

PROPOSED

MMUNICIPAL HARBOR PLAN

Limited Geographic Amendment



MARCH 1999

CITY OF BOSTON · THOMAS M. MENINO, *MAYOR*

Boston Redevelopment Authority · Thomas N. O'Brien, *Director*

CITY OF BOSTON

**PROPOSED MUNICIPAL HARBOR PLAN
LIMITED GEOGRAPHIC AMENDMENT
NORTH STATION**

**City of Boston
Thomas M. Menino, Mayor**

**Boston Redevelopment Authority
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1.0 INTRODUCTION

The Boston Redevelopment Authority (BRA) requests an amendment to the City of Boston's Municipal Harbor Plan (MHP) to include a limited geographic area on the Inner Harbor in the North Station area adjacent to the North End Waterfront subdistrict of the approved MHP. This area comprises approximately 12.3 acres of land and watersheet ("the Amendment Area") and is bounded by the North Washington Street Bridge, Causeway Street, the elevated portion of the Central Artery, and a point approximately halfway across the Metropolitan District Commission (MDC) dam and locks. (See *Figure 1 Amendment Area Locus Plan* and *Figure 2 Amendment Area Aerial View*.)

The Amendment Area includes two privately-owned parcels: the first is a parcel located on the harbor at 160 North Washington Street and 131 Beverly Street. This parcel is occupied by a building commonly referred to as the Hoffman Building and a wharf area known as Lovejoy Wharf. The second privately-owned parcel is located landward of the first parcel, between Causeway Street and Lovejoy Place, with an address of 226 Causeway Street. The Amendment Area also includes approximately 1.6 acres of open space, approximately 4.5 acres of water sheet, and another approximately 2.7 acres of infrastructure including a portion of the MDC dam and locks and a portion of the elevated Central Artery. The portion of the elevated Central Artery included in the Amendment Area is planned by the CA/T project to become the location of an open space known as Portal Park and the entryway to the new Charles River Crossing Bridge.

No substitutions are being sought in this limited MHP Amendment for the portion of the Amendment Area located at 160 North Washington Street and 131 Beverly Street.

The limited MHP Amendment proposed by the BRA requests that the Secretary of Environmental Affairs (EOEA) approve substitute height requirements consistent with the applicable zoning for the 226 Causeway Street parcel. The applicable zoning is set forth in Article 39 of the Boston Zoning Code: North Station Economic Development Area (EDA). See *Appendix 1*. The building height established by the zoning would allow development on this parcel to contribute to the revitalization of the North Station area as contemplated by the zoning without imposing inappropriate impacts on waterfront land.

The zoning for the North Station EDA provides several different height limits, reflecting a careful, site-specific analysis of the impacts of different heights on particular locations in the North Station area. The 226 Causeway Street parcel lies within the "General Area" of the North Station EDA. In the General Area, the zoning allows a height of 155 feet to the top of the highest occupied floor for projects that the BRA reviews under Large Project Review, pursuant to Article 80 of the Boston Zoning Code, and 125 feet for smaller projects. Large Project Review involves a comprehensive, public review of a project's impacts with respect to wind, shadow and other environmental concerns; traffic and parking; urban design; historic resources; and infrastructure systems, and requires appropriate mitigation of those impacts. The thresholds



FIGURE 2
AMENDMENT AREA AERIAL VIEW

and requirements of Large Project Review are discussed in Section 5.1.

A proposal to redevelop an existing, vacant structure at 226 Causeway Street as a mixed-use residential complex was submitted to the BRA and reviewed under the Large Project Review provisions of Article 80. The 226 Causeway Street project proposes the adaptive reuse of the existing structure with a six-story addition, for a total height of 155 feet to the highest occupied floor.

BRA analysis of the impacts of the 226 Causeway Street project shows that, at the proposed height and massing, the impacts of the proposed project on the pedestrian environment of the surrounding area will be minimal. The BRA's findings are discussed in Section 6.1.

The proposed use of the 226 Causeway Street project is residential with parking and ground floor retail space. Boston's existing MHP contains a requirement for the provision of affordable housing in projects that are proposed to be residential. To maintain consistency with the policies set forth in the existing MHP, this MHP Amendment requires that the 226 Causeway Street project, which is proposed as a residential use, provide approximately ten percent of its total units as affordable. The proponent has agreed to set aside 24 units, as affordable units, of which 14 units will be reserved for elderly tenants. This commitment is described in greater detail in section 6.2.

2.0 EXISTING MUNICIPAL HARBOR PLAN

A Municipal Harbor Plan (MHP) is a land use plan prepared by a city or town under the Commonwealth's statewide licensing regulations for waterfront projects. (310 CMR 9.00, the "Waterways Regulations," implementing MGL Chapter 91). An MHP proposes changes to these requirements in order to reflect specific local conditions.

To accommodate the local conditions of the various municipal harbors on the Massachusetts coast, the Waterways Regulations allow municipalities to propose specific use and dimensional requirements as substitutes for corresponding requirements in the Waterways Regulations. The substitute requirements, if approved, will apply to Chapter 91 license applications within the municipality. To propose such requirements, a municipality must submit an MHP to the Secretary of the Executive Office of Environmental Affairs (EOEA).

The City of Boston submitted its MHP (also known as the Harborpark Plan) for approval in October 1990. The decision on the MHP was issued by the Secretary of Environmental Affairs on May 22, 1991. In her decision, the Secretary approved certain use and dimensional requirements of the City's zoning as substitute provisions in several areas, including those immediately adjacent or nearby to the Amendment Area (the North End Waterfront, Charlestown Gateway and the Charlestown Navy Yard).

The MHP is currently in effect and is in the process of being renewed. The BRA is seeking this limited MHP Amendment to incorporate a relatively small geographic area into the plan where a redevelopment proposal has been made for the landward parcel. The proposed MHP Amendment will further the City's goals with respect to the revitalization of the North Station area, assist in creating better pedestrian connections from Causeway Street to the waterfront and reinforce plans being implemented by the MDC and the Central Artery/Tunnel project (CA/T) for the general area.

In accordance with CZM direction, this limited MHP Amendment will constitute the first (albeit procedurally distinct) phase of the larger renewal process for which documentation is currently being prepared. (*See Appendix 2: Letter from the BRA Director to Secretary of Environmental Affairs, dated February 19, 1998 and response from the CZM Director to the BRA, dated May 28, 1998.*)

3.0 PROCEDURE FOR APPROVAL OF LIMITED GEOGRAPHIC AMENDMENT

The Commonwealth's regulations for the review and approval of Municipal Harbor Plans (301 CMR 23.00, the "MHP Regulations") allow the Secretary to approve a proposed MHP amendment without a scoping procedure if the proposed amendment does not involve a "significant addition of geographic area or subject matter to the Approved Plan." 301 CMR 23.06(1).

This proposed MHP Amendment does not constitute a "significant addition of geographic area or subject matter" within the meaning of the Amendment and Renewal procedures found at 301 CMR 23.06(1) for the following reasons:

1. The proposed Amendment concerns a small geographic area. The Amendment would add approximately 12 acres to the broad geographic scope of the approved MHP, of which only approximately 3.0 acres are potential private development parcels. (See Figure 3, *Bird's Eye Perspective of Limited Geographic Area*.) This Amendment Area is adjacent to the North End and the Charlestown Gateway and Charlestown Navy Yard subdistricts, areas for which the Secretary has approved substitution requirements.
2. Within the Amendment Area, the BRA proposes a substitution only for the 226 Causeway Street parcel, covering an area of approximately 1.1 acres.
3. The parcel for which a substitution is requested is not located on the waterfront, but is a landlocked parcel bounded by North Washington Street, Causeway Street, Beverly Street and Lovejoy Place.
4. The BRA is requesting a substitution only from the maximum building height provision of the Waterways Regulations.

Under 301 CMR 23.06(1) such an amendment would be reviewed under 301 CMR 23.04 (Review Procedure). CZM has concurred that this proposed Amendment may be reviewed under the procedures of 301 CMR 23.04 only (i.e., as a "minor" plan amendment that is exempt from scoping). (See Appendix 2 and also the Note below.)

**Note: The CZM letter of May 28, 1998 states that the request to amend the approved MHP for Boston is best considered in the context of a plan amendment for the portion of the Charles River Basin lying between the MDC Dam and the North Washington Street Bridge (including all filled tidelands on either side of the river).*

An amendment encompassing the entire area requested would cut across two separate zoning districts: the North Station Economic Development Area (Article 39) and the Charlestown Waterfront (Article 42B). The Charlestown Waterfront was submitted as part of the City's

Public Participation Process

The procedure outlined in 301 CMR 23.04 contains provisions for public comment and a public hearing to be conducted by CZM which will afford an opportunity for public input on this proposed Amendment.

A briefing on this MHP Amendment was given to The Boston Harbor Association's Harbor Use Subcommittee on July 22, 1998. Issues discussed included traffic at Causeway and North Washington Streets, ground floor retail uses, height, Facilities of Public Accommodation on the ground floor and Chapter 91 review. In response to public comments, the project proponent committed that the ground floor of the 226 Causeway Street building would be open to the public and tickets for ferry/water transportation could be sold in the lobby.

Related Public Processes for Projects within or around the Amendment Area

CZM has requested that a discussion of public processes related to the Amendment Area other than that specified in 30 CMR 23.04 for the review of the MHP Amendment be discussed here. Portions of two high profile public projects are contained in, or impact on, the Amendment Area and have been the subject of extensive public processes. While these projects are discussed in detail in Section 4.4, CZM has requested that the public process aspects of these projects be highlighted here. In addition, CZM has requested an overview of the public process for the project proposed at 226 Causeway Street.

- *Metropolitan District Commission (MDC) New Charles River Basin Master Plan*

The Master Plan for the MDC's New Charles River Basin was released in March 1995. (*See The New Charles River Basin Master Plan, MDC, March 1995.*) The vision for this Plan was to complete the Metropolitan Park System's water park, reshaping the river and its banks in the

original MHP that is currently in the process of being renewed. Boston's planning is neighborhood based and it is important to planning, zoning and coordination with Chapter 91 requirements that the integrity of neighborhood districts be maintained. Therefore, at a meeting on August 24, 1998, CZM staff agreed that the boundary of the proposed MHP Amendment would encompass only those areas located in the North Station Economic Development Area and would be bounded by the applicable portion of the Charlestown Waterfront zoning district. Land area in Charlestown will be discussed as part of the Charlestown Waterfront district when the MHP renewal is submitted. In the August 1998 meeting, CZM requested that the boundary of this MHP Amendment also include the portion of the elevated Central Artery that is planned by the CA/T project to become the location of an open space known as Portal Park and the entryway to the new Charles River Crossing Bridge. This area is included.

“lost half mile” between the Charles River Esplanade and Boston’s Harborpark. The public process that led to the Plan rested in the New Charles River Basin Citizen’s Advisory Committee (CAC), which included appointees of the Executive Office of Environmental Affairs, the City of Boston and the City of Cambridge. Numerous meetings were held to develop the Plan, during which time many others, in addition to the appointees, contributed to the Plan.

- *Central Artery/Third Harbor Tunnel (CA/T) Project*

One of the edges of the Amendment Area is the proposed alignment for the depressed Central Artery and the portal entrance for the new cable stayed Charles River Bridge. The public review process for the CA/T project, while too extensive to summarize here, has included numerous environmental impact and mitigation reports. The review of this publicly-funded project has been carried out under the auspices of the Boston Transportation Department, the BRA, the Central Artery Oversight Committee, community and neighborhood groups, and organizations that specifically monitor the project. CA/T mitigation commitments, several of which bear on the Amendment Area and are discussed in later sections of this report, were developed with public and state agency input in the course of review. Over the years, BRA liaisons have participated extensively in all aspects of the review of the Central Artery project including proposed mitigation measures.

- *226 Causeway Street Article 80 Public Participation Process*

The 226 Causeway Street project proponent and its consultant team met with city and state agency officials, representatives of the local community, local neighborhood associations and other abutters and interested parties during the Article 80 review process. Following the submission of the Project Notification Form (PNF) for 226 Causeway Street, there was a 30 day public comment period during which time the PNF was made available to the public. After submission of the Draft Project Impact Report (DPIR), there was a public review period of 45 days with copies of the DPIR made available to the public. Letters supporting the project are contained in Appendix E of the DPIR. A number of meetings were held with the following parties: Downtown North Association, BRA, owners of the 160 North Washington Street/131 Beverly Street property (the Hoffman building), FleetCenter management, Central Artery/Tunnel (CA/T) staff, North End Waterfront Neighborhood Committee, North End Residents Council, MDC, CA/T Causeway Street Coordinating Group, Boston Transportation Department, Boston Environment Department, Boston Landmarks Commission, and Boston Civic Design Commission.

A list of these meetings including a summary of the discussions that took place is included in *Appendix 3*.

4.0 DESCRIPTION OF THE LIMITED GEOGRAPHIC AMENDMENT

4.1 Description of the Amendment Area

The Amendment Area is an approximately 12.3 acre area comprised of land, watershed and infrastructure bounded by the North Washington Street Bridge, Causeway Street, the elevated portion of the Central Artery, and a point approximately halfway across the MDC dam and locks. The Amendment Area includes two privately-owned parcels along with open space, water sheet, and various infrastructure components including a portion of the MDC dam and locks and a portion of the elevated Central Artery which will be removed by the CA/T project.

4.2 Description of the Parcels

The Amendment Area includes two privately-owned parcels. The first privately-owned parcel is located on the harbor and is occupied by two warehouse type buildings. These buildings are located on separate, adjoining lots under common ownership and are often referred to together as the Hoffman Building. The buildings have an address of 160 North Washington Street and 131 Beverly Street. This parcel includes a waterfront wharf area known as Lovejoy Wharf, which is built on wooden piles over water. The building and wharf area together total approximately 81,760 square feet.

The second privately-owned parcel is approximately 49,400 square feet in size and is located between Causeway Street and Lovejoy Place. It is occupied by the former Stop & Shop Bakery building located at 226 Causeway Street, which contains approximately 235,000 square feet of floor area. The building is currently unoccupied.

The properties share a 50-foot wide passageway called Lovejoy Place. The property line runs down the center of this passageway with a 25-foot easement granted on each side. Lovejoy Place contains approximately 19,692 square feet.

The Amendment Area also includes approximately 2.7 acres of area containing various infrastructure, including a portion of the elevated Central Artery which is planned by the CA/T project to become the location of an open space known as Portal Park and the entryway to the new Charles River Crossing Bridge as well as a portion of the MDC dam and locks.

The Amendment Area also includes approximately 1.6 acres of MDC-owned open space that is planned by the MDC for parkland as part of the implementation of a 1995 Master Plan for the Charles River Basin.

The Amendment Area also includes approximately 4.5 acres of water sheet. All of the areas described above are discussed more fully in section 4.4.

4.3 *Applicable Zoning*

The City's zoning for this area is set forth in Article 39 of the Boston Zoning Code, the North Station Economic Development Area. The privately-owned parcels in the Amendment Area are located within *Area No. 1: General Area* having a height limitation of 155 feet to the top of the last occupied floor for projects subject to Large Project Review under Article 80 and 125 feet for smaller projects. The portion of the elevated Central Artery included in the Amendment Area is zoned as OS-A or Central Artery Air Rights Open Space Subdistrict. The portion containing the MDC dam and locks and the water sheet is zoned OS or Open Space.

4.4 *Planning Context*

There are a number of planning or development initiatives underway in the surrounding area being carried out by a number of different government or private entities. The following descriptions provide an overview of publicly-stated plans or initiatives known to the City at the time of the drafting of this Amendment. The substitution requested in this proposed Amendment is consistent with these planning initiatives.

- *North Station Area Overview*

Over the last five to 10 years, a great deal of rehabilitation and some new development has occurred in proximity to the Amendment Area. New office buildings completed during this period include 101 Merrimac Street (155,000 sf), the Thomas P. O'Neill Federal Building (650,000 sf) and 100 Portland Street (100,000 sf). A new sports arena, the FleetCenter, with 18,000 seats and 1,000 below grade parking spaces, has replaced the old Boston Garden. New regional transit and commuter rail facilities are underway. A residential complex, West End Place was built adjacent to the Charles River Park garage.

- *Metropolitan District Commission (MDC) New Charles River Basin Master Plan and CA/T Mitigation*

In 1995, the MDC issued a Master Plan for the New Charles River Basin, considered a "lost half mile," where the Charles River joins Boston Harbor. (*See The New Charles River Basin Master Plan, MDC, March 1995.*) A major objective of this Plan is pedestrian access between the Esplanade and the Boston Inner Harbor waterfront.

According to the 1995 MDC plan, the vision for the New Charles River Basin is to reshape the connection of water and land at the mouth of the river and all of the relationships that follow. The goal of the MDC's program is to match the quality of the existing MDC Esplanade upstream of the Old Charles River Dam and to complete the connection of the Esplanade to Boston Harbor with a continuous system of landscaped areas and pedestrian walkways. The plan includes some 40 acres of parkland, newly shaped water bodies, landings for a variety of different vessels, docking, pedestrian and bicycling paths, new footbridges and interpretative destinations. (*See*

Figure 4, 1995 MDC New Charles River Basin Master Plan.) While there may be modifications to the MDC Master Plan as implementation occurs by the CA/T in its individual design contracts, the 1995 MDC Master Plan is still the main document describing the MDC's plans for the area.

As a result of CA/T impacts on waterways and wetlands, an extensive mitigation program was developed. The mitigation requirements are detailed in the Department of Environmental Protection's (DEP's) Consolidated Written Determination under Chapter 91 for the CA/T Project. The mitigation program incorporated into the CA/T project is based largely on the concept of the MDC's New Charles River Basin Master Plan. An Amended and Restated Memorandum of Agreement between the Executive Office of Transportation and Construction, the Massachusetts Highway Department and the MDC outlines the specific mitigation measures to be taken and the roles and responsibilities of implementing the mitigation program. (See *Appendix 4.*)

The following summarizes elements of the MDC's Master Plan in or in close proximity to the Amendment Area.

- *Paul Revere Park South.* This 2.1 acre area is proposed as an entry location for the riverfront park system pedestrian connections and passive uses oriented to the river and locks. It is adjacent to and in front of 160 North Washington Street. This area will be improved as a major entrance to the Basin, with intersecting pathways connecting with a pedestrian bridge over the MBTA railroad tracks.
- *Lovejoy Wharf.* In its *1995 Charles River Basin Master Plan*, the MDC proposed Lovejoy Wharf as a water transportation node and park accommodating commuters and tourists exiting water shuttles and water taxis with a connecting set of stairs to the North Washington Street Bridge above. (See *Figure 5, 1995 MDC New Charles River Basin Master Plan with 226 Causeway Street Ground Floor Plan.*) The 1995 MDC plan anticipated the acquisition of Lovejoy Wharf for this purpose and the relocation of the MBTA dock to Lovejoy Wharf. The implementation of the water shuttle and water taxi service was expected to be a private enterprise, requiring marketing and feasibility studies. Since that time, the MDC has notified the owner of the property that it does not intend to move forward with the acquisition of Lovejoy Wharf. (See *Appendix 5*). At this time, the DEP and the owner of Lovejoy Wharf are in discussions regarding a DEP enforcement order to accommodate Harborwalk pedestrian access across Lovejoy Wharf. With this access, a continuous link would be made from the North End MDC park and tennis courts, beneath the North Washington Street Bridge across Lovejoy Wharf and into the MDC's Charles River Basin Park system. The BRA intends to work with the MDC, the CA/T project, the DEP, and others regarding the location of passenger water transportation within the watershed of the Amendment Area.

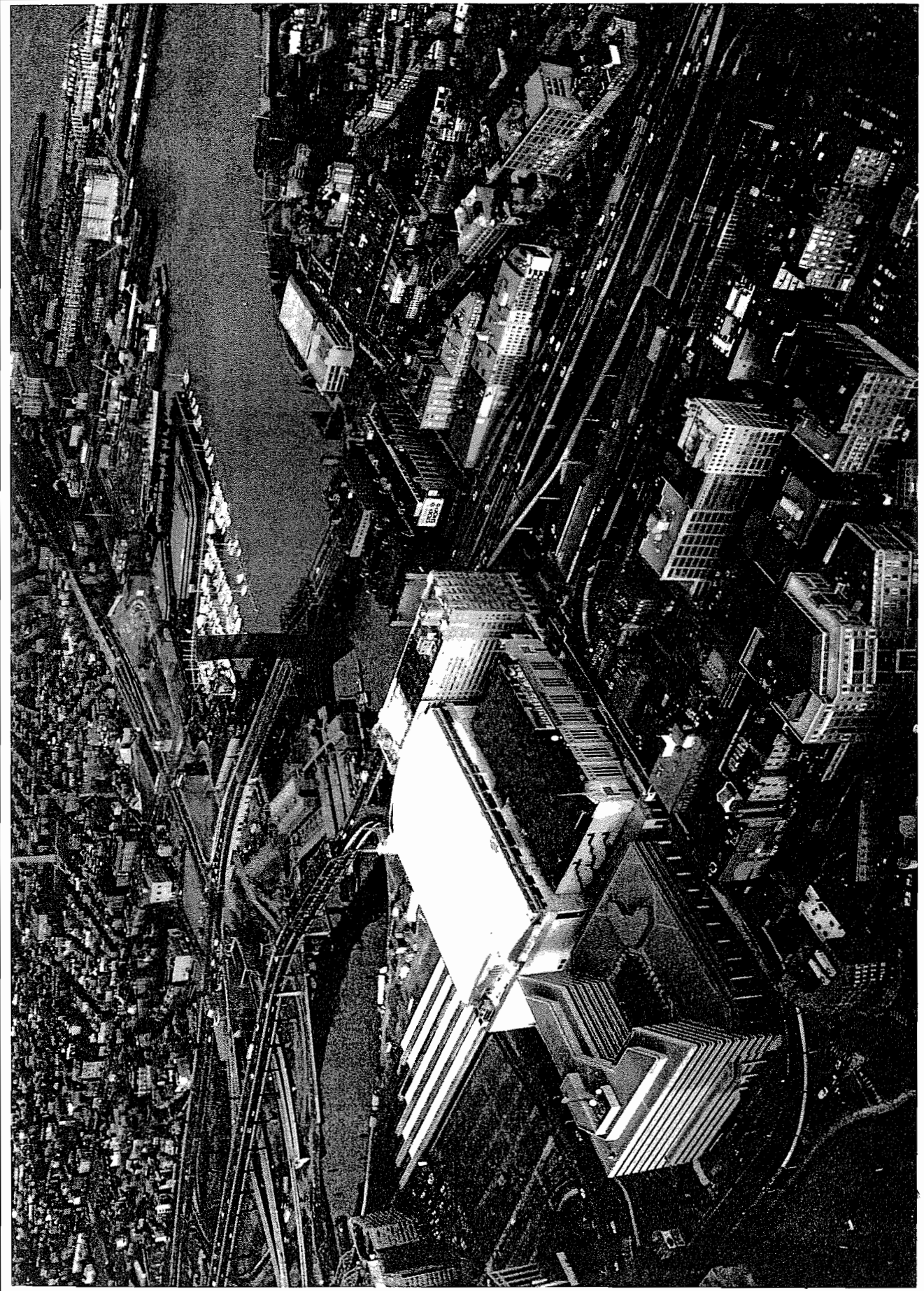


FIGURE 3
BIRD'S EYE PERSPECTIVE OF LIMITED GEOGRAPHIC AREA

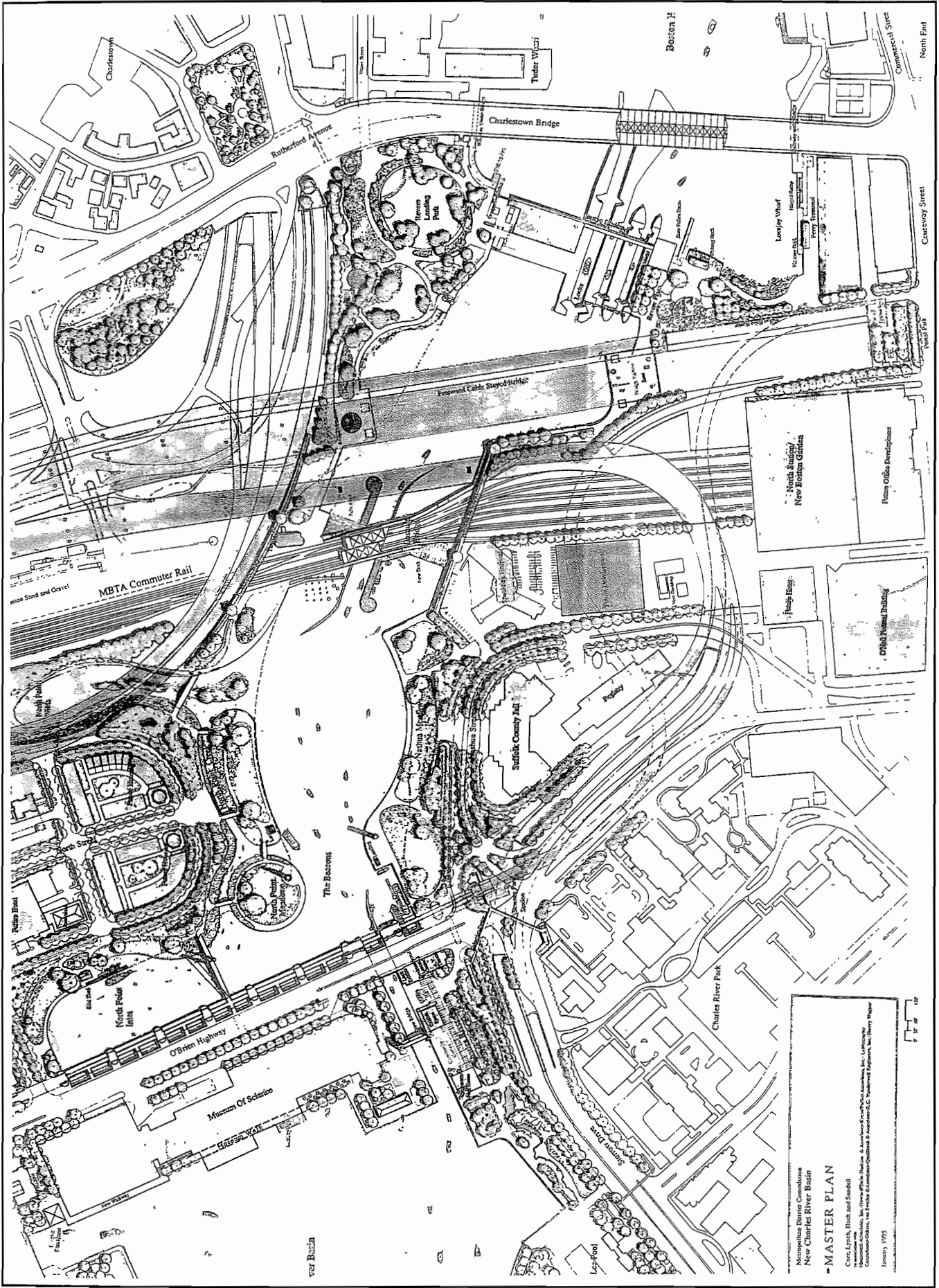


FIGURE 4
1995 MDC CHARLES RIVER BASIN MASTER PLAN

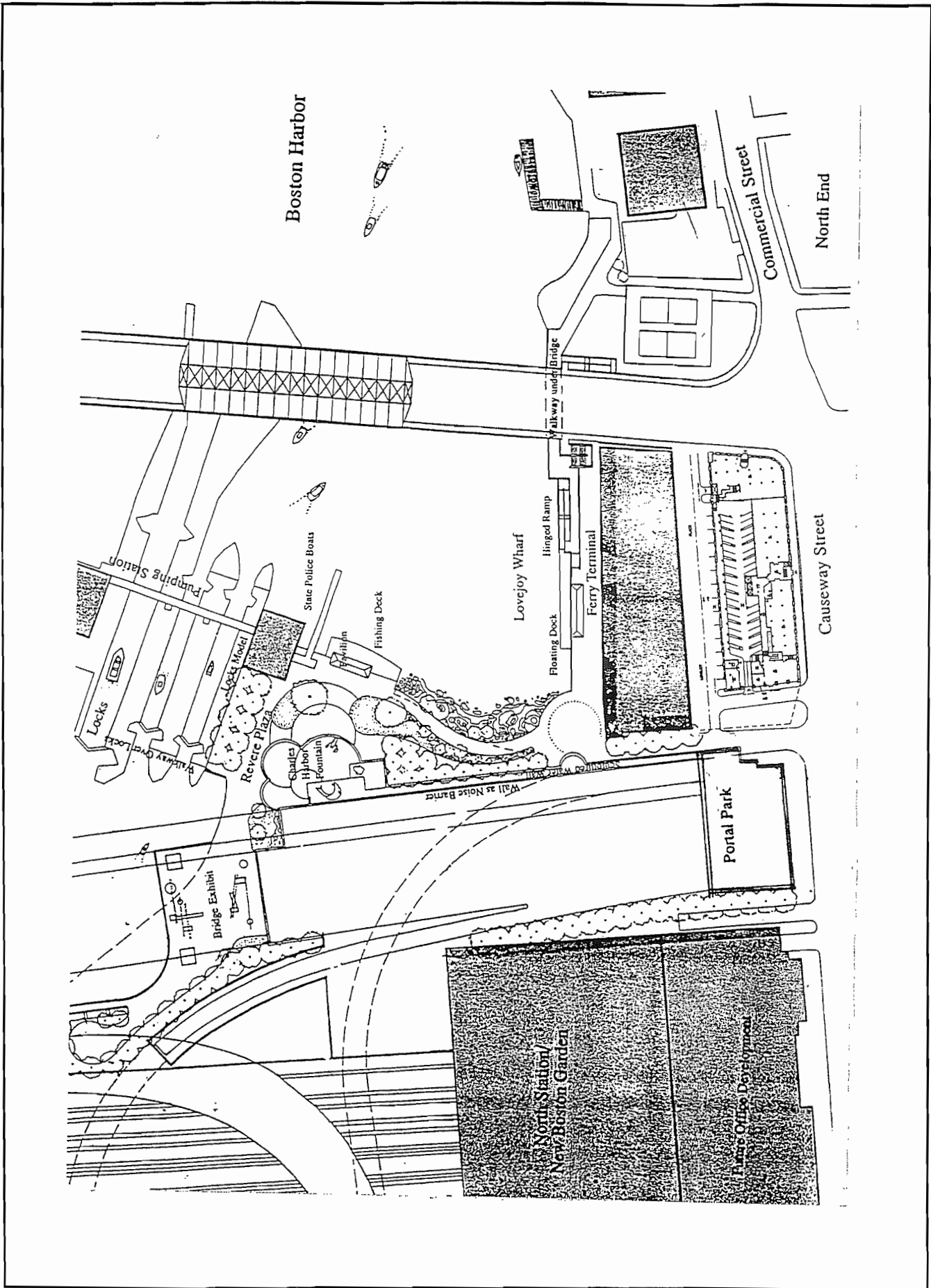


FIGURE 5
 1995 MDC CHARLES RIVER BASIN MASTER PLAN WITH 226 CAUSEWAY STREET GROUND FLOOR PLAN

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- *Paul Revere Park North.* This element of the MDC Master Plan is outside the Amendment Area and is part of the Charlestown Waterfront portion of the MHP. It is discussed here for context only and will be addressed in the MHP renewal for Charlestown. This area is proposed to be expanded to 4.6 acres with new landscaping to provide a gateway to the new park system from Charlestown. Pathways will provide connections to other waterfront areas including Tudor Wharf in Charlestown and to the south toward Lovejoy Wharf and the Amendment Area.

- *Central Artery Charles River Crossing/Portal Park*

The Amendment Area includes a portion of the elevated Central Artery that in future will be the location of an open space referred to as Portal Park and the entryway to the new Charles River Crossing Bridge. Portal Park will occupy a portion of the current Beverly Street adjacent to the 226 Causeway Street building. This area has been acquired by the Massachusetts Highway Department (MHD) and is planned to become MDC-owned parkland at the completion of the CA/T project. (See Figure 6, *Portal Park Concept Plan.*) It will form the east side of an entry “gateway” into the Charles River Basin Park system. Currently, the park is in design. Pathways will lead in from Causeway Street as well as to the replaced Beverly Street to provide access to the waterfront. Another important space in this location is the space beneath the Charles River Crossing Bridge where pedestrians will pass in an east-west direction from one portion of the MDC park system to another. This area, anticipated to be a dark and lengthy crossing, has been identified by the MDC as a location that requires special treatment and animation of some kind. The 1995 MDC Plan provided illustrative suggestions as to the treatment of this area, including interpretative panels, outdoor audio-visual presentations, and special lighting.

- *Central Artery Plan*

As a result of the CA/T project, approximately 40 acres of land in the downtown will become available, including land in the Bulfinch Triangle in close proximity to the Amendment Area.

In 1991, the BRA developed a land use plan for this area, *Boston 2000: A Plan for the Central Artery* that led to the adoption of zoning for the Central Artery parcels. The street system was later refined in *The Central Artery Surface Street Consensus Plan*, a collaborative effort among the City, the MHD and community groups. Currently, another group, the Boston 2000 Working Group, is working on feasibility analyses to implement the vision for the Central Artery parcels.

The CA/T project designs for the surface streets within the Bulfinch Triangle maintain a major thoroughfare in this district, with the Triangle restored to reflect its original design. The street and sidewalk alignments have been designed to create a pedestrian scale appropriate to the context and to provide for development parcels that contribute to the physical coherence of the Bulfinch Triangle district.

The zoning for the Central Artery/Bulfinch Triangle parcels anticipates mixed-use development

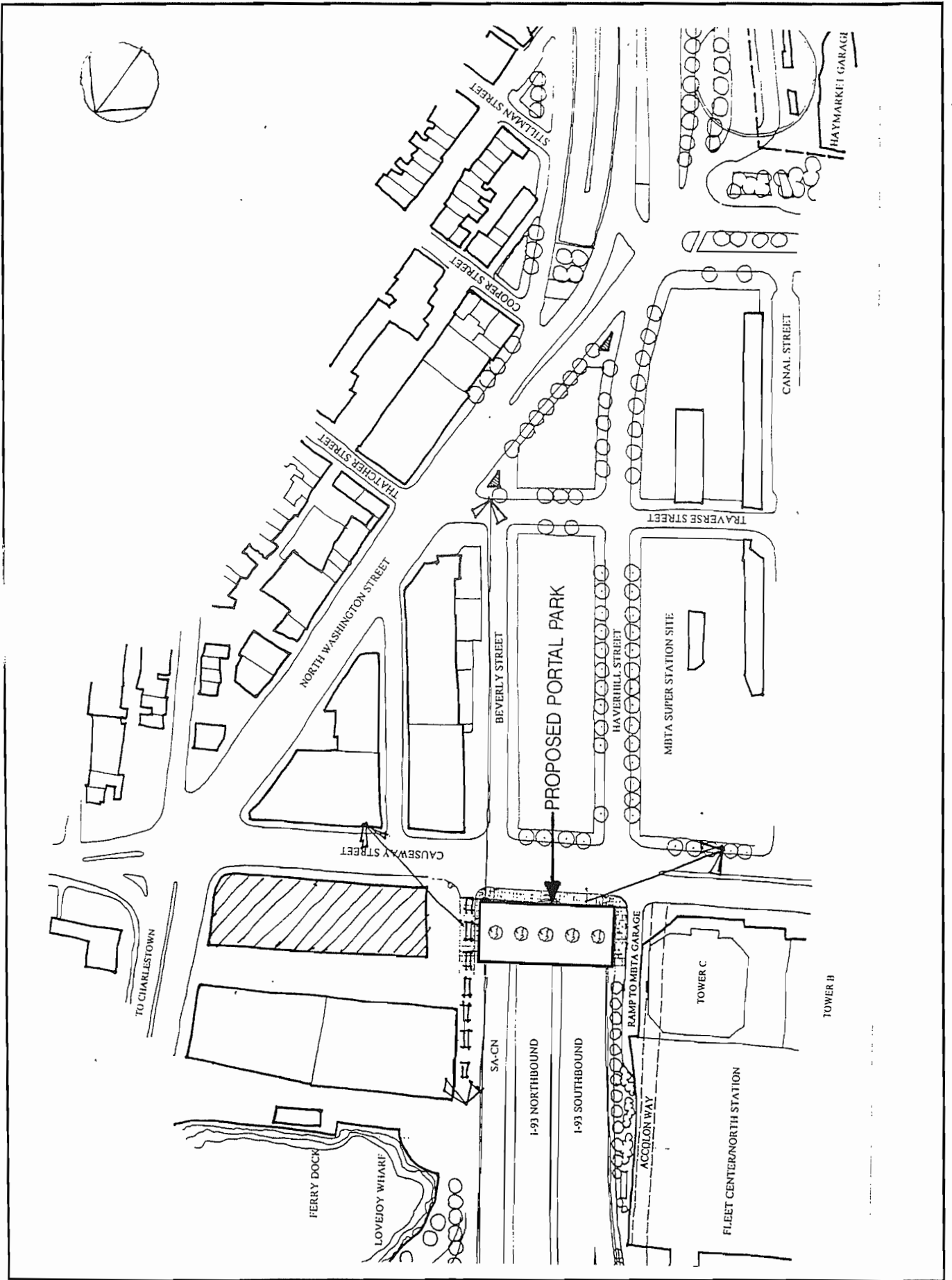


FIGURE 6

PORTAL PARK CONCEPT PLAN

in an effort to recreate the building fabric originally found in the Bulfinch Triangle. The plan will help establish a community over the depressed artery section and link the Triangle with blocks opposite Causeway Street in the Amendment Area. (See Figure 7, *Boston 2000 Plan for the Central Artery, BRA 1991.*)

- *MBTA North Station Improvements Project*

The proposed MBTA North Station Improvements Project will result in the eventual demolition of the elevated Green Line viaducts that now intersect the Bulfinch Triangle. As discussed above, the street network in this area will be restored and parcels created for development.

- *Harborwalk Connections: North End, North Station, Charlestown*

In keeping with the City's Harborpark program, continuous pedestrian access in the form of Harborwalk is planned throughout this area that will connect the Amendment Area with the waterfronts of Charlestown to the north, the North End to the east and the Charles River Basin Park to the west. Harborwalk is a continuous waterfront walkway system to create public access to and along the harbor. Development within the Amendment Area will be consistent with the Harborwalk requirements set out in the City's MHP.

Harborwalk will be extended from the North End and the MDC park, tennis courts and skating rink, continuing beneath the North Washington Street Bridge and across Lovejoy Wharf to the Charles River Basin Park system at Paul Revere Park South. As is the case today, an existing pedestrian connection to Charlestown will continue to be available over the Charles River dam and locks, allowing for pedestrian access to Paul Revere Park North. A second walkway beneath the North Washington Street Bridge on the Charlestown side will allow for pedestrian access to Tudor Wharf.

Ramps and stairs on either side of the North Washington Street Bridge are planned to allow for pedestrian access from Harborwalk level up to bridge level for additional access to Charlestown.

From Causeway Street and North Station, pedestrian access to the waterfront will occur from a newly improved and landscaped Beverly Street and through the new Portal Park.

- *North Station Historic Resources*

The Amendment Area is part of a proposed Causeway/North Washington Street Historic District, considered eligible for listing in the National Register of Historic Places. (See Figure 8, *Historic Resources.*) This district comprises late 19th- and early 20th-century brick warehouse buildings having notable brick, stone and metal detailing. The district includes the eastern half of the original Bulfinch Triangle laid out by Charles Bulfinch in 1808.

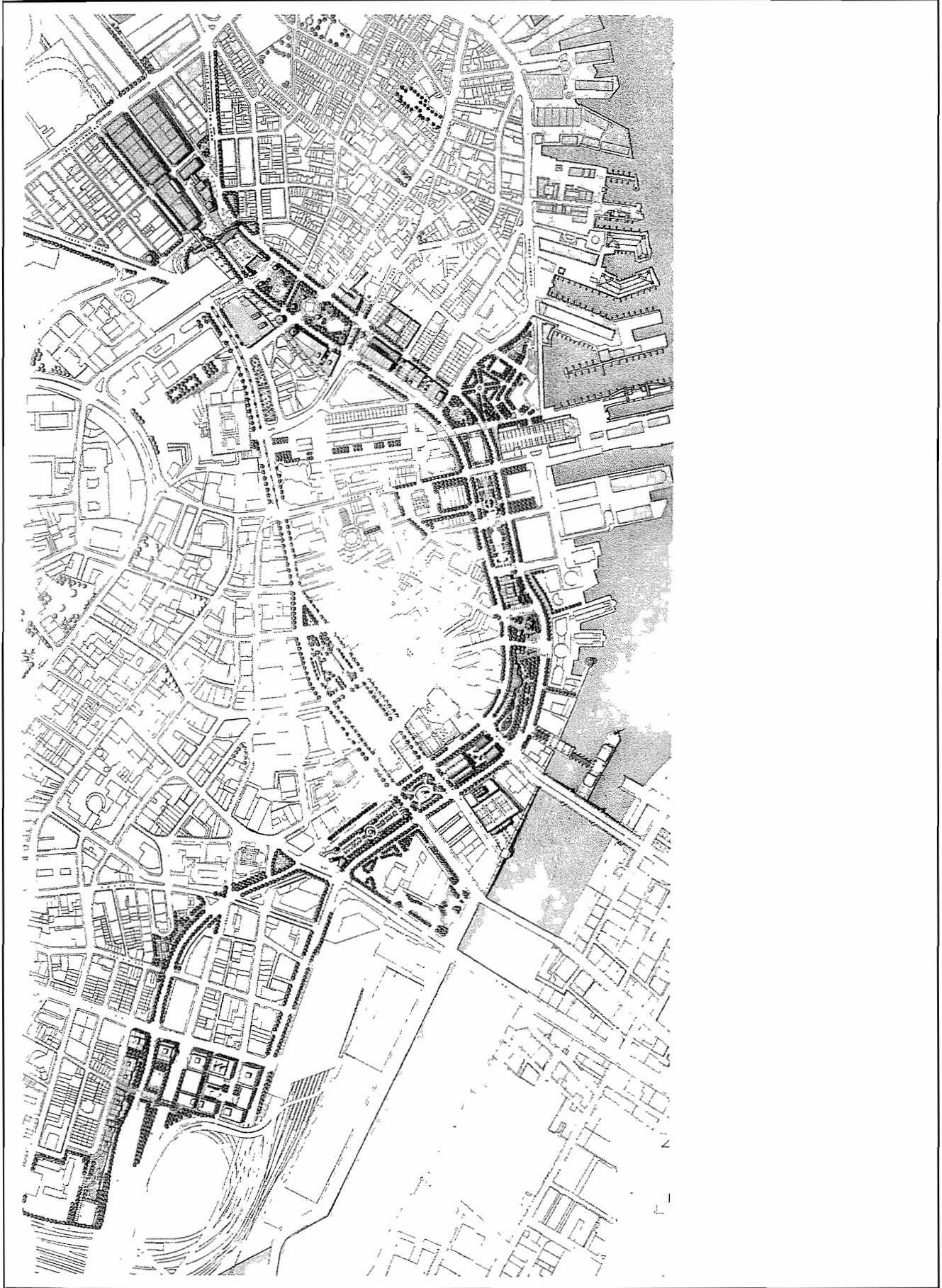


FIGURE 7

BOSTON 2000 PLAN FOR THE CENTRAL ARTERY

BOSTON REDEVELOPMENT AUTHORITY 1991

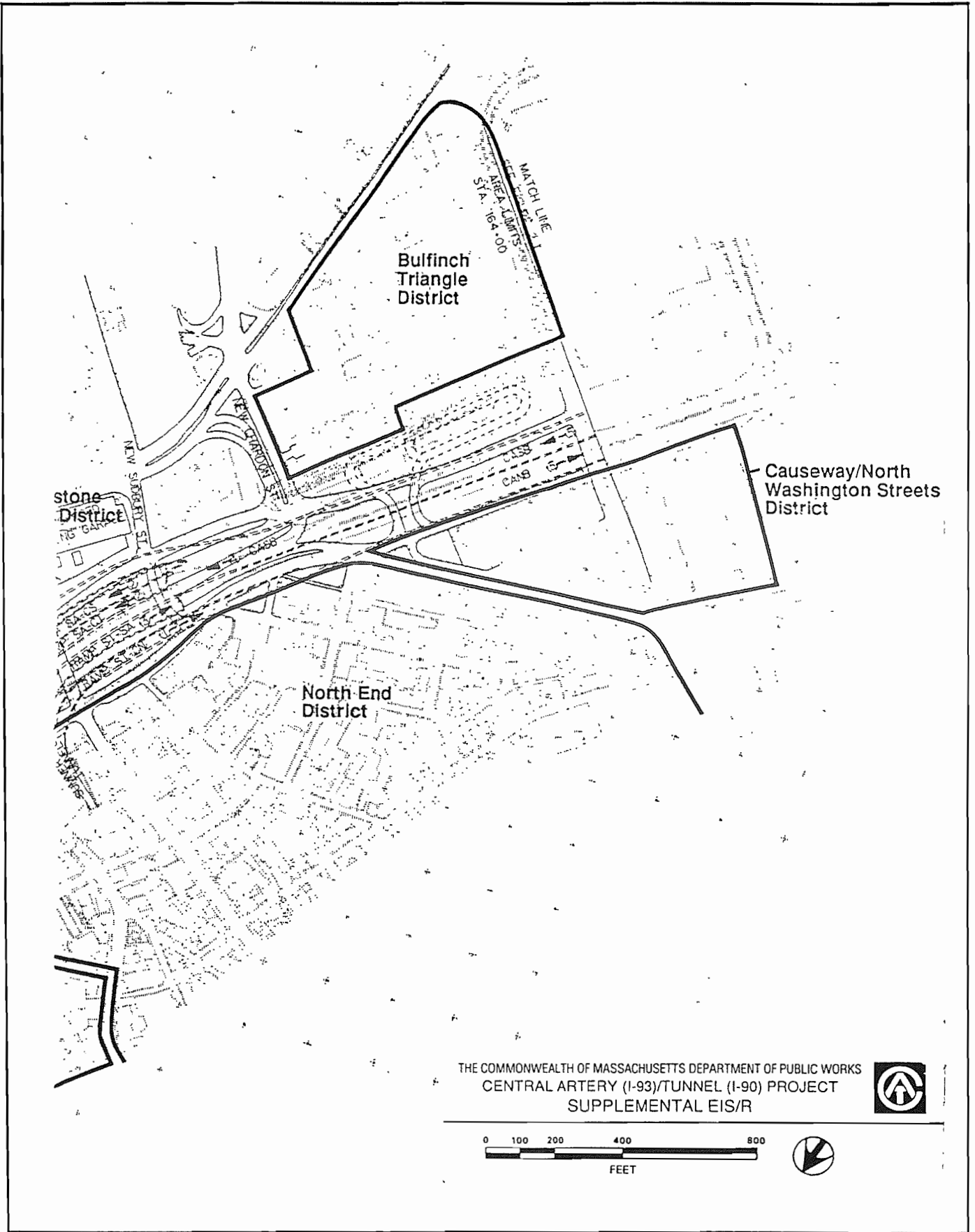


FIGURE 8
 HISTORIC RESOURCES-AFFECTED PROPERTIES CENTRAL AREA ALIGNMENT

- *Passenger Water Transportation*

MBTA Service. Water transportation service is currently operated by the MBTA from the Lovejoy Wharf area. The Massachusetts Highway Department (MHD) constructed a permanent docking facility at a temporary location and the MBTA provides service as partial mitigation for CA/T construction pursuant to the Department of Environmental Protection's (DEP's) Consolidated Written Determination under Chapter 91. The MBTA runs one service to the World Trade Center in South Boston and a second service to the Charlestown Navy Yard and Downtown's Long Wharf. The current location of the docking facility is just north of the existing Lovejoy Wharf and is considered an interim location by the MHD pending any redevelopment of Lovejoy Wharf. (See Figure 9.)

BRA Study. The BRA has engaged TAMS Consultants to conduct a study of passenger water transportation in Boston Inner Harbor with a view toward developing a harborwide concept plan for improved passenger water transportation facilities. The development of facilities for passenger water transportation will be prioritized according to current and projected use; site location; opportunities for intermodal connections; proximity to existing or emerging employment centers and visitor destinations; opportunities for pedestrian connections; proximity to areas of existing and projected public visitation; proposed backland development and waterside access and navigation. A number of sites were pre-selected for study, including the Lovejoy Wharf area, which provides an important intermodal connection at North Station. The focus of the water sheet within the Amendment Area is on active uses, including public water transportation and water-based recreation. According to a preliminary docking needs analysis, in terms of program, it would be beneficial to accommodate both regularly scheduled water transit services as well as public landing/water taxi dockage in this area. In order to accomplish this, it appears that approximately 240 linear feet of dock space would be needed for transit activities and approximately 60 linear feet would be needed for a public landing.

4.5 *Proposed Substitution*

No substitutions are being sought at this time for the portion of the Amendment Area located at 160 North Washington Street and 131 Beverly Street. This parcel contains two adjoining buildings, currently used for office and warehouse purposes, collectively known as the Hoffman Building, and includes Lovejoy Wharf. No proposal for development of this parcel is currently before the BRA.

The parcel located at 226 Causeway is located on private tidelands (see Figure 10, *Tidelands Plan*) and is subject to the Waterways Regulations 310 CMR 9.00. For the portion of the Amendment Area located at 226 Causeway Street, the BRA requests that the building height allowed pursuant to Article 39 of the Boston Zoning Code be substituted for the height allowed pursuant to the Waterways Regulations. The 226 Causeway Street parcel is located landward of the "water-dependent use zone" established by the Waterways Regulations and lies

NOTES:

1. HISTORIC HIGH WATER LINE OFF LOCATION
2. REFERENCE DATUM = MEAN LOW WATER (MLW) 0.0
3. THE PROJECT INCLUDES: LANDSCAPING, A BICYCLE RACK, BENCHES, LIGHTING, TRASH RECEPTACLE AND AN ACCESSIBLE PATH BETWEEN THE STREET AND FLOATING DOCK

HARBOR LINE CHAPTER 239 ACTS OF 1930 & CHAPTER 17 ACTS OF 1934

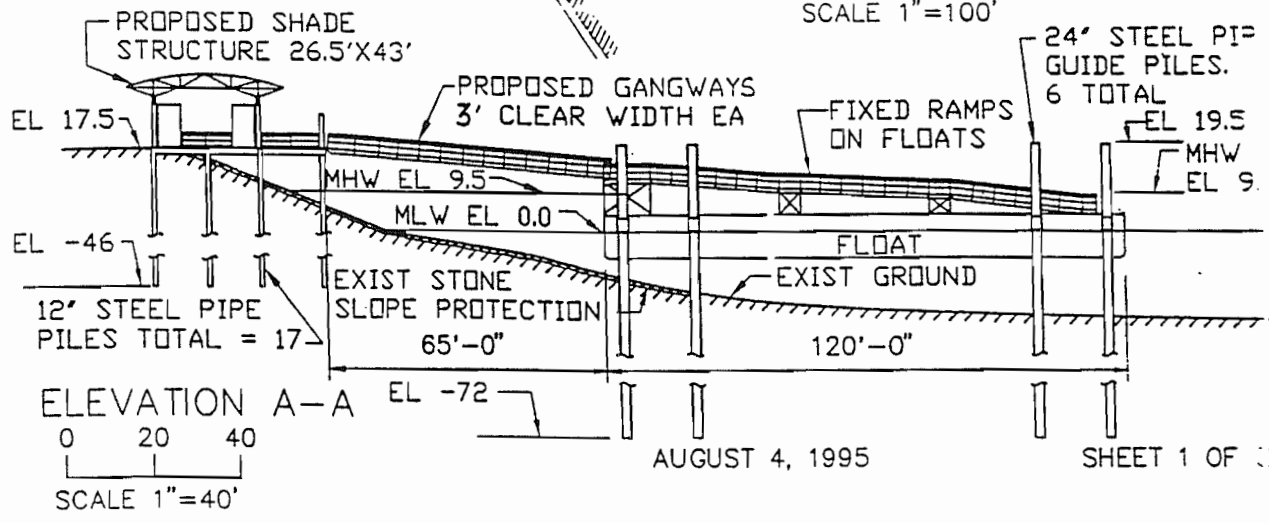
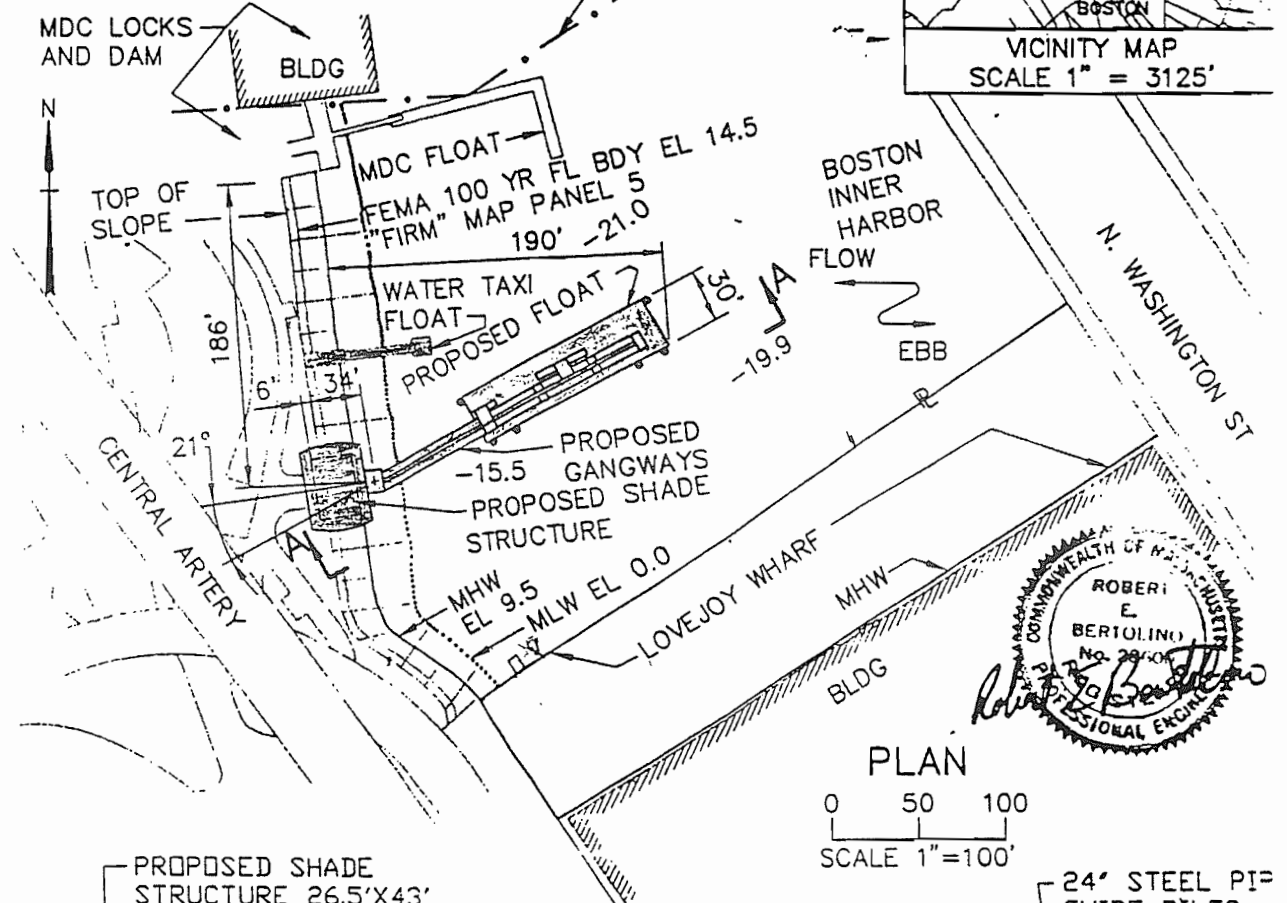


FIGURE 9

approximately 150 feet from the mean high water shoreline at its closest edge and 260 feet at its farthest.

The Waterways Regulations require that new or expanded buildings for nonwater-dependent use not exceed 55 feet in height if they are located over the water or within 100 feet landward of the high water mark. The allowable height increases by ½ foot for every additional foot of separation from the high water mark. 310 CMR 9.51(3)(e) Therefore, the maximum building height allowed under the Waterways Regulations for a building on the 226 Causeway Street parcel ranges from 80 feet along Lovejoy Place to 110 feet at its midpoint and 135 feet along Causeway Street. The requested substitution, if approved, would allow development at 226 Causeway Street to achieve a height of 155 feet to the top of the last occupied floor for a project subject to Large Project Review under Article 80 of the Boston Zoning Code.

The requested substitution will help the City achieve its goals with respect to the revitalization of the North Station area. Article 39 of the Boston Zoning Code sets forth the planning policies, development controls and design guidelines for the North Station Economic Development Area (EDA) and serves as the comprehensive plan for the North Station EDA. Applicable goals and objectives for the North Station EDA include the following:

- *Direct growth away from congested areas and toward transit-accessible underutilized sites.*

The North Station area is intended to accommodate economic growth and expansion. With its excellent access to the regional highway system, MBTA rapid transit, and commuter rail, the North Station area can accommodate economic growth without significant adverse impacts to the local street system. The privately-owned parcels within the Amendment Area are underutilized. The 160 North Washington Street and 131 Beverly Street parcel is only partially occupied. The 226 Causeway Street parcel is entirely vacant and has been unoccupied for ten or more years. The proposed height for the project will allow the 226 Causeway Street building to become productive and help in making a transition to the larger-scale buildings anticipated in the New Boston Garden Development Area and the New Economy Area subdistricts of the North Station EDA.

- *Create a mixed-use district which includes office, retail, research and development, biomedical, institutional, residential and sports facility and entertainment uses.*

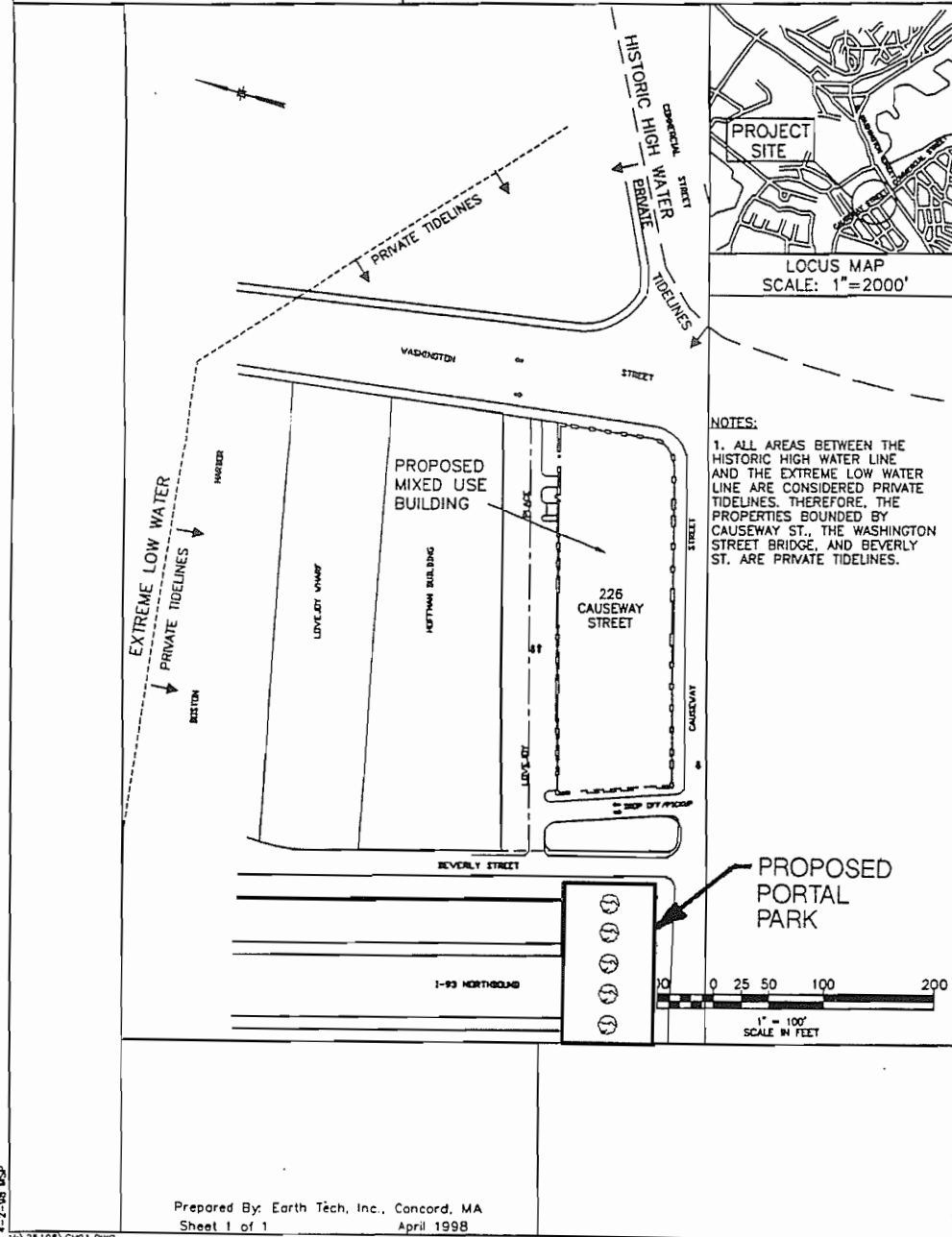
The North Station area is envisioned as an active, highly mixed-use area. The residential reuse contemplated for 226 Causeway Street represents a compatible proposal with other uses already in place or contemplated. It is also a complementary use to the open space and recreational goals for development of new parkland and improved access to the water and shoreline areas.

- *Create a functionally and architecturally unified district that is compatible with the North End and the Bulfinch Triangle.*

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTRY OF DEEDS.

REGISTERED PROFESSIONAL ENGINEER

DATE



4-2-98 MSP

H:\25108\CH91.DWG

Prepared By: Earth Tech, Inc., Concord, MA
Sheet 1 of 1
April 1998

FIGURE 10
TIDELANDS PLAN

The privately-owned parcels within the Amendment Area are part of a proposed Causeway/North Washington Streets Historic District. The renovation of the 226 Causeway Street building will lead to the preservation of the architectural features of this historic building and help to contribute to the North Station area's historical prominence.

- *Create vistas and access to the Charles River and create new recreation space along the Charles River.*

Pedestrian paths to the Charles River and waterfront will be enhanced as result of additional planting proposed along Causeway Street at the 226 Causeway Street project's entrance. In addition, the proponent of the project, in its Draft Project Impact Report (DPIR) for Large Project Review, has stated a commitment to enter into a maintenance agreement with the Commonwealth for Portal Park, a major gateway space being planned in conjunction with the CA/T project.

5.0 IMPLEMENTATION PROGRAM

301 CMR 23.05(5) specifies that a Municipal Harbor Plan must include enforceable implementation commitments to ensure that, among other things, all measures will be taken in a timely and coordinated manner to offset the effect of any plan requirements less restrictive than those contained in 310 CMR 9.00.

5.1 Large Project Review (*Article 80 of the Boston Zoning Code*)

Article 80 of the Boston Zoning Code sets forth procedures and requirements for the review of proposed projects in the City of Boston. These include Large Project Review, which establishes a comprehensive, public review of project impacts and requires appropriate mitigation measures.

Within the Amendment Area, a project must comply with Large Project Review if it proposes to add 50,000 or more square feet of gross floor area. In addition, a project that does not reach this threshold may nonetheless be subject to Large Project Review if it changes the use of 100,000 or more square feet to a use allowed as of right, or 50,000 or more square feet to a use not allowed as of right. *Article 80, Section 80B-2.1.*

Large Project Review allows the City, through the BRA, to evaluate a proposed project's impacts with respect to transportation, environmental protection, urban design, historic resources, and infrastructure systems. *Article 80, Section 80B-3.* In particular, the Environmental Protection Component of Large Project Review allows the BRA to require a detailed analysis of the following impact elements:

- (a) Wind
- (b) Shadow
- (c) Daylight
- (d) Solar Glare
- (e) Air Quality
- (f) Water Quality
- (g) Flood Hazard Districts/Wetlands
- (h) Groundwater
- (i) Geotechnical Impact
- (j) Solid and Hazardous Wastes
- (k) Noise
- (l) Construction Impact
- (m) Rodent Control
- (n) Wildlife Habitat

The review process includes public comment periods on the various filings which include a Project Notification Form and may include Draft and Final Project Impact Reports. *Article 80, Section 80B-5.* In addition to requesting comments from the public, including public agencies,

the BRA must invite other interested City agencies (and may invite other public agencies) to participate in a joint scoping session before the BRA issues its scoping determination. The BRA's approval of the adequacy of a project's impact analysis and mitigation proposals is subject to a vote of the BRA's Board at a public meeting.

Article 80 requires the project proponent to enter into a cooperation agreement with the BRA for the enforcement of all mitigation measures required through the Article 80 review process. *Article 80, Sections 80A-5 and 80B-6.*

5.2 *Other Zoning Review*

In addition to requiring Large Project Review by the BRA, the Zoning Code requires review by other City agencies for certain projects that may have special impacts on their surroundings.

5.2.1 *Boston Civic Design Commission Review (Article 28)*

Article 28 of the Zoning Code establishes the Boston Civic Design Commission (BCDC), which advises the BRA on the schematic design of :

- *Large-Scale Development Projects.* Any project to add or rehabilitate a gross floor area of more than 100,000 square feet.
- *Projects of Special Significance.* Any project that the BCDC determines to be of special urban design significance to the City. These include projects that are:
 - in visual proximity to, and within 500 feet of, a landmark building, an architectural or historic district established by the Boston Landmarks Commission or by state legislation, or a National Register District; or
 - visually prominent from a significant open space area or from a significant public right-of-way; or
 - located in an area of special historic interest, as established by the BRA; or
 - situated in such a way as to have a significant impact on the visual quality of the surrounding area.
- *Civic Projects.* Any project that proposes to create or alter a park or open space, civic or cultural center, or monument that the BCDC determines to be of importance to the character or urban design of the City.

The BCDC reviews project designs at regularly-scheduled public meetings and transmits its recommendations in writing to the BRA and, in some cases, to the Mayor. If the BCDC

disapproves a project's design, the BRA must require the proponent to redesign the project. The BRA may override the BCDC's recommendation only by a vote of the BRA's Board, in which case it must send the BCDC a written report explaining the BRA's decision.

5.2.2 Demolition Delay (Article 85)

Article 85 of the Zoning Code allows the Landmarks Commission to review proposals for the demolition of certain buildings, including any building in the downtown area. After holding a public hearing, the Commission may require a delay of up to 90 days in the demolition of any significant building. The delay period allows the Landmarks Commission, together with the project proponent and other participants, to conduct a review of feasible alternatives to demolition.

6.0 EVALUATION OF PROPOSED SUBSTITUTION

This MHP requests approval of substitute height requirements consistent with the applicable zoning for the 226 Causeway Street parcel, as set forth in Article 39 of the Boston Zoning Code. The 226 Causeway Street project proposes the adaptive reuse of an existing unoccupied warehouse (approximately 235,000 square feet) along with a six-story rooftop addition (approximately 163,000 square feet) for residential and retail uses.

With the addition, the structure would have a building height of 155 feet to the top of the highest occupied floor. The project will have 246 residential units, approximately 135 parking spaces in the basement and partial first floor levels, and public retail space on the remainder of the first floor. In addition, the project proponent has agreed to enter into an arrangement with Meyers Parking System, Inc. to offer residents of the project up to 200 monthly parking spaces at the Government Center Garage. (*See Figure 11 for Proposed Site Plan and Figure 12 for Proposed Building Massing.*)

A covered drop-off is proposed adjacent to the Central Artery's proposed Portal Park at Causeway and Beverly Streets, with an entrance to the lobby. Major new openings will be created on the ground floor. Parking will be accessed from the rear of the building at Lovejoy Place, a private street used for parking and service access.

The 226 Causeway Street parcel is located on filled private tidelands. The proposed use of the building for residential, retail and parking use is considered a non-water dependent use. Under the Waterways Regulations the building height would be limited to 80 feet at the edge of the building along Lovejoy Place and 135 feet along Causeway Street. *310 CMR 9.51(3)(e)*. The BRA wishes to substitute the height of 155 feet allowed pursuant to the North Station EDA zoning (Article 39) for that allowed by the Waterways Regulations.

Figure 13, Massing Analysis shows the difference in massing between the 226 Causeway Street structure as it exists today, as proposed by the proponent in the DPIR at 155 feet, and if constructed pursuant to the Waterways Regulations (the "Chapter 91 height requirements"). The scenario that conforms to Chapter 91 height requirements is a three-floor addition having a footprint smaller than that of the existing building, an alternative that the proponent considers uneconomical and infeasible. The gross square footage of the proposed buildout at 155 feet is approximately 398,000 square feet. At the Chapter 91 heights, the building envelope is approximately 288,317 square feet.

Also provided is an analysis that compares the volume comparison between the preferred buildout (155 feet) and Chapter 91 envelopes. This was calculated by the architects for the 226 Causeway Street proposed project Finegold Alexander & Associates. According to the architects, the preferred build is approximately 36 percent greater than the Chapter 91 version as measured in cubic feet.

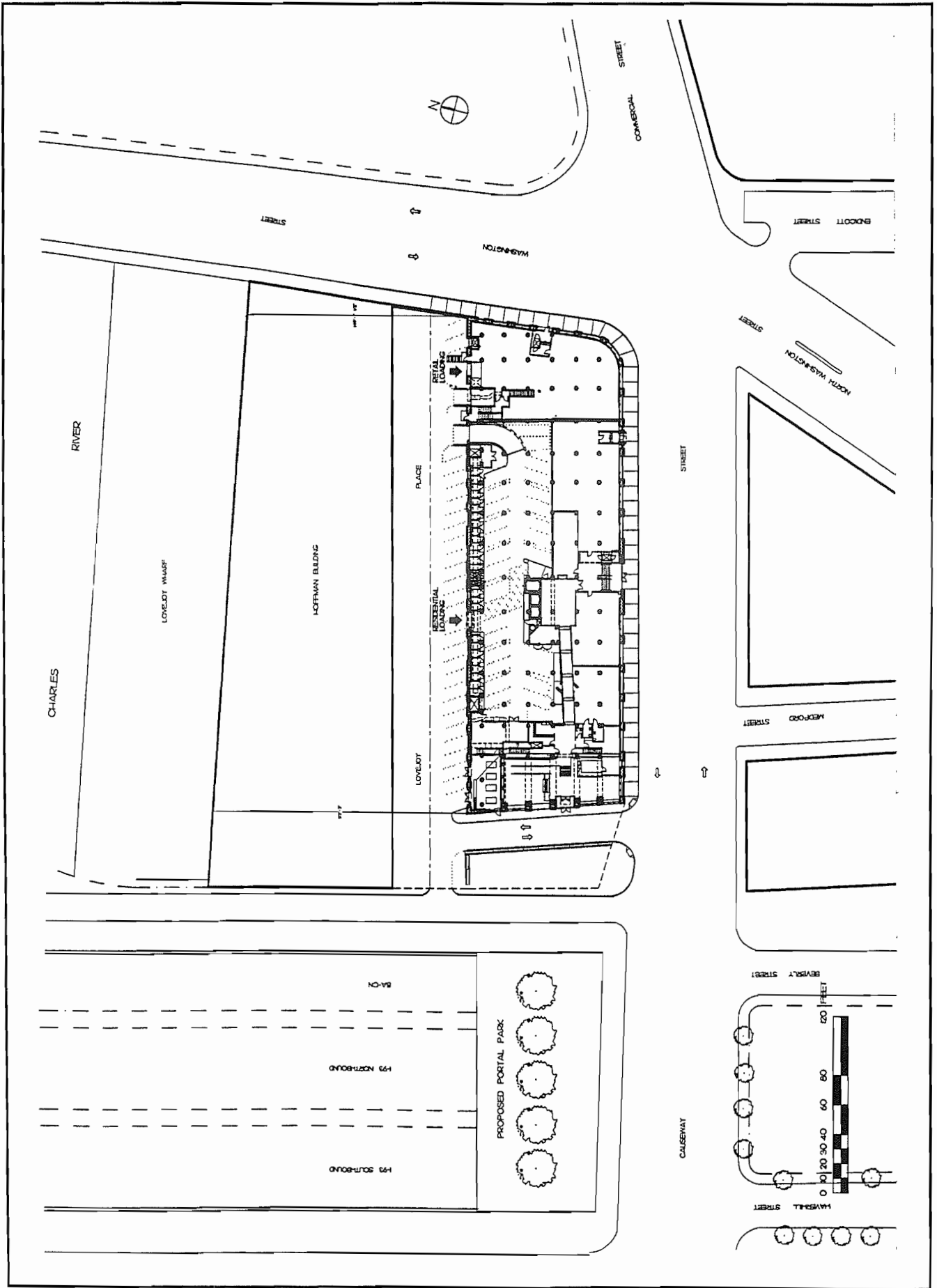


FIGURE 11

PROPOSED SITE PLAN 226 CAUSEWAY STREET

PROPOSED UPPER LEVELS
ARE CENTERED ACROSS BUILDING
EAST-WEST CENTERLINE,
RESULTING IN 20' AVERAGE
SETBACK FROM CAUSEWAY
AND LOVEJOY PLACE

'STREET WALL
HEIGHT'

MECHANICAL
PENTHOUSE

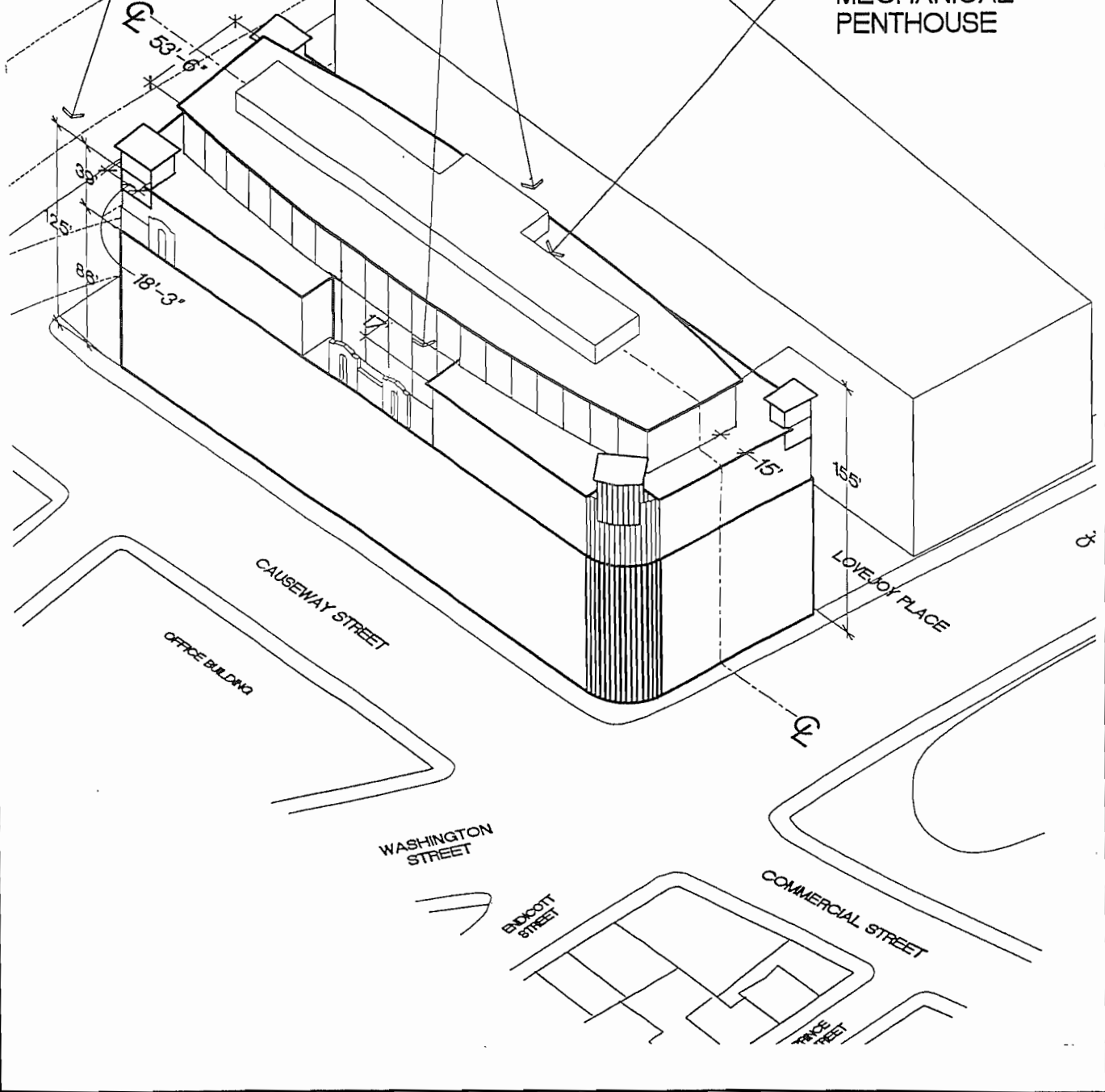


FIGURE 12

PROPOSED BUILDING MASSING 226 CAUSEWAY STREET PROPOSAL

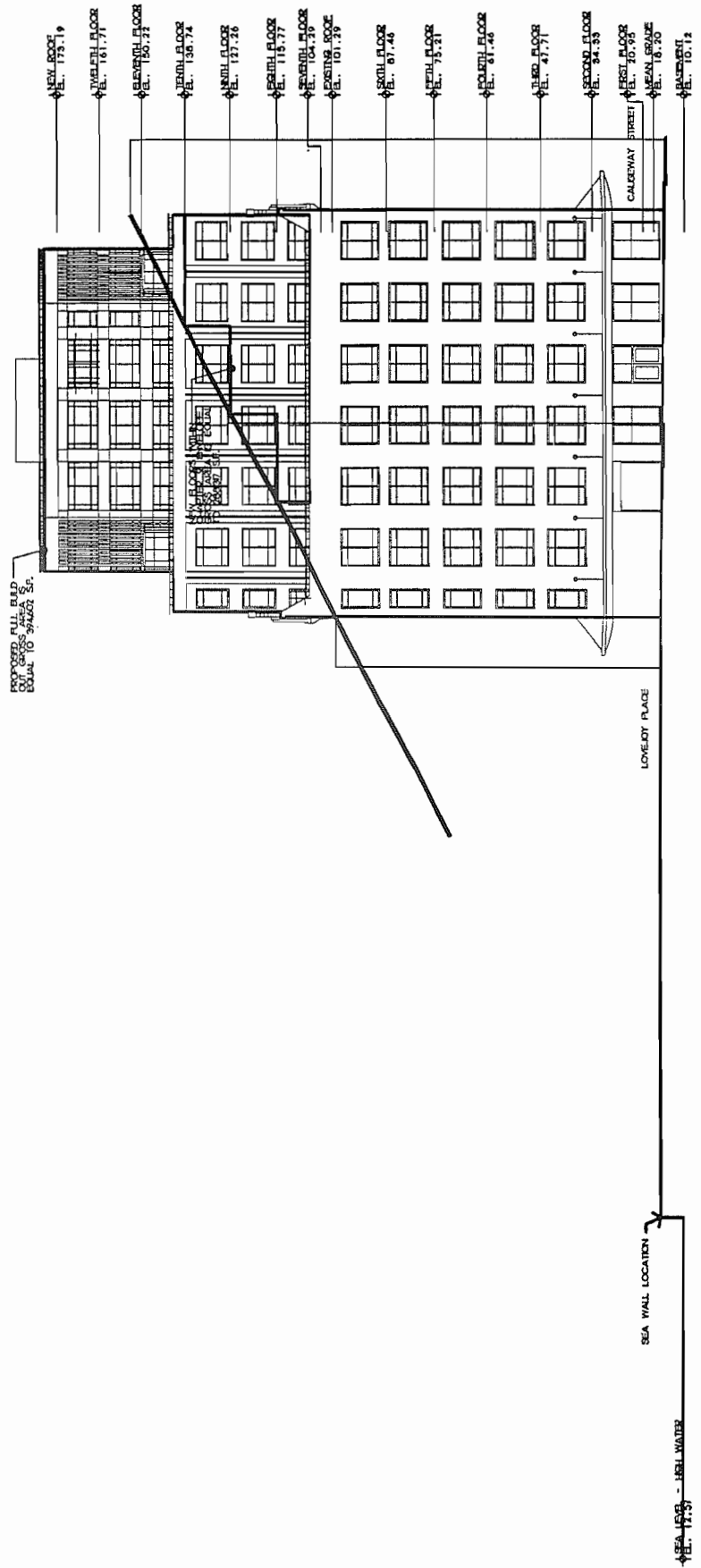


FIGURE 13
MASSING ANALYSIS

A calculation of the difference between the preferred buildout And the Chapter 91 envelopes follows:

<u>Floor</u>	<u>Cubic Feet</u>
<u>Proposed Build Out (Preferred Build)</u>	
Floors B-6	2,955,383
Floors 7-9	1,085,933
Floors 10-12	<u>669,777</u>
Total Residential Floors	4,711,093
Penthouse enclosed	24,300
Total screened and enclosed	81,432
<u>Chapter 91 Build Out</u>	
Floors B-6	2,955,383
Floors 7-9	<u>512,216</u>
Total Residential Floors	3,467,599

The height substitution will allow for the redevelopment of the 226 Causeway Street building, which has lain dormant for over ten years. This warehouse structure was originally constructed for the Austin Biscuit Company in 1906, and most recently was home to the Stop & Shop Bakery, which continued at this location until the mid-1980s. In recent years, a number of prospective developers have unsuccessfully attempted to redevelop the building for productive use. The current proposal would reverse this history and bring activity to this corner of the North Station area. It would also bring into use a building which is a contributing element of a proposed Causeway/North Washington Streets Historic District.

The 226 Causeway Street project proposes to create much-needed housing units in the downtown area and bring active street level uses to the site. This proposal would further the City’s objective of encouraging residential use in the City’s downtown neighborhoods, which is allowed as-of-right in the North Station EDA.

The proposed rooftop addition was designed to be compatible with the existing and proposed nearby structures that will define the North Station area, including the FleetCenter and new towers planned adjacent to it as well as the CA/T Charles River Crossing Bridge. *(See Figure 14, Commercial Street Perspective and Figure 15, Aerial Perspective Looking North.)*

The proposed project includes improvements to the public realm, including sidewalk improvements along Beverly Street. In addition, the project proponent has proposed to sponsor a maintenance program for Portal Park and to landscape its proposed building entry adjacent to Portal Park as discussed in the Draft Project Impact Report (DPIR) and further detailed in a letter

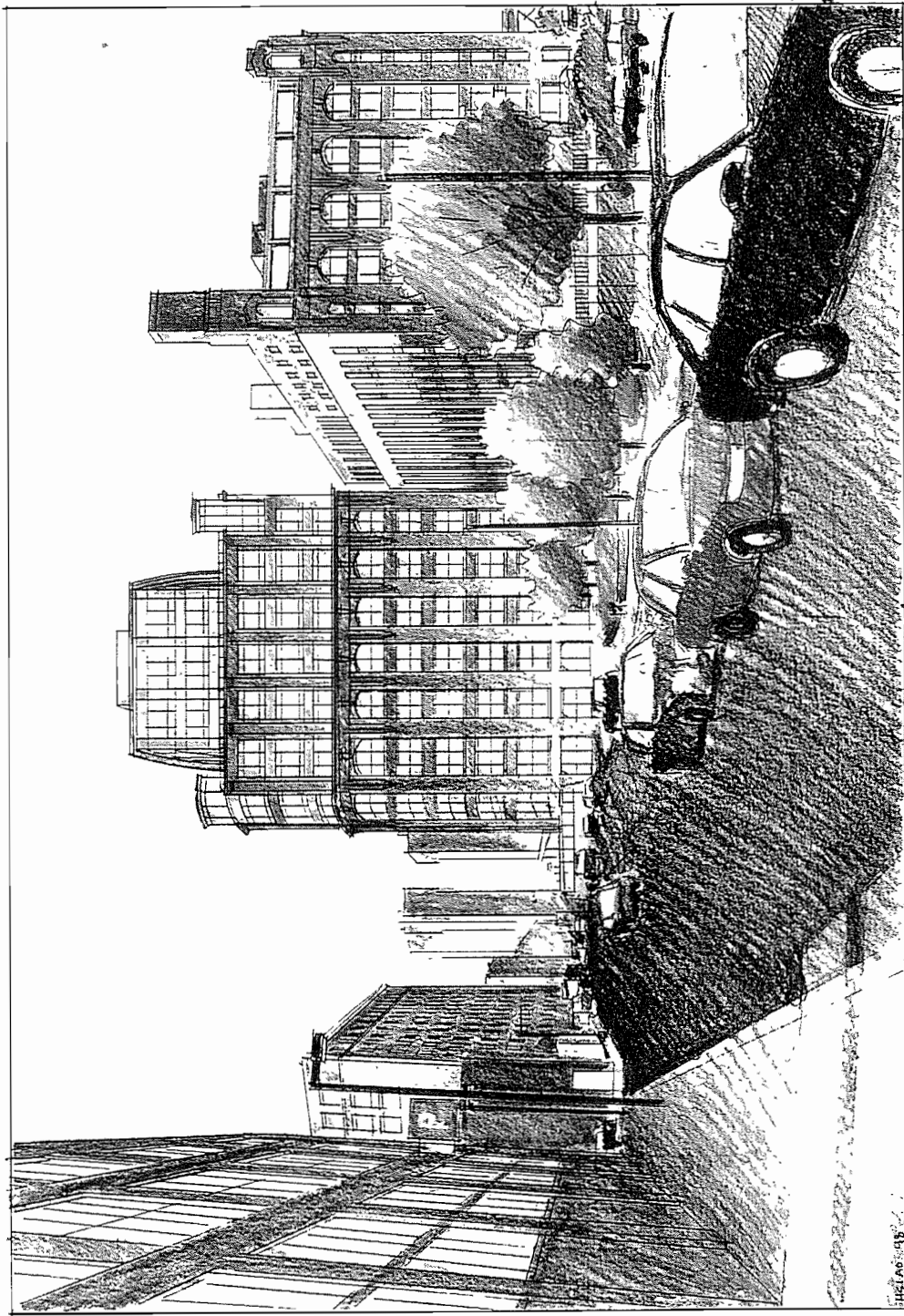


FIGURE 14

COMMERCIAL STREET PERSPECTIVE 226 CAUSEWAY STREET PROPOSAL

BOSTON KENMORE REALTY CORP. FINEGOLD ALEXANDER+ASSOCIATES INC.

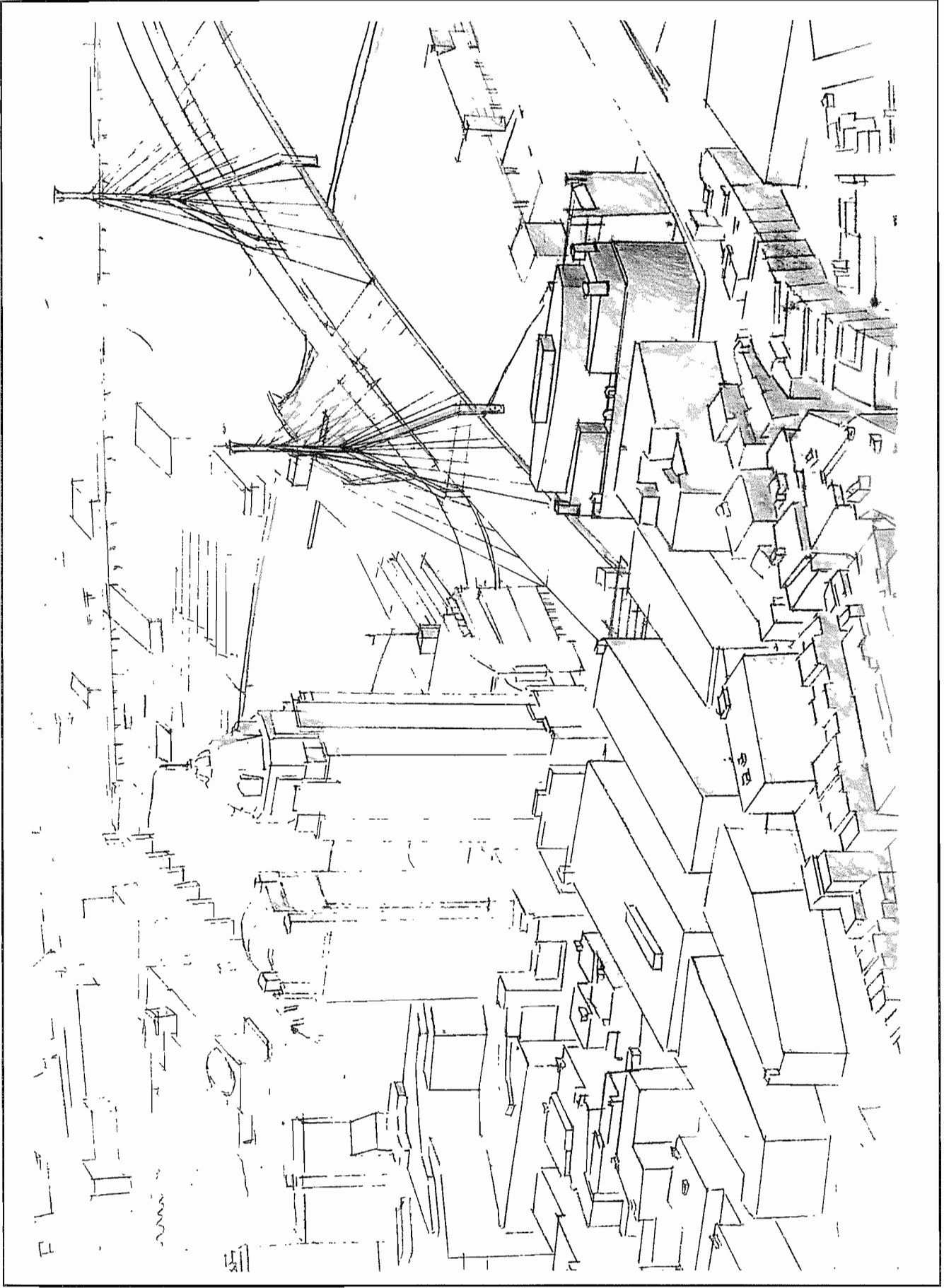


FIGURE 15

AERIAL PERSPECTIVE LOOKING NORTH

BOSTON KENMORE REALTY CORP. FINEGOLD ALEXANDER + ASSOCIATES INC.

from the 226 Causeway Street proponent. (See *Appendix 6, Letter from Edmund Shamsi, July 16, 1998.*) The project proponent for 226 Causeway Street has coordinated its site planning with the plans being crafted by the MDC and the CA/T project for improving access to the waterfront via Portal Park and a new walkway from Causeway Street. The replacement Beverly Street sidewalk improvements will contribute to a more attractive pedestrian connection to the shoreline, while the maintenance commitment for Portal Park will contribute to the public realm in the North Station area. It is recommended that the approval of the MHP Amendment be conditioned on the project proponent's entering into a maintenance agreement with the MDC and CA/T that includes the terms, level of support, and timing of the maintenance commitment.

The proposed project is subject to Large Project Review by the BRA under Article 80 of the Zoning Code. As described in Section 5.1, Large Project Review involves a comprehensive, public analysis of a proposed project's impacts and requires appropriate mitigation measures, enforced by a cooperation agreement. In addition, the project is subject to review by the Boston Civic Design Commission (Article 28). The Boston Civic Design Commission recommended approval of the proposed design on February 3, 1998.

6.1 Impact Analysis

Pursuant to the Article 80 process, the BRA issued a Scoping Determination on January 29, 1998 requiring the review of the project's impacts, including wind and shadow impacts. The Draft Project Impact Report (DPIR) was submitted to the BRA on March 9, 1998 and was subject to public comment as well as review by BRA staff.

On May 15, 1998, the BRA issued a Preliminary Adequacy Determination (PAD) evaluating the DPIR. (See *Appendix 7.*) In response to issues raised in the PAD, a document entitled Supplemental Information to the Draft Project Impact Report ("*Supplemental Information*") was submitted to the BRA on July 2, 1998. (See *Appendix 8.*)

On July 23, 1998, the BRA Board voted to authorize the Director to issue a PAD waiving further review of the 226 Causeway Street proposed development and to execute a cooperation agreement to enforce the mitigation measures required for the project. (See *Appendix 9.*) A PAD waiving further review pursuant to the requirements of Section 80B-5.4 of the Boston Zoning Code was issued on February 26, 1999. (See *Appendix 17.*) The project proponent is required to enter into a cooperation agreement with the BRA for the enforcement of mitigation measures required through Large Project Review. On February 9, 1999, the Zoning Board of Appeal conducted a public hearing and voted to approve a variance from section 39-13 of the Boston Zoning Code that will allow the proponent to construct the proposed project with a skyplane setback of 20 feet from Causeway Street rather than the 40 feet required by the Zoning Code.

The DPIR for the 226 Causeway Street project describes the impacts associated with the proposal. The BRA's PAD evaluating the DPIR indicates that impacts associated with the

proposed rooftop addition will be relatively minimal. Additional information regarding these impacts is provided in the Supplemental Information. In addition, CZM subsequently requested additional studies and points of analysis for this MHP Amendment comparing the impacts of the preferred buildout at 155 feet with those of a buildout under the Chapter 91 height and massing.

6.1.1 Shadow Impacts at 155-foot Height

As required by the BRA's Scoping Determination, the DPIR for the 226 Causeway Street project presented the anticipated shadow impacts from the proposed project during the morning (9:00 am), midday (12:00 noon) and mid-afternoon (3:00 pm) time periods during the vernal equinox (March 21), summer solstice (June 21), autumnal equinox (September 21), and winter solstice (December 21). For each time of the day and year, shadows are depicted for both the no-build (existing) condition and the build condition with the proposed height addition to the building at 226 Causeway Street bringing the building to a total height of 155 feet to the top of the highest occupied floor.

The proponent's analysis of shadow impacts is included in *Appendix 10*. It should be noted that, in response to a request from CZM, the shadow diagrams from the DPIR were subsequently relabeled for this MHP Amendment to show the approximate location of Paul Revere Park South. (*See Appendix 10.*)

With respect to the DPIR's shadow study, the BRA's evaluation found that the primary shadow impact would be on the roof of the 160 North Washington Street/131 Beverly Street building, as well as North Washington Street and somewhat less Lovejoy Place. The following summarizes the shadow impacts at the 155-foot height and the BRA's evaluation:

Tennis Courts:

- According to the DPIR, the proposed project will shade a small portion of the MDC tennis courts (about 10%) in mid-afternoons in the spring and fall.
- The BRA's evaluation found that in spring, the proposed project also would partially shade the tennis courts in *early* afternoon.
- The BRA's evaluation found that in winter, the proposed project also would begin to shade the tennis courts in the very early (immediately after noon) afternoon, but little if any use of the courts would be expected in the winter.
- According to the proponent's Supplemental Information, while new shading will be added to the tennis court area in early afternoon in the spring, this new shading will be limited to the areas in front of the courts along Commercial Street and do not appear to advance to the courts themselves. While the BRA analysis found this to be the case at 3:00 p.m., by interpolation it appears that shadows would encroach on the courts themselves sometime between noon and 3:00 p.m.

Portal Park:

- The BRA's evaluation found that Portal Park would be shaded by the proposed addition only in the very early morning (before 9:00 am).
- According to the proponent's Supplemental Information, the new shading in summer mornings appears to stop short of the Park at 9:00 am; by noon the shading is moved to the rear of 226 Causeway Street and away from Portal Park.

Lovejoy Wharf:

- The BRA's evaluation found that no additional shadowing impact on Lovejoy Wharf would be created by the proposed addition to 226 Causeway Street. Lovejoy Wharf is shaded entirely by the adjacent Hoffman Building (and the FleetCenter in the winter afternoons).

Sidewalks:

- According to the DPIR, the proposed project would shade about 100 feet of the sidewalk along the west side of North Washington Street in the afternoons during the summer solstice.
- The BRA evaluation found that the proposed project also would shade the sidewalk on the east side of the North Washington Street Bridge at the corner of Commercial Street and the northerly sidewalk of Commercial Street during the afternoon in the spring and fall and during the later afternoon in the summer.

Paul Revere Park South

- While not requested in the BRA Scoping Determination, an analysis of the shadow impacts on a planned open space to be known as Paul Revere Park South was requested by CZM. The BRA's review of the proponent's analysis found that the proposed Paul Revere Park South would be unaffected by shadows from the preferred (155 foot) build alternative.

6.1.2 Shadow Impacts at Chapter 91 Height and Massing

In addition to the shadow studies described above, additional studies were requested by CZM for this proposed MHP Amendment. Specifically, CZM requested an impact analysis of shadow at the building heights and massing that would result under the application of the Chapter 91 requirements. This impact analysis was subsequently prepared and submitted by the 226 Causeway Street proponent. (*See Appendix 11.*)

Anticipated shadow impacts from the 226 Causeway Street project were studied for the morning (9:00 am), midday (12:00 noon) and mid-afternoon (3:00 pm) time periods during the vernal equinox (March 21), summer solstice (June 21), autumnal equinox (September 21), and the winter solstice (December 21). For each time of the day and year, shadows are depicted for both the no-build (existing condition) and the build condition using the Chapter 91 alternative height and massing requirements for the building at 226 Causeway Street.

According to the BRA's evaluation of the shadow analysis, the Chapter 91 lower scale alternative would create very minimal additional shadow. There would be no impact on Lovejoy Wharf or on any existing or proposed public open space areas with the exception of a minimal increase in shadow on the MDC tennis courts in the early afternoon of the winter season, when the courts generally would not be in use. As described above, the 155-foot preferred alternative shows a slightly greater shadow impact on the tennis courts, sidewalks and proposed Portal Park. An analysis of the shadow impacts on a planned open space to be known as Paul Revere Land Park South was requested by CZM. The BRA's review of the proponent's analysis found that the proposed Paul Revere Park South would be unaffected by shadows from the Chapter 91 build alternative.

6.1.3 Wind Impacts at the 155-foot Height

The BRA's evaluation of the DPIR's qualitative wind analysis, which was based solely on an empirical examination of the site, concludes that, because the upper story is set back, the proposed addition to the existing building (for a total height of 155 feet to the top of the highest occupied floor) would not result in any increases in wind speeds around the project that would exceed the BRA's guidelines for wind speed or cause dangerous conditions. The sheltering effect of adjacent buildings for some wind directions also mitigates the potential for increased wind speeds from the rooftop addition. The wind analysis was conducted by Frank Durgin, P.E., formerly of MIT's Wright Brothers Wind Tunnel. (*See Appendix 12.*)

The BRA's evaluation found that the proposed project would have little or no effect on winds at the MDC park tennis courts at the corner of North Washington Street/Commercial Street or at the future Portal Park. Although winds were projected to increase (generally from comfortable for short periods of sitting or standing to comfortable only for walking) in Portal Park and along Beverly Street from Causeway Street to the Charles River, this increase resulted from the replacement of the existing elevated expressway with a depressed Central Artery and resulting open space, and not because of the 226 Causeway Street project.

The BRA's evaluation does indicate that the doorways along North Washington Street and Causeway Street will be quite windy for east winds. However, east winds are not a frequent occurrence in Boston, although they are generally storm winds. Moreover, these locations are windy today because of the effects of the existing building; the addition is expected to only minimally increase wind speeds at the entrances. The evaluation suggests that canopies be considered as a potential mitigation measure. In the Supplemental Information, the project proponent committed to providing a canopy along the entire length of the western facade and continue along the storefronts proposed along Causeway Street until reaching the central entrance of the building on the Causeway Street side.

CZM also requested that an analysis of wind impacts on the future Paul Revere Park South and proposed Harborwalk along Lovejoy Wharf be included in this MHP Amendment for the 155-

foot alternative. The wind diagrams for the preferred (155 foot) build were subsequently relabeled to show the proposed parkland and Harborwalk both before and after completion of the CA/T depression. According to the proponent, there is no change in Melbourne Category winds on any of the preferred build figures for the proposed Harborwalk or for NW, NE and E winds in proximity of the Paul Revere Park South before and after CA/T completion. For SW winds, the southwest corner of the Park to the east of Lovejoy Wharf changes from Category 5 to 4 after CA/T completion and for SE winds the same parkland location changes from Category 4 to 3 after CA/T completion.

The BRA analysis also found that for SW winds, the corner of Harborwalk and the North Washington Street Bridge also changes from Category 5 to Category 4 after completion of the depressed Central Artery.

6.1.4 Wind Impacts at the Chapter 91 Height and Massing

In addition to the wind impact analysis requested by the BRA in its Scoping Determination, additional studies were requested by CZM for this proposed MHP Amendment. Specifically, CZM requested an impact analysis of wind at the building heights and massing that would result under the application of the Chapter 91 requirements. This impact analysis was subsequently prepared by the 226 Causeway Street proponent's wind expert Frank Durgin, P.E. and evaluated by the BRA. (See Appendix 13.)

According to Mr. Durgin's analysis, the only location where the Chapter 91 alternative would lead to a change in Melbourne Category for Pedestrian Level Winds (PLWs) is at Location 19, which is the corner of Causeway and North Washington Streets. At this location, under the Chapter 91 alternative, there would be an improvement over the 155-foot preferred build alternative from Melbourne Category 3 (comfortable for walking) to Melbourne Category 4 (comfortable for short periods of standing and sitting) for southeast winds. This evaluation for both the Chapter 91 and the 155-foot alternatives is before completion of the depressed Central Artery.

CZM also requested an analysis of wind impacts on the future Paul Revere Park South and proposed Harborwalk along Lovejoy Wharf be included in this MHP Amendment for the Chapter 91 alternative. The wind diagrams for the Chapter 91 alternative were labeled to show the proposed parkland and Harborwalk both before and after completion of the CA/T depression. According to the proponent, there is no change in Melbourne Category winds for the proposed Harborwalk or for NW, NE and E winds in proximity to the future Paul Revere Park South before and after CA/T completion. For SW winds, the southwest corner of the Park to the east of Lovejoy Wharf changes from Category 5 to 4 after CA/T completion and for SE winds the same parkland location changes from Category 4 to 3 after CA/T completion.

The BRA analysis also found that for SW winds, the corner of Harborwalk and the North Washington Street Bridge also changes from Category 5 to Category 4 after completion of the

depressed Central Artery.

Summary Comparison

For both the 155-foot preferred build alternative and the Chapter 91 alternative, the elimination of the elevated portion of the Central Artery creates a deterioration in local wind conditions. The changes caused by the removal of the elevated highway are identical for the preferred and Chapter 91 alternatives. These changes are detailed below:

for NW winds: Location 13 (Portal Park) changes from Melbourne Category 4 to 3, and locations 21 and 22 change from Category 5 to 4 under both Chapter 91 and 155-foot preferred build alternatives.

For SW winds: Locations 2, 4, 6, 13, 14 and 15 change from Category 5 to 4, and locations 17 and 20 change from Category 4 to 3 under both Chapter 91 and 155-foot preferred build alternatives.

For NE winds: Location 13 changes from Category 5 to 4 and location 20 changes from Category 4 to 3 under both Chapter 91 and 155-foot preferred build alternatives.

For E winds: Location 13 changes from Category 5 to 4 and location 17 changes from Category 4 to 3 under both Chapter 91 and 155-foot preferred build alternatives.

For SE winds: Locations 2, 6, 13, and 14 change from Category 4 to 3 and location 20 changes from Category 5 to 3 under both Chapter 91 and 155-foot preferred build alternatives.

6.2 *Affordable Housing Requirement*

Access to housing on the waterfront for all of Boston's economic sectors is a priority of the Harborpark program. The Harborpark affordable housing requirements are incorporated in the MHP and are consistent with the Waterways Regulations (*see* 310 CMR 9.53(3)(d)). In the North End/Downtown area, the development of housing began in the 1960's with the rejuvenation of the Downtown Inner Harbor. Through the implementation of the Downtown Waterfront Urban Renewal Plan, underutilized piers, warehouses and waterfront land were converted to primarily luxury and elderly housing units, cultural facilities, hotel and office uses and public open space. This rebirth of the downtown waterfront area had many positive effects, but it also negatively affected the mixed-income aspects of the surrounding neighborhoods by creating a tremendous rise in housing costs. To ensure that waterfront residential development would not be detrimental to public's rights in tidelands, the Harborpark District zoning addressed the need for affordable housing on the harbor. For projects requiring a Chapter 91 license, the BRA as the City's planning board must make a recommendation ("Section 18 recommendation")

stating whether it believes that the project would serve a proper public purpose and would not be detrimental to the public's rights in tidelands. The tidelands regulations of the Harborpark zoning contain standards upon which the BRA is required to base its Section 18 recommendation, including a requirement for affordable housing. In addition, the Commonwealth has determined that housing developments on tidelands with an affordable component serve a proper public purpose under Chapter 91. (See 310 CMR 9.53(3).) The Harborpark zoning formed the basis of the City's MHP submission in 1990. To maintain consistency with the policies set forth in the MHP, this MHP Amendment requires that the 226 Causeway Street project, which is proposed as a residential use, provide approximately ten percent of its total units as affordable. The proponent has agreed to set aside 24 units as affordable units for a period of 20 years, of which 14 units will be reserved for elderly tenants. With respect to units reserved for elderly tenants, the proponent has committed that any elderly tenant occupying a unit designated as an elderly unit during the 20 year period commencing with the issuance of a Certificate of Occupancy may continue to occupy the subsidized unit indefinitely. (See Appendix 14.)

6.3 Compliance with Other Waterways Requirements

The 226 Causeway Street site is not located within the water-dependent use zone established by the Waterways Regulations. (The site is located approximately 150 feet from the mean high water mark and is separated from the water by the 160 North Washington Street and 131 Beverly Street buildings.) Therefore, the setback standards of 310 CMR 9.51(3)(c) and the requirements for the incorporation of specific water-dependent uses found in 310 CMR 9.52(1)(a) do not apply, according to a letter from the Department of Environmental Protection (DEP) to the MEPA Unit, dated January 15, 1998. (See Appendix 15.)

The DEP, in its letter referred to above, commended the 226 Causeway Street project for incorporating Facilities of Public Accommodation (FPAs) into the project design program while not required to do so by the current regulations. Approximately 13,000 square feet of the ground floor is reserved for FPAs.

6.4 Completion of Other Review Processes

6.4.1 MEPA Review for 226 Causeway Street

Although the 226 Causeway Street project is categorically included for the preparation of an Environmental Impact Report pursuant to Section 11.25 (4) of the MEPA regulations because it requires a Chapter 91 license for non-water dependent use of one or more acres of tidelands, a request for a waiver has been granted by the Secretary of the Executive Office of Environmental Affairs. A Draft Record of Decision was issued on January 30, 1998 and a Final Record of Decision on June 9, 1998. See Appendix 16.

The Final Record of Decision states that "(b)ased on these findings (established in the decision),

it is my judgment that the waiver request has merit, meets the test established in Section (301 CMR) 11.18 of the MEPA regulations, and will serve to advance the interests of the Massachusetts Environmental Policy Act.” This conclusion was based on several findings which are summarized below:

- The City’s submission of an MHP Amendment that would address the height requirements applicable to the project.
- The existence of ample and unconstrained infrastructure to support the project.
- The BRA’s review of the project through the Article 80 process.
- The rehabilitation of a long-vacant historic structure in the North Station area.
- The agreement by the 226 Causeway Street project proponent to circulate the wind and shadow studies prepared under the Article 80 and MHP Amendment processes to those who have commented on the ENF, and to other interested parties, for comment.
- The agreement by the 226 Causeway Street proponent to coordinate with the MDC, the CA/T project and the Boston Environment Department in planning for the development of the public open space, vehicular access to the building, and construction scheduling and staging. The Secretary noted that the CA/T project has requested the proponent to commit to providing for surface improvements that will harmonize with the CA/T Portal Park and Charles River Basin Park improvements and to maintain construction period noise restrictions similar to those required for the CA/T project. The Secretary found this request to be a reasonable condition for the waiver and indicated that the proponent should comply with it.

6.4.2 Chapter 91 Licensing for 226 Causeway Street

The tidelands history of the 226 Causeway Street project area was researched as part of the CA/T project’s licensing of the Charles River Crossing and of utility relocations along Causeway Street in front of the project site. The Chapter 91 licenses applicable to the Amendment Area are shown on a table and plan of existing licenses prepared by SEA Consultants, Inc. in 1992. (*See Appendix 17 , Chapter 91 Licenses and Other Authorizations Pertaining to 226 Causeway Street.*)

The 226 Causeway Street proponent has researched the tidelands history of the area. According to this research, the historic shoreline for this area can be found on a map entitled “Plan of Part of Boston Harbor” from 1883. The historic low water mark comes from an 1837 map by Pelham; historic mean high water generally ran landward of Nashua Street towards Merrimac Street,

easterly behind Cross Street and northward up to Commercial Street. Based on a review of these maps, the 226 Causeway Street project proponent has determined that the 226 Causeway Street parcel is formerly flowed private tidelands.

At CZM's request, the proponent also evaluated the project's location by reference to the 100-rod line. The proponent's Chapter 91 consultant, Earth Tech, found that:

In the area of 226 Causeway Street, historic extreme low water is more landward than the 100-rodline, as measured from the earliest known shoreline (Boston Inner Harbor, Earliest Known Shoreline of Boston Harbor as Compiled from Plans from Pelham 1775, Wardsworth 1817, Hale 1813, and U.S. Coast Survey 1847). As such, Commonwealth tidelands are determined using historic low water rather than the 100-rod line. The site, located between historic high water and low water, is comprised entirely of private tidelands.

A diagram showing the 100 rod line is included in *Appendix 17*.

The 226 Causeway Street building was erected in 1906 on fill authorized pursuant to a Harbor and Land Commissioners' License No. 3096 issued to Edmond D. Codman and Joseph B. Russell, trustees. This license was replaced by License No. 3180 issued in 1907 to the same parties.

On April 3, 1998, the 226 Causeway Street project proponent submitted an application for a Chapter 91 License in accordance with 310 CMR 9.11(2)(b) and incorporated information requested by the DEP in a memorandum dated January 15, 1998 (*see Appendix 13*). In that memorandum, the DEP also transmitted its comments to MEPA on the Environmental Notification Form submitted by the 226 Causeway Street project proponent.

7.0 AMENDMENT COMPLIANCE WITH STANDARDS FOR APPROVAL

7.1 Consistency with CZM Harbor Planning Guidelines

The MHP regulations require a plan to be consistent with CZM Harbor Planning Guidelines. CZM staff has indicated that the following four elements, which describe plan content, supplant the Harbor Planning Guidelines:

1. A statement of goals and objectives and the corresponding applied policies to guide development in terms of its desired sequence, patterns, limits, and other characteristics;
2. An implementation program;
3. Planning analysis which takes into consideration technical data, community input, and other information which serves as the basis for evaluating tradeoffs among alternatives and choosing preferred courses of action; and
4. A review of the public participation program.

The proposed MHP Amendment is consistent with the four elements described above. The goals and objectives of the City's plan for the North Station waterfront and policies to guide its development are discussed in Section 4. The implementation program is described in Section 5. A planning analysis is provided that describes not only the Amendment Area itself but also the surrounding area, providing a context and framework for the proposed Amendment. Public participation is discussed in Section 3.

7.2 Consistency with CZM Program Policies and Management Principles

The following section summarizes CZM's Program Policies and Management Principles. It describes why the proposed MHP Amendment is consistent with each policy or principle or explains that the policy or principle is not applicable to the area affected by the Amendment.

WATER QUALITY POLICY #1

Ensure that point-source discharges in or affecting the coastal zone are consistent with federally-approved state effluent limitations and water quality standards.

The Massachusetts Water Resources Authority is the regional agency charged with improving water quality in Boston Harbor. In addition, through Large Project Review, the City requires evaluation and mitigation of a proposed project's impacts on the water quality of Boston Harbor and any other affected water bodies.

WATER QUALITY POLICY #2

Ensure that nonpoint pollution controls promote the attainment of state surface water quality

standards in the coastal zone.

The Environmental Component of Large Project Review includes an evaluation and mitigation of a proposed project's impacts on water quality in Boston Harbor, including construction related run-off.

WATER QUALITY POLICY #3

Ensure that activities in or affecting the coastal zone conform to applicable state requirements governing sub-surface waste discharge and sources of air and water pollution and protection of wetlands.

The Environmental Protection Component of Large Project Review requires analysis and mitigation of a proposed project's impacts on air and water resources. The Scoping Determination for Large Project Review may require analysis and mitigation of the project's impacts on, among other factors, air quality, water quality, wetlands, groundwater, and solid and hazardous wastes. The analysis and mitigation required by Large Project Review is coordinated with, but in addition to, the state's MEPA review.

HABITAT POLICY #1

Protect wetland areas including salt marshes, shellfish beds, dunes, beaches, barrier beaches, salt ponds, eel grass beds, and freshwater wetlands for their role as natural habitats.

The Amendment Area does not include or abut, and is not in close proximity to, the ecologically significant resource areas identified in this Policy. The parcel at 160 North Washington Street and 131 Beverly Street extends to the water's edge and the portion of the MDC dam and locks located in the Amendment Area includes approximately 4.5 acres of water sheet, but current levels of bacteria and heavy metals in Boston Harbor make clams and mussels unsafe for consumption. It is anticipated that the ongoing Boston Harbor clean up will one day render shellfish from the harbor safe for consumption. The Environmental Protection Component of Large Project Review addresses a proposed development project's impacts on the water quality of Boston Harbor and other affected water bodies.

HABITAT POLICY #2

Promote the restoration of degraded or former wetland resources in coastal areas and ensure that activities in coastal areas do not further wetland degradation but instead take advantage of opportunities to engage in wetland restoration.

Not applicable.

PROTECTED AREAS POLICY #1

Assure preservation, restoration, and enhancement of complexes of coastal resources of regional or statewide significance through the Areas of Critical Environmental Concern (ACEC) Program.

The Amendment Area does not include complexes of coastal resources of regional or statewide significance.

PROTECTED AREAS POLICY #2

Protect state and locally designated scenic rivers and state classified scenic rivers in the coastal zone.

Not applicable.

PROTECTED AREAS POLICY #3

Review proposed developments in or near designated or registered historic districts or sites to ensure that the preservation intent is respected by federal, state, and private activities and that potential adverse effects are minimized.

The Historic Resources Component of Large Project Review requires review and mitigation of a project's impacts on historic districts. The BRA may invite the Boston Landmarks Commission and the Massachusetts Historical Commission to participate in the review process. In addition, Article 85 of the Boston Zoning Code establishes a separate procedure by which the Boston Landmarks Commission may delay the demolition of a significant building in order to examine the feasibility of alternatives to demolition.

COASTAL HAZARD POLICY #1

Preserve, protect, restore, and enhance the beneficial functions of storm damage preservation and flood control provided by natural coastal landforms, such as dunes, beaches, barrier beaches, coastal banks, land subject to coastal storm flowage, salt marshes, and land under the ocean.

Not applicable. The Amendment Area does not include or abut, and is not in close proximity to, any of the natural coastal landforms identified in this Policy.

COASTAL HAZARD POLICY #2

Ensure construction in water bodies and contiguous land areas will minimize interference with water circulation and sediment transport. Approve permits for flood or erosion control projects only when it has been determined that there will be no significant adverse effects on the project site or adjacent or downcoast areas.

The Environmental Protection Component of Large Project Review includes an examination of a proposed project's construction impacts and requires mitigation of those impacts.

COASTAL HAZARD POLICY #3

Ensure that state and federally funded public works projects proposed for location within the coastal zone will:

- not exacerbate existing hazards or damage natural buffers or other natural resources;
- be reasonably safe from flood and erosion related damage;
- not promote growth and development in hazard-prone or buffer areas, especially in Velocity zones and ACECs; and
- not be used on Coastal Barrier Resource Units for new or substantial reconstruction of structures in a manner inconsistent with the Coastal Barrier Resource/Improvement Acts.

This is not applicable to the privately-owned parcel located at 160 North Washington Street/131 Beverly Street and the privately-owned parcel located at 226 Causeway Street. The Amendment Area does not include or abut, and is not in close proximity to a Velocity zone, ACEC, or any of the natural coastal landforms identified in this policy. A portion of the Central Artery, a publicly funded project, is included in the Amendment Area. It will, as presently planned by the CA/T project, be the eventual location of Portal Park, an open space that will serve as the entry way to the new Charles River Crossing Bridge. The Amendment Area also includes a portion of the MDC dam and locks, open space and water sheet. To address the potential impacts of the CA/T project on waterways and wetlands, a mitigation program was incorporated in the CA/T project based on the MDC's New Charles River Basin Master Plan. Publicly-funded public works projects proposed in the Amendment Area are subject to this mitigation program.

COASTAL HAZARD POLICY #4

Prioritize public funds for acquisition of hazardous coastal areas for conservation or recreation use, and relocation of structures out of coastal high hazard areas, giving due consideration to the effects of coastal hazards at the location to the use and manageability of the area.

Not applicable.

PORTS POLICY #1

Ensure that dredging and disposal of dredged material minimize adverse effects on water quality, physical processes, marine productivity and public health.

Not applicable to the parcel at 226 Causeway Street, which is landlocked. Any new projects proposed for the waterfront parcel at 160 North Washington Street and 131 Beverly Street, or in that portion of the Amendment Area that extends out onto the water, will be required to obtain all applicable federal and state permits with respect to any proposed dredging.

PORTS POLICY #2

Promote the widest possible public benefit from channel dredging, ensuring that designated ports and developed harbors are given highest priority in the allocation of federal and state dredging funds. Ensure that this dredging is consistent with marine environmental policies.

Not applicable.

PORTS POLICY #3

Preserve and enhance the capacity of Designated Port Areas (DPAs) to accommodate water-dependent industrial uses, and prevent the exclusion of such uses from tidelands and any other DPA lands over which a state agency exerts control by virtue of ownership, regulatory authority, or other legal jurisdiction.

The Amendment Area is not located in a DPA. Similarly, the Amendment Area is not located within a Maritime Economy Reserve (MER) district, areas zoned by the City that are restricted to water-dependent industrial uses.

PORTS MANAGEMENT PRINCIPLE #1

Encourage, through technical and financial assistance, expansion of water dependent uses in designated ports and developed harbors, re-development of urban waterfronts, and expansion of visual access.

Through Large Project Review (Article 80), demolition delay (Article 85), and other review processes, the BRA, together with other public agencies, provides technical guidance in project design and implementation to ensure that new projects provide public access to public and private development sites; revitalize Boston's underutilized and dilapidated piers; retain and enhance the historic character of existing buildings while providing activity at ground level; and provide other public amenities that promote visual access to the waterfront. In addition, the MDC's 1995 Charles River Basin Master Plan calls for the development of a park at Paul Revere Park South providing further opportunities for the public to have visual access to the water.

PUBLIC ACCESS MANAGEMENT PRINCIPLE #1

Improve public access to coastal recreation facilities and alleviate auto traffic and parking problems through improvements in public transportation. Link existing coastal recreation sites to each other or to nearby coastal inland facilities via trails for bicyclists, hikers, and equestrians, and via rivers for boaters.

The Amendment Area is located within the Restricted Parking District established by Section 3-1A.c of the Boston Zoning Code. The Restricted Parking District requires a conditional use permit authorized by the City's zoning board (the Board of Appeal) for commercial parking and for parking accessory to a non-residential use. Before authorizing the grant of such a permit, the Board of Appeal must hold a public hearing and determine the appropriateness of the proposed parking and its likely effect on the neighborhood and on pedestrians. *Boston Zoning Code, Article 6*. The Amendment Area also is located within the parking freeze area mandated by the U.S. Environmental Protection Agency under the Clean Air Act and administered by the City of Boston Air Pollution Control Commission. The introduction of commercial parking spaces in the parking freeze area requires a Parking Freeze permit, which the Air Pollution Control Commission may issue only if the proposed parking will not increase the number of commercial parking spaces in the freeze area.

In addition to the parking controls administered by the Board of Appeal and the Air Pollution Control Commission, the BRA, through the Transportation Component of Large Project Review, may condition project approval upon a full analysis of the project's effects on traffic and parking and require the project to provide appropriate mitigation, including coordination with other public agencies concerning the development of public transportation and intermodal transportation links.

The City recognizes that proper development and redevelopment of the land in the Amendment Area is needed to insure improved public access to coastal recreation facilities. This area serves as a gateway to the City from Charlestown via the Freedom Trail along the North Washington Street Bridge, and to the harbor's passenger water transportation service that departs from a docking facility directly north of Beverly Street. The 226 Causeway Street project is providing public realm improvements along Beverly Street that will enhance pedestrian access to the waterfront. The BRA, through Large Project Review, will ensure consistency of new projects in the Amendment Area with the MDC's New Charles River Basin Master Plan, including the plans for Paul Revere Park South, Lovejoy Wharf and Portal Park being directed by the MDC and the CA/T Project.

PUBLIC ACCESS MANAGEMENT PRINCIPLE #2.

Increase capacity of existing recreation areas by facilitating multiple uses and by improving management, maintenance and public support facilities. Resolve conflicting uses whenever possible through improved management rather than through exclusion of uses.

Not applicable.

PUBLIC ACCESS MANAGEMENT PRINCIPLE #3

Provide technical assistance to developers of private recreational facilities and sites that increase public access to the shoreline.

The only privately-owned shoreline within the Amendment Area is occupied by Lovejoy Wharf. The MBTA currently operates water transportation service from a docking facility adjacent to Lovejoy Wharf as mitigation for the Central Artery project. In the 1995 MDC New Charles River Basin Master Plan, Lovejoy Wharf was proposed as a site for water shuttle/taxi service, which would be a private enterprise. The planning for this area in the context of the MDC Master Plan would be consistent with this Management Principle.

Public access to the shoreline will be enhanced by the creation of Portal Park and by a pedestrian pathway along replacement Beverly Street. As part of the mitigation efforts required by the City through the BRA's Large Project Review, the proponent of the proposed project at 226 Causeway Street has agreed to sponsor a maintenance program for Portal Park and make landscape improvements adjacent to its building entranceway at Beverly Street to encourage pedestrian access to the shoreline and the MDC park system.

PUBLIC ACCESS MANAGEMENT PRINCIPLE #4

Expand existing recreation facilities and acquire and develop new public areas for coastal recreational activities. Give highest priority to expansions or new acquisitions in regions of high need or limited site availability. Assure that both transportation access and the recreational facilities are compatible with social and environmental characteristics of surrounding communities.

Not applicable.

ENERGY POLICY #1

For coastally dependent energy facilities, consider siting in alternative coastal locations. For non-coastally dependent energy facilities, consider siting in areas outside of the coastal zone. Weigh the environmental and safety impacts of locating proposed energy facilities at alternative sites.

Not applicable.

ENERGY MANAGEMENT PRINCIPLE #1

Encourage energy conservation and the use of alternative sources such as solar and wind power

in order to assist in meeting the energy needs of the Commonwealth.

Not applicable.

OCEAN RESOURCES POLICY #1

Support the development of environmentally sustainable aquaculture, both for commercial and enhancement (public shellfish stocking) purposes. Ensure that the review process regulating aquaculture facility sites (and access routes to those areas) protects ecologically significant resources (salt marshes, dunes, beaches, barrier beaches, and salt ponds) and minimizes adverse impacts upon the coastal and marine environment.

Not applicable.

OCEAN RESOURCES POLICY #2

Extraction of marine minerals will be considered in areas of state jurisdiction, except where prohibited by the Massachusetts Ocean Sanctuaries Act, where and when the protection of fisheries, air and marine water quality, marine resources, navigation and recreation can be assured.

Not applicable.

OCEAN RESOURCES POLICY #3

Accommodate offshore sand and gravel mining needs in areas and in ways that will not adversely affect shoreline areas due to alteration of wave direction and dynamics marine resources and navigation. Mining of sand and gravel, when and where permitted, will be primarily for the purpose of beach nourishment.

Not applicable.

GROWTH MANAGEMENT PRINCIPLE #1

Encourage, through technical assistance and review of publicly-funded development, compatibility of proposed development with local community character and scenic resources.

The City participates in the review of projects in a variety of ways and at a number of different levels to ensure compatibility with local community character and scenic resources. City and BRA staff participate extensively as liaisons in reviewing aspects of the CA/T project. City staff held appointed positions on the New Charles River Basin Citizen's Advisory Committee, which developed the Master Plan for the New Charles River Basin. With respect to private development, the BRA's Article 80 process allows for a review of a project's impacts with

respect to transportation, environmental protection, urban design, historic resources and infrastructure systems. This review process provides access for other agencies and private developers to the technical assistance of experienced BRA and other agency personnel in matching the design and planning goals of a proposed project with the policies and requirements of all applicable regulatory programs.

GROWTH MANAGEMENT PRINCIPLE #2

Ensure that state and federally funded transportation and wastewater projects primarily serve existing developed areas, assigning highest priority to projects that meet the needs of urban and community development centers.

Not applicable.

GROWTH MANAGEMENT PRINCIPLE #3

Encourage the revitalization and enhancement of existing development centers in the coastal zone through technical assistance and federal and state financial support for residential, commercial and industrial development.

Within the Amendment Area, the warehouse structure at 226 Causeway Street has lain dormant for a number of years. The proposed redevelopment, expansion and adaptive re-use of this building will create much-needed housing units in the downtown area and bring active street-level uses to the site. The warehouse was originally constructed for the Austin Biscuit Company in 1906, and most recently was home to the Stop & Shop Bakery. It was designed to house the baking, warehousing, administration and shipping of baked goods, which continued at this location until the mid-1980's. This distinctive building, designed by Codman and Despredelle, is a major contributing element of a proposed Causeway/North Washington Streets Historic District which has been recommended for listing in the National and State Registers of Historic Places. In recent years, a number of prospective developers have unsuccessfully attempted to rejuvenate the building and place it into productive use. The currently proposed project would reverse this history.

7.3 *Consistency with State Tidelands Policy Objectives*

Standards for approval of a municipal harbor plan are set forth at 301 CMR 23.05 and require consistency with state tidelands policy objectives, as set forth in the state Waterways Regulations at 310 CMR 9.00 et seq. and summarized in the municipal harbor plan approval regulations at 301 CMR 23.05(3)(a). The municipal harbor plan approval regulations identify ten primary state tidelands policy objectives. The manner in which the proposed MHP Amendment is consistent with each of these objectives is discussed in more detail below.

POLICY OBJECTIVE #1

To ensure that development of all tidelands complies with other applicable environmental regulatory programs of the Commonwealth, and is especially protective of aquatic resources within coastal Areas of Critical Environmental Concern, as provided in 310 C.M.R. 9.32(1)(e) and 9.33.

The Amendment Area does not include an “Area of Critical Environmental Concern.” However, as part of Large Project Review under Article 80 of the Boston Zoning Code, the BRA requires the preparation of a Project Impact Report that addresses environmental and urban design impacts, such as wind, shadow, daylight, solar glare, air and water quality, geotechnical impacts, and solid and hazardous wastes. This intensive review process supplements the Environmental Impact Report required under MEPA. A number of other agencies, such as the Boston Transportation Department, the Boston Water and Sewer Commission, the Massachusetts Water Resources Authority, and the Massachusetts Bay Transportation Authority, may participate in the Large Project Review process to help ensure that the concerns of all applicable regulatory programs are adequately addressed.

POLICY OBJECTIVE #2

To preserve any rights held by the Commonwealth in trust for the public to use tidelands for lawful purposes, and to preserve any public rights of access that are associated with such use, as provided in 310 C.M.R. 9.35.

The addition of the Amendment Area to the Municipal Harbor Plan will provide the opportunity to revitalize the North Station/Bulfinch Triangle area and improve public access to tidelands as envisioned in the long-range planning for this area. Revitalization of this area will also increase ridership on the MBTA's water transportation service and provide pedestrian activity at the MDC's Paul Revere Park South, adding to the public use of and access to the waterfront, while at the same time advancing the goal of redeveloping the North Station/Bullfinch Triangle area into a "gateway" neighborhood.

Public realm improvements to enhance public access include the creation of Portal Park and the provision of a public right-of-way to the water along Beverly Street. Portal Park and the Beverly Street right-of-way will become MDC parkland and open space when the CA/T project is completed, providing an entry gateway into the Charles River Basin Park System. In addition, DEP and the owner of the Lovejoy Wharf are engaged in discussions regarding an enforcement order to accommodate Harborwalk at Lovejoy Wharf.

The BRA views the integration of private plans and public initiatives as an integral part of the overall scheme to preserve and enhance the public's right of access and use of tidelands in the City. It is the goal of the BRA to promote restoration of existing buildings in the Amendment Area to the extent practicable while enhancing public use and pedestrian access. The transportation, environmental protection, and urban design components of Large Project Review

authorize the BRA to require an analysis of a project's impacts on the pedestrian environment and to require appropriate mitigation of those impacts. Mitigation measures required by Large Project Review are enforced through a Cooperation Agreement with the BRA. *Article 80, Section 80A-5.*

POLICY OBJECTIVE #3

To preserve the availability and suitability of tidelands that are in use for water-dependent purposes, or which are reserved primarily as locations for maritime industry or other specific types of water-dependent use, as provided in 310 C.M.R. 9.32(1)(b) and 9.36.

The only land within the Amendment Area presently in use for a water-dependent purpose is the portion of the MDC dam and locks located in the Amendment Area and a docking facility adjacent to Lovejoy Wharf that is in use for MBTA water shuttle service. The MDC's 1995 Charles River Basin Master Plan calls for the redevelopment of Lovejoy Wharf for use as a ferry terminal. The water sheet in the Amendment Area is seen as accommodating active water-dependent uses, including additional passenger water transportation and recreational uses.

POLICY OBJECTIVE #4

To ensure that all licensed fill and structures are structurally sound and otherwise designed and built in a manner consistent with public health and safety and with responsible environmental engineering practice, especially in coastal high hazard zones and other areas subject to flooding or sea-level rise, as provided in 310 C.M.R. 9.37.

Although project drawings are reviewed by BRA planners as part of development review under Article 80, the City does not have the primary responsibility for assuring the structural soundness of buildings. Issues of building integrity are regulated by the State Building Code, and plan review is undertaken by state inspectors. Plans for buildings in flood zones are reviewed by the Federal Emergency Management Agency (FEMA). Nothing in the MHP Amendment is inconsistent with the effective implementation of Policy Objective #4 by the proper agencies.

POLICY OBJECTIVE #5

To ensure patronage of public recreational boating facilities by the general public and to prevent undue privatization in the patronage of private recreational boating facilities, as provided in 310 C.M.R. 9.38; and to ensure that fair and equitable methods are employed in the assignment of moorings to the general public by harbor masters, as provided in 310 C.M.R. 9.07.

Not applicable. The boating facilities in use in the Amendment Area are used for MBTA passenger water transportation service. No recreational boating facilities or moorings are located in the Amendment Area at this time.

POLICY OBJECTIVE #6

To ensure that marinas, boatyards, and boat launching ramps are developed in a manner that is consistent with sound engineering and design principles, and include such pumpout facilities and other mitigation measures as are appropriate to avoid or minimize adverse impacts on water quality, physical processes, marine productivity, and public health, as provided in 310 C.M.R. 9.39.

The City's review of any such facilities will be coordinated with state project reviews, and the City will defer to the State with regard to detailed engineering requirements for marinas, docks, and other facilities. Nothing in the MHP Amendment is inconsistent with the effective implementation of such requirements.

POLICY OBJECTIVE #7

To ensure that dredging and disposal of dredged material is conducted in a manner that avoids unnecessary disturbance of submerged lands and otherwise avoids or minimizes adverse effects on water quality, physical processes, marine productivity, and public health, as provided in 310 C.M.R. 9.40.

Neither the approved Municipal Harbor Plan nor the proposed MHP Amendment addresses dredging or disposal of dredged material. Nothing in the MHP Amendment is inconsistent with the effective implementation of Policy Objective #7.

POLICY OBJECTIVE #8

To ensure that non-water-dependent use projects do not unreasonably diminish the capacity of any tidelands to accommodate water-dependent use, as provided in 310 C.M.R. 9.51.

As discussed in the Municipal Harbor Plan, the City interprets this Policy Objective as one that is not intended to prohibit the development of permanent, non-water-dependent uses in the MHP's harbor planning area. The Amendment Area is located within the City's core urban waterfront. As described in Chapter IV of the MHP, the City is seeking to reclaim abandoned and blighted areas of the urban waterfront for public use through balanced private development in accordance with strict guidelines to enhance public access and public use of this intrinsically valuable property. Necessarily, this urban redevelopment will involve a mix of uses, the key being balance and compatibility of public and private uses. Through Large Project Review, the City requires the evaluation and mitigation of project impacts to ensure that private uses are not permitted to interfere with the fundamental objective of an open and accessible waterfront used by a broad cross-section of the public.

Specific requirements set forth in 301 CMR 9.51(3) establish statewide requirements for the conservation of the capacity for tidelands to accommodate water-dependent uses. These

requirements include, among other things, height restrictions, setback distances, open water replacement, and restrictions on facilities of private tenancy. 301 CMR 9.34(2)(b) allows for the substitution of these requirements with location-specific requirements approved in a Municipal Harbor Plan.

Only one substitution is requested in this MHP Amendment, as discussed in Section 4.5. This substitution from the height requirement applicable to a small landlocked parcel is proposed in order to promote the redevelopment of the North Station/Bulfinch Triangle area consistent with long-range plans developed by the City, the MDC, and the CA/T project.

POLICY OBJECTIVE #9

To ensure that non-water-dependent use projects on any tidelands devote a reasonable portion of such lands to water-dependent use, including public access in the exercise of public rights in said lands, as provided in 310 C.M.R. 9.52.

As noted under Policy Objective #8, the City is pursuing a strategy of reclaiming abandoned and blighted areas of the urban waterfront for public use through balanced private development. Long-range planning for the North Station/Bulfinch Triangle area includes the enhancement of public access to the waterfront through a variety of public projects, including the Portal Park and Paul Revere Park South projects. However, because city, state and federal funds for rebuilding and reactivating the waterfront are limited, much of the revitalization that will provide public access to the waterfront must come from private development.

Under Large Project Review, the City, through the BRA, requires a detailed analysis of the impacts of a proposed project on the unique characteristics of its site and neighborhood to ensure that private development enhances the public realm, including the public's access to, and enjoyment of, the waterfront.

POLICY OBJECTIVE #10

To ensure that non-water-dependent use projects on Commonwealth tidelands, except in Designated Port Areas, promote public use and enjoyment of such lands to a degree that is fully commensurate with the proprietary rights of the Commonwealth therein, and which ensures that private advantages of use are not primary but merely incidental to the achievement of public purposes, as provided in 310 C.M.R. 9.53.

As noted under Policy Objective #9, the City's Large Project Review process requires mitigation of project impacts to ensure that private development enhances the public realm and includes opportunities for the public to use and enjoy the waterfront.

This MHP Amendment requests the substitution of only one provision of the Commonwealth's Waterways Regulations: specifically, the substitution of the zoning height limit for the

Waterways height limit with respect to the landward parcel in the Amendment Area.

The addition of the Amendment Area to the Municipal Harbor Plan, together with the requested substitution, is consistent with Policy Objective #10 and with the overall strategy embodied in the approved MHP for stimulating growth and revitalizing blighted areas of the urban waterfront while striking an appropriate balance between private interests and public use and enjoyment.

7.4 Compatibility with State Agency Plans

The Commonwealth's plans for the lands within the Amendment Area include planning for the Charles River Lower Basin by the MDC and the Central Artery and Portal Park by the Central Artery Project (CA/T). This planning has been a focal point of agency review and coordination for the 226 Causeway Street project. The substitution requested in this MHP Amendment is consistent with these state agency plans.

The 226 Causeway Street project proponent has coordinated with the MDC and the CA/T in planning for the development of the public open space, vehicular access to the building and construction scheduling and staging. The 226 Causeway Street project team met with MDC and/or CA/T staff on five occasions prior to the submission of the Draft Project Impact Report (DPIR) to discuss coordination issues between the 226 Causeway Street project plans and those being developed by these state agencies for Portal Park, the Central Artery, and the Charles River Lower Basin. Consistent with the state's planning, the DPIR modifies the project's site plan to support a park-like character for the adjacent area. The 226 Causeway Street project proponent has also initiated discussions with state agencies to assist in the maintenance of Portal Park on an ongoing basis.

Meetings between the 226 Causeway Street project proponent and state agencies are as follows:

- | | |
|-------------------|--|
| December 31, 1997 | Meeting with CA/T regarding new bridge over Charles River and Portal Park |
| January 16, 1998 | Meeting with CA/T project and MDC regarding plans for Portal Park |
| January 23, 1998 | Meeting with CA/T project Causeway Street Coordinating Group |
| February 13, 1998 | Meeting with CA/T and MDC regarding plans for Beverly Street and Portal Park |
| February 19, 1998 | Meeting with CA/T regarding plans for Portal Park. |
| November 2, 1998 | Meeting with CA/T staff regarding timing and project schedule. |

These meetings are more fully described in Appendix 3.

APPENDICES

Appendix 1 Article 39 of the Boston Zoning Code
North Station Economic Development Area

↓ARTICLE 39

NORTH STATION ECONOMIC DEVELOPMENT AREA
(↓Article inserted on September 13, 1989*)

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* Date of public notice: August 12, 1989 (see St. 1956, c. 665, s. 5).

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(Editor's Note: This table of contents is added for the convenience of the user. It has not been adopted as part of this article.)

SECTION 39-1. Statement of Purpose, Goals, and Objectives. The purpose of this article is to establish the zoning regulations for the comprehensive plan for the North Station Economic Development Area ("EDA") as required by the provisions of the Downtown Interim Planning Overlay District, Article 27D of this code. The goals and objectives of this article, which constitutes the North Station EDA Plan, are to direct downtown development in a way that promotes balanced growth for Boston; to channel growth away from congested areas and toward underutilized sites; to create a gateway to the city by rail and highway from the north; to create a mixed-use district which includes office, retail, research and development, biomedical, institutional, residential, and sports facility and entertainment uses; to provide an area of the downtown to enhance the expansion of Boston's biomedical and research and development sectors; to create a complex of facilities and services which will foster economic growth in Boston and throughout the region; to increase the number of jobs in those sectors of the economy likely to employ Boston residents; to promote the creation and incubation of new research and development businesses and uses along with facilities supporting such uses; to create a functionally and architecturally unified district which is compatible with the North End and the Bulfinch Triangle; to create vistas and access to the Charles River; and to create new recreation space along the Charles River.

SECTION 39-2. Recognition of the North Station EDA Plan. In accordance with Section 27D-18 of this code, which requires production of comprehensive planning policies, development controls, and design guidelines for Special Study Areas in the Downtown Interim Planning Overlay District, including the North Station area (Special Study Area No. 5), this article serves as the North Station EDA Plan. The Zoning Commission hereby recognizes this article (approved by the Boston Redevelopment Authority on June 29, 1989) as the North Station EDA Plan and also as the general plan for the North Station EDA and as the portion of the general plan for the City of Boston applicable to the North Station EDA. The preparation of the North Station EDA Plan by the Boston Redevelopment Authority is pursuant to Section 70 of Chapter 41 of the General Laws, Section 652 of the Acts of 1960, and Section 3 of Chapter 4 of the Ordinances of 1952.

SECTION 39-3. Physical Boundaries. The provisions of this article are applicable only in the North Station EDA. The boundaries of the North Station EDA are as shown on a map entitled, "Map 1B North Station Economic Development Area (supplemental to 'Map 1 Boston Proper')" of the series of maps entitled "Zoning Districts City of Boston," as amended.

(↓ As amended on July 31, 1997.)

SECTION 39-4. Applicability. This article together with the rest of this code constitutes the zoning regulation for the North Station EDA and applies as specified in Section 4-1 regarding the conformity of buildings and land to this code. Application of the provisions of Article 27D to the North Station EDA is rescinded, and the North

Station EDA is deleted from the Downtown Interim Planning Overlay District, on the effective date of this article. Where conflicts between this article and the rest of this code exist, the provisions of this article shall govern. Except where specifically indicated in this article, the provisions of this article supersede Sections 13-1, 13-2, and 13-4 and Articles 8 and 14 through 24 of this code for the North Station EDA. The provisions of this article, however, are not applicable to the following Proposed Projects, which are governed by the rest of this code.

1. Any Proposed Project for which application to the Inspectional Services Department for a building or use permit has been made prior to the first notice of hearing before the commission for adoption of this article and for which no Zoning Relief is required.
2. Any Proposed Project for which appeal to the Board of Appeal for any Zoning Relief has been made prior to the first notice of hearing before the commission for adoption of this article, provided that such Zoning Relief has been or thereafter is granted by the Board of Appeal pursuant to such appeal.

↕SECTION 39-5. **General Building Height and Floor Area Ratio.** Except in the New Boston Garden Development Area and the New Economy Development Area, as provided in following sections, a Proposed Project within the North Station EDA is allowed an as-of-right building height of one hundred twenty-five (125) feet and an as-of-right FAR of eight (8); provided that any Proposed Project shall have an as-of-right building height of one hundred fifty-five (155) feet and an FAR of ten (10) if such Proposed Project is subject to or shall elect to comply with Large Project Review and has received a Certification of Compliance pursuant to Section 80B-6.

(↕As amended on May 9, 1996.)

↕SECTION 39-6. **Building Height and FAR in the New Boston Garden Development Area.** Within that portion of the North Station EDA depicted on Map 1B of this code as the "New Boston Garden Development Area," a Proposed Project is allowed an as-of-right building height of four hundred (400) feet and an as-of-right FAR of eleven (11).

(↕As amended on July 31, 1997.)

↕SECTION 39-7. **Building Height and FAR in the New Economy Development Area.** Within that portion of the North Station EDA depicted on Map 1B of this code as the "New Economy Development Area", a Proposed Project is allowed an as-of-right building height of two hundred fifty (250) feet and an as-of-right FAR of eight (8); provided that any Proposed Project shall have an as-of-right building height of three hundred (300) feet and FAR of ten (10) if a Development Plan for such Proposed Project has been approved pursuant to Section 3-1A.a and Planned

Development Area Review. Notwithstanding the foregoing provision, a Proposed Project within that portion of the New Economy Development Area designated for public parking on Map 1B is limited to a maximum building height of sixty-five (65) feet.

(↓As amended on May 9, 1996 and July 31, 1997.)

↓SECTION 39-8. Establishment of Areas Within Which Planned Development Areas May Be Permitted.

1. **PDA Permitted Areas; Review and Approval Requirements.** PDAs, as described in Section 3-1A.a, may be established in the New Boston Garden Development Area and the New Economy Development Area. The purposes for establishment of PDAs are to establish a more flexible zoning law and encourage large-scale private development on underutilized sites in the North Station EDA. No PDA is permitted within the North Station EDA except within the New Boston Garden Development Area and the New Economy Development Area. See Article 80 concerning the applicability of Planned Development Area Review.
2. **Planned Development Areas: Use and Dimensional Regulations.** A Proposed Project described in a Development Plan shall be in Substantial Accord with the dimensional standards set forth in Section 39-6 (for the New Boston Garden Development Area) or 39-7 (for the New Economy Development Area), as applicable. Except where specifically indicated in this article, Section 39-13 (Specific Design Requirements) shall not apply to a Proposed Project described in a Development Plan.

For applicable use regulations, see Section 39-12 (North Station Economic Development Area Use Regulations).

(↓As amended on May 9, 1996 and July 31, 1997.)

SECTION 39-9. [Applicability of Future Amendments.] Deleted on May 9, 1996 by Text Amendment No. 228.

↓SECTION 39-10. Planned Development Areas: Standards for Development Plan Approval. For approval standards for Planned Development Area Development Plans, see Section 80C-4 (Standards for Planned Development Area Review Approval).

(↓As amended on May 9, 1996 and July 31, 1997.)

↓SECTION 39-11. Planned Development Areas: Planning and Development Criteria. The Boston Redevelopment Authority may approve a Development Plan as

meeting the requirement of Section 80C-4 (Standards for Planned Development Area Review Approval) for compliance with the applicable planning and development criteria of this article if the Development Plan proposes a plan for development, consistent with the goals of the North Station EDA Plan, including one or more of the following: (a) the diversification and expansion of Boston's economy in new or expanding areas of economic activity, such as private investment in the research and development of pharmaceutical and biomedical products, in accordance with the provisions of paragraph 1, below, of this section; (b) the construction of major, unique civic facilities, including a new sports and entertainment arena and a multimodal transportation center in accordance with the provisions of paragraph 2, below, of this section; or (c) the creation or retention of job opportunities, in accordance with the provisions of paragraph 3, below, of this section.

1. Development Plan Approval for Diversification and Expansion of Boston's Economy. The Boston Redevelopment Authority may approve a Development Plan proposing diversification and expansion of Boston's economy if a significant portion of the new gross floor area of the Proposed Project is for uses such as, but not limited to, the following: (a) research and development of pharmaceutical and biomedical products; (b) the design, development, fabricating, and testing of instruments for engineering, medical, dental, scientific, optical, or other similar professional use; or (c) other scientific research and development uses, including laboratories and facilities for theoretical, basic, and applied research, product development and testing, prototype fabrication, or production of experimental products prior to preclinical testing.
2. Development Plan Approval for the Construction of Major, Unique Civic Facilities. The Boston Redevelopment Authority may approve a Development Plan proposing construction of major, unique civic facilities if: (a) the Proposed Project includes an indoor sports and entertainment facility; and (b) the Proposed Project is coordinated with North Station as the major transportation gateway to downtown Boston by rail, auto, and public transportation from the north.
3. Development Plan Approval for the Creation or Retention of Job Opportunities. The Boston Redevelopment Authority may approve a Development Plan proposing creation or retention of job opportunities if it determines that: (a) employment positions in businesses occupying the Proposed Project are newly created in Boston, not relocated from other parts of the city; (b) the Development Plan provides for entrepreneurial assistance measures, such as (i) information, outreach, and education programs concerning new business development; (ii) general business planning and management counseling; (iii) technical assistance; and (iv) the establishment of general financing options; or (c) the use proposed will retain jobs in the city or will contribute otherwise to the economic health of

the city, from the Development Plan's showing that at least thirty-three percent (33%) of the gross floor area of the Proposed Project will be leased or used by entities identified in the Development Plan.

(↓As amended on May 9, 1996.)

↓SECTION 39-12. **North Station Economic Development Area Use Regulations.** In the North Station EDA, the use of land and structures is hereby regulated as provided in this section. The provisions of Article 8 apply only as specified in this section, except that Section 8-6 applies. No land or structure shall be erected, used, or arranged or designed to be used, in whole or in part, except in conformity with the provisions of this Section 39-12 or in conformity with the provisions of an approved Development Plan with respect to land or structures located in a PDA.

1. Inclusion of Day Care Facilities. The provisions of this paragraph apply only to Proposed Projects which exceed one hundred thousand (100,000) square feet of gross floor area. Any Proposed Project having a gross floor area, not including the floor area devoted to Residential Uses, which equals or exceeds one hundred thousand (100,000) square feet, shall devote to day care facilities an amount of floor area equal to at least the amount listed below in Table A of this section. An Applicant for a Proposed Project subject to the provisions of this paragraph may fulfill its obligations under this paragraph by (a) creating such facilities on-site; or (b) creating such facilities, or causing such facilities to be created, in the vicinity of the Proposed Project, within the North Station Economic Development Area, the Bulfinch Triangle District, or the North End. Any Proposed Project subject to the provisions of this section shall devote to on-site day care facilities, of the total amount required to be provided pursuant to Table A, an amount of floor area equal to at least four thousand (4,000) square feet or the minimum required square footage, whichever is less. The provision of day care facilities in accordance with this paragraph shall be in conformity with written regulations to be adopted by the Boston Redevelopment Authority after public notice and hearing. For the purposes of this paragraph, the term "day care facilities" includes the finish, furnishings, and equipment required for use of the floor area for such facilities, to enroll people for care, instruction, or recreation during regular business hours.

TABLE A

Provision of Day Care Facilities

<u>Size of Proposed Project (Gross Square Feet)</u>	<u>Minimum Day Care Facilities (Gross Square Feet)</u>
100,000 up to 200,000	2% of gross floor area
200,000 up to 500,000	4,000
500,000 up to 1,000,000	8,000
More than 1,000,000	12,000

2. Allowed Uses. No land or structure in the North Station EDA shall be erected, used, or arranged or designed to be used, in whole or in part, for any use except under the provisions of an approved Development Plan for land or structures in a PDA, or Section 39-12.3 and Article 6, Conditional Uses, unless such use is specified in the Development Plan or in this Section 39-12.2. Any use so specified below shall be allowed as a matter of right, subject only to the provisions of this Section 39-12 or, in the case of a PDA, the approved Development Plan, except that in an OS (Open Space) district only the use specified in paragraph (q) below is allowed.

(a) New Economy Uses. Limited to: basic research; research and development; product development or prototype manufacturing; biomedical technology; pharmaceutical research and development; research and medical laboratories.

(b) Public Arena Uses. Limited to: the production and exhibition of professional and amateur sporting and athletic events; theatrical productions; concerts; public entertainment events; religious gatherings; large-scale meetings; concession services; private clubs serving members and guests; health club and sports medicine clinic; loading and servicing facilities, subject to Section 39-17; video production facilities; ticket sales facilities, and offices for building management and staff.

(c) Residential Uses. Limited to: multifamily dwelling, artists' live/work space, apartment house, lodging or boarding house, temporary housing shelters, group residence, limited, as defined in clause (22B) of Section 2-1, and any dwelling converted for more families, where structures after conversion will conform to this code. Residential uses include any affordable dwelling units, including but not limited to affordable dwelling units which are rental units, condominiums, or limited equity share cooperatives.

- (d) Restaurant and Entertainment Uses. Limited to: the service or sale of food or drink for on-premises consumption, with or without dancing or entertainment; concert hall; theater, commercial or nonprofit (including motion picture or video theater, but not drive-in theater); art galleries, nonprofit or for profit; provided that uses described in Use Item 38A are forbidden.
- (e) Office Uses. Limited to: business or professional offices; real estate, insurance, or other agency or government office; office building; post office, or bank (other than drive-in bank) or similar establishment. (See also paragraph 2(n) of this section.)
- (f) Hotel or motel.
- (g) Deleted on February 22, 1991.
- (h) Day care center, family care center, nursery school, kindergarten, elementary or secondary school, or community health center or clinic.
- (i) Recreational and Community Uses. Limited to: private grounds for games and sports; other social, recreational, or sports and entertainment center conducted for profit; private club (including quarters of fraternal or sororal organizations) operated for members only; adult education center or community center building; settlement house; the maintenance and operation of any amusement game machine in a private club, dormitory, fraternity, or sorority house, or similar noncommercial establishment, or in any commercial establishment.
- (j) Public Service Uses. Limited to: public service pumping station, sub-station, or automatic telephone exchange, subject to St. 1956, c. 665, s. 2.
- (k) Wholesale Uses. Limited to: office or display or sales space of a wholesale, jobbing, or distributing house; and provided that not more than twenty-five percent (25%) of gross floor area devoted to this use is used for assembling, packaging, and storing merchandise.
- (l) Service Uses. Limited to: video or film production studio; barber shop; beauty shop; shoe repair shop; self-service laundry; pick-up and delivery station of laundry or dry-cleaner; tailor shop; hand laundry; dry-cleaning shop; framer's studio; caterer's establishment; photographer's studio; printing plant; taxidermist's shop; upholsterer's shop; carpenter's shop; electrician's shop; plumber's shop; radio and television repair shop; funeral home; undertaker's establishment;

mortuary; research laboratory; radio or television studio; or similar uses provided that in laundries and cleaning establishments, only nonflammable solvents are used for cleaning; animal hospital or clinic.

- (m) **Retail Uses.** Limited to: store primarily serving the local retail business needs of the neighborhood; artist supply store; grocery store; department store, furniture store, general merchandise mart or other store serving the general retail business needs of a major part of the city, including accessory storage; provided that uses described in Use Item 34A are forbidden.

- (n) **Institutional Uses.** Limited to: place of worship, monastery, convent, or parish house; elderly care facility; nonprofit library or museum, not accessory to another institutional use; research laboratory; clinic or professional offices accessory to a hospital or sanatorium whether or not on the same lot, provided that such use will occupy interior space being used by the same institution for another institutional use at the time such change is proposed; hospital, sanatorium, convalescent or nursing home, elderly care facility, orphanage, or similar institution not for correctional purposes, whether or not providing custodial care for drug addicts, alcoholics, or mentally ill or mentally deficient persons; or clinic or professional offices accessory to a hospital or sanatorium whether or not on the same lot, providing custodial care for drug addicts, alcoholics, or mentally ill or mentally deficient persons.

- (o) **Accessory Uses** subject to the limitations and restrictions of Article 10, limited to: conference facilities; auditoria; classrooms; a garage or parking space for occupants, employees, students, and visitors, provided that such use is accessory to a residential use under paragraph 2(c) of this section, a hotel or motel, or a group care residence under paragraph 2(g) of this section; a swimming pool or tennis court; the storage of flammable liquids and gases incidental to a lawful use; the manufacture, assembly, or packaging of products sold on the lot; the maintenance and operation of not more than four amusement game machines accessory to eating and drinking establishments; the keeping of animals, other than household pets, provided that every enclosure is sufficient to prevent a nuisance to any adjacent residences or eleemosynary institutions; the keeping of laboratory animals incidental to an allowed institutional use, provided that all resulting noise, dust, fumes, gases, odors, and refuse matter are effectively confined to the lot or so disposed of as not to be a nuisance or hazard to public health or safety; in educational institutions with more than four hundred (400) full-time students, and in hospitals with more than fifty (50) beds, incidental uses and services ordinarily found in connection therewith and primarily for the

patients and staff or students and faculty, when conducted wholly within a building and entered solely from within the building where there is but one building on the lot or from an entrance not directly facing a street or lot line where there is more than one building on a lot, unless accessory to a hospital or sanatorium or clinic which is an allowed use; research laboratory accessory to an allowed institutional use; and any use ancillary to, and ordinarily incident to, a lawful main use, provided that any such use shall be subject to the same restrictions, conditions, limitations, provisos, and safeguards as the use to which it is accessory.

- (p) For land or structures in a PDA, uses specified in the approved Development Plan, including a parking lot or parking garage or other parking space, whether or not accessory, which would otherwise be a conditionally permitted use under Sections 39-12.3(d) and 39-12.3(m).
- (q) Open Space, as described in Use Item No. 27 of Table A of Section 8-7.

3. Conditional Uses. No land or structure in the North Station EDA shall be erected, used, or arranged or designed to be used, in whole or in part, for any use under the provisions of Article 6 unless such use is specified in this Section 39-12.3. The granting of a permit for any use so specified may be authorized conditionally by the Board of Appeal acting under the provisions of Article 6, subject to the regulations set forth in this Section 39-12, or may be allowed by the Zoning Commission in its approval of a Development Plan for a PDA; except that an OS district, only the use specified in paragraph (m) below may be authorized under Article 6 or under a Development Plan. The continued right to a conditional use granted under Article 6 is dependent upon maintaining the character and extent of operations and structures.

- (a) Residential Uses. Limited to: temporary dwelling structure, orphanage, and any dwelling converted for more families, provided that, after conversion, any nonconformity as to floor area ratio is no greater than prior to conversion.
- (b) Group Care Residence, unless otherwise allowed pursuant to paragraph 2(c) of this section.
- (c) Light Manufacturing Uses, except as allowed in Section 39-12.2(a); kennel or pound.
- (d) Parking lot or parking garage, except as allowed under paragraph 2(o) or paragraph 2(p) of this section.

- (e) Wholesale Uses. Limited to: accessory storage (other than of flammable liquids, gases, and explosives) in roofed structures or office or display or sales space of a wholesale, jobbing, or distributing house where more than twenty-five percent (25%) of gross floor area devoted to this use is used for assembling, packaging, and storing merchandise.
- (f) Fast Food Restaurant Uses. Limited to: sale over the counter, not wholly incidental to a use listed under paragraph 2(a), 2(d), or 2(m) of this section, of food or drink prepared on premises for off-premises consumption or for on-premises consumption if, as so sold, such food or drink is ready for take-out.
- (g) Rental motor vehicle and trailer agency accessory to a hotel or motel, provided that no rental vehicles or trailers are parked on the street and that exterior lighting is arranged to shine downward and away from residences.
- (h) The change of use of any residence to another use.
- (i) Transportation Uses. Limited to bus terminal, bus station, subway station or railroad passenger station, airline shuttle service.
- (j) Ancillary Uses. Any use on a lot adjacent to, or across the street from, but in the same district as, a lawful use to which it is ancillary and for which it would be a lawful accessory use if it were on the same lot; provided that any such use shall be subject to the same restrictions, conditions, limitations, provisos, and safeguards as the use to which it is ancillary.
- (k) Institutional Uses. Limited to: college or university granting degrees by authority of the Commonwealth; fraternity or sorority house or dormitory; trade, professional, or other school; penal or correctional institution; detention home; machine shop or other noisy activity accessory to a school, college, or university, adequately sound-insulated to protect the neighborhood from unnecessary noise; library or museum not conducted for profit and accessory to another institutional use not allowed pursuant to paragraph 2(n) of this section; clinic not accessory to a main use.
- (l) Service Uses. Check cashing business.
- (m) Accessory Uses. Limited to: a garage or parking space for occupants, employees, customers, students, and visitors, such use

not accessory to a residential use, a hotel or motel, or a group care residence.

- (n) Open space recreational building, as described in Use Item No. 27A of Table A of Section 8-7.

- 4. **Forbidden Uses.** No land or structure in the North Station EDA shall be erected, used, or arranged or designed to be used, in whole or in part, for any use specified in the Use Item column of Table A of Section 8-7 if such use is not specified in Sections 39-12.2 and 39-12.3 as an allowed or conditional use, except for such uses as may be allowed to be continued as nonconforming uses under the provisions of Article 9.

(↓As amended on February 22, 1991, September 30, 1993, October 6, 1994, and September 20 and November 21, 1996.)

↓SECTION 39-13. **Specific Design Requirements.** Proposed Projects within the North Station EDA shall comply with the specific design requirements established in this section. Except as provided in Article 6A, no Zoning Relief shall be granted from the provisions of this section. See Section 80C-9 (Planned Development Area Review: Effect on Applicability of Other Zoning Requirements) and Section 39-8.2 (PDAs: Use and Dimensional Regulations) concerning the applicability of the provisions of this section to Proposed Projects in Planned Development Areas.

- 1. **Street Wall Continuity.** The Street Wall of any Proposed Project shall be built:
 - (a) to be coextensive with at least eighty percent (80%) of the "Existing Building Alignment" of the block on which the Proposed Project fronts, established pursuant to Section 18-2 of this code; or
 - (b) to a depth from the street line equal to that of at least eighty percent (80%) of the Existing Building Alignment of either block adjacent to the block on which the Proposed Project is located, if there is no Existing Building Alignment of such block.

Recess Above Display Window Area Street Wall*

<u>Maximum Depth</u>	<u>Maximum Aggregate Surface Area</u>
Fifteen (15) feet	Twenty percent (20%)

*Recesses do not include windows, which must be indented.

2. Street Wall Height. The "Street Wall Height" of Proposed Projects within the North Station Economic Development Area shall not exceed one hundred twenty-five (125) feet. The endwall of a street which is a cul-de-sac does not count as a Street Wall for the purposes of this Section 39-13.

3. Setback Requirements.

(a) Sky Plane Setbacks. Other than decorative cornices and other surface ornamentation, every portion of a Proposed Project (including, but not limited to, mechanical equipment) above the Street Wall Height of such Proposed Project shall be set back by not less than the amount of the "Sky Plane Setbacks" established in Table C for the Street Wall Heights and building heights of three hundred (300) feet. Portions of a Proposed Project more than one hundred seventy-five (175) feet in height above grade level should be treated in a manner to create a visually distinctive roof or other termination of the facade of the Proposed Project.

The amount of the Sky Plane Setback at various heights for each wall of a building depends on whether the particular wall faces on a street identified below in Table B. The endwall of a street which is a cul-de-sac does not count as a Street Wall for the purposes of this Section 39-13.

TABLE B

Streets on Which Setbacks are Required

Causeway Street
Lowell Street

New Nashua Street
North Washington Street

TABLE C

Sky Plane Setbacks
Minimum Depth of Setback from Street Wall

<u>Location</u>	<u>Above Street Wall Height</u>	<u>Above 300' (Total Setback From Street Wall)</u>
Causeway Street*	40'	40'
Lowell Street	15'	15'
New Nashua Street*	35'	50'
North Washington Street	15'	50'

* Above the Street Wall Height, the Sky Plane Setbacks of separate portions of buildings along the same street may be averaged, to avoid repetitive tower distances from the Street Wall, so long as a minimum Sky Plane Setback of twenty-five (25) feet is maintained for portions of each building exceeding the Street Wall Height.

The Sky Plane Setback provisions established in this paragraph shall not be applicable to the extent that, as a consequence of such provisions, the maximum possible gross floor area for any floor of a Proposed Project would be less than nine thousand (9,000) square feet.

- (b) The principal facade of a building may violate the setback requirements up to the one hundred seventy-five (175) foot level, up to a maximum of 35 feet horizontal dimension or one bay or thirty percent (30%) of total horizontal length of the principal facade, whichever is greater.

(↑As amended on July 31, 1997.)

SECTION 39-14. Riverfront Setback Area. No structure shall be erected, altered, or extended within thirty-five (35) feet of the existing mean high water mark of the Charles River.

↑**SECTION 39-15. North Station Central Artery Open Space Subdistrict.** The area within the North Station Economic Development Area depicted on Map 1B of this code as OS-A, the "North Station Central Artery Open Space Subdistrict," is an Air-Right open space subdistrict, subject to the regulations set forth in Section 33-16.

(↑As amended on July 31, 1997.)

↓SECTION 39-16. **Off-Street Loading.** Article 24 governs the provision and design of off-street loading facilities for the use of any structure or land not subject to the provisions of Large Project Review. The provision and design of off-street loading facilities for the use of any structure or land that is subject to Large Project Review shall be determined through such review.

(↓As amended on May 9, 1996.)

SECTION 39-17. **Regulations.** The Boston Redevelopment Authority may promulgate and from time to time amend regulations to administer this article.

SECTION 39-18. **Severability.** The provisions of this article are severable, and if any such provision or provisions shall be held invalid by any decision of any court of competent jurisdiction, such decision shall not impair or otherwise affect any other provision of this article.

APPENDIX B to ARTICLE 39

Definitions

For the purposes of this article only, the following words and phrases, when capitalized, shall have the meanings indicated.

1. "Applicant" means any person or entity having a legal or equitable interest in a Proposed Project subject to the provisions of this article, as set forth in Section 39-4, or the authorized agent of any such person or entity.
2. ["Development Plan"]. Deleted on May 9, 1996 by Text Amendment No. 228.
3. "North Station Economic Development Area Plan" means the comprehensive plan, adopted by the Boston Redevelopment Authority pursuant to Chapter 652 of the Acts of 1960, Section 3 of Chapter 4 of the Ordinances of 1952 and Section 27D-18 of this code, which sets forth the planning policies, development controls, and design guidelines for the North Station Economic Development Area.

- ↕4. "North Station Economic Development Area" means the area depicted on Map 1B of this code.

(↕As amended on July 31, 1997.)

5. "Proposed Project" means the substantial demolition, erection, or extension of any structure or part thereof, or the change of use of any structure or land, for which the Applicant is required to obtain a building or use permit. A Proposed Project may proceed in phases, and may include more than one building, structure, or use.
6. "Street Wall" means the exterior wall or portion of the exterior wall of a Proposed Project that faces a street on which such Proposed Project is located, and is below the Street Wall Height, determined pursuant to Section 39-13.
7. "Substantial Accord" means, with respect to building height, that the vertical distance from grade to the top of the structure of the last occupied floor of a Proposed Project shall not exceed the specified height limit for the applicable district or subdistrict by more than fifteen (15) feet.
8. "Zoning Relief" means any zoning variance, exception, conditional use permit, interim planning permit, or zoning map or text change, or any other relief granted by the Zoning Commission or the Board of Appeal.

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MAP AMENDMENT NO. 229
THE COMMONWEALTH OF MASSACHUSETTS
CITY OF BOSTON
IN ZONING COMMISSION

EFFECTIVE
September 13, 1989†

The Zoning Commission of the City of Boston, acting under Chapter 665 of the Acts of 1956 as amended, after due report, notice, and hearing does hereby amend "Map 1 Boston Proper" of the series of maps entitled "Zoning Districts City of Boston," dated August 15, 1962, as follows:

1. By adopting, as a supplement to said Map 1 and as a part of the Boston Zoning Code, in accordance with the provisions of Section 3-1, a map entitled "Map 1B NORTH STATION ECONOMIC DEVELOPMENT AREA (EDA) (supplemental to 'Map 1 Boston Proper')," designating the boundaries of said downtown district and the boundaries of the subareas within said downtown district; such supplemental map to be dated with the effective date of this amendment.
2. By deleting from "Map 1 Boston Proper" all the zoning lines and designations within the outer boundary of the North Station EDA as established on said Map 1B, and by inserting on said Map 1 the outer boundary of the North Station EDA and within the boundary the following words:

North Station Economic Development Area
See Map 1B

3. By deleting the area of the North Station EDA from the Downtown Interim Planning Overlay District as established in Map Amendment No. 211.

† Date of public notice: August 12, 1989 (see St. 1956, c. 665, s. 5).

Richard S. Keller
Chairman

Robert P. Wears
Vice Chairman

Jean M. McArthur
Joseph W. Joyce

Ane Marie Perry

Marta Bernard Welch

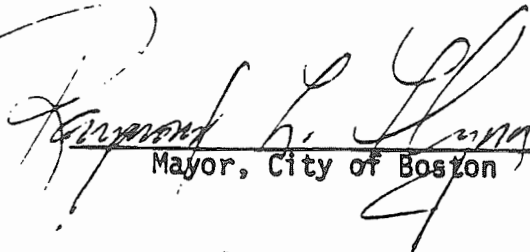
Edward D. Agostino

Robert Jordan

In Zoning Commission

Adopted September 11, 1989

Attest: Marguerite Hildebrand
Secretary

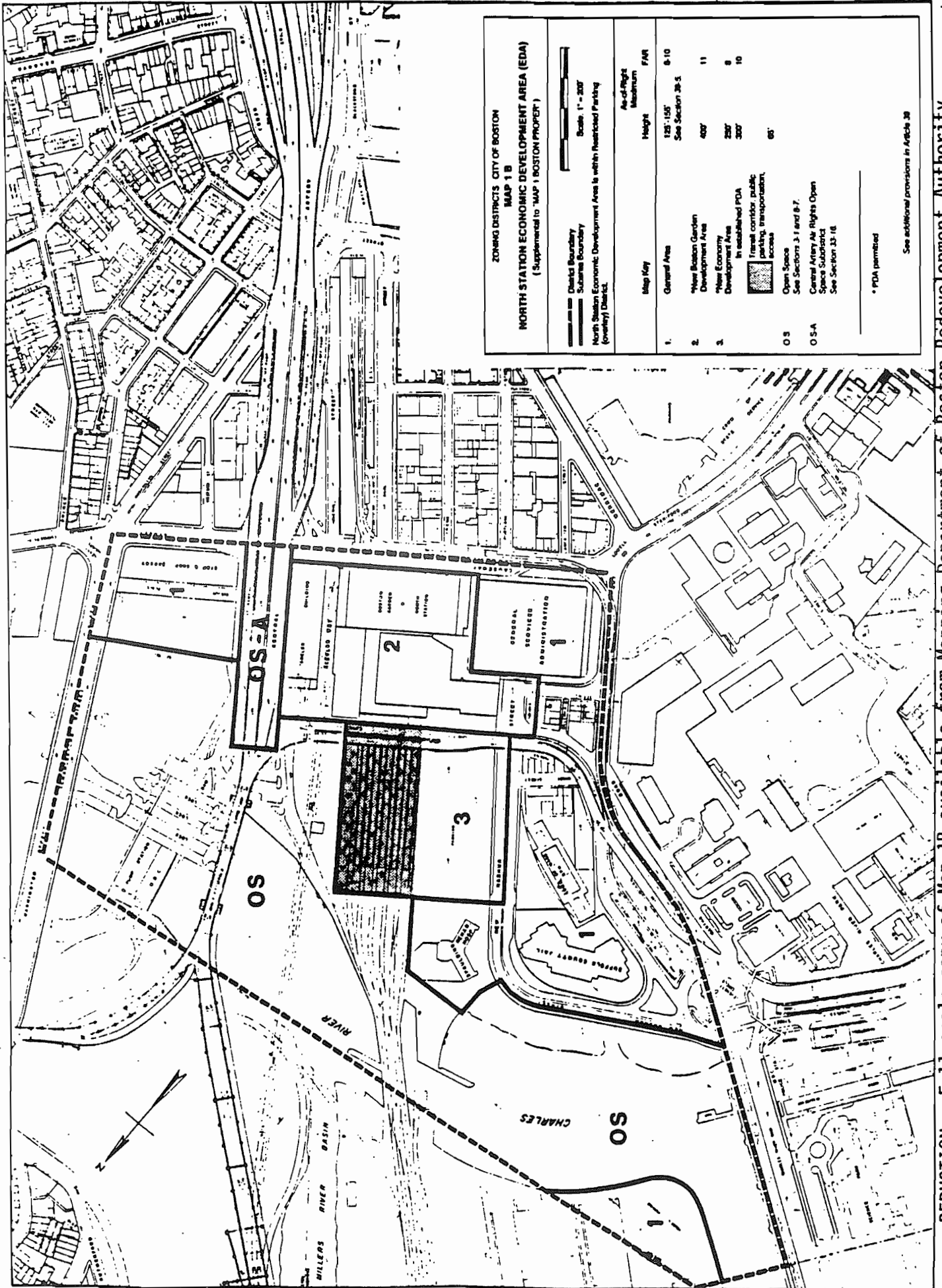


Mayor, City of Boston

Date: September 13, 1989

The foregoing amendment was presented to the Mayor on September 13, 1989, and was signed by him on September 13, 1989, whereupon it became effective on September 13, 1989, in accordance with the provisions of Section 3 of Chapter 665 of the Acts of 1956.

Attest: Marguerite Heldebrand
Secretary



ZONING DISTRICTS CITY OF BOSTON
MAP 1B
NORTH STATION ECONOMIC DEVELOPMENT AREA (EDA)
 (Supplemental to "MAP 1 BOSTON PROPERTY")

District Boundary
 Subarea Boundary
 North Station Economic Development Area is within Restricted Parking (overlaid) Districts.

Scale: 1" = 200'

Map Key	Height	FAR
1. General Area	125' 155' See Section 26.5	8-10
2. "New Boston Garden" Development Area	400'	11
3. "New Economy" Development Area	250' 300'	8 10
O.S.	65'	
O.S.-A		

* PDA permitted
 See additional provisions in Article 28

As-of-Right Maximum
 In established PDA travel corridor, public parking, transportation, access
 See Sections 3.1 and 8.7.
 General Artery Air Rights Open Space Subdistrict
 See Section 33-18

REDUCTION. Full-scale copy of Map 1B available from Mapping Department of Boston Redevelopment Authority.

**Appendix 2 Letter from the BRA Director to Secretary of Environmental
Affairs, dated February 19, 1998 and response from the CZM
Director to BRA dated May 28, 1998.**

Boston Redevelopment Authority

Boston's Planning & Economic
Development Office

Thomas A. Menino, Mayor
Clarence J. Jones, Chairman
Thomas R. O'Brien, Director

One City Hall Square
Boston, MA 02201-1007
Tel 617-722-4300
Fax 617-367-5916

February 19, 1998

FILE COPY

Trudy Coxe
Secretary of Environmental Affairs
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Dear Secretary Coxe:

I am writing in regard to a proposed redevelopment project located at 226 Causeway Street in the North Station area of Boston. The proposal is for a mixed-use residential development consisting of the existing building along with a six-story addition. The program calls for 247 residential units, ground floor retail/service space, and parking.

The 226 Causeway Street project is located on filled private tidelands and is considered a non-water dependent use under Chapter 91 and is therefore subject to the Waterways Regulations. Under those regulations, building height is limited to 80 feet at the seaward edge of the building (along Lovejoy Place) and 135 feet along Causeway Street. The City's zoning for this area is outlined in Article 38 of the Boston Zoning Code, the North Station Economic Development Area. This site is within Area No. 1: General Area having a height limitation of 125 feet as-of-right and 155 feet with review under Article 80.

This site, together with the adjacent Hoffman Building site, were not included in the City's original Municipal Harbor Plan (MHP) submission, and the Boston Redevelopment Authority (BRA) now seeks to cure this circumstance by seeking an amendment to the MHP to allow the BRA to request substitutions of dimensional requirements.

Staff of the BRA and the Office of Coastal Zone Management (CZM) have discussed this matter and agreed that the appropriate approach would be for the City to seek a *limited* harbor plan amendment pursuant to 301CMR 23.04. This section outlines the procedure for an amendment that does not "*involve a significant addition of geographic area or subject matter to the Approved Plan.*"

As you know, city and state representatives have also been meeting to establish a schedule for the submission and review of the City's Municipal Harbor Plan renewal. A timeframe of approximately six months has been outlined. The BRA intends to move forward with the MHP renewal process as expeditiously as possible in order to meet the milestones outlined by CZM.

Secretary Cox
Page 2

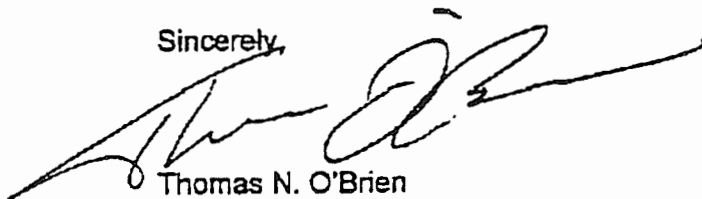
It has been suggested that the limited amendment for the North Station parcels be included in the renewal process. Proponents of the 226 Causeway Street project have indicated to the BRA that the six-month timeframe will negatively impact that project's review schedule. (See letter attached from the proponent dated February 12, 1998.) The project has already received a Draft Record of Decision to Grant a Waiver from the MEPA Unit of the EOE and the BRA expects to receive the Draft Project Impact Report (DPIR) by March 1.

We believe that a limited amendment process encompassing the 226 Causeway Street and Hoffman building sites should be allowed to proceed in advance of the MHP renewal process. The procedure outlines in 301CMR 23.04 contains provisions for public comment and a public hearing and therefore opportunity will be afforded for public input.

The 226 Causeway Street project will be an asset to the North Station, Downtown North and North End neighborhoods. The building, which has lain dormant for several years, will create much-needed housing units in the downtown area and bring active street-level uses to the site. The entry to the building will incorporate open space in conjunction with the proposed Portal Park on Beverly Street. The site is a gateway location from the Charlestown area and will create a stronger link among the City's waterfront neighborhoods.

I appreciate your consideration of this matter. I wish also to thank you and the staff members of CZM and the Department of Environmental Protection for their assistance and availability to the BRA on this and other matters.

Sincerely,



Thomas N. O'Brien
Director

CC: Margaret Brady, Director, MCZM
Elizabeth Grob, MCZM Boston Harbor Regional Coordinator
Greg Carrafiello, Department of Environmental Protection

BKR

Boston Kenmore Realty Corporation, 75 St. Alphonsus Street, Boston, MA
 Phone (617) 731-2050 Fax (617) 232-1508

February 12, 1998

Via Hand Delivery

Mr. Thomas O'Brien, Director
 Boston Redevelopment Authority
 1 City Hall Square
 Boston, MA 02201

Ms. Margaret Brady, Director
 Executive Office of Environmental Affairs
 Coastal Zone Management
 100 Cambridge Street
 Boston, MA 02202

Subject: **226 Causeway Street Redevelopment Project**
Boston Municipal Harbor Plan Amendment

Dear Mr. O'Brien and Ms. Brady:

We recently were told of a meeting that took place last week between BRA and Massachusetts Coastal Zone Management (MCZM) staff regarding the renewal of the City's Municipal Harbor Plan. As stated in our recent February 10th letter to the BRA, we are progressing on a city/state project review schedule that will allow us to complete approvals for our 226 Causeway Street redevelopment project under the city's Article 80, and DEP Chapter 91 this spring. We are expecting to submit the Draft Project Impact Report (DPIR) under Article 80 to the BRA by March 1.

It is our understanding that MCZM wants to consider a limited Municipal Harbor Plan geographic amendment to accommodate plans for the 226 Causeway Street project. It is also our understanding that MCZM wants it included within the City/BRA's formal Municipal Harbor Plan renewal process. It has been informally suggested that the BRA's renewal process will require at least six-months to complete, if not more. As stated in our February 10th letter, we are pursuing project review targets that will be negatively impacted by the proposed six-month Harbor Plan renewal schedule. We therefore request that the BRA, with MCZM's agreement, submit a limited geographic amendment to accommodate the height of 155 feet proposed for our project. This height is based on the city's existing zoning envelope permitted pursuant to the North Station zoning. Our reasons for requesting the expediting of this amendment are based on the following:

BKR

Boston Kenmore Realty Corporation, 75 St. Alphonsus Street, Boston, MA
Phone (617) 731-2050 Fax (617) 232-1506

1. We require Chapter 91 licensing, and are concerned that DEP will not review our application without having height relief to exceed current Chapter 91 limits through a Harbor Plan amendment. In a worst-case scenario, if DEP Chapter 91 review is sequential to the amendment, we are already looking at a potential additional three months or longer delay.
2. Presently, available financing rates are extremely favorable. An extended approval process for an amendment included with the Harbor Plan renewal would jeopardize securing those more favorable rates.
3. The Causeway property has been vacant for the past 12 years. As a result, most of the water pipes have been damaged, the water now channels itself to the exterior walls. A temporary solution has been found but this progressive problem can not be fully addressed until construction begins. The sooner we begin the better chance there is of saving the existing structure. A delay will cause more damage, and may further compromise its structural integrity.
4. With several residential projects in the pipeline, it is imperative to deliver a marketable project as soon as possible to take advantage of the current short-term demand for housing.
5. A delay in approvals will hinder the sequencing of construction activities. It is our intent to complete the buildings structural elements by the fall of 1998, thus avoiding costly temporary provisions for protecting and heating concrete during the winter months.
6. Construction costs are escalating at the rate of approximately 1% per quarter. A delay in a project of this magnitude will have a significant construction cost impact.
7. Contractor availability is a significant issue. We are in the process of selecting a qualified contractor, and the available firms have key staff available for our project commencing late spring of 1998. We have a concern that a delay may jeopardize our ability to contract with a qualified building team.

BKR

Boston Kenmore Realty Corporation, 75 St. Alphonsus Street, Boston, MA
Phone (617) 731-2050 Fax (617) 232-1506

8. With the recent approval of our project by the Boston Civic Design Commission's subcommittee (and final BCDC approval anticipated in March), this has culminated the favorable reaction the project has received by several city and state regulatory agencies. We recently received a draft record of decision from the Executive Office of Environmental Affairs waiving further environmental review.

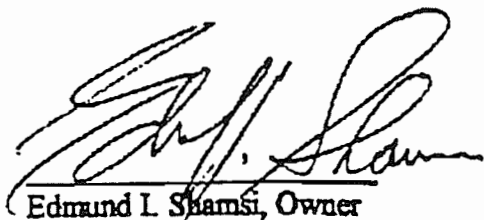
We believe that our project is viewed as a benefit to the community and the fast-tracking of approvals would seem to be justified.

As stated, we want to resolve this current situation. I have asked our environmental consultant Daylor Consulting Group, represented by Mitchell Fischman, to work with both of your agencies to find a mutually beneficial solution. Mr. Fischman will call you early next week to follow up on this letter. He can be reached at 781.849.7070 extension 253.

We believe that the 226 Causeway Street redevelopment project has moved through the public review process very smoothly to date, and we are ready to complete our permit reviews on a faster pace than what we believe the Municipal Harbor Plan renewal process will allow.

Thank you both for consideration of this letter.

Very truly yours,
Boston Kenmore Realty Corporation



Edmund L. Shamsi, Owner

cc: Edward O'Donnell, BRA
Richard Mulligan, BRA
Linda Haar, BRA
Nancy Tentindo, BRA
Elizabeth P. Grob, MCZM, Boston Harbor Regional Coordinator
Gregory A. Carrafiello, DEP, Regional Planner



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
100 CAMBRIDGE STREET, BOSTON, MA 02202
(617) 727-9530 FAX: (617) 727-2754

May 28, 1998

Thomas N. O'Brien, Director
BRA/EDIC
Boston City Hall
One City Hall Square
Boston, MA 02201-1007

Dear Mr. O'Brien:

This letter is in response to your communication with Secretary Coxe and to associated discussions between BRA and MCZM staff, regarding your desire to amend the existing Approved Municipal Harbor Plan for Boston in order to modify the DEP height limit that presently governs a proposed redevelopment project in the North Station area (at 226 Causeway Street).

The Secretary and I concur that this request is best considered in the larger context of a plan amendment for the portion of the Charles River Basin lying between the MDC Dam and the North Washington Street Bridge (including all filled tidelands subject to c. 91 jurisdiction on either side of the river). This geographic area is immediately adjacent to the North End and Charlestown Gateway sub-districts, and thus represents a logical extension of the harbor planning area previously established. On the understanding that the proposed amendment will cover only this limited area and that no substitutions to the dimensional or use requirements of the waterways regulations will be proposed for any waterfront buildings, we are persuaded that the amendment can be reviewed under the procedures of 301 CMR 23.04 only (i.e. as a "minor" plan amendment that is exempt from scoping).

In the interests of further streamlining, we will consider the Charles River amendment to be the first (albeit procedurally distinct) phase of the larger renewal process for which you are currently preparing the necessary documentation. This will allow the amendment decision to be reached expeditiously and issued in simplified letter form, the content of which can be incorporated



subsequently into the updated approval decision that is likely to result from the renewal process.

For our review prior to formal submission of the Charles River amendment, you should provide a draft of the basic background material identified in 301 CMR 23.03 (1) (a)-(d) together with the information required in 301 CMR 23.04(1) (a)-(b). These regulatory provisions generally are self-explanatory, with perhaps the exception of the latter [23.04(b)] which calls for "data and analysis establishing how the plan complies with the standards for approval...". In this respect, we offer the following additional guidance for your draft documentation:

- (1) the analysis should address present and future development conditions with an eye toward specifying appropriate guidance to DEP in future licensing activity within the subject area; among other things, this should specify the desired connection of pedestrian accessways to the Harborwalk on either side of the dam and bridge, the build-out of facilities for public water transportation, the programming of ground floor interior spaces for facilities of public accommodation, and the construction/maintenance of exterior public open spaces; and

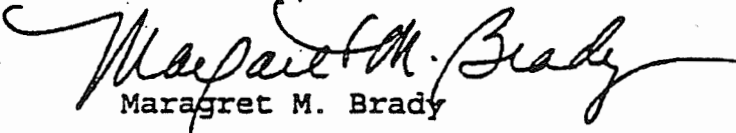
- (2) the analysis of the proposed height substitution for the 226 Causeway Street property should include a detailed analysis of wind, shadow, and other effects of the proposed building expansion on the ground-level environment, with a comparison of such impacts to those which would be associated with the massing and upper-level building configurations that are permissible within the c. 91 height limits presently in effect; the analysis should also establish the extent to which the gross volume of the proposed building expansion exceeds that which would be allowable under the existing waterways regulations, and should identify the measures proposed to mitigate, compensate, or otherwise offset such exceedance.

Given that the Metropolitan District Commission (MDC) and the Massachusetts Highway Department (MHD) have a strong presence within this planning area, I also call your attention to the provisions 301 23.05(4) which requires the City to demonstrate that the proposed plan is "compatible with the plans or planned activities of all state agencies owning real property or otherwise responsible for the implementation or development of

plans or projects" within the subject area.

Please do not hesitate to contact me should you have any further questions in this matter.

Sincerely,



Handwritten signature of Margaret M. Brady in cursive script.

Margaret M. Brady

cc: Trudy Coxé
Elizabeth Grob
Julia O'Brien
Ron Killian
Greg Carrafiello
Mitch Fishman

Appendix 3 226 Causeway Street Project Meetings

<u>Date</u>	<u>Meeting/Purpose</u>
□ November 18, 1997	Downtown North Association, Inc, (Robert B. O'Brien. Director and other Members at this luncheon meeting to discuss project design and how it will help stabilize Causeway Street and improve business in the area by the additional residents). Monthly meetings also attended at which project updates were periodically supplied.
□ November 25, 1997	Boston Redevelopment Authority (Edward O'Donnell and other BRA Staff at this briefing meeting on the project)
□ November 25, 1997	Mr. Herb Hoffman, Mr. Martin Hoffman, and Mr. Matthew Hoffman, owners of the Hoffman Building (the closest Abutter) regarding project design and safeguards to Hoffman Building during construction.
□ December 9, 1997	Meeting with Fleet Center Management (Andrew Nicol and Chris Maher) to coordinate construction impacts with future plans for the Fleet Center/Old Garden sites.
□ December 31, 1997	Meeting with CA/T staff (Dave Beck and Robert Monihan). This was a briefing meeting on plans for the artery.
□ January 5, 1998	Meeting with North End Waterfront Neighborhood Committee to brief the neighborhood on the project planning and evolving design; issues discussed included total parking spaces, commercial use of ground floor, and project impacts; the project proponent engaged additional parking commitments from garages in the site vicinity, but not in the North End, as a result of this meeting, and ground floor commercial uses would exclude a full service restaurant and no new liquor licensing request.
□ January 9, 1998	Meeting with Boston Redevelopment Authority (with Edward O'Donnell and other BRA/City Hall Staff) for pre-PNF submission issues.

- January 15, 1998 Meeting with North End Residents Council to brief neighborhood on project impacts and status of design; similar issues were discussed as at the earlier January 5th. meeting with the North End Waterfront Committee.
- January 16, 1998 Meeting with Central Artery/Tunnel (CA/T) project and MDC staffs regarding plans for Portal Park with Steve Brewer (CA/T) and Karl Hagland (MDC); the 226 Causeway Street building will have its main entrance facing Portal Park and the landscaping plans will be coordinated with plans for Portal Park and the landscaped pedestrian way, limited access roadway to be constructed by the Artery on the Beverly Street alignment.
 - January 23, 1998 Meeting with CA/T Causeway Street Coordinating Group to brief them on project planning and design for the 226 Causeway project.
 - February, 1998 Meeting with Boston Transportation Department to review Transportation Access Plan requirements.
 - February 13, 1998 Meeting with CA/T, MDC regarding plans for Beverly Street and Portal Park including Ron Killion (CA/T), Steve Brewer (CA/T), Karl Hagland (MDC), Fred Yalouris (CA/T), and other artery staffers to continue discussions on Portal Park and CA/T plans for the area. Further information became available on Lovejoy Wharf's future plans and the initial discussions on maintaining Portal Park were held.
 - February 19, 1998 Meeting with CA/T regarding plans for Portal Park including Ron Killion (CA/T) to discuss project proponent maintenance of Portal Park.
 - February 26, 1998 Meeting with the Boston Environment Department regarding open space, site planning, access, traffic and design issues.
 - March 10, 1998 Meeting with BRA Planning Staff (L. Haar, N. Tentindo) to discuss MHP amendment.
 - July 22, 1998 Meeting with Boston harbor Associates to brief TBHA Land Use Committee on project; issues discussed included traffic at Causeway and No/Washington Street, retail uses, height, FPA's on ground floor, and Chapter 91 description. It was reaffirmed that ground floor would be open to the

public and tickets for ferry/water transportation could be sold by one of the commercial establishments.

- July 24, 1998 Meeting with Hoffman to discuss project details.
- September 28, 1998 Public meeting with 22 Causeway Street subcommittee of the North End Community Council to review the project design and impacts with immediate abutters to the project within a two-three-block area.
- September 28, 1998 BRA meeting with representatives of the Hoffman family, owners of the abutting 160 North Washington Street parcel (to 226 Causeway Street), to review the project design and impacts as well as the draft Municipal Harbor Plan Amendment.
- September 28, 1998 Meeting with North End Waterfront Sub-Committee to review update of project proposal for 226 Causeway Street.
- October 1, 1998 BRA meeting with representatives of MCZM (Dennis Duscik), MDC (Katherine Davidge), and the 226 Causeway Street development team to discuss the draft Municipal Harbor Plan Amendment.
- October 15, 1998 Follow up public meeting with 226 Causeway Street project subcommittee (Endicott Street Residents) of the North End Community Council to review additional aspects of the project as requested at the earlier meeting.
- October 15, 1998 Public meeting with the North End Waterfront Residents Committee to review the project design and impacts.
- October 19, 1998 Meeting with BRA to review project status.
- October 21, 1998 BRA meeting with a representative of the Metropolitan District Commission, Kenneth Hagland, to review the project design and impacts as well as the draft Municipal Harbor Plan Amendment.
- October 21, 1998 Meeting with Downtown North Association.
- November 2, 1998 Meeting with CA/T staff regarding timing and project schedule.
- November 12, 1998 Meeting with BRA (Tom O'Malley) on affordable housing and project status.

-
- November 17, 1998 226 Causeway Street meeting with Matt Kiefer, (lawyer for Hoffman's – abutters to 226 Causeway Street)
- November 18, 1998 226 Causeway Street meeting - Downtown North Association.
- December 9, 1998 226 Causeway Street meeting – Downtown North Association.
- January 12, 1999 226 Causeway Street meeting – Downtown North Association.
- January 18, 1999 226 Causeway Street meeting with Councilor Paul Scappichio and members of the 226 Causeway Street Subcommittee, (part of the North End Waterfront Residents Council).
- February 12, 1999 226 Causeway Street meeting with BRA (Paul McCann, Matt O'Neil)

The proponent has also met a number of times with development and design staffs of the Boston Redevelopment Authority and the Boston Landmarks Commission. Meetings will continue to take place with the neighborhood, state and city agencies and with abutters and interested parties during the Municipal Harbor Plan Amendment public review period.

**Appendix 4 Amended and Restated Memorandum of Agreement between the
Executive Office Transportation and Construction, the Massachusetts
Highway Department and the MDC**

The Commonwealth of Massachusetts
Metropolitan District Commission

M. Ilyas Bhatti, Commissioner



Office of the Commissioner
30 Summer Street
Boston, MA 02108
617-722-5114
Fax: 617-727-4891

December 30, 1993

Peter M. Zuk
Project Director
Central Artery/Tunnel Project
One South Station
Boston, MA

Re: Central Artery/Tunnel Charles River Crossing
Section 4(f) Evaluation and Park Mitigation

Dear Mr. Zuk:

Attached please find the "Amendment and Restatement of the Memorandum of Agreement" (MOA) among the Executive Office of Transportation (EOTC), the Massachusetts Highway Department (MHD), and the Metropolitan District Commission (MDC), which I have reviewed and approved for presentation to the Commission.

The MOA outlines a comprehensive mitigation plan for park, wetlands and waterways in the Area North of Causeway Street in conjunction with the forthcoming Final Supplemental Environmental Impact Statement/Report (FSEIS/R) for the New Charles River Basin Crossing. The Mitigation Measures set forth in the MOA have been the subject of extensive coordination between the EOE, the EOTC and CA/T, DEP and MDC staff in recent weeks. The MDC wishes to recognize the efforts of all parties involved in addressing and resolving key issues in the Mitigation Measures associated with MHD's Preferred Alternative for the Crossing (the Non-River Tunnel Alternative, as refined).

Since the 1991 FSEIS/R there have been no changed circumstances that would necessitate any alteration in park designation in the New Charles River Basin portion of the MDC's Charles River Reservation, as outlined in my letter to Anthony Fusco of the Federal Highway Administration dated November 9, 1990.

The MDC agrees with MHD's assessment in the draft Section 4(f) Evaluation that the Preferred Alternative is a substantial improvement over the previously-adopted Scheme Z. As we noted in our comments on the DSEIS/R, the Preferred Alternative (like the other new alternatives studied in the FSEIS/R process) reduces proximity and visual impacts on current and future Charles River park and pedestrian access areas by improving bridge aesthetics, reducing the height and number of loop ramps north of the river, and moving the loop ramps further away from the river. The Preferred Alternative, in conjunction with the

Metropolitan Parks Centennial - 1895-1993

1.000 - Tunnel Project

Peter M. Zuk
December 30, 1993
Page 2 of 3

Mitigation Measures, adequately mitigates the impacts of the New Charles River Crossing on the New Charles River Basin portion of the Charles River Reservation.

Nevertheless, it has always been the MDC's view that the Preferred Alternative has impact on park areas which require substantial mitigation. The MHD's commitments, as set forth in the MOA, will assist in the achievement of MDC's longstanding vision of continuous park and pedestrian access connecting the Charles River Esplanade to Boston Harbor on both sides of the river. The MOA provides the vehicle for implementing the Mitigation Measures (as listed therein) which adequately and appropriately address the impacts of the New Charles River Crossing and achieve the following key park objectives for development of this portion of the Charles River Reservation:

1. Implementation of the MOA will create continuous pedestrian and bicycle access along both sides of the river.
2. Implementation of the MOA includes development of four major park areas within the New Charles River Basin of sufficient size to support recreation. Paul Revere Landing Park North will be expanded to a greater extent than previously committed. Paul Revere Landing Park South, although impacted by the Preferred Alternative, can be successfully developed as a landscaped plaza for recreation uses. It will provide a suitable entry to the New Charles River Basin and provide a connection to Lovejoy Wharf at this key location. The Nashua Street park area will benefit from the additional acquisition of the waterfront portion of the Spaulding Hospital parcel. The park development of the former GSA parcel and additional land being acquired along the North Point waterfront will incorporate a significant new water feature, which will enhance active and passive recreational activities.

In addition, the MOA strikes a careful balance which meets MHD's needs for a level of certainty regarding the Mitigation Measure commitments, while providing MDC the flexibility to enhance the parkland resources as circumstances allow. The MOA also contains an appropriate funding commitment by MHD to a level of quality of park design which is fitting in the New Charles River Basin.

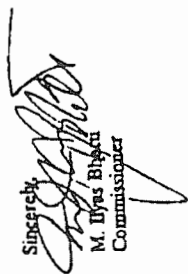
While the Preferred Alternative offers aesthetic improvements over Scheme Z, the MDC still requires that special attention be paid to the design and location of bridge piers and related structures, and the design of the area under the bridge, to assist in achieving MDC's park objectives.

Finally, we are pleased that the MHD recognizes the particular importance of implementing the Mitigation Measures, especially the Pre-mainline Measures, in a timely fashion.

Peter M. Zuk
December 30, 1993
Page 3 of 3

We look forward to working with MHD to ensure the effective implementation of this significant Memorandum of Agreement.

Sincerely,



M. Lynn Bisbee
Commissioner

AMENDMENT AND RESTATEMENT OF THE
MEMORANDUM OF AGREEMENT
BETWEEN
EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION
AND
MASSACHUSETTS HIGHWAY DEPARTMENT
(formerly the DEPARTMENT OF PUBLIC WORKS)
AND
METROPOLITAN DISTRICT COMMISSION

THIS AMENDMENT AND RESTATEMENT OF THE MEMORANDUM OF AGREEMENT (the "MOA") by and among the EXECUTIVE OFFICE OF TRANSPORTATION AND CONSTRUCTION, established and existing under Chapter 6A of the General Laws of Massachusetts and having a principal place of business at 10 Park Plaza, Boston, MA 02116 (the "EOC"), the MASSACHUSETTS HIGHWAY DEPARTMENT (formerly the Department of Public Works), established and existing under Chapter 16 of the General Laws of Massachusetts and having a principal place of business at 10 Park Plaza, Boston, MA 02116 (the "MHD"), and the METROPOLITAN DISTRICT COMMISSION, established and existing under Chapter 28 of the General Laws of Massachusetts and having a principal place of business at 20 Somerset Street, Boston, MA 02108 (the "MDC") (hereinafter "the parties"), is made as of this 30th Day of December, 1993, by amending and restating the Memorandum of Agreement among the parties and the EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS, established and existing under Chapter 21A of the General Laws of Massachusetts and having a principal place of business at 100 Cambridge Street, Boston, MA 02202 (the "EOEA"), dated July 29, 1991 (the "Original MOA") in the following manner specified below. The parties recognize that EOEA, a signatory to the Original MOA, must review the FSEIS/R for the MHD's New Charles River Crossing design and that EOEA can not join in this MOA prior to the issuance of a NEPA Certificate on the FSEIS/R. Notwithstanding this fact, the EOC, the MHD and the MDC agree to the content of this MOA and to be bound by the terms

the Central Artery/Tunnel Project (the "CA/T Project" or the "Project") in Boston, Massachusetts. As part of the CA/T Project, the MHD plans to depress and widen the Central Artery through downtown Boston to Charlestown and to construct a Seaport Access Highway through South Boston which will connect to a new tunnel under Boston Harbor to Logan Airport in East Boston. The Central Artery portion of the Project includes an improved connection between Interstate Route 93, Route 1 and the Central Artery. This improved connection requires the design and construction of a new crossing of the New Charles River Basin.

4. The MHD is preparing to file an FSEIS/R for the design of such a crossing, hereinafter referred to as the "New Charles River Crossing". The parties recognize that the New Charles River Crossing design represents a substantial improvement over Scheme 2, the former Proposed Action. The overall height and mass of the bridge and loop ramp structures have been reduced. The extent and quality of pedestrian access opportunities in the New Charles River Basin have also been improved.

5. The parties recognize that the New Charles River Crossing provides a unique opportunity to further the MDC's goal of developing the Charles River Reservation in the New Charles River Basin. Consequently, the MDC and the MHD have consulted and agreed on mitigation measures in the New Charles River Basin that would both mitigate the Project's impacts on the New Charles River Basin and advance the MDC's goal of developing the New Charles River Basin park and open space. Many of these measures were originally

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hereof. The Original MOA is therefore amended in the following manner:

The text of the Original MOA, beginning with the words "This Memorandum of Agreement" on page 1 and concluding with the words "permitted by law" on page 18, is deleted and the following text is substituted in lieu thereof:

RECITALS

The EOTC, the MHD, and the MDC recognize and recite the following facts upon which the agreements herein are based:

1. The MDC, on behalf of the Commonwealth, owns (or will acquire) and manages the Charles River Basin, including the New Charles River Basin (as defined below), certain parklands adjacent to the Charles River, and the Charles River Dam with navigation locks. The New Charles River Basin is that area between and including the Charles River Dam and the former Charles River Dam (the "New Charles River Basin").

2. The MDC has had long-standing planning objectives of improving the Charles River Basin as part of the metropolitan park system. These objectives are delineated in a letter from M. Ilyas Bhatti, Commissioner, Metropolitan District Commission, to Mr. Anthony Fusco, Regional Administrator, Federal Highway Administration dated November 9, 1990 (a copy of which is attached hereto as Exhibit A).

3. The MHD is in the process of designing and constructing

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the MHD and the MDC hereby agree as follows:

I. MASTER PLAN

A. Role of the parties in the Master Planning Process

The MDC, with the assistance of its Master Planning Consultant (the "Consultant"), was funded by the MHD to conduct a master planning study and prepare a New Charles River Basin Master Plan (the "Master Plan") to develop an integrated park and pedestrian environment for the area. The parties acknowledge that the Consultant's tasks were set forth in a scope of services (the "Scope of Services") and agreed upon by the parties to the Original MOA.

The MDC has submitted the Master Plan to the EOEA for the EOEA's review. The MHD reviewed the Master Plan upon the completion of each phase as outlined in the Scope of Services for consistency with the Letter of Agreement and the NEPA Certificate and for any aspect of the Master Plan which would reasonably be expected to affect the design, construction and scheduling requirements of the CA/T Project. The MDC and the MHD shall ensure that the "Mitigation Measures" (the measures set forth in Item I.B.4) are implemented in a manner consistent with, to the greatest extent possible, the Master Plan for the New Charles River Basin.

B. Mitigation Measures and Performance Standards

1. Purpose of the Performance Standards

The list of Mitigation Measures includes a series of park improvements, pedestrian connections, and wetlands

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set forth in a letter from William V. Twomey, Director, I-90/I-93 Project to M. Ilyas Shatti, Commissioner, Metropolitan District Commission dated November 9, 1990 (the "Letter of Agreement").

6. The Certificate of the Secretary of Environmental Affairs on the CA/T Project's Final Supplemental Environmental Impact Report (the "FSEIR") dated January 2, 1991 (the 1991 "NEPA Certificate") approved the mitigation measures identified in the Letter of Agreement required to mitigate the environmental impacts of the Project.

7. Subsequent to the 1991 NEPA Certificate, the parties entered into the Original MOA which set forth certain agreements and undertakings among the parties. Since that time the MHD provided funds for the MDC to proceed with its master planning process (the "Master Planning Process"). The purpose of the Master Planning Process was to ensure that the planning and design of the various mitigation items created an integrated park and pedestrian environment for the area.

8. In light of the New Charles River Crossing design and the completion of the MDC Master Planning Process, undertaken as described in the Letter of Agreement, the parties desire to set forth certain agreements and undertakings herein contained and amend and restate the Original MOA.

AGREEMENT

Now therefore, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the EOTC,

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and shall provide for separation of pedestrians and bicycles where appropriate. Path widths shall be adequate for anticipated use, with a minimum width of 10-12 feet for principal paths. The term "improve", as used herein, shall encompass site preparation, landscaping, ancillary utilities and structures, utility relocations, and all work necessary to address structural issues, including, without limitation, seawalls, banks, and decks.

3. Performance Standards for Wetlands and Water Feature Wetlands and water features must be incorporated as part of the North Point Area, designated on the Master Plan as: "North Point West", "North Point East" and "North Point Wilds." The following Performance Standards must be met.

A. Vegetated Wetlands Features

1. Minimum 9,500 s.f. of vegetated wetlands (with appropriate plant species) located between elevations 101.0 and 103.5 (CA/T datum) of which 4,000 s.f. must be capable of being classified as "bordering vegetated wetland" under State Wetland Regulations and located between elevation 102.4 and 103.5. May be composed of two or more areas, but each area must have a minimum of 4,000 square feet.
2. Must be hydraulically connected to the Charles River.
3. The vegetated wetlands feature cannot be entirely shaded.
4. Portions must be located in Boston and Cambridge.

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and waterways mitigation. All Mitigation Measures shall be implemented pursuant to applicable laws and regulations. The Performance Standards establish baseline criteria for implementing the list of Mitigation Measures. The MDC shall use its expertise and experience in parkland design and construction to develop at least the level of improvement described in the Performance Standards, in a manner designed to achieve the greatest possible consistency with the MDC Master Plan, but in no area shall the "Usable Area" be less than the area identified below. "Usable Area" shall mean areas generally accessible to the public for open space and recreational purposes, including pedestrian and bicycle paths. All acreages are approximate. Satisfaction of the Performance Standards requirements is not intended to require the placement of any fill in the Charles River below the ordinary high water level (103.3 CA/T Datum).

2. Performance Standards for Parkland and Accessibility For each area intended for public use and enjoyment, the level of quality that is to be achieved shall be typical of other parks in the Charles River Reservation, such as Lechmere Canal, Front Park, and Kennedy Park, and the historic work of the original Storror Memorial Embankment (the Esplanade). Pedestrian and bicycle access shall be continuous along both banks of the river, shall meet all applicable guidelines for accessibility,

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- 2.2 Demolish existing timber wharf and timber piles
- 2.3 Reconstruct wharf
- 2.4 Improve as park with walkway
- 2.5 Provide Lovejoy Wharf/North End Park walkway underpass, with access to North Washington Street bridge

DESCRIPTION:
Lovejoy Wharf, including underpass and connection to North Washington Street Bridge sidewalk.

Minimum Area: 0.8 +/- acres.

3. Leverett Circle/Storror Drive
 - 3.1 Improve greenspaces and edges
 - 3.2 Provide appropriate architectural treatment to underpass and boat section facade
 - 3.3 Provide new pedestrian overpass between Leverett Circle/Science Park MBTA Station and Mashua Street Park

DESCRIPTION:
Minimum area is primarily related to sidewalks and pedestrian overpasses; remainder is parkway landscaped area.

Landscaped Area: 0.9 +/- acres.

4. Paul Revere Landing Park North (the Master Plan designates this area as "Charlestown Meadow East").
 - 4.1 Improve park
 - 4.2 Provide Tudor Wharf/Revere North walkway underpass

DESCRIPTION:
Paul Revere Landing Park North, including underpass to Tudor Wharf.

Minimum Area 4.6 +/- acres.

5. Revere Park North, Westerly Extension (the Master Plan designates this area as

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5. Soils must be of a suitable substrate for establishment of wetland vegetation.

B. Water Features

1. Requires 1.2 acres of contiguous watershed at elevation 102.4, in a manner which will provide 43,000 cubic feet of flood storage volume between elevation 103.5 and 104.3
2. Must be navigable by small watercraft and connect to the Charles River in at least two places.
3. Must have sufficient flow to prevent stagnation.
4. Must have sufficient depth to inhibit growth of vegetation on the bottom which would interfere with navigation.
5. Portions must be located in Boston and Cambridge.

4. List of Mitigation Measures

1. Paul Revere Landing Park South (the Master Plan designates this area as "Revere Plaza East and West").
 - 1.1 Improve park
 - 1.2 Improve corridor south to Causeway Street
 - 1.3 Connect riverside walkway to south trestle walkway
 - 1.4 Provide south bank railroad overpass for pedestrians/bicycles

DESCRIPTION:
Paul Revere Landing Park South and associated access along the Charles River and south to Causeway Street, with pedestrian overpass to the North portion of the Spaulding Rehabilitation Hospital site.

Minimum Area: 2.0 +/- acres

2. Lovejoy Wharf Park
 - 2.1 Acquire wharf property

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Plan designates this area as "North Point East").

- 8.1 Acquire land
- 8.2 Improve park
- 8.3 Remove existing railroad trestle (subject to review of issue with owner)
- 8.4 Rehabilitate Shoreline to permit park use.
- 8.5 Remediate contaminated/hazardous soils, as necessary.
- 8.6 Provide new water features, incorporating bordering vegetated wetlands.

DESCRIPTION:
From MBTA right of way to the boundary of the MDC Central Services parcel, and extending from the river to the proposed roadway in North Point and to the highway loop ramps.

Minimum Area 2.10 +/- acres.

- 9. North Point I (the Master Plan designates this area as "North Point West").
 - 9.1 Acquire land for relocation of MDC Central Services facility
 - 9.2 Replace MDC Central Services facility
 - 9.3 Demolish existing MDC central services facility
 - 9.4 Remediate contaminated/hazardous soils as necessary
 - 9.5 Improve park
 - 9.6 Provide new water feature, incorporating bordering vegetated wetlands
 - 9.7 Provide pedestrian access to North Point Park and Historic Dam North and South

DESCRIPTION:
Banks of the river including MDC Central Services parcel extending to O'Brien Highway and the proposed roadway in North Point.

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"Charlestown Meadows West").

- 5.1 Construct walkway over MBTA railroad tracks to connect with North Point East Park
- 5.2 Improve park
- 5.3 Provide walkway from Rutherford Avenue to Charles River alongside Millers River
- 5.4 (Intentionally omitted)
- 5.5 Construct walkways on either side of MBTA bascule bridge, north half

DESCRIPTION:
North bank of the Charles River from Paul Revere Landing Park North to the MBTA railroad right of way, including the Millers River area and path connecting to Rutherford Avenue via the new intersection. Area extends from the river to the first at-grade/boat section highway ramp. Includes pedestrian overpass to North Point West and walkways along MBTA bascule bridge.

Minimum Area 6.0 +/- acres.

- 6. (Intentionally omitted)
- 7. Mashua Street Park (the Master Plan designates this area as "Mashua Meadows").
 - 7.1 Improve park
 - 7.2 Improve waterfront portion of Spaulding Rehabilitation Hospital site with minimum 100 foot depth (0.6 +/- acres).
 - 7.3 Rehabilitate shoreline to permit park use.
 - 7.4 Remove pilings from watershed (subject to review of issue with owner).

DESCRIPTION:
Mashua Street parcel from O'Brien Highway to edge of MBTA railroad right of way (includes waterfront portion of Spaulding Rehabilitation Hospital site).

Minimum Area 2.6 acres (includes portion of Spaulding site).

- 8. North bank of the Charles River (the Master

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Minimum Area 2.9 +/- acres.

10. "Historic Dam South" as designated on Master Plan.
10.1 Improve area and upgrade associated structures to extent practicable.

DESCRIPTION:

MDC property south of the historic lock extending from O'Brien Highway upstream to area where embankment widens.

Minimum Area 3.1 +/- acres.

11. Historic Dam North as designated on Master Plan
11.1 Improve area and upgrade associated structures to extent practicable

DESCRIPTION:

MDC property accessible to the public outside of the Museum of Science including historic structures.

Minimum Area 1.6 +/- acres.

12. North Point II (the Master Plan designates this area as "North Point Wilds")

12.1 Improve area

DESCRIPTION:

Area generally lying between the proposed roadway in North Point and the MBTA railroad right of way, and extending from the highway loop ramps north to the Gilmore Bridge.

Minimum Area: 6.3 +/- acres

The parties acknowledge and agree that development of the Mitigation Measures in accordance with the terms of this MOA constitutes adequate mitigation for the MDC's parkland requirements associated with the New Charles River Crossing, and that the use of well-designed Mitigation Measures to meet both parkland and wetlands/waterways mitigation requirements is desirable. The MDC agrees that, in its view, these measures are appropriate

substitutions for the mitigation measures originally proposed for the Central Artery North Area Project (another MHD project located in the New Charles River Basin) as set forth in the license issued pursuant to M.G.L. Chapter 91 for the Central Artery North Area Project, License No. 1742.

The parties acknowledge and agree that the design process and public comment as required by licenses and permits may identify desirable changes to the above list. Therefore, the parties further acknowledge and agree that modifications may be made to the above list under the conditions set forth herein and upon the agreement of the MHD and the MDC, subject to regulatory approvals.

II. DESIGN AND CONSTRUCTION OF MITIGATION MEASURES

A. PHASING OF DESIGN AND CONSTRUCTION

The parties acknowledge and agree that the design and construction of certain Mitigation Measures will be commenced expeditiously after the Master Planning Process, and upon issuance of required permits and approvals but no later than the initiation of CA/T Project construction in the New Charles River Basin (the "Pre-mainline Measures"). The parties further acknowledge and agree that they have reviewed and confirmed the Mitigation Measures listed above that can be built as Pre-mainline Measures, and have established priorities for the remaining Mitigation Measures so as to minimize the need for restoration after completion of the CA/T Project. In determining which of the Mitigation Measures shall be Pre-mainline Measures, the parties agree not to designate any

Mitigation Measure as a Pre-mainline Measure which, because of its location or other factors, is likely to be affected by construction activities on the CA/T Project. The parties acknowledge and agree that the Conceptual Implementation Schedule (attached hereto as Exhibit "B") for the Mitigation Measures is subject to modification by the MHD in consultation with the MDC as a result of CA/T Project design and scheduling refinements.

The following Mitigation Measures are now classified as Pre-mainline Measures:

- Lovejoy Wharf and walkways
- Mashua Street Parcel (except Spaulding portion)
- North Point (East and West)
- Paul Revere Landing North and walkways
- Historic Dam (North and South)

B. MDC Role for Design and Construction

The parties acknowledge and agree that the MDC shall be the party responsible for the design, construction, and permitting (the "Implementing Agency") of the Mitigation Measures that are located outside the CA/T Project limits as they are presented in the Project's FSEIS/R as generally depicted on the attached illustration ("Exhibit C"), (the "Project limits" are delineated on Exhibit B as areas 1(b), 5 and 12). The MDC shall be the "Implementing Agency" for Mitigation Measures outside the CA/T Project limits and the "Non-Implementing Agency" for Mitigation Measures within the CA/T Project limits. The parties further acknowledge and agree that such limits are subject to modification and that the MDC's and the MHD's responsibility for design and

construction of the Mitigation Measures will be determined by such limits as are finally established.

For each Mitigation Measure for which the MDC is responsible, the MDC agrees to consult with the MHD at the planning, 25% design, 75% design, and 90% design stages to ensure consistency with the Mitigation Measures located either partially or entirely within the Project limits.

The MDC agrees to complete the design and construction of each Mitigation Measure for which it is responsible in compliance with all applicable laws and for any measure that affects CA/T work, in a manner that will facilitate CA/T Project construction in accordance with the CA/T Project's master schedule. The MDC further agrees to provide standards for design and construction of MDC improvements to the MHD as necessary for the design and construction of Mitigation Measures for which the MHD is responsible.

C. MHD Role for Design and Construction

The parties agree that the MHD shall be responsible for the design and construction of the Mitigation Measures that are located inside the CA/T Project limits. The MHD shall be the Implementing Agency for Mitigation Measures within the CA/T Project Limits and the Non-Implementing Agency for Mitigation Measures outside CA/T Project limits.

For each Mitigation Measure for which the MHD is responsible, the MHD agrees to consult with the MDC at the planning, 25% design, 75% design, and 90% design stages. The MHD

of any MDC land, rights in land and rights to use land as determined by MHD and agreed to by the MDC to be necessary or desirable for the construction of the Mitigation Measures or to construct, maintain, repair and replace other CA/T Project improvements and to cooperate with the MHD in connection with any legislation that may be necessary to facilitate such transfers.

IV. CITIZEN ADVISORY COMMITTEE

The EOEA has established a Citizen's Advisory Committee (CAC) comprised of seven representatives from the environmental and design communities appointed by the Secretary of Environmental Affairs, seven representatives appointed by the Mayor of the City of Boston, and seven representatives appointed by the Mayor of the City of Cambridge.

The parties agree that any of the representatives may be changed from time to time by the party originally designating such representative and that notice of such change be given to the parties to this MOA.

The parties acknowledge and agree that the role of the CAC shall be to advise and comment on the implementation of the Master Plan, and to serve as forum for public discussion on New Charles River Basin parkland issues. The MDC shall, in good faith, review the CAC's comments on the concepts and shall incorporate all such comments that the MDC determines to be reasonable and consistent with the goals of the Master Plan and with the MDC's role as stated herein. MHD and MDC shall co-ordinate MHD's input to and participation in CAC activities.

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further agrees to use MDC design and construction standards, unless in the MHD's judgment such standards would conflict with highway design standards or regulations applicable to the CA/T Project, in designing and constructing the Mitigation Measures.

The MHD agrees to provide all CA/T Project right of way drawings and construction staging and sequencing drawings to the MDC as necessary for the design and construction of Mitigation Measures for which the MDC is responsible. The MHD further agrees to provide the CA/T Project's master schedule to the MDC.

The MHD agrees to fund the design and construction of the Mitigation Measures commensurate with the level of quality that is specified in the Performance Standards.

III. CONTROL AND MAINTENANCE OF MITIGATION MEASURES

The parties acknowledge and agree that the park and pedestrian improvements created by the Mitigation Measures shall be maintained and controlled by the MDC. Those Mitigation Measures which are integral to the operation of highway facilities shall be maintained by the MHD. Upon completion of the CA/T Project, the MHD agrees to transfer to the MDC, subject to MHD acquisition of the same, if necessary, and subject to applicable law, control of the land or interests in land necessary or desirable to achieve this intent. In its transfers, the MHD shall reserve rights in such land as necessary to maintain, repair and replace highway Project improvements.

The MDC further agrees, subject to applicable law, to fully cooperate with the MHD in any requests by the MHD for the transfer

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V. PERMITS

The parties acknowledge and agree that all Mitigation Measures contemplated by this MOA must be planned, designed and constructed in accordance with all applicable federal, state and local laws and regulations.

The MHD agrees to obtain any necessary permits, licenses and approvals for all Mitigation Measures for which the MHD is responsible for design and construction. The MDC agrees to obtain any necessary permits, licenses and approvals for all Mitigation Measures for which the MDC is responsible for design and construction.

The inability of either party to obtain a permit, license or other approval shall not relieve that party of its obligation to meet the Performance Standards for a Mitigation Measure. In the event that MDC elects to pursue shoreline adjustments or other parkland enhancement options not encompassed in the Performance Standards but consistent with the Master Plan, it agrees to assume the permitting requirements of such options, including any permit conditions requiring mitigation for the impacts of such options. Subject further to the terms set forth in Section VI.A hereof, MDC may, at its discretion, elect to adjust its park design criteria for the development of specific areas of the New Charles River Basin in order to facilitate any desired parkland enhancement options. The parties agree not to eliminate the implementation of any listed Mitigation Measure in accordance with the Performance Standards (unless implementation is technically infeasible from an

engineering standpoint). The parties further agree to achieve the implementation of the Mitigation Measures substantially within the time frames set forth in the Conceptual Implementation Schedule (attached hereto as Exhibit B), and within the level of MHD funding specified in Section VI.A. herein. Since the timely implementation of the Mitigation Measures requires timely funding, MHD agrees to use its best efforts to secure and provide funding to the Implementing Agency in a manner which will facilitate the implementation of this MOA, in accordance with the Conceptual Implementation Schedule. MHD's commitment to meet the level of funding for the Mitigation Measures shall not be affected by the MDC's election to prioritize certain Mitigation Measures within the Mitigation program, provided that no Mitigation Measure is eliminated.

The MDC and the MHD agree that in the event that either is unable to obtain a necessary permit, license, and/or approval for any Mitigation Measure, it shall promptly notify the other party. The MDC and the MHD shall, in good faith, then attempt to resolve the issue to the satisfaction of the permitting agency. Upon failure to so resolve the issue, the MDC and the MHD shall, in good faith, seek to identify an equivalent Mitigation Measure. Upon the Implementing Agency's successful acquisition of all necessary permits, licenses, and approvals for the alternative mitigation measure, and subject to concurrence of FHWA and EOEPA, the MHD or the MDC, as appropriate, shall implement the alternative mitigation measure.

those specified in the Performance Standards it agrees to do so in a manner which will not preclude the successful implementation of all Performance Standards outlined in the Mitigation Measures and to assume responsibility for all funding requirements for such parkland enhancements to the extent they exceed the 80 million dollar funding program for the implementation of all the Mitigation Measures specified herein.

The ability of the MDC to implement the Mitigation Measures in a cost-effective manner shall not affect MHD's obligation to provide the funding set forth herein, and the MDC may use such funding available after implementation of all of the Performance Standards set forth herein for other parkland implementation as part of the mitigation for the New Charles River Crossing.

B. SOURCES OF FUNDING

The parties acknowledge and agree that the FHWA is a co-proponent of the CA/T Project, and is the primary funding source for CA/T Project activities. The MHD agrees to use its best efforts to maximize Federal Highway Administration ("FHWA") participation in funding the Mitigation Measures. The MDC agrees to cooperate with the MHD to achieve such maximum FHWA participation. The parties agree that all CA/T Project construction activities, including implementation of the Mitigation Measures, not eligible for FHWA funding are subject to capital appropriation by the Legislature and authorization of annual capital spending limits by the Massachusetts Executive Office of Administration and Finance and that the implementation of CA/T

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The MDC agrees to cooperate with the MHD to obtain any and all permits, licenses, and approvals needed to construct the Mitigation Measures that involve the jurisdiction of the MDC. The MHD agrees to cooperate with the MDC to obtain any and all permits, licenses and approvals needed to construct the Mitigation Measures that involve the jurisdiction of the MHD. The MHD and the MDC agree to seek all necessary permits, licenses, and approvals in a timely manner which will support CA/T Project construction in accordance with the CA/T Project's master schedule.

VI. FUNDING

A. Level of Funding

The parties have assessed the impacts of the New Charles River Crossing, and agree that implementation of the Mitigation Measures in a manner consistent with this MOA adequately and appropriately address these impacts. The parties further agree, after reviewing the fiscal requirements of the parkland, wetlands and waterways mitigation program, that implementation (design and construction) of the Mitigation Measures (in a manner consistent with the Performance Standards), can and shall be attained with an MHD funding program of eighty (80) million dollars in 1993 dollars.

Subject to the terms of this MOA, MHD agrees to secure and provide funding to the Implementing Agency to implement the Mitigation Measures and MDC and MHD agree to implement the Mitigation Measures in a manner which shall satisfy all of the Performance Standards. To the extent MDC seeks to implement a Mitigation Measure(s) which entails parkland enhancements beyond

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Chief Counsel
Metropolitan District Commission
20 Somerset Street
Boston, MA 02108

B. TERMINATION

In the event that the parties are unable to fulfill their responsibilities hereunder as a result of (i) impossibility of performance or (ii) the inability to proceed with the CA/T Project as approved in the NEPA Certificate dated January 2, 1991, and the NEPA Certificate to be issued for the New Charles River Crossing FSEIS/R as such Certificates may be modified and confirmed through any subsequent environmental review procedures that may be required, the parties may, at their option, terminate this MOA by forwarding to the other parties written notice, in which case this Agreement shall terminate and be of no further force or effect immediately upon such notice. The written notice shall describe the contingency which gives rise to the notice of termination.

C. REPRESENTATIVES

EOTC, EOEA, MHD, and MDC shall, from time to time, each designate in writing individuals to act as its representatives for coordination of matters in connection with this MOA. EOTC hereby initially designates its General Counsel and Deputy Secretary of Environmental Policy as its representatives, EOEA hereby initially designates its General Counsel and Undersecretary as its representative, MHD hereby initially designates its CA/T Chief Counsel and CA/T Manager of Environmental Planning as its representatives, MDC hereby initially designates its General

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certified or express mail, to the parties at the addresses set forth below or at such other addresses which are furnished from time to time in writing to the other parties. Any such notice shall be effective upon receipt, if delivered, or upon deposit with the U.S. Postal Service, if mailed.

The EOTC:

Secretary of Transportation
Executive Office of Transportation
and Construction
State Transportation Building
Ten Park Plaza
Boston, MA 02116

The EOEA:

Secretary of Environmental Affairs
Executive Office of Environmental
Affairs
100 Cambridge Street
Boston, MA 02202

The MHD:

Commissioner
Massachusetts Highway Department
State Transportation Building
Ten Park Plaza
Boston, Ma 02116

with copies to:

Project Director
Central Artery/Tunnel Project
One South Station
Boston, MA 02110

Chief Counsel

Central Artery/Tunnel Project
One South Station
Boston, MA 02110

The MDC:

Commissioner
Metropolitan District Commission
20 Somerset Street
Boston, MA 02108

with copies to:

Director of Planning
Metropolitan District Commission
20 Somerset Street
Boston, MA 02108

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of and be binding upon the successors, assigns, representatives and transferees of the parties and all other person claiming by or through the parties.

F. ~~AMENDMENT~~

This MOA, or any part thereof, may be amended from time to time hereafter only in writing executed by the parties to the MOA at the time of the amendment. Upon the issuance of a NEPA Certificate on the New Charles River Crossing FSEIS/R, the parties to this agreement shall present this MOA to the Secretary of EDEA for acceptance.

EXECUTED as a sealed instrument as of the day and year first above written.

EOTC:

EXECUTIVE OFFICE OF TRANSPORTATION
CONSTRUCTION

BY: James J. Kerasiotes
Secretary

MASSACHUSETTS HIGHWAY DEPARTMENT

MHD:

BY: Laurinda T. Bedingfield
Commissioner

Council and Director of Planning as its representatives. Each of EOTC, EDEA, MHD, and MDC shall make its responsibilities under this MOA a high priority for the individuals acting as its representatives and shall maintain continuity of communication by giving each other as much advance written notice as is possible under the circumstances, in the event of a change in representation. Each of EOTC, EDEA, MHD, and MDC shall use reasonable efforts to assure that its representatives under this MOA (or a designee, as appropriate) are available should a need arise. The representatives (or their designees) shall meet as requested to resolve any issues arising hereunder including, without limitation, issues of funding, scheduling and permitting.

D. Work in Harmony

The MHD and the MDC agree to provide competent, suitably qualified and reliable personnel to perform the planning, design and construction of the Mitigation Measures contemplated by this MOA. The MHD and the MDC further agree to at all times maintain good discipline and order at the construction site(s). The MHD and the MDC shall furnish labor that can work in harmony with all other elements of labor employed or to be employed on CA/T Project work.

E. Applicable Law, Successors and Assigns

This MOA is intended to be a binding agreement, enforceable as such, which shall be interpreted pursuant to the laws of the Commonwealth of Massachusetts and shall be construed as a contract under seal. The rights, obligations, liabilities, terms, conditions and agreements hereof shall inure to the benefit

20 Somersel Street
Boston, MA 02108
617-727-5114

EXHIBIT A

The Commonwealth of Massachusetts
Metropolitan District Commission
At: Ilyas Bhatti, Commissioner

November 9, 1990

Mr. Anthony Fusco
Regional Administrator
Federal Highway Administration
55 Broadway, 10th Floor
Cambridge, Massachusetts 02142

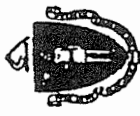
Dear Mr. Fusco:

This letter is written to provide further clarification of determinations made by the Metropolitan District Commission (MDC) regarding the park and recreational status of various areas in the Charles River Basin extension affected by the construction of the Central Artery/Third Harbor Tunnel (CA/T). This determination includes consideration of all changes that have occurred in this area of MDC jurisdiction since the approved 1985 EIS/R on the CA/T; these changes were described in MDC comments on the SDEIS/R dated August 27, 1990.

As I have stated on previous occasions (see letter dated September 24, 1990), the MDC is a multi-purpose agency providing a network of services for Metropolitan Boston including parks and reservations, police, flood control, watershed management and parkway systems. The Charles River Basin extension area was added to the MDC's jurisdictional authority in 1962. The Basin extension was created by the completion of a second dam in 1978, which was erected for flood control, water quality and fisheries restoration purposes, and which extended the Charles River Basin into a former tidal area. The dam and its associated locks are maintained and operated by the MDC, enabling navigation on the Charles River from Boston Harbor to the Upper Charles River, above the Museum of Science. Thus, the Charles River Basin extension (the Charles River between the two MDC dams) is managed by the MDC for multiple uses.

Also located in this Charles River Basin extension area are two major transportation crossings pre-dating MDC jurisdiction: (i) a railroad bridge, dating initially from 1835 and in its current form providing all commuter rail service connections to North Station; and (ii) the existing Central Artery (I-93) bridge dating from 1935.

Since the approval of the CA/T EIS/R in 1986, there have been several significant MDC park land acquisitions along the river banks in the Basin extension, specifically the Nashua Street parcel, the Spaulding Hospital walkway, and the GSA parcel. These acquisitions represent a significant shift away from the previous industrial land uses in this area. When these parcels are developed into usable parks, together with the other proposed park improvements in this area (e.g., the proposed acquisition of private land adjoining the GSA parcel on the North Point Waterfront), a suitable setting for active recreational boating uses will be created. In addition, the substantial expanse of open river surface between the old dam and the MBTA bascule railroad bridge (the river here is 350 to 450 feet wide and over 1,350 feet from the dam to the railroad bridge) is sufficient to allow for a variety of



The Metropolitan District Commission of Boston

Parks

Reservations

Community Planning

Historic Sites

Recreational Facilities

Public Concerns

Public Utilities

Business Harbor District

Navigation Parks

Flood Control

Waterfront Management

Park Water Supply

Quarries, Structures and Building Remnants

Franklin Park and Stone Island Zoned Areas

Parkway, Burrows and Ship's Station

Charles, Minka and Hopedale Parks

Bowen Street, Bow Hill, North Street, and They Street Reservations

METROPOLITAN DISTRICT COMMISSION

By: *[Signature]*
N. Ilyas Bhatti
Commissioner

By: *[Signature]*
Associate Commissioner

By: *[Signature]*
Associate Commissioner

By: *[Signature]*
Associate Commissioner

By: *[Signature]*
Associate Commissioner

MDC:

MetroParks MetroParkways MetroPolice PureWater

EXHIBIT A (continued)

Mr. Anthony Fusco

Page two

November 9, 1990

recreational boating activities; without interfering with existing navigation by boats passing between the two dams via the railroad bridge draw.

These new GSA and Natusus Street parcels were specifically recognized by the MDC as the first step toward extending the Esplanade/Front park lands in its 1988 RFP for development of a master plan for the Basin extension. The MDC's planning objective has been to extend existing active water park sites found in the historic Charles River Basin (above the old dam) to below the Old Science Park dam. The historic Charles River Basin can only be described today as a hub of recreational and sporting activity and has been acknowledged as a treasured water park, both in use and under statutory designation, for the past seventy-five years.

Based upon these changes over the past five years, the MDC has designated the portion of the Basin extension river surface area upstream of the railroad bridge for park and recreational purposes. This water recreation area is administered as part of the Charles River Reservation. This facilitates active recreational boating uses in this area including sailing, use by small motor craft, offshore anchoring, fishing, and appropriately sited landings.

With respect to the portion of the Charles River surface located downstream of the railroad bridge in this multiple use area, the MDC recognizes that the potential for similar recreational uses is not present. This portion of the River is confined in usable width, and by the operation of pump intakes at the new dam. Boats waiting to pass through the twin barge opening in the MBTA Bridge (which must be raised for passing boats, which therefore have long waiting periods during peak commuter rail hours), or through the locks (which can accommodate only limited number of boats at one time) are often queued in both directions in this area. Moreover, a significant portion of the water surface near the north bank of Paul Revere Landing Park is restricted from use and is inappropriate for small boats because of water flow into the pump intakes. Although boat passage through this area is permitted, this is not a suitable location for active recreational boating and none currently exists there today due to these conditions. The downstream river area is also partially bordered by lands which are under the ownership of the transportation agencies, including the MBTA and the Department of Public Works.

MDC plans for use of this downstream river portion of the Basin extension include continuation of its existing navigation, flood control, and associated water management functions, along with transportation purposes, as the primary uses. The downstream water surface will also function as a connection or passageway for recreational boats traveling to the park areas upstream, in a manner analogous to the continuous pedestrian connection planned to link the various park nodes along the waterfront from Boston Harbor to the historic Charles River Reservation. While this navigational function is supportive of recreational uses, the primary use of the water surface itself downstream of the railroad bridge will not be recreational.

The Massachusetts Department of Public Works (MDPW) has also requested clarification of our position regarding the status of certain property located along the Charles River Basin extension known as the "CANA" construction site. These lands were acquired by the MDPW for purposes of constructing the highway connections at Routes 1-93 and US #1. They are presently owned by the MDPW and are the subject of a Chapter 91 license for the CANA construction. The proposed new crossing of the Charles River allows for greater uninterrupted expansion of Paul Revere Landing Park by removing the highway

EXHIBIT A (continued)

Mr. Anthony Fusco

Page three

November 9, 1990

crossing to the west. This realignment effectively consolidates the transportation corridor in this area and significantly improves park opportunities, while also allowing for a continuous pedestrian pathway along the River's edge, located under the new bridges and over the railroad tracks. This is the realignment of a long-standing MDC objective of connecting the historic Charles River Basin Esplanade park to the harbor. Nevertheless, the MDC recognizes that the lands in the CANA area which will after completion of the CA/T be located under highway structures or in highway infield areas, are a continuation of the transportation corridor across the downstream river surface and will continue to be used primarily for transportation purposes.

Pedestrian access along the river bank to the adjoining park nodes is compatible with such transportation uses. The expansion of Paul Revere Landing Park to the edge of the new highway crossing (described above), when developed after the completion of the CA/T project, will become an additional recreational area available for public enjoyment. Other specific landscaping improvements provided in the CANA Chapter 91 plans must be replaced with improvements of an equivalent nature in the CANA area or in the CA/T project area. In order to insure that these mitigation commitments will be implemented by the MDPW in conjunction with the CA/T project, the MDC will initiate that the FEIS/R and other regulatory documents and approvals include detailed plans providing for such improvements.

I hope this information is helpful. Please contact me if you require further clarification.

Sincerely,

John De Villars
M. Ilyas Bhatti
Commissioner

cc: John De Villars

Appendix 5 Letter from the MDC dated July 24, 1998



The Commonwealth of Massachusetts Metropolitan District Commission

20 SOMERSET STREET
BOSTON, MA 02108

ARGEO PAUL CELLUCCI
GOVERNOR
TRUDY COXE
SECRETARY
DAVID B. BALFOUR, JR.
COMMISSIONER

TELEPHONE: (617) 727-5114
FACSIMILE: (617) 727-0891
www.state.ma.us/mdc

July 24, 1998

Herbert S. Hoffman, Martin B. Hoffman, &
Julius Cohen, Trustees
Chardon Realty Trust
160 North Washington Street
Boston, MA 02114

Re: Chardon Realty Trust property on the Charles River in Boston

Dear Messrs. Hoffman, Hoffman, and Cohen:

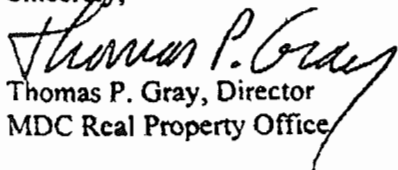
I am writing to inform you that the acquisition plans of the Metropolitan District Commission (MDC) have changed regarding property belonging to you on Lovejoy Wharf in Boston.

In correspondence dated March 10, 1995, the MDC expressed an early interest in the acquisition of a portion of your property. Subsequently, the MDC retained expert title examiners, appraisers, and an engineer to research and report on issues relevant to our acquisition plans. The results of this work, together with changes in funding levels and priorities, have forced the MDC to reconsider our interest in the Lovejoy Wharf location.

The MDC has concluded that it is not in our interest to move forward with any acquisition plans at Lovejoy Wharf at this or any other time.

If you have any questions or concerns regarding this decision, please do not hesitate to contact James Comeau, Parks Acquisition Coordinator at (617) 727-5295, extension 258.

Sincerely,


Thomas P. Gray, Director
MDC Real Property Office


Julia B. O'Brien, Director
MDC Planning Office

cc: K. Haglund
J. Comeau
file

Appendix 6 Letter from Edmund Shamsi, July 16, 1998

BKR

Boston Kenmore Realty Corp. 75 St. Alphonsus Street Boston MA 02120
Phone (617) 731-2050 Fax (617) 232-1506

July 16, 1998

Via Hand Delivery

Mr. Thomas O'Brien, Director
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

*Re: 226 Causeway Street Redevelopment Project
Boston Municipal Harbor Plan Amendment
Commitment to Maintenance of Portal Park*

Based on discussions with your staff and that of the Massachusetts Coastal Zone Management, we have been requested to confirm the public benefits being provided by the 226 Causeway Street Redevelopment, particular as they pertain to maintaining Portal Park and to insuring that the proposed residential project will complement plans being developed by the Central Artery/Third Tunnel (CA/T) and the Metropolitan District Commission (MDC) for the access being planned from Causeway Street to Lovejoy Wharf on the North Station/Fleet Center side of the project.

As we discussed in the Draft Project Impact Report submitted to the Boston Redevelopment Authority on March 8, 1998, we have estimated that the project will lead to the creation of between 30 and 300 construction jobs and that the project will provide additional tax revenues to the City of Boston by creating 240 residential units.

The project will:

- ▶ restore a building which has stood empty for the past 12 years.
- ▶ It will afford the opportunity for the ongoing development of the North Station area into a "gateway" neighborhood.
- ▶ It will increase ridership for the MBTA's Water Shuttle opposite Lovejoy Wharf.
- ▶ It will assist in bringing people a place to live within Boston.
- ▶ It will increase the level of security for the area.

We have been in discussions with the CA/T and the MDC to provide a maintenance arrangement for the proposed Portal Park, to be constructed by the CA/T, to insure that it will remain well landscaped and maintained on a day-to-day basis in conjunction with operations of the 226 Causeway Street project.

BKR

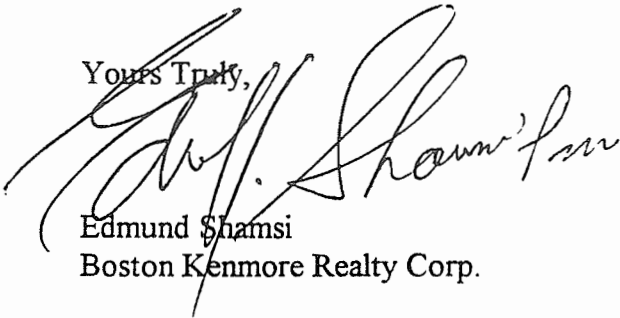
Boston Kenmore Realty Corp. 75 St. Alphonsus Street Boston MA 02120
Phone (617) 731-2050 Fax (617) 232-1506

In discussions that took place earlier in the year with CA/T and MDC senior staff, we outlined a maintenance concept which would be both good for the MDC and for our project which faces out onto Portal Park.

We envision and look forward to maintaining Portal Park. Since a final design has not been presented, we would appreciate having a role in some aspects of the design process.

We would expect to finalize this maintenance agreement prior to securing a final building permit. If you have any questions please feel free to contact me at (617) 731-2050.

Yours Truly,

A handwritten signature in cursive script, appearing to read "Edmund Shamsi".

Edmund Shamsi
Boston Kenmore Realty Corp.

cc: E. O'Donnell, BRA
R. Mulligan, BRA
L. Haar, BRA
N. Tentindo, BRA
E. Grob, MCZM, Boston Harbor Regional Coordinator

Appendix 7 Preliminary Adequacy Determination, May 15, 1998.

Boston Redevelopment Authority

Boston's Housing & Economic
Development Office

Thomas H. Merica, Mayor
Claudia I. Jones, Chairman
Thomas R. O'Brien, Director

One City Hall Square
Boston, MA 02201-1007
Tel: 617-722-4300
Fax: 617-327-5916

May 15, 1998

Mr. Don Hirsch
Boston Kenmore Realty Corp.
75 St. Alphonsus Street
Boston, MA 02120

Dear Mr. Hirsch:

RE: 226 Causeway Street Redevelopment

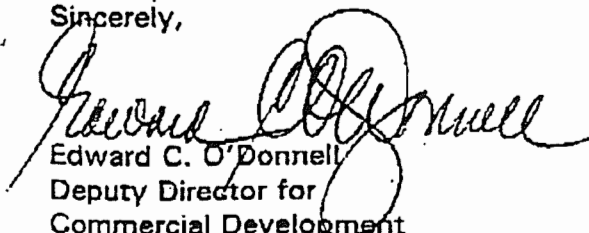
This letter is the Preliminary Adequacy Determination (the "Determination") of the Boston Redevelopment Authority (the "BRA") with respect to the Draft Project Impact Report (the "DPIR") for the proposed 226 Causeway Street Redevelopment (the "Proposed Project").

The BRA is issuing this Determination pursuant to the development review requirements of Article 80 of the Boston Zoning Code (the "Code"). This Determination requests additional information required by the BRA for its review pursuant to Article 80, Section 80B-5 of the Code. Article 80 of the Code, Development Review Requirements, sets out a comprehensive procedure for project review, and requires the issuance of a Final Adequacy Determination prior to issuance of a building permit. The Final Adequacy Determination is issued upon determination by the BRA that the Final Project Impact Report (the "FPIR") is satisfactory.

The Article 80 review and approval process is a series of incremental actions among the project proponent, the BRA and other relevant City of Boston departments. But for the required corrections, clarifications, and additional information referenced in the attached Technical Appendix, the DPIR submitted is sufficient to satisfy the scoping requirements of Article 80.

We look forward to reviewing the Final Project Impact Report.

Sincerely,



Edward C. O'Donnell
Deputy Director for
Commercial Development

Celebrating Our Fortieth Anniversary

Equal Opportunity / Affirmative Action Employer / Equal Housing Opportunity

MEMORANDUM

TO: Public Agencies of the City

FROM: Edward C. O'Donnell, Deputy Director for Commercial Development

DATE: May 15, 1998

SUBJECT: 226 Causeway Street Redevelopment Project: Preliminary Adequacy Determination

The purpose of this memorandum is to convey to you the Boston Redevelopment Authority's Preliminary Adequacy Determination for the 226 Causeway Street Redevelopment project pursuant to Article 80 of the Boston Zoning Code.

Article 80 of the Boston Zoning Code, Development Review and Approval, provides unified requirements for the review of development projects in Boston which include important opportunities for community involvement in the development review process.

Project review under Article 80 Section B-1 is initiated when the project proponent ("Applicant") files a Project Notification Form (PNF) in writing with the BRA. The PNF sets forth in sufficient detail those aspects of the proposed project that are necessary to determine its potential or likely impacts. The Proponent submitted a Draft Project Impact Report (DPIR) in response to the Authority's Scoping Determination on March 9, 1998. Article 80 requires the BRA to invite all of the City's public agencies to comment on the Proponents DPIR.

On May 15, 1998, the BRA issued the enclosed Preliminary Adequacy Determination which sets forth in sufficient detail those elements that the Applicant must include in the Final Project Impact Report ("FPIR"). After the issuance of the Preliminary Adequacy Determination, the Applicant will prepare a FPIR, if necessary, that meets the requirements of the Scoping Determination. When the FPIR is submitted to the BRA, a copy will be sent to you for your review and comment.


If you need clarification please contact Dick Mulligan, at 722-4300, x4301.

DM/119VME
051598

The following comments in response to the Draft Project Impact Report (“DPIR”) must be addressed before an Adequacy Determination for the proposed project is issued.

MEMORANDUM

TO: Richard Mulligan

FROM: Richard Mertens 

DATE: April 1, 1998

SUBJECT: 226 Causeway Street Redevelopment DPIR - Comments

The proposed 226 Causeway Street Redevelopment involves the conversion and renovation of the currently vacant former Stop and Shop bakery into a mixed-use residential complex containing 240 residential units, ground floor retail space, and approximately 135 parking spaces. A six-story roof top addition will be added to the existing six-story building. The total project will include approximately 404,000 sq. ft. of space.

In general, the Draft Project Impact Report (DPIR) has for the most part adequately responded to the BRA's scoping requirements for the Environmental Protection Component and has generally indicated that implementation of the proposed redevelopment should not result in any substantial adverse impacts on environmental quality. Specific comments follow, including issues which should be addressed in the Final PIR.

Construction Impacts

The commitment of the project proponent to take an active role with regard to processing and recycling of demolition and construction waste is appreciated. The recycling should include any asphalt excavated from the site, which can be sent to a batching plant if not reused on the site.

The proponent is encouraged to consider providing subsidized T-passes to construction workers to promote transit access to the site (which is adjacent to two MBTA stations) rather than the use of private vehicles.

Coordination with Central Artery/Tunnel and MBTA Green Line construction projects will be essential, as well as with any major daytime event scheduled at the Fleet Center, particularly with respect to construction traffic.

Noise Analysis

The existing noise environment (L_{dn}) is rather high, exceeding the HUD acceptability threshold without the consideration of special circumstances.

Levels will be reduced slightly, but still remain on the high side, with completion of the CA/T project. Therefore, appropriate sound attenuation measures will be required to mitigate ambient noise impacts to meet the HUD guidelines for residential development. The Final EIR should describe the attenuation measures to be applied and the resultant reduction in noise levels.

Review of the sound level impacts from the rooftop mechanical equipment (Tables B-2 and B-3 of Appendix G) indicate that there will be violations of certain of the octave band center frequencies established in the City of Boston noise regulations, and therefore the project will not be in compliance with the City's regulations. At the closest property line, the 1000Hz frequency is exceeded and at the closest residence, the 500 Hz to and including 8000Hz frequencies are exceeded. Therefore, sound barriers or other attenuation measures will be required. The Final EIR should describe the proposed mitigation measures and the anticipated noise reduction.

Water Quality Analysis

The project proponent is reminded that the indoor drains from the parking garage also will require the installation of oil separators in compliance with Boston Water and Sewer Commission regulations.

The size (capacity) of the sedimentation tank should be provided.

Solid and Hazardous Wastes

The DPIR reports that the project will be designed to accommodate an aggressive recycling program, including the provision of a recycling room in the public spaces in and around the building. According to the (rather small) floor plans, a recycling room is identified on some of the floors of the project but do not appear on all of the floor plans. A recycling room should be provided on each residential floor of the project to encourage residents to recycle.

Wind Analysis

The qualitative wind analysis, which was based solely on an empirical examination of the site, concluded that the proposed addition to the existing building would not result in any increases in wind speeds around the project that would exceed the BRA guideline wind speed or cause dangerous conditions. This situation results primarily because of the set back of the upper story addition. (The sheltering effect of adjacent buildings for some wind directions also mitigates the potential for increased wind speeds from the rooftop addition.) The proposed project was found to have little or no

effect on winds at the MDC park (tennis courts) at the corner of North Washington Street/Commercial Street or at the future Portal Park. Although winds were projected to increase (generally from comfortable for short periods of sitting or standing to comfortable (only) for walking) in Portal Park and along Beverly Street from Causeway Street to the Charles River, this increase resulted from the replacement of the existing elevated expressway with a depressed Central Artery and resulting open space and not because of the 226 Causeway Street project.

The analysis does indicate that the doorways along North Washington Street and Causeway Street will be quite windy for east winds. However, east winds are not a frequent occurrence in Boston, although they are generally storm winds. Moreover, these locations are windy today because of the effects of the existing building; the addition is expected to only minimally increase the wind speeds at the entrances. Canopies might be considered as a potential mitigation measure.

Shadow Analysis

Although the shadow analysis concluded, based on the specific times evaluated, that the project would have minimal effect on pedestrian areas and that the primary shadow impact would be on the roof of the adjacent Hoffman Building (as well as North Washington Street and, somewhat less, Lovejoy Place), by interpolation the following additional impacts can be determined:

- Spring: The MDC tennis courts also would be partially shaded in the early afternoon.
- Summer: Portal Park would be shaded by the addition in the early morning (before 9:00 AM).
- Winter: The addition would begin to shade the tennis courts in the very early (immediately after noon) afternoon, but little if any use of these courts would be expected in the winter.

Infrastructure Systems

No analysis was provided regarding the adequacy and capacity of the water and sewer systems serving the project site, even though this was requested in the scoping determination. The statement that "a capacity study has not been requested at this time" is not sufficient. The Final PIR should provide the requested analysis.

Transportation

Approximately 135 parking spaces will be provided on-site, the 50-space deficit to be made up through arrangements with nearby garages (it is noted that the Government Center Garage is rather distant from the project site and therefore may not be a feasible option). The Final PIR should include a commitment from the project proponent to obtain reserved off-site spaces, if specific arrangements have not been made by the time of filing.

The trip generation summary (Table 7-2) for residential does not appear to be consistent with the mode-split data on page 7-7 (residential vehicle trips in Table 7-2 are the least of the three modes, whereas the auto percentage in the mode split is the highest). This needs to be explained. ✖

MEMORANDUM

TO: Dick Mulligan
FROM: David Carlson
DATE: May 15, 1998
SUBJECT: 226 Causeway Street
DPIR Comments

DAYLIGHT COMPONENT

This section was adequate and seems to make the case well for the proposed (vs. as-of-right) massing.

URBAN DESIGN COMPONENT

The Proponent needs to make the full size submission to BRA Urban Design staff as required [#8: Drawings at an appropriate scale (e.g., 1" = 8', 1"-16', or 1"-20')...]. Also, a basswood model of the finalized massing should still be supplied for insertion in the BRA's 1":40'0" scale model of the downtown area.

Project design has progressed well in the preliminary stage and was approved by the BCDC in their meeting of March 3, 1998. Staff still have some concern about the parking entry directly on the Beverly Street side, although the difficulty of shifting this access to the more appropriate location on Lovejoy Place is recognized. We encourage both continuing in the direction has headed in this process and retaining the thoughtful level of detail and quality that has made the Project so convincing to its reviewers.

INFRASTRUCTURE SYSTEMS COMPONENT

This section of the DPIR seems adequate. References to utilities' contacts should be more clearly cited. It is also unclear (although presumably not a real issue) whether BWSC actively told the proponent not to loop the water systems, or not to assess capacities, or, simply did not request these. It should be noted that these were requested in the Scope anyway, absent the specific guarantee of BWSC of such capacity.

cc: Homer Russell
Dick Mertens



BOSTON
TRANSPORTATION
DEPARTMENT

ONE CITY HALL PLAZA/ROOM 721
BOSTON, MASSACHUSETTS 02201
(617) 635-4680/FAX (617) 635-4295

May 14, 1998

Edward O'Donnell

Deputy Director for Commercial Real Estate
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201-1007

Re: 226 Causeway Street Redevelopment-Draft Project Impact Report (DPIR)

Dear Mr. O'Donnell:

Thank you for the opportunity to comment on the above referenced project. It is proposed to reconstruct the former Stop & Shop Bakery/warehouse structure site to a 240-unit residential complex with 13,000 square feet of retail space and a total of 135 spaces in the underground garage and on the parcel's surface adjacent to Lovejoy Place.

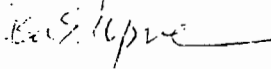
As a result of the minimal parking supply- 0.56 spaces per unit and the trip generating characteristics of a downtown residential complex, peak hour traffic on the adjacent streets is not expected to be significantly impacted as a result of the project proposal. However, the 0.56 parking ratio raises concern given the market price intention of the residential units. The units are proposed to be sold at market and above prices, which is indicative of a greater vehicle ownership, therefore a larger supply of parking will be required. Unless the project proponent can present documented information ensuring the 0.56 ratio will accommodate owner demand, it is BTD's conclusion the proposed parking supply is inadequate and needs to be addressed. It is stated in the DPIR an additional 50 spaces are being pursued at nearby commercial garages to raise the ratio to 0.75 spaces per unit for a total of 185 spaces. With the proposal of 13,000 square feet of retail and a deficit of 55 spaces to reach a 1.0 space/unit ratio, it is likely, a lack of parking will become an issue for residents, retailers, and the neighboring parking supply. The project proponent shall reanalyze the parking supply and demands and provide data supporting available space in alternate garages.

Two driveway access schemes are presented for 2004 and post 2004 street conditions. The indefinite configuration of the adjacent street system as a result of Central Artery (CA/T) work is unresolved at this time, hence, the proponent's consultants reviewed two access alternatives at BTB's request. The 2004 access scheme presents a full access driveway off Causeway Street at the existing curb cut to the site and Lovejoy Place. It is preferred all access occur from Beverly Street, yet the status of Beverly Street in 2004 is contingent on the CA/T construction schedule-as to whether it will be accessible or not. A one-way circulation scheme should be looked at using the driveway as well. In the post 2004 scheme it is proposed for in only access at the existing driveway and out via Beverly Street. The proximity of Beverly and the driveway present a conflict problem between the left turn in at the drive and left out of Beverly Street. The driveway and access require further engineering. The BTB will work closely with the project proponent to ensure safe and adequate access to the site.

Loading and Service access is not addressed in the DPIR and is required to be presented. All access and loading should be accommodated off public right of way on private property within the building or on Lovejoy Place with a mutual understanding of abutters. Adequate lane widths and turning radii shall be engineered and presented to BTB with a full site plan detailing driveway access, pedestrian walkways, existing and proposed street policy and street curb edges surrounding the site and to the opposite side of the adjacent road. BTB will review this plan with the project proponent prior to any Public Improvement Commission, Department of Public Works and/or ZBA presentations.

The above comments should be addressed either in supplemental form or with your agency's further requirement of a final impact report.

Sincerely,



Lisa E. Lepore
Deputy Director Policy and Planning

cc: Councilor Scapicchio
F.G. Ham-VAI Ass.
R. Mulligan-BRA

bcc; Director Jayasinghe
V. Gupta
Reading file

Appendix 8 Supplemental Information to the DPIR, July 2, 1998.

FILE COPY

Daylor
Consulting
Group
Inc.

**226 CAUSEWAY STREET
REDEVELOPMENT
BOSTON, MA**

**SUPPLEMENTAL
INFORMATION TO THE
DRAFT PROJECT
IMPACT REPORT**

July 2, 1998

Submitted to:

**Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201**

Submitted by:

**Boston Kenmore Realty Corporation
75 St. Alphonsus Street, Suite D
Boston, MA 02120**

Prepared by:

**Daylor Consulting Group, Inc.
Ten Forbes Road
Braintree, MA 02184**

In Association With:

**Fingold Alexander + Associates, Inc.
Tech Environmental, Inc.
Vanasse & Associates, Inc.**

Daylor
Consulting
Group
Inc.

July 2, 1998

Mr. Edward C. O'Donnell
Deputy Director for Commercial Development
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201-1007

Re: 226 Causeway Street Redevelopment, Boston, Massachusetts

Dear Mr. O'Donnell:

The supplemental information provided below is offered in response to your letter dated May 15, 1998 regarding the Draft Project Impact Report (DPIR) for the above mentioned project. We offer the following clarifications and additional information to satisfy the scoping requirements of Article 80. Your comments and our responses are organized according the topic raised in your letter (See attached Appendix).

Construction Impacts

Comment: The commitment of the project proponent to take an active role with regard to the processing and recycling of the demolition and construction waste is appreciated. The recycling should include any asphalt excavated from the site, which can be sent to a batching plant if not reused on the site. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: The project will include recycling of asphalt from the site. It is anticipated that approximately 2,000 square feet of asphalt will be recycled.

Comment: The proponent is encouraged to consider providing subsidized T-passes to construction workers to promote transit access to the site (which is adjacent to two MBTA stations) rather than the use of private vehicles. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: The trade contracting plans along with the site logistics plans will not allow parking by the subcontractors on local side streets. All the trade contractors employed will be encouraged to carpool and use public transportation. There are a number of trade contractors that are provided subsidies. for example, pipe fitters (\$5/day), plumbers (\$4/day), sprinkler fitters (\$7/day), along with company programs.

Comment: Coordination with Central Artery/Tunnel and MBTA Green Line construction projects will be essential, as well as with any major daytime event scheduled at the Fleet Center, particularly with respect to construction traffic. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: The project proponent is working closely with the Central Artery team regarding site logistics and traffic patterns. In addition, the project proponent also been working closely with Dick Loring of Boston Transportation Department to ensure minimizing traffic during events at the Fleet Center.

Noise Analysis

Comment: The existing noise environment (L_{dn}) is rather high, exceeding the HUD acceptability threshold without the consideration of special circumstances. Levels will be reduced slightly, but still remain on the high side, with completion of the CA/T project. Therefore, appropriate sound attenuation measures will be required to mitigate ambient noise impacts to meet the HUD guidelines for residential development. The Final EIR should describe the attenuation measures to be applied and the resultant reduction in noise levels. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: Future noise levels in the vicinity of the 226 Causeway Street building were estimated from noise measurements taken by the CA/T Project. The team's noise consultant, Tech Environmental Inc., reviewed these data more closely and have determined that the data were contaminated by construction noise. To make the data representative of the background noise levels which will be experienced by the future occupants of the residences at 226 Causeway Street, the following adjustments have been made to the data; the adjusted noise measurements are presented in a revised Table B-1 (attached) and are summarized as follows:

- 1) The hourly noise measurements from 1800 to 2300 on August 31 appear to be contaminated with construction noise. The data for these five hours was replaced with data for the same hours from the previous day. The revised L_{dn} presented in Table B-1 represents 1800 August 30, to 1800 August 31, 1997.
- 2) The monitoring equipment were improperly sited on the side of the Hoffman Building. The reflection of the noise off of the


building caused the instrument to double-count traffic noise from the street. Therefore, three decibels were subtracted from each of the hourly measurements presented in the revised Table B-1 to correct for this problem (halving a noise results in a 3 decibel decrease, just as doubling a noise results in a 3 decibel increase).

- 3) The lowest residential units in the building, where occupants will experience the most noise, will be located on the second floor of the building (approximately 20 feet above the ground). The noise measurements were taken at an elevation of 13 feet above the ground. The background noise levels which future residences on the 2nd floor will be exposed to (Table B-1) were adjusted by the noise reduction which will occur as the noise travels over the additional vertical distance of 7 feet, a reduction of 3.7 decibels. Residences on higher floors will experience even lower background noise levels.

Taking all of these adjustments into account, the revised Table B-1 indicates that the L_{dn} for residences on the 2nd floor of the building will be 66 dBA. Review of the FSEIR for the CA/T Project indicates that in the vicinity of 226 Causeway Street, the CA/T Project will result in noise levels which will be 4 dB less than if the project was not built.¹ Taking into account the 4 dBA noise reduction associated with depressing the Central Artery, the future L_{dn} for the project area will be approximately 62 dBA. This noise level is below than the HUD acceptability threshold of 65 dBA. Therefore, special noise attenuation measures are not necessary for this project.

Comment: Review of the sound level impacts from the rooftop mechanical equipment (Tables B-2 and B-3 of Appendix G) indicate that there will be violations of certain of the octave band center frequencies established in the City of Boston noise regulations, and therefore the project will not be in compliance with the City's regulations. At the closest property line, the 1000 Hz frequency is exceeded and at the closest residence, the 500 Hz to and including 8000 Hz frequencies are exceeded. Therefore, sound barriers or other attenuation measures will be required. The proposed mitigation measures and the anticipated noise reduction should be discussed. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

¹Mass. Dept. Of Public Works, "Central Artery (I-93)/Tunnel (I-90) Project - Final Supplemental Environmental Impact Report, Part I, Book 2 of 3, Chapters 4-12, Table 5.2, November 1990.



Response: The noise analysis presented in the DPIR (summarized in Tables B-2 and B-3) was extremely conservative and did not model the noise mitigation provided by the roof-line of the proposed building. The roof-line of 226 Causeway Street will act as a noise barrier in all directions for the mechanical equipment, including the location of the closest property line and the closest residence. The noise analysis in the DPIR did not take into account the noise reduction caused by the diffraction of the sound as it travels the longer distance around the roof-line than if it could travel on a direct line. Tables B-2 through B-10 (attached) have been revised to include the noise reduction caused by the diffraction of the mechanical equipment noise by the building's roof-line. The noise reduction achieved by the shielding caused by the roof-line depends on the increase in the path the sound has to travel because of the roof-line and the frequency of the sound.²

The revised results in Tables B-2 and B-3 indicate that the project will not violate any of the octave band frequency noise requirements for a Residential-Industrial area, at either the closest property line or the closest residence. All predicted noise levels now show full compliance with all applicable City of Boston and Massachusetts DEP noise regulations.

Water Quality Analysis

Comment: The project proponent is reminded that all indoor drains from the parking garage will require the installation of oil separators in compliance with Boston Water and Sewer Commission regulations. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: The project proponent will comply with the Boston Water and Sewer regulations regarding the provision of oil separators on all drains from the parking garage to the municipal system.

²Edison Electric Institute, "Electric Power Plant Environmental Noise Guide", Volume 1, 2nd Edition, pp. 5-18 to 5-23.

Comment: The size (capacity) of the sedimentation tank should be provided. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: The separation tank to be provided for the drainage from outdoor parking areas will be one thousand (1,000) gallons in size according to the DEP guidelines for stormwater management. The design criteria for separation tanks require 400 cubic feet of storage per acre of parking. The outdoor parking area is approximately 13,200 square feet, requiring 921 gallons of storage to meet the design criteria.

Solid and Hazardous Wastes

Comment: The DPIR reports that the project will be designed to accommodate an aggressive recycling program, including the provision of a recycling room in the public spaces in and around the building. According to the (rather small) floor plans, a recycling room is identified on some of the floors of the project but do not appear on all of the floor plans. A recycling room should be provided on each residential floor of the project to encourage residents to recycle. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: Each floor of the building has a room for trash disposal, with a trash chute connecting to a compactor. The intent is to have recycling on every floor of the building. The building management plan will develop the frequency of collection and type of items to be recycled.

Wind Analysis

Comment: The qualitative wind analysis, which was based solely on empirical examination of the site, concluded that the proposed addition to the existing building would not result in any increases in wind speeds around the project that would exceed the BRA guideline wind speed or cause dangerous conditions. This situation results primarily because of the set back of the upper story addition. (The sheltering effect of adjacent buildings for some wind directions also mitigates the potential for increased wind speeds from the rooftop addition.) The proposed project was found to have little or no effect on winds at the MDC park (tennis courts) at the corner of North Washington Street/Commercial Street or at the future Portal Park. Although winds were projected to increase (generally from comfortable for short periods of sitting or standing to comfortable (only) for walking) in Portal Park and along Beverly Street from Causeway Street to the Charles River, this increase resulted from the replacement of the existing elevated expressway with a depressed Central

Artery and resulting open space and not because of the 226 Causeway Street project.

The analysis does indicate that the doorways along North Washington Street and Causeway Street will be quite windy for east winds. However, east winds are not a frequent occurrence in Boston, although they are generally storm winds. Moreover, these locations are windy today because of the effects of the existing building; the addition is expected to only minimally increase the wind speeds at the entrances. Canopies might be considered as a potential mitigation measure. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: There is a canopy that is provided along the entire length of the western facade. Canopies continue along the storefronts proposed along Causeway Street until reaching the central entrance of the building on the Causeway Street side.

Shadow Analysis

Comment: *Although the shadow analysis concluded, based on the specific times evaluated, that the project would have minimal effect on pedestrian areas and that the primary shadow impact would be on the roof of the adjacent Hoffman Building (as well as North Washington Street and, somewhat less, Lovejoy Place), by interpolation the following additional impacts can be determined:*


Spring: The MDC tennis courts also would be partially shaded in the early afternoon.

Summer: Portal Park would be shaded by the addition in the early morning (before 9:00 AM).

Winter: The addition would begin to shade the tennis courts in the very early (immediately after noon) afternoon, but little if any use of these courts would be expected in the winter.

(Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: While new shading will be added to the MDC tennis court area in early afternoons in the spring, this new shading will be limited to the areas in front of the courts along Commercial Street and do not appear to advance to the courts themselves.



Portal Park new shading in summer mornings appears to stop short of the park at 9:00 AM; by noon the shading is moved to the rear of 226 Causeway Street and far away from Portal Park.

It is true that winter afternoon shadows would partially cover the tennis courts after noon during a period where the courts would not likely to be in use.

Infrastructure Systems


Comment: No analysis was provided regarding the adequacy and capacity of the water and sewer systems serving the project site, even though this was requested in the scoping determination. The statement that "a capacity study has not been requested at this time" is not sufficient. The requested analysis should be provided. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: The following utility connections have been provided in the DPIR at the request of the Boston Water and Sewer Commission (see attached 6/2/98 Memo from Judith Nitsch Engineering, Inc. w/attachments).

1. Sanitary Sewer: Connection to new 10-inch ductile iron sewer main constructed by the Central Artery, Contract C14B1.
2. Storm Drain: Connection to the new 36-inch storm drain constructed by the Central Artery, Contract C14B1.
3. Domestic Water: Connection to the existing 8-inch water main in Lovejoy Place.
4. Fire Service: The existing fire service will be maintained.

A single copy of the record set of the Site Utility and Grading Plan is attached (more copies are available on request).

The evidence supplied above and in the attachments suggest that the BWSC has fully accepted the above approach to utilities subject to final approval by the Central Artery. According to the meeting minutes of April 24, 1998 between Peter Wong of the Boston Water and Sewer Commission, and John M. Schmid of Judith Nitsch Engineering, Inc., Mr. Wong stated that the Project Owner must obtain permission from the Central Artery to connect the proposed storm drain and sanitary sewer to the new storm drain and sanitary sewer constructed as part of the Central



Artery Project because the Boston Water and Sewer Commission has not accepted these utilities to date.

Transportation

Comment: Approximately 135 parking spaces will be provided on-site, the 50-space deficit to be made up through arrangements with nearby garages (it is noted that the Government Center Garage is rather distant from the project site and therefore may not be a feasible option). A commitment from the project proponent should be obtained to reserve off-site spaces. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: The project proponent has given serious consideration to the parking supply issue and considered alternatives to meet the parking demand. As presented in the DPIR, valet parking would allow parking for up to 185 vehicles. Further recent negotiations with nearby commercial garages will allow for a total parking supply of up to 335 spaces. The project proponent has a signed letter with the Government Center Garage confirming that the parking garage operator will offer tenants up to 200 parking spaces on a monthly basis. The project proponent also indicates that it may be possible to increase this number. In addition, the project proponent has made a commitment not to use the Commercial Street garage, and will insert confirmatory proper language in tenant leases at 226 Causeway Street that use of this garage would be grounds for tenant eviction. The project proponent agrees that 226 Causeway Street tenants should not, and will not, be eligible for city issued North End on-street parking stickers.

The project proponent has also secured a signed letter from Enterprise-Rent-A-Car to offer tenants the service of calling Enterprise and having a car delivered to them at 226 Causeway Street. The tenant would be able to sign for the vehicle at his residence and conveniently leave from an on-site location for a proposed destination. This service will help convince tenants of an alternative to having their own vehicles vs renting one.

Comment: The trip generation summary (Table 7-2) for residential does not appear to be consistent with the mode-split data on page 7-7 (residential vehicle trips in Table 7-2 are the least of the three modes, whereas the auto percentage in the mode split is the highest). This needs to be explained. (Source: Richard Mertens, April 1, 1998 BRA Memorandum)

Response: When converting the person-trips to vehicle-trips, an auto occupancy rate of 1.1 persons per auto was utilized. This explains the lower vehicle trip


number in comparison to pedestrian and transit trips. This information may not have been clearly identified in the DPIR

Comment: As a result of the minimal parking supply - 0.56 spaces per unit and the trip generating characteristics of a downtown residential complex, peak hour traffic on the adjacent streets is not expected to be significantly impacted as a result of the project proposal. However, the 0.56 parking ratio raises concern given the market price intention of the residential units. The units are proposed to be sold at market and above prices, which is indicative of a greater vehicle ownership, therefore a larger supply of parking will be required. Unless the project proponent can present documented information ensuring the 0.56 ratio will accommodate owner demand, it is BTM's conclusion that the proposed parking supply is inadequate and needs to be addressed. It is stated in the DPIR an additional 50 spaces are being pursued at nearby commercial garages to raise the ratio to 0.75 spaces per unit for a total of 185 spaces. With the proposal of 13,000 square feet of retail and a deficit of 55 spaces to reach a 1.0 space/unit ratio, it is likely, a lack of parking will become an issue for residents, retailers, and the neighboring parking supply. The project proponent shall reanalyze the parking supply and demands and provide data supporting available space in alternate garages. (Source: Lisa Lepore, Boston Transportation Department, May 14, 1998 Letter)

Response: See Response to Transportation Comment on previous page.

Comment: Two driveway access schemes are presented for 2004 and post 2004 street conditions. The indefinite configuration of the adjacent street system as a result of Central Artery (CA/T) work is unresolved at this time, hence, the proponent's consultants reviewed two access alternatives at BTM's request. The 2004 access scheme presents a full access driveway off Causeway Street at the existing curb cut to the site and Lovejoy Place. It is preferred all access occur from Beverly Street, yet the status of Beverly Street in 2004 is contingent on the CA/T construction schedule-as to whether it will be accessible or not. A one-way circulation scheme should be looked at using the driveway as well.

In the post 2004 scheme it is proposed for in only access at the existing driveway and out via Beverly Street. The proximity of Beverly and the driveway present a conflict problem between the left-turn in at the drive and left out of Beverly Street. The driveway and access require further engineering. The BTM will work closely with the project proponent to ensure safe and adequate access to the site. (Source: Lisa Lepore, Boston Transportation Department, May 14, 1998 Letter)

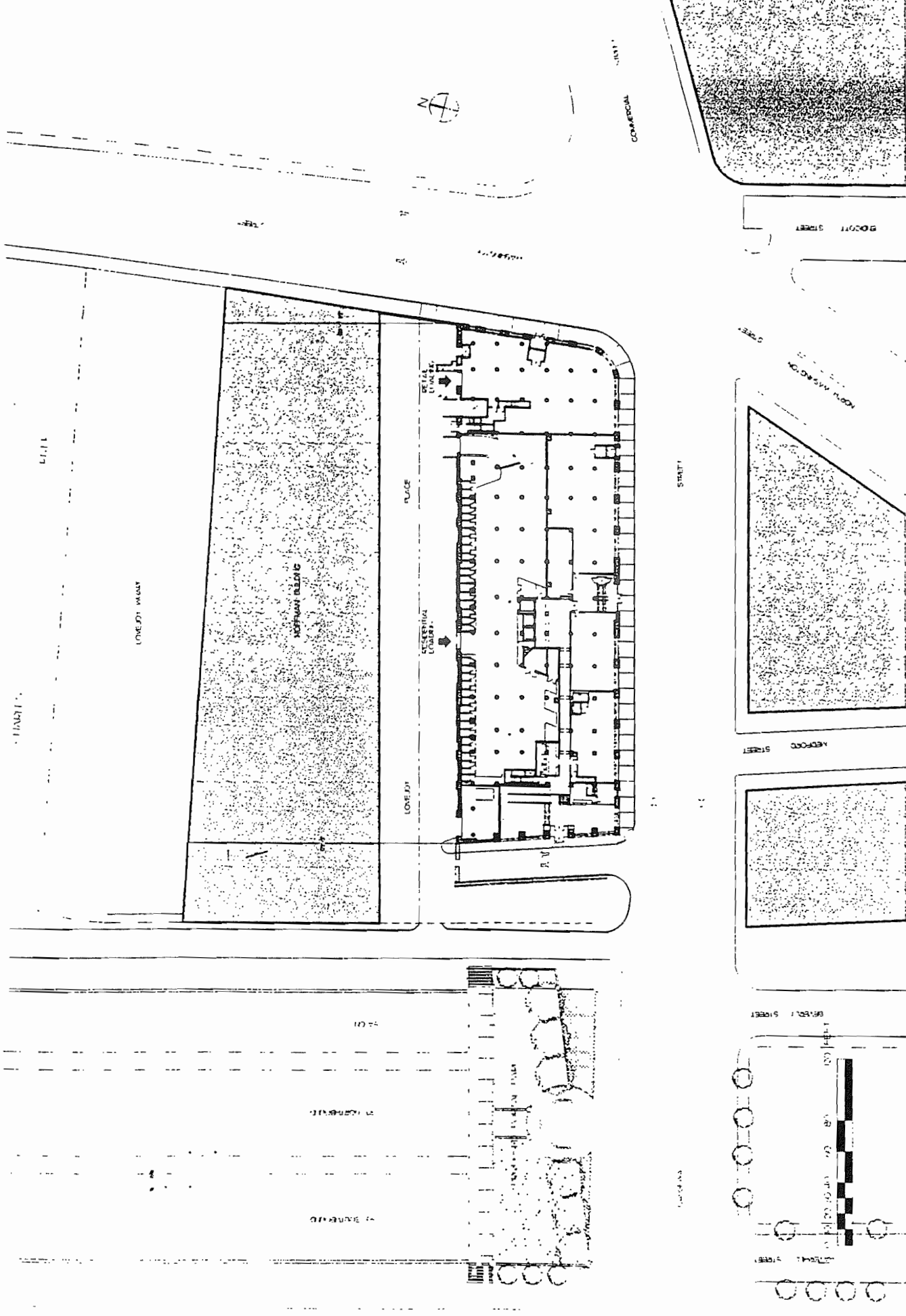


Response: The project proponent's traffic engineer, Vanasse & Associates, will work closely with BTM on ensuring that an engineering and access solution works not only in the short-term (until 2004), but after completion of the CA/T post 2004. Final street/access layout in the long-term awaits further resolution from the CA/T on the layout/alignment of Beverly Street replacement. In the interim, access to/egress from Causeway Street may be required subject to further comment and refinement by BTM and CA/T.


Comment: *Loading and service access is not addressed in the DPIR and is required to be presented. All access and loading should be accommodated off public right of way on private property within the building or on Lovejoy Place with a mutual understanding of abutters. Adequate lane widths and turning radii shall be engineered and presented to BTM with a full site plan detailing driveway access, pedestrian walkways, existing and proposed street policy and street curb edges surrounding the site and to the opposite side of the adjacent road. BTM will review this plan with the project proponent prior to any Public Improvement Commission, Department of Public Works and/or ZBA presentations. (Source: Lisa Lepore, Boston Transportation Department, May 14, 1998 Letter)*

Response: Loading and service access for a primarily residential building is more limited than for purely commercial (office/retail) uses. The Site Plan as presented as Figure 3-1 in the DPIR has been revised to highlight the loading areas and is attached on the following page. The Site Plan proposes loading from Lovejoy Place. Loading for the residential uses will be via a loading dock at about the halfway point on Lovejoy Place to a freight elevator. The major first floor retail user will be serviced from a loading dock on Lovejoy Place at the building end closest to the North Washington Street Bridge. This loading area for retail uses should not interfere with abutters or users of Lovejoy Place, and will be used for a large portion of the 13,000 square feet of subdividable retail space proposed in the DPIR.

At the time of approvals from the City's Public Improvements Commission (PIC) for curb-cut modification at the Causeway Street site drive, a more detailed site plan will be presented to BTM and PWD for consideration/approval.



PROPOSED SITE PLAN
FIGURE 3-1



Urban Design

Comment: The proponent needs to make the full size submission to BRA Urban Design staff as required [#8: Drawings at an appropriate scale (e.g., 1" = 8', 1"-16', or 1"-20')...]. Also, a basswood model of the finalized massing should still be supplied for insertion in the BRA's 1":40'0" scale model of the downtown area. (Source: David Carlson, May 15, 1998 BRA Memorandum)

Response: The architect will make the full size drawing submission to the BRA Urban Design staff during the course of the normal approval process. The basswood model of the finalized massing will also be provided upon completion to the BRA.

Comment: Project design has progressed well in the preliminary stage and was approved by the BCDC in their meeting of March 3, 1998. Staff still have some concern about the parking entry directly on the Beverly Street side, although the difficulty of shifting this access to the more appropriate location on Lovejoy Place is recognized. We encourage both continuing in the direction has headed in this process and retaining the thoughtful level of detail and quality that has made the project so convincing to its reviewers. (Source: David Carlson, May 15, 1998 BRA Memorandum)

Response: The project proponent has redesigned the project so that all access to the parking entry is from Lovejoy Place. The access to the parking entry from Beverly Street has been eliminated partly in response to concerns raised by project reviewers.

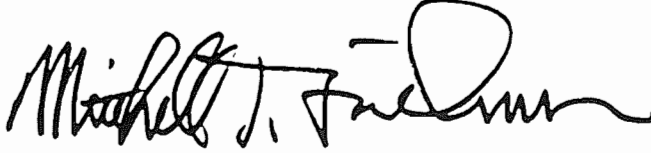
Infrastructure Systems

Comment: This section of the DPIR seems adequate. References to utilities' contacts should be more clearly cited. It is also unclear (although presumably not a real issue) whether BWSC actively told the proponent not to loop the water systems, or not to assess capacities, or, simply did not request these. It should be noted that these were requested in the Scope anyway, absent the specific guarantee of BWSC of such capacity. (Source: David Carlson, May 15, 1998 BRA Memorandum)

Response: See prior comment on page 7 regarding utility hookups and commitments made by the Central Artery engineers to separate out the wastewater and stormwater systems which should help address capacity concerns.

Please let us know if you require additional information in response to your comments on the DPIR.

Sincerely,
Daylor Consulting Group Inc.

A handwritten signature in black ink, appearing to read "Mitchell L. Fischman". The signature is fluid and cursive, with a large loop at the end.

Mitchell L. Fischman, AICP
Director of Planning

enclosures

cc: E. Shamsi, BKRC

TABLE B-1**Calculation of Day-Night Noise Level (L_{dn}) From Central Artery/Tunnel Noise Data -
Area Near 226 Causeway Street (dBA)**

Hour	August 30 & 31, 1997 131 Beverly Street
0000 - 0100	69.8
0100 - 0200	67.8
0200 - 0300	68.8
0300 - 0400	67.3
0400 - 0500	63.8
0500 - 0600	65.3
0600 - 0700	68.8
0700 - 0800	60.3
0800 - 0900	61.3
0900 - 1000	62.3
1000 - 1100	61.8
1100 - 1200	61.8
1200 - 1300	62.3
1300 - 1400	66.3
1400 - 1500	61.3
1500 - 1600	61.8
1600 - 1700	61.8
1700 - 1800	61.3
1800 - 1900	61.3
1900 - 2000	60.8
2000 - 2100	62.3
2100 - 2200	59.8
2200 - 2300	70.8
2300 - 0000	71.3
L_{dn} (dBA):	66

Source: Central Artery/Tunnel for site N-270 (131 Beverly Street).

Note: Measurements between 10 pm and 7 am include addition of 10 dB.

TABLE B-2

**ESTIMATE OF TOTAL SOUND LEVEL IMPACTS
AT THE CLOSEST PROPERTY LINE**

(SEE TABLES B-4 TO B-10 FOR DETAILS ON EACH SOUND SOURCE)

Modeled Receptor -- Closest Property Line (Lovejoy Place @ Ground-Level)											
Sound Source	Octave Band Center Frequency (Hz)									Calculated	Calculated
	31	63	125	250	500	1000	2000	4000	8000	Linear	dB(A)
Two 240-Ton Chillers	49	47	37	36	32	28	26	21	18	51	35
Garage Vent	40	38	35	27	19	13	10	4	-7	43	24
20-Ton RTU (west)	45	43	37	31	25	21	17	14	10	47	29
20-Ton RTU (middle)	45	43	37	31	25	21	17	14	10	47	29
20-Ton RTU (east)	45	43	37	31	25	21	17	14	10	47	29
Makeup Air Vent	45	43	37	31	25	21	17	14	10	47	29
50-Ton Cooling Tower	23	21	13	7	6	5	4	2	-6	25	11
Total Sound Pressure Level (L _p), (dB)	53	51	44	39	35	31	28	24	20	56	38
Boston Residential-Industrial Limits (dB)	72	71	65	57	51	45	39	34	32		55

TABLE B-3

**ESTIMATE OF TOTAL SOUND LEVEL IMPACTS
AT THE CLOSEST RESIDENCE**

(SEE TABLES B-4 TO B-10 FOR DETAILS ON EACH SOUND SOURCE)

Modeled Receptor - Closest Residence: 223 Endicott Street											
Sound Source	Octave Band Center Frequency (Hz)									Calculated	Calculated
	31	63	125	250	500	1000	2000	4000	8000	Linear	dB(A)
Two 240-Ton Chillers	48	46	37	35	33	26	22	17	12	51	34
Garage Vent	34	33	29	21	13	7	4	-3	-19	37	18
20-Ton RTU (west)	39	38	31	25	19	15	11	7	-2	42	23
20-Ton RTU (middle)	44	42	37	30	26	19	13	10	4	47	28
20-Ton RTU (east)	47	45	40	33	28	21	16	13	8	49	30
Makeup Air Vent	43	41	36	28	24	17	11	8	0	45	26
50-Ton Cooling Tower	24	22	15	8	9	4	2	0	-9	26	11
Total Sound Pressure Level (L_p), (dB)	52	50	44	39	35	28	24	20	14	55	37
Boston Residential-Industrial Limits (dB)	72	71	65	57	51	45	39	34	32		55

TABLE B-4

ESTIMATE OF NOISE FROM CHILLERS
AT CLOSEST PROPERTY LINE AND RESIDENTIAL RECEPTORS

Two 240-Ton Chillers												
	Octave Band Center Frequency (Hz)										Calculated	Calculated
	31	63	125	250	500	1000	2000	4000	8000	Linear	dB(A)	
Sound power level (L _w), dB	104	104	97	98	98	96	94	90	91	109	101	
Stack directivity (120°) ¹	0	0	0	0	0	0	0	0	0			
Net L _w , dB	104	104	97	98	98	96	94	90	91	109	101	

Modeled Receptor -- Closest Property Line (Lovejoy Place @ Ground-Level)												
Distance in feet =	217 feet										Calculated	Calculated
Distance in meters =	66 meters										Linear	dB(A)
	31	63	125	250	500	1000	2000	4000	8000	Linear	dB(A)	
Drop-off with distance (dB)	-44	-44	-44	-44	-44	-44	-44	-44	-44			
Loss from Air Absorption ² (dB)	0	0	0	0	0	0	-1	-2	-6			
Shielding by Roof (d=8')	-11	-13	-16	-18	-21	-23	-23	-23	-23			
Sound Pressure Level (L _p), (dB)	49	47	37	36	32	28	26	21	18	51	35	

Modeled Receptor - Closest Residence: 223 Endicott Street												
Distance in feet =	317 feet										Calculated	Calculated
Distance in meters =	97 meters										Linear	dB(A)
	31	63	125	250	500	1000	2000	4000	8000	Linear	dB(A)	
Drop-off with distance (dB)	-48	-48	-48	-48	-48	-48	-48	-48	-48			
Loss from Air Absorption ² (dB)	0	0	0	0	0	0	-1	-2	-8			
Shielding by Roof (d=3')	-8	-10	-12	-15	-17	-22	-23	-23	-23			
Sound Pressure Level (L _p), (dB)	48	46	37	35	33	26	22	17	12	51	34	

Footnotes: ¹ Directivity Effect from "Electric Power Plant Environmental Noise Guide" -EEI Table 4.19
² Air Absorption Sound Attenuation Rates from "Electric Power Plant Environmental Noise Guide" -EEI Table 5.1

Sound Attenuation Rates (dB per 100 m)									
31.5	63	125	250	500	1000	2000	4000	8000	
0.00	-0.01	-0.03	-0.10	-0.24	-0.44	-0.88	-2.51	-8.77	

TABLE B-5

ESTIMATE OF NOISE FROM THE GARAGE VENT
AT CLOSEST PROPERTY LINE AND RESIDENTIAL RECEPTORS

Garage Vent	Octave Band Center Frequency (Hz)									Calculate Linear	Calculated dB(A)
	31	63	125	250	500	1000	2000	4000	8000		
Sound power level (L _w), dB	95.0	95.0	95.0	89.0	85.0	81.0	78.0	73.0	66.0	100	88
Net L _w , dB	95	95	95	89	85	81	78	73	66	100	88

Modeled Receptor -- Closest Property Line (Ground-Level)												
Distance in feet =	217 feet										Calculate Linear	Calculated dB(A)
Distance in meters =	66 meters											
	31	63	125	250	500	1000	2000	4000	8000			
Drop-off with distance (dB)	-44	-44	-44	-44	-44	-44	-44	-44	-44			
Loss from Air Absorption ² (dB)	0	0	0	0	0	0	-1	-2	-6			
Shielding by Roof (d=8')	-11	-13	-16	-18	-21	-23	-23	-23	-23			
Sound Pressure Level (L _p), (dB)	40	38	35	27	19	13	10	4	-7	43	24	

Modeled Receptor - Closest Residence: 223 Endicott Street												
Distance in feet =	424 feet										Calculate Linear	Calculated dB(A)
Distance in meters =	129 meters											
	31	63	125	250	500	1000	2000	4000	8000			
Drop-off with distance (dB)	-50	-50	-50	-50	-50	-50	-50	-50	-50			
Loss from Air Absorption ² (dB)	0	0	0	0	0	-1	-1	-3	-11			
Shielding by Roof (d=6')	-11	-12	-16	-18	-21	-23	-23	-23	-23			
Sound Pressure Level (L _p), (dB)	34	33	29	21	13	7	4	-3	-19	37	18	

and Pressure Levels from Manufacturer's Data

Footnotes: ² Air Absorption Sound Attenuation Rates from "Electric Power Plant Environmental Noise Guide" -EEl Table 5.1

Sound Attenuation Rates (dB per 100 m)									
31.5	63	125	250	500	1000	2000	4000	8000	
0.00	-0.01	-0.03	-0.10	-0.24	-0.44	-0.88	-2.51	-8.77	

TABLE B-6

ESTIMATE OF NOISE FROM WEST ROOFTOP UNIT (RTU)
AT CLOSEST PROPERTY LINE AND RESIDENTIAL RECEPTORS

20-Ton RTU (west)											
	Octave Band Center Frequency (Hz)									Calculated Linear	Calculated dB(A)
	31	63	125	250	500	1000	2000	4000	8000		
Sound power level (L_w), dB	100.0	100.0	97.0	93.0	91.0	89.0	85.0	83.0	83.0	105	94
Trans. Loss Through Walls ² (dB)	0	0	0	0	0	0	0	0	0		
Net L_w , dB	100	100	97	93	91	89	85	83	83	105	94

Modeled Receptor -- Closest Property Line (Lovejoy Place @ Ground-Level)											
Distance in feet =		217 feet									
Distance in meters =		66 meters									
	Octave Band Center Frequency (Hz)									Calculated Linear	Calculated dB(A)
	31	63	125	250	500	1000	2000	4000	8000		
Drop-off with distance (dB)	-44	-44	-44	-44	-44	-44	-44	-44	-44		
Loss from Air Absorption ¹ (dB)	0	0	0	0	0	0	-1	-2	-6		
Shielding by Roof (d=8')	-11	-13	-16	-18	-21	-23	-23	-23	-23		
Sound Pressure Level (L_p), (dB)	45	43	37	31	25	21	17	14	10	47	29

Modeled Receptor - Closest Residence: 223 Endicott Street											
Distance in feet =		424 feet									
Distance in meters =		129 meters									
	Octave Band Center Frequency (Hz)									Calculated Linear	Calculated dB(A)
	31	63	125	250	500	1000	2000	4000	8000		
Drop-off with distance (dB)	-50	-50	-50	-50	-50	-50	-50	-50	-50		
Loss from Air Absorption ¹ (dB)	0	0	0	0	0	-1	-1	-3	-11		
Shielding by Roof (d=6')	-11	-12	-16	-18	-21	-23	-23	-23	-23		
Sound Pressure Level (L_p), (dB)	39	38	31	25	19	15	11	7	-2	42	23

Footnotes: ¹ Air Absorption Sound Attenuation Rates from "Electric Power Plant Environmental Noise Guide" -EEL Table 5.1

Sound Attenuation Rates (dB per 100 m)								
31.5	63	125	250	500	1000	2000	4000	8000
0.00	-0.01	-0.03	-0.10	-0.24	-0.44	-0.88	-2.51	-8.77

² Transmission loss for a steel supported stud wall with rigid foam fill and a stucco exterior (wall of density 5 lb/sq ft) from Table B.3 of the "Electric Power Plant Guide - Volume 1." Edison Electric Institute, 1984

TABLE B-7

ESTIMATE OF NOISE FROM MIDDLE ROOFTOP UNIT (RTU)
AT CLOSEST PROPERTY LINE AND RESIDENTIAL RECEPTORS

20-Ton RTU (middle)											
	Octave Band Center Frequency (Hz)									Calculated Linear	Calculated dB(A)
	31	63	125	250	500	1000	2000	4000	8000		
Sound power level (L_w), dB	100.0	100.0	97.0	93.0	91.0	89.0	85.0	83.0	83.0	105	94
Trans. Loss Through Walls ² (dB)	0	0	0	0	0	0	0	0	0		
Net L_w , dB	100	100	97	93	91	89	85	83	83	105	94

Modeled Receptor - Closest Residence: 223 Endicott Street											
Distance in feet =	217 feet										
Distance in meters =	66 meters										
										Calculated Linear	Calculated dB(A)
	31	63	125	250	500	1000	2000	4000	8000		
Drop-off with distance (dB)	-44	-44	-44	-44	-44	-44	-44	-44	-44		
Loss from Air Absorption ¹ (dB)	0	0	0	0	0	0	-1	-2	-6		
Shielding by Roof (d=8')	-11	-13	-16	-18	-21	-23	-23	-23	-23		
Sound Pressure Level (L_p), (dB)	45	43	37	31	25	21	17	14	10	47	29

Modeled Receptor - Closest Residence: 223 Endicott Street											
Distance in feet =	317 feet										
Distance in meters =	97 meters										
										Calculated Linear	Calculated dB(A)
	31	63	125	250	500	1000	2000	4000	8000		
Drop-off with distance (dB)	-48	-48	-48	-48	-48	-48	-48	-48	-48		
Loss from Air Absorption ¹ (dB)	0	0	0	0	0	0	-1	-2	-8		
Shielding by Roof (d=3')	-8	-10	-12	-15	-17	-22	-23	-23	-23		
Sound Pressure Level (L_p), (dB)	44	42	37	30	26	19	13	10	4	47	28

Footnotes: ¹ Air Absorption Sound Attenuation Rates from "Electric Power Plant Environmental Noise Guide" -EEI Table 5.1
Sound Attenuation Rates (dB per 100 m)

31.5	63	125	250	500	1000	2000	4000	8000
0.00	-0.01	-0.03	-0.10	-0.24	-0.44	-0.88	-2.51	-8.77

² Transmission loss for a steel supported stud wall with rigid foam fill and a stucco exterior (wall of density 5 lb/sq. ft).
from Table 6.3 of the "Electric Power Plant Guide - Volume I," Edison Electric Institute, 1984

TABLE B-8

ESTIMATE OF NOISE FROM EAST ROOFTOP UNIT (RTU)
AT CLOSEST PROPERTY LINE AND RESIDENTIAL RECEPTORS

20-Ton RTU (east)											
	Octave Band Center Frequency (Hz)									Calculated	Calculated
	31	63	125	250	500	1000	2000	4000	8000	Linear	dB(A)
Sound power level (L _w), dB	100.0	100.0	97.0	93.0	91.0	89.0	85.0	83.0	83.0	105	94
Trans. Loss Through Walls ² (dB)	0	0	0	0	0	0	0	0	0		
Net L _w , dB	100	100	97	93	91	89	85	83	83	105	94

Modeled Receptor -- Closest Property Line (Lovejoy Place @ Ground-Level)												
Distance in feet =	217 feet										Calculated	Calculated
Distance in meters =	66 meters										Linear	dB(A)
	31	63	125	250	500	1000	2000	4000	8000			
Drop-off with distance (dB)	-44	-44	-44	-44	-44	-44	-44	-44	-44			
Loss from Air Absorption ¹ (dB)	0	0	0	0	0	0	-1	-2	-6			
Shielding by Roof (d=8')	-11	-13	-16	-18	-21	-23	-23	-23	-23			
Sound Pressure Level (L _p), (dB)	45	43	37	31	25	21	17	14	10	47	29	

Modeled Receptor - Closest Residence: 223 Endicott Street												
Distance in feet =	242 feet										Calculated	Calculated
Distance in meters =	74 meters										Linear	dB(A)
	31	63	125	250	500	1000	2000	4000	8000			
Drop-off with distance (dB)	-45	-45	-45	-45	-45	-45	-45	-45	-45			
Loss from Air Absorption ¹ (dB)	0	0	0	0	0	0	-1	-2	-6			
Shielding by Roof (d=3')	-8	-10	-12	-15	-17	-22	-23	-23	-23			
Sound Pressure Level (L _p), (dB)	47	45	40	33	28	21	16	13	8	49	30	

Footnotes: ¹ Air Absorption Sound Attenuation Rates from "Electric Power Plant Environmental Noise Guide" - EEI Table 5.1
Sound Attenuation Rates (dB per 100 m)

31.5	63	125	250	500	1000	2000	4000	8000
0.00	-0.01	-0.03	-0.10	-0.24	-0.44	-0.88	-2.51	-8.77

² Transmission loss for a steel supported stud wall with rigid foam fill and a stucco exterior (wall of density 5 lb/sq ft), from Table 6.3 of the "Electric Power Plant Guide - Volume 1" Edison Electric Institute, 1984

TABLE B-9

ESTIMATE OF NOISE FROM MAKEUP AIR UNIT
AT CLOSEST PROPERTY LINE AND RESIDENTIAL RECEPTORS

Makeup Air Vent	Octave Band Center Frequency (Hz)									Calculate Linear	Calculated dB(A)
	31	63	125	250	500	1000	2000	4000	8000		
Sound pressure level @ 5 ft. (Lp), dB	100.0	100.0	97.0	93.0	91.0	89.0	85.0	83.0	83.0	105	94
Net Lw, dB	100	100	97	93	91	89	85	83	83	105	94

Modeled Receptor -- Closest Property Line (Lovejoy Place @ Ground-Level)												
Distance in feet =	217 feet										Calculate Linear	Calculated dB(A)
Distance in meters =	66 meters											
	31	63	125	250	500	1000	2000	4000	8000			
Drop-off with distance (dB)	-44	-44	-44	-44	-44	-44	-44	-44	-44			
Loss from Air Absorption ² (dB)	0	0	0	0	0	0	-1	-2	-6			
Shielding by Roof (d=8')	-11	-13	-16	-18	-21	-23	-23	-23	-23			
Sound Pressure Level (L _r), (dB)	45	43	37	31	25	21	17	14	10	47	29	

Modeled Receptor - Closest Residence: 223 Endicott Street												
Distance in feet =	389 feet										Calculate Linear	Calculated dB(A)
Distance in meters =	119 meters											
	31	63	125	250	500	1000	2000	4000	8000			
Drop-off with distance (dB)	-49	-49	-49	-49	-49	-49	-49	-49	-49			
Loss from Air Absorption ² (dB)	0	0	0	0	0	-1	-1	-3	-10			
Shielding by Roof (d=3')	-8	-10	-12	-15	-17	-22	-23	-23	-23			
Sound Pressure Level (L _r), (dB)	43	41	36	28	24	17	11	8	0	45	26	

and Pressure Levels from Manufacturer's Data

Footnote: ² Air Absorption Sound Attenuation Rates from "Electric Power Plant Environmental Noise Guide" - EEP Table 5.1

Sound Attenuation Rates, (dB per 100 m)									
31.5	63	125	250	500	1000	2000	4000	8000	
0.00	-0.01	-0.03	-0.10	-0.24	-0.44	-0.88	-2.51	-8.77	

TABLE B-10

ESTIMATE OF NOISE FROM COOLING TOWER
AT CLOSEST PROPERTY LINE AND RESIDENTIAL RECEPTORS

50-Ton Cooling Tower											
	Octave Band Center Frequency (Hz)									Calculate	Calculated
	31	63	125	250	500	1000	2000	4000	8000	Linear	dB(A)
Sound pressure level @ 5 ft. (L _p), dB	78.0	78.0	73.0	69.0	72.0	73.0	72.0	71.0	67.0	83	78
Net L _w , dB	78	78	73	69	72	73	72	71	67	83	78

Modeled Receptor -- Closest Property Line (Lovejoy Place @ Ground-Level)											
Distance in feet =	217 feet									Calculate	Calculated
Distance in meters =	66 meters									Linear	dB(A)
	31	63	125	250	500	1000	2000	4000	8000		
Drop-off with distance (dB)	-44	-44	-44	-44	-44	-44	-44	-44	-44		
Loss from Air Absorption ² (dB)	0	0	0	0	0	0	-1	-2	-6		
Shielding by Roof (d=8')	-11	-13	-16	-18	-21	-23	-23	-23	-23		
Sound Pressure Level (L _w), (dB)	23	21	13	7	6	5	4	2	-6	25	11

Modeled Receptor - Closest Residence: 223 Endicott Street											
Distance in feet =	267 feet									Calculate	Calculated
Distance in meters =	81 meters									Linear	dB(A)
	31	63	125	250	500	1000	2000	4000	8000		
Drop-off with distance (dB)	-46	-46	-46	-46	-46	-46	-46	-46	-46		
Loss from Air Absorption ² (dB)	0	0	0	0	0	0	-1	-2	-7		
Shielding by Roof (d=3')	-8	-10	-12	-15	-17	-22	-23	-23	-23		
Sound Pressure Level (L _w), (dB)	24	22	15	8	9	4	2	0	-9	26	11

and Pressure Levels from Manufacturer's Data

Footnotes: ² Air Absorption Sound Attenuation Rates from "Electric Power Plant Environmental Noise Guide" -EEl Table 5.1

Sound Attenuation Rates (dB per 100 m)								
31.5	63	125	250	500	1000	2000	4000	8000
0.00	-0.01	-0.03	-0.10	-0.24	-0.44	-0.88	-2.51	-8.77

MEMORANDUM

TO: Mitchell Fischman, AICP, Daylor Consulting
FROM: John M. Schmid, P.E. *JMS*
DATE: June 2, 1998
RE: 226 Causeway Street, Boston, MA

Please find the following documents:

1. Copy of February 27, 1998 BWSC Meeting Minutes
2. Copy of April 24, 1998 BWSC Meeting Minutes
3. Copy of Sheet C-1, Site Utility & Grading Plan 'Progress Print'

JNEI has proposed the following utility connections at the request of BWSC:

1. Sanitary Sewer - Connect to the new 10-inch ductile iron sewer main constructed by the Central Artery, Contract C14B1.
2. Storm Drain - Connect to the new 36-inch storm drain constructed by the Central Artery, Contract C14B1.
3. Domestic Water - Connect to the existing 8-inch water main in Lovejoy Place.

The existing fire services will be maintained.

Please call if you have any questions.

MEETING MINUTES

Date: April 24, 1998

Location: Boston Water & Sewer Commission

Project: 226 Causeway Street
JNEI Project #1839

Attendees

Peter Wong - Boston Water & Sewer Commission (BWSC)
John M. Schmid, P.E. - Judith Nitsch Engineering, Inc. (JNEI)

This meeting was held to review the 226 Causeway Street Site Plan Application. The following issues were discussed:

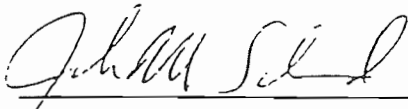
1. Mr. Wong requested that JNEI forward him copies of the Central Artery As-Built Plans for review. These plans are enclosed with this document.
2. Mr. Wong stated that the Project Owner must obtain permission from the Central Artery to connect the proposed storm drain and sanitary sewer to the new storm drain and sanitary sewer that was constructed as part of the Central Artery Project because the BWSC has not accepted these new utilities to date. The BWSC will not approve the Site Plan Application until this issue is resolved.
3. Mr. Wong stated that the Cross-Connection Permit and Oil/Water Separator design must be submitted for approval before the BWSC will approve the Site Plan Application.
4. A Department of Environmental Protection (DEP) Sewer Connection Permit is required for this project. The application cannot be submitted to the DEP until BWSC approval is obtained. Mr. Wong requested that a note be placed on the plan indicating that a DEP permit is required. Mr. Schmid stated that the plan will be revised accordingly.
5. Mr. Wong requested that the storm drain connection detail be revised to indicate a "Typical Field Connection Detail" for pipes greater than 24 inches in diameter. Mr. Schmid stated that the plan will be revised accordingly.
6. Mr. Wong requested that the existing 1-1/2-inch water meter be returned to the BWSC. Mr. Schmid stated that the plan will be revised to direct the contractor to return the meter.
7. Mr. Wong requested that the plan be revised to indicate an 8"x8"x6" tee for the six-inch domestic water connection instead of a tapping sleeve and valve. Mr. Schmid stated that the plan will be revised accordingly.

Meeting Minutes: JNEI Project #1839
1998
Page 2

Mr. Wong and Mr. Schmid reviewed the BWSC billing records for this site. The billing records indicate that the two of the three accounts have been abandoned. Mr. Schmid will revise the plan to indicate which accounts have been abandoned.

The BWSC billing records also indicate that the building is served by a 4-inch and 6-inch fire service. The survey indicates that the building is served by two 4-inch fire services. The Architect and/or MEP must confirm the size and location of the fire services to ensure the size and locations are accurately indicated on the plan.

If any of the attendees feel that these Minutes do not accurately reflect the discussions, please notify the writer within one week of receipt. JNEI will determine if edits will be made and, if so, the Minutes will be reissued.



Prepared by:

JMS/smj

cc: All Attendees
Bruce Stanki Finegold Alexander Architects
Mohammed Zade Zade Company

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MEETING MINUTES

Date: February 27, 1998

Location: Boston Water & Sewer Commission

Project: 226 Causeway Street
JNEI Project #1839

Attendees:

Cary McGuire - Boston Water & Sewer Commission (BWSC)
John M. Schmid, P.E. - Judith Nitsch Engineering, Inc. (JNEI)


The meeting was held to review the Central Artery (Contracts C14B1 and C15A2) utility improvements on Causeway Street and Beverly Street to determine the appropriate utility lines to connect the new water, sewer, and storm services.

1. Contract C14B1 installed a new 10-inch ductile iron sewer main on Beverly Street abutting the site to the west. Mr. McGuire stated that the new sewer connection shall connect to this main. This main was constructed in August 1995 by the Central Artery. The Central Artery still owns and maintains this main because they have not submitted As-Built Plan to BWSC for review and approval.
2. Contract C14B1 is installing a new 36-inch storm drain on Beverly Street abutting the site to the west. Mr. McGuire indicated that the storm connection shall connect to this main. This main is under construction and should be completed this spring. The Central Artery still owns and maintains this main because they have not submitted As-Built Plan to BWSC for review and approval.
3. Contract C14B1 installed a 12-inch HS water main on Beverly Street abutting the site to the west. The Central Artery still owns and maintains the 12-inch water main because they have not submitted As-Built Plan to BWSC for review and approval. Mr. Schmid stated that JNEI intends on utilizing the existing fire services to the building and does not intend on connecting to the new 12-inch HS water main.
4. Mr. McGuire suggested that the domestic water service be connected to the existing 8-inch water main in Lovejoy Place.
5. Mr. McGuire stated that the project owner must obtain permission from the Central Artery to connect to the new sanitary sewer and storm drain before the BWSC will grant Site Plan Approval.

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February 27, 1998
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6. Mr. Schmid informed Mr. McGuire that the Existing Conditions Plan that was provided to JNEI does not indicate the new Contract C14B1 utilities. Mr. Schmid also does not have copies of the C14B1 As-Built Drawings. Mr. McGuire provided Mr. Schmid with the name of a Central Artery contact who should be able to provide this information to JNEI. The contact is: John Cuzak, 951-6455.

If any of the attendees feel that these Minutes do not accurately reflect the discussions, please notify the writer within one week of receipt. JNEI will determine if edits will be made and, if so, the Minutes will be reissued.



Prepared by: John M. Schmid, P.E.

JMS/smj

cc: All Attendees

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Appendix 9 Memorandum to the BRA Board, July 23, 1998

MEMORANDUM

JULY 23, 1998

**TO: BOSTON REDEVELOPMENT AUTHORITY AND
THOMAS N. O'BRIEN, DIRECTOR**

**FROM: EDWARD C. O'DONNELL, DEPUTY DIRECTOR FOR
COMMERCIAL DEVELOPMENT
RICHARD MULLIGAN, SENIOR PROJECT MANAGER**

**SUBJECT: 226 CAUSEWAY STREET
NORTH STATION ECONOMIC DEVELOPMENT AREA**

SUMMARY: This memorandum requests that the Director be authorized (1) to issue a Preliminary Adequacy Determination waiving further review of the proposed mixed use residential redevelopment of 226 Causeway Street in the North Station Economic Development Area, pursuant to Article 80B, Section 5.4(c)(iv) of the Boston Zoning Code and to issue a Certificate of Compliance upon the successful completion of the Article 80 process; (2) into a Cooperation Agreement, a Boston Residence Construction Employment Plan and any and all other appropriate and necessary agreements in connection with the project which, in the Director's sole discretion are in the best interests of the Authority; (3) to issue a recommendation pursuant to Section 18, Chapter 91 of the Massachusetts General Laws (Tidelands) indicating that the proposed project serves a proper public interest and is not detrimental to the public's rights in tidelands.

On December 12, 1997 Boston Kenmore Realty Corporation ("BKRC") filed a Project Notification Form ("PNF") with the Boston Redevelopment Authority ("the BRA"), consistent with Article 80 of the Boston Zoning Code (the "Code"). Concurrently BKRC filed an Environmental Notification Form ("ENF"), consistent with the Massachusetts Environmental Policy Act ("MEPA"). As described in the PNF/ENF, BKRC's project includes 240 residential units of rental housing accommodations and approximately 13,000 square feet of subdividable retail space ("the Proposed Project"). The retail space is proposed to be located along the Causeway Street side of the property, thus adding to the ground level vitality. Further, the proposed retail space meets the standard of a "Facility of Public Accommodation" as defined by Chapter 91 of the Massachusetts General Laws. The Proposed Project will have a total parking of approximately 135 spaces. increasable to 175 spaces with valet parking, primarily in the basement and partial first floor levels.

The Proposed Project, located at the intersection of Causeway and North Washington Street, is a vacant warehouse structure of approximately 235,000 square feet ("sf"). Although the structure has been vacant for the better part of a decade, its most recent use was as a bakery for the Stop and Shop Companies. As part of BKRC's adaptive re-use proposal, 226 Causeway Street will be expanded through a six story addition of approximately 163,000 sf. A new lobby will be created

along the Causeway Street side of the building, offering concierge services to building residents. Of the proposed 240 market rate residential units to be created as part of the Proposed Project, there will be a mixture of one, two and three bedroom units. Parking will also be created within the existing building, with approximately 135 spaces located within the basement and first floor areas. The parking area will be accessed via both Beverly Street, a public way located to the side of 226 Causeway Street, and from Lovejoy Place, a private way located at the rear of the structure.

226 Causeway Street has the potential to become an important gateway to the fast developing North Station area, serving as a transition area between the low to medium density of the North End and Bulfinch Triangle areas and what is expected to be large scale development within those areas stipulated as the "New Boston Garden Development Area" and the "New Economy Development Area" by Article 39 of the Code. Over the past several years, major infrastructure improvements have become a part of daily life in the North Station Area. The Fleet Center was constructed atop a new connector tunnel for the Massachusetts Bay Transportation Authority's Green Line. With the demolition of the old Boston Garden now substantially completed, work is proceeding to complete the underground connection. Upon the completion of the tunnel connection, the elevated Green Line rail system which runs through the North Station area will be demolished. At the same time, work related to the Central Artery/Third Harbor Tunnel is very much in evidence. The next major hurdle to be undertaken will be the Charles River Crossing, which will occur almost immediately adjacent to the Proposed Project. The Charles River Crossing will also create "Portal Park", to be located immediately adjacent to the Proposed Project as part of the Charles River Basin Parks system. BKRC, as a community benefit gesture, has offered to maintain Portal Park for a minimum of ten years. BKRC's annual maintenance costs are estimated to be in the area of \$45,000.

In submitting its PNF, BKRC's proposed six story addition would have brought the building to a height of 155', the same height limitation allowed under Article 39 of the Code for those projects which opt for Major Project Review. In response to the Scoping Determination issued by the BRA and in preparing a Draft Project Impact Report ("DPIR"), it was determined that the subject property had inadvertently been omitted from the City of Boston's Municipal Harbor Plan (the "Harbor Plan"). The practical effect of that omission is to limit the height of the Proposed Project not to the 155' allowed by the Code, but rather the 125' limit otherwise imposed by Chapter 91.

The BRA, through authorization by the Board of Directors earlier this year, has prepared a Municipal Harbor Plan Amendment for North Station (the "Amendment") to be submitted to Commonwealth of Massachusetts' Executive Office of Environmental Affairs ("EOEA") for review, publication and approval. The Amendment proposes to include a limited geographic area of approximately 2.6 acres bounded by Causeway Street and the Harbor including two parcels; one located on the Harbor at 160 North Washington Street and 131 Beverly Street which is approximately 62,450 sf in size, and a second area which is approximately 49,400 sf. in size located between Causeway Street and Lovejoy Place, a private way jointly owned by 226 Causeway Street and 160 North Washington Street and 131 Beverly Street. The Amendment proposes no changes to the existing permitted uses except for a height substitution for 226 Causeway Street permitting construction to a height of 155' which comports with the existing

zoning for this site. The BRA and BKRC believe that the Amendment will be received favorably by EOEA and will, after appropriate legal review, become part of the Municipal Harbor Plan.

On March 9, 1998, the aforementioned DPIR was filed, providing transportation, environmental, transportation and infrastructure related information requested by the BRA and the City of Boston in its Scoping Determination. That data was augmented by the July 2, 1998 filing by BKRC of a document entitled, "Supplemental Information To The Draft Project Impact Report". With the filing of the DPIR and the related supplemental information, it is the staff's recommendation that sufficient information exists to justify a waiver of further review. The staff's recommendation is further supported by action on June 9, 1998 by Ms. Trudy Coxe, Secretary of EOEA. On that date, Secretary Coxe issued a final record of decision stating that the Environmental Notification Form (ENF) filed by the BKRC on December 12, 1997 requesting a waiver from the requirement to prepare an Environmental Impact Report (EIR) "meets the test established in Section 11.18 of the MEPA Regulations, and will serve to advance the interests of the Massachusetts Environmental Policy Act." Secretary Coxe thereupon granted the requested waiver.

The Proposed Project has been the subject of considerable discussion among the BRA, BKRC, the North Station and North End communities. At the BRA's request, BKRC has sought to establish a dialogue with those communities and their elected officials, State Senator Robert Travaglini, State Representative Sal DiMasi, Boston City Councilor Paul Scapicchio and Suffolk County Register of Probate, Richard Iannella, a former Boston City Councilor. In response to neighborhood concerns, BKRC has proposed several community benefit items, including a resodding of the North End Little League field, the donation of 100 street trees for the North End community and the creation of a trust fund for the neighborhood, with the aim of subsidizing low and moderate income tenants living in the area for a period of five years. The Proposed Project has also received a strong endorsement from the Downtown North Association.

As a result of recent discussions with Councilor Scapicchio, BKRC has taken steps to satisfy the concerns of the community and the Boston Transportation Department with respect to any impact the redevelopment may have on most especially the North End. To this end, BKRC has proposed various parking remediations to ensure that no vehicles belonging to residents of the residential units of the Proposed Project will be parked on city streets. BKRC has committed to an absolute ban on its residents obtaining North End parking stickers. BKRC has further committed to contract with a parking garage approved by the community and the BRA to provide additional parking as necessary. BKRC contemplates that its charge for parking both on and off site will be substantially less than current market charges, and will therefore be attractive to its residents.

In order to accomplish these goals, a series of actions are required from the BRA. Appropriate votes follow:

VOTED: That the Director, be and hereby, is authorized to issue a Preliminary Adequacy

Determination which finds that the Draft Project Impact Report as supplemented adequately describes the potential impacts arising from the proposed project at 226 Causeway Street and waives further review of the proposed project on 226 Causeway Street pending an additional public comment period as provided for in Article 80B, Section 8B-5.4(c)(iv) of the Boston Zoning Code; and

FURTHER

VOTED: That the Director be and hereby is authorized to issue a Certificate of Compliance for the 226 Causeway Street project at the conclusion of the adhesional public comment period, assuming no new significant information is submitted and the completion of all Article 80 processes, subject to continuing design review by the Boston Redevelopment Authority (“BRA”) and the Boston Civic Design Commission, in accordance with Article 80B, Section 80B-5.4(c)(iv) of the Boston Zoning Code; and

FURTHER

VOTED: That the Director be and hereby is authorized to execute a Cooperation Agreement, a Boston Resident Construction Employment Plan and any and all other Agreements and documents in connection with the 226 Causeway Street project, which the Director, in his sole discretion, deems appropriate and necessary, and, upon the terms and conditions to be determined to be in the best interests of the Boston Redevelopment Authority; and

FURTHER

VOTED: That the Director be authorized to issue a Section 18 Recommendation to the Commonwealth of Massachusetts Department of Environmental Protection relative to the filing of an application for a license by the Developer for the development and construction of 226 Causeway Street, such certification in the form of a written recommendation stating that the BRA has determined that the 226 Causeway Street project serves a proper public interest and would not be detrimental to the public rights and the tideland and further stating that the Section 18 Standards of Section 42A-5 of the Boston Zoning Code have been met.

**Appendix 10 Shadow Impact Analysis for 226 Causeway Street at the 155-foot
Height**

Note: Shadow diagrams from the DPIR have been relabeled to show the approximate location of Paul Revere Park South.

5.7 SHADOW ANALYSIS

5.7.1 Introduction

As required by the BRA Scope, the following analysis describes and depicts graphically the anticipated shadow impacts from the proposed project during the morning (9:00 AM), midday (12:00 noon) and mid-afternoon (3:00 PM) time periods during the vernal equinox (March 21), summer solstice (June 21), autumnal equinox (September 21), and the winter solstice (December 21). For each time of the day and year, shadows are depicted for both the no-build (existing) condition and the build (with the proposed height addition to the building at 226 Causeway Street) condition.

The following discussion focuses on major pedestrian areas near the project site, including the proposed Portal Park, the MDC park, and sidewalks. It also reviews potential impacts on Lovejoy Wharf, an existing parking area along the Boston Harbor, to the north of the 160 North Washington Street building, which is included in plans by the MDC for recreation use and extension of the Harborwalk.

5.7.2 Shadow Analysis

(See Figures 5.7-1 through 5.7-12 at the end of this section for shadow diagrams during the specified analysis periods for the No Build and Build conditions).

Vernal Equinox (March 21)

The morning (9:00 AM) shadow diagram indicates that the proposed project will create new shadow on the adjoining Hoffman Building extending almost to the middle of the roof of that building. The Hoffman Building is 90 to 115 feet in height, taller than the present 226 Causeway Street building (87 feet). There is no new impact on pedestrian spaces from the proposed additional building height on March 21.

At noontime, the new shadow is confined to a few feet of the North Washington Street roadway. There is no new impact on pedestrian areas.

The 3:00 PM new shadow extends an additional 150 feet to the east beyond the existing shadow. This shadow affects a portion of Commercial Street but does not affect the MDC tennis courts.

Summer Solstice (June 21)

The new morning (9:00 AM) shadow from the proposed project in the summer will extend onto the northbound lanes of I-93 (Central Artery). However, the shadow will extend no further onto the roadway than the shadow cast by the Hoffman Building. Pedestrian spaces will be unaffected. With the depression of the Central Artery and

completion of replacement Beverly Street, new shadow will cover a small portion of the new street but will not extend to Portal Park.

The noontime shadow impact is minimal, with the extension of the existing shadow onto a small part of the Hoffman Building. Lovejoy Place will be unaffected, since this private way is already in shadow from the existing building.

The 3:00 PM new shadow is limited to the paved area at the intersection of North Washington Street and Commercial Street. Pedestrian areas will be unaffected.

Autumnal Equinox (September 21)

As with the spring shadow, the new morning (9:00 AM) shadows from the proposed project will cover about half of the Hoffman Building's roof. Pedestrian spaces will be unaffected.

By noon, new shadow extends a small distance onto the North Washington Street roadway, and for a small distance onto the roof of the Hoffman Building. Pedestrian areas will be unaffected.

The new shadow at 3:00 PM extends east about 150 feet beyond the existing shadow and shades no more than 10% of MDC tennis courts, confined to the backcourt areas. The remainder of the courts are unaffected by shadows cast by 226 Causeway Street and generally unaffected by the Hoffman Building which partially shades the opposite backcourt area of the court closest to North Washington Street.

Winter Solstice (December 21)

During winter, shadows reach their peak lengths due to the low solar altitude angles. Morning (9:00 AM) shadow from the proposed building will shade most of the Hoffman Building's roof. Pedestrian areas will be unaffected.

The noontime shadow cast by the proposed building will have almost no additional impact on the area, due to extensive shading by existing buildings.

The 3:00 PM existing shadow, the longest shadow of the year, extends several hundred feet to the east of the proposed building, shading some buildings on the north side of Commercial Street. The MDC tennis courts are already shaded by the existing Causeway Street and Hoffman buildings. The new shadow will extend the lengthy existing coverage to a couple of buildings between Commercial Street and the Boston Harbor to the east of Charter Street.

Impacts on Lovejoy Wharf

The proposed project has no shadow impact on Lovejoy Wharf (now used for parking). The height of nearby buildings and the angle of the sun are such that the Hoffman Building itself creates the only shadow impact on this Boston Harbor wharf.

Impacts on Proposed Portal Park

The shadow analysis reveals that at all times studied, there were no new shadow effects on the proposed Portal Park from the proposed project.

Impacts on MDC Tennis Courts

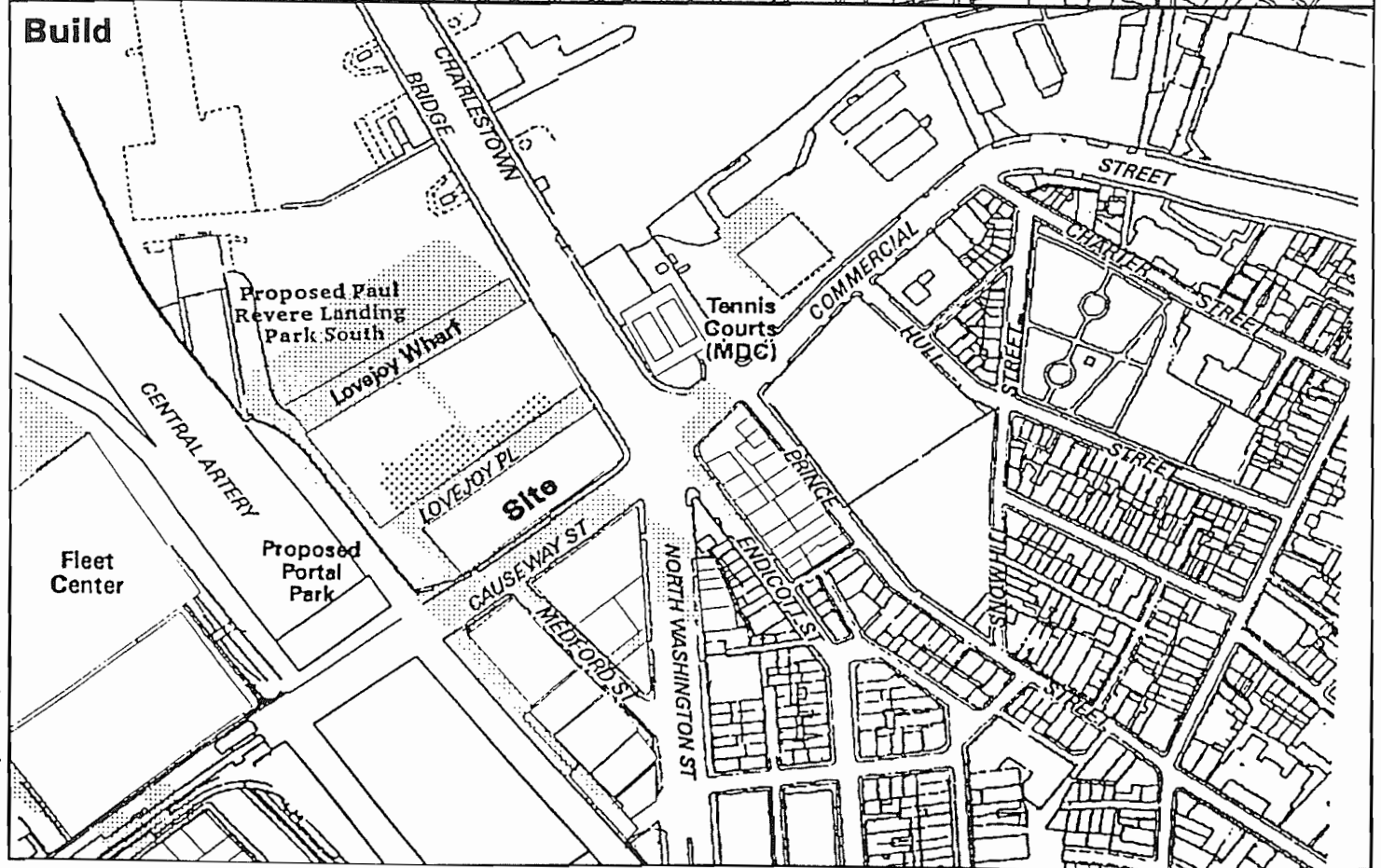
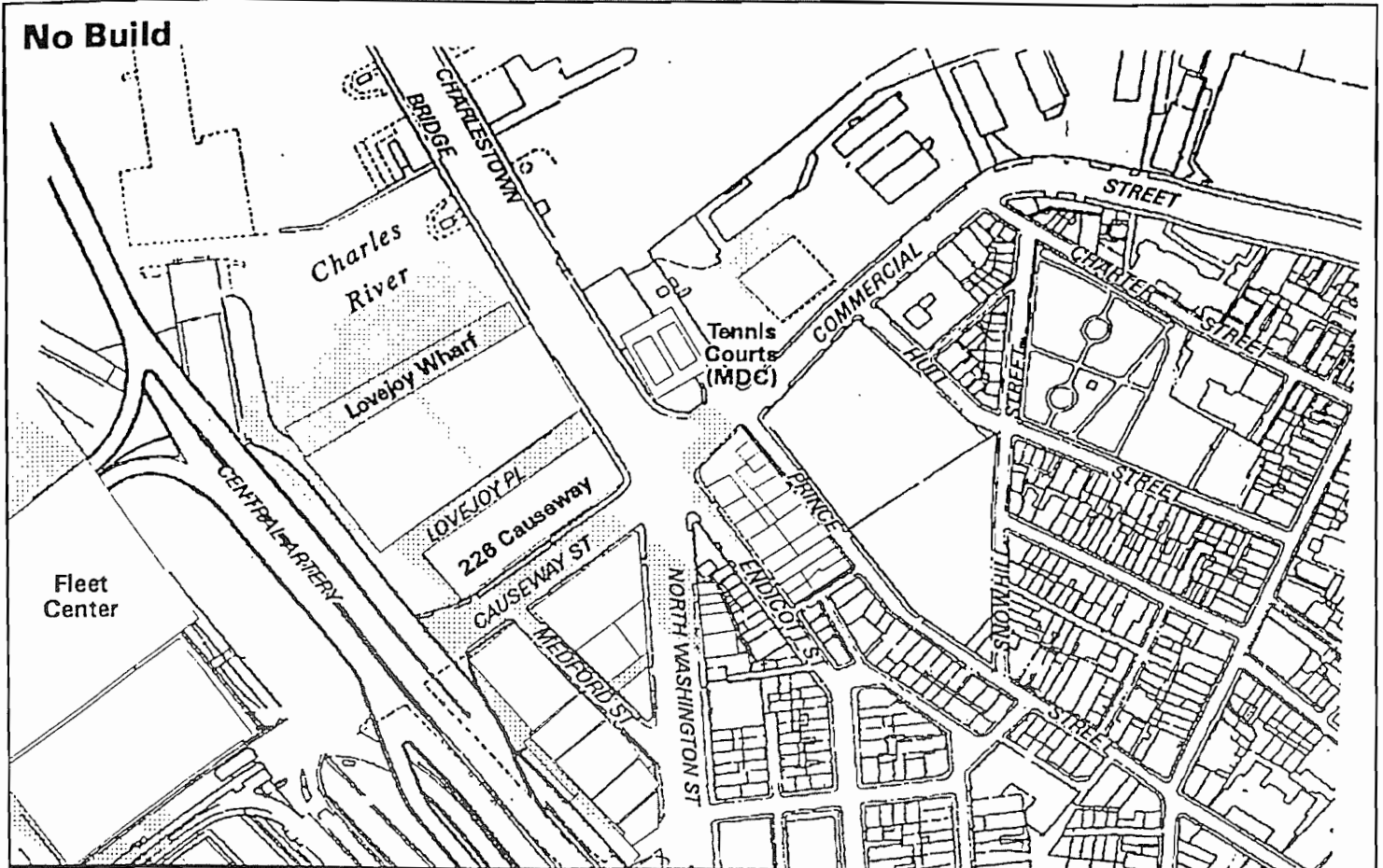
The proposed project will shade a small portion (about 10%) of the MDC tennis courts in mid-afternoons in the spring and fall. In the winter, the existing buildings already shade the courts during the afternoon, and there is no additional impact from the proposed project. In the summer, the courts will *not* be shaded at all by the proposed project.

Impacts on Sidewalks

The project will shade about 100 feet of the sidewalk along the west side of North Washington Street in the afternoons during the summer solstice. At other times of the year, the proposed project will create no new shading on sidewalks in the area.

5.7.3 Conclusions

The shadow study presented in this report addresses the BRA scope and focuses particularly on the project's impact on pedestrian areas. The study concludes that the proposed project will have a minimal effect on pedestrian areas, and that the primary shadow impact will be on the roof of the Hoffman Building directly north of 226 Causeway Street.



Date: 19 Feb 88 13:04:18 Thursday
 User: jasonw/mar1.map



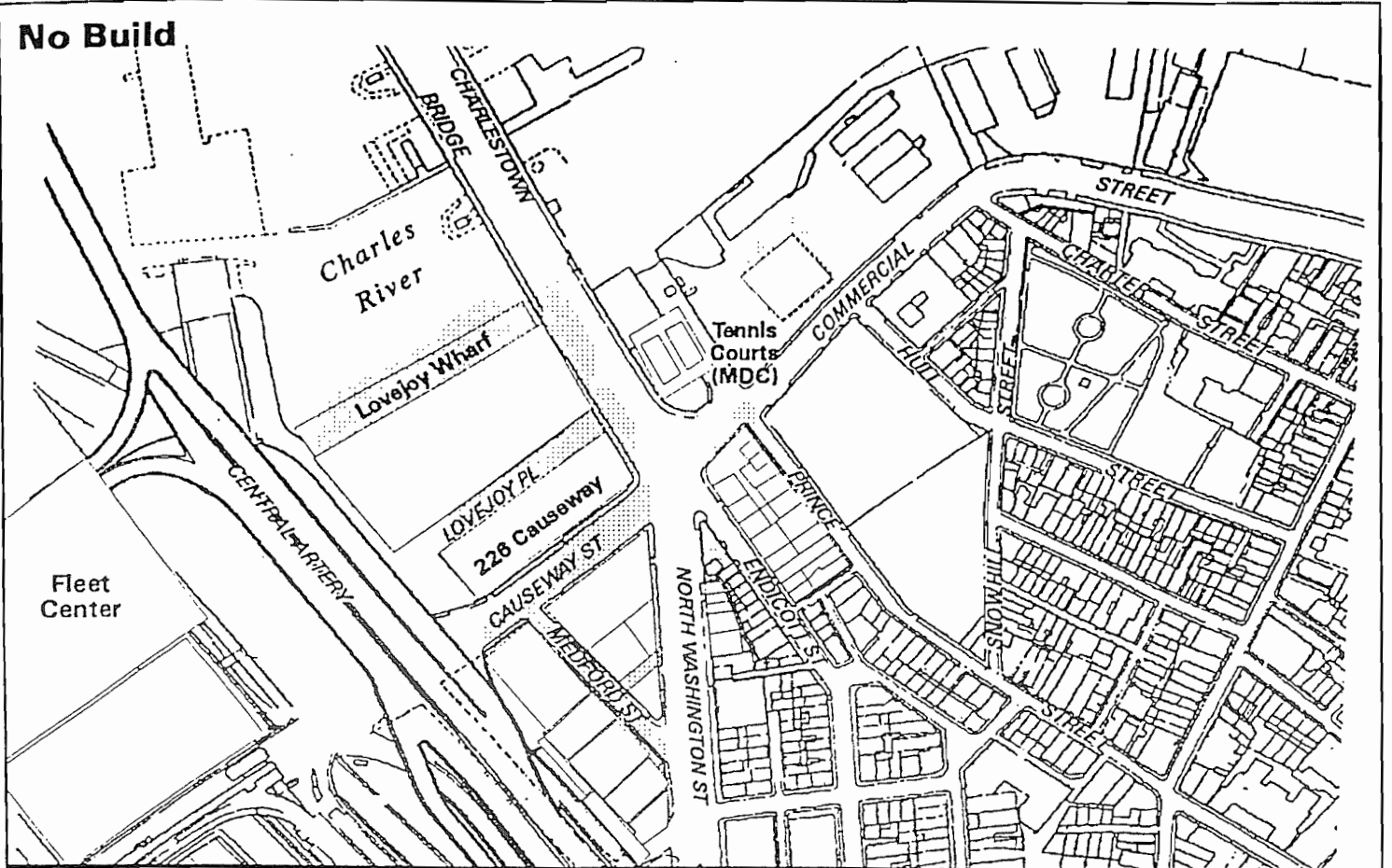
-  Existing Shadow
-  Additional New Shadow

Figure 5.7-1
Shadow Impacts
March 21, 9:00 AM

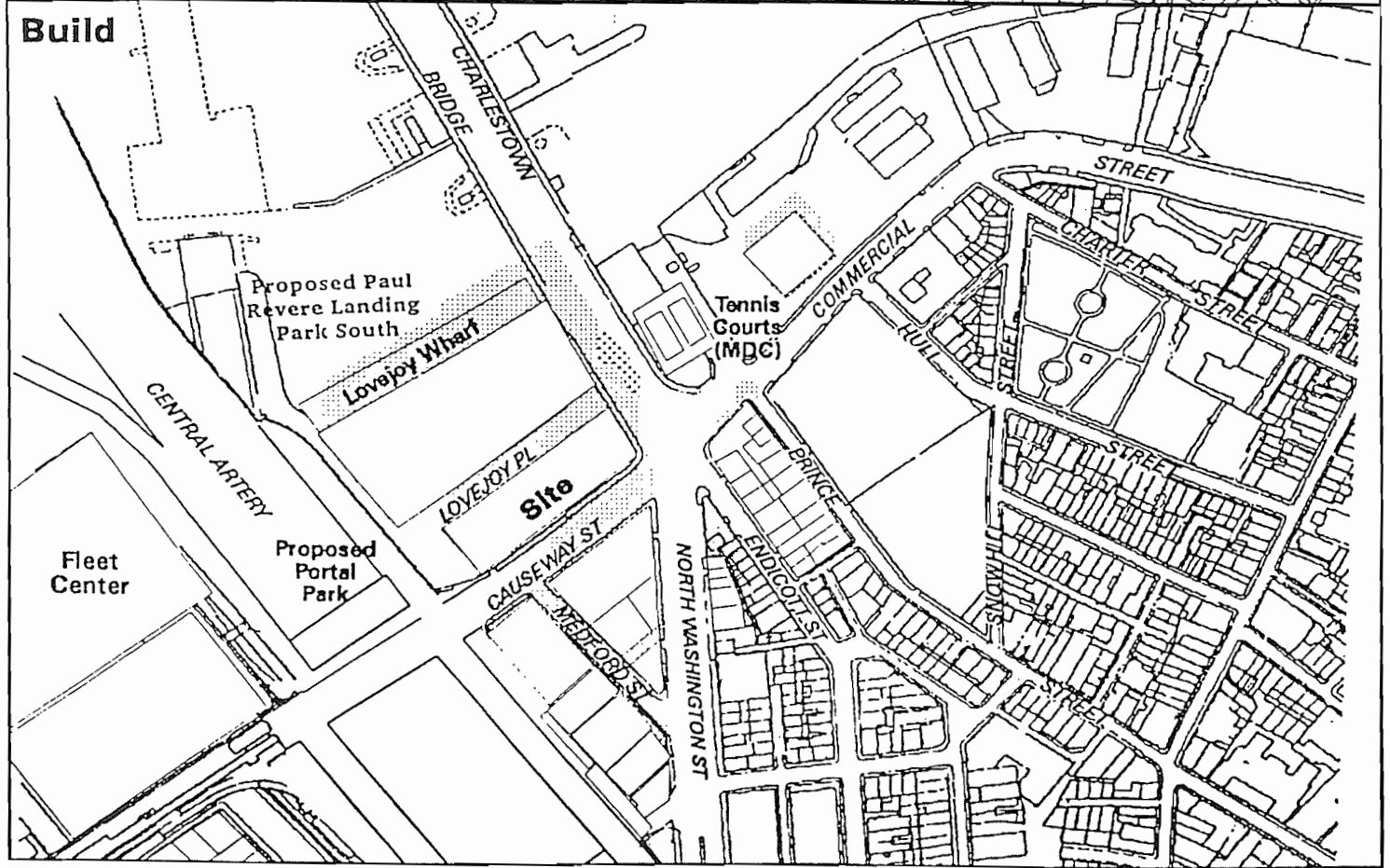
0 Feet 300



No Build



Build




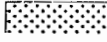
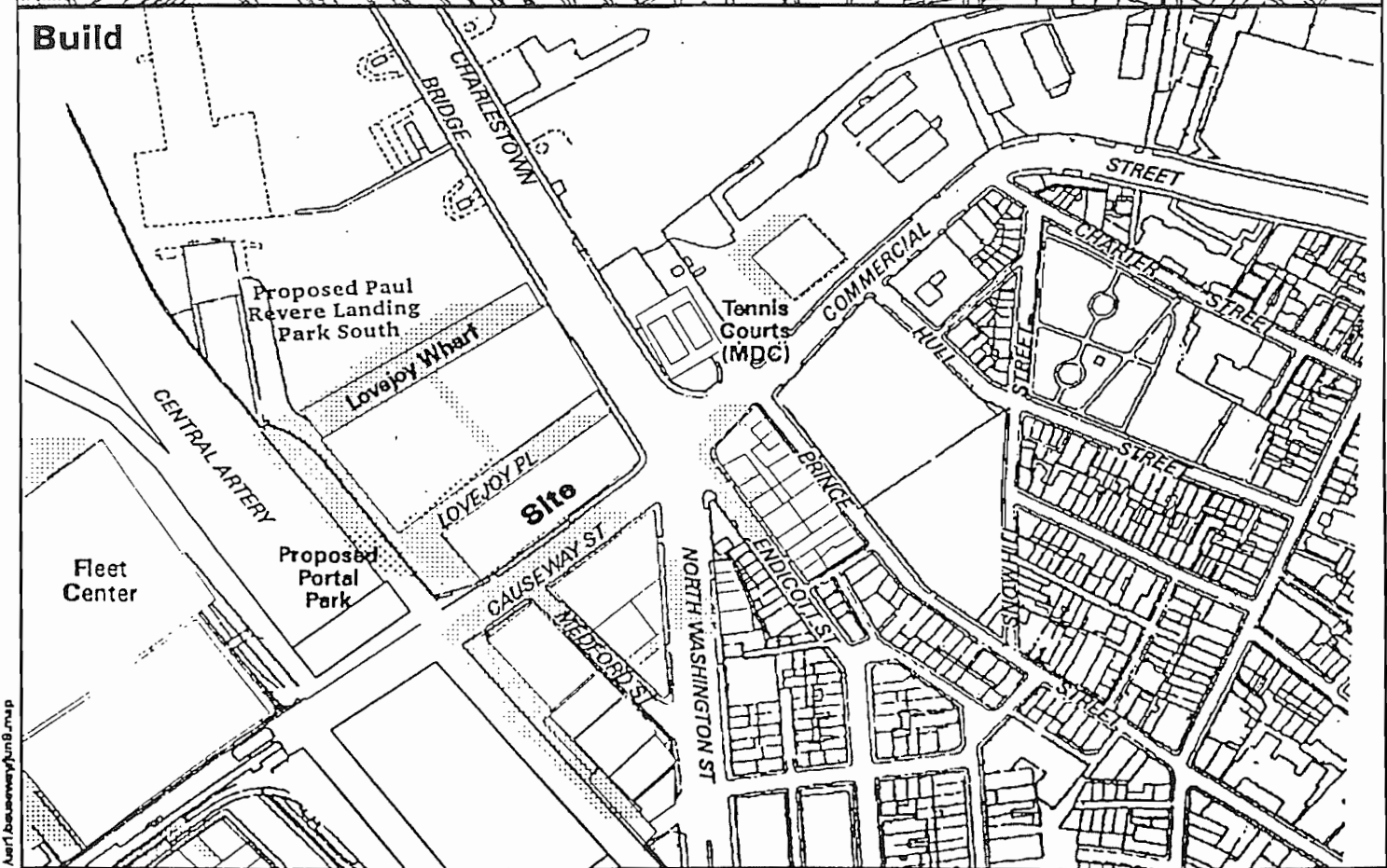
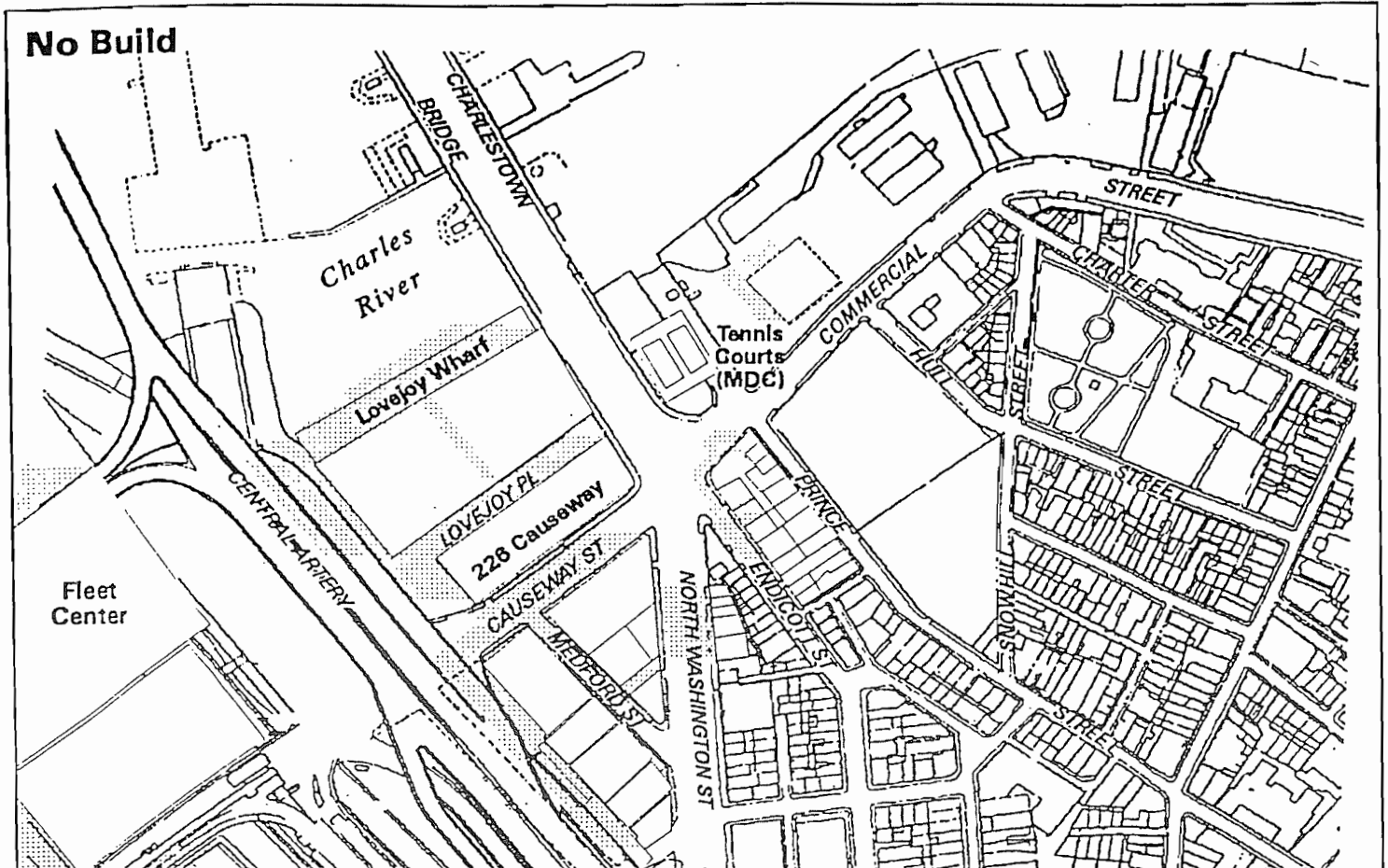
-  Existing Shadow
-  Additional New Shadow

Figure 5.7-2
Shadow Impacts
March 21, Noon

0 Feet 300





Date: 09 Feb 98 14:28:31 Monday
 User: baasewy\un8.mup


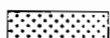
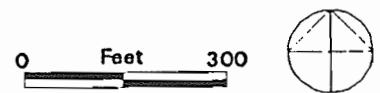
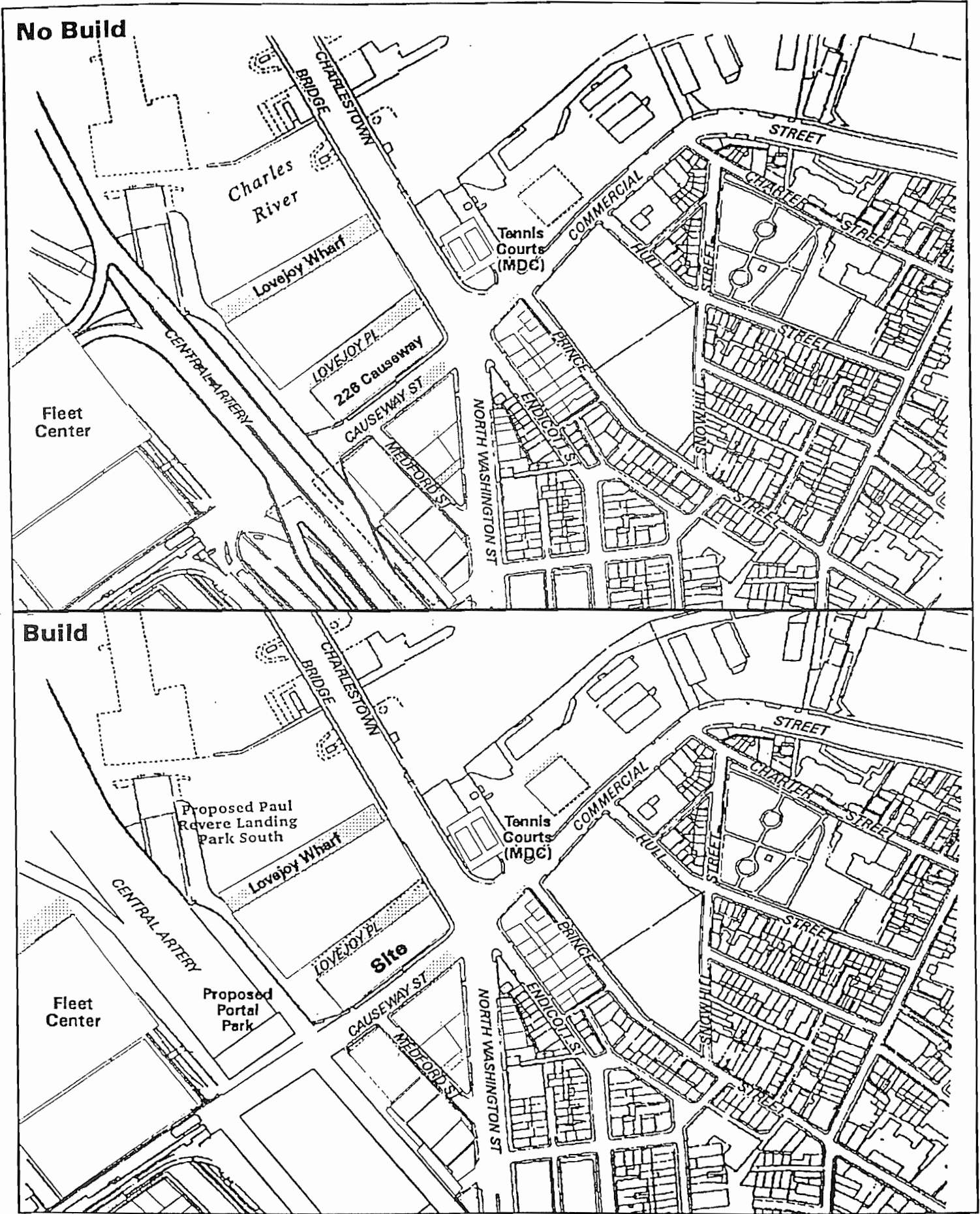
-  Existing Shadow
-  Additional New Shadow


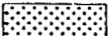
Figure 5.7-4
Shadow Impacts
June 21 9:00 AM





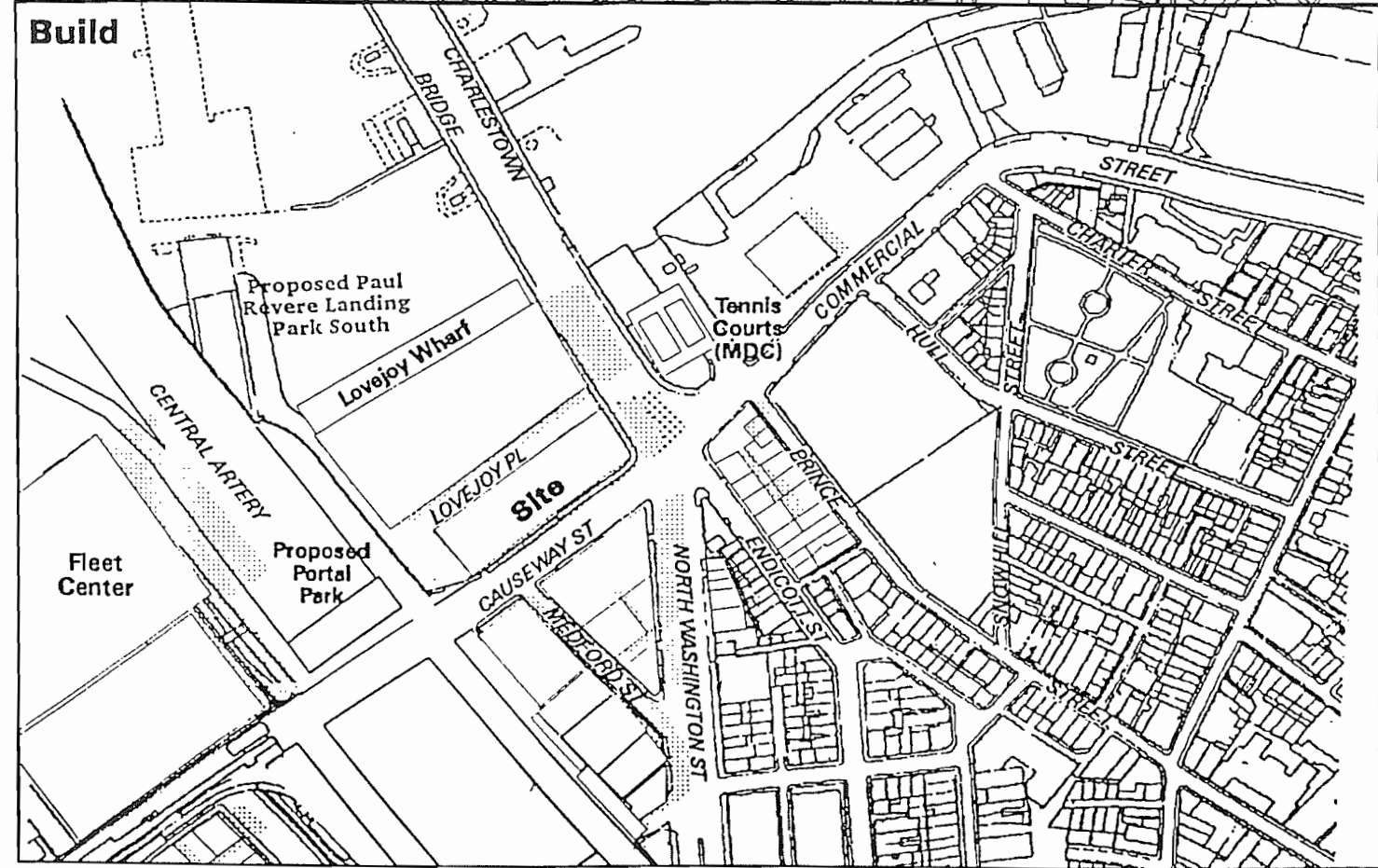
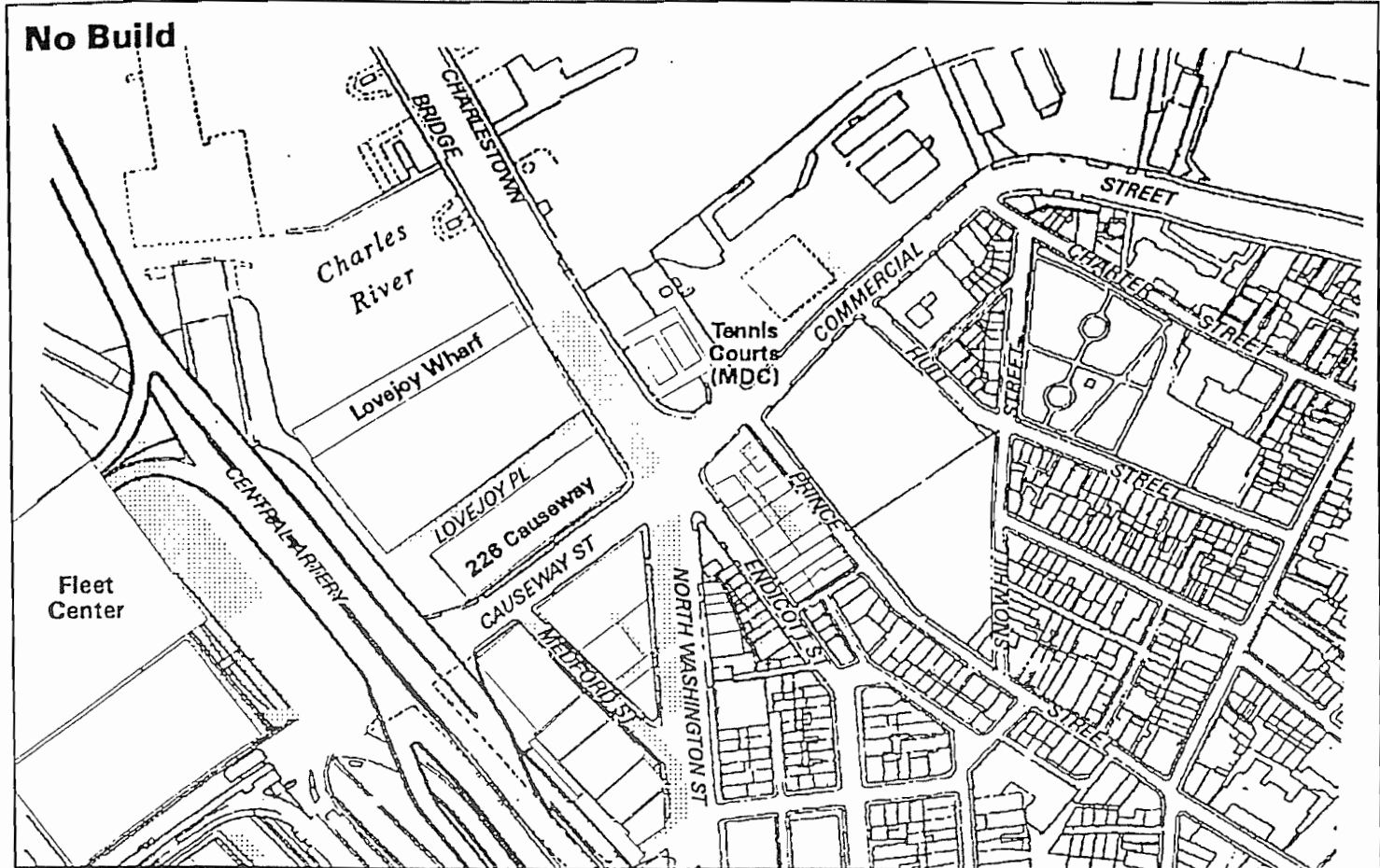
No Build

Build

-  Existing Shadow
-  Additional New Shadow

**Figure 5.7-5
Shadow Impacts
June 21 Noon**







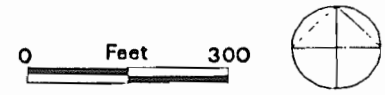
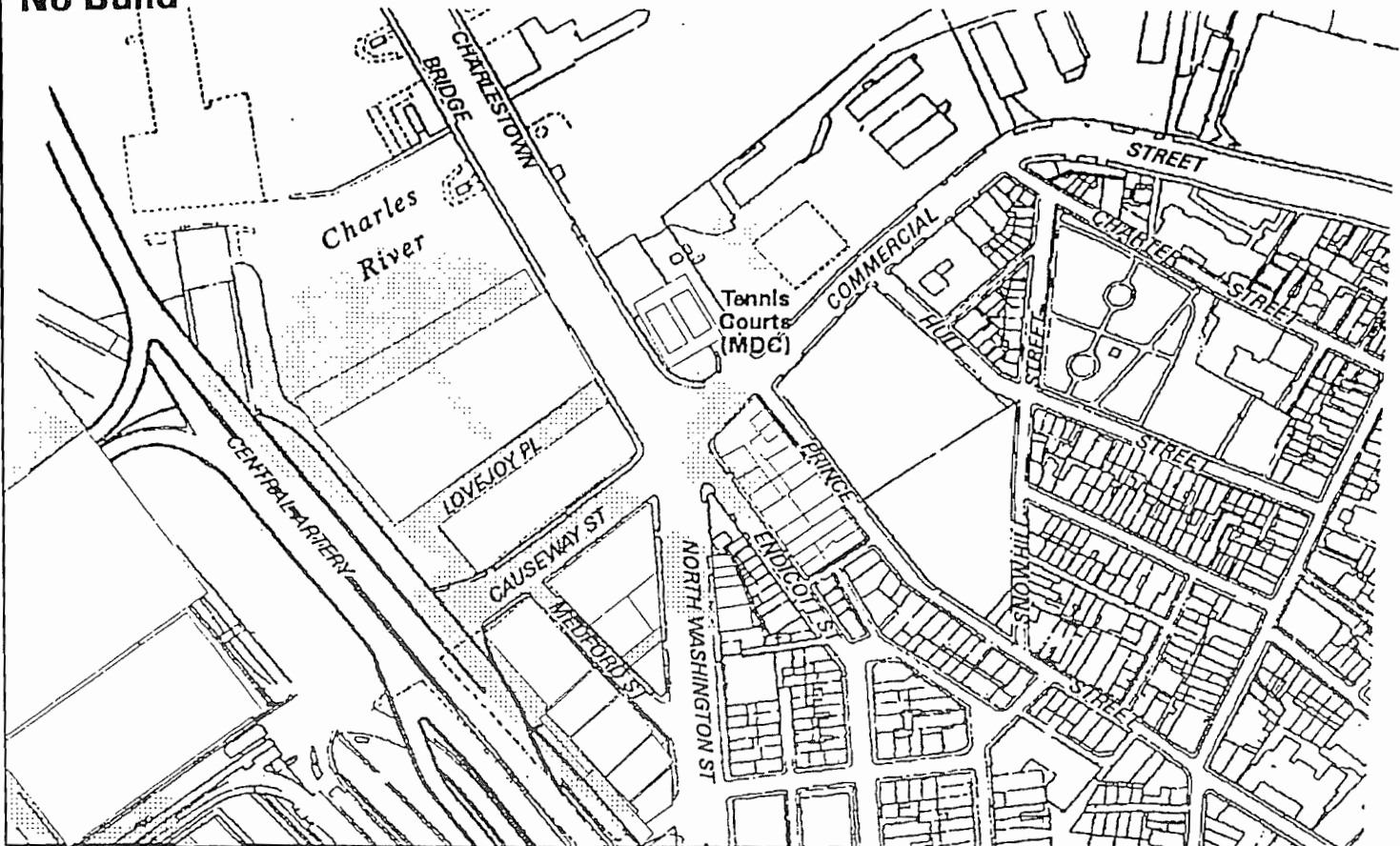
-  Existing Shadow
-  Additional New Shadow

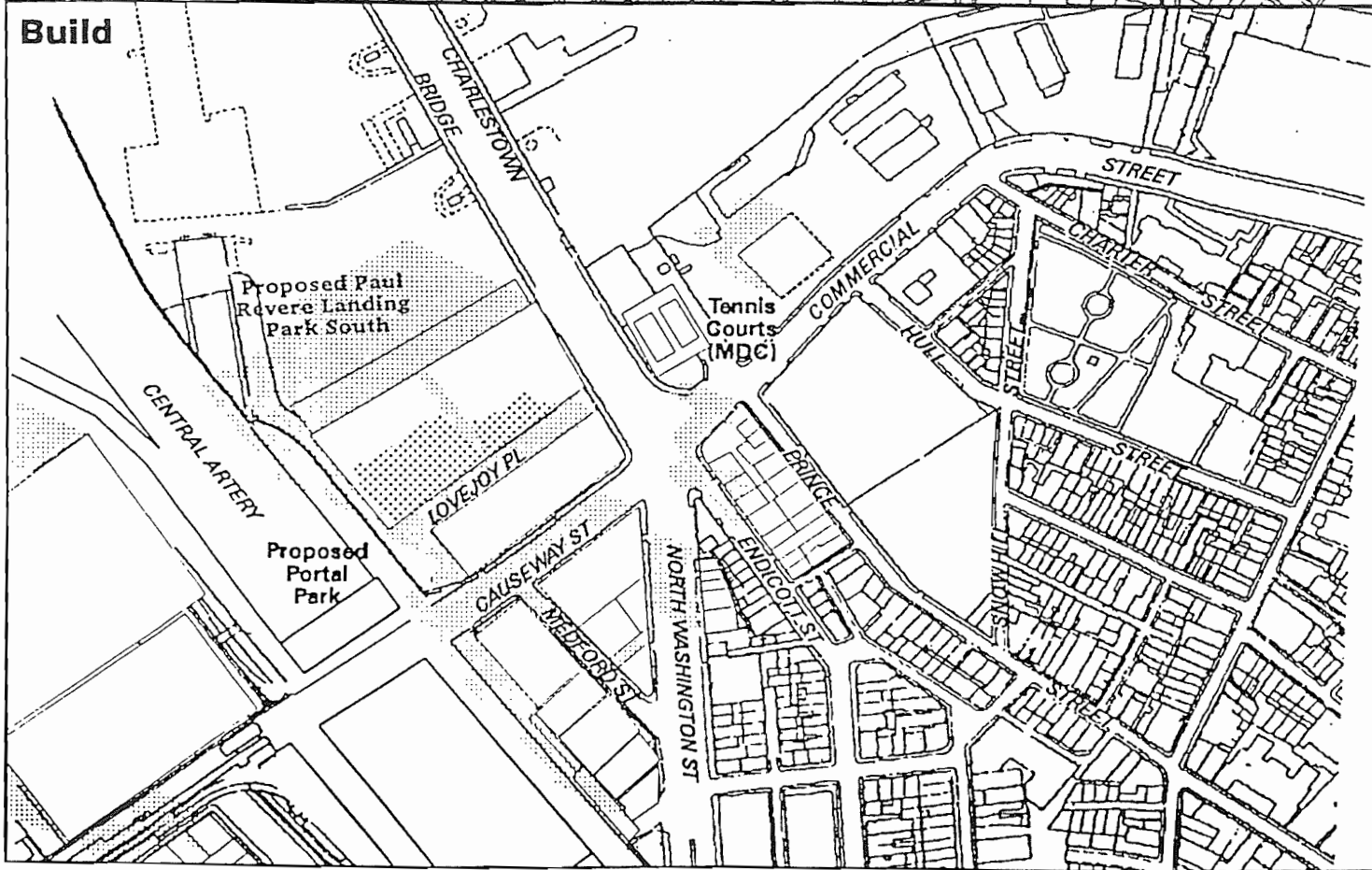
Figure 5.7-6
Shadow Impacts
 June 21 3:00 PM



No Build



Build





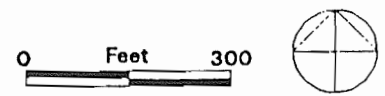
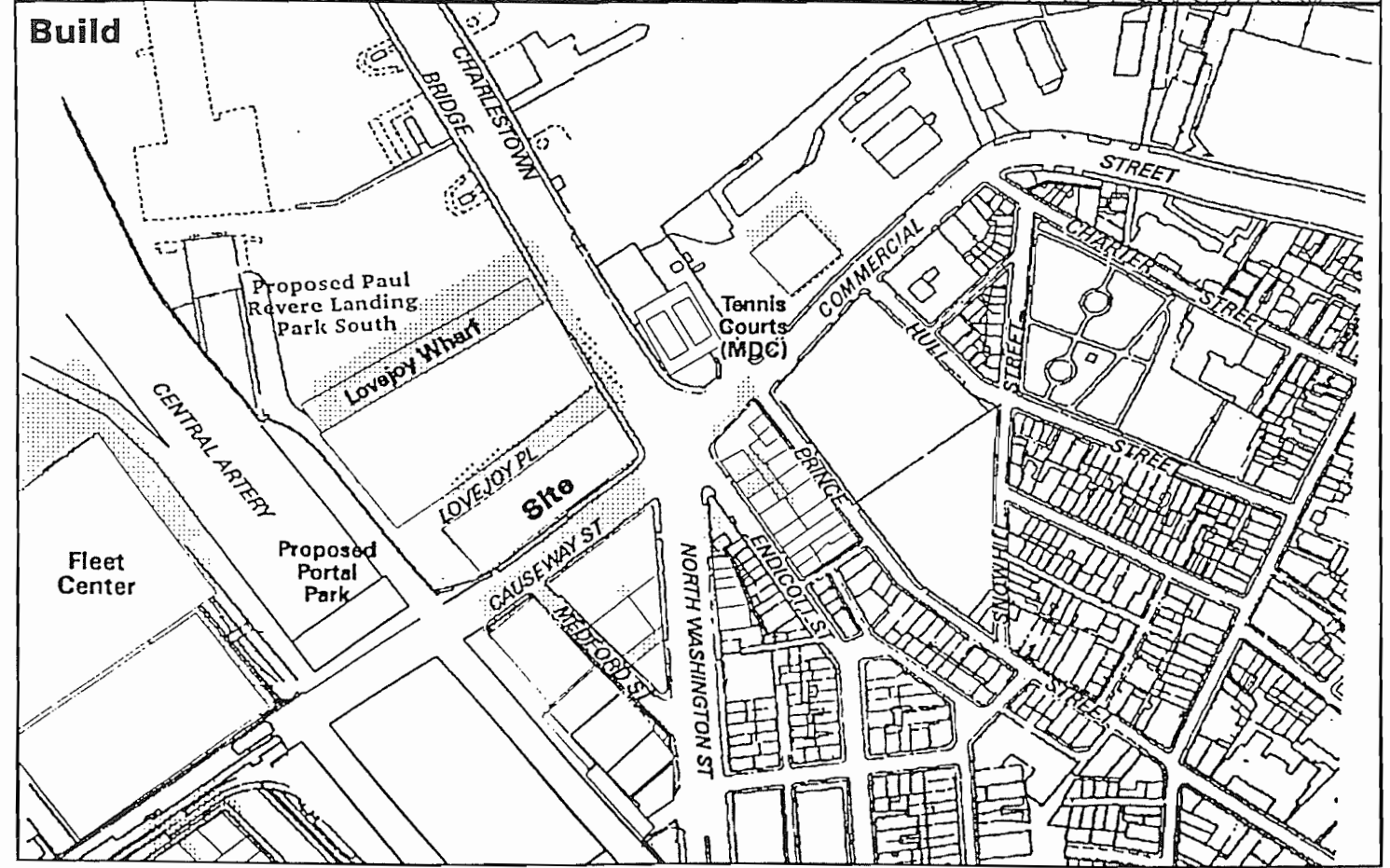
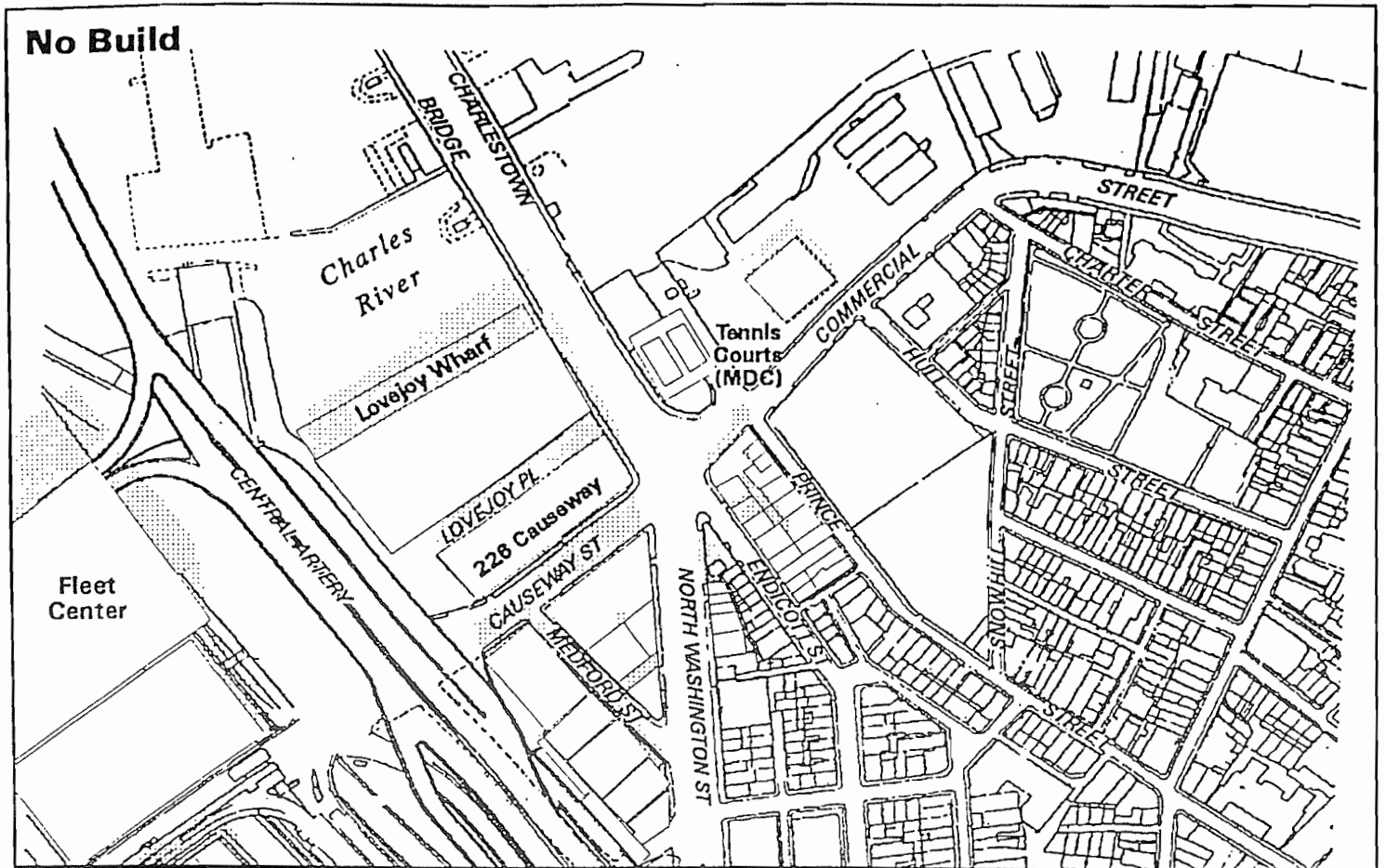
-  Existing Shadow
-  Additional New Shadow

Figure 5.7-7
Shadow Impacts
September 21 9:00 AM





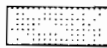

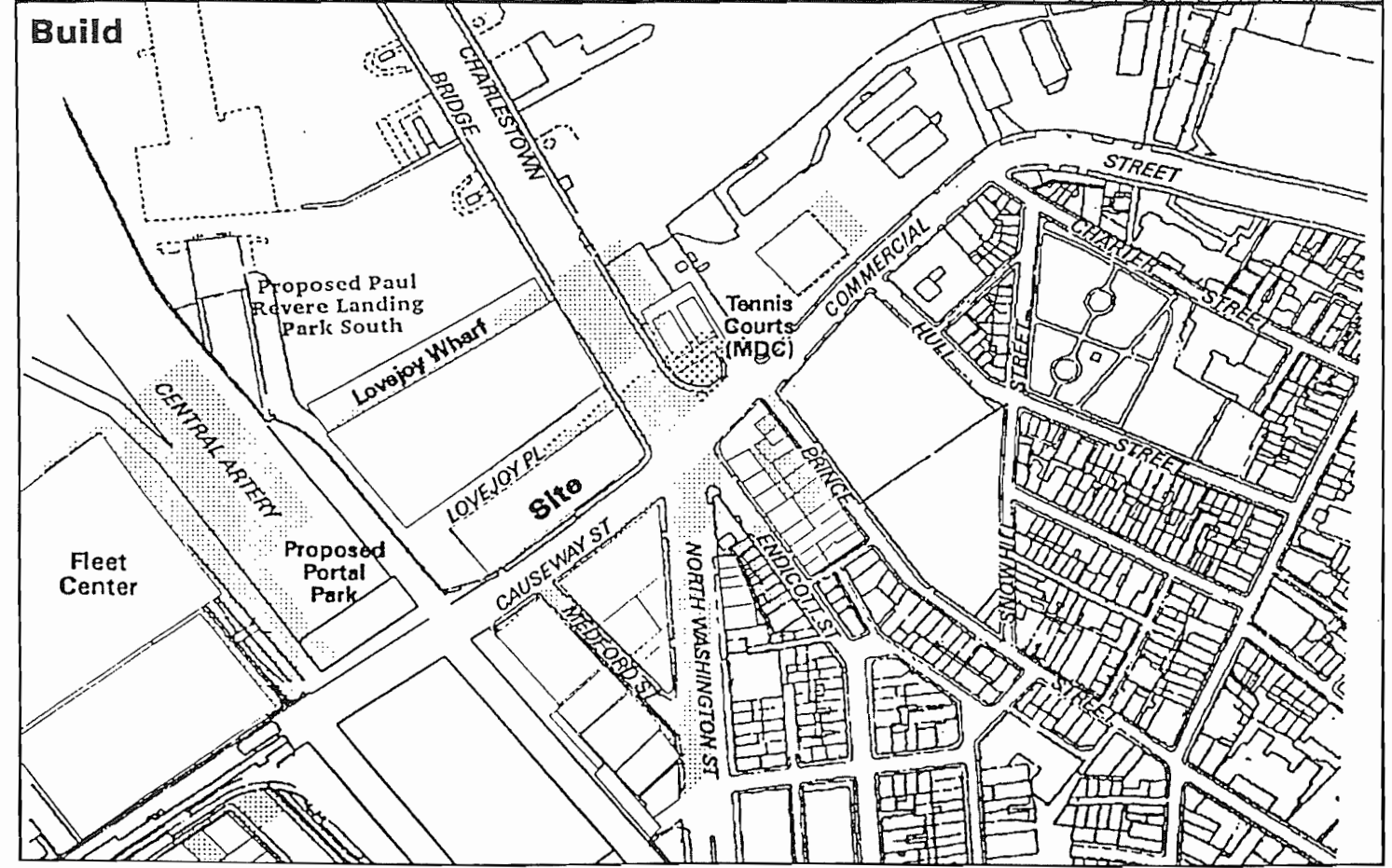
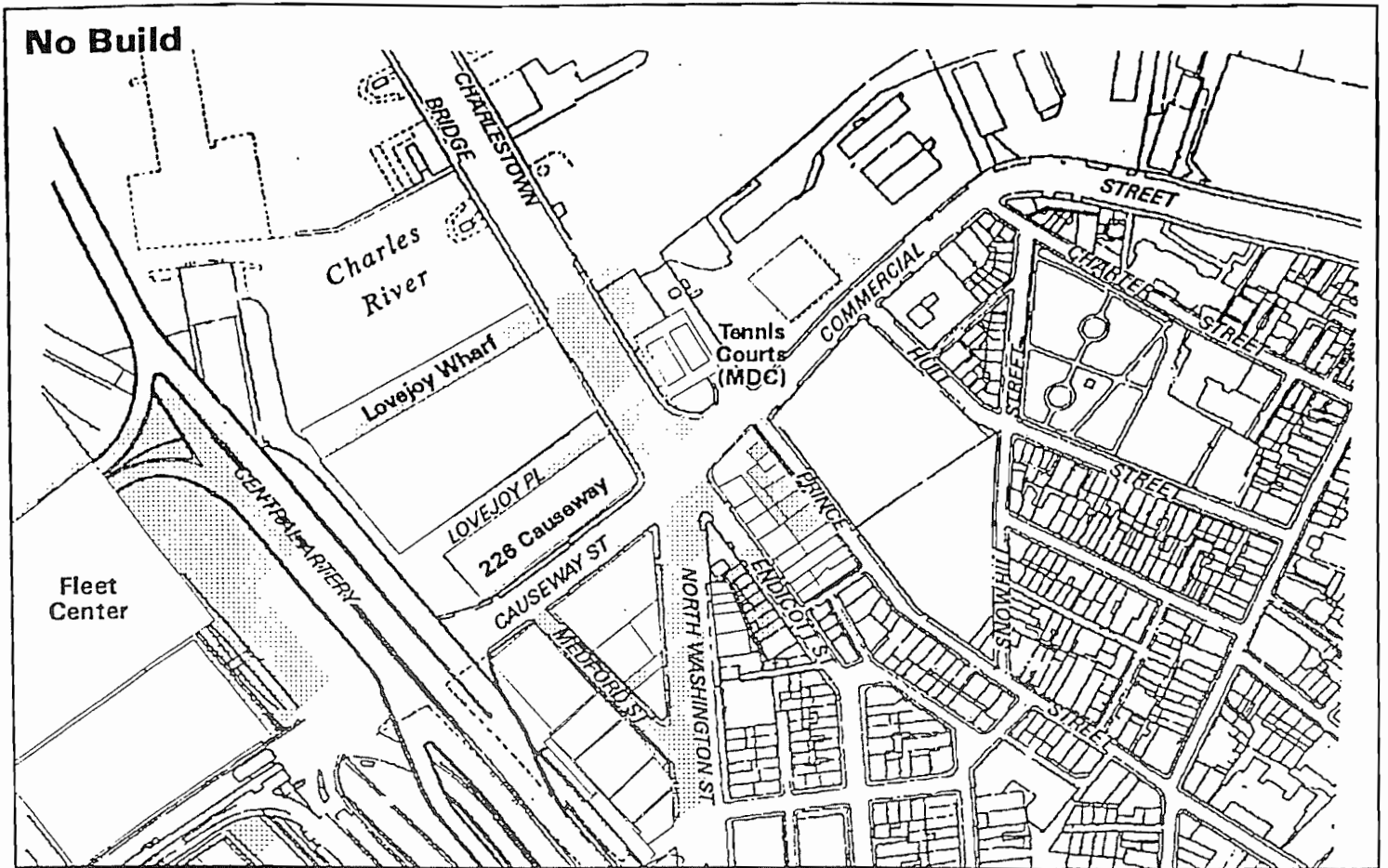
-  Existing Shadow
-  Additional New Shadow

Figure 5.7-8
 Shadow Impacts
 September 21 Noon

0 Feet 300





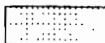

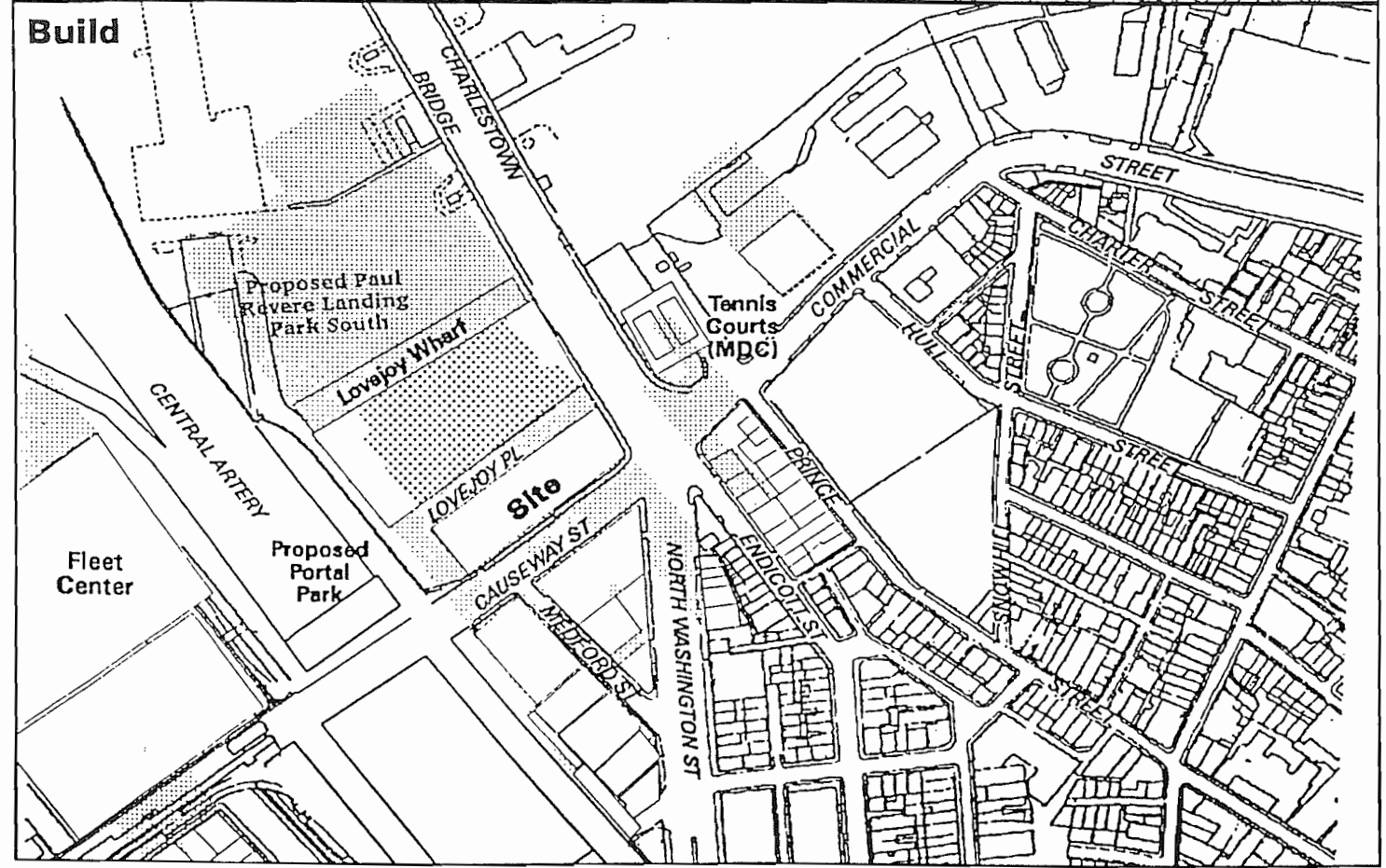
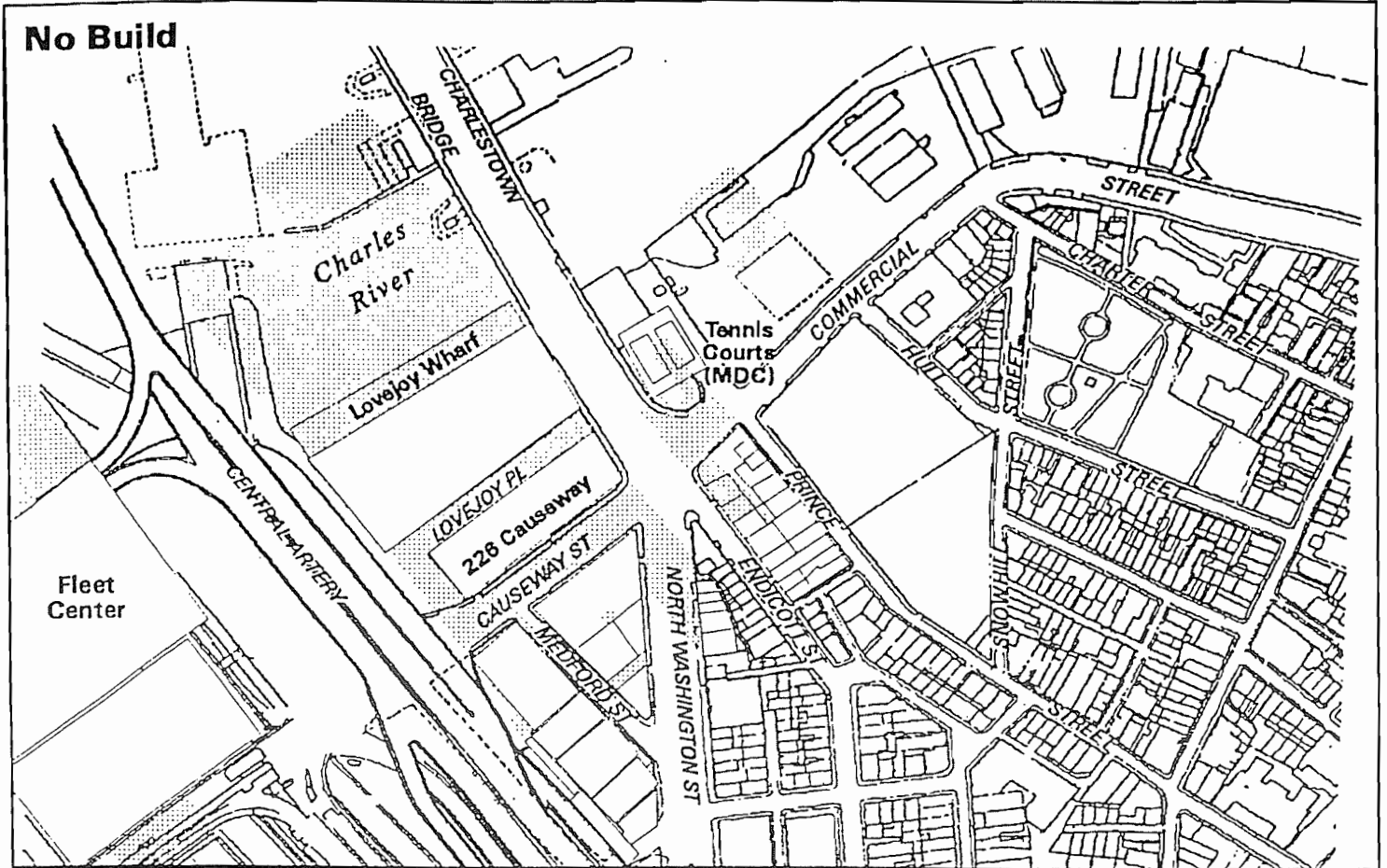
-  Existing Shadow
-  Additional New Shadow

Figure 5.7-9
Shadow Impacts
 September 21 3:00 PM

0 Feet 300







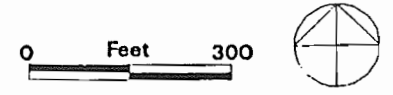
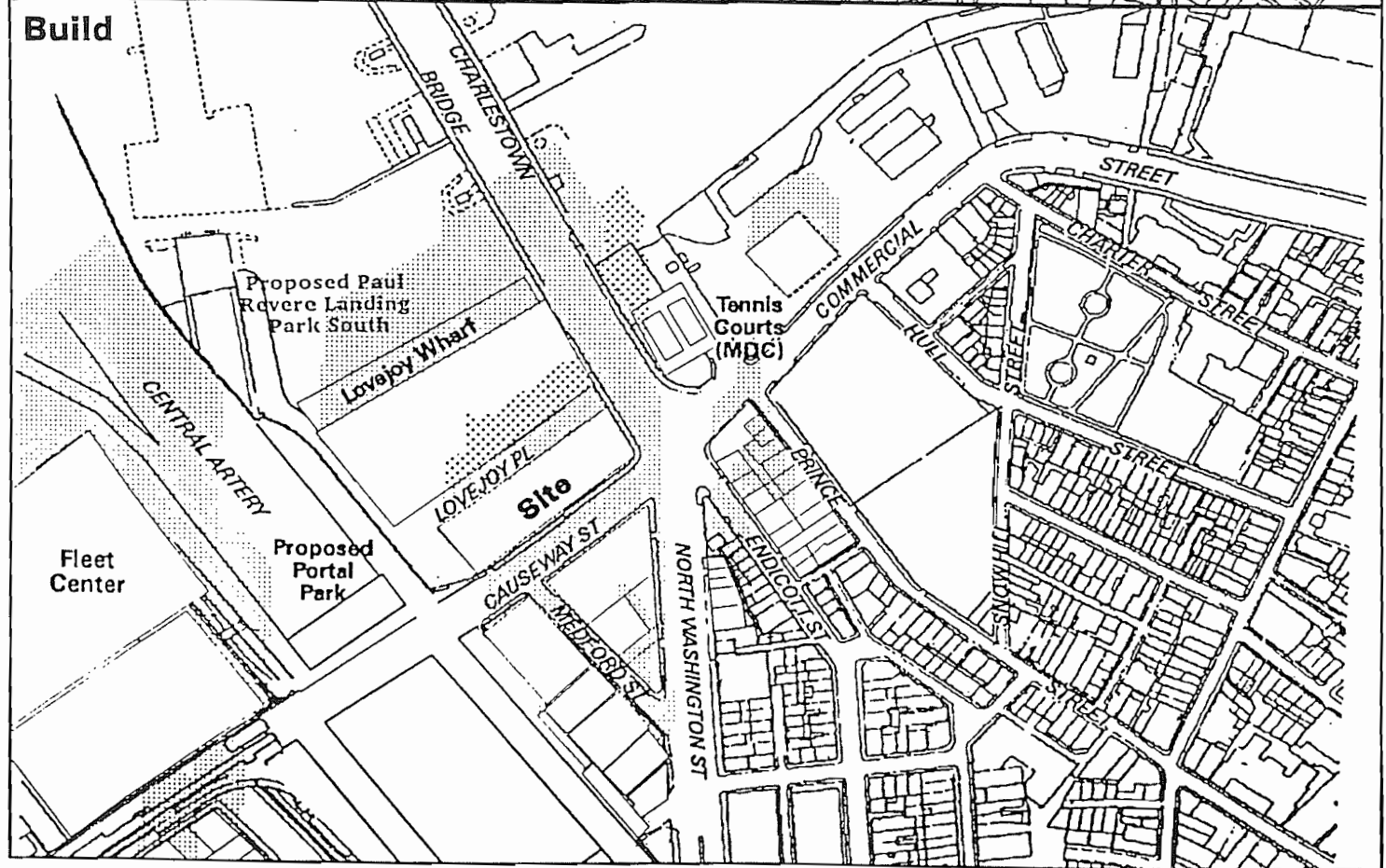
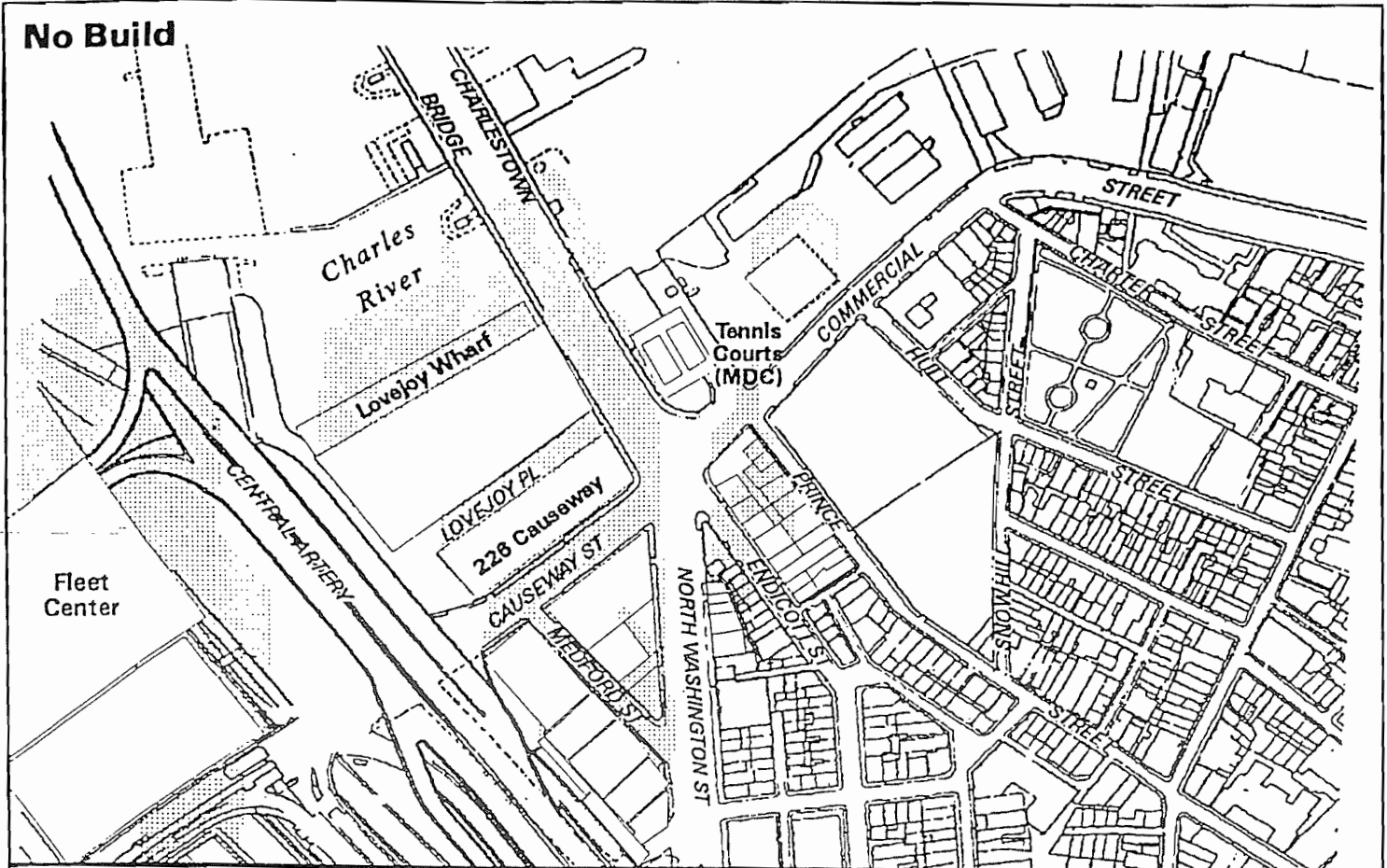
-  Existing Shadow
-  Additional New Shadow

Figure 5.7-10
Shadow Impacts
December 21 9:00 AM







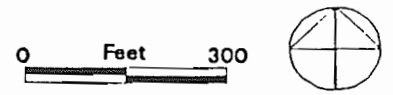
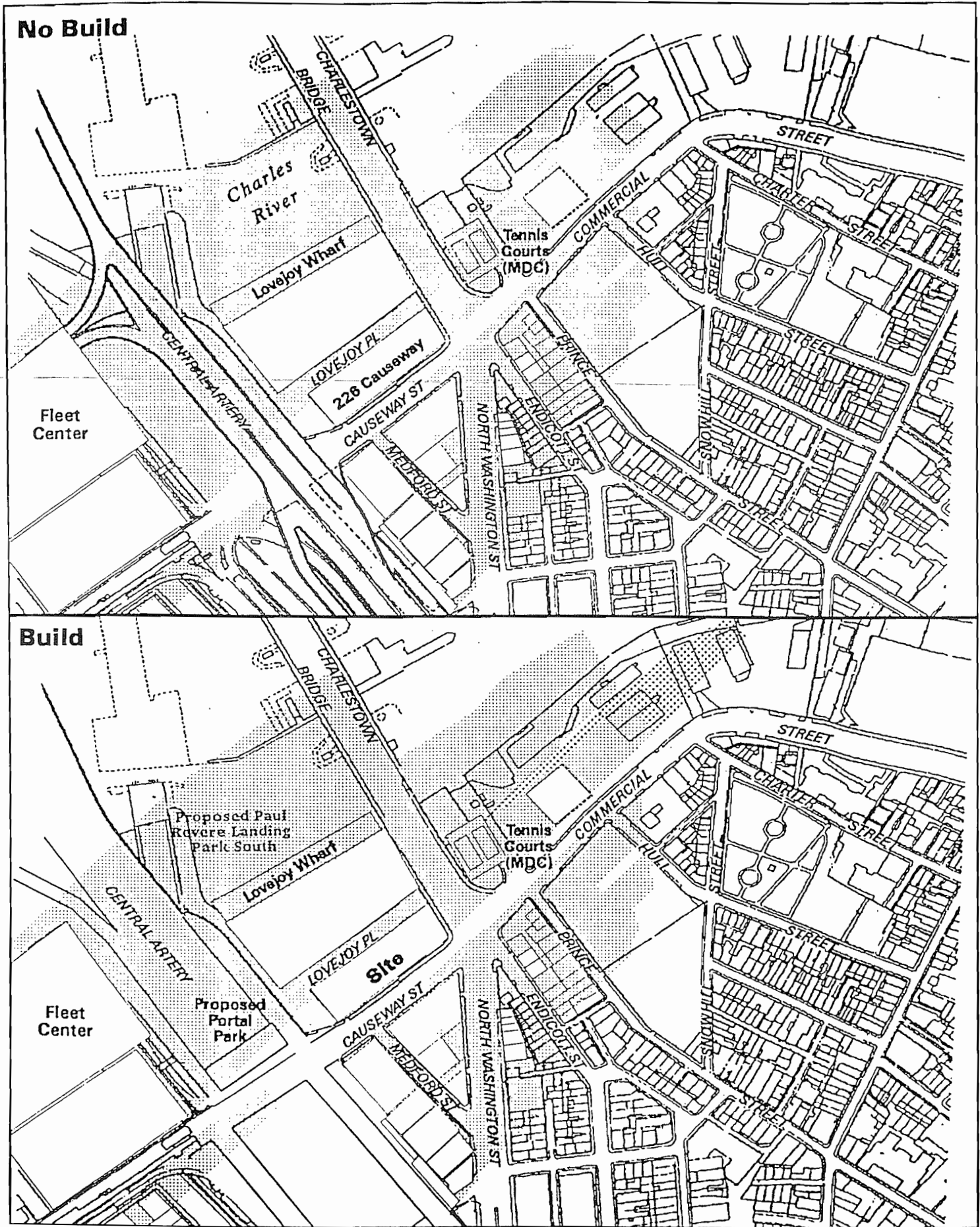
-  Existing Shadow
-  Additional New Shadow

Figure 5.7-11
 Shadow Impacts
 December 21 Noon





No Build

Build



-  Existing Shadow
-  Additional New Shadow

Figure 5.7-12
Shadow Impacts
December 21 3:00 PM



**Appendix 11 Shadow Impact Analysis for 226 Causeway Street at Chapter 91
Height and Massing**

**Shadow Impact Analysis for 226 Causeway Street
(c. 91 Massing and Height Alternative)**

Shadow studies have been completed for project development on 226 Causeway Street in accordance with c. 91 requirements related to setback and height restrictions in accordance with 310 CMR 9.51(3) (e), which provides:

“that new or expanded buildings for nonwater-dependent use shall not exceed 55 feet in height if located over the water or within 100 feet landward of the high water mark; at greater landward distances, the height of such buildings shall not exceed 55 feet plus one-half foot for every additional foot of separation from the high water mark.”

The following analysis describes and depicts graphically the anticipated shadow impacts from the proposed project during the morning (9:00 AM), midday (12:00 noon) and mid-afternoon (3:00 PM) time periods during the vernal equinox (March 21), summer solstice (June 21), autumnal equinox (September 21), and the winter solstice (December 21). For each time of the day and year, shadows are depicted for both the no-build (existing) condition and the build (with the c. 91 alternative height and massing to the building at 226 Causeway Street) condition.

The following discussion also focuses on major pedestrian areas near the project site, including the proposed Portal Park, the MDC park, and sidewalks. It also reviews potential impacts on Lovejoy Wharf, an existing parking area along the Boston Harbor to the north of the 160 North Washington Street building,

(See Figures 5.8-1 through 5.8-12 at the end of this section for shadow diagrams during the specified analysis periods for the No Build and Build [c.91 alternative] conditions).

Vernal Equinox (March 21)

The morning (9:00 AM) shadow diagram indicates that the c.91 alternative will create no additional shadow on pedestrian spaces or Lovejoy Wharf from the additional c.91 building height on March 21.

At noontime, there is no new shadow and no new impact on pedestrian areas. A small sliver of new shadow is present on the Charlestown Bridge roadway portion near the Commercial Street intersection.

The 3:00 PM new shadow affects a sliver portion of the land along Commercial Street in front of the MDC tennis courts.

Summer Solstice (June 21)

The new morning (9:00 AM) shadow from the c. 91 alternative in the summer will extend onto a portion of the northbound lanes of I-93 (Central Artery). Pedestrian spaces and Portal Park will be unaffected.

There is no noontime shadow impact from the c. 91 alternative.

The 3:00 PM new shadow is limited to a sliver of the paved area at the intersection of North Washington Street and Commercial Street. Pedestrian areas will be unaffected.

Autumnal Equinox (September 21)

As with the spring shadow, the new morning (9:00 AM) shadows from the c. 91 alternative will not affect pedestrian areas.

By noon, a new shadow sliver extends a small distance onto the North Washington Street roadway. Pedestrian areas will be unaffected.

The new shadow at 3:00 PM shades a small portion of the area in front of the MDC tennis courts.

Winter Solstice (December 21)

During winter, shadows reach their peak lengths due to the low solar altitude angles.

Morning (9:00 AM) shadow from the c. 91 alternative will not affect pedestrian areas.

The noontime shadow cast by the c. 91 alternative will shade a small portion of the MDC tennis court closest to the harbor.

The 3:00 PM existing shadow, the longest shadow of the year, extends several hundred feet to the east of the 226 Causeway Street site, shading some buildings on the north side of Commercial Street. The MDC tennis courts are already shaded by the existing Causeway Street and Hoffman buildings. The new c.91 shadow will slightly extend the lengthy existing coverage to a sliver portion of one building between Commercial Street and the Boston Harbor to the east of Hull Street.

Impacts on Lovejoy Wharf

The c. 91 alternative has no shadow impact on Lovejoy Wharf (now used for parking). The height of nearby buildings and the angle of the sun are such that the Hoffman Building itself creates the only shadow impact on this Boston Harbor wharf.

Impacts on Proposed Portal Park

The c. 91 alternative has no shadow impact on the proposed Portal Park.

Impacts on MDC Tennis Courts

New shadow impact from the c. 91 alternative on the MDC tennis courts is limited to noontime shading of a small portion of the court closest to the harbor in December; a small area in front of the tennis courts at 3:00 PM in September; and a sliver portion of land along Commercial Street in front of the courts at 3:00 PM in March.

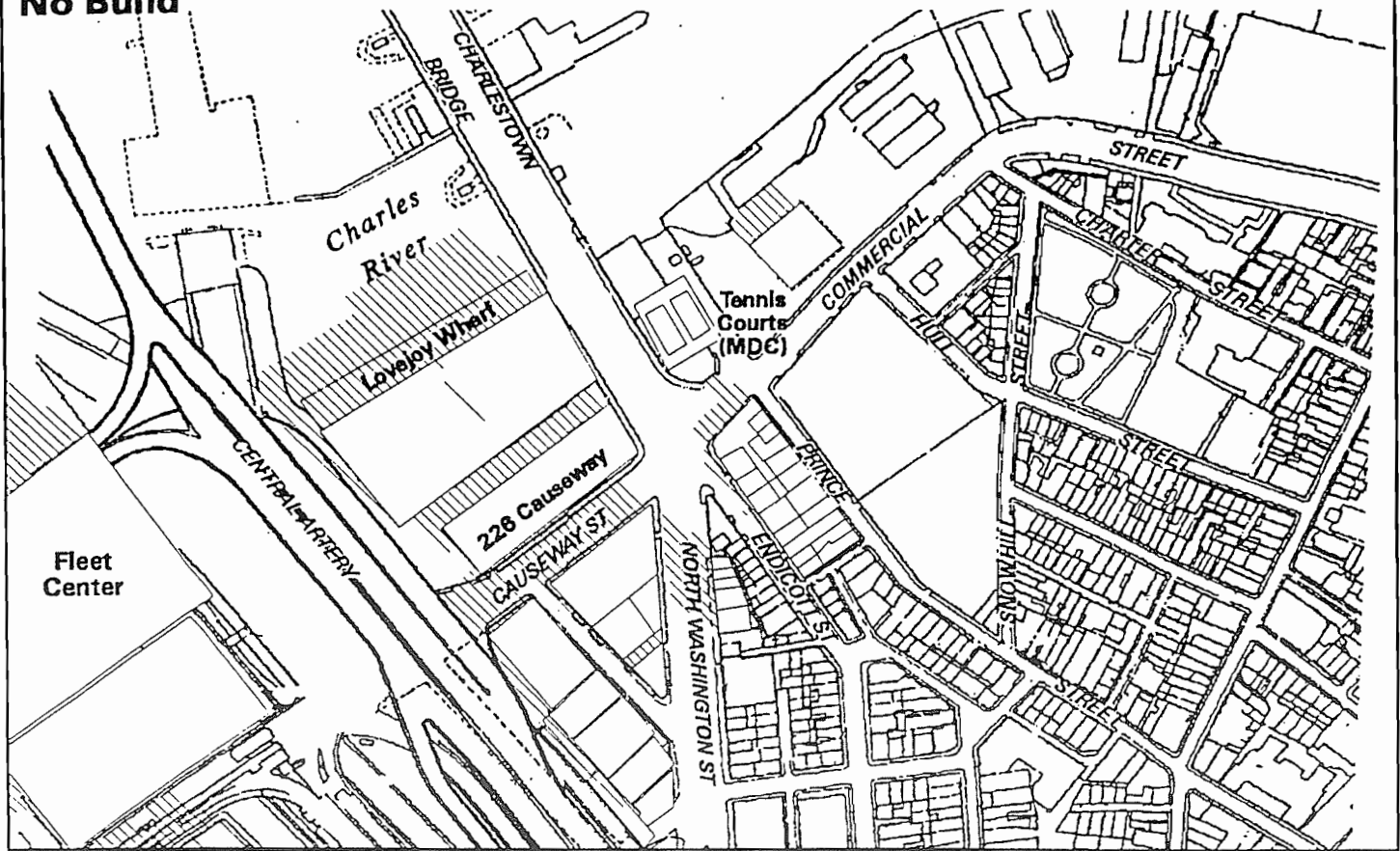
Impacts on Sidewalks

The c. 91 alternative has no shadow impact on sidewalks in the area.

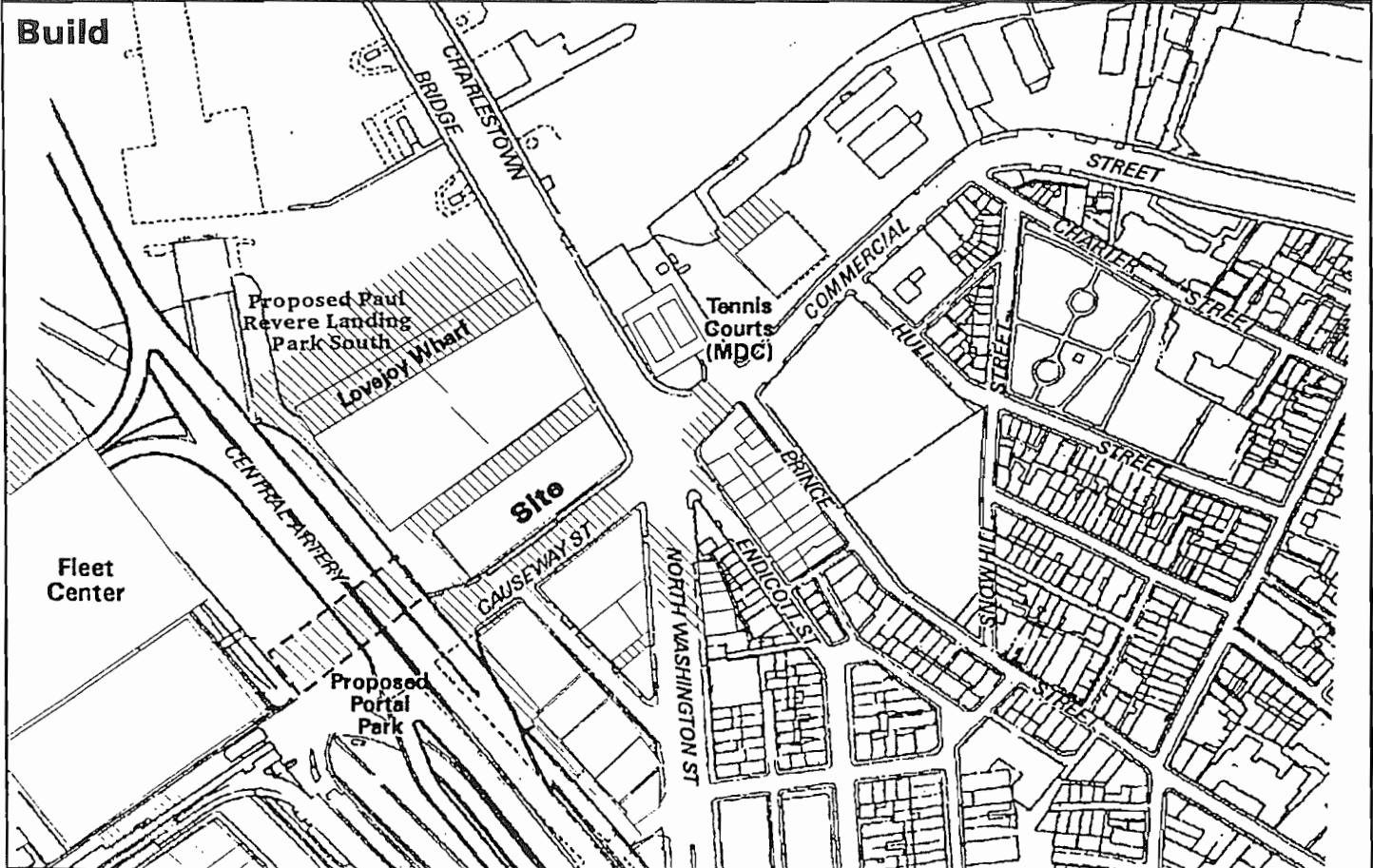
Conclusions

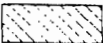
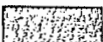
The study concludes that the c. 91 alternative shadows, as with the proposed project shadows (at 155 feet), will have minimal to no effect on pedestrian areas in the vicinity of the site.

No Build



Build



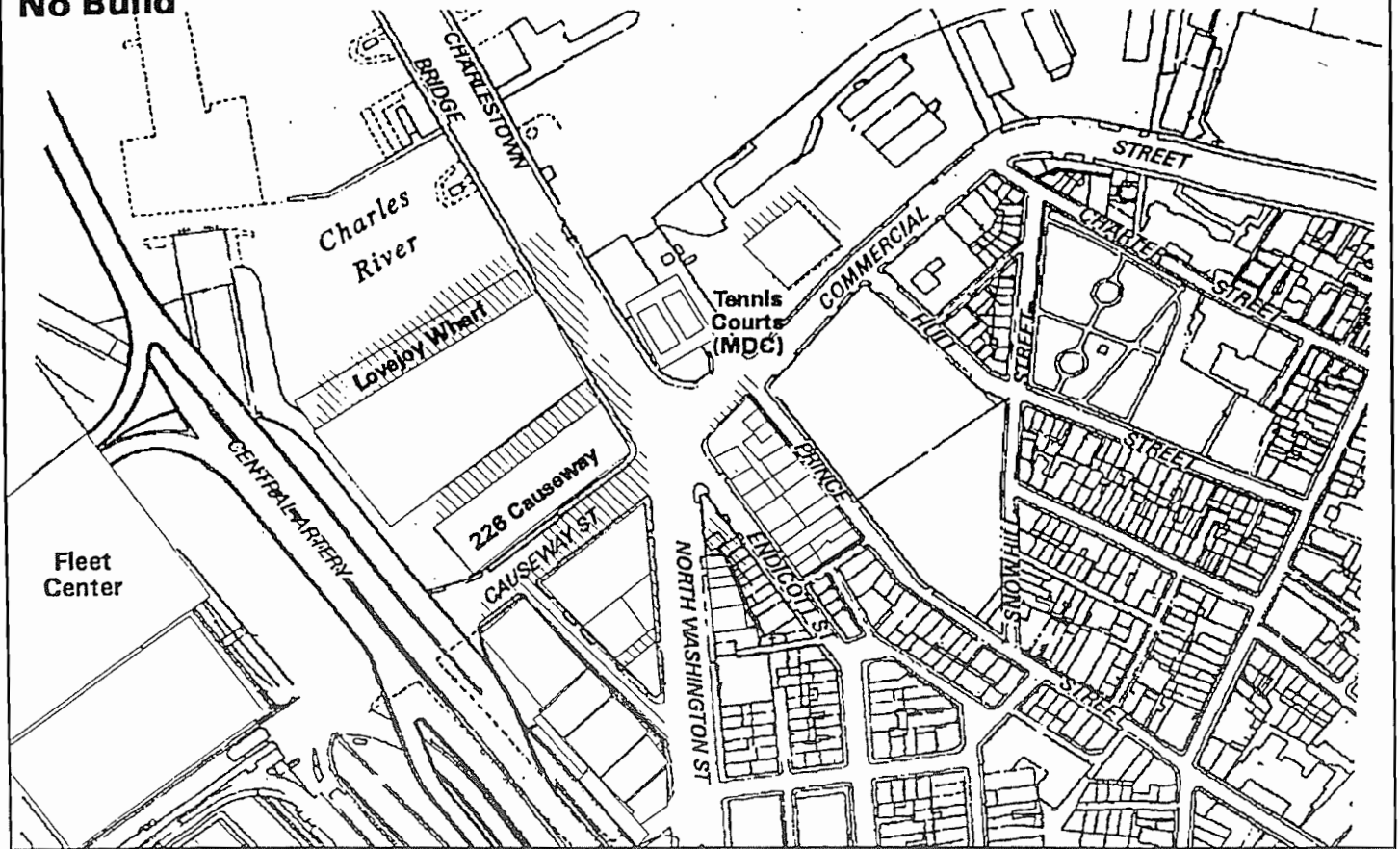
-  Existing Shadow
-  Additional New Shadow (226 Causeway)

March 21st 9:00 AM
c. 91 Alternative

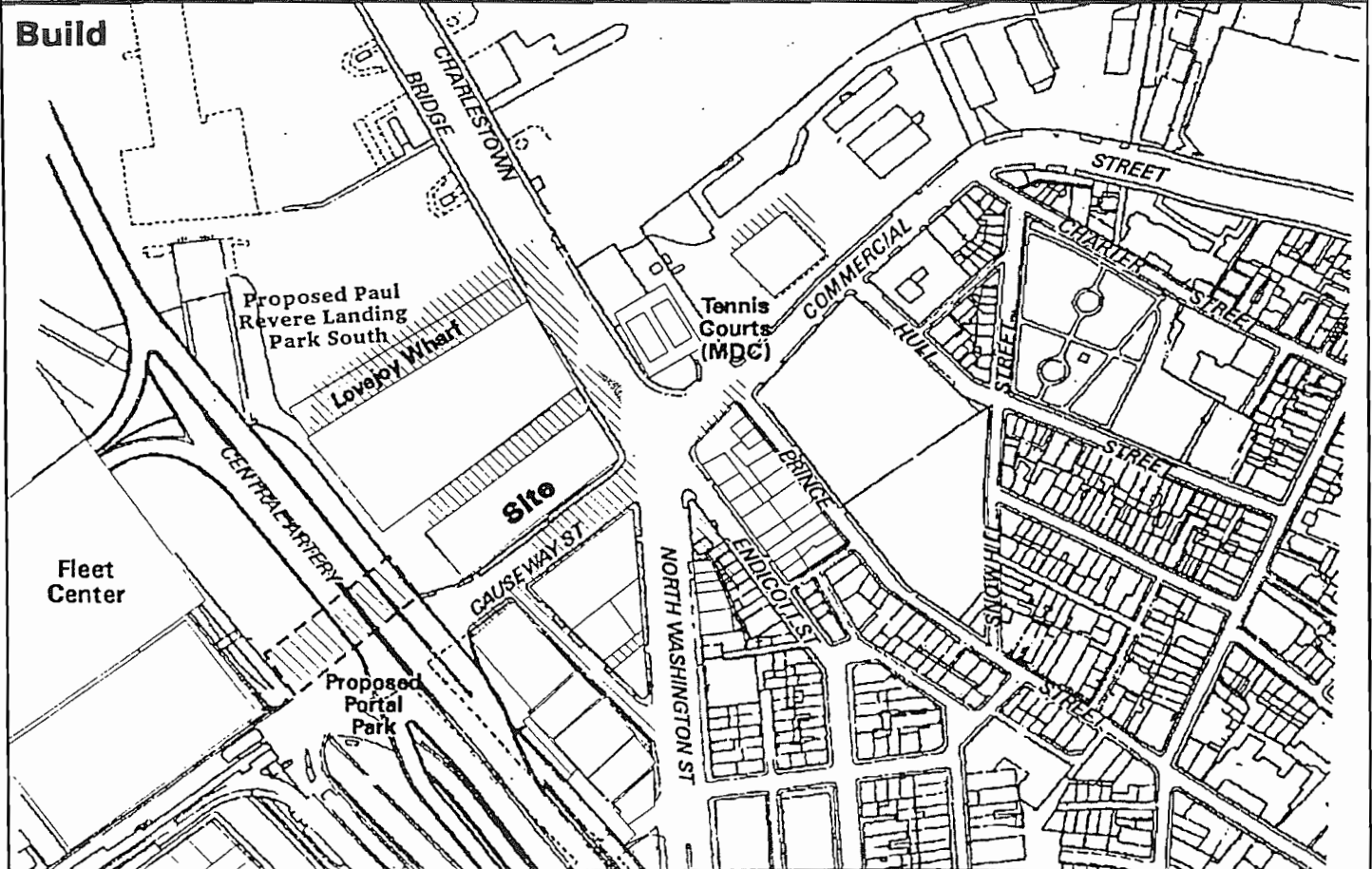
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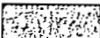


No Build



Build



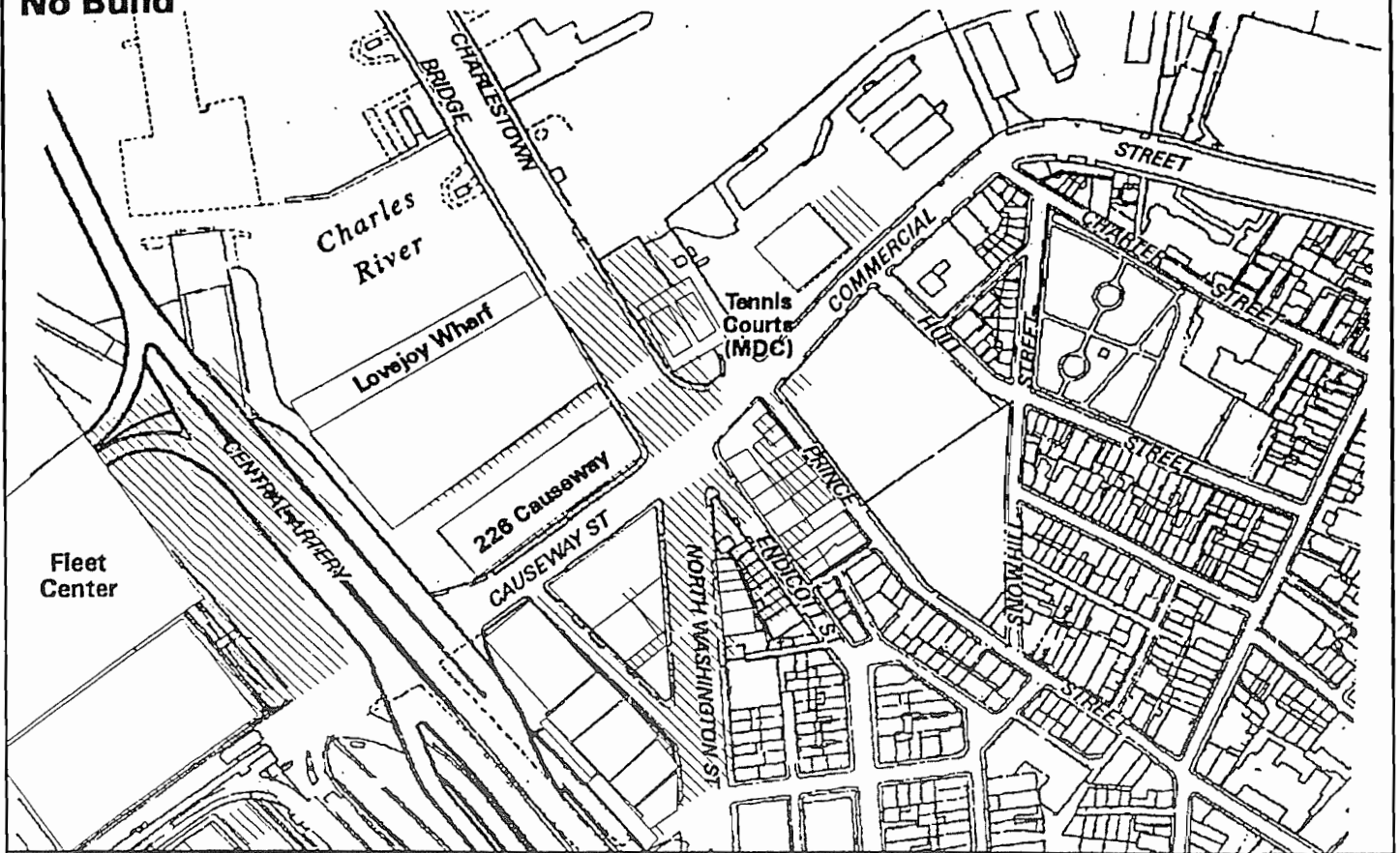
-  Existing Shadow
-  Additional New Shadow (226 Causeway)

March 21st Noon
c. 91 Alternative

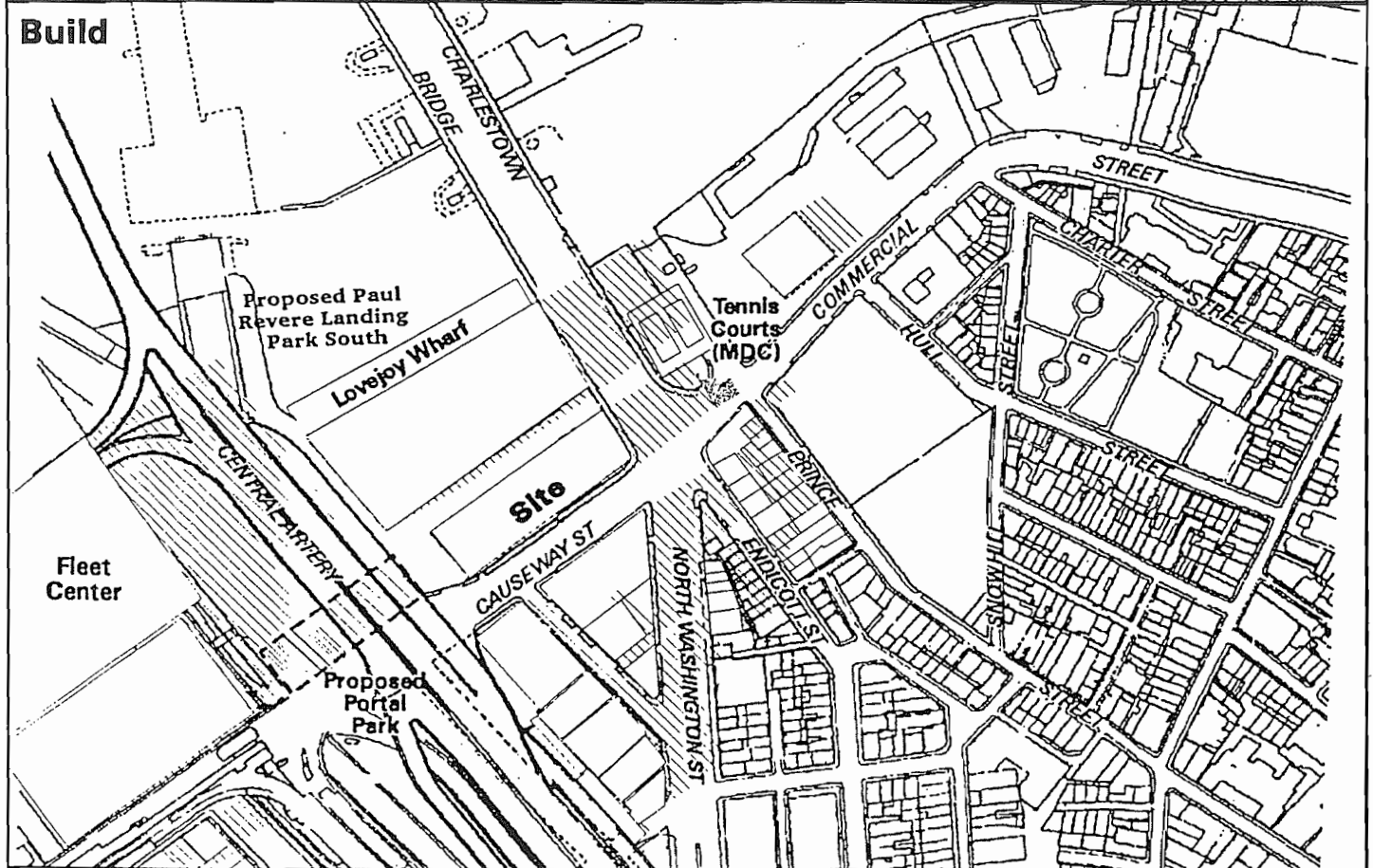
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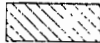



No Build



Build



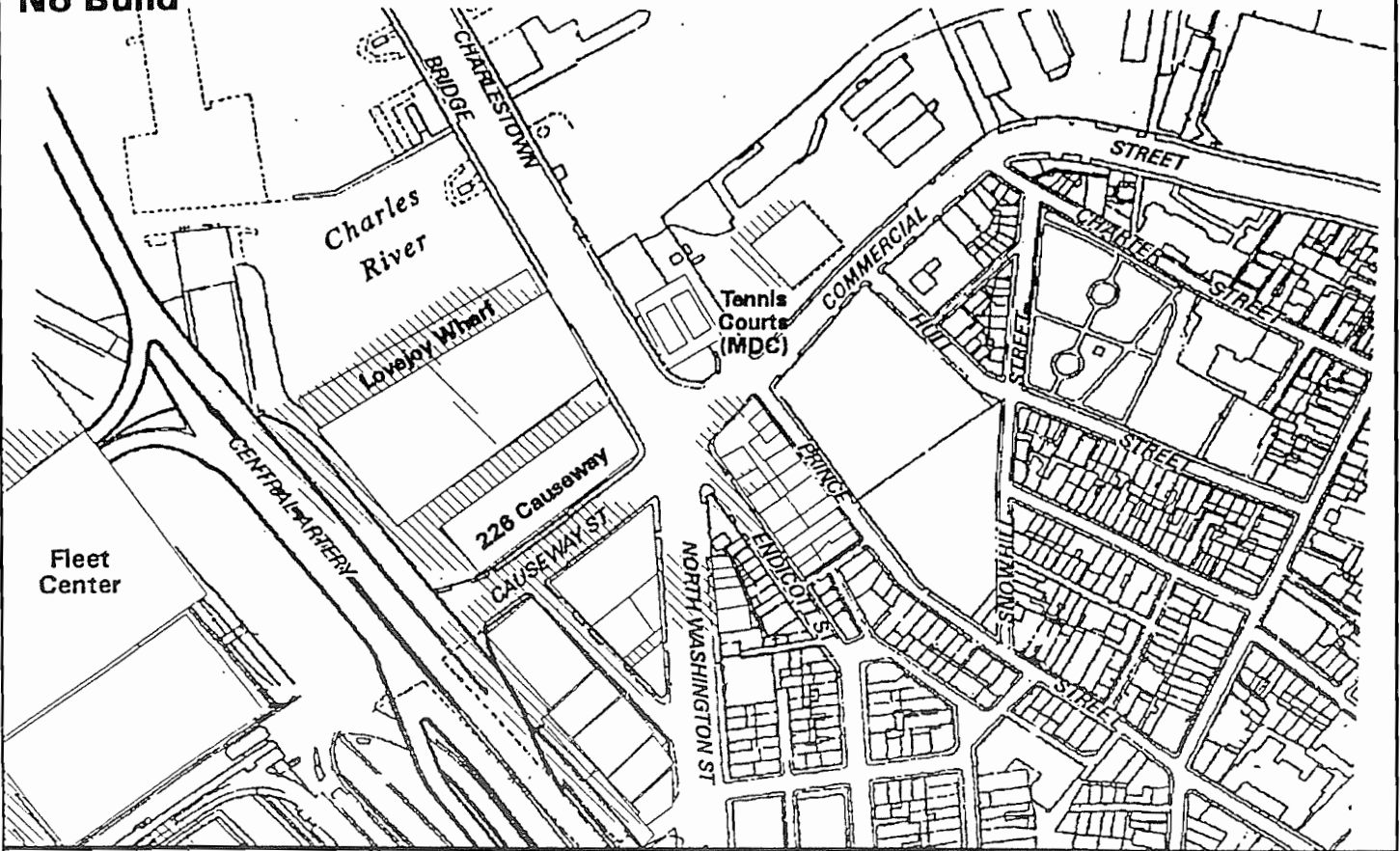
-  Existing Shadow
-  Additional New Shadow (226 Causeway)

March 21st 3:00 PM
c. 91 Alternative

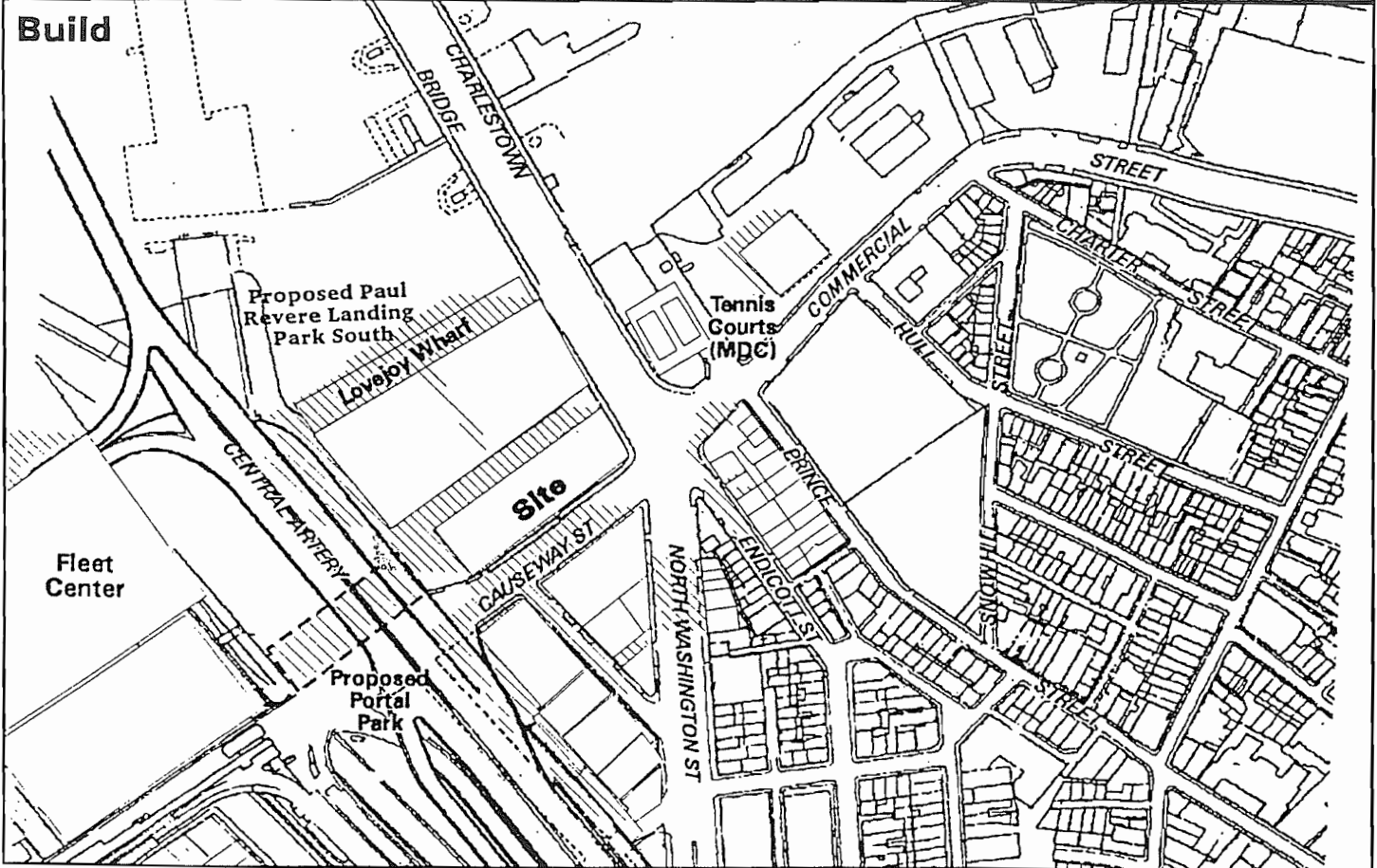
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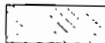
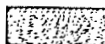


No Build



Build



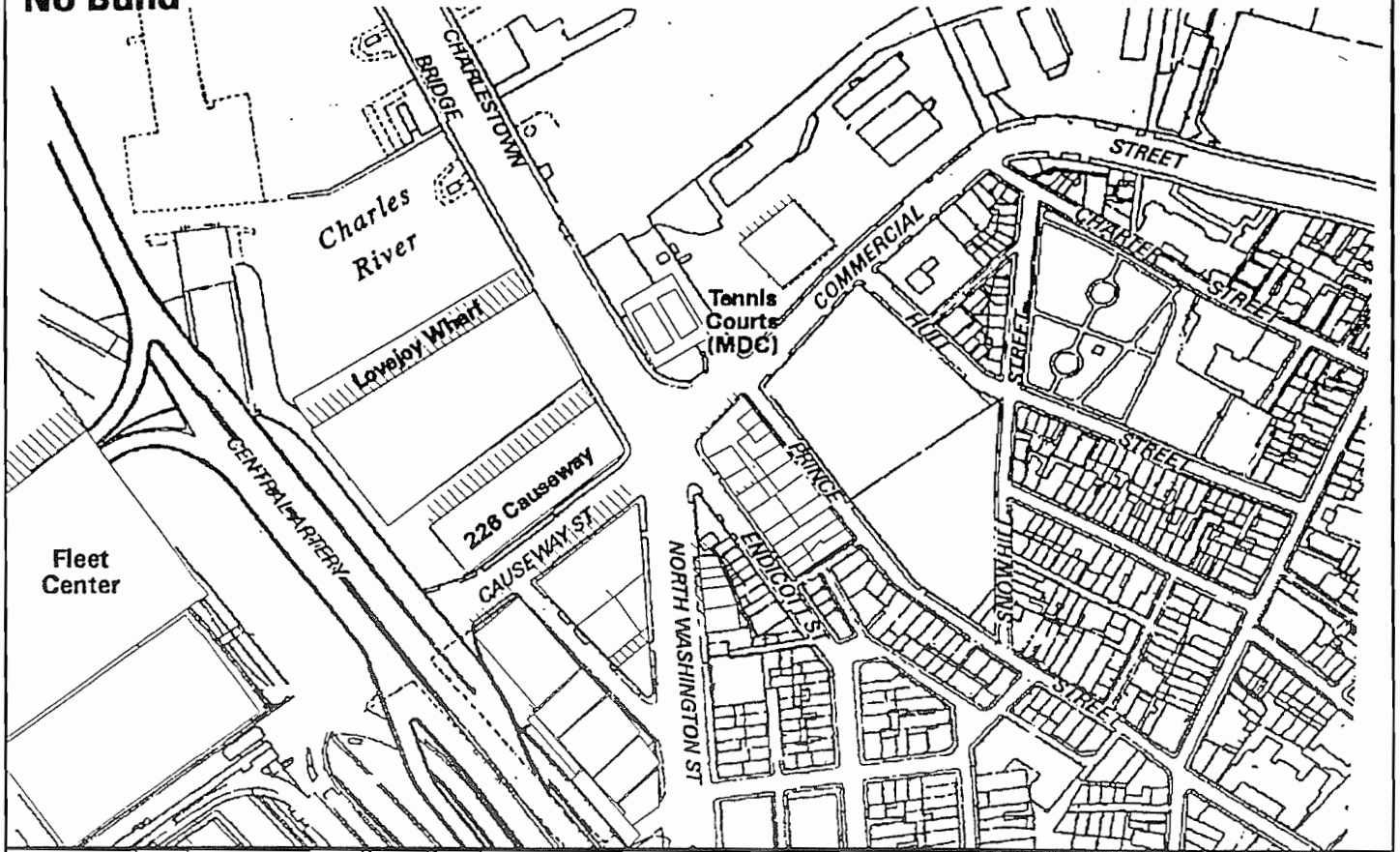
-  Existing Shadow
-  Additional New Shadow (226 Causeway)

June 21st 9:00 AM
c. 91 Alternative

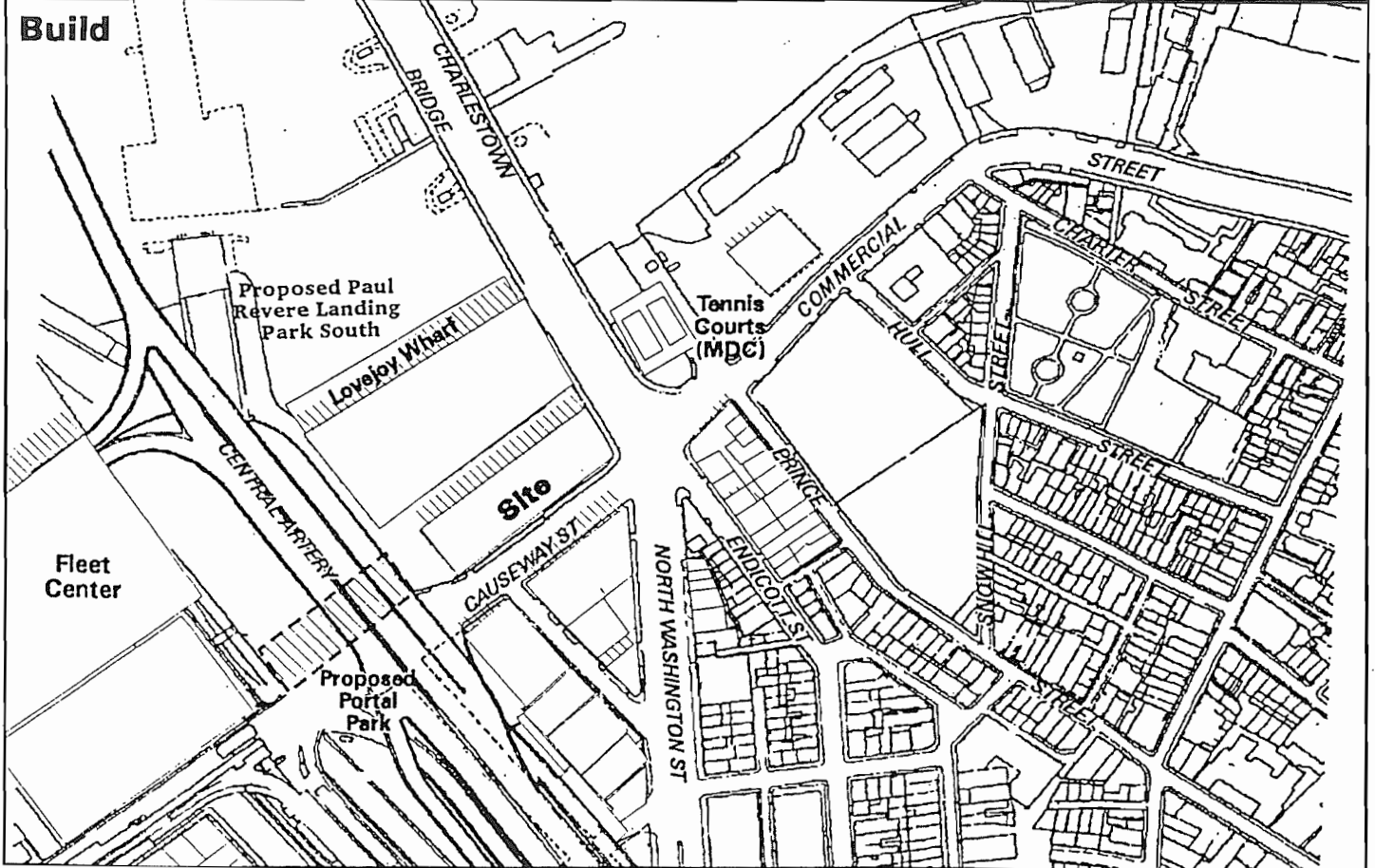
0 Feet 300


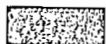


No Build



Build



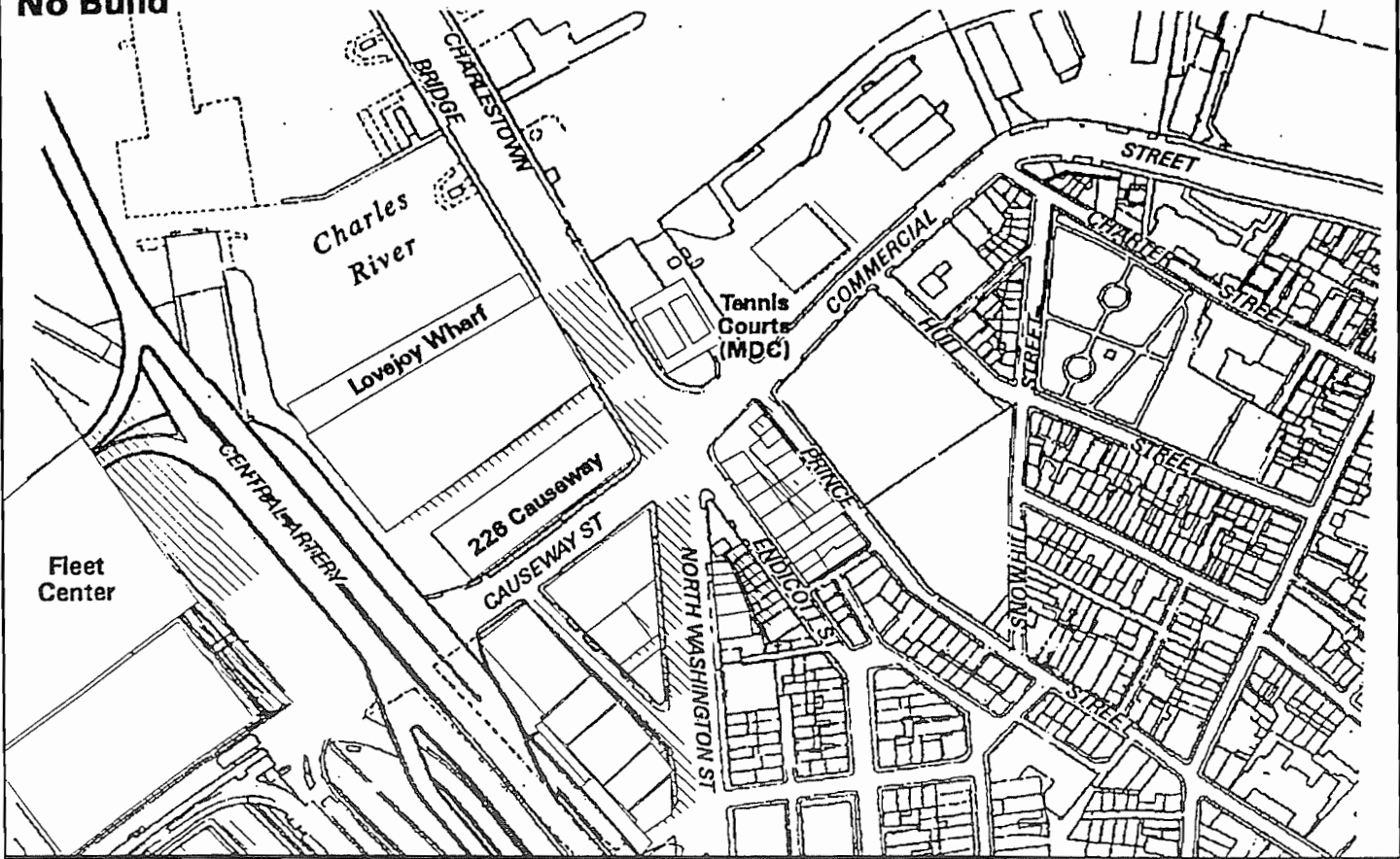
-  Existing Shadow
-  Additional New Shadow (226 Causeway)

June 21st Noon
c. 91 Alternative

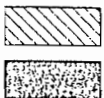
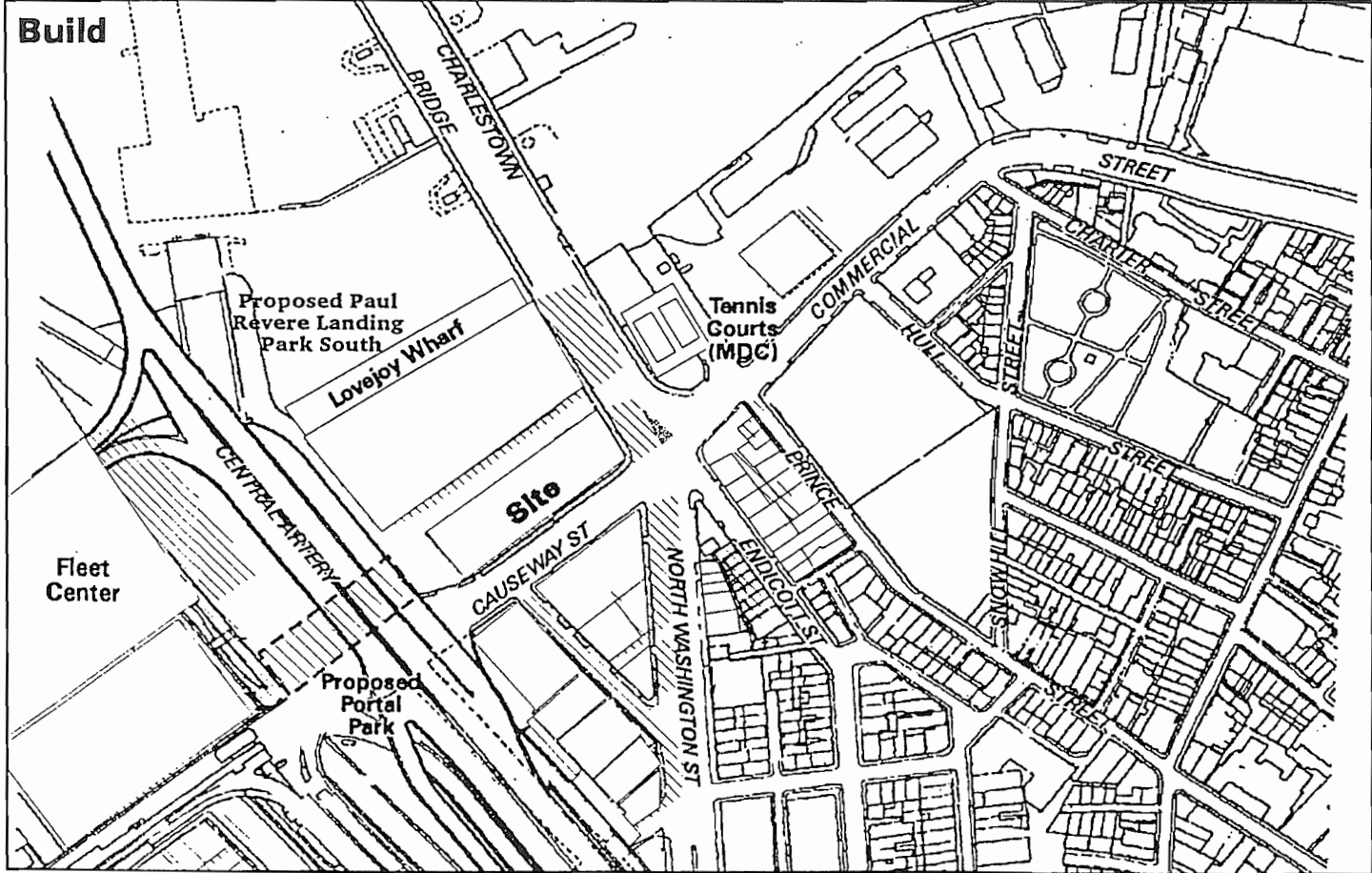
0 Feet 300



No Build



Build



Existing Shadow

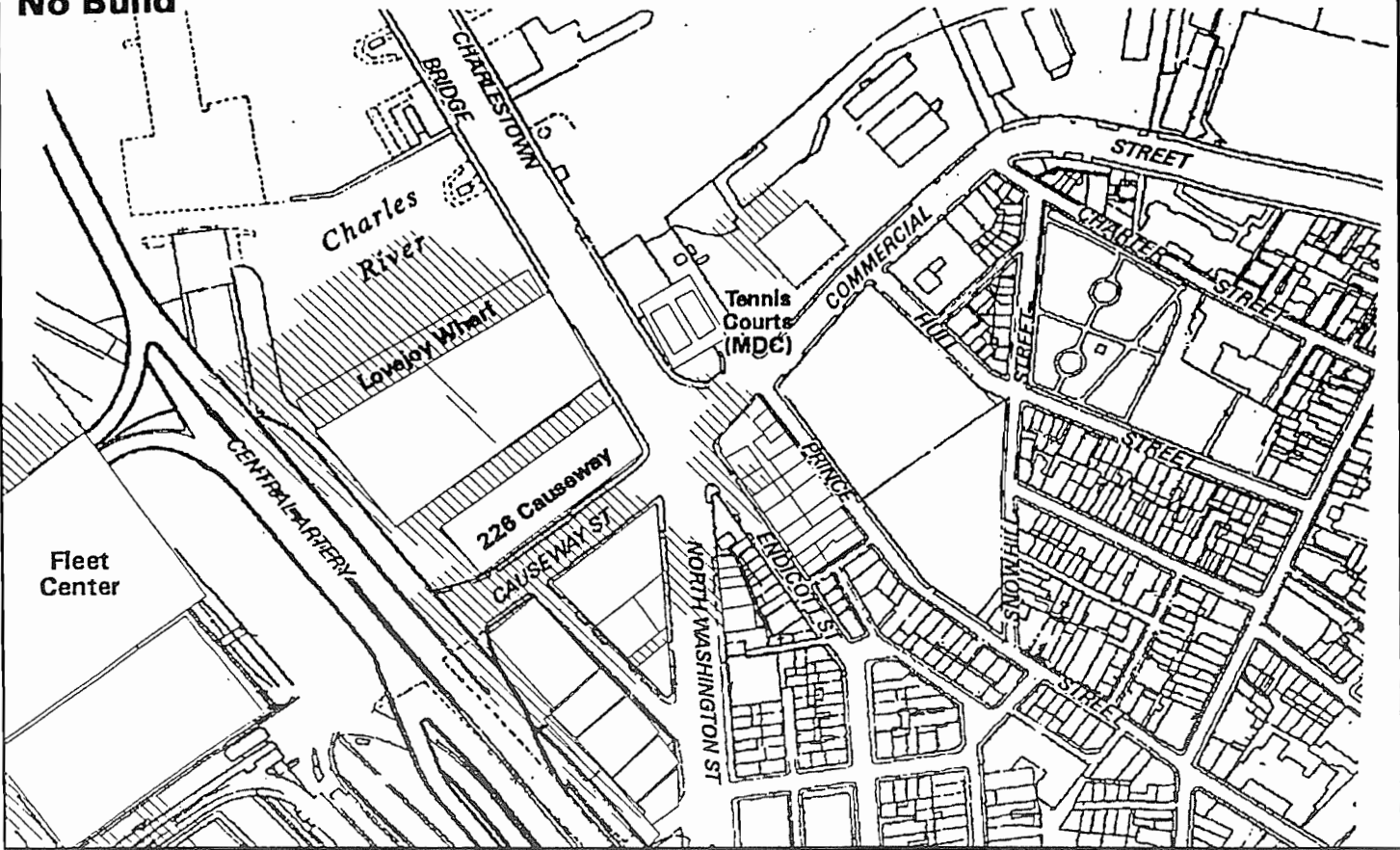
Additional New Shadow (226 Causeway)

June 21st 3:00 PM
c. 91 Alternative

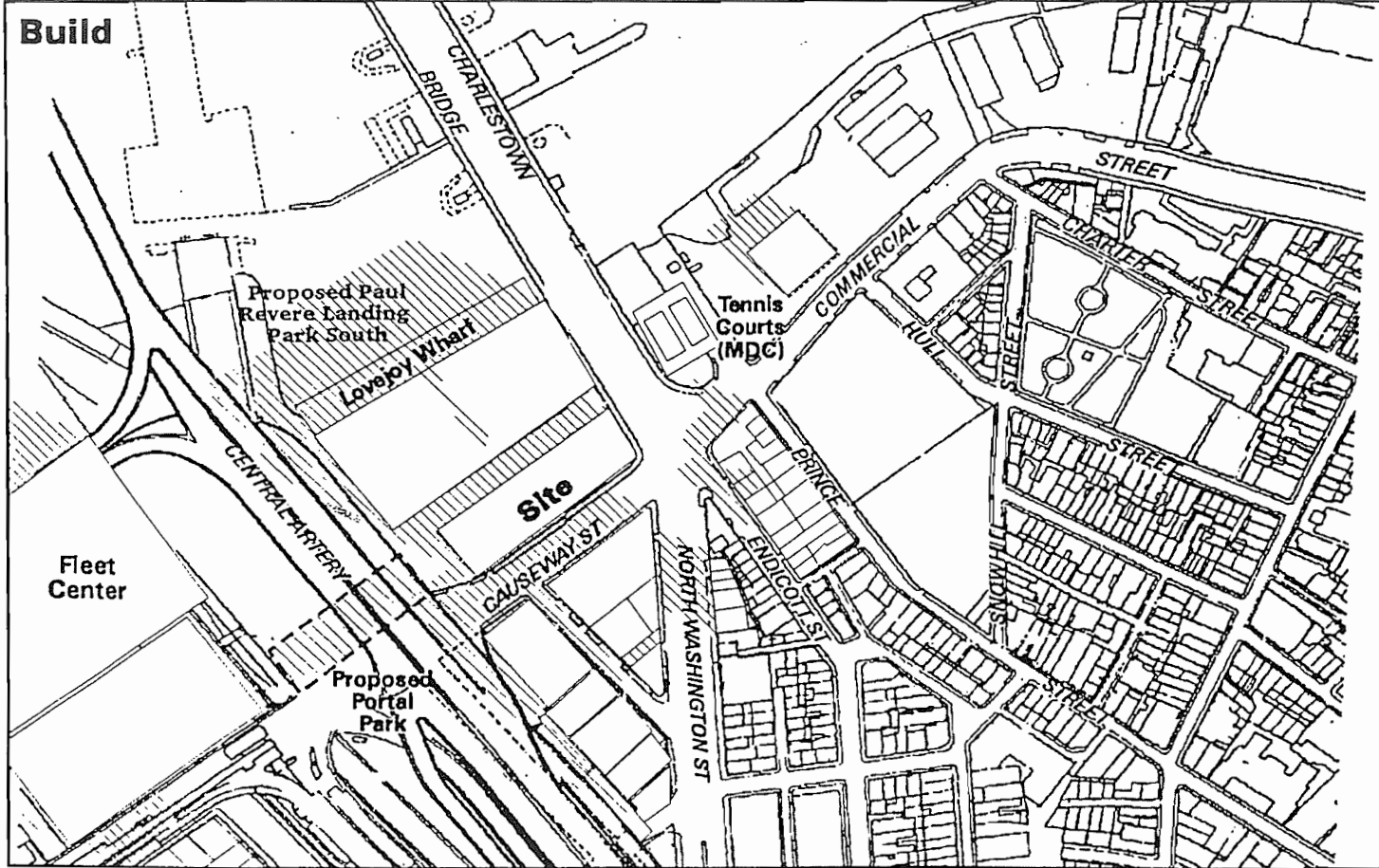
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



No Build



Build



 Existing Shadow

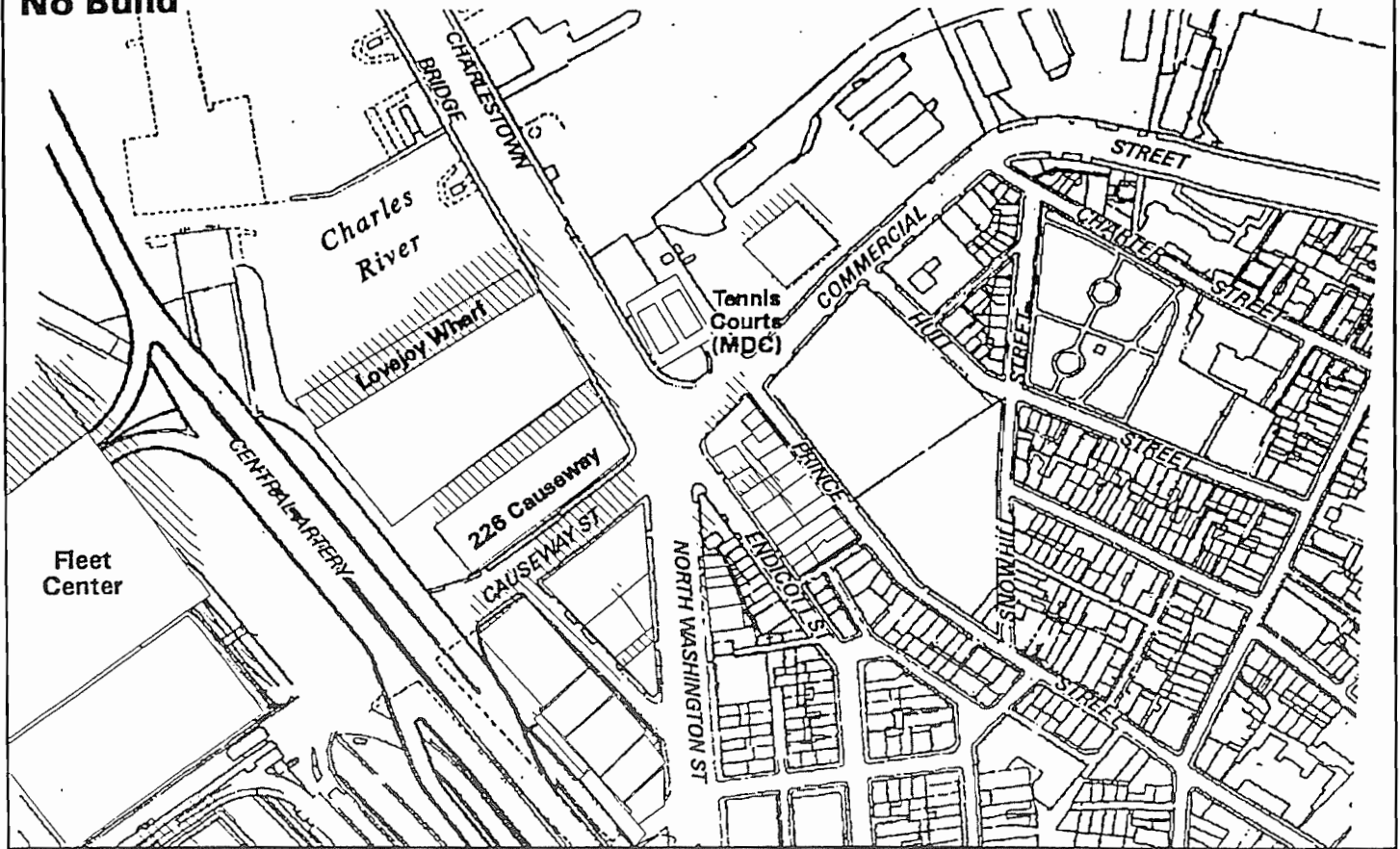
 Additional New Shadow (226 Causeway)

September 21st 9:00 AM
c. 91 Alternative

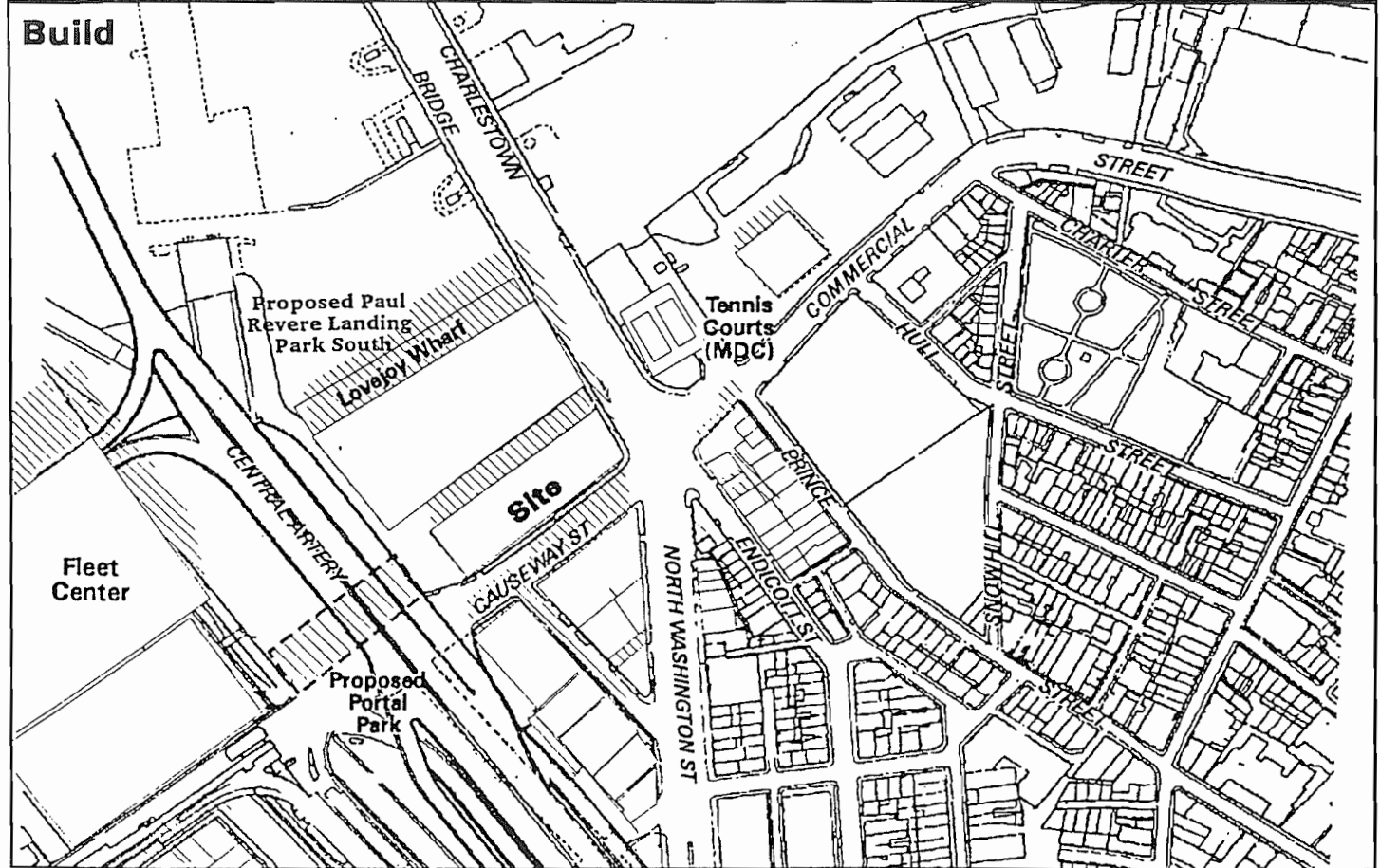
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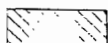
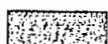


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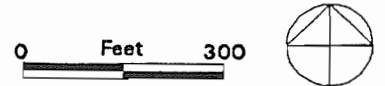


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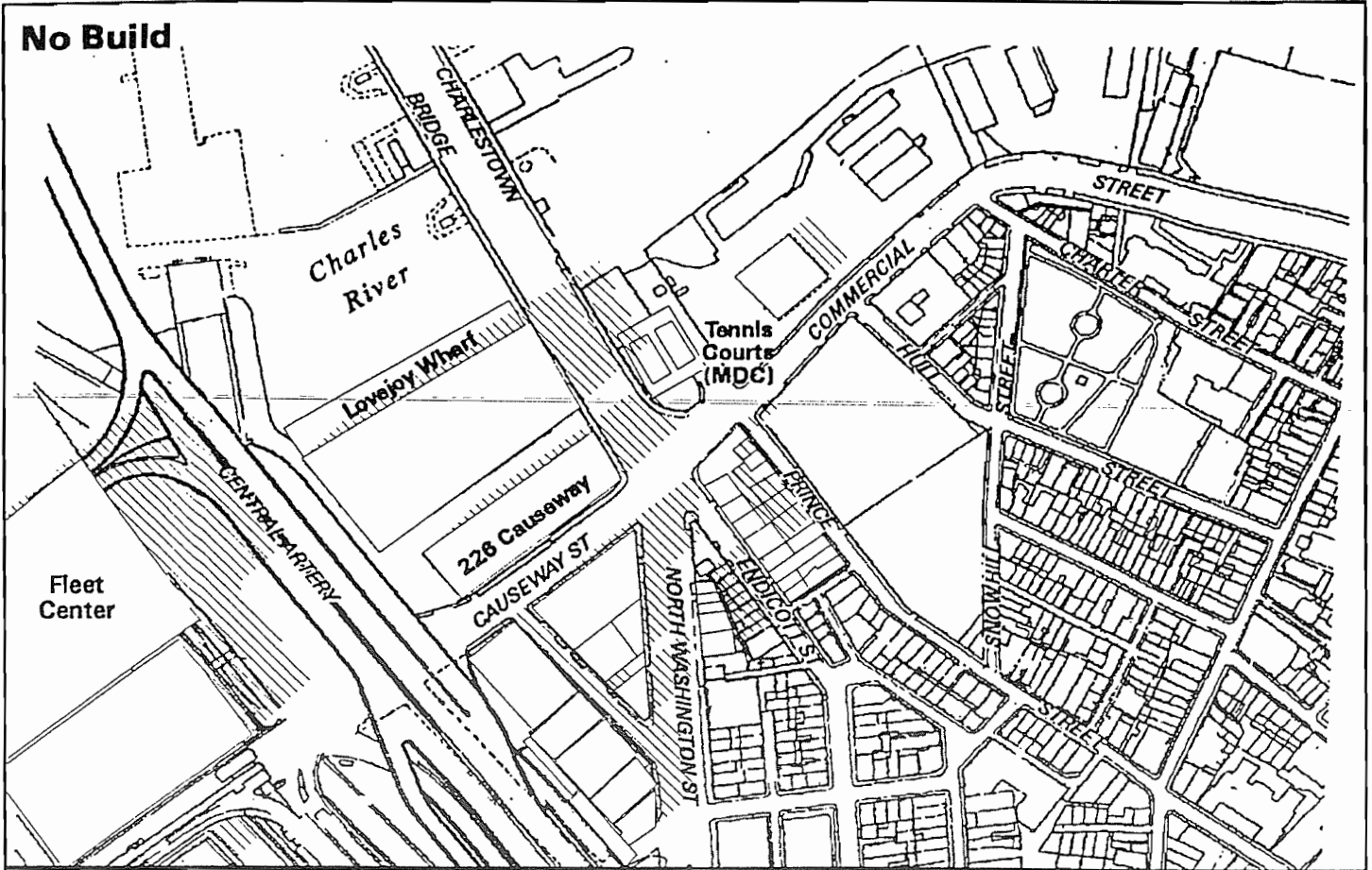


-  Existing Shadow
-  Additional New Shadow (226 Causeway)

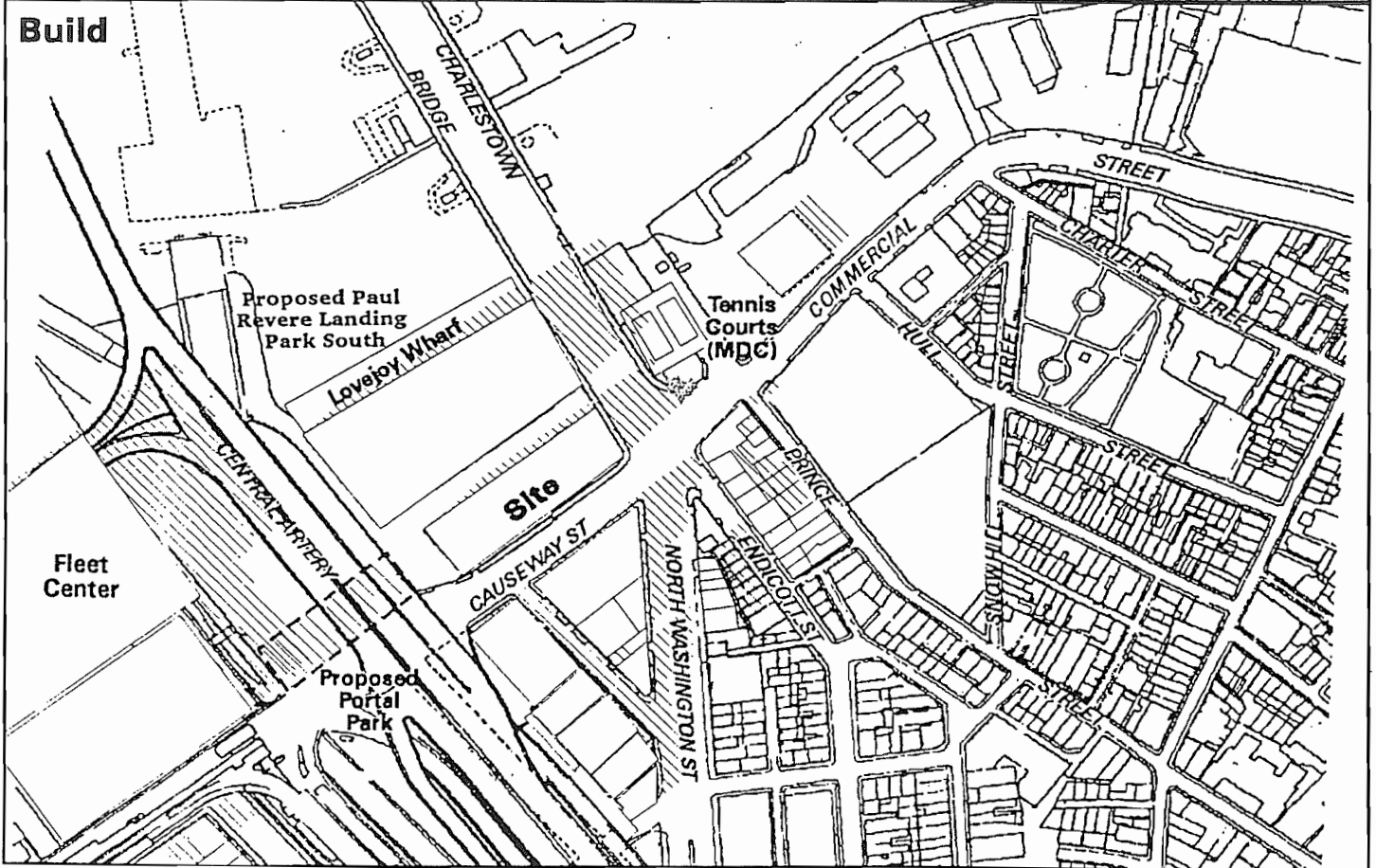
September 21st Noon
 c. 91 Alternative
 Figure 5.8-8





No Build



Build



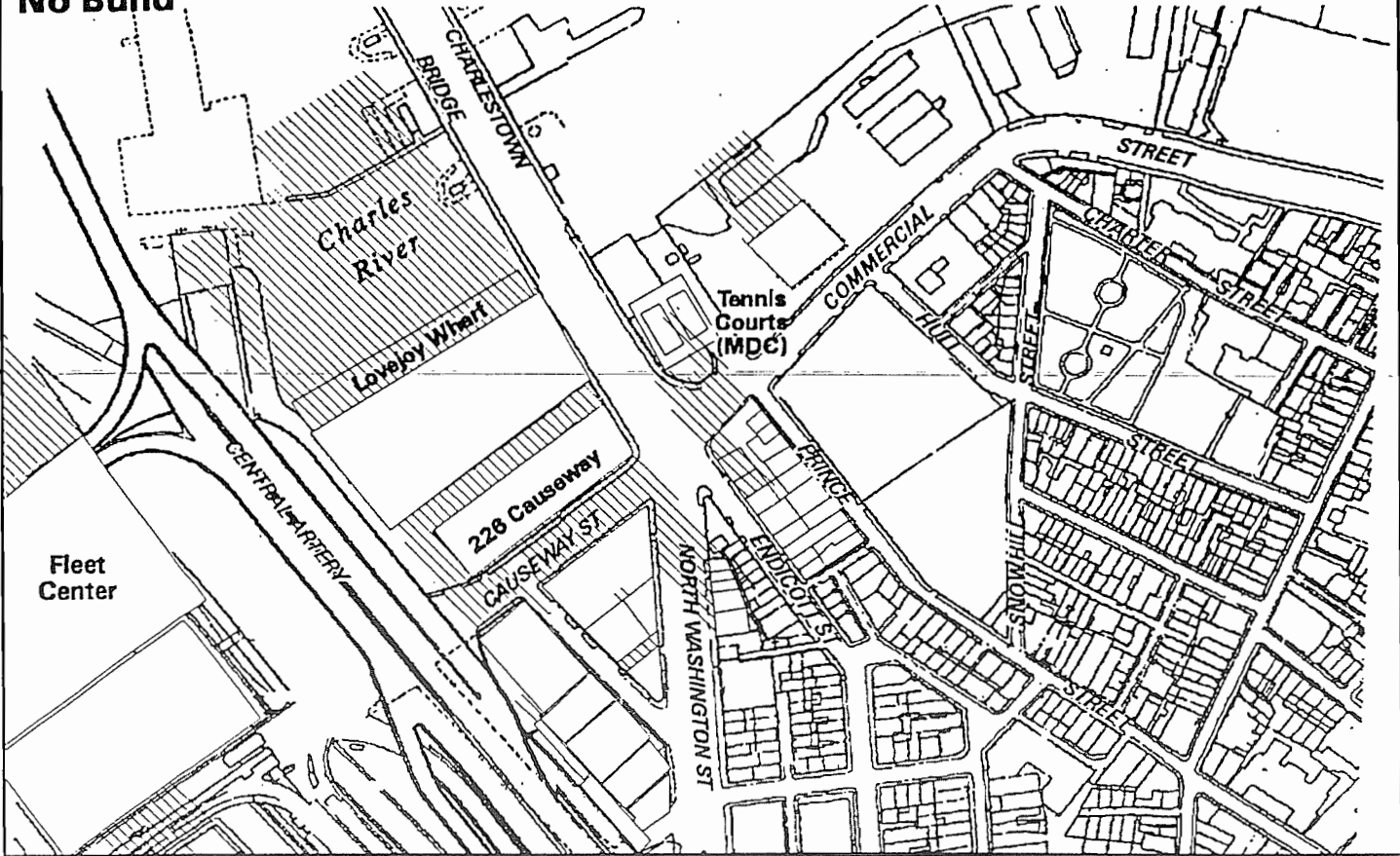
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September 21st 3:00 PM
c. 91 Alternative

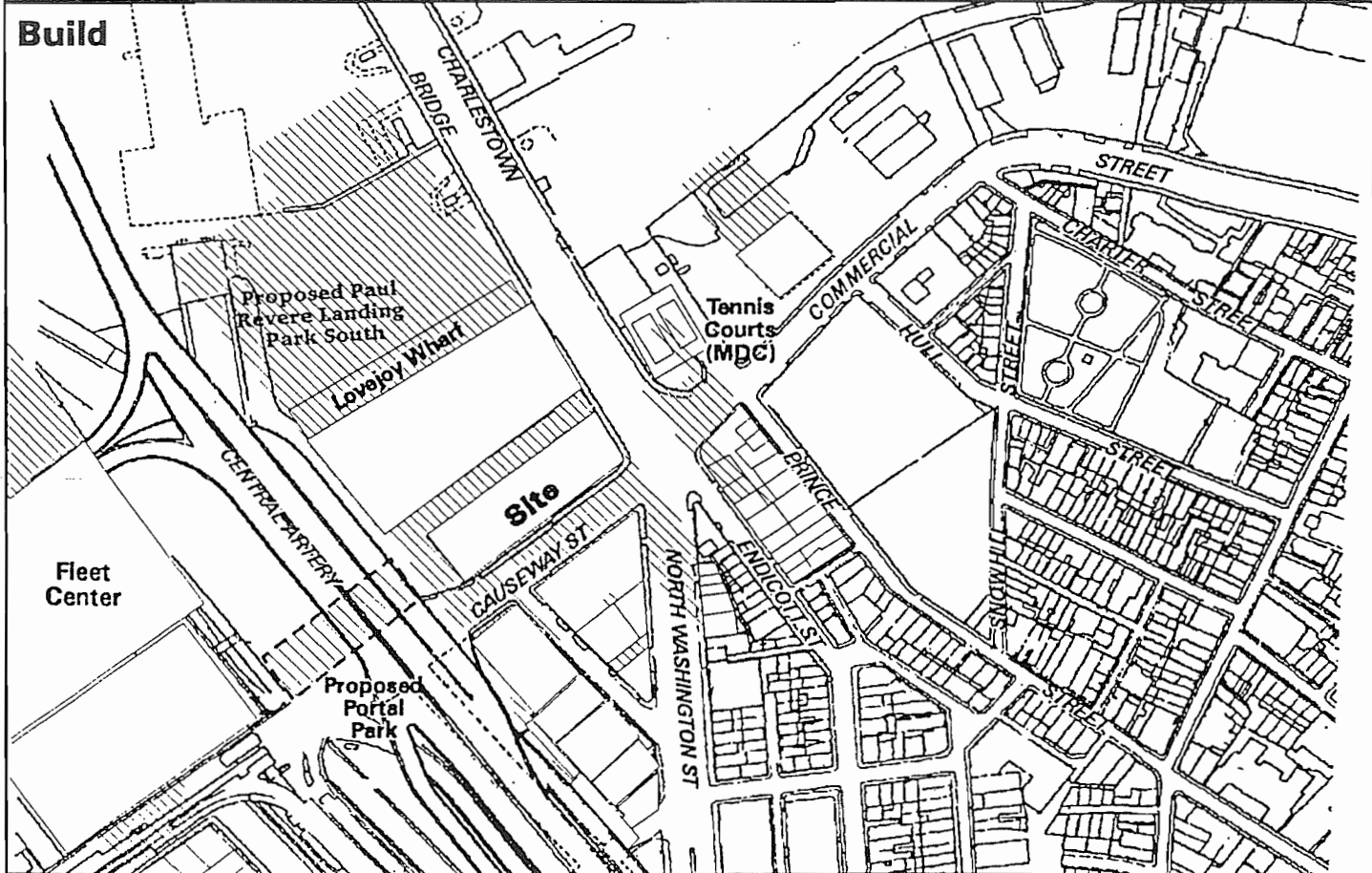
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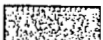
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Build



 Existing Shadow

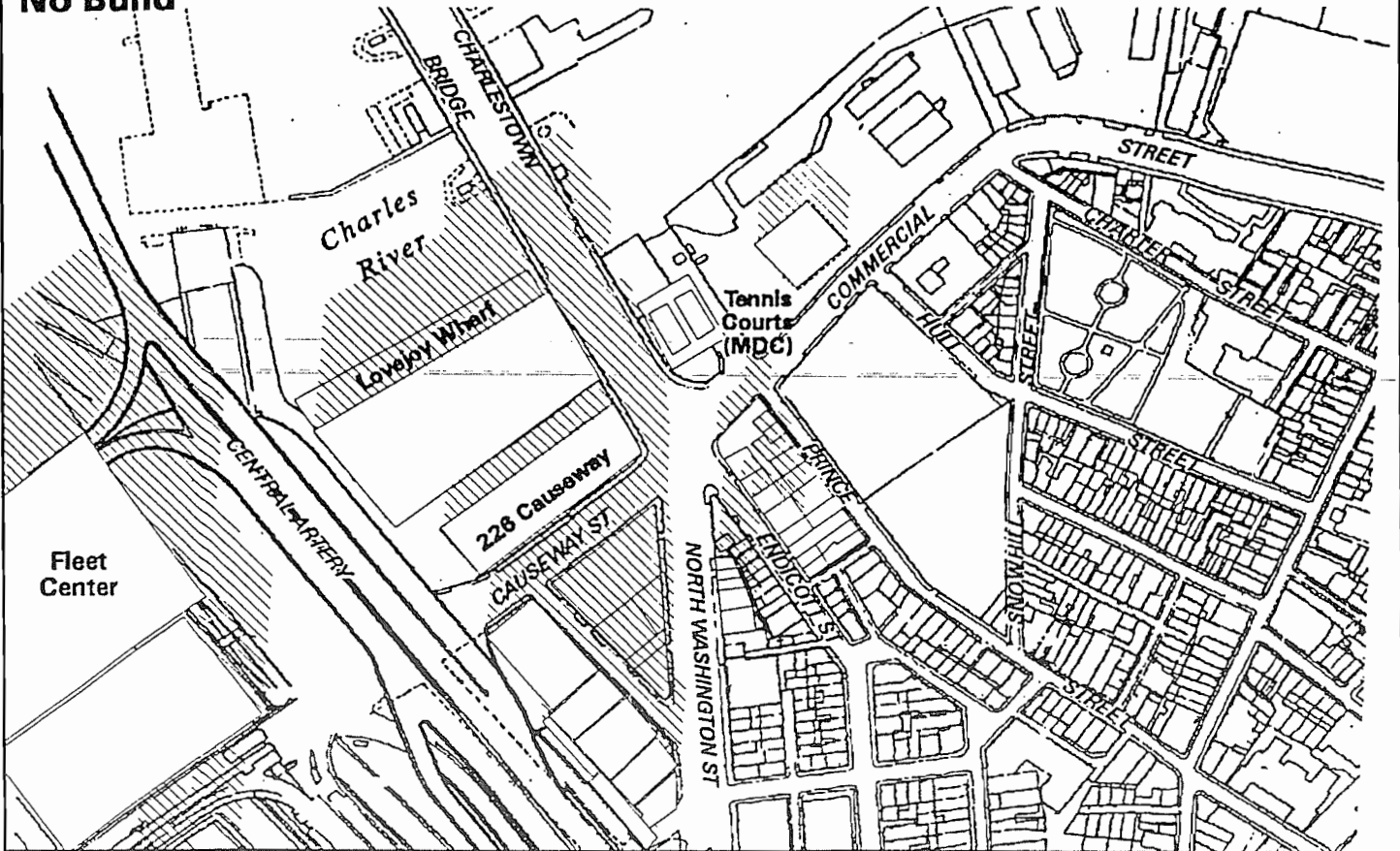
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December 21st 9:00 AM
c. 91 Alternative

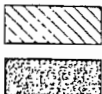
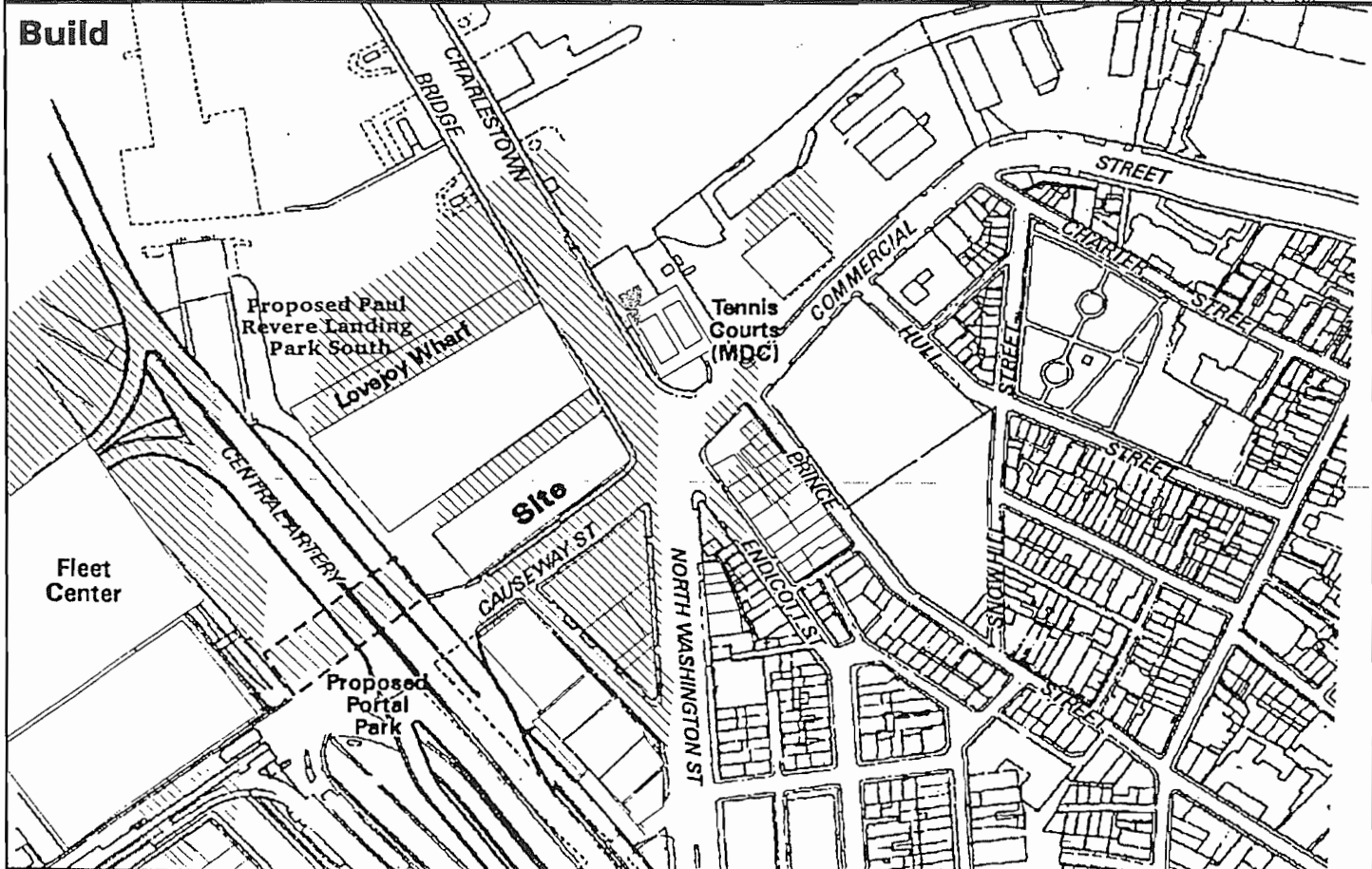
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No Build



Build



Existing Shadow

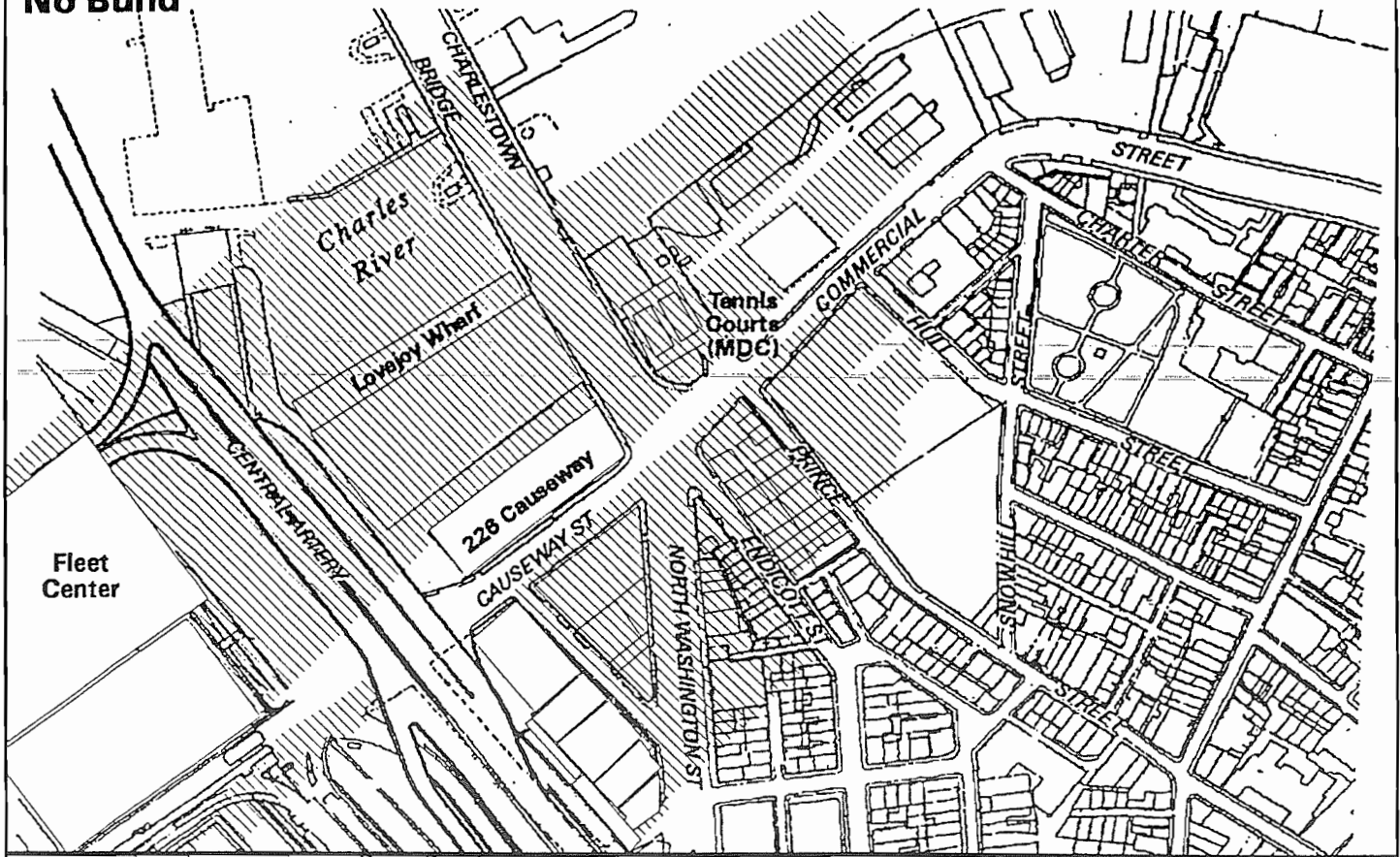
Additional New Shadow (226 Causeway)

December 21st Noon
c. 91 Alternative

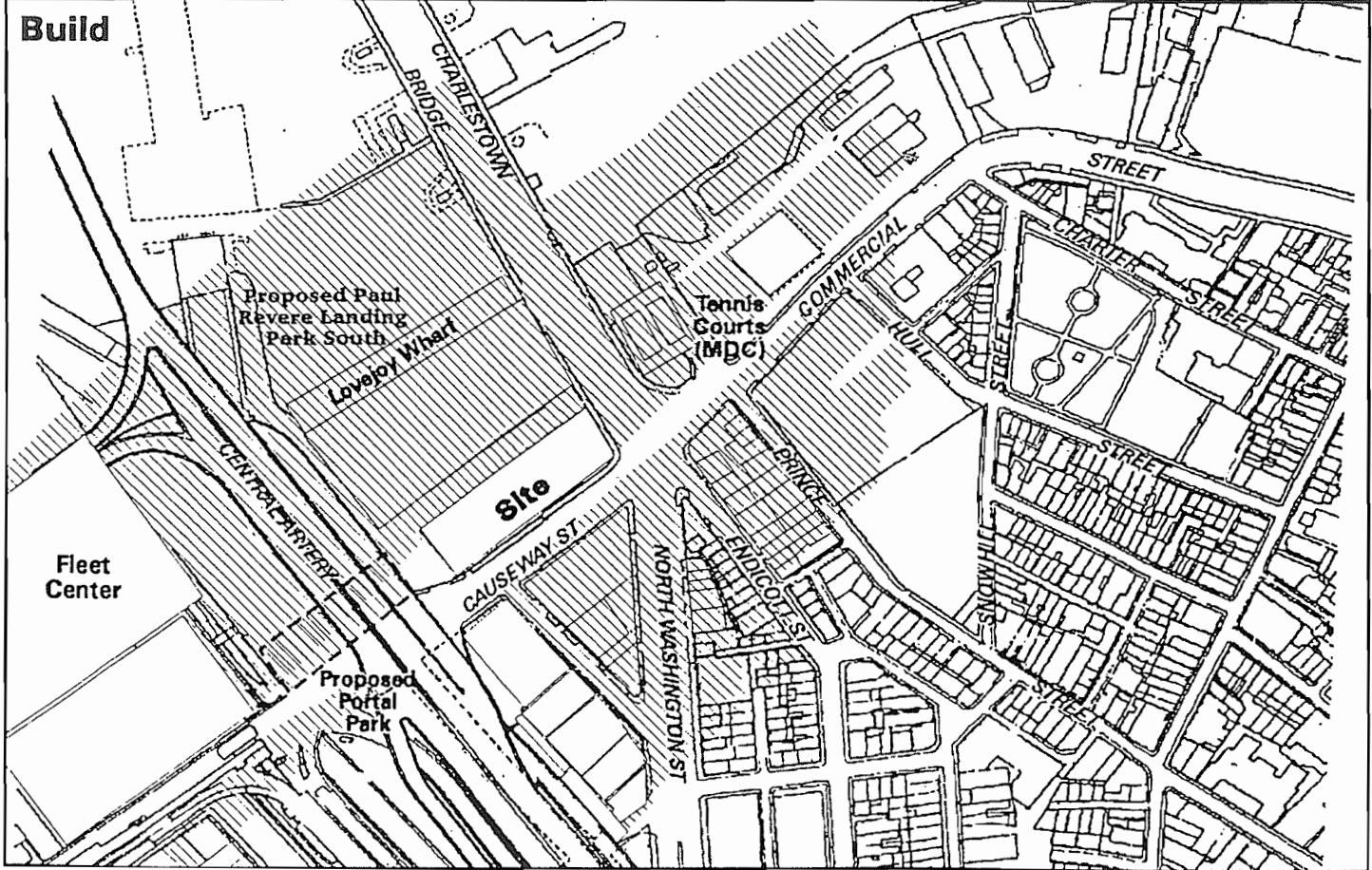
0 Feet 300





No Build



Build



-  Existing Shadow
-  Additional New Shadow (226 Causeway)

December 21st 3:00 PM
c. 91 Alternative

0 Feet 300



Note: Wind diagrams from the DPIR have been relabeled to show the approximate location of Paul Revere Park South.

**A QUALITATIVE ASSESSMENT OF PEDESTRIAN LEVEL WINDS
FOR THE 226 CAUSEWAY STREET REDEVELOPMENT**

BY

FRANK H. DURGIN

FEBRUARY 7, 1998

**SUBMITTED TO:
DAYLOR CONSULTING GROUP, INC.
10 FORBES ROAD
BRAintree, MA 02184
ATTENTION MITCHELL FISCHMAN**

A QUALITATIVE ASSESSMENT OF PEDESTRIAN LEVEL WINDS FOR THE 226 CAUSEWAY STREET REDEVELOPMENT

BY FRANK H. DURGIN

1.0 SUMMARY

An assessment has been made to determine the effect of the proposed renovations to 226 Causeway Street on pedestrian level winds (PLWs) in its vicinity. Winds for existing conditions and build conditions both before and after the Depressed Central Artery is completed were assessed and compared. No location considered was found to have PLWs that exceed the Boston Redevelopment Authority (BRA) guideline wind speed for any of the conditions considered. Although the renovations increase the building from 6 to 12 stories, because the upper 3 stories are set back 20 feet on three sides, the building was found to behave like a nine story building for assessing PLWs. As a result, the renovated building just raised PLWs a little, particularly near the ends of the building. Only for SE storm winds was the wind at any location (19) found to change categories. Adding the renovations had little or no effect on winds in the MDC Park nor in the area that is proposed for the Portal Park. PLWs at the main entrance on Causeway Street and at the other two proposed entrances were generally acceptable and were not affected substantially.

When the existing elevated expressway was replaced with the Depressed Central Artery there were significant changes in PLWs near the SW end of the building. At the entrance at the SW end of the building PLWs were increased but not significantly except for SE winds. Winds in Portal Park increased one category for all wind directions considered. Winds along Beverly Street from Causeway Street to the harbor shore were increased for both NW and SE winds primarily because the open space created by the depressed expressway lined up with the wind for these two wind directions. PLWs in the MDC park were unaffected by the change in the expressway.

2.0 INTRODUCTION

This is an assessment of pedestrian level winds (PLWs) in the vicinity of the 226 Causeway Street Redevelopment. Both existing and build conditions are considered. The assessment for build conditions discusses winds both before and after the Depressed Central Artery is completed.

The assessment is based on:

- 1) The following maps and drawings;
 - a) Topographic and Planimetric Survey maps of the area obtained from the BRA;
 - b) Maps of the site and surrounding area giving building heights obtained from Mitchell Fischman of The Daylor Consulting Group;
 - c) Various drawings showing floor plans and elevations contained in Project Notification Form;
- 2) Two site visits;
- 3) 11 photographs taken at the first site visit;
- 4) A copy of the Scoping Determinations issued by the BRA;
- 5) An evaluation of the urban context of the proposed project site;

6) A review of the Boston wind climate; and

7) The author's 25 years of experience dealing with PLWs.

The interaction of the wind with buildings and structures is very complicated and, at times, difficult to predict, especially for urban areas such as this, that include a mixture of low-rise, mid-rise, and high-rise buildings. Thus this evaluation provides a qualitative assessment of PLWs.

2.0 LOCATION AND DESCRIPTION OF THE PROJECT AND SURROUNDING AREA (Figures 1, 2, and 3)

2.1 LOCATION AND DESCRIPTION OF THE PROJECT (Figures 1 - 3)

The site is located on the west corner of the intersection of Causeway Street and North Washington Street. The existing building occupies almost all of the area bounded by North Washington Street, Causeway Street, Beverly Street, and Lovejoy Place. There is a small open area at the SW end of the block just northeast of Beverly Street. Currently, Beverly Street at that point is under the Fitzgerald Expressway. When the Depressed Central Artery is completed it will be exposed. 226 Causeway Street was built in 1906 for the Austin Biscuit Company and was used as the Stop and Shop Bakery until the mid 1980's. Currently it is unoccupied. The existing building is six stories high and about 85 feet to the roof, but parapets bring the effective height for wind to about 90 feet. The names of some buildings, the heights of most nearby buildings and the 28 locations that are considered in the assessment are indicated in Figure 1.

The renovated building will contain 247 apartments with some retail space and a 32 car garage on the first floor. This garage will be accessed from the Beverly Street end of the building. Six floors will be added bringing the total height of the building to 155 feet. The first three added floors will have essentially no setback, but the upper three will be set back 20 feet from Lovejoy Place, North Washington Street, and Causeway Street. These setbacks will result in the building being effectively only about 125 feet tall for winds from the NW, N, NE, E, SE, and S. The upper three stories will have no setback from Beverly Street. There will be a 73 car garage in the basement. This garage will be accessed from the North Washington Street end of Lovejoy Place. A plan view of the first floor is given in Figure 2.

The main entrance to the renovated building will be in the middle of the Causeway Street facade (Location 18). There will be a drop-off entrance at the Beverly Street end near the entrance to the first floor garage (Location 15). Also, there will be an entrance to the NE retail space in the middle of the North Washington Street facade (Location 16). Entrances to the two retail spaces along Causeway Street will be from the main lobby. The only other entrance will be near the entrance to the basement garage at the NE end of Lovejoy Place (Location 12 in Figure 1).

2.2 THE SURROUNDING AREA (Figures 1 - 3)

Figure 1 depicts the existing building and immediate surrounding area within a couple of blocks. Building heights are given to the nearest 5 feet. The area surrounding 226 Causeway Street contains mixture of low-rise and mid-rise buildings. The closest large building is the story Hoffman Building to the NW across Lovejoy Place. The Hoffman building is 9 stories and 115 feet high at the North Washington Street end and 6 stories and 105 feet to the top of the parapet at the Beverly Street end. Boston Harbor and the mouth of the Charles River are beyond. The top of the 9 story part of the Hoffman Building is about the same height as the top of the ninth floor of the proposed renovation. The Hoffman Building does and will provide considerable sheltering for the 226 Causeway Building for NW winds.

For N and NE winds the site is quite exposed due to the presence of the harbor and MDC park across North Washington Street. To the E and SSE there are only 2 to 5 story buildings, but many of them are on top of Copps Hill and so they provide considerable sheltering for winds from these directions.

To the SE across Causeway Street is a 9 story building about 105 feet tall and it currently provides much sheltering for the NE end of 226 Causeway Street for winds from the SE. The buildings across Causeway Street the other side of Medford Street at the SW end of 226 Causeway Street are only 65 feet high. The Financial District lies further to the SE, and S and will reduce any winds from those directions.

To the SW and W close by there are North Station, the Fleet Center, and the O'Neil Building, all of which are between 95 and 145 feet. Further away are the West End, Beacon Hill, Massachusetts General Hospital, and the two Longfellow Towers, all of which will tend to slow the winds from these directions.

Thus the site is quite sheltered from all winds except those from the N and NE. The Hoffman Building, and the Harbor Walk area are all very exposed to NW winds.

Figure 2 shows the ground floor plan and build conditions with the existing Central Artery (Fitzgerald Expressway). Figure 3 depicts conditions after completion of the Depressed Central Artery including the proposed Portal Park off the SW end of 226 Causeway Street.

3.0 THE WIND CLIMATE

3.1 THE VARIATION OF WIND SPEED WITH HEIGHT

In general, the natural wind is unsteady (*i.e.*, it is gusty) and its average speed increases with height above the ground. Figure 4 depicts how the average wind speed varies with height for different types of terrain. While generally it does not happen, when one puts up any building, the possibility exists that the building will bring the higher speed winds at the top of the building down to ground level.

Monolithic buildings (*i.e.*, those that do not change shape with height), if they are significantly taller than most of the surrounding buildings, almost invariably will be windy at their bases. However, when there are many buildings of similar height in the area, they tend to shelter one another. As noted above, the setback of the top three stories of the proposed renovation to 226 Causeway Street breaks up the monolithic nature of the renovated 226 Causeway Street.

3.2 STATISTICAL DESCRIPTION OF THE BOSTON WIND CLIMATE

The project site is located about 1.5 miles WNW of Logan Airfield. Thus, the wind data from Logan Airfield usually used to define the winds for Boston is applicable. Figure 5 depicts a wind rose for Boston. The length of each line radiating from the center of the figure to the outermost crossing line is proportional to the total time the wind comes from that direction. The other lines crossing the radial lines indicate the frequency of winds less than 7.5, 12, and 19 mph. As noted in the figure, the wind rose is based on surface wind data from Logan Airfield taken from 1945 to 1965. While data from 1965 to 1996 is also available, it is not believed to be as representative of the true winds in Boston, due to the many 25 to 40 story buildings that have been built in the Financial District of Boston since 1965. The Financial District is just one mile west of Logan Airfield.

Figure 5 shows that the winds in Boston come primarily from the NW, W, and SW. Figures 6 through 9 show wind roses for Boston for winter (Dec., Jan., and Feb.), spring (Mar., Apr., and May), summer (Jun., Jul., and Aug.), and fall (Sep., Oct., and Nov.). These figures show that NW winds tend to occur during the colder months and SW winds during the warmer months. Spring and fall are transitional, but winds in the spring are stronger than those in the fall. Strong easterly winds usually occur during storms when there is precipitation.

The Hoffman Building provides much sheltering from NW winds even for the Beverly Street entrance. The main entrance on Causeway Street is in the lee of both buildings. The site is less protected for SW winds, but they are lighter and some windiness is desirable on hot summer days.

The average wind speed at Logan Airfield at 58 feet (the average height at which the data was taken) is 12.9 mph. At pedestrian height (*i.e.*, at chest height, 4.5 feet) it is about 8 mph. The average wind speed at 58 feet at Logan Airfield for each month is shown in Figure 10. Seasonally the average is 14.2 mph in the winter, 13.9 in the spring, 11.2 in the summer, and 12.3 in the fall.

4.0 CRITERIA

Since the early 1980's, Boston has used a guideline criteria for acceptable winds of not exceeding a 31 mph effective gust more often than once in one hundred hours. The effective gust is defined as the average wind speed plus 1.5 times the root mean square variation about the average and can be shown to be about the fastest one minute gust in an hour. When many stations are considered the effective gust averages 1.38 times the average wind speed.

In 1978, Melbourne [2] developed a probabilistic criteria for average PLWs which accounted for different types of pedestrian activity as well as the safety aspects of such winds. Durgin [3] has reinterpreted his criteria to apply to Equivalent Average winds. (see Figure 11). The Equivalent Average used in this figure is similar to an hourly average, but combines the effects of steady and gusting winds. Five Categories of PLWs are defined :

- 1) Dangerous and Unacceptable;
- 2) Uncomfortable for Walking;
- 3) Comfortable for Walking;
- 4) Comfortable for Short Periods of Standing and Sitting;
- 5) Comfortable for Long Periods of Standing or Sitting.

These criteria are not absolute (any location can have dangerous winds in a hurricane). Rather, they imply that the location would have wind speeds such that the activity suggested is possible most of the time, and would be perceived as such, by most people who frequent the location. For example, the winds at pedestrian level at Logan Airfield are, while in Category 3 (comfortable for walking), are almost in Category 2 (uncomfortable for walking) (see Figure 10), and are well under the BRA 31 mph effective gust wind speed guideline (converted to an equivalent average wind), which is in the middle of Category 2. Therefore, most people would perceive conditions in the open at Logan Airfield as marginally comfortable for walking.

5.0 PEDESTRIAN LEVEL WINDS AT THE SITE

5.1 INTRODUCTION

In the following sections the effects of NW winter winds, SW summer winds, and easterly storm winds will be discussed for existing conditions and for build conditions both before and after the Depressed Central Artery is completed. The proposed renovations will probably be completed before the Depressed Central Artery is finished. The effects of the building on PLWs in the proposed Portal Park over the entrance to the Depressed Central Artery will be considered (See Figure 3).

For the most part the weather in New England is dominated by either large coastal storms (fall, winter, and spring) or the Bermuda High (summer). Typically, when a coastal storm occurs, it rains or snows for 4 to 12 hours, then it clears. As the storm moves to the NE, winds blow from the NW for three or four days until the next weather system arrives. These storms and the NW winds following them occur mostly in the fall, winter, and spring. NW winds are particularly uncomfortable in the winter, when typically they occur on cold days. The Bermuda High is generally responsible for the SW winds that occur in the summer.

5.2 NORTHWEST (WINTER) WINDS (Figures 12 - 14)

5.2.1 Introduction

NW winds blow directly at the NW facade of the Hoffman Building which is upwind of the existing 226 Causeway Street Building. The Hoffman Building is 9 stories high at its NE end and 6 stories at its SW end. The existing 226 Causeway Street Building is 6 stories, so currently it is quite sheltered from NW winds.

5.2.2 Existing Conditions in NW Winds (Figure 12)

With the sheltering of the Hoffman Building, PLWs along much of Causeway Street and in Lovejoy Place are probably in Category 5 (Locations 8, 11, 12, 17, 18, and 23). Winds along the sidewalk at the NE end of both the Hoffman Building and 226 Causeway Street are believed to be in Category 4 (Locations 7 and 16). PLWs in the area of the Harbor Walk and the MDC Park are in Category 3 because both areas are quite exposed (Locations 1, 2, 3, 4, 9, and 10). The same is true of the E corner at Commercial and Prince Streets, the N corner of Causeway and Prince Streets, and the W corner of Causeway and Endicott Streets (Locations 28, 27, and 26). The corner of North Washington and Endicott Street, and the two E corners of North Washington and Causeway Streets are somewhat sheltered and probably have PLWs in Category 4 (Locations 25, 24, and 19). Winds at the SW end of the Hoffman Building are in Category 4 (Location 6) because that area is in the separated flow off the W corner of the building. The Hoffman Building provides sheltering for the SW end of 226 Causeway Street for NW winds (Category 5 at Location 15). Location 14 at the SW end of 226

Causeway Street next to Beverly Street and the Fitzgerald Highway is less sheltered and winds there are probably in Category 4. Location 13, the other side of the Fitzgerald Highway in the future Portal Park area, would have much less sheltering except for the expressway and its supports. PLWs there are also believed to be in Category 4.

5.2.3 Build Conditions Before Completion of the Depressed Central Artery in NW Winds (Figure 13).

As noted above, the set-back of the top three stories of the renovated 226 Causeway Street Building will cause the renovated building to influence winds at pedestrian level as if it were a 9 story building instead of the 12 story building it will actually be.

Thus, the renovated building will not be significantly taller than the Hoffman building as it effects PLWs. None of the locations upwind of the Hoffman Building or at its ends (Locations 1-7) will be affected. Nor will the winds in Lovejoy Place (Locations 11, 8, and 12) be affected. In fact, the only places where the renovations are expected to have any effect on PLWs, will be at locations 14 and 20 at the SW end of the building and at Location 26. Wind speeds may increase slightly at these locations, but in no case is a change in category expected.

5.2.4 Build Conditions After Completion of the Depressed Central Artery in NW Winds (Figure 14)

The change to a Depressed Central Artery will have no effect on winds at the NE end of the site.

With the completion of the Depressed Central Artery, the roads of the expressway will probably go below ground level somewhere between locations 2 and 6. Thus the expressway will no longer provide much sheltering for the Portal Park area. The NW wind coming around the E corner of the Hoffman Building will be unobstructed. Similarly the wind coming of the N corner of the Fleet Center will have reduced interference. These off corner winds will be squeezed between the Fleet Center/North Station and the Hoffman/226 Causeway Buildings, causing increased winds at Locations 6, 13, 14, 20, 21, and 22. Winds at locations 6, 14, and 20 will not change category, but will be increased from low to high Category 4. Winds in Portal Park (Location 13) will increase from mid Category 4 to mid Category 3. Winds at stations 21 and 22 will increase from high Category 5 to low 4.

These changes will be due entirely due to the change in the configuration of the expressway and would occur with or without the renovated 226 Causeway Street Building.

5.3 SOUTHWEST (SUMMER) WINDS (Figures 15 - 17)

5.3.1 Introduction

The prevailing winds in the summer are from the SW. They winds approach the site along Causeway Street and come from directly over North Station and the Fleet Center. Both these buildings offer considerable sheltering for the entire site except right along Causeway Street. It should be borne in mind that, on hot summer days, some windiness may be desirable.

5.3.2 Existing Conditions in SW Winds (Figure 15)

Locations 1 - 5 are in the lee of the Fleet Center and/ or the base of the expressway. Locations 1, 3, and 5 are somewhat more exposed and currently probably have winds in

low Category 4. Locations 2 and 4 are less exposed and have winds in Category 5. Locations 6, 13, 14, and 15 are in the lee of North Station and / or the expressway. All currently are believed to have winds in Category 5. Locations 8, 11, and 12 in Lovejoy Place have SW winds in Category 4 as does Location 9 in the MDC Park due to the wind coming out of Lovejoy Place. Locations 7, 10 and 16 all currently have winds in Category 5, as they are in the lee of both the Hoffman Building and 226 Causeway Street.

Along Causeway Street from Beverly Street to North Washington Street and Keavy Square, Locations 17-19, and 20-24 all probably have PLWs in Category 4 for SW winds. Location 25 is sheltered by the 105 foot building on the SE side of Causeway Street (Category 5). Location 26 at the corner of Endicott and Causeway Streets would be quite windy except the building there is low (Category 4). Location 27 on the S corner of Prince and Causeway Streets is less exposed and has PLWs in Category 4. On the other hand, Location 28 on the E corner of Prince and Commercial Streets is sheltered by the 65 foot building SW of it on the other side of Prince Street (Category 5).

5.3.3 Build Conditions Before Completion of the Depressed Central Artery for SW Winds (Figure 16).

While the SW facade of the renovated 226 Causeway Street building is vertical all the way to the top, the setbacks on either side allow some the SW wind to be escape to the two sides for the top three stories; thus it does not act as a truly monolithic building. As a result the renovated building will cause no changes in category at any of the locations considered. There will be small increases in the PLWs at Locations 11 and 17 on either side of the building at the SW end. PLWs at Locations 8, 22, and 23 may also increase, but less than at 11 and 17. Changes at all other locations considered will not be noticeable.

5.3.4 Build Conditions After Completion of the Depressed Central Artery for SW Winds (Figure 17).

As for NW winds the completion of the depressed expressway will have more effects on PLWS for SW winds than the renovated building before completion. Although still in the lee of the Fleet Center, Location 2 will now have PLWS in Category 4 due to the reduced sheltering of the expressway. Locations 1, 3, 4, and 5 will also see increased winds, but no change in category. With the removal of the elevated expressway the winds at locations 6, 13, 14, and 15 will all change from Category 5 to 4 due to the increased exposure of both the Hoffman and 226 Causeway Buildings. PLWs at Locations 17 and 20 will probably increase to low Category 3. Winds in Lovejoy Place at locations 8, 11, and 12 will also increase slightly, but not change category.

Along Causeway Street on both sides, PLWs at Locations 18, 19, 21, 22, and 23 will increase for SW winds, without the elevated expressway upwind. None will change category. The remaining locations (7, 9, 10, 16, and 25-28) are far enough from the elevated expressway that removing the expressway will have little or no effect on PLWs at those locations.

5.4.0 EASTERLY STORM WINDS (Figures 18-26)

5.4.1 Introduction

Easterly winds occur about one third of the time. Light easterly winds occur as a storm starts or in the summer as a sea breeze. During the first 4-12 hours of a typical coastal storm, it rains or snows depending on the temperature, and the wind is from the

NE, E, or SE depending on whether the center of the storm passes to the east or west of the city.

Since for strong easterly winds it will generally be raining or snowing, and people expect it to be windy, the emphasis in the following discussions will be on entering or exiting the various buildings. Also, because easterly winds cover such a wide range of wind directions, the discussion will cover NE, E, and SE winds separately in that order. The site is quite exposed to NE winds, sheltered from E and SE winds.

5.4.2.0 NE Storm Winds

5.4.2.1 Introduction

NE winds blow down Commercial Street and approach the site from over the MDC park. Upwind of the park there are only low buildings so the site is quite exposed for NE winds.

5.4.2.2 Existing Conditions in NE Winds (Figure 18)

Locations 1, 2, 3, and 5 are exposed except for a little sheltering by the Charlestown Bridge. Winds there are probably in low to mid Category 3. Location 4 is close to the bridge and in the lee of it (Category 4). Location 6 is totally in the lee of the Hoffman Building (Category 5). Locations 7 and 16 are at the upwind ends of the two buildings and probably have SW winds in Category 4 for NE winds. Location 10 is down wind of the 35 foot building and somewhat sheltered. PLWs there are probably in Category 4. Location 9 in the MDC Park is too far away from that building and so has winds in Category 3.

PLWs in Lovejoy Place would also be in Category 3, but the wind flowing around the corners of the two buildings at the entrance to Lovejoy Place separates, and causes an effective local narrowing of the gap between the two buildings. The wind slows down downwind of that local area, causing the wind between the two buildings (Locations 8, 11, and 12) to be in Category 4.

Locations 13, 14, and 15 are all downwind of 226 Causeway Street and have winds in Category 5. PLWs at the E corner of 226 Causeway Street (Location 19) and at the N corner of the 105 foot building between North Washington and Causeway Streets (Location 24) both have winds in Category 3 for NE winds. The same separated flow phenomenon described above for Lovejoy Place causes the PLWs along Causeway Street downwind of Locations 19 and 24 to all have winds in Category 4 (Locations 17, 18, 20, 21, 22, and 23).

Location 25 is in the lee of Copps Hill and the Buildings on the NE side of Endicott Street (Category 5). Locations 26-28 are more exposed with Location 27 being the most exposed. Locations 26 and 28 have winds in Category 4 and 27 in Category 3.

5.4.2.3 Build Conditions Before Completion of the Depressed Central Artery in NE Winds (Figure 19).

For NE winds, the setbacks of the top three floors on all three sides of the renovated 226 Causeway building allow some of the NE wind to escape along the two sides of the top three stories. PLWs are the same as for a 9 story building. As a result, the renovated building will cause no changes in Category at any of the locations considered. There will be small increases in the PLWs at Locations 12 and 19 on either side of the building at the NE end. PLWs at Locations 8, 11, 18, 23, and 24 may also increase, but less than at 12 and 19. Changes at all other locations considered will not be noticeable.

5.4.2.4 Build Conditions After Completion of the Depressed Central Artery in NE Winds (Figure 20).

Completion of the Depressed Central Artery will not effect PLWs at any Locations except 13 and 20. Winds at Location 20 will be accelerated to Category 3 because the NE wind will then expand around that corner into the open space beyond. Without the sheltering of the existing expressway structure, winds in Portal Park will increase from Category 5 to 4. Changes at other locations will not be noticeable.

5.4.3.0 E Storm Winds

5.4.3.1 Introduction

E winds approach the site from directly over Copps Hill. The tops of the buildings on Copps Hill are as high as or higher than the tops of either the Hoffman Building or 226 Causeway Street. However, because Copps Hill is two blocks away, sheltering from it is somewhat limited.

5.4.3.2 Existing Conditions in E Winds (Figure 21)

Locations 1 and 2 lie outside the limits of the Copps Hill sheltering. Both are somewhat sheltered by the Charlestown Bridge and probably have winds in low Category 3. Location 3 is slightly more sheltered and has PLWs in Category 4. Locations 5, 6, and 7 are totally sheltered by the bridge or the Hoffman Building (Category 5). Locations 11-15 are all completely sheltered by 226 Causeway Street (Category 5). Location 8 is somewhat windy due to the E wind entering Lovejoy Place and blowing along the SE wall of the Hoffman Building (Category 4).

Location 9 in the MDC park is very exposed, but in the lee of Copps Hill (Category 4). Location 10 is less protected by Copps Hill, but is directly in the lee of a 35 foot building (Category 5).

For Locations 16 and 7 the E wind is deflected along the sidewalk of North Washington Street by the NE facades of the Hoffman and 226 Causeway Street Buildings putting PLWs there in Category 3. Similarly the SE facade of 226 Causeway Street deflects the E wind along the sidewalk beside it, causing PLWs at Location 18 to be in Category 3. This wind dissipates somewhat by the time it reaches Location 17; PLWs there are in high Category 4. Across Causeway Street, locations 20-23 are all in the lee of the buildings on the SE side of Causeway Street and probably have PLWs in Category 5 for E winds.

In Keavy Square Location 19 at the E corner of 226 Causeway Street has winds in Category 4. But across Causeway Street, Location 24 at the N corner of the 105 foot building probably has winds in high Category 3. Locations 25, 26, and 28 are in the lee of Copps Hill and the buildings just to the SE of them. They have winds in Category 5. Location 27 on the S corner of Prince and Causeway Streets probably has PLWs in Category 4 due to the presence of the 65 foot building on that corner.

5.4.3.3 Build Conditions Before Completion of the Depressed Central Artery in E Winds (Figure 22).

For all locations except Locations 8, 16 and 18 the renovated 226 Causeway Street will have little or no effect PLWs. PLWs at Locations 8, 16, and 18 will increase slightly due to the 3 story addition (as noted many times the top 3 stories will not effect PLWs). None change category and the increase will be small. This does mean that the proposed doorways at locations 16 and 18 will be quite windy for E winds.

5.4.3.4 Build Conditions After Completion of the Depressed Central Artery in E Winds (Figure 23).

As for the NE winds removal of the elevated expressway will only affect winds near the SW end of the site. Only two locations (13 and 17) are predicted to have increased winds such that the winds change category. Winds at Location 13 in the proposed Portal Park will increase from Category 5 to 4. Winds at Location 17 will increase from Category 4 to 3. In both cases the increase will be caused by the removal of the structure of the existing elevated expressway which currently provides some sheltering for Location 13 and resistance to the wind accelerating around the corner at Location 17.

PLWs will also increase slightly at Locations 14 and 18, but not change category. These increases will occur for the same reasons mentioned above.

5.4.4.0 SE Storm Winds.

5.4.4.1 Introduction

SE winds approach the site from over the Financial District with its many 25 to 40 story buildings, and blow directly at the SE facade of 226 Causeway Street. The Financial District is several blocks away. Closer to the site across Causeway Street is the 105 foot building between North Washington and Medford Streets, and the 65 foot building between Medford and Beverly Streets.

5.4.4.2 Existing Conditions in SE Winds (Figure 24).

Locations 1-5 are all in the lee of both the Hoffman and 226 Causeway Buildings. Locations 1 and 2 are somewhat less sheltered and are believed to have winds in Category 4. Locations 3-5 are very sheltered and have PLWs in Category 5. Locations 6, 7, 9, and 10 all have PLWs in Category 4. Locations 11, 8, and 12 are also very sheltered and have winds in Category 5. The same is true for Locations 17, 18, and 20-23.

Locations 13 and 14 are mostly sheltered by the expressway, and probably have winds in low Category 4 for SE winds. Winds at Location 15 are controlled by 226 Causeway Street and are in mid or high Category 4. Winds at Location 19, the E corner of 226 Causeway Street, and along the sidewalk on the SW side of North Washington Street (Locations 7 and 16) are probably all in high Category 4.

The windiest place near the site for SE winds is at Location 24 at the S corner of the intersection of Causeway and North Washington Streets (Category 3). PLWs there are caused by the SE wind blowing against and along the 105 foot building at that corner. Location 25 at the corner of Endicott and North Washington Streets is somewhat sheltered by the building to its SE, but winds coming up both streets combine to make that Location have winds in high Category 4.

Finally, Locations 26, 27 and 28 to the NE of Keavy Square along the sidewalk on the SE side of Causeway and Commercial Streets are all sheltered by the buildings along that sidewalk.

5.4.4.3 Build Conditions Before Completion of the Depressed Central Artery in SE Winds (Figure 25)

Again, because the renovated 226 Causeway Street Building aerodynamically will act like a 9 story building, it will have little effect on PLWs at any of the locations except those at the NE and SE ends of the building. Winds at Location 19 will increase from high Category 4 to low 3. PLWs at Location 16 (at the entrance to the retail space at that end of the building) will also increase, but stay in Category 4. At the other end of the building, winds at both Locations 14 and 15 will also increase, but stay in Category 4. Changes at all other locations will not be noticeable.

5.4.4.4 Build Conditions After Completion of the Depressed Central Artery in SE Winds (Figure 26)

Completing the Depressed Central Artery will remove all obstacles to the SE wind SE of Causeway Street between Beverly and Haverhill Streets. This will allow the SE winds to approach that end of the site unobstructed. As a result, PLWs at Locations 13, 20, 14, 6, and 2 will all increase from Category 4 or 5 to 3. Thus the proposed Portal Park will be quite windy for SE winds. PLWs in other areas near the site will be unaffected.

6.0 SUMMARY AND CONCLUSIONS

An assessment has been made to determine the effect of the proposed renovations to 226 Causeway Street on PLWs in its vicinity. Winds for existing conditions and build conditions both before and after the Depressed Central Artery is completed are assessed and compared. No location considered is found to have PLWs that exceed the BRA guideline wind speed for any of the conditions considered. Although the renovations increase the building from 6 to 12 stories, because the upper 3 stories are set back 20 feet on three sides, the building was found to behave like a nine story building for assessing PLWs. As a result, the renovated building raised PLWs a little, particularly near the ends of the building. Only for SE storm winds was the wind at any Location (19) found to change categories. Adding the renovations had little or no effect on winds in the MDC Park nor in the area that is proposed for the Portal Park. PLWs at the main entrance on Causeway Street and at the other two proposed entrances were generally acceptable and were not affected substantially.

When the existing elevated expressway was replaced with the Depressed Central Artery there were significant changes in PLWs near the SW end of the building. PLWs at the entrance at the SW end of the building were increased for SE winds. Winds in Portal Park increased one category for all wind directions considered. Winds along Beverly Street from Causeway Street to the harbor shore, including part of the Harbor Walk, were increased for both NW and SE winds primarily because the open space created by the depressed expressway lined up with the wind for these two wind directions. PLWs in the MDC park were unaffected by the change in the expressway.

It is concluded that the proposed renovations to 226 Causeway Street will have little effect on PLWs in and near the building. However, the depressed expressway will increase PLWs near the SW end of the building and particularly in the proposed Portal Park.

7.0 REFERENCES

- 1) Davenport, A.G., and Isyumov, N., " The Application of the Boundary Layer Wind Tunnel to the Prediction of Wind Loading" , Proceedings of Intl. Seminar on Wind Effects on Buildings and Structures, Ottawa, Canada, September, 1967.
- 2) Melbourne, W.H., "Criteria for Environmental Wind Conditions", Journal of Industrial Aerodynamics, Vol. 3, 1978, pp. 241-249.
- 3) Durgin, F. H., "Pedestrian Level Wind Criteria Using the Equivalent Average", Journal of Wind Engineering and Industrial Aerodynamics, Vol. 66 (1997) pp. 215-226

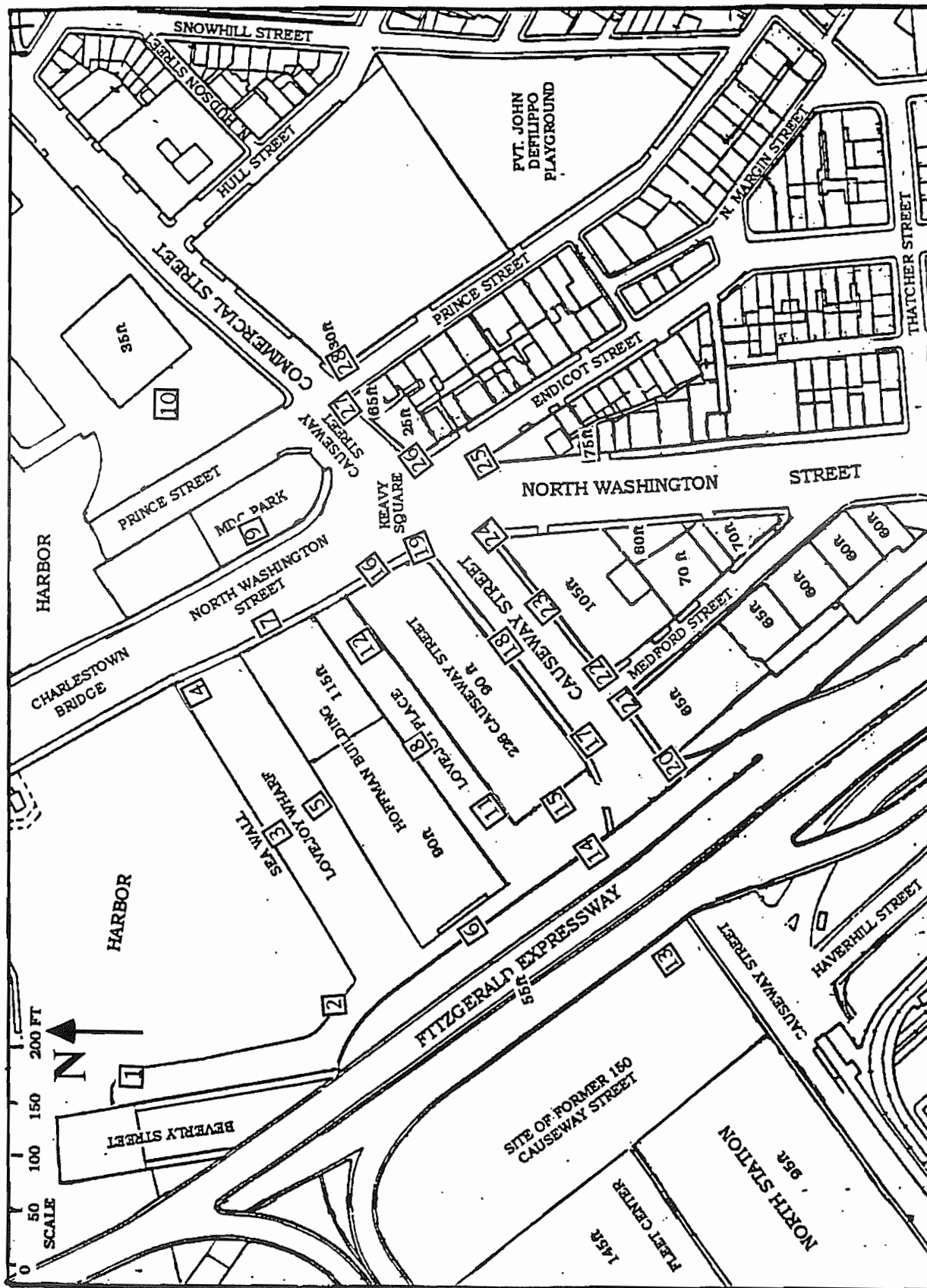


Figure 1 Map of Area Giving Some Building Names and Heights for Existing Conditions.

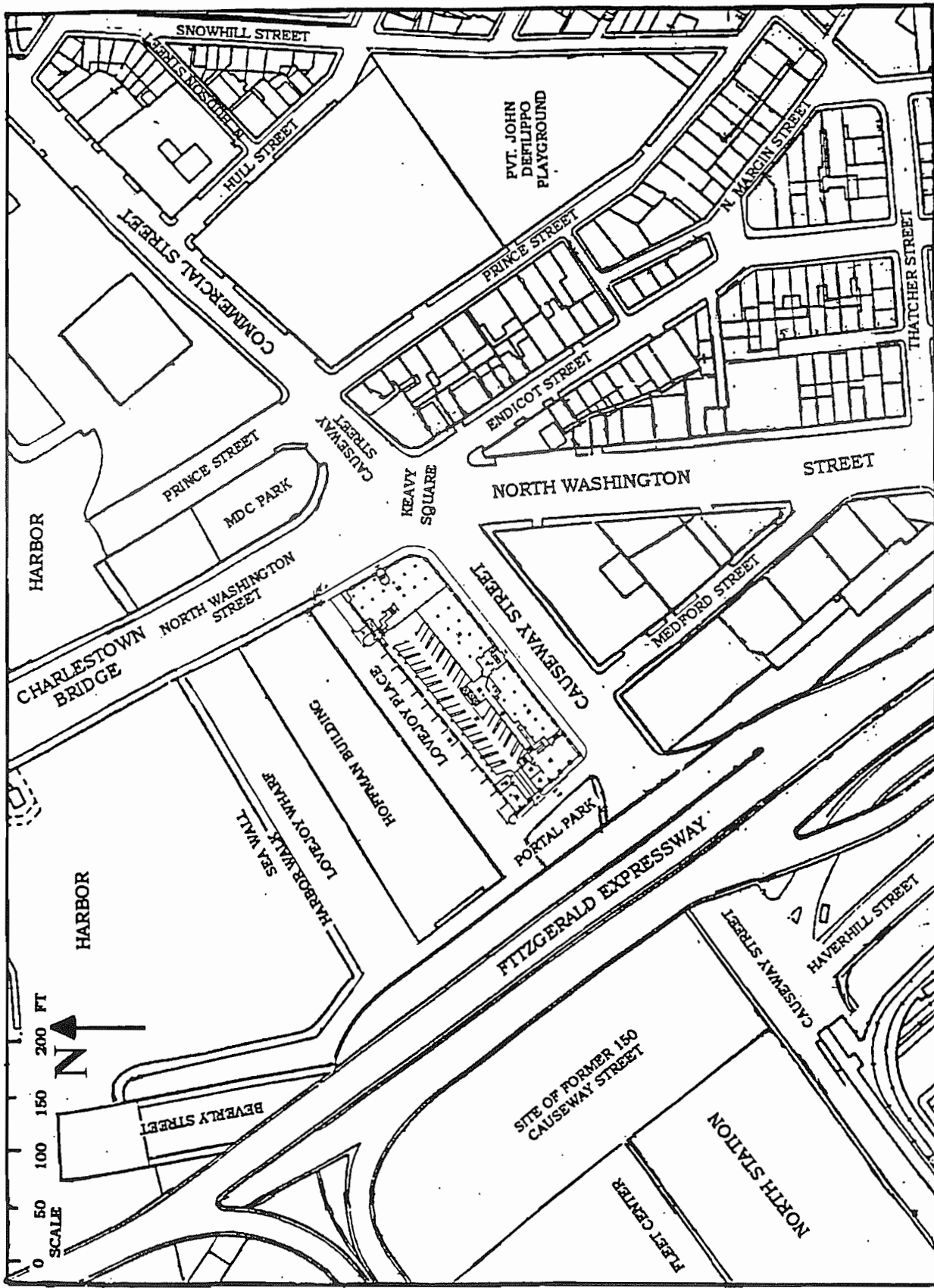


Figure 2 Map of Area for Build Conditions Before Completion of the Depressed Central Artery

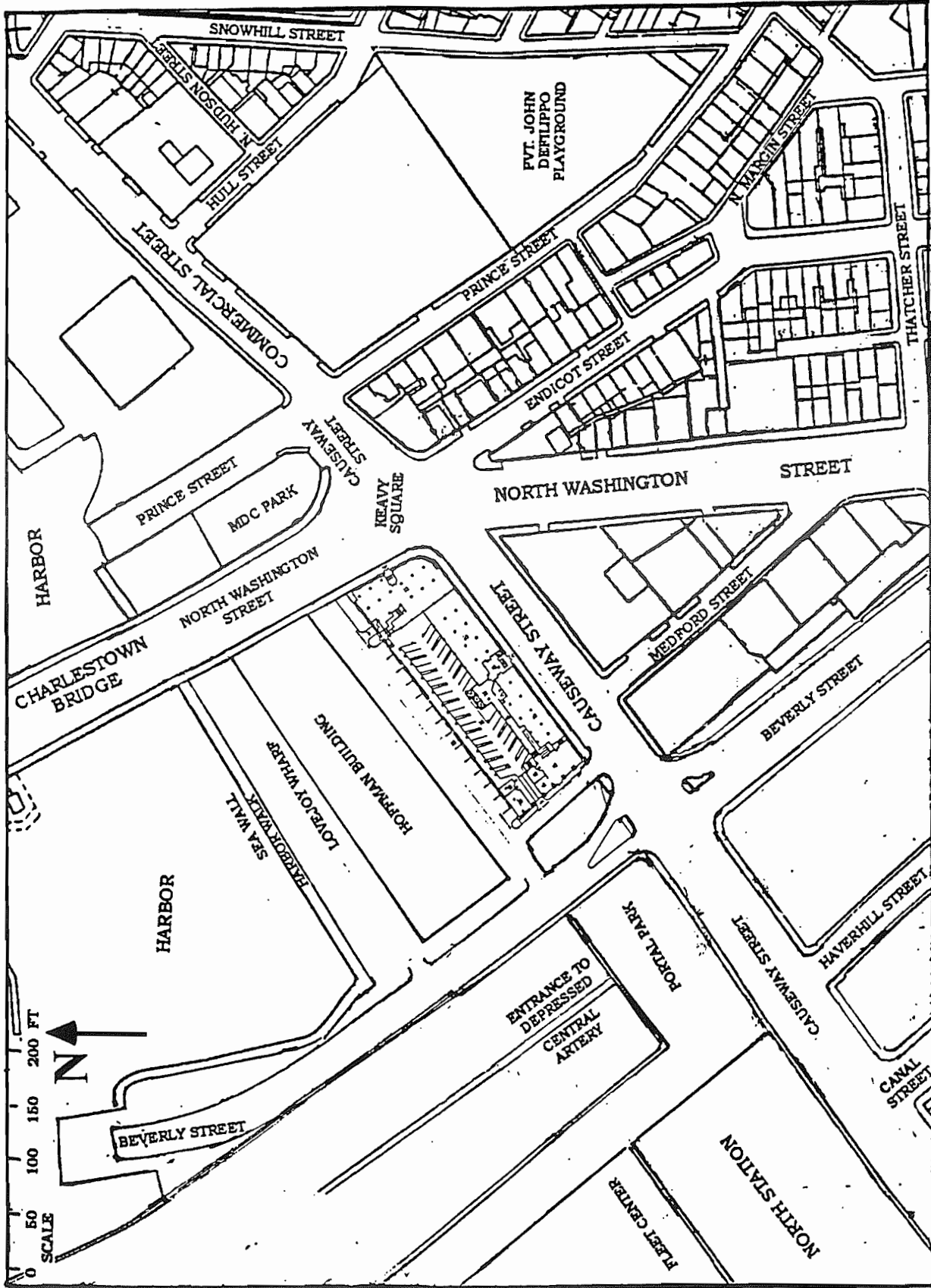


Figure 3 Map of Area for Build Conditions After Completion of the Depressed Central Artery

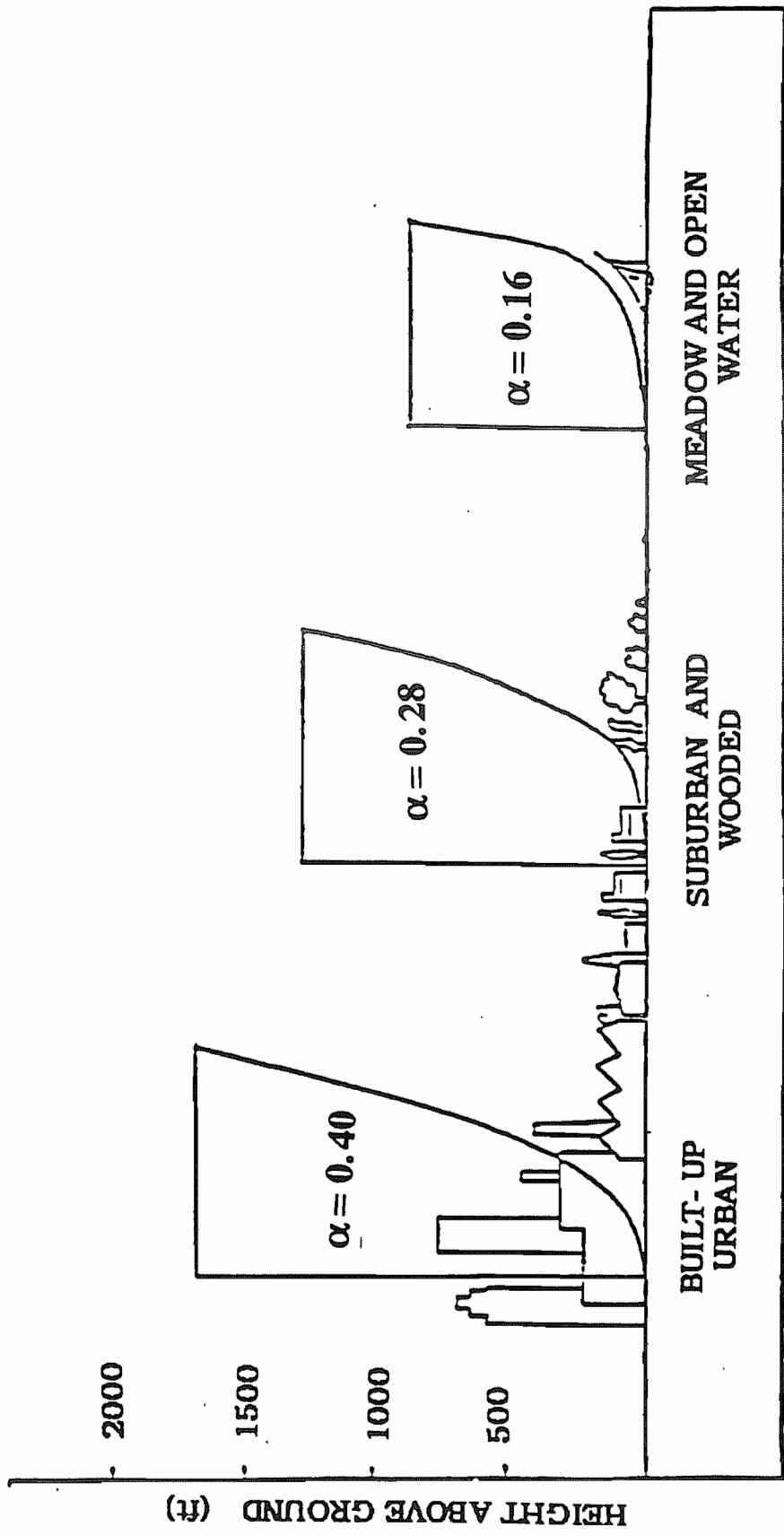


Figure 4 Types of Earth's Boundary Layer after Davenport [1]

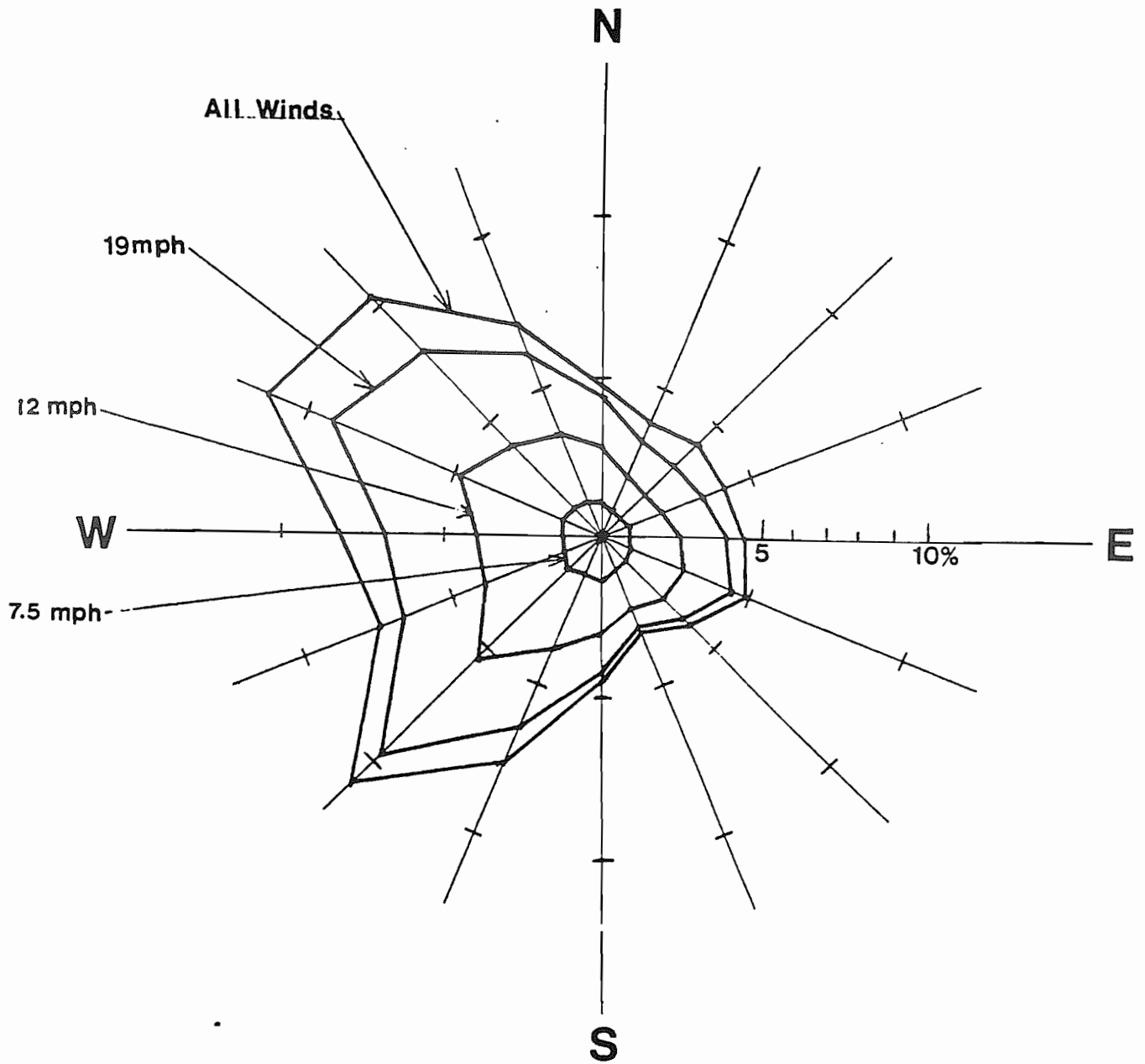


Figure 5 Annual Wind Rose for Boston Based on Surface Data from Logan Air Field 1945-1965

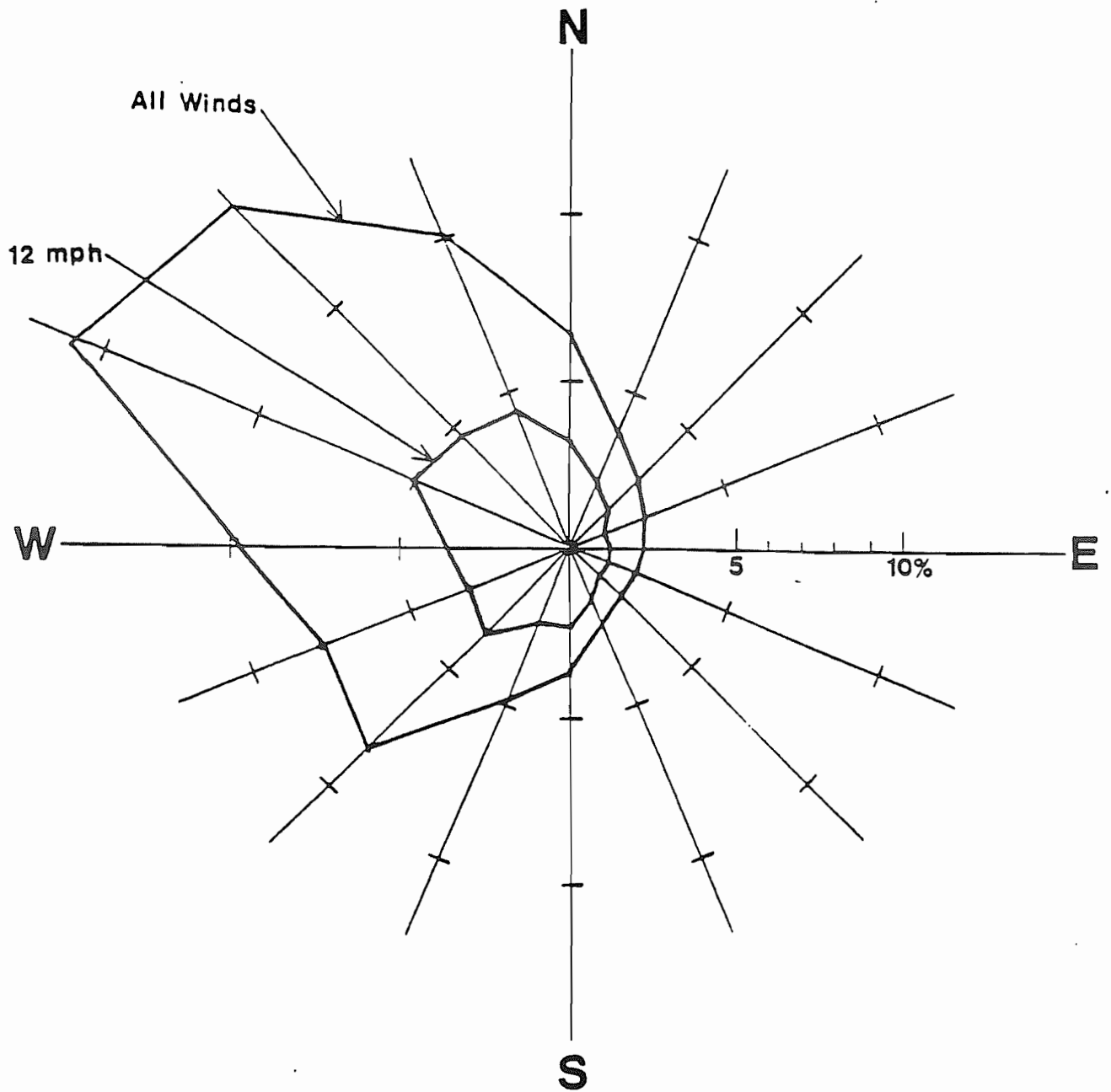


Figure 6 Winter (December, January, February) Wind Rose for Boston Based on Surface Data from Logan Air Field 1945-1965

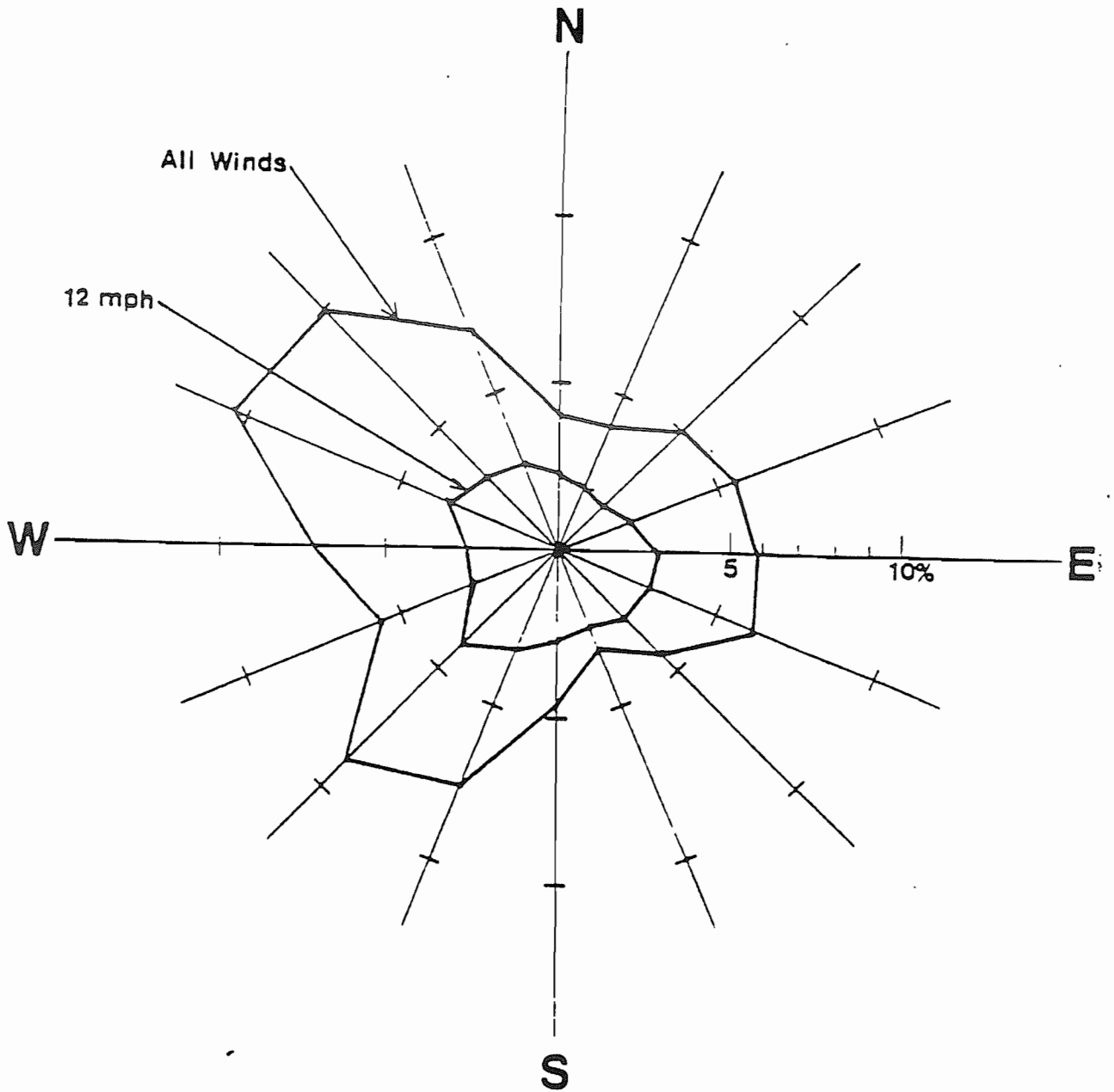


Figure 7 Spring (March, April, May) Wind Rose for Boston based on Surface Data from Logan Air Field 1945-1965

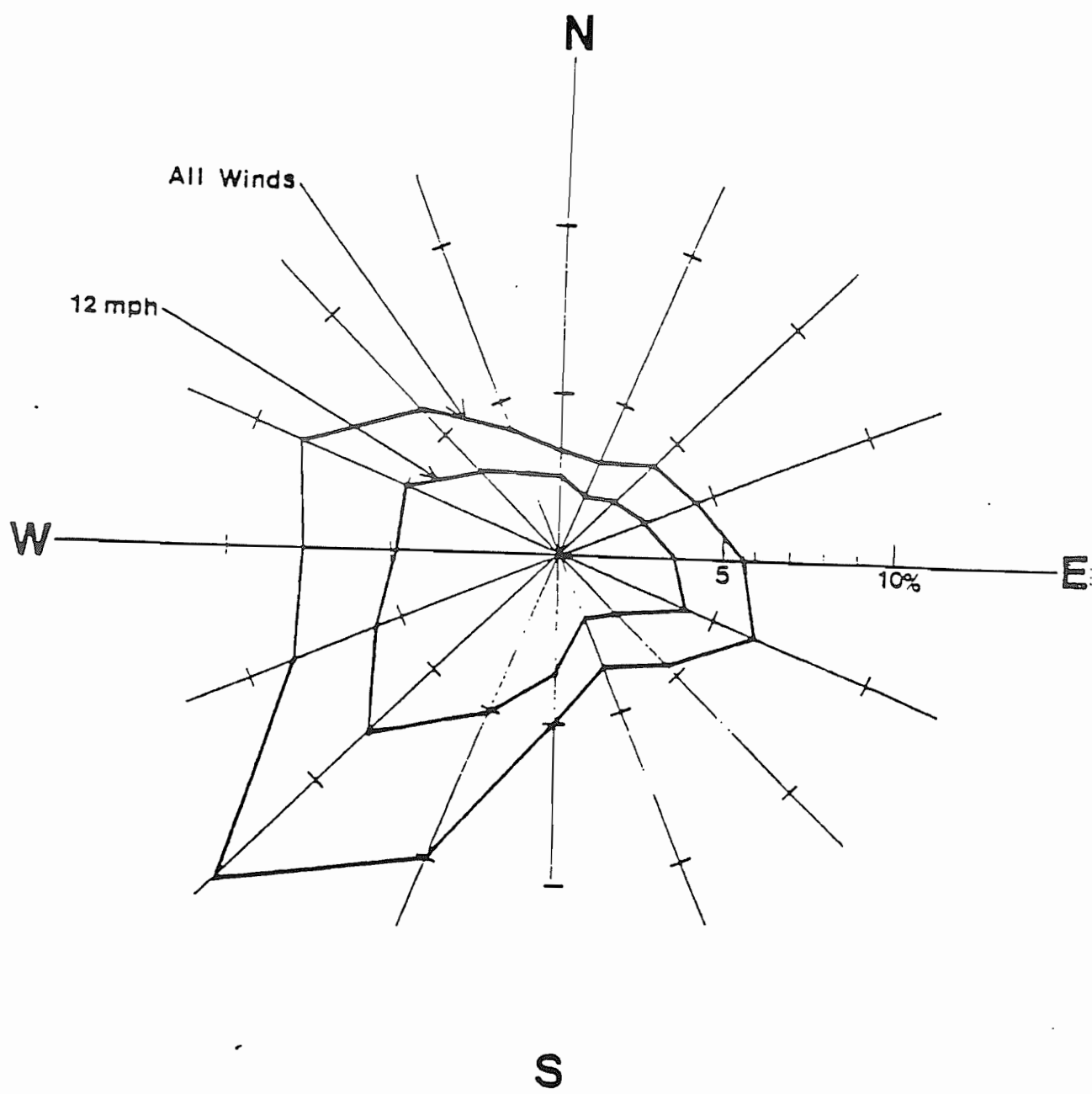


Figure 8 Summer (June, July, August) Wind Rose for Boston based on Surface Data from Logan Air Field 1945-1965

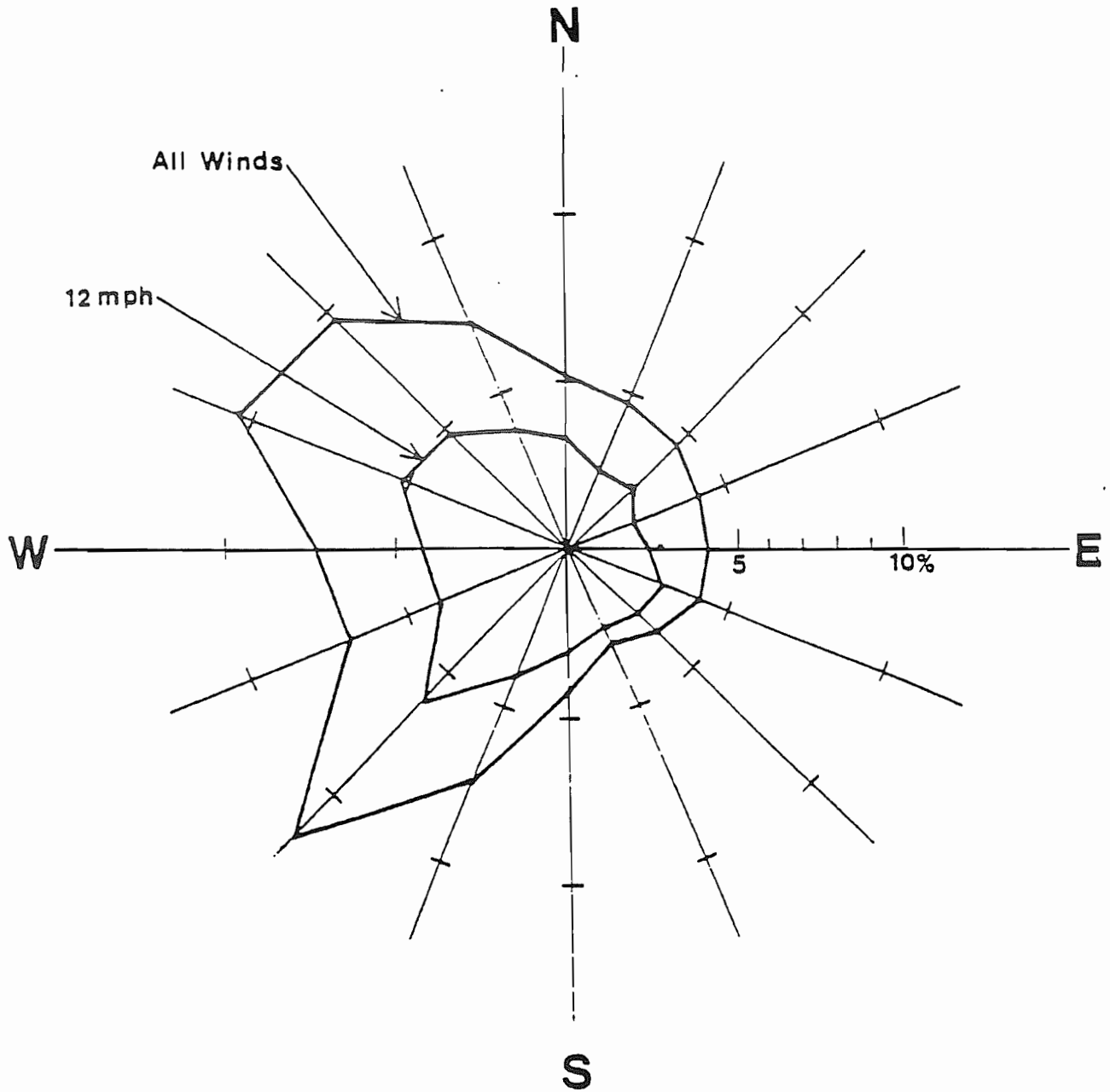
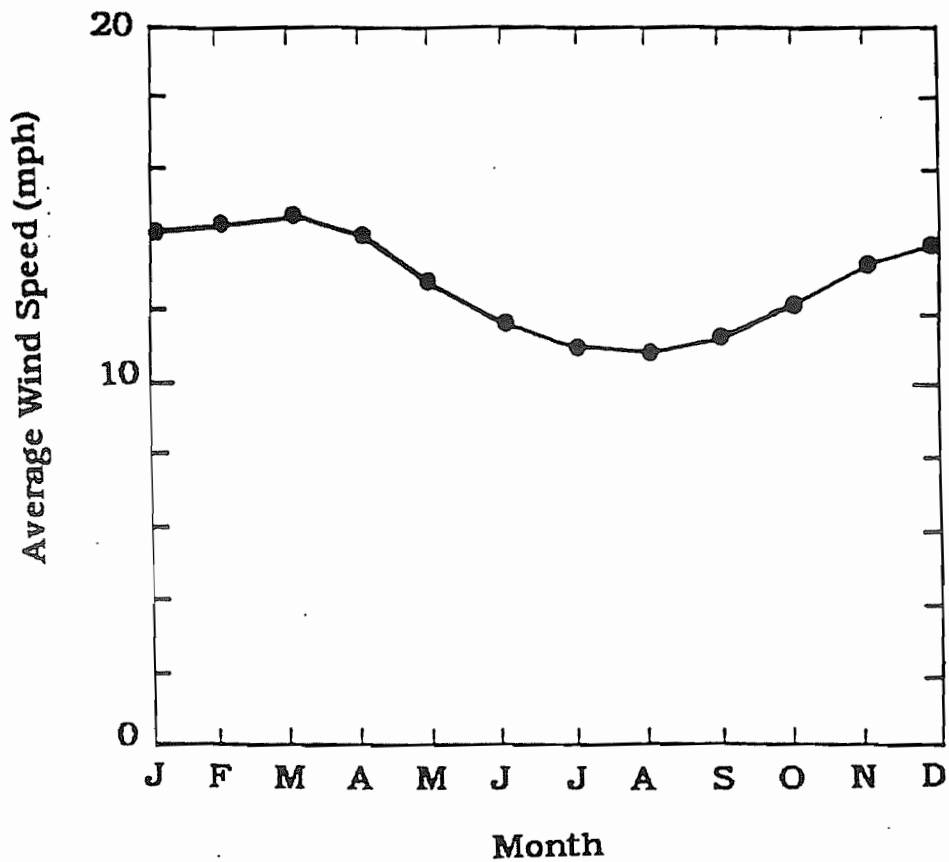
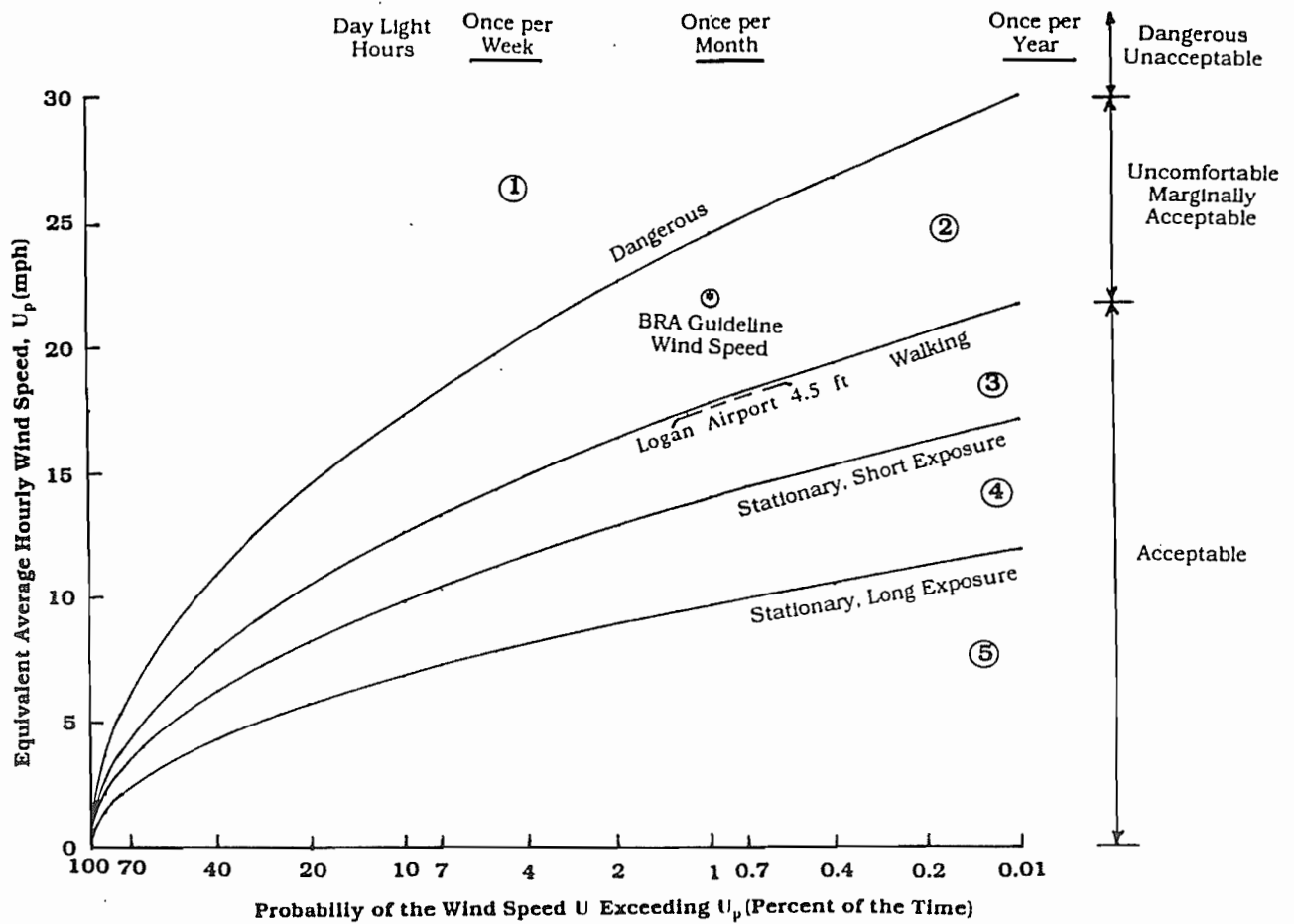


Figure 9 Fall (September, October, November) Wind Rose for Boston based on Surface Data from Logan Air Field 1945-1965



Yearly Average wind Speed 12.9 mph

Figure 10 Average Wind Speed for Boston for each Month, based on Surface Data from Logan Air Field 1945-1965



CATEGORIES

- ① Dangerous and Unacceptable;
- ② Uncomfortable for Walking;
- ③ Comfortable for Walking;
- ④ Comfortable for Short Periods of Standing or Sitting;
- ⑤ Comfortable for Long Periods of Standing or Sitting.

Figure 11 Melbourne's Criteria [2] as Modified by Durgin [3] for Equivalent Average Wind Speeds

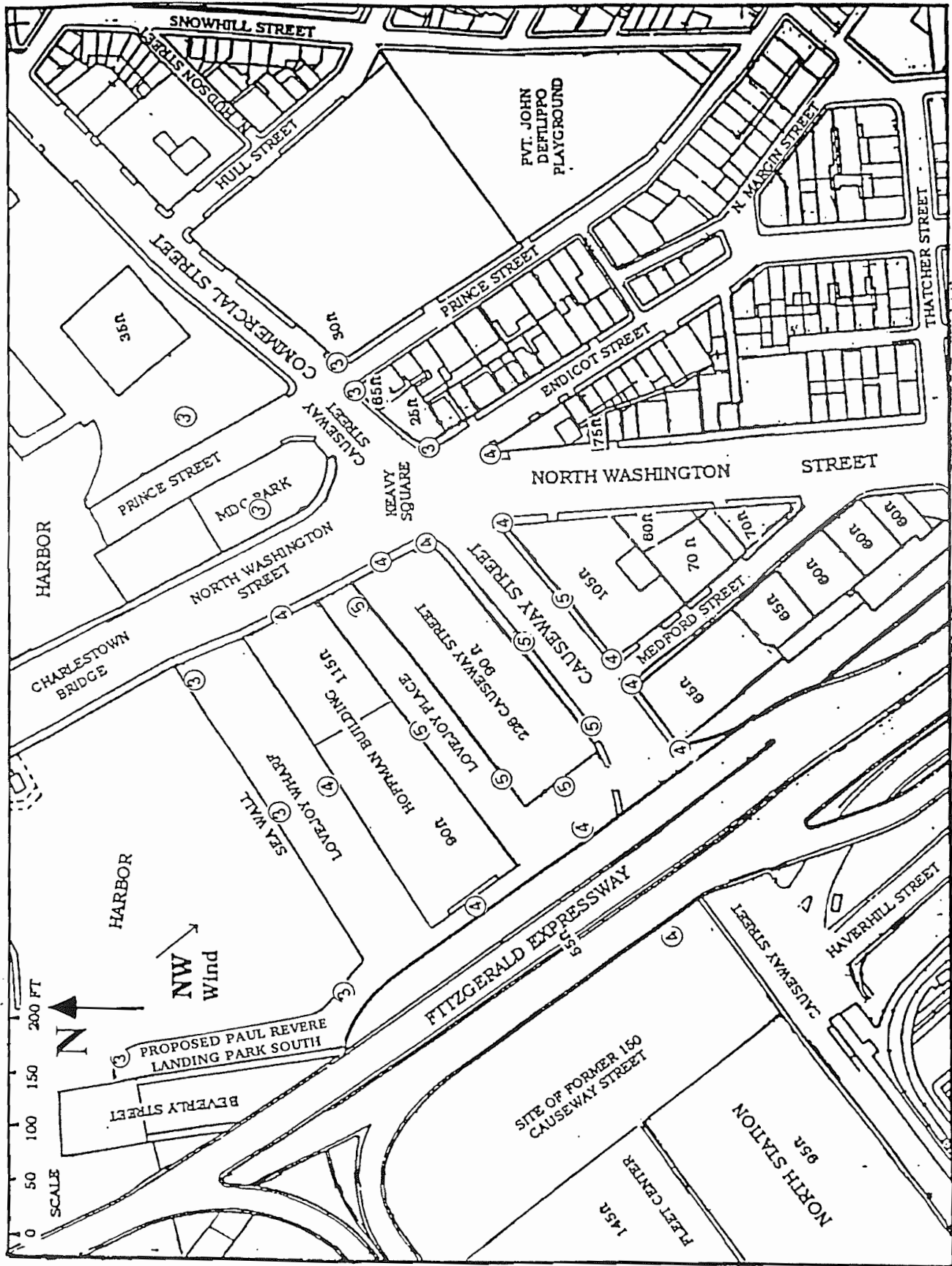


Figure 12 Melbourne Categories for Existing Conditions for NW Winds

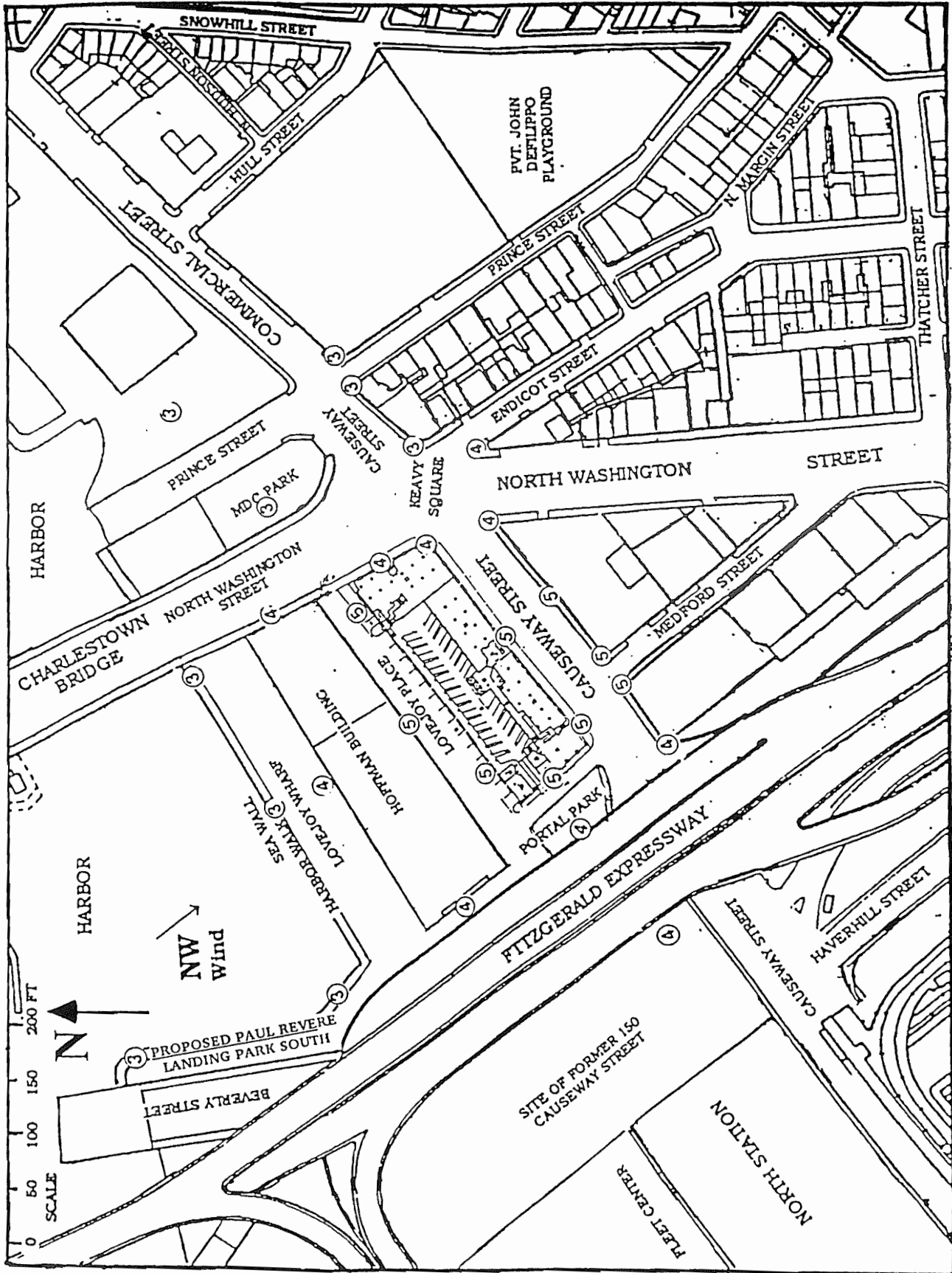


Figure 13 Melbourne Categories for Build Conditions Before Completion of the Depressed Central Artery for NW Winds

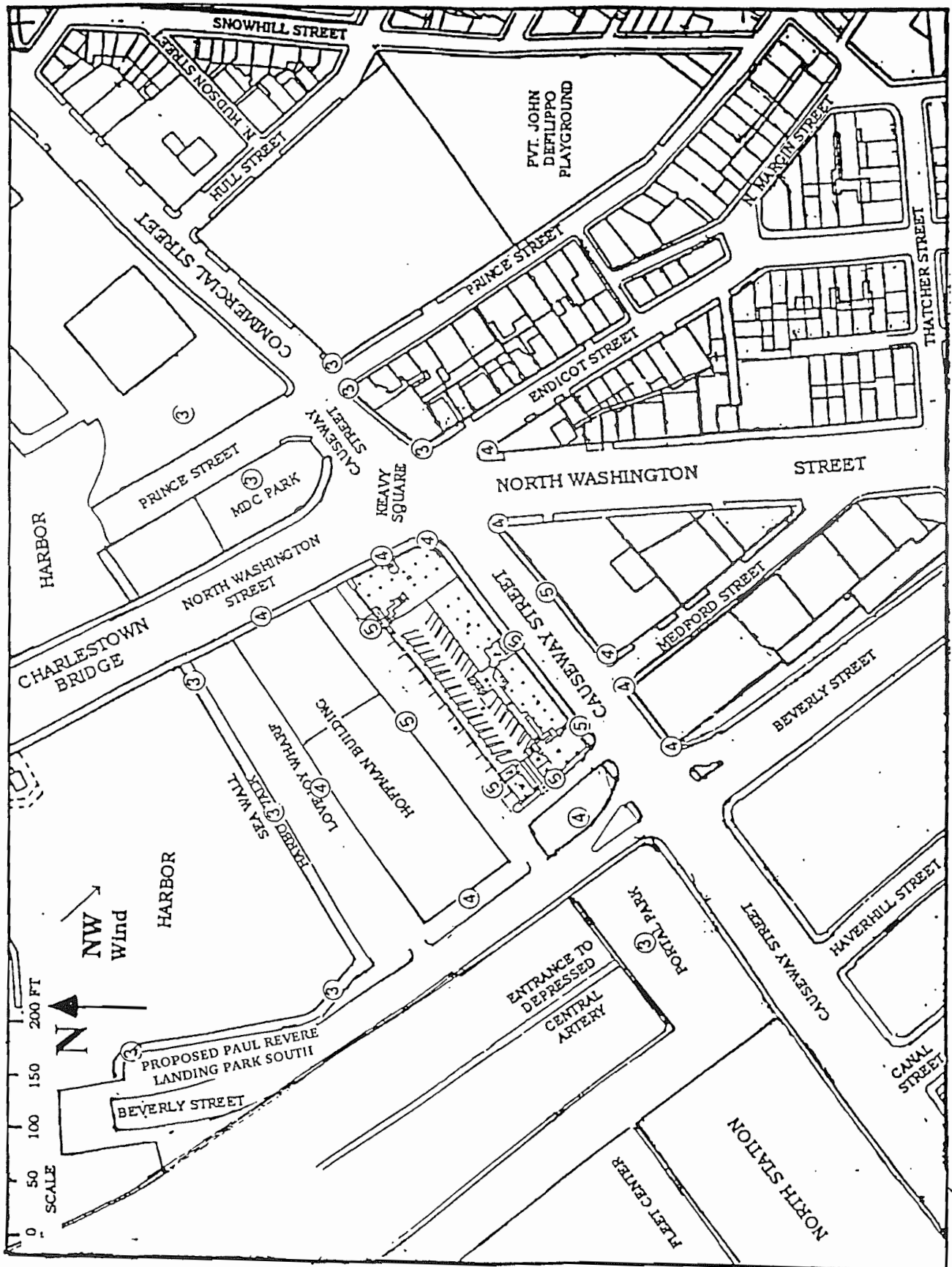


Figure 14 Melbourne Categories for Build Conditions After Completion of the Depressed Central Artery for NW Winds

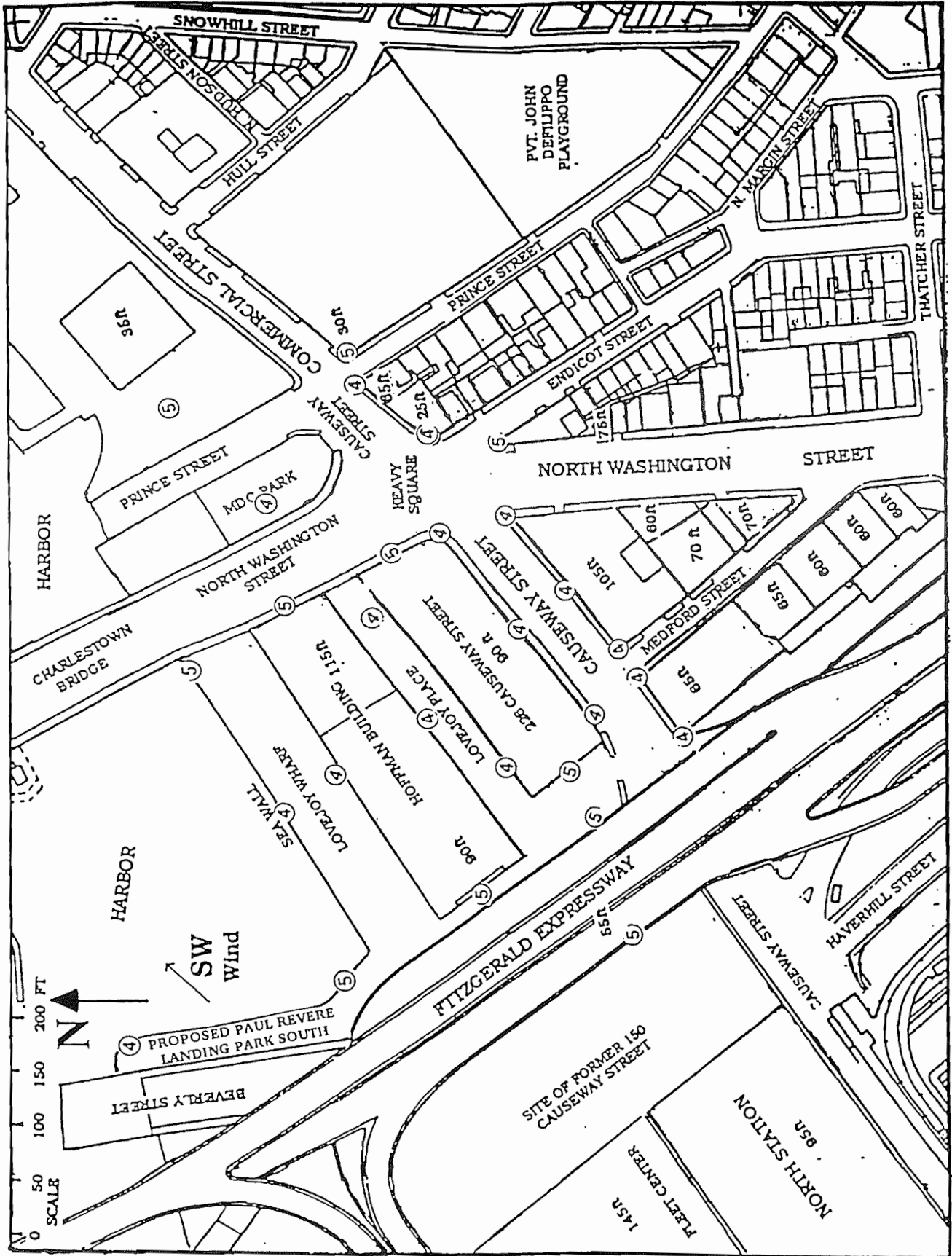


Figure 15 Melbourne Categories for Existing Conditions for SW Winds

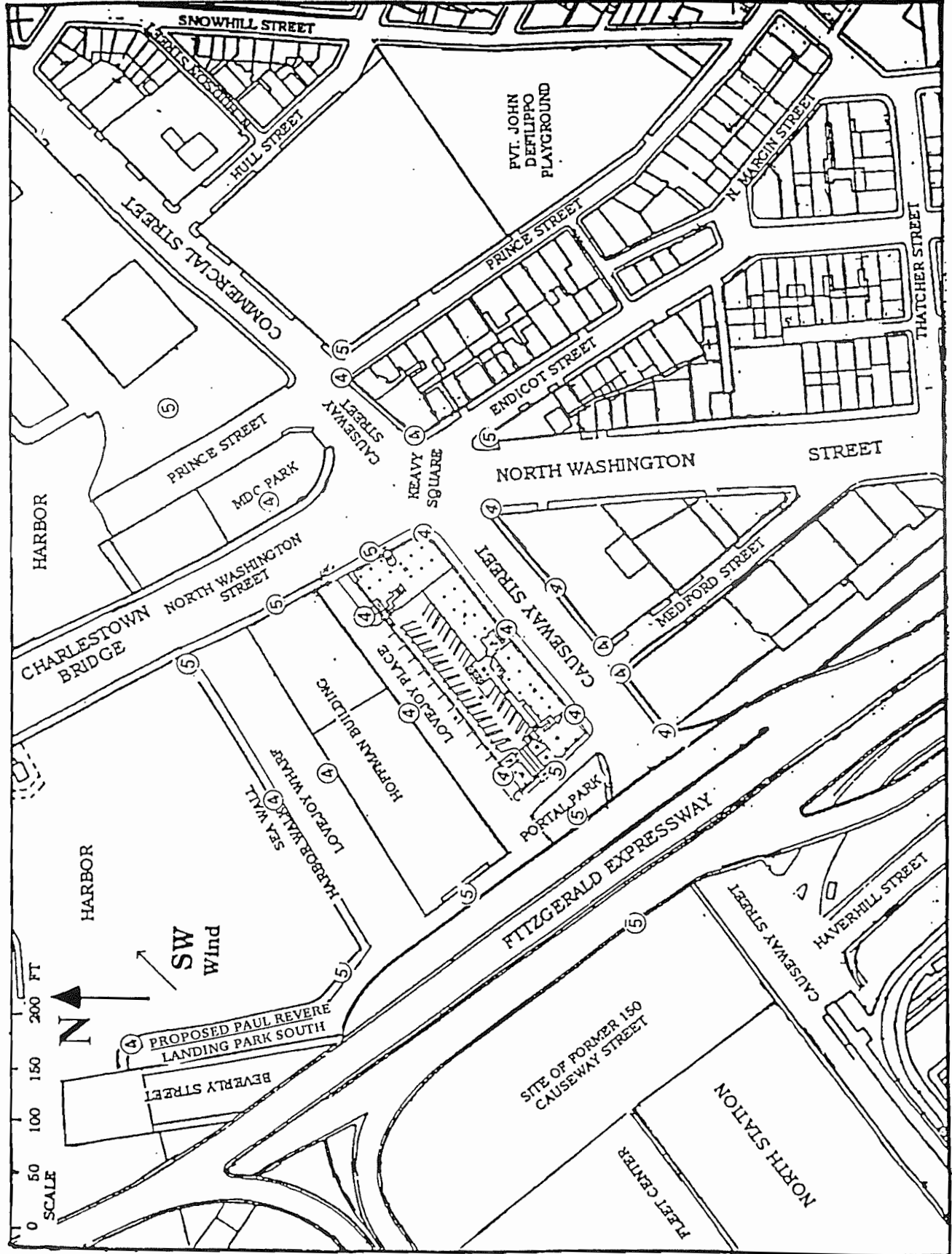


Figure 16 Melburne Categories for Build Conditions Before Completion of the Depressed Central Artery for SW Winds

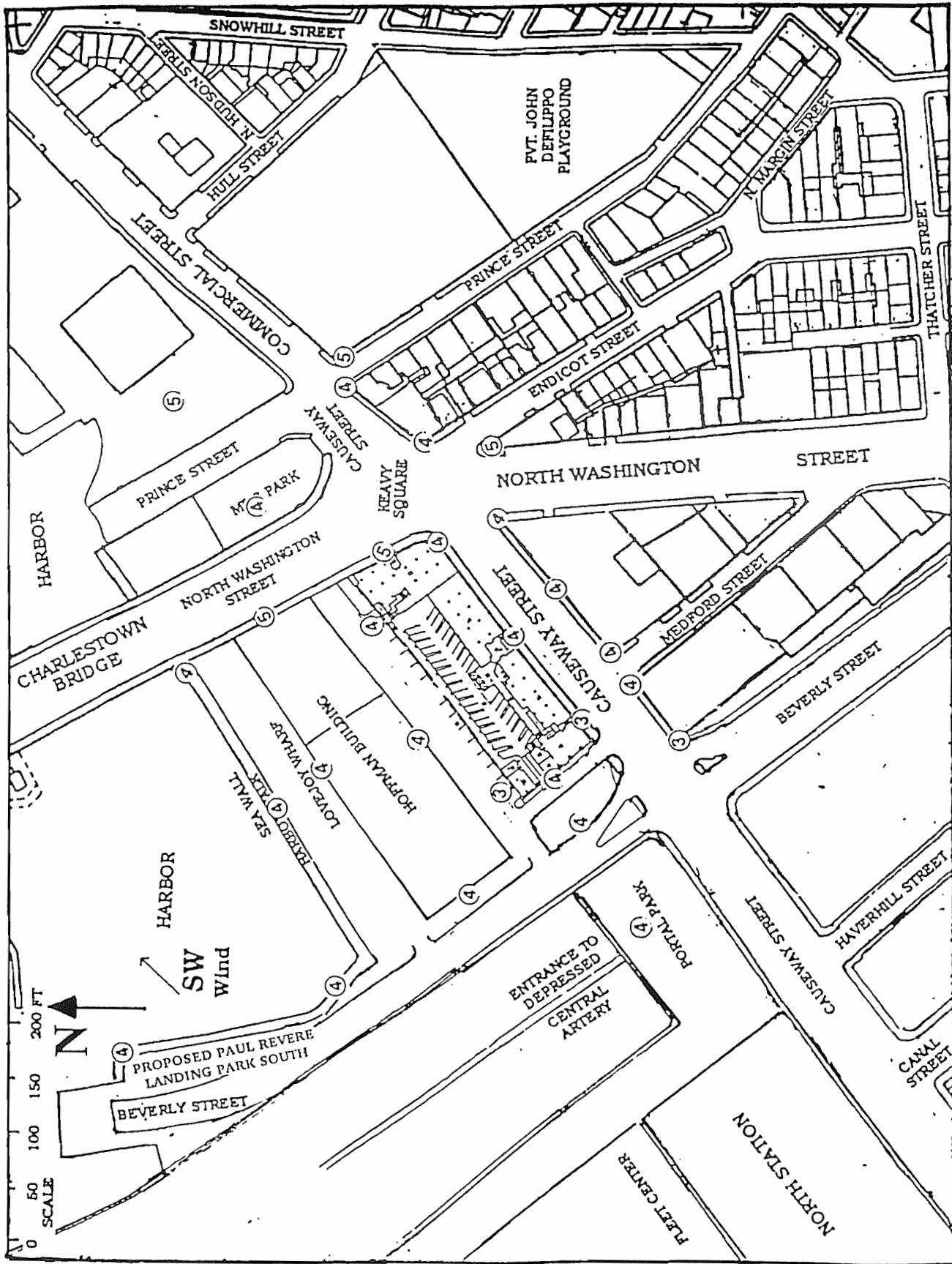


Figure 17 Melbourne Categories for Build Conditions After Completion of the Depressed Central Artery for SW Winds

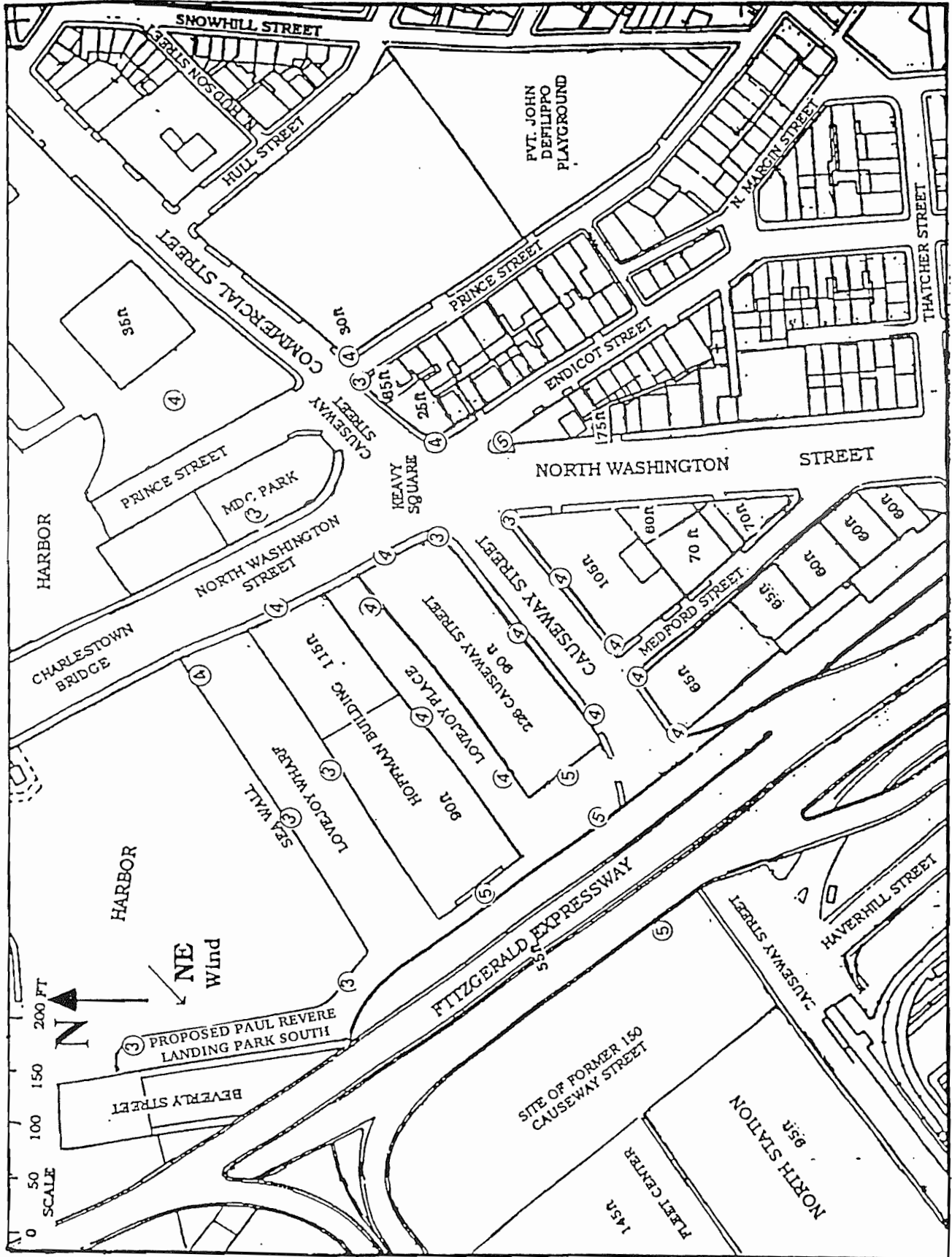


Figure 18 Melbourn Categories for Existing Conditions for NE Winds

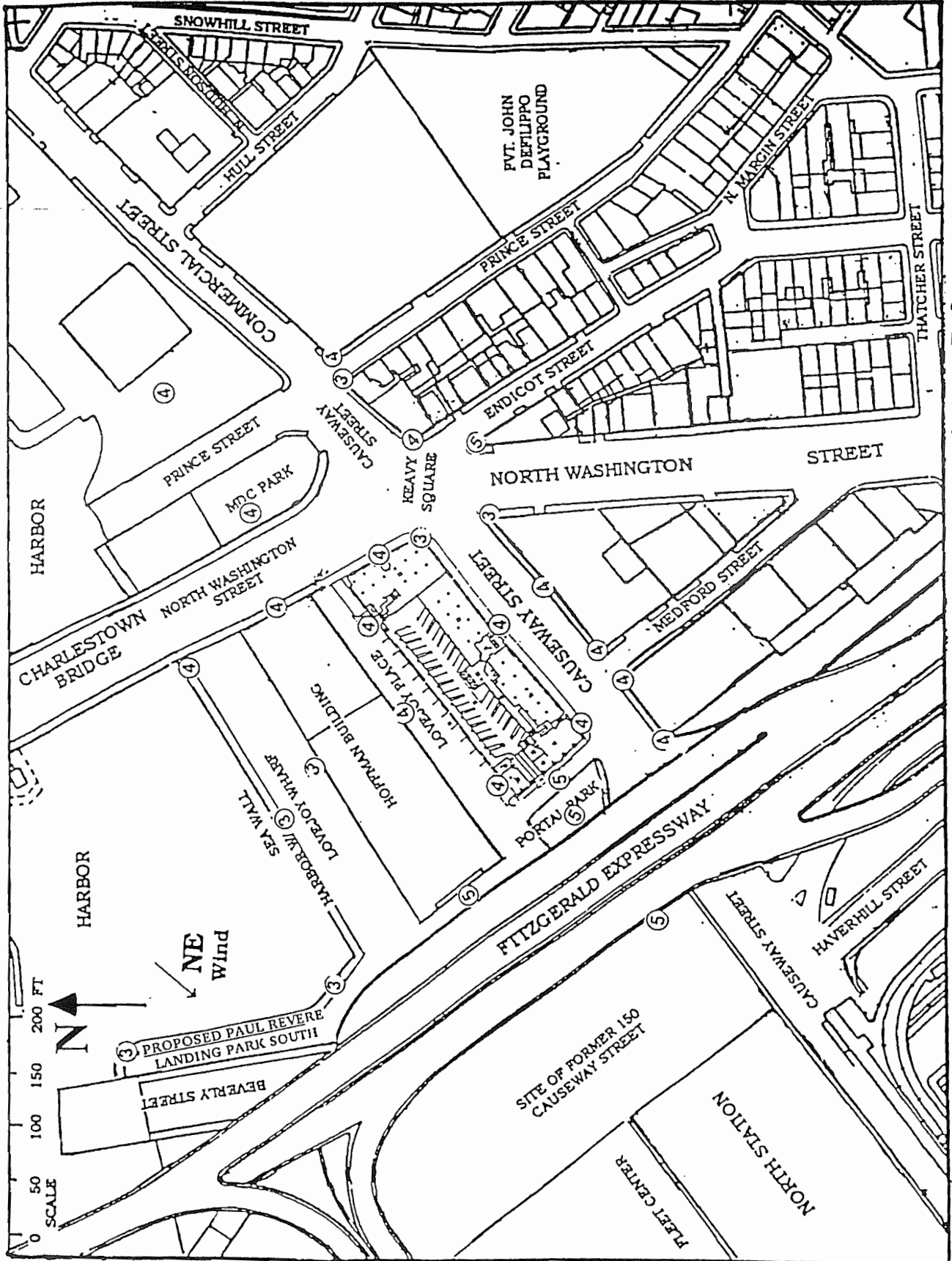


Figure 19 Melbourne Categories for Build Conditions Before Completion of the Depressed Central Artery for NE Winds

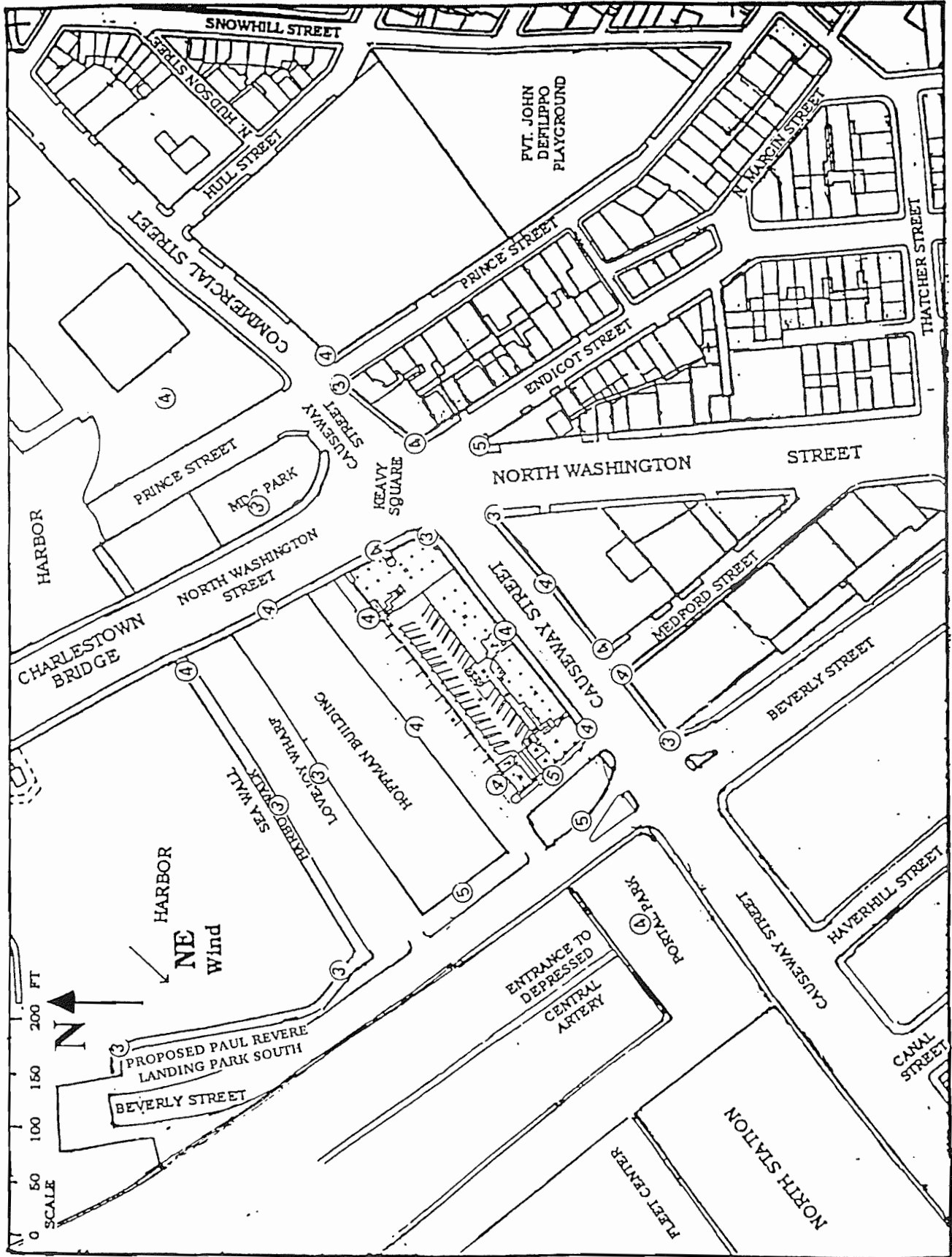


Figure 20 Melbourne Categories for Build Conditions After Completion of the Depressed Central Artery for NE Winds

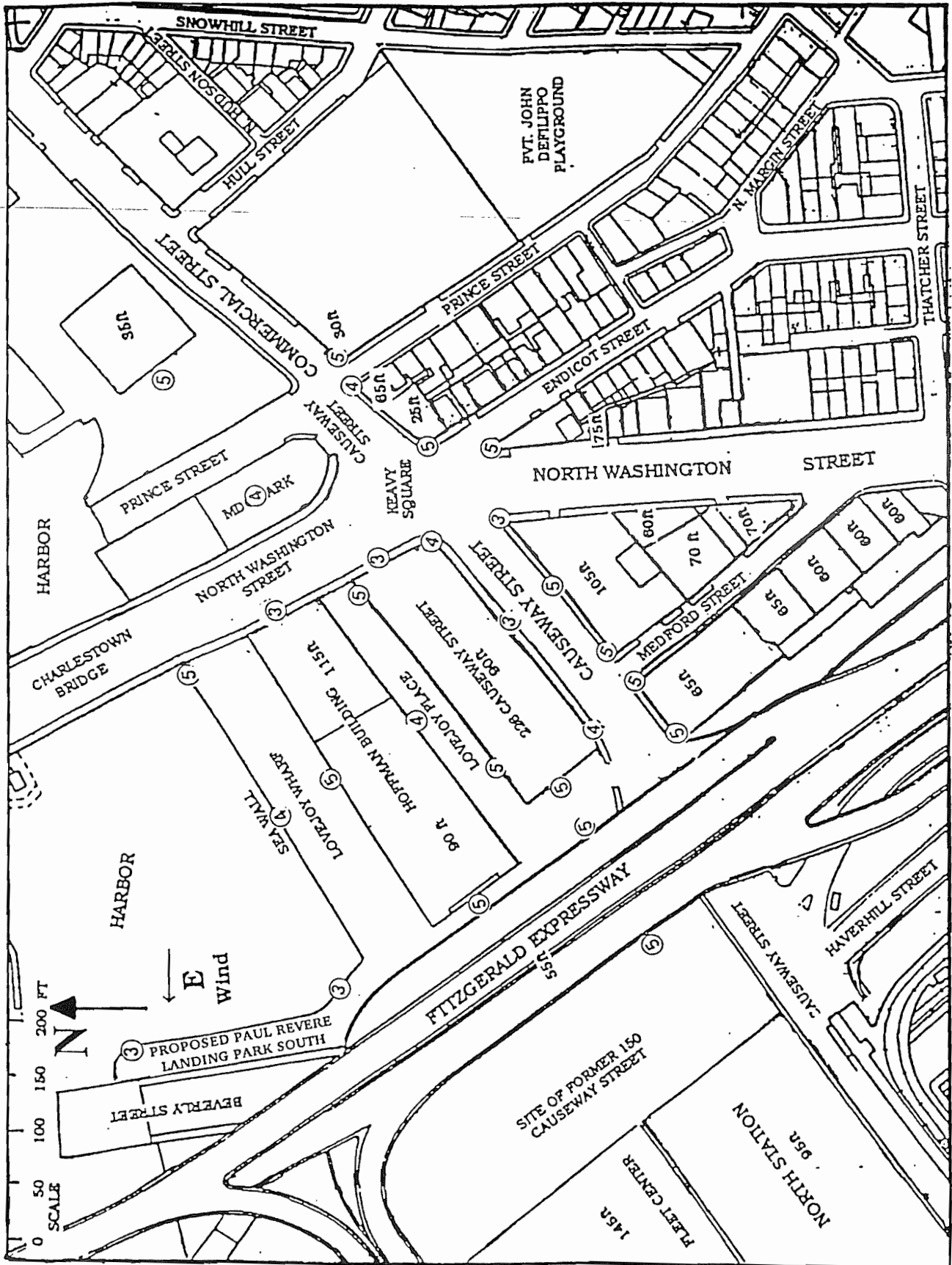


Figure 21 Melbourne Categories for Existing Conditions for E Winds

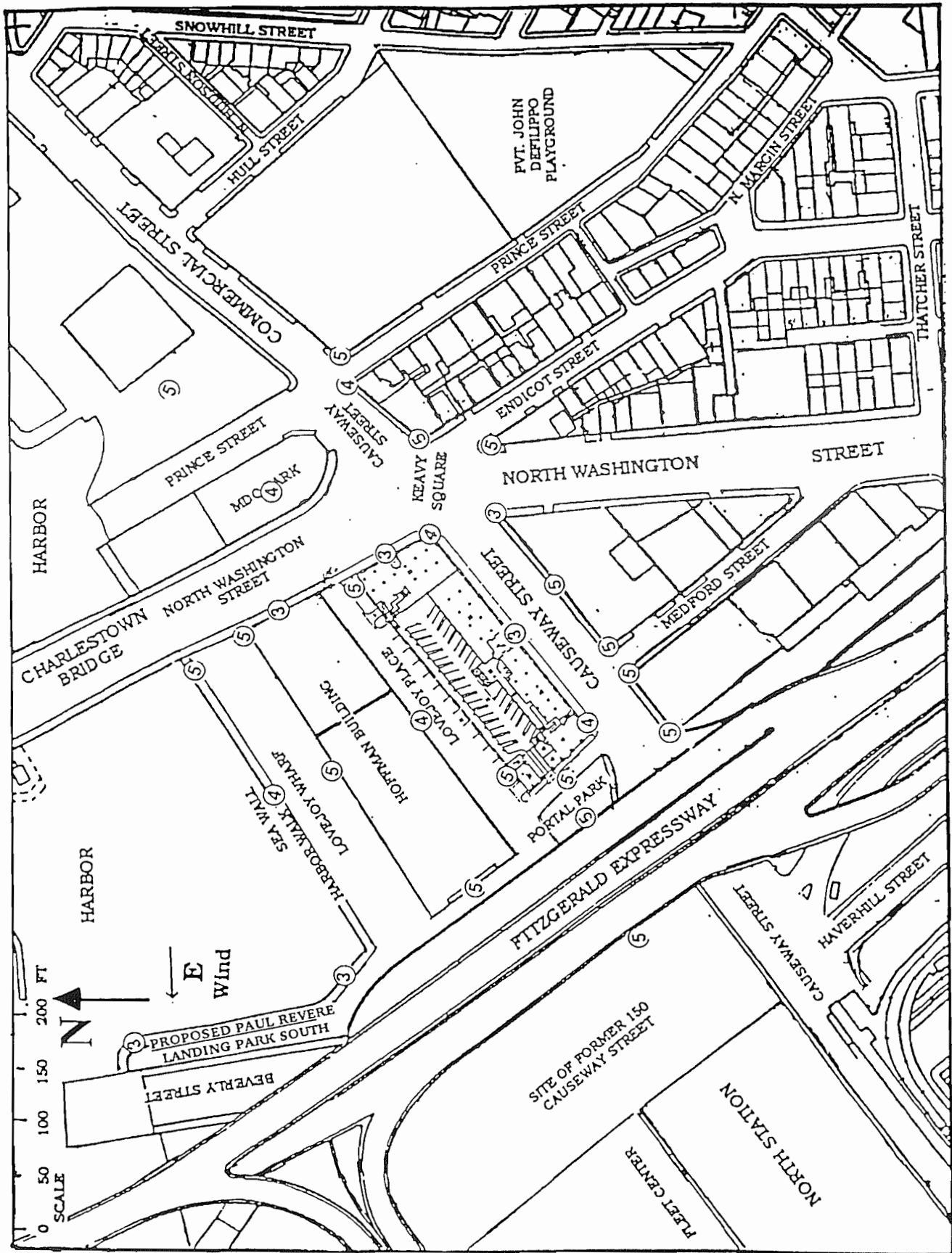


Figure 22 Melbourne Categories for Build Conditions Before Completion of the Depressed Central Artery for E Winds

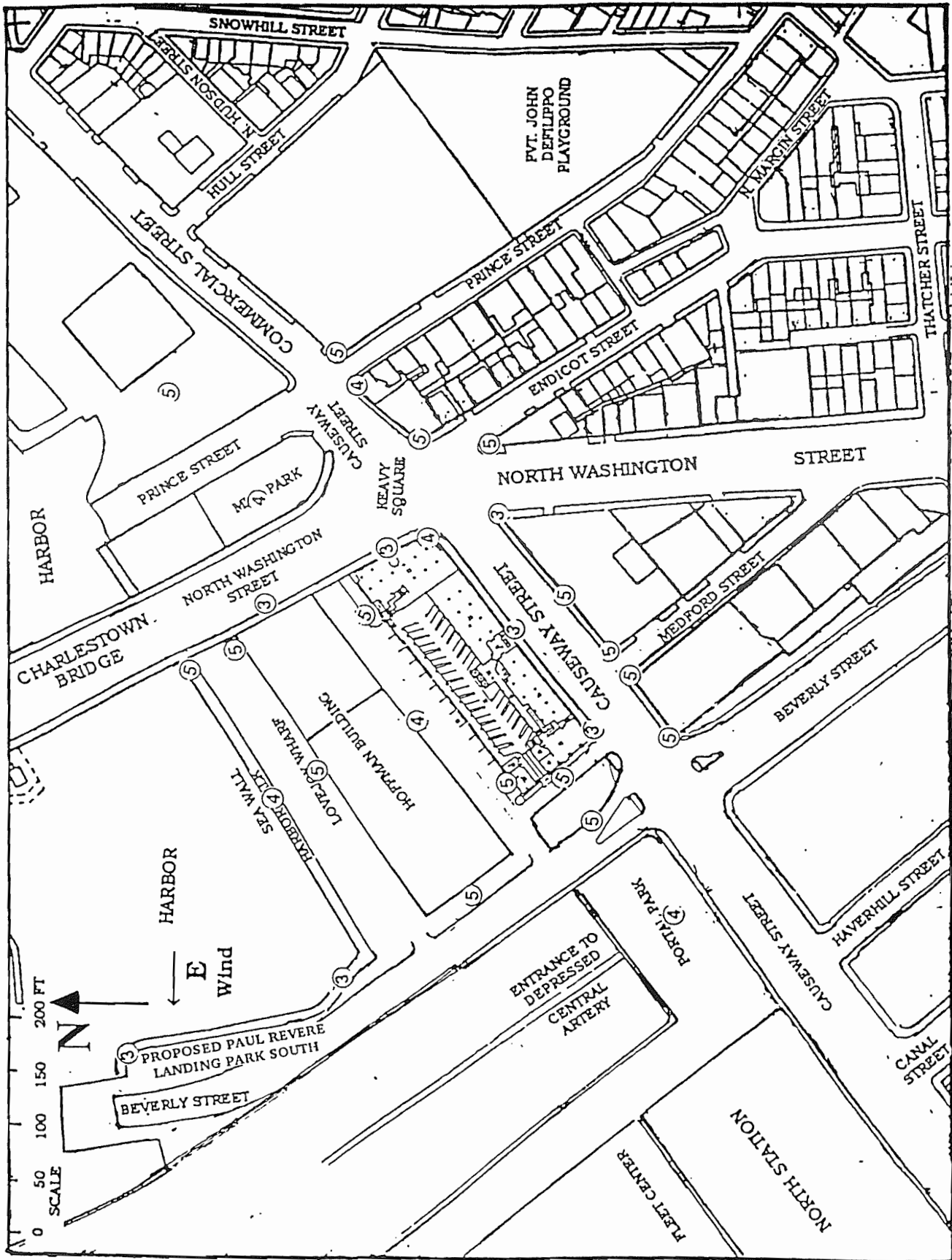


Figure 23 Melbourn Categories for Build Conditions After Completion of the Depressed Central Artery for E Winds

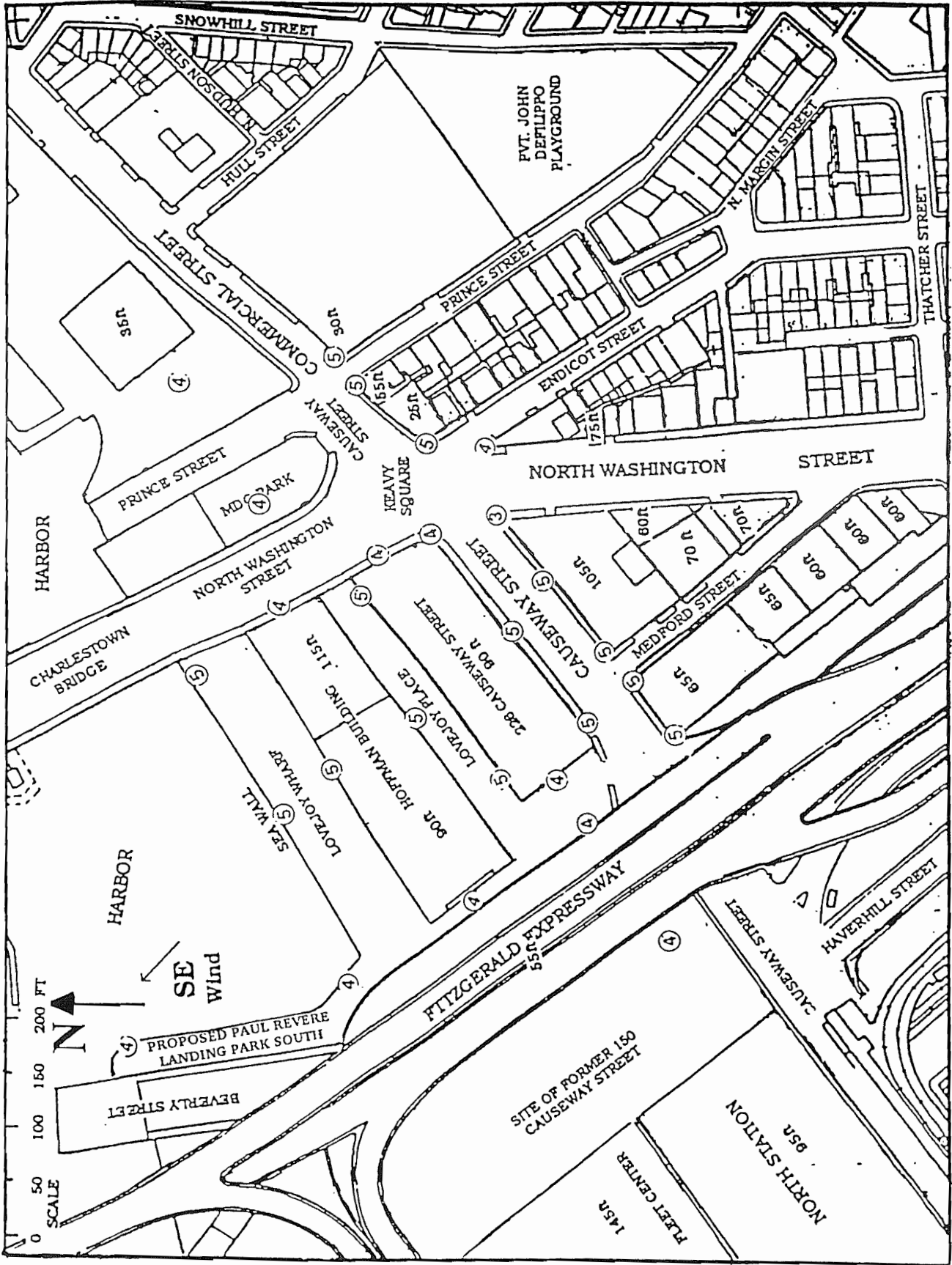


Figure 24 Melbourn Categories for Existing Conditions for SE Winds

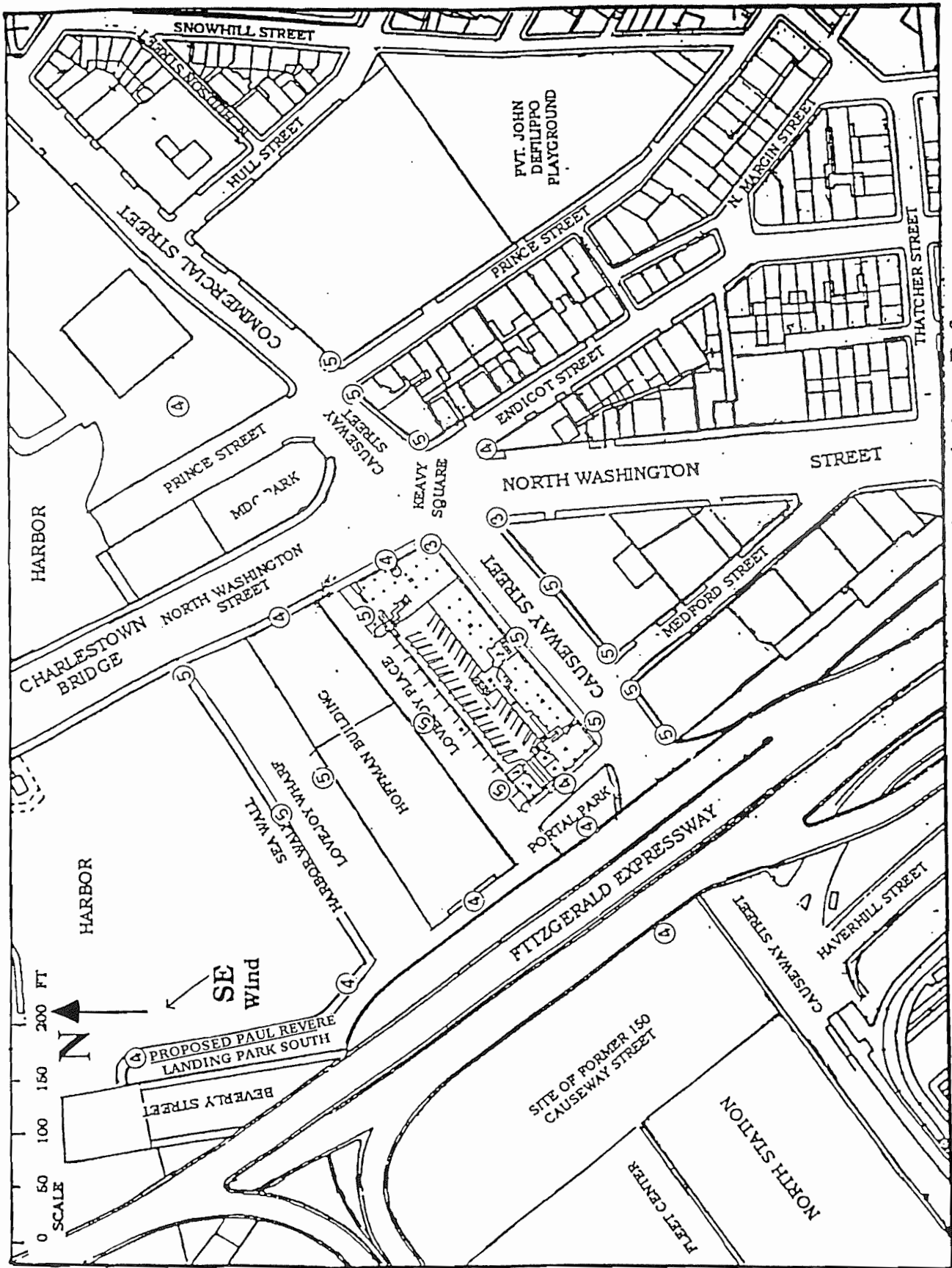


Figure 25 Melbourne Categories for Build Conditions Before Completion of the Depressed Central Artery for SE Winds

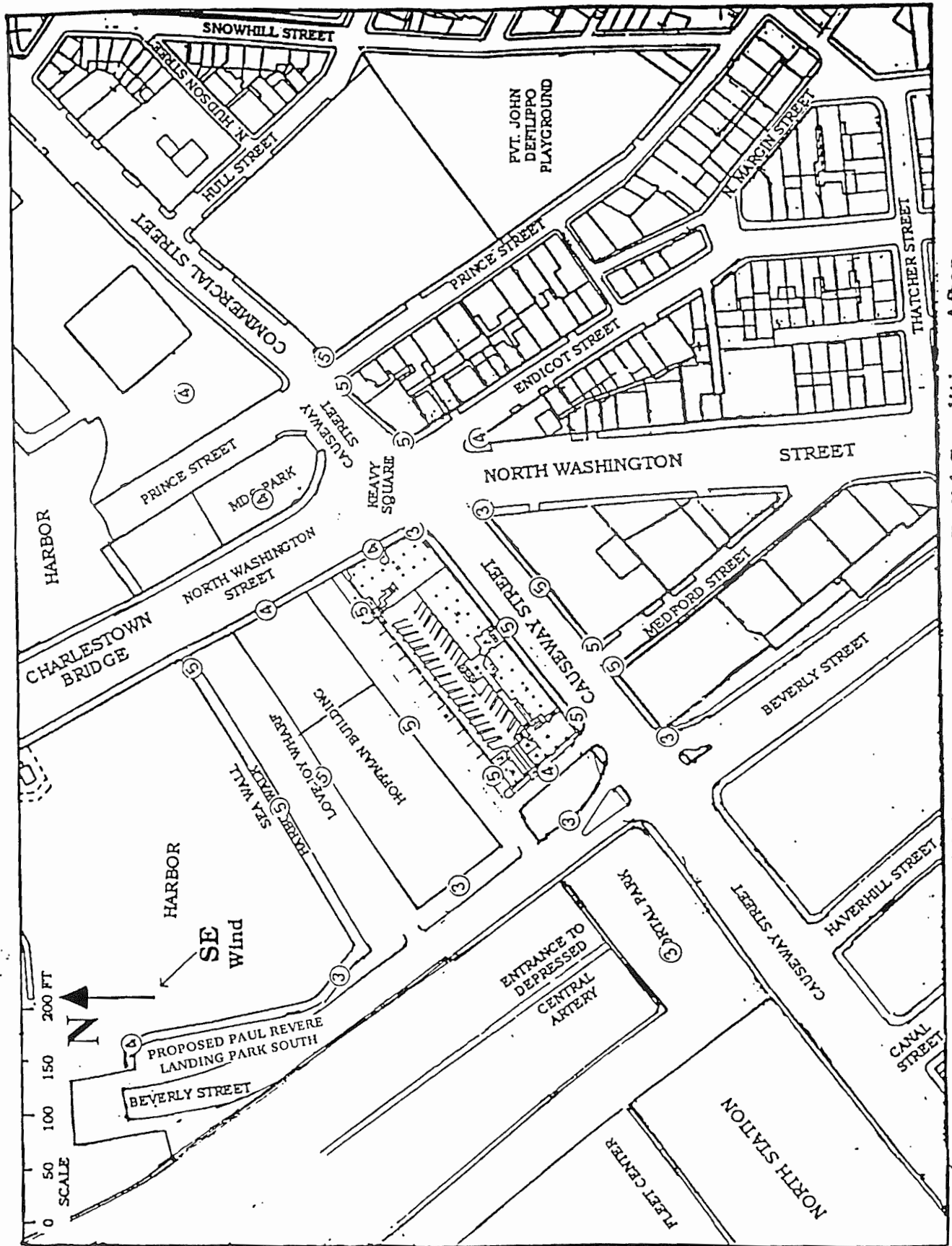


Figure 26 Melbourne Categories for Build Conditions After Completion of the Depressed Central Artery for SE Winds

**Appendix 13 Assessment of Pedestrian Level Winds for 226 Causeway Street
project at Chapter 91 Height and Massing**

RECEIVED

OCT 26 1998

Frank H. Durgin, P.E.
19 Payson Road
Belmont, MA 02178-2720
Tel. and Fax: 617-484-2347
October 21, 1998

Re: 226 Causeway Street Chapter 91 Alternative Building effects on PLWs

Mitchell Fischman
Daylor Consulting Group, Inc.
Ten Forbes Road
Braintree, MA 02184

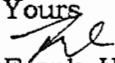
Dear Mitch,

I have examined the drawings of the Chapter 91 alternative of the 226 Causeway Street Building. I believe that location 19 is the only place where the proposed Chapter 91 building would cause a change in predicted pedestrian level winds (PLWs) from those expected for the preferred 155 ft. Alternative. Location 19 is at the west corner of the intersection of North Washington and Causeway streets. The reduced PLWs would only occur for SE winds (This is the least likely direction for winds in Boston). PLWs would be reduced from Category 3 (comfortable for walking) to Category 4 (Comfortable for short periods of standing or sitting) for the Chapter 91 alternative. This would be true either before or after completion of the Depressed Central Artery.

The replacement of the current elevated Central Artery with the Depressed Artery now under construction will cause significant changes in PLWs at several locations for some of the directions considered in my report. These changes will be the same for both the preferred 155 ft. Alternative and the Chapter 91 Alternative to the proposed 226 Causeway Street building. The changes are listed below (Refer to the maps in my report for station locations):

For NW winds:	PLWs at location 13 in Portal Park will increase and go from Category 4 to 3. Those at locations 21 and 22 will increase and go from Category 5 to 4;
For SW Winds:	PLWs at locations 2, 4, 6, 13, 14, and 15 are predicted to increase and go from Category 5 to 4. Those at locations 17 and 20 will increase and go from Category 4 to 3;
For NE Winds:	PLWs at location 13 are predicted to increase and go from Category 5 to 4. Those at location 20 will increase and go from Category 4 to 3;
For E winds	PLWs at location 13 are predicted to increase and go from Category 5 to 4. Those at location 17 will increase and go from Category 4 to 3;
For SE winds	PLWs at locations 2, 6, 13, and 14 are predicted to increase and go from Category 4 to 3. Those at location 20 will increase and go from Category 5 to 3;

If there are further questions feel free to ask.

Yours

Frank H. Durgin, P.E.

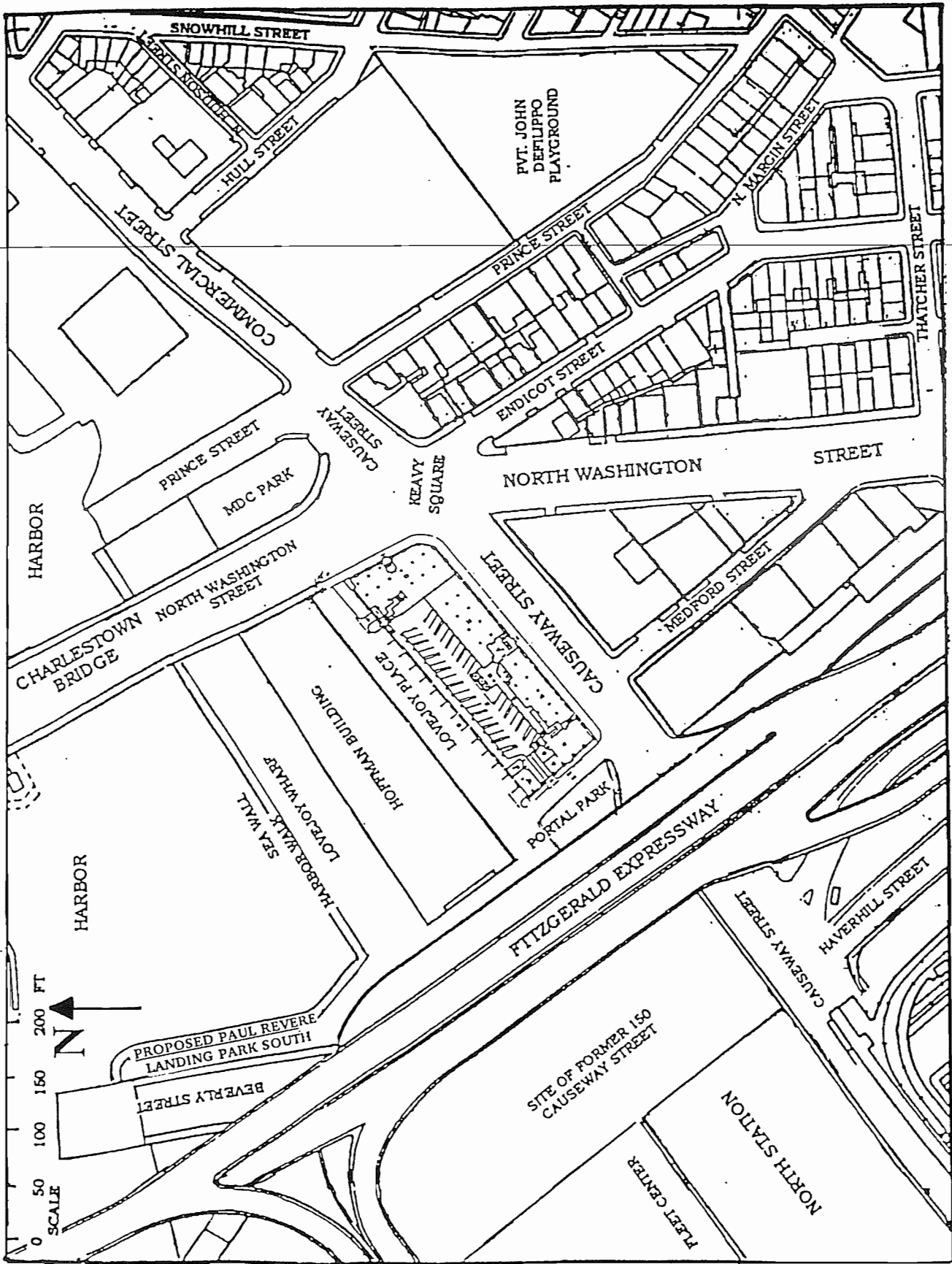


Figure 2 Map of Area for Build Conditions Before Completion of the Depressed Central Artery

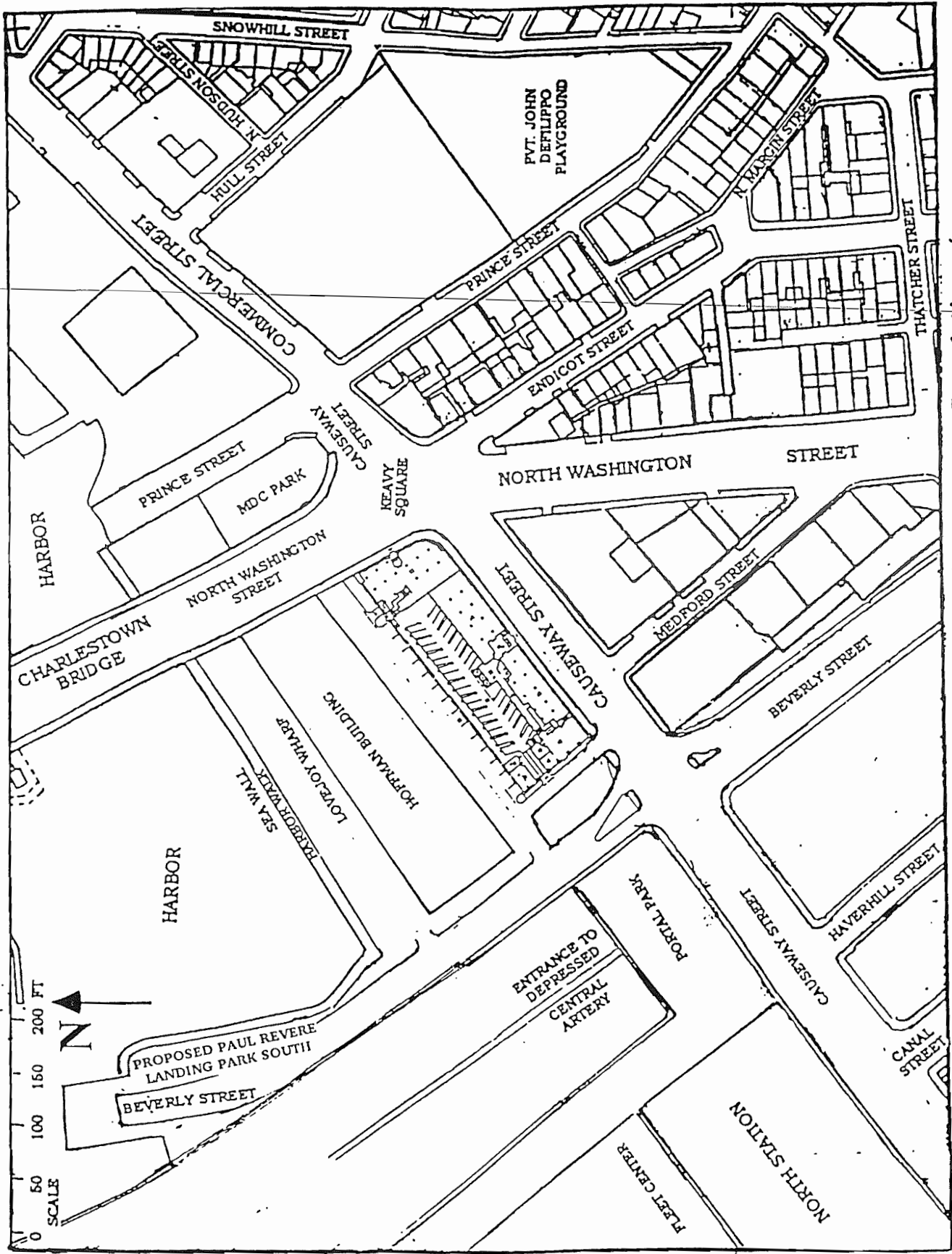
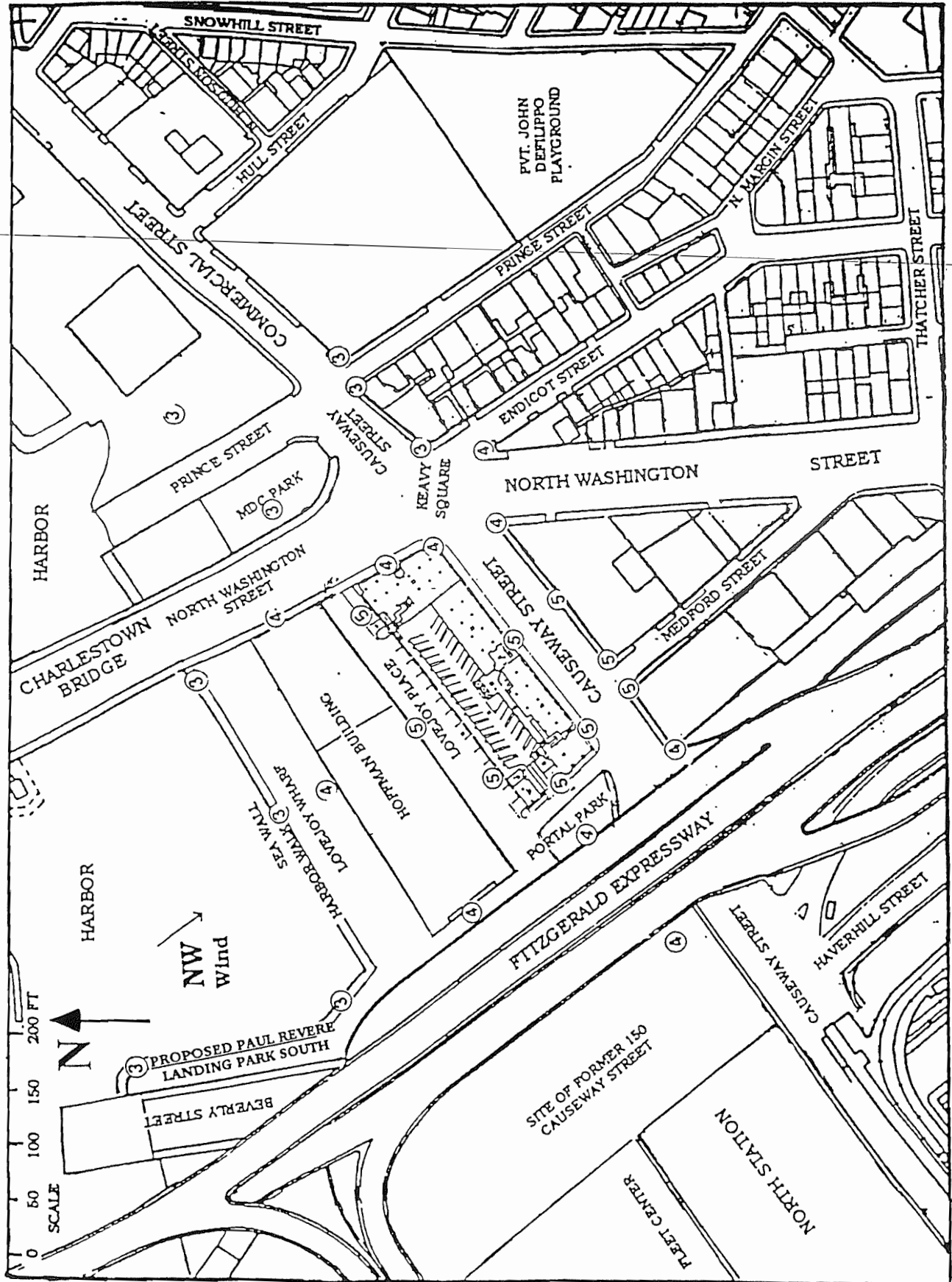
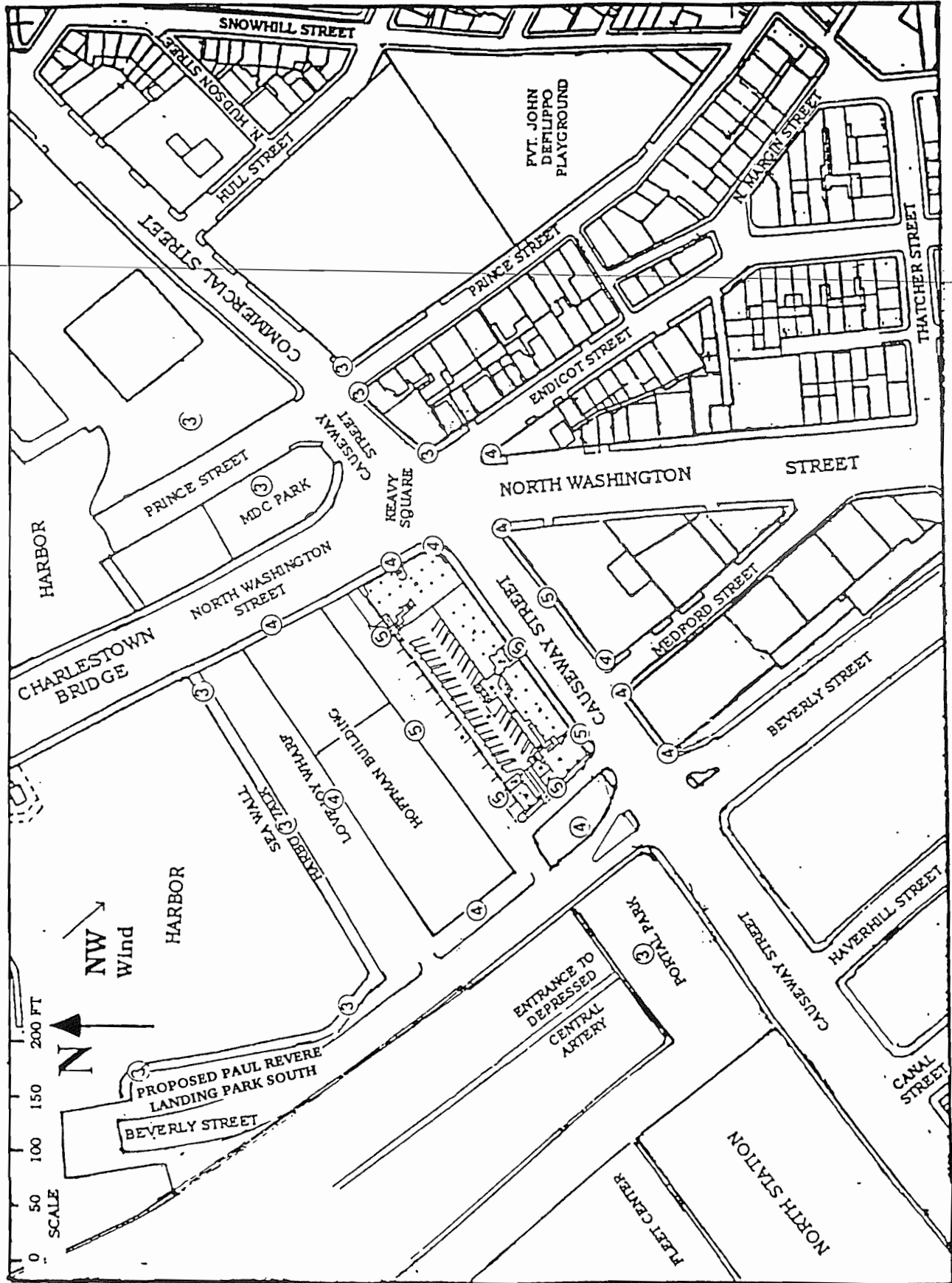


Figure 3 Map of Area for Build Conditions After Completion of the Depressed Central Artery

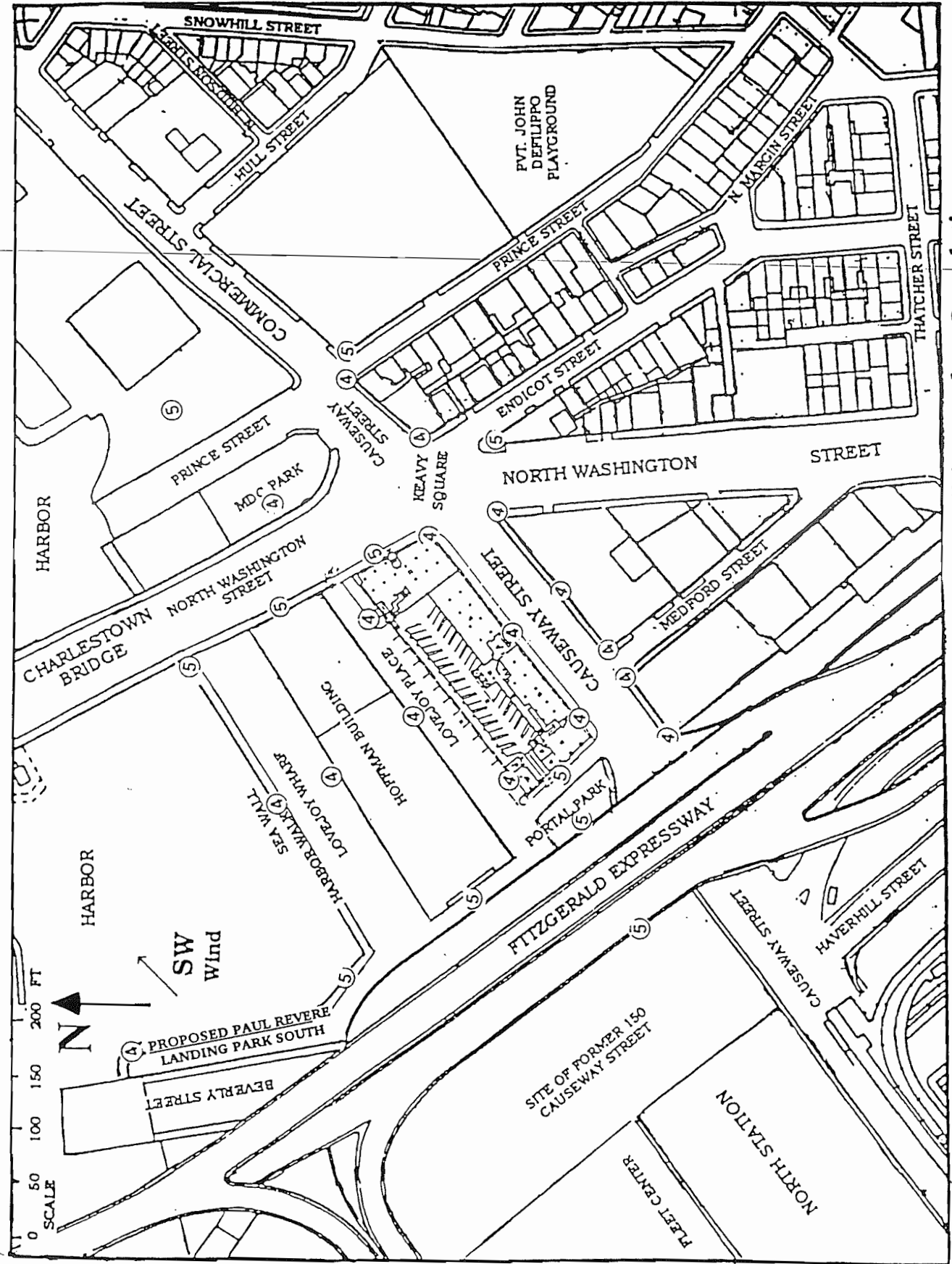


Melbourne Categories for Chapter 91 Build Conditions Before Completion
of the Depressed Central Artery for NW Winds
Figure 1

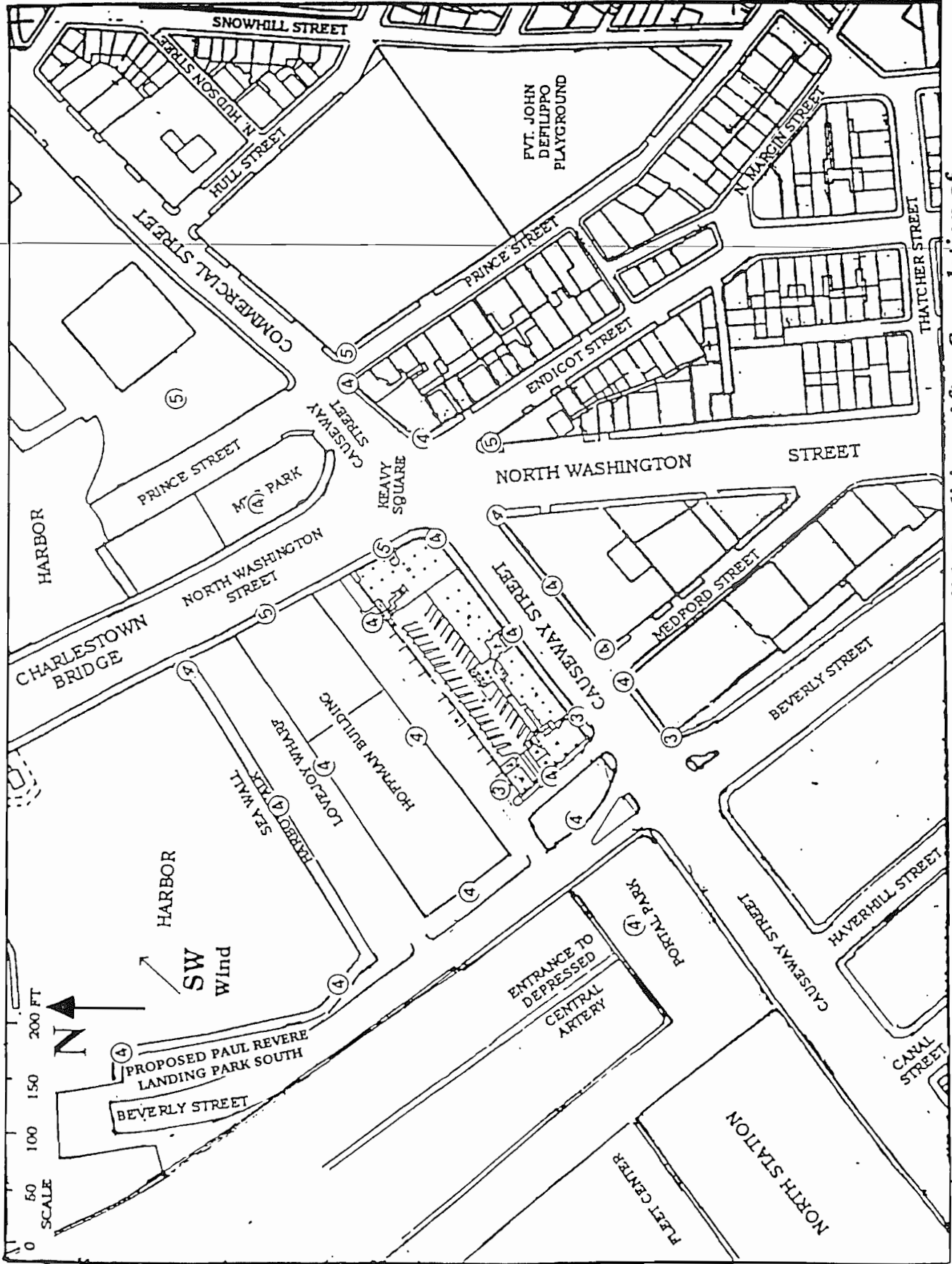


Melburne Categories for Chapter 91 Build Conditions After Completion of the Depressed Central Artery for NW Winds

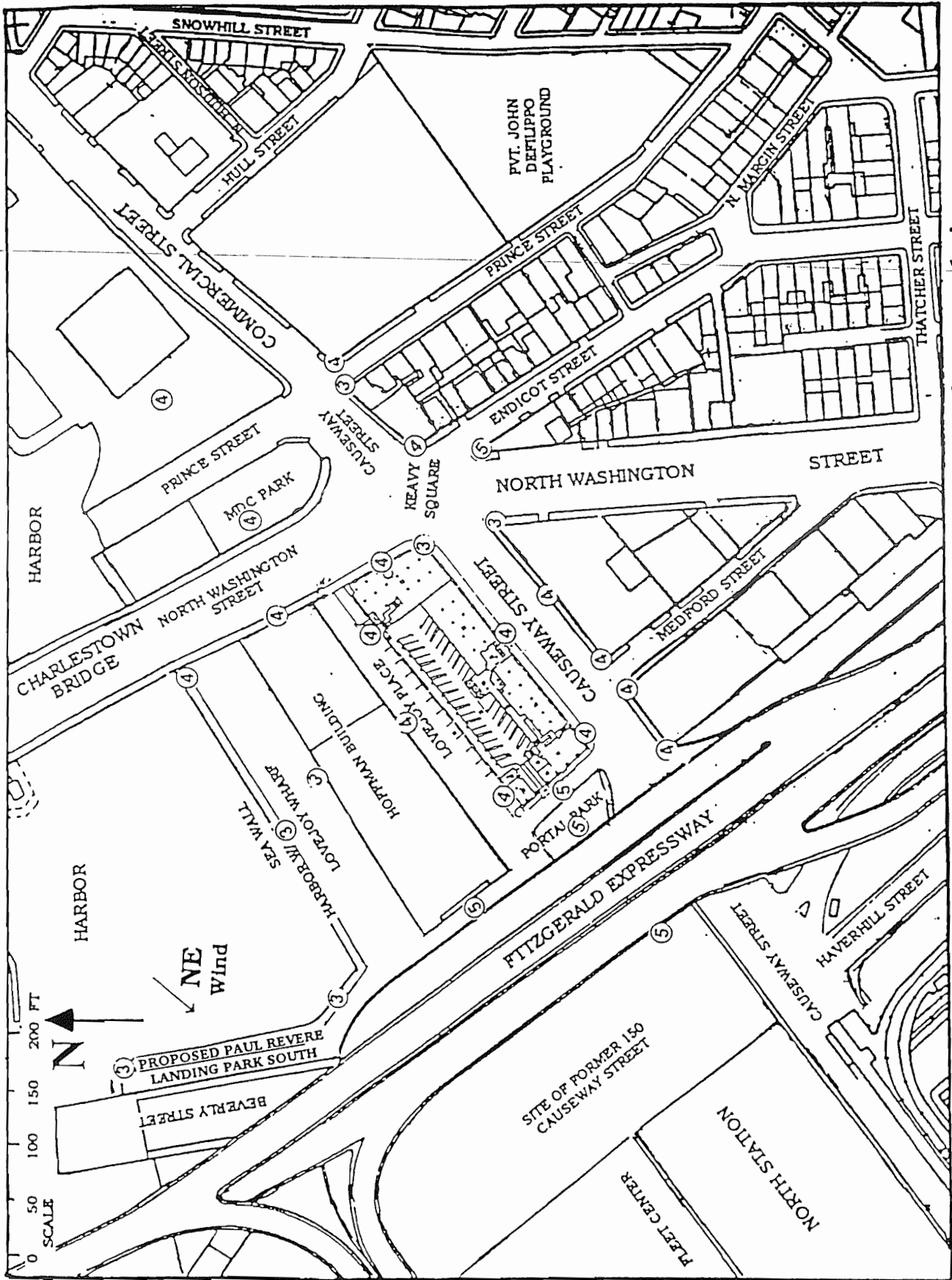
Figure 2



Melbourne Categories for Chapter 91 Build Conditions Before Completion
of the Depressed Central Artery for SW Winds
Figure 3

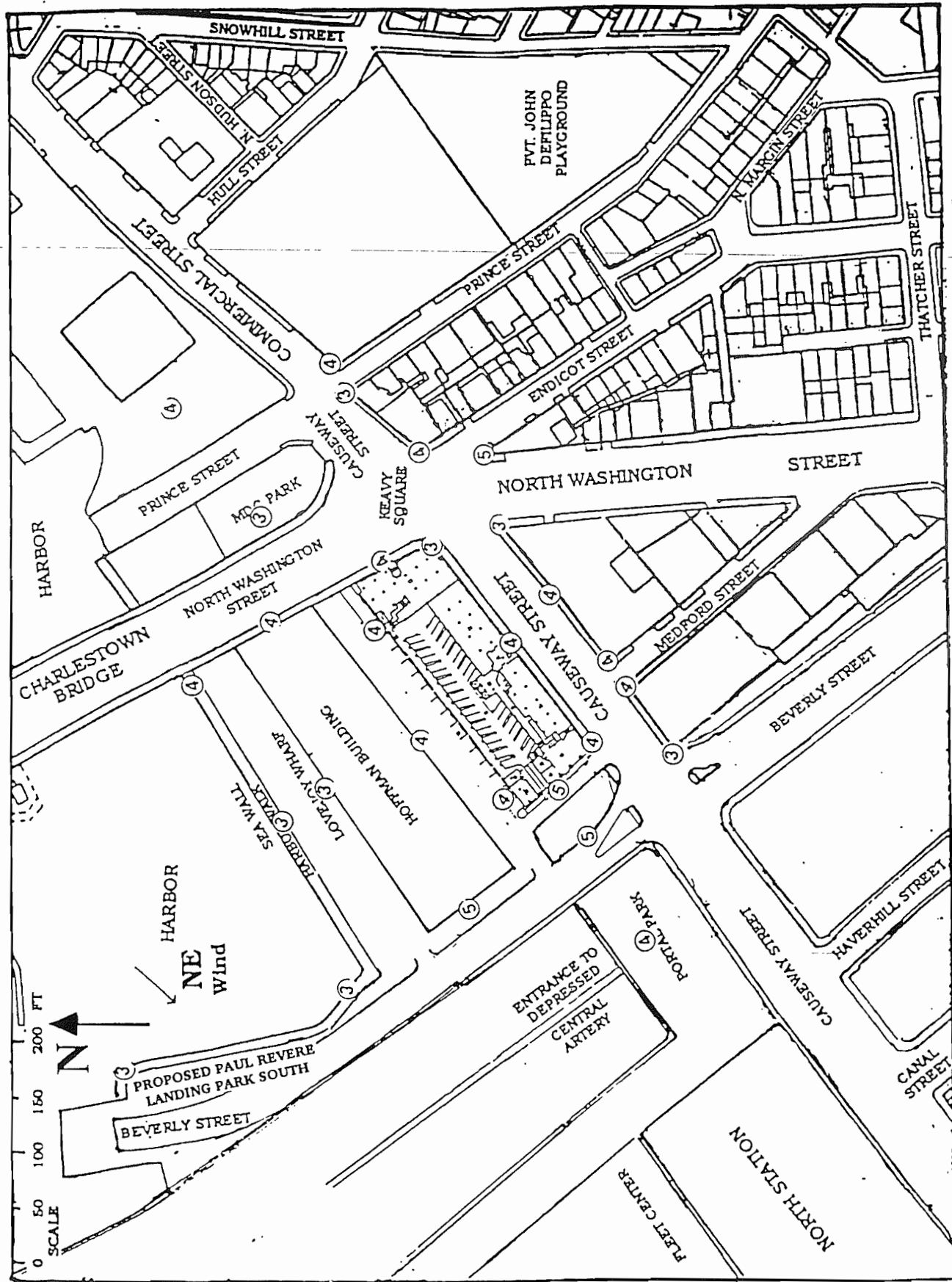


Melbourne Categories for Chapter 91 Build Conditions After Completion of the Depressed Central Artery for SW Winds
 Figure 4

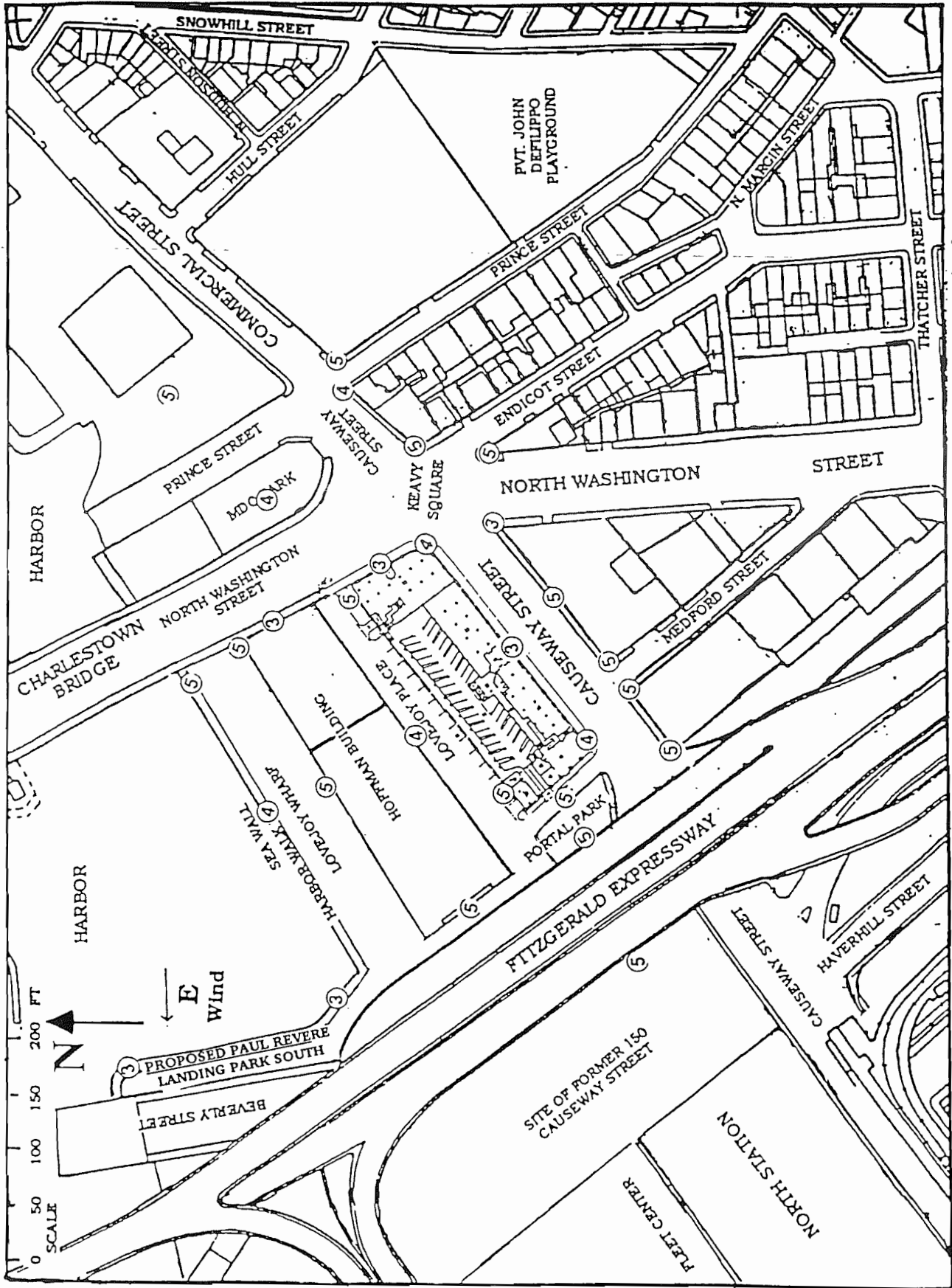


Melbourne Categories for Chapter 91 Build Conditions Before Completion
of the Depressed Central Artery for NE Winds

Figure 5



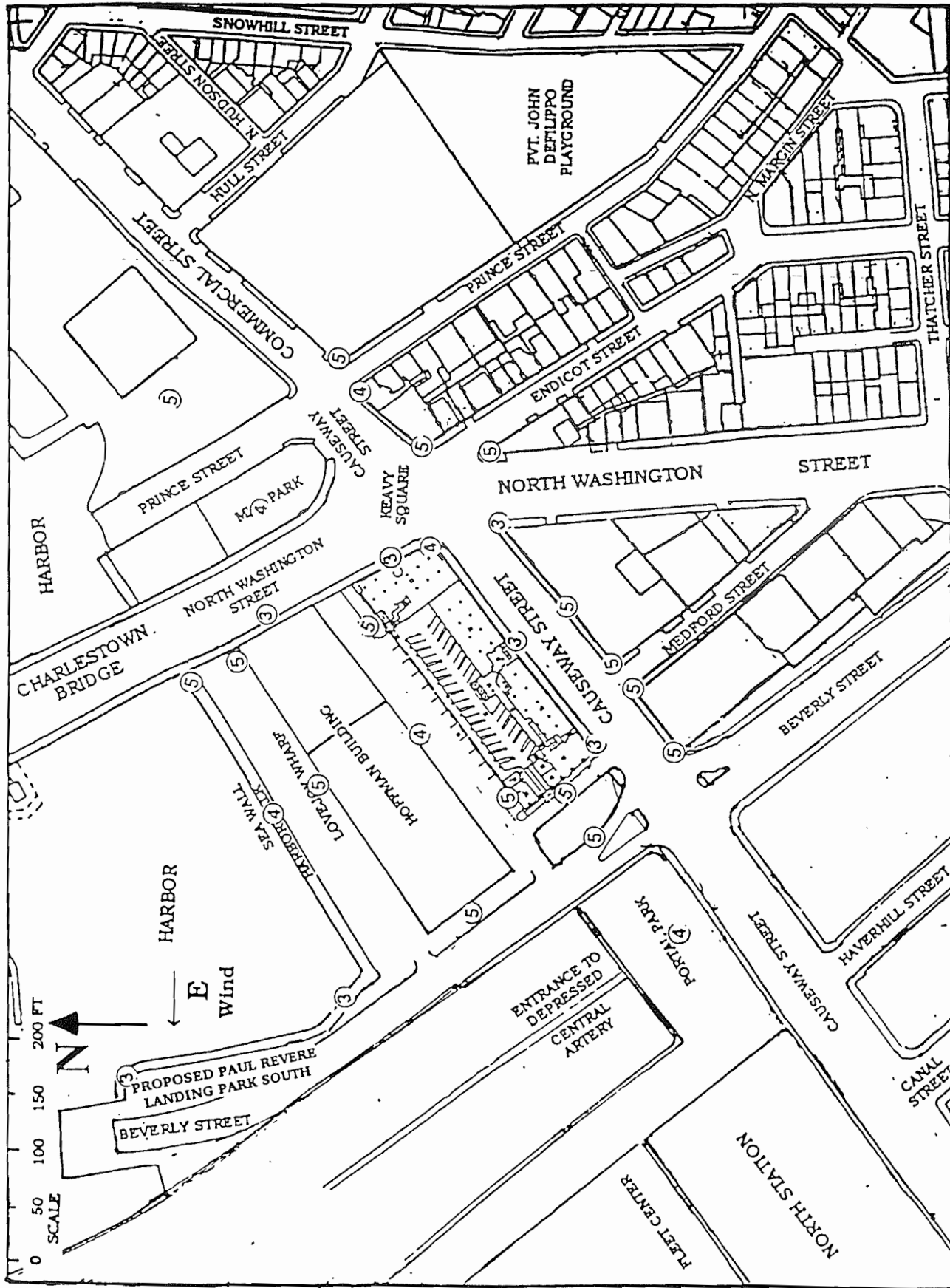
Melbourne Categories for Chapter 91 Build Conditions After Completion of the Depressed Central Artery for NE Winds
 Figure 6



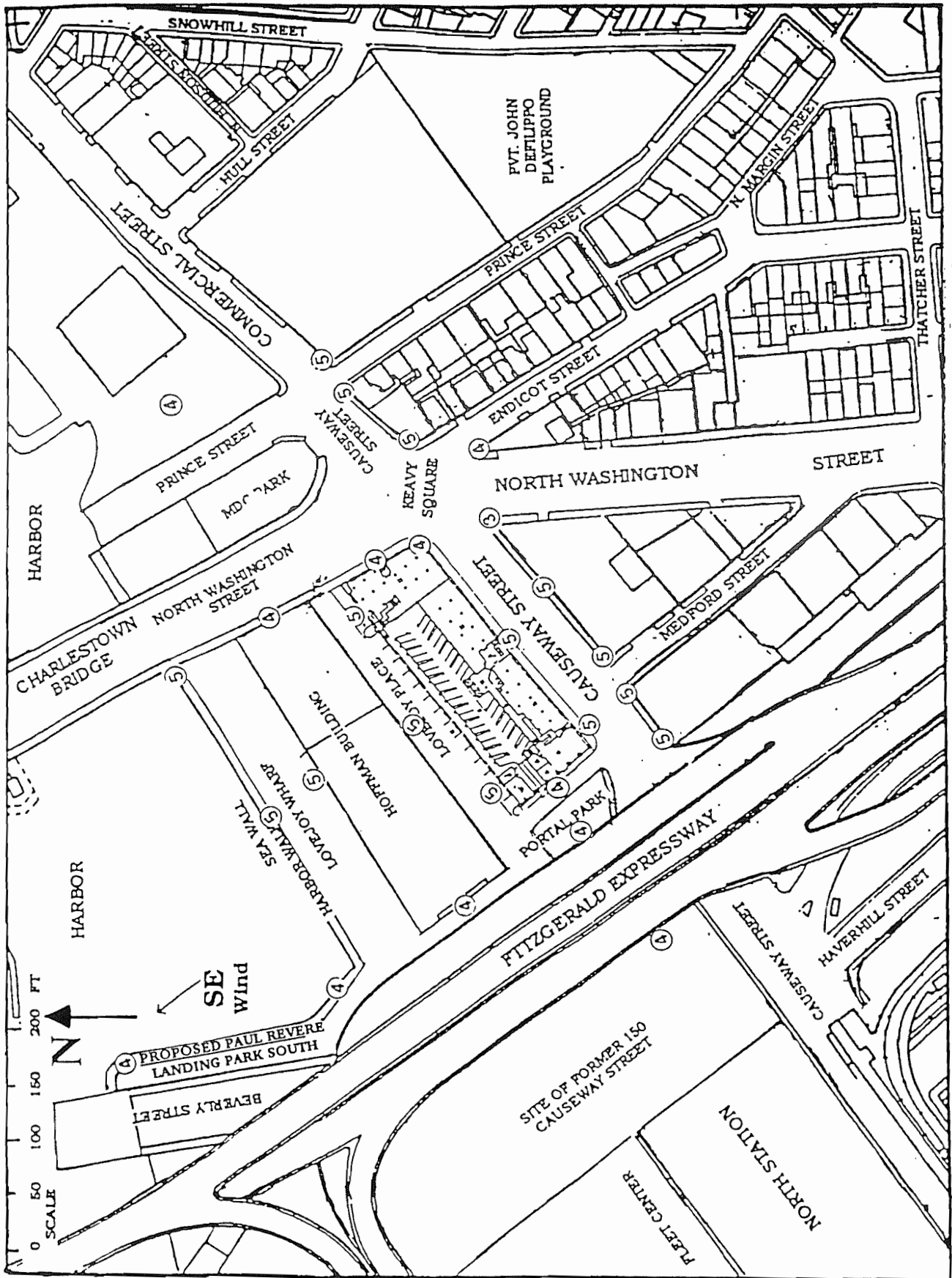
Melbourne Categories for Chapter 91 Build Conditions Before Completion

of the Depressed Central Artery for E Winds

Figure 7



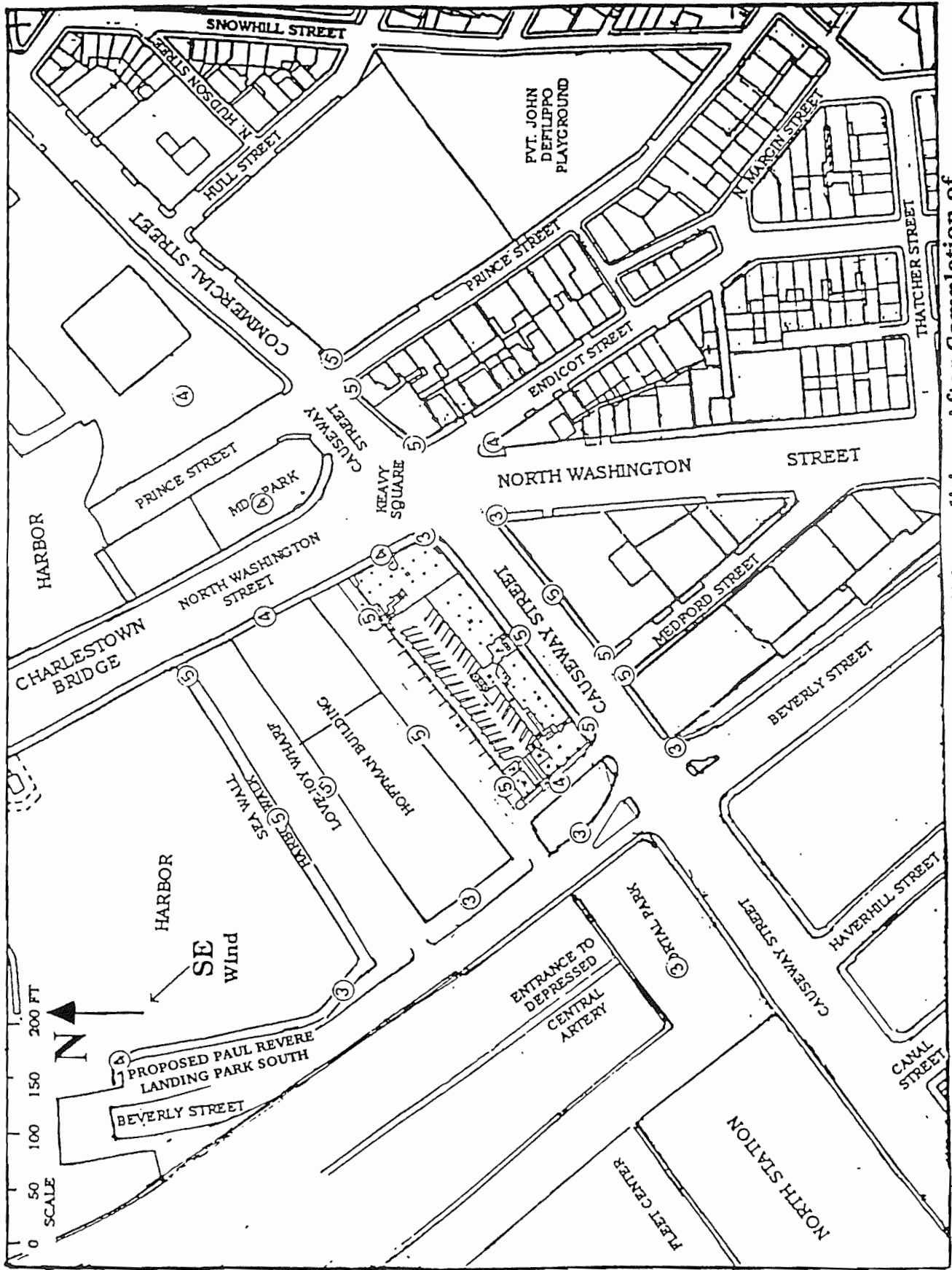
Melbourne Categories for Chapter 91 Build Conditions After Completion of the Depressed Central Artery for E Winds
 Figure 8



Melbourne Categories for Chapter 91 Build Conditions Before Completion

of the Depressed Central Artery for SE Winds

Figure 9



Melbourne Categories for Chapter 91 Build Conditions After Completion of the Depressed Central Artery for SE Winds
 Figure 10

Appendix 14 Developer's proposed Memorandum of Understanding

22

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding by and among Boston Kenmore Realty Corp., a Massachusetts corporation having a place of business at 75 St. Alphonsus Street, Boston, MA 02120-1676 ("Boston Kenmore"), and the Boston Redevelopment Authority regarding the project known as the "Gateway" at 226 Causeway Street, Boston, Suffolk County, Massachusetts (the "Project").

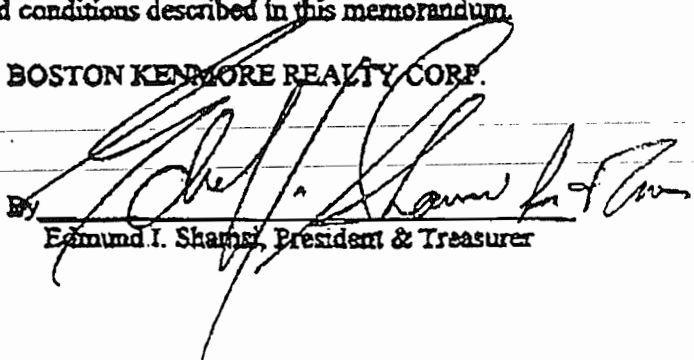
Boston Kenmore has proposed the redevelopment of 226 Causeway Street in the North Station District of Boston to erect a six (6) story addition to a height of 155 feet and change the occupancy from a bakery building to 246 apartments, parking garage and retail in the North Station EDA. The Project does not require linkage for affordable housing under the City of Boston Zoning Ordinance, nor does it require any affordable set-aside under the Harbor Plan by virtue of being constructed on private, as opposed to Commonwealth, tidelands. Nevertheless, in an effort to maintain consistency with the policies set forth in the Municipal Harbor Plan and by the City of Boston and to further the goals of the North End Neighborhood, Boston Kenmore is prepared to offer an affordable housing package by setting aside twenty-four (24) units based on the annexed schedule as affordable units for a period of twenty (20) years, provided that fourteen (14) of the affordable units shall be reserved for elderly tenants. With respect to the units so reserved, any elderly tenant occupying a unit designated as an "elderly unit" during the twenty (20) year period commencing with the issuance of a Certificate of Occupancy may continue to occupy the subsidized unit indefinitely. Rent increases for the twenty-four (24) units shall be based upon the Consumer Price Index from time to time.

In consideration of Boston Kenmore's offering the foregoing affordable units for community benefit, the parties to this Memorandum of Understanding agree to actively support the Project at all regulatory hearings, including the Boston Zoning Board of Appeals, and community meetings and further support Boston Kenmore in obtaining a license for a commercial parking lot on the premises to permit angle parking at Lovejoy Place and to expand the existing parking license to permit parking in the building for a total of 135 parking spaces. Further, in order to help alleviate the reported shortage of parking spaces in the North End and vicinity, Boston Kenmore is willing to provide twenty-five (25%) percent of the 135 spaces on site to North End residents at a fee of \$145.00 per month. This parking would exist until such time as construction commenced. Once the building is completed, Boston Kenmore will address the reporting parking issues by entering into an arrangement with Meyers Parking System, Inc. to offer residents of the Project up to 200 monthly parking spaces at the Government Center Garage. Overnight spaces at Government Center will be available for residents of 226 Causeway Street. We are happy to provide a copy of a letter from Meyers Parking System, dated March 11, 1998, to this effect.

The sole obligation of Boston Kenmore to this Memorandum of Understanding is to agree to provide the affordable units under the terms and conditions described in this memorandum.

BOSTON KENMORE REALTY CORP.

By


Edmund I. Shamsi, President & Treasurer

Date: February 9, 1999

Appendix 15 Letter from DEP to the MEPA Unit, January 15, 1998



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

ARGEO PAUL CELLUCCI
Governor

TRUDY COXE
Secretary

DAVID B. STRUHS
Commissioner

TO: R.J. Lyman, Director, MEPA Unit

FROM: Jeffrey R. Martin, Acting Program Chief
Waterways Regulation Program *JRM*

DATE: January 15, 1998

RE: 226 Causeway Street Redevelopment
Boston Inner Harbor/Charles River, Boston
EOEA #11414

The Department of Environmental Protection, Waterways Regulation Program (WRP), has reviewed the referenced Environmental Notification Form (ENF) noticed in the Environmental Monitor on December 24, 1997. The project involves the renovation of an existing, 6-story warehouse building, into a 12-story residential structure with ground floor retail space and parking. The proposed project is a nonwater-dependent use of filled tidelands of Boston Harbor in Boston.

The site consists of 1.1 acres of filled tidelands and, therefore, the preparation of an EIR is categorically required. The proponent has requested a waiver of this requirement. The project appears to meet the criteria needed to grant a waiver, and the information requested below will likely be sufficient for the Department to make its licensing decision. Therefore, based upon waterways considerations, the WRP does not object to the proponent's request for a waiver of the requirement to prepare an EIR.

The WRP offers the following comments:

Chapter 91 Jurisdiction: Upon preliminary review of our licensing records, the existing building is located within the geographic jurisdiction of M.G.L. c. 91 pursuant to 310 CMR 9.04. The historic high water mark (HHWM) is located an average of approximately 1,450 feet landward of the project site and the historic mean low water is located seaward of the project site. Pursuant to 310 CMR 9.02, the extent of Commonwealth tidelands is defined as lands which are located seaward of the historic mean low water mark or, a line 100 rods (1,650 feet) seaward of the historic mean high water mark, whichever is more landward. The entire project site appears to be located on filled private tidelands. However, the proponent should provide the Department with further documentation verifying the location of the

HHWM relative to the project site to ensure that the site is less than 100 rods (1,650 feet) seaward of the HHWM, especially along the southwest corner.

Nonwater-Dependent Use of Tidelands: The use of the renovated building for residential, retail and parking purposes constitutes a nonwater-dependent use project pursuant to 310 CMR 9.12(2)(e).

Proper Public Purpose: As stated in M.G.L. c.91, s.18, "No structure or fill for nonwater-dependent use of tidelands may be licensed unless a written determination by the Department is made following a public hearing that said structures or fill shall serve a proper public purpose and that said purpose shall provide a greater public benefit than public detriment to the rights of the public in said tidelands..." Pursuant to 310 CMR 9.31(2)(b), the Department presumes the referenced requirement is met if the project complies with the standards of 9.51, and 9.52 (described below).

The project site is located approximately 150 feet from the current mean high water shoreline, and is separated from the waterfront by a similar building located on Lovejoy Wharf. Since the project site does not have a water-dependent use zone, the setback standards of 9.51(3)(c), and the requirements for the incorporation of specific water-dependent uses found in 9.52(1)(a), do not apply.

Public Open Space - Pursuant to 310 CMR 9.51(3)(d), for projects involving the renovation or reuse of existing buildings, open space should be provided to the "maximum reasonable extent." The existing building footprint occupies close to 70% of the site. The proponent has proposed to provide landscaped public open space at the southwest portion of the site. This open space is adjacent to a proposed park (Portal Park) which will be designed by the MDC, and located above the transition portal between the Charles River Bridge and the depressed Central Artery. Portal Park, in combination with a redesigned Beverly Street, will provide one of the major entrances into MDC's Lower Charles River Basin waterfront park system. The WRP recommends that the proponent coordinate with the MDC, and CA/T Project, to ensure that the design of their open space is consistent with, and augments the MDC efforts at this important juncture. The proponent should consider allowing the MDC to design the onsite open space and possibly grant the MDC a permanent easement.

The perimeter of the site along Causeway Street and North Washington Street includes public sidewalks. The proponent should assess the condition of these sidewalks and make any necessary improvements to ensure that safe public access, of an adequate width, is maintained along and through the site to the waterfront park system.

Height - As currently designed, the project does not meet the height limitations outlined in section 9.51(3)(e). In accordance with the referenced standard, the maximum allowable building heights are approximately 80 feet at the buildings seaward edge, 110 feet at its midpoint, and 135 feet along Causeway Street. The proponent is proposing to add six floors to the existing building, resulting in an increase in height to 125 feet at both the buildings seaward edge and along Causeway Street, maintaining this height within a 20 foot setback, and then increasing the height to 155 feet within an approximately 136 foot wide central core which straddles the buildings midpoint.

The proponent is fully aware of the current designs inconsistency with the WRP's height standard, and is in the process of assessing possible options to address this issue, the most expeditious of which would be to revise the project to comply with the regulatory standard. The proponent is also exploring, with the City of Boston and MCZM, the possibility of incorporating the site into the City's impending renewal of their Municipal Harbor Plan. Any request for greater heights should be supported by, at a minimum, an analysis of the resultant wind and shadow effects upon the surrounding pedestrian and waterfront environment. As mentioned earlier, the primary concern is impacts to the adjacent 25,000 s.f. Portal Park, pedestrian connections to the waterfront, and waterfront open space and water-dependent uses along Lovejoy Wharf and Paul Revere Landing Park South. The WRP will remain actively involved in the resolution of this issue. A copy of said analysis should also be submitted with the proponents waterways application.

Facilities of Public Accommodation - The proponent should be commended for the incorporation of Facilities of Public Accommodation (FPA's) into the project's design program. While not required by the current regulations, the proponent is proposing to reserve approximately 13,000 s.f. of the ground floor for FPA's, including a restaurant/deli, public lobby, and related facilities.

Waterways Application Status: The WRP looks forward to continuing its review of the proposed project and awaits the submission of an application which meets the minimum submittal requirements of 310 CMR 9.11(2)(b) and incorporates the information referenced above.

Any questions regarding the above should be directed to Gregory Carrafiello at (617) 292-5686.

JRM/GAC/gac

cc: Boston Kenmore Realty Corporation
M. Fischman, Daylor Consulting Group
L. Carr, Earth Tech
P. Brady, CZM
J. Mead, CZM
File

**Appendix 16 MEPA Final Record of Decision
MEPA Draft Record of Decision**



*The Commonwealth of Massachusetts
 Executive Office of Environmental Affairs
 100 Cambridge Street, Boston, MA 02202*

ARGEO PAUL CELLUCCI
 GOVERNOR
 TRUDY COXE
 SECRETARY

June 9, 1998

Tel: (617) 727-9800
 Fax: (617) 727-2754
<http://www.magnet.state.ma.us/envir>

FINAL RECORD OF DECISION

PROJECT NAME : 226.Causeway Street Redevelopment
 PROJECT LOCATION : Boston
 EOEA NUMBER : 11414
 PROJECT PROPONENT : Boston Kenmore Realty Corporation
 DATE NOTICED IN MONITOR : February 11, 1998

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and Section 11.18 of the MEPA regulations (301 CMR 11.00), I have reviewed this project and hereby **grant a waiver** from the categorical requirement to prepare an Environmental Impact Report (EIR).

Project Description

According to the Environmental Notification Form (ENF), the project consists of redevelopment of an existing 235,000 square foot (sf) unoccupied building, which formerly housed the Stop & Shop Bakery, located at 226 Causeway Street in Boston. The proponent plans to build 247 residential units in the upper floors, 120 to 135 parking spaces in the basement and first floor, and 13,000 square feet of retail space in the first floor. A six story addition to the building is planned, increasing its maximum height from about 86 feet to 155 feet and its floor area to 404,000 sf. The building is next to the Central Artery's proposed Portal Park at Causeway and Beverly Streets.

Categorical Inclusion

The project is categorically included for the preparation of an Environmental Impact Report (EIR) pursuant to Section 11.25(4) of the MEPA regulations because it requires a Chapter 91 license for non-water dependent use of one or more acres of tidelands.

Jurisdiction

The project will require a Chapter 91 license and a sewer extension/connection permit from the Department of Environmental Protection. Because the proponent is not seeking financial assistance from the Commonwealth, MEPA jurisdiction is limited to

the subject matter of the state permits and agency actions required or potentially required for the project (use of tidelands, water, wastewater).

Waiver Request

In a letter dated December 15, 1997, included with the ENF filing, the project proponent requested a waiver from the categorical inclusion for the preparation of an EIR for the project. The waiver request was discussed fully at the MEPA consultation session held on January 7, 1998. The Draft Record of Decision (DROD) was published in the Environmental Monitor for public comment on February 11, 1998. Three comment letters were received.

Criteria for Waiver

Section 11.18 of the MEPA regulations provides that a waiver may be granted when strict compliance with the regulations will lead to undue hardship and will not serve to minimize or avoid damage to the environment. These findings shall be based on one or more of the following circumstances: 1) the impacts of the project are insignificant; 2) the aspects of the project which cause it to be categorically included are not within the subject matter jurisdiction of MEPA; 3) ample and unconstrained infrastructure exists to support the project; and 4) the terms agreed to as a condition of the waiver will bring about benefits in excess of those that could be achieved in the absence of a waiver.

Findings

1. While there are issues that have not been fully resolved at this point, in particular compliance with the height requirements of Chapter 91, they are well understood and can be addressed adequately through the Chapter 91 and Article 80 processes. In addition, issues that have been raised concerning community character and the nature of the residential units to be built are outside of my jurisdiction in this case, and must be resolved by the City.

According to the Department of Environmental Protection, the project appears to be located on filled private tidelands, and is a non-water dependent use. Therefore, it must meet the applicable standards of Sections 9.51 and 9.52 of the Waterways Regulations.

In order to comply with Section 9.51 (3) (d) of the Waterways Regulations, public open space must be provided to the maximum reasonable extent. The existing building footprint occupies approximately 70 percent of the site; no increase in building footprint is planned. The proponent proposes to provide landscaped public open space at the southwest portion of the site, adjacent to the proposed Portal Park to be located above the transition portal between the Charles River Bridge and the depressed Central Artery. Chapter 91 does not have a requirement for Facilities of Public Accommodation to be part of this project. However, the proponent plans about 13,000 square feet of retail space on the ground floor of the building.

The maximum permissible height allowed by the Chapter 91 Regulations for this site is about 80 feet at the seaward edge of the building and 135 feet at Causeway Street. The proposed maximum height of 155 feet does not comply with this requirement (although it complies with City of Boston zoning).

Since I issued the Draft Record of Decision, the City of Boston, the Massachusetts Coastal Zone Management Office (MCZM) and the proponent have discussed alternative ways to resolve the height issue. Rather than seeking an amendment to the Municipal Harbor Plan for this site only or waiting until it completes work on the renewal of the existing Plan, the City plans to submit a request for a Plan amendment for the portion of the Charles River Basin lying between the MDC dam and the North Washington Street Bridge (including all filled tidelands subject to Chapter 91 jurisdiction on either side of the river, including the 226 Causeway Street site).

With the understanding that the proposed amendment will cover only that limited area and that no substitutions to the dimensional or use requirements will be proposed for any waterfront buildings, MCZM believes that the amendment can be reviewed as a minor plan amendment. It also will consider the amendment to be the first phase of the larger renewal process for which the City is preparing documentation, thus expediting the review of the amendment.

2. Ample and unconstrained infrastructure exists to support the project. There is adequate water and wastewater capacity, and the building is located adjacent to the North Station Green Line and Commuter Rail Station.

3. The project will be reviewed by the Boston Redevelopment

for the Article 80 process includes community review, urban design, environmental protection, infrastructure, transportation access and water and sewer components.

4. The project will rehabilitate a long-vacant historic structure in the North Station area.

5. The proponent has agreed to circulate the wind and shadow study to be performed as part of the Article 80 and the Harbor Plan Amendment processes to those who have commented on the ENF (and other interested parties) for comment.

6. The Proponent has agreed to coordinate with the MDC, the Central Artery project and the Boston Environment Department in planning for the development of the public open space, vehicular access to the building, and construction scheduling and staging. The Central Artery/Tunnel Project has requested the proponent to commit to providing for surface improvements that will harmonize with the CA/T Portal Park and Charles River Basin Parks improvements, and to maintain construction period noise restrictions similar to those required for the CA/T Project. I find that complying with this request is a reasonable condition for this waiver, and expect the proponent to do so.

Based on these findings, it is my judgement that the waiver request has merit, meets the tests established in Section 11.18 of the MEPA regulations, and will serve to advance the interests of the Massachusetts Environmental Policy Act. Therefore, I grant the waiver for the Redevelopment of 226 Causeway Street, subject to the conditions described above.

June 9, 1998
DATE

Trudy Cox
Trudy Cox

- Comments Received on the ENF:
- Central Artery Environmental Oversight Committee, 1/13/98
 - BRA, 1/12/98
 - MHC, 1/13/98
 - BWSC, 1/13/98

MHD CA/T, 1/14/98
BED, 1/14/98
DEP WRP, 1/15/98
Phyllis Rugnetta, NEWRA Construction
Committee, 1/22/98
David A.Lubiak, 1/23/98

Comments Received on the DROD:

BRA, 2/19/98, 3/2/98
CA/T Project, 2/24/98

TC/JGH/jh



The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Boston, MA 02202

ARGEO PAUL CELLUCCI
 GOVERNOR

TRUDY COXE
 SECRETARY

Tel: (617) 727-9800
 Fax: (617) 727-2754

January 30, 1998 <http://www.magnet.state.ma.us/envir>

DRAFT RECORD OF DECISION

PROJECT NAME : 226 Causeway Street Redevelopment
 PROJECT LOCATION : Boston
 EOE NUMBER : 11414
 PROJECT PROPONENT : Boston Kenmore Realty Corporation
 DATE NOTICED IN MONITOR : December 24, 1997

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and Section 11.18 of the MEPA regulations (301 CMR 11.00), I have reviewed this project and hereby propose to grant a waiver from the categorical requirement to prepare an Environmental Impact Report (EIR).

Project Description

According to the Environmental Notification Form (ENF), the project consists of redevelopment of an existing 235,000 square foot (sf) unoccupied building, which formerly housed the Stop & Shop Bakery, located at 226 Causeway Street in Boston. The proponent plans to build 247 residential units in the upper floors, 120 to 135 parking spaces in the basement and first floor, and 13,000 square feet of retail space in the first floor. A six story addition to the building is planned, increasing its maximum height from about 86 feet to 155 feet and its floor area to 404,000 sf. The building is next to the Central Artery's proposed Portal Park at Causeway and Beverly Streets.

Categorical Inclusion

The project is categorically included for the preparation of an Environmental Impact Report (EIR) pursuant to Section 11.25(4) of the MEPA regulations because it requires a Chapter 91 license for non-water dependent use of one or more acres of tidelands.

Jurisdiction

The project will require a Chapter 91 license and a sewer extension/connection permit from the Department of Environmental Protection. Because the proponent is not seeking financial assistance from the Commonwealth, MEPA jurisdiction is limited to

the subject matter of the state permits and agency actions required or potentially required for the project (use of tidelands, water, wastewater).

Waiver Request

In a letter dated December 15, 1997, included with the ENF filing, the project proponent requested a waiver from the categorical inclusion for the preparation of an EIR for the project. The waiver request was discussed fully at the MEPA consultation session held on January 7, 1998.

Criteria for Waiver

Section 11.18 of the MEPA regulations provides that a waiver may be granted when strict compliance with the regulations will lead to undue hardship and will not serve to minimize or avoid damage to the environment. These findings shall be based on one or more of the following circumstances: 1) the impacts of the project are insignificant; 2) the aspects of the project which cause it to be categorically included are not within the subject matter jurisdiction of MEPA; 3) ample and unconstrained infrastructure exists to support the project; and 4) the terms agreed to as a condition of the waiver will bring about benefits in excess of those that could be achieved in the absence of a waiver.

Findings

1. While there are issues that have not been fully resolved at this point, in particular compliance with the height requirements of Chapter 91, they are well understood and can be addressed adequately through the Chapter 91 and Article 80 processes. In addition, issues that have been raised concerning community character, the nature of the residential units to be built, and traffic at this location are outside of my jurisdiction in this case, and must be resolved by the City.

According to the Department of Environmental Protection, the project appears to be located on filled private tidelands, and is a non-water dependent use. Therefore, it must meet the applicable standards of Sections 9.51 and 9.52 of the Waterways Regulations.

In order to comply with Section 9.51 (3) (d) of the Waterways Regulations, public open space must be provided to the maximum reasonable extent. The existing building footprint

occupies approximately 70 percent of the site; no increase in building footprint is planned. The proponent proposes to provide landscaped public open space at the southwest portion of the site, adjacent to the proposed Portal Park to be located above the transition portal between the Charles River Bridge and the depressed Central Artery.

The maximum permissible height allowed by the Chapter 91 Regulations for this site is about 80 feet at the seaward edge of the building and 135 feet at Causeway Street. The proposed maximum height of 155 feet does not comply with this requirement (although it complies with City of Boston zoning).

The proponent has suggested that it may ask the City to pursue an amendment to the Municipal Harbor Plan in order to resolve the height issue. While that would be one way to proceed in this case, I discourage the proponent from seeing the municipal harbor planning process as a *de facto* variance procedure to be pursued on a site by site basis. Because such planning needs to look at the long-term goals of a wider area, it can be time consuming, and is rarely appropriate as a way of dealing with conflicts between state and municipal requirements on a specific site. I note, however, that the City does plan to renew its existing plan in the near future, and there may be an opportunity to incorporate sites such as this one into the plan at that time.

Chapter 91 does not have a requirement for Facilities of Public Accommodation to be part of this project. However, the proponent plans about 13,000 square feet of retail space on the ground floor of the building.

2. Ample and unconstrained infrastructure exists to support the project. There is adequate water and wastewater capacity, and the building is located adjacent to the North Station Green Line and Commuter Rail Station.

3. The project will be reviewed by the Boston Redevelopment Authority under Article 80 of the Boston Zoning Code. The scope for the Article 80 process includes community review, urban design, environmental protection, infrastructure, transportation access and water and sewer components.

4. The project will rehabilitate a long-vacant historic structure in the North Station area.

5. The proponent has agreed to circulate the wind and shadow study to be performed as part of the Article 80 process to those who have commented on the ENF (and other interested parties) for comment.

6. The Proponent has agreed to coordinate with the MDC, the Central Artery project and the Boston Environment-Department in planning for the development of the public open space, vehicular access to the building, and construction scheduling and staging.

Based on these findings, it is my judgement that the waiver request has merit, meets the tests established in Section 11.18 of the MEPA regulations, and will serve to advance the interests of the Massachusetts Environmental Policy Act. Therefore, I propose to grant the waiver for the Redevelopment of 226 Causeway Street, subject to the conditions described above. This Draft Record of Decision shall be published in the next issue of the *Environmental Monitor* for a fourteen day comment period, after which I shall reconsider, modify, or confirm the waiver.

January 30, 1998

DATE

Trudy Coxo

Comments Received: Central Artery Environmental Oversight
Committee, 1/13/98
BRA, 1/12/98
MHC, 1/13/98
BWSC, 1/13/98
MHD CA/T, 1/14/98
BED, 1/14/98
DEP WRP, 1/15/98
Phyllis Rugnetta, NEWRA Construction
Committee, 1/22/98
David A.Lubiak, 1/23/98

TC/JGH/jh

**Appendix 17 Chapter 91 Licenses and Other Authorizations Pertaining to 226
Causeway Street**

Table Showing Previous Chapter 91 Licenses and Other Authorizations Pertaining to the Site

License	Issued To:	Work Authorized	Date Issued	Recorded	Book	Page	Comments	Map Reference
H&L, #1984	Theodore Heard and Larkin Trull, Trustees of John Trull	Build a sea-wall and fill solid on Charles River	1/27/1897		77			F
H&L, #2054	Theodore Heard and Larkin Trull, Trustees of John Trull	Widen and extend Wharf on the Charles River	9/17/1897					H
H&L, #1985	George Minott and Meary Scammon, Trustees of Otis Meinott	Build a sea-wall and fill solid on Charles River	1/27/1897			81		G
H&L, #989	George Minott, executor and trustee of Otis Minott	Reconstruct and extend wharf on piles and over the tide-marks of Charles River	5/5/1887			171		E
H&L, #2658	Edmund Codman and Joseph Russell, Trustee of Lovejoy's Wharf Trust	Fill solid, erect buildings, and drive piles at Lovejoy's Wharf on the Charles River	9/29/1902					I
H&L, #3180	Edmund Codman and Joseph Russell, Trustee of Lovejoy's Wharf Trust	Build a bulkhead and fill solid on Charles River	6/10/1907					J
H&L, #3342	Edmund Codman and Joseph Russell, Trustee of Lovejoy's Wharf Trust	Build a bulkhead and fill solid on the Charles River	1/6/1909			250		K
H&L, #3373	Edmund Codman and Joseph Russell, Trustee of Lovejoy's Wharf Trust	Build a pile wharf on the Charles River	5/24/1909			485	Made irrevocable by Chapter 691 Act in 1966	L
PoB, 134	Massachusetts Department of Public Works	Construct a high level bridge across the Charles River near Warren Bridge	9/29/1949					N
PoB, #104	The Boston and Maine Railroad	Fill Solid an area bound by the Charles River, Warren Avenue Bridge, and Freight House #9 in and over the tide waters of Charles River	1/2/1949					M

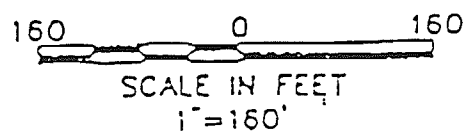
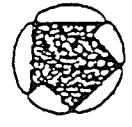
Table Showing Previous Chapter 91 Licenses and Other Authorizations Pertaining to the Site (Cont'd)

License	Issued To:	Work Authorized	Date Issued	Recorded	Book	Page	Comments	Map Reference
PoB, #179	Massachusetts Department of Public Works	Place and maintain fill in the tidewaters of the Charles River near the North Station Industrial Building and the Warren Avenue Bridge	4/27/1951					O
H&L, #45	Commissioners of the Charles River and Warren Bridge	Draw on Warren Bridge	1/1870			146		A
H&L, #770	Trustees of John W. Trull	Extend Lovejoy's Wharf	9/6/1883			403		D
H&L, #734		Reconstruction of Warren Bridge	5/1/1883					C
H&L, #380	John Heard, Trustee for John Trull	Build a sea wall across the dock of Trull's Wharf and fill the area enclosed by such wall	8/1/1877					B

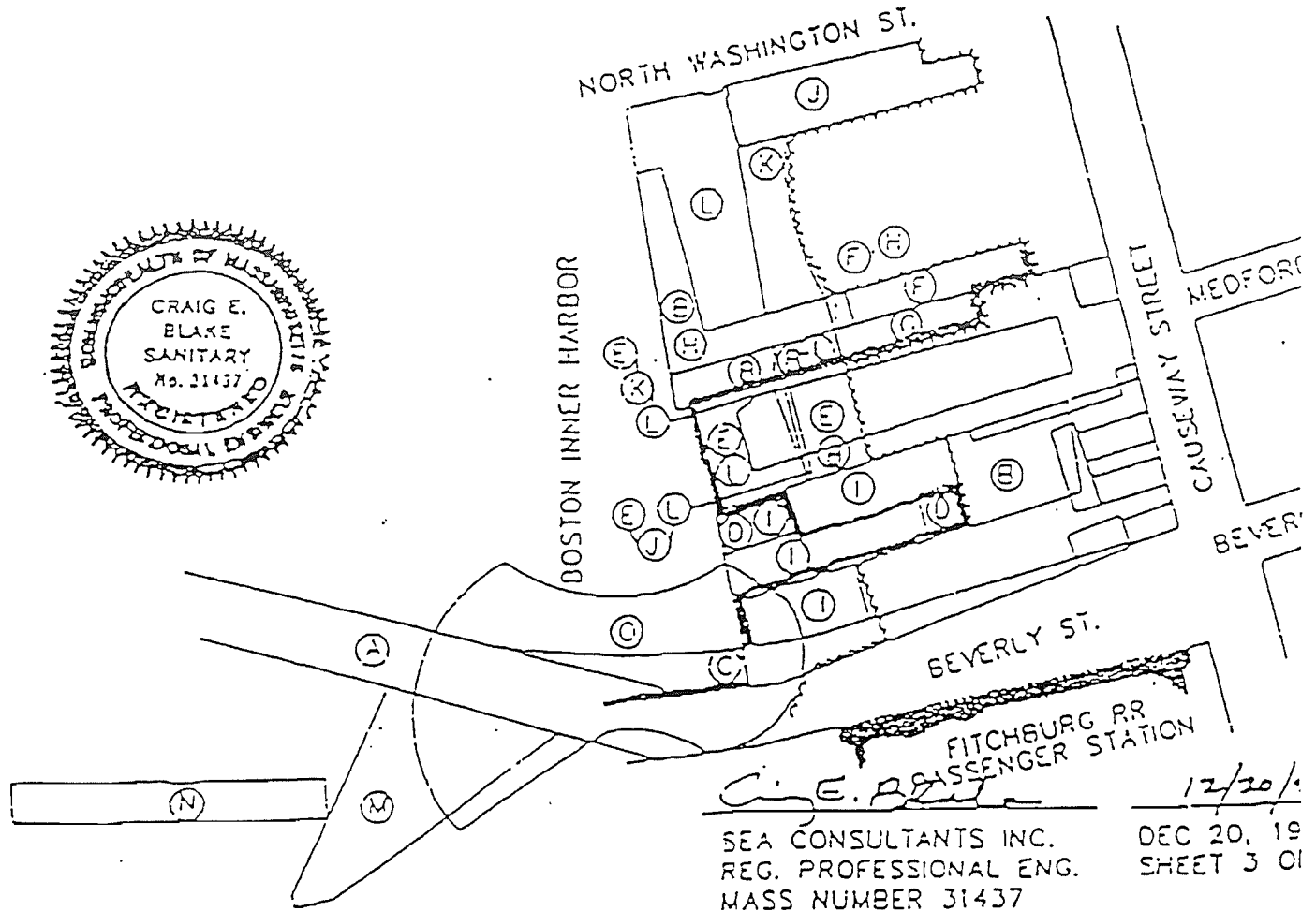
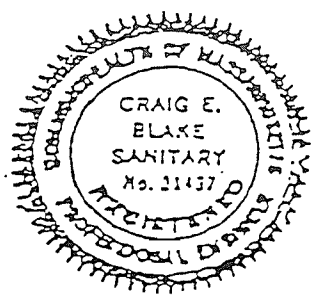
H&L = Harbor & Land; DPW = Department of Public Works; PoB = Port of Boston

SEAWALL/BULKHEAD AS OF 1883

EDGE OF PILE-SUPPORTED PIER AS OF 1883



(A)	#770	HARBOR & LAND
(B)	#380	HARBOR & LAND
(C)	#734	HARBOR & LAND
(D)	#770	HARBOR & LAND
(E)	#989	HARBOR & LAND
(F)	#1984	HARBOR & LAND
(G)	#1985	HARBOR & LAND
(H)	#2054	HARBOR & LAND
(I)	#2658	HARBOR & LAND
(J)	#3180	HARBOR & LAND
(K)	#3342	HARBOR & LAND
(L)	#3373	HARBOR & LAND
(M)	#104	PORT OF BOSTON
(N)	#134	PORT OF BOSTON
(O)	#179	PORT OF BOSTON

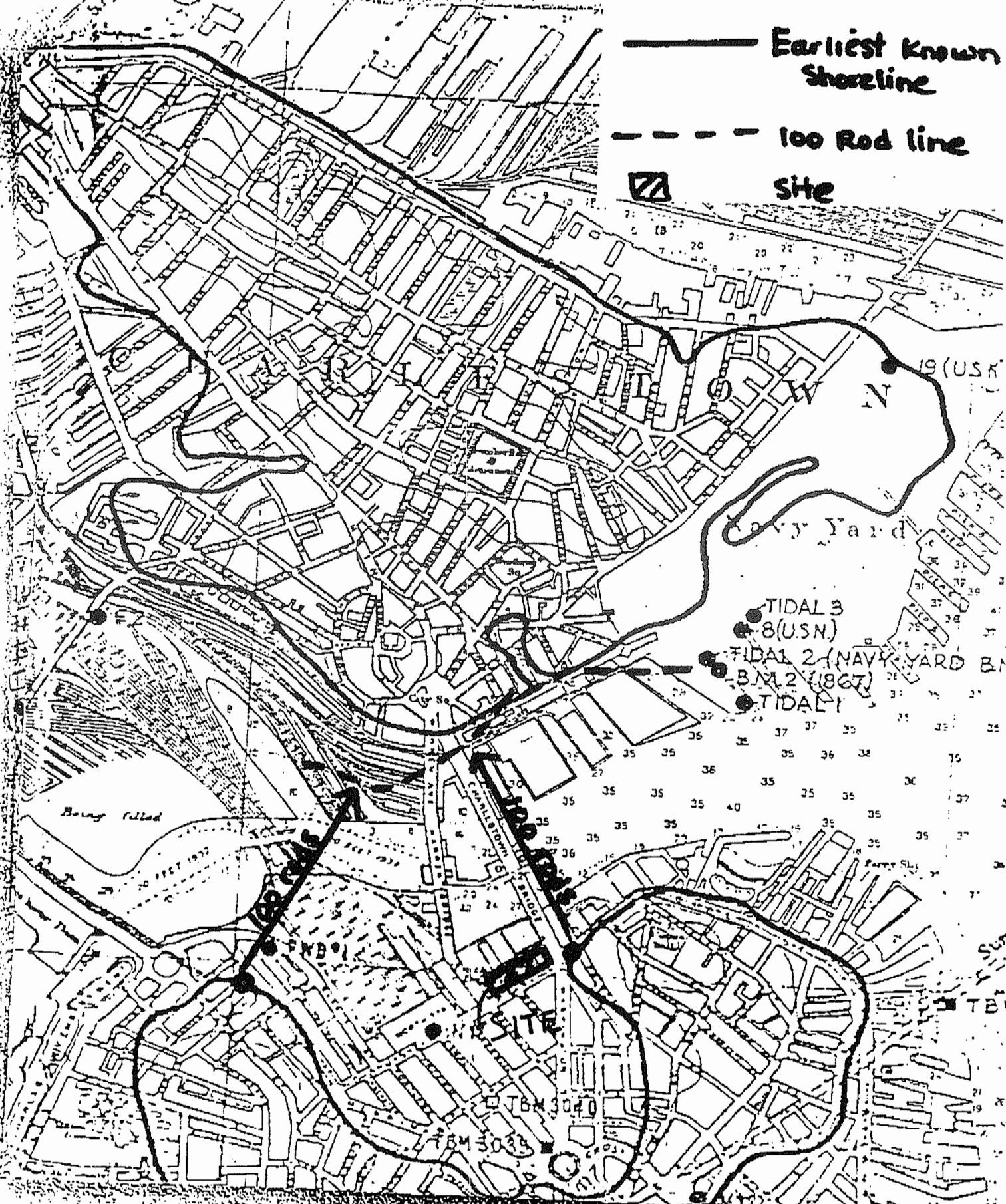


PLAN
OF
EXISTING LICENSES

PLANS ACCOMPANYING PETITION OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS TO RELOCATE UTILITIES ON FILLED TIDELANDS ADJACENT TO BOSTON INNER HARBOR, BOSTON, MASS.

Craig E. Blake 12/20/91
SEA CONSULTANTS INC. DEC 20, 1991
REG. PROFESSIONAL ENG. SHEET 3 OF 3
MASS NUMBER 31437

2805
FILE NO. 280
Reviewed by Department of Environmental Protection
MAR 06 1992



Appendix 18 Preliminary Adequacy Determination, February 26, 1999.

February 26, 1999

Mr. Edmund Shamsi
Boston Kenmore Realty Corporation
75 St. Alphonsus Street - Suite D
Boston, Massachusetts 02120

Re: Preliminary Adequacy Determination Waiving Further Review
226 Causeway Street
Boston, Massachusetts

Dear Mr. Shamsi:

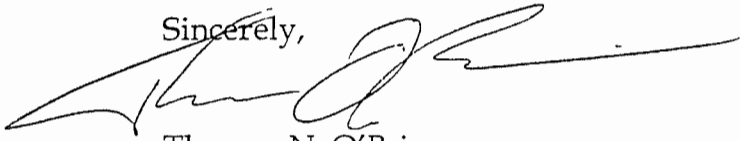
Please be advised that on July 23, 1998, the Boston Redevelopment Authority ("BRA") Board voted its authorization for the Director to issue a Preliminary Adequacy Determination (the "Determination") waiving further review of the proposed development to be located at 226 Causeway Street in Boston. The Boston Kenmore Realty Corporation (the "Proponent") seeks to develop approximately 240 residential units of rental housing, approximately 13,000 square feet of retail space and approximately 135 parking spaces at 226 Causeway Street (the "Proposed Project").

Pursuant to the July 23, 1998 vote by the BRA, I hereby issue in connection with the Proposed Project this Preliminary Adequacy Determination waiving further review pursuant to the requirements of Section 80B-5.5 of the Boston Zoning Code for the filing and review of a Final Project Impact Report, subject to continuing design review by the BRA. This Preliminary Adequacy Determination waiving further review shall not become final until nineteen (19) days after the date hereof. The public is hereby invited to comment concerning any conditions the BRA may require in this Preliminary Adequacy Determination for the mitigation of the Proposed Project's impacts. Such comments must be submitted in writing to the BRA within fourteen (14) days after the date of this Preliminary Adequacy Determination and must be based on significant new information not submitted during the public comment period or scoping session required by subsections (b) and (c) of this Section 80B-5.4 of the

MR. EDMUND SHAMSI
February 23, 1999
Page Two

Boston Zoning Code. The BRA shall consider any comments received and may modify the Preliminary Adequacy Determination to add, delete, or modify the conditions set forth herein, provided that any such changes shall be made no later than the date on which the Preliminary Adequacy Determination becomes final. This document shall supercede any other previously issued Preliminary Adequacy Determination.

Sincerely,

A handwritten signature in black ink, appearing to read 'Thomas N. O'Brien', with a long horizontal flourish extending to the right.

Thomas N. O'Brien
Director

