

SANTE HARBOR: A PROPOSED RESIDENTIAL DEVELOPMENT  
FOR THE NORTH STATION AREA

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Sante Harbor: A Proposed Residential Development for the  
North Station Area

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ABSTRACT

This thesis considers whether, and under what conditions, a fledgling developer without substantial financial resources can realistically make its debut on a large project owned and/or controlled by a multiplicity of public and private institutions and instrumentalities. A co-equal theme is what requirements must be met to make housing the central focus of such a project. A series of major constraints and obstacles is catalogued and analyzed; and a strategy proposed to cope with all of them. We conclude that the site constraints can be overcome, and the housing potential of the site realized, by a careful attention to the buffering of undesirable adjacencies and a brilliantly implemented orientation toward both distant views and desirable site amenities. Financial analysis suggests a preference for condominiums over rentals but without forecasting entirely the rental option. Our strategy for implementing this development idea exploits the advantages of priority, access and time which will permit us to compete seriously for the development designation, but with no assurance of a successful outcome.

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SANTE HARBOR: A PROPOSED RESIDENTIAL DEVELOPMENT  
FOR THE NORTH STATION AREA

Introduction

This thesis analyzes the feasibility of developing a new residential community, to be called Sante Harbor, in the North Station area. The specific site has not been definitively determined because the existing context will have to be altered to create development parcels of sufficient size and appropriate relationship to surrounding uses. Nevertheless, we have identified a use - housing - and an area to accommodate that use with specificity adequate to permit meaningful discussion.

A lack of precision is unavoidable given the fact that, in truth, there is no development opportunity at all at the present time. One of the underlying themes of this thesis is that worthwhile development activity need not wait for a willing seller and a coherent, buildable site to be identified in advance. Creative, even visionary, development may often begin with no more than an idea and a location. The developer must then labor to fit the idea to the location, sometimes over a period of years, before his vision comes to fruition.

We would like to suggest that there is a useful distinction between a "location" and a "site." The former refers simply to an area which may be identified by coordinates. The latter, by contrast, describes a location which is ready to accommodate development of a defined scope and nature. In that sense, we have an idea and a location; and this thesis considers how the location may be transformed into a site to accommodate our idea.

The four principal challenges we have addressed correspond to the chapter headings which set off the components of our analysis. The first

challenge is planning and design. Our location has considerable appeal, but also a significant number of constraints which must be overcome to fully realize its potential. The challenge is, therefore, to describe both verbally and graphically all of the opportunities and constraints and to generate a site and design program which together will frame the issues for the design professionals we intend to hire and will help to guide them in their resolution.

We next confront the challenge of implementation. This challenge has two parts: we must comprehensively identify the parties who are likely to play a role in the process by which the location becomes one or more sites and explain in what ways they are likely to interact and why. Once the political interests have been catalogued and analyzed, a further challenge is to explain how a fledgling development entity (hereafter sometimes the C-G Sante Harbor Partnership) can put itself in the middle of what is sure to be a lengthy and contentious pre-development planning effort. The goal is to fashion a strategy that affords us the best chance of obtaining the right to develop the site essentially as we wish.

These two challenges constitute the central issues of this thesis. If the contextual constraints can be minimized and controlled and the attributes of the location highlighted and emphasized, a part of Boston that has lain virtually dormant for many years can be dramatically brought to life. No one ought to mistake the enormity of the challenge - Sante Harbor absolutely demands brilliant design to realize its hidden potential. The "solution" to the location's multiple constraints cannot reasonably be expected from us. Rather, as developers, our role will be to guide and even inspire our architect/planner to produce and implement a solution that optimally meshes the requirements of imageability, livability, efficiency

and beauty. The developer/architect team which meets this challenge will justly win the plaudits of professionals, commentators and users alike. Our objective here is to outline how we propose to go about the process of selecting and interacting with an architect so as to help him produce his best work. It is our conviction that although brilliant design cannot be produced on command, there is much that the developer can do to nurture and encourage it.

The challenge of implementation is central to this thesis because the Sante Harbor site does not exist at all today. Helping to shape it is itself a tall order; but the challenge is made infinitely greater because when the site does come together, it will without question constitute the largest, high-FAR parcel which may be developed largely without demolition (only the Registry Building at 100 Nashua Street must be demolished) within a mile of the CBD. We are picking up the gauntlet at a point considerably earlier than most developers are inclined to do. At this stage, both the process and its result are hard to anticipate with any confidence; however, we are confident that our willingness to enter the fray at this early date is precisely the edge that makes our prospects credible.

The real challenges of this thesis are, then, to help identify the opportunity, create the site, secure development rights, and shape and inspire the design. Next to those challenges, market analysis and financial structuring are relatively straightforward. Everything we know and read about Boston suggests that there is a strong and growing demand for upper-income housing. Except for condominium conversions, the range of choices for the prospective upper-income resident is remarkably thin. Those two widely recognized facts establish the contours of the opportunity. They do not, of course, constitute a sufficient underpinning for a large,



multiple phase, ownership/rental project in a pioneering location. Although we have answered a priori the marketing questions "what" and "where," much more must be done to provide useful guidance on "how many," "for whom (how much)," "which amenities," and "when."

But we cannot hope to answer the marketing issues on a micro level, as applied to Sante Harbor. This will require a professionally designed marketing study. At an appropriate time (probably during the search for financing) we intend to commission such a study. Here, we must be content to outline the questions we expect the study to address, and the methodology we expect it to employ. This is done in the Appendix chapter on marketing.

Financial analysis is an on-going process in any development effort. Before a developer gets too infatuated with a location or a possible use, he should subject his enthusiasm to the discipline of basic feasibility analysis. That analysis will set forth a development budget and a projection of stabilized year income and expenses. If the return on the total asset is comfortably above the current threshold of long term financability, the developer may know enough to continue with the overall planning effort. A more detailed financial analysis, incorporating discounted cash flow principles, sensitivity of the returns to varying assumptions, and the risk-return tradeoffs which flow from alternative debt/equity structures, should logically await a better definition of the program, the timing, the market absorption, and the cost than we have at present. We will perform the basic feasibility analysis, we will compare in simplified form the financial consequences of developing rental vs. condominium housing, and we will explain the issues we expect to have to address in the search for Sante Harbor financing. The financial analysis is not central to this thesis because the project's life cycle financial

analysis cannot occur until its nature, scope, timing, and cost have been clarified.

The authors understand that their choice of topic does not lend itself readily to tight, cogent analysis. There is a temptation to be overly discursive and descriptive, to lay out as comprehensively as possible all of the many elements - physical, political, economic, financial, even historical - which will together determine the fate of Sante Harbor. Although contextual detail is not unimportant, it cannot be more than a backdrop for analysis. Of crucial importance is the ability to draw a coherent picture from the morass of accumulated detail. Analysis and synthesis, understanding, judgment and conclusions must follow the scrupulous amassing of background information.

Effective analysis must begin with an appreciation of the thematic underpinnings of one's investigation. This thesis has two core themes. On the one hand, we are studying the process of "getting started." One classic way to begin is with a business plan which moves from a modest investment opportunity through progressively larger or more complex undertakings to the entrepreneur's goal. Our focus, by contrast, is on a project instead of a plan. And not just any project, but one of broad scope and multi-layered obstacles. In essence, we are asking whether and under what conditions a fledgling developer can hope to make his debut with a "page one" project.

Our second thematic underpinning is more substantive. We are attempting to catalogue the issues that must be addressed in establishing the feasibility of a multi-phase, mid-to-high-rise, ownership/rental housing project in a pioneering downtown location. Under this broad umbrella, we will ask whether: the site can physically accommodate the program in a way which will appeal to the identified market; the market will absorb the

program, at the forecast rents/prices and times; the project can be built and rented/sold so as to achieve economic returns sufficient to satisfy both debt and equity investors; the site can be acquired and approved for the programmed use; and lastly, whether "the case for housing" will have to be based on other than a highest and best use analysis.

A NOTE OF THE NATURE OF THE DEVELOPMENT PLANNING PROCESS

The development partnership began with a back-of-the-envelope determination that a major housing project on the Sante Harbor site would be financable and profitable. As we progressed beyond an initial intuitive flush of excitement, it became apparent that success would necessarily depend on the solution to a number of interlocking, mutually dependent problems and opportunities; and that each of these problems and opportunities in turn posed multi-faceted, complex issues for thought and action. The way in which one set of issues was resolved would inevitably affect the context within which all the others had to be approached. The number of ways in which the pieces might fall together is daunting in itself, separate and apart from thinking through all their implications.

Sensible planning can do no more at the predevelopment stage than set forth a credible, realistic scenario linking the stages of the development process. The developer can have no doubt that the development effort will not proceed in precise conformity with the outlined scenario; but the very act of committing one possible scenario to paper will help to clarify the many ways in which each stage of the development process affects and is affected by, all the others. When, as will surely occur, the development effort goes off the track or takes an unanticipated detour, the developer must reassess his position. The objective at that point is to rethink the original scenario so that the desired goal can still be reached, albeit by a different route.

In the course of the development process, there will be many such changes in course. If the process were retrospectively mapped, it would resemble more a drunken rat's path through a devilishly convoluted maze,

than a laser beam ricocheting smartly off a communications satellite. If a developer truly appreciates that he cannot realistically hope ever to walk the straight and narrow, he will be far less likely to lose his way entirely when circumstances force him off the preferred path. The process of thinking through all of the steps involved in getting from the first flush of enthusiasm to closing the permanent loan will of necessity be lengthy and circuitous. If the developer has planned carefully and well, however, he will have armed himself with a mental "homing device". When forced to depart from the original flight path, he will mentally reset his bearings and plot the most direct new course to the desired landing area. If the craft is soundly engineered, and the navigational equipment up to the task of performing in turbulent weather, no possible succession of mid-course corrections will ultimately block the attainment of the original destination.

SITE HISTORY

### The North Station District

The North Station district, defined as the triangular area in Boston bounded by the Charles River to the north, North Washington Street to the east, and Merrimac Street, Lomasney Way, and Martha Road to the southwest, is a complex urban fabric containing threads of residential, institutional, commercial, industrial, retail, office and parking uses. Major automotive and public transportation nodes and a major sports arena dominate the area and to a large degree define its character.

The district includes three distinct areas; the Bulfinch Triangle, North Station, and the Nashua Street institutional area north of the Storrow Drive Ramps to the Charles River. It is directly abutted by Charles River Park, Government Center, and the North End (See Maps 1-5).

To best understand the area's complexities, it is helpful to briefly review the history of the North Station district.

#### Historical

It is the transportation systems which have had the greatest impact in shaping the area's physical characteristics and uses. From the early 1800's until now, the North Station district has experienced both economic vitality and decline due in both cases to the transportation systems.

Most of the land was originally a tidal marsh. In 1643 a dam was constructed across the mouth of the marsh, creating a pond which could be flooded at high tide. Additionally, a canal was dug connecting the pond with Boston Harbor. The flooding and receding waters powered a water mill on the dam, as well as saw and grist mills along the canal (See Maps 6,7,8).

In the early 1800's, the mill pond was filled to create the area now known as the "Bulfinch Triangle," bounded by Causeway, North Washington, and

Merrimac Streets. The triangular street pattern (See Map 9) was planned and designed by Charles Bulfinch, the noted Federal-style designer of Boston residences and institutions (most notably, the Harrison Gray Otis houses, the original portion of the State House, and the reconstruction and expansion of Faneuil Hall). The landfill development, which housed warehousing and manufacturing uses, was created using fill cut from the top of Beacon Hill. The canal was widened to provide improved access for goods shipped between the Middlesex Canal and Dock Square. The causeway across the pond was widened and became Causeway Street.

Rail use began rather modestly in Boston in 1826. Planning of the Bunker Hill Monument led to the construction of a four mile, horse-drawn railroad to simplify moving the granite, quarried in Quincy, to the water and then by barge to Charlestown. Four years later the Boston and Lowell Railroad was incorporated, followed a year later by the Boston and Worcester and the Boston and Providence lines. All three opened for travel in 1835.

The Lowell Railroad brought its tracks across the Charles River to a station created by filling further into the river than the original Bulfinch Triangle. The Boston and Maine Railroad and the Boston and Fitchburg Railroad came into Boston in 1844 (See Maps 10 and 11). The Boston and Maine station was in Haymarket Square. Several lines merged, and the remaining Railroads were consolidated into the Union Station (predecessor of North Station) by 1894. At that time, Union Station was the largest railroad station in the country, serving nearly 500 trains daily. Thus all of the northern and western railroads eventually came into the old Mill Pond region and early gave Causeway Street the railroad terminal character that it has today.



The new North Station and Boston Garden Building, the Madison Hotel, and the Analex Building were constructed in 1928 by the Boston and Maine Railroad. The canal had long since been filled in, as had the mill pond. The new building created a new wave of activity in the area, and began a period of revitalization of the North Station district. Excellent transportation connections served the area with North Station providing commuter and long haul rail to points in the north. The elevated Green and Orange lines provided transit connections to all other subway lines and further developed what was by then a major transportation node for both the manufacturing/wholesaling businesses and suburban commuters (See Maps 12 and 13). In 1953 the Central Artery was completed, easing traffic congestion in the area, improving the regional automobile highway system and establishing the present form and character of the North Station area.

The elevated transit and Central Artery structures created visual and environmental barriers at pedestrian level, blocking sunlight, creating noise, and rendering the area bleak and inhospitable. The area experienced nearly two decades of decline in the mid-fifties and sixties, a result influenced both by the construction of the transit structures and the concurrent decline of the West End residential neighborhood. Manufacturing companies moved out of the area, reflecting the more general trend of manufacturing companies preferring suburban locations.

There remained the traditional mix of uses in the area including institutional, office, furniture manufacturers, wholesalers, and retailers, and scattered residential. There was an increase in low-end entertainment and restaurant activities. The Madison Hotel closed and was later demolished, along with several lounges and rooming houses, to clear the site for the present GSA Building. The area still houses several fast food

restaurants, adult theatres, branch banks, liquor stores, an electrical supply house, a hardware store, and other assorted shops. The predominance of grade-level parking largely dedicated to government and institutional employees has had a negative effect on the area, as have the deterioration of the Boston Garden and the adult theatres and lounges that serve the area's most frequent patrons (See Maps 14 and 15).

Urban renewal efforts in the area began in the early sixties. The West End was leveled for what is now Charles River Park, a residential complex originally built as rental housing and currently being converted to condominiums.

During the 1950-1970 urban renewal programs, areas surrounding North Station changed uses. The Charles River Complex introduced high-end residential uses to the West End, the Massachusetts General Hospital expanded, and Scollay Square became Government Center to the south. In addition to the declining rail and increasing automotive traffic at North Station, the long period of redevelopment of the West End and Scollay Square areas tended to isolate the Bulfinch Triangle area, contributing to a pattern of disinvestment, neglect, and gradual deterioration in the 1970's.

In 1975, the Orange Line elevated structure was removed and replaced by a subway running under the Charles River. The Charles River Dam project was recently completed, and the Federal government's 850,000 square foot GSA building is presently reaching completion. These projects represent the public investment in the North Station area to date.

The BRA revitalization plan entitled "New Directions for North Station," produced in 1977, identified conflicts and issues for the area and proposed a three phase strategy for turning the area around. Several of the Phase I and II proposals for street improvements and land-use changes have

been implemented and have contributed to the gradual reinvestment in the Bulfinch Triangle.

Many of the older loft buildings in the Bulfinch Triangle have been or are being converted to office uses with private investments, the result of the pressures of increased demand in the Boston market for mid-priced office space and the public improvements in the area. With a generally low-rise building pattern, the dominant physical image at street level in the area is one of enclosing walls and barriers. The Bulfinch Triangle is the only sub-area with a sense of place, based on the scale, density, detailing and homogeneity of 19th century buildings.

The North Station area is now one of contrasts. It is discontinuous with some clearly defined sectors. The area has a rich and varied history as a transportation terminus and a manufacturing/wholesaling district, and is a gateway for those entering Boston from the north. There are pockets of artist's lofts still in the area, but most are being displaced in favor of office use. Causeway Street remains the most deteriorated area, especially below the elevated Green Line structure.

Land use north of the Storrow Drive ramps has been effectively landbanked until rail, highway, and riverfront improvement plans are finalized. The grade-level parking seems large in area and impenetrable. The area seems isolated from the Bulfinch Triangle because of barriers created by the elevated Green Line and highway structures, as well as the discontinuity of the street system. Activity patterns for the North Station area will become clearer when the GSA Building opens and the transportation issues are resolved. The GSA was attracted to the site contingent upon a City and MBTA commitment to remove the elevated line. This project is the

key focus of an overall urban renewal strategy for the area as promoted by the Boston Redevelopment Authority (BRA).

The zoning for the area remained inconsistent and was generally lower than other downtown areas with Floor Area Ratios (FAR) ranging from 2 to 4 (See Map 20) was compared with more prevalent FARs of 8, 10, and higher in other downtown areas.

#### Current Context

The North Station District has been the subject of considerable attention recently, focusing on three issues: depression of the Central Artery; relocation and depression of the Green Line; and a new/refurbished arena.

#### Central Artery Project; Timing and Impact (See Maps 16 and 17)

The City of Boston, together with the State, has requested funds from the Federal government to depress the Central Artery. The State Executive Office of Transportation and Construction (EOTC) has been conducting major planning efforts aimed at widening and depressing the Central Artery. The plan includes removing the ramps immediately behind the Boston Garden, replacing the southern connector ramp with a tunnel and the northern connector with a new ramp. This would greatly improve the characteristics of the area, as well as some of the traffic congestion everpresent at Leverett Circle. The impact of this project on the elevated ramp system and effects on other structures in the North Station area must be included in the site analysis. Approval of funding of this project is still pending in the U.S. Congress, and the timing of its implementation is still uncertain.

There are two major aspects of the Central Artery reconstruction project that will impact development of the site. First, the project itself is not a certainty. Design development will necessarily be different under

an existing site condition scenario than it would be if the Artery project is funded and implemented. Similarly, if only a portion of the Artery project is funded, the issues raised in the design process will change.

For example, under existing site conditions the designers will have to incorporate the connector ramps as they are, the Registry Building, the Spaulding Rehabilitation Hospital, and the commuter rail tracks. Under a partial funding scenario, one or both of the connector ramps will remain, changing the site context very little. However, under a fully-funded project the ramping system would be completely changed, the Registry Building would be demolished, and construction of an air-rights garage over the commuter rail tracks would be probable. As one can see, the uncertainty of the Artery project presents major design and siting problems.

Resolution of the design issues may demand postponement of design development until the Artery's fate is known. This does not preclude other development planning and coordination, as is suggested later in the design and politics sections, but the significance of the project and its impact on development in the area are central to the overall success of a major redevelopment of the North Station and cannot be overlooked or avoided. A decision on the funding of the Artery project is expected in 1985.

The timing of the Artery project adds another level of uncertainty to the redevelopment of the area. As proposed, the relocation of the connector ramps would take approximately 10-15 years from the date the Central Artery project commences. The North Station area will basically be a construction site for that period, hardly the best setting for a residential development.

However, other redevelopment could take place during the reconstruction of the Artery. Office development, parking, and transportation improvements could take place simultaneously with the Artery project if staging and

implementation of the various redevelopment projects is done logically. Coordinating these various projects will require governmental oversight. The most likely agency to oversee the initial redevelopment process is the BRA.

Therefore, the final designs and implementation of any redevelopment plan for the area should be closely coordinated with the timing and final design process of the Central Artery reconstruction.

The funding for the project rests on appropriation by the Federal government of highway improvement funds. These funds are generated by the federal gasoline excise tax, levied locally and theoretically reinvested in the on-going maintenance and improvement of the federal highway system. Taxes generated in each state are applied to improvements in that state. The funds for the project are available in Massachusetts' share of those federal highway funds. Application has been made for the funds and awaits final federal approval.

Green Line Project; Timing and Impact (See Map 18)

The Massachusetts Bay Transportation Authority (MBTA) has plans for removing the elevated section of the Green Line in the North Station area. The MBTA has under contract a design and engineering team for a major alteration of the North Station Transit Complex, including relocation of the elevated Green Line and a redeveloped commuter rail terminal. Its plans call for a tunnel under Accolon Way and behind the present Garden to a bulkhead beginning southeast of Leverett Circle, where the Green Line would surface and continue, elevated, to the Lechmere Station. The Green and Orange lines would share a below-grade station, dubbed the "Super Platform," which would connect to the commuter rail. Again, this project will dramatically improve the area by reducing the noise, increasing the

sunlight, and improving the aesthetics of the pedestrian levels below the tracks.

The prospect of major transit system changes at and under the proposed development site adds a set of complex planning and design issues which must be evaluated.

Removal of the elevated structure and construction of the tunnel could be accomplished within five years of the start of construction. A temporary bus service between Lechmere and North Station will be utilized until project completion, as will a turnaround system for the Green Line trolleys at the North Station/Canal Street station.

Federal funding earmarked for urban mass transportation as well as State transportation funds will be used for this project. Although funds have not been appropriated, the MBTA has completed plans for the reconstruction, an Environmental Impact Report has been submitted, and those whom we talked with at the MBTA and the state transportation agencies were confident that the funding would be approved this year. The GSA building was located in the North Station district only after city officials promised to actively pursue removal of the elevated structure. It appears likely that the funding for the project will be approved, given the substantial commitment in the GSA building by the federal government and the MBTA's extensive planning, design, and approval efforts.

Removal of the elevated structure could be accomplished by 1988, if funding is approved this year. It would positively impact the North Station district and remove one of the major barriers between Government Center and the river area. The area to the north of the connector ramps will not be directly impacted, as the Green Line reconstruction does not involve it.

Indirectly, the area will benefit from the improvement of the district and of the area.

Redevelopment plans for the area should capitalize on the site's access to all major transportation modes - public transportation, commuter rail, and the interstate highway system - and should emphasize connections to downtown. Improvement of the Green Line and removal of the elevated structure will do much to improve the district and attract additional investment.

Our assessment of the projects' probability of funding is 90%, based on our discussions with city and state transportation officials and the observance of federal investment in the district.



SITE CONTEXT

We began by looking at the site and the surrounding areas, trying to determine what opportunities and constraints to development were presented by the site itself in context with its' surroundings. We present these below, together with a brief discussion of the potential impact of these externalities on a residential development in the North Station area.

It is surrounded by several distinct neighborhoods and institutional/governmental complexes including: the Cambridge/Science Park/Industrial Park to the north across the Charles River; Charlestown to the northeast; the North End to the east; the Bulfinch Triangle/Arena area and Government Center to the south; and the Charles River Park Complex, Beacon Hill, and the MGH campus to the west. The evolving land uses in the area are still very much impacted by the complex of transportation systems converging on the site.

Neighboring Districts (See Map 19)

Cambridge/Science Park/Industrial Park (A)

Cambridge's southeast sector supports a variety of industrial uses along the northern river edge which, combined with the rail yards and the Boston Sand and Gravel Co., establishes poor visual quality for a development immediately across the river. The city is in the midst of a major redevelopment of the Lechmere Canal and a new Lechmere Green Line station located on the northeast side of the McGrath-O'Brien Highway. The city intends to support industrial activity in the foreseeable future; however, the Community Development Office recently began a major study of the area, expected to take approximately six months, and the MDC is hoping to improve the river's edge as a linear park directly opposite North Station. This will do little to improve the area, given the tremendous negative impact of the operating gravel pit and truck terminals. Interstate 95 and

the major connector ramps leading to the Mystic River Bridge separate the Industrial Park/Gravel Pit area of the north riverfront from Charlestown and further limit aesthetic improvement to the northern river edge.

#### Charlestown (B)

Charlestown is largely a residential neighborhood. The area has experienced significant upgrading recently, as young professionals and real estate developers have been drawn to the area for its proximity to downtown Boston and the relatively lower property values.

This community hosts several famous and well-attended historic attractions, namely the USS Constitution, Paul Revere Park, and Bunker Hill. A Freedom Trail spur has been proposed by the BRA to more closely tie the Charlestown neighborhood with the center city.

The area is primarily 4 and 5-story brick rowhouses constructed in the 1800's. Many of the buildings in Charlestown have historic significance. The Bunker Hill Monument stands at the crest of the hill that defines most of Charlestown, a tribute to the famous "don't shoot until you see the whites of their eyes" revolutionary Battle of Bunker Hill.

The U.S. Navy maintained a large complex of buildings on Charlestown's waterfront. The Charlestown Navy Yard has strongly influenced the overall development and character of Charlestown.

The shipping terminal on Charlestown's Mystic River waterfront is a major cargo distribution point for the Boston area.

#### The North End (C)

Historically, the North End has been a residential area for immigrants new to America and Boston. Primarily of four to six story brick rowhouse buildings in a very tight building and street pattern, the North End has been heavily Italian in character for many years. The North End is one of

the most physically and socially close-knit residential neighborhoods in Boston. It has a long tradition of ethnic foods, festivals, and friendliness. Long time residents of the area have recently become concerned by the pressures of condominium conversions and development in the area forcing out many families.

The auto traffic on North Washington Street acts as a barrier for pedestrian activity to North Station, with Causeway Street as the only connector between the two areas. Rehabilitation, renovation, and new construction along North Washington Street have improved the streetscape, and more can be expected as the area improves.

Government Center/Quincy Market (D)

Government Center and Quincy Market are major destination points for pedestrians and automobiles. Characterized by a mixture of low-rise, historic buildings, mid-rise brick and stone 19th and 20th century buildings, and modern, high-rise towers, the area houses the State and City Offices as well as numerous retail and office uses.

The Government Center Garage visually cut off the North Station area from the City Hall Plaza and the financial district. Many employees pass through the North Station area to and from work, primarily along Canal and Portland Streets.

Quincy Market and the waterfront act as prime commercial attractions for downtown activity. The proposed extension of the Freedom Trail along New Congress Street, through Canal Street and to Charlestown across the new MDC Dam will help reinforce the pedestrian connection between the Government Center/Quincy Market area and North Station.

Charles River Park (E)

Charles River Park is a residential complex consisting of approximately

2,250 units in 15-35 story buildings. The residential towers are relatively disconnected and placed in a seemingly random pattern. An important design issue regarding the redevelopment of the area north of the connector ramps is the location and type of pedestrian connector between the Charles River Park and the new development.

Beacon Hill (F)

Beacon Hill is predominantly a residential district consisting of 18th and 19th century brick townhouses. Considered to be one of the premier residential neighborhoods in Boston, Beacon Hill real estate commands some of the highest residential values.

Massachusetts General Hospital (G)

The MGH is located immediately adjacent to Charles River Park. The world-renowned teaching hospital occupies over 2,000,000 s.f. in 20 buildings 10 to 15 stories high and densely packed onto approximately 450,000 s.f. of land between Cambridge Street and Charles River Park.

MGH has made it clear that any development needing MGH land will have to include MGH expansion facilities as well as substantial hospital parking requirements. The hospital has projected institutional needs of between 100,000 and 486,000 s.f. of office and institutional space, including general services space and a specialized, 160 bed Alzheimer's Disease Clinic, and parking needs ranging from 2,500 to 5,000 parking spaces.

Existing Conditions

In principle, the mixture of activities in the North Station area serve the objectives of sound urban design goals. The mixture of arena, transportation, retail, office, institutional, and governmental uses should ensure continuous activity rather than the sterility of a single-use urban

zone. However, the physical structures supporting each of these uses have deteriorated badly, and the elevated Green Line and the connector ramps do little to improve the ambience of the area.

The BRA has been actively pushing removal of the Green Line structure and the connector ramps. The MDC has plans for the waterfront, the Mass. General Hospital is planning for new structures on its land, and the MBTA has plans to completely rebuild the commuter rail station. These improvements, as well as a renovated or newly-built arena, will change completely the tenor and character of the North Station district. Additionally, the guidelines for improvements to the Boston Garden property, as viewed by the BRA, will include improved pedestrian access from Causeway Street to the river's edge. Consequently, pedestrian access to the site will improve from the south.

The two BRA plans for the area, the 1977 "New Directions" and 1980 "District" both contain important policy directions for the whole district. They emphasize retaining the historical character of the Triangle, increasing development around North Station, and developing the area between the ramps and the riverfront for medium density mixed use. Both plans suggest the need for revised zoning of the area north of Causeway Street. The BRA has suggested the area be redeveloped in two phases. The first phase includes the area south of the connector ramps, and phase two includes the area north of the ramps. (See Map 20)

The "Change and Growth in Central Boston" report published in May, 1984 by the Greater Boston Chamber of Commerce continues to highlight the development opportunities for the North Station area. The report designates four "priority growth areas," including the North Station area, where "major

growth will be encouraged, even if departing from existing bulk and density patterns."

"The City should designate such areas [as the North Station area] as its highest priority for encouraging major, higher-intensity growth and development of a scale that cannot be adequately supported elsewhere. The City should then back that designation with actions: scheduling public facilities investments to support new growth, actively soliciting appropriate development, revising codes to allow the growth to occur, and adopting careful guidelines for its shaping, including preservation plans where appropriate."

A major factor in the future of both the North Station site and the area north of the ramps is the expansion plan being developed by Mass. General Hospital (MGH). This internationally renowned institution projects the need for more office space and substantial additional parking. Because MGH owns a majority of the land north of the ramps and smaller portions of the area south of the ramps, it will be essential to coordinate any redevelopment with the hospital.

#### Ownership and Use

The current land uses in the North Station area are shown in Map 14.

Present ownership patterns vary within the North Station area. The Bulfinch Triangle is characterized by small parcels and multiple private ownership for all portions except the state and city-owned highway and transit corridors which bisect the site. The North Station zone consists of larger parcels owned privately (the Boston Garden and Analex buildings), the City (parking area), and the Federal Government (GSA building), with smaller parcels controlled by MGH and the BRA. The area north of the ramps, the

proposed site, consists of larger parcels owned by MGH, the State, and the MBTA.

Site Access

Access to the site is excellent. Rail and public transportation services include: the Commuter Rail, serving the north and northeast suburbs as far away as Gardner, Lowell, Haverhill, and Ipswich as well as service to New Hampshire and Maine; the Green Line, which runs from Lechmere Station through the North Station area, and the Orange Line which runs from Oak Grove to Forest Hills; and the Central Artery which connects Routes 1, 2, 3, 28, and Interstate 93 at North Station.

Under favorable traffic conditions automobile access to the site is excellent from the north and west; congestion on the Central Artery can negatively impact accessibility from the south.

The proposed widening and depression of the Central Artery, as well as the proposed Third Harbor Tunnel, will greatly improve automobile access from the south. Completion of the Southwest Corridor Project will increase commuter access from the south, and the possible extension of the Green Line beyond Lechmere will generate still more commuter trips through the North Station district.

Local pedestrian and automobile access to the site is limited and confused. The Boston Garden, the GSA Building, the connector ramps, and the parking lots presently create a barrier to southern access, the commuter rail tracks eliminate ground-level access from the east, and to the north is the Charles River, leaving only the western edge access.

For pedestrians, the site is only a short walk to the North End, Government Center, Quincy Market, the waterfront, and only slightly further away, the downtown financial district.



### Circulation Patterns

A discontinuity of streets and pathways characterizes the district. A basic collector pattern exists around the perimeter of the site, and east-west on Causeway Street. Secondary streets are generally short and discontinuous. The interaction between existing modes of transportation and the North Station district is instructive, though inconclusive by itself, for projecting patterns for any redevelopment. The existing pattern is shown in Map 21.

### Traffic

The hierarchy of highways and roads provides excellent local and regional access to the site, as mentioned previously. Historically, Causeway Street has always been a terminus for the street network because of the extensive rail yards to the north side. As rail use declined, other land uses filled in but the street network remained subordinate to the Storrow Drive ramps and the Leverett Circle connections. Presence of the commuter rail tracks has precluded east-west connections on the river side of the ramps. Hence, all traffic from the west to Charlestown or the North End has been routed along Causeway Street. Causeway Street carries a variety of auto, truck, and bus traffic because it is the only east-west connection through the North Station district between Government Center and the Charles River.

Vehicular access to the district occurs at Leverett Circle from the west on Storrow Drive and at Causeway Street from the south. Access from the north artery occurs at Haymarket. Access back to the highway network is somewhat different, with west access remaining at Leverett Circle, north access at Leverett Circle, and south access to Causeway Street.

The local street network is tied into these connections as well as the surrounding downtown circulation. The complex system, however, is presently clear only to regular users. Narrow streets, parking lots, construction, and inadequate stacking space for highway ramps cause traffic jams at peak hours.

#### Mass Transit

The excellent transit access provided by the Green Line, Orange Line, and commuter rail is clearly a major asset of the area and site. The interface between the lines is awkward but relatively convenient because of the physical proximity. Presence of the two lines along Canal Street on the east side compounds the barrier effect of the transit corridor. The elevated Green Line structure on Causeway Street has long limited redevelopment of the south side and created a dark, unpleasant pedestrian environment at street level.

The commuter rail system remains as the only vestige of North Station, which in its prime was one of the busiest rail terminals in the country. What remains of long haul passenger rail has largely been transferred to South Station, as northbound passenger service has all but ceased (excepting the commuter rail services).

#### Parking

The parking context in the North Station area is currently in conflict between: State transportation policy which tends to discourage parking around a major transit terminal; City policy which places a lid on downtown parking; and private demand generated by the Boston Garden and MGH which, according to MGH officials, could fill as many as 5,000 spaces. The conflict centers around the coincidence of excellent automotive access at the intersection of west and north/south highways and transit access. The

North Station area would appear to be a logical place for a downtown perimeter parking terminus if ramp connections could be designed to withstand the additional loading. However, State and City planning policies recommend suburban locations for major automobile parking facilities, encouraging commuters and shoppers to leave their cars at the suburban locations and travel to Boston via public transportation (See Map 22).

#### City Services

Water, sewer, and steam services are available along Nashua Street. Boston Edison maintains a steam plant adjacent to the Registry Building, with main feeds along Nashua Street. Plans are to continue using this plant for the next 5-10 years. A major overflow sewer runs down Nashua Street and over the Charles to Somerville, and an interceptor sewer follows Causeway Street and Lomasney Way. High and low pressure water runs throughout the area, fed from a main 30 inch line in Traverse Street. In short, there appears to be adequate service in the area for major development (See Map 23).

#### Pedestrian

The pedestrian network reflects the local street system and follows several major patterns of movement. North Station serves as a destination for commuters at morning and evening peaks. They filter through the Bulfinch Triangle from downtown primarily, and secondarily from MGH through the Charles River Park complex and along Nashua Street. The area also provides inexpensive and dedicated parking areas for downtown and institutional office workers. The Boston Garden generates similar surges for events, with many patrons walking from downtown jobs, parking, or transit stops. In addition, there is a more random pattern of movement within the Triangle to retail and entertainment functions, and to the DPW

building (also known as the Registry building) on Nashua Street. Pedestrian paths are well-defined since the limited through connections north/south and east/west usually dictate a single, efficient path. Canal Street is the dominant north/south path, and Causeway Street the east/west walkway.

Canal Street sidewalk improvements have improved the North Station/Haymarket connection and have catalyzed revitalization of the Bulfinch Triangle. Causeway Street remains a dismal pedestrian environment with only the south-lighted Garden arcade providing some relief as a covered access to the entrances of the building. The elevated structure is the primary negative element on what would otherwise be a pleasant, broad collector street for the North Station area (See Map 24).

#### Open Space

The usable open space in Boston is concentrated along the Esplanade in Back Bay, the Common and Public Garden, and Waterfront Park. The North Station riverfront breaks the Charles River open space system in half, with the Esplanade currently ending at the Museum of Science and then continuing as a pedestrian way from the Charlestown Bridge to Waterfront Park. The Metropolitan District Commission, owner of the two riverfront parcels at either end of the water frontage, would like to expand its esplanade green belt riverfront park to include a linkage, presumably along the site's Charles River frontage. (See Map 25)

The district is conspicuously lacking in open space and greenery. Amenities are few, with the Canal Street improvements providing the only open-space attraction to pedestrians. Pedestrian paths are discontinuous and generally lead to North Station as a destination. The GSA building has eliminated the path along Nashua Street which used to connect the Bulfinch

Triangle with the riverfront. Perception of the river is virtually nonexistent to pedestrians.

Linear park-like treatments such as those on Canal Street could be applied to Causeway Street, Nashua Street, Merrimac Street, North Washington Street, and other pedestrian connectors. Such measures would dramatically improve the street environment and provide a sense of more open space.

#### Proposed Transit, Highway, and Parking Changes

Circulation, access, and pedestrian activities will be improved if either or both of the transportation projects is implemented. The State and City are actively promoting depression of the Central Artery which will improve vehicular access to and through downtown. These measures will improve access to the North Station area as well.

#### Transit

The multi-faceted transit project proposes to depress the Green Line under and behind the Garden with a new stop under Accolon Way and remove the elevated structure on Causeway Street as far as Leverett Circle. The project is proposed to be a phased, cut-and-cover relocation. The new tunnel would be constructed first and the elevated structure removed upon completion. The new "Super Platform" would connect the Green and Orange lines and would offer an easy transfer point to the North Station commuter trains.

Another proposed improvement is the extension of the commuter rail tracks to the back of the Garden, providing more direct patron service to North Station. While the City has questioned the necessity of this extension, the MBTA has indicated that it is required for the operation of 10 car trains, given the location of switches to the north. This detail will affect the final designs of a new train station to be built as part of

a new or renovated arena. All these measures would improve access to the area and reduce negative transportation impacts on surrounding land uses.

#### Highway

The preliminary plans for depressing the Central Artery submitted by the State in the "June 1983 Supplement to the Draft EIS for the Third Harbor Tunnel, Interstate 90/Central Artery, Interstate 93" include replacement of the Storrow/Leverett Circle connections to the Artery with a combination of tunnels and elevated roadways, depression of the artery southward under Causeway Street, and alteration of access points to and from the artery. Such measures would be accompanied by local street improvements including extension of the east/west Traverse Street. The depressed artery would provide air rights and joint development opportunities to help restore the Triangle plan and eliminate the present barrier to the North End.

Current plans have not been finalized on the Leverett Circle ramp connections. These will have a major impact on the proposed River esplanade extension and the redevelopment of the BRA phase II site. The construction period for the DPW project is projected to be 8 to 12 years.

#### Parking

There are already two preliminary proposals for new parking facilities in locations in the North Station area. The first proposes an interim lot for North End residents between Canal Street and the Central Artery during the Central Artery construction process. The second is an air rights structure over the commuter rail tracks north of the Artery ramps combined with other development by MGH. The MCCA, in its' "Multi-Purpose Arena Feasibility Study: Final Report" prepared by Howard Needles Tammen and Bergendoff in November, 1984, concluded that the "incremental parking demand in the North Station area . . . is best met by development by the private

sector, specifically the Massachusetts General Hospital, at a site north of the Storrow Drive ramps." State and City policies for the North Station district are potentially in disagreement with construction of parking terminals at a major, multi-mode transportation nexus.

HISTORY AND CURRENT STATUS OF ARENA PROPOSALS



In 1973, the Bruins and Celtics owners agreed to build an \$18.5 million, 18,000-seat arena in the center of a city-planned redevelopment project in the South Station area. In 1974, Boston Garden owners withdrew their support after a dispute over projected operating costs. In 1975, Delaware North purchased the Boston Garden.

Real estate developer Mortimer Zuckerman announced an agreement for an arena facility among the Bruins, Celtics and Boston Lobsters. The agreement, which outlined plans to create an independent arena authority to build, own, and operate a \$35 million facility, was defeated in 1977 when the Legislature refused to back the \$17.5 million bond issue needed to begin construction.

In 1979, the BRA released the "Development Plan for North Station District," prepared for the BRA by Moshe Safdie and Associates, Inc., which called for comprehensive development in the North Station area. The Plan also called for a renovation of the Boston Garden.

In 1980, the Boston Celtics, in cooperation with Ogden Leisure Co., the owners of Suffolk Downs, studied a privately-funded arena to be located on the grounds of Suffolk Downs in Revere. After spending approximately \$400,000 on surveys, plans, and permits to create a 20,000-seat arena, the project was cancelled.

Early in 1981, the Delaware North Companies, Inc., parent company of the New Boston Garden Corp. and the Boston Bruins, announced plans for a publicly-supported redevelopment of the fire-damaged Rockingham Park complex in Salem, New Hampshire. In addition to revitalizing the horse racing program and adding a greyhound racing program, the promoters proposed a multi-purpose sports and entertainment complex which would house the relocated Bruins hockey team. The New Hampshire State Legislature voted

down the state-funded incentives sought by Delaware North, and the proposal was dropped.

In response to the prospect of the Boston Bruins moving to New Hampshire, an "Arena Committee" was organized by U.S. Senator Paul Tsongas and other community leaders to develop a proposal for a new arena in the Boston area. The Committee's report, prepared with the assistance of the BRA, was issued in August, 1981.

The report recommended the construction of a new arena facility to the rear of the present Boston Garden, including some associated parking capacity. The Committee also called for the establishment of an independent, State-level "Bay State Arena Authority" to oversee construction and subsequent operation of the facility. Revenue bonding capability of the approximately \$50 million construction cost was recommended for the proposed Authority. Finally, the Committee recommended that the State hotel tax be increased from 5.7% to 8%, with the increased taxes within the Interstate 495 Loop pledged to cover debt service on the proposed Arena Authority bonds.

In 1982, the State Legislature, focusing on the fiscal crisis in the City of Boston, enacted the "Tregor Bill." Included in this act was the creation of the Massachusetts Convention Center Authority (MCCA). Among the MCCA's initial legislative mandates was the authority to take over management of the Boston Common Parking Garage and the construction of a convention center. The enabling legislation also authorized a feasibility study of a multi-purpose arena for the Boston area.

In 1984, the MCCA presented its feasibility study for the construction of a multi-purpose arena. The study concluded that a new 17,300 seat arena at North Station is the preferred alternative to renovating the existing

Boston Garden structure. The project would be funded by a 2.3% increase in rooms tax and include office and retail space.

#### Current Proposals

There are three groups contending for the right to build/rebuild the Boston Garden: the Massachusetts Convention Center Authority (MCCA); a joint partnership between Delaware North, which owns the Garden and the Boston Bruins, and Lincoln Property Co., a Dallas-based development firm; and H.N. Gorin Associates, Inc., a Boston-based management/development firm.

#### MCCA

The MCCA has requested Legislative approval of a \$141 million bond issue to be funded by increasing the hotel/motel tax, proceeds to be used for site acquisition and construction costs of the new arena. The MCCA's preferred site is the land immediately north of the existing Boston Garden on land owned by the City of Boston with air rights development over the commuter rail tracks.

The MCCA would purchase the Boston Garden and demolish it once the new arena was completed, selling the development rights for two office towers to a private developer. The MCCA would fund part of the proposed galleria connecting the office, retail, arena, and transportation uses. Finally, the MCCA projections show the city receiving approximately \$2.4 million in annual tax revenue and a one-time linkage payment of \$2.5 million.

#### Delaware North

Delaware North and Lincoln Property Co. have proposed a \$325 million, 2 million square feet, privately-funded development which would include an \$18 million renovation of the Garden, a 30-story and a 25-story office tower, 170,000 square feet of retail space, a 15-story, 300 room hotel, and a 1500-car parking garage. Although Delaware North owns the Boston Garden

property, their proposed development would require obtaining ownership of the municipal parking lot behind the Garden.

This proposed development would generate approximately \$8.2 million annually in tax revenue and a one-time linkage payment of \$8 million.

H.N. Gorin

H.N. Gorin Associates, Inc., in association with ex-senator Tsongas, has proposed a \$1.2 billion, 5.6 million square feet, privately-funded development which would include a 15,500 seat arena, two 51-story and two 33-story office buildings, a 70-story tower including a 900 room hotel and ten floors of luxury condominiums, one 38-story and two 11-story residential buildings, and parking for 5,000 cars.

The proposed development requires obtaining ownership of the Boston Garden property, the municipal parking lot, air rights over the commuter rail on both sides of the Central Artery ramps, and approximately 5 acres of land owned by the Massachusetts General Hospital, a total requirement of approximately 18 acres of land.

The development would generate \$24 million in annual taxes, and a one-time linkage payment of \$19.2 million.

Current Status

The arena proposals have received a great deal of attention recently. Significant developments occurring in June and July, 1985 have all but assured Delaware North victory. Several key development issues have been highlighted in the context of the decision-making. These are presented in the following discussion of the most likely scenario for the arena property.

The Gorin plan has been all but defeated for two reasons; first, they did not control any of the land they proposed to develop and second, their plan was not in keeping with the current thinking of the BRA. The

development issues raised here are obvious. Without site control (or, at a minimum, holdings within the proposed development parcel) the proponents had very little chance of success. Add to this the fact that MGH has made it clear, on several occasions, that they were not in support of the proposal, which included a substantial amount of development on land owned by MGH, and that they would consider any attempt to secure possession of their property hostile.

Any successful land taking would necessitate public taking by eminent domain. The BRA did not publicly support the Gorin plan, and thus would be unlikely to agree to support eminent domain takings. Any development, especially one as comprehensive, ambitious, massive, and costly as the Gorin proposal must secure the necessary support and approvals from the public planning agencies. In an area that has been targeted as one of three or four in the city where intensive development will be allowed, Gorin was extremely presumptuous in its development planning, strategy, and publicity.

The Massachusetts Convention Center Authority proposal, thought by many to be the strongest candidate until late in May, has apparently been abandoned for two reasons; present, on-going negotiations with the major tenants (the Celtics and the Bruins) and lack of legislative support for the necessary public funding. The development issues raised here are the economic and financial feasibility of the development.

As described earlier, the MCCA was created in part to evaluate the potential of a publicly-owned and operated arena/convention facility in Boston. Several sites were considered, but the Boston Garden property was recommended for access and competition reasons. The site provided superior automotive and transit access, and any public arena/convention development on alternate sites would have to compete with the Boston Garden. For these

reasons, a public taking of the Boston Garden property combined with related adjacent development was recommended.

Recent developments have rendered the MCCA powerless to pursue the public arena proposal. Delaware North, owner of the Bruins (one of the prime tenants), announced in June that negotiations between the Celtics owners and Delaware North of a long term lease guaranteeing Celtics tenancy at Boston Garden were nearing completion. Without the Bruins and the Celtics, the public arena would have no tenants. Without prime tenants, the feasibility of the arena became very doubtful.

The funding for the public arena was widely expected to be included in the 1986 State Budget. However, when the State Budget was passed on June 29, 1985, the necessary funding approval was not included. In fact, an amendment was offered earlier in the House which would have allowed funding by splitting the hotel-motel tax, and was overwhelmingly defeated by a vote of 154-0 (Boston Globe - July 2, 1985). Apparently Senate President Bulger, a strong supporter of the public arena proposal, had not secured the necessary legislative approval, and the arena idea died.

Apparent winner by virtue of their patient involvement and tenant and property control, Delaware North has publicly agreed to a substantial renovation of the Boston Garden and, in partnership with Lincoln Property, construction of office, retail, hotel, and parking structures. By carefully playing their control and additional development cards, Delaware North has been able to out last the other players in the bidding-up-the-pot arena game and appears to be the player that will ultimately claim the public approvals kitty.

PREVIOUS PLANNING EFFORTS

Safdie Master Plan

"A Development Plan for North Station District" was prepared for the BRA by Moshe Safdie and Associates in 1979. The plan, as described by Boston Mayor Kevin H. White in the foreward, "is dramatic, exciting, and ambitious." In the plans preface, BRA Director Robert Ryan suggested that, "because of the market forces building in this area, we can expect development that will include new residential, commercial, office, hotel, and retail space, as well as significant new access to the waterfront for the people of Boston."

It is the residential component of the Safdie Master Plan that we first chose to explore in our thesis. It was our belief that a residential community could be successful on the site, and we were initially intrigued both by the plan's ambitiousness and the idea of creating a residential island. We present the Safdie Plan as a backdrop to our thinking. The residential component, sans island, is a loose model for what we would hope to achieve in the ultimate development. We will present the Safdie Master Plan, outlining the overall plan for the district and highlighting the residential component.

Combining private and public funding initiatives, the plan included extensive transportation improvements, increased commercial and retail activity, and more innovative riverfront development, principally creating an island in the Charles River for over 1,000 new housing units.

Safdie looked at the entire North Station area and proposed development of the three sub-areas, the Bulfinch Triangle, the Garden/North Station complex, and the land north of the connector ramps, to include the following (See Maps 26 and 27):



### Bulfinch Triangle

Mixed commercial, wholesale and office uses are located in renovated structures (500,000 square feet) and in new construction (150,000 s.f.) matching the existing character of the Triangle.

### Garden/North Station Complex

Safdie envisioned reconstructing the area, combining the train, transit and Garden activities on the north side of the building and major new office and commercial uses, totalling 1,400,000 s.f., surrounding a central space, establishing a Rockefeller Center-type of open space. The new development would include 1,500 parking spaces, replacing those in existing surface parking lots.

### Residential Island

Safdie proposed dredging a 180 ft. wide canal north of the connector ramps (and under the railroad tracks), creating an island on which would be built 875 to 1,100 residential units in mid and high rise buildings.

Safdie proposed a phased development of the area over a fifteen year period. The plan also required that several public initiatives be taken to ensure the success of the plan, as presented below;

### Public Initiatives

#### Immediate (1-3 years):

- \* - Canal Street improvements (implemented by Fall 1980)
- Green Line structure on Causeway Street removed, and interim bus service between Lechmere and North Station (30 months).
- Lomasney Way and Merrimac Street widened from Leverett Circle to Government Center garage (24-36 months).
- \* - Billerica Street block cleared and prepared for development (36 months)
- Commuter Rail Station improved including possible extension of the

tracks and connections to the Green and Orange Line (36 months).

Short Term (4-7 years):

- \* - Nashua Street closed to arterial traffic (4 years)
- Permanent relocation of the Green Line to Lechmere (4-7 years)

Long Term (8-15 years):

- Northbound Storrow connector relocated to connect with 195/93 (8-10 years).
- Southbound Storrow connector to the elevated artery rebuilt on grade or via tunnel (10-12 years).
- Existing Storrow connector is removed, either totally or in part depending upon the completion of new southbound connector (8-12 years).
- Refurbish or reconstruct below-grade central section of artery (12-15 years).
- Relocate on grade or depress the commuter rails.

Although some of these recommended public initiatives have been or are in the process of being completed (identified with an asterisk, \*) a number of the seemingly most important recommendations have yet to reach the implementation stage. Emphasis must be placed here on the uncertainty of the proposed arterial reconstruction plans. Any development of the site must include the present system as part of the overall site plan, allowing for worst case site analysis. Subsequent implementation of the proposed plans will only improve the characteristics of the development but must not be relied upon in site analysis and design.

Wallace, Floyd Report (See Map 28)

Initial discussion of an air-rights parking structure have recently focused more generally on the planning of the entire area north of the ramps. Wallace, Floyd and Associates prepared a report for the Executive

Office of Transportation and Construction (EOTC) recommending a realigned Nashua Street bisecting the area from the rear of the GSA building to 100 feet from the river's edge, and then running parallel with the riverbank to Leverett Circle.

Two development parcels, approximately 5 acres each, would be created on the east and west side of the realigned Nashua Street, as well as sufficient access, queing and ramping space for a major air-rights parking garage completely covering the commuter rail tracks to the railroad bridge. A pedestrian link over the tracks, via the new garage would be constructed which would complete the connection of the Charles River Esplanade system with the Harbor Waterfront Park.

This plan would involve substantial negotiations with the MGH, the DPW, the MDC, the MBTA and the City of Boston. In discussions with Brian Thompson, a Boston architect familiar with the MGH's needs and the Wallace Floyd report, several attractive options possible within the report were raised. MGH would lose some of its land, which totals approximately 306,000 s.f. However, a land swap might be arranged between MGH, the DPW, and the City which would effectively add developable area for MGH (40%-60%) and the City. The 100 feet wide strip north of the realigned Nashua Street from Leverett Circle to the railroad bridge would become an MDC park, continuing the present Esplanade system toward the harbor.

The plan would further necessitate negotiation between the MBTA, an air-rights garage developer, and the MGH, which has a substantial parking as well as institutional requirement in the area. Finally, negotiations for control of the DPW property will be necessary for the development assemblage. Under the Wallace, Floyd plan, the "Registry" building would be demolished and the site cleared for development.

The proposed Central Artery project would impact this plan in a number of ways. If the connector ramps are reconstructed, it would involve several temporary and long-term takings. Approximately 24,000 s.f. of MGH land adjacent to the present ramp structure would be temporarily taken for a cut-and-cover southern artery/Leverett Circle connector tunnel. Additionally, the land immediately behind the "Registry" building would be taken permanently for the new ramping system between Leverett Circle and the northern artery. This would eliminate the present loading locks on the rear of the Registry building and seriously impair the building's useability. Although demolition of the building seems more probable under the artery reconstruction scenario, the DPW currently has plans to renovate the building.

Clearly, the various Federal, State and local planning agencies do not have totally congruent ideas regarding the long term land uses in the North Station area, as evidenced by the radically different plans submitted to the BRA (The Safdie Plan) and the EOTC (The Wallace, Floyd Report). Undertaking a development within this complex environment presents many planning and design complications. Coordinating the various interests of the present and potential landowners in the area adds many levels of negotiating, coordinating, compromising, and cajoling toward a mutually-acceptable overall development plan for the area. This is especially true of this plan, which adds the additional complexity of land swaps.

The North Station district remains a highly complex area of the downtown with a rich past and promising future. The basic framework for land use has been set and needs to be fine-tuned as state and MBTA transportation projects and implementation procedures are finalized.

The general image of the North Station area is one of small, discrete, and legible sub-areas. Taken together, they lack continuity of pathway, scale, pattern, land-use, building style and vehicular access. The overall impression is one of confusion and fragmentation with some concerns for public safety.

The area continues to be dominated by transportation uses and their various positive and negative impacts. A clear understanding of the existing and proposed circulation in and around the site is essential for a functional and feasible redevelopment of the area. The two transportation projects must be considered as options until federal funding is assured, and will have critical impacts on the site design.

As identified by the MCCA, the following land use issues should be considered in the ongoing redevelopment of the area.

- The two transportation projects will have significant implications for redevelopment potential and plans. Any project in the area will have to contend with long-term (8-15 years) disruption in the area caused by potential artery reconstruction. District plans will have to be refined pending funding and schedules of these projects.
- The status of the Central Business District office market and related planning will have to be carefully coordinated with the BRA's Phase I guidelines.
- MGH plans will have to be coordinated with the BRA phase I and II plans.
- Rezoning should be considered by the City in parallel with phase I and II plan finalization.

- The existing Garden site has substantial redevelopment potential with the removal of the elevated Green Line structure and construction of a new arena immediately behind the present Garden.

THE SANTE HARBOR SITE

The larger site location is considered to be the land bounded by the Storrow ramps, the Charles River bank, and the MDC Dam. This site includes the "Registry" Building, the Spaulding Rehabilitation Hospital, parking for MGH and DPW, and the commuter rail tracks. Although this thesis focuses on an individual component (residential) of an overall mixed-use plan for the area, obvious consideration must be paid to the ultimate, overall plan for the area.

The Sante Harbor site is part of the parcel north of the connector ramps. Because of the complexities involved in the multiple ownerships, we purposefully have not chosen a specific piece within the parcel. There are several possible scenarios to ultimate development of the area, each requiring a different approach by C-G Sante Harbor Partnership. It is for this reason that we have not anchored our residential community.

We have, however, established clear development guidelines, analyzed the impacts of varying Floor Area Ratios (FAR), unit sizes, and number of units to the amount of land necessary for development, and proposed a well-developed idea of what, where, why, and for whom this development is intended.

#### Ownership and Intended Uses

Ownership of the site is shown in Map 29. As is apparent from the map, MGH is the only private landowner north of the Storrow ramps. Other landowners are the Commonwealth of Massachusetts' Department of Public Works and Metropolitan District Commission, the City of Boston, the Massachusetts Bay Transportation Authority, the B & M Railroad, and the Trustees of 140 Trust. Public-held land north of the ramps comprise nearly 70% of the total area.



The MGH and the MBTA have discussed a major development including air rights construction over the tracks. The hospital foresees substantial internal office and parking needs and would like to develop most of the area immediately adjacent to the connector ramps. Because MGH owns most of the land in this area, including the Spaulding Rehabilitation Hospital, any development proposed for the riverfront must coordinate plans and design to integrate the total area.

The Department of Public Works owns the majority of the land on which our proposed development would be built. Its' primary use is parking for the government employees working in the "Registry" Building. The Department does not have any plans for the land.

The anticipated changes in the land-use, redevelopment and transportation systems in the North Station area place constraints on the site design as well as the present opportunities for revitalization of the area and its principal activities. The fact that a comprehensive, coordinated North Station development policy has not yet been formulated by the City, State, and Federal governments presents additional complexities for any development in the area, be they privately-sponsored by the MGH or publically by any one of the various public agencies in the area. However, the lack of an overall plan for the area is also a significant advantage to the partnership. We can and will endeavor to incorporate objectives previously expressed by these various players concerning urban renewal goals and criteria in our development planning and strategizing.

#### Proposed Development

The C-G Sante Harbor Partnership believes that there is a market, that the North Station location is viable for housing, and that we have the

capabilities to assemble the development team necessary to accomplish the project.

It is our intention to secure control of the residential portion of any redevelopment occurring in the site area. Our program will depend in part on the final land area and FAR allowed for residential development. For the purposes of the thesis, we will present several alternatives and their impact on the overall project.

Compare, for example, a 3, 4, or 5 acre site with FARs of 4, 6, 8, and 10. The following table summarizes the maximum allowable gross building square feet under each of these possible scenarios.

<u>Acres</u>	<u>FARs/Allowable SF</u>			
	<u>4</u>	<u>6</u>	<u>8</u>	<u>10</u>
3	522,000	784,000	1,045,000	1,300,000
4	700,000	1,045,000	1,400,000	1,750,000
5	870,000	1,300,000	1,700,000	2,200,000

As is readily apparent, the potential gross building area allowable varies greatly with area and FAR changes. We are faced with the possibility of a similar range of allowable area and FAR, namely a development ranging in size from 522,000 square feet to 2,200,000 square feet.

The development will be significantly different at 522,000 s.f. than at 2,200,000. It is our intention to involve ourselves in the on-going planning in an attempt to guide the final planning guidelines in the direction of an allowable gross area of 1,300,000 s.f. This will allow us to include in the development elements which would not be possible at 522,000.

We want to include different types of units to appeal to different segments of the residential market. We surmise that there are three to four

different sub-markets likely to be attracted to our development; "Yuppies," two wage earning households anxious to live in the city; "Empty-nesters," both working and retired, who would like to be closer to the cultural and social attractions of the city; and "Mingles," young professionals choosing to share living expenses who would like to live close to where they work. There may even be a market of young families wishing to live in the city but unable to find housing large enough for a growing family, yet affordable.

Our program is necessarily vague at this point. Without knowing who the ultimate user(s) will be and therefore which of the virtually limitless possible amenities to offer, what the square footage of each unit will be, whether the units will be rental, rental/sale, or sale, and without knowing exactly where the development will be on the site it is fruitless to develop a specific program. Rather, the program should not be finalized until the site and marketing questions are answered.

By process of derivation we can take a first cut at what the hypothetical development program would look like. If we determine that the average unit size should be targeted at approximately 1,000 s.f., that the average efficiency of apartment and condominium buildings is 85%, that we are targeting a development of approximately 1,000 units, and that there will be a structured parking requirement of 1.5 spaces per unit (at approximately 350 s.f./space) the mathematics suggest 1,176,470 s.f. of residential construction ( $1000/85\% * 1000$ ) and 525,000 s.f. of structured parking ( $5 * 1000 * 350$ ). Referencing the FAR Table, a development of approximately 1,200,000 s.f. is possible on 5 acres with an FAR of 6, on 4 acres with an FAR of 8, and on 3 acres with an FAR of 10 (or densities of 200, 250, and 333 units per acre, respectively) if parking is not included in FAR calculations, and on a 5 acre site with an FAR of 8 and on 4 acres

with an FAR of 10 (densities of 200 and 250 units per acre) if parking is included in FAR calculations.

We hope to persuade the BRA and MGH to include a 5 acre site with an FAR of 6 (excluding parking), a density of 200 units per acre, in the redevelopment plans for the area north of the ramps. Our recommendation will be to place the residential development in the 5 acre parcel to the west of the realigned Nashua Street created in the Wallace, Floyd report.

The overall impact of the varying site size and FAR on the character of the development will be minimal, given the necessary minimum FAR of 6-7. For example, a 13 story, elevatored, approximately 40-unit, apartment building with on grade parking for sixty cars in an urban location represents an FAR approximately 2. Once the density increases beyond this type of high-rise density, the impact on the urban fabric and character is considerably less than the impact of going from a single-family neighborhood, whose FAR might reach .2, to a rowhouse density of approximately .5, to a 6 story elevator apartment density of approximately 1.4, to the 13 story density of approximately 2. Alternatively, an FAR of 6 allows construction of 6 times the number of square feet of land on the site; a six-story structure covering the whole site or a twelve-story structure covering half the site. Similarly, an FAR of 10 implies a ten-story structure covering the entire site or a twenty-story structure covering half the site. The difference between six and ten stories and twelve and twenty stories makes little difference to the general character of the development. FAR is simply a measure of the allowable density of development. When FARs of 6 to 10 are initially called for, a dense, urban development is implied. They require mid-to-high rise construction with little open space and virtually no private open space. Structured parking

becomes necessary and virtually all of the site is taken up by the development structures.

The real measure of the relative, qualitative impact of projects which vary in size and density (FAR) is gained after the project is completed from the end users and critics. A magnificent design can make a project with an FAR of 10 seem intimate while another project with a much lower density may seem exposed, crowded, and unfriendly.

Once the density has been determined for the development the next critical question is; how much housing, on what size parcel, and in what location is needed (either in each phase or the whole project, if no phasing is involved) to achieve the elusive "critical mass" necessary for a successful project?

There are two measures of a project's success; financial return and market acceptance. Financial success, crucial to the development entity, may be measured by financial analysis. Generally, there are three components to the financial returns of a project; current cash flow, tax benefits, and residual value realized upon sale or refinancing.

Market acceptance can be assessed by measures such as vacancy rates, competitive rental/sale prices, and user surveys. The issues involved in market acceptance revolve around a project's livability. User surveys generally focus on questions about the convenience of parking and services, the safety of the project, unit size and efficiency, privacy, and "quality of life" issues such as the open space and recreational facilities available. Successful projects are those which are highly rated with low vacancies.

Successfully developing a site with the characteristics of the Sante Harbor site will require extensive analysis of other similar projects. We

recognize that the site is a pioneering location with significant constraints. It is surrounded by 40 feet high arterial ramps on three sides, major rail activities occur on site, the soil conditions are unfavorable, and it is separated from the rest of downtown Boston by severe psychological and physical barriers. A successful development will have to create its environment completely, as there is no present pedestrian or residential fabric at all to the site. Further, the development will have to overcome the constraints of the site. The uncertainty of the Central Artery and the elevated Green Line projects add yet another set of development timing issues.

If the DPW secures funding for the Central Artery project, the site will be in a construction zone for 10-15 years. It will be crucially important to track the legislative process responsible for or influential on the artery legislation, and to formulate contingency plans for possible legislative results. For example, if the DPW secures funding in 1985 and begins to implement the reconstruction plans, it is unlikely that a residential development would be successful during the course of the artery reconstruction. The most likely result would be to postpone development until the reconstruction of the adjacent structures is complete. This could mean a 5-10 year postponement period.

There are examples of residential projects which have been successful on sites similar to the Sante Harbor site. Battery Park City in New York, a phased residential rental project, has been successful despite the phasing and construction activities of successive phases. Initially an industrial area with little or no residential identity or pedestrian activity, Battery Park is an excellent example of the "critical mass" necessary to attract tenant interest in a pioneering location, while the continuing construction

of successive phases has generated noise and activity not usually associated with a residential development.

The Golden Gateway Center in San Francisco is on a site with characteristics similar to those of North Station. It is immediately adjacent to an elevated highway structure, was primarily industrial in character, and had no residential identity. Located on nine acres, the Center includes 1,196 apartments, 58 single-family townhouses, and 60,000 square feet of retail space in four 20-26 story towers and three city-block size clusters of 4-6 story buildings. It boasts an automobile-free pedestrian environment, interior courtyards and parks, and recreational facilities. The Center has been fully occupied since its completion, testimony to the successful creation of a community on a once-blighted site.

Locally, redevelopment of the Charlestown Navy Yard required overcoming significant site constraints similar to those of the site. The Yard has numerous 4-8 story industrial-type buildings and numerous piers. It is between the arterial structures leading to the Mystic River Bridge and the Boston Harbor. It is a marginally-pleasant, 20-minute walk from the Yard to Haymarket on a good day, an unpleasant, exposed walk during inclement weather. Redevelopment to date has included a residential rehabilitation of one of the buildings, a 500 slip marina, a waterfront restaurant, a convenience store, some office development and some landscaping and grounds improvement associated with the rehabilitated areas. The apartments rented immediately and have been almost fully occupied since their completion. The Yard has been successful by introducing enough related activity, such as the restaurant, the store, the marina and the site improvements, to make the residential component successful.

These projects range in size, both in terms of land area and number of units. They have in common, however, the initial goal of creating an urban residential fabric where there was none in areas that were barren, industrial wastelands. It appears that the "critical mass" can be as little as 250 units, with substantial related improvements (the Charlestown Navy Yard), to over 1,200 units (the Golden Gateway Center). Our initial target project size will be a parcel of approximately 5 acres, with a potential first phase development of 1,500 parking spaces, some retail and office space, and 250 residential units. This "first-cut" program incorporates enough of each of the uses to create the "critical mass" necessary for a successful project.

However, careful analysis of other similar projects will have to be undertaken. A fact-finding tour of 5 to 10 other projects should be made, preferably with members of the design team, to familiarize the team with the elements necessary to incorporate into the final design for Sante Harbor. Particular attention should be paid to site constraint issues and how the other projects were able to overcome the problems of development in a pioneering location with a negative identity on a barren site adjacent to present and future construction projects.

Careful consideration must be given to minimum set-back distances required to mitigate the negative impacts of the artery structure, orientation and massing of the buildings to create buffers, design and construction of units with the ultimate users in mind, and introduction of open space, landscaping, and related activities such as retail, restaurant, and recreation facilities in necessary numbers to achieve the successful "critical mass."



It should be pointed out that the Charles River Complex is also a large, residential development adjacent to the site. The Complex has often been criticized for its haphazard and somewhat barren site layout and aesthetically unimpressive building design. It has a very low vacancy rate, however, and measures up to what some developers would call a successful project. We do not feel that the Complex has been successful in creating a community. There are very few residentially-related activities in the Complex, the buildings are sited around parking areas, the pedestrian circulation focuses on barren pathways, and the level of amenities is sparse. We will approach the development of Sante Harbor partly with the attitude of wanting to be the opposite of Charles River Park.

DESIGN CRITERIA AND THE DEVELOPMENT TEAM

The design for a residential complex on the site should emphasize the water access, pedestrian circulation, open space, view corridors, and distant views from higher floors (See photographs in Appendix). Additionally, the varied requirements of the sub-markets anticipated must be accommodated within the development.

Elements of both the Safdie Plan and the Wallace, Floyd report should be incorporated in the final plan for the area. Safdie's vision of an 875-1,100 unit residential component mixed with office and retail development is essentially our's as well. His vision of an automobile-free environment focusing on pedestrian spaces and networks will be incorporated in our design. Parking below-grade, perhaps combined with a two-story platform which would include parking, retail, and office uses and on which the residential community would be constructed, would emphasize the pedestrian and minimize the pedestrian-level impact of the artery ramps. Safdie's mixing of building heights and massing contributes to the self-contained, pedestrian-oriented, community atmosphere aimed at, and has promoted concern for these details in the design development. The idea of a canal is attractive but financially unsupportable.

The realignment of Nashua Street, as suggested in the Wallace, Floyd report, would satisfy the many interested parties in the area by creating development parcels for MGH, for office and retail development, for residential development, and for a major parking facility. We will actively support this concept and include it in the design concept and development process.

#### Design Goals and Criteria

One of the development team's prime responsibilities initially will be to formulate a program for the design development process. In addition to

the obvious necessity of design which is compatible with the future plans of the public planning agencies, we have developed a specific list of goals to be achieved in the design of a residential component in the larger site redevelopment. These goals are presented below; (See Maps 30 and 31)

- To create a new, first class, waterfront residential community which will be safe, pleasant, accessible, and flexible towards future changes in uses. The development should provide year-round recreation activities and facilities such as boating, a swimming pool, a health club, playgrounds and public spaces, skating, etc.
- To develop attractive pedestrian pathways and linkages to the North Station, Government Center, MGH, Science Park and the waterfront park system. Pedestrian connections should maximize natural and designed amenities. Interior open space should be provided in conjunction with the pedestrian circulation spaces. Planting, benches, and other amenities should be provided. Exterior landscaping, streetscaping, and open space should compliment the buildings and their surroundings, particularly on the riverfront and transitions to surrounding areas. Design of the pedestrian circulation system should accommodate the continuation of a pedestrian/service street planned between the GSA building and the new arena, if built.
- The amenity value of the waterfront location and the spectacular views from higher floors should be emphasized through orientation of buildings, open spaces, and possible water activities such as boating. Views of the Charles River Basin, Back Bay, Beacon Hill, Government Center, the North End, Boston Harbor, and Charlestown are afforded from the site. This suggests the introduction of residential towers as a component of the residential development.

- To provide a sense of tradition and continuity from the Bulfinch Triangle area to the riverfront. The building design should respect the historical context of the North Station district through massing, detailing, materials, and site connections. The design should be compatible with and compliment adjacent development, since the development will also provide public access to the riverfront and MDC esplanade park. Heights should respect surrounding scale and should not exceed fourteen stories, and multiple entrances and separate addresses should be provided and combined with separation of building mass to accomplish a private, residential atmosphere. Supportive retail development such as a marine supplies store, a waterfront cafe, and a convenience store should be incorporated in all phases.
- To provide an integrated and efficient facilities and operations management system, and to design the residential and service facilities as compactly as possible to minimize the land area necessary and which minimizes the negative aesthetic impact and maximizes efficiency. The community should include a parking structure on-site, preferably below grade. The service facilities are to be accessed at grade either on the pedestrian/service street or near the automobile entrance to the parking facility.
- To design and phase the construction of the infrastructure, the residential components, and the amenities to minimize the potential negative impacts of construction of subsequent phases.
- To incorporate rail, public transportation, and automobile access as well as the Spaulding Rehabilitation Hospital (SRH) into the site plan, to collaborate with the MGH, the DPW, the MDC, and the MBTA on design and phasing issues, to respect City land-use redevelopment policies and

the design review process, and to minimize the community impacts of design, construction, and operation management through scheduling, planning, and community relations.

- Assessment of the site capacity and market potential suggest the feasibility of a total development package of approximately 1,000 units, or approximately 1,300,000 square feet. This requires a rezoning or planned unit district assignment to allow for an approximate FAR of 7. The development parcel area totals approximately 5 acres.

#### Key Environmental Issues

Redevelopment of the North Station area will involve detailed analysis of the environmental impacts associated with the final redevelopment plan. The key environmental issues identified by the partnership are as follows:

Parking and Traffic - parking and traffic impacts will depend on trips generated, highway and local street access, and State and City plans and policies. Modal split analysis should be provided with respect to transit use vs. automotive.

Open Space and Recreation - Given the limited amount of open space and recreation land in the area, the effectiveness of the site plan will depend on the appropriate and attractive treatment of this crucial amenity.

Topography and Soils - The topography of the area is virtually flat, reflecting the fact that most of the area lies on fill which has been successively added to since the original filling of the Mill Pond. A structural engineer should complete a study of the site to determine the impact of the high water table and filled soil conditions on the project as well as the impact of construction on adjacent structures, proposed transit projects, and water traffic.

Energy Consumption - The increased site development and density would require a thorough energy analysis and design response.

Water and Sanitary/Storm Sewage - Studies should be undertaken to determine projected peak loading and demand levels and assess current site capacities.

Air/Water Quality - The noise and air pollution from the Artery and deisel train engines seriously affect the site, as does the visual disruption of the Artery structure and the railroad bridge. Analysis of emissions and runoff from the development based on a final design should be undertaken.

Noise - Construction noise and vibration impact analysis based on final design should be undertaken to determine impacts on surrounding property as well as earlier phase construction.

Draft Environmental Impact Report Outline - Although Environmental Impact Reports have been filed for the Artery and Green Line projects, a report will most likely be required for this development as well. An outline should be compiled.

The intention of these guidelines is to provide two levels of design control for the development; design requirements and responsibilities for the residential buildings, support and infrastructure facilities, and recommended design guidelines for making the project compatible with surrounding context. The contextual and urban design issues which affect and will be impacted by a residential development on the site must be carefully examined. Particular attention should be focused on the relationship between major transportation projects and development opportunities currently under discussion as they relate to the proposed residential development.

The concept and design development described in this section will evolve from our analysis of the site, the program and the specific site opportunities and constraints. The design concept and an outline set of development guidelines were developed to a level of detail sufficient for rough cost estimating purposes.

#### Development Impacts

The proposed development would have significant positive impacts on the area and the City. Immediate benefits are many;

- On a previously unexploited waterfront parcel, the development would turn a blighted area into an attractive, mixed-use residential community.
- Gentrification pressure on Charlestown and the North End would be somewhat relieved.
- The housing stock in the city would be increased.
- Construction jobs would be created during construction.
- Permanent service, retail, management, and maintenance jobs would be created.
- Property tax revenue will be generated for the city.
- Income, sales, and excise taxes will be generated.

The revitalization and development potential of the North Station area will be significantly affected by the completion and occupancy of the GSA building and the outcome of the two major transportation projects currently being advocated by the State and supported by the City.

The GSA building is expected to house approximately 3,500 employees, which should have a tremendously positive impact on redevelopment of the area. The pedestrian traffic in the district will increase, as will the demand for associated retail trade such as restaurants. Combined with the



proximity of the Massachusetts General Hospital employees, estimated to number 8,000 to 10,000, excellent redevelopment potential exists for the Sante Harbor site. Attractive linkages between the GSA, MGH, North Station, and the site should be integrated in the site plan.

The proposed depression of the Central Artery will substantially impact the area north of the ramps by relocating and depressing the connector ramps.

The MBTA plans to relocate and depress the Green Line, combined with the proposed extension of the commuter rail tracks to a new station linked to the Green and Orange Lines will greatly improve the efficiency of the transit system. Additionally, removal of the elevated structure will have a dramatic, positive effect on Causeway Street. Funding for this project is almost certain, and the MBTA is currently completing its planning.

#### Architect Selection

Choosing the architect and design consultants will be one of the key decisions made by the partnership, one which must be made quite early in the development process. The design team will be responsible for translating, refining, and developing the preliminary program into a financable, marketable, and politically acceptable development plan and design and must, therefore, be chosen carefully.

The architect will be responsible for overseeing other design specialty sub-consultants in several disciplines including structural, electrical, mechanical, geotechnical, acoustical, and environmental engineering, as well as building and zoning code analysis.

Selection of the architectural firm should rest on the following positive characteristics:

- Experience - The successful firm should have had specific experience in residential projects of the type proposed. Specifically, a phased, approximately 1,000 unit, mid-to-high rise, mixed-use, residential community on a highly constrained site.
- Resources - This project will require an ability to commit substantial architectural resources. Because the project will be phased, the architectural firm will have to commit to a five year buildout. Further, the Sante Harbor partnership will require substantial, on-going interaction between the principal(s) of the firm, the general partners, the various governmental approvals agencies, and the development managers.
- Reputation - The Sante Harbor partnership will need an architectural firm with an established and respected reputation to legitimize our ability to get the job done. Scepticism on MGH's, the City's, and our financial source's part will be assuaged to a certain degree with a highly-respected architectural firm on the team.
- Relationship - Careful consideration must be given to the dynamics of the firm as it relates both with the partnership and with the larger public involved in the project. We must be relatively sure that a positive working relationship can be maintained over the entire project period.

Choice of the architectural firm should be based upon obtaining a positive evaluative result when applying the above criteria to possible architects. Once chosen, everything that the partnership has done to date will be presented to the firm. Our initial discussions will be factual, focusing mainly on the issues, players, and possible outcomes. Several concepts will most likely emerge quickly. Initial concept development

should focus on the three or four most likely to receive positive responses from the MGH and the BRA. We will maintain on-going communication with the major players who will be influential to Sante Harbor's ultimate achievement.

Concurrent with initial concept development, the partnership intends to retain a construction cost estimator/engineering consultant to ensure the efficiency, flexibility, affordability, and achievability of the preliminary architectural work.

Once we have established an internally agreed-upon concept, one that is likely to be affordable, marketable and conceptually well-received by the MGH and the BRA, the architectural firm will be left to refine and develop it to a "presentation" stage. At this point, all parties involved in the redevelopment should be independently approached for their approval.

Designation without competition is the "best case" scenario. Early in the design process, the design team, in conjunction with the Construction Manager, should prepare a schedule for seeking all of the approvals necessary before construction can begin. It is essential that the approvals process be structured in such a way that does not retard the project's start-up and progress. Attention must be paid to the timing of lengthy reports such as Environmental Impact Reports. These require a substantial amount of preparation time and will be extensively reviewed after submission, a process that can take years to complete. Although there has been a substantial amount of environmental impact analysis work done as part of the MBTA's and DPW's projects in the North Station area, an EIR will likely be required of our development. An Environmental Impact Consultant should be chosen as soon as possible following selection of the design team.

Logical consultants would be those who've already prepared reports on the area.

It is our opinion that the development will need brilliant design and expert coordination to be successful. The site presents many constraints, discussed earlier, which will tax all but the most creative and innovative urban designers. The preliminary design concept and program will be crucial in obtaining developer designation by the public and private entities.

#### Construction Management

C-G Sante Harbor Partnership will solicit interest from construction management firms to join the development team early in the process.

The conclusion drawn by the partnership, after interviews with the several contractors and construction management firms, favored the construction management approach over the general contractor approach for two reasons; time and cost savings.

Construction management firms are able to effect cost savings ranging from 10-30%, and time savings of 20-40%, especially on complex projects which require management of numerous contractors, sub-contractors, and suppliers. It is the partnership's opinion that cost savings would be realized which could be redirected to additional amenities, and the partnership (and its investors) would have an independent expert responsible for overseeing its financial, structural, and organizational interests.

The selection of the Construction Manager should take place simultaneously with the final selection of the development team, but should be based on the Construction Manager's qualitative experience, record, and responsiveness to the project's requirements. Other selection criteria are similar to those for selecting architects.

THE POLITICS OF THE DEVELOPMENT PROCESS

## Introduction

In the course of researching and writing this thesis, our thinking has evolved through a number of distinct stages. The stages are defined by successive hypotheses about the nature of the problem facing us as would-be developers of a portion of this site. Using the information we possessed at any point in time, we formulated an hypothesis about what the problem was and how we would have to resolve it. As new information became available, we found it necessary first to question, and then to reformulate, our previous hypothesis. At a certain point, we were compelled to arbitrarily cut off further fact-gathering and to commit what we had learned to paper. We decided to recapitulate faithfully the stages through which our thinking evolved, rather than to focus exclusively upon what we now believe to be a correct reading of the site's politics. We are doing this because we believe that change, and the attitudes toward it, are of the essence of the development process; and because the process by which our eyes were opened to realities that were once obscure, has some intrinsic, substantive interest, particularly with regard to our "getting started" theme.

## Why Sante Harbor

The sequence of events that has brought the development partnership to the present moment is worth recounting. We began with an interest in the much-discussed Boston Garden problem. Certain civic elements expressed the view that Boston's place in the top rank of American cities, its status as a "world class" city, would not be secure until it had a state-of-the-art sports and entertainment facility. The issue of how best to effect what seemed to be a civic consensus - albeit one that did not reflect unanimity about the renovation versus new construction options -- seemed to afford a wide birth for a dispassionate, analytical comparison of the three

alternatives that had surfaced. The original hope was that this analysis would be of use to the municipal and state officials whose actions would ultimately determine which of the proposals, if any, got built.

When we considered the matter more closely, however, we decided to move in a different direction. Rather than focus on helping the public sector to make a decision about someone else's proposals, our entrepreneurial instincts suggested that there might be opportunities here for those nimble enough to seize them.

It is a commonplace that major development in an area will, in and of itself, increase land values in the immediate vicinity. We did not know which of the contending forces would survive the public combat for the right to build a new, or rebuild the existing, arena; but we felt that this time, after so many earlier, false starts, the odds strongly favored the selection of someone who would move ahead to complete the job. The first step was to consider where near the proposed new or renovated Garden, additional development could be accommodated.

The Bulfinch Triangle was to a large extent "spoken for" by investors and developers who had anticipated the value - enhancing potential of the new GSA Building and the planned demolition of the elevated Green Line. Furthermore, we believed that the opportunities for substantial new construction in this area were slight. New construction would depend upon demolition; and the uniform low-rise scale and common historic origins of the district made that seem an extremely unlikely prospect.

The area that seemed to hold the greatest promise was all of the land from the Storrow Drive ramps north to the Charles River. The area had no image to speak of, and certainly no positive image. And yet that very fact perhaps had caused other developers to ignore it entirely in the

highly-competitive search for buildable downtown sites. The site did not impinge directly on any existing neighborhoods. Of course that meant that the urban fabric was "thin" at best and the location would inevitably be perceived by lenders and by future users as pioneering. On the positive side, however, the absence of a dense, urban context would surely calm the political waters and help to smooth the passage through the necessary permitting process.

Rarely, if ever, could an urban developer hope to come upon such a large site so close to the downtown core by time and distance, and, most importantly, so lacking in existing, high-value uses. The developer's natural disposition to "think big" was here joined to a site that demanded an unfettered imagination. The fact that MGH was the major private player was surely not an unmixed advantage; but the scales seemed to tip in favor of that as well. One owner was to be preferred to many, since it obviated the need for a land assemblage, a task in which a thinly capitalized, first-time developer would be greatly disadvantaged. Moreover, we felt confident that the hospital could be expected to understand that it would have to join forces with a developer to produce anything on the site not for its own use. In sum, the Sante Harbor site was large, well-located, seemingly wide open in the sense that no one appeared to have the inside track, close enough to the Boston Garden redevelopment to be economically benefitted by it and apparently not constrained by any factors that precluded a major development effort within a reasonably short time horizon. We decided to make it the focus of our attention.

#### Understanding the Hurdles

Any strategy for shepherding a development idea through site control and the local approvals process must start with a clear-eyed perception of



all aspects of what the game is likely to entail. The developer must know who all the players are, must understand their needs and motivations, the laws and customs which will help to shape their perception of how much discretion they have, and how to exercise it. Most sites will have a history and a context: together these will help to define the limits of the possible. Politics, defined as the playing out of the interests of land-owners and office-holders, their would-be successors and their respective agents and supporters, will inevitably play a role as well. Each of these must be accorded a proper degree of attention and respect. The strategy the developer ultimately formulates must be an expression of everything he has come to understand about his site, its context and all those who have or assert an interest in its development.

Before turning to the specifics of the Sante Harbor site control and approvals strategy, we think it essential to underline a philosophical point of view which will color everything we say and do as developers. In approaching the infinitude of development possibilities, a developer should have a well-conceived methodology for identifying those things on which he will spend his time. Every development possibility can theoretically be located on a continuum measuring the ease or difficulty with which site control and building approvals are likely to be attained. In a world in which time is a scarce and ever dwindling resource, a developer who chooses to pursue sites and/or ideas that are positioned on the problematic end of the spectrum, should have very clear and definite reasons for doing so. Typically, those reasons might encompass a perceived potential for earning very high investment returns (due in part to the difficulty factor itself) or a desire to accomplish something commendable and praiseworthy against what is perceived to be great odds. The important point is that there be

one or more clear, well-conceived and explicitly articulated reasons for choosing a difficult site or project, where an easier one might surely be identified and pursued. If a developer goes after something tough without understanding that he is doing so and why, he is not likely to persevere - and will surely fail -- or, alternatively, he will pursue the prize in a dogged, "I'll-kill-them-before-they-kill-me" fashion, which is equally unlikely to produce results. The C-G Sante Harbor Partnership has no doubt that its idea is located somewhere toward the problematic end of the continuum but is resolute in its determination to persevere out of our conviction that great profits and notoriety will come to those who pull this off.

#### Engineering versus Design

A developer should understand that the soundness of his strategy will ultimately depend upon the appropriateness of its central premises - all of which should be able to be stated simply and without excessive adornment -- and, as a necessary corollary, the complete avoidance of any temptation to lay out the steps to be followed in a rigid, "manual-like" fashion. He should strive, to borrow a metaphor from the building process, to lay a solid and durable foundation based upon correct engineering principles, rather than to erect an edifice with virtuosic architectonic detailing. "Engineering" rather than "design" is the appropriate goal because while the essentials of the strategy must be correct the details, the step-by-step, will inevitably prove far different in actuality than they may have been imagined in planning.

Note that two different things are being said here. First, as previously discussed, no developer can hope to anticipate accurately the tortuous path that his idea will follow from conception to acceptance.

Thus, any effort to fine tune the development strategy will have no positive value because the fine tuning will have to be discarded as irrelevant as events begin to unfold. The second point is that the effort to produce a finely nuanced, carefully detailed step-by-step battle plan will not merely waste the developer's time, but very likely prove his undoing as well. The reason is that the developer may have a very hard time overcoming the all-too-human temptation to become wedded to handiwork on which he has lavished so much care and attention; and this inflexibility is precisely the opposite of the nimbleness and ready adaptability which must characterize the successful developer's approach to the implementation of his strategy.

Background: The Site Context

The Boston Garden was constructed in 1928, the same year as the Boston and Maine railroad tracks and terminal. The MBTA Green and Orange Lines were routed through North Station in the 1940s. The Garden has been home to the National Hockey League's Bruins since its inception, and to the Celtics since their entry into the National Basketball Association in 1946. The on-and-off ramps to the Central Artery from Causeway Street were constructed in 1953. The adjacent Bulfinch Triangle District, which contains a preponderance of nineteenth century four to six story buildings in various architectural styles, was for many years the furniture wholesaling district of Boston. When North Station was at its peak as a commuter facility, the surrounding area had a certain unmistakable downscale vitality, with a wide variety of retail merchants located along Causeway Street to serve the needs of homebound commuters and Garden events patrons. North Station, however, began to decline as a transportation nexus.

At the same time, the rest of Boston had begun to emerge from a forty year hibernation, and through the 1960s and 70s decisively emerged into the

front page rank of American cities in terms of investment attraction, job and income growth. By comparison to the glamorous investment magnets of the city -- the waterfront, the financial district, Beacon Hill, Back Bay and the Copley Square/South End area -- North Station seemed a seedy and vaguely discomfiting cousin, whose occasional forays from the attic to the drawing room are palpably unpopular with the rest of the family. Causeway Street became a satellite "adult entertainment district," considerably more compact than the Combat Zone but only slightly less disreputable.

Sometime in the mid 1970s, the city woke up to the fact that the North Station/Bulfinch Triangle area was stagnating, if not dying; and that the decay would become irreversible unless steps were taken to spur interest and investment. Sentiment was building in Washington for the development by the General Services Administration of a new federal building in Boston. The need for such a building was objectively debatable, but the city, specifically Mayor White, saw a significant opportunity to influence the location of the GSA building and, at little initial cost to the city, begin the process of salvaging the North Station district.

The city believed that the long-term prospects of this gateway area would be greatly enhanced by locating the federal building here and by relocating the Green Line Station, which would permit the demolition of the blighting elevated tracks. The city further understood that getting federal funding for the Green Line relocation would be far more likely once the GSA had committed to the area, since they would then have a vested interest in improving the image and appearances of the area. The challenge was to get the GSA to commit to North Station.

The principal mechanism that was used was a well-orchestrated publicity campaign built around a planning effort carried out under the aegis of the

professional planning staff of the BRA. The BRA engaged the renowned architectural and planning firm of Moshe Safdie and Associates, Inc. to produce "A Development Plan For: North Station District". Safdie and his staff understood their primary mission very well -- to create a strong, positive image of what the North Station District could become, to offset the powerful, negative image of what the District was. Their principal insight was that, properly understood, the North Station District was a nexus between the Charles River (albeit a distinctly unprepossessing stretch of it) and the city's hugely successful Quincy Market-Waterfront area. The residential island was a very alluring and "imageable" perception of what imaginative city planning could conceive; and the Safdie plan was instrumental in persuading the GSA to choose North Station at its home. Having achieved its true mission, the plan thereafter languished. The city did not move decisively to create the conditions that would allow the plan to be effectuated. No land takings occurred. Nothing was done to encourage land-owners (principally MGH) to seek the joint venture development of their land in ways that would meet the plan's goals. The existing industrial zoning for the land, with an FAR of 2, was maintained. If the city had genuinely been interested in fostering development of the kind envisioned by Safdie, there is much that it could have done to make it more likely. The city's silence and inactivity spoke volumes. Development in this area was not a priority, despite the ringing rhetoric with which the Safdie Plan had been introduced. Developers interested in pursuing portions of it would be "on their own" and would not receive any advance encouragement from the BRA.

RIP: Gateway Center

The Gorin-Tsongas Gateway Center proposal had a number of similarities to the present proposal, and was on that account well worth studying. It

too saw immense economic potential in the area north of the Storrow Drive ramps. Like us, the Gateway Center partners had to evolve a strategy for securing the participation in some form of MGH. If their proposal prevailed, our thesis would ipso facto become moot. But we anticipated that Gateway Center would lose the Garden competition; and that an analysis of its failure would prove a treasure trove of insight for someone quietly stalking the same prey.

Gateway Center had so many things working against it that the intriguing question was why it was proposed at all. Cynics suggested that Roz Gorin's real aim was publicity. The enormous scale and scope of her project insured that, for the cost of a few renderings and a model, she would travel the immense distance from obscurity to notoriety overnight. This she has done; but we believe much more is to be gained by taking her at her word: she entered the competition to win it, with the confident expectation of doing so.

Gateway Center was much more grandiose than the other proposals for a new or renovated Garden, at a time when the grandiosity of projects like International Place and New England Life (500 Boylston Street) was causing some observers to question whether Boston was losing the very qualities -- of scale, respect for history and livability -- that had helped to fuel its investment renaissance. But Gorin evidently discerned a different reality. Preservationists and no-growth advocates might be horrified by the immensity of a Gateway Center. But they are a small minority, have little impact on the political process (although they can, and do, use the courts to slow a project down) and will never align themselves with a developer in any event. A developer must know who his/her potential allies are, and shape his proposal to secure their active support. They will support a project if

they see something in it for them. In this context, the use of the (overblown) figure "2 billion dollars" as an estimate of the project's build-out cost, was probably no accident. As a highly placed former city official observed, when a number like that is used (four times the cost of Copley Place) every person who is in or near municipal government thinks "There's got to be something in there for me." By this theory, the unprecedented scope of the Gateway Center was intended to convey the message that this proposal was large enough to make everyone happy. We do not know, of course, if considerations such as these explain the scale of Gateway Center. But if they do, its fate suggests that quality, appropriateness and merit can sometimes prevail against a narrow and crass self-interest.

Gateway Center was proposed to be built on land that was entirely owned by entities other than the proposers. The decision by the would-be developer to "go public" with a massive PR blitz probably reflected the failure of an earlier, behind-the-scenes, effort at land assemblage or partnership structuring. Indeed we know that Roz Gorin met with the MGH Trustees' Planning and Building Committee on February 7, 1985, to present in outline form a version of the Gateway Center proposal that was later unveiled to the world. We also know that it was rebuffed rather decisively. Lacking the land or any reasonable prospect of obtaining it through negotiation, Gorin conceived a strategy that contains several lessons for those, like us, who expect to be dealing with some of the same players.

Having failed to secure the cooperation of the hospital, and having been rebuffed as well when she approached Delaware North, the Bruins' owner, Gorin decided that if the BRA could be successfully romanced, all of the dominoes would fall in due course. The goal was to persuade the BRA to sell to the Gateway Center partnership the surface parking lot being operated on

the north side of the present Garden. Ownership or control of that parcel would, she reasoned, force all of the reluctant parties to deal with her on her terms. And why should the BRA ceremoniously place the crown upon her head? Because it was indisputable, so she said, that the public preferred a new privately financed arena to the drab old dowager on Causeway Street.

The problems with this strategy were many. First, assuming that a strong, public preference could indeed be substantiated for a new, private arena, Gorin grossly misjudged the BRA. The agency is in the business of professional city planning. It likes to think that it is above politics; and although the agency's self-image of virginal innocence has been frequently compromised, the political pressures that it does respond to are never of the "straw poll" variety. If one hopes to have an impact on the agency, one must assiduously, patiently and respectfully court it in private. So far as we have been able to determine, Gorin made no effort to do this. And the BRA responded to a proposal that it had played no part in helping to shape precisely as a dispassionate observer could have anticipated. It quickly determined that the proposal was without allies and that it would not have to expend any of its institutional capital to inflict a mortal wound. Accordingly, it remained silent as the death throes ran their course.

The second problem would have been fatal even if the first had not. Gateway Center's chief appeal was in its promise to build a state-of-the-art arena without public subsidies of any kind. That promise was dependent on the intensive development of a variety of other uses, a good deal of it on MGH land. Here, too, Gorin badly misread the needs and desires, both substantive and procedural, of a key player. Gorin evidently believed that MGH's earlier rejection of her plans for Gateway Center was no more than a



negotiating ploy. She deluded herself into thinking that the hospital was not really rejecting the substance of her ideas, but instead was simply requiring her to prove the appeal and staying power of her plan in the public domain. If she managed to topple that crucial first domino, then the hospital would be prepared to deal.

In the classic (and sometimes effective) manner of a developer who refuses to take no for an answer, Gorin interpreted the hospital's "no" as a "not yet". As Gorin played with the pieces of the puzzle in her mind, the hospital - whose Planning and Building Committee was chaired by the renowned real estate deal-maker Ferdinand Colloredo-Mansfeld -- was seeking to be the last piece of the required assemblage, rather than the first. Gorin could understand and even admire that -- the last holdout always gets the best terms; and this deal was big enough to satisfy the hospital's financial requirements, as they would be made known to her at the appropriate time.

This is how we surmise that Gorin "read" the hospital's rebuff. If you began with the assumption that the hospital was angling for the highest price or the best deal, its behavior could plausibly be seen in that light. But the starting point was wrong. Gorin was defeated at the starting gate because she failed to understand, failed even to try to understand, the other horses. MGH, though it is not immune to the blandishments of high finance, is not fundamentally a high-rolling, fast-stepping, deal-maker at all. It is rather an immensely prestigious, self-aware, proud and ponderous institution whose strongest animating principle is its own growth. While others may fear the hospital's propensity to swallow everything in its considerable domain, the hospital views its own growth as essential to the fulfillment of the dual mission to attend to the afflicted while extending the boundaries of knowledge.

We learned a great deal from observing the fiery descent of the Gateway Center streamer. Gorin had a brilliant insight, that the coming-to-fruitition of the decades-long struggle to create a modern arena would herald a new era of real estate excitement in the area north of the Garden site, stretching to the river. What she failed to perceive was that the battle for the Garden opportunity was a sideshow. The real potential lay elsewhere, north of Storrow Drive ramps. No one else had yet perceived the opportunity, so a clear field might be possible. Since the required land was mostly in the hands of the hospital, a public bid process could perhaps be avoided. And finally, if one checked carefully, it would become apparent that the hospital's own needs and the city's could be jointly accommodated in a plan that combined housing, offices (institutional) and parking. We decided that the core Gorin insight was as valid as ever; and that an entirely different approach could meet with an infinitely happier fate.

#### Awakening the Slumbering Giant

A major challenge for the Caner-Geller partnership (hereafter sometimes C-G) will be to secure the cooperation and active involvement in the development effort of Massachusetts General Hospital (MGH). MGH is one of the most significant and important institutions in the region. It is the oldest voluntary, non-profit hospital in New England. It was chartered in 1811 and admitted its first patient in 1821. It employs 9700 persons, has 1082 beds, is a major teaching arm of the Harvard Medical School (415 interns and residents, 426 clinical and research fellows), has an annual operating budget of more than 350 million dollars (audited statement, year ending 9/30/83), of which some 83 million is devoted to the study of the causes, prevention and treatment of the many maladies of man.

The importance of the hospital to the city of Boston is even greater. A major export product of Boston is medical care and services. Every time someone is cared for at MGH who lives outside the city, every time an MGH physician is engaged in consulting or research for an institution or instrumentality located elsewhere, fresh money, the fuel for local growth, is injected into the City's economy. The centrality of MGH in the life of the city and the region has long since been established beyond dispute; and any strategy for securing site control and ultimately municipal endorsement of the project's plans must take full cognizance of that fact.

Our position is that acknowledgement of MGH's institutional role and legitimate concerns for expansion and growth, is not merely a necessity but in some sense a moral imperative as well. MGH is too important to New England and to Boston, and its vital role in preserving and enhancing the lives of many thousands of persons each year too clear, to justify a posture on the developer's part that is in the least patronizing or adversarial. If C-G's plans for the Sante Harbor property required the hospital to retreat from its determination to remain the preeminent treatment and research facility in the region, we would not only be doomed to fail but would deserve to as well. Unlike others in the development fraternity who have advanced plans for this site as if MGH would in time have no choice but to accommodate to them, the C-G strategy is to involve the relevant decision-makers at MGH from an early date, in the genesis and elaboration of plans for Sante Harbor.

When the Sante Harbor partnership conducted its first reconnaissance of the site, it appeared that the "no build" option was firmly entrenched. The principal owners were two: MGH held over 300,000 square feet of land, most -- except for the Spaulding Rehab. Hospital -- acquired about 40 years ago;

and various instrumentalities of the state owned the preponderance of what remained. The state actors were in fact a witches' brew; but at this early stage, they appeared to comprise an undifferentiated mass, which we saw no need to attempt to disentangle. For the record, the state actors included the Department of Public Works (DPW), the Massachusetts Bay Transportation Authority (MBTA), which owned the commuter rail tracks, the Massachusetts District Commission (MDC), which owned a strip of future parkland along the Charles River, the Division of Capital Operations and Planning (DCOP), under Administration and Finance, which controlled 100 Nashua Street, and the Executive Office of Transportation and Construction (EOTC), which though not a landowner was in control of the design and engineering for the Central Artery Reconstruction, a process that could not be accomplished without land takings in the Sante Harbor site. EOTC also had a great deal of influence over DPW. The other player was the Boston Redevelopment Authority (BRA). Any development of the Sante Harbor property would certainly involve zoning variances or a Planned Development Area (PDA) designation, in either of which the BRA would play a large role.

In sum, therefore, we saw a large, private institutional landowner which had been land-banking its holdings for some four decades, an array of state bureaucracies not known for their ability to initiate complex development efforts, and the city planning agency. As we saw it, the question was how to determine whether anything was going on; and if not, how best to get something started.

Our first move was direct and unsubtle. We contacted MGH's General Counsel who we were given to understand was responsible for all of the hospital's real estate. We explained that we were doing a thesis that involved analysis of the feasibility of mixed-use (with housing emphasis)

development on a site that included all of MGH's North Station property. We further explained that our purpose was academic, that we assumed that the hospital hoped to use the land to accommodate institutional expansion, that we thought such a use could be effectively integrated with housing and ancillary uses, and finally that if MGH shared its plans with us, we would freely share with them our thinking and conclusions on a basis which left both parties free to pursue their interests as they saw them. The response was sobering and disheartening. We were advised that the chance that the hospital would cooperate with us was remote at best, that if we had any thought of attempting to effectuate any part of our development idea, we should so state clearly at the outset, or leave ourselves open to unspecified retaliation, that the hospital needed this land for its own purposes sometime in the 1990s, and that the hospital would strenuously resist any effort, no matter what the source, to interfere with its rights as property owner. All of this was stated staccato-like, by someone who was plainly used to questions of this sort and felt that leaving any ambiguity whatsoever about the hospital's posture and intentions could only be productive of mischief and unpleasantness. After this avalanche of negativism, we were invited to send a letter, if we felt we must, and assured that it would be promptly conveyed to the proper authority for decision. We thought about sending a letter but decided that since the door had been firmly and unambiguously slammed shut, there was nothing to be gained by putting our request "on the record".

At this point, it appeared that our analysis would have to proceed without any reliable information about the hospital's plans and thoughts. Accepting at face value the hospital's stated determination to retain its land purely for institutional purposes, it appeared that nothing at all

would happen until it decided, on its own schedule, to apply for zoning approvals and permits. We began to think that we were facing a two-fold challenge: how to get MGH to think that the time to move was "now" or at least "soon", rather than continuing to think in terms of the distant future; and if the first objective could be attained, how to shape the development program so that it accommodated a significant non-institutional component, principally housing.

At this juncture, we felt that the hospital was in complete control of the timetable. The only way the giant could be coaxed into action was via the blunt instrument of a public taking which would carry with it the implicit threat of additional takings. To salvage any substantial part of its own plans, the hospital might then be compelled to step on the accelerator. However, we saw a taking as the dimmest of possibilities when the city was itself facing a severe revenue shortfall and no public purpose was apparent to justify the use of the most drastic weapon in a city's land-use armory.

There appeared to be no means of influencing the timetable directly. If a developer cannot obtain what he seeks by frontal assault, he should consider more subtle strategies. Was there any way to obtain movement on the timetable by seeking to shape the program first? If the BRA saw, or could be made to see, the housing potential of this site, perhaps another approach to the hospital would be met with a better reception. As we searched for an opening, a way of moving the issue forward, a fairly uncomplicated, albeit indirect, strategy came to mind. If the hospital saw that its plans for the Sante Harbor site would never be any more than a starting point for administrative review and regulation, and that in fact those plans were sharply at variance with what the city had in mind for the

site, and so could not be viewed as promising, then perhaps it would understand that there was nothing to be gained by a posture of regal aloofness.

Moreover, we would argue, a clear-eyed comprehension of the city's present and prospective political center of gravity pointed to the advisability of moving now to help shape the process by which the nature and density of development at Sante Harbor, would be determined. The Flynn Administration, we would point out, had a certain radical, or populist, disposition. It had already, in the first year of its term, confronted Boston University over the sale to it of the Commonwealth Avenue Armory. In return for dropping its challenge to the sale, it was able to force Boston University to agree to sell certain property that it had acquired for student housing in the Audubon Circle neighborhood. We would suggest that the Administration had otherwise behaved in a fashion that surprised and delighted the development community. It was likely that, over time, its populist soul would come to the fore more frequently, perhaps more unpredictably; and that therefore, confronting the issue now afforded the greatest potential for helping to shape its resolution.

The next step was to assess the sentiment of the BRA. A developer seeking to assess the sentiment of an institution as diffuse, and even byzantine, as the BRA, should clearly understand what he is about. The BRA is an instrumentality whose mission is defined by statute, history and massive, daily interaction with present and future developers. In its present incarnation, it seems (at least rhetorically) to be defining itself in opposition or in contrast to the role that it played under Mayor White. Development was White's consuming interest and the BRA was accordingly on a short leash. Flynn came to office vowing to appoint a strong director who

would then function independently, but with a general mandate to channel development pressure toward the long-neglected neighborhoods and to push the development of new housing, using linkage payments to supplement other forms of housing subsidy. At certain times and on certain issues, the planning side of the BRA will be in the forefront. When that occurs, a developer's interests are best served if he sees where and when the horse is going and figures out a way to help him get there. When the policy is being drafted, there may be some opportunity to advise on its general content. After all, the BRA does not want to produce a planning document whose recommendations for development are ignored. But once a plan takes shape and is published, the quick-footed developer will try to develop ways of fulfilling its goals.

When we began to think of the politics of Sante Harbor, we saw the problem as getting MGH to alter its "no build" and "institutional only" mind-set. Further investigation revealed that a maelstrom was churning beneath the superficially calm surface. MGH had already come to grips with the inescapable reality that, although no one could compel it to move forward, when it finally decided to do so, it would have to play by the same rules as other landowners. It had begun, ever so deliberately, to cultivate a non-adversarial relationship with the BRA.

In 1984, it signed a Co-operation Agreement with the BRA which set forth the rights and responsibilities of the parties with respect to the approved Planned Development Area (PDA) for the hospital's main campus, which called for Phase I facilities to be operational by March, 1990 and Phase II by March, 1997; and declared for the first time the hospital's support for the "intent of . . . the North Station Urban Redevelopment Project . . . to produce mixed use development which includes institutional uses and tax producing real estate." (Co-operation Agreement, paragraph 12)



The hospital's support was to be demonstrated in its agreement "to cooperate with the Authority to formulate a unified development plan for the project area, with particular focus on Sub-Area II of the project." The Agreement anticipated that by its second anniversary the unified development plan would be completed.

Nothing has been done by the BRA to carry out the goal of formulating, with MGH's cooperation, any such unified development plan. Bureaucratic inertia may be partly to blame, but we believe that the unified development plan has been temporarily put aside to await the formulation of Downtown by Design, the master planning document on which director Coyle himself has lavished so much attention. It is an open secret that one of the districts in which Downtown by Design will propose to permit high-intensity, high-rise development is North Station. The BRA staff undoubtedly feels that the Sub-Area II unified development plan should follow, rather than feed, Downtown by Design.

The parties, in short, have committed to cooperating on paper, but have not cooperated in fact. MGH, no longer the slumbering giant, is not passively awaiting events. In March of this year the hospital sent Coyle a curt missive. It reminded him of the Co-operation Agreement (which he had signed), made reference to the flurry of activity surrounding the proposals for a new Boston arena, and submitted a summary of the hospital Master Plan for the land on Nashua Street. The Master Plan calls for development at an FAR of nearly 11 (existing zoning allows an FAR of 2) and includes a program calling for two massive structures containing a preponderance of non-taxpaying uses (assuming that most of the more than 2000 proposed parking spaces are intended for the hospital's own use). One hopeful element is that the plan calls for 200-250 units of housing.

That letter, and the Master Plan Summary which accompanies it, cannot have done much to endear the hospital to Coyle. First, it betrays no evidence of having been carefully thought out or planned. It is poorly written, poorly presented and substantively highly objectionable. Its release to Coyle, at a time when he was probably in an advanced stage of drafting Downtown by Design, may be viewed by him - even if it is not so intended -- as a "declaration of war" of sorts, especially since the hospital chose to include in its transmission to Coyle a copy of the letter declaring its rejection of Roz Gorin's Gateway Center proposal. Even if one is not inclined to be contentious, it is hard not to read the hospital's message as: "we shot Roz Gorin down when she tried to mess with our land, and we'll do the same to you." The ingredients for a stand-off, in which the BRA and the MGH resolutely block the achievement of the other's objectives, without advancing their own, would seem to be in place.

Yet we have a somewhat different view of what is really happening. Coyle and Colloredo-Mansfeld may not have gotten off on the right foot but their respective institutions are moving toward a common, or at least similar, understanding of the proper use of Sante Harbor. We were informed by persons in a position to know that Downtown by Design would permit high-FAR, high height development in this area. Similarly, the hospital's planning no longer regards its prior master planning efforts as sacrosanct. Recently, a Boston architect was engaged by Colloredo-Mansfeld to review the hospital's real needs for the Nashua Street property. He was commissioned to produce a plan that would allow those needs to be met, perhaps on an accelerated timetable, in a manner that created one or more sites on which high-intensity tax-producing uses could be developed. We spoke to this architect at length and learned what he proposed to Colloredo-Mansfeld when

he presented his recommendations on June 28. Those recommendations were well-received and although we cannot know, we do anticipate that the hospital will at some early date take action toward effecting the substance of the plan.

The hospital's true needs for this property are much more modest than it has acknowledged in the past. They require approximately 100,000 SF of back-office space, a new 160 bed hospital specializing in the treatment of Alzheimer's disease and a very substantial quantity of parking, estimated at 2500-5000 spaces. These institutional needs should be sited near each other, but there is no need for them to be located on the portion of the Nashua Street property nearest the MGH main campus.

The planning solution advanced by MGH's consultant borrowed heavily from a study done in the early 1980s by Wallace, Floyd, the engineering and transportation consulting firm. The basic organizing principle of the new plan is a new Nashua Street, to be created by making the street run "straight" through the MGH property toward the river, where it would then turn left and connect with Leverett Circle. The plan calls for an air rights garage to be erected above the North Station commuter tracks. It calls for various land swaps to create coherent, developable parcels. And it demands the demolition of the Registry Building at 100 Nashua Street. If all this occurred, the hospital's institutional requirements could be comfortably met on one side of the new Nashua Street, in the area adjacent to the present Rehab. Hospital. The other side of Nashua Street would constitute a newly minted, immensely valuable development corridor of between five and six acres. The breakthrough is that the hospital appears to be moving toward a posture where it will facilitate, rather than block, an intense, non-institutional development of its land.

Getting on the Train before it leaves the Station

Our thinking about the politics of Sante Harbor has shifted dramatically within a few short weeks. It appears that we are no longer confronted by a slumbering giant. The giant has slimmed down considerably and appears determined to be taken for a species of gazelle. (Shamelessly shifting metaphors), the train is about to leave the station and we would like very much to be aboard.

Note that we are now confronting a very different set of problems. As we see it, our new goals must be: to influence events in the short-term so that nothing is done to preclude our long-range objectives; to put ourselves in a position where we are assured of serious consideration when a choice of developer(s) is made; and to "angle for an edge" to reduce the likelihood that, as our outside reader forecast, we would "lose in the finals".

The playing field has shifted and we should understand how the game is likely to be played from here. First, all of the state instrumentalities are assured of a vital role in the genesis and implementation of a final development plan for the site. This cannot be avoided, given the hospital's probable intent to call for the realignment of Nashua Street, for land swaps to create coherent development parcels, and for the development (by it and others) of an air rights garage. The obvious consequence is that the process has been made immensely more complicated. We cannot foresee what mechanisms may be created, whether formal or otherwise, to mediate the interests of the several parties; but it is likely that a quick and elegant solution will not be forthcoming. In short, although the race is likely to begin soon, the finish line is not in sight.

Second, Colloredo-Mansfeld is head of CC & F as well as Chairman of MGH's Planning and Building Committee. The potential for him to advocate a

solution to the hospital's expansion needs that would also benefit CC & F was always present, and appears now to be occurring. Colloredo-Mansfeld would like the Nashua Street corridor to be developed in a way that emphasizes high-rise office uses. We are guessing, but we expect him to try to get CC & F designated as developer without bidding; and if that goal proves unattainable, to do what he can to assure that the competition attracts few qualified bidders.

We are now at a point where we can recall with nostalgia that set of problems which appeared to confront us when we thought we had to rouse the slumbering giant. Admittedly, we were facing long odds but if we succeeded, the potential payoff was a negotiated development opportunity between our team and the hospital. Now, if anyone is to negotiate a deal it appears that it will be MGH and CC & F. Assuming that disaster does not occur, we are looking at a protracted planning process, followed by some sort of competitive submission against a field that is likely, if Boston's golden era continues, to involve some of the largest and most highly reputed developers in the pantheon.

First, let us frankly acknowledge that this new set of problems may be more than a first time developer can hope to handle. A significant part of successful development is choosing opportunities wisely; and it may be that we will be forced to conclude at some point that the odds are so unfavorable as to make the effort pointless. But we are not at that point. Consider International Place. When Don Chiofaro began to compete for that opportunity he had never done a development in his own name. Undaunted by his own short list of credits, he conceived a strategy and pursued it with a single-mindedness that the competition was unable or unwilling to duplicate. Consider Copley Place. UIDC, though clearly a major national developer,

chose Copley Place as its first Boston venture. Its strategy was to pursue the project, from a research and design point of view, as if it had been designated to do it; and at an appropriate time, to argue that the opportunity should be given to it without a competition. This was a bold and risky plan, especially considering that the determination whether to proceed by negotiation or bid would be thrashed out among three mutually disputatious individuals - Fred Salvucci (Transportation Department), Frank Keefe (The Office of State Planning) and John Driscoll (The Turnpike Authority). No claim is made that the analogies to International Place or Copley Place are precisely in point. Our position is simply that it is possible at this early date to conceive a strategy that will appear no less credible - or no more incredible -- than the strategies devised by Chiofaro and Ken Himmel. If the strategy can be stated in a way that does not leave the reader hopelessly at sea, and if objective checkpoints can be articulated by which to measure its success, then the C-G partnership can set sail with a reasonable expectation of dropping anchor, someday, at Sante Harbor.

#### Angling for an Edge

As first-time developers considering where to make our debut, it would not be difficult to make a strong, even an overwhelming, case in favor of some other site. From today's perspective, it would appear that: housing is not in a strong position to become a major component of the final plan; the Cooperation Agreement between MGH and the BRA will eventually be extended and expanded to include all of the various state instrumentalities in the effort to generate a unified development plan for the project area; this will assuredly push back the choice of a developer by several years; that choice will in all likelihood be made by means of some form of national

design competition in which several deep-pocket teams can be expected to compete. If the planning and selection process in fact proceeds in this fashion, the C-G partnership would face very long odds indeed and would have to justify its involvement by pointing to the favorable exposure it could expect to receive. A sober-minded decision to select another ship on which to make our maiden voyage may eventually be forced upon us; but this ship is sturdy and bids fair to look ravishing under sail. If we make certain minor modifications to the hull and the rigging, we think it will do fine on the open water.

To decide what "minor modifications" are needed, we should first be clear about any advantages we may possess. In sum, they are not negligible. We appear to be the first development entity to have identified this site as having substantial, realistic potential as a focus for luxury housing. Although the Safdie Plan proposed this use some six years ago, no serious planning or feasibility analyses were ever done to go beyond the basic conceptual outline of that plan. No other developer has talked to the staff of the BRA about the site. It is of course impossible to know whether other Boston developers are analyzing the same site and use behind closed doors; but in a city and business in which "leaks" and "rumors" afford a frequent and surprisingly well-founded hint of future possibilities, there is no indication that anyone else is covetously eyeing the same dirt.

Second, between us we probably have a range of local contacts that could win us an audience with many of the key players. We would expect to be able to see, in private, Robert Buchanan (General Director of MGH), Charles Haar and Sidney Rabb (Trustee and Honorary Trustee of MGH, respectively), Frank Keefe, State Secretary of Administration and Finance, Tunney Lee (MIT Professor, on leave, and Director of the Department of

Capital Operations and Planning), and William Geary, Chairman of the Metropolitan District Commission. In addition, as we have already discovered in this and previous efforts, the staff of the BRA is quite accessible and generally willing to speak candidly and freely to developers. I hasten to add that we are not in a position to ask favors of any of these persons, nor that they would be inclined to grant them if we asked. However, access can be of significant value in at least two ways: one can gain insight not obtainable by any other means into the hidden agendas of bureaucracies and individuals, which may sometimes be decisive in their deliberations; and one can "make an impression" and thereby exert a powerful, though subtle, influence on the decision-making process. Ex parte contacts are greatly frowned upon when a formal competition is underway: all the more reason to pursue them assiduously in advance of the competition.

Our third advantage is time. One of us will be going to work in September but his employer has explicitly agreed that he is not prohibited or discouraged from pursuing development opportunities on his own. The other intends to support himself by reactivating an income and investment property brokerage business that he had successfully begun before entering MIT. One of the principal benefits of this business is precisely that it will enable him to pursue projects of this sort. Since both of us are confident that we will be able to support ourselves in jobs that will not demand all of our available hours, we expect to be able to handle the demands of the Sante Harbor project "on the side". At some point, of course, if we are successful, we will have to relegate our other activities to a subordinate position.



Our advantages are priority, access and time. These advantages are not substantive: that is, in and of themselves, they will have no meaning when the selection of one or more housing developers is made. Rather, they are tools with which to overcome the substantive weaknesses of the inchoate C-G partnership. If we use all of those tools sedulously and with a sense of real commitment, the C-G partnership can put itself in a position to contend seriously for the prize.

Anticipating the day when a formal response to a Request for Proposals is due, we must with unsparing honesty identify our weaknesses and develop a strategy for minimizing or eliminating them. Putting the bad news all together, we lack nothing except experience (a successful track record), reputation (a recognized and respected name), influence (one large step beyond access, the ability to get favors without having to ask for them) and financial credibility (the ability to convince the decision-maker that one has the capacity to make the pretty picture happen). Clearly these are all substantive. They are the criteria by which the developers will be selected.

How then to proceed? Our strategy has four elements to be pursued in sequence.

- 1) Use our advantages to their fullest. We expect to use our priority, time and access to acquire a comprehensive and intimate understanding of all aspects of this development opportunity. We will state that we are interested in developing housing on the Sante Harbor site (we intend to create a partnership or other ownership entity called the Sante Harbor Housing Partnership. The frequent repetition of the name will help to give us an identity and create a subtle momentum in favor of housing as a major component of the unified development plan); and would like to produce a

proposal that gives due regard to the goals and objectives of whichever agency or entity we happen to be addressing. If that kind of guileless directness does not produce a reciprocal openness, we will volunteer our thoughts and plans in sufficient detail to demonstrate our seriousness and the care with which we have approached our task. We will be shameless name-droppers and will use every appropriate opportunity to demonstrate that we have been around, that others at least as important and crucially positioned as our present audience (without our saying so), have judged us worthy of their time and attention. Our notion is that access builds upon itself, and that each time a new door is opened, other doors - previously locked -- become penetrable. We further believe that access and influence are on a continuum and that the ability to see and talk to people, in private, in time helps to create a perception of influence, which either is metamorphosed into the real thing or may sometimes serve as an effective surrogate for it.

The product of all of these meetings, interviews and discussions will be a far better understanding of the political context than anyone else has or is likely to have. No less important than our knowledge is the knowledge of us that significant players will now have. If we sell ourselves well in these private tete-a-tetes, we will have begun to overcome the disadvantages of experience, reputation and influence.

2) We will approach MGH, either through Colloredo-Mansfeld or our contacts on the Board. In our view, MGH is coming to understand that the time for development of Sante Harbor, after four decades of land-banking, is near at hand, but that they are not particularly well-positioned to shape the process or the result.

Colloredo-Mansfeld appears to be taking the lead, and although no one should doubt his skill or determination, the hospital's performance to date leaves great doubt that he knows where he wants to take it or how to get there. The hiring of a local architect as a consultant suggests that the hospital is open to new ideas and that its own goals are still somewhat in flux. Furthermore, the program that he was given to work with is predominantly non-institutional in character. Assuming that this program represents the hospital's true agenda - as distinguished from Colloredo-Mansfeld's -- it suggests that an income stream is becoming an important consideration in the hospital's future financial planning. That too is a favorable signal of the hospital's growing receptivity - despite all of its vociferous protestations to the contrary -- to some sort of joint venture with a real estate developer.

We will in some fashion approach MGH with an offer to act as their development consultant. We will acknowledge "up front" our wish to be considered as the developer of at least a portion of the site; but will state that we will perform our advisory role in a professional and unbiased manner. We will offer to produce a completely integrated feasibility analysis of the non-institutional development potential of the site (including possibly the air rights garage) and will outline several approaches to effectuating the recommendations of the study. We will emphasize our ability to help educate the hospital on the opportunities and pitfalls of what is likely to be a protracted and highly complex public-private interaction. As part of the contract, we will offer to represent the hospital in the elaboration and emendation of the Cooperation Agreement signed in 1984 with the BRA.

We think this strategy is a "no-lose" proposition. If we are rebuffed, we will at least win points for boldness and integrity. We will also have called attention to ourselves in a way that is likely to be remembered. If our offer is accepted, we can expect a multitude of benefits to flow from the engagement. Most optimistically, there is a chance that our efforts will be so well-received that we can begin to think about the potential for a negotiated designation, in joint venture with the hospital, on the model of UIDC and Copley Place. More realistically, the contract will assure us of access to all of the decision-makers both in and out of the hospital. As MGH's representative, no door is likely to be closed to us. We may have an opportunity to influence the substance of the hospital's thinking about the role that housing should play in the final Sante Harbor plan. We will be prepared with a number of arguments in favor of housing, including the "goodwill" value of associating the hospital with the provision of so vital a need and the labor relations and competitive value of providing a desirable place to live for hospital employees, particularly at the senior level. In performing this service, we expect to leave all of those with whom and for whom we labored with a strongly positive view of our competence, political sensitivity, professional comportment and personal qualities. We will then have one more advantage and a considerably less daunting set of disadvantages with which to confront the competitive hurdles in front of us.

One risk of this strategy is that we may at some point have to face the "no win" choice of endorsing or working for a program that puts housing in a distinctly subordinate role or terminating our contract. The "bad feelings" that walking out on the contract are likely to produce would be so destructive of any future hope of obtaining a development designation, that

we should resolve at the outset to complete the job no matter what. We think that housing is reasonably well-positioned to make it into the final unified plan, and that our functioning as insiders in the planning process cannot but improve its prospects.

3) We will approach a number of individuals and firms in an attempt to put a development team in place and ready to go "when the gun goes off". This team will be chosen with three ends in mind: every member should add something to the overall strength and image of the group; the people we recruit should be "stars" in their own right whose unavailability to other groups may thin out or at least discourage the competition; and by putting the group together, we expect to enhance our own credibility when we move to step number four. The team will include a deal-maker, finance expert; an architect-planner with a demonstrated facility for designing luxury housing on difficult urban sites; a marketing firm with a successful history in both market analysis and sales or rentals; a law firm specializing in complex real estate ventures; an array of engineering experts, including geotechnical, structural and mechanical engineers; and a skilled asset management firm with a particular strength in managing luxury condominium and rental housing.

We have already discussed several specific names as possible team members. John Fowler of Fowler, Goedecke, Ellis, and O'Connor is our probable choice as money source. In putting him on the team we would frankly be borrowing his good name and reputation. His long-standing involvement with Charles Square, the Fan Piers, Arlington-Hadassah and International Place attests both to his "nose for success" and his bulldog persistence, his willingness to stay with complicated but worthy projects for years if necessary to get them going. The financing challenge for C-G

will be to carry the project to step four without any dilution of "ownership". This may require a considerable investment of risk capital on our part.

Another prospective team member is the west coast planning and design firm Fisher-Friedman. We had occasion this year to spend the better part of an afternoon with Rod Friedman and he made a very strong impression. He is a brilliant architect who has spent his entire life in housing. Among his many credits is Golden Gateway Common which we have identified as a worthy antecedent for Sante Harbor. The Common is a mixed rental/ownership project, of similar scale, with a number of undesirable adjacencies and a brilliantly conceived and executed interior, above-grade focus. We feel confident that Friedman would welcome the opportunity to do a major project in Boston.

4) The final step is to approach a major housing developer as a joint venture partner. We take this step reluctantly because we would prefer to do the project ourselves. However, unless a negotiated designation appears possible - and perhaps not even then -- we cannot win the competition unless the first name on the development proposal belongs to someone who has successfully done this sort of thing before. No amount of access, no brilliantly completed consulting contract, no illustrious roster of team members, can entirely overcome the disadvantage of being a rookie on a project that demands a veteran. We know that it will be necessary to hitch our horse to someone else's wagon, and it is necessary to begin thinking now about who that partner should be.

First, we understand clearly that this is the last step in the process. If we sought out a partner without having painstakingly ploughed through steps 1 through 3, we would have nothing to put on the table and so could

expect to be thanked for our information and politely but firmly shown to the door. If, however, we have done everything described here, and can distill our knowledge into a snappy, graphically impressive half-hour presentation, our reception is likely to be highly solicitous and respectful. We can expect an even better reception if we arrange to make our pitch to at least three housing developers and inform each of them that others are getting the same opportunity. We want a developer who will fund the competition in a first-class manner and who will agree to employ us as project manager-partner if our submission is successful. We would expect to retain a minority interest in all of the financial benefits of the development (perhaps 33-40% between us of the amount retained by the development partner), but we would want to be "out front" as project manager so that, like Ken Himmel after Copley Place, we would be in a position to go it alone the next time.

We have identified three potential developer partners. As we move through steps 1 through 3, we will be giving careful consideration to these partners, and to others, looking for the one that will afford the best combination of competitive enhancement and a favorable compensation package. The partners we are considering include:

- 1) Housing Innovations, Inc. This minority-owned firm (Denis Blackett), originally based in Boston and now in Oakland, has been around the track many times, is developing part of Battery Park City in New York, has excellent connections with both the city and state, and does not have a Boston project at present (advantageous from a control point of view). We do not know whether it has the dollars to fund in the proper manner a national design competition.

2) Perini Development. This firm is most active on the west coast, although its headquarters are in a Boston suburb. The firm is extremely well-connected locally, having won several major public works type jobs (like the Red Line subway extension). They also own Golden Gateway Commons. We do not know whether they would be receptive to the kind of partnership we propose; but we surmise that they might be willing to take a back seat on the development side to get the contract to build the job.

3) Olympia & York. We know the firm is looking for additional Boston opportunities to follow up on 53 State Street. We also know that they have entered into deal-oriented partnerships with local developers (like the Chase family in Hartford). We do not know how much housing they have developed nor whether they have an appetite for more.

Of course, we cannot be certain that this vital last step will produce its intended result - the creation of a development partnership in which Caner-Geller are development managers sharing a significant ownership position. If, as we conclude elsewhere, Sante Harbor meets the feasibility test, the opportunity is likely to interest our prospective partner; but they are likely to be skeptical that Caner-Geller will add significant value to their submission. The question is so obvious and so crucial that we must raise it ourselves. Our argument, which must be presented with just the right mixture of self-confidence and humility, is two-fold.

First, we will assert that our work to date has put us way ahead of the field with respect to knowledge of the site and all of the factors which impinge upon it. We will review the cast of characters who will affect the selection of a developer and will explain our connection to each of them. Under the former city administration, all power with regard to development resided with the mayor, unless he chose to take a passive role. Mastery of



the political process depended on but one thing: access to the corner office. Under the present mayor, politics is again taking on a byzantine flavor. Power is fragmented and shifting. It is impossible to read the political winds without patiently cultivating a wide-ranging network of sources and contacts. Anyone coming in from outside without an experienced local guide would be at a great disadvantage. We would argue that no one is better positioned to act as a guide on the Sante Harbor opportunity; and that the odds in favor of designation would materially improve if our names were on the submission. The argument is a delicate one and potentially self-defeating. We have to guard against being understood as saying that Boston is a jungle. The reluctance of some developers to participate in municipally-sponsored design competitions is in part the result of a perception that politics is ultimately decisive. Our argument is not that politics will determine the choice of the Sante Harbor developer; but that a superior understanding of the multifarious influences impinging on the choice, will permit the shaping of the winning submission.

The second argument is that after the selection is made, the same steady hand is needed to bring Sante Harbor on line as quickly, painlessly and economically as possible. It is not enough to win the opportunity. One must act thereafter to make the most of it. We must be prepared to demonstrate, and not merely assert, our project management skills, by preparing and presenting a development plan, a financing proposal and the elements of the project team.

#### The Case for Housing

The case for housing at Sante Harbor is not premised on a "highest and best use" analysis. We have not compared housing to a range of other uses -- office, hotel, retail, institutional, civic - which might be sited there.

Instead, we have asked whether housing is itself feasible; and since it is, have concluded that it ought to be the preferred use because of the well-documented need for it, both currently and prospectively. The case for housing therefore consists of two elements: first, a demonstration of its feasibility; and second, a summary of the arguments that will be used to persuade those who will affect the determination of a program for the site, that they should support it.

### Housing Feasibility

To establish the feasibility of housing at Sante Harbor it is necessary to demonstrate: that the use can be physically accommodated; that it can secure the required approvals and permits; that the market will absorb it, at the forecast prices and times; and that the development of the project is financable. We will address these items consecutively.

The appeal of the Sante Harbor site from a physical standpoint is based on its location and its size. The site is within one mile of Boston's Central Business District; has better access - by automobile, commuter rail, MBTA rail and buses, or on foot -- than any other location that we know of, with the possible exception of South Station; has a "long edge" abutting the Charles River, which has the further appeal of an MDC linear park which, though not explicitly part of Harborpark, can be effectively linked to it; and is arguably large enough - at 5-6 acres - to make possible a project of sufficient scope to overcome the location's principal current deficiency - the lack of a dense urban fabric and desirable image. We have considered a number of other projects, such as the Golden Gateway Project in San Francisco, which were successfully developed for luxury housing despite constraints that were no less serious, from a design and marketing perspective, than those we confront. Although their success cannot be

viewed as determinative, we believe that the antecedents support our judgment that Sante Harbor can become, over time, not merely an appropriate -- but an excellent -- site for housing.

The political case for housing at Sante Harbor is considered separately.

A market analysis has not been performed, although the appendix contains a discussion of the design and scope of such an analysis. We are both long-time Bostonians (one of us is a native) and we have followed the development and maturation of the real estate market in Boston, and its housing component in particular, with keen interest. Since 1980, luxury condominiums have been added to the city's housing stock at a rate of nearly 2500 units per year. Absorption has outpaced supply and prices have therefore soared. In 1984 the increase was 23% in Boston, and was certainly higher in the better neighborhoods, closer to the city's urban core. Our judgment is that demand will continue strong throughout the rest of the decade. The city's population has begun to reverse a decades long decline and is projected to increase by over 10% before 1990. In addition, the trend toward smaller households is expected to continue and even intensify. Finally, job growth is expected to add many thousands of new, highly paid workers to the city's labor force and many of them will prefer to live in close proximity to their jobs. Based on our general knowledge, our reading of BRA research reports, and our awareness of the market prices being achieved on condo sales (\$225/square foot seems to be about the current median in the neighborhoods we regard as attractive to our target market), we believe that Sante Harbor would have high market acceptance at \$200/square foot.

As discussed in the chapter on financing, Sante Harbor would be financable under current market conditions as a condominium and might be financable as a rental project if certain agreements or concessions could be secured.

Having established the preliminary feasibility of Sante Harbor, we must be prepared to answer a different question: given the other economic uses which might be developed on the site, why should those who have the power to determine a program choose housing? Our case for housing rests in the main upon what might be called urban planning considerations. The fundamental notion is that Boston will be a better city if this major area for development is not given over entirely to uses which are already adequately supplied elsewhere. We will make the argument first to the BRA, where, based upon our "soundings" to date, we expect a favorable reception. Next, as outlined in the implementation strategy, we will attempt to work with the hospital, as an insider, in helping to formulate their position on the unified development plan they have committed to produce with the BRA. At some point in this process, we expect to encounter significant input from the state instrumentalities which, as abutters or landowners, will inevitably influence the shape of the final plan.

The "urban planning" arguments we intend to make in support of a substantial housing component at Sante Harbor will include:

- 1) No displacement. The great advantage of Sante Harbor in helping to meet the city's great need for additional housing supply is that no one will be displaced in developing it. This means that politicians and civil servants will not experience pressure from citizens concerned about preserving the quality of life in their neighborhoods. Mayor Flynn has a long-standing antipathy to condominium conversions because he believes that

low-to-moderate income renters are displaced when units are converted. Whatever the merits of that argument, it has no applicability whatever to new condominium construction. As part of our coalition-building effort, we intend to contact the Mayor's development advisors - John Connally, Peter Dreier (of Tufts University, and a strong advocate of the anti-conversion position) and Kevin Phelan (a Meredith and Grew Vice President, and liaison to the "real estate establishment") -- and make the argument that major new construction, by meeting the demand for in-town condominiums, will help to moderate the values of convertible properties, and thereby reduce the incentive to convert them.

2) Limited Negative Impact on Abutters. The isolation of Sante Harbor from contact with existing neighborhoods is a planning challenge but a politically favorable circumstance. Almost anywhere else in the city a project of this magnitude would be regarded as potentially disruptive over an area much wider than its immediate environs. The "politics of approval" would accordingly be greatly complicated as interest groups jockeyed for influence in producing a development plan that most nearly reflected their own agendas. Here, the citizen input can be expected to be slight.

3) Deflects Gentrification. There is some potential for persuading groups in the North End and perhaps Charlestown that Sante Harbor will help to deflect the insistent gentrification pressures they are facing. By creating a new neighborhood aimed at the high-end market, we should prove attractive to significant numbers of people who would otherwise direct their search for housing at these hard-pressed areas. The argument may have particular force because our target market - \$200/square foot - more closely parallels the condo market in the North End and Charlestown, than it does the market in Back Bay, Beacon Hill or the waterfront.

4) Extension of City's Urban Fabric. Sante Harbor can be viewed as major in-fill development which extends the city's urban fabric to an area which has lain dormant for more than 40 years. In-fill is generally viewed positively by those with a planning perspective. It is seen as helping to "complete" the city by eliminating unsightly holes or gaps. It allows the city to resist pressures to extend outward or upward. Moreover, this project may have the additional benefit of helping to link the North End and the West End, thus helping to make the city more cohesive and perhaps marginally less turf-conscious.

5) Reducing the Pressure of Commuters. To the extent that Sante Harbor is able to appeal to families who work in the city, but would otherwise live in its outlying neighborhoods or suburbs, the commuting pressures on the city's highways and streets may be somewhat relieved. More generally, we would expect that very few of Sante Harbor's residents would use their automobiles for getting to work.

6) 24 Hour Use. One advantage that housing has over offices or any other use which emphasizes employment, is its ability to bring people to the site, and keep them there, around the clock and through the entire week. In the drafts of the Downtown by Design planning document which have been circulated and summarized in news accounts, great emphasis has been placed upon balanced development which assures that the city's business areas do not become unpopulated, lifeless canyons after dark. If Sante Harbor did not contain a substantial residential community, a major planning goal of the city would be needlessly sacrificed.

7) River Constituency. The MDC may be persuaded that the Sante Harbor residential community would constitute the best possible guardian for any linear park that they may envision for the area. The community may be

expected to have a possessive and protective attitude toward both the park and the river. Sante Harbor as envisioned will be a densely developed area; and the strip of green and blue planned by the MDC will surely come to be regarded fondly. The MDC's parks more than occasionally fall into disrepair, and the commission is understandably sensitive to suggestions that its park management effort is deficient. Because of the vital importance of the linear park to Sante Harbor's desirability, there is ample reason to believe that it will remain a jewel long after the designers have left the scene.

8) Cleaning Up Causeway Street. The city, the owners of Boston Garden and the GSA are all vitally concerned with the future of Causeway Street and of the Bulfinch Triangle which it abutts. Since the residents of Sante Harbor will have to travel along or across Causeway Street en route to almost anywhere they might want to go, we expect that they will become a vocal and potent interest group in favor of the redevelopment of the street along lines more compatible with a residential neighborhood. Sante Harbor is sufficiently isolated so that the civic uses of Causeway Street will not substantially disrupt its residential character; but the street is the most logical place - other than the new Nashua Street - on which to locate service oriented retail. In time, we expect the entire Bulfinch Triangle area to be improved in ways that serve the interests of the new or renovated Garden, the GSA and Sante Harbor alike.

A PRIMER ON GETTING STARTED



The C-G Sante Harbor Partnership has a strong bias toward self-examination. This is a product of personal predilection; but it is also derived from a carefully considered judgment that long-term success in development depends in part on a determination to eschew the unreflective, reactive, seats-of-the-pants modus operandi which has characterized so much of the business in the past.

In our view, each development effort is a real-world laboratory in which the developer mixes the elements of development in varying proportions, much as a chemist uses the materials of his trade, in hopes of producing just that combination which, when subjected to the "laws" of the competitive marketplace, will prove both durable and appropriate. We do not assert that the laws of the marketplace are like the laws of chemistry. If, however, the developer fails to use each development effort as an opportunity to test and refine his notions about which "elements" are superior, and in what proportions, he is wasting a valuable opportunity. Over time, a developer who truly understands that even his failures can be the building blocks of future success, will have a much better time of it than a developer who views failure as a contagion, to be isolated and avoided at any cost. Successful or not, each development effort is an opportunity to distill and extend the wisdom of experience. What is desired is an expandable compendium of knowledge, in which patterns of behavior are recognized, effective strategies identified, common issues or problems noted and alternative approaches compared. Such a storehouse will never assure that all one's strategies are sound and effective, but it will help to guard against the egregious error which can not only deflect a particular development, but sometimes unhorse an organization entirely.

Sante Harbor, thematically, is about "getting started" in two distinct senses. Our first concern is the debut development; but we are also greatly interested in learning how any development effort can be most appropriately begun. We have not carried Sante Harbor far enough to be able confidently to distill its lessons, but our implementation strategy reflects a set of hypotheses about the peculiarities of the debut development as well as the more general requirements of nurturing any idea through the early stages of pre-development. It would seem appropriate to advance these hypotheses explicitly.

- 1) Reconnaissance or fact-gathering should be as objective and open as possible.

Very early in any development effort it will be necessary to investigate the site, its ownership, abutting owners and interested parties, the neighborhood or community, the relevant political sub-division and the history, laws and practices of the approvals bureaucracy. This investigation should be done by the developer himself (in a small organization). The investigation should be conducted in the manner of a historian and not a lawyer. The objective is not to make a case or fit the facts to a preconceived hypothesis, but to obtain as much information as possible, almost without discrimination. If the fact-gathering effort is polluted by premature strategizing, important facts will be overlooked or their significance misconstrued. The developer should state that he is thinking about doing a development in the community, that he has not decided on a site or a use, but that he wants to find out everything about the community, much as if he were thinking of moving there, which in a sense he is. Like the historian, the developer should be careful about his sources. Certain matters, like zoning, can be considered only be a careful perusal of

the official sources. Statements about what the sources contain and how they should be interpreted should be duly noted, but cannot be a substitute for the text itself. Where a fact is stated, but cannot be confirmed by reliable documentation, multiple sources should be sought. If the matter is in doubt, great care should be taken in building a strategy around its assumed truth.

The developer should understand that the interests of individuals and institutions are the keys to understanding and predicting their behavior; but that those interests will not always be what they appear and will sometimes remain maddeningly obscure. At various times in the Sante Harbor effort, we have identified MGH's interests as: land-banking their Nashua Street property for institutional purposes in the 1990s; studying the options for near-term joint development of the Nashua Street property in a way that permits the integration of institutional and other uses; and planning for the joint development of the Nashua Street property so as to maximize the monetary return to the hospital (particularly in terms of an income stream) from its prescient land investment. It is possible that the hospital does not have a single, unvarying interest at all, but is instead responding by fits and starts to its own perception of the shifting political and development climate. At any rate, there is little doubt that the developer would be well-served by a thorough understanding of the interests, both latent and patent, fundamental and evanescent, of all parties who have or are likely to assert an interest in his development idea. The frame of mind he must cultivate to aid in the apprehension of those interests is skeptical, open, receptive, self-questioning, persistent.

2) Be very observant and very attentive. Leave no stone unturned.

As first-time developers who are also first on the scene, C-G is in a

position, over time, to make ourselves more knowledgeable about this opportunity than anyone else. We must not squander this potential advantage. That means, among other things, that we must pursue hints, or rumors, or suggestions with the bulldog tenacity of a cub reporter who senses that he's on to a "Pulitzer" story. When the hospital asserted with no equivocation that it intended to hold the Nashua Street property for its own needs to the 1990s, we could have spent a lot of time generating a strategy for overcoming their supposed "no build" and "institutional only" mind-set. Fortunately, we discovered soon thereafter, through an offhand remark by a BRA staffer, that the hospital had engaged a local architect to do a mixed-use planning study. It took some considerable digging, but we located this individual and he proved as open and willing to talk as his client was aloof and uncooperative. Our meeting with him was a revelation. It opened our eyes to the hospital's true state of mind: fluid, uncertain, receptive to mixed use and early development. The point is that valuable, even crucial, information may be found in the unlikeliest places or in the most roundabout way. The journalism analogy is apt. Official sources and spokesman have their place but the world view they expound is narrow, partial, self-serving and sometimes deliberately misleading. They should always be supplemented by sources - like "our" architect - who are relatively unconstrained by real or perceived bureaucratic muzzling. The easy path is to accept what one hears at face value. It is much harder - but also more productive - to understand that truth has to be pursued, because it does not yield itself easily.

3) Recognize your natural allies and make them your allies in fact.

Any developer, particularly a beginner, is apt to feel on occasion that he is swimming upstream against a floodtide, or flying solo through a storm.

An iron will and a steely determination to persevere will come in handy; but a frank acknowledgement of the need for support and assistance is even more important.

When the development effort begins, you will have no committed allies. But your reconnaissance will have surely revealed a range of possible supporters. Understand that some will merely support the need for development (which they see as serving growth and jobs) while others can be viewed as potential advocates for the specific project you are proposing. The nature of their interest will determine the degree to which they will be willing to use their influence on your behalf. At the pre-development stage, the developer should identify his potential backers and begin to cultivate them. He should determine what their interests are, where they may overlap his, and how together they can act to further their shared aims.

The developer's search for allies, to be maximally effective, should cover not only those who are certain to play a role in the evolution of the process, but as well those who may not perceive that they have an interest in its outcome. In Sante Harbor, obvious potential allies include the BRA, by virtue of its preference for dense mixed-use development on this site, and its concern for the inadequacy of new housing production in the city, and the building trades organizations, who are interested in fostering large projects that promise years of employment for their members.

But other potential allies may be discerned, lurking in the shadows. It may be possible to secure the support of the hospital's medical staff which may have an interest in the development of high-quality housing within walking (or shuttle-bus) distance of their jobs. C-G should consider setting up a meeting with interested physicians, either directly or through

any association which can be identified as representing them in some capacity. If this is done, great care should be taken to avoid the implication that C-G desires the physicians to put pressure on the hospital administration to act in furtherance of housing development. That is in fact precisely what C-G desires; but the physicians must be trusted to decide for themselves whether and how such pressure should be applied. The coalition-building effort should not obtain a new ally only at the cost of alienating a larger, more significant entity whose ultimate support for the project is probably essential to its success. But the MGH doctors can be an important part of the effort to win the hospital to our side. We should seek the formation of a liaison committee to represent the interests of the hospital's physicians in the elaboration and implementation of the plans for Sante Harbor. In time, the committee could evolve into an interest group with genuine influence on the hospital's posture toward Sante Harbor.

We believe that the Sante Harbor proposal is one that would be enthusiastically endorsed by the commercial developers of the new/renovated Garden and its immediate environs. For reasons of competitive self-interest, they are likely to regard housing as a better use of Sante Harbor than more office space, especially if the elevated Green Line remains while the two developments compete in a perhaps overbuilt office market.

The fledgling developer who does not approach his debut as would a challenger trying to unseat a long-time incumbent, is doomed to remain an outsider, peripheral to the power games which allocate major urban development opportunities. The beginning of wisdom is to recognize that allies are as vital as oxygen, and potentially as ubiquitous.

4) Learn from your predecessors.

Although the Sante Harbor proposal calls for development in a

pioneering location, it is not completely virgin territory. The ground has been ploughed before, albeit with only a meagre harvest. The Gorin-Tsongas Gateway Center proposal was a made-to-order "experiment" in which an experienced developer attempted to win the right to develop Sante Harbor - and much else as well - preemptively. We very carefully charted the progress of this abortive effort -- its success would obviously have rendered moot our own plans -- because in essence it was functioning as an "advance party" for our own development expedition. We discussed elsewhere what we learned from the Gateway Center proposal. Our point here is simply to underscore that a previous development effort - preferably recent, in the same area and incorporating at least some similar uses - is an unexcelled source of useful insights into winning site control and development approval.

5) Anticipate your weaknesses and develop a strategy for minimizing them.

Every development effort must, at an early date, "take inventory" of its strengths and weaknesses. Because it is so hard, particular attention must be paid to identifying and measuring the importance of weaknesses, since competitors and opponents can be counted on to be clever and resourceful in unearthing and exploiting them. One approach is to disarm your critics by acknowledging in advance where you could be stronger. The model is the trial counsel who elicits on direct examination of his witness those items which could otherwise be used to devastating effect by the adroit cross-examiner. On a human level, there is a certain empathetic identification with one who humbly admits to being less than a paragon. Yet the admission of weakness must be accompanied by taking (and loudly trumpeting) specific and credible steps intended to vitiate the weakness.

The Sante Harbor Partnership identified its weaknesses - all crucial, since they are the probable criteria for developer selection -- as experience, reputation, influence and financial credibility. Unless we could simultaneously explain in a credible, straightforward manner how those weaknesses could be turned into strengths before "decision time", we would have no basis, except for the "learning experience", to stay in the hunt.

- 6) Adhere to the sequence of steps outlined in your strategy, avoiding the temptation to skip intermediate steps.

If your strategy has been well-conceived, each step should accomplish something necessary to the achievement of subsequent steps. If steps are skipped, out of impatience or a sense that the process must be accelerated to keep pace with an externally determined timetable, the developer may be attempting to do something without having put down the proper foundation.

In the Sante Harbor strategy, for example, the predicates for approaching a development partner are, in order, acquiring a comprehensive and intimate understanding of all aspects of the development opportunity, securing some kind of cooperative working relationship with MGH, and putting together the working pieces of a highly reputed, committed and experienced development team. If any of the essential predicates are omitted, we would be at risk of having our prospective development partner reject the opportunity entirely as too speculative; or alternatively recognize the development opportunity as both substantial and imminent, but fail to perceive why it would be in its interest to negotiate some form of joint venture with C-G.

The foregoing is not to suggest that changes in the timetable, or unanticipated events, may not require some rethinking of the tactical steps and their interrelationships. Flexibility and nimbleness are among the few



obvious advantages of a fledgling developer and should not be dissipated by a slavish adherence to a meticulously articulated plan. Nevertheless, though the plan will change, the objective should be to replace it with a new plan to channel the developer's energies until it too has been overtaken by events.

7) Make frequent and (free) use of available expertise.

Many kinds of experts that a developer might call upon are accustomed to consulting widely without charge, as a way of building a name and generating future businesses. Mortgage brokers, architects and planners, asset managers, commercial and residential brokers, all are in very competitive businesses in which some degree of "specing" of labor is a well-established way of beating the competition. The experts' willingness to talk can be even more pronounced in the case of a fledgling developer. We have found that experts are often eager to talk to developers who are just starting out: they know that lending a helping hand can lead to a lifetime relationship; that their words can have a real impact on the developer's plan; and that the rookie is far more likely to be seeking a collegial, collaborative relationship.

The developer should identify a cross-section of the best experts in areas that concern him; and should consult those experts frequently and in depth. He should always send in advance of any meeting an agenda and a list of topics or questions on which he would like the experts' judgment and advice. It would also be helpful to include a brief project description and any background deemed essential to an understanding of the developer's difficulties. Of course, if the project comes together, the experts consulted during the pre-development phase should be very well represented on the final team.

The Sante Harbor Partnership acknowledges the time and effort expended on their behalf by John Fowler and his staff, and by Robert Weinberg, Esq. Both will be invited to be part of the development team.

- 8) Build toward a point at which you are ready to announce that you are a player.

A step-by-step, planned, carefully followed strategy is essential for a first-time developer to build credibility. He must make up in energy, precision and quality what he lacks in experience and reputation. He can be sure that no one will give him the benefit of the doubt, so he must leave no room for doubt. Everything that bears his signature must proclaim the competence and professionalism of its author. Nevertheless, the developer should act from the beginning as if he belongs, and knows it, with the fast company he has chosen to travel with. At every turn, he should assert, with quiet conviction, his confidence that he is equal to any challenge that comes his way.

The C-G team will stay at the staff level only during the fact-gathering stage of pre-development. After the contours of the opportunity have been ascertained, we intend to address our correspondence and our calls to the "principals": Robert Buchanan, M.D., Ernest Haddad, Larry Martin, Ferdinand Colloredo Mansfeld (MGH); Stephen Coyle and his staff (BRA); and the top brass at each of the relevant instrumentalities of the Commonwealth. If the developer is not bold in going to the sources of power, he will undercut his own insistence that he is ready to stand as an equal with his rivals and with all those who will affect and make the developer selection.

A simple but effective technique for building credibility is to demonstrate that one is "in the know". This is done by subtly referencing

persons you have seen or spoken to, whose identity would be likely to impress the present listener with the degree to which you have penetrated the inner sanctum. Credibility is in part merely the perception that one has the sort of contacts and relationships that assure an audience for one's plans and ideas. That perception is achieved by developing, and quietly but effectively publicizing, the desired contacts and relationships.

9) Look for an "edge", and when you find it, milk it till it's bone dry.

A developer must be as cognizant of his strengths as his weaknesses. A strength is a tool or a mechanism which may be exploited to produce an "edge". The Sante Harbor Partnership possesses strengths of priority, time and access. Our strategy is to build on the use of those strengths to become the most knowledgeable player in the game, to secure a position of trust and confidence with one of the major institutional participants (probably MGH), and to put together a strong and credible development team. All of this must be accomplished in advance of our adding the crucial final ingredient - an experienced development partner with a successful track record of luxury housing development. The knowledge we expect to acquire will give us an edge in credibility and reputation. The hospital tie-in, or some substitute, will assure that we are part of the process. And the finding and meshing of the many parts of the team will, together with the "edges" already discussed, help us persuade the development partner that joining forces with us would be advantageous to him. Obtaining those "edges" depends on the ability to sell ourselves to others -- the universe of observers and participants, the key decision-makers within the essential project - influencing organizations, the marketplace of possible team participants. And that ability in turn requires a showing that talking to or working with us will in some way give our interlocutors an "edge". We

are realists. Effectuating our strategy demands a showing that we are giving something of value for what we are getting in return. Where we have been well-received in researching this thesis, we have gotten a false picture of the receptivity of very busy people to working with the "new boys on the block". We know that we have been living a charmed life; and that advancing Sante Harbor after we lose our student identity cards, will require an ability to deal in the only currency the marketplace truly understands - personal or organizational self-interest.

- 10) Generate a pre-development budget and a credible combination of sources to meet it.

The frequent use of free expertise (lesson #7) is vitally important for a fledgling developer; but there is no doubt that money will be necessary to carry the project to the point at which a development partner can be approached, and project financing sought. Unless you have clearly and conservatively anticipated all of your pre-development expenses, you will run out of money well short of your goal and the seed money you have expended will be lost. There is an obvious and painful trade-off between the sources of pre-development funds and the retention of equity. The earlier in the process you seek a money partner for "mezzanine financing", and the greater the magnitude of the financial partner's commitment, the greater the dilution of ownership is likely to be. On the other hand, a developer - particularly one whose capital is as modest as ours -- is likely to want to limit his downside risks. The mezzanine partner will typically enter the process after a real development opportunity has crystalized; and will commit to funding all of the expenses incurred from that point (sometimes including a reimbursement of the developer's expenses to date) to project financing. Depending on the terms of the construction loan, his

investment will be reimbursed at the first construction draw, or in stages thereafter.

Our goal is to avoid the necessity for mezzanine financing entirely, if possible; but more realistically, to carry the project ourselves sufficiently far so that when the money partner does come in, his total exposure, the time during which he will have equity in the deal, and the degree of risk of a total loss of capital, will all be as precisely quantifiable - and modest - as possible. We intend to use Fowler, Goedecke to locate and structure our mezzanine financing, much as they have done for Carpenter & Company and Don Chiofaro. We will obtain a letter from John Fowler stating his judgment that our project will be attractive to the real estate venture capital market; and committing to place such financing if, as and when required.

In this context, the infeasibility of site control may be seen as an advantage: it means that we will not have to expend the very considerable sums that would otherwise be required to option or buy the land.

11) Avoid re-inventing the wheel by documenting everything.

Much of the learning that occurs in real estate development is "lost" because there is no formal mechanism to capture it and pass it on. The Sante Harbor Partnership will maintain, for this and for all future development efforts, a looseleaf book, organized by tasks or goals, in which the progress of our efforts can be observed and charted. This book will faithfully record all significant activity, and will not be culled to eliminate evidence of "false starts" or "detours". In our view, the lessons of the Sante Harbor effort will only become clear when it has run its course, and the tortuous path which it traveled can be studied and assessed. Discrimination, choice and judgment should be largely deferred to the end.

A final project debriefing is anticipated in which all those who played a role in the development will be asked to review the development book and respond, in writing, to the questions: what did we learn? What did we do well? What could be done better? This process of comprehensive documentation and debriefing should enable us to generate, over time, a C-G Development Manual (the "bible") in which the how and why of development tasks are spelled out in detail. When the organization grows, new employees can learn the C-G way by reading both specific development books and the firm bible.

This is admittedly an ambitious agenda. We are mindful that the press of daily activities will frequently threaten to push the documentation obligation aside. However, since we believe that the faithful performance of one's documentation responsibilities is essential to our concept of "learned expertise", we will insist that all employees, as a condition of employment, document their activities within the week in which they occur. If we succeed in inculcating a habit of contemporaneous recordation of all development activity, the C-G partnership will have secured a valuable competitive edge.

12) Believe in yourself, be patient but know when to quit.

The Sante Harbor effort is certain to be lengthy, circuitous and problematic. As a fledgling developer, we anticipate a string of early rebuffs - much like what we experienced in our first approach to the hospital -- and few words of encouragement. There is no point in even making the attempt unless one understands how lonely and unrewarding it is likely to be in its early stages, and how skeptical, and even hostile, our various audiences will appear. We will have to be sustained by our self-regard and our belief in the project. And we will have to sustain each

other. Moreover, even if the strategy, or some variant of it, begins to work, the monetary gratification will not occur for several years, at best. Developers contemplating a project like Sante Harbor should be quite confident of their ability to work for years, if necessary, with meagre tangible or psychic rewards. Developers rarely regard their own mental equipment as a possible project-killing impediment, but unless the earliest reconnaissance considers this issue, a successful project is quite unlikely.

Having launched the project and nurtured it, against all odds, to a point where the prize appears tantalizingly close, the developer does not want to consider the possibility of failure. Yet failure is surely more likely than success, and becomes only marginally less so as the first elements of the strategy fall into line. In fact, in its earliest stages, the project may be regarded as such a long-shot that opponents do not feel obligated to attempt to shoot it down. Only later, when success is within view, do opponents roll out the heavy-guage artillery. The cruel reality for the fledgling developer who has elected a "page one debut" is that his day of reckoning is likely to come later, when the investment, in all its forms, has reached a truly impressive level. Yet the developer must understand that, beyond a certain point, further effort may be pointless and even self-destructive. Since time is the only truly non-renewable resource, great care must be taken in using it wisely. Our model here is Mort Zuckerman, who was willing ultimately to throw in the towel on Park Plaza despite the years of effort and millions of dollars that he had expended on it. It was a painful and chastening experience; but it saved him and his company for other battles, with happier results. We will keep Mort Zuckerman's Park Plaza experience in mind as we pursue Sante Harbor.

FINANCIAL FEASIBILITY



Financial Feasibility Summary

	<u>Rental Alternative 1</u>	<u>Rental Alternative 2</u>	<u>Condo Alternative 1</u>	<u>Condo Alternative 2</u>
Total Development Cost	148,544	196,398	179,977	233,615
Equity Required	20,687	73,327	-	31,000
Project Value	151,360	151,360	-	-
Net Operating Income	15,568	15,568	-	-
Return on Asset	10.48%	7.93%	49.60%	15.25%
Net Profit on Sales	-	-	33.16%	13.23%

This thesis considers Sante Harbor at the earliest stage of pre-development, before the existence of the opportunity has been widely perceived and its scope and duration reasonably bounded. Moreover, it is highly probable that the multiple complexities discussed in the design and politics sections will preclude a construction start in less than two to three years. For that reason, among others, a market analysis was not undertaken: its results could not be more than preliminarily suggestive of the market niches at which Sante Harbor should be aiming. Nevertheless, a first cut at financial feasibility was deemed essential for two reasons: to determine whether, under realistic and conservative assumptions, the project could be financed if it could be both built and marketed at today's prices; and to identify areas of particular significance in the ultimate deal-structure, so that we would have a basis for focusing our energies and attentions in the elaboration of the Sante Harbor opportunity. This analysis will explain what we did, will evaluate the results and will pinpoint those things which should be done, and why, as part of the financing strategy for Sante Harbor.

Our analysis was organized as follows. We analyzed the development of rental and condominium housing separately, each under two basic scenarios. Alternative 1 assumed no acquisition or site premium cost. We know that the land will not be free and that we will have to incur significant site premium costs (because of the poor quality of the soil and the necessity to create a desirable living environment out of what is now an urban wasteland). But we wanted to see how the project looked under a highly favorable set of assumptions. If it was only marginal then, it would appear to be difficult to negotiate a deal structure that would produce satisfactory returns. Conversely, a very favorable return on asset would indicate that there was "room" in the project to accommodate a significant land payment and contribution toward site improvements. How much "room" would be suggested by considering the sensitivity of the "return on asset" to changes in the assumed land cost.

The second scenario is based on our best estimate of the land and site costs under current conditions. The land unserviced cost is \$25/saleable square foot, \$30,000 per unit and 12.5% of the forecast sales price for an average unit. Some sales of new land have occurred in the last year to condo developers at between 30 and 40 dollars per saleable foot, but we believe that this location does not warrant a "top of the market" price. The site premium cost is in considerable doubt but we chose a number slightly higher on a percentage basis than what has been projected for Piers 1, 2, 3, where the developer anticipates incurring substantial expense - as for the dredging of a canal - to create an imageable community where none presently exists. We would expect that the infrastructure costs at Sante Harbor - such as for building a new Nashua Street -- would be subsidized or shared by all of the uses to be created in the immediate vicinity.

Together, the two apartment and condominium scenarios would set parameters or boundaries within which the economic potential of Sante Harbor could be assessed.

You will note that the total development cost for rental alternative #2 is simply the total development cost for rental alternative #1 plus the assumed acquisition and site premium cost. (The identical relationship exists for the condominium alternatives except that the carrying cost is plainly higher for the second alternative.) The financial feasibility model derives a mortgage loan amount and a maximum equity investment based on a realistic debt coverage ratio, mortgage constant and desired rate of return on equity. It also produces a project value equal to the sum of the equity investment and mortgage loan which the project will support. We have noted with an asterisk the major return measures which indicate the project's investment potential.

The first thing to do is to compare project value and total development cost. Unless the value that has been created exceeds the cost of development, the project would seem to flunk a very basic test of feasibility. The second key criterion is the return on asset or gross yield (net operating income divided by total development cost). Here, what you should be looking for is a return at least one to three points higher than current long-term interest rates for safe (U.S. Government Securities) investments. (Thirty year bonds are currently yielding approximately 10.7%). The required equity return will vary with the level of risk. Finally, the return on equity is the ratio of the cash flow before taxes to the required equity, the so-called cash-on-cash return (here note that under both rental alternatives we assumed a required equity - to be "kept in" the project as reserves - equal to 110% of the equity amount which, when added

to the mortgage loan amount, would equal the total development cost). The required equity yield varies with the interest rate environment, the city and the type of risk. Current cash-on-cash returns for first-quality, fully occupied, credit-tenanted downtown office buildings (still considered to be the real estate investment most resembling an investment-grade bond) are reported to be in the 7-9% range. Considering the riskiness of a major luxury rental project in an unproven location, we felt that an equity yield of 12% would approximate what an investor would expect today.

The condominium analysis varied the assumptions used in the rental analysis only in a few respects: the hard cost of construction was assumed to be 10% higher, and 200 of the parking spaces were assumed to be held off the market, as guest parking. No income and expense analysis was done and the financial feasibility model, accordingly, could not be used. A line item for "carrying cost" is essential since the condominium can not all be assumed to be presold. The Heritage, the proposed 88 unit super-luxury condominium at Arlington Street and Hadassah Way, anticipates a 14 month sell-out with 50% presales and an average 35% of the units unsold for the entire marketing period. Those assumptions produced a carrying cost equal to almost 6% of total condominium development costs. We used a more conservative 8% because we anticipate a more modest level of presales.

Evaluation of Results

Rental Alternative 1: Sensitivity of ROA and ROE to Monthly Rents

<u>Rent</u>	<u>ROA</u>	<u>ROE</u>	<u>Rent</u>	<u>ROA</u>	<u>Rent</u>	<u>ROA</u>
\$2,500	10.48%	12.54%	\$3,000	12.34%	\$3,500	14.20%
\$2,600	10.85%	17.19%	\$3,100	12.71%	\$3,600	14.57%
\$2,700	11.22%	26.30%	\$3,200	13.08%	\$3,700	14.94%
\$2,800	11.60%	52.17%	\$3,300	13.45%	\$3,800	15.31%
\$2,900	11.97%	672.34%	\$3,400	13.83%	\$3,900	15.68%

Rental Alternative 2: Sensitivity of ROA and ROE to Monthly Rents

<u>Rent</u>	<u>ROA</u>	<u>ROE</u>	<u>Rent</u>	<u>ROA</u>	<u>Rent</u>	<u>ROA</u>
\$2,500	7.93%	3.54%	\$3,000	9.33%	\$3,500	10.74%
\$2,600	8.21%	3.94%	\$3,100	9.61%	\$3,600	11.02%
\$2,700	8.49%	4.40%	\$3,200	9.90%	\$3,700	11.30%
\$2,800	8.77%	4.94%	\$3,300	10.18%	\$3,800	11.58%
\$2,900	9.05%	5.58%	\$3,400	10.46%	\$3,900	11.86%

Rental Alternative 2: Sensitivity of ROA to Acquisition and Site Premium Costs

<u>Combined Acq. &amp; Site Prem.</u>	<u>Acquisition</u>	<u>ROA</u>
27,000,000	\$10,000,000	8.93%
32,000,000	\$15,000,000	8.65%
37,000,000	\$20,000,000	8.40%
42,000,000	\$25,000,000	8.16%
47,000,000	\$30,000,000	7.93%
52,000,000	\$35,000,000	7.71%
57,000,000	\$40,000,000	7.51%
62,000,000	\$45,000,000	7.31%
67,000,000	\$50,000,000	7.13%
72,000,000	\$55,000,000	6.95%
77,000,000	\$60,000,000	6.79%

The Rental Alternative.

We began with the hypothesis that unsubsidized rental housing might, contrary to the reigning consensus, be financable under prevailing conditions in Boston. Our notion was that market rent levels were approaching a level at which they would produce financable yields. We did not do a rental market analysis but we did enough research to learn that luxury rents were approaching, and in some cases exceeding, \$2000 per month

for 2 bedroom downtown apartments. We wanted to test whether those numbers might make it possible to profitably develop rental housing.

It would seem from a perusal of the rental numbers that our intuition was wrong. Even under the artificially favorable circumstance of no land or site costs, the return on asset figure falls considerably short of the desired 13% (or 3% higher than current long-term Treasury yields). The project value is less than 2% greater than the project cost, an uncomfortably thin margin of value creation. The equity return would appear to be above the threshold 12% but in truth it is not. That is because we achieved a favorable mortgage constant of 10% only by surrendering to a project lender a full 50% of Sante Harbor's economic benefits, including cash flow. In reality, therefore, the equity yield is only 6.27%. Finally, we exceed the target return on asset at \$3200 and achieve returns comparable to those of condominium alternative #2 only at rents of nearly \$3800 per month.

The prospects for successful development of luxury rentals would seem even bleaker than that. Alternative #2 imputes a realistic land and site cost, and then tests how changes in the acquisition cost affect the gross yield. Using the "base case" assumptions, the key parameters of feasibility fall to truly abysmal levels. Project value is only 77% of total development cost; the ROA is at only 61% of the required mark; and the equity yield falls to a nearly inconsequential 3.54%. Furthermore, the ROA still falls short of the threshold yield when the rent is escalated to \$3900, a level that would make even some hard-boiled New Yorkers gasp in astonishment. Lastly, the ROA seems quite insensitive to downward modifications in the land cost. If the land cost is cut by 2/3 (to \$10 million), the ROA increases only 1%.

If a market analysis indicates that Sante Harbor would have excellent market acceptance as a rental project, but not a condominium, does this "first cut" feasibility study indicate that the matter is not worth further consideration? What strategies might be pursued to produce a more favorable, but still realistic, set of returns?

It is essential to recognize that this analysis, though adequate when a project is in its infancy, does not consider many factors which will have a bearing on a project's feasibility and value. It entirely omits any reference to tax impacts; it ignores the timing of cash outflows and income, without which one is unable to measure the discounted present value of any real estate opportunity; and it neglects as well an analysis which would take the project from its stabilized year through an assumed holding period to a sale. As a result of these omissions, three of the four components of real estate return - tax benefits, equity buildup and appreciation, which may be "pulled out" of a project through a refinancing or a sale - are not considered. Given these omissions, the inadequacy of the key financial parameters under our "first cut" analysis may not be fatal.

If it become necessary to produce a financing package for the development of luxury housing at Sante Harbor, the following possibilities would be worth exploring:

- 1) Perform a 10 year discounted, after-tax, cash flow analysis concluding with a sale. Since housing is among the most favored forms of investment under our tax code, and is likely to remain so even after reforms are enacted, we would expect that tax benefits would contribute a substantial fraction of the total net present value of a Sante Harbor development. The analysis should consider a variety of sale scenarios including the in-house conversion of the project to condominium at various points in its life

cycle, a sale to a condo converter, or a sale to an apartment investor. The sale of the project could be expected to produce a significant return to the equity investor. (Note that even under an unmodified rental alternative 2, the financial feasibility model legitimates a mortgage loan equal to 66% of project cost, leaving only 34% to be raised from equity sources.) In short, a more complete analysis of the rental alternative might indicate that the project can be made to work through an artful combination of reduced upfront costs, mortgage interest writedowns and full utilization of available tax benefits.

Let us consider how each of these elements of a workable Sante Harbor financing package might be achieved.

2) Upfront costs might be reduced by persuading MGH to become a partner in the venture. If their land were contributed "at cost" in return for a 25% interest in all of the benefits of ownership -- except tax benefits, which as a tax exempt institution they would not need -- they could anticipate a first year cash flow of over \$600,000 and the venture, by that single maneuver, would approach a 10% ROA.

3) In return for obtaining inexpensive long-term mortgage financing, if it is available at all, we would probably have to alter the exclusively luxury appeal of Sante Harbor. The typical low-interest housing loan requires that 20% of the units be reserved for persons who earn less than 80% of the median income in the SMSA. Back-of-the-envelope calculations indicate that if 200 units were rented at \$750 monthly instead of \$2500, the gross rental income for the project would be reduced by 14%. That is a significant loss; but if a long-term loan could be obtained at 2/3 to 3/4 of the prevailing rate, with little or no surrender of equity, Sante Harbor ought to give it very careful consideration. We are mindful, as well, that reserving 20% of



the units for persons of low-to-moderate income would be helpful in shepherding the project through the dicey political minefield before it. If some way were found for giving preference to MGH staffers to satisfy the 20% requirement, the financing strategy would dovetail nicely with the implementation strategy. We are aware that the acceptance of this form of low-interest debt may restrict the ability to convert the building to condominiums for some period of time.

4) The Sante Harbor project will produce very substantial tax losses under almost any rental scenario. If the depreciable base of the building is \$150 million (nothing for land or infrastructure improvements) and the current 18 year recovery period is continued, the project will generate losses in the range of 5.73 million dollars annually (8.33 million depreciation less cash flow). This creates a significant syndication opportunity. At the present time, any syndication analysis would be rank speculation; but when the issue is ripe, and the future tax environment clarified, we intend to approach several major apartment syndicators (like the March Company and Boston Financial Technology Group) to solicit their advise and counsel on whether, and how, a syndication could help to make Sante Harbor feasible as a rental development.

Condo Alternative 1: Sensitivity of ROA  
to ROA to Sales \$/SF

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<u>Sale \$/SF</u>	<u>ROA</u>
\$150	16.26%
\$160	22.93%
\$170	29.60%
\$180	36.27%
\$190	42.93%
\$200	49.60%
\$210	56.27%
\$220	62.94%
\$230	69.60%
\$240	76.27%
\$250	82.94%

Condo Alternative 2: Sensitivity of ROA  
to Sales \$/SF; and Acquisition Cost

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<u>Sales \$/SF</u>	<u>ROA</u>	<u>Acquisition</u>	<u>ROA</u>
\$150	-10.43%	\$10,000,000	28.30%
\$160	-5.29%	\$15,000,000	24.77%
\$170	-0.16%	\$20,000,000	21.43%
\$180	4.98%	\$25,000,000	18.26%
\$190	10.12%	\$30,000,000	15.25%
\$200	15.25%	\$35,000,000	12.40%
\$210	20.39%	\$40,000,000	9.60%
\$220	25.53%	\$45,000,000	7.09%
\$230	30.66%	\$50,000,000	4.61%
\$240	35.80%	\$55,000,000	2.25%
\$250	40.94%	\$60,000,000	.00%

The Condominium Alternative

This alternative seems to "pass" the basic feasibility test. Assuming land and site premium costs of nearly 50 million, we anticipate a total development cost (exclusive of carrying charges) of some 140.60/square foot. (That allocates 22% of total development cost to parking) The Piers 1, 2, 3 projections, which target a \$300/square foot market, project a cost of \$125/square foot. Although we're not sure that the two numbers are precisely comparable, we do take some comfort in the fact that our projected costs in the "base case" are only 89% of a contemporaneous set of projections for a project that is aiming at a considerably wealthier segment

of the market. Our projections for the price of a parking space are also eminently achievable in the current market. Finally, holding 200 spaces for guest parking represents a \$3 million cost for which we have included no return. Thus, we believe that a credible argument can be made for the realism of the "base case".

The "base case" produces an economic return that appears to be above the required threshold and within the range of industry expectations. The ROA is 15.25% and the net profit on sales (profit margin) is 13.23%. By comparison, the Druker Company's Heritage project forecasts an ROA of 16.21% and a margin of 13.94%. A closer examination of the figures suggests, however, that artful deal-structuring and assiduous construction management will be necessary to keep the returns at a satisfactory level.

1) First, the returns are highly sensitive to the sales price per square foot. A reduction of only 5% to \$190/SF, causes the ROA to plummet 34%, to 10.12%. And at \$180/SF, the ROA is under 5%. The improvement in ROA is no less dramatic for increases in the forecast sales price per square foot. At \$210/SF, ROA is 20.39%; and at \$220, 25.53%. Our conclusion is plain. The market study must identify a very narrow range within which we can expect to achieve a rapid absorption of units, and the project should not be undertaken unless a healthy percentage of presales is recorded.

2) In contrast to what we observed in analyzing rental alternative 2, the ROA is highly sensitive to changes in the land cost. A \$10 million reduction in acquisition cost - to \$20 million - will cause the ROA to rise 6.17%, to 21.43%. We did not test the combined effect of lowering the land cost and changing the sales per square foot, but it is intuitively obvious that reducing the up-front exposure will diminish the sensitivity of ROA to modest changes in sales per square foot, thus stretching the uncomfortably

thin margin for error apparent in the base case. This analysis suggests that a major effort should be made to persuade MGH to "joint venture" the development of the Sante Harbor condominiums.

3) That conclusion is buttressed when one considers the practical obstacles to a realistic Sante Harbor financing package. The sheer size of the project makes financing problematic: few lenders would be willing, or able, to make the loan themselves. The most that could be obtained from a consortium of lenders would be \$202 million (75% of project value). If we were working with the base case, that would mean that equity of over \$30 million would be necessary. That too is a tall order. If, however, MGH accepted a joint venture position and looked to the profit potential of Sante Harbor for their return, all sorts of possibilities would open up. Not least important, it would allow the developer more flexibility in stretching the project out over several phases if the market analysis suggested the desirability of doing so.

Conclusion. The financability of a Sante Harbor rental project would have to be regarded as a difficult proposition today, and could be accomplished, if at all, only by some combination of joint venturing with MGH, reduced finance charge and full utilization of available tax benefits. Condominiums would be easier to finance; but since they produce no cash flows, are tax disfavored (their gain is taxed at ordinary rates) and produce returns which vary greatly with modest swings in sales per square foot, any mechanism that reduces the degree of upfront exposure would greatly aid in persuading investors that the downside risk is not incommensurate with the potential for gain.

APPENDICES

Pro Forma Operating Statement  
Rental Alternative 1

Income:	
Gross Rental Income	\$30,000,000
Less: Vacancy	(1,500,000)
Other Income (7)	210,000
Parking (8)	2,520,000
Total Income	<u>\$31,230,000</u>
Expenses:	
5.00% Management Fee (7)	\$ 1,561,500
4.10% Other Admin. (7)	1,230,000
Sub-Total Admin.	<u>\$ 2,791,500</u>
16.50% Oper. Expense (7)	\$ 5,550,000
7.30% Maint. Expense (7)	2,190,000
10.00% Tax/Ins. Exp. (7)	3,000,000
5.00% Other Expenses (7)	1,500,000
25.00% Parking Expense (8)	630,000
Total Expense	<u>\$15,661,500</u>
Net Operating Income	\$15,568,500

Sante Harbor Financial Feasibility  
Rental Alternative 1

Assumptions:	
Acquisition Cost (1)	0
Site Premium Cost (2)	0
Number of Units (3)	1,000
Avg. Unit Size (3)	1,200
Bldg. Efficiency - %	85%
Total Square Feet	1,411,765
Construction Cost/SF (4)	\$65.00
Total Const. Cost	\$91,764,706
Parking Spaces/Unit	1.5
Const. Cost/Space (5)	\$15,000
Total Parking Spaces	1,500
Total Parking Cost	\$22,500,000
Soft Costs (6)	34,279,412
Soft Cost/SF 30% TCC & PCC	\$24.28
Total Dev'l Cost	\$148,544,118
Avg. Cost/Unit	148,544
Unit Cost/SF	\$123.79
Total Cost/SF	\$105.22

Operating Assumptions:

Rental Income/Unit/Mo.	\$2,500
Vacancy Rate	5.00%
Other Income: % GRI	0.70%
Parking: \$140.00/Mo./Space	
Management Fee	5.00%
Admin. Exp.: % GRI	4.10%
Operating Exp.: % GRI	18.50%
Maint. Exp.: % GRI	7.30%
Tax/Ins. Exp.: % GRI	10.00%
Other Expenses: % GRI	5.00%
Parking Expense: % PI	25.00%

Financial Feasibility Model

Gross Income	\$32,730,000
- Vacancy & Expenses	17,161,500
Net Oper. Income	<u>\$15,568,500</u>
/ Debt Coverage Ratio	1.2
Annual Debt Service	\$12,973,750
/ Mortgage Constant (9)	0.1
Mortgage Loan Amount	<u>\$129,737,500</u>
Net Operating Income	\$15,568,500
Less: Annual Debt Svc.	12,973,750
Cash Flow Before Taxes	
to Equity	\$ 2,594,750
/ Desired Rate of Return	
on Equity	12.00%
Maximum Equity Invest.	\$21,622,917
Plus: Mortg. Loan Amt.	129,737,500
Project Value	<u>\$151,360,417</u>
Return on Asset (ROA)	10.48%
Equity Required	\$20,687,279
Cash Flow Before Taxes	2,594,750
Return on Equity	12.54%

Total Development Cost	\$148,544,118
Total Income	31,230,000
Total Expenses	15,661,500
Net Operating Income	15,568,500

Gross Yield (ROA) 10.48%

NOTES:

1. Assumes no acquisition cost.
2. Assumes no site premium cost.
3. Assumed Market analysis.
4. Chief Estimator, Vappi and Co.
5. Piers 1,2,3 projections.
6. Jim McKellar
7. Institute of R.E. Mgmt; "Income/Expense Analysis, Apartments, Boston, Unfurnished Elevator Bldgs.
8. Meyers Parking Systems, Boston, North End Garage estimate.
9. John Fowler, current participating debt terms: 10% interest plus 50% participation.

Pro Forma Operating Statement  
Rental Alternative 2

<u>Income:</u>	
Gross Rental Income	\$30,000,000
Less: Vacancy	(1,500,000)
Other Income (7)	210,000
Parking (8)	2,520,000
Total Income	<u>\$31,230,000</u>
<u>Expenses:</u>	
5.00% Management Fee (7)	\$ 1,561,500
4.10% Other Admin. (7)	1,230,000
Sub-Total Admin.	<u>\$ 2,791,500</u>
18.50% Oper. Expense (7)	\$ 5,550,000
7.30% Maint. Expense (7)	2,190,000
10.00% Tax/Ins. Exp. (7)	3,000,000
5.00% Other Expenses (7)	1,500,000
25.00% Parking Expense (8)	630,000
Total Expense	<u>\$15,661,500</u>
Net Operating Income	\$15,568,500

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Sante Harbor Financial Feasibility  
Rental Alternative 2

<u>Assumptions:</u>	
Acquisition Cost (1)	\$30,000,000
Site Premium Cost (2)	17,854,412
Number of Units (3)	1,000
Avg. Unit Size (3)	1,200
Bldg. Efficiency - %	85%
Total Square Feet	1,411,765
Construction Cost/SF (4)	\$65.00
Total Const. Cost	\$91,764,706
Parking Spaces/Unit	1.5
Const. Cost/Space (5)	\$15,000
Total Parking Spaces	1,500
Total Parking Cost	\$22,500,000
Soft Costs (6)	34,279,412
Soft Cost/SF 30% TCC & PCC	\$24.28
Total Dev'l Cost	\$196,398,529
Avg. Cost/Unit	196,399
Unit Cost/SF	\$163.67
Total Cost/SF	\$139.12

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Operating Assumptions:

Rental Income/Unit/Mo.	\$2,500
Vacancy Rate	5.00%
Other Income: % GRI	0.70%
Parking: \$140.00/Mo./Space	
Management Fee	5.00%
Admin. Exp.: % GRI	4.10%
Operating Exp.: % GRI	18.50%
Maint. Exp.: % GRI	7.30%
Tax/Ins. Exp.: % GRI	10.00%
Other Expenses: % GRI	5.00%
Parking Expense: % PI	25.00%

Financial Feasibility Model

Gross Income	\$32,730,000
- Vacancy & Expenses	17,161,500
Net Oper. Income	<u>\$15,568,500</u>
/ Debt Coverage Ratio	1.2
Annual Debt Service	\$12,973,750
/ Mortgage Constant (9)	0.1
Mortgage Loan Amount	<u>\$129,737,500</u>
Net Operating Income	\$15,568,500
Less: Annual Debt Svc.	12,973,750
Cash Flow Before Taxes	
to Equity	\$ 2,594,750
/ Desired Rate of Return	
on Equity	12.00%
Maximum Equity Invest.	\$21,622,917
Plus: Mortg. Loan Amt.	129,737,500
Project Value	<u>\$151,360,417</u>
Return on Asset (ROA)	10.48%
Equity Required	\$73,327,132
Cash Flow Before Taxes	2,594,750
Return on Equity	3.54%

Total Development Cost	\$196,398,529
Total Income	31,230,000
Total Expenses	15,661,500
Net Operating Income	15,568,500

Gross Yield (ROA) 7.93%  
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NOTES:

1. \$25/Salable square foot.
2. 10% of Total Dev'l Cost (Piers 1,2,3)
3. Assumed market analysis.
4. Chief Estimator, Vappi and Co.
5. Piers 1,2,3 projections.
6. Jim McKellar
7. Institute of R.E. Mgmt.; "Income/Expense Analysis, Apartments," Boston, Unfurnished Elevator Buildings.
8. Meyers Parking Systems, Boston, North End Garage estimate.
9. John Fowler, current participating debt terms: 10% interest plus 50% participation.

Pro Forma Operating Statement  
Condominium Alternative 1

Acquisition Cost	\$	0
Site Premium Cost		0
Construction Costs (1)		100,941,176
Parking Cost (2)		22,500,000
Soft Costs (3)		37,032,353
Hard Cost Contingency (4)		6,172,059
Sub-Total		166,645,588
Carrying Cost (5)		13,331,647
Total Development Cost		<u>\$179,977,235</u>
Total Number of Units (6)		1,000
Unit Size (6)		1,200
Price/SF (6a)		\$200
Sub-Total Condominium Sales		<u>\$240,000,000</u>
Total Parking Spaces (?)		1,500
Less: Guest Parking: 1 Space/5 Units		200
Parking Spaces to be Sold		<u>1,300</u>
Cost/Space		<u>\$22,500</u>
Sub-Total Parking Sales		<u>\$ 29,250,000</u>
Total Project Sales		\$269,250,000
Gross Potential Profit		\$ 89,272,765
Return on Asset (8)		49.60%*

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Total Project Sales		\$269,250,000
Total Development Cost		<u>179,977,235</u>
Net Profit		<u>\$ 89,272,765</u>
Net Profit on Sales (Profit/Sales)		33.16%*

Assumptions:

Number of Units	1,000
Avg. Unit Size	1,200
Bldg. Efficiency - %	85%
Total Square Feet	1,411,765
Construction Cost/SF	\$71.50
Total Const. Cost	\$100,941,176
Parking Spaces/Unit	1.5
Const. Cost/Space	\$15,000
Total Parking Spaces	1,500
Total Parking Cost	\$ 22,500,000
Soft Costs	37,032,353
Soft Cost/SF 30% TCC & PCC	\$26.23
Total Dev'l Cost	<u>\$160,473,529</u>
Avg. Cost/Unit	160,474
Unit Cost/SF	\$133.73
Total Cost/SF	\$113.67
Carrying Cost: % Total	8.00%
Hard Cost Contingency	5.00%
Sale Price/SF	\$200*
Parking Space Price	\$22,500
Infrastructure: % of Cost	0.00%
Land Cost: \$/Salable SF	\$0

NOTES:

1. \$71.5/SF (10% higher than rental alternative).
2. \$15,000/space (Piers 1,2,3 projections).
3. 30% of hard costs (Jim McKellar)
4. 5% of hard cost (The Heritage projections).
5. Sales period interest, taxes, operating expenses (Total development cost X 8%).
6. Assumed market analysis.
- 6a. Piers 1,2,3 projections are \$300/SF
7. 1.5 spaces/dwelling unit
8. Total condo sales less total condo development costs divided by total condo development cost (no land or site premium cost).



Pro Forma Operating Statement  
Condominium Alternative 2

Acquisition Cost (1)	\$ 30,000,000
Site Premium Cost (2)	19,664,559
Construction Costs (3)	100,941,176
Parking Cost (4)	22,500,000
Soft Costs (5)	37,032,353
Hard Cost Contingency (6)	6,172,059
Sub-Total	216,310,147
Carrying Cost (7)	17,304,812
Total Development Cost	<u>\$233,614,959</u>
Total Number of Units (8)	1,000
Unit Size (8)	1,200
Price/SF (8a)	\$200
Sub-Total Condominium Sales	<u>\$240,000,000</u>
Total Parking Spaces (9)	1,500
Less: Guest Parking: 1 Space/5 Units	200
Parking Spaces to be Sold	<u>1,300</u>
Cost/Space	\$22,500
Sub-Total Parking Sales	<u>\$ 29,250,000</u>
Total Project Sales	\$269,250,000
Gross Potential Profit	\$ 35,635,041
Return on Asset (10)	15.25%*

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Total Project Sales	\$269,250,000
Total Development Cost	233,614,959
Net Profit	<u>\$ 35,635,041</u>
Net Profit on Sales (Profit/Sales)	13.23%*

Assumptions:

Number of Units	1,000
Avg. Unit Size	1,200
Bldg. Efficiency - %	85%
Total Square Feet	1,411,765
Construction Cost/SF	\$71.50
Total Const. Cost	\$100,941,176
Parking Spaces/Unit	1.5
Const. Cost/Space	\$15,000
Total Parking Spaces	1,500
Total Parking Cost	\$ 22,500,000
Soft Costs	37,032,353
Soft Cost/SF 30% TCC & PCC	\$26.23
Total Dev'l Cost	<u>\$160,473,529</u>
Avg. Cost/Unit	160,474
Unit Cost/SF	\$133.73
Total Cost/SF	\$113.67
Carrying Cost: % Total	8.00%
Hard Cost Contingency	5.00%
Sale Price/SF	\$200
Parking Space Price	\$22,500
Infrastructure: % of Cost	10.00%
Land Cost: \$/Salable SF	\$25

NOTES:

1. \$25/salable square foot.
2. 10% of total condo development cost less site premium plus carrying costs.
3. \$71.5/SF (10% higher than rental alternative)
4. \$15,000/space (Piers 1,2,3 projections).
5. 30% of hard costs (Jim McKellar)
6. 5% of hard cost (The Heritage projections).
7. Sales period interest, taxes, operating expenses (Total development cost X 8%).
8. Assumed market analysis.
- 8a. Piers 1,2,3 projections are \$300/SF
9. 1.5 space/dwelling unit.
10. Total condo sales less total development costs divided by total condo development cost.

### Outline for a Market Study of Sante Harbor

A complete market analysis will produce revenue forecasts for a series of alternative economic scenarios over the projected ownership cycle. The revenue forecasts will in turn constitute data to be used in the investor's return/risk analysis. Typically, the investor's return/risk analysis will consider the proposed investment under realistic base (most likely), best (optimistic), and worst (pessimistic) case scenarios. The market analysis should, in a professional feasibility study, feed directly into the return/risk analysis by generating base, best and worst case revenue forecasts.

This chapter analyzes each of the steps in the market analysis process. For each step, we summarize the underlying theory (why the step is useful), the methodology (how the analysis is performed) and the output. This section constitutes a primer on the theory and practice of market analysis, including both macro and micro (project-specific) elements.

It is our view that such an analysis need not be performed for every project, and that in fact a full-scale analysis will seldom be necessary or even desirable. If one has identified a site and an intended use, there will obviously be no need to select a target SMSA (although one may want to perform a growth forecast on that SMSA as part of the "go-no go" decision). The where and what having been answered a priori, the market analysis will be concerned simply with yes-no, how much, for whom and when.

#### Selecting Target SMSAs

The underlying theory here is that, *ceteris paribus*, it is better to invest in cities and regions that are growing than in those which are stable or declining. Growth is measured by population, jobs and income. Real estate developers would ordinarily be more concerned with the measure of

growth that is most likely to influence the particular products they intend to develop -- housing specialists are interested in population growth; office developers, job growth, etc. The sheer size of an SMSA, together with the diversity of its employment mix, furnish fairly reliable evidence of its general immunity or at least resistance to both short-term cyclical fluctuations and long-term structural decline. Even if a region will not grow, if it is resistant to a generalized decline the developer will feel justified in believing that his investment has a measure of protection on the downside. Particularly if a developer is contemplating a major investment which cannot be built and sold during the expansionary phase of a single economic cycle, he should seek to make his investment in a stable metropolitan area. Stability is reflected in "universities and research parks, sophisticated engineering firms and financial institutions, public relations firms and advertising agencies, transportation networks and utilities systems."<sup>1</sup> Broadly speaking, such instrumentalities are transaction facilitators and producers of innovation which in critical mass will at the least "soften the shock of exogenous change by minimizing the impact of a dying industry on the metro area."<sup>2</sup>

Having explained briefly what the developer should be looking for, we now turn our attention to how he might find it. The goal at this stage is to identify those metro area statistics which will permit us to compare and evaluate SMSAs to select a target for additional market studies and marketability analyses. It is apparent that this discussion is not directly applicable to the Sante Harbor project, since we have answered the where and the what questions a priori.

The key measures of SMSA growth are:

-- Population. The growth or decline of an SMSA's population may not

be as important as its source. An increase in births relative to deaths will create little immediate demand for new real estate product; but a significant immigration of adults, such as has been occurring in Florida for many years, will. Note also that it is not an easy matter to forecast population growth - the results can vary widely depending on assumptions about immigration, household size, birth rates, death rates and fertility rates.

-- Birthrates. The birthrate will be affected among other things by social mores, which are difficult to forecast, and by the age cohort of the population over time. For example, because the baby boom generation is now in its peak reproductive years, household formation rates can be expected to be temporarily robust, and housing and related goods in great demand, so long as the high rates of household formation persist.

-- Fertility is basically a measure of the number of births over a woman's lifetime. During the baby boom years American families expected to have three plus children. Today, the expectation is for about two. That is a change of epochal dimension which has far greater long-term significance than the birthrate at any one time.

-- Death rates. The gain in life expectancy has been dramatic in the twentieth century. This has been achieved mainly by reducing the incidence of mortality during childhood and before the age of fifty. To achieve significant further declines in death rates will depend upon progress against the diseases of the old. Regardless, however, sub-replacement fertility rates and the present age distribution of the population assure a continuation of the widely noted "graying of America".

-- Immigration. The United States has always been a magnet for the poor and disaffected of other countries. What may not be generally understood is that "The [current] ratio of total net migration to total growth . . . nearly 40 percent . . . is . . . greater . . . than than reached at the peak European immigration a century ago."<sup>3</sup> Although there is much debate about the significance of this phenomenon, the weight of informed opinion is that it contributes to economic ferment and vitality provided it does not become totally uncontrolled.

-- Household composition. Housing developers, in particular, are vitally concerned with the demand for net new dwelling units. This measure of housing demand is highly sensitive to changes in average household size. Where the age and income distribution of the population point toward smaller household units, housing investment should produce superior returns (particularly since the profit on smaller units is higher per foot of developed space).

-- Overall measures of employment and new-job formation. An SMSA with high employment, low unemployment and a high rate of new job formation would appear to be well-positioned for future growth. Yet such a location could be undercut by its own success if labor shortages develop and the wage rate and cost of doing business rise so quickly that business expansion is choked off.

As this recital of the factors underlying growth should indicate, targeting an SMSA is an art, not a science, and furthermore one in which the goal is careful risk management rather than optimization. There is assuredly no sense in rank ordering any substantial number of SMSAs as candidates for investment, though a better case can be made that SMSAs can be usefully grouped into broad categories such as highly desirable,

desirable or undesirable. It must be emphasized that investment in a highly desirable SMSA could prove disastrous; while a mature, stable SMSA, or even a declining one, will surely present numerous opportunities for locating an unappreciated gem. The process of choice cannot be reduced to an equation or formula, but rather requires a healthy dose of developer's intuition. The acuity of a developer's feel, however, will likely improve if he is fully informed about the relevant SMSA's prospects for growth or decline.

#### Identifying Investment Opportunities

We are now concerned with determining what sorts of real estate investment are most appropriate in the target SMSA, and what levels of pricing and production of that use are consistent with predicted rates of absorption. We are still at the "macro" level in that we are not attempting to forecast the market acceptance of a particular idea in a specified location. Instead we are testing a range of possible uses and locations against the existing and forecast stock of those possible uses and the demand for them. A real estate market study is a demand oriented macro analysis which studies the existing economic base of a specified market area (like an SMSA) to distill the determinants of demand. The product of this analysis is a compilation of aggregated data whose presentation and interpretation gives a highly representational "snapshot" of the target market. How the real estate investor may most effectively exploit the opportunities revealed by the market study for acquisition or development of real estate assets is the focus of the marketability (micro) phase of the analysis. The market study will be flawed if it is limited strictly to economic activities. An area's attitudes toward growth, the ability and depth of its political leadership, the honesty and competence with which it seeks to identify and attack its problems, the quality of its educational

system at all levels, the age, maintenance and upkeep of its transportation and utility infrastructure, its tax environment and attitudes toward public spending, all play a role in predicting the potential for orderly and sustained growth, as opposed to spasmodic boom-bust fluctuations.

The elements of a market study include:

- an economic base analysis which delineates the market area and catalogues basic (production of goods and services for export) and non-basic (supportive activities) economic activities. These furnish the bases for the forecasts of population, employment, personal income, earnings, etc. of the SMSA and the interpretive ratio analyses which are derived from them. Ratio analysis is really a simplified form of econometric modelling. It seeks to derive meaningful multipliers relating the export base segment of the given market to the other sectors of the economy, and then to population growth as well. For the large-scale development whose implementation is expected to require seven to ten years or more, it may be advisable to engage a firm with expertise in econometric forecasting (like Data Resources or Chase Econometrics) to perform the desired analysis. The economic base analysis will certainly contain:

- projections of total employment during the forecast period.
- projections of future population, based in part upon an observed ratio between employment and population in the base year.
- projections of future housing need, based on the previously identified trends in fertility, birthrates, household formation and immigration.

This list might be extended, but the important point is to "convert employment and population growth into gross crude indicators of the overall

demand for land use in the appropriate residential, retail and industrial categories."<sup>4</sup>

Several matters of technique bear special mention. First, to maintain comparability between SMSAs, the study should use Standard Industrial Classifications (SIC) to identify basic and non-basic sectors. Second, the developer should understand the analyst's choice of the SMSA, the labor market area or the primary-secondary-tertiary retail trading area as the analytical unit. Finally, if the developer is performing his own analysis based on existing sources of data, he should be especially wary of population projections that are sometimes "a product of the rich imagination of community boosters seeking to realize self-fulfilling prophecies."<sup>5</sup> Accepting ill-considered rosy forecasts at face value contributes to the unfortunate prevalence of periodic over - or underbuilding that continues to bedevil real estate investors.

The market study may cover as well the following elements. There will be a supply and demand analysis showing current inventory for the defined use, current occupancy levels, vacancies, annual production and absorption for a period of years, and current asking rents or land prices. The raw data of the supply and demand analysis must be sifted and subjected to the analyst's informed judgment. Vacancies, for example, should be categorized by rent levels and income classes. The vacancy level in the target market is the investor's real concern. The analyst must be sensitive to potentially significant nuances such as the degree of substitutability between apparently stratified rent levels. If class A property is in short supply but class B is glutted, the softness in the B market may act as a depressant on class A rents (if the market is one in which certain tenants will accept a lesser product). A qualitative analysis of the nature of the



vacant or unsold inventory may reveal facts, such as an inappropriate amenity package or unsuitable building materials, which will help to assure that serious design flaws do not occur.

The product of the supply and demand analysis is the market absorption rate in the targeted submarket. It should be a simple matter to determine how long it will take for the market to absorb current unsold or unleased inventory at recent historic absorption rates. If this analysis suggests that significant overbuilding has occurred or is occurring, the developer's margin for risk may be unacceptably tight, in that even the best location and superior design may fail to command the required rents or sales prices.

The final element of the market study is a careful survey of the competition. This element may have somewhat less utility for a multi-phased, multi-year project since some of the competition may not even be in the planning stage when the study is performed; and yet the developer should care greatly about which projects in his target market have been notably successful and why. There is no patent on good ideas; and with appropriate adaptations, the developer may profitably reprise aspects of his competitors' projects that have proved their worth in the market. We intend to use the existing Condex database on condominium sales in Boston (Suffolk County) to isolate those amenity and product packages that have the greatest appeal, in terms of willingness to pay, for our target markets.

#### Project - Specific Analysis

We are now at the level of location - specific micromarket analysis. The previous level of analysis generated a predicted market absorption rate for the proposed use - for example, how many rental or for - sale housing units can be absorbed, at specified rent or sales prices, within the Boston SMSA or the city of Boston. Here we narrow our focus to our specific site.

We want to know how many units, of what type and price, can be rented or sold there, containing what features and amenity packages, during each phase of the projected development period. The answers to these questions may be seen, broadly, as illuminating issues of quality (price or rent), quantity (absorption over time) and specific selling ideas or requirements. In recognition of the irreducible component of uncertainty in real estate development, particularly that which has a long lead time before construction start, and multiple phases, a marketability analysis should generate capture and absorption rates, as well as revenue forecasts, under most likely, optimistic and pessimistic scenarios.

The discrete elements found in a typical marketability analysis include:

- neighborhood delineation and analysis. The study will often begin with a map identifying the site, the boundaries of the neighborhood and the setting of the neighborhood within the metro area. Preferably, the map will pinpoint road and public transportation access to the site, the location of schools, shopping districts, hospitals and other uses pertinent to the (housing) use contemplated. The neighborhood will be described by income, education, occupation, age and population trends. Major natural and man-made features, both favorable and problematic, should be identified. The history of the neighborhood, if pertinent, should be included. An economic and demographic profile of the neighborhood, and a description of its principal uses and locations, only scratches the surface of what is needed. This report, if expertly done, should enable a stranger who reads and absorbs its contents to engage a longtime resident in conversation so that the resident might be moved to inquire "Why haven't I seen you around before?".

Some of the issues which the neighborhood analysis should address include: the area's reputation and the reasons for it; any signs of blight or deterioration; conversely, evidence of pride of ownership and the quality of routine maintenance; any evidence that lenders are reluctant to extend loans to homes or businesses in the area; are utilities and other infrastructure requirements in place for the planned use; a report on vacancy and occupancy rates by use, tenure and price; environmental and site constraints to further development - noise, air and water pollution, traffic congestion and inharmonious adjacent uses. It should be noted that much of the typical neighborhood delineation and analysis appears in the body of this thesis.

-- site analysis. This is a detailed extension of neighborhood analysis, with a particular focus on physical and geological conditions and terrain. The highest-and-best-use concept, developed by appraisers, asks whether a proposed use on a site is reasonably probable, legally permissible, physically possible, adequately and appropriately supported by the market and financially feasible.<sup>6</sup> All except the last question are part of the site analysis.

-- survey and analysis of the competition. It is vital for an investor to determine not only "how competitors are currently serving the area . . . [but] how additional competitors are planning to serve it in the immediate future."<sup>7</sup> (emphasis in original) A residential survey checklist might include the following: location map showing the subject site and competitive projects; a physical description of the competition: breakdown of units, bedrooms, square feet; unit and project amenities; sales and rental ranges; absorption of existing, new units and pre-sales; vacancies stratified by unit mix and price/rent; quality of merchandising (model

units, architectural models, advertising, signs); lease and/or sales terms for recent transactions; demographic profile of buyers/renters; a qualitative judgment of the reviewer on a 10 point scale.

-- marketing strategy and management plan. The key element of the marketing strategy is a clear and precise description of the characteristics and preferences of the "target market", which is a "sophisticated" way of describing your customers. The investor must have a very clear picture of the kinds of people he hopes to attract. Whether based on long and intimate familiarity with the area and its people, or on the commissioning and detailed analysis of a study of the type discussed here, the merchandising should unmistakably demonstrate that its creator knows the people who live there, their likes, dislikes, manias, phobias, mores, everything which makes them New Englanders or Bostonians or residents of one of Boston's highly distinctive, prideful, turf-conscious neighborhoods. The marketing strategy should carefully attend to such details as "the signage program, . . . the way prospective user traffic will be handled, how sales models will be shown, and . . . the sales/lease closing rooms."<sup>8</sup> Considering how difficult and expensive it may be to attract a prospect to the site, it would be most unfortunate to lose him because of inept or unprofessional sales ministrations.

The investor must also consider, even at the predevelopment stage, how he will handle the property management function. There are at least two good reasons for this: buyers and/or tenants will frequently inquire about it and the absence of a clear, well-articulated policy may be harmful to the marketing effort; and the marketing effort will, except in the rare instance of a 100% presold property, continue while some persons are in occupancy and the property is in fact being managed. The quality of management will

therefore affect the success of the merchandising effort. The property management function will typically encompass promotion policies; tenant screening and lease execution; maintenance and replacement policies; accounting and reserve controls; and policies for the operation of the property.

Aspects of the Market Analysis that are peculiar to Apartment Investing

The site plan for Sante Harbor will probably entail 4-6 high-rise apartment structures (9-14 stories each), containing between 200 and 300 units. Each building is proposed to have a variety of apartment types distinguished not only by number of bedrooms and baths, but by an explicit sensitivity to the special requirements and desires of the various sub-markets to which we are attempting to appeal. The first building will be weighted in the direction of prudence and safety; that is, we will reach out to the family market, where we are admittedly experimenting, only to a limited degree. If our experiment vindicates the judgment that the market is ready to reward our determination to meet a previously unappreciated, inadequately served need, we will program the later phases to reflect a mix of unit types more in keeping with our entrepreneurial instincts.

We will study existing high-rise complexes, both rental and condominium, to determine the nature and extent of supporting amenities that are typically provided. Our judgment is that a higher level of service is generally provided in condominiums. One explanation for this is that the expense of providing those services is billed directly to the unit owner and therefore does not reduce the developer or condo sponsor's net profits. Note, however, that during the selling period, the developer will indeed have to bear the share of total common area operating expenses attributable to the unsold units. Since a high level of amenities and services appears

to be characteristic of upscale condominiums, the developer must be willing to assume his share of the resultant costs during the marketing phase.

The supporting amenities found in high-rise apartments and condominiums may include concierge service, maid service, uniformed doormen, attended garages or valet parking, in-building or easily accessible health facilities, convenience retail, on-call workmen for unit maintenance and repair, and even room service (for those residential projects tied in with hotel developments). Our judgment is that some of these amenities are typically included in a given project because "the competition" provides them and it is feared that the failure to do so may cause sales or vacancy problems. We will not include an amenity without carefully considering what it adds, or more particularly, what the "willingness to pay" regression study and in-depth survey results suggest it may contribute in the form of higher rents or prices. Furthermore, we intend to test our judgment that a project will experience superior market acceptance if it allocates dollars toward the design and construction of the units themselves as opposed to the imitative inclusion of amenity packages whose inappropriateness may be seen in their near-total disuse.

We believe, for example, that the production of units which effectively screen out noise from the street and from other apartments would answer a frequent and strongly felt criticism of apartment living. It will be costly to do this, certainly; and may require the reduction or elimination of certain amenities. We believe, however, that the successful urban residential developer must attempt to create and sustain the illusion that his high-rise apartments have more in common with private homes than they do with tenements. Toward that end, noise control is one highly effective way of helping the tenant or buyer to forget that he may have intrusive and

uncongenial neighbors above, below and to either side of him. We will be looking for other devices and techniques to help support Sante Harbor's appeal to not only confirmed urbanites but to those who might be attracted to urban living for the first time, if it could be made more like what they are used to. City living need not give up on providing at least some of the benefits for which suburbia is so much extolled -- most prominently, privacy, quiet and individualized outdoor space.

Conducting an Apartment Oriented Demand and Supply Analysis

1) Data must be gathered on the local housing stock and the short-run changes that are expected from new construction, rehabilitation, demolition and abandonment.

2) Information on access, infrastructure, and availability and quality of complementary facilities - schools, shopping, hospitals, recreation - must be obtained. The intent is to determine whether the urban fabric which supports and sustains residential development is firmly in place. If there are significant gaps in this fabric, the development must be viewed as risky.

3) Stratified vacancy data must be obtained and analyzed. The goal is to determine, geographically and by rent class, what parts of the market are tight and what parts are glutted. It is dangerous to draw conclusions from the raw numbers alone. One must attempt to understand the causes for the observed vacancy disparities.

4) The economic and demographic characteristics of the target neighborhood must be understood. The intent is to construct a user profile -- age distribution, household size, household income, mobility, race and ethnicity, household characteristics; in short, "any unique characteristics

or attributes of the occupants of the target or surrounding neighborhood that will have an impact on demand."<sup>9</sup>

5) The competitive sales inventory is assessed. If one is proposing urban, high-rise luxury rentals and if one is further targeting families and empty nesters as at least two of the potential user groups, the range of competitive alternatives may be large indeed. It would appear to encompass other urban rentals, both high-rise and townhouse; luxury suburban rentals, including high-rise, garden and townhouse; suburban single-family subdivisions and multi-family, cluster ownership; and urban condominiums of all types. The potential for guessing wrong with respect to part of one's target market cannot be discounted; but the advantage of casting a wide net is precisely that it cushions the downside risk. If one aims at a broad range of user groups, one is unlikely to miss the mark with all of them. We must be careful, however, to understand that there is a potential for friction -- and consequent market resistance -- in appealing to disparate groups that may not view each other with unmixed glee. Empty nesters, for example, may display considerable resistance to living next to families with young children. To the extent that problems of this sort are identified in the predevelopment stage, good design, sensitive management and foresighted marketing should help to mitigate the problem.

6) A detailed field survey is performed. The output is a summary which includes the quality, quantity, vacancy, turnover, occupational mix, amenities, etc. of whatever projects are judged to be competitive. The intent is to produce data which will assist in forecasting the market absorption rate of the new and planned rental units, including the subject property.



Projection of Operating Income and Expenses

An apartment developer who forecasts his income with uncanny accuracy, but is sloppy or haphazard in anticipating expenses, will find that the excellence of his market judgment is for naught. If expenses exceed projections and rents cannot be raised, the unpleasant choice is deferral of maintenance or other "discretionary" items, or the acceptance of lower-than-expected yields. Operating expense projections should take account of all of the following items: maintenance and repair, including apartment cleaning and redecorating for new tenants, repair of all building systems and (a major problem in Boston, particularly for waterfront property) extermination expense; payroll for on-site staff; the cost of apartments used by staff; prorata apportionment of off-site administrative expenses; fixed expenses, including taxes and adequate insurance; utilities, including solid waste hauling; reserves; and management fees, usually between 3 and 6 percent of effective gross income. The Institute for Real Estate Management (IREM) publishes an annual Income/Expense Analysis for apartments, stratified by city and type of dwelling. This source is an excellent check on the realism of one's expense projections.

Footnotes

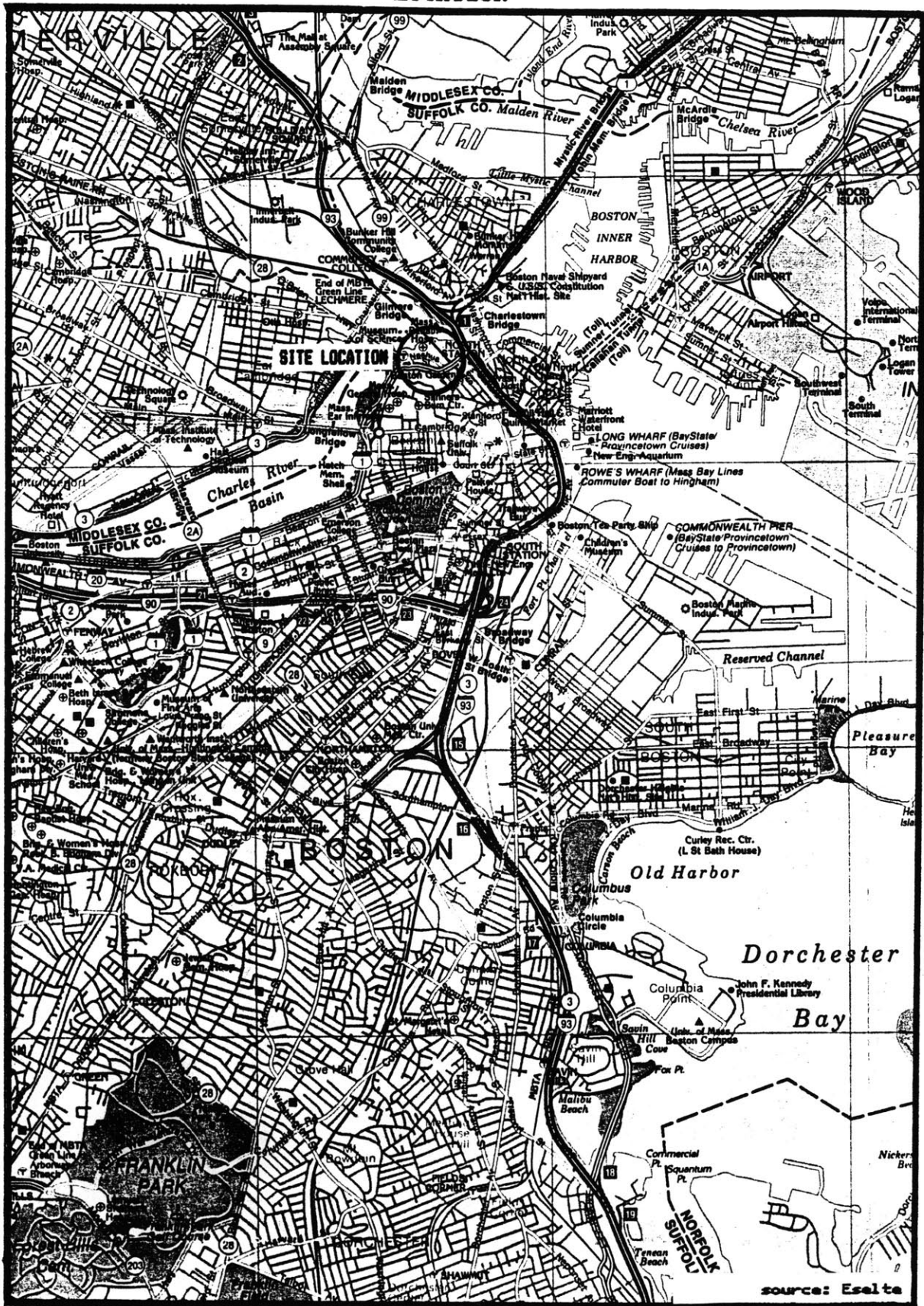
1. Real Estate Investment, Stephen A. Phyrre and James R. Cooper, John Wiley and Sons, 1982, p. 83.
2. Ibid., p. 83.
3. Ibid., p. 88.
4. Ibid., p. 103.
5. Ibid., p. 106.
6. Ibid., p. 126.
7. Ibid., p. 131.
8. Ibid., p. 136.
9. Ibid., p. 530

LIST OF MAPS AND SOURCES

MAP

1. Locus Map - Eselte Map Service; "Map of Greater Boston", 1982.
2. Locus Map - Ibid.
3. Locus Map - Massachusetts Convention Center Authority (MCCA).
4. Locus Map - Boston Redevelopment Authority (BRA).
5. Locus Map/Aerial View - Moshe Safdie and Associates.
6. Locus Map/Historical - Whitehill, Walter Muir; "Boston - A Topographical History." 2nd Ed. Belknap Press/The Harvard University, 1968.
7. Locus Map/Historical - Ibid.
8. Locus Map/Historical - Ibid.
9. Bulfinch Plan
10. Locus Map/Historical - Ibid.
11. Locus Map/Historical - Ibid.
12. Public Transportation - Massachusetts Transportation Authority (MBTA); "T System Map", 1982.
13. Commuter Rail Lines - MBTA.
14. Existing Land Use - MCCA.
15. Property Ownership - BRA.
16. Proposed Central Artery Depression Plan - Massachusetts Department of Public Works.
17. Road Network - BRA.
18. Green Line Improvements - MCCA.
19. Neighboring Districts - BRA.
20. Existing Zoning And Land Use Policy - BRA/MCCA
21. Existing Circulation - MCCA.
22. Future Parking Options - MCCA.
23. City Services - BRA.
24. Existing Urban Design Context - MCCA.
25. Open Space - BRA.
26. Safdie Plan - BRA.
27. Safdie Model - BRA.
28. Wallace, Floyd Plan - Executive Office of Transportation and Construction.
29. Land Ownership - MCCA.
30. Urban Design Issues And Opportunities - MCCA.
31. Proposed Urban Design Guidelines - MCCA.

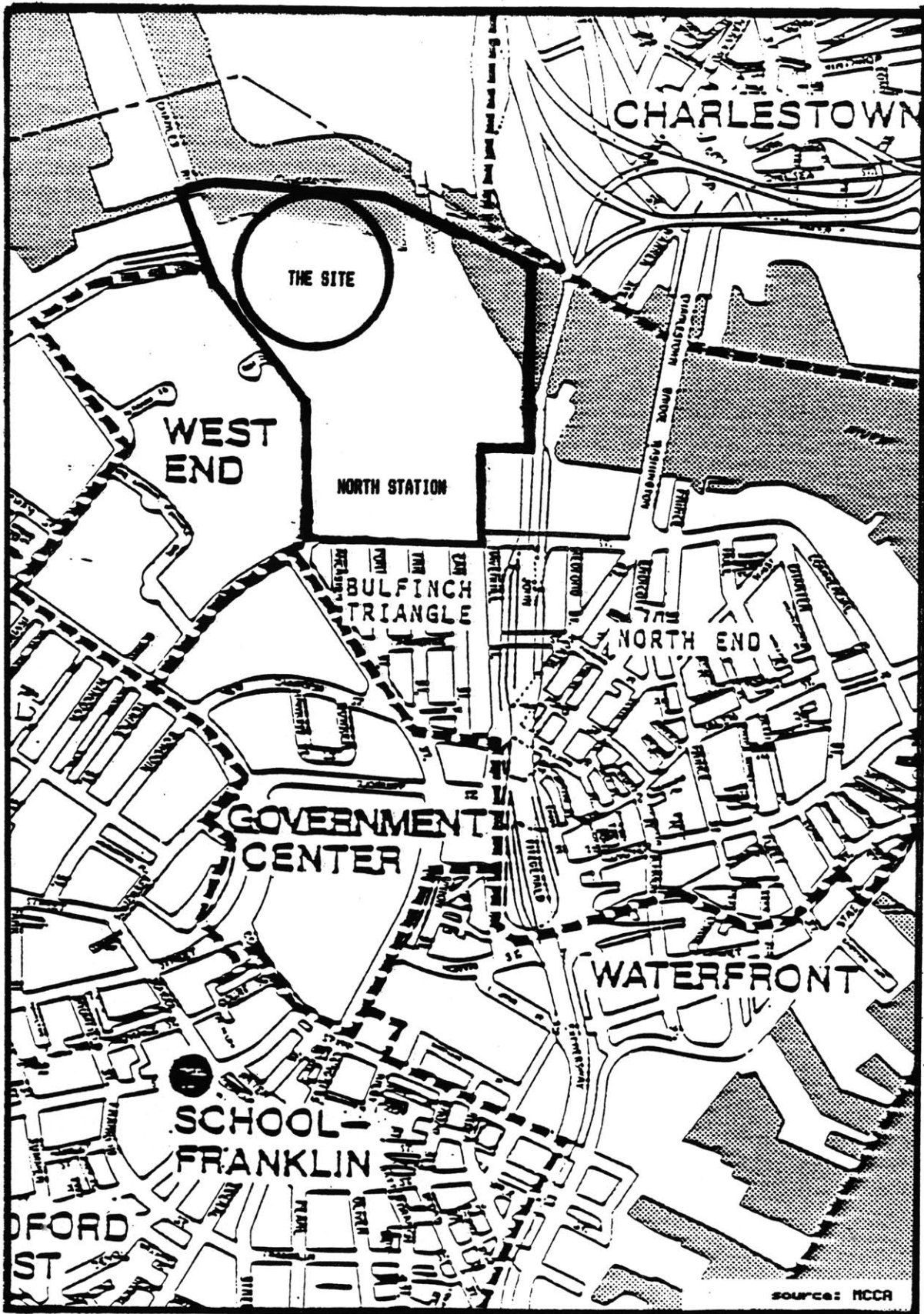
# MAP 1 LOCATION



### MAP 2 LOCATION

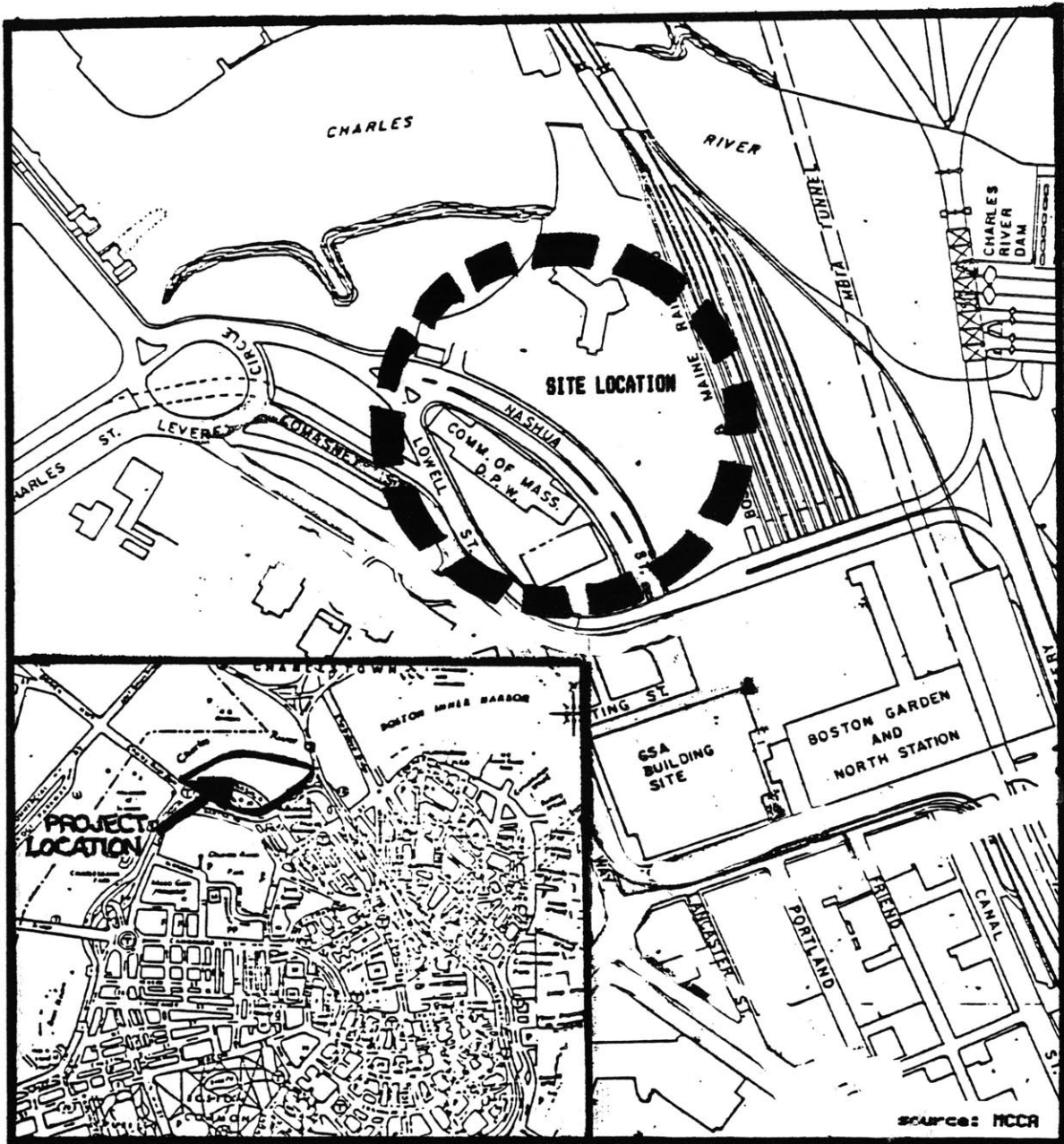


MAP 3  
LOCATION

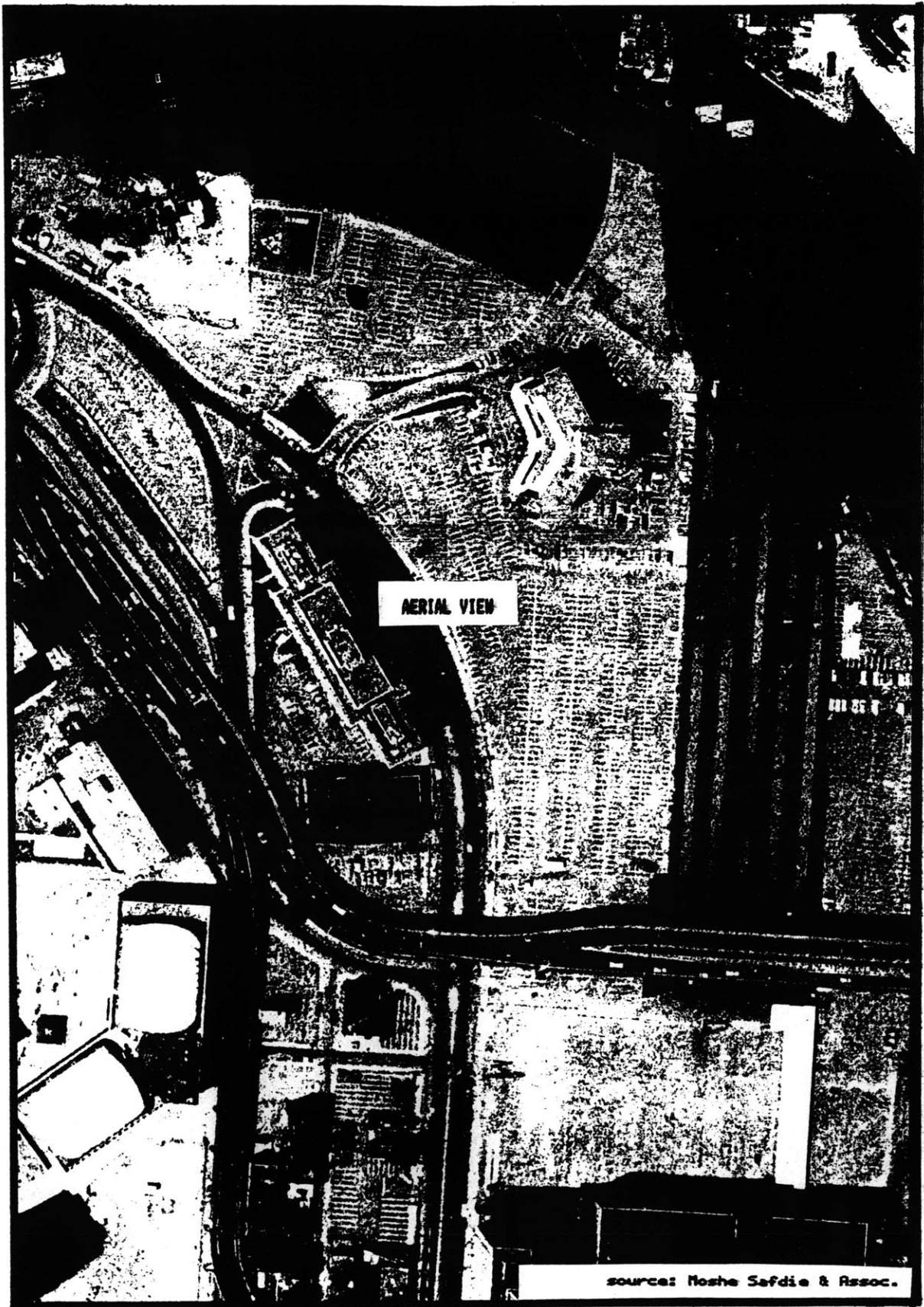


MAP 4

LOCATION



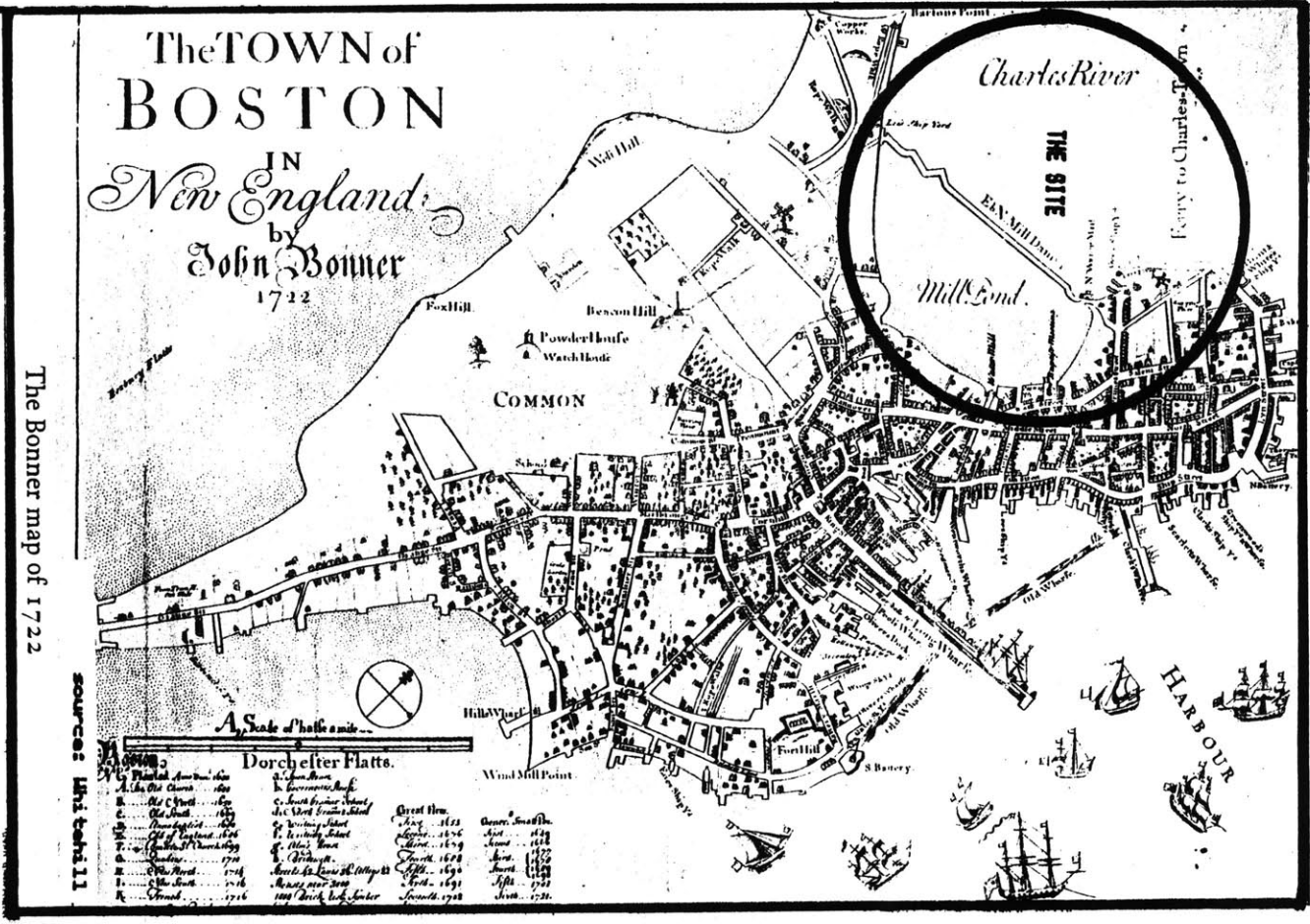
**MAP 5  
LOCATION**



**AERIAL VIEW**

**source: Moshe Safdie & Assoc.**

The TOWN of  
**BOSTON**  
 IN  
*New England*  
 by  
 John Bonner  
 1722



The Bonner map of 1722

Sources: Mitchell

A Scale of half a mile

Dorchester Flatts.		Great Street		General Smith	
A. The Old Church	1630	1630	1630	1630	1630
B. The Old Jail	1630	1630	1630	1630	1630
C. The Old Prison	1630	1630	1630	1630	1630
D. The Old Court	1630	1630	1630	1630	1630
E. The Old School	1630	1630	1630	1630	1630
F. The Old Tavern	1630	1630	1630	1630	1630
G. The Old Mill	1630	1630	1630	1630	1630
H. The Old Bridge	1630	1630	1630	1630	1630
I. The Old Fort	1630	1630	1630	1630	1630
J. The Old Harbor	1630	1630	1630	1630	1630

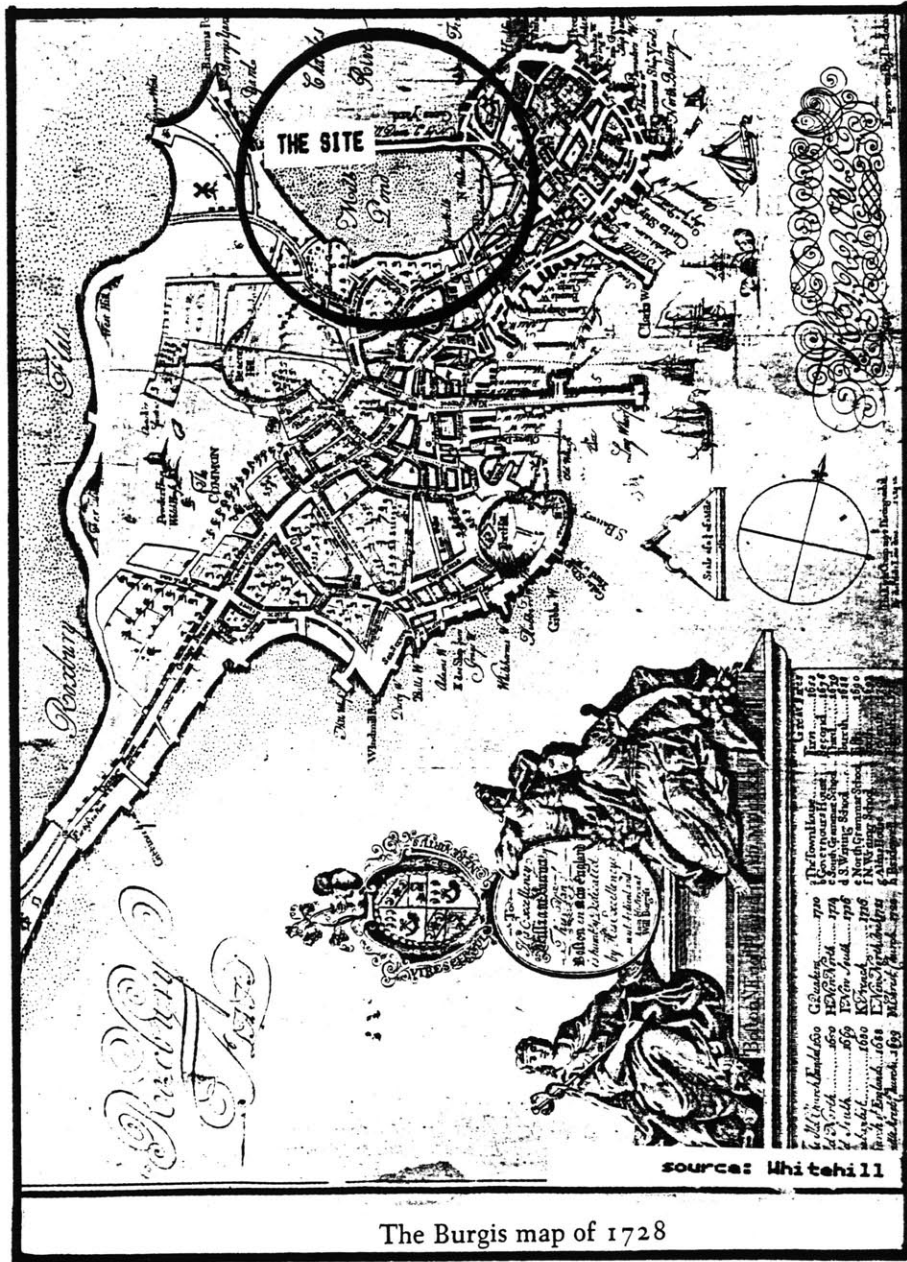
LOCATION/HISTORICAL

MAP 6



MAP 7

LOCATION/HISTORICAL



The Burgis map of 1728

MAP 8

LOCATION/HISTORICAL

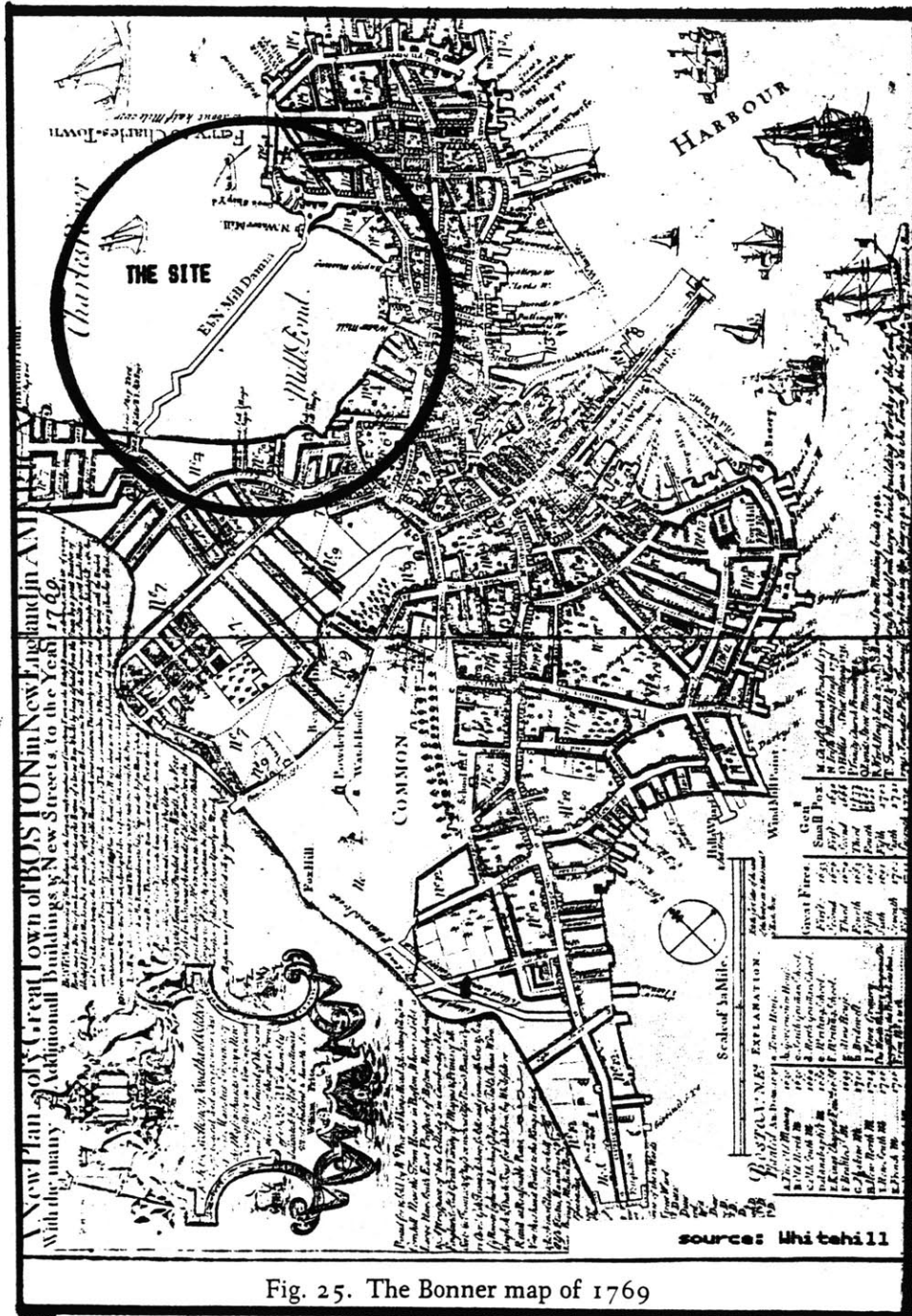


Fig. 25. The Bonner map of 1769

MAP 9

BULFINCH PLAN

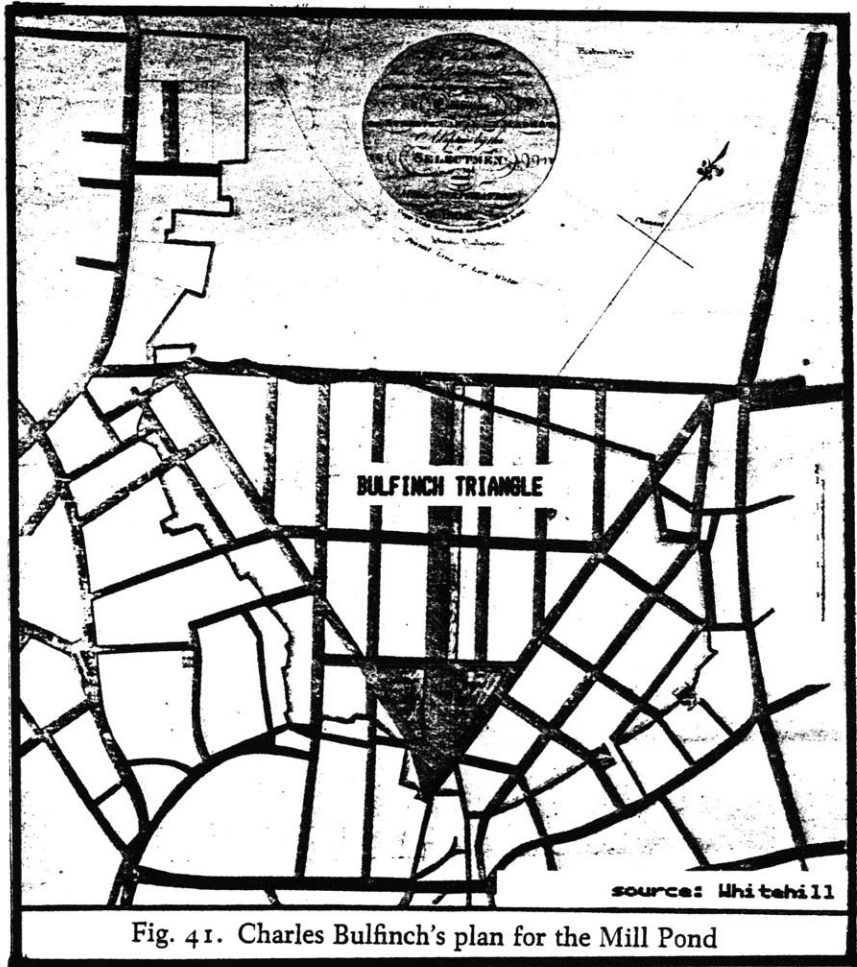
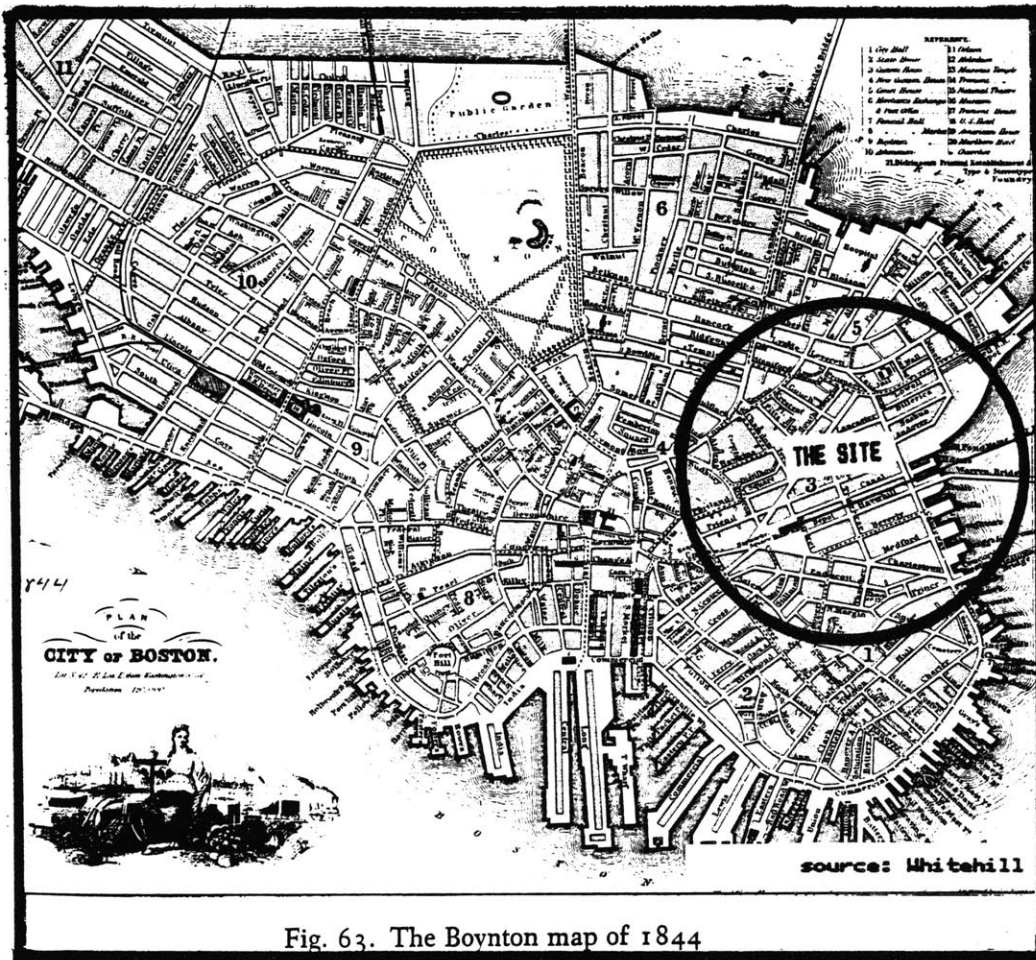


Fig. 41. Charles Bulfinch's plan for the Mill Pond

MAP 10

LOCATION/HISTORICAL



MAP 11

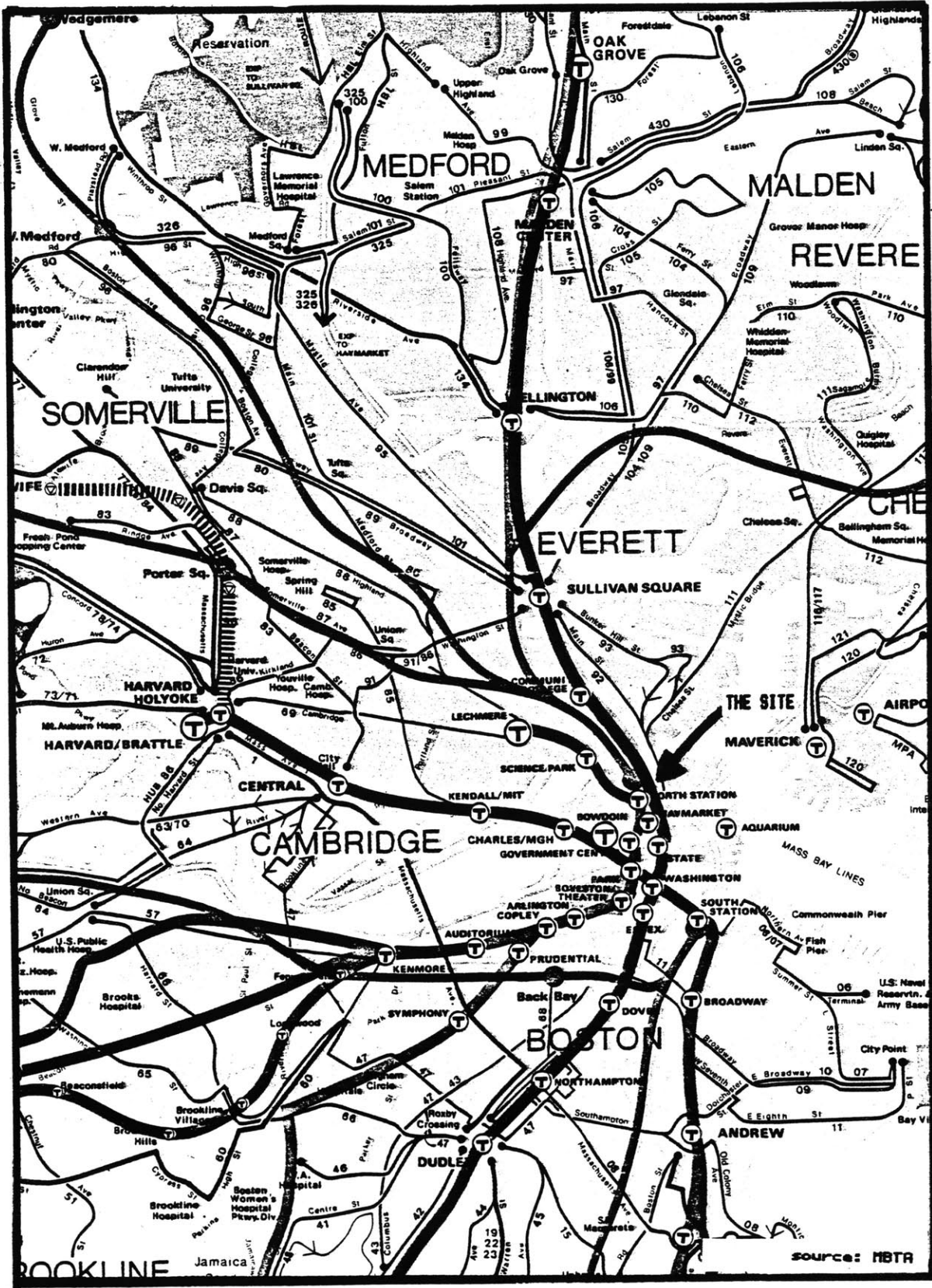
LOCATION/HISTORICAL



Fig. 69. The Colton map of 1855

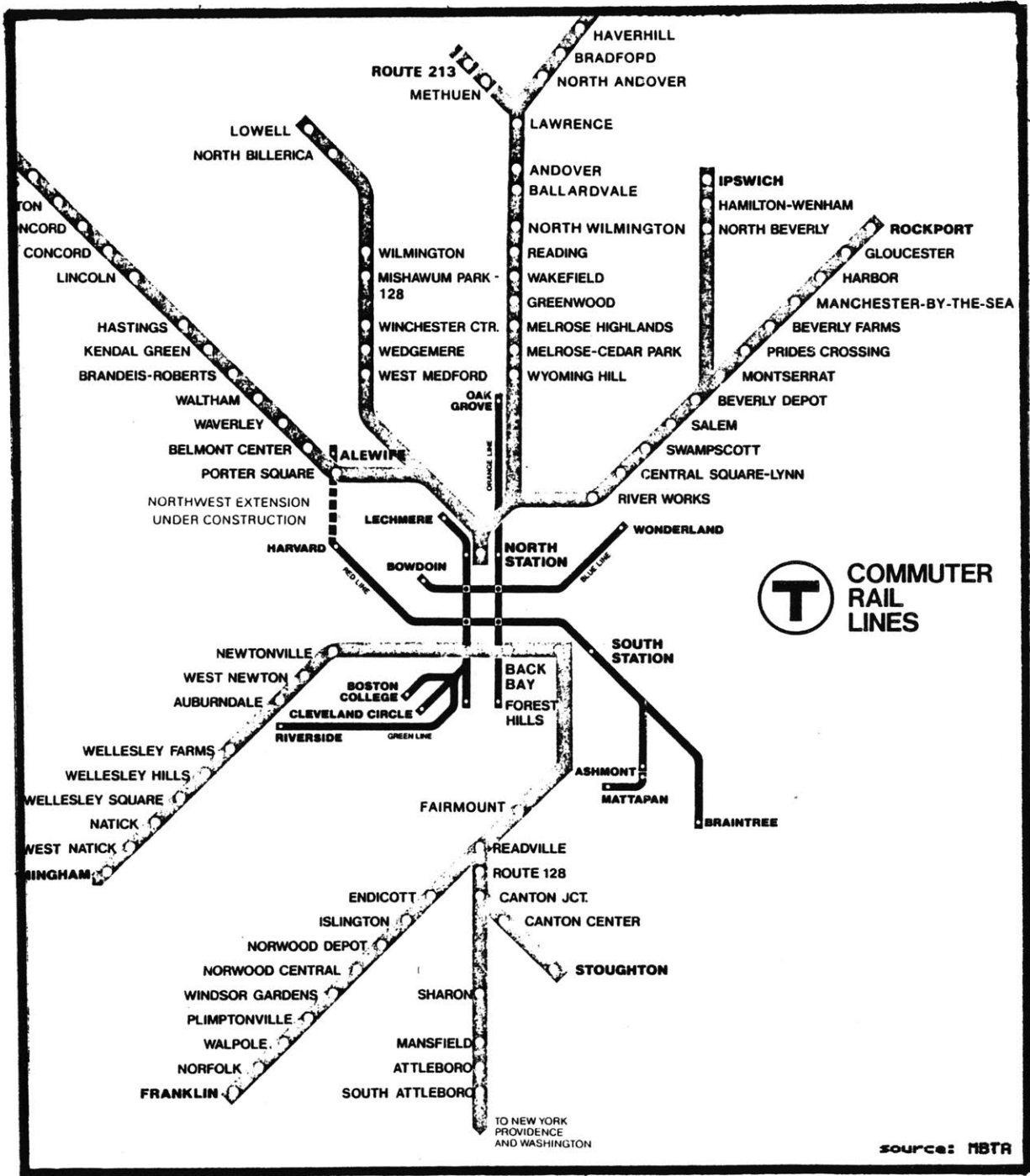
MAP 12

PUBLIC TRANSPORTATION



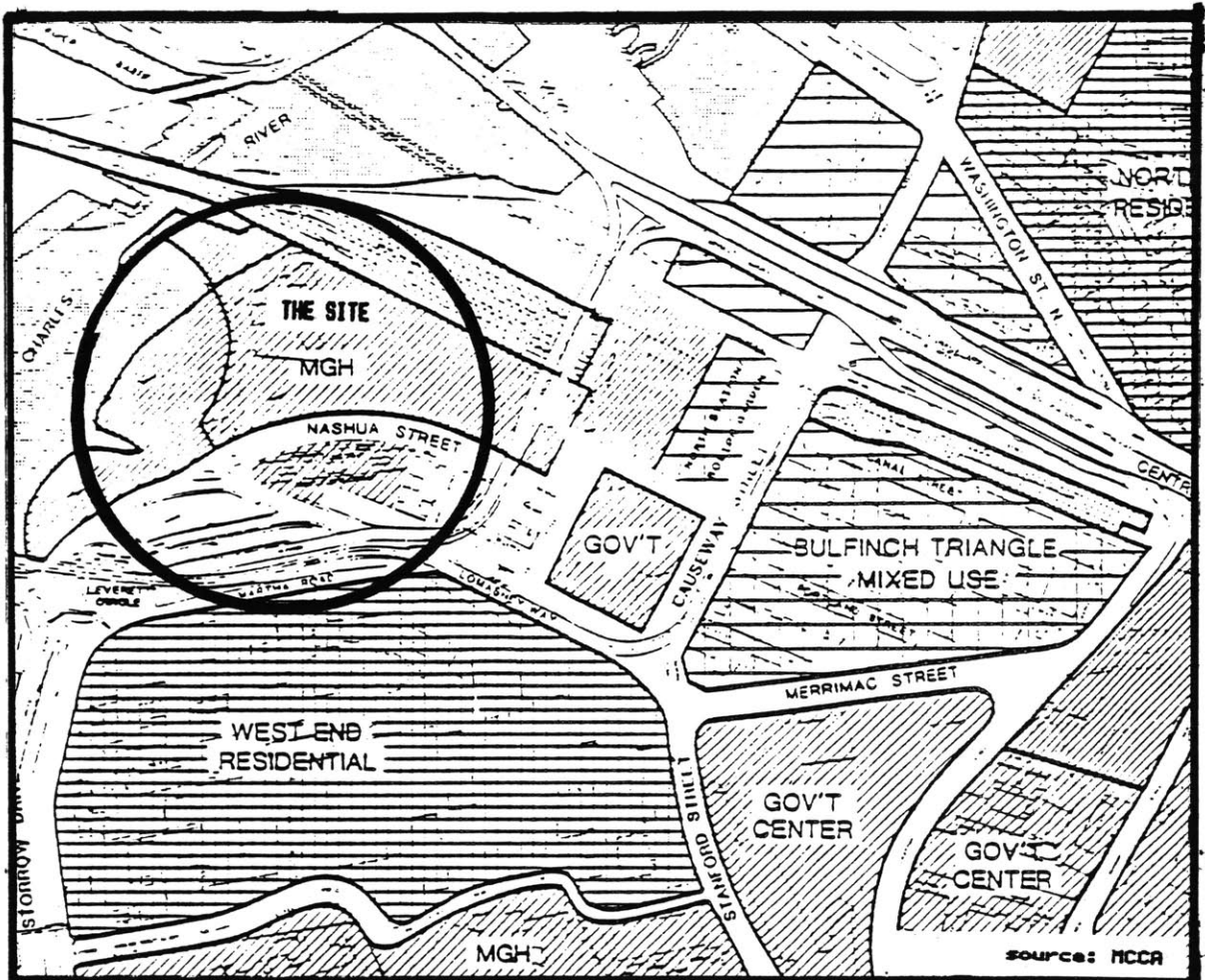
# MAP 13

## COMMUTER RAIL LINES



MAP 14

EXISTING LAND USE



EXISTING LAND-USE

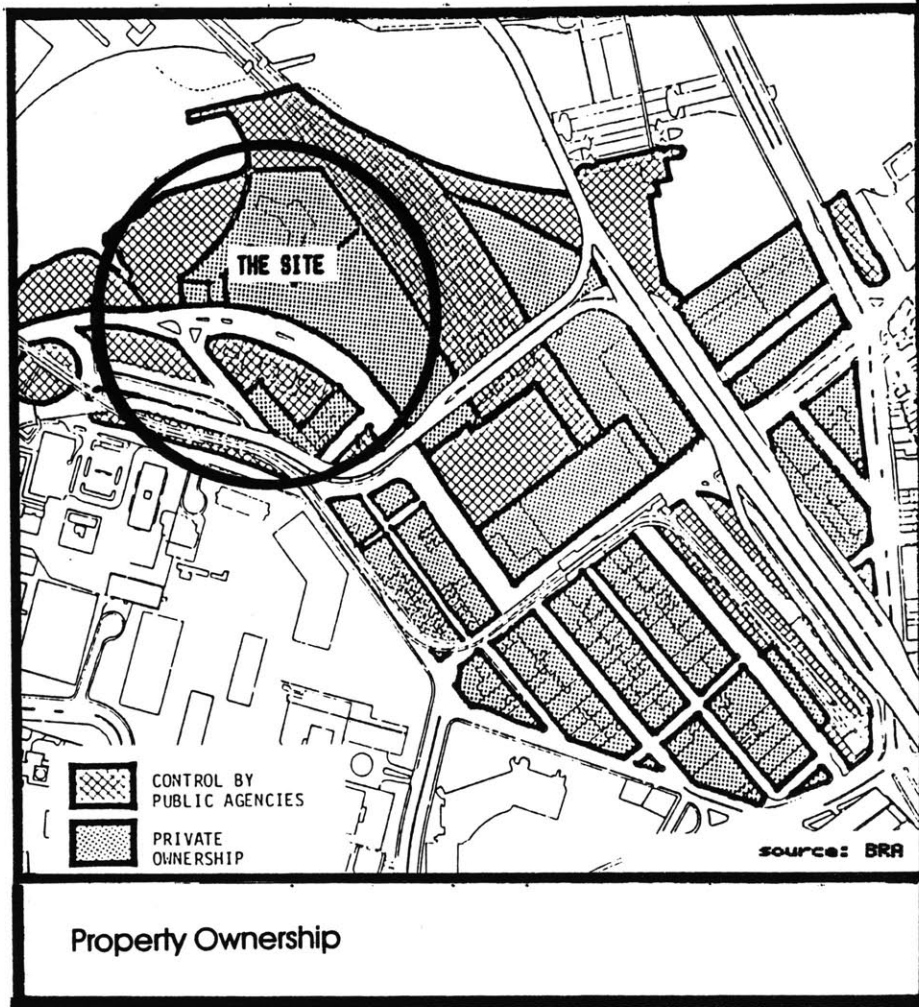
Key

	MIXED USE
	RESIDENTIAL
	INSTITUTIONAL
	TRANSPORTATION



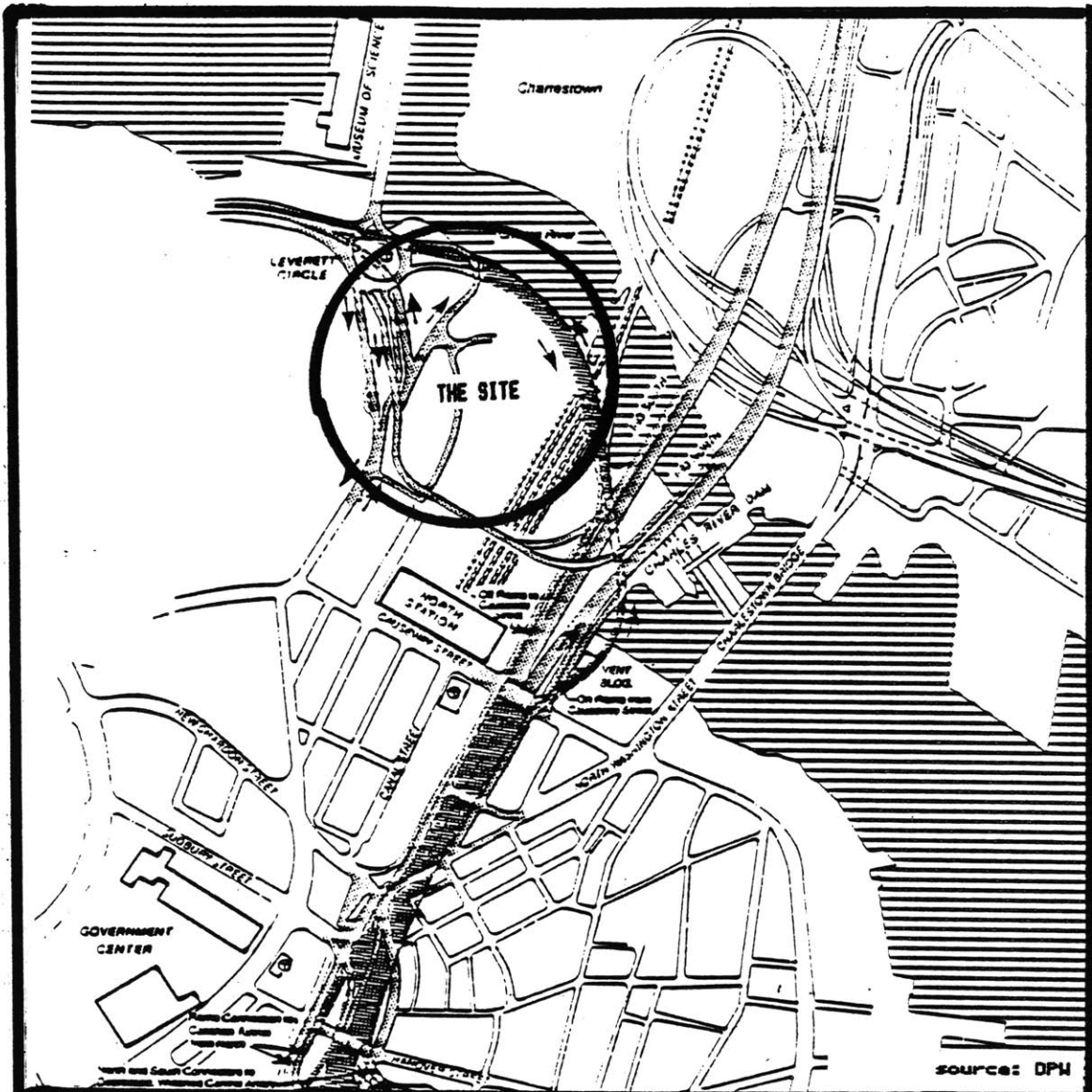
**MAP 15**

**PROPERTY OWNERSHIP**



MAP 16

PROPOSED CENTRAL ARTERY DEPRESSION PLAN



LEGEND

New or reconstructed roadway



Tunnel



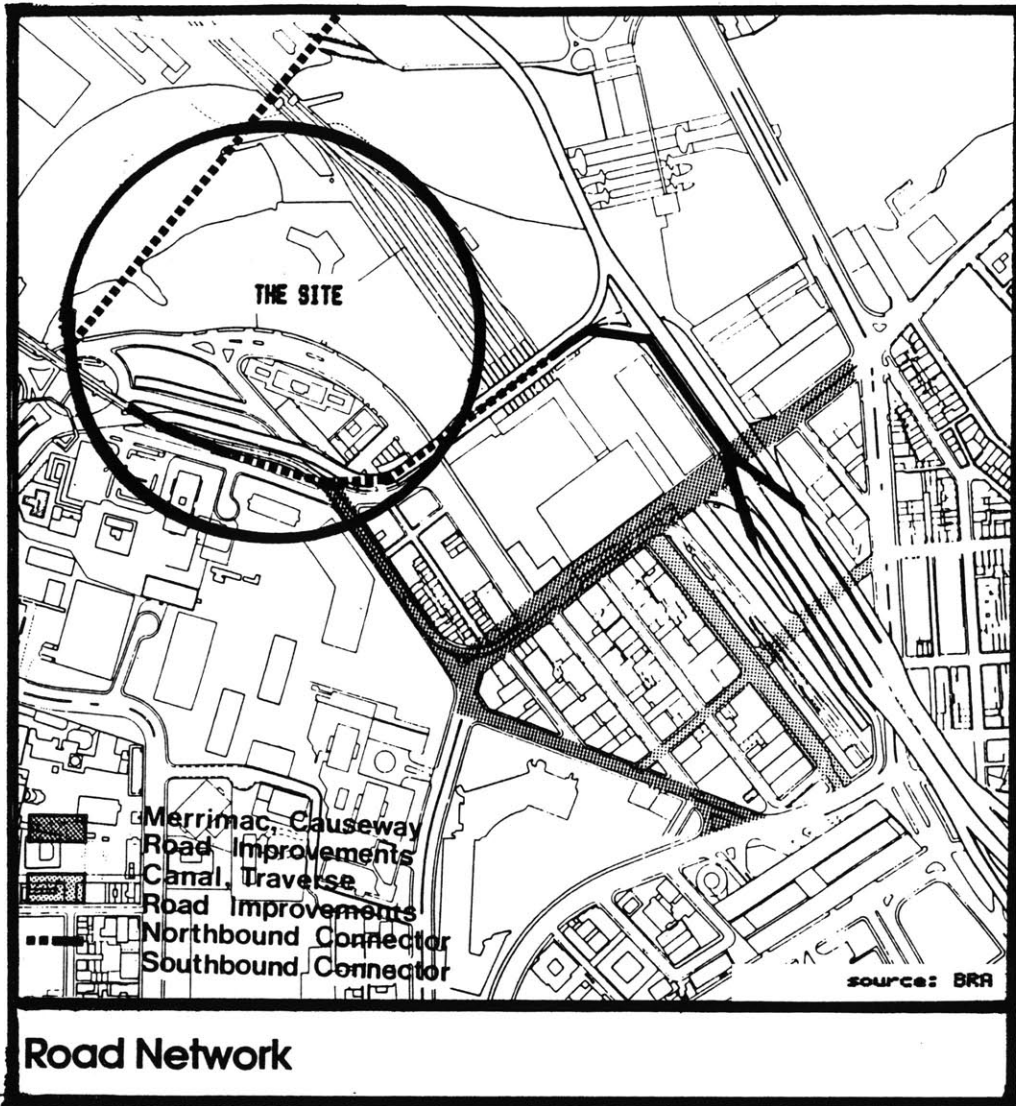
• Vent buildings shown are possible locations

• Plans are not to scale

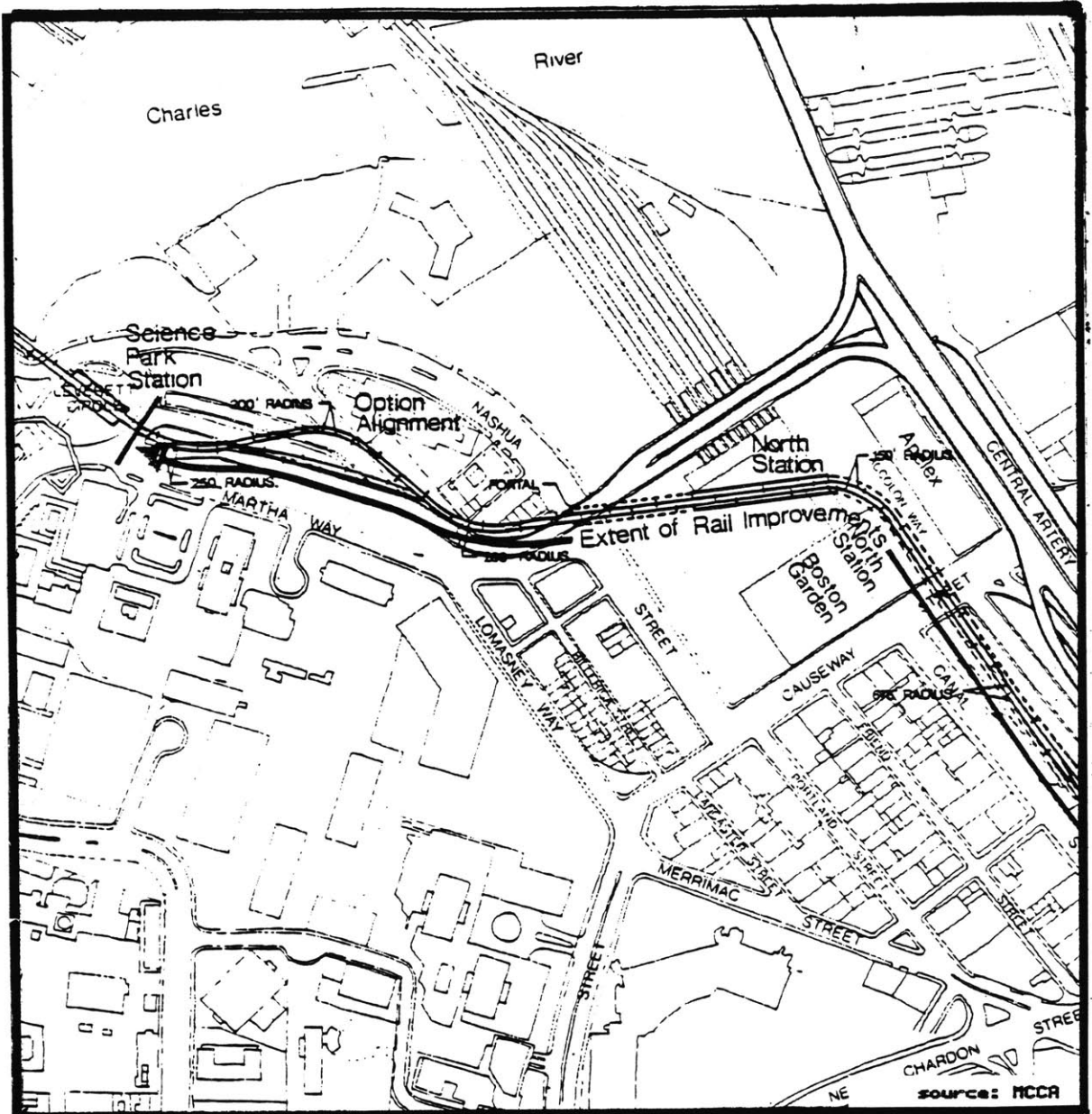
source: DPH

**MAP 17**

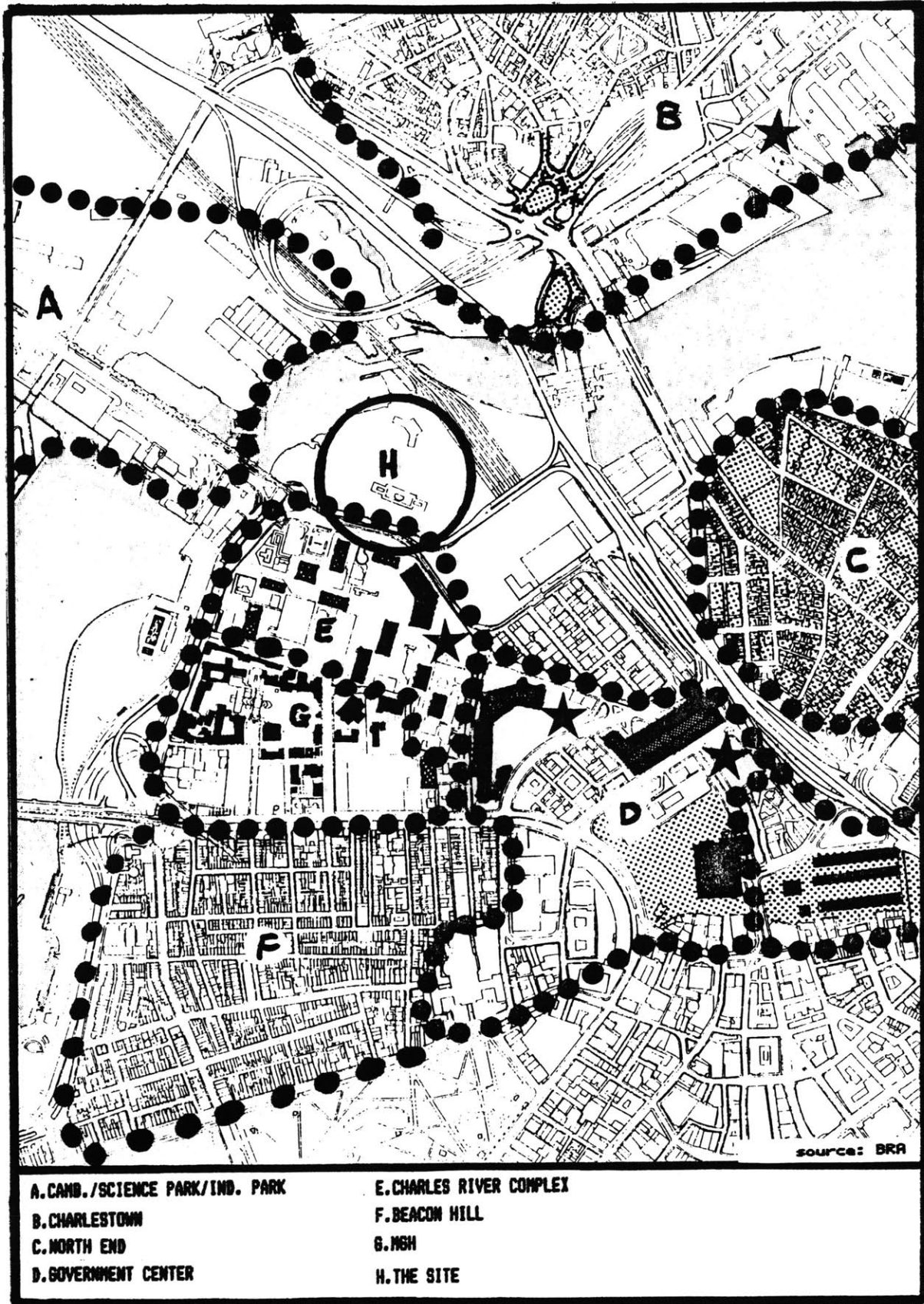
**ROAD NETWORK**



# MAP 18 GREEN LINE IMPROVEMENTS



# MAP 19 NEIGHBORING DISTRICTS



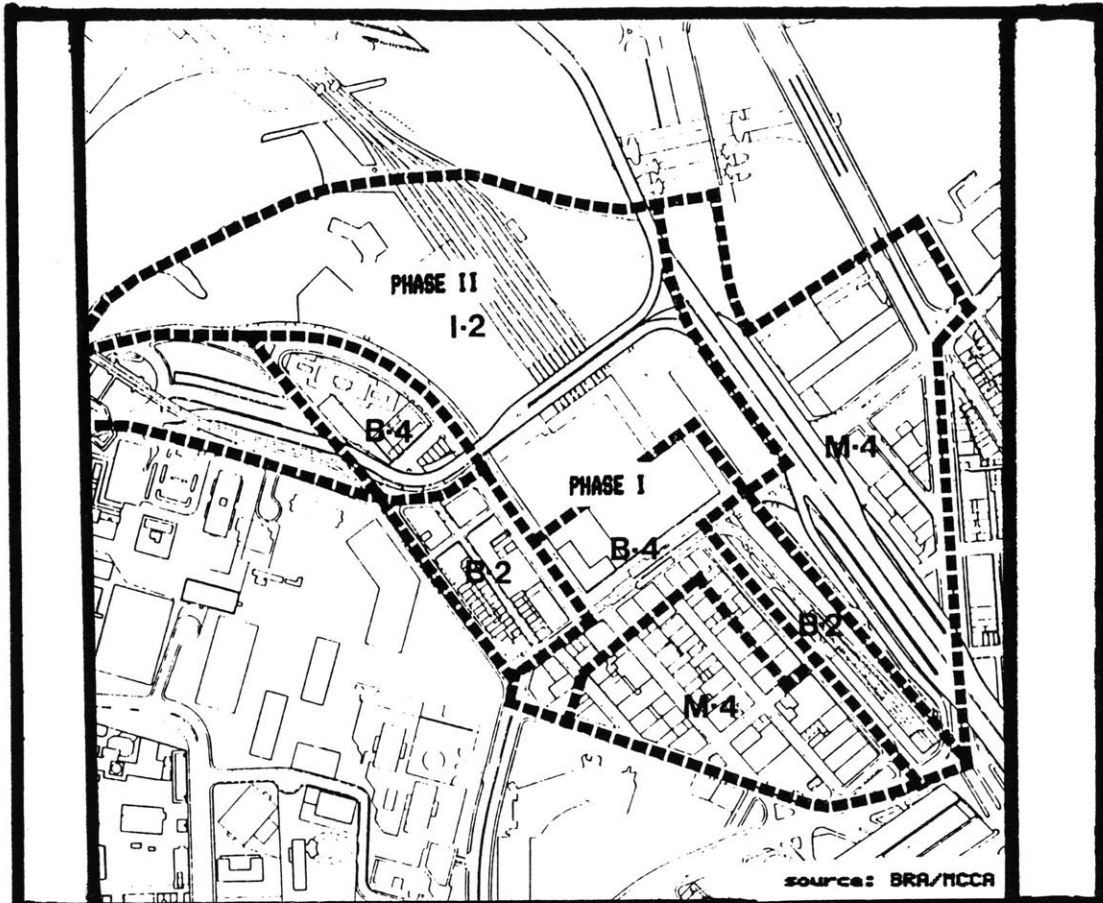
A. CAMB./SCIENCE PARK/IND. PARK  
B. CHARLESTOWN  
C. NORTH END  
D. GOVERNMENT CENTER

E. CHARLES RIVER COMPLEX  
F. BEACON HILL  
G. NSH  
H. THE SITE

source: BRA




MAP 20

EXISTING ZONING AND LAND USE POLICY



EXISTING ZONING AND LAND-USE POLICY

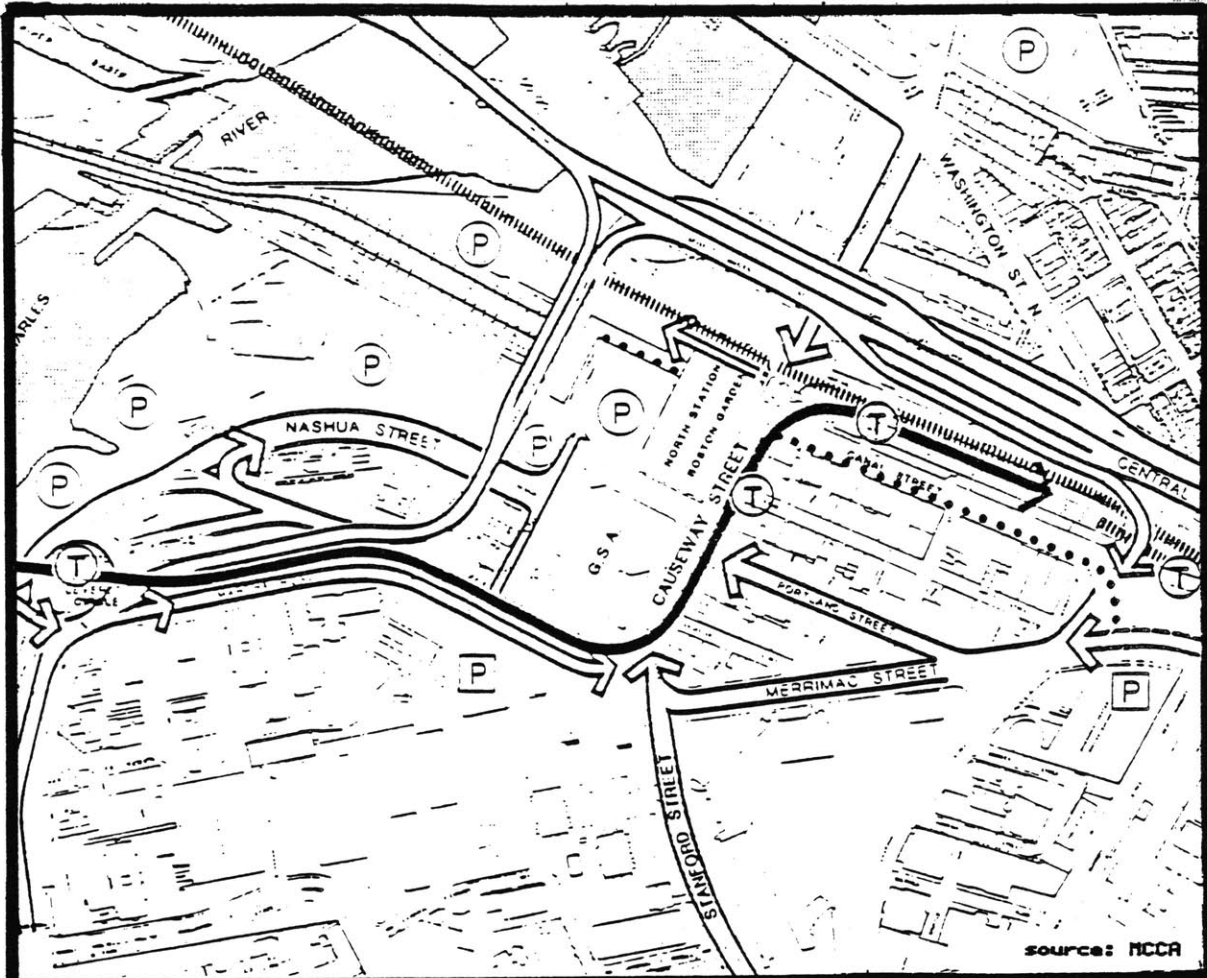
Key

-  SITE
-  ZONING AREA
-  BRA DESIGNATED REDEVELOPMENT AREA

- I-2 GENERAL MANUFACTURING: FAR-2
- B-2 RETAIL BUSINESS & OFFICE: FAR-2
- B-4 RETAIL BUSINESS & OFFICE: FAR-4
- M-4 LIGHT MANUFACTURING: FAR-4




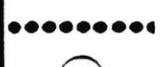


MAP 21

EXISTING CIRCULATION



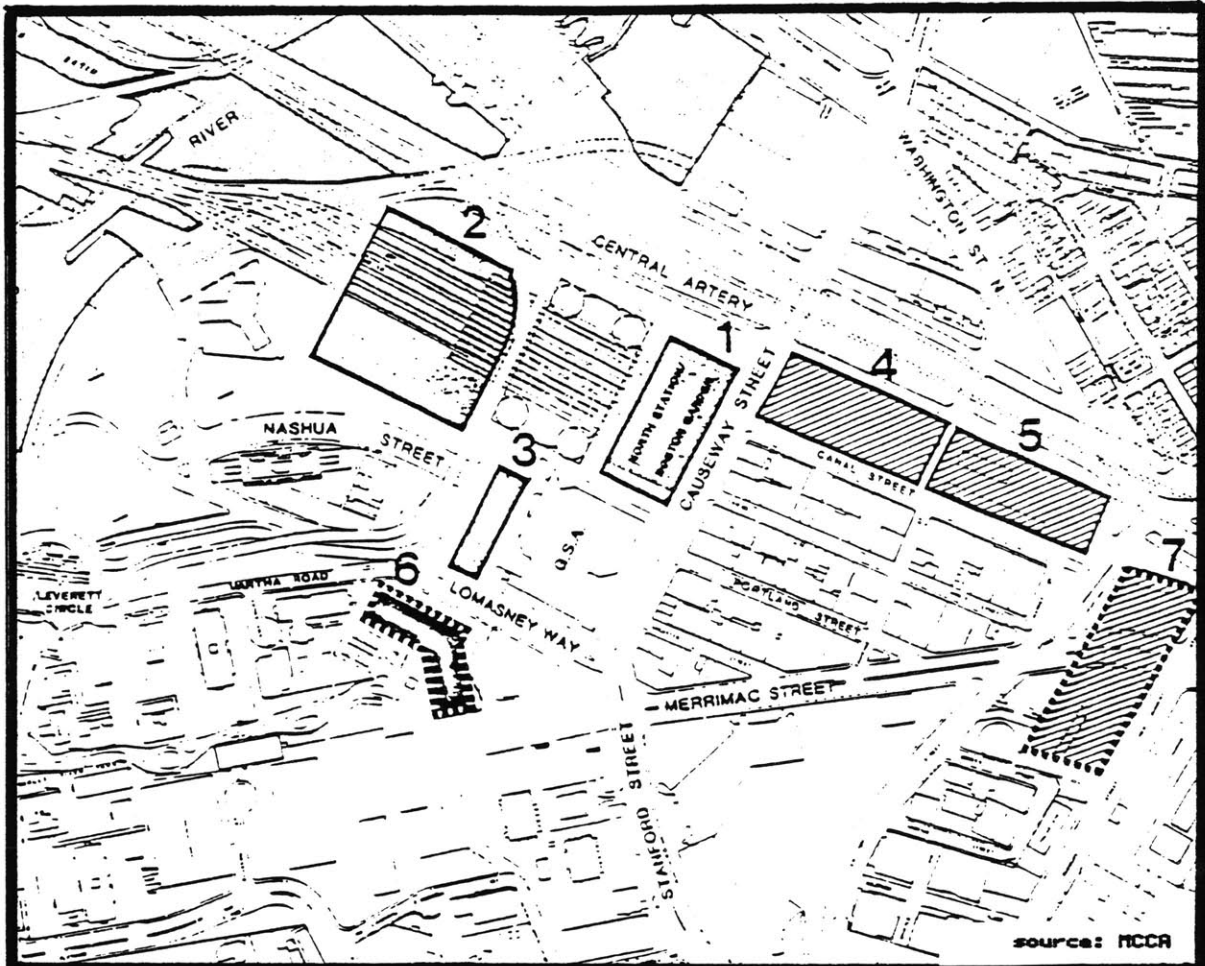
EXISTING CIRCULATION

Key

-  STREET/HIGHWAY NETWORK
-  TRANSIT - ELEVATED
-  TRANSIT - DEPRESSED
-  PEDESTRIAN PATHWAY
-  PARKING
-  SITE

**MAP 22**

**FUTURE PARKING OPTIONS**



**FUTURE PARKING OPTIONS**

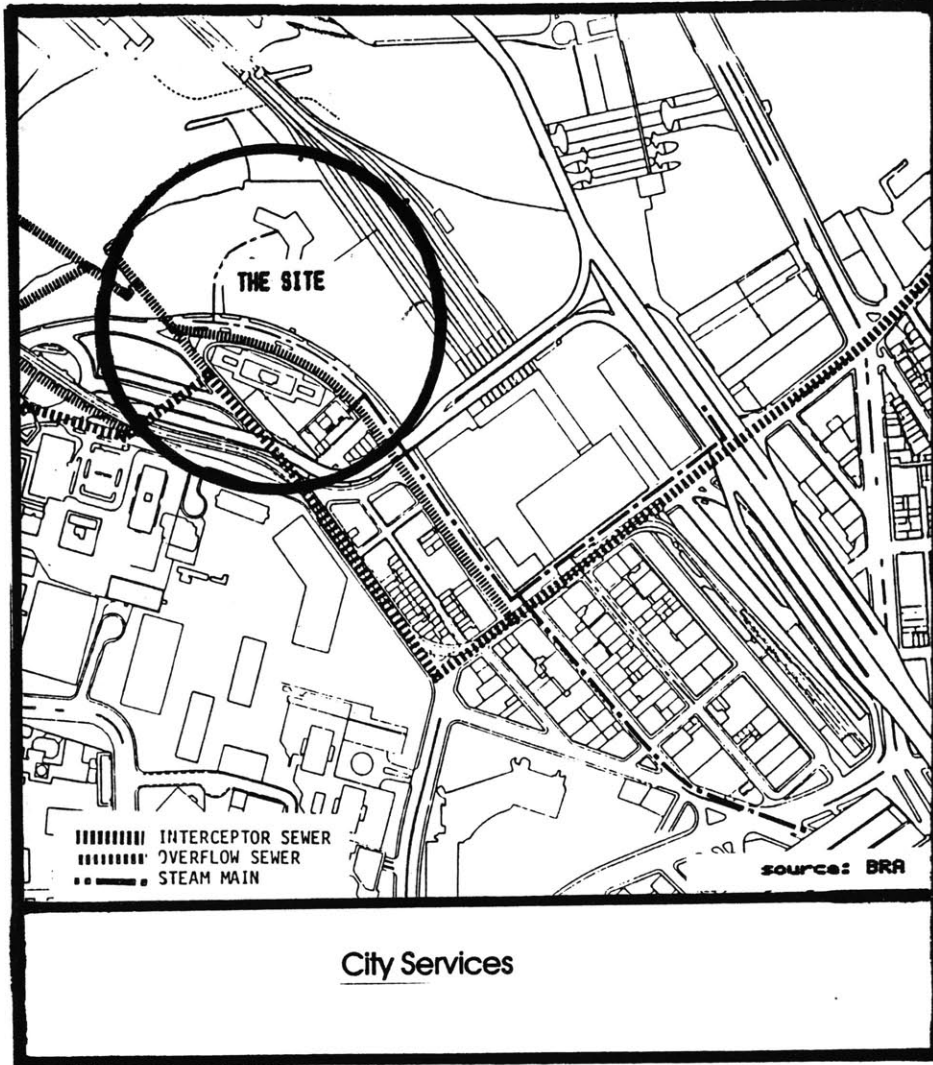
**Key**

- 1) DEVELOPMENT SITE
- 2) AIR RIGHTS/MGA
- 3) NORTH OF GSA
- 4) TRANSIT/BUS DEPOT
- 5) NORTH END RESIDENTS
- 6) CHARLES RIVER PARK (EXISTING)
- 7) GOVERNMENT CENTER (EXISTING)

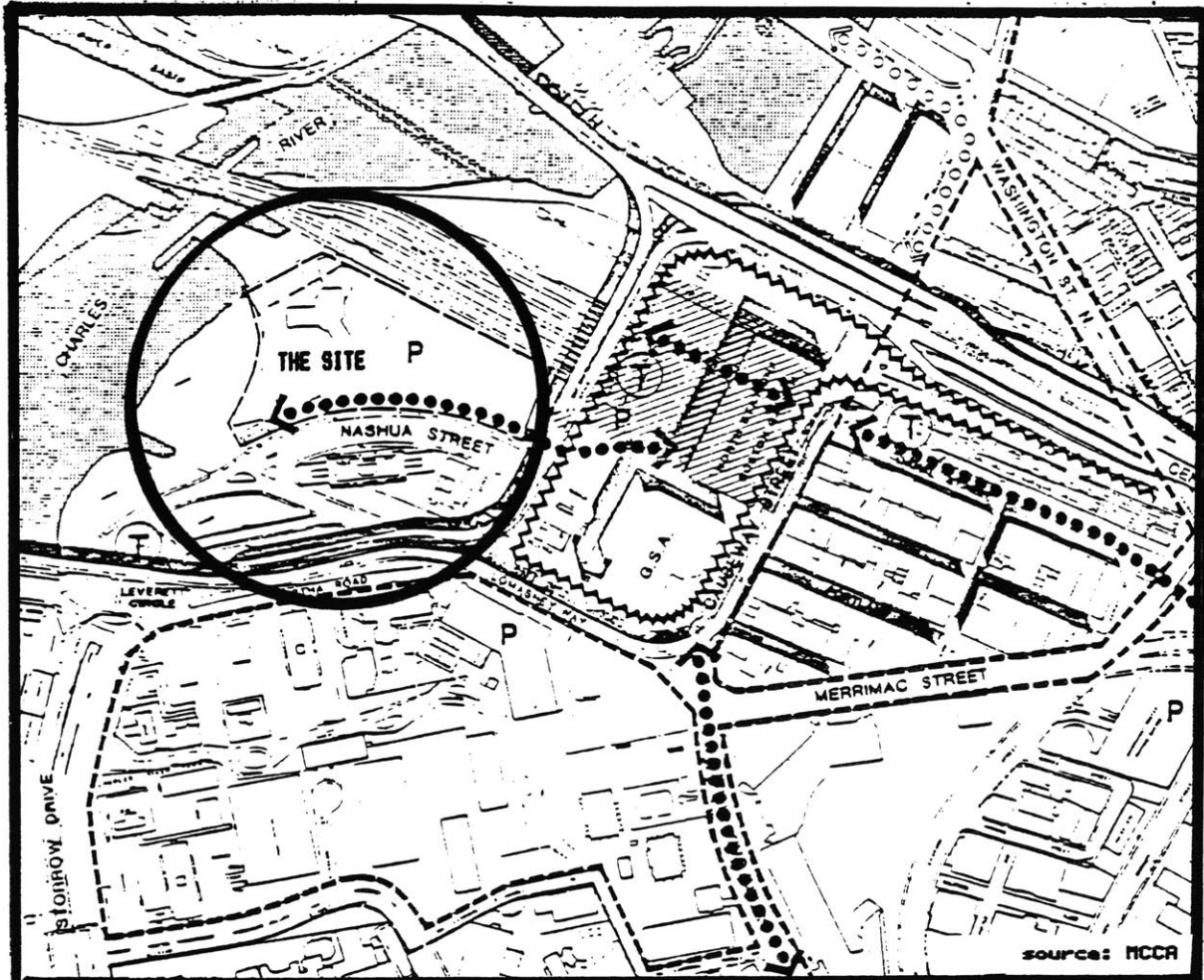


MAP 23

CITY SERVICES


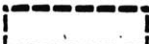




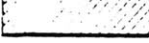


EXISTING URBAN DESIGN CONTEXT



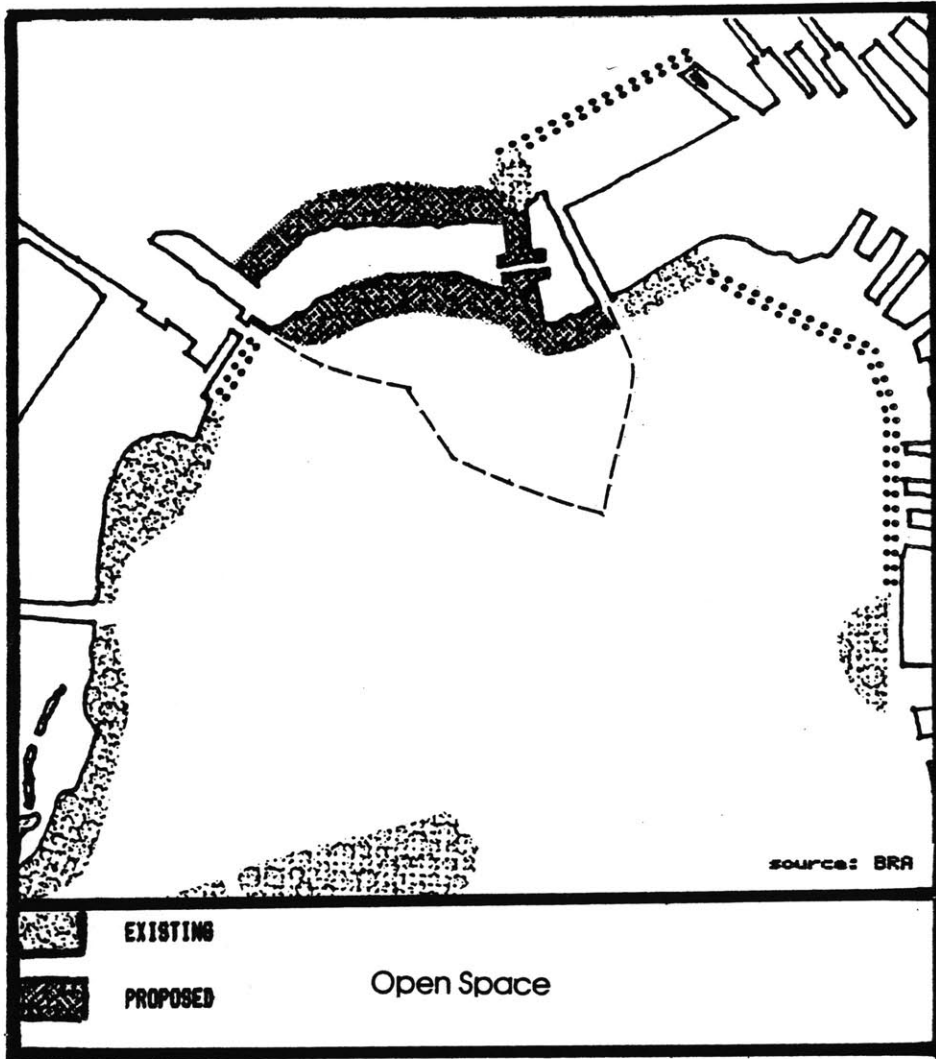
EXISTING URBAN DESIGN CONTEXT

Key

-  BARRIER
-  DISTRICT
-  MAJOR PATHWAY
-  MAJOR STRUCTURES: BUILDING & VIADUCTS
-  TRANSIT STATION
-  PARKING
-  ARENA SITE

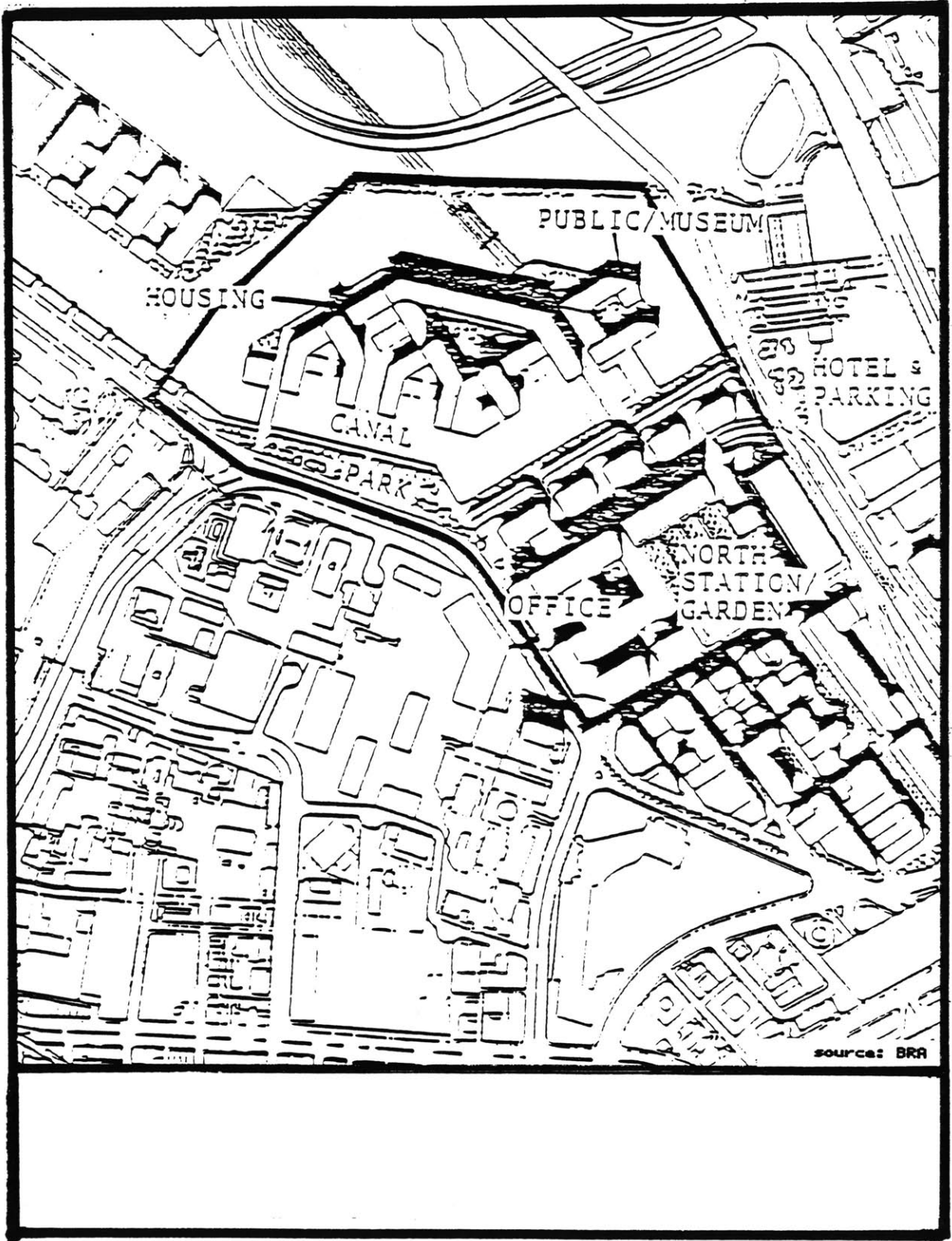
MAP 25

OPEN SPACE

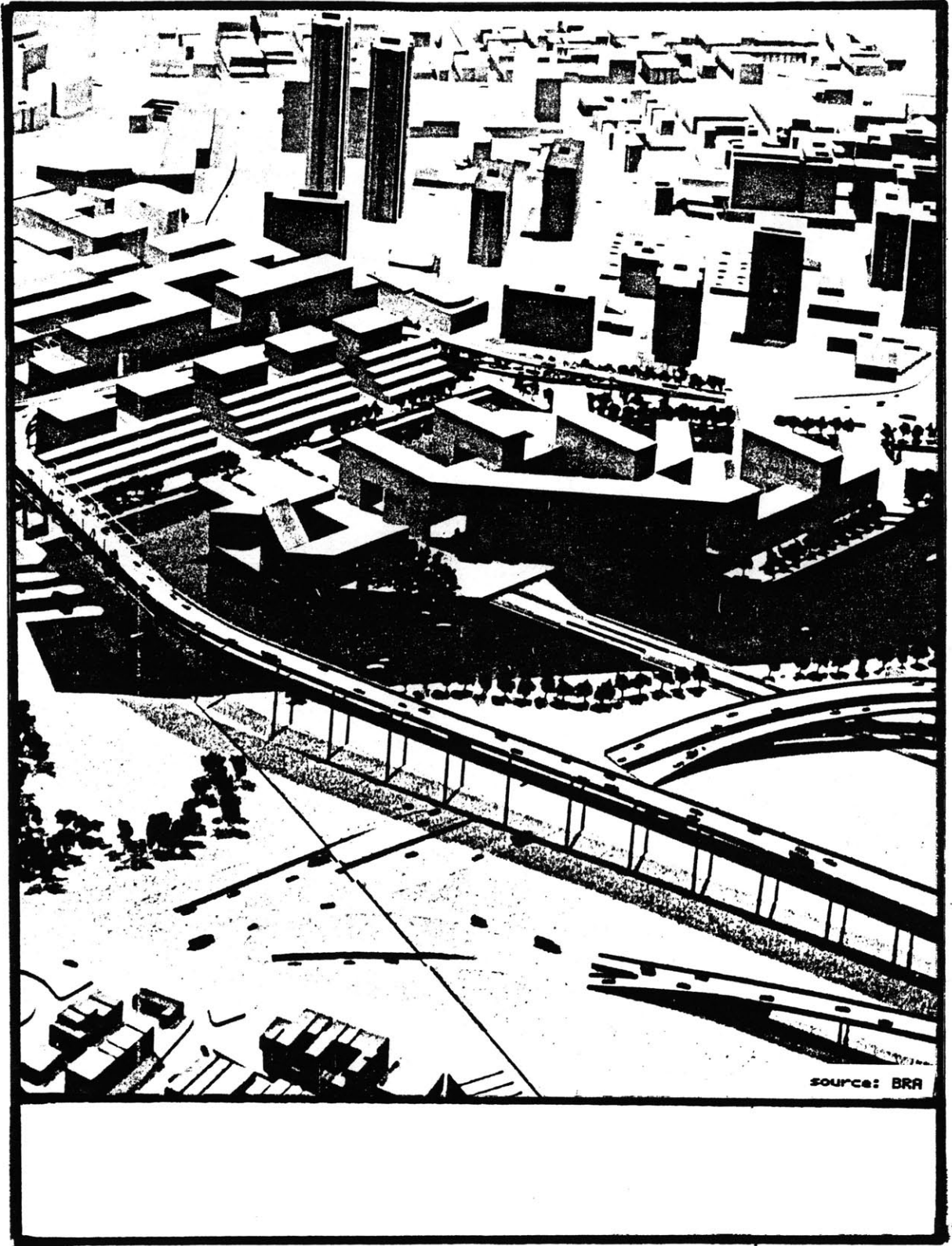


MAP 26

SAFDIE PLAN

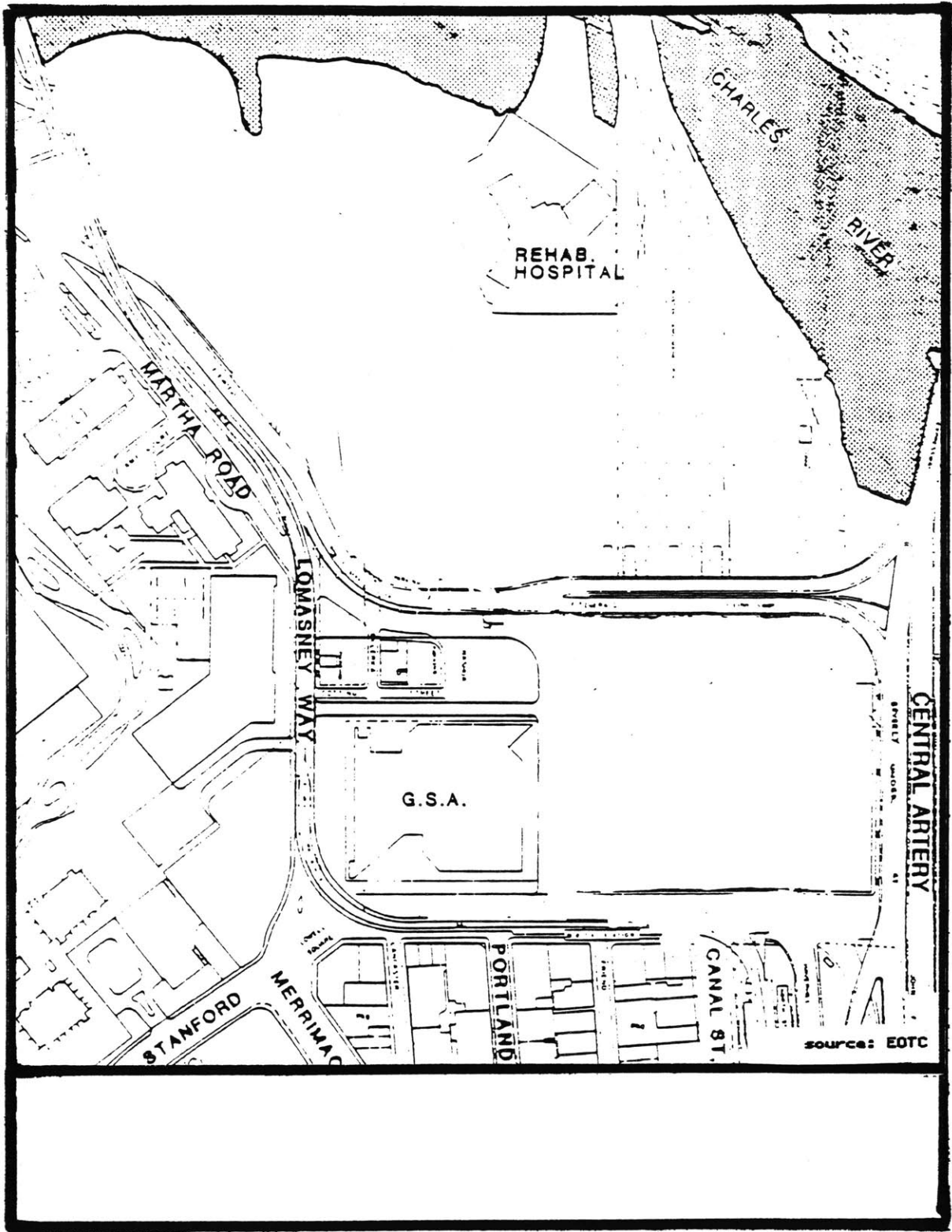


SAFDIE MODEL



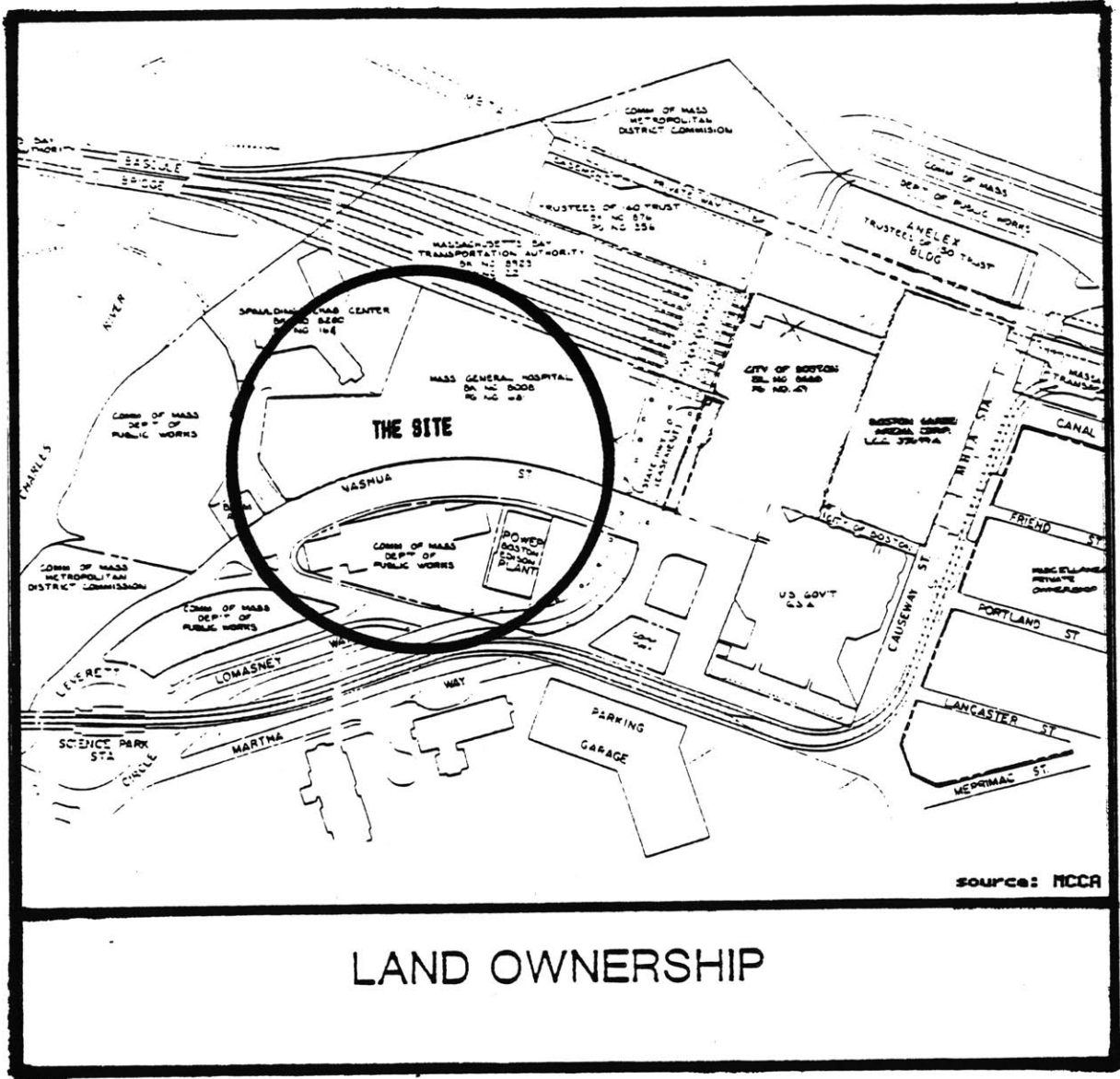
MAP 28

WALLACE, FLOYD PLAN



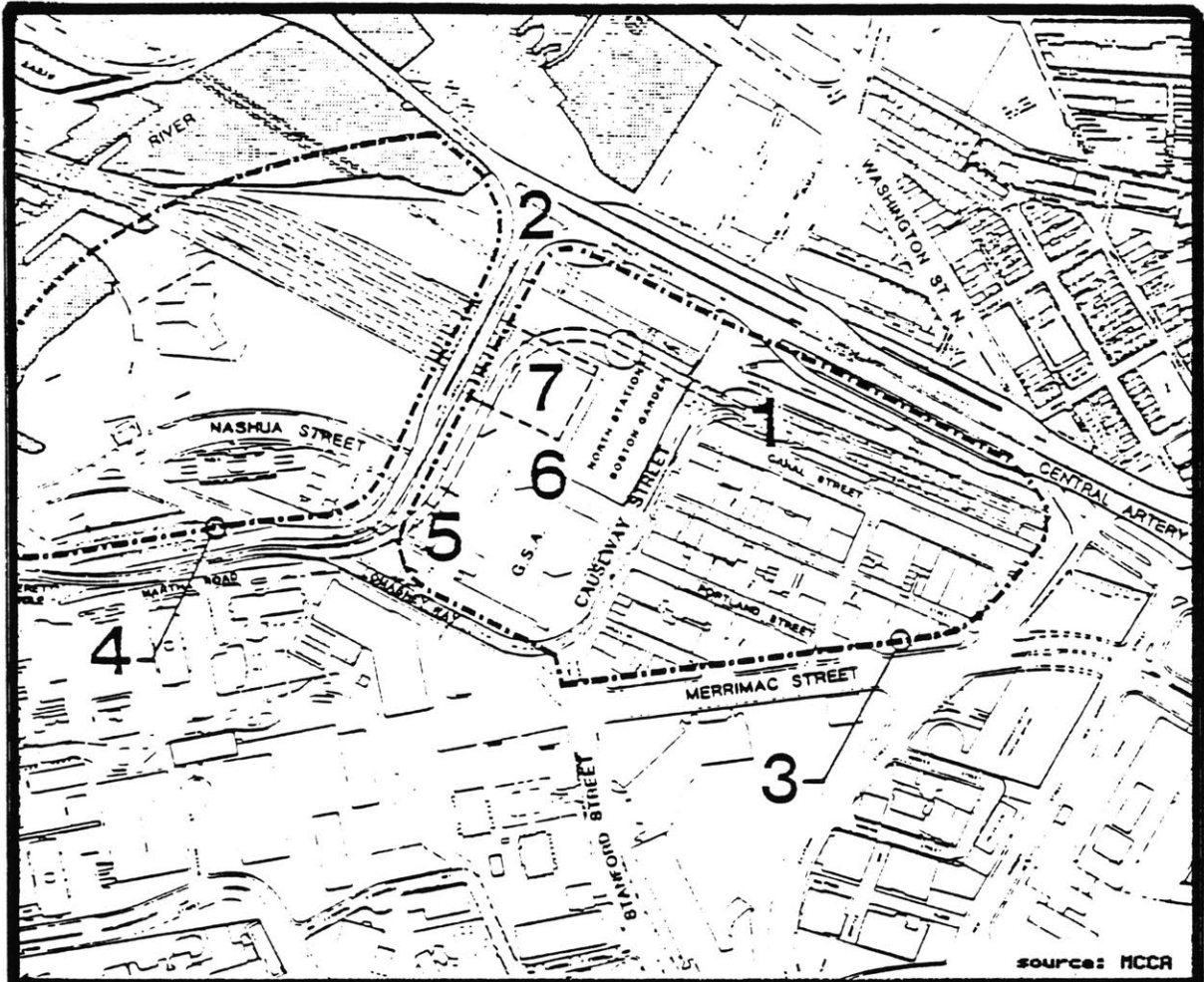
# MAP 29

## LAND OWNERSHIP



## LAND OWNERSHIP

URBAN DESIGN ISSUES AND OPPORTUNITIES



URBAN DESIGN ISSUES AND OPPORTUNITIES

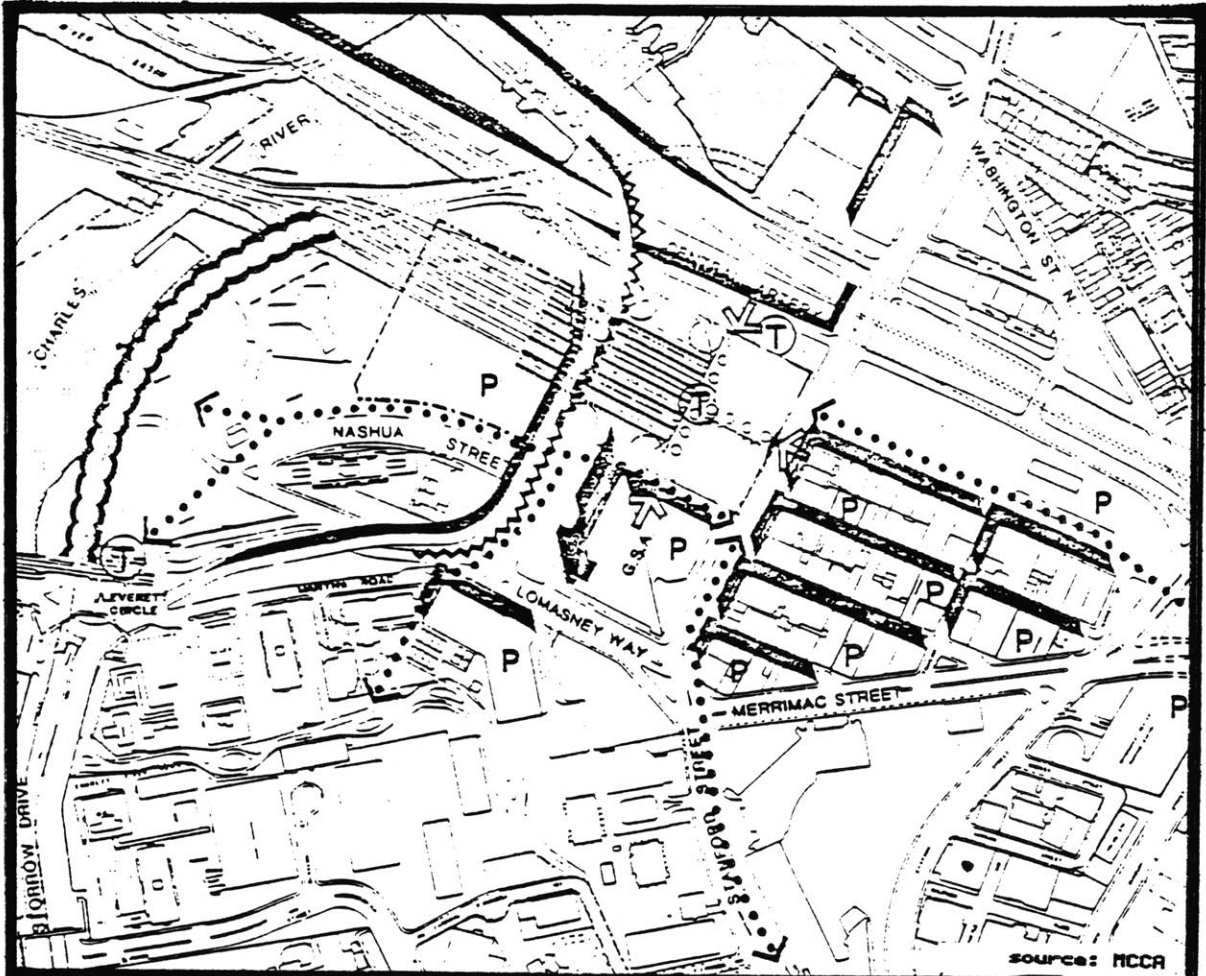
Key

- 1) GREEN LINE RELOCATION
- 2) CENTRAL ARTERY RECONSTRUCTION
- 3) PHASE I REDEVELOPMENT AREA
- 4) PHASE II REDEVELOPMENT AREA
- 5) PARCEL NORTH OF GSA
- 6) NEW PEDESTRIAN STREET
- 7) COMPUTER RAIL TRACK EXTENSION






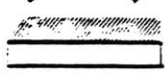

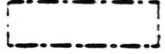

MAP 31

PROPOSED URBAN DESIGN GUIDELINES

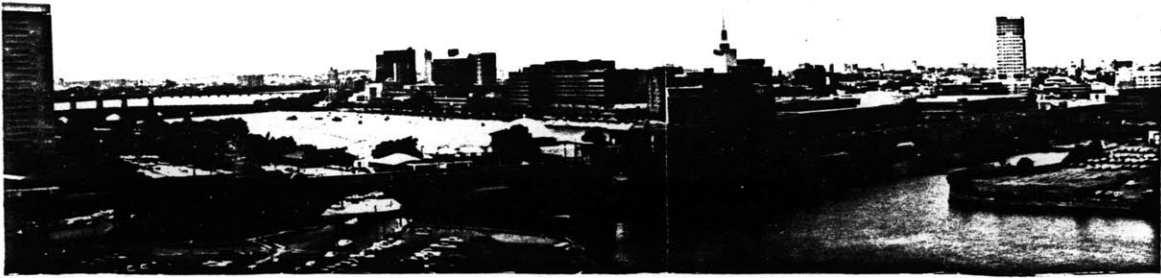


PROPOSED URBAN DESIGN GUIDELINES

Key

-  BARRIER
-  MAJOR EXTERIOR PATHWAY
-  MAJOR INTERIOR PATHWAY
-  MAJOR STRUCTURES: BUILDINGS & VIADUCTS
-  TRANSIT STATION
-  AIR RIGHTS SITE
-  SITE

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EAST BUNKER HILL MONUMENT, MYSTIC RIVER BRIDGE, CHARLESTOWN



SOUTH ANALEX BUILDING, BOSTON GARDEN, GSA BUILDING, CONNECTOR RAMP

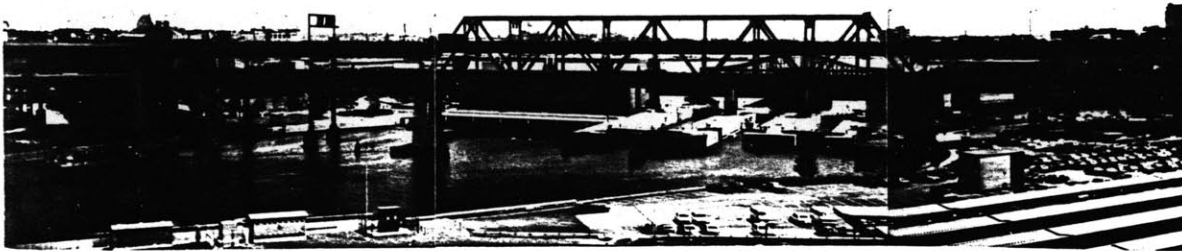
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EAST MYSTIC RIVER BRIDGE, CHARLESTOWN, CHARLESTOWN BRIDGE, MDC DAM



SOUTH ANALEX BUILDING, BOSTON GARDEN, GSA BUILDING

VIEWS FROM THE 5th FLOOR - SPAULDING REHABILITATION HOSPITAL



WEST

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NORTH

INDUSTRIAL PARK, BOSTON SAND AND GRAVEL CO., INTERSTATE 93



EAST

BUNKER HILL MONUMENT, INTERSTATE 93, CHARLESTOWN BRIDGE



SOUTH

ANALEX BUILDING, BOSTON GARDEN, GSA BUILDING

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