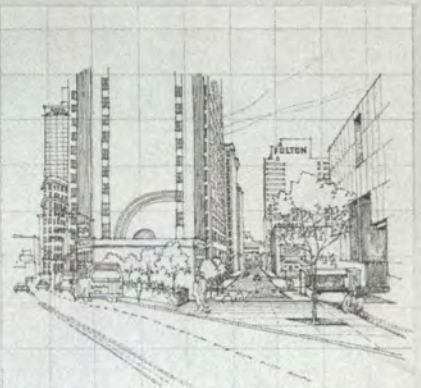
DESIGN SOLUTION


CARNEGIE PLAZA
MARGARET MITCHELL SQUARE ON PEACHTREE


INTERNATIONAL BLVD.
ELLIS ST.
HOUSTON ST.
PEACHTREE ST.
MARGARET MITCHELL SQUARE
CENTRAL CITY PARK
CONE ST.
FORSYTH ST.
PARK PLACE
CONTEXT
0 100 300
SITE PLAN
0 15 50 100 200



LEVEL 1062 - 52
SOTTOPASSAGIO

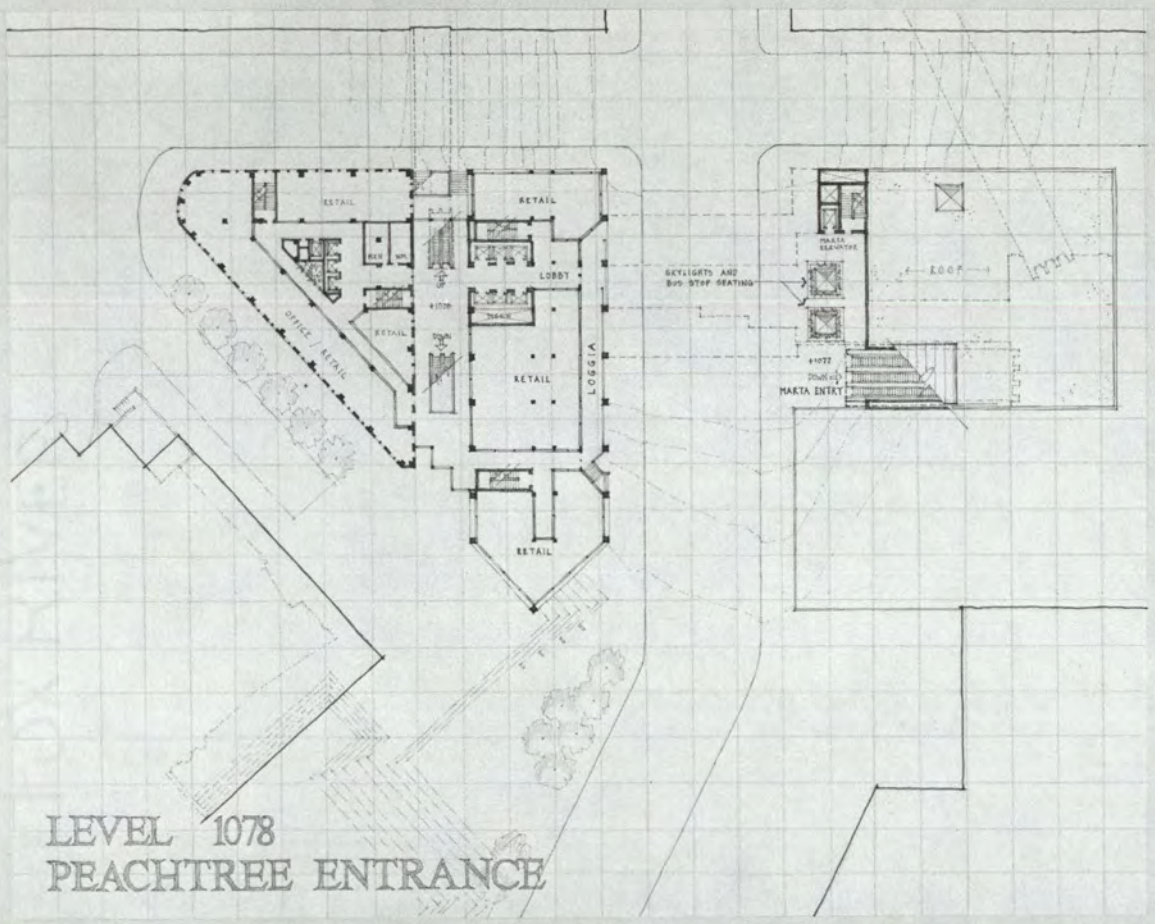


MARGARET MITCHELL SQUARE

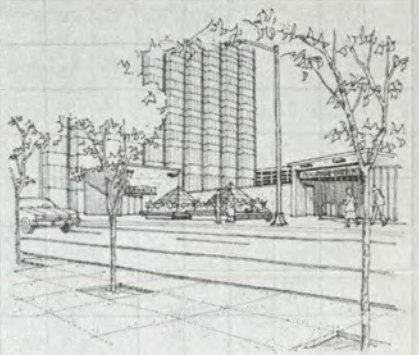
ENTRANCE INTO GALLERIA

FLOOR PLAN

0 25 50 100



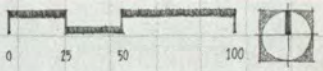
LEVEL 1078
PEACHTREE ENTRANCE

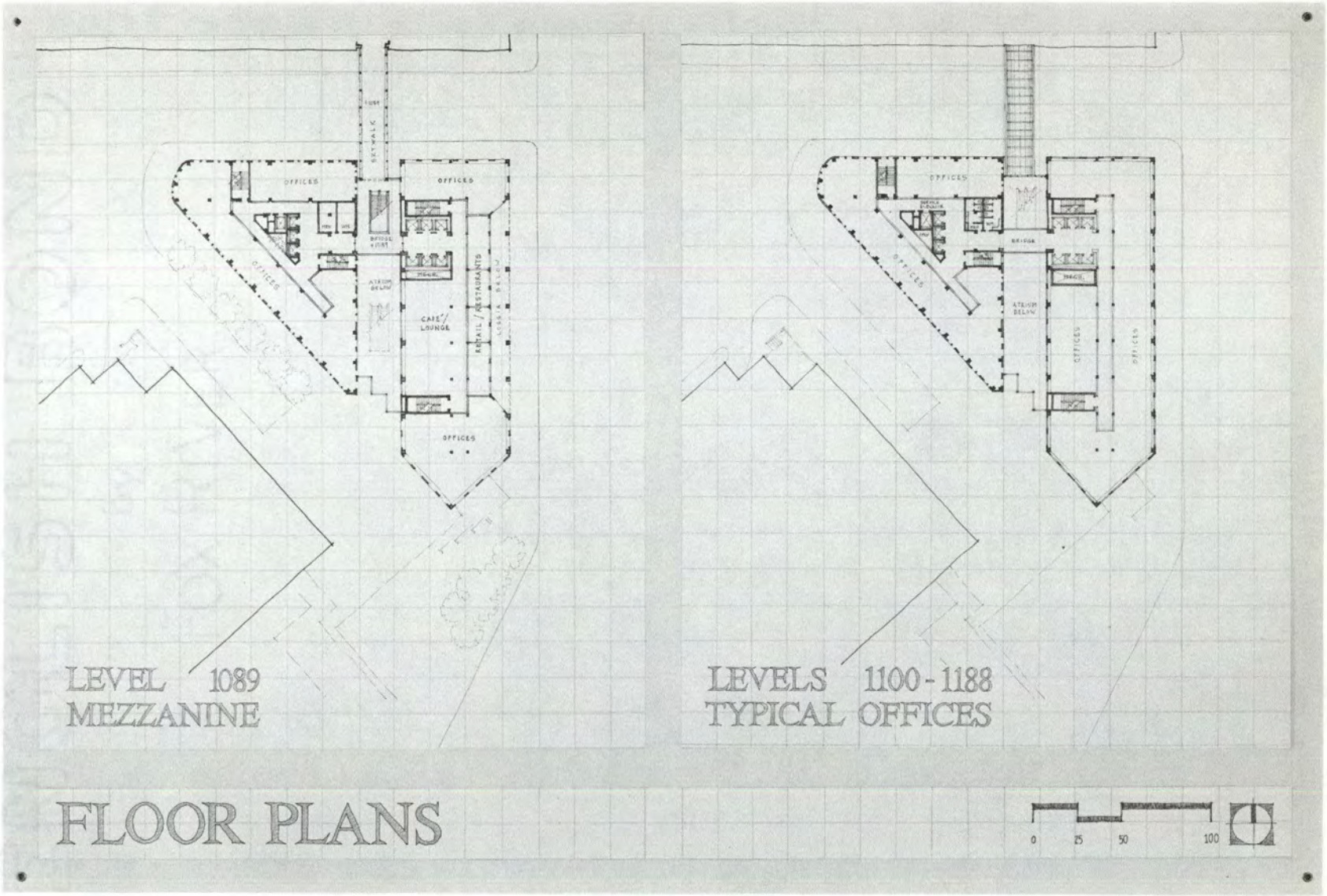


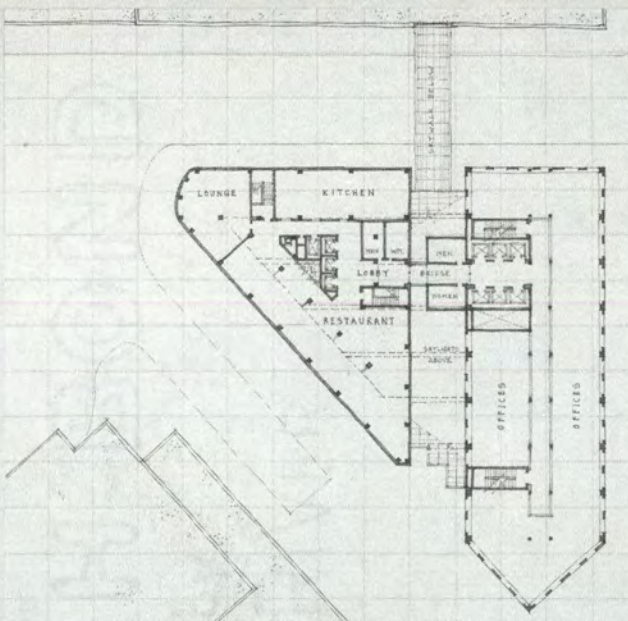
MARTA SEATING · SKYLIGHT

CARNEGIE WAY PEDESTRIAN ST.

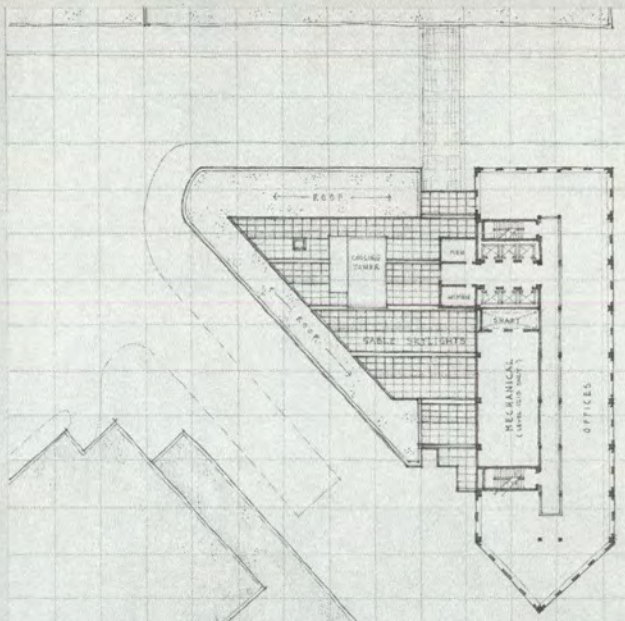
FLOOR PLAN




OFFICES
OFFICES
OFFICES
CAFE/ LOUNGE
RETAIL / RESTAURANTS
OFFICES
OFFICES
OFFICES
OFFICES
OFFICES
BRIDGE
ATRIUM BELOW
LEVEL 1089
MEZZANINE
LEVELS 1100 - 1188
TYPICAL OFFICES
FLOOR PLANS
0
25
50
100

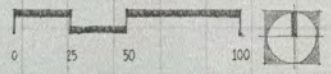


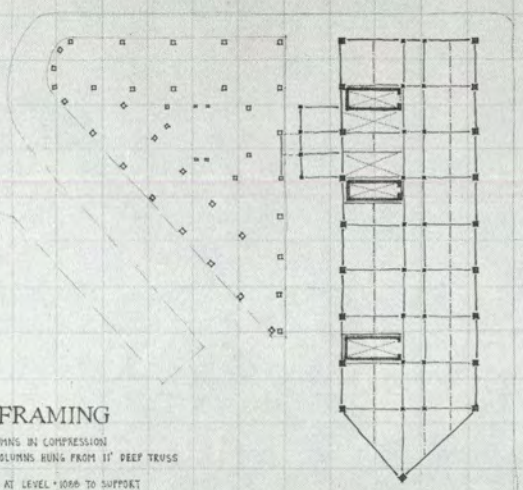
LEVEL 1199
ROOF RESTAURANT



LEVELS 1210-1320
ABOVE CARNEGIE

FLOOR PLANS





- STEEL FRAMING

PERIMETER COLUMNS IN COMPRESSION
INNER TENSILE COLUMNS HUNG FROM 11' DEEP TRUSS AT ROOF LEVEL
TRANSFER BEAM AT LEVEL +1066 TO SUPPORT CANTILEVERED BATHROOMS ABOVE

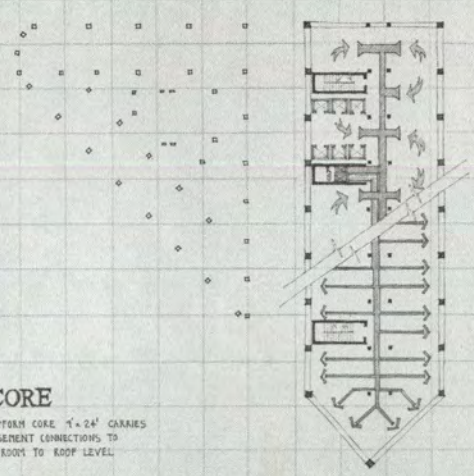
- CELLULAR DECKING

SPANS 13' FROM SPANDREL TO INTERMEDIATE JOISTS TO BEAM
CELLS OPEN TO HORIZONTAL MECHANICAL SPINE

- SLIPFORM CORES

3 CORES GIVE LATERAL BRACING TO STEEL FRAME

STRUCTURAL FRAMING



- SERVICE CORE

A SINGLE VERTICAL SLIPFORM CORE 9'x 24' CARRIES ALL SERVICES FROM BASEMENT CONNECTIONS TO MID-LEVEL MECHANICAL ROOM TO ROOF LEVEL COOLING TOWER.

- SERVICE SPINE

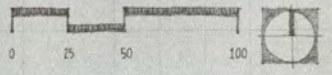
HORIZONTAL SHAFT CARRIES ALL SERVICES FROM VERTICAL CORE TO EQUAL DISTRIBUTION THROUGHOUT FLOOR PLAN ON 4'-6" MODULE.

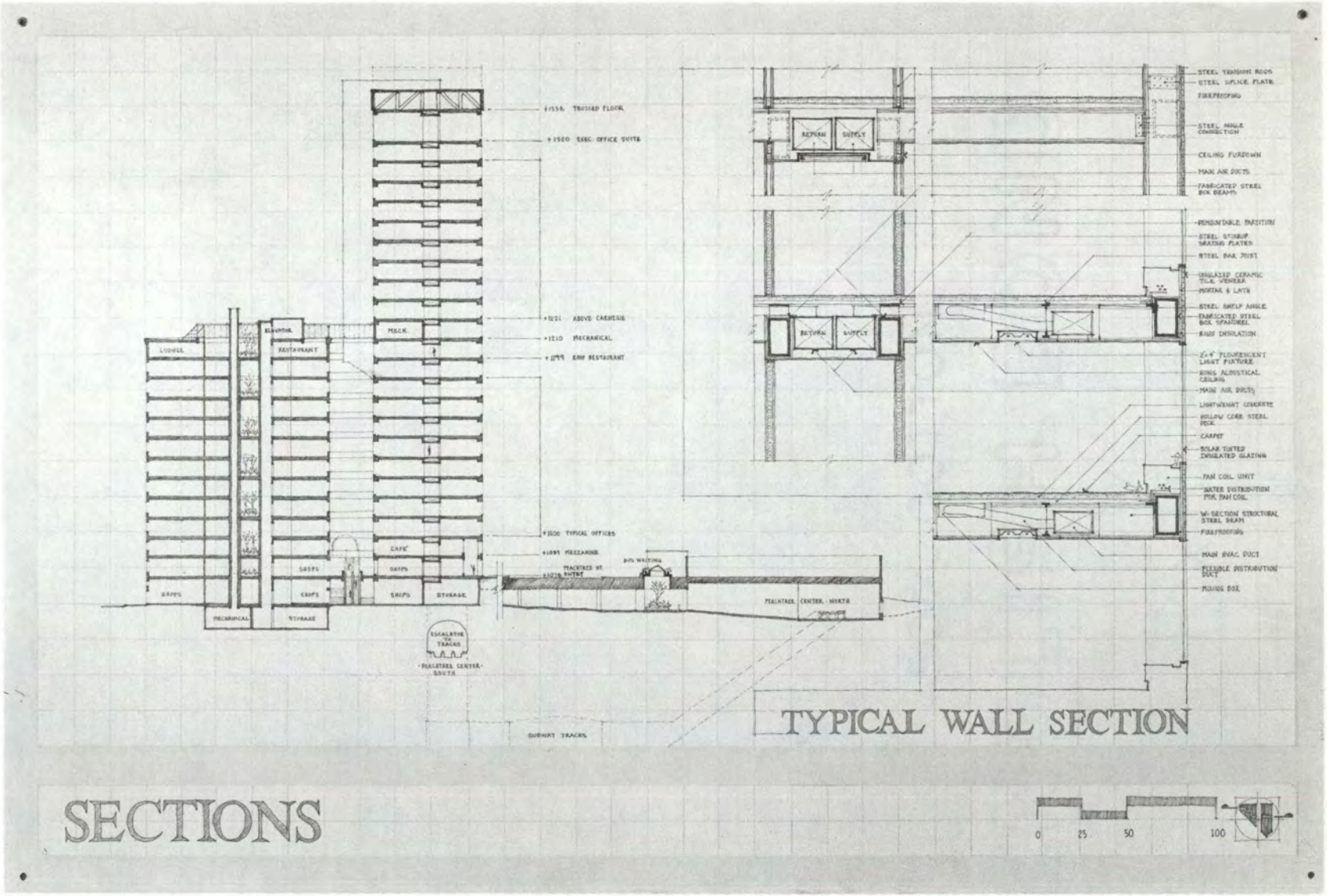
- FAN COILS

FLOOR MOUNTED WINDOW UNITS, INDIVIDUALLY CONTROLLED

HVAC DISTRIBUTION

BUILDING SYSTEMS

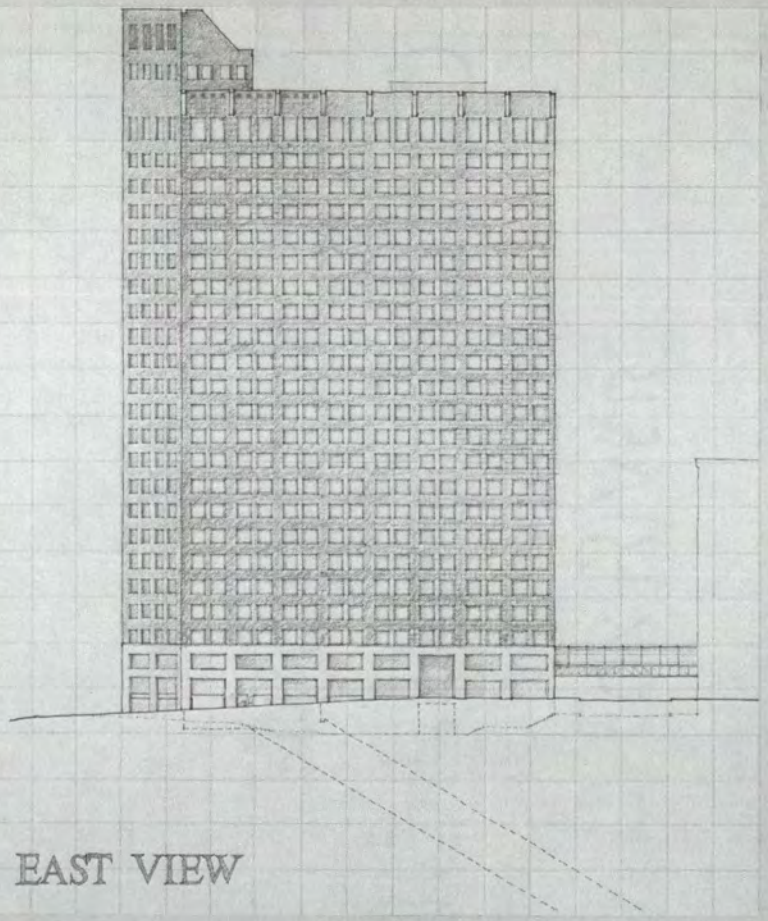




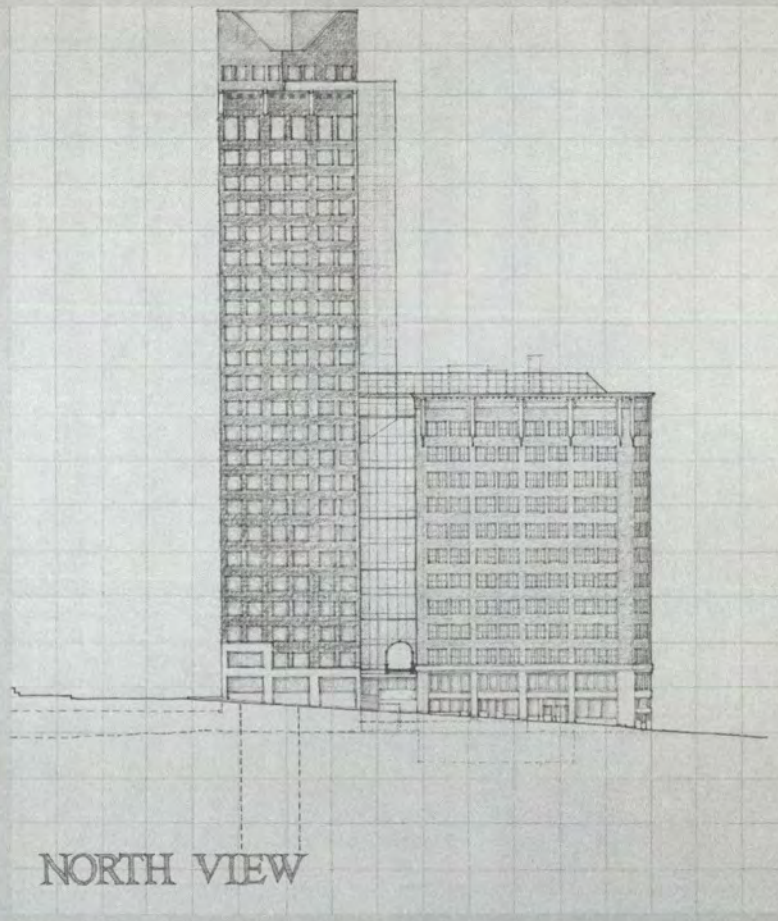
TYPICAL WALL SECTION

SECTIONS

0 25 50 100

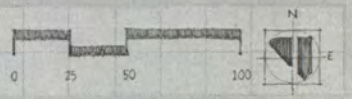


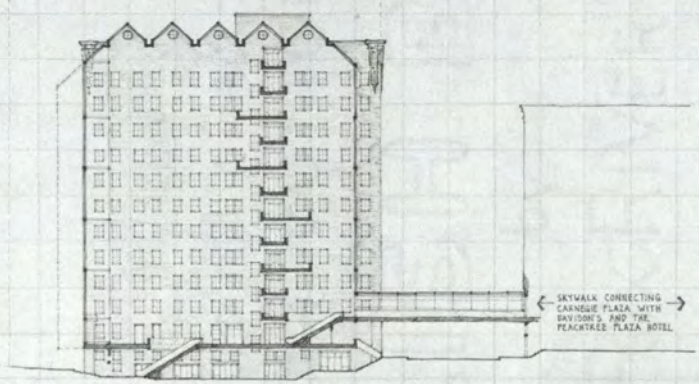
EAST VIEW



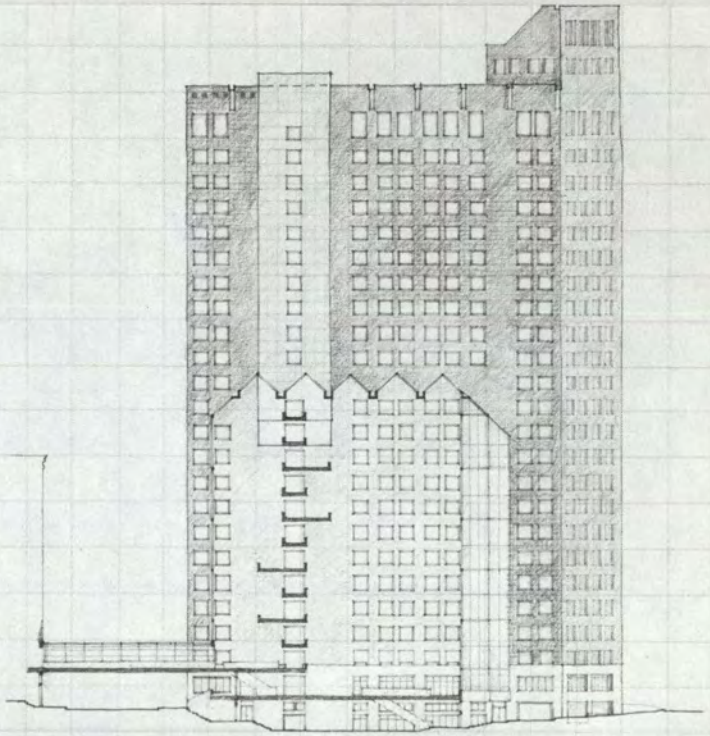
NORTH VIEW

ELEVATIONS



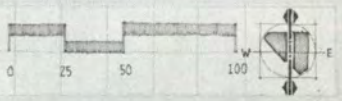


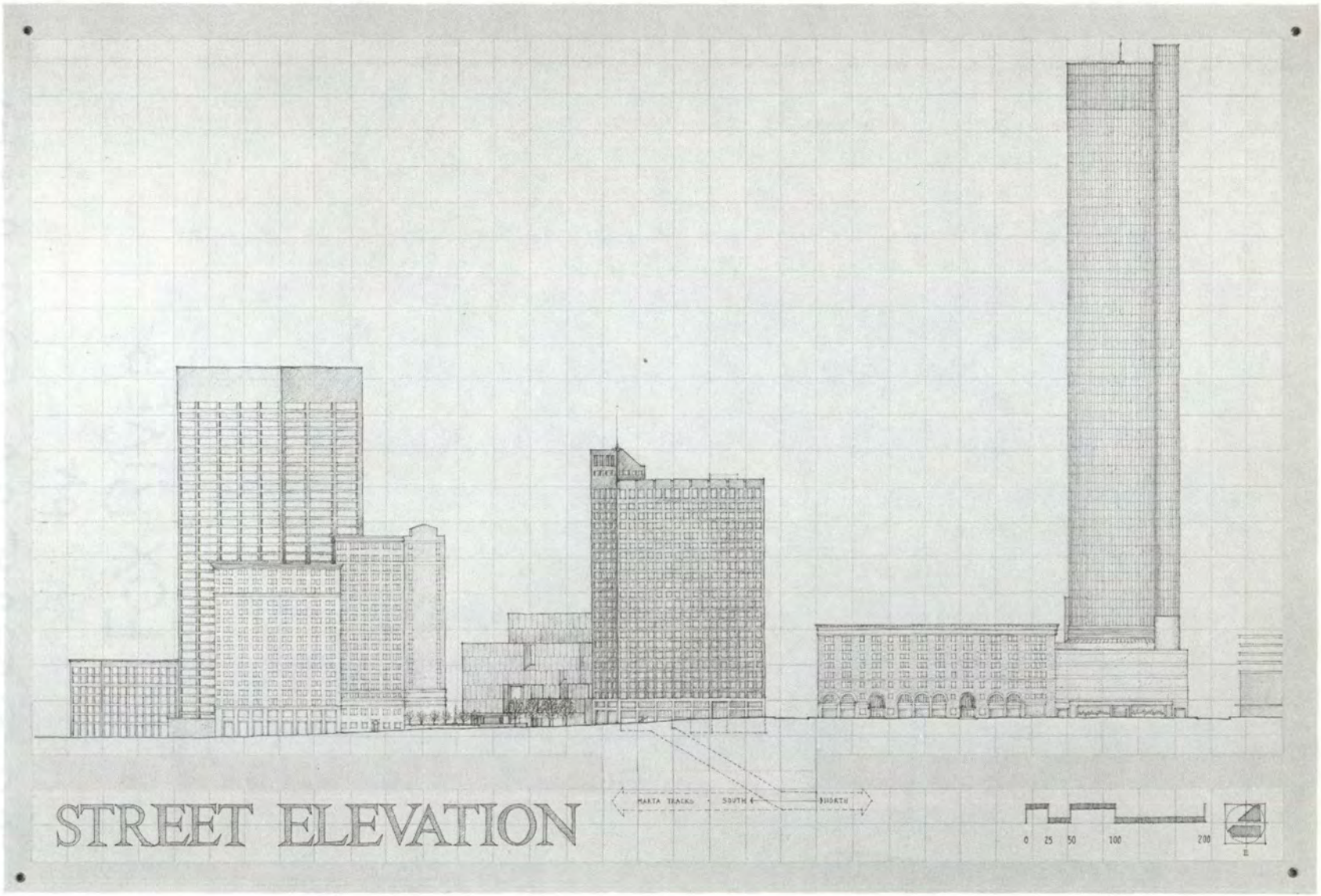
EAST VIEW



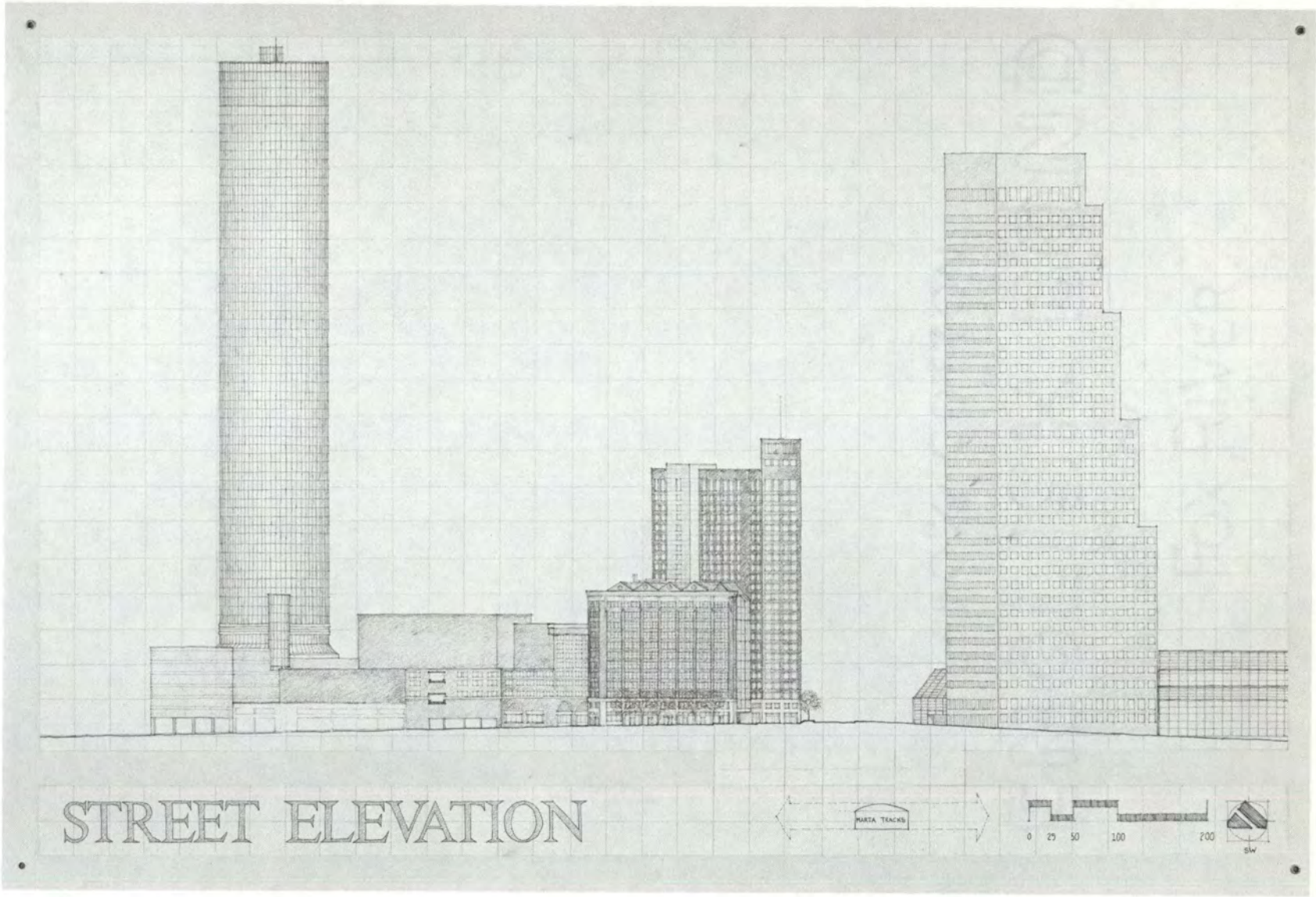
WEST VIEW

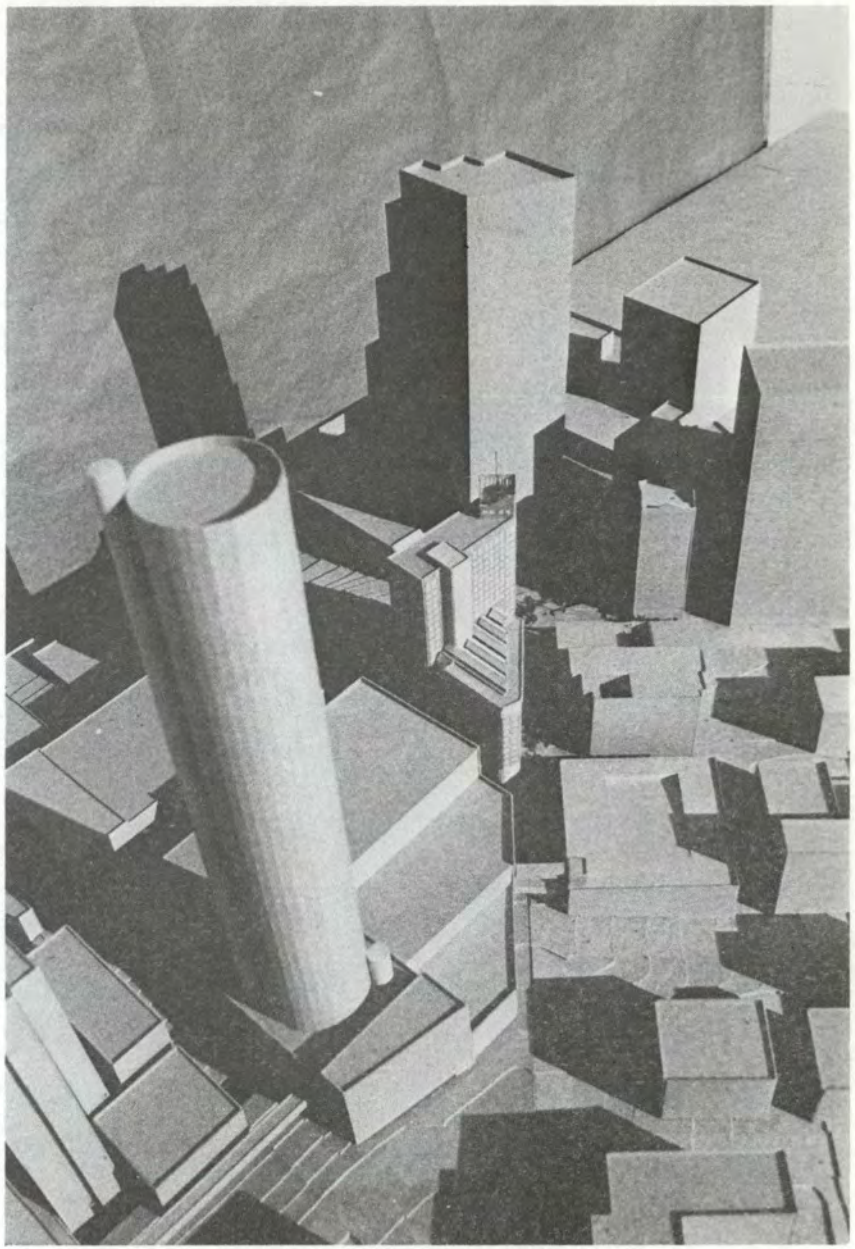
ATRIUM SECTIONS

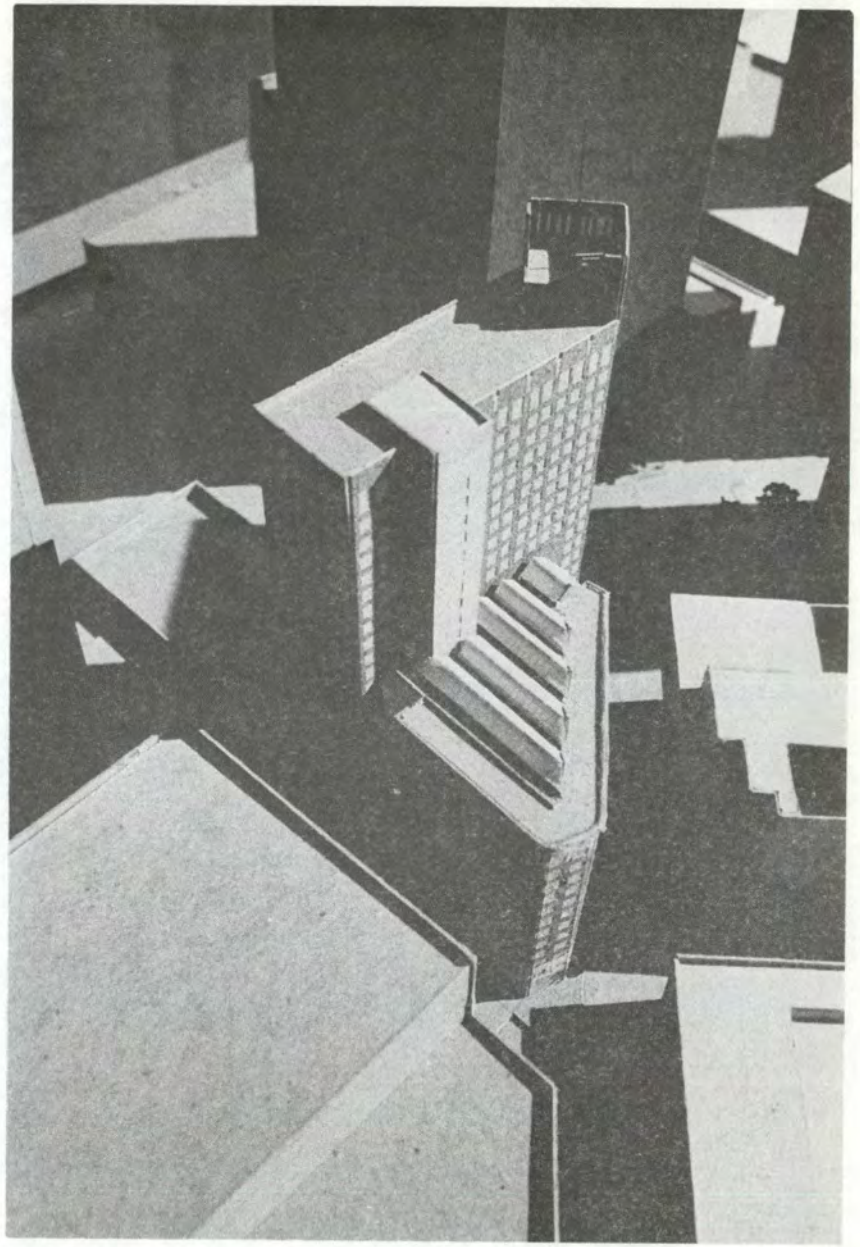


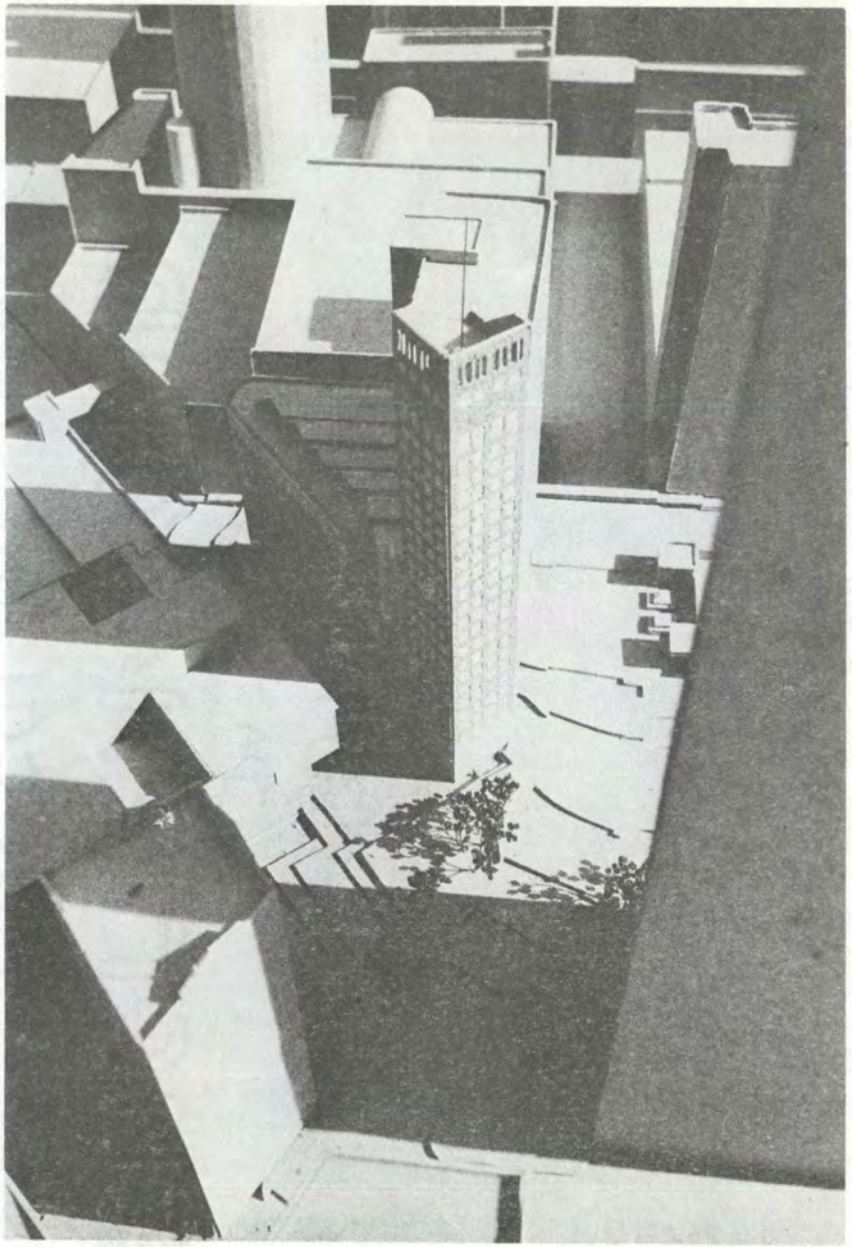


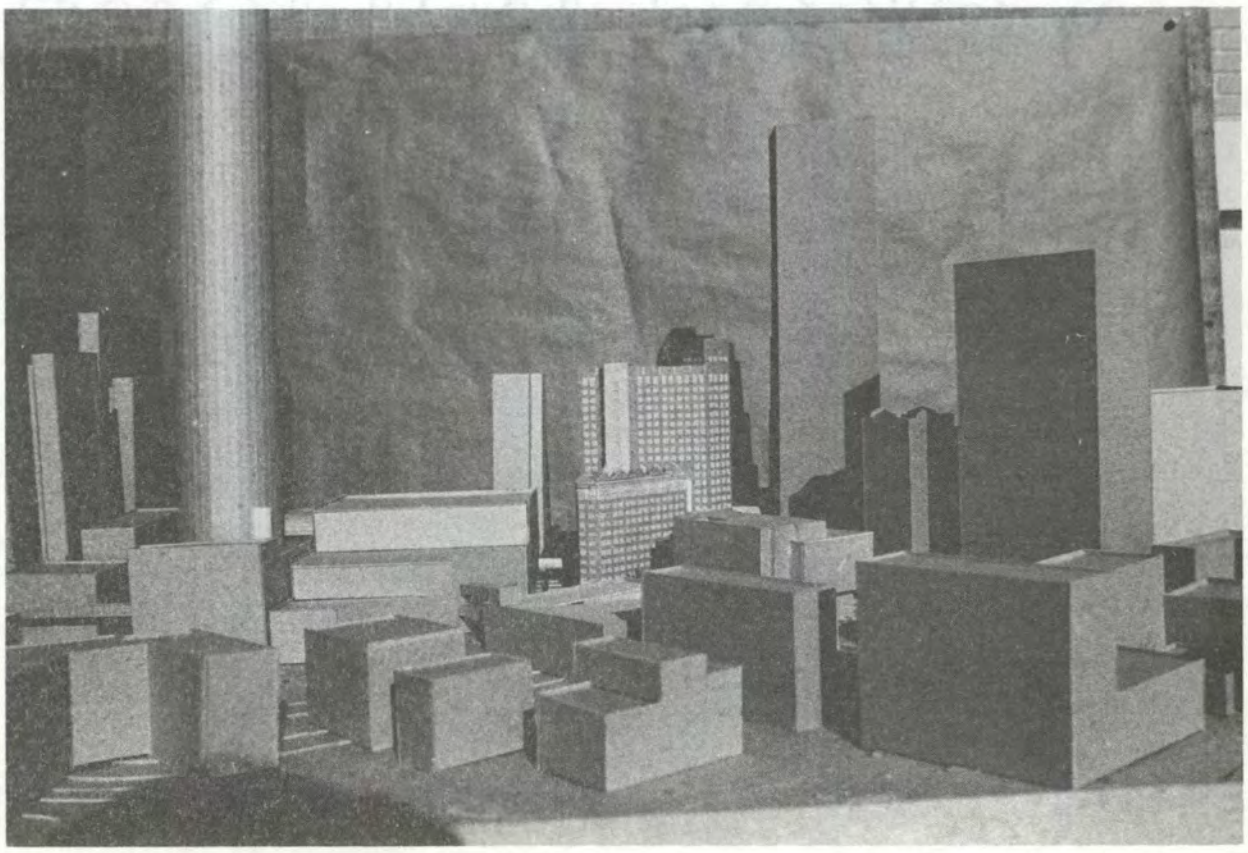
STREET ELEVATION


STREET ELEVATION
MARTA TRACKS
0 25 50 100 200
SW









RESOURCES

FOOTNOTES

1) CAP Handout: Population & Housing

2) Downtown U.S.A.: "Atlanta" p.201

3) ibid. p.203

4) ibid. p.203

5) ibid. p.205

6) ibid. p.203

7) ibid. p.203

8) ibid. p.205

9) ibid. p.203

10) CAP Handout: Future Changes in Fairlie-Poplar

11) Downtown U.S.A.: "Atlanta" p.206

12) ibid. p.207

13) ibid. p.215

14) ibid. p.215

15) Williford, Wm. Peachtree Street Atlanta. p.12

16) Hecksche, August. Open Spaces. pp.57-58

17) Downtown U.S.A. : "Atlanta" p.217

18) CAP Handout: Office Space

19) CAP Handout: Recent Changes in Fairlie-Poplar

20) Business Atlanta. February 1983
"Downtown's Retail Dilemma" p.52

21) CAP Handout: Recent Changes in Fairlie-Poplar

22) Farr, Finis. Margaret Mitchell of Atlanta. p.78

23) Watters, Pat. Coca Cola: An Illus. History. p.62

24) CAP Handout: Historic Sites

25) Georgia-Pacific Handout: Leasing Information

26) Arch. Record. "Atlanta Public Library". pp.83-89

27) CAP Handout: Recent Changes in Fairlie-Poplar

28) CAP Handout: Transportation

29) MARTA Plans for Station N1. dwgs.

30) Interview: Mr. Bruce Henry, MARTA. Mar.27, 1983

31) CAP Handout: Recent Changes in Fairlie-Poplar

32) Interview: Mr. J. Heath, Mar.27, '83
Atlanta's City Planning Department

33) CAP Handout: Vehicular Movement

34) Interview: Mr. J. Heath, Mar.27, '83
Atlanta's City Planning Department

35) Georgia-Pacific Handout: Leasing Information

36) CAP Handout: Carnegie Building

37) CAP Handout: Historic Sites

38) Interview: Mr. P. Query, Ackerman Assoc. Feb.20, '83

39) CAP Handout: Winecoff Building

40) Interview: Mr. J. Heath, Mar.27, '83
Atlanta's City Planning Department

41) Atlanta City Code 1980

42) CAP Handout: Office Space

43) Interview: Mr.P.Query, Ackerman Assoc. Feb.20,1983

44) ibid.

45) Ripnen,K. Off.Bldg.& Off.Layout Planning. p.64

46) Green,Lois. Interiors Book of Offices. p. 2

47) Ripnen,K. Off.Bldg.& Off.Layout Planning. p.64

48) ibid. p.65

49) Graphic Standards , "Elevators". p.762

50) Atlanta Building Code 1980

51) Green,Lois. Interior Book of Offices. p.2

52) Shoskes,Lila. Space Planning. p.113

53) Ripnen,K. Off.Bldg.& Off.Layout Planning. p.65

54) Bond,Gordon. Office Buildings. p.237

55) Miller,Michael. Building Design & Construction
"Trade-Offs in Building Design" pp.58-60

56) Downtown U.S.A. "Atlanta" p.205

57) Interview: Mr.J.Heath, Mar.27,1983
Atlanta's City Planning Department

58) CAP Handout: Retail Trade

BIBLIOGRAPGHY

Bond,Gordon. Office Buildings. New York : Prentice-Hall , 1961

Brolin,Brent. Architecture in Context.
New York: Van Nostrand-Reinhold , 1980

Egan,M.David. Concepts in Building Firesafety.
New York: John Wiley & Sons , 1978

Farr,Finis Margaret Mitchell of Atlanta.
New York: Wm.Morrow & Co. , 1965

French,Jere Stuart. Urban Space.
Dubuque,Iowa: Kendall Hunt Co. , 1978

Geist,Johann F. Arcades.
Cambridge,Mass. : MIT Press , 1983

Green,Lois. Interiors Book of Offices.
New York : McGraw-Hill , 1959

Grinter,Linton E. Theory of Modern Steel Structures.
New York : The MacMillian Co. , 1962 , 3rd Ed.

Halprin,Lawrence. Cities.
Cambridge,Mass. : MIT Press , 1972

Heckscher,August. Open Spaces: The Life of American Cities
New York : Harper-Row , 1977

Hornbostel,Caleb. Materials & Methods for Contemp. Const.
New Jersey : Prentice-Hall Inc. , 1982 , 3rd. Ed.

Ripnen,Kenneth H. Office Bldg. & Office Layout Planning.
New York : McGraw-Hill , 1960

Schmertz. Office Building Design.
An Architectural Record Book
New York : McGraw-Hill , 1975

Shoskes, Lila. Space Planning.
New York : McGraw-Hill , 1976

ed. Thompson, Elisabeth K. Recycling Buildings.
An Architectural Record Book
New York : McGraw-Hill , 1977

Watters, Pat Coca Cola : An Illustrated History.
New York : Doubleday , 1978

Atlanta
New York : Smith & Durrell , 1942

Williford, Wm. Bailey Peachtree Street Atlanta.
University of Georgia Press , 1962

Planning and Design of Tall Buildings
"Tall Building Systems and Concepts", Vol. IA
New York: American Society of Civil Engineers, 1972

Mixed-Use Developments : "New Ways of Land Use"
Wash., D.C. : Urban Land Institute , 1976

Built to Last : "Natl. Trust for Historic Preservation"
Massachusetts Department of Community Affairs
Preservation Press , 1977

Downtown U.S.A. : "Atlanta" pp. 201-216
London : Architectural Press , 1978

PERIODICALS

"Zerox Center"
Progressive Architecture, Dec.1980, pp.58-63

"Structuring Tall Buil;dings"
Progressive Architecture, Dec.1980, pp.50-57

"Wainwright Addition"
AIA Journal, Mid-May 1982 , pp. 162-169

"Atlanta Public Library"
Architectural Record, March 1981 , pp.83-88

"Downtown's Retail Dilemma"
Business Atlanta, Feb. 1983 , pp.46-54

"Trade-Offs Considered in Building Design"
Building Design and Construction, Nov.1981, pp.58-60

UNPUBLISHED MATERIAL

Handout Reports on Atlanta's CBD
Central Atlanta Progress
Studies on Various Topics from 1981-1983
- Carnegie Building
- Winecoff Building
- Office Space
- New Construction
- Historic Sites
- Hotel Facilities
- Convention Centers
- Retail Trade
- Future Progress
- Crime
- Population and Housing
- Future Changes in Fairlie-Poplar
- Transportation
- Vehicular Traffic

Sales Brochure, Leasing Information
"The Tower at Georgia-Pacific Center"
Cushman & Wakefield , Atlanta

Documents : Plans, Details, Sections
Peachtree Center Station (N1)
Metropolitan Atlanta Rapid Transit Authority (MARTA)

INTERVIEWS

Mr. Rob Miller , Rabun,Hatch,Dendy-Architects : Atlanta
January 24, 1983
February 27,1983

Mr. Paul Query , Ackerman Associates : Atlanta
February 27,1983
March 19, 1983
April 30, 1983

Mr. Bruce Henry , MARTA Planning Department
April 30, 1983

Mr. John Heath , Atlanta City Planning Department
March 19, 1983

Mr. Larry Fonts , V.P. , Central Atlanta Progress
March 19, 1983
September 12, 1983