BUILDINGS OF COMPROMISE:

Combining New Construction and Adaptive Reuse in Downtown Boston

by

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A. B., Architecture
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(1977)

Submitted in partial fulfillment
of the requirements for the Degrees of

MASTER OF ARCHITECTURE
and
MASTER OF CITY PLANNING

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
February 1982

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January 14, 1982

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ABSTRACT

The building of compromise is a recently emerging building type which combines high rise new construction with adaptive reuse and preservation. The design process for producing them is a highly political and generally controversial one. Because there have been so few of them, we are not yet able to integrate intelligent evaluations of alternative approaches to compromise with the brokering process between competing interest groups.

The thesis uses 53 State Street, a highly controversial case in downtown Boston, as a vehicle for analysis. Through a three stage feasibility analysis involving physical design, financial analysis, and institutional analysis, an alternative approach to the site is identified. This alternative is then compared to those actually considered in the case, and was found to have been feasible and, according to several criteria, superior to the others.

The thesis then analyzes what adjustments could be made in the public and private domains to allow such a full range of alternative schemes to be identified, explored, and considered in the brokering process. Possible improvements are identified, and include reduction of risk levels through information exchange, structural change within the city regulatory agencies, and change in the financial parameters governing rehabilitation and new development.

ACKNOWLEDGEMENTS

Without the generous assistance of many individuals, this document would never have been completed.

The author wishes to thank the staff of the Boston Landmarks Commission, the development team at Olympia and York, and the Beacon Companies, for their help in assembling information on the cases.

My thesis advisor, William Porter, provided insightful and timely direction in an economic but enormously useful manner. My two other readers, Tunney Lee and Miller Blew, besides contributing greatly to this work, are responsible for my ability to conduct several major portions of the analysis.

Linda Laplante, of the Department of Architecture, provided just the right combination of patience and a sense of urgency to help me complete the document itself.

And finally, warmest thanks to L.B.T.

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CHAPTER 1: INTRODUCTION

One of the perennial conflicts in American urban design and land development is the one between developer and preservationist. The developer is often caricatured as a greedy, short-sighted character who blinks dollar signs and will bulldoze anything to win high financial returns. The preservationist, by contrast, is stereotyped as the self-appointed curator of the city as museum, the nostalgic academician who throws himself in front of the developer's bulldozer to protect the past from future evil.

In recent years, however, the interests of these two traditionally opposed interest groups have merged. During the 1970's, particularly in the northeastern United States, the adaptive re-use of older structures became acceptable, profitable, and fashionable. This segment of the design and development world has matured to a $40 billion a year enterprise.[1] Indeed, the reuse movement has grown so in depth and breadth that it is now possible to discern sub-types of adaptive re-use, to develop measures of success for judging them, and to devise regulatory

frameworks for guiding their production.

One distinct trend within adaptive re-use in older central cities is the development of the "hybrid building". The "hybrid" building is an ensemble of structures or portions of structures of disparate histories, styles, materials, scales, and heights developed on a single site by a single owner. The hybrid building is a literal collage of old and new, partially high rise and partially low-rise. It is characterized by powerful contradictions in architectural style, and most important, urban design objectives and development economics. Members of the architectural press have called them "piggybacks or shoe-horn buildings"[2] and "prosthetic architecture."[3]

In fact, the hybrid building is a building of compromise. The compromise may be the end product of competition between interest groups each achieving partial success on the same site, as exemplified by the 53 State Street development in downtown Boston. It can also represent an internal compromise between conflicting forces acting on a single owner. The

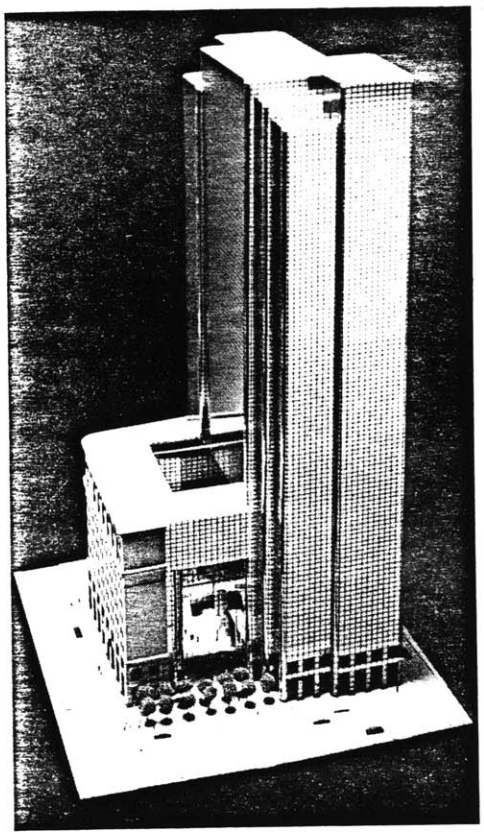


Exhibit 1-1

53 State Street
Boston, MA

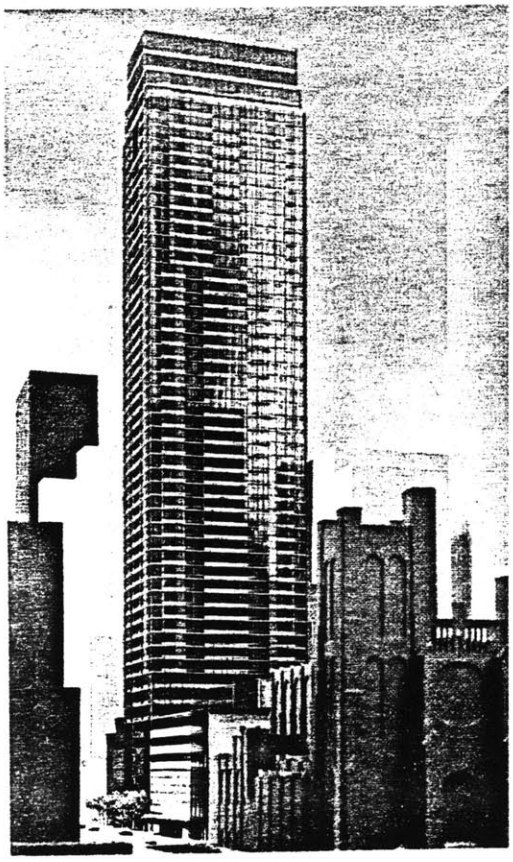


Exhibit 1-2

Museum of Modern Art
N.Y., N.Y.

condominium addition to the Museum of Modern Art can be interpreted as such a compromise; one between the Museum's interest in preserving its institutional integrity (a purveyor of fine design and urban amenity) and its very real need to be financially self-sustaining (Exhibit 1-1, 1-2).

The writer believes the trend toward these buildings of compromise may represent new potential for balancing between competing interests for old and new architecture, and possible solutions to difficult conflicts between development pressure and preserving urban amenity. Nearly all cities have sites currently occupied by older low rise structures which may be subjected to development pressure for more intensive (denser, taller, and more efficient floor plans) use. Traditionally the futures of these sites has been determined by a win-loss game between developer and preservationist; the hybrid building type opens other possibilities. In the writer's view, the new building of compromise, because of its convenience in resolving urban design and development disputes, may rapidly become the expedient favorite of preservationist, developer, and local official alike.

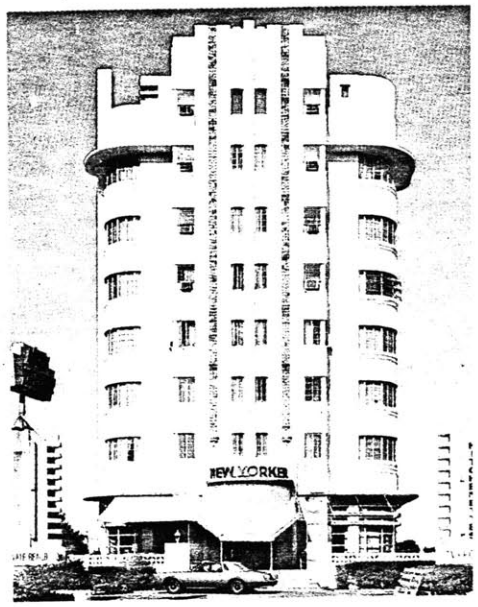


Exhibit 1-3

New Yorker Hotel
Miami, Florida

original structure
demolished, January 1931

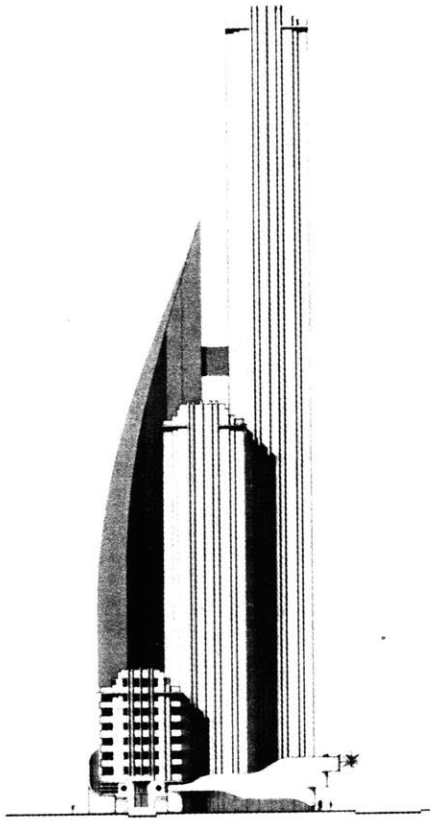


Exhibit 1-4

Compromise Scheme

The making of a building of compromise involves a political as well as a design process. Inevitably, these events are highly controversial, and solutions to a given site may be more representative of the balance of power between participants than any design intentions.

The thesis uses 53 State Street, a major current development project on a prime downtown site in Boston, Massachusetts, as an vehicle for examining the process of making a building of compromise. In this highly controversial case, many participants and observers were left wondering if the eventual solution represented much more than a "lowest common denominator solution", and whether or not all available alternatives were seriously considered. This thesis will attempt to shed light on both these issues as a way of furthering our understanding of the general set of issues governing buildings of compromise.

The retrospective analysis in Chapter 2 establishes the factual account of the process which led to the compromise approach to developing the site. Chapter 3, in the projective mode, identifies different

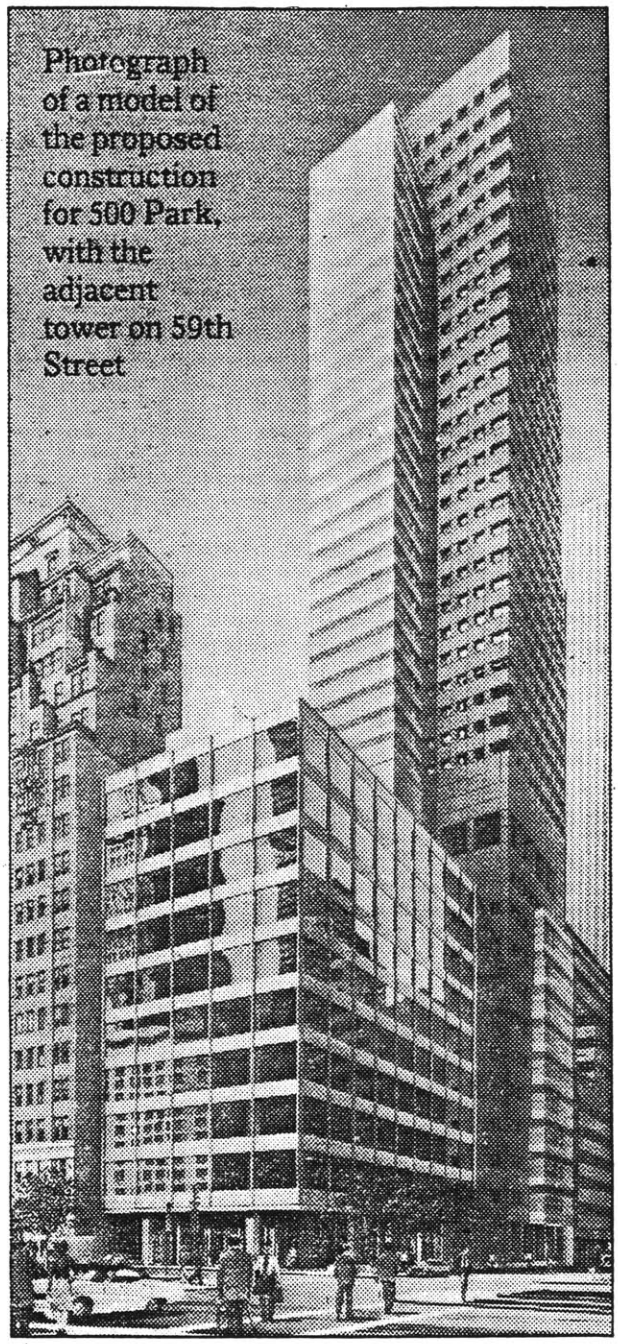


Exhibit 1-5

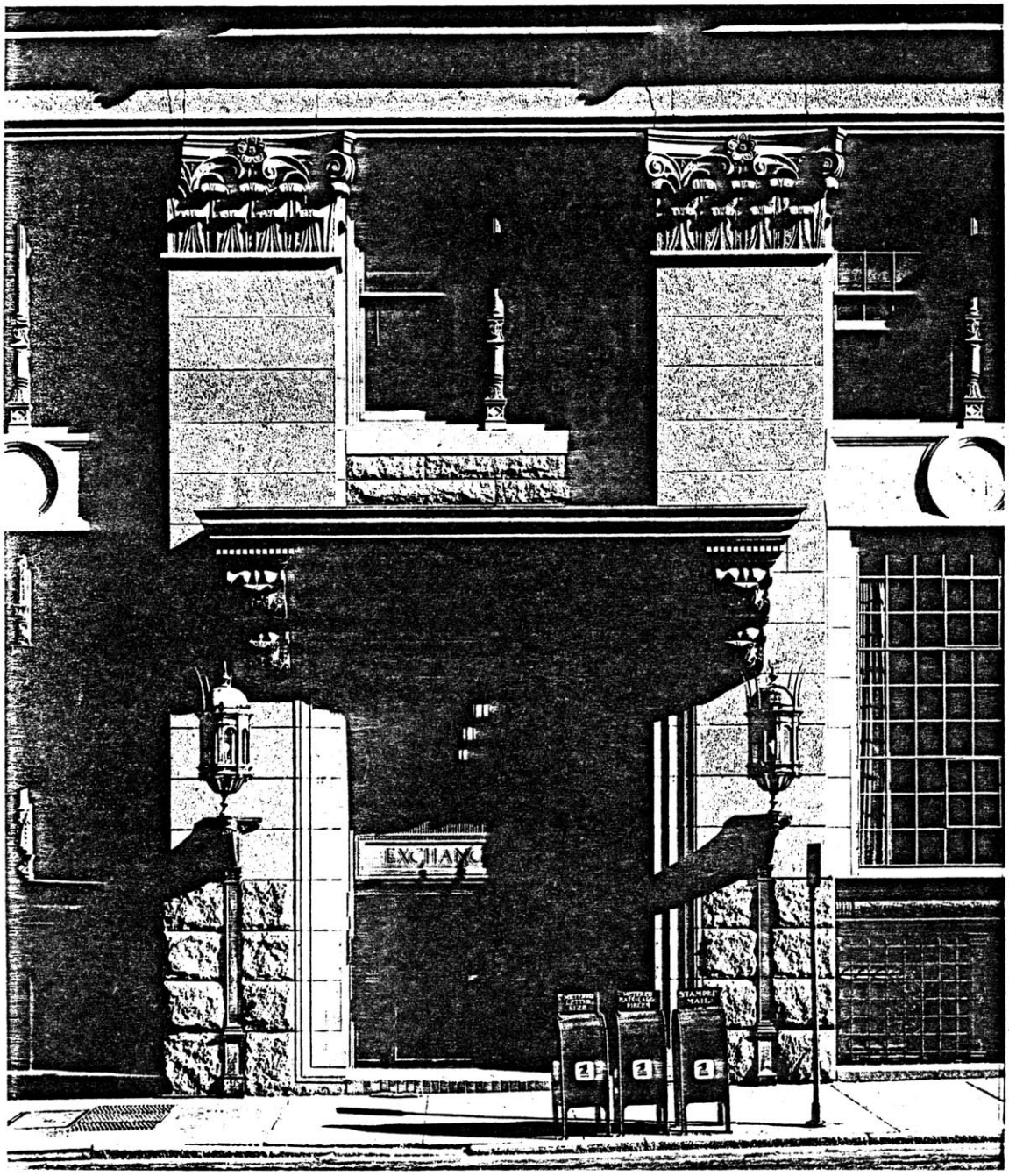
Foreground building by Skidmore, Owings, and Merrill, 1960.

High-rise addition to rear proposed 1981.

operating assumptions for the site and conducts a three-stage feasibility analysis for alternative development programs. First, an illustrative alternative development approach is presented investigating the physical feasibility of alternative schemes for the site. Next, this scheme is analyzed for financial feasibility, and compared to the range of alternatives actually identified during the case. This expanded range of alternatives is then compared and evaluated. Chapter 4 examines the political feasibility of the alternative scheme, and is the third stage of the feasibility analysis. An analysis of the development process is presented, offering explanations for the failure of the process to consider the full a range of development alternatives.

In Chapters 5 and 6, these ideas are tested against two analogous cases to the 53 State Street development; The Old Federal Reserve Bank Complex and The United Shoe Machinery Corporation Building, both recent compromise cases in Boston.

Finally, in Chapters 7 and 8, possibilities for change in the private and public domains are identified to improve the process for making buildings of compromise.



53 State Street Entrance

CHAPTER 2

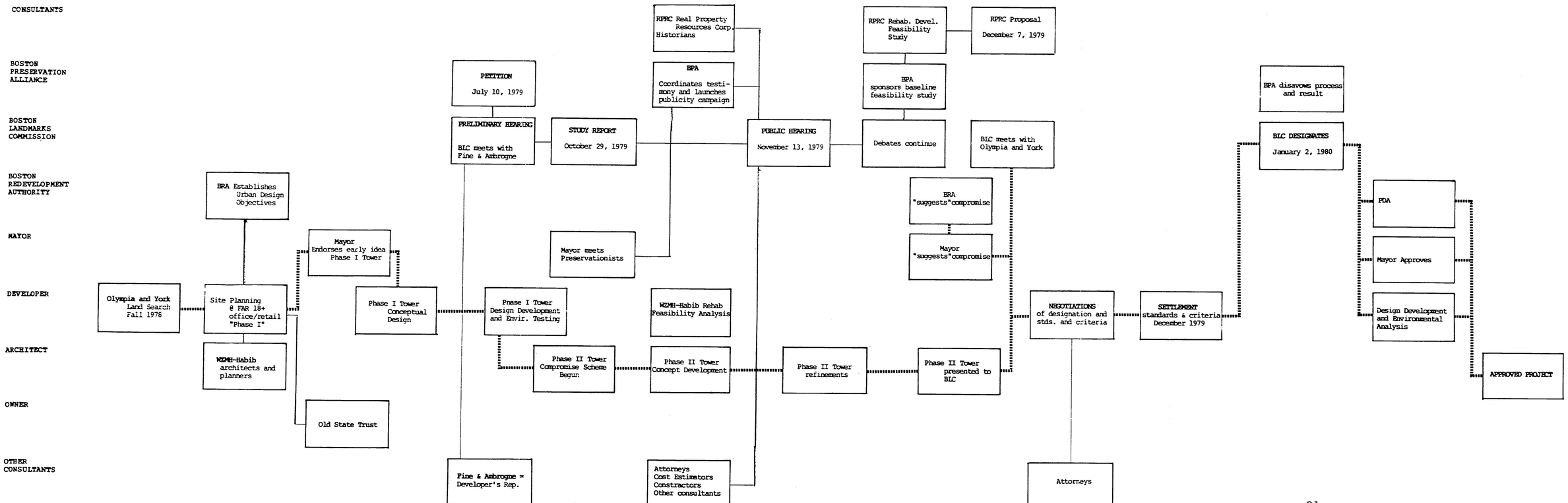
53 STATE STREET: A BUILDING OF COMPROMISE
RECONSTRUCTION OF THE DEVELOPMENT PROCESS

This chapter reconstructs, by way of detailed narrative, the development process for 53 State Street during the landmarks designation proceedings. Through this "storytelling", the reader can become familiar with the problem, the actors, and the rules by which they interected. This understanding is fundamental to the analysis and critique which follows in subsequent chapters. The chronology of events is summarized in Exhibit 2-1, "Development Process Flow Chart".

THE DEVELOPER: BACKGROUND

Olympia and York Developments, Ltd., began in 1955 as a small floor and wall tile importing company in Toronto. Founded by Samuel Reichmann, an Austrian immigrant, and his three sons, the firm first entered the real estate development market in the early 1960's when it developed an industrial and commercial park in the Toronto municipality of York. In 1963, Olympia and York built a data center for Bell Canada, the country's largest telephone utility, who were so

EXHIBIT 2-1: 53 STATE STREET LANDMARK DESIGNATION PROCESS



pleased with the facility that they accepted the firm's proposal to build an office tower in Ottawa. This project was the first in what was to become a huge portfolio of downtown prime office properties. Olympia and York's real estate development operations blossomed. By concentrating on establishing a reputation for quality construction and reliability for delivering projects on time and on budget, Olympia and York soon became known as one of the select group of first class, top notch developers worldwide. In Canada they won commisions from such prestige clients as the Toronto Star (Canada's largest newspapaper) the Bank of Montreal, and the Canadian subsidiaries of Sun Co., Texaco Inc., and Xerox Corporation.

Prospective clients were impressed not only by the company's list of prestige commissions, but also by its unique ability to move decisively without delays. Because Olympia and York is essentially a family-held business (the seven-member board of directors consists of the three brothers, their wives, and their mother) with a very narrow upper management group, corporate decisions are made without the costly and frustrating time delays which clients had come to

expect from its larger, more complex competitors. As well, Olympia and York built a widespread reputation for creative and astute project management. The Reichmanns, for instance, after observing and analyzing construction methods in the U.S. and Canada, built a gigantic temporary people and equipment mover when they constructed First Canadian Place, an office complex in Toronto. This temporary system cost $2 million, but it saved an estimated 1.3 million man-hours of work over conventional construction methods.

In the late 1970's, with their operations soundly established in Cananda, Olympia and York began looking for areas for expansion. Frustrated by the restrained growth and increasing regulatory constraints in Canadian cities at that time, Olympia and York joined several of the largest Canadian developers, including Cadillac-Fairview, Trizec Corporation, and Daon, in looking to the U.S. for development opportunities. These firms believed that their large-scale operations could compete favorably, if not brilliantly, in the U.S. market, which was populated primarily by smaller, more locally-oriented development companies.[1]

The aggressiveness of Olympia and York's entry into the U.S. real estate development market reflected this confidence. Olympia and York became involved in several major American market areas, including Dallas, San Francisco, Denver, and Los Angeles. By far the most dramatic move, however, was in the country's most competitive and symbolic market -- New York City. In September 1977 Olympia and York purchased eight prime office buildings in downtown Manhattan, housing blue-chip tenants such as ITT, American Brands, Sperry-Rand, and Harper & Rowe, and overnight became one of New York's largest commercial real estate land-owners.[2]

In late 1978 Olympia and York became interested in developing in Boston. The city apparently first caught the attention of one of the Reichmann brothers when he came to visit a daughter at nearby Brandeis University. Reportedly, Reichmann instinctively sensed the burgeoning growth potential in the city's downtown, and sent, after returning to Toronto, a team to investigate sites in the central business district for a possible office building development.[3]

ECONOMIC CONDITIONS

Whatever the reason for Reichmann's initial interest in Boston, there is no doubt that his instincts about the city's development prospects were correct. His reconnaissance team found the city ripe for development of all kinds, particularly commercial office space, in late 1978. The Boston Redevelopment Authority (BRA), had published a series of reports documenting and projecting a real estate development boom for the city. In "A Decade of Development in Boston", a comprehensive report on development in the public and private sectors from 1968 to 1978, BRA Director Robert Ryan wrote:

> "The achievements of the 1968-78 decade provide a solid base for very substantial advances over the next ten years. An impressive array of public and private investment projects are already in the pipeline, and the prospects and potential for the future are oustanding....In response to the scarcity of new office space, the rise in rent levels, and the expansion plans of firms occupying Boston's office buildings, more than eight million square feet of new office construction is anticipated over the next decade."[4]

Indeed, Boston's office market had begun to blossom after many decades of relatively low productivity. The decade from 1968-78 had been the most productive,

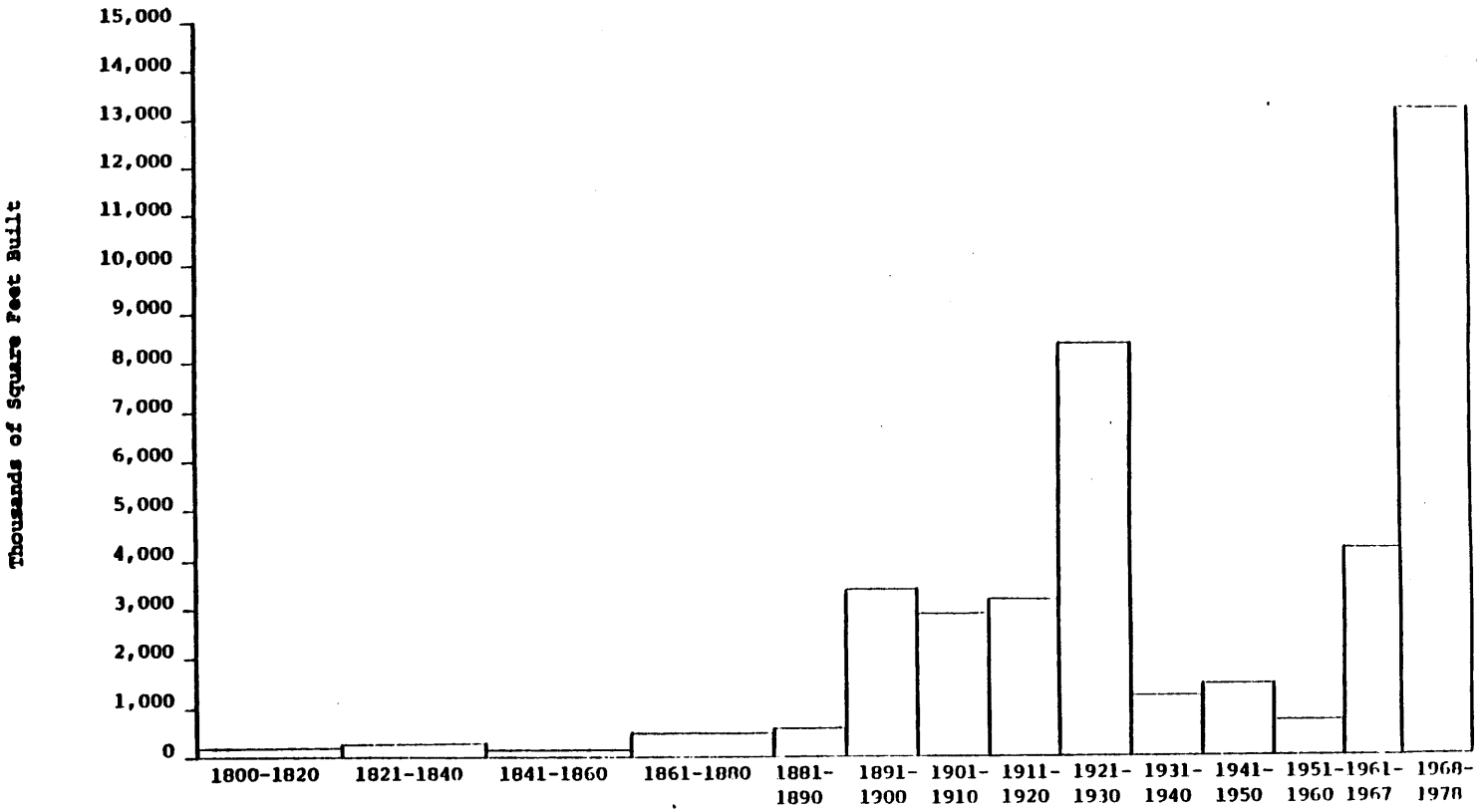
in terms of square footage of new construction and rehabilitations, in the city's history. Approximately 13.2 million square feet of new space, and one-half million of converted space had been added during this time period.[5] Aside from a temporary softness in the market during the 1975-77 recession, office vacancy remained low.[6] This data is represented in a bar chart in Exhibit 2-2.

Exhibit 2-3 shows that the 1977 peak in vacancy rate occurred in 1977, and was a temporary condition due to overbuilding in the downtown core. Sixty State Street, completed in 1977, a 38-story tower with a prime location in the heart of the government center/ financial district, was a "barometer" for these changing market conditions. After early rent-up difficulties, the project made a dramatic recovery and boasted a 97% rent-up at the highest rents in the city at the time it was available for occupancy.

The BRA's forecast for the late 1970's and early 1980's was highly optimistic. Based on an office tenant survey conducted in 1977, the BRA projected an annual absorption rate of approximately 600,000 square

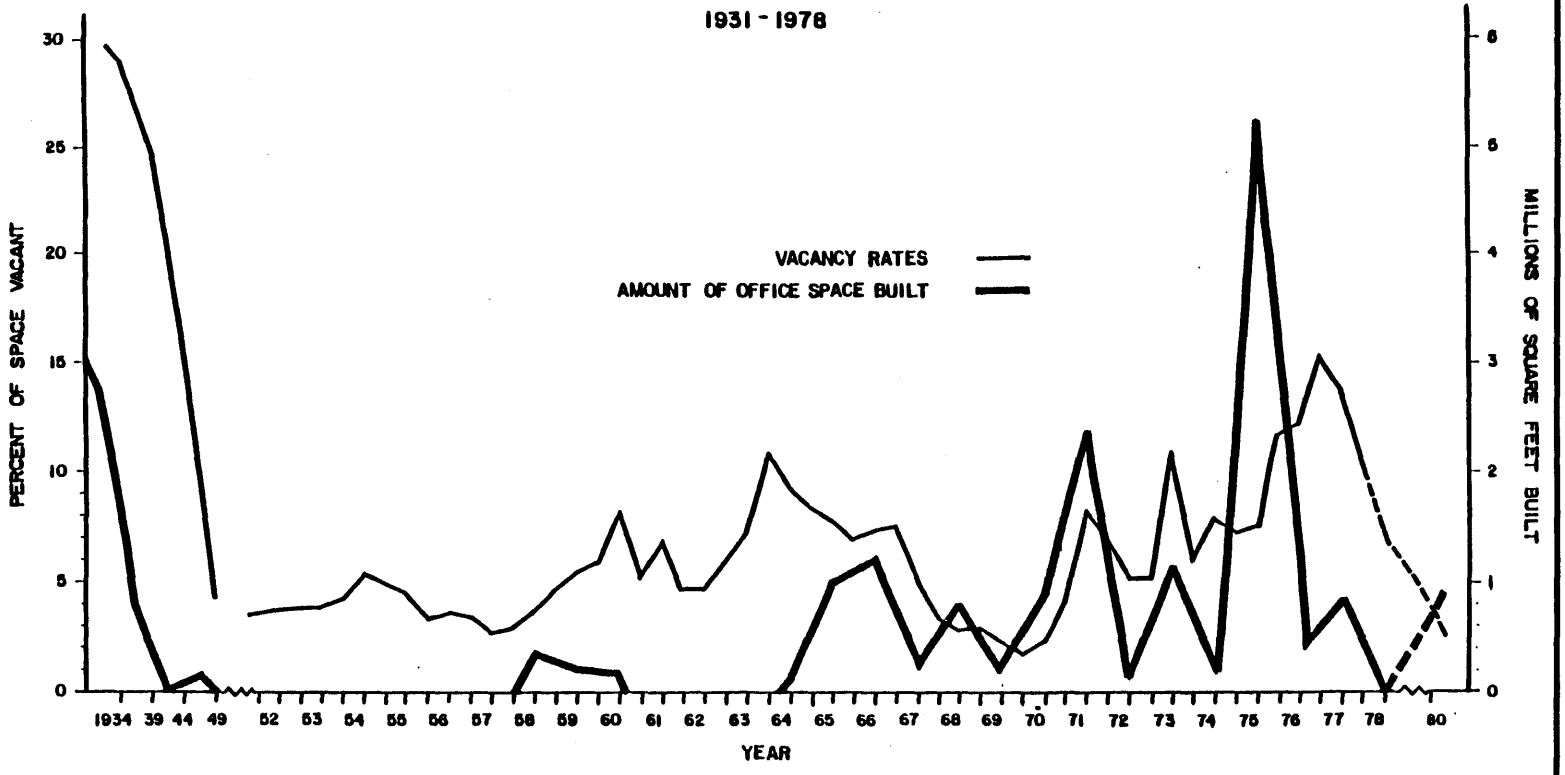
Exhibit 2-2

DOWNTOWN BOSTON'S CURRENT OFFICE STOCK
BY DECADE OF COMPLETION
(In Thousands of Square Feet)



Source: Office Industry Survey (Office Space Inventory), Michael Matrullo, BRA Research

Exhibit 2-3



SOURCES: VACANCY RATES - BOMA OFFICE VACANCY SURVEYS; 1934 THROUGH 1978
AMOUNTS OF OFFICE SPACE BUILT - THE OFFICE INDUSTRY SURVEY VENTORY & INTERIM REPORT), MICHAEL MATRULLO, B.R.A. RESEARCH

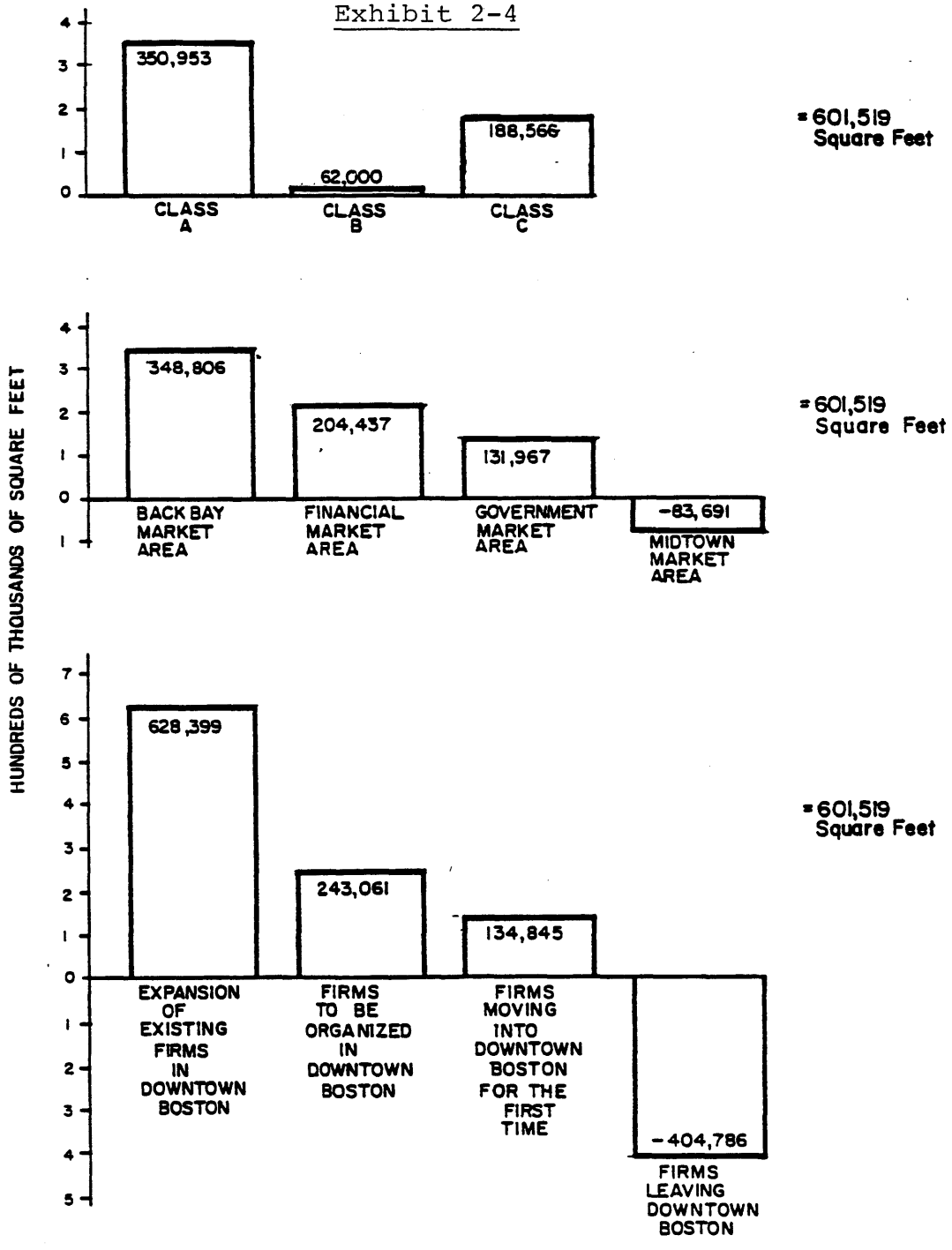
feet in downtown Boston from 1978-1982. 58% of this market was projected in Class A, or roughly 350,000 square feet per year. The BRA anticipated construction of an additional 1 million square feet during the early 1980's.[7] The projections are summarized in Exhibit 2-4.

Market forecasts from private industry were equally optimistic. The overall office space vacancy rate had steadily declined from the post World War II peak of 15.1% in April 1977, reported by the Building Owners and Managers Association (BOMA). The April 1978 vacancy rate was 10.9%; this continued to fall to 9.0% by October 1978. This aggregate rate is divided into market segments in Exhibit 2-5. As can be seen from this data, the expansion strength within the overall office market was in the Class A category. This was Olympia and York's specialty.

Although the financial component of the economic equation was not quite as bright as the market forecast for Boston at this time, development in the late 1970's was certainly achievable with conventional terms.

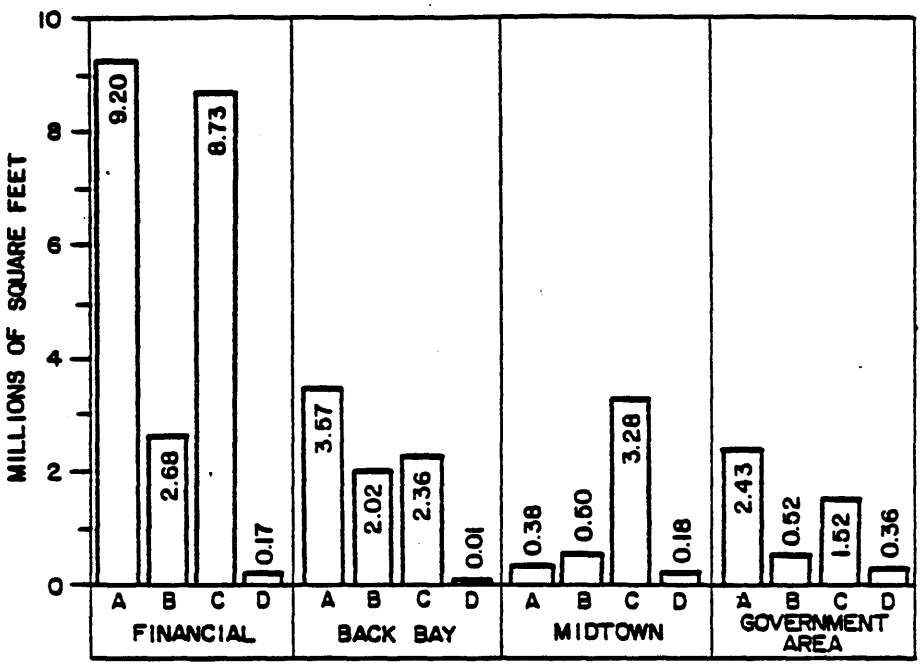
DOWNTOWN BOSTON'S YEARLY ABSORPTION RATE FOR OFFICE SPACE TO 1982 THREE DIFFERENT PROFILES

Exhibit 2-4



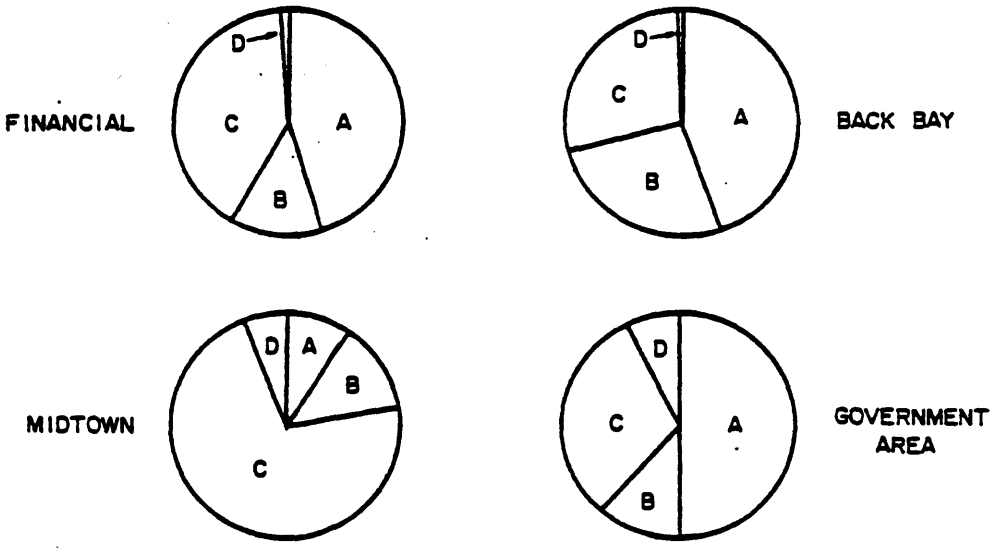
GROSS SQUARE FOOTAGE OF OFFICE SPACE BY CLASS FOR EACH MARKET AREA

Exhibit 2-5



C. OFFICE SPACE BY CLASS

PERCENTAGE BREAKDOWN FOR EACH MARKET AREA



The prime interest rate from 1977 to 1979 ranged from 11% to 13.5%. Construction financing was commonly available at 10.5%, and large-scale projects could attract permanent financing at 9.5% with a 40 year term.[8] Developers view this period nostalgically as the final days of the conventional development finance--an era featuring fixed rates, long terms, and undiluted ownership by the developer.

As the case unfolds, the reader will see that financing was of secondary concern to the capital-deep Canadian developers, whose access to favorable financing is the envy of many competitors. Nonetheless, Olympia and York's began preliminary project planning for an entry into the Boston office market under financial conditions which did not introduce significant uncertainty to the development formula, as might be the case today.

THE POLITICAL CLIMATE

The political climate for development was as sunny as the economic. Mayor Kevin White, anxious to erase Boston's anti-development reputation, was decidedly pro-development at this time. Furthermore, he saw

commercial office building as the key element in the city's renaissance. ""First and forremost," he wrote in 1973,"is Boston's office building boom--the vehicle for the transformation of the City into a high-grade service activity center."[9] He stated,

> "There is an extraordinary commitment to Boston's growth, and this commitment is expanding...The commitment highlights the outstanding prospects for the City's economy, with all that they signify for jobs and income for the people of Boston. The public and private commitment to growth, and the favorable prospects for the City's economy, provide new opportunities for business investment and social gains."[10]

The Mayor's boosterism for development continued throughout the decade, and in 1979 White wrote,

> "I am alert to the acute shortage of office space, the absorption of vacancies, the sharp rise in office rents, and the need for new office construction. A number of developer proposals for new office buildings are currently under review. The prospects for growth in Boston's office-based services are one of the brightest elements in the City's future and I will work with the private sector to help make that future a reality."[11]

The Mayor was not alone in welcoming the projected development boom to Boston. The Greater Boston Chamber of Commerce, the Greater Boston Real Estate Board, and the print media all projected continuing economic renaissance for Boston. Seizing upon the opportunity to become a national magnet for high technology and professionals, services, and frustrated by its image as a no-growth, overtaxed business community, all sectors of Boston seemed to anxious to host the investment promised by the 1980's.

THE LAND SEARCH

It was against this backdrop of market, financial, and political optimisim that Olympia and York began their land search in late 1978. The Olympia and York team identified prime areas of the dowtwon for a potential office building. The government center and financial district were easily trageted as the optimal areas for Class A office development. The Olympia and York team looked at several potential sites, weighing factors of location, land area, access, and ease of assembly.

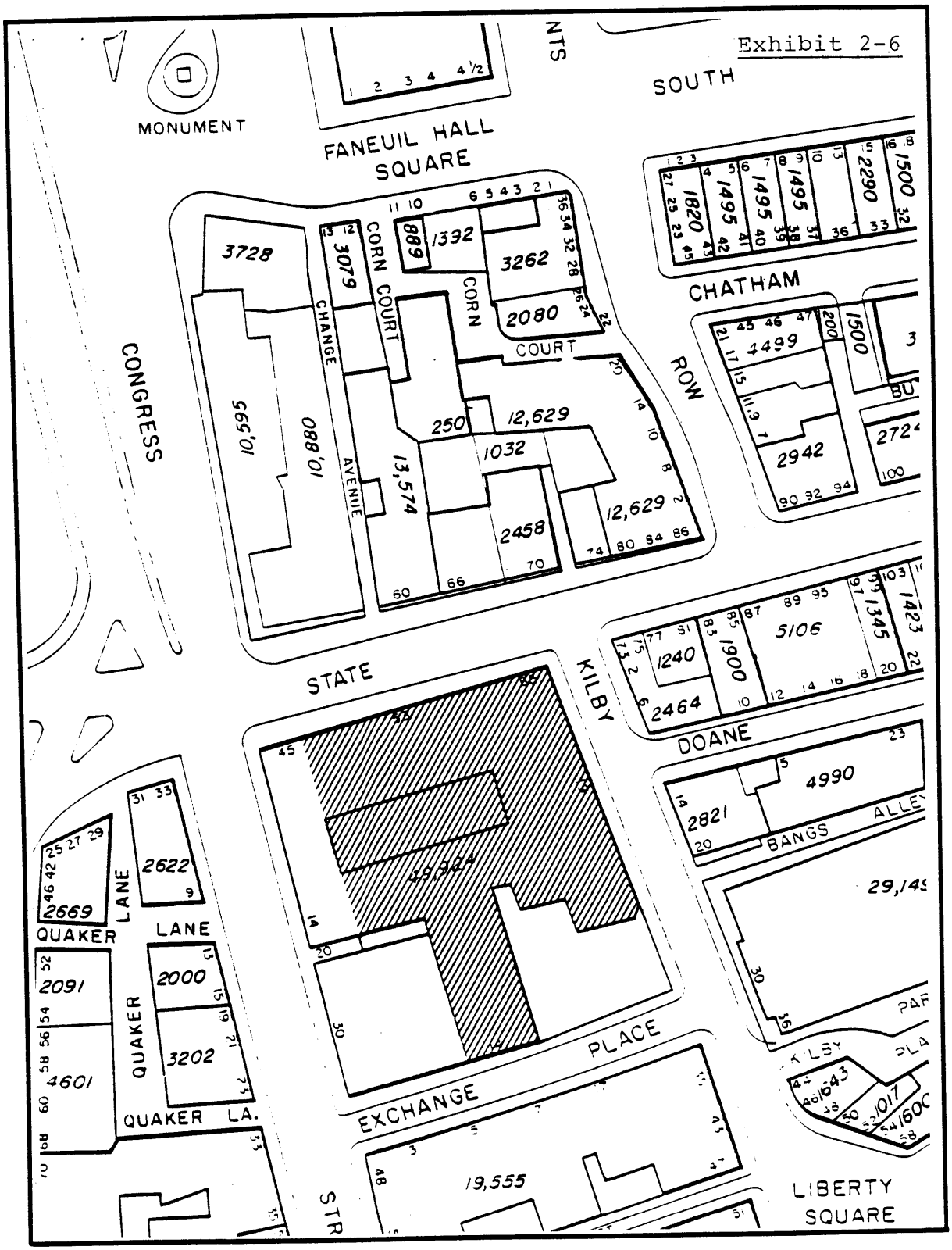
The strongest of these parcels was the block between

State, Congress, Kilby Streets and Exchange Place, at the heart of downtown. It contained several buildings, including the original building for the Boston Stock Exchange, known as 53 State Street. The parcel was known as the Exchange Block, and its location was absolutely prime (See Exhibit 2-6).

THE PROPERTY

The Exchange Block is located at the heart of Boston's central business district on the boundary between the government center and the financial district, on Congress Street, the main avenue which connects the two (See Exhibit 2-7). To the north and west is the government center, including City Hall and numerous government office buildings for state and federal agencies. To the south and east was the financial district, including the headquarters of many Boston financial institutions. It is arguably the finest business location in the city. Land use in the district was almost exclusively retail and commercial. The financial district and government center accounted for 25.6 million, or over 68% of the entire competitive office space market for downtown Boston. The financial district, to which the

Exhibit 2-6


MONUMENT
FANEUIL HALL SQUARE
SOUTH
NTS
CONGRESS
STATE
CHANGE AVENUE
CORN COURT
CORN COURT
CHATHAM
ROW
KILBY
DOANE
BANGS ALLEY
QUAKER LANE
QUAKER LANE
QUAKER LA.
EXCHANGE PLACE
LIBERTY SQUARE
3728
3079
889
1392
3262
2080
595'01
088'01
250
12,629
1032
13,574
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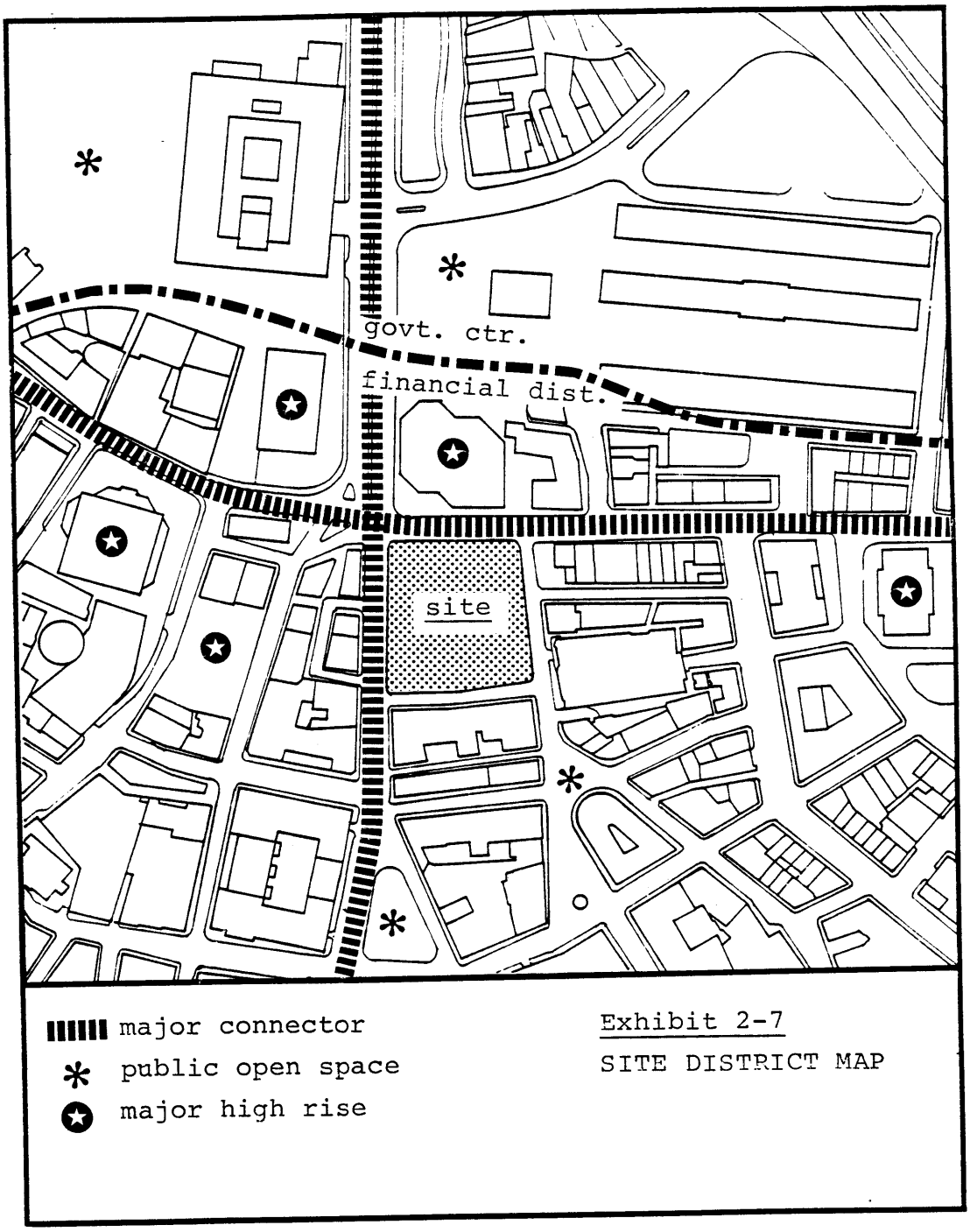


Exhibit 2-7

SITE DISTRICT MAP

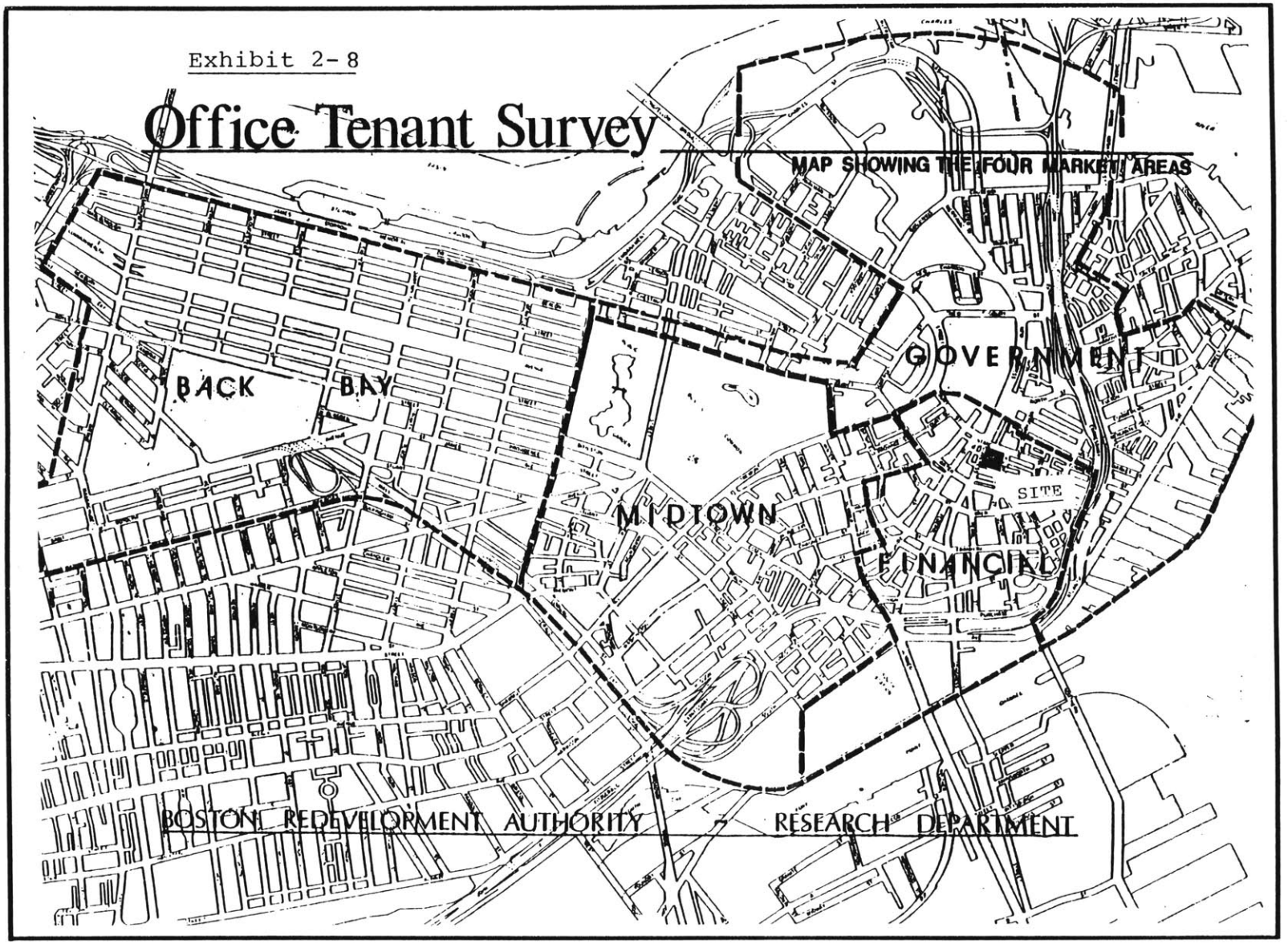
Exchange Block served as a gate from the north, alone accounted for 55% of the overall market. It also had the highest concentration of Class A, B, and C space in the downtown.[12] See Exhibits 2-8 and 2-9.

The Exchange Block was also a strong location for retail use. The parcel lay between the two strongest retail magnets in the downtown; the phenomenally successful Faneuil Hall Markets to the north, and the established Washington Street Mall shopping area to the west, which had two anchor regional department stores. Lafayette Place, a proposed $190 million mixed-use development project containing retail and hotel facilities, would further reinforce the Washington Street Mall as as Boston's core shopping district. The Exchange Block fell on the natural pedestrian route between these two prime areas, and could be favorably positioned to capture a limited portion of the retail market.

The overall retail market was increasing in overall volume as well. Research conducted by consultants to the BRA in 1978 analyzed the economic and social profile of the typical office tower worker, and found

Exhibit 2-8

Office Tenant Survey

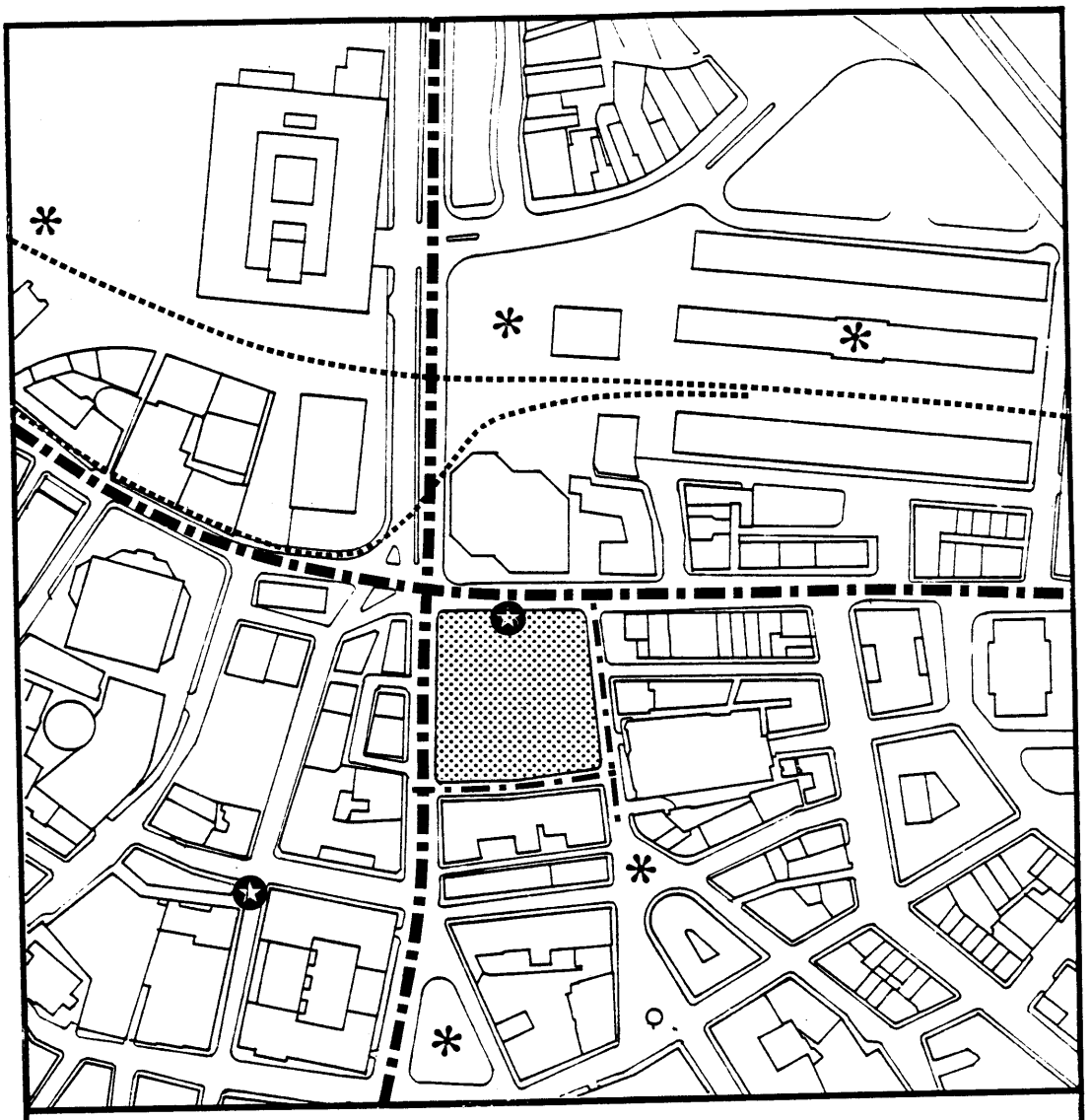


that downtown workers did a majority of their shopping for certain items in the central business district. This consumer population, labelled the "captive" retail market, was expanding due to the concentration of business investment in Boston's downtown.[13]

Overall, the Exchange Block seemed ideally located for a prime commercial office development and had strong potential for a limited retail program. Other possible uses, such as hotel or residential, were not as suitable for the site. The location was inferior for these uses to other previously announced projects in the vicinity, which were scheduled to enter the market at the time of the anticipated demand.

ACCESS

The site was well supported by public infrastructure. Its location within the government/financial core provided access to four MBTA (public transit) subway lines within five blocks of the site. Direct access to one of these lines was even available through the basement of the buildings on site, and could potentially bring even more pedestrian traffic through the development (See Exhibit 2-9).



primary vehicle
secondary vehicle
primary pedestrian
public transportation
public space/node

Exhibit 2-9

MOVEMENT SYSTEMS

Pedestrian and Vehicle Access

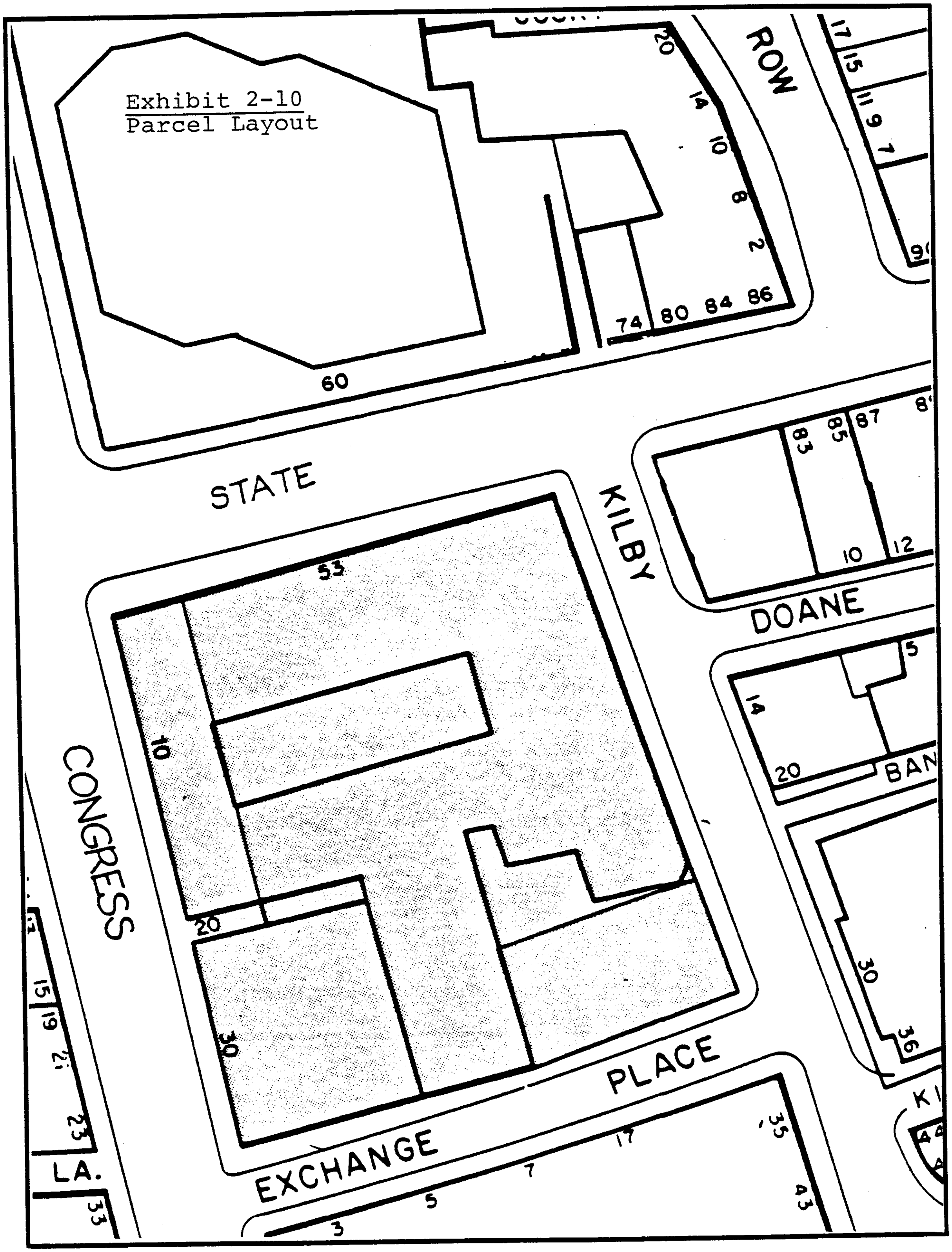
The site was also surrounded by public streets on all four sides. In addition to State and Congress Streets which provided excellent pedestrian access, visibility, and a choice of prestigious business address. Kilby Street and Exchange Place provided enough secondary frontage to comfortably accomodate service access, loading docks, and entrance and exits for an undergound garage.

PHYSICAL FEATURES

The site was a textbook example of a perfect site for a downtown high rise building. Nearly rectangular, the site contained 49,924 square feet, providing ample room for the "ideal" tower footprint (18,000 to 25,000 square feet per floor) with a low or medium-rise base and an open plaza or entry court. Its configuration was regular and compact, allowing for a conventional floor plan layout (Exhibit 2-10).

Since the site had been occupied by three structures for a number of years, the developers believed no complications would arise from the construction of a high rise tower. Borings from adjacent high rise sites confirmed that the soil was competent and

Exhibit 2-10
Parcel Layout



stable.[14] The closer Olympia and York analyzed the Exchange Block, the more feasible it seemed.

EXISTING BUILDINGS

The Exchange Block was part of a contiguous district populated by buildings of an average height of ten stories, dating from the late nineteenth and early twentieth centuries (See Exhibit 2-11). More recent buildings from the late 1960's and the 1970's occupied sites to the north and west, including Sixty State Street, One Boston Place, and the New England National Bank Building, all high rise office towers. These new high rises, together with small historic structures such as the Old State House, dating from 1747, created a heterogenous neighborhood of startling contrasts which spanned the history of the city.

The site was occupied by three seemingly incongruous buildings. Fronting State Street and Kilby Street was the largest--an eleven story granite structure called the Exchange Building, which was built in 1899 to house the Boston Stock Exchange. Above its ground floor panelled banking hall and marble lobby were ten floors of office space. The building, although

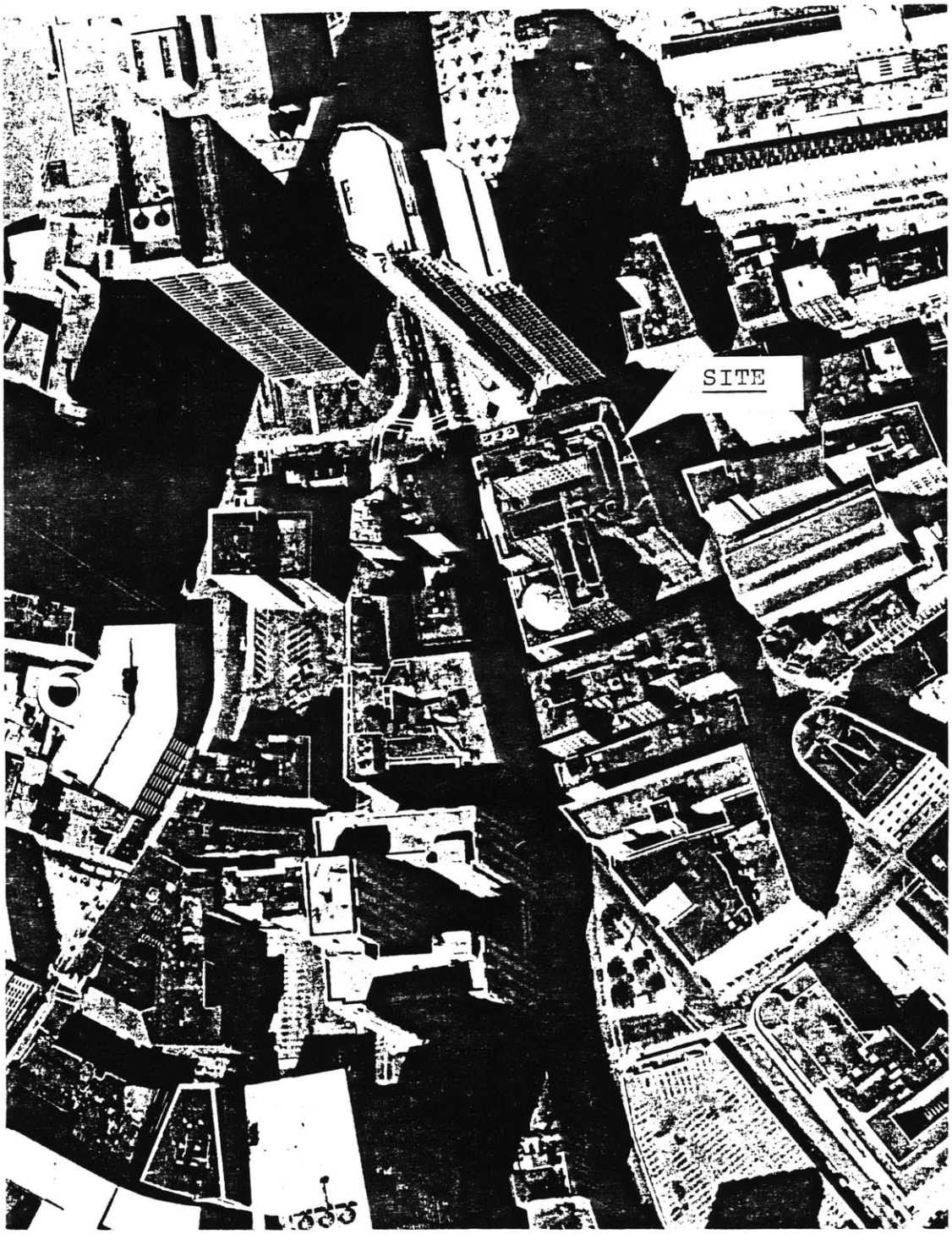


Exhibit 2-11 Exchange Block District

massive and well-crafted, seemed a poor use of the site to the Olympia and York team. In their view, the State/Congress Street corner was the site's most valuable asset--and the natural focus for the site. The existing Exchange Building, however, ended in a raw brick wall about forty feet shy of this corner and instead was oriented towards the Kilby/State Street Corner (See Exhibit 2-12). A five story building, Ten Congress Street, which was connected on its floor levels to the Exchange Building, filled in the remaining 40 feet of site. Another lower structure, 30 Congress Street, occupied the Exchange Place/Congress Street corner (See Exhibit 2-13). The fourth corner, at Exchange Place and Kilby Street, was undeveloped and was currently used for parking.

Olympia and York considered these buildings essentially worthless. Not only did they seem poorly sited, but the structures were old and in poor condition. Even the largest and most substantial of the three, the Exchange Building, had been sub-divided in a hopelessly confused and ad-hoc manner. The developers were convinced that these buildings were a drastic underutilization of the development potential of

Exhibit 2-12

View of Exchange Building from State Street showing raw wall at prime corner.

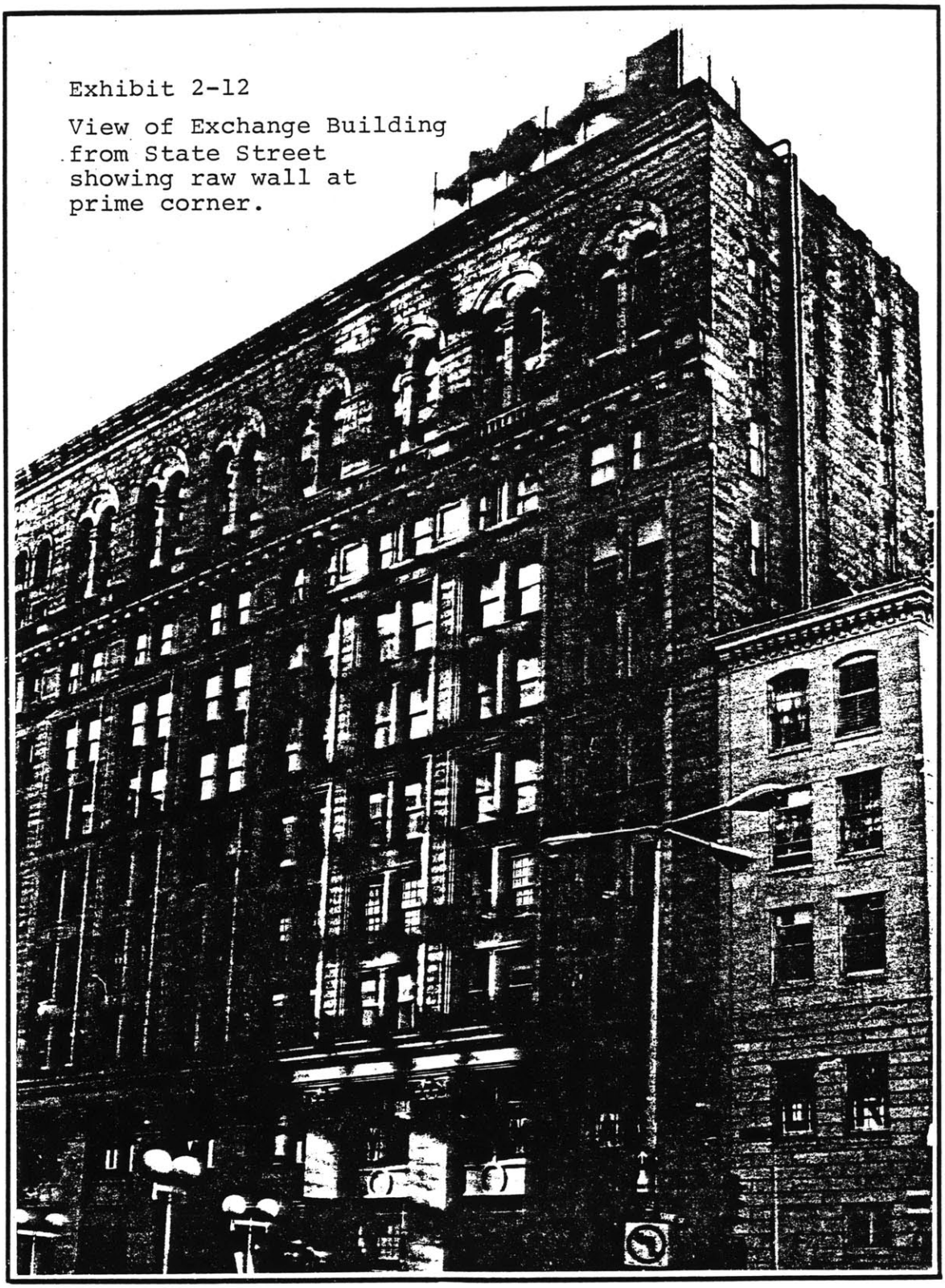


Exhibit 2-13

View of the Exchange Building and 30 Congress Street from the State/ Congress Corner.

the site.

OWNERSHIP

Further encouraging to the Olympia and York was the fact that the entire block was under single ownership. It had been purchased from the State Street Bank, who still remained a tenant in the building, by Old State Trust, in 1973. Albert I. Edelman and Harold Theran, beneficiaries of the trust, were approached for a disicussion of a purchase or lease arrangement. The owners, who had no interest in developing the site themselves, were receptive. Olympia and York was further encouraged, and began to analyze the development potential of the site.

EXISTING ZONING

The site was in a downtown B-10 zoning district, as is almost all of downtown Boston. (See Exhibit 2-14) This zoning category allows for retail and commercial uses up to a maximum allowable FAR of 10. The existing buildings together totalled close to this ceiling of 499,240 square feet. However, given the prime location, the neighboring high rise projects completed during the previous decade, and the city's strong pro-

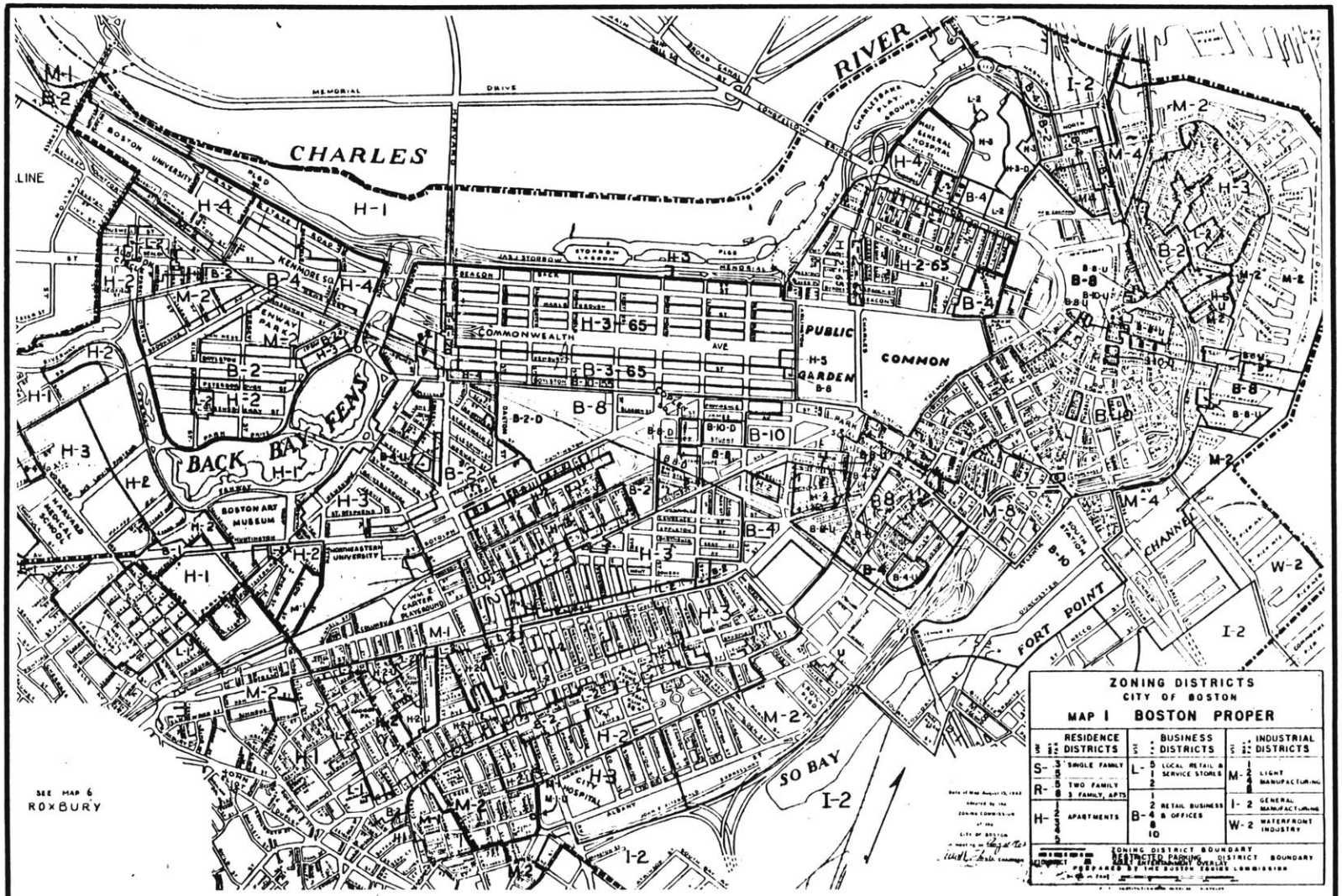


Exhibit 2-14 Zoning Map of Boston

development policy, Olympia and York were confident a density increase could be obtained through a variance or special district designation.

PRELIMINARY PLANNING

Having found a clearly developable site in a prime location with a cooperative owner, Olympia and York began preliminary site analysis and planning. In September 1978, Olympia and York hired WZMH-International, a Toronto-based architecture and planning firm, as architects for the office tower on the Exchange Block. WZMH-International had designed numerous facilities for Olympia and York in the previous fifteen years. WZMH-International had ten offices in Canada and the United States, and had designed buildings for sites from Saudi Arabia to Los Angeles.

Given that floor-area-ratios of recent development projects Boston had been in the 16-20 range, well above the official 10, Olympia and York looked at precedents to establish a target program. At nearby 28 State Street, the FAR was 21.7. At One Boston Place it was 21.58. At the 100 Federal Street site it was 18, and at One Beacon Street it was 17.26.

The recently completed One Post Office Square Project, at the Old Federal Reserve Site, had an FAR of 21.6 over its office sub-parcel. In fact, no project since 1968 within the downtown business district which sought a variance had an FAR of less that 18.[15] Using this as a first approximation, Olympia and York programmed the site for FAR 18, or roughly 900,000 square feet total, including approximately 40,000 s.f. for retail and the remainder for Class A office space. The developers assumed, as they had in first investigating the site, that the existing buildings would be cleared.

FINANCIAL MODEL

Although neither the city nor this writer have been able to confirm the financial structure of Olympia and York's venture, conventional assumptions would produce the investment expectation represented by the capital cost estimate and operating pro forma presented in Exhibits 2-15 and 2-16. This is most likely baseline from which the developers worked.

DESIGN INTENTIONS

WZMH-Habib developed a design proposal for the

Option 1	FAR:	18				
				total	office	retail
	TOTAL SF:	898632	New Construction:	898632	858632	40000
	Retail:	40000	Retained/Rehab:	0	0	0
	Office:	858632				

Development Cost Estimate		
Direct		
New Construction/sf:	74	66499
Rehab. Construct/sf:	34	0
Demolition Costs:		2600
Total Direct Costs:		69099
Indirect Costs:		
Legal & Acct @ 2% TDC:		1382
Arch/Eng. @ 6% TDC:		4146
Marketing @ 20% of rents:		3595
Project Administration @ 6%:		4146
Financing Fees @ 3% of TDC:		2073
Construction Interest		
18 mo. @ 45% @ 13%		6063
Rent-up Deficit @ 10% rents:		1797
Carrying Cost on Land:		825
Contingency @ 5% TDC:		3455
Tenant Finish @ $10/sf:		8586
Total Indirect Costs:		27482
Total Project Costs:		96581
New:		96581
Old:		0
Sources of Funds:		
Mortgage, assume @ 75%		72436
Equity:		24145

Exhibit 2-15 Phase I Capital Cost

Income and Expense Analysis

			1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gross Potential Income:														
Office @ new:	22		0	18890	20401	22033	23796	25700	27755	29976	32374	34964	37761	40782
@ old:	18		0	0	0	0	0	0	0	0	0	0	0	0
Retail @ new:	24		0	960	1037	1120	1209	1306	1411	1523	1645	1777	1919	2073
@ old:	22		0	0	0	0								
Total:			0	19850	21438	23153	25005	27006	29166	31499	34019	36741	39680	42854
Vacancy @ 5% GPI:														
Office:			0	-944	-1020	-1102	-1190	-1285	-1388	-1499	-1619	-1748	-1888	-2039
Retail:			0	-48	-52	-56	-60	-65	-71	-76	-82	-89	-96	-104
Net Rental Income:			0	18857	20366	21995	23755	25655	27708	29924	32318	34904	37696	40712
Office Component:			0	17945	19381	20932	22606	24415	26368	28477	30755	33216	35873	38743
Retail Component:			0	912	985	1064	1149	1241	1340	1447	1563	1688	1823	1969
Operating Expenses & R. E. Taxes														
Office @ $7.04/sf:				6045	6528	7051	7615	8224	8882	9592	10360	11188	12084	13050
Energy @ $1.00/sf.														
Insurance @ .08/sf.														
Janitorial @ .75/sf.														
Management @ 4%, .88/sf.														
Maintenance @ 4%, .88/sf.														
Rep. Reserve @ 2%, .44/sf.														
R.E. Taxes @ $3.00/sf.														
Retail: Net, carry vacant @ $7 /sf. Assume 5% vacancy.				14	15	16	18	19	21	22	24	26	28	30
Net Income Before Ground Rent:														
Office:				11901	12853	13881	14991	16191	17486	18885	20396	22027	23789	25693
Retail:				898	970	1047	1131	1222	1319	1425	1539	1662	1795	1939
Total:				12799	13823	14928	16123	17412	18805	20310	21935	23689	25585	27631
Ground Rent:				-900	-900	-900	-900	-900	-900	-900	-900	-900	-900	-900
Free & Clear Income:				11899	12923	14028	15223	16512	17905	19410	21035	22789	24685	26731
Debt Service: (assume 11%, 30 yr., 72436 loan)				-8479	-8479	-8479	-8479	-8479	-8479	-8479	-8479	-8479	-8479	-8479
CFAF:				3420	4444	5549	6744	8033	9426	10931	12556	14310	16206	18252
Depreciation: New:	40/150	Life:		40	39	38	37	36	35	34	33	32	31	30
		Base:	96581	-3622	-3575	-3528	-3481	-3432	-3383	-3333	-3283	-3232	-3180	-3127
Old:	5/SL	Base:	0	0	0	0	0	0	0	0	0	0	0	0
Amortization: k=11.43%M			72436	-311	-545	-605	-672	-746	-828	-919	-1020	-1132	-1257	-1395
Taxable Income:				-202	868	2021	3263	4601	6043	7597	9273	11079	13026	15126
Tax Savings @ 50%:				-101	434	1011	1631	2301	3022	3799	4636	5539	6513	7563
Capitalized Value:				0	0	0	0	0	0	0	0	0	0	222761
Mortgage Balance:														-63005
Residual Value (includes 28% cg tax)														160472
ATCF:				3521	4009	4539	5112	5733	6405	7132	7919	8771	9693	171161

NPV @ 12%:	81230	Profitability Index @ 12%:	3.36	ROTA: (yr. 1)	12.32
15%:	64569	@ 15%:	2.67	Cash/Cash (yr. 1)	14.16
18%:	52030	@ 18%:	2.15		

Exhibit 2-16

Olympia and York program from September 1978 to June 1979 (See Exhibits 2-17 and 2-18). This scheme, called the "Phase One Tower", was characterized by several fundamental urban design intentions:

1. Frame the Old State House at State and Congress Streets by adding a tower to the "family" of towers which surrounded it on the north and west sides;

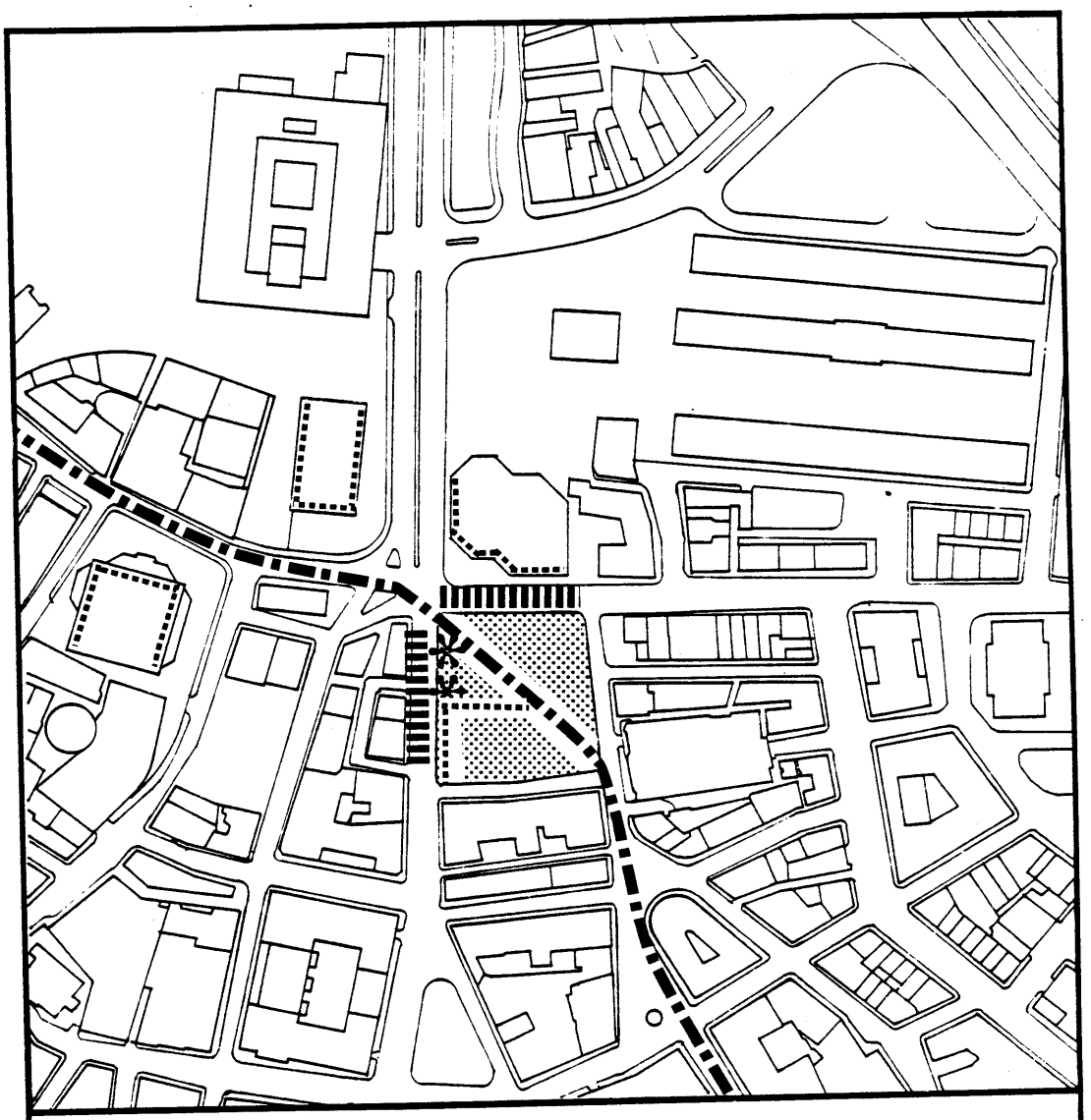
2. Relieve the compression at the State/Congress intersection by locating the tower on the southest corner of the site. (Exchange Place and Kilby Street) This massing concept, working with an assumed floor area of 25,000 square feet per floor, resulted in an overall height of approximately 36 stories.

3. Intensify the street-level activity by locating two levels of retail space at the base of the building and using a transparent, cellular-frame architectural vocabulary for this portion.

4. Allow diagonal pedestrian movement through the site from the State/Congress Corner to the Exchange/Kilby corner, which faced onto Liberty Square. This design parameter was introduced by the BRA, who felt this pass-through would create a valuable linkage with the Broad Street district to the southest, an area targeted for development.[16]

PRELIMINARY REVIEW OF THE PROJECT

The preliminary review of the Olympia and York development for the Exchange Block was extremely



pedestrian movement

open space/plaza

increased activity edges

tall buildings to "frame" State House

Exhibit 2-17

Phase I Urban Design Intentions

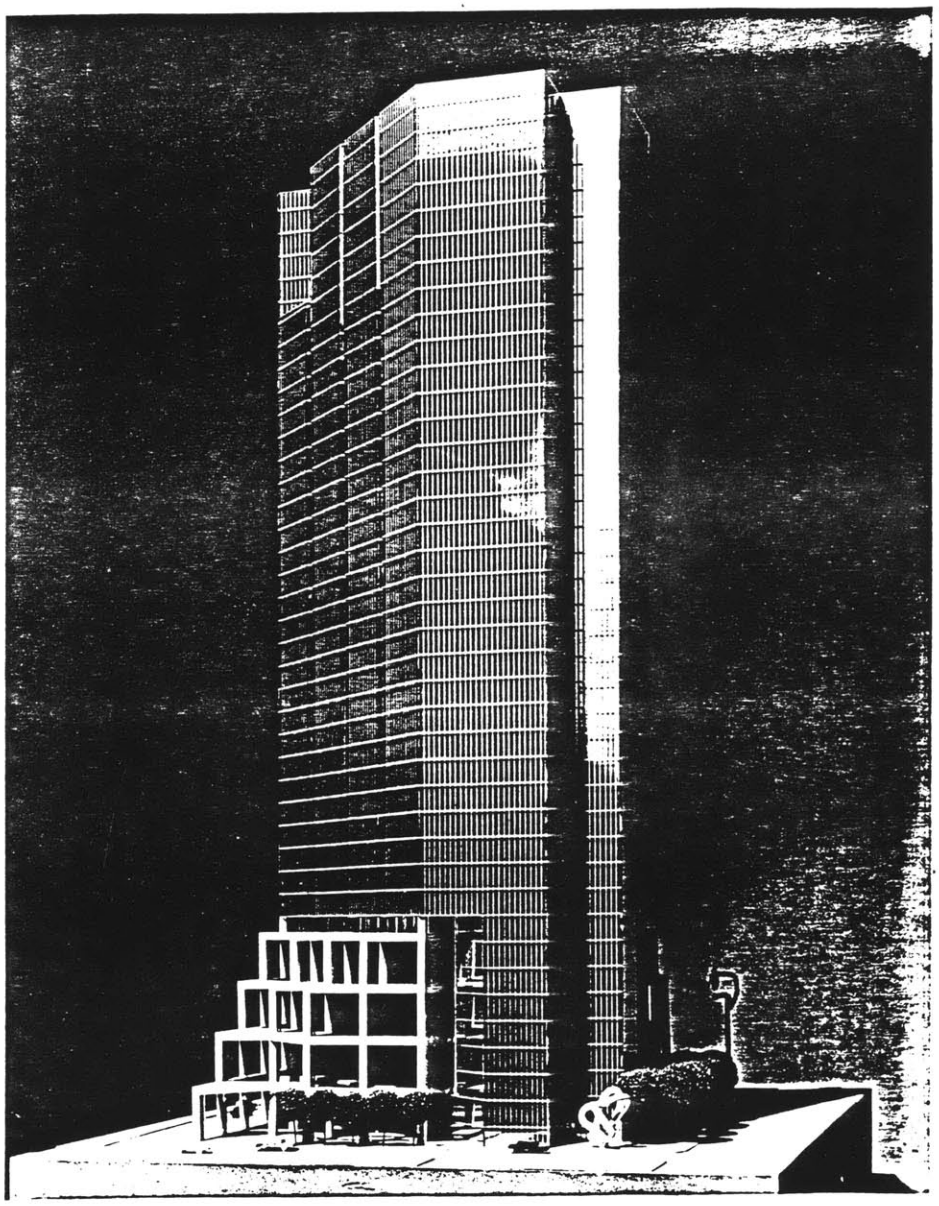


Exhibit 2-18 Phase I Model

favorable. In the spring of 1979, Olympia and York presented the design and development proposal to mayor Kevin White, who, according to one participant, "loved it".[17] The BRA staff encouraged further development of the concept. Olympia and York subsequently prepared for design development and wind tunnel testing. It was preparing for its preliminary public reviews for zoning and other permits when news of the project first became public.

PUBLIC RESPONSE TO THE PROPOSAL

Before plans of the proposed building were even released to the press, public controversy over Olympia and York's intentions began to brew. The mere thought of a forty-story tower on the site provoked alarm and suspicion. The idea that such a major addition to the Boston skyline would be the work of non-Bostonians also seemed to bother the public. The developers were characterized in the press as "One of the giants in real estate development from across the northern border."[18]

WZMH-Habib, who at that time maintained offices in nearby Cambridge, acknowledged they had produced the

Phase One tower design of 40 stories, but maintained that "...the model is not valid. It has been scrapped and we still have no idea of concept."[19]

Harold Theran of Old State Trust would not confirm that Olympia and York were negotiating for the site, and insisted that he was looking at several potential offers. This coordinated effort to maintain a low profile with such a major project, particularly when reporters had seen a model of the scheme in the Mayor's office, was interpreted by many as a suspicious collusion between the city and the developer. Olympia and York were laying low, so the press wrote, until "a viable project with the blessing of the city can be put together."[20] An atmosphere of mistrust was early established between the general public, the developer, and the city.

Opposition to the project fell into two camps-- those who regarded the Exchange Building as an historic landmark worthy of preservation, and those who were categorically opposed to high rise development on the site. The former group found a forum for their issues before the Boston Landmarks Commission (BLC)

through the landmarks designation process. The latter constituency, as we shall see, lacked a real forum for its concerns, although they were subsumed in the historic preservation debates.

THE BOSTON LANDMARKS COMMISSION (BLC)

As the result of a home rule petition backed by the City Council, Mayor, and the Governor in 1975, the Boston Landmarks Commission had been established by Chapter 772 of the Massachusetts General Laws, to fulfill five purposes:

> 1. To protect the beauty of the city of Boston and improve the quality of its environment through identification, recognition, conservation, maintenance, and enhancement of areas, sites, structures, and fixtures which constitute or reflect distinctive features of the political, economic, social, cultural, or architectural history of the city;
>
> 2. To foster appropriate use and wider public knowledge and appreciation of such features, areas, sites, structures, and fixtures;
>
> 3. To resist and restrain environmental influences adverse to such purposes;
>
> 4. To encourage private efforts in support of such purposes; and
>
> 5. By furthering such purposes, to promote the public welfare, to strengthen the cultural and educational life of the city and the Commonwealth and to make the city a more attractive and desirable place in which to live and work.[21]

The Commission is a body of nine members and nine alternates, drawn both from professional disciplines related to development and preservation--architects, planners, preservationists, real estate developers, business leaders--and the general public. Professional membership groups (the Boston Society of Architects, The Greater Boston Real Estate Board, etc.) nominate the commisioners for appointment by the Mayor. Technically, the Landmarks Commission is a city department. It is a functional unit of the Redevelopment Authority (BRA), which provides professional staff to the Commission. The BLC's powers include the authority to conduct surveys, take property by eminent domain, initiate and accept grants for historic preservation, carry on educational activities in furtherance of its mission, and advise officials of the city and state on preservation issues. The Commission also acts as the local historical commission for the city, and therefore inititates the federal listing process by considering and nominating properties to the National Register of Historic Places.

The Commission's primary function, in statute and

practice, is the designation of landmarks, landmark or architectural districts, or protection areas. Although neither districts nor protection areas can be designated in central Boston, individual landmarks or historic districts can be, subject to the approval of the Mayor and the City Council.

BLC LANDMARKS DESIGNATION PROCESS

The designation process follows six basic steps:

1. Petition: Any ten registered voters in the city of Boston or any Commission members may submit a petition to the Commission requesting that a property be considered for designation. The petition states the general arguments supporting the structure's landmark quality, and formally initiates the process.

2. Preliminary Hearing: Within 30 days of the filing of the petition the Commission holds an informal preliminary hearing to hear the arguments for designation from the petitioners. A decision is then made either to proceed with consideration or to reject the petition.

3. Study Report: If the Commission decides to follow the designation procedures for the site or structure, the BLC staff then prepares a study report on the property. The report researches the history, ownership, and planning characteristics of the subject property. After determining the significance of the site and considering alternatives for its future use, the report recommends standards for future development, which may or may not include landmarks designation. General standards and criteria for demolition, construction, rehabilitation are recommended.

4. Public Hearing: Within 21 days following the completion of the study report the Commission holds a public hearing to hear arguments in suppport and in opposition of the designation. Petitioners, preservationists, representatives of organized interest groups, abutters, project proponents, architects, and real estate professionals may prepare testimony and appear at the hearing.

5. Vote: Following the public hearing the Commission votes to decide for or against designation. A two-thirds majority of the nine member Commission is required for approval. Specific standards and criteria are adopted as part of, and are considered to govern, a landmark designation decision. The process of writing such standards and criteria may determine the time frame between a hearing and a decision.

6. Reviews: The Commission's decision in favor of designation is subject to Mayoral veto within 15 days of the decsion. If the Mayor approves the designation, the City Council may veto the decision by a two-thirds vote taken within thirty days of the Mayor's approval.

The entire landmarks designation process may take anywhere from three months to over a year, depending on the complexity of the case, the extent of disagreement between proponents and opponents of the designation, and the work load of the BLC staff. The differences in the duration of landmarks proceedings generally occur between the study report, the public

hearing, and the Commission vote, the stages in the process where the bulk of the consultant's reports, feasibility analyses, and lobbying efforts are concentrated.

BLC REGULATORY POWERS

Once designation has been completed, the Commission performs a regulatory function through its design review processes. A district commission, consisting of three members of the BLC and two members/ alternates who own property or reside in the district, is appointed by the Mayor and is approved by the City Council. The district commission implements the designation decision by approving or disapproving any proposed modifications to the designated property . The district commission's permission to proceed with such modifications is rendered through either a Certificate of Design Approval or a Certificate of Exemption. The latter is issued for work undertaken for ordinary repair, rectifying conditions hazardous to public health, or for avoiding substantial hardship to the owner. The process for design review includes appeals to the superior court of Suffolk County if the commission's decision is contested.

DESIGNATION OF THE EXCHANGE BUILDING

Although the process for designation of landmarks appears straightforward and clear in the statute, in practice the interaction of developer, preservationist, the Commission, and other city departments is extraordinarily complex. In the sections following, each stage of the designation and negotiation is described.

PETITION

On July 10, 1979, ten registered voters of Boston filed a petition to designate the Exchange Building, or 53 State Street, a landmark of the city of Boston. The petition claimed that the building was worthy of designation because it was the only remaining work in the downtown area of Peabody and Stearns, the notable Boston architectural firm. The petitioners argued that the Exchange Building, together with a few other buildings in the area, "marks the zenith of granite, load-bearing walled commercial architecture in Boston."[22]

LEGAL COUNSEL

Olympia and York had been aware of the preservation

sympathy for the structure but considered it unfounded. They considered 53 State Street a poorly sited, inefficient building which had fallen into disrepair and vastly underutilized the site's potential. Wary of the complications which might ensue during a landmarks designation process, Olympia and York hired the law firm Fine and Ambrogne, who had served as counsel to the developers the Faneuil Hall Marketplace, and who had a reputation for successful negotiations with the city in large-scale development projects in Boston. Attorney Phil David Fine would represent Olympia and York in all deliberations with the city and the landmarks commission.

The first contact between the development interests and the BLC came a few days before the petition was filed. Attorney Fine requested a meeting with BLC Executive Director Marcia Myers to discuss the procedures for designation. At this meeting Fine gave a presentation of the background of Olympia and York, and explained the proposal, outlining why he felt the development made sense to the city--the tax arrearage on the property, the prospect of tax-producing development, the strong demand for Class A office

space, and the jobs the development would bring to Boston--arguments which would resurface throughout the subsequent BLC deliberations. About one week after this initial meeting, the BLC was advised that Fine and Ambrogne also represented Old State Trust, the current owners of the property.

On July 24, 1979, the BLC held its preliminary hearing to decide whether or not to proceed with the designation process. Speaking at this hearing were the petitioners and the President of the New England Chapter of the Society of Architectural Historians. Written testimony from Wheaton Holden, an historian and expert on the work of Peabody and Stearns, was also submitted. Cited as reasons for designation were the quality of the building's design and construction, the notoriety of the firm which designed it, and the role of the building in Boston's financial history. Added to the list of arguments in support of designation were the less "historical" features of the building--the texture of its stone, the building's scale, and the way that it "fit into the neighborhood"[23]--qualities the petitioners argued no new office building could match.

Attorney Fine also appeared before the BLC on the same day in its business session. His arguments against designation were purely economic. He repeated his themes of tax benefits to the city, economic loss to the current and potential owners of the property stemming from either delays imposed by a designation process or designation itself.[24] The debate over the fate of 53 State Street was thus cast as a choice between the BLC's mission to "protect the beauty of the city of Boston"[25] and the obligation of the regulatory process to weigh "economic considerations...the permanent jobs, supplies, and services sustained by such a huge investment."[26]

On August 14, 1979, the BLC voted to proceed with the preparation of the study report. In the two months, required to complete the study, letters supporting landmark desingation began to pour in to the Mayor's office and the BLC. Architects, planners, preservationists, and other concerned citizens wrote to register their support of designation, echoing the familiar themes of quality design and construction, historic value, the influence of Peabody and Stearns, and the scale and massing relationships of the existing

building to the neighborhood. Letters were received from an estimated 1000 people, an extraordinary outpouring of support for a single designation case. Support for designation was also registered by numerous professional societies and preservation groups. The Boston Society of Architects, the Bostonian Society, the City Conservation League, the Architectural Conservation Trust, and the regional office of the National Trust for Historic Preservation were among the many organized groups who registered support of the designation.

THE BOSTON PRESERVATION ALLIANCE (BPA)

The most visible proponents of the designation was the Boston Preservation Alliance, an "umbrella" group which coordinates preservation activities of public and private preservation groups in Boston. Formed in April 1978, the BPA boasts a membership of some twenty-five organizations, including the Boston Landmarks Coimmission itself.[32] The Alliance serves as a clearinghouse for preservation information, a coordinating body for preservation activities, a lobbying group at the state and local levels, and as an educational forum for preservation and urban design.

The BPA felt the Exchange Building was a crucial case. They believed the building was an irreplaceable component of the low and medium rise downtown district, and a significant individual building. Furthermore, they believed rehabilitation of the structure might be financially feasible. The BPA began coordinating and organizing support for the designation and the public hearing, which had been scheduled for November 13, 1979.

REASSESSMENT BY THE DEVELOPER: A SECRET COMPROMISE

Meanwhile, Olympia and York's architects had been quietly re-assessing their design. Although the preliminary review of the Phase One tower by the Mayor and the BRA had been enthusiastic, the architects had sensed as early as June 1979, when news of the project was beginning to appear in the press, that the preservation issue was not one to be treated lightly. Director of Design for WZMH-Habib, Chung Lee, recalls that he began to conceptualize a compromise scheme integrating parts of the Exchange Building with a new office tower at this time.[27] This concept was developed into what became known as the Phase Two Tower, developed in late summer 1979, shown

in Exhibits 2-19 and 2-20. Shaped by the same urban design concerns for the placement of the tower, the movement of pedestrians through the site, and the same 900,000 square foot development program, the Phase Two Tower shared many conceptual underpinnings with the original scheme for the site. Lee worked to keep the "L" shaped portion of the Exchange Building which faced Kilby and State Streets (Exhibit 2-20). As he recalls, he recognized that this partial retention offered the only possible solution to the mounting controversy. He felt the scheme would retain the best parts of the existing building and also meet the needs of both his client and the city.

Olympia and York agreed this compromise approach could potentially satisfy the preservationists' swelling opposition to their development. The developers felt the concept of a partial retention offered a politically tractable solution, and instructed the architects to continue to develop the scheme. The team decided, however, to keep the compromise approach a secret from the city and the preservationists. Olympia and York still felt the original

Exhibit 2-19

Early Rendering of
Phase II Tower

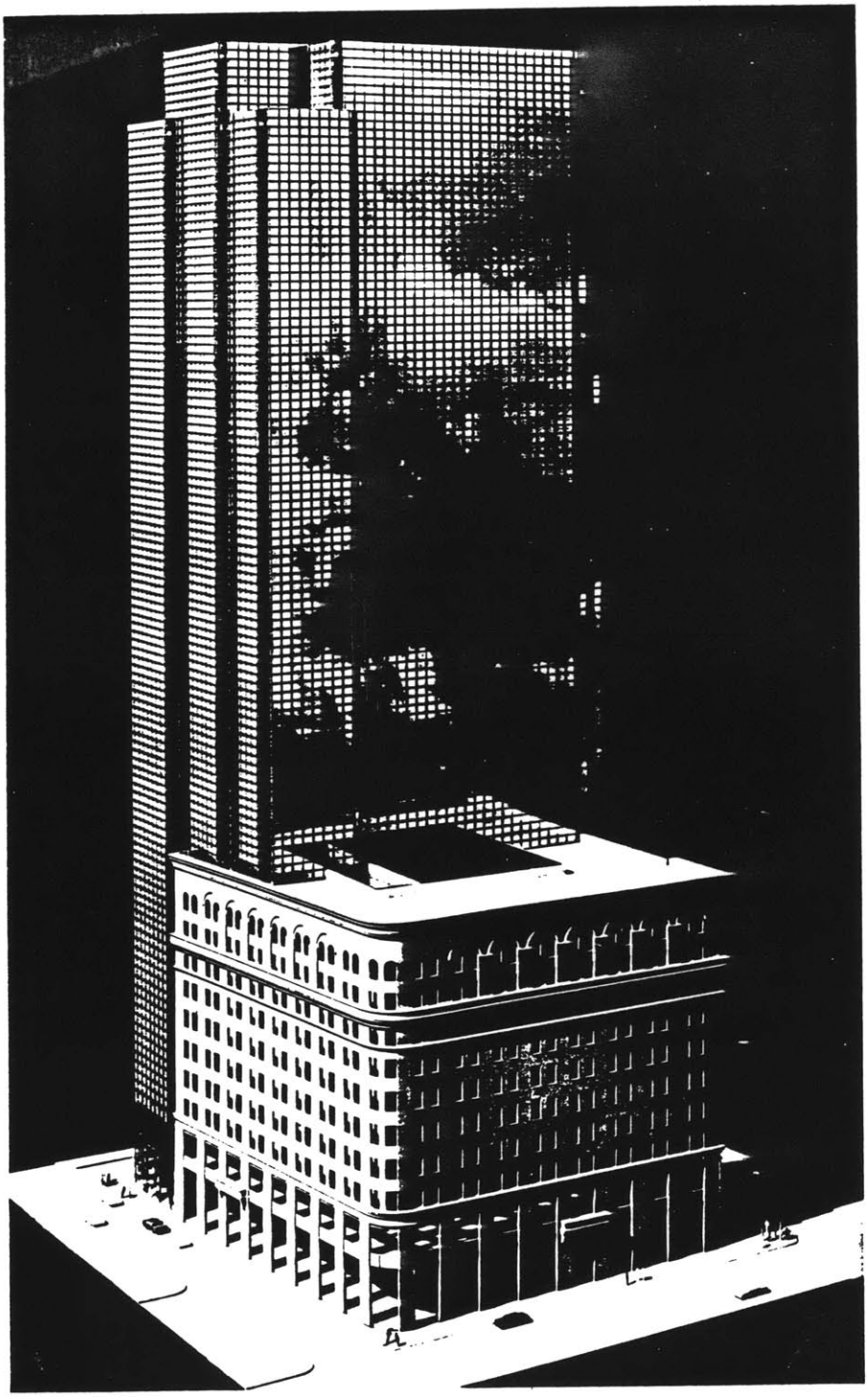


Exhibit 2-20 The Kilby/State "L"

scheme had a chance to succeed, and wanted to proceed on that basis. The refinement of the compromise scheme proceeded quietly. Other participants in the case eventually claimed authorship of the compromise concept. BRA Director Robert Ryan stated in January of 1980, when the controversy had subsided, that "the meetings on this project go back to last summer, when I first asked the developers to explore the possibility of a design which would allow retention of the facades of 53 State Street.[28]

Indeed, Boston Globe columnist Anthony Yudis wrote on July 9, 1979, which was before the petition for designation was even filed, "It is conceivable that a compromise plan saving the best features of the old building could be worked out, similar to the compromise development on the old Federal Reserve Bank site in Post Office Square."[29] Yet another author of the compromise concept was an architect who wrote the Mayor in late summer and suggested a similar approach.[30]

MEETING THE MAYOR

On October 22, a group of preservationists met with

the Mayor to present their arguments in favor of designating the Exchange Building at 53 State Street. Organized by Landmarks Commission Executive Director Marcia Myers, the preservationists discussed the significance of the building relative to American architectural and commercial history, the effects of high rise development on the site, the reuse potential for the building and the site, and the extent of the support for the designation among the general public.

Mayor White's response was non-committal and discouraging to the preservationists. He professed dissatisfaction with the prospect of high rise development on the site, but stated he preferred a "strong development" to a "weak compromise".[31] The preservationists interpreted these comments to mean that the Mayor would veto any designation which obviated dramatic development on the site. This introduced a difficult dilemma for the preservationists. Although they still advocated designation, they were now afraid a strict designation would ultimately result in an immediate mayoral veto and the eventual loss of the entire building. They too began to wonder if a compromise was the only remaining approach--and if it

was feasible.

Unbeknown to the preservationists, just such a compromise scheme was actually presented to the Landmarks Commission the day after their meeting with the Mayor. This, the Phase Two design developed by the architects over the summer, was presented to the BLC on October 23. Ironically, this was also the day that the Commission staff Study Report was also released. Attention quickly focussed on the anxiously awaited Study Report, and the existence of a compromise scheme went largely unnoticed for several months.

THE STUDY REPORT

The Study Report examined the history, significance, economic status, and planning context of the Exchange building. It recommended, "without qualification or reservation, that The Exchange Building be designated a Landmark...and that the property be considered for nomination to the National Register of Historic Places."[32] In addition, 10 Congress Street was recommended for designation. This recommendation was made because 10 Congress St. was connected through on

all floors through the west wall of the Exchange Building, in spite of the staff's admission that the building itself was not worthy of designation.[33]

In recommending the Exchange Building for landmark status, the study report found that the building met all four of the Commission's criteria for designation. It was a distinguished architectural design, possessed distinctive characteristics of construction, was of a style inherently valuable for study, and a notable work of an influential architecture firm. A section of the report, summarizing the property's historic importance, appears in Appendix A.

Immediately after the release of the study report the advocates and opponents of the designation of the Exchange Building began preparations for the public hearing. Rupert Davis, a member of the BPA, coordinated testimony in favor of the designation. Attorney Phil Fine, representing the development interests, prepeared the case against designation.

THE PUBLIC HEARING

The public hearing for the landmark designation of

the Exchange Building, in one BRA staffmember's words, was "the most crowded event in the history of the BRA boardroom"[34] and lasted over six hours. The voluminous transcript of the hearing documented this single session as an intense condensation of the entire controversy. The issues raised at this hearing were debated and researched in the weeks and months which followed.

The testimony in favor of designation followed several themes. The Massachusetts Historical Commission, the Boston National Park Service, the Historic Neighborhoods Foundation, and the City Conservation League all endorsed the landmark designation, citing the building's critical role in the character of the old financial district, its prominence in Boston economic and political history, its high architectural quality, and its comfortable human scale. As one witness stated, destruction of the Exchange Building would "massively alter the scale and environment of lower State Street. It is one of many buildings that were erected near the turn of the century, when Boston maintained height restrictions."[35] Witnesses warned the Commission of the hazards of allowing the

"Manhattanizing"[36] of the city the urban design costs of creating "an anonymous slot between impersonal skyscrapers, as has happened in so many other financial districts around the country."[37] These sentiments were reinforced by testimony from the New England Chapter of the Society of Architectural Historians, the National Trust for Historic Preservation, the Society for the Preservation of New England Antiquities, and the Bostonian Society.

By contrast, the anti-designation testimony was primarily economic in thrust. Deputy Mayor for Fiscal Affairs James Young claimed that designation was equivalent to a tax "appropriation" of two million dollars per year assuming a million square foot tower could be built on the site.[38] The Executive Vice President of the greater Boston Chamber of Commerce testified that Boston was in dire need of Class A office space. A major new tower was needed, he argued, to sustain Boston's growth as a regional employment and industrial center. He maintained that the proposed office tower would create about 2000 construction jobs and 6000 permanent jobs.

Past BRA Director and Director of Public Facilities Robert Kenney testified that the vacancy rate was lower and the absorption rate higher than anticipated and reported by the BRA. He argued that the development planned for the Exchange Block was not only critical to the city's growth, but the lack of available alternative sites made it impossible to redirect the demand to another section of Boston.[39]

A Senior Vice President of the John Hancock Insurance Company testified that the 53 State Street location was "one of the most desirable sites in the city for a new office building"[40]. Ironically, he argued that, from an institutional lender's point of view, the exisitng building was a poor candidate for rehabilitation.

A Certified Public Accountant testified that the property had been operating at a loss from 1974-1978, and needed redevelopment to become a viable income-producing property. The President of the Massachusetts Building Trades testified that the new construction proposal would bring more jobs to the local economy.[41]

Following the economic and financial witnesses presented against designation, Fine called upon several of the developer's own consultants. Chung Lee from WZMH-Habib explained a rehabilitation feasibility study his firm had prepared. His conclusions were that the building was inefficient in layout, and needed substantial repair and additional new construction to overcome its circulation and leasability handicaps.[42]

A cost estimator from George B. Macomber Company, working from these architect's plans, provided construction cost estimates for the rehabilitation of the building. Using the design drawings and the cost estimate, a feasibility specialist from Carpenter and Company claimed that a rehab scheme was financially infeasible. Finally, David Habib of WZMH-Habib testified that the Exchange Building was not, in his opinion, a good example of the work of Peabody and Stearns. Furthermore, he argued, the demolition and replacement of the building with new construction was justified by centuries of architectural history, in which demolitions and replacements were the customary way to meet changing needs.[43]

Two witnesses in favor of designation made arguments on economic terms--Roger Webb, President of Architecture Conservation Trust (ACT) and developer of Old City Hall, and J. Miller Blew, a developer and educator at the Harvard Graduate School of Design. Roger Webb testified that the building was structurally sound and was at the strongest possible lcoation of any existing building in Boston. These two factors, Webb argued, greatly enhanced the probability of a successful reuse program.[44] Blew argued that designation was preferable to new construction because: 1) straight rehabilitation of the building was financially feasible; 2) only a development scheme of at least 900,000 square feet was a superior investment alternative; this required a hefty zoning variance and introduced uncertainty; and 3) the complexity of the issues a 53 State St. demanded a closer look at available options and designation could serve as a first step in this process.[45]

THE ENSUING DEBATES

All the issues introduced at the public hearing were intensely debated in subsequent months. J. Miller Blew suggested in his closing comments that the

preservation interests undertake a baseline rehabilitation study to confirm that straight reuse of the building was feasible. This would not only place the developer's reuse study, which did seem rather perfunctory, under close scrutiny, but would also serve as a starting point for the two opposing parties to make tradeoffs. On Novemder 26, the BPA announced they had commissioned Mr. Blew's development and consulting firm, Real Property Resources Corporation, to undertake such a feasibility study of the Exchange Building. Meanwhile, the Alliance submitted a list of questions to the developer's feasibility analyst in an attempt to clarify his underlying assumptions and expose what they believed was a heavily biased analysis.

Meanwhile, Attorney Fine and architects WZMH-Habib met with the Landmarks Commission to discuss a process whereby a compromise development scheme might be worked out. The first of these meetings took place on the 28th of November. The BPA was not invited to these meetings, at the developer's insistence, despite the BLC's expressed argument that no legitimate compromise could be reached without their

participation. Ultimately, the BPA and the original petitioners were not involved in this negotiation process until a settlment had already been reached. During the fall of 1978, WZMH-Habib had been busily refining their compromise scheme. Phase Three of their work, which was eventually accepted as the final development scheme, was the architects' second iteration of the early compromise approach begun several months earlier. The tower portion was "slenderized" as much as possible, and the volume joining the new building to the old was carefully reshaped. This scheme, which was ready for discussion with the BRA by early December, is shown in Exhibits 2-21 and 2-22.

A COUNTER-ARGUMENT

The Real Property Resources Corporation (RPRC) "Development Feasiblity Study" was released on December 7. It concluded,

> "that the physical and financial program presented in this report is entirely feasible and would be a great success on the market if it is completed as scheduled in 1981. This program is superior to all but the very highest density new office development which might be accommodated on the site."[46]

The RPRC analysis assumed no increase in density on the site from the existing base FAR of 10, but

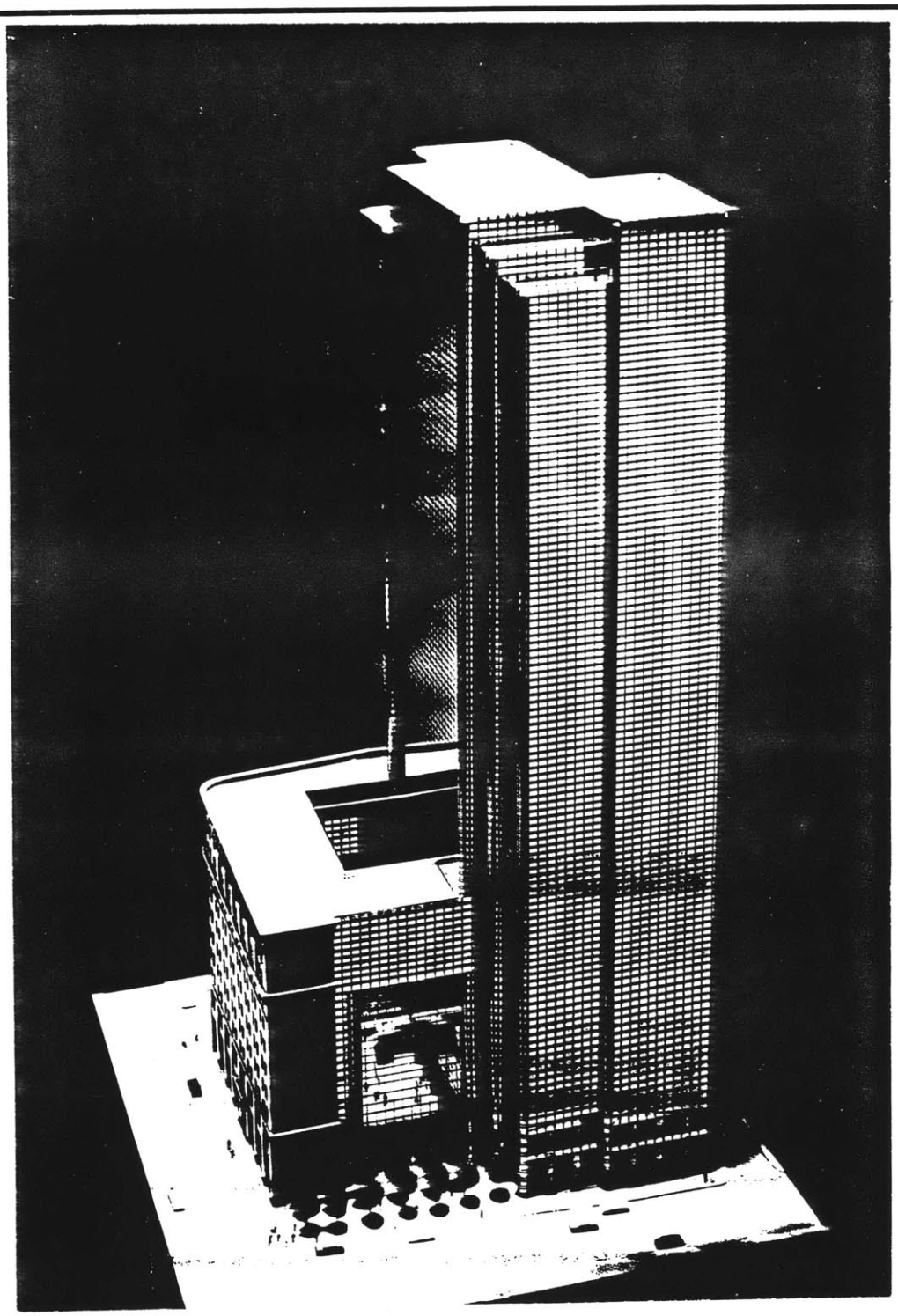


Exhibit 2-21 Phase II Model

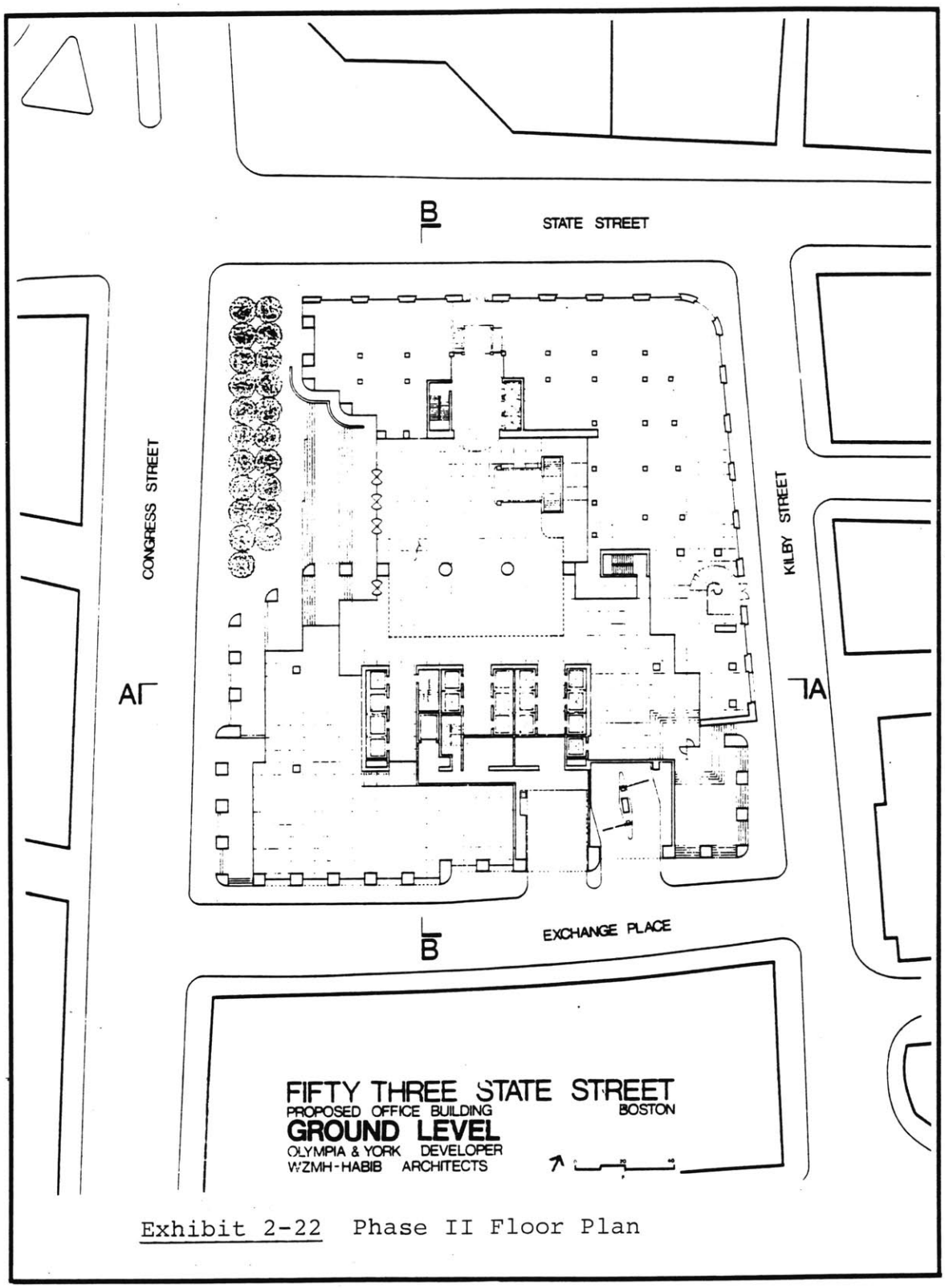


Exhibit 2-22 Phase II Floor Plan

identified this as another possible option for consideration. As a baseline rehab approach, the scheme was preservationist in spirit. RPRC suggested a new construction addition to the Congress Street wall, an existing "raw" brick facade (Exhibits 2-23 and 2-24). Otherwise, its intent was to retain and rehabilitate the existing structure.

As an investment, RPRC saw straight rehabilitation as only one of several attractive options available to the developer. Differing in their estimates of construction and operating costs, the RPRC analysts reached an opposite conclusion from the developer's analysts-- rehabilitation of the building was not only desirable, but economically superior to any other alternative schemes except one which included over 800,000 square feet.

THE DEAL

As comprehensive thorough as the RPRC report was, it arrived too late in the development process to register any impact on the outcome. At the time of its release, the development team and their attorneys were already meeting with the representatives of the

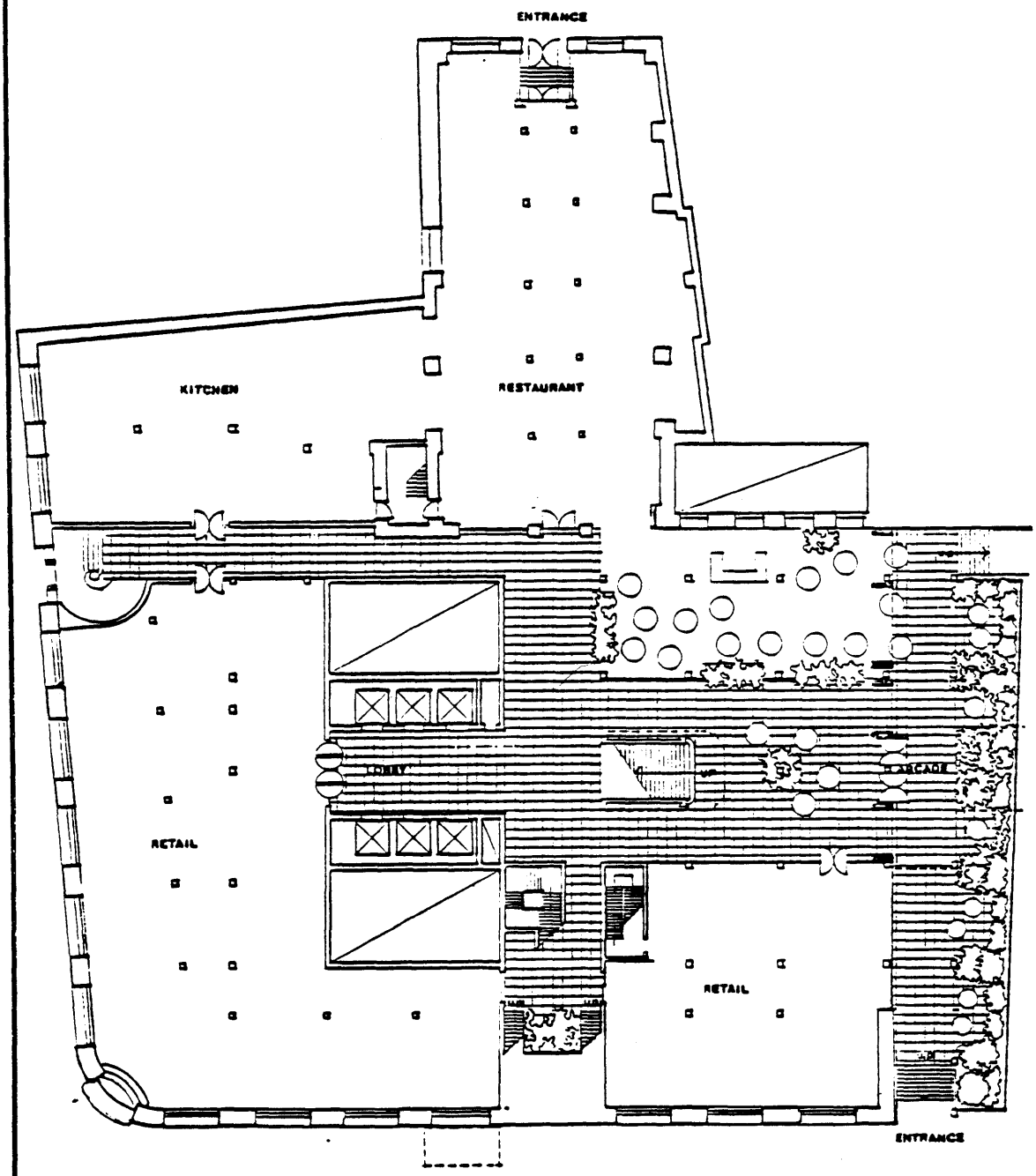
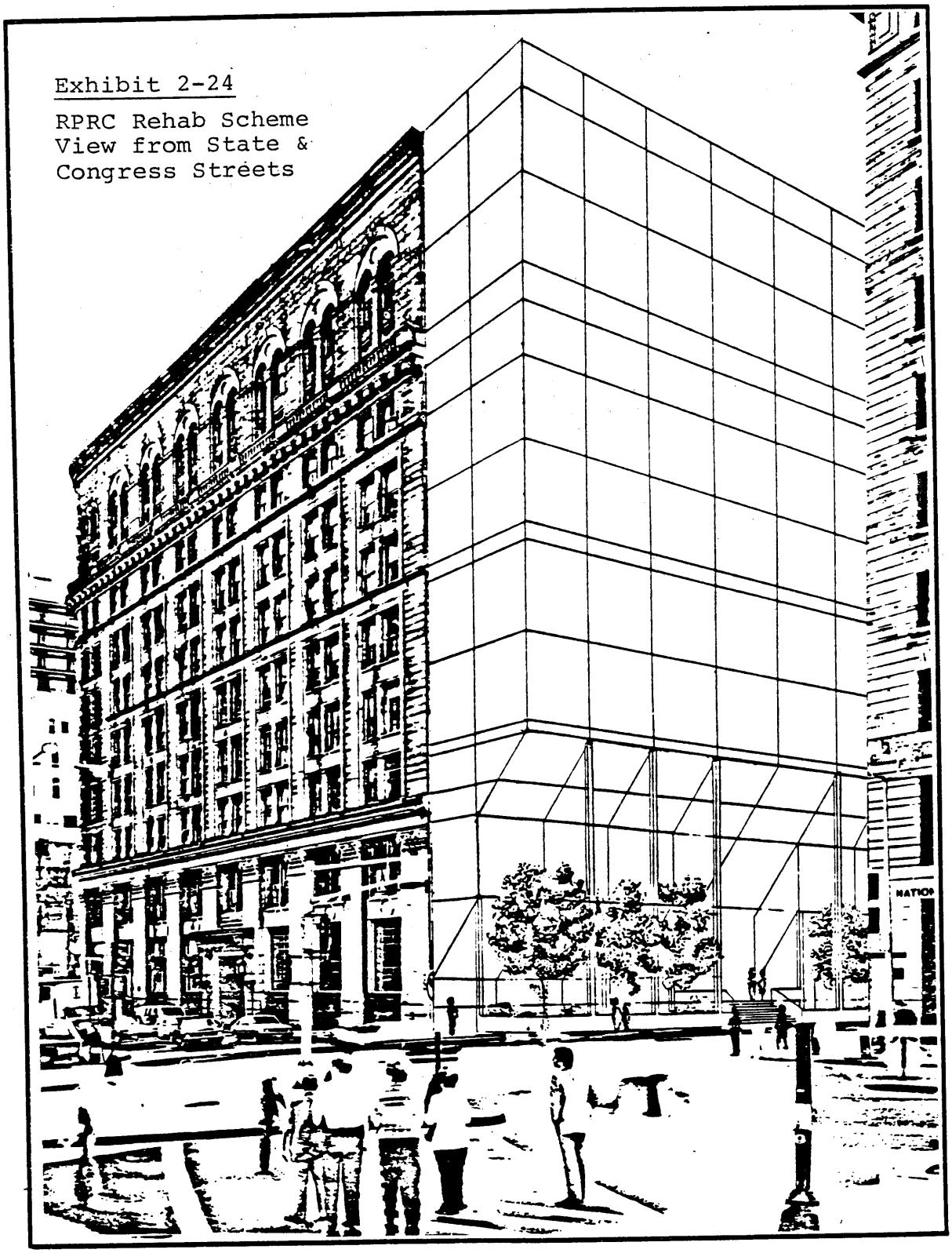


Exhibit 2-23 Real Property Resources Rehab Scheme

Exhibit 2-24

RPRC Rehab Scheme
View from State &
Congress Streets



BRA and the BLC and attempting to refine the architectural design of the project, not its fundamental parameters. Olympia and York's foresight in quietly developing their compromise scheme paying handsome dividends--they had an insurmountable headstart in the negotiations.

Although December 1979 was yet another month of an outpouring of pro-designation sentiment in letters to the BRA, BLC, and the Mayor, this was the period during which, in fact, the finishing touches were being put on the compromise scheme and the standards and criteria of the designation. In four meetings from December 11 to December 21, settlements were reached between the Commission and the developers regarding:

1. The actual boundary line of the designation.
2. The retention of the last two bays of the Kilby Street facade, which the developer originally wanted to demolish.
3. The depth of the facades to be retained.
4. The retention of the existing floor levels and spandrels.
5. The treatment of the end wall facing Congress Street.
6. The type of glass used in the existing building.
7. The reuse and/or relocation of the historic stairway in the entrance.[49]
8. The format and substance of the standards and criteria governing the designation.[47]

On December 21, the Boston Preservation Alliance was invited to see the compromise scheme. The Alliance, believing it was seeing the scheme in its conceptual, rather than final stages, was pleased to the developer moving towards a compromise strategy, and was relieved to see at least partial retention of the Exchange Building. They expressed dismay at the proposed high density and skepticism over the appropriateness of the chosen materials. They were not aware, of course, that it was really too late for these comments.

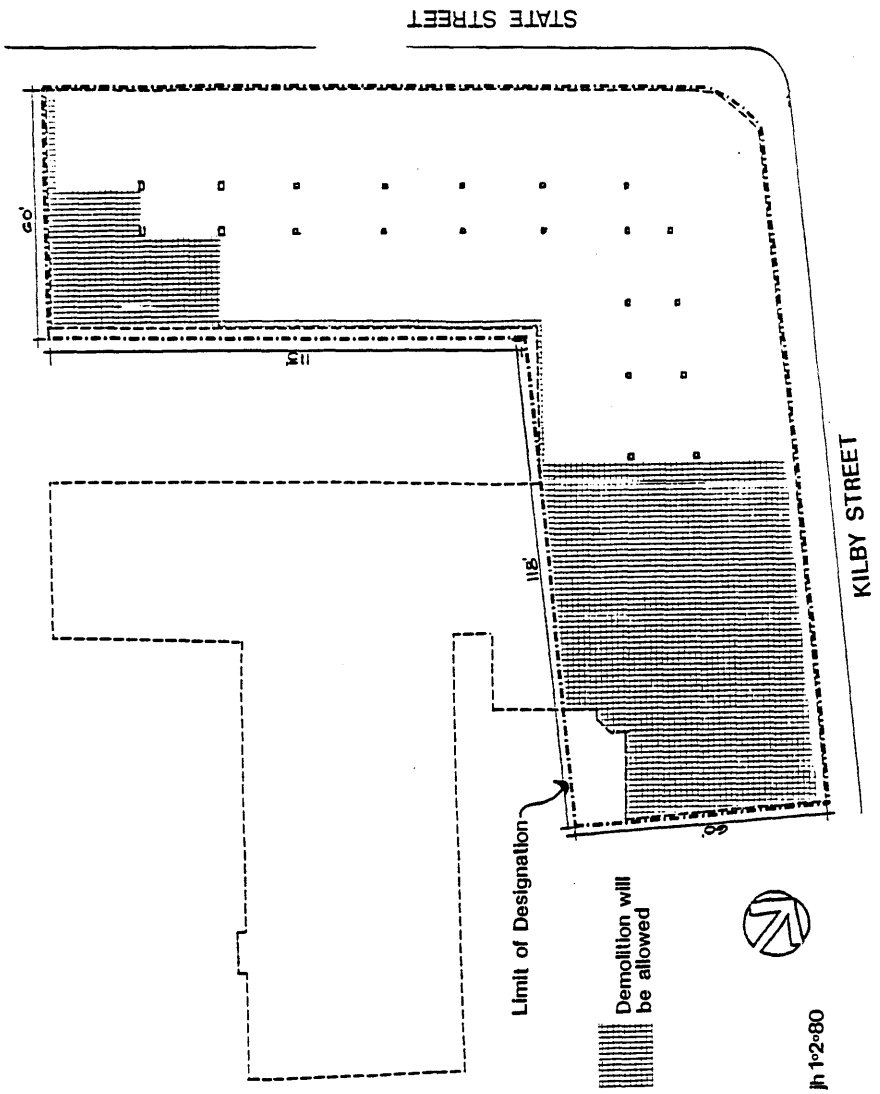
DESIGNATION

On January 2, 1980, the Boston Landmarks Commisssion voted to designate a portion of the Exchange Building (Exhibit 2-25). Plans were announced for a forty-story tower on the southern half of the site, and the retention of the "L" portion of the original Exchange Building. BRA Director Robert Ryan touted it as an exemplar of development and preservation:

> "Today, with the proposal for 53 State Street, Boston can show once again how a new and exciting building can be integrated into the distinctive scale and character of our downtown. This is an exciting proposal because it will enable us to retain the most important parts of the buildings which now exist on site, namely the facades on State and Kilby Streets...And most important to me, we will retain the present scale of building heights on State Street."[51]

Exhibit 2-25

The Designation
Boundary Line



The Exchange Building ◦ 53 State Street

THE RESPONSE

Angus Crowe, then Chairmain of the BPA, felt the scheme did not respect the architecture of the existing building.[49] One radio announcer called it "a strange blend, a 19th century granite building 11 stories tall wrapped around a modernistic office tower perhaps 40 stories."[50] Globe columnist Ian Menzies was more direct: "Has Boston really saved 53 State Street or is the city's preservation effort merely a facade? Put it another way, how viable is a venerable old Boston building that retains its face but looses its behind?"[51]

The Preservation Alliance, feeling they had been misrepresented in the media as endorsing the compromise scheme, promptly issued press releases clarifying their role in the compromise process and dissociating themselves from the proposal. They insisted they had not been full participants in the design negotiations and had only been asked on short notice to comment on a fait accompli. Furthermore, they maintained, they had been led to believe that the project was not finalized when they were allowed to see it. They claimed the Standards and Criteria, the "sole factors on which the preservation, or lack therof, is

grounded",[52] were shown to the Alliance members only two hours before the final hearing. They were disgruntled not only with the substance of the designation, but resentful they had been excluded from the secretive design discussions which took place after the public hearing and determined the designation. They restated their preference for a moderate and sympathetic addition to the existing building, a concept RPRC had originally suggested as well.[53]

The original petitioners for designation were also angry over the outcome of the six month effort. Spokesman Richard Heath wrote that the compromise "is a complete capitulation to the developer." He felt the BLC process was one which ignored the original petitioners and became an closed brokering game between the city, the developer, and preservation professionals. In the process, he believed, the BLC had been co-opted by the developer. He'd "rather the BLC and the preservation constituency go out kicking and lose than lay down and be carried out."[54]

THE AFTERMATH

There is no doubt that the final compromise reached for the development of 53 State Street left many

participants and observers wondering if it was a net gain or loss for the city. Not only is the end product controversial, but many participants feel that the process led more readily to confrontation, and dispute than it did to constructive communication and resolution. Actors on both sides (and in the middle) of the issues in the case were left feeling exploited and unfairly treated by the process.

What went wrong? What elements of the process led to the compromise approach now under construction, of which few are genuinely proud? How can we be sure that all the alternatives were considered--and if they weren't, why not? These questions still linger in the minds of both participants and observers of the 53 State Street Case, and are addressed in subsequent chapters in this thesis.

The analysis of the process is only meaningful, however, if we can identify one or several outcomes which can be judged superior to the one actually accepted. At 53 State Street, this range of alternatives is bounded by the straight rehabilitation

scheme developed by Real Property Resources Corporation on the one hand, and the original Phase One (total demolition and construction of a 900,000 square foot tower) Olympia and York proposal on the other. It is to this range of possible compromises, of which the current Exchange Place development is but one example, that the thesis now turns.

CHAPTER 3

53 STATE STREET: RECONSIDERATION

This chapter considers alternative development approaches to the Exchange Block, irrespective of the process recounted in Chapter 2. Four design variables are explained, and alternative approaches to each are described. An illustrative proposal incorporating these objectives is then presented. Next, a computer model is used to measure the financial feasiblity of each identified alternative. Finally, a comparative evaluation of these alternative development scenarios is conducted.

DESIGN VARIABLES

The thesis investigates alternative development schemes through the consideration of four variables: 1) the amount of the existing building retained; 2) site density; 3) building massing; and 4) the relationship between old and new construction. Each of these is explained and illustrated in the sections following.

Design Variable 1: Retaining more of the Exchange

Building. The value of a landmark in the city extends beyond the preservation of a period facade or certain selected details. An old building is useful because it, in the company of other buildings of varying age, documents and communicates the stream of time. To perform this role meaningfully, however, a landmark must retain its character and "content" as well as its appearance. The notion of organization, treatment of needs for light, air, views, the actual construction system, and a building's sense of scale and dimension are as important to conveying its place in history as is its external facade.

The value of the Exchange Building, for instance, extends beyond its granite facade. Its value is not 2-dimensional, as the eventual designation might suggest, but spatial and architectural as well. The building is organized as a modified "U" shaped plan, a common strategy for maximizing natural light and air for office space arranged in "wings" (Exhibit 3-1). Centralized circulation was located at the union of the two wings, at the groin of the "U". The third wing, extending to the south down the center of the site, reflects the same objectives of providing

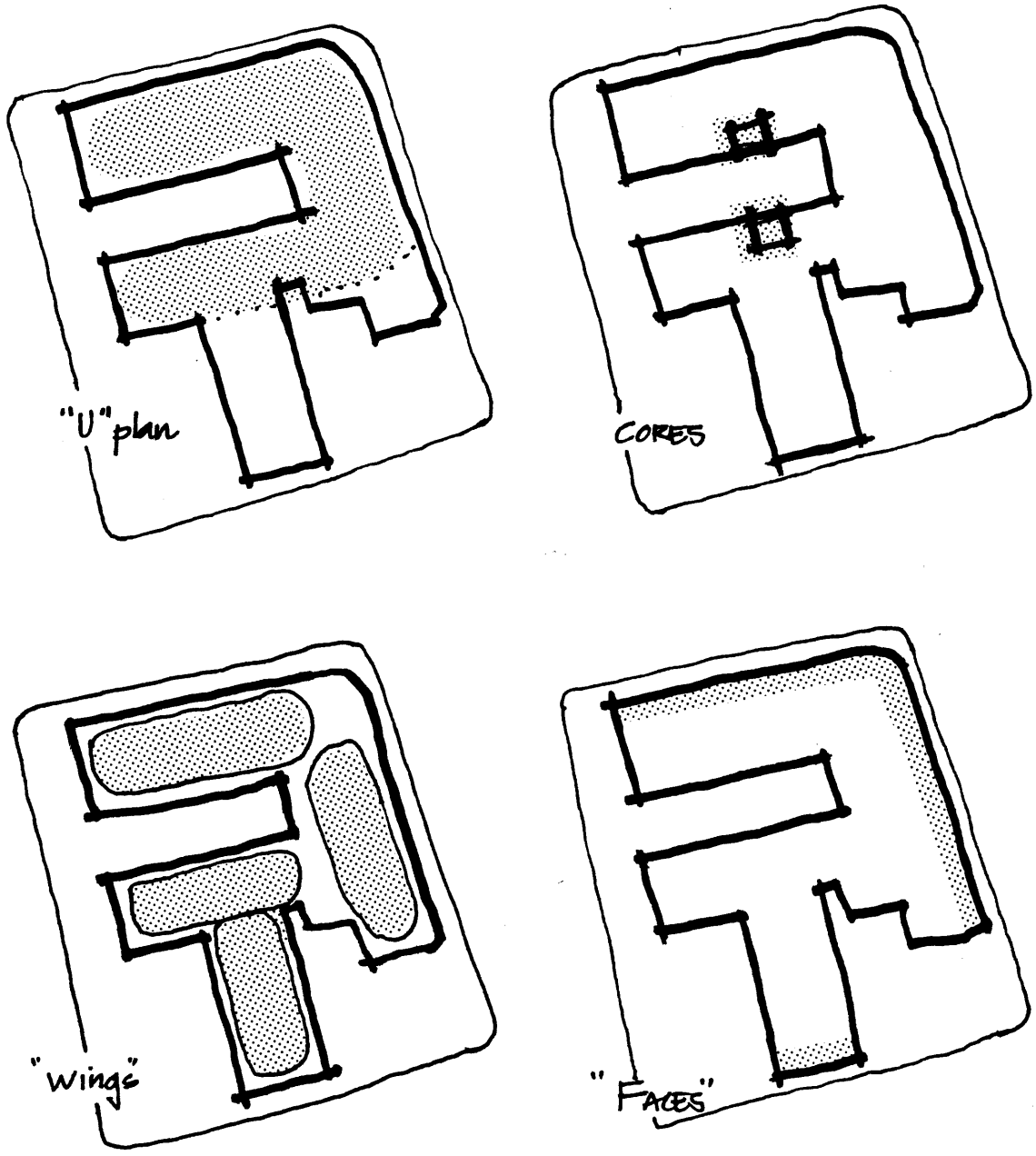


Exhibit 3-1

Structural Analysis

centrally located circulation and ample light and views on both sides of the shallow, thin building plan.

Landmark designation, even if it applies to only a portion of a building, should attempt to capture the "content" as well as the appearance of a building. In the case of the Exchange Building, the content of the structure includes the "U" Plan, the dimension and materials of the atrium, and the placement of vertical circulation elements in central locations, a strategy which adds activity and interest to the atrium itself. The interior atrium walls, constructed in utilitarian brick with segmented arches, are as rich in meaning and content as the dressed granite facades on State and Kilby Streets. Retention of the entire "U" concept, maintaining the original atrium and wing dimensions, is therefore the first parameter of the attempted redesign.

Design Variable 2: Reducing the Site Density and/or Building Height. The Olympia and York scheme has an FAR of 21.47, including approximately 900,000 square feet in the new office tower and 200,000

square feet in the retained "L" portion of the Exchange Building. This represents 41 stories of an average 26,000 square foot each. Independent of financial feasibilty, which is investigated in subsequent sections of this chapter, arguments against high density at the Exchange Block are:

Disruption of the scale relationships in the district. WZMH-Habib's theory that "framing" the Old State House with a family of high rise towers will enhance its "centerpiece value" is dubious. The design strategy the architects selected does, literally, frame the Old State House; however, the huge scale difference between the Old State House and the very closely grouped towers on all sides seems to ridicule, rather than enhance, what is the architectural focal point of the district.

At certain times of the day, the Old State House is now "spotlighted" by the sunlight which penetrates between existing towers. Its warm color and texture are highlighted

in contrast to surrounding structures. Too many tall buildings placed too close will, however, keep the Old State House in a perpetual shadow of flat, subdued light, significantly reducing the building's gemlike quality.

Furthermore, the existing Exchange Building is a "transitional building" between the large recent structures and the finer grained fabric of the financial district south of State Street. The building's massiveness and deeply textured stone make it a strong "gate" building to the district. This role would be undermined by the placement of too tall and large a building on the southern portion of the site.

Adverse environmental effects of high site density on the Exchange Block. Shadow studies conducted by WZMH-Habib as part of the environmental analysis required under the city PDA review process were interpeted by the environmental consultants as follows:

"additional incremental shadow components due to the new tower will probably not be significant. This is due to the proximity and shadow effects of other similarly large towers in the immediate vicinity."[1]

This reassuring statement obscures, in fact, a heavy bias in the analysis which considers the area north of the site, the Faneuil Hall Marketplaces, very important, but minimizes the impacts to the other surrounding areas. It is true, for instance, that the 39-story, Sixty State Street tower already shadows a substantial portion of the area to the north, and the 41-story Olympia and York tower will add only a small marginal shadow in this direction. The sun and shadow effects are more serious, however, for other parts of the city.

Shadow impacts for Washington Street, Court Street, and other areas to the southeast and southwest, are considerable. Justifying height by the existence of tall neighbors,

some of which were also in the pre-development stages at the time of the case, is a persuasive but less than objective argument. In the words of one BRA staffmember, "the only mitigation measure available is to reduce the height of the tower by nearly half."[2] (For more shadow analysis, see Appendix C).

Ground level wind effects of the tower have been analyzed in wind tunnel testing conducted by Bolt, Beranek, and Newman, consultants for the environmental impact analysis. In fact, the final design was revised to improve the building's performance relative to this criteria. Consequently, the consultants claim, at certain locations around the Exchange Block, pedestrians will enjoy a net improvement in wind conditions due to the design of the new tower and the configuration of the atrium.

This writer is not qualified to either confirm or reject this claim. Assuming that

similar mitigation measures could be achieved regardless of density, (the reduction in wind effects was apparently achieved by shaping the low atrium to allow air passage up above the fifth floor along Congress Street) the wind impacts of alternative development schemes are considered "neutral" the comparative evaluation presented subsequently.

The tower's impacts on traffic, sewage, and other city infrastructure are claimed to be minimal. Again, lacking the expertise to evaluate this claim, this criteria is considered neutral in the evaluation.

The policy impacts of high density on the site. The BRA, using the Greater Boston Real Estate Board's projections for office space absorption, predicted a yearly rate of 800,000 square feet through 1983. This estimate has actually proved conservative-- absorption has run at an average of 830,000 square feet per year from April 1979 to April 1981. Demand for office space in

Boston is strong, substantial, and sustained.

In each review of a proposed high density development above the existing zoning baseline FAR of 10, the BRA makes an implicit policy choice. Market demand can be met by approving a few projects of super high density, and concentrating investment in a few areas. Alternatively, the same demand can be met not by approving limited number of super-density projects, but by stimulating widespread and individually smaller rehabilitation or new construction projects on a greater number of sites. In practice, of course, the city can attempt to combine and balance these two supply strategies.

Given these choices, each decision regarding a major high density development can be seen to have a significant impact on the entire market. The policy preference implicit in such decisions will either encourage a general development and reinvestment in a wider

distribution throughout the city or will encourage supply through a very few intensive developments of the highest density.

The approval of the FAR 21.47 at the Exchange Block, particularly on a site which appears to have been able to support efficient and feasible infill around the existing building, clearly indicated a policy preference for the latter strategy. The approval of 1.1 million square feet, along with 1.2 million at Dewey Square, seriously weakened the market position of the smaller investors considering upgrading, infill, or more modest new construction.

For the urban design, environmental, and policy-related reasons cited above, the thesis adopts a second design objective of a general reduction in site density. The optimal FAR, in terms of financial performance, is explored in the analysis presented in subsequent sections of the chapter.

Design Variable 3: A building massing which

minimizes the perceived bulk of the building, especially on Liberty Square. The eventual formula of density, height, and site configuration results in an average floor of 26,000 square feet located on the southern half of the property. This building volume covers nearly all the remaining site area around the retained "L" portion of the Exchange Building, for the full 41-story height.

The architects have used two massing techniques to reduce this great bulk. By using a series of round-cornered tubes to compose the shaft of the tower, the overall mass is broken into more slender vertical portions. These tubes are of varying height to create the impression of stepped massing, even though the top is actually flat. Although both these design strategies add visual interest and successfully reduce the perceptual mass of the huge building, several weaknesses in the overall massing can be considered (Exhibit 3-2).

First, the actual, as well as perceived mass, on the Liberty Square corner is still huge. The current openness of this corner of the Liberty Square is an

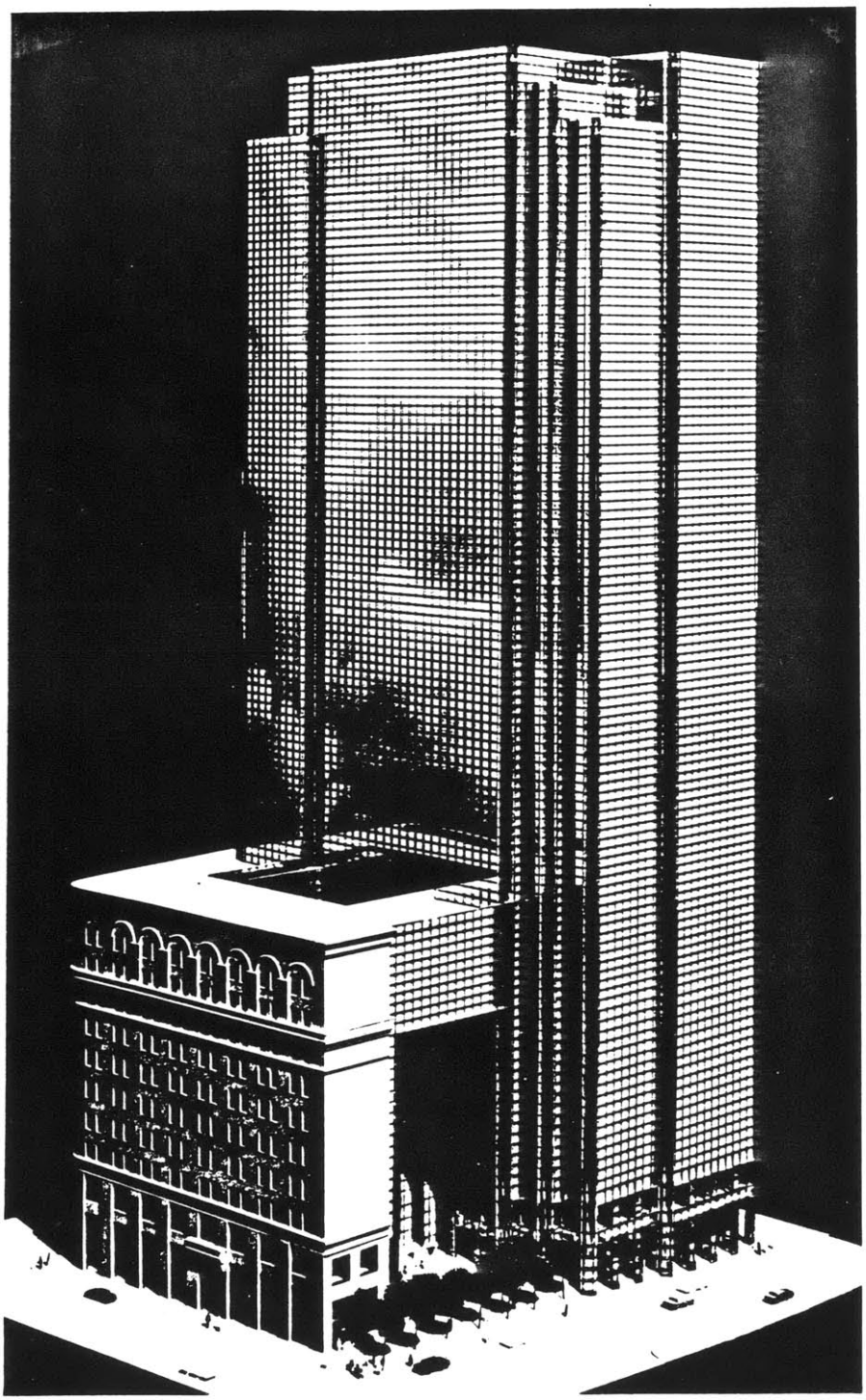


Exhibit 3-2

Phase II Tower
Massing Discussion

important "release" to the tightening and funneling of the triangular street pattern at this location. However, no attempt was made to shift the building's mass away from this corner of the site. The openness and permeability now afforded by the Exchange Building will be replaced by a ponderous mass which will close this end of Liberty Square. The massing is even a bit ironic, given the BRA's insistence on a pedestrian pass-through at the ground level; the building massing above implies everything but easy passage (See Exhibit 3-3).

Second, the stepped massing of the tower, although certainly a commendable strategy for reducing the tower's huge bulk, would have been more effective if it had been more emphatic. The actual reduction in floor areas first occurs at the 39th and 40th floors. From the pedestrian level, therefore, the stepped massing accomplishes no perceivable reduction in bulk. Since the first 39 floors of the tower are all the same floor area, the positive effects of the stepped massing are irrelevant except when viewed from above or afar (Exhibit 3-4).

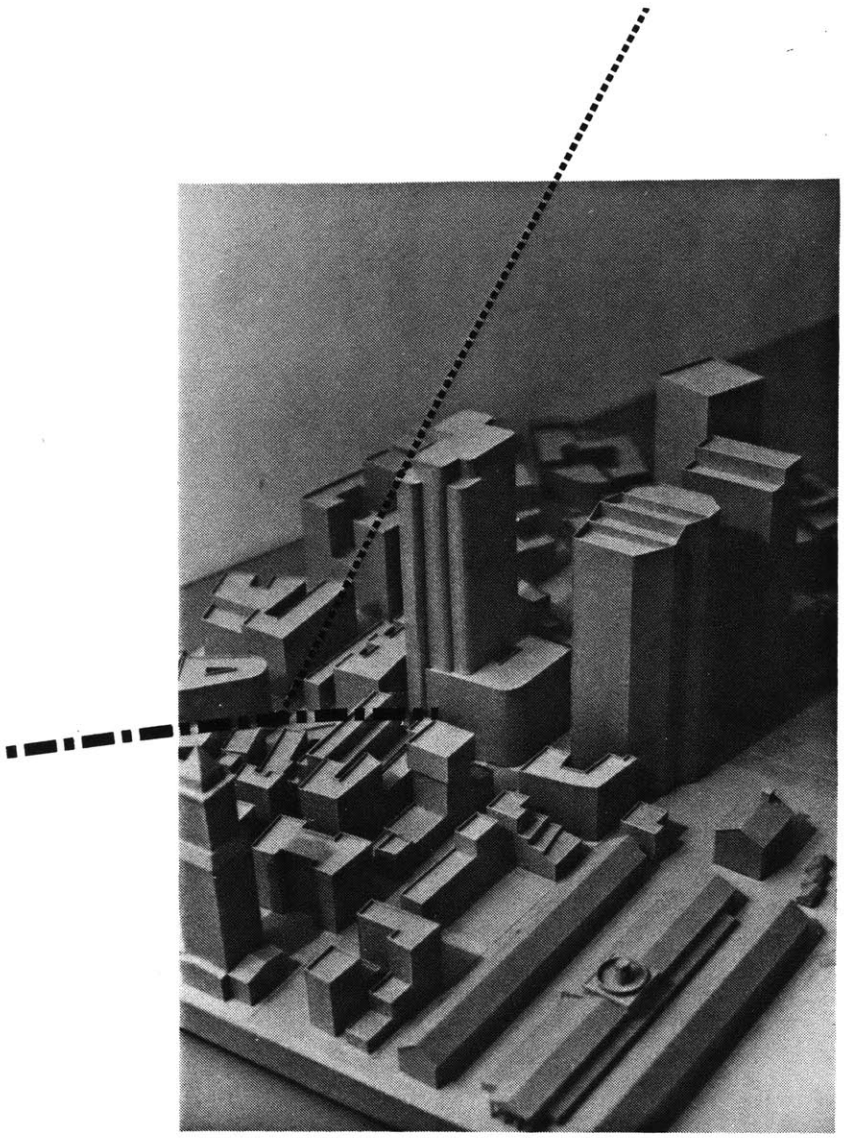


Exhibit 3-3
Massing at Liberty Square

pedestrian movement

sight line

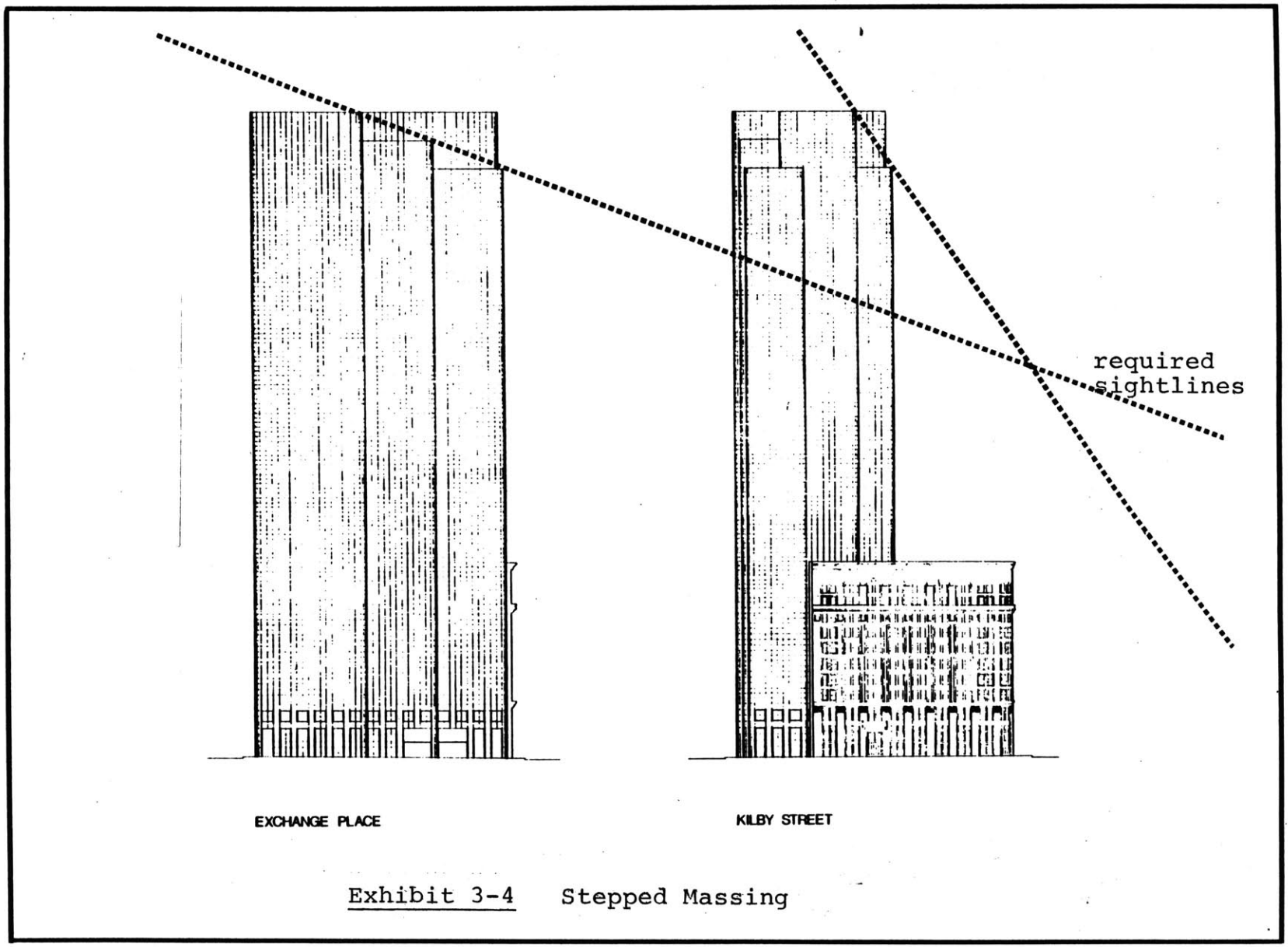


Exhibit 3-4 Stepped Massing

Third, the use of the rounded corner, although a direct effort to relate the new building to the old (the intent was to echo the rounded corner of the retained "L" portion of the Exchange Building) may actually work counter to the effort to reduce the mass of the tower. The rounded corners extend the building visually and increase its perceptual mass, whereas sharper, squared, or angled corners would strike crisper lines and creates sharper reflections and shadows, which culd help reduce the visual bulk of the building.

An alternative design is therefore predicated on the objectives of reducing the building mass at Liberty Square, using a more aggressively stepped massing with earlier floor area reductions (occurring at lower heights in the building) and crisp, rather than rounded corners.

Design Variable 4: Improve the architectural relationship between the old and the new. Identifying the "proper" relationship between old and new parts of a building "collage" is a question of current interest in the architectural profession, and evades

easy answers. In this section, the thesis proposes an analytical framework for considering the issue, and identifies an alternative set of design strategies for approaching an addition to the Exchange Building.

An entire volume devoted to the subject of Old and New Architecture: Design Relationship, was published this year by the National Trust For Historic Preservation, summarizing the proceedings of a conference held on the subject in December 1977.

Contributing to the volume were architects, preservationists, planners, critics, journalists, educators, and public officials. And although it is the single-most comprehensive work focussed specifically on the subject, the publication evades firm conclusions. All the contributing authors agree that the relationship between old and new should be "a sympathetic one", or one based on mutual "respect" between old and new. Definitions of what actually constitutes this respect, and what specific design strategies produce such a relationship, however, are as numerous as there are authors.

Should a new building contrast or blend with the old? Is "respect" for the old achieved by repeating architectural elements, materials, or details, or by providing a stark backdrop which accents the old by its "neutrality"? Should the new portion look new or attempt to mimic the old? As with all design issues, these questions escape easy and absolute answers. Preferred design strategies seem to vary with each designer's espoused philosophy, education, and/or explanations of their work.

The lack of consensus within the profession is further frustrated by the absence of a logical analytical framework for assessing the design relationship between old and new strucutres.? What are the different degrees to which a new building can relate to an old? Is the relationship a question of degree as well as character and quality?

This thesis proposes that the design relationship between old and new construction is expressed, interpreted, and can be evaluated at five different "levels", from the most literal and direct to the most cosmetic and superficial. In descending order

of importance, these are: 1) functional and organizational; 2) spatial; 3) formal; 4) sensory or appearance-related; and 5) illusory or allusory. This concept is diagrammed in Exhibit 3-5. Each of the "levels" is discussed below and used to formulate design objectives for the illustrative scheme presented later in this chapter.

1. Functional/Organizational

Apart from any manipulation of materials, finishes, voids, reference lines, projecting cornices, etc., the most fundamental level at which new and original construction can relate is through the basic functional organization of the two building pieces. The conceptual arrangement of program elements, primary vertical circulation, relationship between building plans and sections are the available design tools. In the writer's view, this "level" of the relationship is fundamental, and is unaffected by design strategies of the other four levels.

For example, the retained major entrances,

Exhibit 3-5

Degree/"Level"	Quality/Character ie:
1. functional	sympathetic
	respectful
2. spatial	reinforcing
	contrasting
3. formal	highlighting
	replicating
4. sensory	reversal
	mediative
5. illusory/allusory	competitive
	subordinate
	reflective
	independence
	reinterpretive
	literal
	resonant
	dissonant
	repetitive
	exaggeration
	dependent
	...

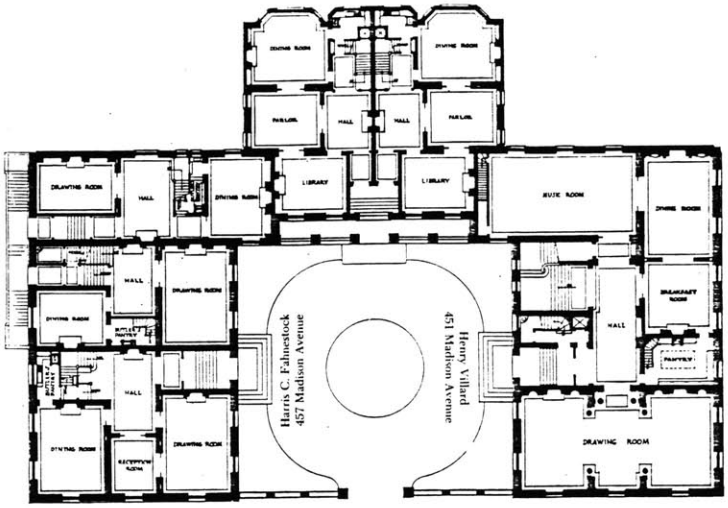
The design relationship can be formulated using qualitative approaches to each degree or level of the relationship. The levels are listed in decscending order of strength.

plan organization and site orientation, and circulation patterns of an old building can either be reinforced or changed by the plan organization of the new addition.

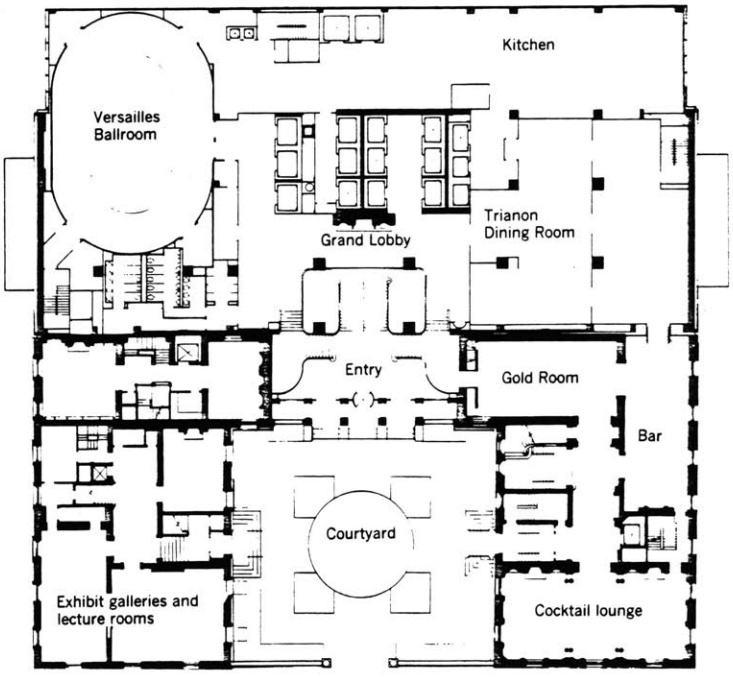
The Helmsley Palace Hotel in New York, for example, a building of compromise which utilizes a "U" shaped set of townhouses as a frontispiece for a 50-story hotel tower, is very weak in this respect. The Villard Houses (the townhouses) create a natural entry courtyard facing Madison Avenue. In the new plan, however, the main entrances to the hotel, are located a full floor level below the courtyard and on the side streets, rather than the front, unrelated to the original, established entrance which organized the entire complex. This incongruity weakens both the function and the spirit of the old building, the new addition, and whatever synergy the two could have created (See Exhibits 3-6 to 3-8). No amount of exterior detailing, repetition or replication of form, or faithful reproduction has the same

Exhibit 3-6

Floor Plans
Helmsley Palace Hotel
New York City



original



now

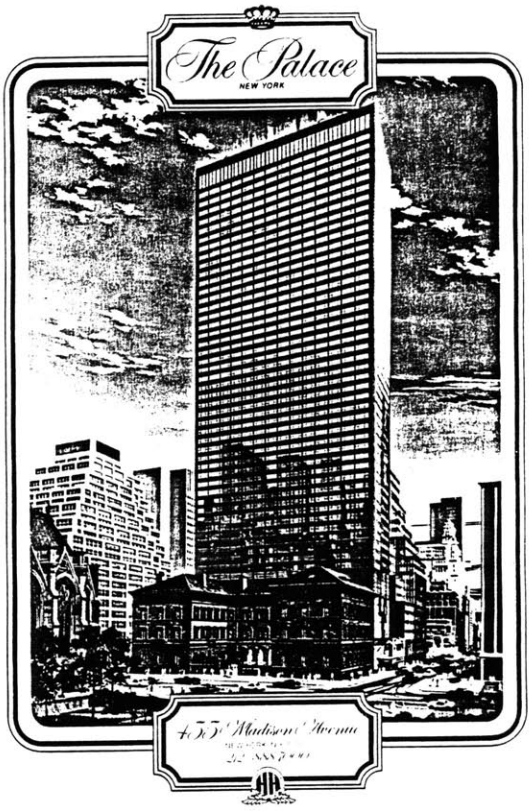
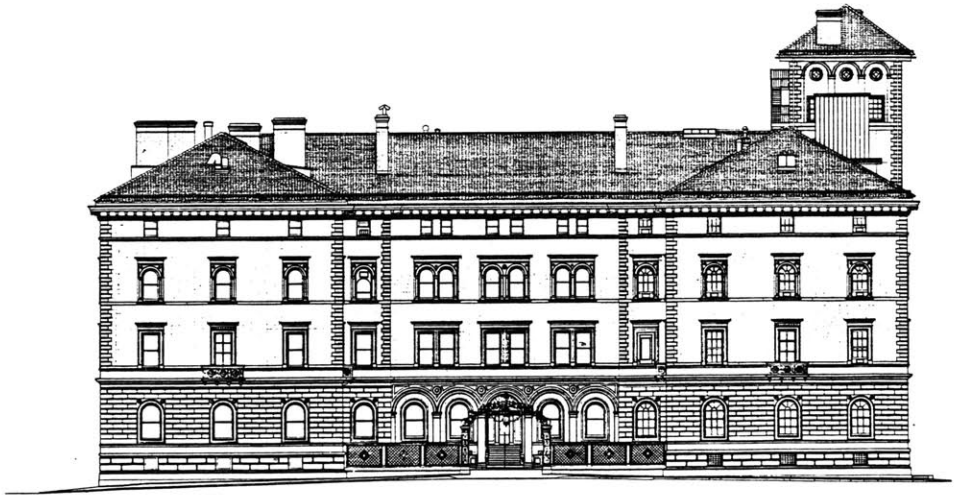
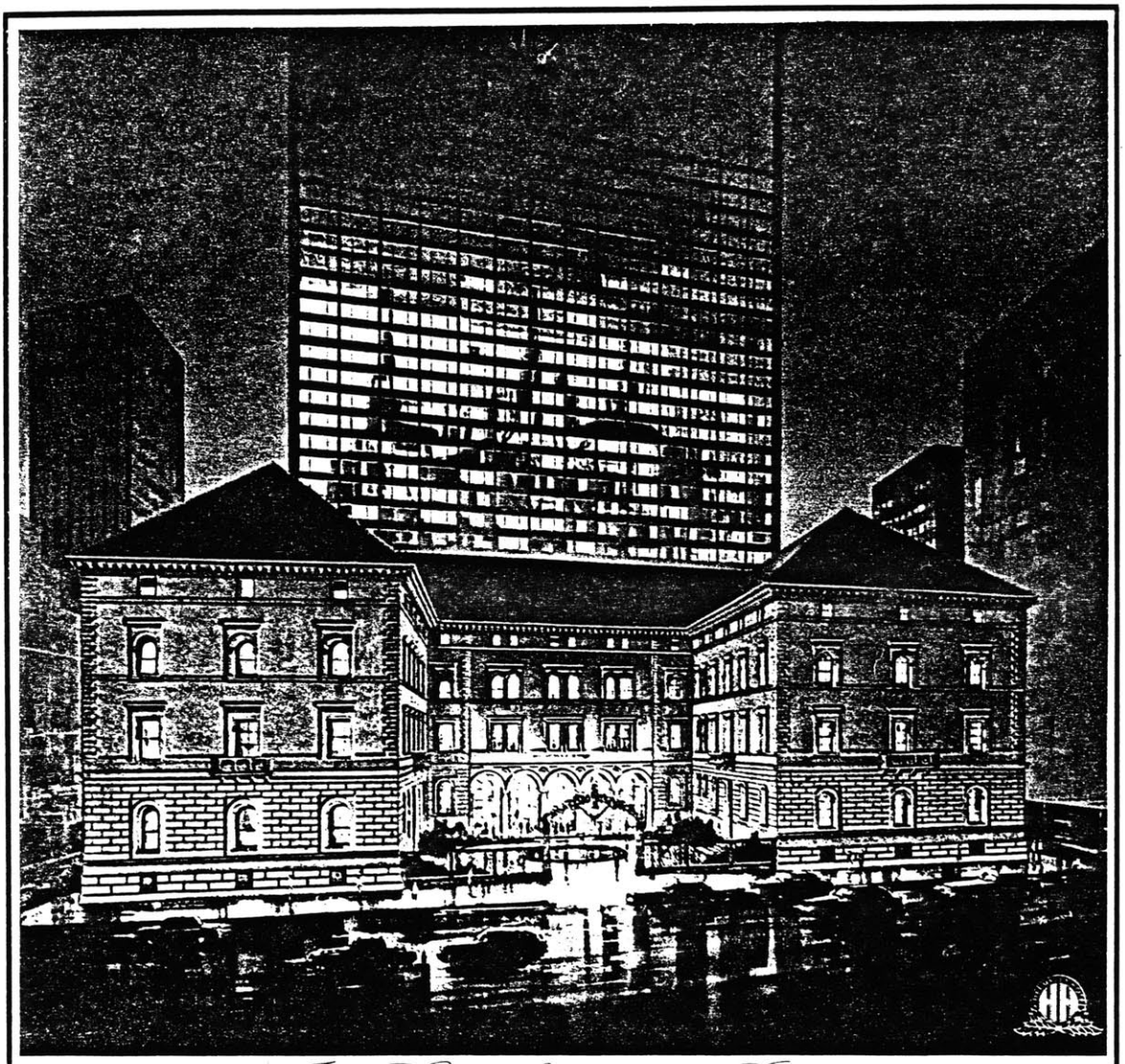


Exhibit 3-7





It's The Helmsley Palace

It's Dom Perignon and pheasant under glass. Under crystal.

It's having your morning coffee overlooking the spires of St. Patrick's.

It's sipping 20 year old Scotch in a 100 year old bar where all the spirits aren't in bottles.

It's strolling through a New York landmark – the most historically significant grand entrance and public rooms of any hotel in America.

It's 51 stories of gleaming gold and silver and marble. With all the style and panache of a Cole Porter lyric.

It's paintings by La Farge. And glass by Tiffany.

It's opening night on Broadway.

It's Scarlatti and F. Scott Fitzgerald.

It's La Scala, the Louvre and tea from Fortnum & Mason. It's the most magnificent hotel to open in New York in a century. It's The Helmsley Palace.

The Helmsley Palace

Exhibit 3-8

impact of the functional strategy used in the addition.

Likewise, the section organization of a new addition can either reinforce or weaken the old building. WZMH-Habib's scheme for 53 State Street is quite successful in this respect. The first twelve floors of the new office tower were designed to correspond exactly to the floor elevations of the original Exchange Building. Although this incurred greater costs (the original floors are not regularly spaced and include some inefficient floor-to-floor heights) the architects achieved a functional, literal connection between the old and new and will be able to create visual continuity in the treatment of the facade (Exhibit 3-9).

2. Spatial

The next level of design relationship involves three-dimensional strategies to relate old to new. After the primary functional relationship has been established,

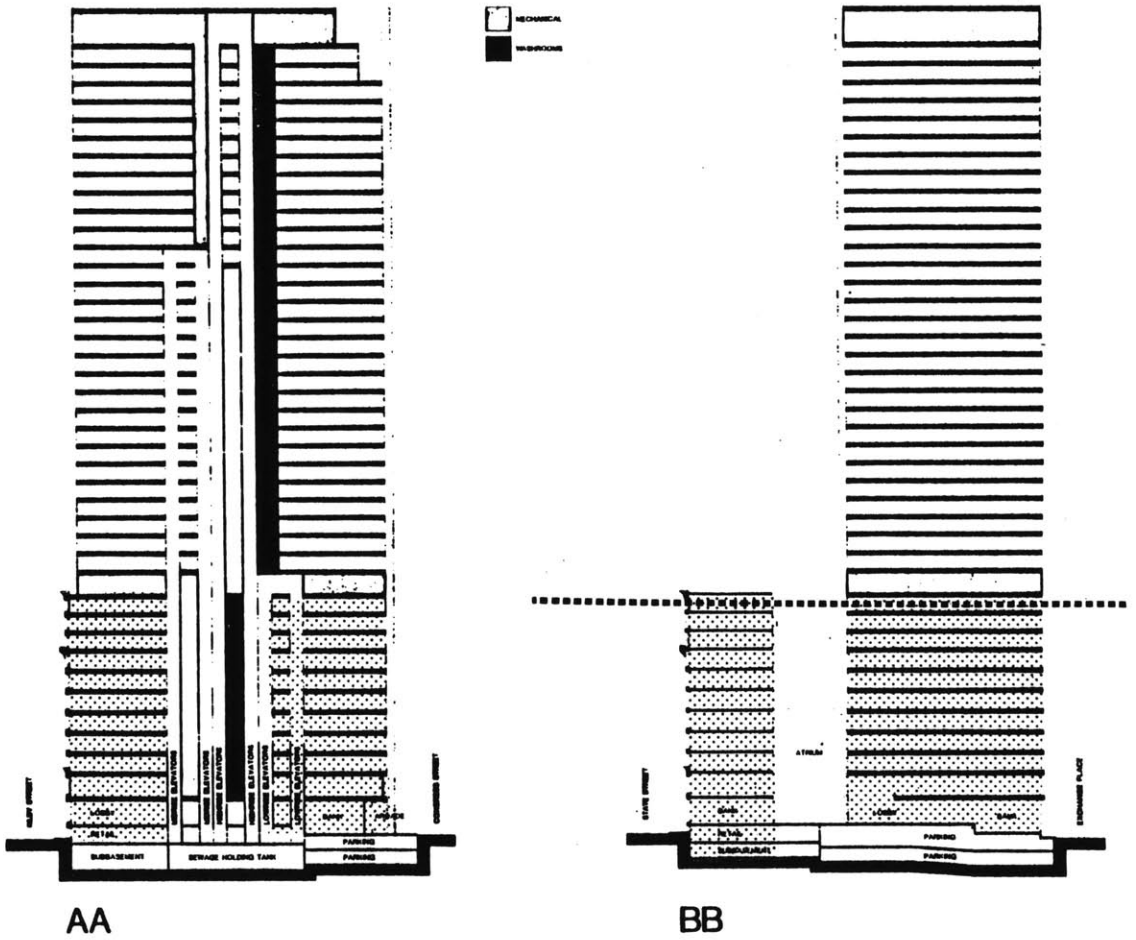
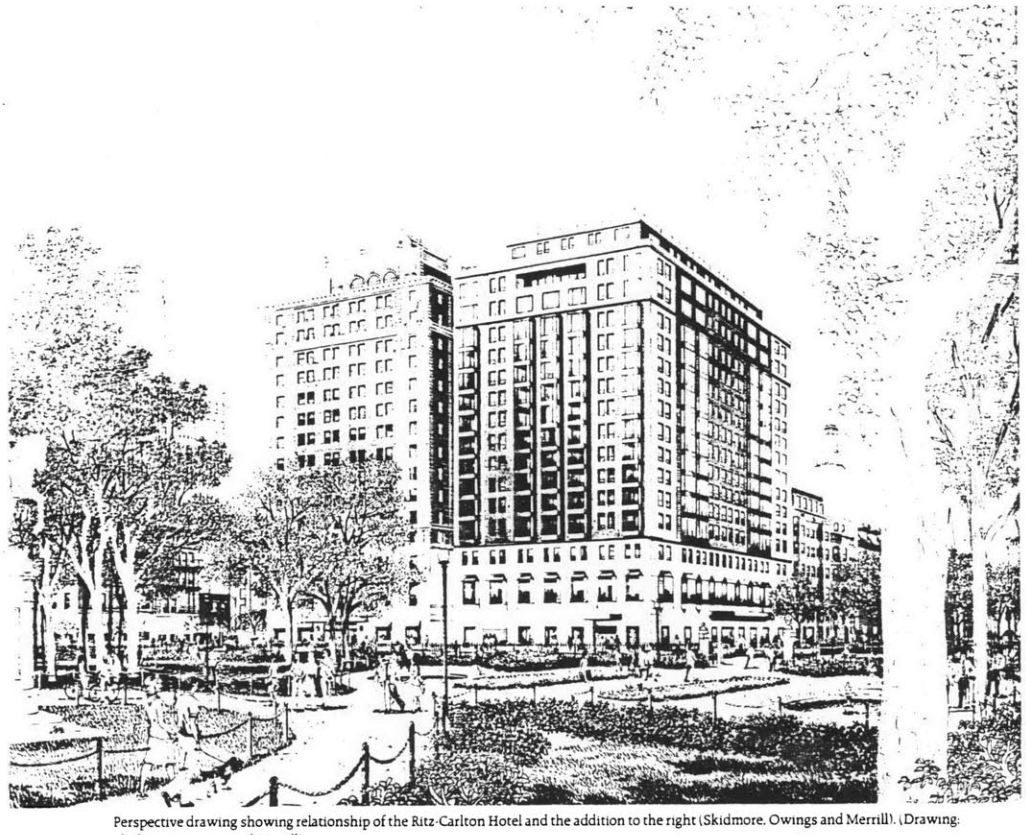


Exhibit 3-9 Matched Floor Levels

the placement, orientation, and configuration of building masses can be used to express a number of design relationships. In addition, the use of reveal lines, voids, projecting string courses, etc. can be used. Two useful examples are the addition to the Ritz-Carlton Hotel and the One Post Office Square project, both in Boston. At the Ritz--Carlton the addition is sized, proportioned, and configured identically to the original building. Projections and setbacks occur exactly as they do in the original structure (Exhibit 3-10).

The spatial strategies used at One Post Office Square, however, are quite different and much less literal than those at the Ritz--Carlton. In this project the two building masses are vastly different in size, but are related through a series of three-dimensional strategies. The office tower was set back from the street, a deliberate effort to allow the original building to predominate the site. The string courses in the



Perspective drawing showing relationship of the Ritz-Carlton Hotel and the addition to the right (Skidmore, Owings and Merrill). (Drawing: Skidmore, Owings and Merrill)

Exhibit 3-10

Near replication of dimension, form, ordering, and materials

original building are then used as reference lines for massing changes in the adjacent newly constructed tower. The lower portion of the tower, for instance, is a deep void in reference to the solid base courses of the old building (Exhibit 3-11).

3. Formal

The forms in an original building can also be used as cues for the new addition. This can be a spatial (three-dimensional) relationship, but could simply be two-dimensional (painted or within the building skin). At this level, the shape and dimensioning of form conveys a relationship between new and old. The addition to the Boston Public LIbrary, with its overscaled replication of forms found in the original structure, is a notable example of this relationship at the formal level (Exhibit 3-12).

4. Sensory/Appearance-Related

Two-dimensional strategies can also be used to express the design relationship between

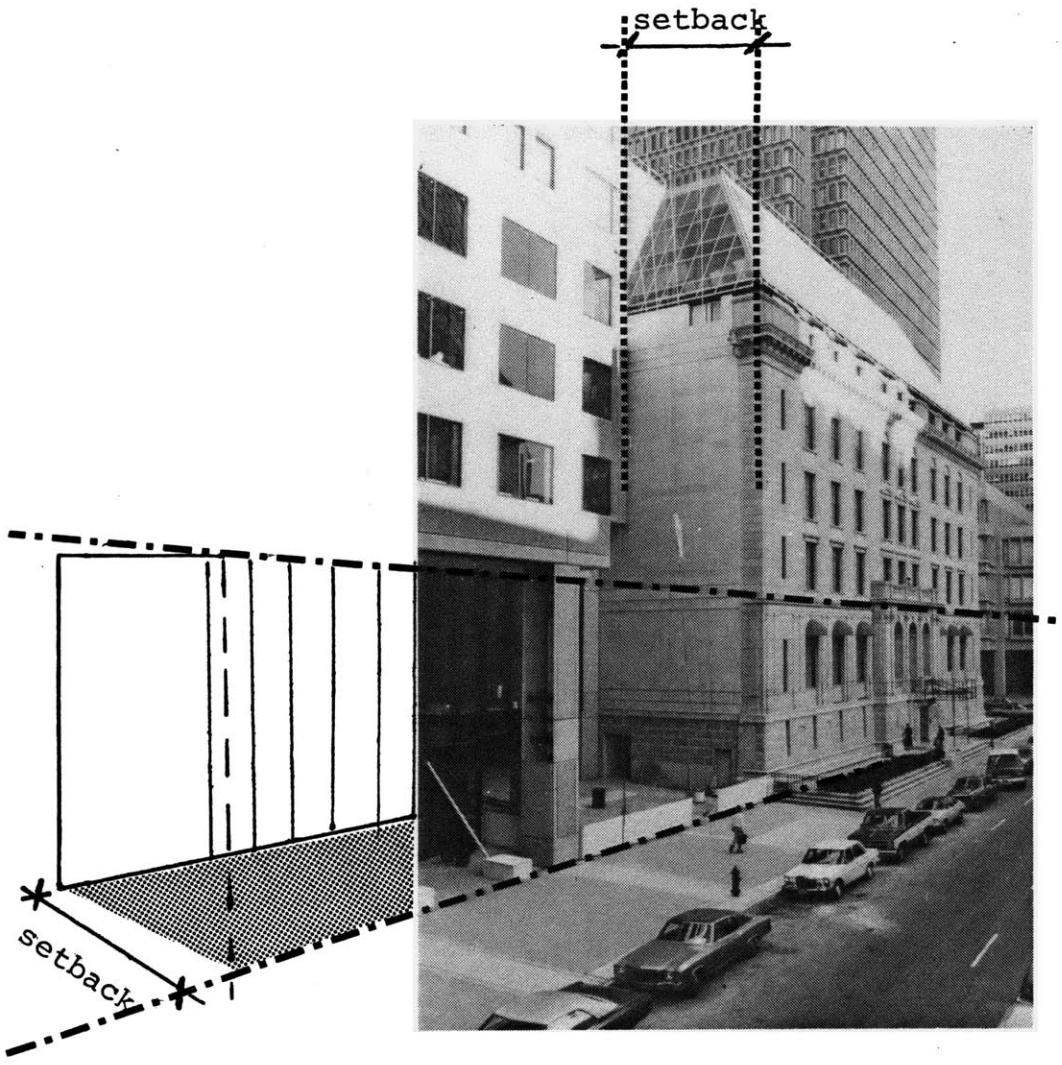


Exhibit 3-11

One Post Office Square
Lower Level Massing

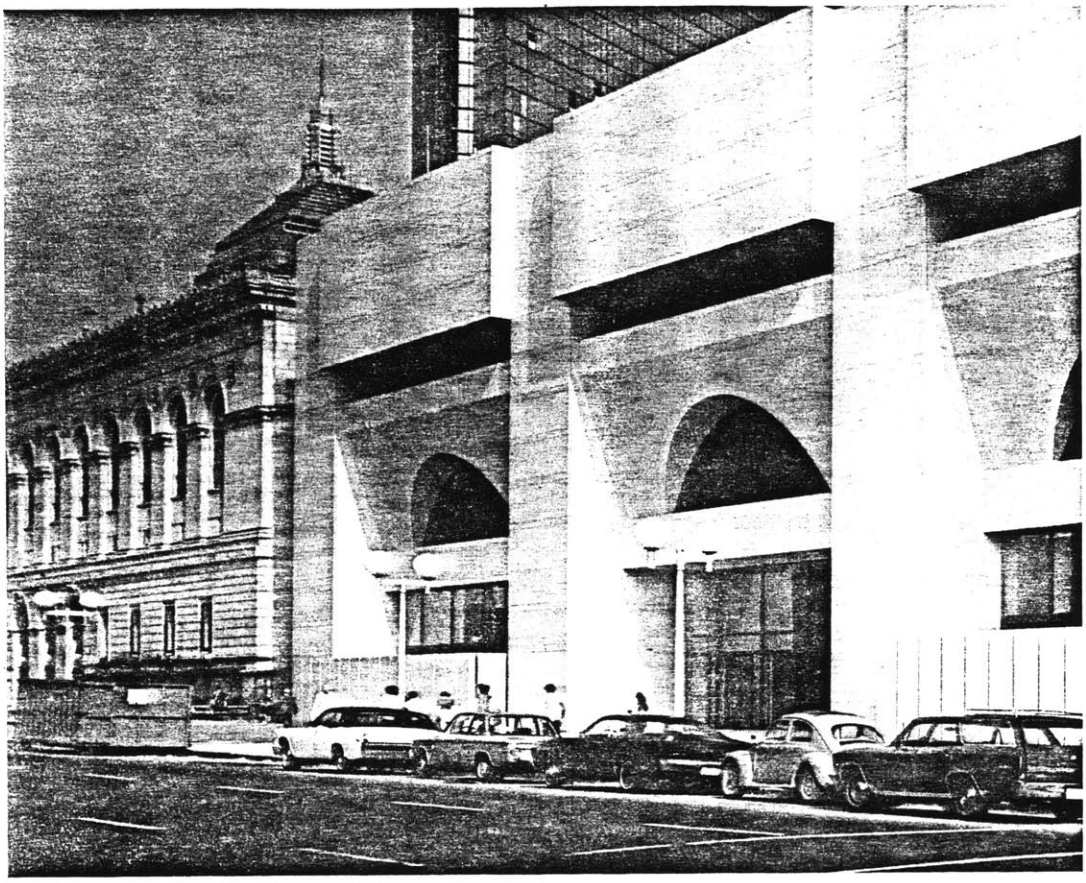


Exhibit 3-12

Addition to the Boston Public Library.

Philip Johnson, 1973

Repeating form and order, different dimension

old and new. As the functional level discussed above related primarily to plan and section organization, the sensory level relates primarily to the design of the elevation and selection of materials. An older facade is often organized hierarchially with a conventional set of ordering elements--masonry base courses, pilasters, string courses, projecting sills and lintels, cornices, and parapets. These elements are combined in a conventional building syntax. The cornice, for instance, was used not only as a decorative element, but as a conventional device for "ending" the building and giving a wall a defined top.

A new addition to an old building may attempt to respond to these ordering devices literally by replicating the elements in similar dimension, material, and sequence. Alternately, the new addition may respond figuratively by using a similar form at a different scale, a solid instead of a void, a projection instead of a recess. A third

approach is not to respond at all--to design the new as if the old did not exist.

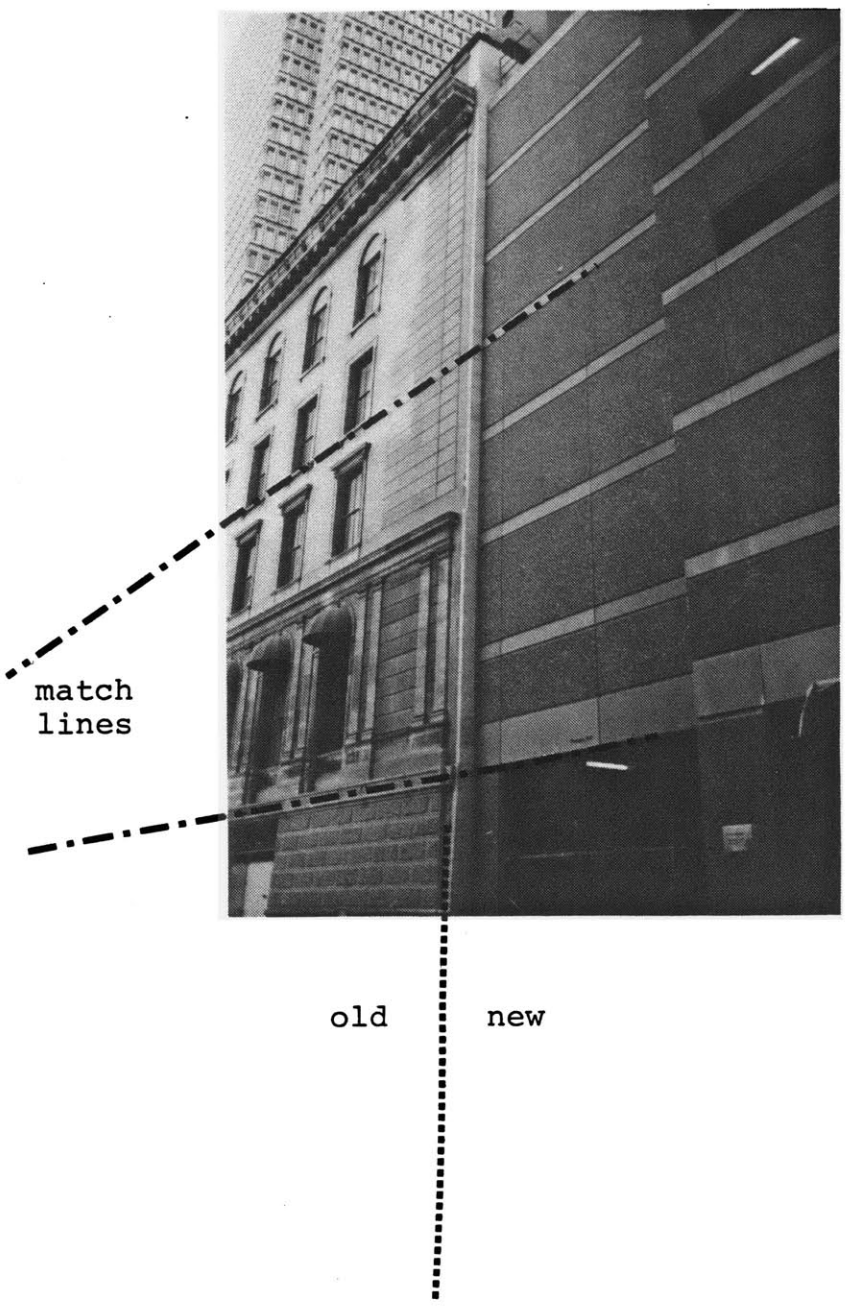
Similarly, materials used in a new addition also communicate a relationship between the old and the new. The color, texture, and arrangement of material in an addition can either match, contrast, or mediate between the new and the old. At One Post Office Square, for instance, great care was taken to match the color and texture of pre-cast concrete panels to the granite and limestone in the existing building (Exhibit 3-13). The designers of the Penn Mutual Tower in Philadelphia, however, took exactly the opposite approach--to highlight and contrast the old stone facade with a sheer dark glass background (Exhibit 3-14). Which approach is the most appropriate?

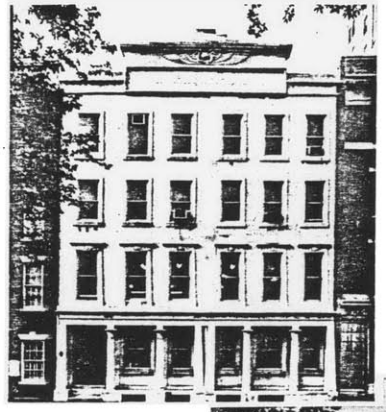
5. Illusory/Allusory

Finally, a relationship between the old and new can be made through historical allusion (adding eclectic or out-of-context elements)

Exhibit 3-13

Materials at One Post Office Square





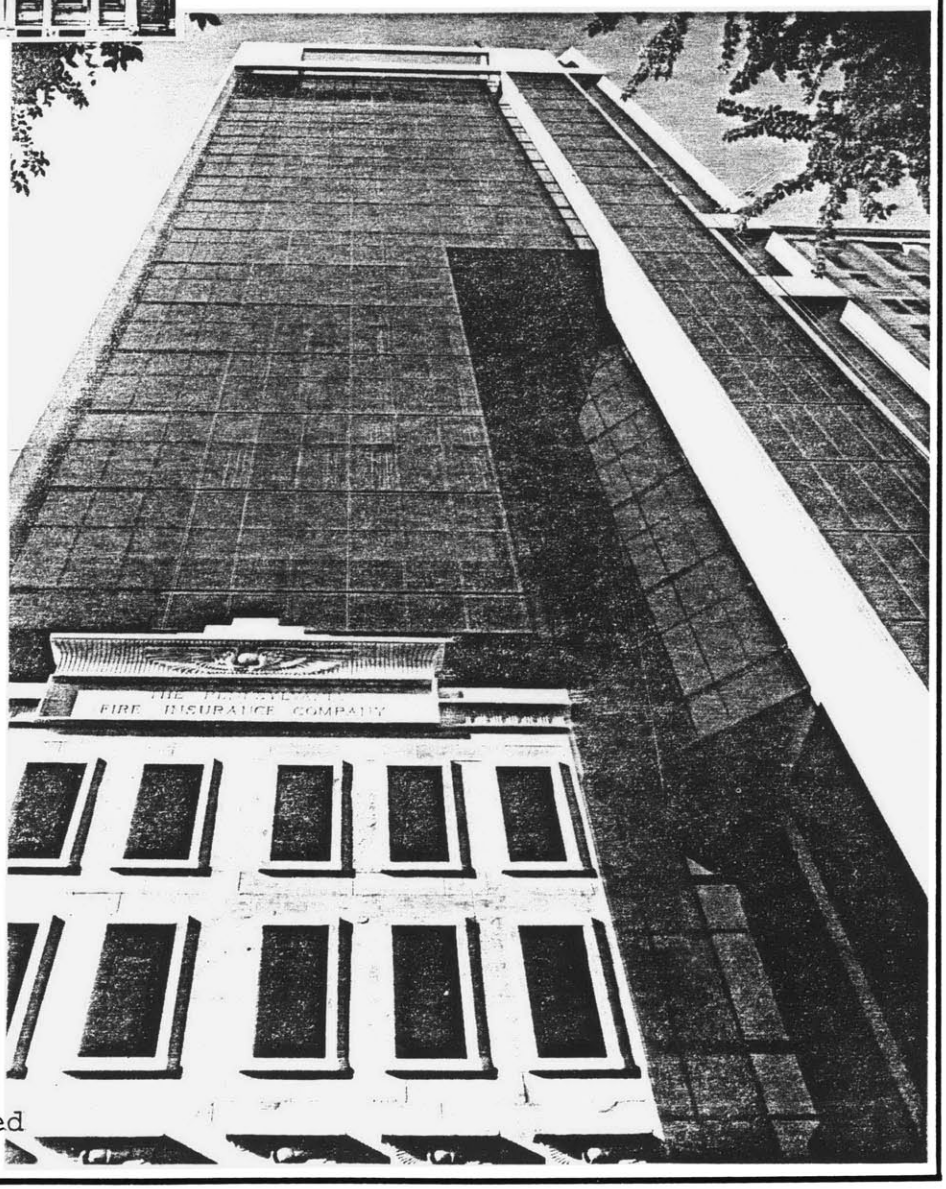
original facade

Exhibit 3-14

Penn Mutual Tower
Philadelphia, PA

Mitchell-Giurgola

Contrasting materials



incorporated in new

or illusion (murals, trompe-l'oeil). This can create a relationship where actually, in functional, spatial, formal, or sensory terms, there is none.

At the Exchange Block this writer would have adopted the following objectives in creating the design relationship between the Exchange Building and the new addition (refer to Exhibits 3-15 to 3-19):

1. Reinforce the Kilby Street entrance by connecting it to the overall movement and circulation plan of the new complex. (functional)
2. Reinforce the State Street entrance by making direct connections to the circulation system for the new building. (functional)
3. Match the first twelve floor levels of the new building to those of the old, as does the WZMH-Habib scheme. (functional)
4. The overall plan configuration and massing of the building should attempt to highlight the original Exchange Building when viewed from the Liberty Square side. This

Exhibit 3-15

Reinforcing Existing Circulation

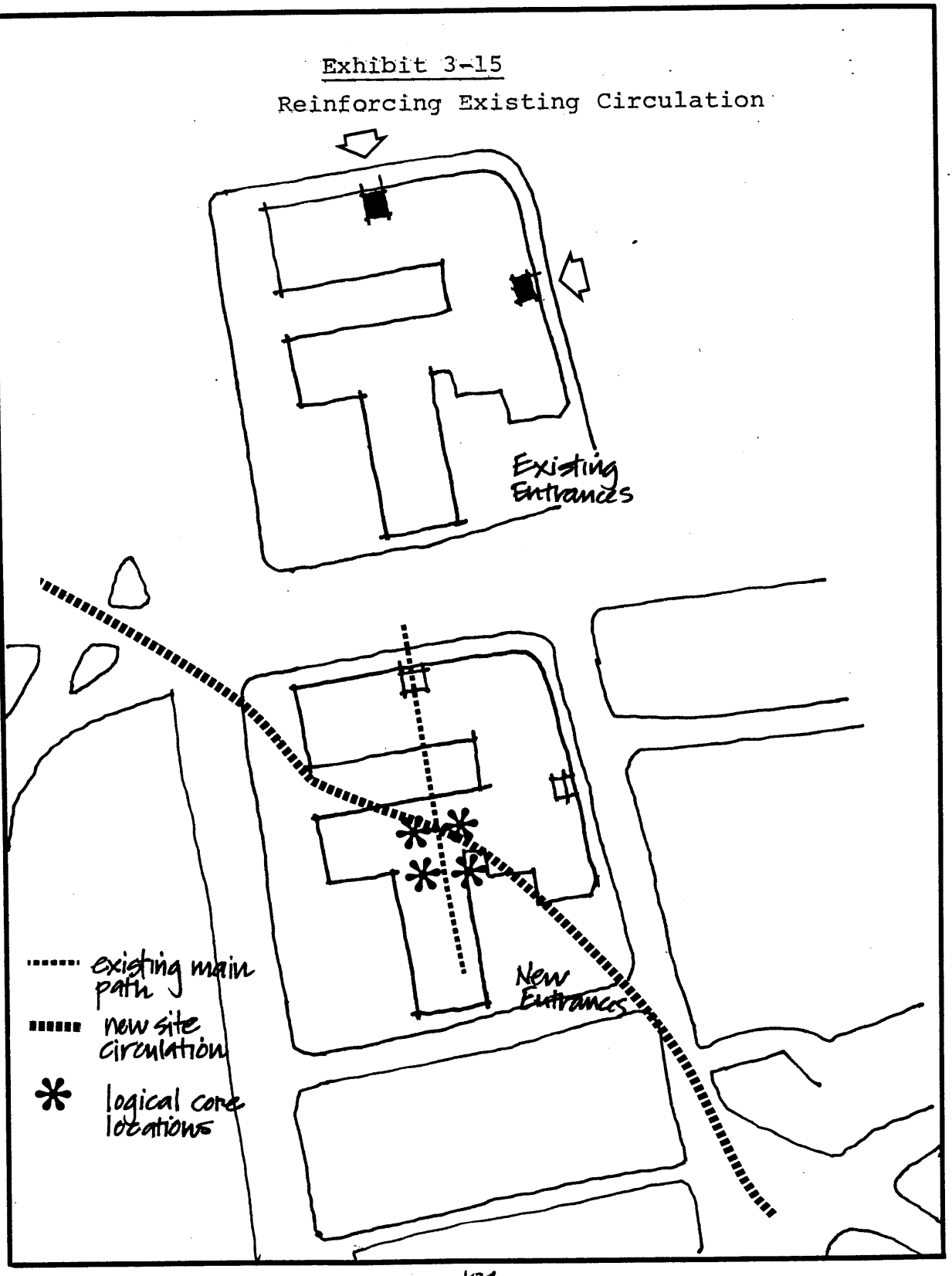
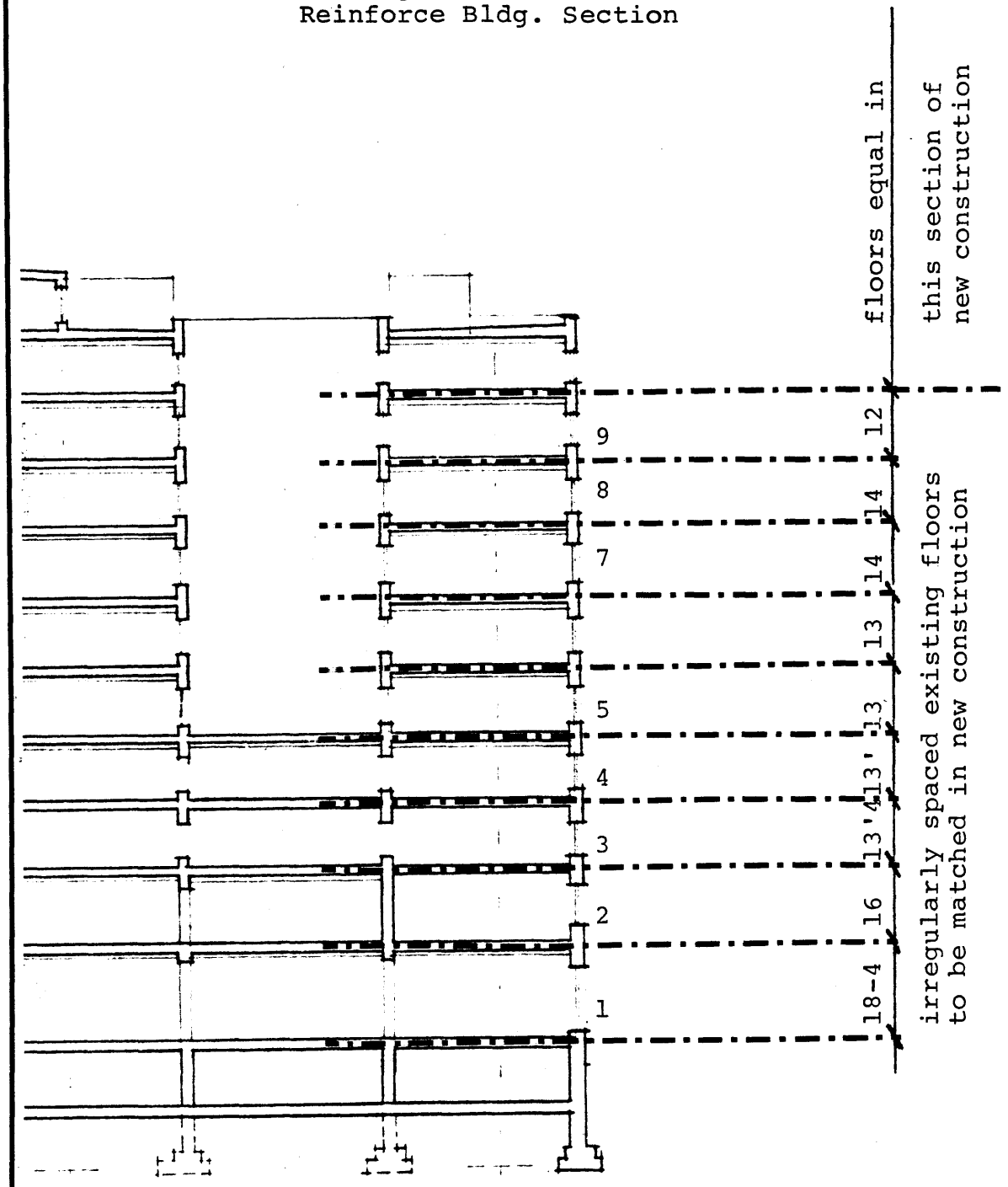


Exhibit 3-16

Matching Floor Levels to
Reinforce Bldg. Section



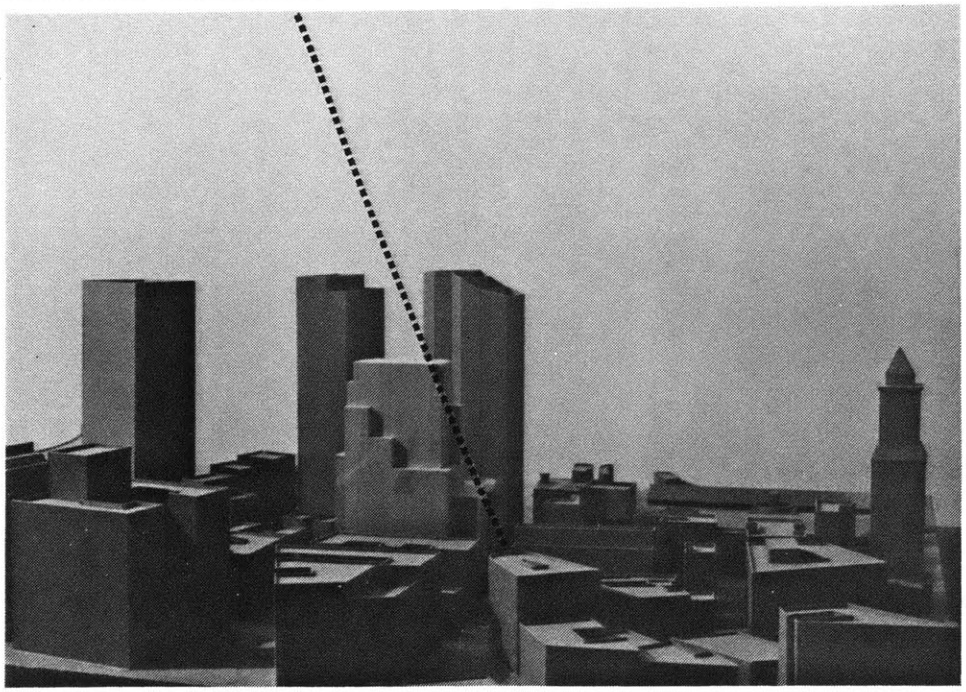
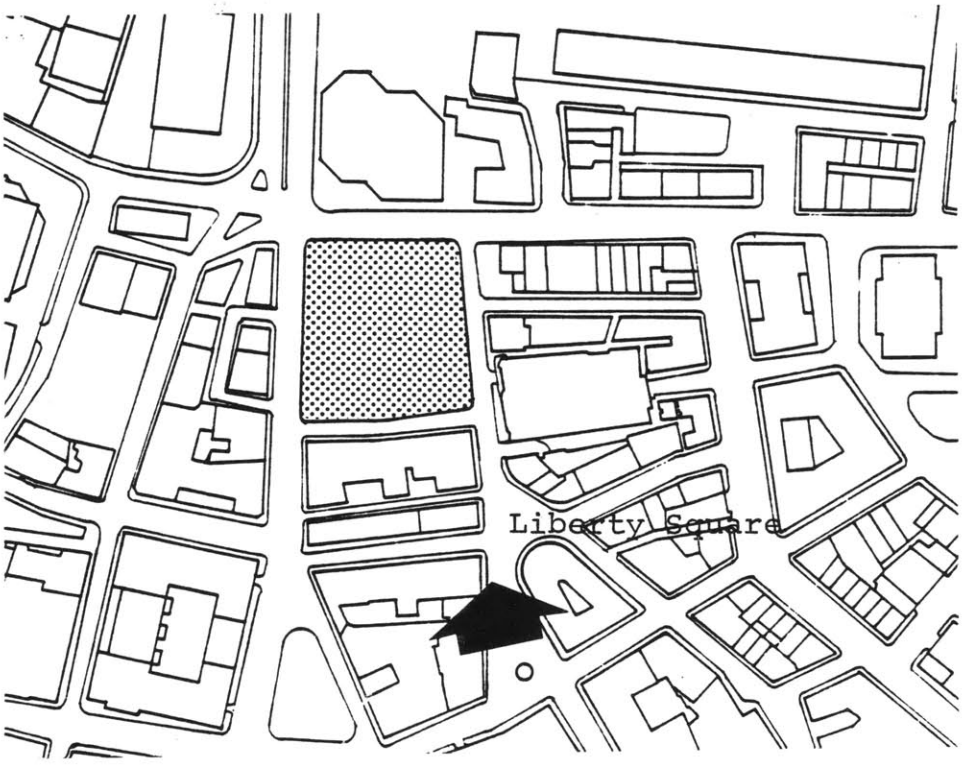


Exhibit 3-17 Massing from Liberty Square



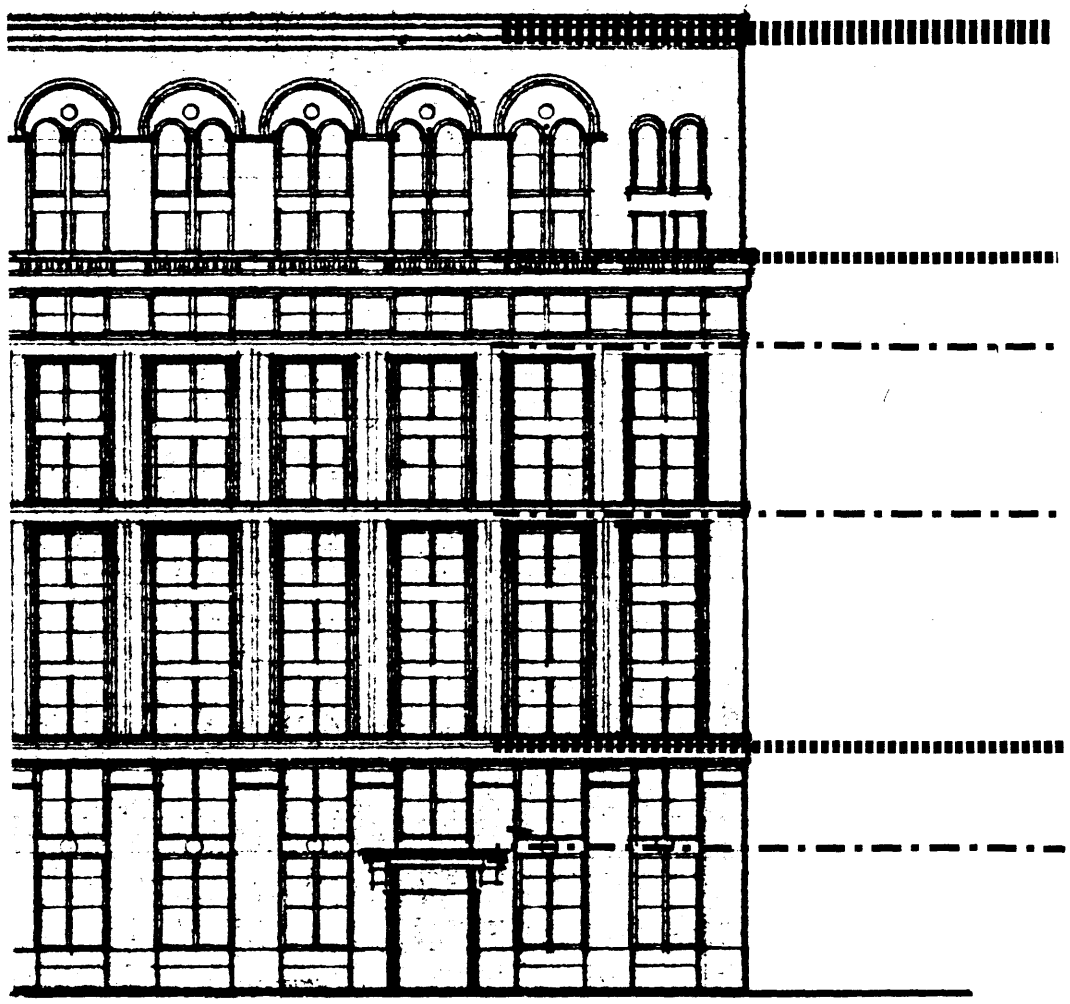
can be achieved by increasing the setback at the southeast corner and using a lower mass at this part of the site.

5. In the facade, use elements to reference but not literally replicate primary existing facade elements on the Exchange Building, particularly the ground level colonnade. Because of the matched floor heights, retention of continuous sill and head lines in horizontal lines is possible. (spatial, formal)

6. Use a combination of masonry/stone and glass curtain wall to create a transition within the new building from the old to the new. Glass can be used on the upper floors of the building, masonry in the lower floors. This will establish a stronger relationship between the old and new at the lower levels, but responds to the different requirements at various building elevations. The masonry creates texture and visual comfort at the lower levels, the glass will lighten the upper portions of the tower as it reaches its full height. (sensory)

Exhibit 3-18

Major Reference Lines

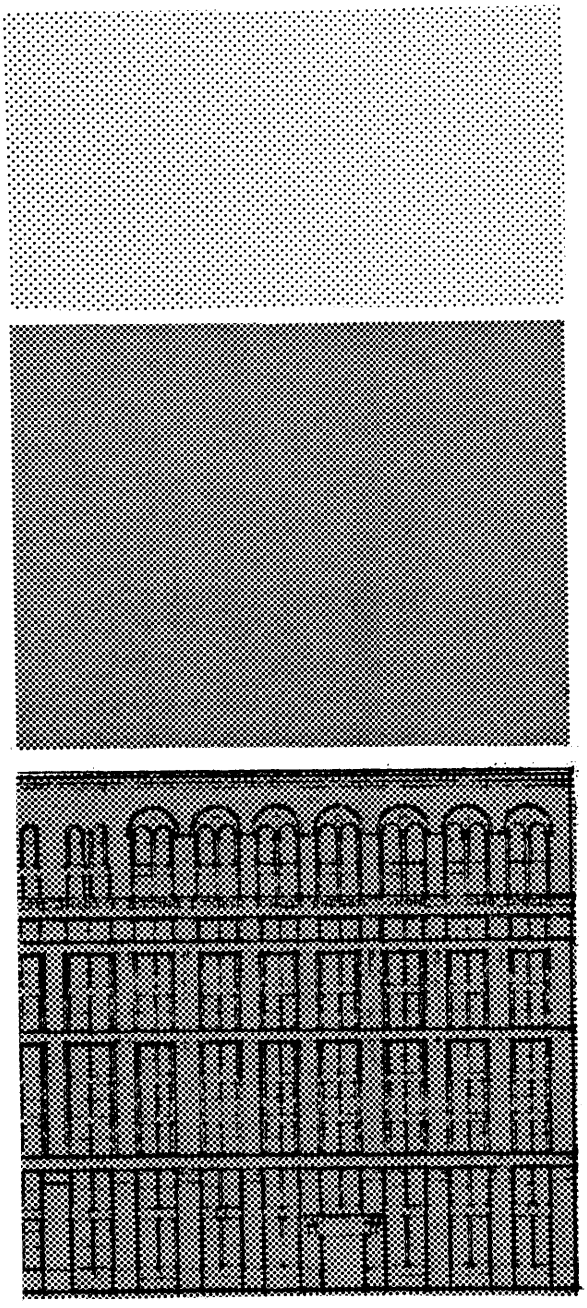


3-dimensional/spatial

2-dimensional/visual

Exhibit 3-19

Building Skin Material Zones



18+
high-rise zone
reflective, sheer
glass

12-16

mid-rise zone
smooth texture
fine-grained masonry

existing 11 flrs.

rusticated
textured masonry
zone

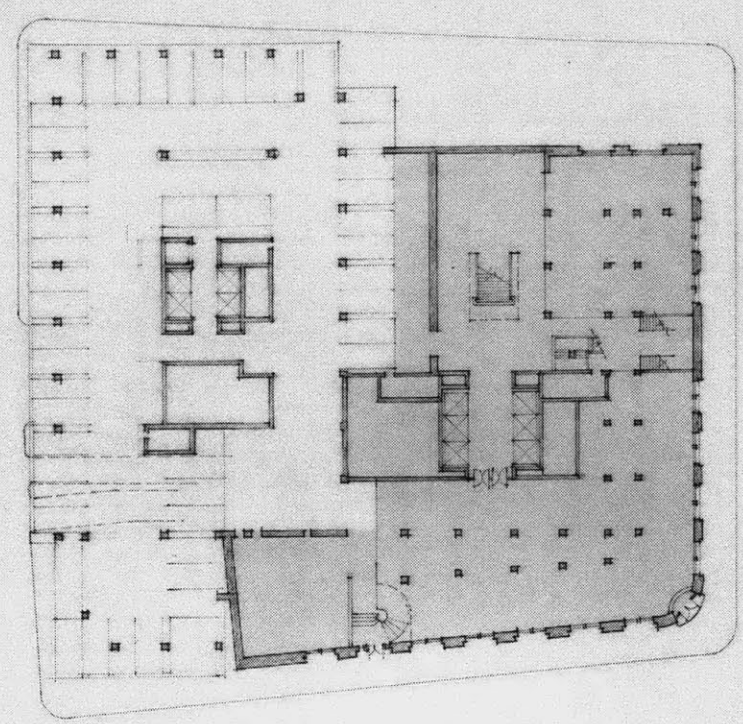
Attempting to define the "proper" architectural relationship between old and new structures seems to produce more questions than ready answers. Each of the strategies described in the sections above are at the designer's disposal. The "correctness" of one approach is over another is difficult to establish. This is particularly perplexing when combining a high rise program with a low-rise existing structure, because the meaning of the architectural elements in an old structure may actually be irrelevant to the new building. For example, the cornice line of an old building, the architectural convention for marking its ending, is irrelevant to the new building, particularly if it soar upwards another thirty floors. When an element's meaning and intention is no longer applicable, it is difficult to argue that the correct approach must involve its repetition or referencing in the new design.

General rules may be not be useful solutions to these issues. For example, a local Historical Commission recently ruled categorically that an addition to a particular brick building could not be brick, to "avoid mimicry".[3] Such broad-sweeping

rules are needlessly restrictive of the design process, and may very well eliminate as many superior solutions as it prevents poor ones. Design objectives must be allowed to emerge from careful analysis of the particular qualities of the district, site, and building's under examination. In the writer's view, it is more important in a design review process to clearly identify and carefully consider alternative design strategies than it is to establish and enforce generic, prescriptive standards.

AN ALTERNATIVE APPROACH

The four design variables governing addition to the Exchange Building outlined in the preceding sections--retention of original building, site density, new addition massing, and relationship between old and new structures--are incorporated in an illustrative development scheme in Exhibits 3-20 to 3-26. This scheme is not intended as an architectural counter-proposal to the Olympia and York/WZMH-Habib design to be interpreted literally, but to serve as a component of feasibility analysis and a testing ground for some of the ideas explored above.



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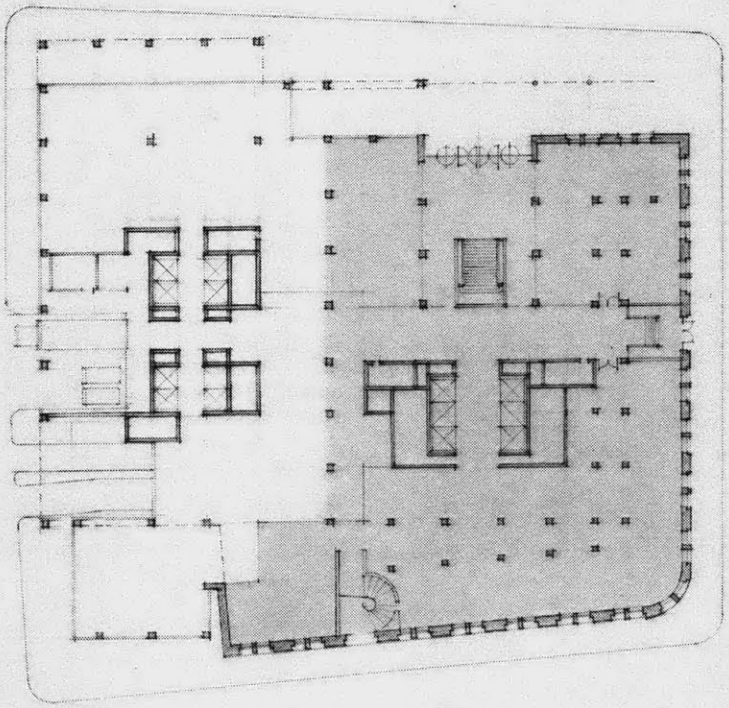
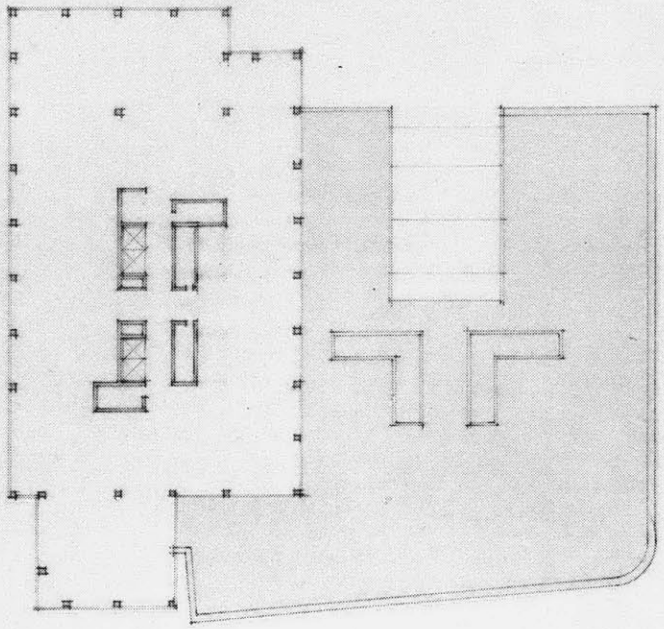
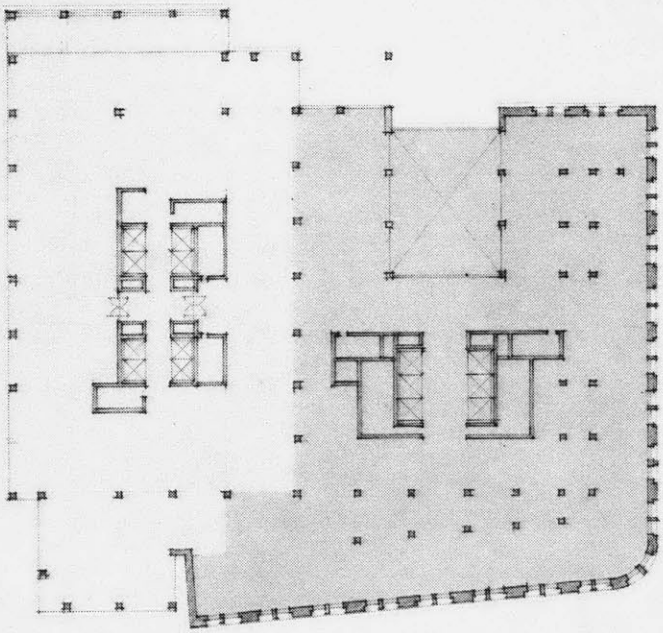


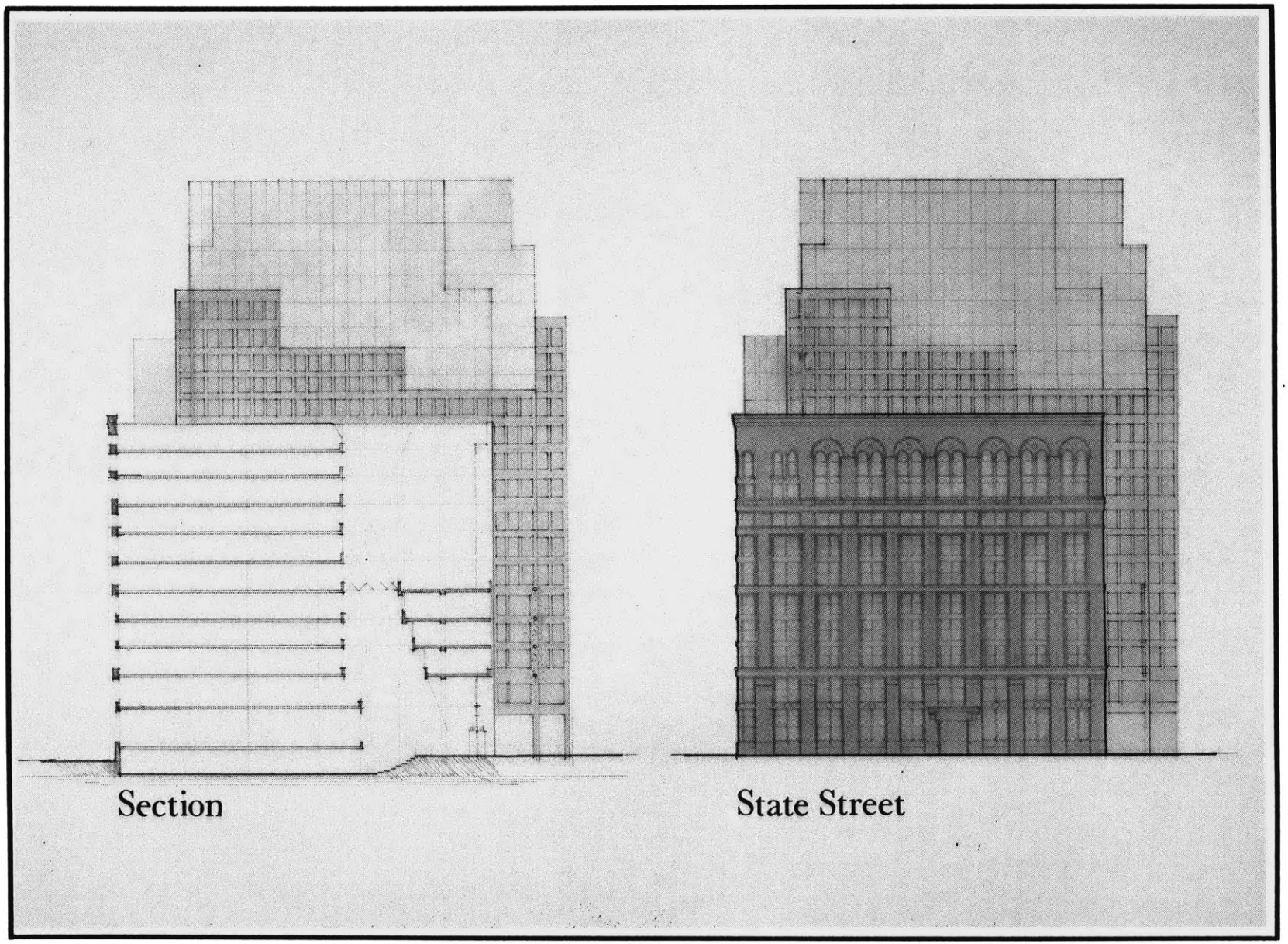
1st



Upper



Mid Level



Section

State Street

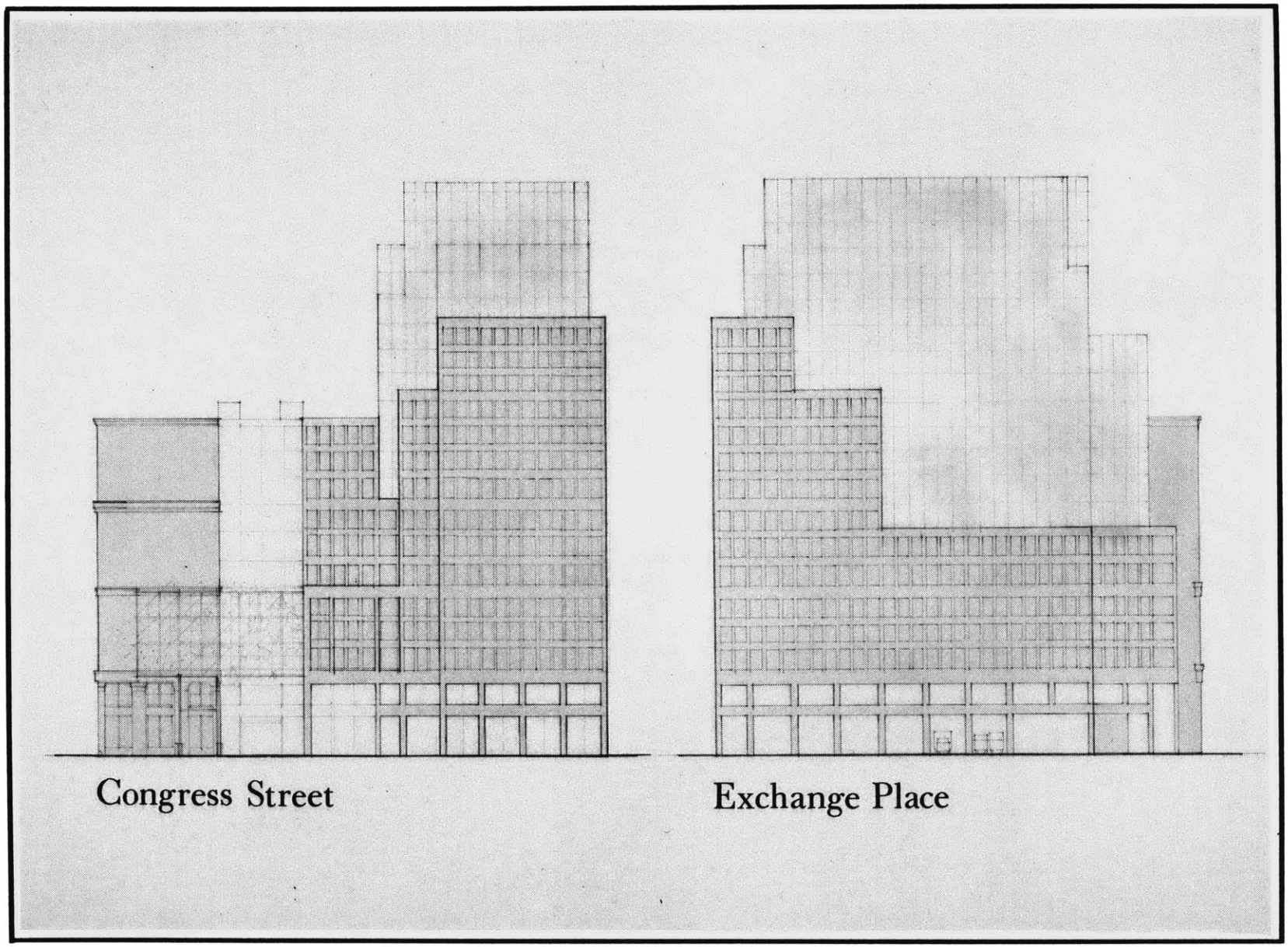
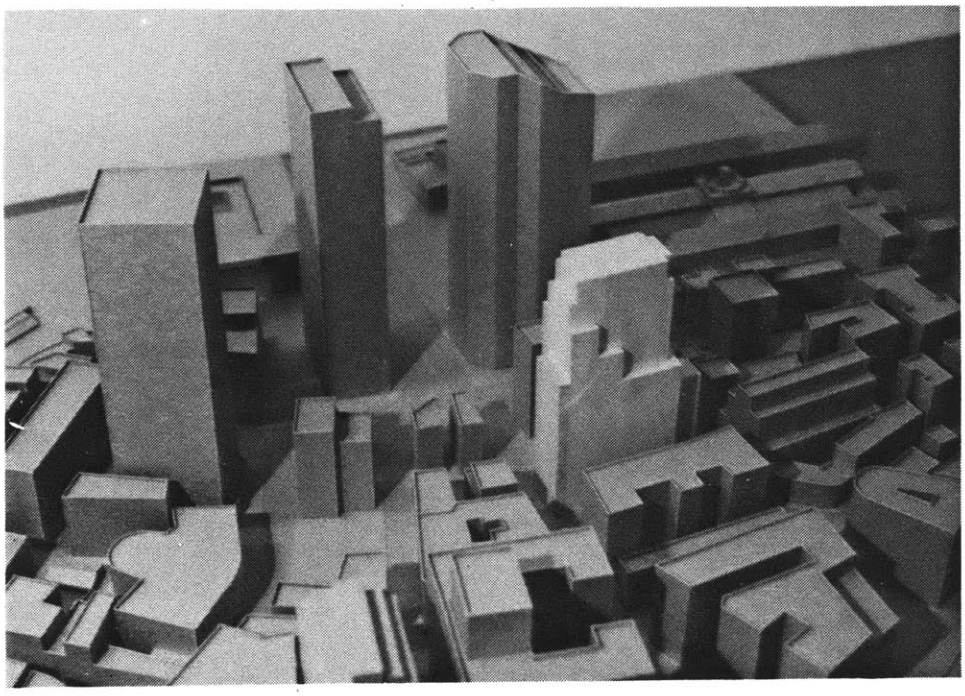

Congress Street
Exchange Place

Exhibit 3-24



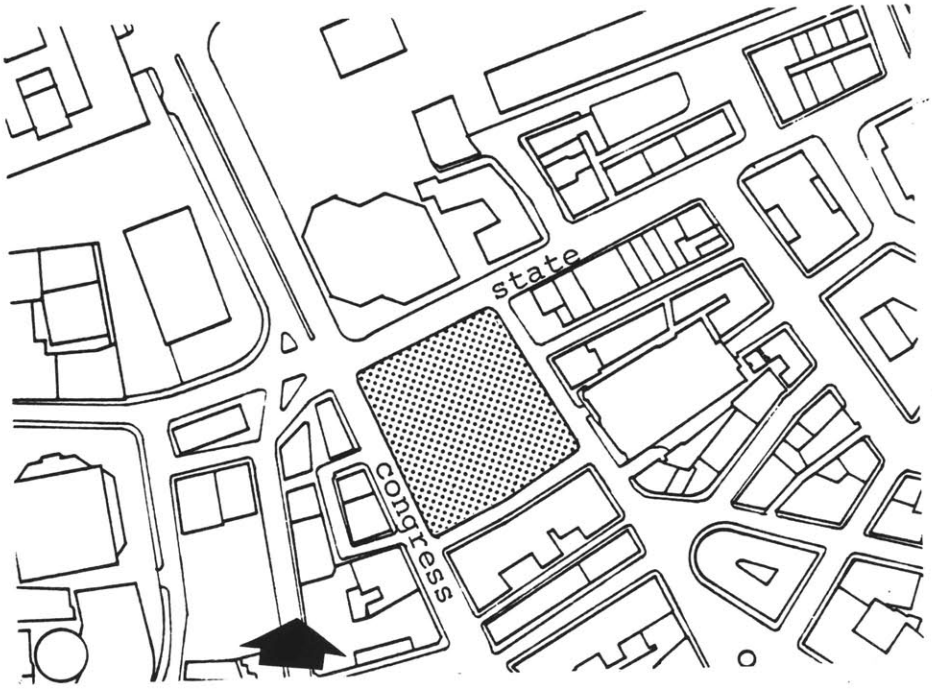
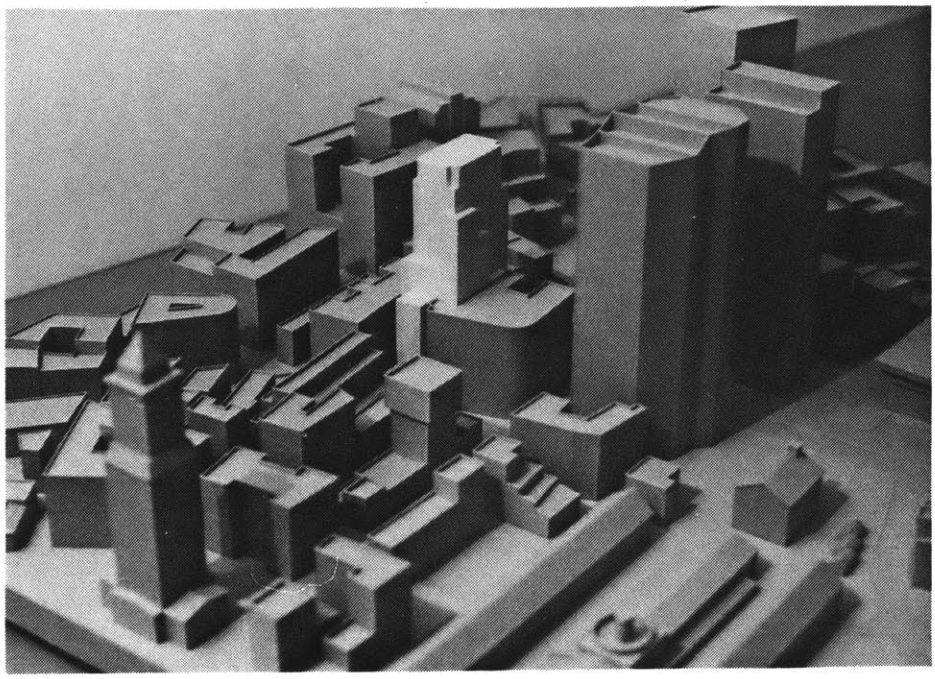
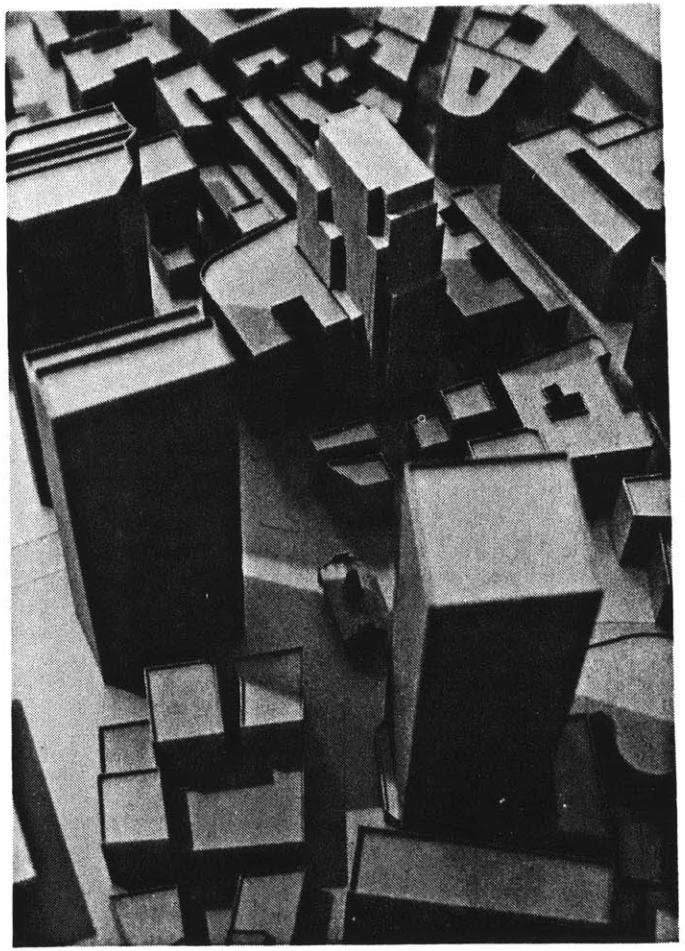
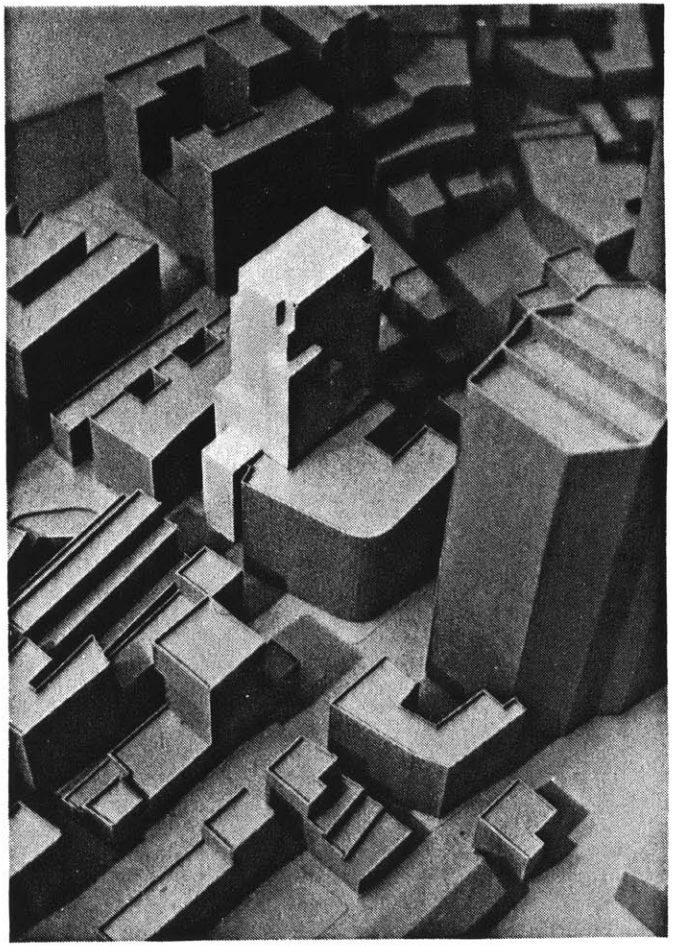


Exhibit 3-25



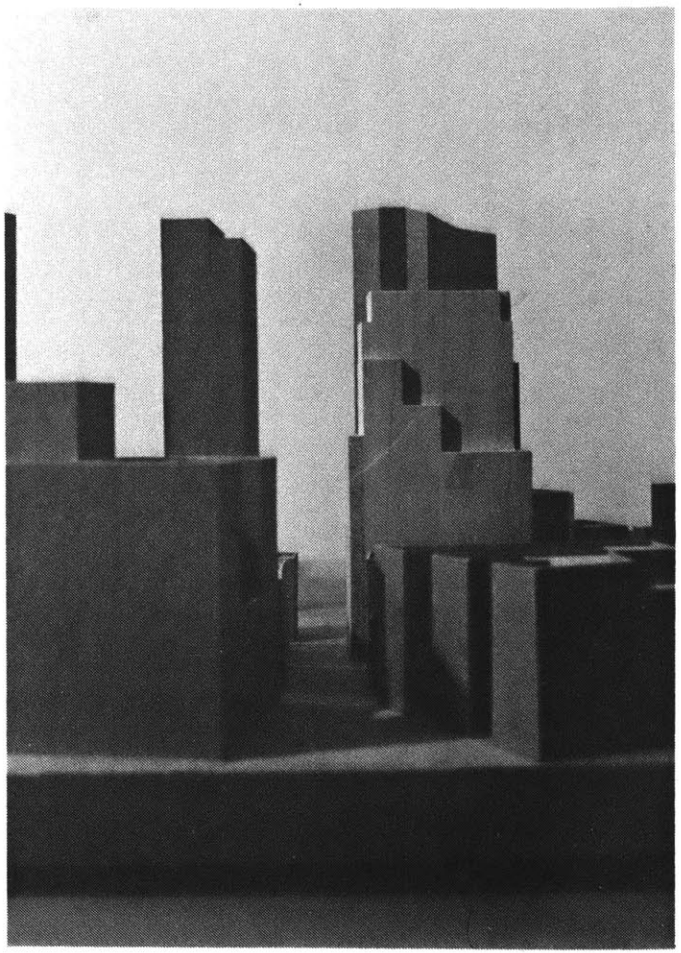


View down Court/State St.

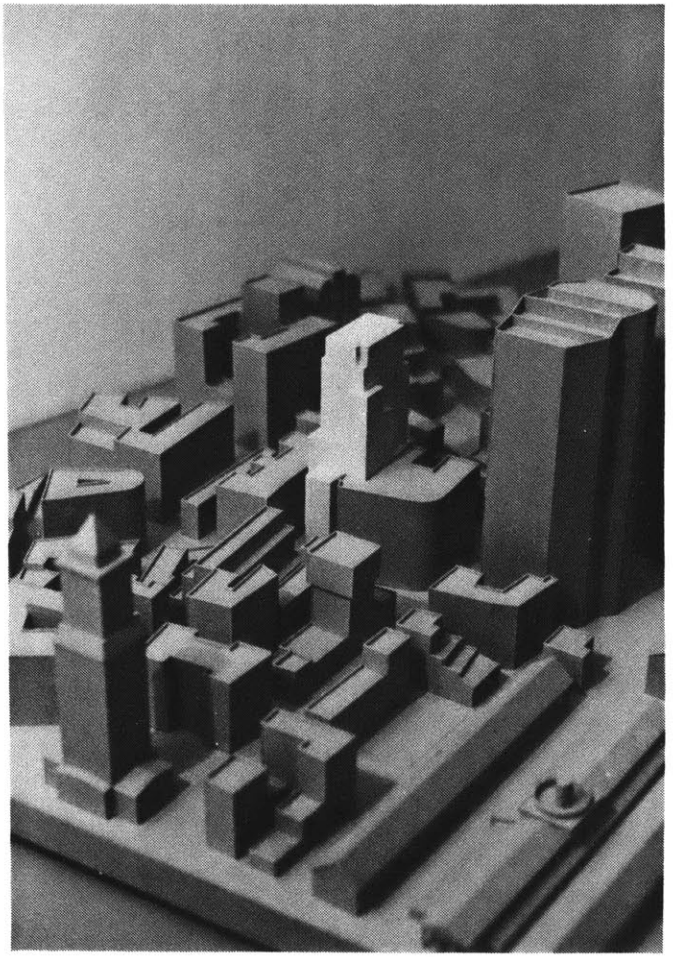


View of Kilby/State St. corner

Exhibit 3-26 A



Congress St. looking North



View from northeast
Quincy Markets in foreground

Exhibit 3-26 B

DESIGN INVESTIGATION: CONCLUSIONS

The physical feasibility analysis leads to the following conclusions (Refer to Exhibits 3-20 to 3-26):

1. It was physically feasible to have retained the "U" portion of the Exchange Building, rather than just the Kilby/State Street "L", and still preserve adequate open site area to construct an efficient and eminently rentable new office building addition. The original interior walls and dimensions of the atrium could be retained. The tallest portion of the new addition could be setback from the face of the existing south atrium wall to preserve its original dimension and character.

2. It was physically feasible to manipulate the mass of the building to reduce the impact and bulk on Liberty Square. Retaining the openness on this public space carries no significant costs in floor plan efficiency.

3. It was physically feasible to have positioned and oriented new central circulation in direct

relationship to the original ones, thereby reinforcing the meaning and functional utility of the retained entrances and street facades. By linking the State Street entrance on axis with the new core circulation, it becomes an integral and natural part of the building's circulation.

4. It was architecturally feasible to use a combination of materials elements to achieve a smoother transition between the old and new parts of the building without sacrificing boldness in the new addition.

By using masonry in the lower portion of the skin of the new building, the transition from old, heavily textured and massively dimensioned material (the worked granite of the Exchange Building) and the new, sheer, lightweight material (the glass) is more gradual. This masonry could be a polished or textured stone or concrete. These prefabricated panels, clipped to the steel frame, will have less "load-bearing" character than the Exchange Building granite, but more than the glass above. Its color could also be an intermediate one between the two other materials.

5. From an urban design standpoint, it was desirable to reduce both the height and the bulk of the tower on the south half of the site. This not only helps establish a stronger relationship between the old and new portions of the building, but also reduces the adverse effects of such height on the surrounding district.

FINANCIAL FEASIBILITY ANALYSIS

Financial feasibility can be measured by a several different return measures and value concepts, and profitablity indices. Density, or site yield, is not necessarily the key variable in evaluating alternative combinations of adaptive reuse and new construction. In comparing such alternatives, measurement of financial superiority is sensitive to the variables of project cost, (the differential between construction costs for types of new construction and rehabilitation) income stream, (the differential between rent levels and operating costs for old space and new space), and tax effect (the differences in tax treatment of income from new and historic rehabilitation development).[4]

ALTERNATIVES FOR CONSIDERATION

Six alternative development programs are analyzed in this section of the thesis. All of the schemes presented are physically feasible. These include the two schemes presented by the developer (one was accepted and is now under construction), the straight rehab scheme proposed by Real Property Resources Corporation, the author's scheme presented in this thesis, and two subsequent iterations. Each one assumes a different proportion of new construction to rehabilitated square footage. The overall site density varies from 450,000 s.f. to 1.1 million square feet. The six options are explained in chart form in Exhibit 3-27.

METHOD OF ANALYSIS

To perform this analysis, a computer model was created using the Visi-Calc (a business forecasting and "spread-sheet" program) software and a small business computer. The model uses as its basic program inputs site density, proportion of new versus rehab construction, and the proportion of retail versus office square footage. Secondary inputs involve construction costs and projected rents.

EXHIBIT 3-27 CHART OF OPTIONS FOR THE EXCHANGE BLOCK

Option	Description	Source	Date	FAR	Total SF	New SF	Rehab SF
1	Olympia and York Phase I Tower	O & Y	Fall 1979-Summer 80	18	900,000	100%	0%
2	Real Property Resources Rehab Scheme	RPRC	Nov. 1979	7.99	400,000	88%	12%
3	Olympia and York Phase II Tower	O & Y	Sept 1980-present	21.14	1,100,000	80%	20%
4	Thesis I	thesis	April 1981	15	750,000	66%	33%
5	Thesis II	thesis	April 1981	12	600,000	58%	42%
6	Thesis III	thesis	April 1981	10	500,000	50%	50%

Given these inputs, the model is capable of computing a full project cost estimate, and generating an operating pro forma for a ten year period. In its calculation of tax effect, the computer will differentiate between new and rehab construction and treat each according to the applicable depreciation regulations.

Finally, the model computes summary measures of value and return, including Net Present Value at three different discount rates and related profitablility indexes. These results can be used to judge relative financial performance of the six options.

UNDERLYING ASSUMPTIONS

For the purposes of fair comparison, the underlying assumptions and internal calculations of the model are held consistent for all six of the analyses. This results, for certain variables, biases in favor of some schemes and against others. Rather than fine-tune the model for maximum accuracy (in reality an endeavor with diminishing marginal returns) for each individual computer run, it is more useful simply to identify these biases and estimate their effects.

Project Cost Analysis

1. Time: all project cost estimates and income pro forma statements are constructed as if they were being done at case time; that is, from the point of view of a decision-maker at the time of the case. All construction costs, income and expense figures, debt assumptions, and tax laws are applicable to 1979-80.

2. Construction Costs: For new construction, $74 per square foot. This is a discounted figure from today's average for Class A new construction. Use of a single, unadjusted figure for all six models in technically unfair. For example, the cost per square foot, assuming similar qualities of materials and construction , for a 22-story building is not the same as a for a 41-story building. This difference, after balancing costs for foundations, elevators, roof, services, and exterior envelope, can still be within 5%, with the advantage going to the 41-story tower. Similarly, this flat assumption is biased against Option 2, (the RPRC scheme), since the actual new construction would not require foundation, elevator, and envelope costs equivalent to that of a new building.

For major rehabilitation, including new core and services, $34 per square foot, a discounted figure from current comparables running $36-$40/sq. ft.[5]

2. Demolition: Ranges from the RPRC estimate of 1.1 million for minimal demolition to Olympia and York estimate of 2.5 million for major demolition, with intermediate alternatives estimated pro rata.

3. Indirect Costs: Percentages given in model. A slight bias here against new construction schemes, since the compromise approaches are more complex and involve detailed public review and revision.

4. Sources of Funds: Permanent financing is assumed in each case @ 75% of total project cost.

Income and Expense Analysis

1. Inflation: Assumed at 8% per year for all cases, applied to both income and expense items.

2. Rent Levels: New construction, assumed at $22 office and $24 retail. Rehab construction assumed at

$18 office and $22 retail. Difference in rent level is more valuable in comparing "pure" schemes, ie: 100% new vs. 100% old, since cost difference in case of compromise is unlikely. 100% CPI escalation is optimistic but neutral in bias across alternatives.

3. Vacancy: For all cases considered at 5%. Given the current market, (Class A office vacancy below 3%) a very minimal negative bias against schemes with higher proportion of office to retail.

4. Operating Expenses and Real Estate Taxes: Assumed @ $7.04 per square foot for office and net for retail. (See breakdown) Minimal bias.

5. Ground Rent: assumed at $900,000 per year for all schemes, based on the reported ground lease between Olympia and York and Old State Trust. Considered fixed, although could have been different if allowable FAR had not been assumed at 19-20.

6. Debt Service: Assumed 11% fixed interest, 30 year term, k= 11.43 in all cases.

7. Depreciation: For new construction, 150% declining balance over 40 year term. For rehab construction, 5 year straight line depreciation. (Old tax law)

8. Tax Savings: Assumed 50% bracket in all cases.

9. Capitalized Value: In tenth year, cash flow capitalized at 12%.

9. Residual: In tenth year, capitalized value less mortgage balance and capital gains tax. For simplicity, transaction costs ignored. No bias.

RESULTS OF ANALYSIS

The cumulative net effect of the internal biases appears evenly balanced in terms of favoring new or rehab construction, and is probably also within a 5-10% sensitivity range.

In Exhibits 3-28 through 3-39, the six alternative development programs are measured for financial performance (two pages each option). Their performance is then compared and summarized in Exhibit 3-40.

Exhibit 3-28

Option 1 FAR: 18

			total	office	retail
TOTAL SF:	898632	New Construction:	898632	858632	40000
Retail:	40000	Retained/Rehab:	0	0	0
Office:	858632				

Development Cost Estimate		
Direct		
New Construction/sf:	74	66499
Rehab. Construct/sf:	34	0
Demolition Costs:		2600
Total Direct Costs:		69099
Indirect Costs:		
Legal & Acct @ 2% TDC:		1382
Arch/Eng. @ 6% TDC:		4146
Marketing @ 20% of rents:		3595
Project Administration @ 6%:		4146
Financing Fees @ 3% of TDC:		2073
Construction Interest		
18 mo. @ 45% @ 13%		6063
Rent-up Deficit @ 10% rents:		1797
Carrying Cost on Land:		825
Contingency @ 5% TDC:		3455
Tenant Finish @ $10/sf:		8586
Total Indirect Costs:		27482
Total Project Costs:		96581
New:		96581
Old:		0
Sources of Funds:		
Mortgage, assume @ 75%		72436
Equity:		24145

Income and Expense Analysis

			1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gross Potential Income:														
Office @ new:	22		0	18890	20401	22033	23796	25700	27755	29976	32374	34964	37761	40782
@ old:	18		0	0	0	0	0	0	0	0	0	0	0	0
Retail @ new:	24		0	960	1037	1120	1209	1306	1411	1523	1645	1777	1919	2073
@ old:	22		0	0	0	0								
Total:			0	19850	21438	23153	25005	27006	29166	31499	34019	36741	39680	42854
Vacancy @ 5% GPI:														
Office:			0	-944	-1020	-1102	-1190	-1285	-1388	-1499	-1619	-1748	-1888	-2039
Retail:			0	-48	-52	-56	-60	-65	-71	-76	-82	-89	-96	-104
Net Rental Income:			0	18857	20366	21995	23755	25655	27708	29924	32318	34904	37696	40712
Office Component:			0	17945	19381	20932	22606	24415	26368	28477	30755	33216	35873	38743
Retail Component:			0	912	985	1064	1149	1241	1340	1447	1563	1688	1823	1969
Operating Expenses & R. E. Taxes														
Office @ $7.04/sf:				6045	6528	7051	7615	8224	8882	9592	10360	11188	12084	13050
Energy @ $1.00/sf.														
Insurance @ .08/sf.														
Janitorial @ .75/sf.														
Management @ 4%, .88/sf.														
Maintenance @ 4%, .88/sf.														
Rep. Reserve @ 2%, .44/sf.														
R.E. Taxes @ $3.00/sf.														
Retail: Net, carry vacant @ $7 /sf. Assume 5% vacancy.				14	15	16	18	19	21	22	24	26	28	30
Net Income Before Ground Rent:														
Office:				11901	12853	13881	14991	16191	17486	18885	20396	22027	23789	25693
Retail:				898	970	1047	1131	1222	1319	1425	1539	1662	1795	1939
Total:				12799	13823	14928	16123	17412	18805	20310	21935	23689	25585	27631
Ground Rent:				-900	-900	-900	-900	-900	-900	-900	-900	-900	-900	-900
Free & Clear Income:				11899	12923	14028	15223	16512	17905	19410	21035	22789	24685	26731
Debt Service: (assume 11%, 30 yr., 72436 loan)				-8479	-8479	-8479	-8479	-8479	-8479	-8479	-8479	-8479	-8479	-8479
CFAF:				3420	4444	5549	6744	8033	9426	10931	12556	14310	16206	18252
Depreciation: New:	40/150	Life:		40	39	38	37	36	35	34	33	32	31	30
		Base:	96581	-3622	-3575	-3528	-3481	-3432	-3383	-3333	-3283	-3232	-3180	-3127
Old:	5/8L	Base:	0	0	0	0	0	0	0	0	0	0	0	0
Amortization: k=11.43%M			72436	-311	-545	-605	-672	-746	-828	-919	-1020	-1132	-1257	-1395
Taxable Income:				-202	868	2021	3263	4601	6043	7597	9273	11079	13026	15126
Tax Savings @ 50%:				-101	434	1011	1631	2301	3022	3799	4636	5539	6513	7563
Capitalized Value:				0	0	0	0	0	0	0	0	0	0	222761
Mortgage Balance:														-63005
Residual Value (includes 28% cg tax)														160472
ATCF:				3521	4009	4539	5112	5733	6405	7132	7919	8771	9693	171161
NPV @ 12%:	81230			Profitability Index @ 12%:				3.36				ROR%: (yr. 1)		12.32
15%:	64569					@ 15%:		2.67				Cash/Cash (yr. 1)		14.16
18%:	52030					@ 18%:		2.15						

Exhibit 3-29

Exhibit 3-30

Option 2	FAR:	7.99				
				total	office	retail
	TOTAL SF:	398893	New Construction:	46368	46368	0
	Retail:	48000	Retained/Rehab:	352525	304525	48000
	Office:	350893				

Development Cost Estimate		
Direct		
New Construction/sf:	74	3431
Rehab. Construct/sf:	34	11986
Demolition Costs:		1200
Total Direct Costs:		16617
Indirect Costs:		
Legal & Acct @ 2% TDC:		332
Arch/Eng. @ 6% TDC:		997
Marketing @ 20% of rents:		1596
Project Administration @ 6%:		997
Financing Fees @ 3% of TDC:		499
Construction Interest		
18 mo. @ 45% @ 13%		1458
Rent-up Deficit @ 10% rents:		798
Carrying Cost on Land:		550
Contingency @ 5% TDC:		831
Tenant Finish @ $10/sf:		3509
Total Indirect Costs:		8057
Total Project Costs:		24674
New:		6877
Old:		17798
Sources of Funds:		
Mortgage, assume @ 75%		18506
Equity:		6169

Income and Expense Analysis

			1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gross Potential Income:														
Office @ new:	22		0	1020	1102	1190	1285	1388	1499	1619	1748	1888	2039	2202
@ old:	19		0	5786	6249	6749	7289	7872	8501	9182	9916	10709	11566	12491
Retail @ new:	24		0	0	0	0	0	0	0	0	0	0	0	0
@ old:	22		0	1056	1140	1232								
Total:			0	7862	8491	9170	8574	9260	10000	10800	11664	12598	13605	14694
Vacancy @ 5% GPI:														
Office:			0	-340	-368	-397	-429	-463	-500	-540	-583	-630	-680	-735
Retail:			0	-53	-57	-62	0	0	0	0	0	0	0	0
Net Rental Income:			0	7469	8066	8712	8145	8797	9500	10260	11081	11968	12925	13959
Office Component:			0	6466	6983	7542	8145	8797	9500	10260	11081	11968	12925	13959
Retail Component:			0	1003	1083	1170	0	0	0	0	0	0	0	0
Operating Expenses & R. E. Taxes														
Office @ $7.04/sf:				2470	2668	2881	3112	3361	3630	3920	4234	4572	4938	5333
Energy @ $1.00/sf.														
Insurance @ .08/sf.														
Janitorial @ .75/sf.														
Management @ 4%, .88/sf.														
Maintenance @ 4%, .88/sf.														
Rep. Reserve @ 2%, .44/sf.														
R.E. Taxes @ $3.00/sf.														
Retail: Net, carry vacant @ $7 /sf. Assume 5% vacancy.				17	18	20	21	23	25	27	29	31	34	36
Net Income Before Ground Rent:														
Office:				3995	4315	4660	5033	5436	5871	6340	6848	7395	7987	8626
Retail:				986	1065	1151	-21	-23	-25	-27	-29	-31	-34	-36
Total:				4982	5380	5811	5012	5413	5846	6314	6819	7364	7953	8590
Ground Rent:				-900	-900	-900	-900	-900	-900	-900	-900	-900	-900	-900
Free & Clear Income:				4082	4480	4911	4112	4513	4946	5414	5919	6464	7053	7690
Debt Service: (assume 11%, 30 yr., 18506 loan)				-2115	-2115	-2115	-2115	-2115	-2115	-2115	-2115	-2115	-2115	-2115
CFAF:				1967	2365	2796	1997	2398	2831	3299	3804	4349	4938	5575
Depreciation: New: 40/150	Life:			40	39	38	37	36	35	34	33	32	31	30
	Base:	6877		-258	-255	-251	-248	-244	-241	-237	-234	-230	-226	-223
Old: 5/SL	Base:	17798		-3560	-3560	-3560	-3560	-3560	0	0	0	0	0	0
Amortization: k=11.43%M		18506		-80	-88	-98	-109	-121	-134	-148	-165	-183	-203	-225
Taxable Income:				-1851	-1449	-1015	-1810	-1406	2590	3061	3570	4119	4712	5352
Tax Savings @ 50%:				-925	-724	-507	-905	-703	1295	1531	1785	2060	2356	2676
Capitalized Value:				0	0	0	0	0	0	0	0	0	0	64081
Mortgage Balance:														-16953
Residual Value (includes 28% cg tax)														46222
ATCF:				2892	3090	3303	2902	3101	1536	1768	2019	2290	2582	49121

NPV @ 12%:	29172	Profitability Index @ 12%:	4.73	ROTA: (yr. 1)		16.54
15%:	24060	@ 15%:	3.90	Cash/Cash (yr. 1)		31.89
18%:	20157	@ 18%:	3.27			

Exhibit 3-31

Exhibit 3-32

Option 3 FAR: 21.14

TOTAL SF:	1055393
Retail:	36000
Office:	1019393

	total	office	retail
New Construction:	865000	847000	18000
Retained/Rehab:	190393	172393	18000

Development Cost Estimate		
Direct		
New Construction/sf:	74	64010
Rehab. Construct/sf:	34	6473
Demolition Costs:		2500
Total Direct Costs:		72983
Indirect Costs:		
Legal & Acct @ 2% TDC:		1460
Arch/Eng. @ 6% TDC:		4379
Marketing @ 20% of rents:		4222
Project Administration @ 6%:		4379
Financing Fees @ 3% of TDC:		2190
Construction Interest		
18 mo. @ 45% @ 13%		6404
Rent-up Deficit @ 10% rents:		2111
Carrying Cost on Land:		825
Contingency @ 5% TDC:		3649
Tenant Finish @ $10/sf:		10194
Total Indirect Costs:		29618
Total Project Costs:		102601
New:		93501
Old:		9100

Sources of Funds:	
Mortgage, assume @ 75%	76951
Equity:	25650

Income and Expense Analysis

			1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gross Potential Income:														
Office @ new:	22		0	18634	20125	21735	23473	25351	27379	29570	31935	34490	37249	40229
@ old:	18		0	3103	3351	3619	3909	4222	4559	4924	5318	5744	6203	6699
Retail @ new:	24		0	432	467	504	544	588	635	686	740	800	864	933
@ old:	22		0	396	428	462								
Total:			0	22565	24370	26320	27927	30161	32574	35180	37994	41033	44316	47861
Vacancy @ 5% GPI:														
Office:			0	-1087	-1174	-1268	-1369	-1479	-1597	-1725	-1863	-2012	-2173	-2346
Retail:			0	-41	-45	-48	-27	-29	-32	-34	-37	-40	-43	-47
Net Rental Income:			0	21437	23152	25004	26530	28653	30945	33421	36094	38982	42100	45468
Office Component:			0	20650	22302	24086	26013	28094	30342	32769	35391	38222	41280	44582
Retail Component:			0	787	850	917	517	558	603	651	703	760	820	886
Operating Expenses & R. E. Taxes														
Office @ $7.04/sf:				7177	7751	8371	9040	9764	10545	11388	12299	13283	14346	15494
Energy @ $1.00/sf.														
Insurance @ .08/sf.														
Janitorial @ .75/sf.														
Management @ 4%, .88/sf.														
Maintenance @ 4%, .88/sf.														
Rep. Reserve @ 2%, .44/sf.														
R.E. Taxes @ $3.00/sf.														
Retail: Net, carry vacant @ $7 /sf. Assume 5% vacancy.				13	14	15	16	17	19	20	22	23	25	27
Net Income Before Ground Rent:														
Office:				13474	14552	15716	16973	18331	19797	21381	23092	24939	26934	29089
Retail:				774	836	903	501	541	584	631	682	736	795	859
Total:				14248	15388	16619	17474	18872	20382	22012	23773	25675	27729	29948
Ground Rent:				-900	-900	-900	-900	-900	-900	-900	-900	-900	-900	-900
Free & Clear Income:				13348	14488	15719	16574	17972	19482	21112	22873	24775	26829	29048
Debt Service: (assume 11%, 30 yr., 76951 loan)				-8987	-8987	-8987	-8987	-8987	-8987	-8987	-8987	-8987	-8987	-8987
CFAF:				4361	5501	6732	7587	8985	10495	12125	13886	15788	17842	20061
Depreciation: New:	40/150	Life:		40	39	38	37	36	35	34	33	32	31	30
		Base:	93501	-3506	-3461	-3416	-3370	-3323	-3275	-3227	-3178	-3129	-3078	-3027
Old:	5/SL	Base:	9100	-1820	-1820	-1820	-1820	-1820	0	0	0	0	0	0
Amortization:	k=11.43%M		76951	-331	-559	-620	-688	-764	-848	-942	-1045	-1160	-1288	-1429
Taxable Income:				-966	219	1496	2397	3842	7219	8898	10708	12660	14764	17034
Tax Savings @ 50%:				-483	110	748	1199	1921	3610	4449	5354	6330	7382	8517
Capitalized Value:				0	0	0	0	0	0	0	0	0	0	242063
Mortgage Balance:														-67276
Residual Value (includes 28% cg tax)														174369
ATCF:				4844	5391	5984	6388	7064	6885	7676	8532	9458	10460	185913

NPV @ 12%:	91580	Profitability Index @ 12%:	3.57	ROTA: (yr. 1)	13.01
15%:	73274	@ 15%:	2.86	Cash/Cash (yr. 1)	17.00
18%:	59465	@ 18%:	2.32		

Exhibit 3-33

Exhibit 3-34

Option 4 FAR: 15.00

			total	office	retail
TOTAL SF:	748860	New Construction:	498860	481860	17000
Retail:	38000	Retained/Rehab:	250000	229000	21000
Office:	710860				

Development Cost Estimate		
Direct		
New Construction/sf:	74	36916
Rehab. Construct/sf:	34	8500
Demolition Costs:		1600
Total Direct Costs:		47016
Indirect Costs:		
Legal & Acct @ 2% TDC:		940
Arch/Eng. @ 6% TDC:		2821
Marketing @ 20% of rents:		2995
Project Administration @ 6%:		2821
Financing Fees @ 3% of TDC:		1410
Construction Interest		
18 mo. @ 45% @ 13%		4126
Rent-up Deficit @ 10% rents:		1498
Carrying Cost on Land:		550
Contingency @ 5% TDC:		2351
Tenant Finish @ $10/sf:		7109
Total Indirect Costs:		19512
Total Project Costs:		66528
New:		54500
Old:		12028
Sources of Funds:		
Mortgage, assume @ 75%		49896
Equity:		16632

Income and Expense Analysis

			1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gross Potential Income:														
Office @ new:	22		0	10601	11449	12365	13354	14422	15576	16822	18168	19622	21191	22887
@ old:	18		0	4122	4452	4808	5193	5608	6057	6541	7064	7630	8240	8899
Retail @ new:	24		0	408	441	476	514	555	599	647	699	755	816	881
@ old:	22		0	462	499	539								
Total:			0	15593	16840	18188	19061	20585	22232	24011	25932	28006	30247	32667
Vacancy @ 5% GPI:														
Office:			0	-736	-795	-859	-927	-1002	-1082	-1168	-1262	-1363	-1472	-1589
Retail:			0	-44	-47	-51	-26	-28	-30	-32	-35	-38	-41	-44
Net Rental Income:			0	14813	15998	17278	18108	19556	21121	22810	24635	26606	28734	31033
Office Component:			0	13987	15106	16314	17619	19029	20551	22195	23971	25889	27960	30196
Retail Component:			0	827	893	964	488	527	570	615	664	717	775	837
Operating Expenses & R. E. Taxes														
Office @ $7.04/sf:				5004	5405	5837	6304	6809	7353	7941	8577	9263	10004	10804
Energy @ $1.00/sf.														
Insurance @ .08/sf.														
Janitorial @ .75/sf.														
Management @ 4%, .88/sf.														
Maintenance @ 4%, .88/sf.														
Rep. Reserve @ 2%, .44/sf.														
R.E. Taxes @ $3.00/sf.														
Retail: Net, carry vacant @ $7 /sf. Assume 5% vacancy.				13	14	16	17	18	20	21	23	25	27	29
Net Income Before Ground Rent:														
Office:				8982	9701	10477	11315	12220	13198	14254	15394	16626	17956	19392
Retail:				813	878	949	472	509	550	594	641	693	748	808
Total:				9796	10579	11425	11787	12730	13748	14848	16036	17318	18704	20200
Ground Rent:				-900	-900	-900	-900	-900	-900	-900	-900	-900	-900	-900
Free & Clear Income:				8896	9679	10525	10887	11830	12848	13948	15136	16418	17804	19300
Debt Service: (assume 11%, 30 yr., 49896 loan)				-5702	-5702	-5702	-5702	-5702	-5702	-5702	-5702	-5702	-5702	-5702
CFAF:				3194	3977	4823	5185	6128	7146	8246	9434	10716	12102	13598
Depreciation: New: 40/150	Life:			40	39	38	37	36	35	34	33	32	31	30
	Base:	54500		-2044	-2018	-1991	-1964	-1937	-1909	-1881	-1853	-1824	-1794	-1764
Old: 5/SL	Base:	12028		-2406	-2406	-2406	-2406	-2406	0	0	0	0	0	0
Amortization: k=11.43%M		49896		-215	-237	-263	-292	-324	-360	-399	-443	-492	-546	-606
Taxable Income:				-1256	-446	427	815	1785	5237	6365	7581	8893	10308	11834
Tax Savings @ 50%:				-628	-223	213	408	893	2618	3182	3791	4446	5154	5917
Capitalized Value:				0	0	0	0	0	0	0	0	0	0	160835
Mortgage Balance:														-45717
Residual Value (includes 28% cg tax)														115886
ATCF:				3821	4200	4610	4777	5235	4528	5063	5643	6270	6948	123567
NPV @ 12%:	62932			Profitability Index @ 12%:				3.78				ROTA: (yr. 1)		13.37
15%:	50629					@ 15%:		3.04				Cash/Cash (yr. 1)		19.20
18%:	41330					@ 18%:		2.48						

Exhibit 3-35

Exhibit 3-36

Option 5	FAR:	12.00				
				total	office	retail
	TOTAL SF:	599088	New Construction:	349088	332088	17000
	Retail:	38000	Retained/Rehab:	250000	229000	21000
	Office:	561088				

Development Cost Estimate		
Direct		
New Construction/sf:	74	25833
Rehab. Construct/sf:	34	8500
Demolition Costs:		1600
Total Direct Costs:		35933
Indirect Costs:		
Legal & Acct @ 2% TDC:		719
Arch/Eng. @ 6% TDC:		2156
Marketing @ 20% of rents:		2396
Project Administration @ 6%:		2156
Financing Fees @ 3% of TDC:		1078
Construction Interest		
18 mo. @ 45% @ 13%		3153
Rent-up Deficit @ 10% rents:		1198
Carrying Cost on Land:		550
Contingency @ 5% TDC:		1797
Tenant Finish @ $10/sf:		5611
Total Indirect Costs:		15203
Total Project Costs:		51135
New:		39039
Old:		12096
Sources of Funds:		
Mortgage, assume @ 75%		38351
Equity:		12784

Income and Expense Analysis

			1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gross Potential Income:														
Office @ new:	22		0	7306	7890	8522	9203	9940	10735	11594	12521	13523	14605	15773
@ old:	18		0	4122	4452	4808	5193	5608	6057	6541	7064	7630	8240	8899
Retail @ new:	24		0	408	441	476	514	555	599	647	699	755	816	881
@ old:	22		0	462	499	539								
Total:			0	12298	13282	14344	14910	16103	17391	18782	20285	21907	23660	25553
Vacancy @ 5% GPI:														
Office:			0	-571	-617	-666	-720	-777	-840	-907	-979	-1058	-1142	-1234
Retail:			0	-44	-47	-51	-26	-28	-30	-32	-35	-38	-41	-44
Net Rental Income:			0	11683	12618	13627	14164	15298	16521	17843	19270	20812	22477	24275
Office Component:			0	10857	11725	12663	13676	14770	15952	17228	18606	20095	21702	23438
Retail Component:			0	827	893	964	488	527	570	615	664	717	775	837
Operating Expenses & R. E. Taxes														
Office @ $7.04/sf:				3950	4266	4607	4976	5374	5804	6268	6770	7311	7896	8528
Energy @ $1.00/sf.														
Insurance @ .08/sf.														
Janitorial @ .75/sf.														
Management @ 4%, .88/sf.														
Maintenance @ 4%, .88/sf.														
Rep. Reserve @ 2%, .44/sf.														
R.E. Taxes @ $3.00/sf.														
Retail: Net, carry vacant @ $7 /sf. Assume 5% vacancy.				13	14	16	17	18	20	21	23	25	27	29
Net Income Before Ground Rent:														
Office:				6906	7459	8056	8700	9396	10148	10960	11836	12783	13806	14911
Retail:				813	878	949	472	509	550	594	641	693	748	808
Total:				7720	8337	9004	9172	9905	10698	11554	12478	13476	14554	15719
Ground Rent:				-900	-900	-900	-900	-900	-900	-900	-900	-900	-900	-900
Free & Clear Income:				6820	7437	8104	8272	9005	9798	10654	11578	12576	13654	14819
Debt Service: (assume 11%, 30 yr., 38351 loan)				-4383	-4383	-4383	-4383	-4383	-4383	-4383	-4383	-4383	-4383	-4383
CFAF:				2437	3054	3721	3889	4622	5415	6271	7195	8193	9271	10436
Depreciation: New: 40/150	Life:			40	39	38	37	36	35	34	33	32	31	30
	Base:	39039		-1464	-1445	-1426	-1407	-1387	-1368	-1347	-1327	-1306	-1285	-1264
Old: 5/SL	Base:	12096		-2419	-2419	-2419	-2419	-2419	0	0	0	0	0	0
Amortization: k=11.43%M		38351		-165	-182	-203	-225	-250	-277	-307	-341	-379	-421	-467
Taxable Income:				-1447	-810	-124	63	816	4047	4923	5868	6887	7986	9172
Tax Savings @ 50%:				-723	-405	-62	31	408	2024	2462	2934	3443	3993	4586
Capitalized Value:				0	0	0	0	0	0	0	0	0	0	123489
Mortgage Balance:														-35135
Residual Value (includes 28% cg tax)														88996
ATCF:				3160	3459	3783	3857	4215	3391	3809	4261	4750	5278	94846
NPV @ 12%:	48955			Profitability Index @ 12%:				3.83				ROTA: (yr. 1)		13.34
15%:	39484					@ 15%:		3.09				Cash/Cash (yr. 1)		19.06
18%:	32319					@ 18%:		2.53						

Exhibit 3-37

Exhibit 3-38

Option 6 FAR: 10.00

			total	office	retail
TOTAL SF:	499240	New Construction:	249240	232240	17000
Retail:	38000	Retained/Rehab:	250000	229000	21000
Office:	461240				

Development Cost Estimate

Direct		
New Construction/sf:	74	18444
Rehab. Construct/sf:	34	8500
Demolition Costs:		1600
Total Direct Costs:		28544
Indirect Costs:		
Legal & Acct @ 2% TDC:		571
Arch/Eng. @ 6% TDC:		1713
Marketing @ 20% of rents:		1997
Project Administration @ 6%:		1713
Financing Fees @ 3% of TDC:		856
Construction Interest		
18 mo. @ 45% @ 13%		2505
Rent-up Deficit @ 10% rents:		998
Carrying Cost on Land:		550
Contingency @ 5% TDC:		1427
Tenant Finish @ $10/sf:		4612
Total Indirect Costs:		12330
Total Project Costs:		40874
New:		28702
Old:		12172

Sources of Funds:

Mortgage, assume @ 75%	30655
Equity:	10218

Income and Expense Analysis

			1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gross Potential Income:														
Office @ new:	22		0	5109	5518	5959	6436	6951	7507	8108	8756	9457	10213	11031
@ old:	18		0	4122	4452	4808	5193	5608	6057	6541	7064	7630	8240	8899
Retail @ new:	24		0	408	441	476	514	555	599	647	699	755	816	881
@ old:	22		0	462	499	539								
Total:			0	10101	10909	11782	12143	13114	14163	15296	16520	17842	19269	20810
Vacancy @ 5% GPI:														
Office:			0	-462	-498	-538	-581	-628	-678	-732	-791	-854	-923	-996
Retail:			0	-44	-47	-51	-26	-28	-30	-32	-35	-38	-41	-44
Net Rental Income:			0	9596	10364	11193	11536	12458	13455	14532	15694	16950	18306	19770
Office Component:			0	8770	9471	10229	11047	11931	12886	13916	15030	16232	17531	18933
Retail Component:			0	827	893	964	488	527	570	615	664	717	775	837
Operating Expenses & R. E. Taxes														
Office @ $7.04/sf:				3247	3507	3787	4090	4418	4771	5153	5565	6010	6491	7010
Energy @ $1.00/sf.														
Insurance @ .08/sf.														
Janitorial @ .75/sf.														
Management @ 4%, .88/sf.														
Maintenance @ 4%, .88/sf.														
Rep. Reserve @ 2%, .44/sf.														
R.E. Taxes @ $3.00/sf.														
Retail: Net, carry vacant @ $7 /sf. Assume 5% vacancy.				13	14	16	17	18	20	21	23	25	27	29
Net Income Before Ground Rent:														
Office:				5523	5964	6442	6957	7513	8114	8764	9465	10222	11040	11923
Retail:				813	878	949	472	509	550	594	641	693	748	808
Total:				6336	6843	7390	7428	8023	8664	9358	10106	10915	11788	12731
Ground Rent:				-900	-900	-900	-900	-900	-900	-900	-900	-900	-900	-900
Free & Clear Income:				5436	5943	6490	6528	7123	7764	8458	9206	10015	10888	11831
Debt Service: (assume 11%, 30 yr., 30655 loan)				-3503	-3503	-3503	-3503	-3503	-3503	-3503	-3503	-3503	-3503	-3503
CFAF:				1933	2440	2987	3025	3620	4261	4955	5703	6512	7385	8328
Depreciation: New: 40/150	Life:			40	39	38	37	36	35	34	33	32	31	30
	Base:	28702		-1076	-1063	-1049	-1034	-1020	-1005	-991	-976	-960	-945	-929
Old: 5/SL	Base:	12172		-2434	-2434	-2434	-2434	-2434	0	0	0	0	0	0
Amortization: k=11.43%M		30655		-132	-145	-161	-179	-199	-221	-245	-272	-302	-335	-372
Taxable Income:				-1578	-1057	-496	-443	165	3256	3964	4728	5551	6440	7399
Tax Savings @ 50%:				-789	-529	-248	-222	83	1628	1982	2364	2776	3220	3699
Capitalized Value:				0	0	0	0	0	0	0	0	0	0	98591
Mortgage Balance:														-28091
Residual Value (includes 28% cg tax)														71070
ATCF:				2722	2968	3235	3247	3537	2633	2973	3339	3736	4165	75698
NPV @ 12%:	39647			Profitability Index @ 12%:				3.88				ROTA: (yr. 1)		13.30
15%:	32063					@ 15%:		3.14				Cash/Cash (yr. 1)		18.91
18%:	26320					@ 18%:		2.58						

Exhibit 3-39

EXHIBIT 3-40 FINANCIAL PERFORMANCE COMPARISONS

Option	Project Const. Value	ROTA (yr. 1)	Cash/Cash (yr. 1)	Net Present Value @12%	@15%	@18%	Profitability @12%	@15%	@18%	Ranking[1]	Ranking[2]
1	96.6 million	12.32	14.16	81.2	64.6	52.0	3.36	2.67	2.15	6	2
2	24.7 m	16.54	31.89	29.2	24.1	20.2	4.73	3.90	3.27	1	6
3	102.6 m	13.01	17.00	91.6	73.3	59.5	3.57	2.86	2.32	5	1
4	66.5 m	13.37	19.20	62.9	50.6	41.3	3.78	3.04	2.48	4	3
5	51.1 m	13.34	19.06	48.9	39.5	32.3	3.83	3.09	2.53	3	4
6	40.9 m	13.30	18.91	39.6	32.0	26.3	3.88	3.14	2.58	2	5

Notes:

[1]Based on unit profitability index only.
[2]Based on volume profitability measure assuming six options compare favorably with alternative investments available to developer in other cities, locations, markets.

From the above analysis, one can see that new construction is less profitable, on a dollar-of-investment-to-dollar-of-return basis, than rehabilitation. Rehab construction's combination of savings in production (construction) costs and favored tax treatment results in superior performance, on a per square foot basis, than new construction. This is not, however, the single basis on which the decision-maker chooses one over the other.. Assessment of risk, timing, and change over time can favor new construction.

By itself the profitability indices can only be used to make a relative evaluation of identified alternatives, and tells little about the environment in which decisions are made. Because of this, their interpretation can vary significantly. For example, an international developer with ready access to capital and debt markets and alternative development opportunities in other locations, such as Olympia and York, has a different view of profitability than the smaller entrepreneur with capability for only a smaller venture. In addition, none of the large developer's alternative investments in other locations may match

the profitability performance of the even the weakest of the six alternatives considered here. If this were the case, the developer would choose to build the scheme yielding the highest density regardless of its performance relative to the other five, since it would certainly outperform, in the aggregate and on a per dollar basis, any other opportunity in the developer's pipeline.

Although financial performance of alternative development schemes can be objectively measured, an absolute "winner' cannot be identified without a full understanding of the decision-making environment. Superiority can be measured in several ways. If the developer will decide on a per dollar profitability, the RPRC, straight rehab scheme is superior. If all six of the identified alternatives out-perform a developer's potential investments in other locations, the highest volume approach (the scheme now under construction) is the clear favorite. Regardless of the decision-rule, it is clear that a range of at least six physically feasible altervatives were financially feasible as well.

OVERALL EVALUATION OF ALTERNATIVES

How can we comprehensively judge the relative merits of the six alternatives available for the Exchange Block? Given the apparent physical and financial feasibility of the schemes, and assuming equal political feasibility for each, which is the superior? How can we measure it?

In this chapter criteria for the evaluation of buildings of compromise at the Exchange Block are proposed. A rating system is designed, and comprehensive evaluations of the six alternate schemes is then presented. This system of evaluation is then used to demonstrate the differing preferences of several actors in the case.

CRITERIA FOR EVALUATON

In order to compare alternatives, the thesis proposes seven criteria for evaluating buildings of compromise in Boston: urban design excellence, building preservation, environmental impacts, policy impacts, financial performance, credibility of the public review processes, and "demonstration value". Each is explained below:

Urban Design Excellence

Streetscape activity: the ability of the development program and design concept to enliven the site edges with activity and extend the active daily time period.

Connection to movement systems: the ability of the scheme to accommodate pedestrian movement around, through, and to the site. The success at resolving the conflicts between service, vehicular, and other (ie: subway) access to the site.

Massing and Configuration: the scheme's impact on adjoining and adjacent structures, squares, outdoor areas.

Preservation of Building

Appearance: the scheme's success at preserving, enhancing, and renewing the value of the appearance of the preserved structure.

Content: the demonstrated understanding and integration of the new building with the old in terms of building plan organization, section interrelationship, dimensional character, etc. Does the new addition reinforce or weaken the meaning and functional utility of the old?

Density: Environmental Impacts

The success of the scheme at minimizing adverse sun and shadow effects.

The success of the scheme at minimizing adverse ground level wind effects.(treated neutrally)

The success of the scheme at minimizing overload on public infrastructure.(treated neutrally)

Density: Policy Implications

The effects of the development on the type and distribution of investment. Will a favorable ruling on the development option encourage or discourage widespread investment throughout the city?

Financial Feasibility

Profitability-Based: using profitability index

Volume-Based: considering possible factors of inferior alternative investments in other locations, limited opportunity in Boston, etc.

Credibility of Boston's Design and Development Review Process

What would the acceptance of each scheme imply

}bout the competence and thoroughness with which each body conducts its charge? How would acceptance of each scheme affect the future effectiveness and credibility of the BRA, BLC, and Zoning Board of Appeals?

Demonstration Value:

Few sites have flexibility of the Exchange Block, or the adaptability of the Exchange Building itself. Given the range of alternatives available, and the amount of controversy, what does the scheme demonstrate about the prospects for reasonable compromise?

METHOD OF EVALUATION

In conducting any evaluation, there are two stages where the evaluator's subjectivity is made explicit --in the selection and definition of the criteria, outlined above, and in the assignment of value to these criteria for measuring performance. The criteria outlined are those of the writer, and do not represent those of actors or other observers of the case.

A simplified cost-benefit arithmetic rating system is used to compare development alternatives. Each of the above-defined criteria is assigned a value such that their sum totals 1.00. Next, each alternative scheme is rated by the writer for performance in each criterion. Scores range from 1-10 (1 is the poorest rating, 10 is the highest). By multiplying this score times the criterion's value, a composite value can be entered on the chart. Finally, the sum of these composite values is an overall score for the scheme, along the bottom line.

A series of analyses can be conducted adjusting the valuation of criteria to refect the bias of other actors or observers--the BLC or the developer, for example. Four such alternatives are presented in Exhibits 3-41 through 3-44. The first assumes the writer's own valuation. The second is evaluated from the Landmarks Commission's perspective. The third and fourth analyses are from the point of view of the developer.

SUMMARY OF COSTS AND BENEFITS

Rating Scale: BLC

Criteria	Valuation	O & Y Phase 1 Option 1 score	O & Y Phase 1 Option 1 value	RPRC Option 2 score	RPRC Option 2 value	O & Y Phase II Option 3 score	O & Y Phase II Option 3 value	Thesis I Option 4 score	Thesis I Option 4 value	Thesis II Option 5 score	Thesis II Option 5 value	Thesis III Option 6 score	Thesis III Option 6 value
Urban Design													
Streetscape Activity	0.03	9.00	0.27	8.00	0.24	9.00	0.27	9.00	0.27	9.00	0.27	9.00	0.27
Connection to Movement	0.03	7.00	0.21	7.00	0.21	8.00	0.24	8.00	0.24	8.00	0.24	8.00	0.24
Building Massing & Config.	0.05	6.00	0.30	9.00	0.45	4.00	0.20	7.00	0.21	8.00	0.40	8.00	0.40
Preservation													
Appearance	0.15	0.00	0.00	8.00	1.20	4.00	0.60	6.00	0.90	6.00	0.90	6.00	0.90
Content	0.20	0.00	0.00	10.00	2.00	4.00	0.80	7.00	1.40	7.00	1.40	7.00	1.40
Density: Environmental													
Sun/shadow Effects	0.05	4.00	0.20	10.00	0.50	3.00	0.15	6.00	0.30	7.00	0.35	8.00	0.40
Wind Effects	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Impact on Infrastructure	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Traffic	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Density: Policy													
Distributional issue: directing supply & rehab vs. new	0.10	0.00	0.00	10.00	1.00	0.00	0.00	8.00	0.80	8.00	0.80	8.00	0.80
Financial Performance:													
Profitability Index:	0.02	7.00	0.14	10.00	0.20	8.00	0.16	8.00	0.16	8.70	0.17	8.80	0.18
NPV of Investment:	0.02	8.87	0.18	3.19	0.06	10.00	0.20	6.87	0.14	5.35	0.11	4.33	0.09
Credibility of City Review													
BRA/Zoning	0.10	0.00	0.00	8.00	0.80	2.00	0.20	9.00	0.90	9.00	0.90	9.00	0.90
BLC/Designation	0.20	0.00	0.00	10.00	2.00	2.00	0.40	9.00	1.80	9.00	1.80	9.00	1.80
Demonstration Value	0.05	0.00	0.00	1.00	0.05	5.00	0.25	6.00	0.30	7.00	0.35	7.00	0.35
TOTAL	1.00		1.30		8.71		3.47		7.42		7.69		7.72

Exhibit 3-41

SUMMARY OF COSTS AND BENEFITS

Rating Scale: Author

Criteria	Valuation	O & Y Phase 1 Option 1 score	O & Y Phase 1 Option 1 value	RPRC Option 2 score	RPRC Option 2 value	O & Y Phase II Option 3 score	O & Y Phase II Option 3 value	Thesis I Option 4 score	Thesis I Option 4 value	Thesis II Option 5 score	Thesis II Option 5 value	Thesis III Option 6 score	Thesis III Option 6 value
Urban Design													
Streetscape Activity	0.10	9.00	0.90	8.00	0.80	9.00	0.90	9.00	0.90	9.00	0.90	9.00	0.90
Connection to Movement	0.05	7.00	0.35	7.00	0.35	8.00	0.40	8.00	0.40	8.00	0.40	8.00	0.40
Building Massing & Config.	0.05	6.00	0.30	9.00	0.45	4.00	0.20	7.00	0.35	8.00	0.40	8.00	0.40
Preservation													
Appearance	0.05	0.00	0.00	8.00	0.40	4.00	0.20	6.00	0.30	6.00	0.30	6.00	0.30
Content	0.05	0.00	0.00	10.00	0.50	4.00	0.20	7.00	0.35	7.00	0.35	7.00	0.35
Density: Environmental													
Sun/shadow Effects	0.05	4.00	0.20	10.00	0.50	3.00	0.15	6.00	0.30	7.00	0.35	8.00	0.40
Wind Effects	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Impact on Infrastructure	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Traffic	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Density: Policy													
Distributional issue: directing supply & rehab vs. new	0.15	0.00	0.00	10.00	1.50	0.00	0.00	8.00	1.20	8.00	1.20	8.00	1.20
Financial Performance:													
Profitability Index:	0.08	7.00	0.53	10.00	0.75	8.00	0.60	8.00	0.60	8.70	0.65	8.80	0.66
NPV of Investment:	0.08	8.87	0.67	3.19	0.24	10.00	0.75	6.87	0.52	5.35	0.40	4.33	0.32
Credibility of City Review													
BRA/Zoning	0.10	0.00	0.00	8.00	0.80	2.00	0.20	9.00	0.90	9.00	0.90	9.00	0.90
BLC/Designation	0.10	0.00	0.00	10.00	1.00	2.00	0.20	9.00	0.90	9.00	0.90	9.00	0.90
Demonstration Value	0.15	0.00	0.00	1.00	0.15	5.00	0.75	6.00	0.90	7.00	1.05	7.00	1.05
TOTAL	1.00		2.94		7.44		4.55		7.62		7.80		7.78

Exhibit 3-42

SUMMARY OF COSTS AND BENEFITS

Rating Scale: Developer 1: (volume-biased scale)

Criteria	Valuation	O & Y Phase 1 Option 1 score	O & Y Phase 1 Option 1 value	RPRC Option 2 score	RPRC Option 2 value	O & Y Phase II Option 3 score	O & Y Phase II Option 3 value	Thesis I Option 4 score	Thesis I Option 4 value	Thesis II Option 5 score	Thesis II Option 5 value	Thesis III Option 6 score	Thesis III Option 6 value
Urban Design													
Streetscape Activity	0.04	9.00	0.36	8.00	0.32	9.00	0.36	9.00	0.36	9.00	0.36	9.00	0.36
Connection to Movement	0.04	7.00	0.28	7.00	0.28	8.00	0.32	8.00	0.32	8.00	0.32	8.00	0.32
Building Massing & Config.	0.02	6.00	0.12	9.00	0.18	4.00	0.08	7.00	0.28	8.00	0.16	8.00	0.16
Preservation													
Appearance	0.03	0.00	0.00	8.00	0.24	4.00	0.12	6.00	0.18	6.00	0.18	6.00	0.18
Content	0.02	0.00	0.00	10.00	0.20	4.00	0.08	7.00	0.14	7.00	0.14	7.00	0.14
Density: Environmental													
Sun/shadow Effects	0.03	4.00	0.12	10.00	0.30	3.00	0.09	6.00	0.18	7.00	0.21	8.00	0.24
Wind Effects	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Impact on Infrastructure	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Traffic	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Density: Policy													
Distributional issue: directing supply & rehab vs. new	0.05	0.00	0.00	10.00	0.50	0.00	0.00	8.00	0.40	8.00	0.40	8.00	0.40
Financial Performance:													
Profitability Index:	0.35	7.00	2.45	10.00	3.50	8.00	2.80	8.00	2.80	8.70	3.05	8.80	3.08
NPV of Investment:	0.30	8.87	2.66	3.19	0.96	10.00	3.00	6.87	2.06	5.35	1.61	4.33	1.30
Credibility of City Review													
BRA/Zoning	0.06	0.00	0.00	8.00	0.48	2.00	0.12	9.00	0.54	9.00	0.54	9.00	0.54
BLC/Designation	0.06	0.00	0.00	10.00	0.60	2.00	0.12	9.00	0.54	9.00	0.54	9.00	0.54
Demonstration Value	0.00	0.00	0.00	1.00	0.00	5.00	0.00	6.00	0.00	7.00	0.00	7.00	0.00
TOTAL	1.00		5.99		7.56		7.09		7.80		7.50		7.26

Exhibit 3-43

SUMMARY OF COSTS AND BENEFITS

Rating Scale: Developer 2: (volume-biased scale)

Criteria	Valuation	O & Y Phase 1 Option 1 score	O & Y Phase 1 Option 1 value	RPRC Option 2 score	RPRC Option 2 value	O & Y Phase II Option 3 score	O & Y Phase II Option 3 value	Thesis I Option 4 score	Thesis I Option 4 value	Thesis II Option 5 score	Thesis II Option 5 value	Thesis III Option 6 score	Thesis III Option 6 value
Urban Design													
Streetscape Activity	0.04	9.00	0.36	8.00	0.32	9.00	0.36	9.00	0.36	9.00	0.36	9.00	0.36
Connection to Movement	0.04	7.00	0.28	7.00	0.28	8.00	0.32	8.00	0.32	8.00	0.32	8.00	0.32
Building Massing & Config.	0.02	6.00	0.12	9.00	0.18	4.00	0.08	7.00	0.28	8.00	0.16	8.00	0.16
Preservation													
Appearance	0.03	0.00	0.00	8.00	0.24	4.00	0.12	6.00	0.18	6.00	0.18	6.00	0.18
Content	0.02	0.00	0.00	10.00	0.20	4.00	0.08	7.00	0.14	7.00	0.14	7.00	0.14
Density: Environmental													
Sun/shadow Effects	0.03	4.00	0.12	10.00	0.30	3.00	0.09	6.00	0.18	7.00	0.21	8.00	0.24
Wind Effects	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Impact on Infrastructure	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Traffic	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00	NA	0.00
Density: Policy													
Distributional issue: directing supply & rehab vs. new	0.05	0.00	0.00	10.00	0.50	0.00	0.00	8.00	0.40	8.00	0.40	8.00	0.40
Financial Performance:													
Profitability Index:	0.10	7.00	0.70	10.00	1.00	8.00	0.80	8.00	0.80	8.70	0.87	8.80	0.88
NPV of Investment:	0.55	8.87	4.88	3.19	1.75	10.00	5.50	6.87	3.78	5.35	2.94	4.33	2.38
Credibility of City Review													
BRA/Zoning	0.06	0.00	0.00	8.00	0.48	2.00	0.12	9.00	0.54	9.00	0.54	9.00	0.54
BIC/Designation	0.06	0.00	0.00	10.00	0.60	2.00	0.12	9.00	0.54	9.00	0.54	9.00	0.54
Demonstration Value	0.00	0.00	0.00	1.00	0.00	5.00	0.00	6.00	0.00	7.00	0.00	7.00	0.00
TOTAL	1.00		6.46		5.85		7.59		7.52		6.66		6.14

Exhibit 3-44

QUESTIONS AND CONCLUSIONS

In the writer's view, the analysis of costs and benefits leads to the conclusion that a scheme retaining the "U" of the Exchange Building of FAR 12-15 would have been a superior alternative to the scheme now under construction. Using the same valuation of the criteria, the RPRC scheme of total retention is also a strong performer.

The writer's intent is not to convince the reader of the superiority of his scheme, but to argue for thorough and complete evaluation of alternatives. No doubt some readers will take issue with the author's choice and definition of criteria, their relative weights, and the resulting evaluation of the site alternatives, but this is beside the point. What is much more important than reaching agreement on these specific points is recognizing the institutional need for some framework which would facilitate more thorough evaluation, discussion, and negotiation in important and compex cases.

So far, this thesis has presented evidence that an intermediate density scheme falling between the total

retention approach and the final compromise scheme was physically and financially feasible, and may have been a superior scheme overall. Why wasn't such alternative seriously considered? Was such a scheme politically feasible?

CHAPTER 4

POLITICAL FEASIBILITY ANALYSIS

The alternative scheme of medium density and more extensive retention of the original Exchange Building was physically and financially feasible. Why was it not even considered during the long and protracted debates between the developer, preservationists, and the city? What factors in the process prevented this alternative from emerging?

In the writer's opinion, the scheme eventually accepted and now under construction was the inevitable outcome of the process which governed the 53 State Street case. Likewise, the process prevented the medium density/further retention scheme developed in this thesis from being seriously considered. This chapter presents possible explanations for why this was true.

GOVERNING FACTORS

The reasons for this are several and interrelated. Referring to the flow chart (Exhibit 2-1) and the narrative description of the development process presented in Chapter 2, it can be demonstrated that

seven central factors governed the interaction between interest groups in the 53 State Street case:

1. Legacy of high density.
2. Poor information exchange.
3. Tacit approvals from the Mayor rendered city agents powerless.
4. The issues of preservation and density were confused.
5. The BLC had an undefined scope of power.
6. Arguments for preservation are outdated.
7. Designation, when viewed as an endpoint in a process, may weaken the value of designation and the likelihood of reaching a compromise.

In the following sections of this chapter, each of these factors is examined. In Chapters 5 and 6, two other cases of buildings of compromise are examined for further insight into these issues. In Chapter 7, possibilities for change are identified.

THE LEGACY OF HIGH DENSITY

The granting of zoning variances for FAR greater than 18 has been a commonplace event in recent the recent

development history of Boston. This implicit policy leads the developer, as at 53 State Street, to expect high site density "as of right".

It is clear in the 53 State Street case that the developer considered an FAR of 20 a de facto right, and not a variable for negotiation. Olympia and York's planning for the site, if not their initial interest, stemmed from their confidence in achieving high density. Given the pattern established by precedent, they can hardly be faulted. No major commercial development in Boston since 1968 which sought an FAR increase had been denied. It is easy to understand why Olympia and York opposed the designation so vehemently.

POOR INFORMATION EXCHANGE EARLY IN THE PROCESS

As Attorney Fine stated at the public hearing:

> "...When an agreement was entered into in this building and for a substantial period of time thereafter, there was no Landmarks designation filed...when Olympia and York was shown the building by a brokerage firm, when it entered into an agreement under which it leased the property, and when it retained its architect, there was no Landmark petition filed. As a matter of fact... there was no Landmark petition filed until well after the closing on the property."[1]

More fundamental to the process than the exact chronology of petition dates, leasing arrangements, and closing on the property is the fact that the developer was not informed, did not investigate, and/or underestimated the depth and breadth of the preservation sentiment for the Exchange building from the outset. This information gap is the result of at least three factors:

1. The Boston Landmarks Commission had not yet assumed the more active planning role it has since adopted. In subsequent episodes, such as the planning study it commissioned for the Broad Street district, the BLC sought to anticipate, rather than respond to, development initiatives.

At the time of the 53 State Street controversy, the BLC was in the process of compiling an inventory of over 144,000 downtown buildings to provide vital statistics and an historic merit rating of each property. This kind of inventory, the BLC believed, would greatly aid developers, preservationists, and planners to

key properties and guiding development. This inventory certainly would have been provided the kind of information that Olympia and York needed to have at the earliest stage of the pre-development process if they were to alter their development strategy for the site.

2. Olympia and York, as newcomers to Boston development, relied on their formal contacts (the Mayor and the BRA) for advice on the potential of a conflict in the public arena, such as a dispute over the historic character of the property. Contact with the BLC, a clearly a more biased actor, but also a better barometer for such issues, did not occur until designation process was already in motion. The developer's first interaction with the BLC, in fact, was in the preventive mode; a more ideal process would have them making contact earlier, in an information-gathering mode.

3. During the 53 State Street case, the BLC itself was in its relative youth, particularly in large-scale downtown designation. Only the

Federal Reserve Case, described in Chapter 4, was of comparable complexity, size, and difficulty. The Exchange Building designation was a "toothcutting" case, during which the Commission's clout was being tested and defined. Without major precedents demonstrating the Commission's power, the developer may have underestimated not only preservation support for the building, but the power of the public agent charged with representing its interests. Had this power been amply demonstrated in a preceding case, earlier and more amiable interaction between the Commission and the developer may have been the result.

TACIT MAYORAL APPROVAL AND POWERLESS CITY AGENTS

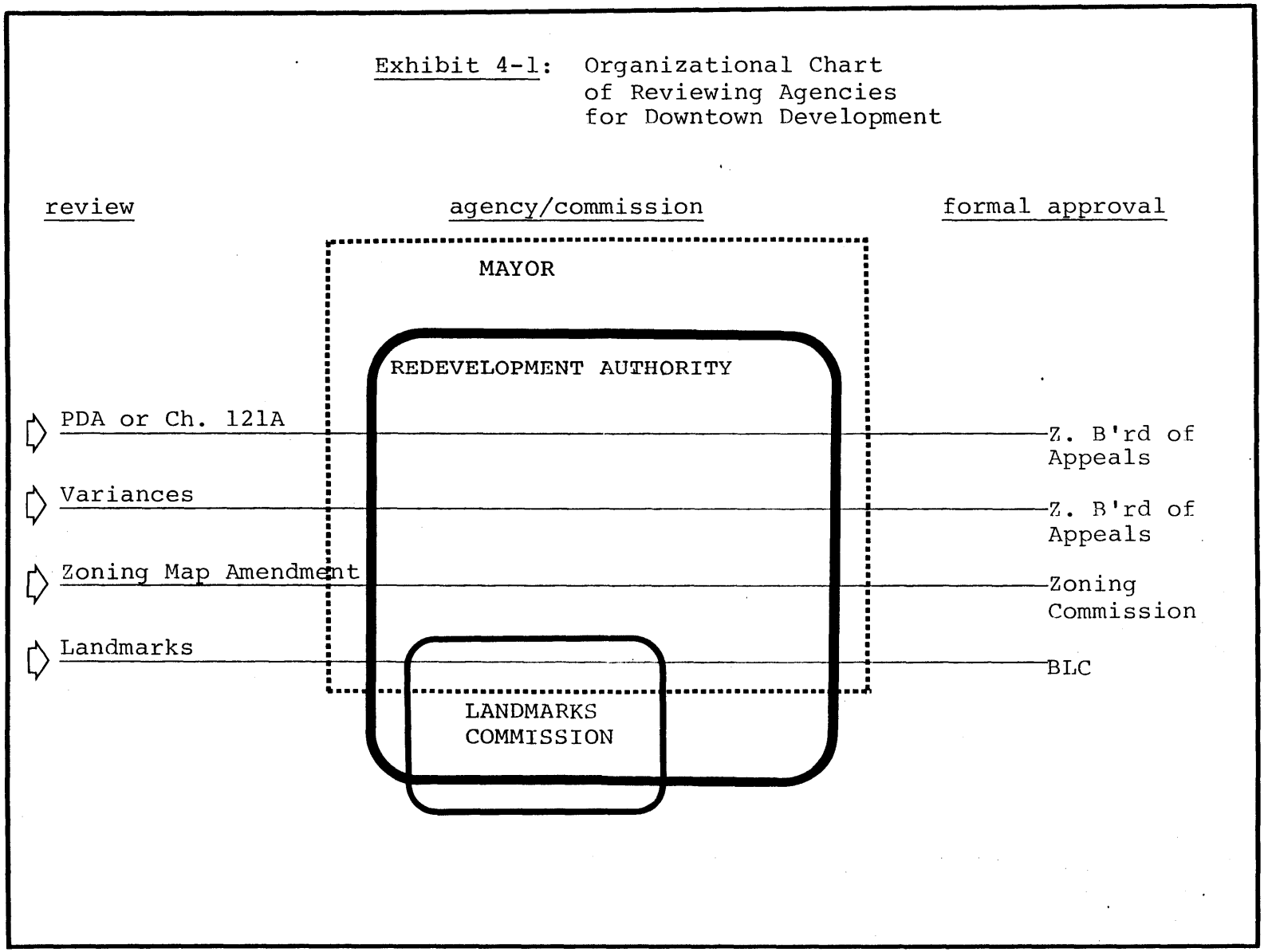
One of the primary reasons the controversy over the development of the Exchange Block was so bitter was the high risk profile held by the developer at the time the battle lines were actually drawn. Olympia and York had proceed to such an advanced stage of pre-development planning for their Phase One scheme (demolition of the Exchange Building) by the time the preservationists became involved that it was

impossible for them to consider any fundamentally different alternative. For a comparison to other cases, see Exhibits 5-1 and 6-1.

Olympia and York would not have proceeded to such a high risk position without the tacit approval of the Mayor very early in the process. Indeed, when the controversy erupted, the developers may have felt victimized by the Boston process. Having invested considerable time, money, and effort into planning for a high rise development on the site which they had every reason to believe was politically benign, they would be justifiably angry to learn, six months into the process, of the passionate and organized opposition to their project.

9irect communication between the mayor and the developer is, of course, not in itself a weakness in the regulatory process, but its use and interpretation can be. Exhibit 4-1 illustrates the writer's mapping of the organization of the regulatory departments which govern downtown commercial development. All relevant departments fall directly or indirectly within the Mayor's purview via the Redevelopment

Exhibit 4-1: Organizational Chart of Reviewing Agencies for Downtown Development



Authority. Direct access to the Mayor, therefore, can have the effect of emasculating these line agencies. In addition, the ostensibly more independent bodies, such as the Zoning Board of Appeals and the Zoning Commission, are bypassed by the special review processes which govern large scale commercial development, and play a subordinate role to the Redevelopment Authority.

Evidence indicates that the Mayor's predisposition on a given development proposal exerts a powerful influence on its fate as it moves through the city's regulatory reviews.[2] At 53 State Street, the BLC felt it had to choose between losing the entire building or accepting some sort of compromise, since the Mayor had at the earliest stages of contact between the city and the developer, endorsed the concept of high density development on the site.

Further confirmation of the significance of an early tacit approval can be seen in the fact that the final scheme underwent an <u>increase</u> in density as a result of the preservation battle. Overall site density increased from 900,000 square feet (originally proposed

in the total demolition scheme) to 1.1 million square feet by the end of the process. This increase is a kind of "compensation" to the developer for the costs of the delay, or the "penalty" for having to retain portions of the old building. No one had anticipated this result. As one participant said, "This happened at the end of the process. The bonus is something strictly between the Mayor and the developer."[3] Thus, having committed the city to an early acceptance of a 900,000 square foot development on the site, the Mayor left little margin for later bargaining. This first scheme became the baseline for the subsequent negotiations. In effect, the Mayor had granted an FAR of 19 on a de facto basis. The reason none of the other intermediate density schemes, including the one presented in this thesis, were investigated is because the tower became non-negotiable at the earliest possible stage.

This style of leadership effectively emasculates and demoralizes the city agencies. Each has a specific charge, and explicit procedures by which to implement it. But early commitments and tacit agreements between the mayor and the developer seriously undermine

their purpose and effectiveness. With this in mind, it is easy to see the near inevitability of the final compromise scheme. In fact, despite the sophisticated and sustained lobbying directed at the BRA and BLC, these two agencies had no point of entry and no power to negotiate certain issues--such as density--with the developer.

THE PRESERVATION AND DENSITY ISSUES WERE CONFUSED THROUGHOUT THE PROCESS. THE INTERRELATIONSHIP OF THE TWO, AND IN WHOSE PURVIEW EACH LAY, WAS NEVER CLEAR

As outlined in the description of the development process, support for designation fell into two categories: support based on the historic merit of the property; and support based on opposition to the high density promised by redevelopment of the site. As well, the opponents of designation argued that the building was not worthy of landmark status, and that higher density would offer greater net benefits to the city.

The two issues of preservation and site density were endlessly and continuosly interlaced throughout the

deliberations on the Exchange Block. It was never clear, however, where the proper forum for the discussion of each issue was--the BLC, BRA, or the Zoning Board of Appeals. Should the issues be debated together or independently? And in what sequence?

In fact, both issues were argued before the Landmarks Commission. Although the Commission's specific charge is to study and designate landmarks, included in their scope of powers is consideration of long-term effects of their decisions on a subject property. Since higher density was sure to govern the replacement of the Exchange Building were if it were not to designated, the potential impacts of the eventual height, bulk, and density of the replacement or addition became primary concerns for debate before the Commission.

The participants were also indecisive in their willingness to consider the density issue before the Landmarks Commission. Both the preservationists and the developers argued both sides of the issue. The preservationists warned that the high rise tower destined

to replace the Exchange Building would destroy the comfortable human scale of the district. On the other hand, they tried to prevent the developer from discussing high density when he framed the issue in terms of the potential tax benefits of high density, arguing that comparing an FAR 10 alternative to an FAR 20 alternative was irrelevant to a landmarks designation hearing.

Similarly, the developers were alternately in favor of debating density and insisting that it was not part of the Commission's purview. Attorney Fine stated,

> "I will make one continuing objection to any reference to the height of any building which may be built there. The issue before this Commission is the preservation of the existing building... and not the issue as what may be there in there in the event we do not designate it"[4]

The same attorney later argued, however, the tax "penalty" imposed by designation by calling witnesses who compared the tax yield from an FAR 10 development to and FAR 20 development.

Only one witness, J. Miller Blew, proposed a

potential resolution of this ambiguous overlapping of issues. He suggested, although emphasizing the legal independence of the landmarks and the zoning reviews, that some tradeoff might be reached via a zoning bonus for the old building.[5] This was a prophetic suggestion, although it would appear Mr. Blew was proposing the bonus be added to the baseline FAR 10, not the FAR 19, as the eventual concession to the developer would indicate.

What is the procedure for the review of proposals for changes in site density limits, and why was the 53 State Street process so confused? As can be seen from Exhibit 4-2, downtown Boston is zoned almost entirely B-10, with a maximum base FAR of 10 times site area. There are three standard procedures to gain approval of higher density:

1. Request a zoning variance. Using this procedure, a deviation from existing zoning limitations is obtained if the applicant can demonstrate that special conditions make the property different from others in the district, such as an unusual shape or difficult topographic features.

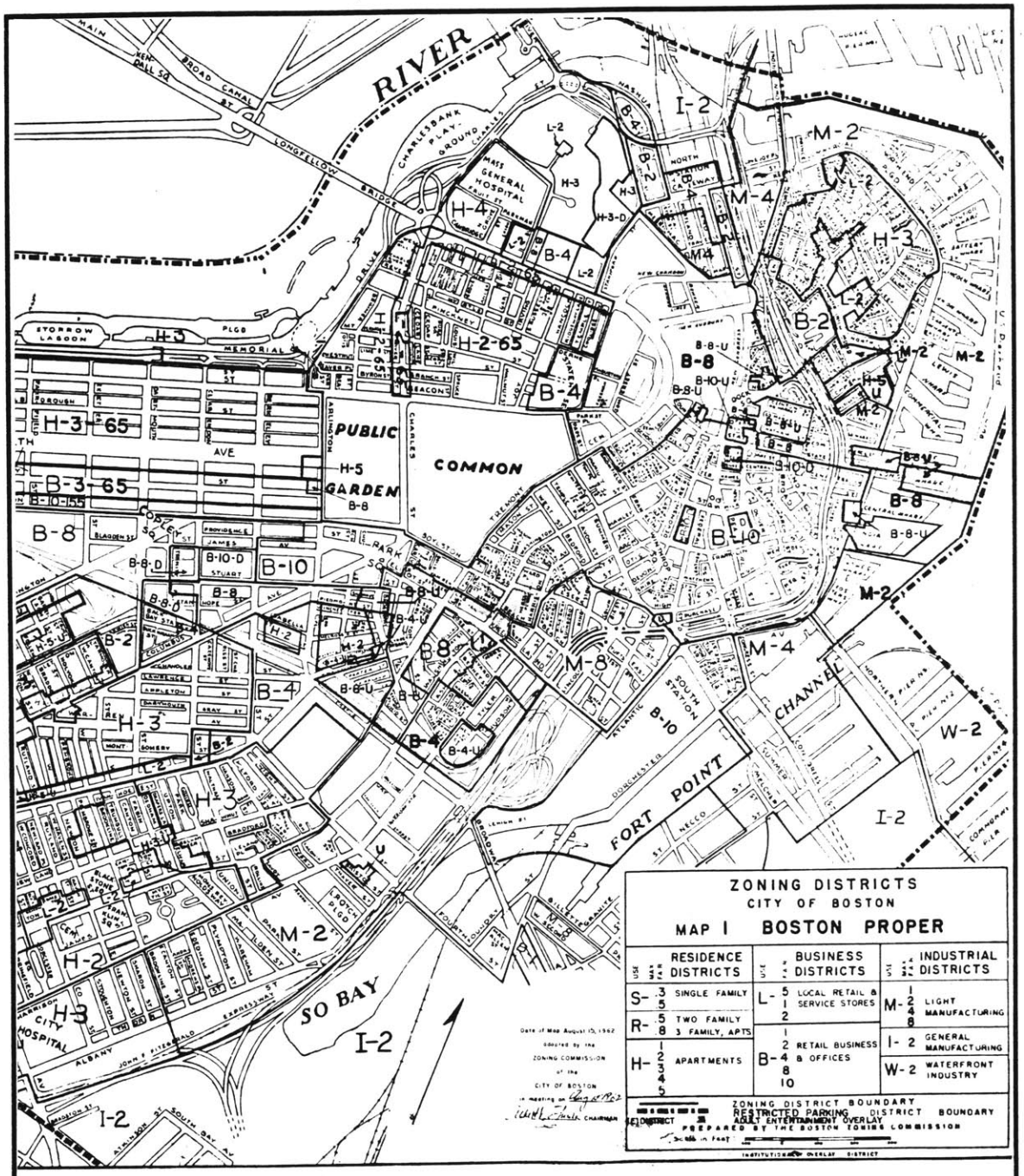


Exhibit 4-2

Downtown Zoning Map

The Zoning Board of Appeals rules on the request, based on recommendations made by the BRA staff.

2. Request a zoning map amendment. The actual zoning map and text of the Boston Zoning Code may be amended by the Zoning Commission to accommodate special needs. The Commission will rule after considering the analysis and recommendations of the BRA.

3. Request a special district designation with the BRA. Under a Planned Development Area (PUD), Urban Renewal Area, or Chapter 121A Agreement designation, flexibility in application of the zoning code is allowed. In each case, the proposal is reviewed by the BRA; its recommendation to grant or reject the requested deviations are forwarded to the Commission and the Board of Appeals.

For a major downtown office building development such as 53 State Street, the third approach is usually chosen, with the developer applying for either or both the PDA and Chapter 121A designation. Both of

these reviews are designed to allow for numerous and interrelated deviations from the zoning standards, such as height, density, parking ratio, etc.

Application to follow either PDA or Chapter 121A is not the beginning of the city's review of a proposed project, but is actually the culmination of an informal review and an indication that the development project is entering the final stages of public review. The BRA has usually been involved in shaping the project for several months before a PDA or 121A application is filed. Formal application to initiate these procedures indicates basic agreement between the city and developer on the fundamental development concept.

In the Exchange Place case, Olympia and York began their discussions with the BRA in the early stages of their site planning and programming, in the winter of 1978. From these discussions emerged the urban design objectives of opening the site to the Congress/ State Street corner and allowing the diagonal pedestrian movement through the site. At this time the BRA staff also undertook a preliminary analysis of whether a high rise building would be desirable on

the site from an urban design point of view. No documentation of this analysis was made available to the writer.

The major issues of density, financial feasibility, and urban design were negotiated at these early stages. The PDA process was used by the BRA to fine-tune the development approach. This meant, according to one BRA staffmember, maximizing the public plaza area, minimizing the overall height, negotiating a final density to provide a reasonable financial return, achieving the best quality of building skin as possible, and getting the developer to assume as much of the cost of public improvements as possible[6]

Under the PDA process, the Zoning Commission and the Zoning Boards of Appeals, who officially amend the map and grant the variances required for project approval, play "rubber stamp" roles in this process. It is the BRA who makes the detailed study, refinement, and modifications to the development scheme, and the BRA who forwards a project to these two boards for official approval.

Although a public hearing is required for all three steps, (the PDA recommendation by the BRA, the map amendment by the Commission, and the granting of the variance by the board of Appeals) all three participating authorities are much less accountable to the general public than the BLC, which has a powerful, well-organized, and articulate constituency in the City. This compounds the confusion--the Landmarks Commission becomes the battleground for the debate of all issues, including density.

The building of compromise introduces new stresses to the regulatory system. One of the special ways is that it forces the simultaneous consideration of density and preservation issues. The functional separateness of the Landmarks Commission, the BRA, and the Zoning Board of Appeals, and the ambiguity in the extent and sequencing of their overlap, does not currently accommodate a thorough review of such projects. This is another factor in the process which prevented the consideration of intermediate alternatives for the Exchange Block.

THE SCOPE OF BLC DESIGN REVIEW POWERS IS UNDEFINED

The 1975 statute establishing the BLC's power to designate landmarks and districts outlines specific procedures for operations. Included in these procedures is the promulgation of standards and criteria which define each designation and govern the future of the property. Subsequent Certificates of Design Approval, for any "reconstruction, restoration, exterior, or interior replacement or alteration, or demolition of any landmark"[7], are issued only if the proposed work is consistent with these standards and criteria running with the landmark.

The standards and criteria establish the actual substance of the designation. The statute, however, does not specifically prescribe what the scope or content of the standards should be, and simply states "general standards and other appropriate criteria consistent with the purposes of this act"[8] be written. Their scope and specificity are established, in effect, on a case-by-case basis.

The BLC Study Report, completed between the preliminary hearing and the pubic hearing in each

designation case, often includes the general standards and criteria which have been adopted as the Commission's baseline for designation. In cases where more specific guidelines are needed to define the designation, as in compromise cases, a specific set is written and supersedes this general set.

The content of the standards and criteria was another controversial issue in the 53 State Street case. The standards and criteria, written during an intense three week period, covered the following issues:[9]

1. General: the scope and intent of the designation
2. Masonry: the treatment of existing granite, limitations on removal, the number of openings allowed to be filled or added, the reuse of masonry to cover "raw" walls.
3. Doors and Entrances: the visual balance of existing and proposed new entrances, the retention of detail, ornaments.
4. Fenestration: the kind of sash and glazing allowed in each portion of the building, the treatment of spandrels, retention of decorative elements.
5. Signs and Lighting: retention of existing plaques, limitations on additional signs and lighting, general lighting of the facade.
6. Additions: the sight-line criteria for penthouse additions, the relationship of new construction in scale, color, materials, and facade organization.
7. Roofs: treatments of surfaces and plantings.
8. Demolition: the allowed demolitions, as outlined in the designation boundary map.

At the time the original statute was drafted, landmark designation and substantial new construction were thought to be mutually exclusive. In cases of "pure" preservation or adaptive re-use, the standards and criteria were written with a straightforward intention: ensuring the character of a landmark, structure, or district by recommending the building techniques and materials appropriate in future use of the property.

A building of compromise, however, in proposing substantial new construction in addition to a landmark, introduces unanticipated questions. To what extent should the BLC have design review authority over the new construction?

This issue was never resolved in the 53 State Street case. The BLC argued that since the act's fundamental intent was to protect and enhance landmark structures, and its own charge was to set criteria "consistent with the purposes of this act"[10], it had review rights over any new construction which would impact a designated structure. The 53 State Street tower, they argued, was just such a case.

The developer's attorney's, on the other hand, argued that the BLC's charge was much more specific and limited in scope. They argued the BLC's mission and specific powers were to study and rule on the designation of landmarks, and to issue standards and criteria which governed those landmarks alone. In the attorney's draft of the standards and criteria, which he proposed in early December 1979, he stated, "Construction of a high rise tower on the same block shall be permitted...The design of this tower will not be reviewed..."[11] Although this passage was removed in subsequent editing and negotiation, this underscores the continuing debate over the ppwers and authority of the Commission. As a compromise, no specific references are made in the standards and criteria relating to the development of the non-designated portions of the site at all, almost as if this area were beyond the Commission's jurisdiction.

Ironically, the lawyers later asked the BLC to lend its support to the high rise proposal during the subsequent PDA Zoning Review. Although the developer's attorneys earlier argued that the Commission should have no review authority over proposed new

construction, they did suggest that they appear as expert witnesses on behalf of the high rise development proposal. Ultimately, after some internal debate, the BLC declined lend such support, but this chain of events is further evidence of the fundamental ambiguity in the Commission's formal authority.

In a letter to BRA Director Robert Ryan declining to appear in favor of the developer, the BLC wrote,

> "Members of the Landmarks Commission do not wish, however, in endorsing the restoration of the Exchange Building, to be seen to be supporting the design or location of the proposed high rise tower. The Commission is concerned that there is no explicit city policy guiding new high rise development, and fears that without a strong policy, such development will be detrimental to the character of downtown Boston"[12]

This issue still remains unresolved, as can be seen from subsequent cases.[13] In the 53 State Street case, the controversy over the formal authority of the BLC made it impossible to hold serious discussions of the design and development issues presented by the proposed new construction. The developer never accepted the legal standing of the Commission to enter into such negotiations.

CONVENTIONAL ARGUMENTS FOR HISTORIC PRESERVATION ARE RENDERED OBSOLETE IN COMPROMISE CASES, AND ARE NOT COMPELLING TO AN INVESTMENT DECISION-MAKER

The building of compromise not only adds special stresses to the regulatory framework governing downtown development, but also changes the cost-benefit ratio of rehabilitation to new construction in financial terms as well. By definition, the building of compromise proposes high density. This poses an immediate problem: conventional arguments and incentives for reuse, which have been increasingly well articulated and developed over the last decade, are simply unconvincing to the developer.

Arguments in favor of preservation and adaptive reuse fall into three broad categories: tax benefits, gains in efficiency, and enhanced marketability. Each of these is discussed in the context of the 53 State Street case in the sections below.

1. Taxes

The most conspicuous adjustment in the development formula forced by a building of

compromise relates to the tax benefit package of the Tax Reform Act of 1976 and subsequent amendments in 1978. Often a strong point of leverage in persuading an owner to choose renovation over demolition and new construction, the relative size of such benefits is miniscule in the development equation for construction of a major high rise tower. There are at least three reasons why the tax advantages are no longer compelling:

A. The actual amount of the tax benefit is too small to be an effective incentive. When compared to a $125 million typical project cost, the tax benefit from the rehabilitation of an existing, and usually smaller, building are inconsequential, and hardly seem worth the effort, expense, and delay of the required local, state, and federal reviews.

B. A developer who undertakes a project of this magnitude (at least 85 million dollars investment) may not be interested or cannot use the rapid amortization offered by the tax package. Both the form of ownership and the income stream represented by the typical

portfolio of properties calls for extended and sustained depreciation rather than rapid depletion of negative income benefits. Although the tax losses can be syndicated, the larger, cash-rich and diversified real estate firm may prefer long-term steady depreciation. In fact, in the One Post Office Square project, a directly analogous case, the owner /developer is not taking advantage of the accelerated depreciation allowed under the Tax Act. This is an archtypical example of how the formula changes for a building of compromise.

C. In a rapidly inflating market, such as the Boston Class A office market, the ratio of tax benefit (a function of construction cost and investment) to taxable income (a function of market rent, occupancy, and operating expenses) is constantly decreasing --swinging from rehabilitation in favor of new construction. This margin continues to widen as long as the market rent inflation is greater than construction cost inflation, as

has been the case in the Boston market. In October 1979, just before the BLC hearing, average rents for Class A office space in Boston was 16.00 per square foot. By late 1980, when Olympia and York began pre-leasing, rents were quoted at $30 to $40 per square foot. This represents an increase of 75 to 150% in 18 months, or 50% to 100% annual rent inflation. This exceeds even a high construction cost inflation rate of 10% per year.[6]

This differential in inflation rates continually reduces the relative value of tax advantages to the developer over time. The delay imposed by the certification process for the historic rehabilitation design, cost estimating, and certification process continually reduce their upside potential.

D. The "demolition penalty" in the Tax Act--not allowing demolition costs to be deducted if the structure was listed on the National Register, also fails as an incentive in buildings of compromise. It is only an incentive

if the envisioned replacement for the structure is small enough for such a "penalty" to register an impact. This may work only at the smallest scale of total project investment.

In cases where the ultimate site density is an open question, however, as with 53 State Street, the non-deductability of demolition costs may, in fact, create incentives counter to the legislation's objectives. If, for instance, the Exchange Building were successfully listed on the National Register in its entirety (this was probable) and the site density were still undefined, powerful incentives for demolition would be established. In order to offset the demoliton penalty imposed by the federal listing, (a fixed cost) the developer will naturally seek, under the apparently "ceilingless" Boston density review, the highest possible site FAR. The National Register listing, when combined with a negotiated density ceiling, therefore, can be actually fuel the desire for increased site density--a kind of policy backfire.

This is in fact the case in the United Shoe Machinery Corporation Building case, an analogous case analyzed in Chapter 6.

2. Efficiency Arguments

Efficiency arguments also irrelevant in cases of buildings of compromise. The argument that rehabilitation takes less time, and can happen year round (because the existing shell affords weather protection) is irrelevant. Not only can construction be phased effectively year-round, but the cost of the time lag for new construction is clearly outweighed by the benefits. In an inflationary market, with deep demand, the margin between construction costs and rent levels can widen <u>in favor of the developer</u>. Over time, this can actually make it advantageous to complete a new construction project at a later date than anticipated for a rehabilitation program, as long as the market demand is still sufficient. Furthermore, the fact that rehabilitation is faster than new construction is irrelevant when comparing 400,000 of one and

800,000 square feet of the other. The time cost of money is irrelevant if the longer schedule can yield a higher volume project with comparable profitability.

3. Marketing Arguments

Marketing arguments for preservation claim that old buildings add charm to their sites and districts, increase property values, and tangibly contribute to the successful marketing of the project. The achilles heel of this argument is that it only applies to weak markets, which by definition will not produce a building of compromise situation. Under the tight market conditions which generate a building of compromise the demand is so strong and projected absorption so substantial that no developer would prefer 300,000 "charming square feet" to 1,000,000 less charming, but easily rentable square feet.

The boom market conditions which set the stage for buildings of compromise present a paradox for the conventional incentives for rehabilitation

development. The preservation incentives, however, are not the only casualties. The same market conditions remove incentives for the developer to interact with the city in other ways as well, some of which have been points of entry for winning concessions on development issues in the past. The Chapter 121A tax agreement is a prime example of this phenomenon.

The Chapter 121A provision allows the developer to gain deviations from conventional zoning and tax regulations, in exchange for agreeing to a more thorough public review procedure. This may result in negotiation with the city of project design, area improvements, etc. Under a 121A agreement, a municipality can stimulate and direct investment by substituting a negotiated in-lieu of tax payment to the city for conventionally assessed property taxes. This negotiated payment is customarily a proportion of project income, and ranges from 15-20% of annual rent roll.

However, the inflationary market which produces the building of compromise, removes the incentive to seek a 121A agreement. As office rents soar, the marginal benefit of a 121A agreement over a standard

assessment diminishes. This eliminates a potential point of entry for the city to effectively negotiate urban design issues, including historic preservation.

VIEWING DESIGNATION AS AN ENDPOINT IN A NEGOTIATION PROCESS RATHER THAN AS A STARTING POINT MAY WEAKEN BOTH THE VALUE OF DESIGNATION AND THE PROBABILITY OF REACHING A REASONABLE COMPROMISE

The enabling statute for the Commission implies that designation, although the endpoint in a study and analysis process, is not the endpoint in the process of guiding the future of the landmark. The statute provides for appeals to the Commission, and to County Superior Court, if necessary, to challenge a designation ruling. Designation can be, in some cases, a baseline from which subsequent deviations are subsequently allowed.

In practice, designation is seen and used as an endpoint in the design and planning for a site. Participants in the process attempt to resolve all issues upon designation--the design review of new construction, the economic issues, and the site density

issues. And although the Commission must consider these issues in making an intelligent designation decision, it cannot reassonably be a forum for such a broad range of issues. The current process makes landmarks designation a proxy for other important reviews, each of which deserves a separate and expert forum.

Each actor--the Commission, developer, and the preservationists has several motivations for viewing designation as an endpoint in the process. For the BLC, designation is their last official opportunity to have input into the development project. Given the limited voice they are allowed both before and after their official involvement, they feel they must maximize their impact through designation itself. Their interest is to influence as many issues of concern, directly or indirectly, as they possibly can in the designation.

The developer shares this preference for an expeditious resolution of controversy and a definitive designation as well. Although the developer's consultants could not themselves reach consensus on the

substance of the standards and criteria (the lawyers drafted and advocated standards and criteria giving the developer carte blanche, whereas the architects were more willing to negotiate), the desire for finality and clarity was shared by all. For the developer, whose life is governed by uncertainty, a definitive designation with clearcut guidelines is preferable to time consuming and expensive negotiations in subsequent stages of the development process.

The preservationist lobby, usually in a reactive position, are equally interested in establishing irrevocable rules through designation. Their involvement is short and temporary, and the threat (real or imagined) of the developer's evil intentions encourages them to win hard guarantees from the developer as soon as possible.

Ultimately, the designation proceedings on the Exchange Building was used as a proxy for the consideration and review of a series of separate and interrelated issues. Some feel this compressed review process, which collapses several issues into one,

dilutes the meaning and value of designation. Not only does this process confront the Commission with issues (density, for instance) it may not be qualified to consider, but it removes the responsibility from other city agencies who are charged with conducting those reviews.

Under an alternative model, designation would not be seen as a strict endpoint in the Commission's involvement. For example, the designation process, could be revised to provide a two step designation. A preliminary designation would be more "pure"-- based on historic issues rather than on consideration of density, economic, or other issues. Revisions to such a designation could then be allowed through subsequent discussions of those issues. The level of discussion for modified, or partial designations, would be raised, since the burden of proof of hardship would be shifted to the developer. Under the current model, by contrast, it is incumbent upon the preservationists, or the Commission itself, to argue for full designation and to accept partial designation. This concept is further discussed in Chapter 7.

It is of course not at all clear that such a change would actually enhance the effectiveness of the Commission or raise the standard of the city's overall review of development alternatives available for a given site. However, it seems clear that the collapsing of multiple issues under the rubric of a landmark designation reduces the probability of establishing effective discussions between city and developer.

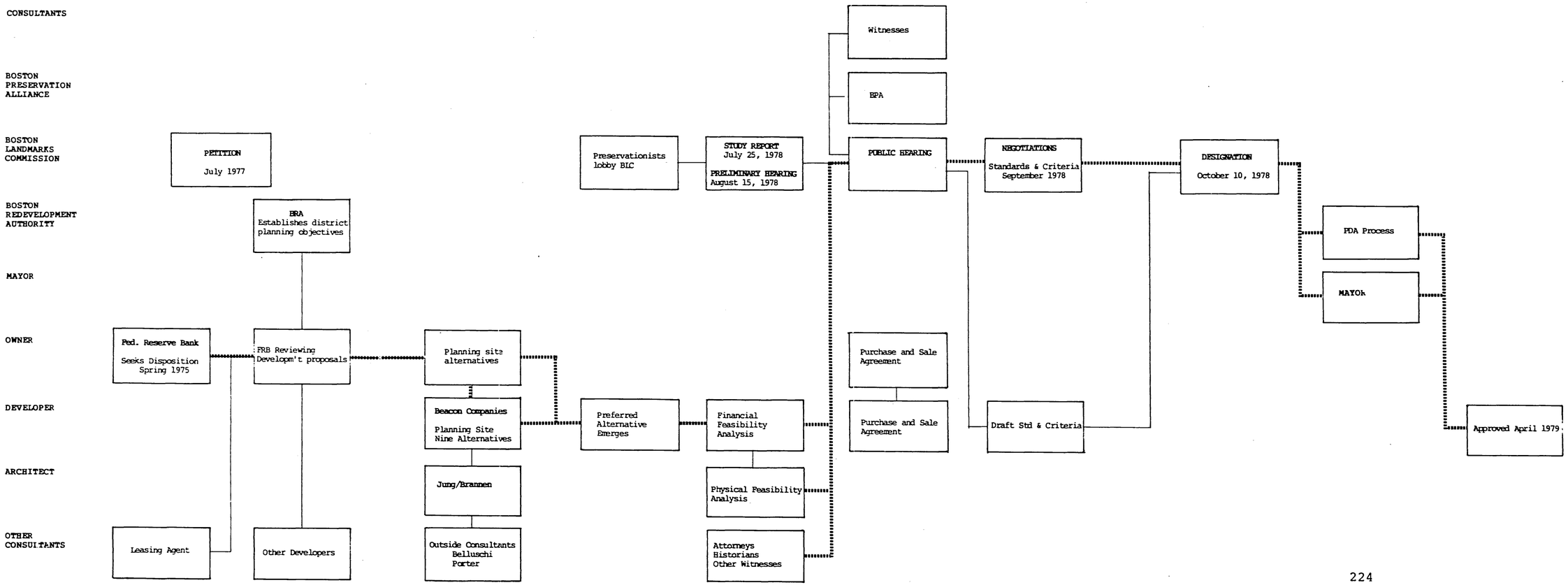
CHAPTER 5

THE OLD FEDERAL RESERVE COMPLEX

Another way to consider the possible alternative outcomes in the 53 State Street case is to look at other buildings of compromise governed by the Boston system. There are two such cases, the Old Federal Reserve Bank Complex, and the United Shoe Machinery Corporation Building. Although governed by the same real estate economics, historic issues, and regulatory frameworks as 53 State Street, the three cases vary widely in their outcomes. An analysis of the causes of these variations is useful in considering alternatives for working with buildings of compromise.

The United Shoe Machinery Corporation Building, the subject of another controversy and now at a decision-making impasse, is examined in Chapter 6. In this chapter, The Old Federal Reserve Complex, renamed as One Post Office Square and currently nearing completion, is analyzed. First, a brief background narrative and flow chart (Exhibit 5-1) describe the property, the problem, the actors, and the landmarks process. Next, governing factors which account for the

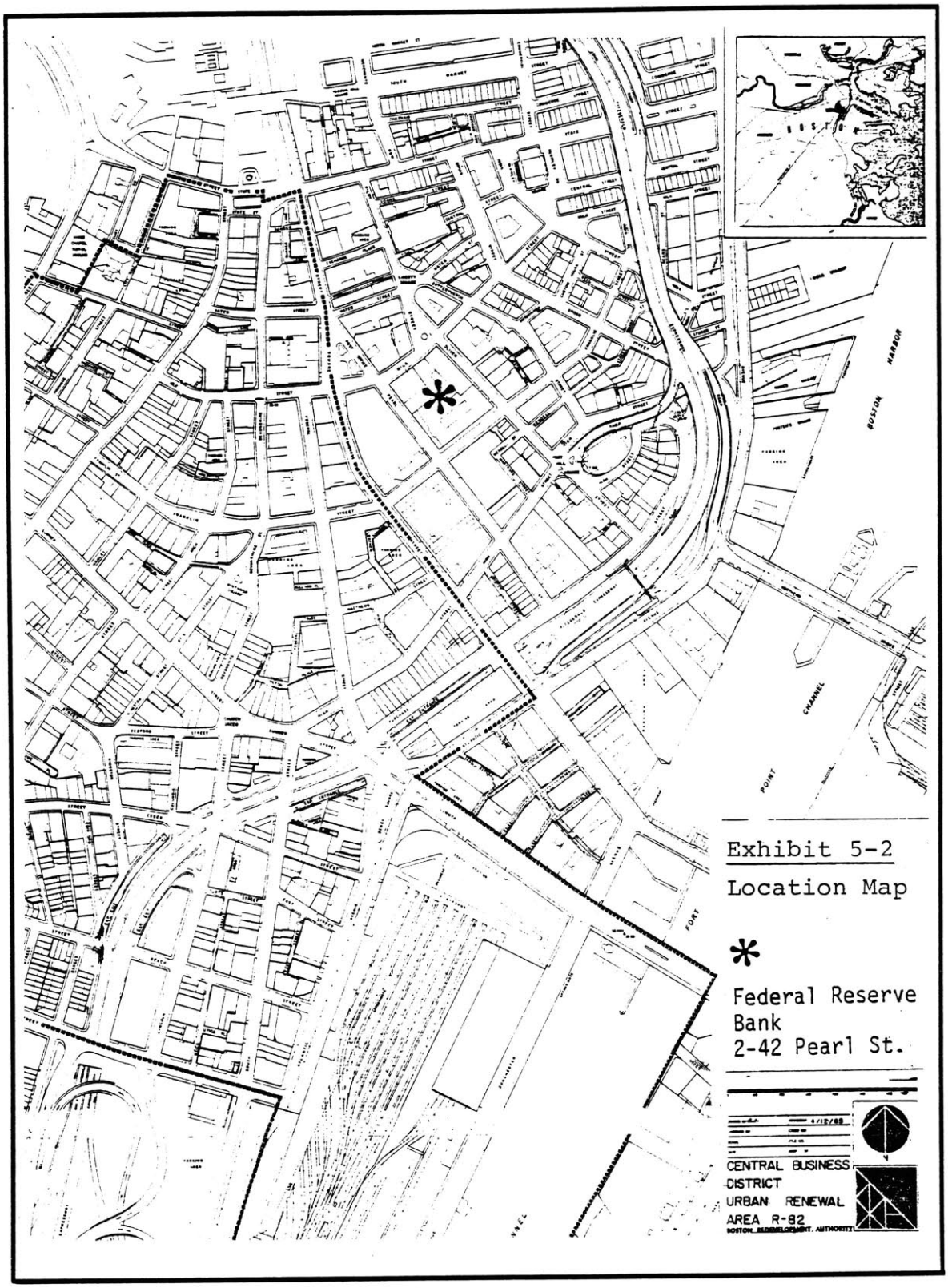
EXHIBIT 5-1: OLD FEDERAL RESERVE COMPLEX LANDMARK DESIGNATION PROCESS

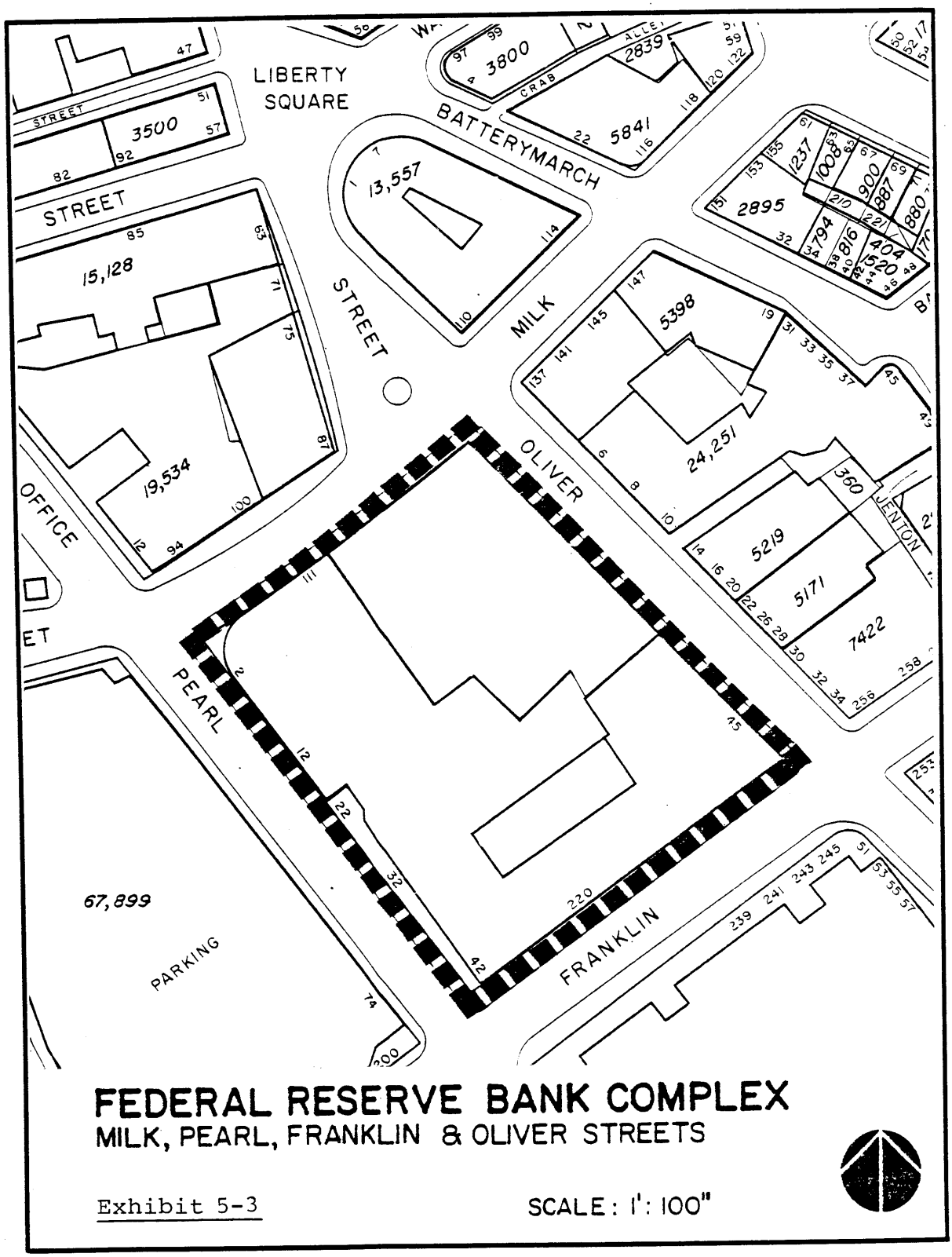


differences in process and result between the 53 State Street case and One Post Office Square are identified.

DESCRIPTION AND BACKGROUND

The Federal Reserve Bank complex is located on the block bounded by Milk, Pearl, Franklin, and Oliver Streets, facing Post Office Square near the heart of the downtown financial district (Exhibit 5-2). The complex consists of three buildings which contain both small offices and large ceremonial banking halls and meeting chambers. The two main buildings are six stories tall, flat-roofed, steel-framed and faced with limestone. One was built in 1922, and was the first built-to-suit home for the Federal Reserve Bank in Boston, since it occupied various spaces in the city from 1914. An addition to this original structure was planned in the 1940's, and after delays imposed by the death of the commissioned architect and the second World War, was constructed in 1953. A one-story structure was built behind the two main buildings in the 1975. A parking garage, built in 1972, occupied the remainder of the site (Exhibits 5-4 and 5-5).


BOSTON HARBOR
CHANNEL
POINT
FORT
Exhibit 5-2
Location Map
*
Federal Reserve Bank
2-42 Pearl St.
CENTRAL BUSINESS DISTRICT
URBAN RENEWAL AREA R-82
BOSTON REDEVELOPMENT AUTHORITY



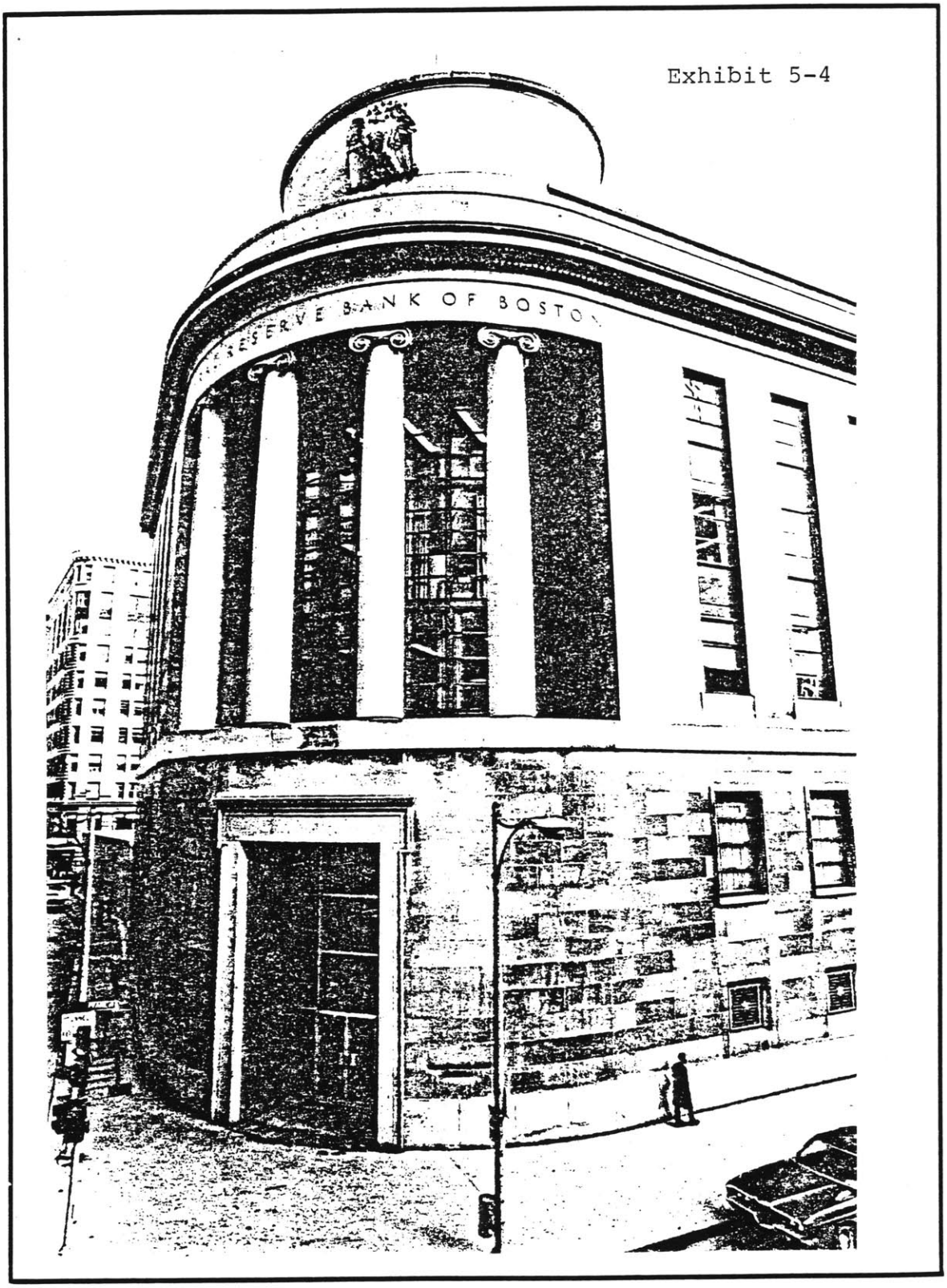
FEDERAL RESERVE BANK COMPLEX

MILK, PEARL, FRANKLIN & OLIVER STREETS

Exhibit 5-3

SCALE: 1": 100"

Exhibit 5-4



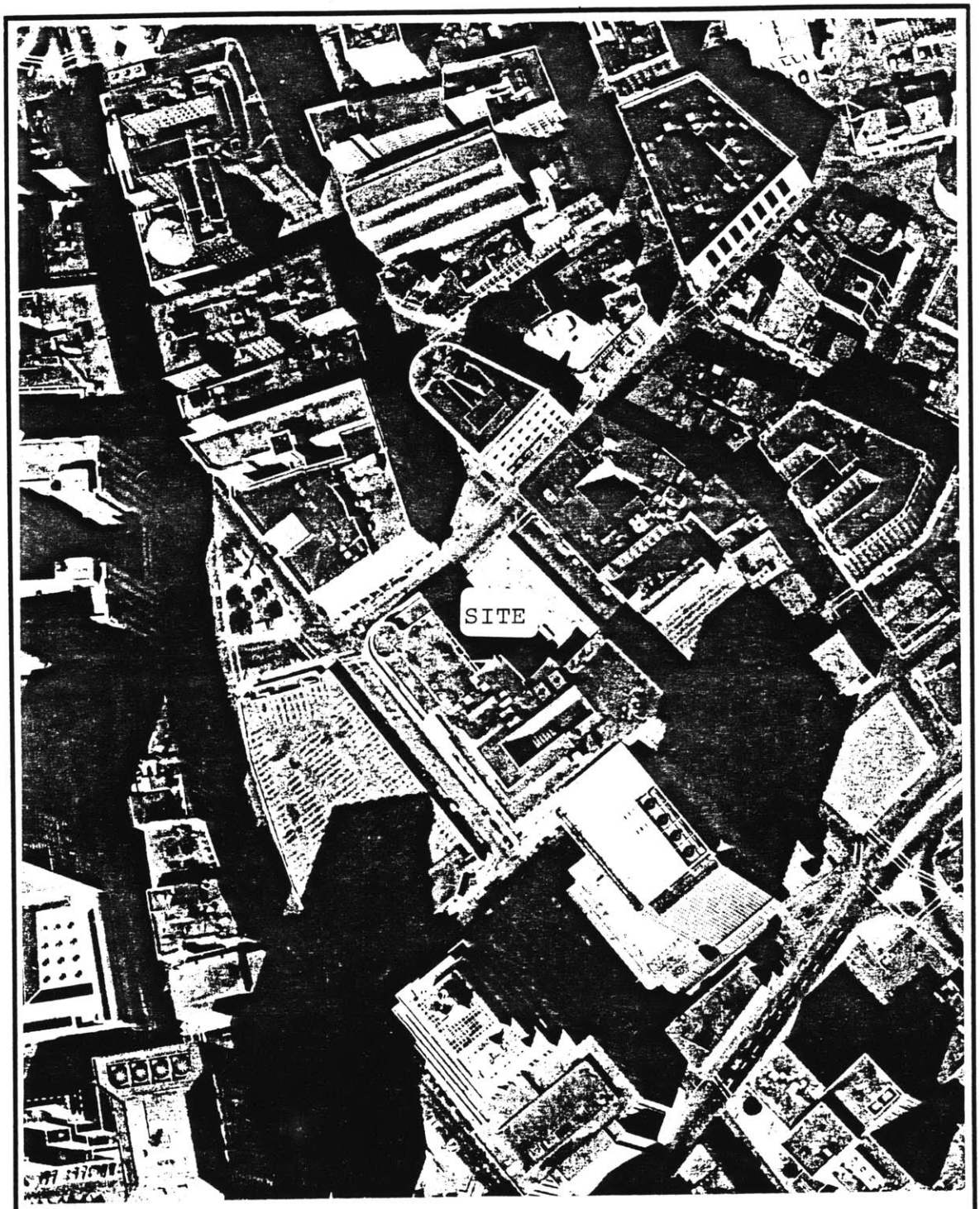


Exhibit 5-5
District Aerial View

The area surrounding the Federal Reserve Complex is populated by a mixture of commercial buildings built both before and after the Boston fire of 1919. Ranging in height from 4 stories to high rise towers of 28 stories, these buildings house the regional and state headquarters of many of Boston's most established financial institutions. Known as the financial district, the area land use is almost entirely commercial office space with limited supporting retail.

The complex was the home of the regional office of the Federal Reserve System from 1922 until 1978, when it moved to its new office tower in the South Station area. Planning for the future of the old site was begun in early 1977.

THE PROPERTY DISPOSAL

As a quasi-public agency, the Federal Reserve Bank had three central objectives in the disposal of the property:

1. Identifying a new use for the property which was consistent with the city's overall planning objectives for the district, and participating in the planning and programming process to ensure this outcome.

2. Guiding the redevelopment of the property to maximize the tax yield to the city and minimize the probability of future blight due to prolonged vacancy.

3. Accepting, if necessary, a below-market value for the property to help ensure a high quality development project.

The Federal Reserve Bank retained a prominent Boston leasing agent to market the complex. Over a three year period, however, no suitable purchaser was found. The bank reviewed redevelopment proposals of each of the prospective purchasers. It was clear the existing buildings would be difficult to reuse. Although structrally sound and well maintained, the previous banking uses left some peculiar and difficult spaces--such as solid concrete vaults, very high ceilings, and a fortress-like architecture which successfully conveyed the image of security but would be extremely expensive to alter for new use. None of the preliminary schemes presented seemed feasible.

The physical difficulties presented by the existing buildings translated directly into weak financial

feasibility. Some of the schemes seemed unrelated to the market at that time, such as a proposal for a high rise condominium tower attached to the rear of the 1951 building.

THE BEACON COMPANIES

In February 1978, The Beacon Companies, a real estate development company known for its office and industrial developments in both downtown and suburban Boston, became interested in the property. The Beacon Companies approached the Federal Reserve Bank and initiated a planning process for the site, led by architects Jung/Brannen of Boston.

This planning process, which Beacon partner Edwin Sidman remembers as "one of the most creative processes I have ever been involved in"[1] produced nine schemes for the site. The alternatives for reuse of individual buildings, overall site density, and program uses were defined and explored. Each of the schemes was based on differing assumptions and interpretations of the overall market, the reusability of the various buildings, and the appropriate density in the district.

Emerging from this planning process was one scheme which seemed to have both design and financial feasibility. This scheme called for the retention of the 1922 building, widely acknowledged as the more historic and architecturally attractive of the two main buildings, and the replacement of the 1953 and 1972 buildings with a new office tower. The 1922 building would be restored and reused for either office or hotel use.

The Federal Reserve Bank was also impressed with Beacon's scheme. It seemed to combine the best portions of the original comppex with bold enough new construction to anchor the entire site in the market. The office market, although no yet experiencing the dynamic boom it has in the years since, did seem to warrant development of this size.

THE BLC's DESIGNATION PROCESS

The Landmarks Commission had received a petition seeking the designation of the Federal Reserve Complex almost one year before this time, in August of 1977. The Commission had not yet considered the case, since its redevelopment seemed far from imminent, but had

proceeded to the study report stage. This report was completed at the same time the Beacon Companies planning effort was conducted and speculation about the proposed development began to appear in the local press.

The study report recommended that the entire complex be designated a landmark. It found that the 1922 building, in particular, was a significant part of Boston and New England banking history, and a quality example of the Renaissance Revival Style in America. Furthermore, it maintained, the building was an important work of the architect R. Clipson Sturgis.

The 1953 addition was also deemed worthy of designation. The study report called it a fine example of "Governmental Modern Style" or "Academic Classicism", a suitable addition to the 1922 building, and a major work of Paul Philippe Cret. The study report recommended that it, and the 1922 building, also be nominated to the National Register of Historic Places.[2]

The public hearing for designation was scheduled for August 15, 1978. In the interim, letters of support

for the Beacon scheme were received by the BLC. Endorsements of the Beacon scheme, and opposition to the overall designation, followed four themes: 1) the proposal was the only financially feasible alternative available for the site, and the only proposal the bank had seen in its three years of planning which met the city's and bank's objectives for redevelopment; 2) designation would adversely affect the bank's effort to sell or lease the property; 3) the 1953 building and other minor site structures were very difficult to reuse, and had been inadequate even for the bank; and 4) the 1953 addition was not architecturally significant, and contrary to the BLC report, was not the work of Cret.[3]

Undaunted, the Beacon Companies entered into a purchase and sale agreement with the Bank on August 15, 1978, the same day the public hearing before the Landmarks Commission was scheduled.

THE PUBLIC HEARING

At the August 15 hearing, proponents argued for the architectural and historic significance of the complex, the importance of the complex in maintaining

the scale and integrity of the district, and the feasiblity of reuse. Reuse of both the 1953 and the 1922 buildings, they argued, was financially and physically feasible.

The Beacon Companies presented the oppposite arguments. They exhibited the nine alternatives they had developed, and explained the relative strengths and weaknesses of each. The physical obstacles to alternative reuse approaches, and their likely financial consequences, were identified.

Following this presentation of alternatives, witnesses appeared in support of the Beacon scheme which proposed the retention of the 1922 building, and the clearance of the rest of the site for copnstruction of a high rise office tower. These witnesses argued that: 1) the 1953 addition was not architecturally significant; 2) the 1953 building had many peculiar strucutral and architectural features which made its reuse difficult; and 3) the "fortress=-like" architecture of both the 1922 and the 1953 buildings offered little amenity to the pedestrian; and 4) locating an office tower on the rear of the site behind the

1953 addition, as some had suggested, would significantly reduce the attractiveness of the site for high grade office tenants.[4]

The developers were concerned that designation of even the 1922 building would be too inflexible to allow for a reuse program. He felt a premature designation would only thwart the Bank's and the developer's efforts to achieve a successful rejuvenation of the property. The mere threat of designation, Sidman reported, was creating difficulty in the Beacon Companies' efforts to attract hotel operators. Although there was unanimity among the particpants in the process, Sidman felt, the preservation interests did not seem to understand the financial and physical constraints on redeveloping the existing buildings.

Although the hearing produced no clear conclusion, a mutual interest in a compromise scheme which retained portions of the Federal Reserve complex emerged. Over the two months which followed, until the designation on October 10, 1978, the exact substance of the designation was negotiated. During this period, the developer's primary concern was to build flexibility into the standards and criteria which would

govern the reuse of the 1922 structure. Two key issues were central to the redevelopment plan: 1) the "permeability" of the ground floor--the developer's concern for achieving adequate access, light, and visibility between the inside and outside of the building; and 2) retaining the option of adding additional rooms above the existing structure, which might be needed to achieve the efficiency and economies of scale necessary for financial feasiblity.

DESIGNATION

The developers felt strict standards and criteria from the Commission would not accommodate their needs. During September 1978, several versions of the standards and criteria for the 1922 building were drafted by the preservationists, developers, and Commission. Designation under these criteria was approved by the Commission on October 10, 1978.

The PDA Zoning Review Process was set in motion for the proposal, and the project received approval in April of 1979 for a thirty-nine story tower adjacent to the 1922 building. The 1922 building was to be converted into a 300 room Class A hotel. The

original parcel was divided into two independent sub-parcels. The project was built to an overall FAR of 14.6, with an FAR of 21.6 on the office tower sub-parcel.[5]

GOVERNING FACTORS

The One Post Office Square project, now nearing completion and nearly fully leased, has been a stunning commercial success. It combined adaptive reuse and high rise new construction in a way which had not really been attempted before. In many ways, it is a pioneering building of compromise.

This development is a product of the same public review and regulatory system which governed and produced the 53 State Street resolution. Yet, this compromise was reached with less bitterness and contention, and resulted in less political fallout for the Commission, developer, and preservationists. What factors account for the differences in the tone and quality of the negotiating process?

An analysis of the process in the One Post Office Square case indicates that several factors are

critical to a successful negotiation of buildings of compromise: 1) physical separability; 2) legal and financial separability; 3) original owner's position and objectives; 4) analytical thoroughness of the developer; 5) risk profiles; and 6) availability of precedents.

PHYSICAL SEPARABILITY

Unlike the Exchange Block, the Federal Reserve Complex was an ensemble of distinctly independent buildings which were historically and physically severable. As can be seen in Exhibits 5-2 to 5-4, the buildings of the Federal Reserve complex occupied corners of the site, whereas the Exchange Building occupied portions of its entire site. Thus, on the 54,326 square foot Federal Reserve Site, buildings could be independently considered for rehabilitation or demolition while enough site area could be reserved for the construction of an efficient office building.

Ease of physical separation is clearly one of the key factors in generating a building of compromise. The physical independence of parts of a building or complex have direct political implications as well as

the more obvious structural and architectural implications. In cases where decisions to retain or demolish some portions of a building or complex are negotiated between preservationists and developers, the historical independence of individual components is critical.

LEGAL AND FINANCIAL SEPARABILITY

The original Federal Reserve Site was eventually partitioned into two sub-parcels, one for the 1922 building, and another for the development of a new office tower and a low-rise parking garage. Separate development entities for each sub-parcel were also established.

The physical separability of existing structures can be easily translated into convenient legal frameworks as well. This separation enhances construction and management of the building of compromise. Since the new construction project follows a different review process than the historic rehabilitation, it is convenient to separate them legally. In this way, reviews for site density for the office tower, for example, can be handled independently from the

historic rehabilitation certification process. Pre-development and construction phase efficiency is enhanced.

Legal separation between old and new can also accommodate multiple forms of ownership which might be convenient in the operation of a building of compromise. For instance, the One Post Office Square project combined hotel use with an office program. A separate ownership structure for the two components allows unencumbered relationships between operators and joint venture partners that the deal may require. The difference in tax treatment for historic rehabilitation and new construction can also be easily accomodated. Ownership groups can be structured to optimize these differences and strengthen the overall project.

The partitioning of legal and financial interests is possible, of course, without the physical severability offered by the One Post Office Square project. A skilled deal-maker can successfully accommodate the diverse interests and objectives of multiple parties on a site such as the Exchange Block. However, if the separation of project components is clearly

exists in the physical form of the property (as at the Old Federal Reserve Site, and not at the Exchange Block), the legal and financial separation required in a building of compromise is made easier.

Reaching a superior compromise is easier without a controversy over where to draw the line between old and new. Physical as well as legal alternatives are more readily grasped, considered, and refined by all actors involved.

POSITION AND OBJECTIVES OF THE ORIGINAL OWNER

A major factor in the success of the One Post Office Square process was the active and sophisticated participation of the Federal Reserve Bank itself, the owner of the property. As a quasi-public agency, the Bank's primary motive was the successful and appropriate reuse of the site -- returning the property to tax generating use and complying with the City's overall planning objectives for the district.

By contrast, the typical private owner, such as Old State Trust in the 53 State Street case, has a very different list of objectives and order of priorities.

Whereas the Federal Reserve Bank had no immediate financial constraints but did have an important public reputation to protect, the private owner typically needs to maximize cash gain and carries less public responsibility.

The Federal Reserve Bank tried to market their property for three years before The Beacon Companies was selected. This time-consuming process, involving solicitation and review of numerous redevelopment proposals, none of which seemed appropriate or feasible, must have been frustrating to the Bank. This commitment to a long period of exploration performed an invaluable service to the city, since it allowed a full range of alternatives for the site to be examined. The standard of evaluation and discussion was naturally elevated through this process.

No private owner can be expected to have such an avid interest in the future development of a site after its disposition. In reviewing the One Post Office Square case, therefore, it is critical to remember the critical role the Federal Reserve Bank played in building an atmosphere conducive for detailed study

and analysis of development alternatives for the site.

The owner need not be public to assume such a role, however. Likewise, public ownership is no guarantee of such leadership. (Witness St. Bartholomew's Church and the Museum of Modern Art in New York) In the absence of such enlightened leadership by an owner, however, the public process must somehow endeavor to achieve similarly successful results.

ANALYTICAL THOROUGHNESS OF THE DEVELOPER

One distinction which can be drawn between the 53 State Street and One Post Office Square cases is that one involved a Boston developer and the other involved a Canadian company. Although an apparently superficial observation, this distinction could account for some of the tonal differences in the negotiation of a compromise.

Olympia and York's proven track record and continued success in the United States is adequate evidence of their extreme overall competence, as well as of their ability to enter new markets and negotiate unfamiliar

political landscapes. In a controversial development process such as in a building of compromise, however, there are distinct advantages to being a local actor.

For example, the Canadian developers clearly underestimated the interest and political clout of the Boston preservation community. Since they operated from a distance, they relied upon official sources--the Mayor or the BRA--for indications of possible conflicts. It was clearly difficult to read the nuances of the political climate through surrogates, however. The Beacon Companies, by contrast, were long-standing citizens of Boston. With their offices only a few blocks from their site and city hall, and with a proven local track record spanning three decades, they, were much better equipped to sense, anticipate, and respond to the political controversy which surrounds a building of compromise.

Olympia and York responded to this disadvantage by hiring a local law firm to represent them in public forums against the preservation lobby. This strategy was successful in insulating Olympia and York from direct involvement in the controversy. In fact,

whereas Beacon Company partner Sidman and his staff participated heavily in the public hearings and discussions with the Landmarks Commission, not a single person from Olympia and York appeared at the highly contentious public hearing for designation.

This insulation may have achieved the developer's objective of maintaining a low profile, as is Olympia and York's style, but it may have worked against the formulation of a well-developed compromise as well. Although the lawyer's involvement afforded the developers legal protection, it also seemed to increase the contentiousness of the process. Discussion often focused on the legal and technical dimensions of decisions and issues of legal precedent, rather than on the substance of the design and financial issues being negotiated.

More important than the fact that Olympia and York was a foreign developer, or the impacts of their using a lawyer to represent them, is their attitude towards the preservation issues and public review process. By underestimating the depth of the preservationists' interest in the Exchange Building, Olympia

and York simply did not recognize the need for a thorough investigation of development alternatives. By contrast, Beacon took almost an opposite approach in the Old Federal Reserve Complex case by initiating an exploration of alternative development approaches.

This difference in approach set the tone for the entire process. The Beacon Companies developed nine alternative schemes for their site before the designation hearings, before signing their purchase and sale agreement with the Bank, and before negotiations with the BLC. Having done their "homework", the Beacon Companies was better prepared to argue for their scheme and against other alternatives. This not only set the tone for more friendly negotiations, but also facilitated discussion at a high level of specificity and sophistication. The Beacon Companies' options were available for scrutiny, challenge, and debate, which were supported by the design and financial analyses the developer had prepared.

The reader will recall in the 53 State Street case that a primary difficulty in seeking a compromise was identifying alternatives for comparison and finding a

forum in which to have them recognized and considered by the participants. The developer provided only one site approach. The BPA-sponsored, RPRC scheme provided the polar opposite, and arrived too late in the process to register any impact on the outcome. The scheme now under construction, although developed over a six month period before made public, was offered late in the process as the only possible resolution of a hopelessly advanced confrontation.

The inferiority of the Federal Reserve Site to the Exchange Block may account for the difference in the developers' attitudes toward generating alternative development approaches described above. The extremely favorable market conditions under which Olympia and York began pre-development planning for the Exchange Block, and the "textbook perfection" of the site for high rise development made the detailed and thorough analysis of alternatives demanded by a building of compromise seem unnecessary. By contrast, the comparatively weak office market and the physical difficulty of reusing the Federal Bank buildings prompted a very thorough and patient search for an appropriate development approach to the Federal

Reserve Site.

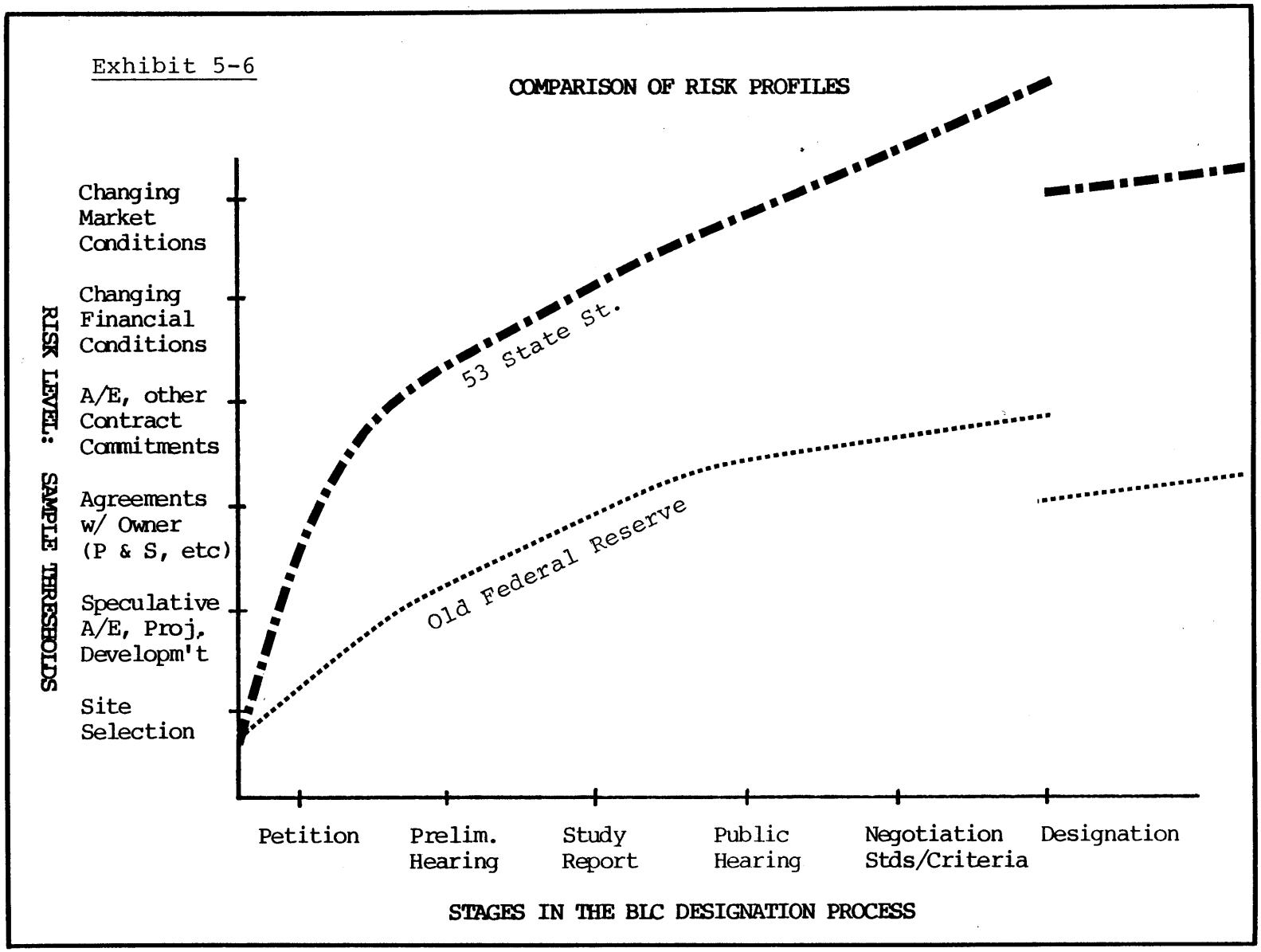
RISK PROFILES

The uncertainty of success which characterized the Federal Reserve site and the Beacon Companies' involvement from the outset led the developers to minimize their risk profile. By contrast, the Olympia and York's high confidence in success at the Exchange Block led them to develop a very high risk profile earlier in the landmarks process. This difference is fundamental to understanding the successes and failures of the two processes. (Refer to Exhibit 5-6)

The Beacon Companies, wary of market softness and the growing preservation concern over the Federal Reserve complex, invested considerable time and resources into exhaustive preliminary planning before they began formal acquisition. Of course, the ownership status of the property allowed them this time and patience. Therefore, when the landmark designation process was initiated, the developers had not committed significant resources beyond this exploratory stage.

By contrast, Olympia and York were well into design

Exhibit 5-6


COMPARISON OF RISK PROFILES
RISK LEVEL: SAMPLE THRESHOLDS
Changing Market Conditions
Changing Financial Conditions
A/E, other Contract Commitments
Agreements w/ Owner (P & S, etc)
Speculative A/E, Proj. Developm't
Site Selection
53 State St.
Old Federal Reserve
Petition
Prelim. Hearing
Study Report
Public Hearing
Negotiation Stds/Criteria
Designation
STAGES IN THE BLC DESIGNATION PROCESS

development on their Phase One scheme when the preservation controversy erupted. They had reportedly already entered into a leasing understanding with Old State Trust based on an anticipated FAR of 19. Given this high risk profile, Olympia and York's interest in exploring fundamentally different approaches to site development was understandably low.

It is clear that a low risk profile at the time of negotiations is helpful in setting the stage for a strong compromise. The regulatory process which governs this kind of development might be refined to minimize the developer's risk profile. Clearly the Boston process currently does not. Some possiblilities for improvement are suggested in Chapter 7.

AVAILABILITY OF PRECEDENTS

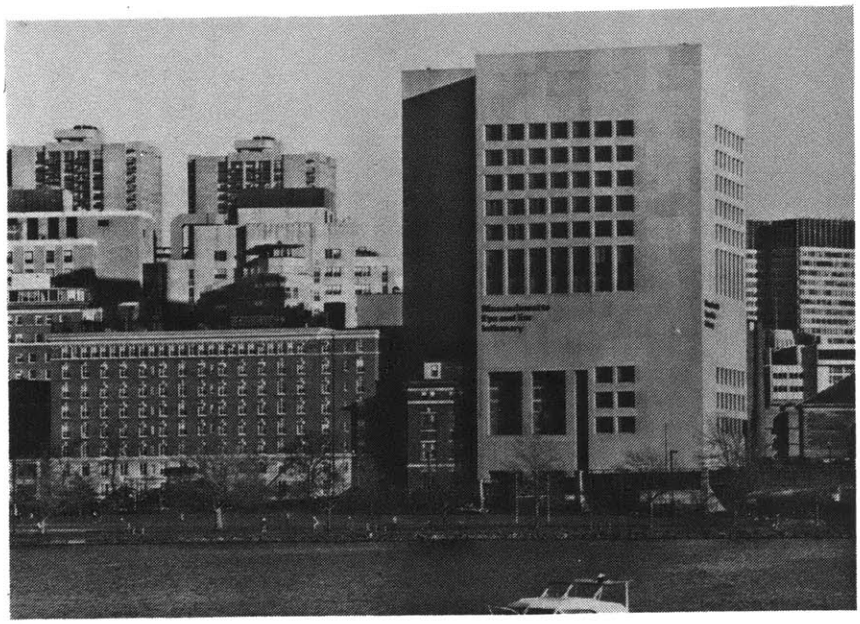
One Post Office Square was one of the first buildings of compromise. At the same time it was being planned, the Helmsley Palace Hotel and early schemes for St. Bartholomew's church complex in New York were being developed. The only completed examples of buildings of compromise available at this time were the Massachusetts Eye and Ear Infirmary in Boston and

the Penn Mutual Tower in Philadelphia (Exhibits 5-7 and 5-8). And although both these buildings do combine high rise construction with portions of original structures, no attempt was made to integrate them spatially as well as architecturally. These two projects do not raise or address the range of architectural, financial, and urban policy issues raised by both 53 State Street, One Post Office Square, and the subsequent United Shoe Machinery Building case.

The resolution of the Old Federal Reserve Complex case was, therefore, an immediate and direct precedent for the 53 State Street case. This worked both for and against the process of reaching a compromise. Although it served as a tangible example for visualizing what might be achieved at the Exchange Block, it also served to galvinize the positions of opposing parties.

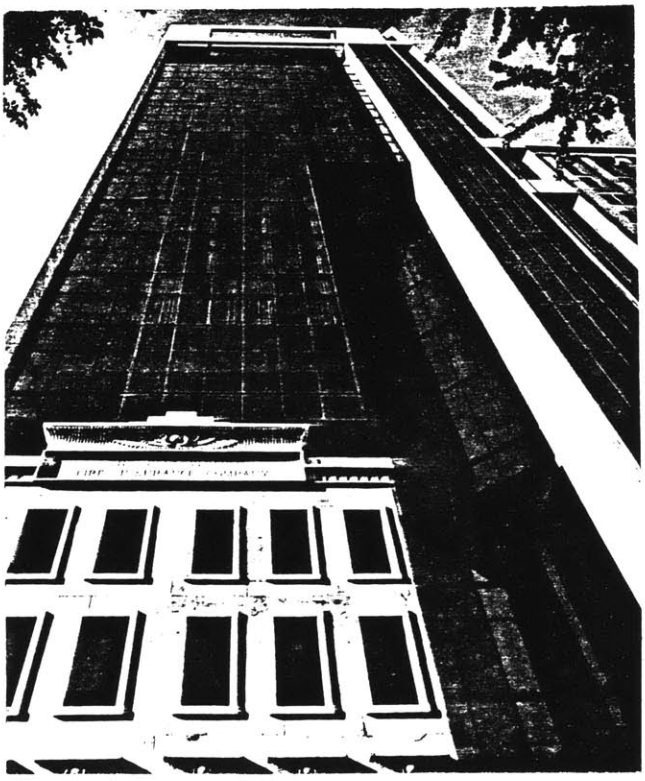
Preservationists who objected to the One Post Office Square solution and considered it a sellout to developers were much more determined to defeat any similar scheme for the Exchange Block. Likewise, the developer, who was apprehensive about the financial

Exhibit 5-7



Mass.
Eye & Ear I
Boston, MA

Exhibit 5-8



Penn Mutual Tower
Philadelphia
Mitchell/Giurgola

and physical liabilities of an old building, would be aware of the precedent established by the One Post Office Square Project, and would prepare to argue against a similar resolution on his site (Exhibits 5-9 and 5-10).

Thus, while the concept of compromise may have appealed to the imaginations of both the preservationists and the developers in the One Post Office Square case, thereby bringing them closer together, an available real-life example of such a compromise may have polarized these interests at 53 State Street.

SUMMARY

The Federal Reserve Complex and Exchange Block cases occurred roughly nine months apart. Both these projects resulted in high rise, high density towers connected to low-rise, rehabilitated structures. The two cases, however, are extremely different, both in process and results. Before drawing any conclusions, it is useful to examine a third Boston case, the United Shoe Machinery Corporation Building. It offers yet another view of the city's regulatory capability in dealing with buildings of compromise.

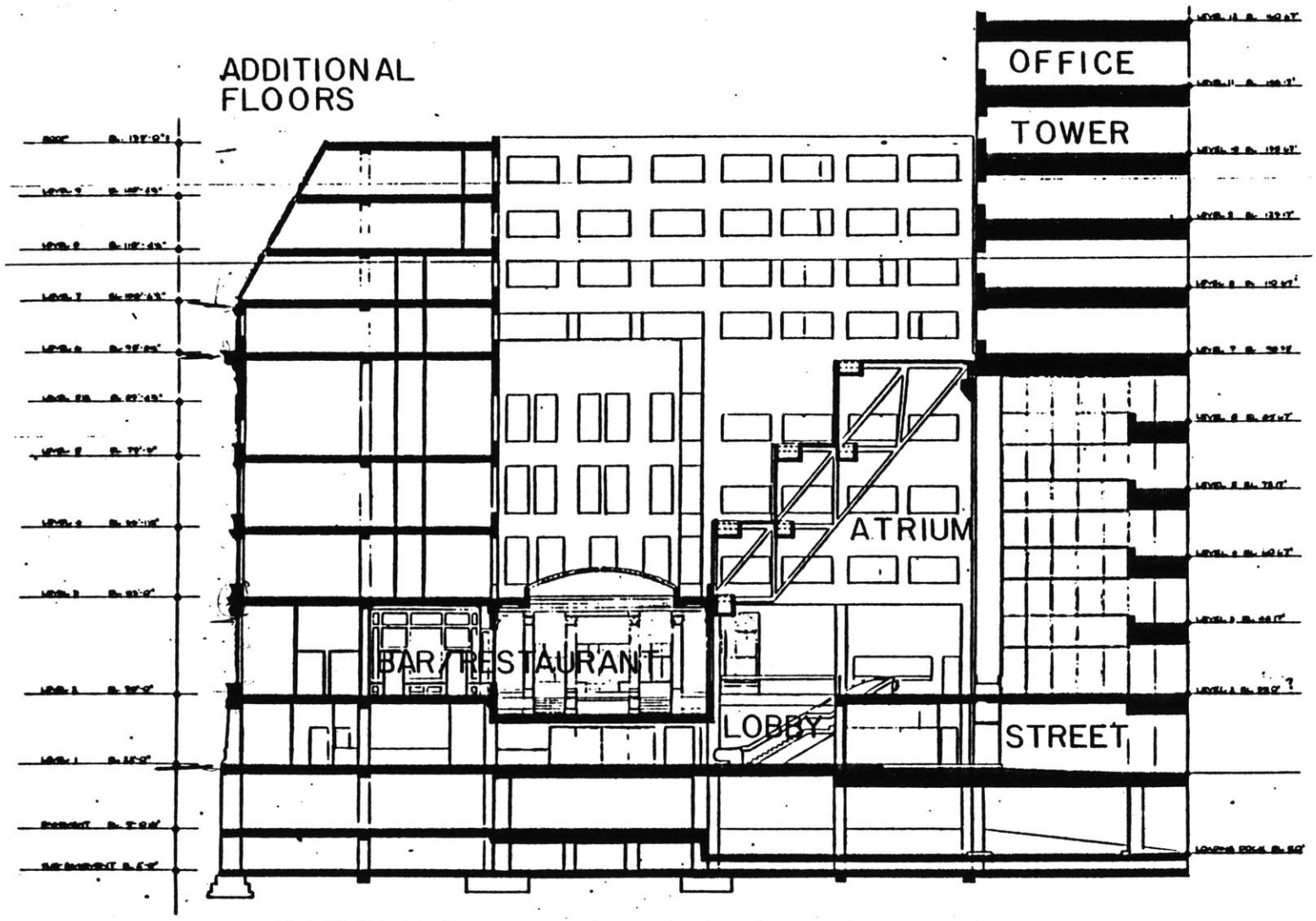


Exhibit 5-9 Section Through Atrium

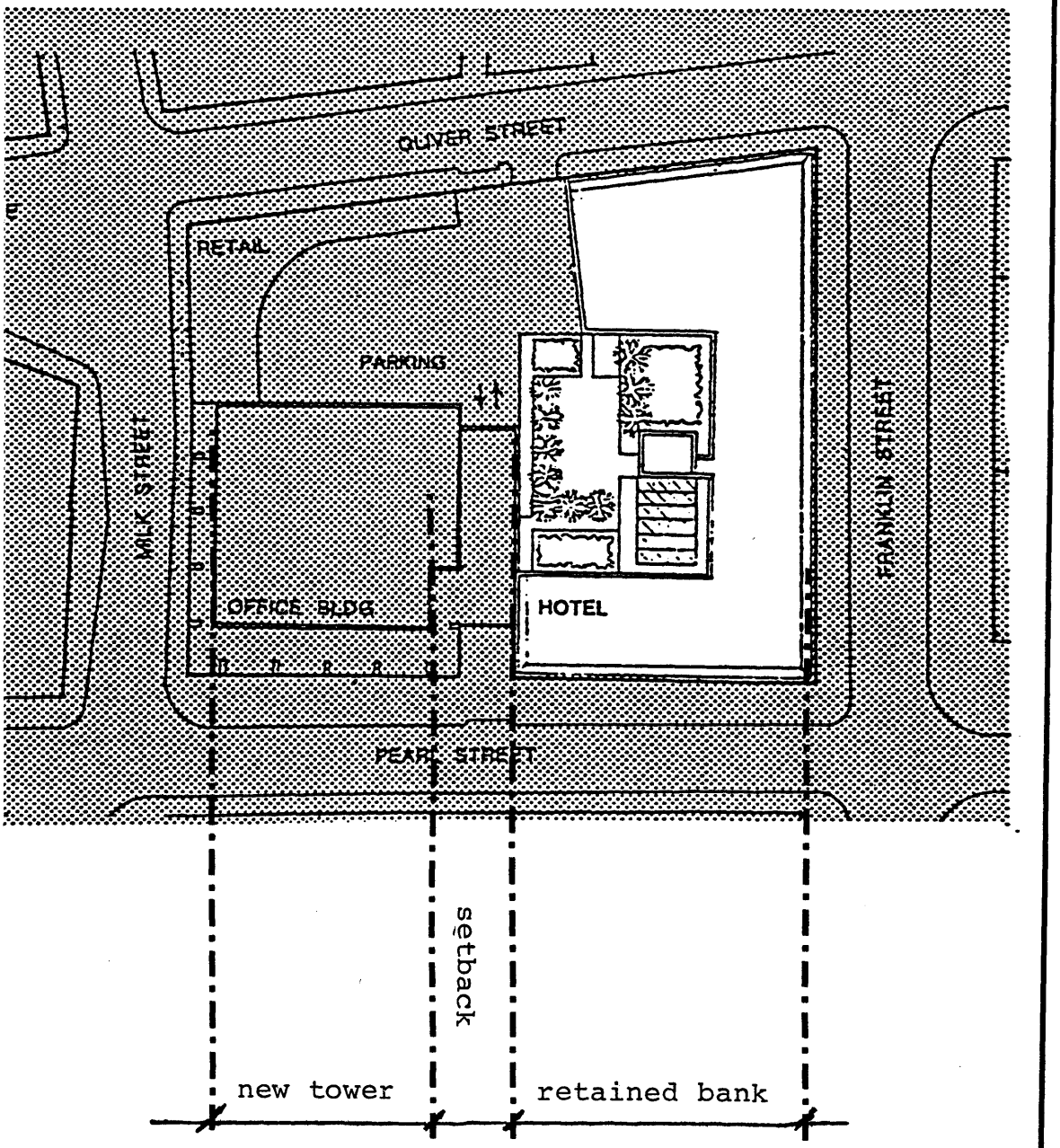


Exhibit 5-10

Schematic Floor Plan

CHAPTER 6

THE UNITED SHOE MACHINERY CORPORATION BUILDING

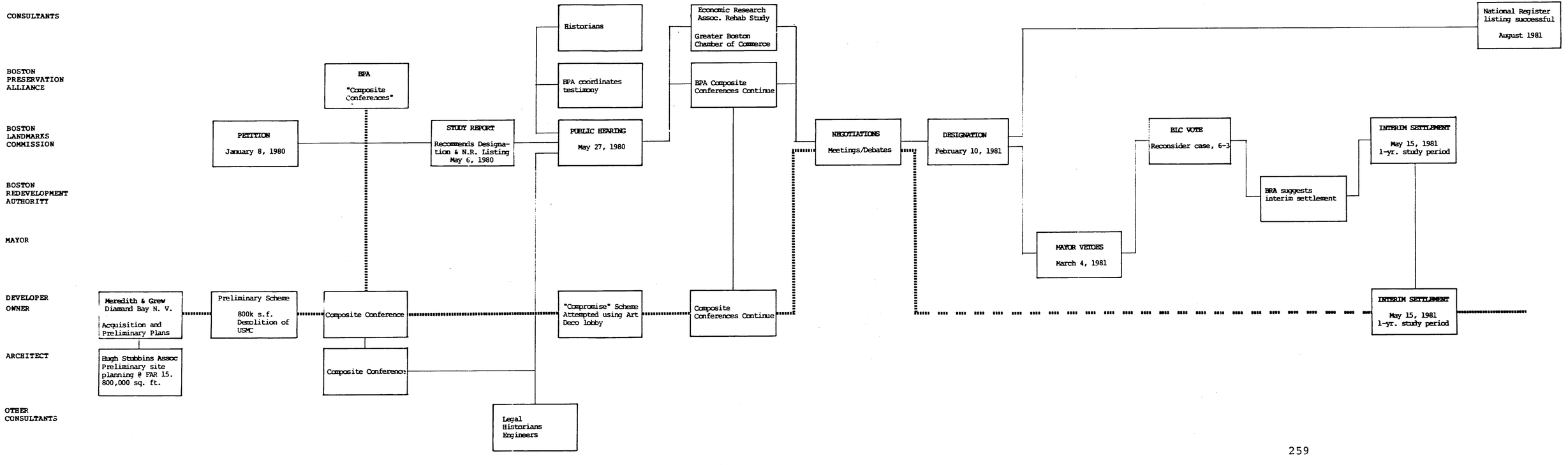
This chapter examines the landmarks designation of the United Shoe Machinery Corporation Building, another downtown office building site. The latest of the three Boston examples, the USMC case is useful to analyze for evidence of "public learning" during the three major buildings of compromise. As for the Old Federal Reserve Complex, the chapter first describes the designation process for the USMC Building (See Exhibit 6-1) and then compares it to the 53 State Street case.

BACKGROUND

The United Shoe Machinery Corporation (USMC) Building is located on the block bounded by Federal High, and Matthews Streets and High Street Place in downtown Boston (Exhibit 6-2). This site is at the southern edge of the financial district of the city, an area characterized by a mix of low and medium rise commercial buildings dating to the turn of the century and several modern high rise office towers.

USMC was formed by the consolidation of three

EXHIBIT 6-1: UNITED SHOE MACHINERY CORPORATION BUILDING LANDMARKS DESIGNATION PROCESS



companies which held the rights to the manufacture and distribution of machinery for making shoes. From its creation in 1899, the USMC grew to a position of near total market domination. By 1909, the Corporation controlled 98% of the shoe machinery in the United States. This explosive growth continued internationally during the 1920's to South America, Canada, England, Scandanavia, South Africa, and Australia.

In 1928, the Corporation began acquiring property on High and Federal Streets in Boston for the construction of a corporate headquarters building. The USMC Building, as it it now known, was designed by the architectural firm Parker, Thomas, and Rice, and was constructed from 1929-30. The building is a complicated ziggurat form built over an irregular trapezoidal floor plan which follows the exact site shape created by the city streets. The base of the building is built out to the sidewalks without setbacks, and the building steps back in massing as it rises to its peak of twenty-four stories. Although not as renowned an example of the style as the Chrysler or Empire State Buildings in New York, the USMC Building is one of the few major commissions in the Art Deco style in

the city of Boston (Exhibits 6-3 and 6-4).

In 1964, after thirty-four years of ownership, the USMC decided to sell the building. It had fully depreciated the property from its balance sheet and felt it could uses its investment in the building in other areas of its business. Maurice Gordon, of Maurice Gordon and Sons, one of the largest private real estate owners in New England, purchased the building under a sealed bid process in February of that year.

Mr. Gordon operated the property until his death in 1977, when it was purchased with several other properties in his estate by a trust in the names of Herbert Vaughn and Thomas M. Horan. The beneficiary of the trust is Diamand Bay N.V., a Netherlands Antilles corporation, whose stock is fully owned by a Kuwaiti Corporation. Mr. Horan is a Chairman of the Board of Meredith and Grew, one of the prominent Boston commercial real estate brokers which now manages the planning for the future of the site.[1]

In late 1979, Meredith and Grew began planning for a new office tower on the USMC Building site. Faced

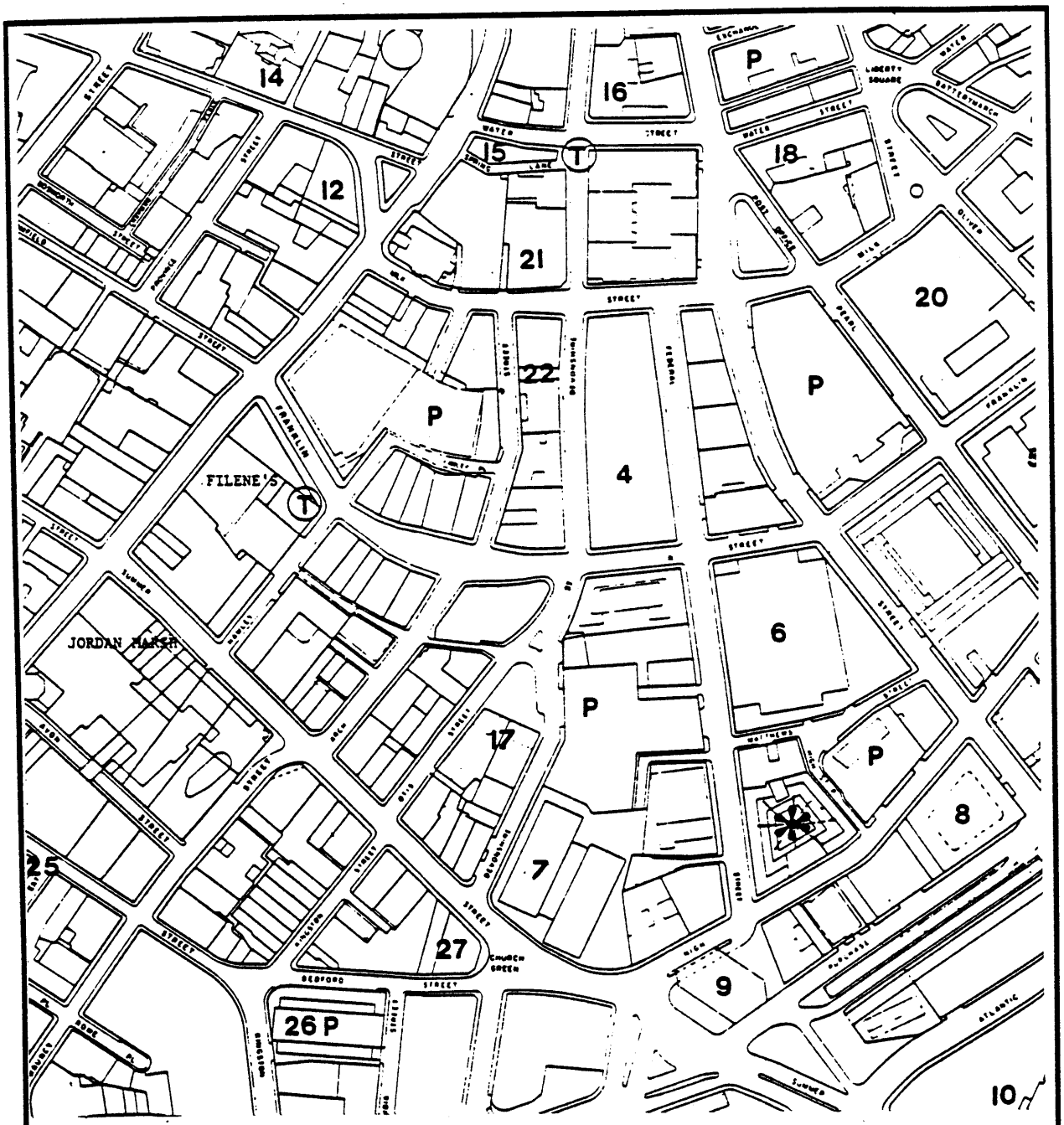


Exhibit 6-2

Location Map

* USMC Bldg.

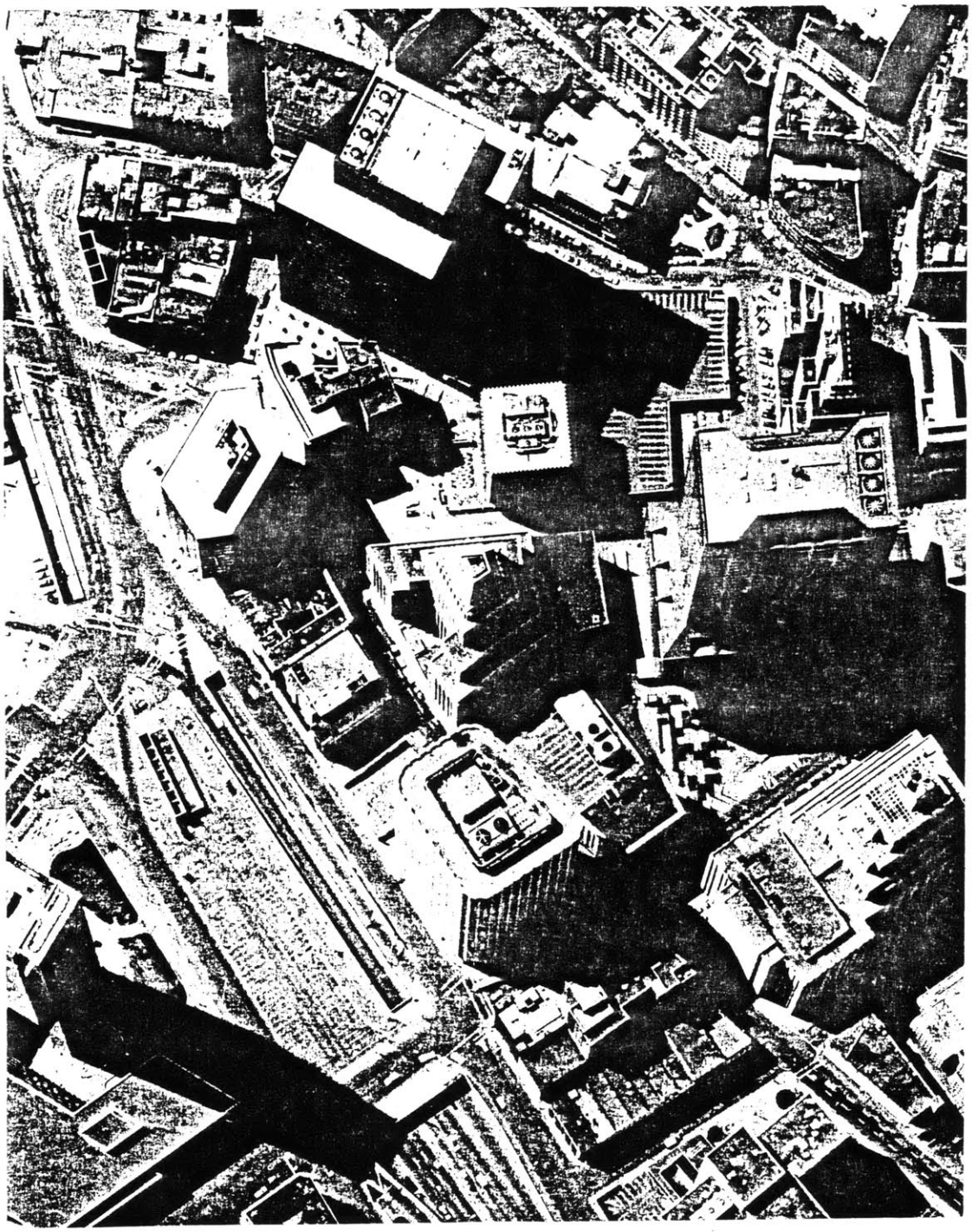


Exhibit 6-3

Site District Aerial

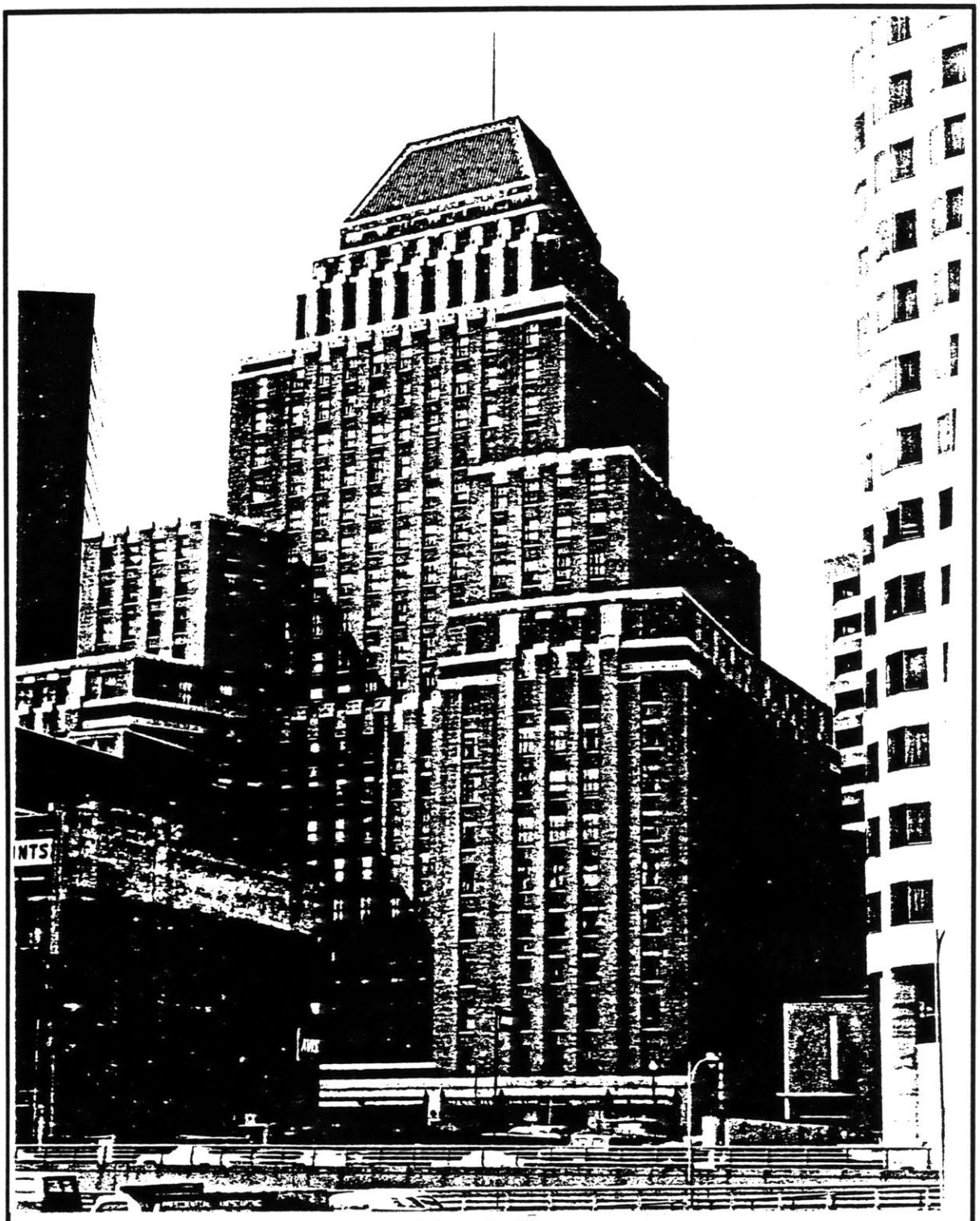
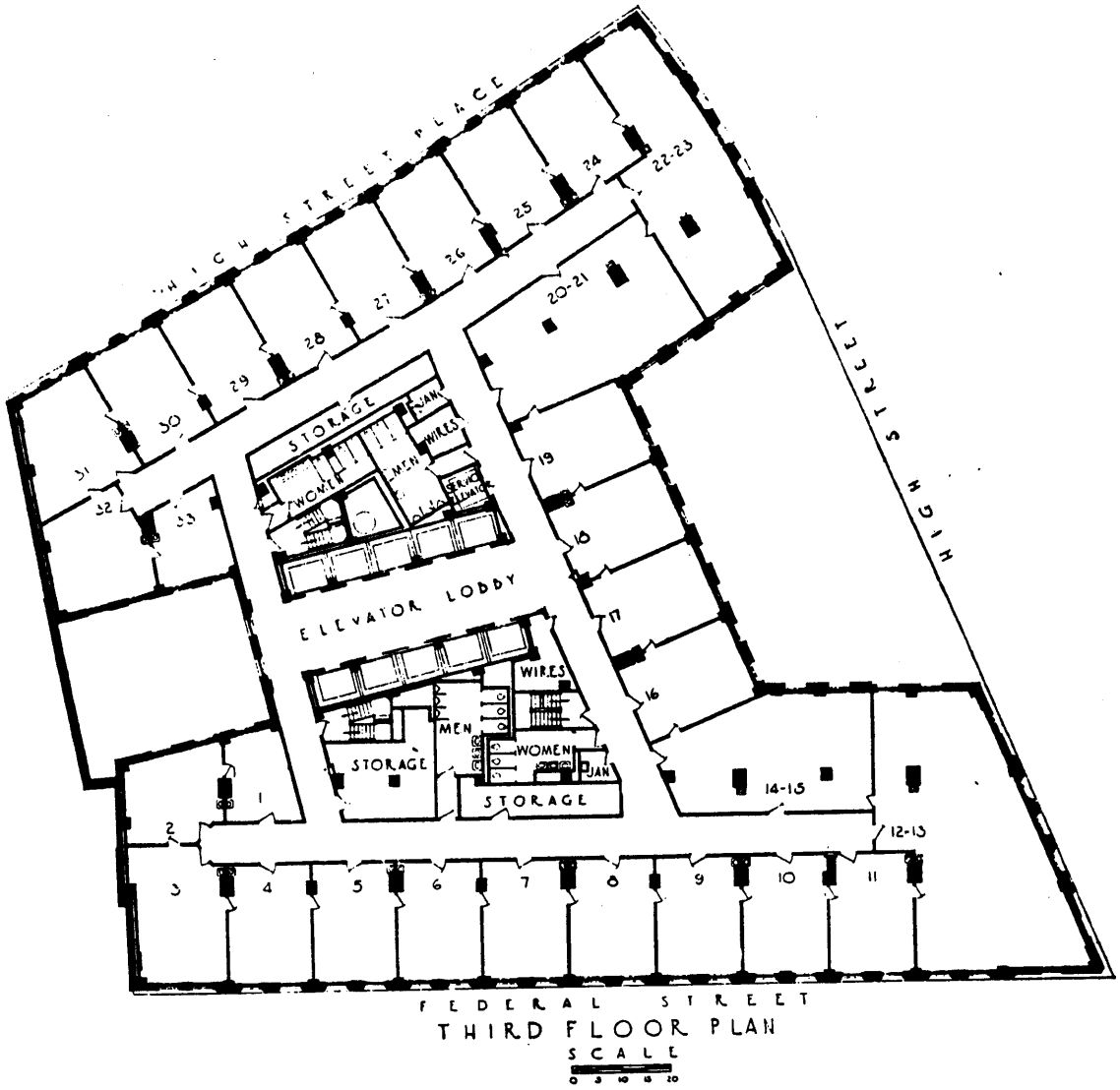


Exhibit 6-4

United Shoe Machinery
Corporation Building

Exhibit 6-5

Floor Plan



ONE-FORTY FEDERAL STREET

with a building they considered obsolete, in poor and deteriorating condition, and in a prime development location near public transit and in the financial district, the firm felt they had acquired an underutilized asset. Furthermore, the sustained growth in the commercial Class A office market in metropolitan Boston made them confident that such a development would be a commercial success.

The developers envisioned a building of roughly 800,000 square feet. By adding portions of an adjoining parcel under the same ownership, they could assemble a base site area of 59,100 square feet. The new building would represent an FAR of 13.5.

PETITION AND STUDY REPORT

On January 8, 1980, a petition was filed with the Boston Landmarks Commission by Pauline Chase Harrell, chairperson of the BLC, and nine other Boston voters. On January 22, the Commission voted to hear the case and to proceed with the study report on the property. A preliminary hearing was scheduled for May 27, 1980.

The BLC staff study report was released May 6, 1980. It found that the USMC Building was the finest and most intact example of the Art Deco style in Boston, and whereas it did not rank in overall excellence with other examples of the era found in New York and Florida, it was the apex of the style in Boston. Furthermore, the study reported that the buildings was one of the first built under the 1928 amendment to the Boston Zoning Code, and was therefore both a leader and an important surviving artifact of the ziggurat massing which resulted from these revised policies. The report recommended the building be designated a Boston landmark and that it be nominated to the National Register of Historic Places.

The study report cited, interestingly enough, both the One Post Office Square and the Exchange Place developments as reasons to support the "pure" rehabilitation of the USMC Building. The report claimed that these cases demonstrated the city's interest in combining new construction and historic preservation. However, the study wondered, "Will the character of Boston be destroyed by continued high rise development?"[2]

The report argued that, because the city faced a strong commercial real estate market and could look forward to continued high absorption, it should pick and choose from numerous development proposals which seeking approval. Healthy market conditions, the BLC staff argued, were the ideal context in which the city should aggressively bargain for the highest in design quality, economic development, and public improvement.

EARLY NEGOTIATIONS

The developers continued to develop their plans for the USMC site. They were concerned, however, about the progressing landmarks designation process. Beginning in March, as the BLC staff prepared their study report, a series of meetings were held between the developers and the preservationists. Called "composite" meetings, these sessions were held between the developers, architects Hugh Stubbins & Associates, and members of the Boston Preservation Alliance. These exploratory meetings were held, as one participant wrote, with the hope that "the development of a 'better process' might avert a confrontation similar to that of 53 State Street."[3]

The meetings were held to discuss historic issues, including designation, urban design issues related to new construction, and the feasibility of rehabilitation. There were three meetings before the public hearing.

PUBLIC HEARING

At the public hearing on May 27, 1980, testimony was heard both for and against designation. Proponents of designation included the Boston Preservation Alliance, the Society of Architectural Historians, the Essex Institute, and several individual architectural historians, all of whom lent support to the BLC staff report on the building. These witnesses argued that the USMC Building was an exemplar of a major architectural style, representative of major forces in Boston and regional history, and the work of a noted architectural firm. Also appearing in favor of landmark designation was an office leasing agent who argued that any new building which replaced the USMC Building would, because it would obstruct prime views and the relationships of the skyline to the streetscape, negatively impact the desirability and marketability of adjacent office buildings.

An owner of a nearby building, claiming to represent owners in the district, appeared and lent his support to designation.

Opponents of designation included an attorney for the owners, who disputed the contention that the building had historic value. He maintained, furthermore, that landmark designation would impose substantial economic hardship on the owner.

William LeMessurier, a noted structural engineer, presented his analysis of the cost and feasibility of repairing the exterior. Using a strict interpretation of the BLC guidelines (he assumed all exterior castings would be replicated in original materials) he estimated a renovation cost of over $7 million dollars, which he claimed was too expensive for feasible rehabilitation of the property.

An appraiser from C.W. Whittier & Co. appeared and testified that the property was generating cash deficits, and needed repairs whose cost exceeded the value of the property. It was not feasible for rehabilitation, he claimed.

Several architects, including the firm hired for the development of a new tower for the site, appeared at the hearing. They argued that the building was not of high architectural distinction, and that a superior ground-level relationship could be achieved through new construction. In terms of urban design, they argued, the existing building offered no pedestrian amenities. A new building could provide, they explained, deeper pedestrian level setbacks, an open public plaza, and improved overall pedestrian circulation patterns.[4]

The hearing provoked another round of planning and research by the Landmarks Commission, preservationists, developers, and other consultants. Meanwhile, in its capacity as local historical commission, the BLC had voted to nominate the United Shoe Corporation Building to the National Register. This recommendation was forwarded to the Massachusetts Historical Commission on April 9, 1980. MHC approved this recommendation and forwarded the nomination to Washington for final acceptance by the Department of Interior on May 14, 1980.

FURTHER STUDY AND ANALYSIS

In August, the Commission was approached by prominent Boston adaptive reuse architect Charles Tsekeres of CBT Associates. Tsekeres oppposed designation of the USMC Building, but was concerned about its potential replacement. He suggested that the Commission use its power to designate the USMC Building a landmark as a point of entry to becoming more actively involved in the overall planning for the site. Designation should used as a tool, he reasoned, "to advance the aesthetics of the City of Boston."[5] He felt the BLC should establish development guidelines and participate in the pre-development planning for the site.

Preservation Alliance chairman Angus Crowe also appeared before the Commission during this time period and expressed concern over the gap in the planning process for the site. He, hoiwever, did not feel the BLC was the proper body to assume responsibility for the overall planning of the site. "...some agency or organization should be looking at appropriate location, density, height, massing, and other aspects of new development," he said, "but the Commission is not necessarily that entity."[6]

This issue confused the Landmarks Commission. The Commissioners were not certain their statutory charge included such broad, over-arching planning powers. In the end, the Commission decided not to participate in the planning for the site, but to commission an independent consultant's report to explore the feasibility of rehabilitating the USMC Building. Economic Research Associates (ERA), a national market research and consulting firm, were selected to do this analysis.

The ERA report was released in November 1980. It was a thorough and well-documented report, but failed to state a definitive conclusion. It presented a synopsis of the factors involved in evaluating rehabilitation -- cash flow, financing, tax treatment of income, etc. in an very general "textbook" manner. It failed, however, to isolate the specific physical (the configuration and condition of the USMC Building itself) and economic (the needs and objectives of the property managers, investors, and developers) facts in the case which would lead to a recommendation. In summary, the ERA report expressed a preference for rehabilitation, but recommended simply that "...there

is a potential for significant returns, mainly in the form of tax savings."[7]

As non-committal as it was, the ERA report still provoked several more months of debate between its authors and the developer's own feasibility consultants who had reached an opposite conclusion about rehabilitation of the United Shoe Machinery Building. In correspondence over this time, the two consultants challenged each other on the underlying assumptions concerning tax rates, acquisition costs, financing costs, and several other pivotal terms of the financial analysis.

Although these spirited debates continued without significant conclusion throughout the fall and winter, the "composite" meetings betweeen the developers, architects, and preservationists broke down. Apparently, after several months of consultation, the two interests still found themselves in such disagreement that they saw no hope of forging a workable compromise. Preservation Alliance Chariman Crowe was later to comment, "I believe the intent of the owners and the Architects was/is to convince the Alliance that the positive aspects of new development

outweigh retention of the USM Building, and to further convince the Alliance to withdraw its support for designation."[8]

Meanwhile, other interest groups in Boston became involved in the case. The Greater Boston Chamber of Commerce (GBCC) had formed a Special Project Review Committee to study cases like the USMC Building case as part of its Boston 2000 campaign. The Chamber had adopted, as part of their 1980-81 agenda, an effort to participate in development cases related to preservation and new construction. No doubt this was a result of the 53 State Street case, which crystallized so many of the key economic and urban design issues confronting the city. Their objective was to endorse and encourage development or rehabilitation projects which they felt were compatible with their "Guidelines for Development", a policy document the Boston 2000 Committee produced in January 1981.

As part of its project evaluation, the Special Review Committee invited J. Miller Blew, of Real Property Resources Corporation, to comment on the feasibility of rehabilitating the USMC Building. By now a

familiar expert witness in such cases, Blew presented a third analysis of the case -- different in its conclusions from both the ERA and the developer-sponsored feasiblity studies. He argued that the building's location and the overall market conditions made operating success a distinct probability if the building were rehabilitated. For his analysis he assumed a more lenient interpretation of the preservation standards for rehabilitation, prevailing interest rates (which was higher than the ERA analysis by 3 points), and devised a deal structure which he felt reflected the needs of foreign investors. His conclusion was that rehabilitation was feasible.[9]

The Special Project Review Committee then made a recommmendation to the BLC, the contents of which emphasize the dilemmas posed by the building of compromise. It wrote, "the building does not merit Landmark designation, but what is worthy of preservation are the qualities of scale, massing, and height embodied in the existing structure"[10] The Chamber did not support the replacement of the existing building with a 40-story tower, but instead suppported the idea of allowing replacement of the structure with a

new one of roughly the same size and scale. Again, the issues of density and preservation were hopelessly intertwined, and the regulatory review framework seemed unable to accomodate their decoupling.

AN INTERIM RESOLUTION

The Landmarks Commission met in December with the developers to explore possible areas for compromise. It was clear from this meeting that a compromise in the One Post Office Square or 53 State Street manner was not possible. Much to the dismay of the Commission, the developers' proposed "compromise" was a 800,000 to 1 million square foot tower which incorporated some materials from the existing building in an Art Deco entrance lobby. This was unacceptable to the BLC.

On February 10, 1981, the Landmarks Commission voted to designate the USMC Building, in its entirety, a Boston landmark. This recommendation was forwarded to the Mayor for review and approval. On March 4, 1981, the Mayor rejected this finding and wrote:

> "My reason for disapproval is that at this time I am not convinced that the historical significance of this building warrants designation and imposition of such constraints on the owners. My action should not be interpreted as an an endorsement of further development on the site."[11]

Under the 1976 statute, the Commission may respond to a mayoral veto in two ways -- accepting it or voting to reconsider the case. On March 10, 1981, the Commission voted 6-3 to rehear the USMC Building case. This reopened the case and essentially restarted the designation process all over again.

By now the owners were frustrated and growing concerned with the review process process. If the case were reconsidered, and designation reaffirmed, the probability of their being able to build new construction would be even more remote. As well, the time delay imposed by another designation process would be costly, both in terms of staff resources and in the potential loss of credibility with their foreign investor group.

The developers were interested in keeping their options for the site open. With BRA Director Robert Ryan serving as an intermediary, the owners sought to reach a "cease-fire agreement" with the Landmarks Commission. This agreement was reached in May of 1981, a full fifteen months after the landmark designation process was initiated. The Commission agreed not to take any further action on the case. In return, the owners/developers agreed not to demolish the building for a period of one year, during which they would work with the city to explore development alternatives, including a rehabilitation approach.[12]

At last update, the cooperative process between the developer, city, and landmarks commission supposedly established by this May settlement seems to have broken down. The outcome of the controversy, and the future of the USMC Building, is yet uncertain.

The nomination of the USMC Building to the National Register of Historic Places was successful, however. In August 1981, the building was listed and became subject to the package of economic and legal advantages and constraints. This success at the

national level, when coupled with indecision at the local level, may create motivations counter to the pro-preservation intentions of the Tax Act and listing on the Register. The impact of such circumstances on the outcome is yet unkown, and is one reason to monitor the progress of the USMC case over the next several months.

GOVERNING FACTORS

Like the One Post Office Square case and the 53 State Street case, the USMC Buiding story can be used to shed light on the way Boston deals with buildings of compromise. The case not only confirms several of the weakness in the system observable through the 53 State Street case, but also suggests possibilities for reform.

Five themes in the USMC case are useful in considering the process of brokering a compromise solution: 1) the impact of physical separabilty on the likelihood of compromise; 2) the importance of risk profiles; 3) an interest in compromise but an absence of a forum in which to reach it; 4) the power of precedents; and 5) the possibility of using designation

as a starting, rather than ending point, in negotiations. Each of these themes is discussed in the sections following.

PHYSICAL SEPARABILITY

As illustrated in the One Post Office Square case, the ease of physical separability is instrumental in building a process for compromise. From physical separability follows not only convenient and open-minded planning, but financial and legal convenience as well.

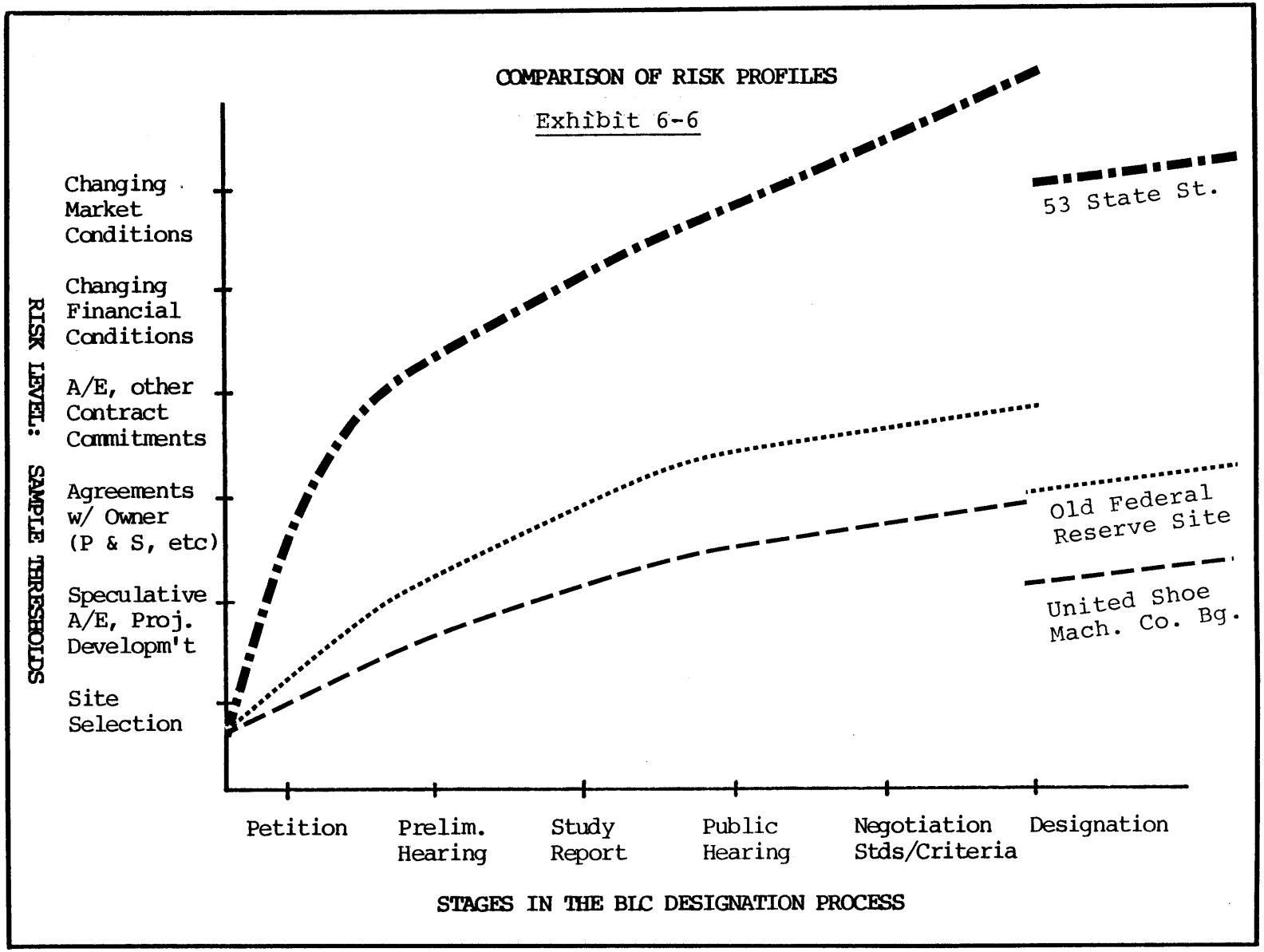
The USMC Building, however, did not lend itself to any form of physical compromise. The building covered its entire site to its edges, leaving little possibility for infill. The building itself was executed in highly specific architectural style which is not easily adapted or interpreted. The overall composition and building massing is so individual, and so self-sufficient, that it is impossible to remove a piece without destroying the whole. Subtraction on the order of One Post Office Square or 53 State Street is unthinkable.

Only one compromise option seemed available -- leaving the USMC Building intact (it covers 37,300 square feet of the entire 59,100 total assemblable property) and building a new office building on the remaining 21,800 square feet of site area. Although this floor area falls within the "ideal" range for office buildings, this full site footprint is undesirable from an urban design point of view, and this scheme never emerged as a serious alternative.

THE IMPORTANCE OF RISK PROFILES

As illustrated in the comparison of the One Post Office Square case to the 53 State Street case, keeping the developer's risk profile low greatly increases the likelihood that a compromise can be seriously considered. Is this verified by the USMC case?

The ownership structure enabled the developer to maintain a lower level of risk in the USMC case than at 53 State Street (Exhibit 6-6). Since the property had been acquired as part of the Maurice Gordon estate, it was not single-mindedly targetted for new construction as was Olympia and York's, arrangement


COMPARISON OF RISK PROFILES
Exhibit 6-6
RISK LEVEL: SAMPLE THRESHOLDS
Changing Market Conditions
Changing Financial Conditions
A/E, other Contract Commitments
Agreements w/ Owner (P & S, etc)
Speculative A/E, Proj. Developm't
Site Selection
53 State St.
Old Federal Reserve Site
United Shoe Mach. Co. Bg.
Petition
Prelim. Hearing
Study Report
Public Hearing
Negotiation Stds/Criteria
Designation
STAGES IN THE BLC DESIGNATION PROCESS

with Old State Trust. Presumably the objectives of the Kuwaiti ownership werer reasonable financial return and inflation protection. Unlike Olympia and York's agenda, which was to maximize the income yield from high intensity development of the site, the Kuwaiti interests may have been more receptive to less intense, although profitable, uses of the property.

The stable ownership of the property no doubt aided the process of examining alternatives. Whereas Olympia and York's ground lease with Old State Trust, an arrangement which was interrupted by the designation process, exposed the developer to added risk, the USMC Building was under stable control and ownership by Meredith and Grew. This stability allowed the exploration of alternatives to proceed in a more thorough manner.

In the USMC case several key actors demonstrate a increased sophistication in dealing with a building of compromise. The developer's interest and initiation of contact between themselves and the preservationists was not only a sign of reckoning with their

proved political clout, but a strategy to limit the risk exposure of the developer, as well.

AN INTEREST IN COMPROMISE, AN INABILITY TO REACH IT

Even though the USMC Building site was extremely difficult to consider as a compromise site, the actors in the process were much more willing to attempt to forge a compromise than at 53 State Street. Meetings between the developer and the preservationists were held early in the process, both before and after the designation hearing.

It is by no means clear that the developer's objective in suggesting these negotiations was to actually reach a compromise. It is probable, as Angus Crowe suggested, that their hope was to co-opt the preservationists before the controversy reached "53 State Street proportions". At any rate, the ostensible interest in compromise was doomed for two reasons at USMC Building -- the fundamental difficulty of finding a physical compromise, and the lack of a forum in which to reach such an agreement.

At USMC, the participants appeared willing to

negotiate a compromise, but the physical constraints on the site were insurmountable. The participants, frustrated by the same lack of forum which plagued the 53 State Street case, even went as far as to devise one of their own--the "composite meetings". Hugh Stubbins and Associates, architects for the developers, registered this familiar frustration with the process in explaining the need for the composite meetings:

> "There currently exists no forum in which all three issues (urban design, historic, and economic) can be recognized and discussed. Without such a discussion, fully informed opinions cannot be developed, and consequently, positions are set, for and against, without a complete understanding of the alternatives."[13]

The situation was quite the opposite at 53 State Street. The physical facts at the Exchange Building invited compromise. The developer, however, was not interested in one -- and the governing political framework presented no forum in which a genuine one could be negotiated.

THE IMPORTANCE OF PRECEDENTS

As noted in the analysis of the One Post Office Square case, each building of compromise has significant impacts on the process and results of subsequent ones. In much the same way that the resolution of the One Post Office Squiare case affected the attitudes and strategies of the actors in the 53 State Street case, 53 State influenced the USMC case.

The 53 State Street case seemed to establish several key facts: the strength of the Boston preservation consituency, the use of preservation as a way of winning high density, and the political acceptability of partial designations. Each of these was brought to bear in the USMC case, which followed.

The 53 State Street case clearly announced the strength of the Boston preservation community. The "composite meetings" initiated by the developer, in which the preservationists were primary participants, was in recognition of their authority.

Unfortunately, this healthy impact is balanced by

potentially negative ones as well. The developer's proposal to make a compromise -- the offer to reuse some lobby materials and adapt an Art Deco vocabulary in the new building --was a disappointing development in the effort to deal with the complexity of by a building of compromise. The site density issue, still inextricable from the preservation questions, is only further confused by such attempts to win concessions through hollow "historic preservation". This event may signal the further erosion in the meaning and significance of landmark designation. At the Old Federal Reserve, individual buildings within a larger complex were removed and exempted from designation. At 53 State Street, major portions of a single structure wre removed. Finally, at USMC, the developer proposed designation based on portions of individual spaces, and the adoption of a stylistic similarities in the new architectural style.

This progression may be helpful in developing the compromise building type. Certainly the full range of partial designations should be considered in choosing a proper solution for any single site.

Nonetheless, the difficulty of reaching a compromise be increasing. Developers may now see the opportunity to force partial designations as a way of circumventing strict regulations. The baseline for negotiation was previously biased towards total, or near total, retention. The Landmarks Commission will find it increasingly difficult to justify its reasoning for a full structure designation and to defend such decisions against the backdrop of previous concessions and partial designations.

THE POSSIBILITY OF USING DESIGNATION AS A STARTING RATHER THAN ENDING POINT IN A NEGOTIATION PROCESS. Interestingly enough, the USMC Building case demonstrated one model for a revised designation process suggested in the thesis -- using designation as a starting point, rather than an endpoint.

Because of the difficulty in reaching a compromise scheme, the Commission voted to designate the USMC Building in a "pure sense"; that is, rather than brokering a phsysical, financial, and historic settlement between the parties and fashioning a customized designation to govern it, as they did at 53

'tate and One Post Office Square, the BLC used designation as a way to force a process leading to a resolution.

The mayor's subsequent veto of the designation, although interpreted by some as a stalemate, when combined with the Commission's decision to reconsider the case, may have initiated a very healthy process. The settlement which emerged from this apparent deadlock was a year-long "ceasefire" in order that the parties could explore alternative approaches to developing the site. This "pure" designation, therefore, may have marked the beginning of a period of thorough analysis of alternatives, rather than the end, as it did with 53 State Street and One Post Office Square. It may have been made a clearer statement of the Commission's objectives and established its standing in the future of the project.

It is also quite possible, as some readers of this thesis have argued, that this "pure" designation, and the subsequent interim settlement actually <u>marks the end of the Commission's involvement and influence</u> over the property. There is evidence

that this is true. Since the settlement in May, as has been noted, little substantive communication has occurred between the developer and the Commission. If the settlement was to initiate a more open planning process, including the preservation interests, and under the overall guidance of the BRA, it seems thus far to have failed.

It is too early to know, however, if this approach will fail altogether. As the expiration of the agreement approaches, the process will be reopened. Although other factors have changed in this twelve-month period (the Economic Recovery Act of 1981, for example), the potential for using designation as a way of provoking, rather than ending, a negotiation process may then be known--does this tactic enhance the Commission's influence, or does it disenfranchise it from the process?

SUMMARY

Chapters 5 and 6 have recounted the landmarks process for One Post Office Square, and the United Shoe Machinery Corporation Building, Boston buildings of compromise which preceded and followed

the 53 State Street case. From these comparisons, the thesis has identified several key factors which seem to govern the actors' abilities to consider, negotiate, and forge a compromise. These factors involve the physical adaptability of the site, the risk profile of the actors, particularly the developer, the forums for discussion, and the use of precedents.

CHAPTER 7

POSSIBILITIES FOR CHANGE

The preceding analyses in this thesis lead to the conclusion that the process followed in resolving the 53 State Street controversy was incomplete; it did not include at least one feasible solution which may have been, in this writer's view, a superior development approach. Chapter 4 analyzed why this alternative, which may have been only one of several physical and financially feasible alternatives, was politically infeasible. Chapters 5 and 6 confirmed several of these hypotheses by examining two comparable cases. What factors in the political process could be changed to promote a more complete evaluation of alternatives? What new analytical tools would lead to more successful buildings of compromise?

AREAS FOR IMPROVEMENT

In this chapter, several possibilities for change are identified. These factors are numerous and interrelated, but fall into four general categories: 1) information gaps; 2) weaknesses in city policy; 3) flaws in city procedures; and 4) inadequate

analytical tools. Each of these areas is discussed in detail in the sections following.

INFORMATION GAPS

In the 53 State Street process, there were intentional and unintentional information gaps between the developer, preservationists, the Commission, and other city departments. The following reforms would contribute to closing these gaps:

1. Identify historic resources. The comprehensive inventory of downtown buildings commissioned and completed by the BLC in the last year greatly enhances the flow of information between the Commission and developers. This document, which runs some 1200 pages, identifies and legitimizes preservation interests in the city, and reduces the likelihood that a prospective developer would progress as far as Olympia and York did before recognizing the potential for conflict.

   Documents such as this protect the developer's risk profile, and reduce the

probability of an adversarial relationship between developer and preservationist. As well, the process of inventorying and giving priority ratings to individual structures forces preservationists to establish objectives on a citywide, rather than piecemeal basis. In the absence of such a comprehensive review, preservation battles are fought on a case-by-case basis, where the potential for abuse of the designation power--to halt new construction, for instance--is greater.

2. A potential by-product of an early declaration of intentions by the Commission, which a survey in part represents, is that <u>developers may also volunteer more information earlier</u> in the process. In dealing with many elements of uncertainty at simultaneously, the developer is suspicious of unknown forces such as a Landmarks Commission, whose initiative might jeopardize even the best of investment opportunities. Reducing his uncertainty by providing information or a clear statement

of objectives may pay off handsomely; he may approach negotiations more cooperatively.

3. Information exchange between city agencies could also be improved. The fact that the BRA saw the Olympia and York development scheme so early, and yet did not notify the BLC until much later may have contributed to the difficulty all parties had in resolving the dispute in subsequent stages of the process.

Early communication between the BRA and BLC could have prevented several specific events: (1) the developer's risk profile would have been protected, since the Commission would have alerted the developer to the interest in the building's landmark potential; (2) the mistrust between city departments, the feeling each had that the other was trying to "slip something by" would not have been as powerful an undercurrent in the subsequent events. The contentiousness of the review process was at least partially a result of

the each participant's feeling of defensiveness for having been excluded from other parts of the process.

4. Preservationists need to learn more about development, and developers need to learn more about preservation. The gap between these traditionally opposed parties, as suggested in the introduction to the thesis, has narrowed significantly in recent years. Experience has shown even the most skeptical observers that sound business investment and preservation are not mutually exclusive. Still, the two parties approach a given situation with near polar opposite objectives. Olympia and York never intended to retain the old building--they simply did not consider it a development alternative until it was forced upon them by a political process. How different the events might have been if the developer had considered, from the earliest stages, that reuse might have some investment potential.

It should be noted that the 53 State Street compromise, imperfect as it may be, was a direct offspring of the compromise reached for the Old Federal Reserve Complex reached only a year earlier and just a few blocks away. This kind of public learning must be encouraged. If it continues, the knowledge and information gaps between the two parties will grow progressively narrower.

WEAKNESSES IN CITY POLICIES

The 53 State Street process, and all future compromise cases in Boston, could benefit from overall clarification of zoning policy in the downtown. As explained in Chapter 4, the legacy of zoning variances for nearly double the base FAR leads to high expectations by owner, seller, and developer, and places each of these actors at unnecessary risk in a compromise negotiation.

There are two generic approaches for responding to the upward pressure exerted on an existing FAR ceiling during growth cycles of the local economy: 1) review each development proposal on a case-by-case basis; or 2) perform an across-the-board revision

and/or increase in the density ceiling. Both these options are available and workable in dealing with buildings of compromise, but one concept is key: uncertainty caused by inconsistent enforcement is the achilles heel of any zoning policy.

Case-by-Case Zoning

The case-by-case strategy is currently practiced by the City of Boston. The BRA prefers this approach, according to one staffmember, "because we are convinced it gives us better control over the project."[1] There is reason to doubt this. Although it almost guarantees BRA review over all projects (virtually every proposed project will exceed the existing FAR 10), this strategy has three distinct drawbacks. First, consistency is difficult. Each site possesses peculiarities of views, orientation, shadow, neighboring buildings, etc. and has varying reasons to argue for its approval or disapproval. However, the credibility of the case-by-case method is rooted in rules established by precedent, and as such presents a paradox--although designed to allow consideration on a project specific basis, each decision is conditioned and limited by its precedents. Substantive concerns

may have to be subordinated to create a track record of consistency and fairness.

This precedent-related system has created a "shadow" FAR of 18 or more. The developer's expectations for the future and his tacit and explicit business arrangements are made with this in mind. As the developer's risk profile rises, the probability of intelligently and fairly resoving a conflict involving a compromise diminishes.

A high shadow FAR removes incentives for smaller-scale investment are removed. Fear of citywide overbuilding, due to the widespread belief that everything will eventually be 40 stories tall, encourages owners to incubate property until they are offered a price based on FAR 19 or more.

The case-by-case method is likely to remain favored in Boston in the foreseeable future. Even within this, the substance as well as the procedures for project review can be improved. These possibilities are discussed in subsequent sections.

Across the Board Reform

Instead of allowing variances above the base FAR on a case-by-case basis, the city could consider an across-the-board FAR increase from 10 to 12 or 14. The optimal number is a worthy subject of detailed analysis, but is beyond the scope of this thesis. If this new FAR ceiling were strongly enforced, unlike current policy, several improvements in the development and preservation environment would be registered.

1. The medium density ceiling would encourage smaller scale and more widely distributed investment in the city. Infill on sites with current FAR's of 8-10 could be improved without the massive density now required to encourage investment on a downtown property.

2. The overall review of city property and zoning districts will demand the same performance from the BRA and Zoning Commission as the landmarks inventory did of the preservationists and the Landmarks Commission. Without periodic comprehensive analysis such as this, the BRA is ruling on important cases

The key to successful re-zoning lies in the consistency of its application. When William Whyte recommended a similar approach to improving zoning in Manhattan earlier this year, he emphasized,

> "Cut the density limit to a floor area ratio of fifteen, and keep it there. People who bought sites in anticipation of higher density will scream, and a grandfather clause may be necesssary. But developers could live with less, as some have indicated, <u>if</u> it were matched with the certainty of clearer rules and faster procedures."[2]

The value of certainty to the developer cannot be overstated, particularly in the rapidly changing financial climate which has characterized recent development history. For example, consider a typical $100 million project on a 40,000 square foot site. Assuming a $25 per square foot rental, a single percentage point increase in permanent financing is equivalent to an added $1 million of debt service per year, or a <u>net</u> cash flow of $1.25 million per year. This greater cash flow requirement ius equivalent to

rent from an additional 59,000 square feet. In other words, a delay causing a cost of permamanent debt increase of a single interest point also costs the developer 1.5 FAR points as well. A balance point exists between the added income provided by an increase in allowable site density and the costs associated with the time required to seek and win one. The volatility of the debt markets is a strong argument for certainty in allowable site density (Exhibit 7-1).

FLAWS IN CITY PROCEDURES

The procedures followed by various city departments in the 53 State Street case could also be modified to encourage more constructive negotiations. Several possibilities are discussed below:

1. Reinforce the individual charge of each of the departments, and improve the sequencing of their participation. The BRA, BLC, and Zoning Board of Appeals processes are too interwoven to allow sufficient focus on individual issues.

Exhibit 7-1

Project Profile Relating Site
Density to Cost of Permanent Debt

Project Profile: 1,000,000 sq. ft. office tower
40,000 sq. ft. parcel
$125/ sq. ft. total project cost
1.25 debt coverage

Total Permanent Loan:

$100,000,000

Each pt. increase in interest rate constant =

$ 1,000,000 in required debt service =
$ 1,250,000 in net income =
$ 1,562,000 in gross income =
62,500 sq. ft. @ $25/ sq. ft.

Assumes rent levels remain constant over period.

The FAR equivalent $\frac{\text{62,500 sq. ft. building area}}{\text{40,000 sq. ft. total parcel}}$ =

1.5 FAR points

Since the building of compromise demands a simultaneous review of several difficult issues, the reviews for density and preservation need to be either sharply partitioned and clearly sequenced or incorporated in a more coherent overall review. As discussed in Chapter 5, the current process makes the designation review a proxy for the density review. For these cases, the idea of holding a density review first, independently of preservation issues, and then conducting the landmarks designation process, may have some merit. In this way, the important issues of wind, shadow, and infrastructure impacts could be independently considered, and not confused with preservation issues.

The fatal flaw in this idea, of course, is that landmark designation could be used as a "stonewalling" strategy against any proposed development which had passed the density review. This would argue for an alternative procedure which formally incorporated the multiple reviews that are now unofficially subsumed in the designation ruling.

Devising such a procedure, of course, is far from easy. The advantage of a comprehensive, multi-department review is, in theory, that independent city agencies are not placed in direct competition and given the opportunity to nullify each other, but are instead forced to work together to reach a mutually agreeable solution. A model for this kind of one-stop review is the "Design Advisory Group" found in some small cities and towns in Massachusetts. Something approaching this process was attempted on a de facto basis in the United Shoe Machinery Corporation Building case, as discussed in a Chapter 6. In several months, when that difficult case is resolved, we will be better equipped to judge the potential of such an approach.

2. Insulate the city departments from the Mayor, and protect the Mayor and developer from forming early tacit agreements. The thoroughness each of the city department's project review is directly related to the

independence it feels from prior informal approvals and the potential for later reversals of its decisions.

Reform in this area is highly dependent on the style of leadership held by the Mayor, and can be expected to vary from administration to administration with the identical organizational structure. Specific ideas for structural changes are also possible, and are discussed in subsequent sections of this chapter.

IMPROVE ANALYTICAL TOOLS

It is clear from interviews with the participants in the 53 State Street case and a review of the materials documenting the proceedings that the building of compromise introduces a level of complexity to the development formula requiring new and improved analytical tools. These needed tools fall into three broad categories: design tools, financial tools, and regulatory tools, and would ideally be employed by developers, preservationists, and the city departments in considering buildings of compromise.

Design Tools

The building of compromise demands the highest level of design professionalism and the mastery of the architect's and urban designer's tool kits. Because the building type can offer the developer a range of financial alternatives, the designer and the public official reviewing proposals must make use of the full range of design strategies now available.

Particularly promising is the potential for computer applications to conduct physical feasiblity studies and environmental impact analyses. Sophisticated computer-aided design now conducted in several of the larger domestic firms allows the designer to perform sensitivity analyses on a given development program, adjusting the model for building massing, height, shape, configuration, efficiency, thermal performance, and evaluating attendant impacts on surrounding sunlight, wind, and public infrastructure. The forging of a building of compromise demands this higher level of analysis and decision-making.

The ability to systematically develop, compare, and refine alternatives with a common basis for analysis

should be substituted for the piecemeal, out of sequence process which plagued the 53 State Street case. This level of analysis is not technologically difficult, and will become increasingly accessible to design professionals in the public and private sectors.

The "vocabulary of negotiation"--that is, the array of design strategies available to relate old to new, large to small, massive to light, smooth to rough, etc.--is important to develop and disseminate. The 53 State Street case will add to this vocabulary, as did the cases which preceded it. Without such a common design vocabulary, intelligent discussion, negotiation, and brokering will be difficult and inadequate. Architects, developers, and Commissioners must make an effort to stay fluent in this developing language. The natural result will be higher standards of historical interpretation and innovative design.

Financial Tools

As in the design domain, existing financial incentives and tools for analysis need updating or

replacement to facilitate careful consideration of the building of compromise. Conventional arguments must be reevaluated and revised in light of the new possibilities introduced by the building type. Arguments dating from the earlier win-loss game between preservationist and developer still endure, but are no longer relevant.

The choice between new and rehabiliation construction is complex economic equation, involving differentials in production cost, income potential, and tax treatment. In Boston, the issue of site density, as it straddles this question, is another source of variability. This relationship is one, however, which can be accurately modelled manually or with the aid of small business computer. Sensitivity analyses, such as the ones conducted in this thesis, could be used in tandem with design analyses, to reach a resolution or, at the very minimum, illuminate the fundamental issues to be considered. In a short while, integrated software for small stand-alone computers will be able to evaluate both design and financial alternatives simultaneously. For a modest investment, most planning, design, and consulting firms and public

agencies will be able to have this capability in a very few years. A research agenda can be identified.

1. The perennial debate over the difference in taxes generated by new construction/high density versus rehab/existing density can and should be systematically researched. What variables are involved in recapturing demand if a high density proposal is rejected from a particular site--can it in fact be recaptured by the city by developing another site, and how? How can this be documented?

2. How can internal contradictions in the tax code be removed? The demolition "penalty", for instance, can clearly operate counter-intentionally, when coupled with a variable limit on site density.

3. How can we identify the "optimal" FAR for a given compromise site? A computer model performing iterative calculations adjusting for site density, production costs,

rent potential, and tax effects, could be easily developed.

Regulatory Tools

As well as more sophisticated inputs to decision-making, there is a need for refinements in the decision-making process itself. More explicit tools for evaluating alternative approaches, of which the cost-benefit analysis presented in Chapter 4 is but one elementary example, will help to organize performance measurement, identify criteria, and reveal biases.

ENHANCING THE INFLUENCE OF THE BLC

The modifications suggested above for improving the assume, to a certain extent, that the current administration, the BRA, and the developer share an interest in improving the process between the BLC and the developer in cases of compromise. As can be seen in other examples (see discussion of the Old Federal Reserve Complex and the United Shoe Building in Chapters 5 and 6), this can be the case. It is quite possible, however, that these actors would resist any reforms which would enable a more comprehensive review of buildings of compromise. If this is the

case, what changes in the formal powers and authorities of the Landmarks Commission would force a similar "equalization" of power between the developer and the Commission?

There are at least three structural changes which could increase the BLC's ability to force more careful reviews of compromise cases. Each of these reforms, in the author's estimation, has a very low probability of being politically palatable to the other actors involved. A discussion of them is still useful, however, since it further illuminates how the Commission currently functions and how buildings of compromise are produced.

Allow the Commission to Designate Protection Areas and/or Districts

The Commission is not empowered to designate protection, architectural, or landmark districts in the downtown central district. Their power in this area of Boston is limited to the designation of landmark structures. This restriction contributes to the confusing merger of site density review with preservation deliberations. In some cases where the concern

for preserving a structure is based not on its historic merit, but on a desire to retain the scale, massing, and overall site density that the building represents, landmark designation is used as a proxy for a density review.

Allowing the Commission to designate districts or protection areas in the downtown might de-couple these issues, and return designation to is original intent --to protect distinctive historic resources--and discourage its use as a tool to unilaterally prevent new construction. Decisions on the issues of density, building scale, massing, etc. would be reviewed explicitly. Whatever the outcome--rehabilitation or total demolition and new construction--the developer's, city's and general public's ability to focus on these issues would be enhanced. The standards of argument, and the acceptability of the resolution would naturally rise.

Remove the Mayor's Veto Power

In the 53 State Street case, the BLC felt forced to to choose betweeen a compromise proposal authored by the developer, or face losing the building entirely.

The mayor's veto power, and his expressed interest in avoiding a "weak compromise", led the Commission to believe it should accept the developer's scheme. Some believe this erodes the significance of designation, and lowers the standards by which structures are designated landmarks.

If the Commission had been free to operate without the Mayor's veto, it almost certainly would have forced a more thorough consideration of alternatives. The threat of a "pure" designation can bring the developer to the negotiating table in the same way the threat of demolition often persuades a preservationist to make concessions on design controls and restoration standards. Real political power for the Commission--the authority to demand careful evaluation of site alternatives--stems from it's ability to prevent development from occurring. The Mayor's veto power, and his early and direct contact with the developer, effectively nullifies this source of power. If this single factor were changed, the balance of power between developer and the Commission would be one which facilitated a higher and more serious level of discussion.

The original purpose of the mayoral veto power --establishing checks and balances in the system-- would need replacement. The possibility for abuse of the designation power by the BLC, if the veto pwwer were removed, must be acknowledged.

Allow the BLC to act in a Planning Capacity

In recent years, the BLC has adopted a more aggressive planning approach to their work. The Broad Street/Custom House District Study, commissioned by the BLC last year, is a notable example of this more "pro-active" strategy.

In this case, the BLC assumed this posture because they believed no other city department had taken the initiative to guide development in the district. Frustrated by their position of constantly reacting to the initiatives of others, the Commission took it upon themselves to act as the planning department of the redevelopment authority for the area.

This raises fundamental questions about the BLC's role within the city government. Overall comprehensive planning is clearly not what was originally in-

tended for the landmarks commission, and may in fact dilute its central mission of studying and designating landmarks, structures, and districts. Other city agencies and departments are already charged with the responsibility for setting and implementing overall planning policies.

The effect of the BLC's entry into the "planning business" will be two-fold. First, it will position the Commission to better understand, influence, and nego-
tended for the landmarks commission, and may in fact dilute its central mission of studying and designating landmarks, structures, and districts. Other city agencies and departments are already charged with the responsibility for setting and implementing overall planning policies.

CHAPTER 8

LESSONS AND QUESTIONS FOR THE FUTURE

It is clear from examining the 53 State Street case in detail, and comparing it to One Post Office Square and United Shoe Machinery Corporation Building, that there has been significant "public learning".[100] The interest in compromise, the serious consideration of alternatives, and the struggle to clarify the relationship between preservation issues and site density issues currently occupy the planning agenda. This was not the case when 53 State Street occurred.

53 State Street was a watershed case. It crystallized a series of seemingly disjointed, but inextricable urban development issues. Although this thesis has argued that the process governing the development was a weak and incomplete one, it is clear that the case has had a significant impact on planning and development in downtown Boston. A comprehensive zoning and development policy review is now in the works at the BRA. Responding to both internal (from groups like the BLC) and external pressure, the city

has realized the need for a stronger, more explicit downtown development policy. Groups such as the Boston Chamber of Commerce, provoked into action by the 53 State Street controversy, are now participating in a significant way to balance the interests of preservationists with the development and growth Boston continues to enjoy.

The news may not be all good. With budget cutbacks and institutional reorganization, the BLC may be one of the first of the city departments to be reduced. What has been learned from these precedent-setting cases may be lost if the Commission cannot translate its expertise into action.

The thesis has documented how a special development project, a building of compromise, introduced new demands on the Boston system. Both the public and private frameworks governing development were pushed to the limit in trying to conduct the sophisticated level of analysis demanded by this new building type. And although the solution may not have entirely pleased anyone, it is clear the building of compromise performed at least one invaluable function--

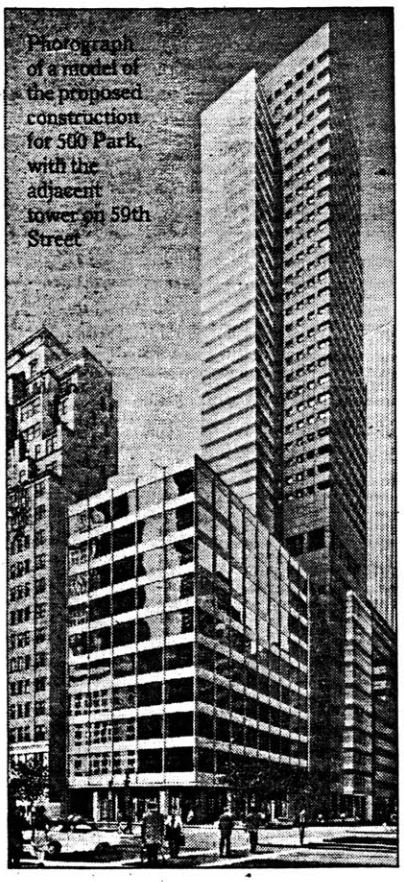


Exhibit 8-1
500 Park Avenue

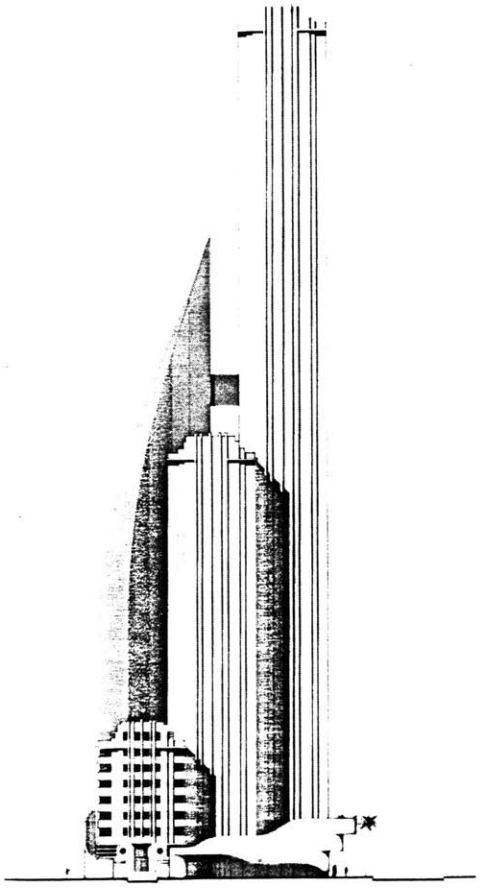


Exhibit 8-2
New Yorker Hotel

it heightened our interest in urban development and enabled us to see weaknesses in our regulatory decision-making environment.

It seems likely that the building of compromise will become a common element of the urban landscape of the 1980's. All cities with low or medium rise architectural resources will be confronted with compromise cases during strong growth phasees. The current flurry of examples, the current architectural interest in ecclecticism, and the architecture professions's ceaseless fascination with building types will, no doubt, lead to a proliferation of such solutions.

One cannot discount, as well, the considerable political convenience offered by the building of compromise. As suggested in the thesis, there is the danger that the compromise approach will become an expedient favorite of the developer, the preservationist, and the city official as well. This will hopefully not happen before we develop better analytical and political tools to generate alternatives, evaluate their strengths and weaknesses, and forge a

Exhibit 8-3

Chicago Board
of Trade Building

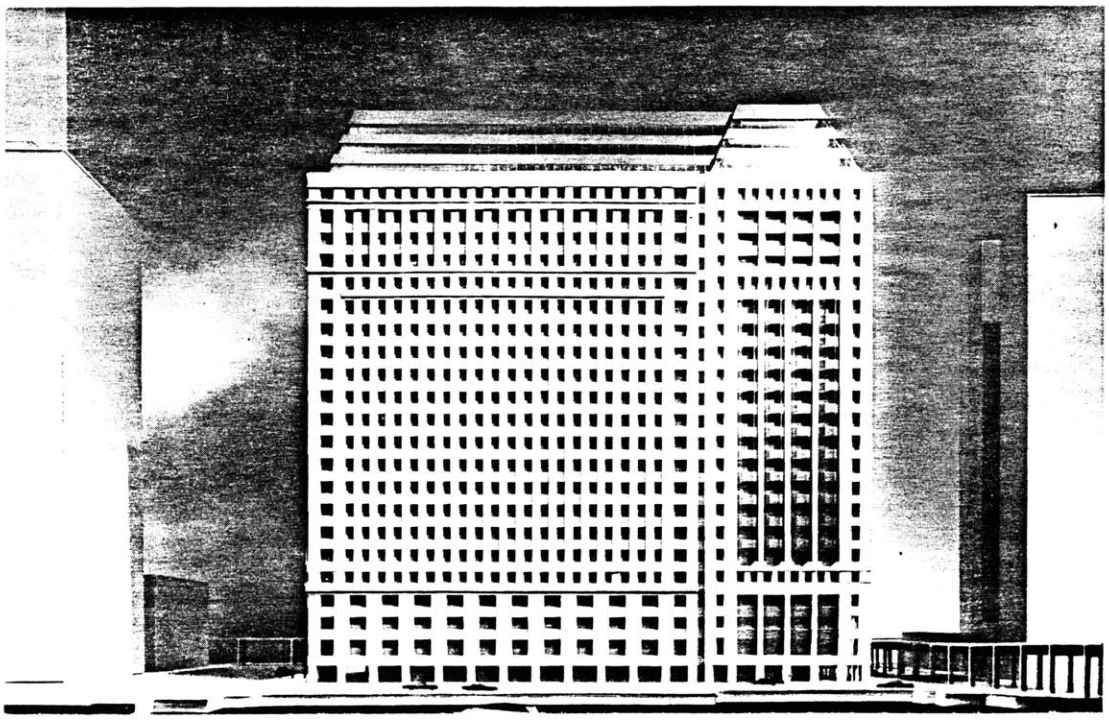


Exhibit 8-4 Builders Building, Chicago

superior compromise. This thesis represents what might be the first steps in understanding these challenges and developing these tools.

AN AGENDA FOR THE FUTURE

This thesis has focused exclusively on three local cases, and has examined them in their own time frames. Significant changes have since occurred in the regulatory and financial environments, both at the local and national levels, with important implications for buildings of compromise.

This thesis has intended to provide a foundation for understanding the past and present of the building of compromise. In the process, it has identified several areas that are in need of further study and development. If we continue to develop and refine specific tools in the urban design, financial, and political arenas, and are able to devise strategies for employing them in a responsive and responsible decision-making framework, the building of compromise may hold exciting promise for the future of our cities.

Appendices

A. Summary of Historic Significance, excerpted from Boston Landmarks Commission Study Report, "The Exchange Building".

B. Standards and Criteria for the Exchange Buillding, excerpted from BLC Study Report.

C. Shadow Studies
Conducted by author on base analysis provided by WZMH-Habib, Architects, Boston.

3.0 SIGNIFICANCE

3.1 Historical Associations:

The site of the Exchange Building on State Street has historical significance in political and economic arenas. The site has been associated with merchants and stock exhanges for 138 years and earlier has been associated with colonial and Revolutionary era events and persons.

State Street (originally called King Street) was one of the original streets in the City of Boston. In the late seventeenth and early eighteenth centuries, the eastern end of the street led into the Long Wharf. Among the first building that one met on land when coming from this wharf was the Bunch-of-Grapes Tavern, which occupied the corner of State and Kilby Streets. Also, on this block stood the mansion of John Winthrop, first Governor of the Massachusetts Bay Colony. Further up the street was Town House, now known as the Old State House, which served as the principal seat of government for the Province, County, and Town. An open air market place was also found in this area. State Street was the center of the colony's governmental and commercial activities.

The Bunch-of-Grapes Tavern was in operation from the mid-seventeenth century until the end of the eighteenth century. It provided a popular meeting place for merchants and the masters of vessels and later for leaders of the Revolution. The newly-arrived governors were often taken there for an elegant dinner. In 1798 the tavern was replaced by a brick store. The Bunch-of-Grapes Tavern is commemorated by a plaque which is displayed on the State Street facade of the Exchange Building, as is a similar plaque for Governor Winthrop.

After the Revolution, the area around State Street continued to be the business center of the city. In 1837, 22 of the 35 banks in Boston were located on this street. (Winsor, Vol. IV., p.55). In 1840, the Boston Exchange was organized by a group of prominent citizens, who determined that is was necessary because of the increased amount of business transactions and the large number of out-of-town businessmen that were visiting the City. Boston was at its height of prosperity in foreign and domestic commerce. The corner stone for the Merchant's Exchange was laid in August, 1841. The four story, Greek Revival structure was designed by Isaiah Rogers. This building served a number of purposes; it was the seat of the Boston Board of Trade in the 1860's, and the Post Office occupied a part of the building in 1865. In 1873 the Board of Trade established a central headquarters for all the business exchanges of the city in the Merchant's Exchange. Some remodeling of the building was done to accommodate this purpose.

These alterations to the Merchant's Exchange, however, were not sufficient to serve the purposes of Boston's continuously growing business concerns. In 1889 the Merchant's Exchange was torn

down, and the Exchange Building was built in its place. It still serves its original functions as the location of the stock exchange and of commercial offices. For a period of time the Stock Exchange was located in a newer building, constructed in 1908, at 30 Congress Street, also designed by Peabody & Stearns in the Neo-classical Revival style.

The other remaining building on the block, 10 Congress Street, was built in 1924 by the State Street Trust Company which merged with the National Union Bank, chartered in 1792. The National Union Bank occupied the State Street-Congress Street corner site prior to 1924. The new State Street Trust Company, chartered in 1891, leased its first office at 53 State Street but moved next door to the Union Bank in 1900, the property that it later purchased and demolished.

When State Street built the structure now occupying the site, Allan Forbes was the bank president. Mr. Forbes is largely responsible for the image of 10 Congress Street, although Parker, Thomas & Rice were the architects of record, and Richardson, Barott, & Richardson were responsible for executing the interior banking hall which occupied 10 Congress and a portion of The Exchange Building. Contemporary writers described the building as Colonial in type, and the Bank's own description of the structure in 1926 suggested that it was "patterned after the old counting rooms of Boston merchants during the first part of the eighteenth century, arranged on a much larger scale." (Log, p.9). Walter Whitehill summarized the State Street Bank building aptly; "...they did not reproduce it archeologically, for it was rather an original creation of Allan Forbes' imagination." (Whitehill, "Allan Forbes," p.19).

The building at 10 Congress Street and the interior banking hall of the State Street Bank are important historically as period reproductions in the Neo-Colonial Revival era.

3.2 Architectural Significance:

The Exchange Building is architecturally significant for several reasons. It represents in both style and scale the type of architecture that became prevalent in Boston's financial district at the turn of the century. It is also significant because it is an almost unaltered example of Peabody & Stearns' early commercial architecture. This firm made an extraordinary contribution to the architecture of Boston and the New England region.

Robert Swain Peabody was the son of Reverend Ephraim Peabody and Mary Jane Derby Peabody, who were both members of prominent New England families. He was born in 1845 in New Bedford. Peabody received his Bachelor of Arts degree in 1866 from Harvard College. Upon graduation, Peabody worked for Gridley J.F. Bryant. A few months later he took a job with Henry Van Brunt, where he met John Goddard Stearns, who was the chief draftsman.

Peabody was exposed to the methods and traditions of the Beaux Arts while working for Van Brunt, who had received his training from Richard Morris Hunt. Peabody left for Europe in 1867. He studied in London for a short time, and then transferred to the Ecole des Beaux Arts. Two of this fellow students were Frank W. Chandler and Charles Follen McKim. Peabody returned to Boston in the spring of 1870, and entered into partnership with his former colleague, John Goddard Stearns, Jr. With Peabody in charge of design, the firm of Peabody and Stearns flourished for nearly fifty years. In his later years, Peabody became involved in many professional and civic organizations. He also spent much of his time writing, and he produced over fifteen books, articles and addresses. Both Peabody and Stearns died in 1917.

John Goddard Stearns, Jr. was born in New York City in 1843. He received his primary and secondary education in New York and Brookline, Massachusetts. Stearns entered the Lawrence Scientific School of Harvard College in 1861, and he graduated with a Bachelor of Science degree in Engineering in 1863. He worked for the firm of Ware and Van Brunt from 1863 to 1870. As mentioned above, it was during this time that he met Peabody, and in 1870 the successful partnership was formed. Stearns was in charge of supervision of all building construction.

Scholars Wheaton Holden and Anthony Bond have provided insight into the method by which the firm could accomplish the large volume of work which they produced. Peabody was the initial designer for their commissions with the staff then fleshing out his sketches but not without final approval by Peabody; Stearns was the expeditor and superintendent of construction. The division of responsibility was efficient and cooperative according to contemporaneous reports. (Holden, JSAH, p. 116; Bond, P. 16).

The firm's work was prolific and encompassed nearly every building type from railroad stations to office buildings to boathouses. While their commissions were largely located in the northeast, examples of Peabody & Stearns' designs were found as far west as Colarado and Oregon.

The firm's commercial buildings (including office buildings, stores, banks, hotels) numbered about sixty of which thirty-four were located in Boston. Of these thirty-four, twenty-one remain, generally intact. In the first decade of the partnership, about nine commercial buildings were constructed of which eight were located in Boston, and of which only one is known to remain. Stylistically, the structures displayed variety and ranged from French Second Empire to Queen Anne to High Victorian Gothic. In the 1880's, the second decade of the firm's existence, the designs for commercial buildings numbered twelve, spread from Boston to New York to St. Louis, showing the geographical expansion of the firm's activity. Of the four of these that were built in Boston, only two remain: The Exchange Building of 1887-1891 and The Fiske Building of 1888-1889 at 89 State Street. The latter has been unrecognizably altered.

The designs of this decade were critical in the development of Peabody & Stearns' commercial style. The various electic styles were abandoned, and a personal style began to emerge: the Romanesque Revival style fused with Italian palazzo tradition. The Romanesque Revival style was popularized by H.H. Richardson in the 1870's. The onset of the late Renaissance Revival Style is first seen in Boston in the Boston Public Library of 1888, designed by McKim, Mead & White. It is the merging of these two stylistic strains that characterized Peabody & Stearns' commercial style in the 1880's and, as importantly, was the precursor of their future design direction which remained firmly in the Italian Classical Revival mode. After 1892, no vestiges of the Romanesque style are seen in Peabody & Stearns' commercial work, but the handling of materials and large-scale forms learned from their Romanesque experience remain throughout their work. Aside from the 1874 Boston Post Building, a small but important cast iron High Victorian Gothic building in its own right, and the irrevocably altered Fiske Building, The Exchange Building is the only remaining example in Boston of this nationally renowned firm's formative years.

Architectural historians contend that the most important work of these early years was the widely published R.H. White Warehouse Store of 1882-1883 on Bedford Street and Harrison Avenue because of its effect on other architects of the day, namely Richardson and Sullivan. The demolition of this building with the last decade makes the intact Exchange Building all the more important.

Besides the stylistic impact of the Exchange Building on the late 19th Century Boston commercial architecture and its decisive role in the development of the firm's personal commercial style, The Exchange Building is the city's prime and earliest existing example of the monumental elevator office block. Noted architectoral historian, Henry Russell Hitchcock in his Guide To Boston Architecture (1607-1954) found several buildings worthy of mention to illustrate Boston's Financial District. Of the eight structures itemized, only two date prior to 1922; these two are McKim, Mead, and White's New England Trust Company Building at the corner of Milk and Devonshire, demolished for a parking lot, and The Exchange Building. After mentioning the 1928-30 United Shoe Machinery Building, Hitchcock states, "More Bostonian is the much earlier Exchange Building." (Hitchcock, p.13).

Sheer size and the ability to organize the facades of the new elevator buildings coherently is characteristic of Peabody & Stearns' work. It is not surprising that an examination of office buildings built from 1885 through 1915 indicates the gradual increase in bulk of most downtown Boston office structures. (The Exchange Building itself housed 1,100 rooms). What is surprising, however, is that Peabody & Stearns were consistently responsible for the largest of them.

Peabody & Stearns has been best known for the Custom House Tower, begun in 1909, at the foot of State Street. At one time

seven (now five) of their buildings stood on State Street. The Exchange Building at the head of State Street, is the most distinctive early work and provides a critical counterpoint to the Custom House Tower, the culmination of their Boston career and the only skyscraper in Boston until the 1960's.

The Exchange Building also represents the work of a notable firm of builders, the Norcross Brothers. This remarkable firm is associated with many of Boston's most significant later 19th century buildings, and with almost all of H.H. Richardson's best known designs. Well-known for their innovative construction techniques, the Norcross firm was among the earliest builders to become general contractors, due in considerable measure to the need for efficiency in building the increasingly complicated later 19th century structures. The craftsmanship of Norcross Brothers is well known and evident in the handling of the granite on The Exchange Building. The firm owned granite quarries and for many of Richardson's commissions supplied the materials. Although Norcross Brothers were active after the disappearance of the Boston Granite Style, the firm carried out the traditions of expert handling of the material intrinsic to the style.

3.3 Relationship to the Criteria for Landmark Designation

The Exchange Building clearly meets the criteria for landmark designation as established by Section 4 of Chapter 772 of the Acts of 1975 in that it is of distinguished architectural design, embodying distinctive characteristics of construction, of a style which makes it inherently valuable for study, and as a notable work of an architectual firm whose work influenced the development of the city, the Commonwealth, and the Nation.

The Exchange Block
53 State Street, Boston

10.0 SPECIFIC STANDARDS AND CRITERIA

10.1 General

1. The intent is to preserve the overall character and appearance of the exterior of the building, its importance in the definition of the city block, and its richness of detail.

2. Although the designation applies only to the exterior of the building, the Commission encourages the preservation of the rich materials and details that exist in the interior.

3. The elevations along State and Kilby Streets shall be subject to the guidelines for the building exterior.

10.2 Masonry

1. No granite element will be painted. Masonry cleaning will be done in a manner that, in the judgement of the Commission, will have no destructive effect on the masonry.

2. No granite elements will be removed or obscured on the State or Kilby Street facades.

3. No new openings will be allowed on the State or Kilby Street facades. Existing and original openings will not be closed or framed down.

4. If altered, the masonry infills to the left of the Kilby Street entrance should be removed and the original detail restored.

10.3 Doors and Entrances

1. The primary entrances on State and Kilby Streets will be retained as visually dominant.

2. All existing original details in the two entrances will be retained and restored.

3. Retention of original interior elements visible from and supportive of these entrances is encouraged.

4. The iron and copper lanterns flanking the State Street entrances will be retained in situ and restored.

5. The existing corner entrance may be altered or eliminated.

10.4 Fenestration

A. Base Portion

1. Any replacement sash will have a profile not greater than the existing profile and will be shaped to exactly match original opening.

2. Contemporary glazing and sash will be permitted.

3. The small-paned windows to the right of the State Street entrance may be removed and replaced with contemporary windows. If altered, the masonry side panels will be removed and the original granite opening restored.

4. The iron spandrels of the ground floor will be retained.

5. Retention of all iron grill and decorative ironwork is encouraged.

6. If altered, the raised sills of the ground floor windows should be removed and the original detail restored.

B. Shaft and Attic Portion

1. Any replacement sash will have a profile not greater than the existing profile and will be shaped to exactly match original opening.

C. 1. The color and material of all replacement or existing fenestration will be reviewed.

10.5 Signs and Lighting

1. The three existing placques will be retained in situ.

2. No additional signage or lighting fixtures will be attached to or allowed to obscure any granite portion of the facade.

3. General lighting of the building facade is encouraged. Fixtures should not be visible from the street and the lighting patterns should enhance the original design elements.

10.6 Additions

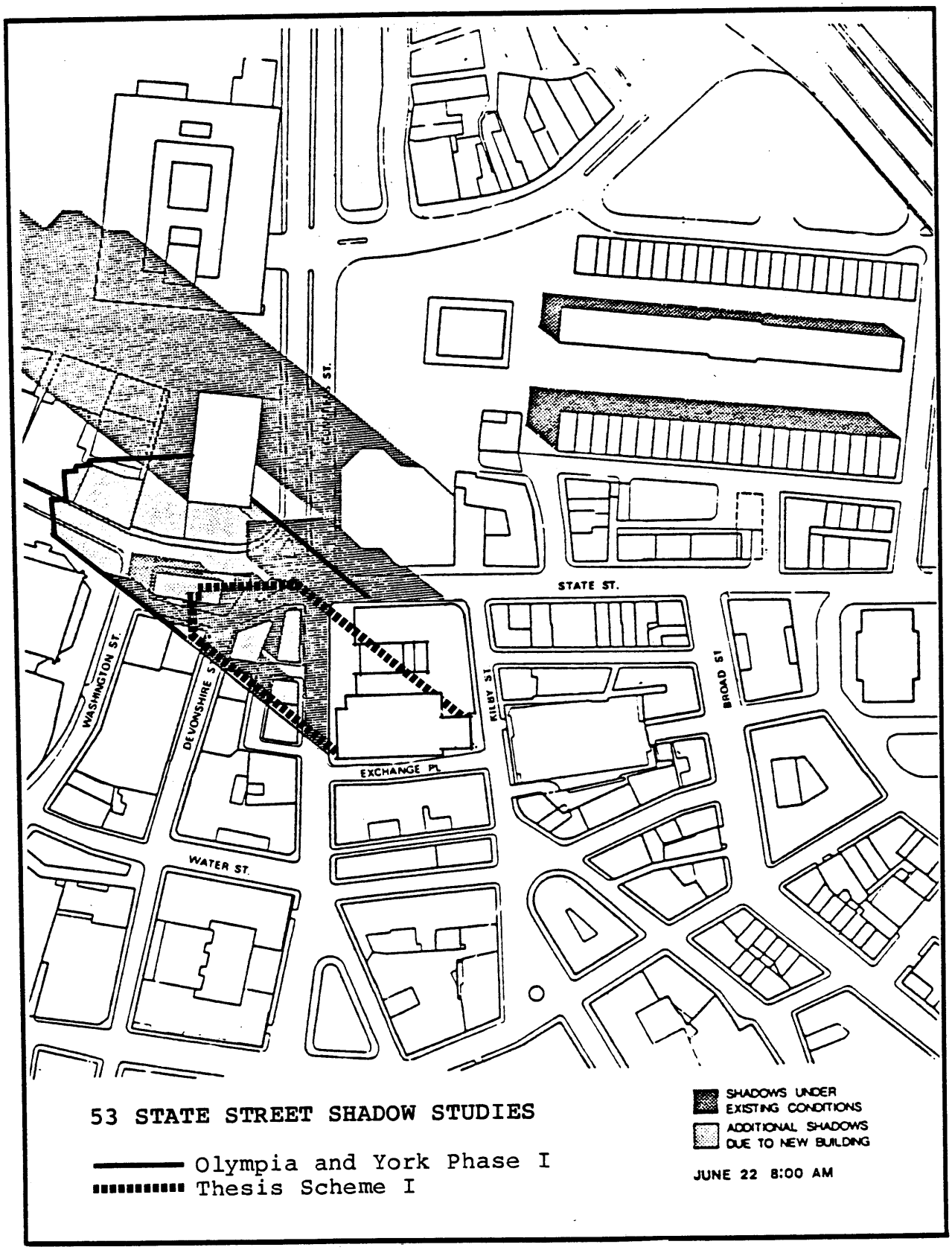
1. No addition shall obscure or replace any masonry portion of the State and Kilby Street facades of the building.

2. Penthouses will be located to be not visible from any public street at a distance equal to that between the existing State Street and Kilby Street facades and the Old State House.

3. Any portions of the existing building exposed to public view because of demolition or new construction will preserve the visual character of the building. Reproduction is discouraged in favor of simple, contemporary design.

10.7 Demolition

1. Demolition of portions of the original building and 10 Congress Street will be considered providing it has minimal adverse effect on the State or Kilby Street facades.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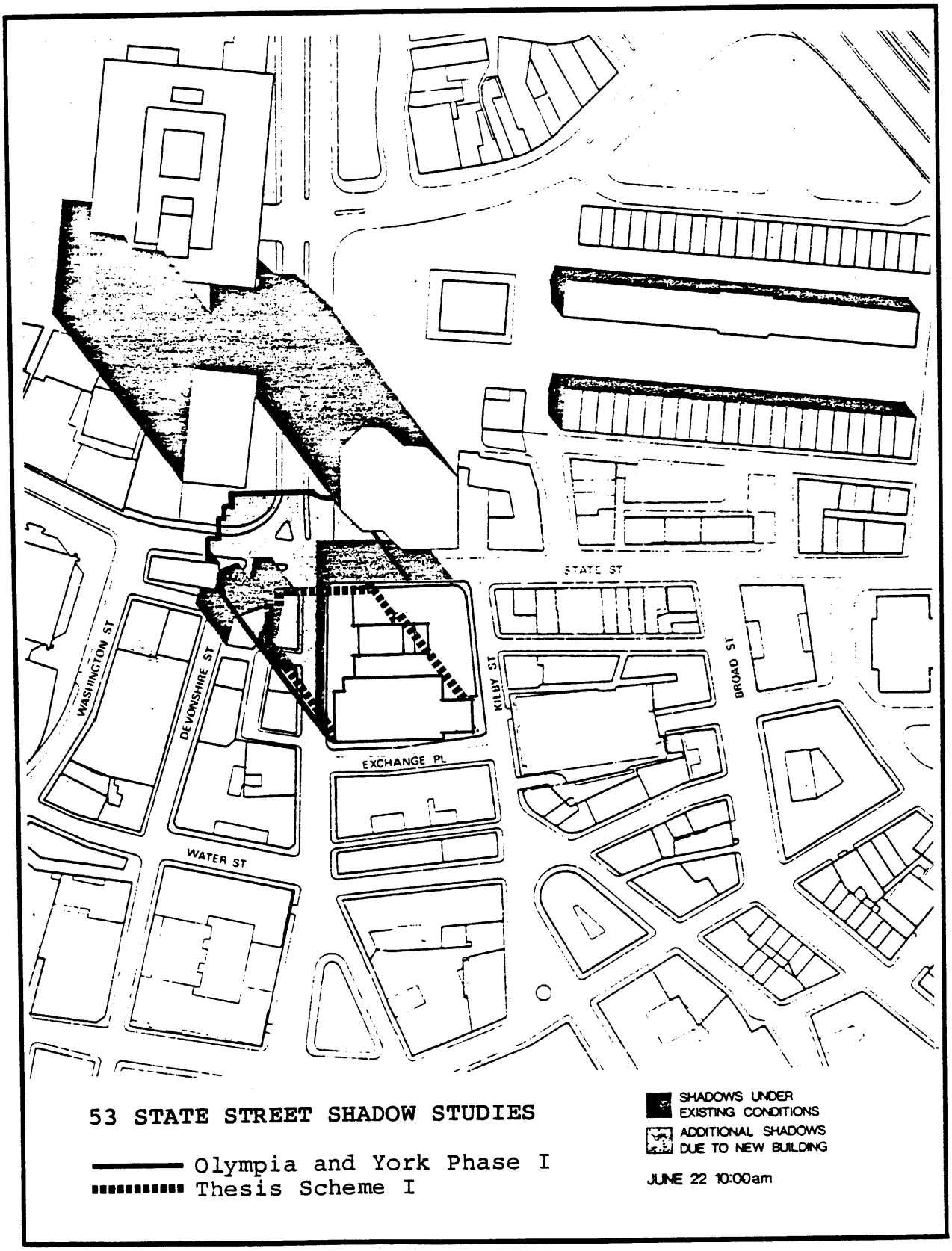
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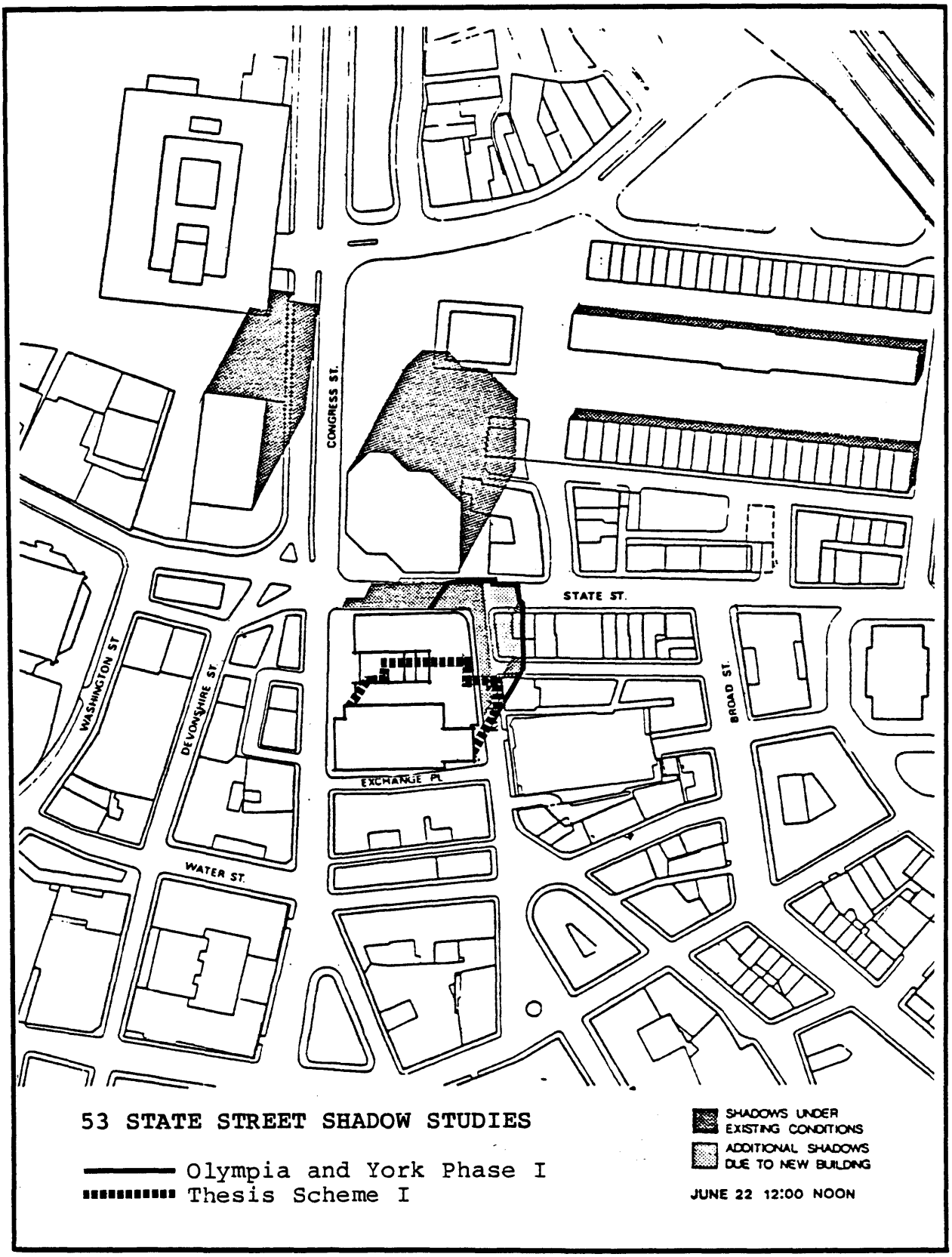
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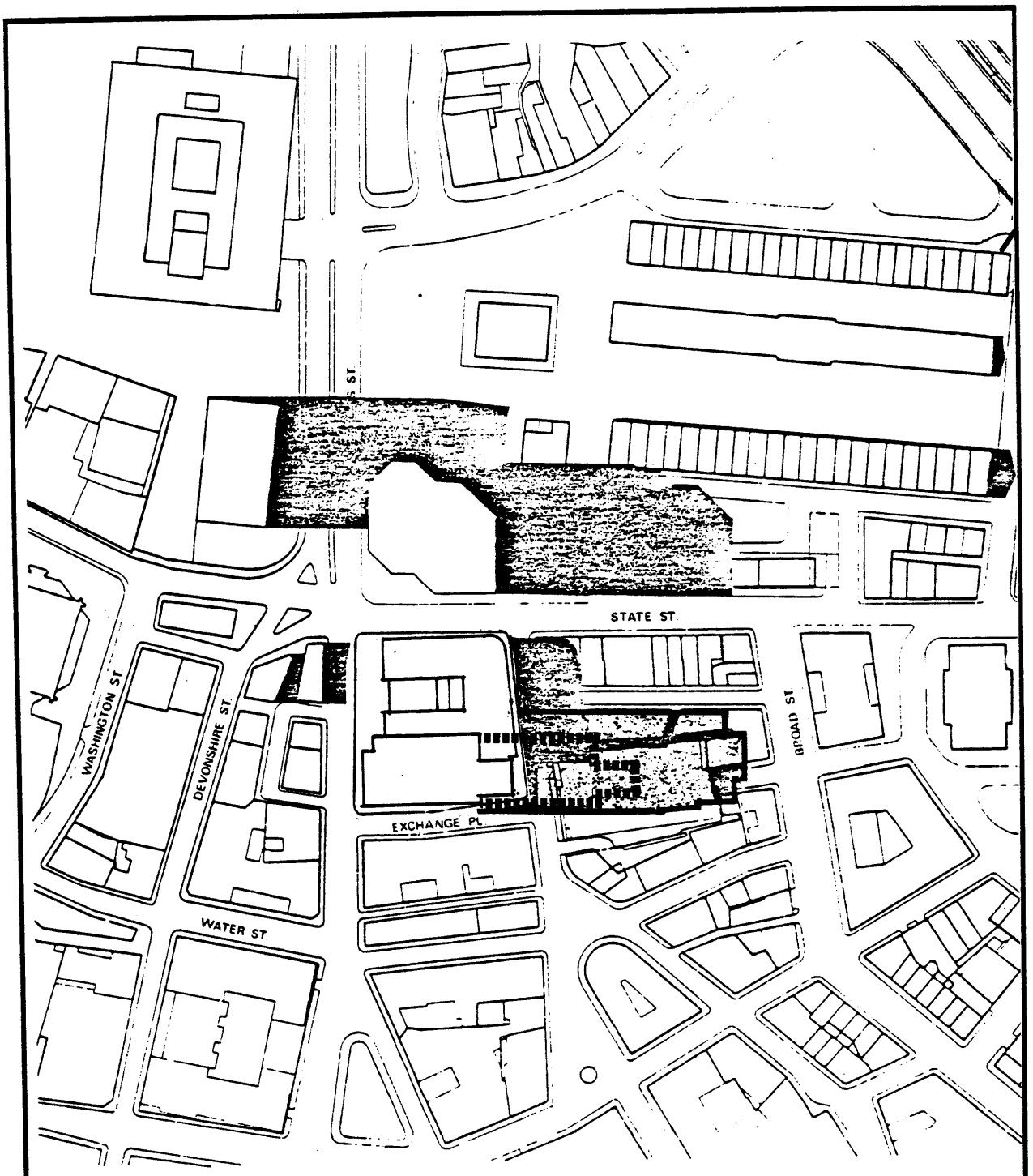

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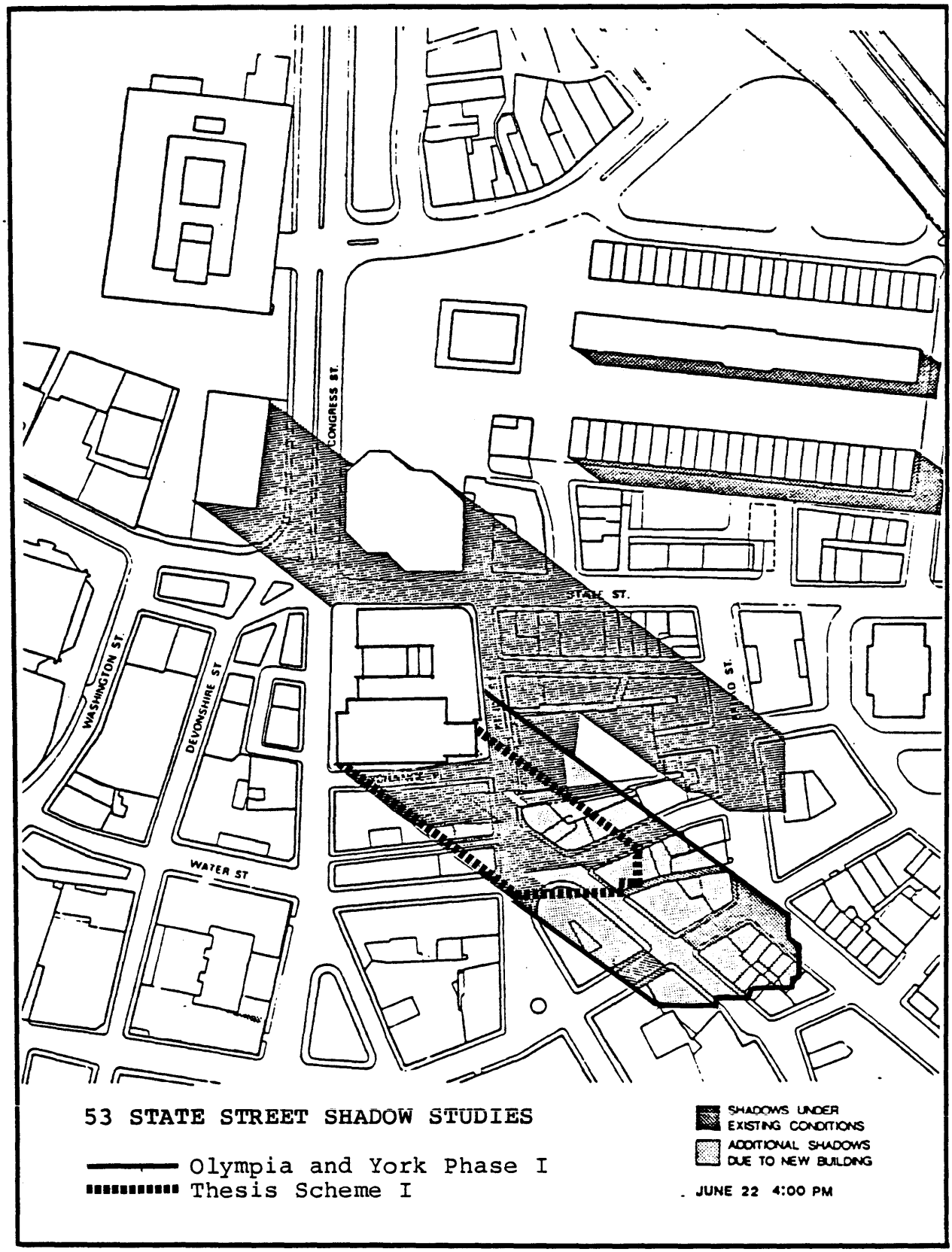
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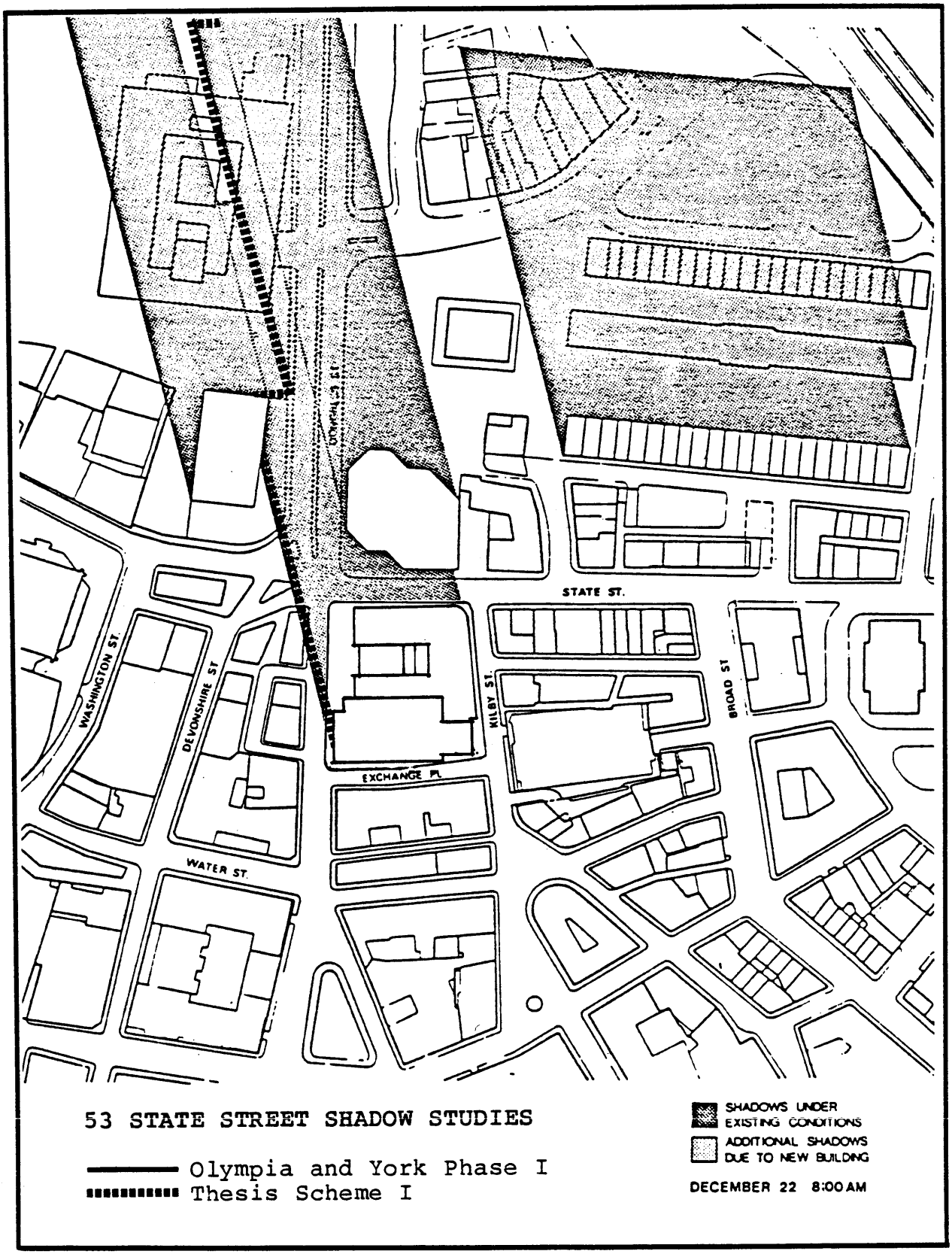
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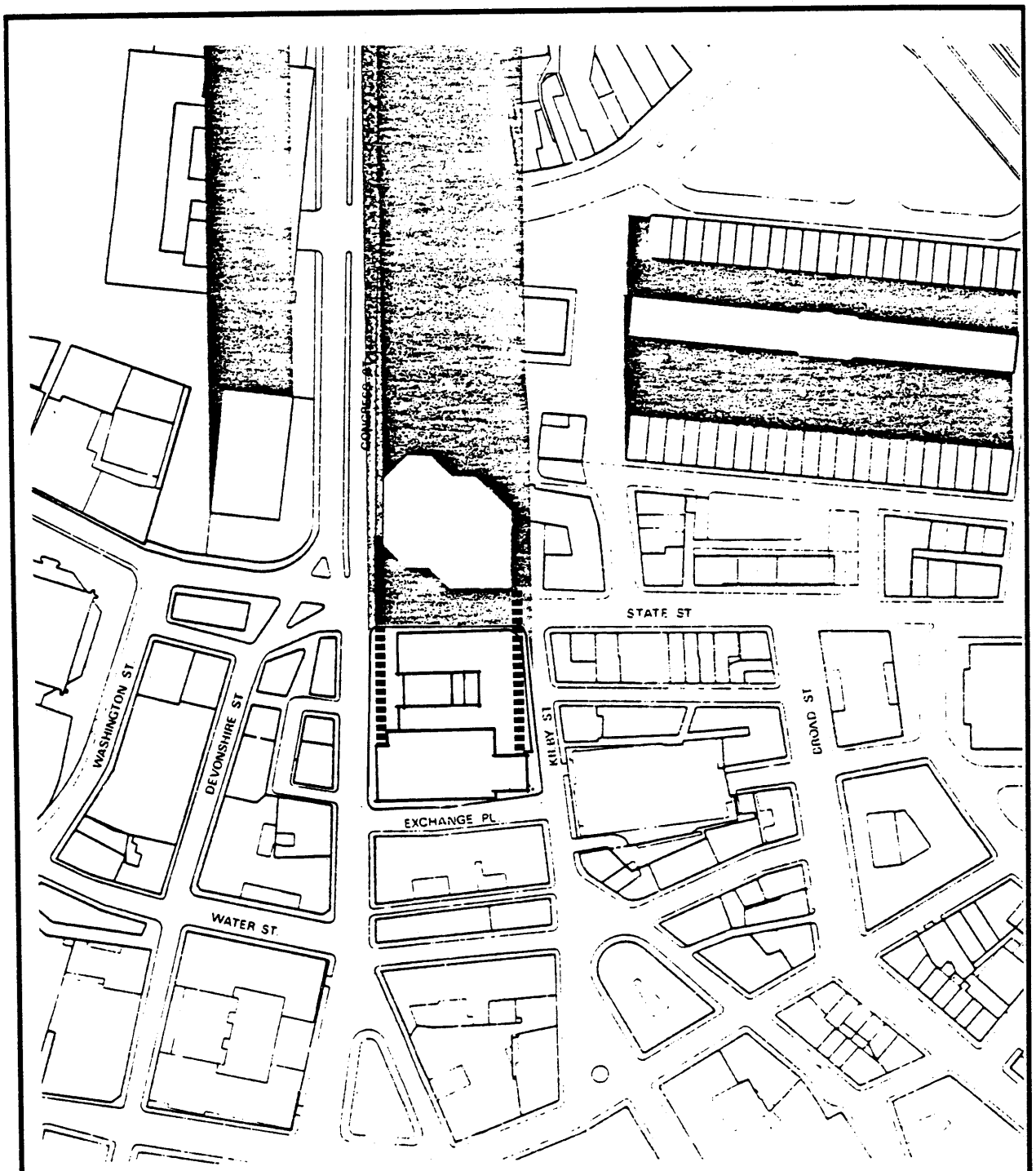

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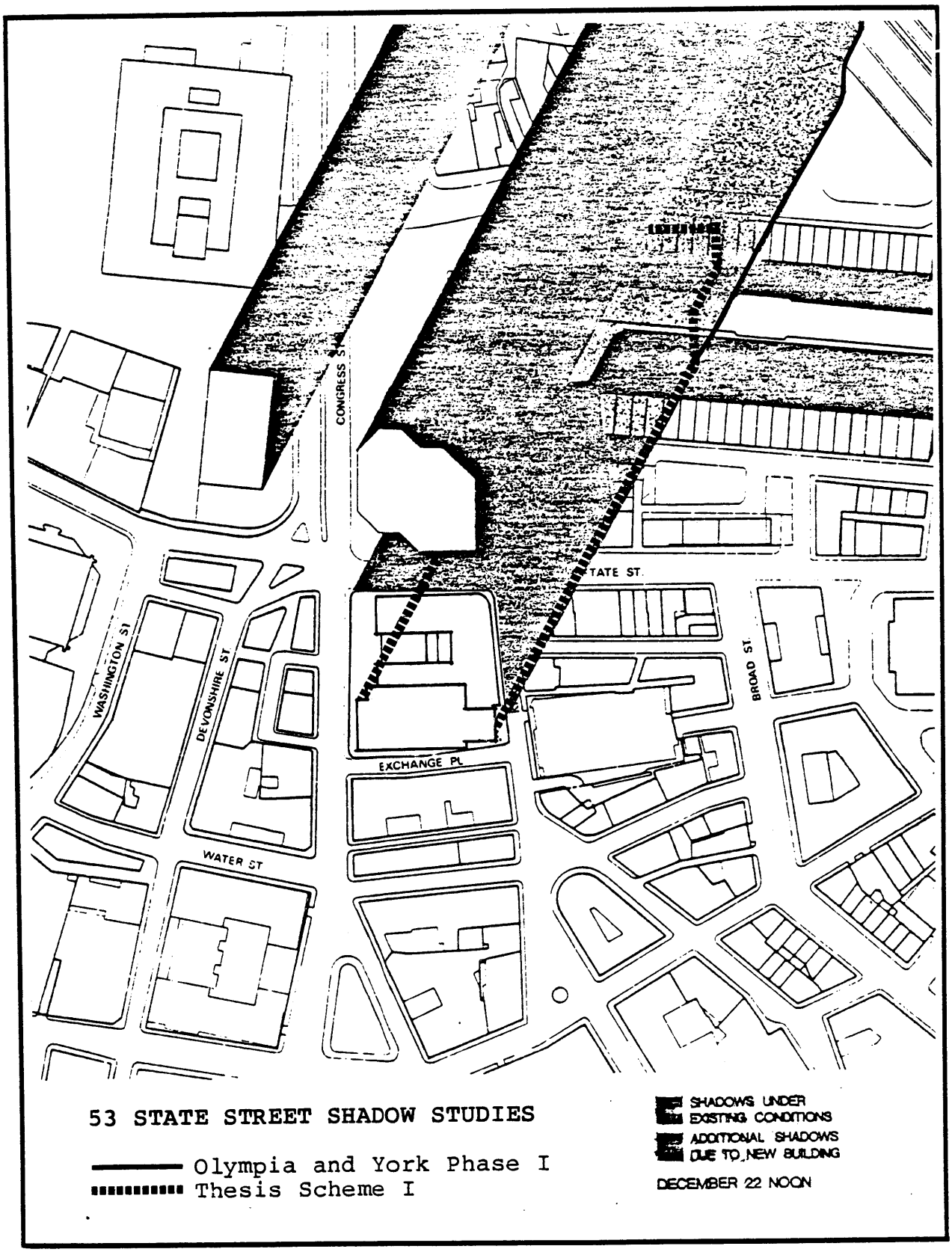

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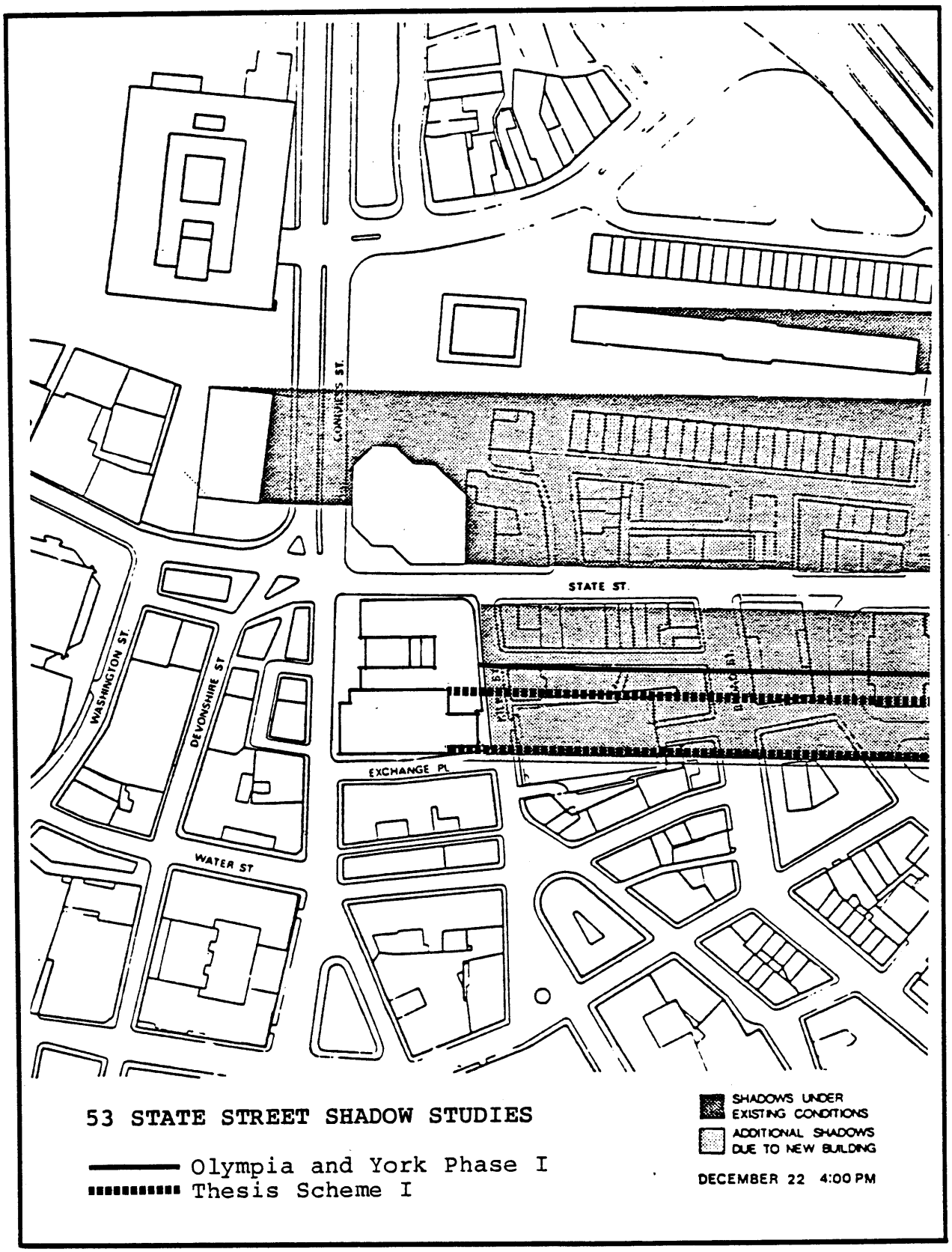
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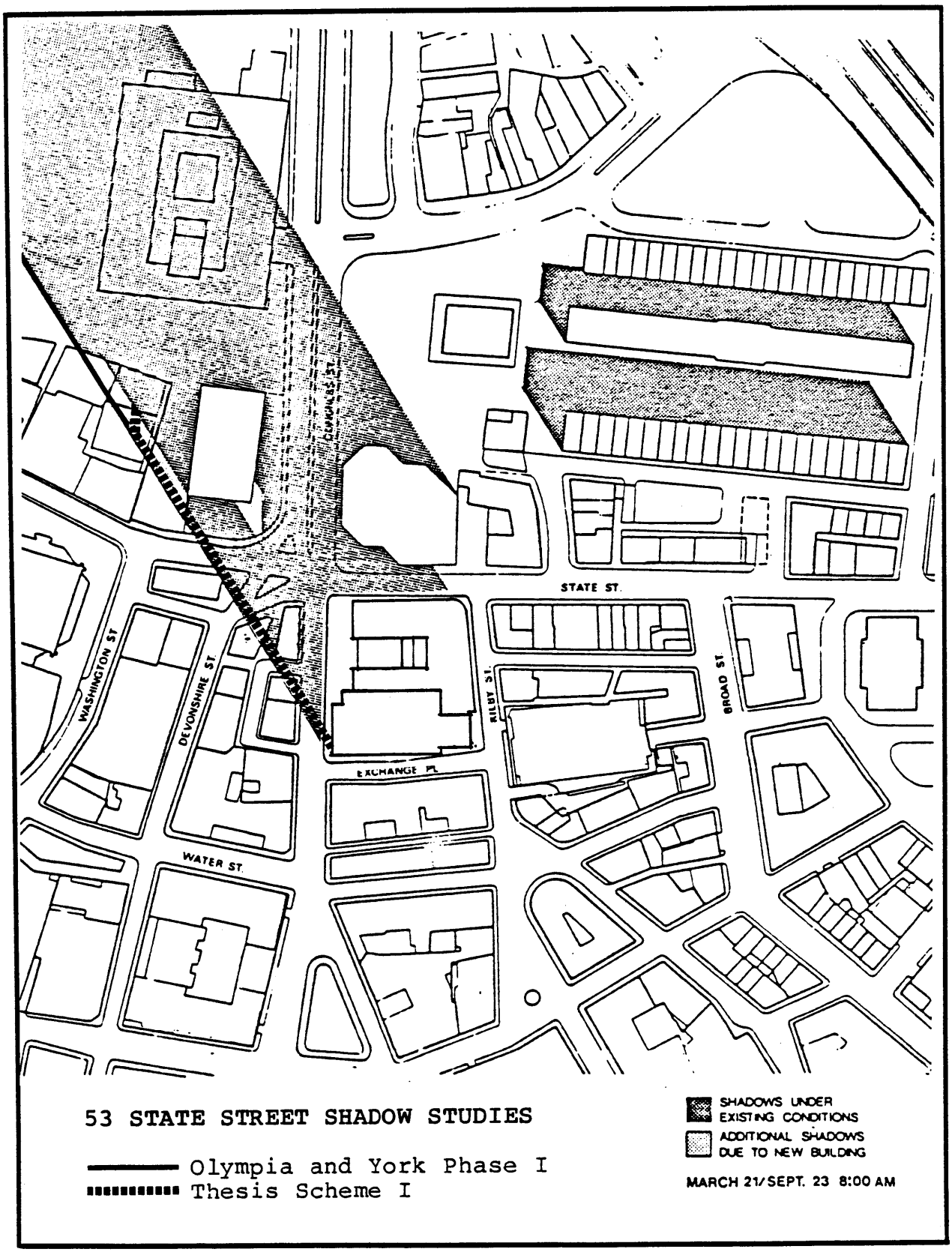
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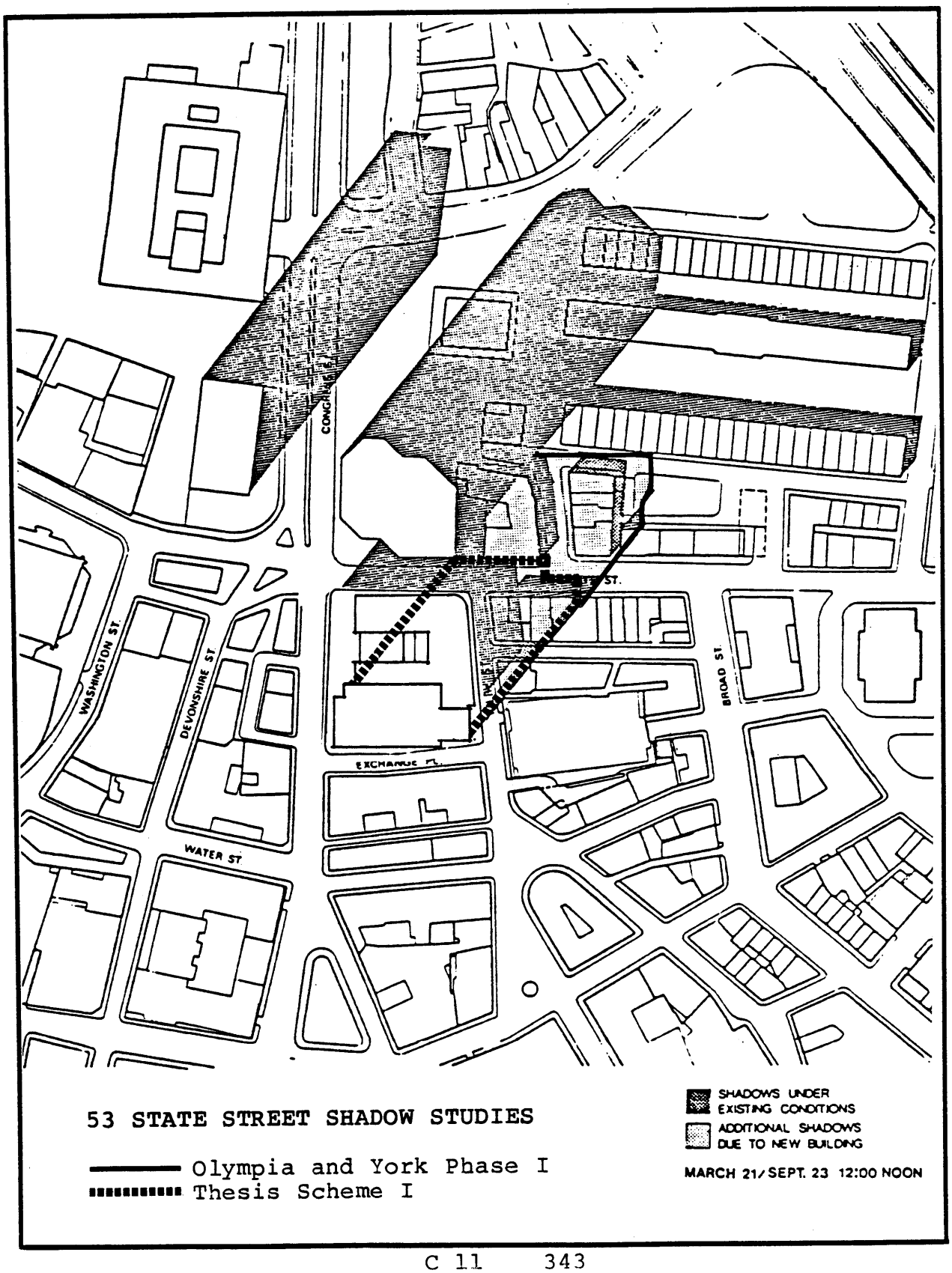
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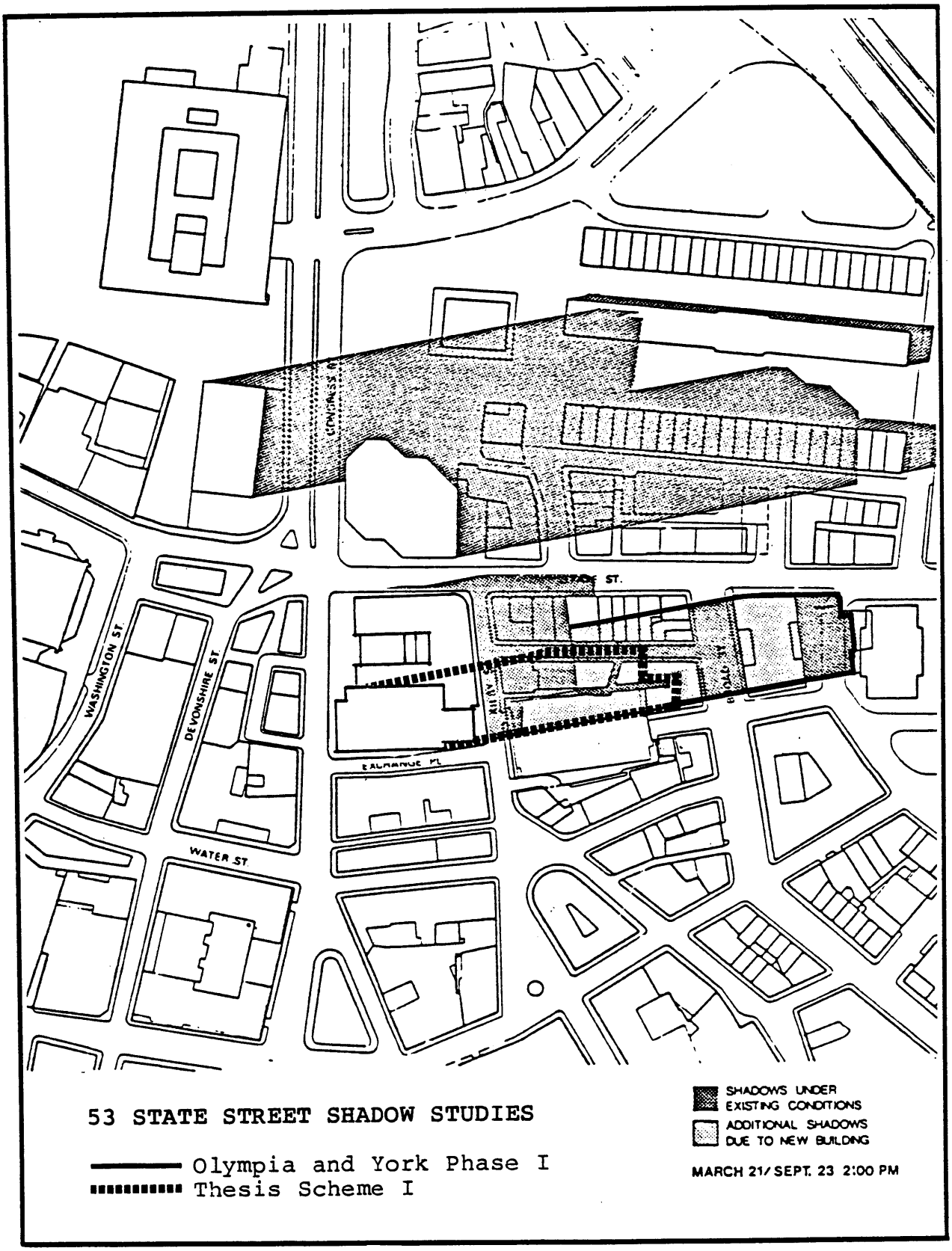

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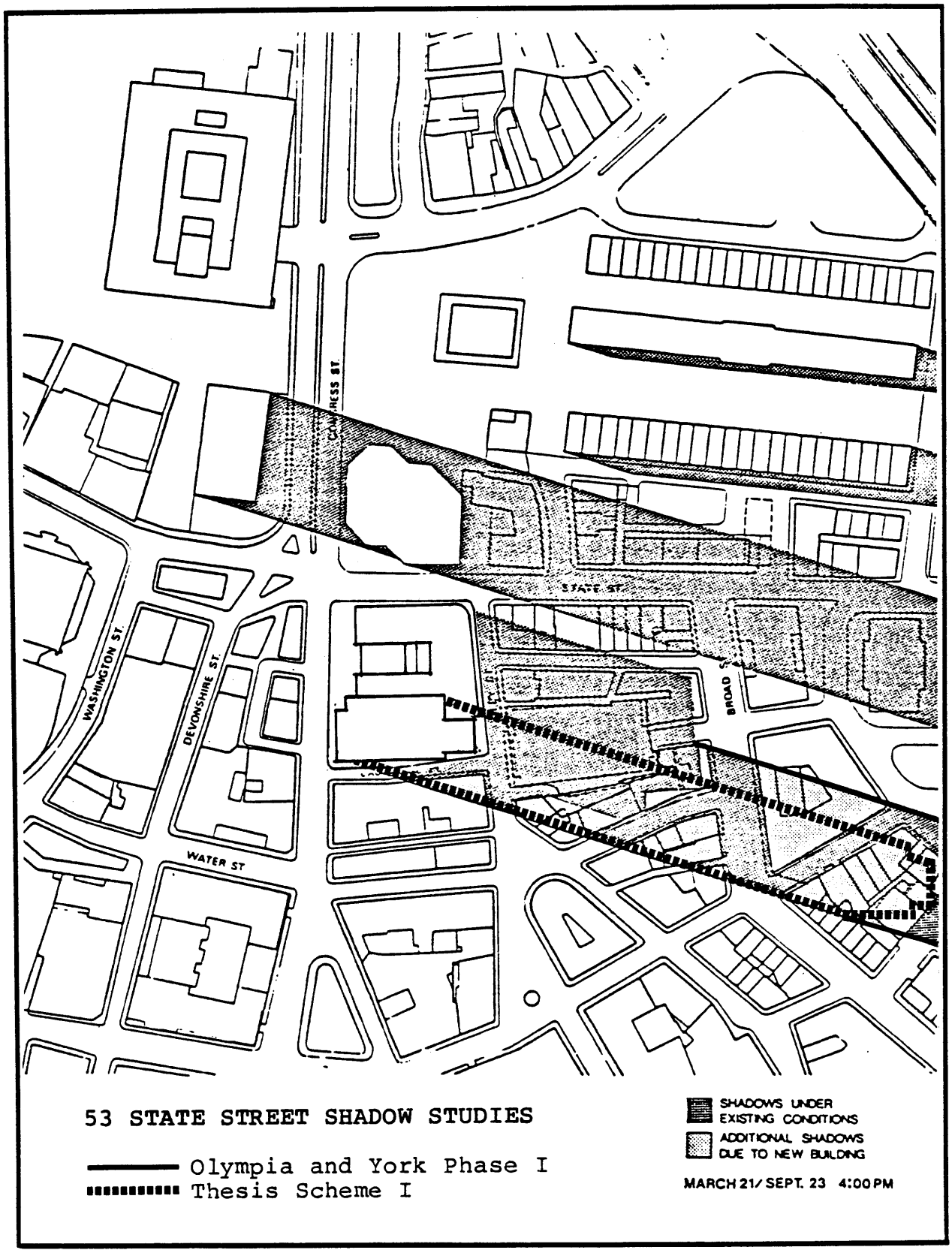
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FOOTNOTES

Chapter 1: Introduction

1. "Rating Reuse," in Progressive Architecture, Nov. 1980, 11:80, p. 87.

2. Ada Louise Huxtable, "500 Park--A Skillful Solution," New York Times, April 4, 1981.

3. Robert Campbell, "Blending the old and the new," in Boston Globe, December 24, 1980.

Chapter 2: The Development Process

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2. Owen Moritz, "...and the recluse billionaires who own it," Boston Globe, July 5, 1981, p. 77.

3. From interviews with BRA staff.

4. Christopher Carlaw, (BRA report), "A Decade of Development in Boston", May 1979, p. iii.

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7. Martrullo, M. (BRA report), "The Office Industry Survey", March 1979, p. 44.

8. These figures are a composite of information from the First National Bank of Boston, the Greater Boston Real Estate Board, and other industry sources.

9. Kevin White, in "Boston's Development Prospects: Commitment to the City's Future", Jan. 1973, p. I-4.

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16. Interview with Chung Lee, Director of Design, WZMH-Habib, Boston.

17. Ibid.

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25. Ian Menzies, "Guardian of Beauty", in Boston Globe, Auguust 13, 1979, p. 11.

26. William Dorfman, "Storm Signals Are Up", in Boston Globe, August 19, 1979, p. F1.

27. Interview with Chung Lee.

28. Robert Ryan, Transcript of Statement at BLC meeting, Jan 2, 1980, BLC case file.

29. Yudis, op. cit.

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31. BLC staff notes from meeting with Kevin White, October 22, 1979, BLC case file.

32. BLC Study Report, October 1979, p. 7.0.

33. Ibid.

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35. BLC Hearing Transcript, p. 17.

36. Ibid., p. 22

37. Ibid., p. 19

38. Ibid., p. 78

39. Ibid., pp. 125-130.

40. Ibid., pp. 138-139.

41. Ibid., pp. 140-188.

42. Ibid., pp. 154-156.

43. Ibid., pp. 124-186.

44. Ibid., pp. 24-26.

45. Ibid., pp. 103-105.

46. Real Property Resources Corporation, Development Feasibility Study, December 6, 1979, p. 1.

47. Chronology of Meetings on 53 State Street, BLC Case File.

48. Transcript of statement by Robert Ryan, Jan. 2, 1980, p. 1.

49. Rabinowitz, "Facade of Stock Exchange Building to Survive," Boston Herald American, Jan. 3, 1980.

50. Transcript of News Bulletin, WEEI Radio CBS 59, Jan. 3, 1980, Chuck Krause.

51. Ian Menzies, "Will Compromise Plan for 53 State Work?," in Boston Globe, January 14, 1980, p. 11.

52. Press Release, BRA, Jan. 4, 1980.

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54. Letter from Richard Heath to Boston Landmarks Commission, Jan. 10, 1980, BLC case file.

Chapter 3: Reconsideration

1. Shadow Studies were conducted by the author using the base analyses prepared by WZMH-Habib for the environmental analysis required by the PDA process.

2. Memorandum, Dick Mertens to BRA, Sept. 25, 1980, p. 2.

3. Interview with staff at CityDesign Collaborative, Inc., consultants in this case.

4. The tax treatment of real estate was substantially revised in the Economic Recovery Act of 1981 (effective January 1, 1982). This analysis was conducted using the old tax laws.

5. Estimated costs were generated in consultation with local developers involved in current rehabilitation projects and McCarthy & Lilburn, Chartered Quantity Surveyors, Boston.

Chapter 4: Analysis of the Process

1. Arabian, op. cit., p. 156.

2. Evidence for this observation includes the developer selection processes for the Long Wharf Hotel (1979) and the Charlestown Navy Yard (1981-82). In both cases the executive decision ignored the recommendations of both city-city-employed and independent professional advisory boards who conducted lengthly and thorough analysis and negotiations.

3. Interview with Chung Lee, op. cit.

4. Arabian, op. cit., p. 36.

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9. Standards and Criteria, BLC case files , Jan. 2, 1980.

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11. Standards and Criteria, December 11, 1979 draft version by Phil David Fine.

12. Memorandum, Marsha Myers to Robert Ryan, December 12, 1979.

13. See Chapter 6, the United Shoe Machinery Building case.

Chapter 5: The Old Federal Reserve Complex

1. Information on the development process comes from conversations with Mr. Edwin Sidman of The Beacon Companies, consultations with Paul Fallon and Mr. Robert Brannen at Jung/Brannen Associates, and other project consultants.

2. BLC Study Report, The Old Federal Reserve Site July 25, 1978, pp. 12-15.

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4. BLC, tape of public hearings, BLC case file.

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Chapter 6
The United Shoe Machinery Corporation Building

1. Information for this narrative are drawn from Harvard Graduate School of Design cases 313-059 URB4R2 and 9-313-126 and the BLC Study Report.

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6. Ibid.

7. Economics Research Associates, (ERA), "Analysis of the Economics of Rehabilitating the United Shoe Machinery Building", October 1980, p. 25.

8. Letter, Angus W. Crowe & Associates to the BLC, Aug. 14, 1980, BLC case files.

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11. Kevin White letter to Thomas Hynes, March 4, 1980, BLC case files.

12. Meredith and Grew letter to BLC, May 15, 1980.

13. Hammer, op. cit., p. 1.

Chapter 7: Possibilities for Change

1. Interview with Zoning Official, April 7, 1981.

2. William Whyte, "How to Make Midtown Livable," in New York Magazine, 14:10, March 9, 1981.

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1. "A Classic Battle at 53 State St.," Boston Globe, November 19, 1979, p. 12.

2. Arabian, I. M., "Transcript of Public Hearing November 13, 1979," BLC case file document, December 5, 1979.

3. Blew, Miller, "Angus W. Crowe, AIA," Harvard Graduate School of Design Case Study, Harvard College, Cambridge, Mass., 1980.

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5. _____, "Central Business District Preservation Study," September 1980.

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Study of Employees and Their Housing Preferences," July 1974.

14. Crowe, Angus and Davis, R., "Preserve 53 State Street" and "Designation Standards," Boston Globe, December 9, 1979, p. A4.

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