East Cambridge Riverfront Plan

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The Intent of this Publication

This publication's purpose is to inform developers, businessmen, landowners, governmental agencies and concerned citizens of Cambridge's proposal to transform a blighted, largely vacant industrial area of the East Cambridge riverfront into a dramatic new urban development. This 40-acre site is planned to be a mixed use development of retail, residential, office and institutional uses, enriched with numerous public amenities. The plan offers a broad range of benefits that include significant tax advantages for the City and thousands of new jobs. The City's urban design plan, development objectives and guidelines, implementation strategy, and capital improvement plan necessary to bring about this transformation are presented in this report.

Special thanks are extended for the local, County, State and Federal support we have received to date. The City of Cambridge is most grateful to: the residents and businessmen of East Cambridge, the office of the Lieutenant Governor, the Executive Office of Environmental Affairs, the Massachusetts Bay Transportation Authority, the Massachusetts Department of Public Works, the Metropolitan District Commission, the Middlesex County Commissioners, and the State Planning Office. The continuing support of Congressman O'Neil, Senator Brooke, and Senator Kennedy has been greatly appreciated.

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Table of Contents

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Dennis Carlone, photography, figures 24, 43-45, 47, 49, 51, 53, 70.
Richard Cheek, photography for the Cambridge Historical Comm., 55-59.
Massachusetts Bay Transportation Authority, figure 14.
Metropolitan District Commission, figure 12.
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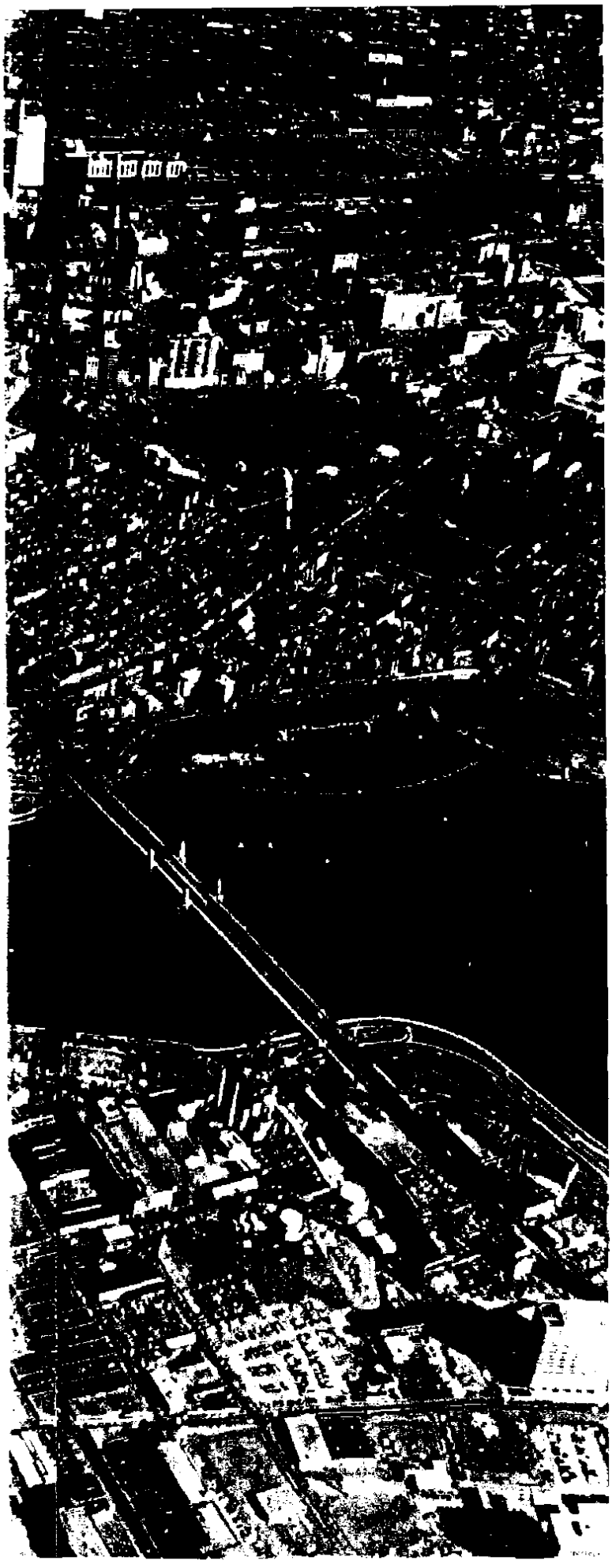


1 Introduction

East Cambridge is now at a critical point in its historical evolution — a point at which fundamental decisions must be made. The past twenty years have seen shifts in land uses and continual decay of what was once the city's major industrial area. Some indicators of these changes are: the recent closing and subsequent demolition of the National Casket Building, the closing of Carter Ink, the vacancy of two major riverfront buildings, change of ownership and use of several other industrial buildings in the Lechmere area.

Should continued neglect of the East Cambridge Riverfront and industrial area be permitted to further erode the neighborhood's physical environment and the city's economic viability? The obvious answer was reiterated through a series of comprehensive planning meetings and discussions held in the neighborhood in 1975 and 1976.

In 1976 the Cambridge Planning Board authorized the Community Development Department to undertake a comprehensive urban design study of East Cambridge. The object of the study was to formulate a developmental framework for the East Cambridge riverfront that would benefit a broad range of interests: neighborhood and city, public and private.

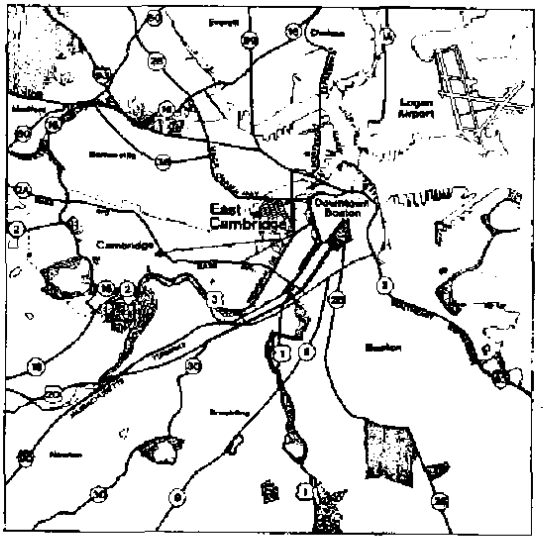
Five underlying goals have guided this urban design study: (1) increased employment opportunities; (2) expansion of the city's tax base; (3) enhancement of physical environment; (4) conservation of the neighborhood's existing social and economic diversity; and (5) exploitation of the environmental, recreational, and economic potential offered by the Charles Riverfront.

East Cambridge's many physical attributes, its historical diversity, current pressures for change, and the enthusiasm of various interest groups provide opportunities for creating a positive future for the neighborhood. The East Cambridge urban design study has analyzed these opportunities and developed an exciting new image which meets the study goals for this area of the City.

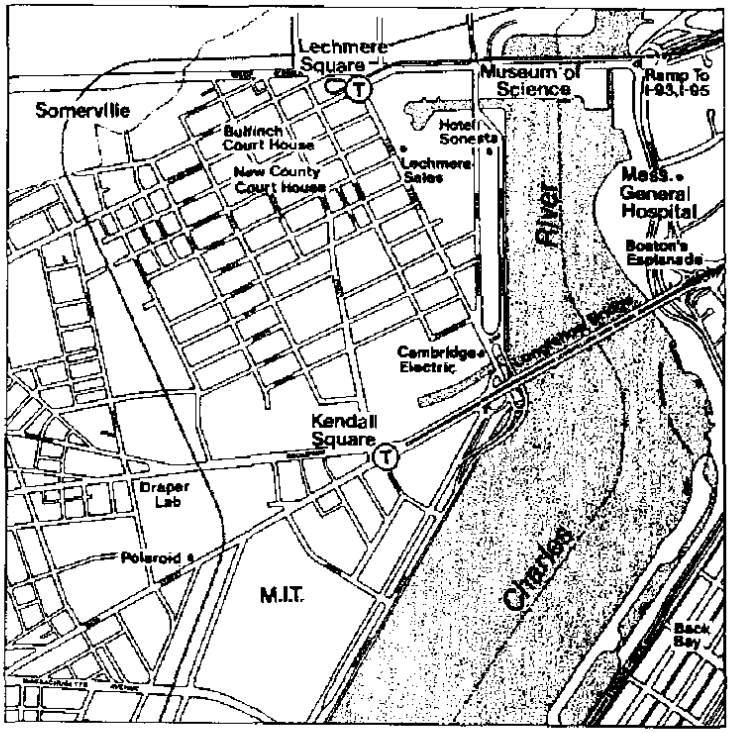
1. Aerial Photograph.
Photograph shows East Cambridge's prominence on the Charles River and proximity to downtown Boston. The East Cambridge riverfront lies in the foreground between the two major bridges at the center of the photograph.

The following actions are the necessary prerequisites to realizing a prosperous and vital East Cambridge Riverfront.

1. Create a 16-acre open space system that would form the skeleton for new development, as well as link the historical residential community to the Charles River.
2. Transform the Lechmere Canal into the focal point of an animated and unique public space surrounded by retail activity and residential use.
3. Eliminate blight at Lechmere Square and Monsignor O'Brien Highway by integrating a new transit station location with proposed development.
4. Implement one of the proposed by-pass plans by which unnecessary through traffic can be diverted around the East Cambridge neighborhood and Kendall Square.
5. Convert Cambridge Parkway into a half-mile long park and access road at the River's edge by shifting its current traffic load to a widened two-way Commercial Avenue.
6. Protect and enhance the historical resources of East Cambridge.
7. Rezone the present industrially zoned land into a pattern of distinct districts which both embodies the City's development objectives and establishes a clear, constructive framework for private developers.
8. Work with existing businesses, landowners and new developers to develop and improve retail activity, industrial activity, office activity and housing.
9. Protect the East Cambridge community from uncontrolled land use changes and offer the residents housing rehabilitation and subsidy assistance.

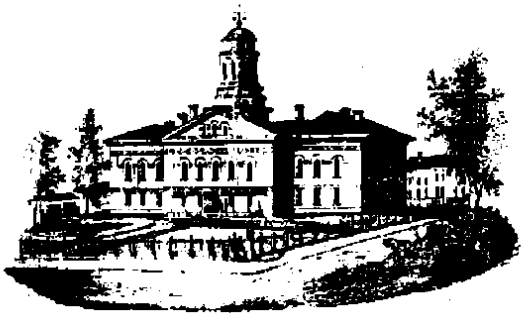


2. Regional Context.
Logan International Airport is minutes away and major regional highway crossroads (the intersections of I-95 with I-93 and the Massachusetts Turnpike) are located nearby.

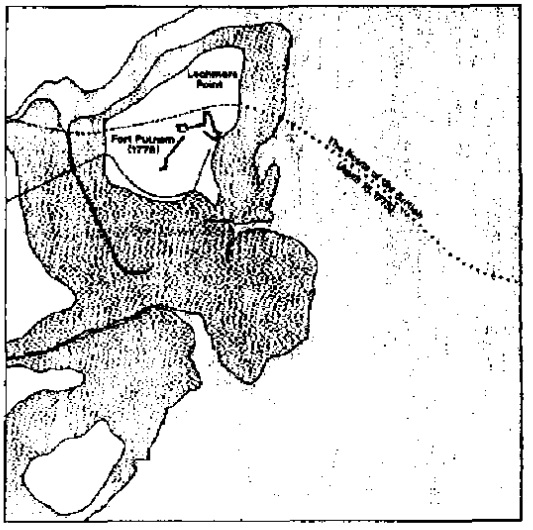


3. Major Neighborhood Landmarks.
The Massachusetts Institute of Technology is located along the southern edge of the East Cambridge neighborhood. Harvard University is just across town, and Massachusetts General Hospital is within a ten-minute walk on the Boston side of the Charles River.

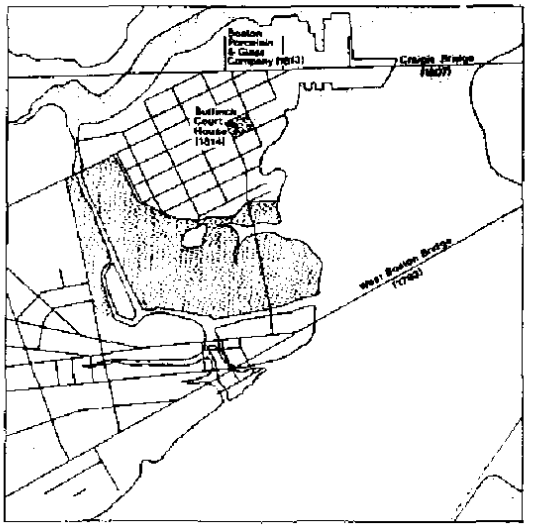
2 History of East Cambridge



4. **The Middlesex County Courthouse.**
Designed by Charles Bulfinch, the courthouse looked like this in 1854.



5. **Circa 1790**
East Cambridge became an island at high tide. Its military importance stemmed not only from East Cambridge's nearness to Boston, but also from the island's sixty-five foot height above sea level.



6. **Circa 1850.**

A review of East Cambridge's historical evolution contributes to an understanding of the existing situation, the forces that created it, and the elements necessary in planning for its rejuvenation and future.

East Cambridge is rich in history. During the Revolution, Lechmere's Point played a strategic role. The British landed there on April 19, 1775 and began their march to Lexington and Concord. General George Washington built Fort Putnam there on the highest point. In March, 1776, during the Siege of Boston, the patriots routed the British from this location.

In the early 1800's, East Cambridge was still an island surrounded by marshland, but by the end of the 19th century landfilling had quadrupled the available land. The island was one of the first large scale speculative real estate undertakings in the United States. The original street grid remains today much the same as it was laid out in 1811 for development by the Lechmere Point Corporation.

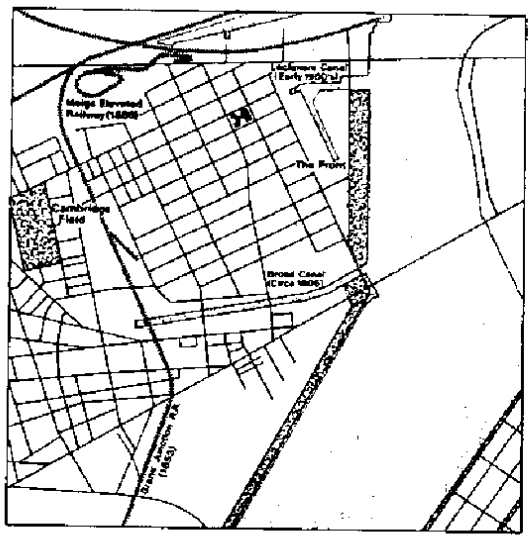
The corporation made two astute moves which guaranteed the success of their venture. First, they convinced the county government, then based in Harvard Square, to relocate in East Cambridge. For this purpose the corporation donated land and money for a courthouse designed by Boston's leading architect, Charles Bulfinch. (Bulfinch also designed the Massachusetts State House and the U. S. Capitol building). Secondly, the corporation persuaded the Boston Porcelain and Glass Company to move into East Cambridge. This action set a precedent and led the way for the future industrialization and development of East Cambridge.

Before the Civil War there was a good balance of residential and industrial activity. Factory workers lived in modest cottages. Clerks, lawyers, merchants and businessmen occupied "Quality Row" and "Millionaire's Row." Toward the Charles River, furniture and soap manufacturing concerns sprang up on newly landfilled areas.

Waves of immigration brought Irish, Italians, Lithuanians, Poles and Portuguese who represented an abundant source of low cost labor for the local factories. The value of East Cambridge land sky-rocketed when its suitability for industrial purposes was enhanced by the arrival of the railroad in 1853. The construction of Lechmere Canal in 1895 further improved transportation access. The

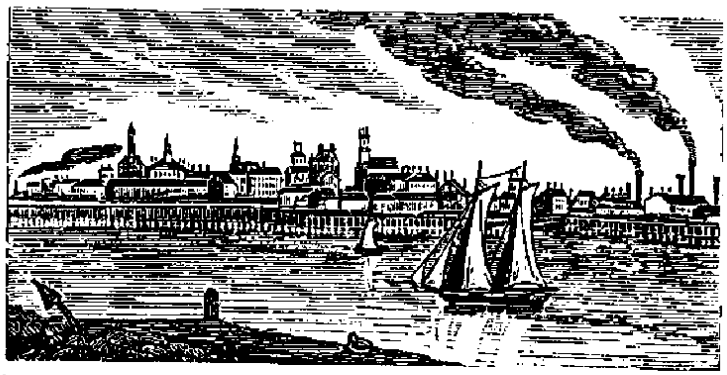
final landfilling (to the present granite retaining walls) was completed at the turn of the century.

But not all land was planned for industry. Charles Eliot, famed landscape architect and partner of Frederick Law Olmsted, planned the East Cambridge Riverfront as the "jewel" of the Cambridge Park System. Calling the park "The Front," Eliot envisioned a linear expanse one-half mile long encompassing all the land between Commercial Avenue and the Charles River. The Cambridge Park reports from 1895 to 1940 praised the planning of "The Front" and stressed the importance of its realization. Unfortunately, for reasons unclear, the plan was never implemented. In 1950 the City sold this piece of land to developers who constructed the present industrial buildings.



8. Circa 1900.
The final landfilling was to be culminated with "The Front," a major public park that was planned to be the "jewel" of Cambridge.

7. New England Glass Company Works.
Interior.

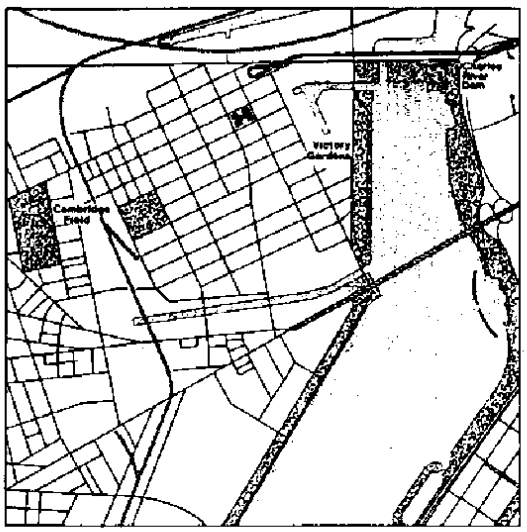


9.

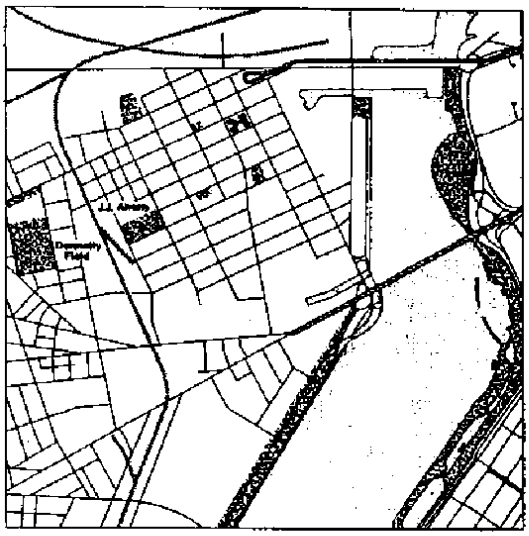
9. East Cambridge.
The Riverfront in 1839.

10. Quality Row.
Holy Cross Polish National Church, built in 1827, is at the left of the photograph.

10.

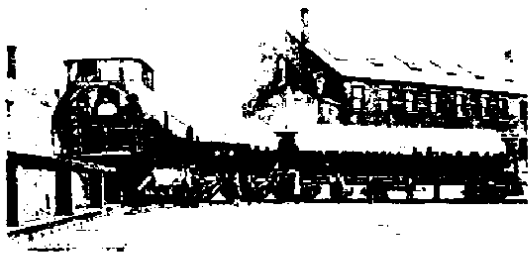


11. Circa 1947.
"The Front" was never realized and temporarily became the World War II victory gardens of East Cambridge. A public park for Boston's West End and East Cambridge was built at the foot of the Charles River Dam and Viaduct. Both riverfront open spaces no longer exist.

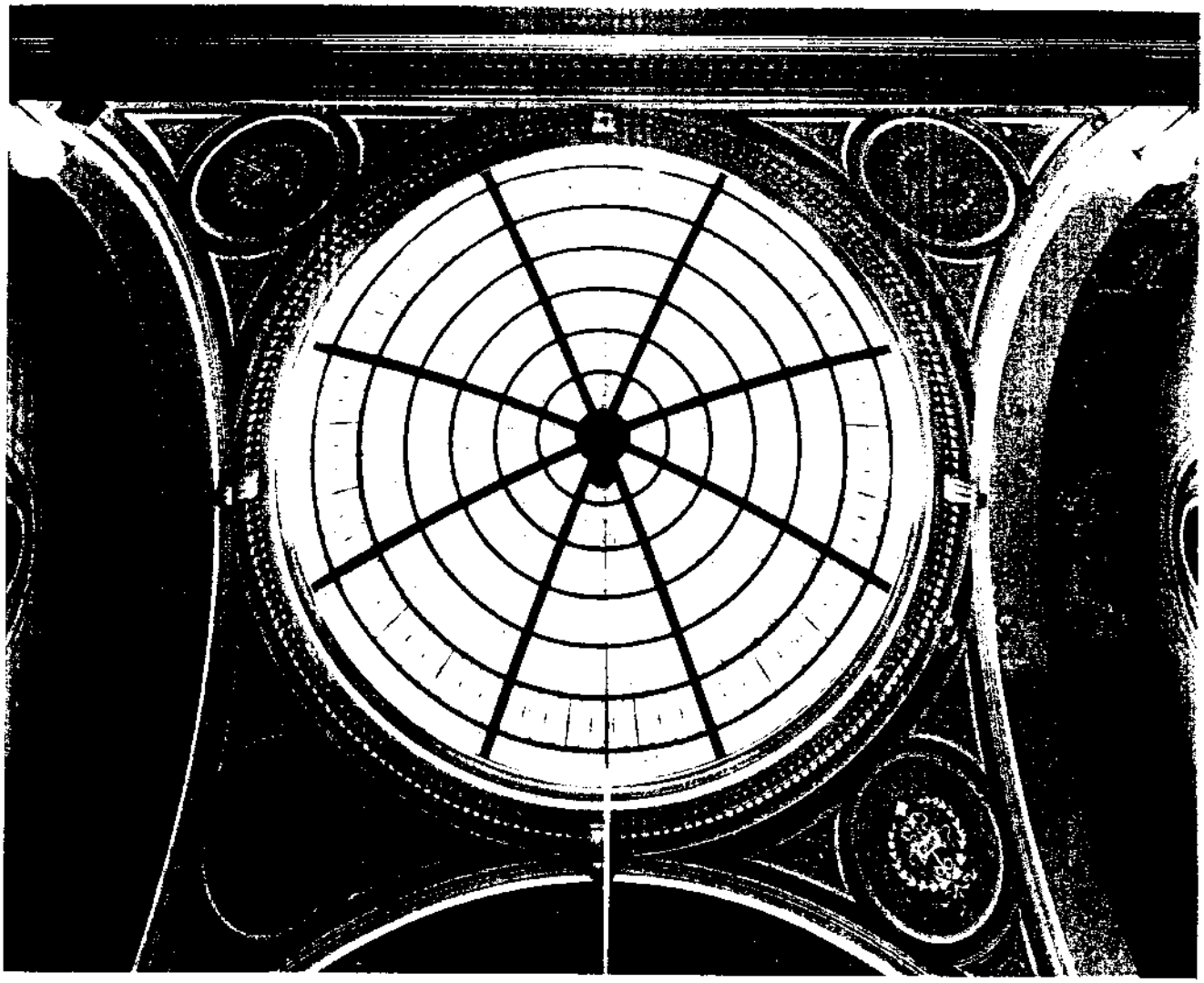


13. Circa 1977.
Cambridge's open space system has been drastically reduced during the last generation. At the same time, Boston enlarged its riverfront park system through further landfilling.

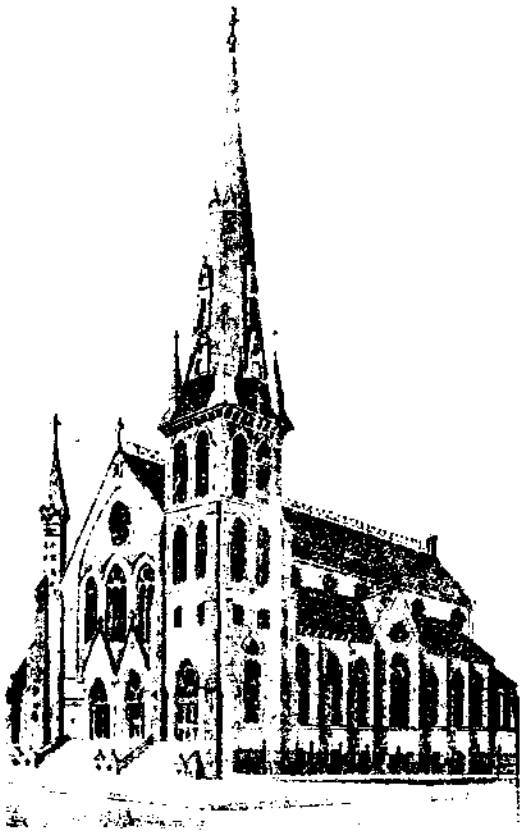
12. Aerial Photograph.
Photograph of the East Cambridge riverfront, circa 1949, clearly shows the beautiful park created by the Charles River Dam at the base of the Charles River Basin. The victory gardens and the Lechmere Canal are in the foreground. The Museum of Science began building its facilities on the Charles River Dam park site shortly after this picture was taken.



14. The Meigs Elevated Railway.
This railway was an experimental forerunner of rapid transit development in America. This photograph of 1887 shows the cylindrically-designed steam locomotive, tender, and car posed on the monorail structure in East Cambridge. The railway performed very well under extensive testing and was open for public demonstration in 1888. Unfortunately, it was felt to be a little ahead of its time and never became a part of Boston's rapid transit system.



15. Dome of the Registry of Deeds and Probate, 1898.



16. Sacred Heart Church, 1874.
The 180 foot high spire was lost in 1961.

Architectural Significance

The developmental history of East Cambridge shaped the character of its buildings. Taken collectively, the buildings of East Cambridge constitute an excellent example of the vernacular architecture of the mid-19th century in its original setting. The houses of factory workers and small businessmen have changed very little since the 19th century. These residences range in style from Georgian to the Colonial Revival of the turn of the century.

Since the middle of the 19th century, East Cambridge has owed much of its growth to manufacturing. Numerous examples of factory architecture representing the industrial growth of Cambridge are located within this part of the City. The building of the old Irving & Casson—A. H. Davenport Furniture Company, once the finest furniture makers and wood finishers in New England, is still located on Otis Street. The Davenport Company gave its name to the davenport sofa and furnished the buildings of H. H. Richardson and many other famous architects, as well as the White House and the United Nations in New York City. The oldest part of the building dates from 1866.

17. Vernacular Architecture, Mid-19th Century.
Although these buildings on Cambridge Street were replaced by the Registry of Deeds, most of 19th century East Cambridge remains intact and worthy of preservation.

18. 134 Otis Street.
Interior.

Many of the early civic, religious, and commercial buildings of East Cambridge still play an important role in the daily lives of the residents. The Holy Cross Polish National Church was built in 1827 for a Unitarian congregation. This Federal style meetinghouse is the second oldest church building in Cambridge. Saint John's Church (now Sacred Heart Church) was built in 1874 in the Gothic Revival style by East Cambridge's growing Catholic population. The Putnam School, built in 1887, stands on the site of Old Fort Putnam and an earlier Putnam School that had been built in 1825. The Queen Ann Style building has rich surface decoration of brick and terra cotta.

The Middlesex County Buildings are the most important public buildings in East Cambridge. As mentioned earlier, the Old Superior Courthouse was originally built in 1814 to plans by Charles Bulfinch. It was remodeled and enlarged by Ammi B. Young, the designer of the Boston Customhouse. He followed closely Bulfinch's original conception. Also standing in this group of county buildings is the monumental Registry of Deeds & Probate Court, built in 1898.

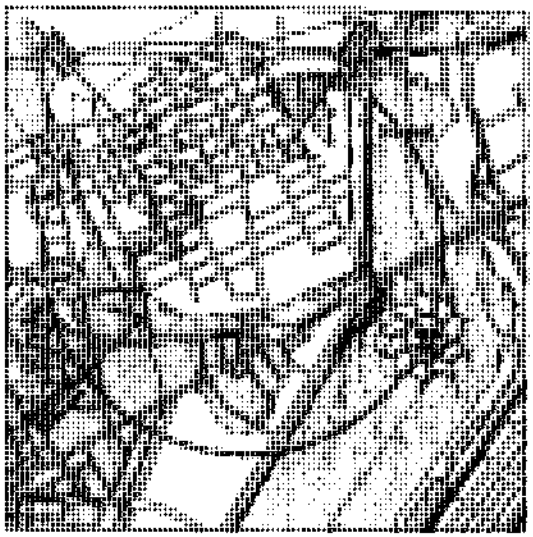
Historic East Cambridge remains an island. It is no longer encircled by water but instead by industrial land. The neighborhood's historic tie to the river has been severed, and the grand vision of "The Front," which would have ensured the public right to the river, has been lost. But East Cambridge has retained its ethnic diversity and rich architectural heritage; approaches must be found that will preserve both valuable qualities. Two striking examples of the valuable architectural heritage, the Bulfinch Courthouse and the Putnam School, are vacant and are threatened with demolition. All of this reemphasizes the major currents of change that are affecting the area and further points to the need for a strong sense of direction and developmental control.

19. Putnam School, 1877.

20.

3 Issues and Opportunities

The future of East Cambridge will be determined as much by the way things are now as by plans for change. The neighborhood's locational and physical characteristics strongly influence what may be done in the future. Historic development patterns will guide change. The needs and desires of people who live, work and own property in the neighborhood must be considered. But a number of significant opportunities also exist in East Cambridge. If properly capitalized upon by the public and private sectors, these existing conditions can substantially improve both the physical environment and economic climate of East Cambridge. This chapter summarizes the issues and opportunities which have been considered in preparing the East Cambridge Riverfront Plan.



21. Natural Conditions.
The toned land area approximates the existing ten-foot flood zone.

Natural Conditions

Much of East Cambridge is filled land, as in Boston, tidal flats were filled as early settlements grew and economic activity expanded. Figures 5, 6, 8, 11 and 13 show the physical expansion of East Cambridge. This landfilling gave the neighborhood a spectacular, although underutilized, urban waterfront.

Most of the neighborhood is flat, between 10 and 20 feet above sea level. (See Figure 21) The residential part of the neighborhood rises to over 40 feet. The 10 feet contour represents the limit of a 100-year flood plain. However, the new Charles River Dam at Charlestown will further stabilize the river water level to only a six inch maximum change, virtually eliminating the flooding of property.

Bedrock is located near the surface only in the higher unfilled section of the neighborhood. In the landfilled areas there is an extensive layer of soft material above the bedrock. Due to the depth to bedrock, high foundation costs are incurred for structures of more than three stories. The availability of solid foundation materials at the location of the original East Cambridge waterfront (now the edge of the residential area) has undoubtedly encouraged high rise construction there during recent years, such as the new Middlesex County Courthouse.

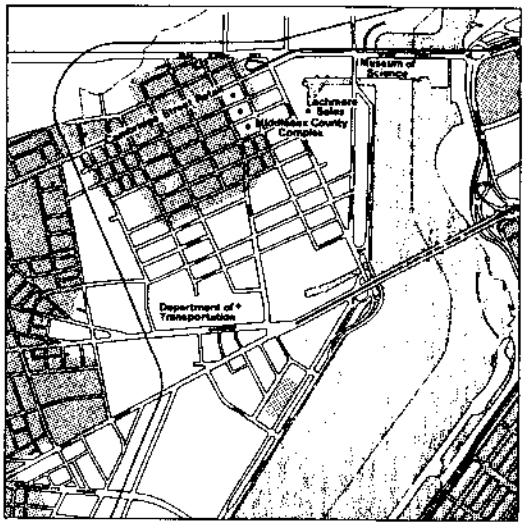
Other natural conditions, such as the direction of the sun and the shadows it casts as it travels in its east to west arc, the severe storms from the northeast, winter winds from the northwest, and gentle summer breezes from the southwest (see Figure 21), should all be considered in the site design of new development.

Existing Land Use and Development Characteristics

Because East Cambridge originally developed as a separate community, it now contains nearly all of the land uses found in any contemporary American city. However, two distinct areas dominate: a residential neighborhood and an industrial area which almost completely encircles it. The table below shows the breakdown of land uses by area in 1972:

	Acres	Percent of Total
Residential	67	17
Commercial	25	6
Industrial, Office, Vacant	276	69
Institutional	22	5
Outdoor Recreation	8	2
Public Transportation (MBTA)	2	1
	400	100

The residential section of the neighborhood consists primarily of 2 and 3 story wood frame structures, though there are some notable groups of brick rowhouses. The neighborhood is quite dense for such low scale development, with more than forty dwelling units per net residential acre. The housing stock has deteriorated during recent decades. A recent housing condition survey indicated that two-thirds of the neighborhood's stock needs some type of improvement and twenty percent needs structural renovation. Between 1950 and 1970 the residential population dropped from about 9,000 to 5,800.



22. Generalized Land Use.
The toned area indicates predominantly residential areas. Note that Boston's housing fronts the river, while Cambridge's residential neighborhoods are landlocked.

23. Existing Land Use
(Buildings not keyed are presently vacant.)

- *Residential*
- *Retail, Office, Hotel, Service*
- *Institutional and Governmental*
- *Industry, Research and Development, Warehousing, Construction*
- T *Transit*
- P *Structured Parking*
- U *Utilities*

A neighborhood oriented commercial area, along Cambridge Street, is located within the residential section. The institutional uses are also primarily neighborhood oriented and include schools, churches, a firehouse and a library. The exceptions are the Middlesex County governmental complex at Third and Otis Streets, the Museum of Science on the Charles and the Federal Department of Transportation research center at Kendall Square.

The industrial section of the neighborhood consists primarily of 19th century brick factory buildings and more recent one and two story warehouse and industrial structures. Since World War II rising land and labor costs, transportation system changes, alternative space requirements, urban renewal and other factors have contributed to the decline of this area. Today there are many vacant and underutilized buildings and parcels. A more regionally-oriented department store has flourished along First Street.

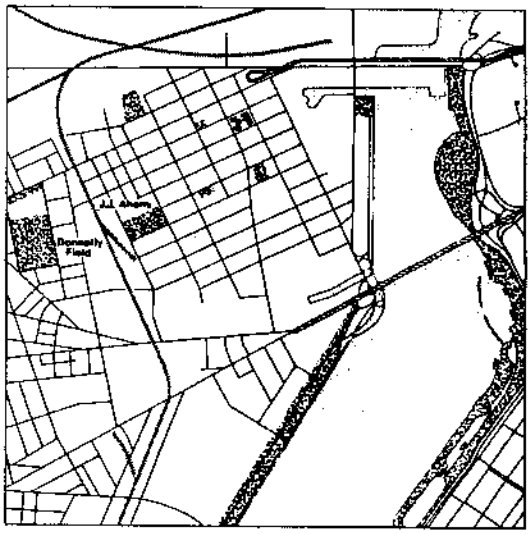
Open Space

East Cambridge has a serious shortage of neighborhood-oriented parks and playgrounds. The neighborhood is vastly underserved when measured against both national and regional standards. The residential part of the neighborhood is so densely developed that there is no space for developing additional open space without displacing some other activity.

The major open space facilities, Gore Street playground and J. J. Ahern Field, are at the western periphery of the residential area forming a boundary between a small number of residences and industrial land. Both are difficult to supervise by the neighborhood and have heavy truck routes next to them.

The ring of industrial land which surrounds the residential section of the neighborhood forms a barrier to the Charles River. There is little visual evidence of the area's proximity to the water, nor are there suitable circulation links which provide residents with easy access to this significant urban amenity. However, many East Cambridge residents speak fondly of the riverfront open space that existed thirty years ago.

24. Aerial Photograph.
The Longfellow Bridge links the Boston Esplanade (foreground) with the East Cambridge riverfront at the top of the photograph.



25. Existing Open Space.

Transportation

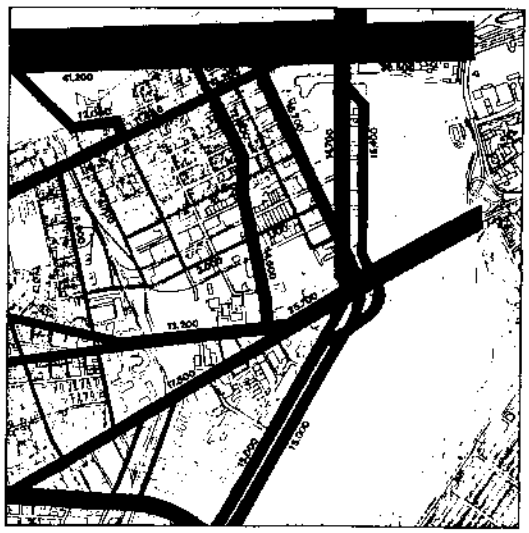
Throughout its history East Cambridge has been well served by a variety of transportation systems: railroads, canals, local streets, regional highways, public rapid transit and bus service. Unfortunately, the range of choices is more limited today than in the past. The canals have been abandoned and filled, rail service has been curtailed, and transit facilities have deteriorated. This decline in alternative modes has contributed to heavy reliance on automobile and truck travel.

East Cambridge's location invites tremendous volumes of through-traffic daily. Monsignor O'Brien Highway carries over 38,500 vehicles per day. Memorial Drive and its extensions (the Cambridge Parkway and Commercial Avenue) carry 30,000. Both are considered an important part of the regional arterial network. Third Street, a narrow residential street, is used by more than 12,000 cars daily. Both trucks and cars use residential streets as thoroughfares at all hours.

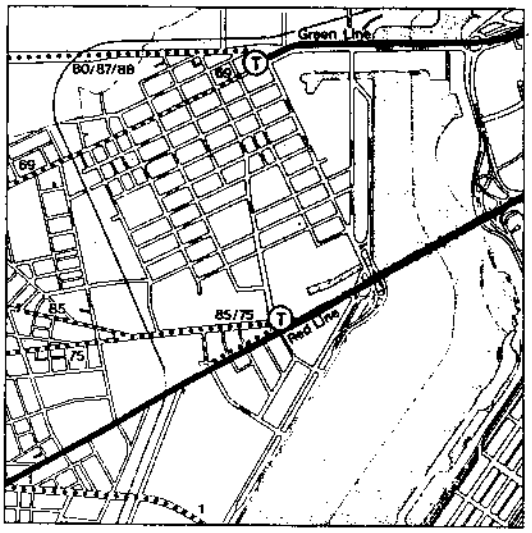
Parking is another critical neighborhood issue. Residents and employees must compete for an insufficient number of on-street spaces. The City's residential parking sticker program has helped to some degree, but a major need for more parking still exists around the county government complex. Proposed off-street parking for the new county courthouse has yet to be built. One proposal involves replacing the Bulfinch Courthouse building with a parking lot, but only a fraction of the total need would be satisfied.

27. **Third Street.**
Photograph shows heavy truck through-traffic.

East Cambridge is served by two rapid transit lines, the MBTA (Massachusetts Bay Transportation Authority) Red Line and Green Line, and seven MBTA bus lines. The Red Line station at Kendall Square is slated for extension and renovation as part of a general Red Line upgrading program. The Green Line station, the most convenient rapid transit link for neighborhood residents, is a physical eyesore and not safely accessible to pedestrians. The location of the elevated railway and station at the intersection of Monsignor O'Brien Highway and Cambridge Street creates havoc for both vehicles and pedestrians in Lechmere Square and presents a most unsightly gateway to the city. Improvement of this situation should be an integral part of the revitalization of this section of the neighborhood.



26. Existing Daily Traffic Volumes.



28. **Mass Transit:**
The dotted lines indicate existing bus routes.

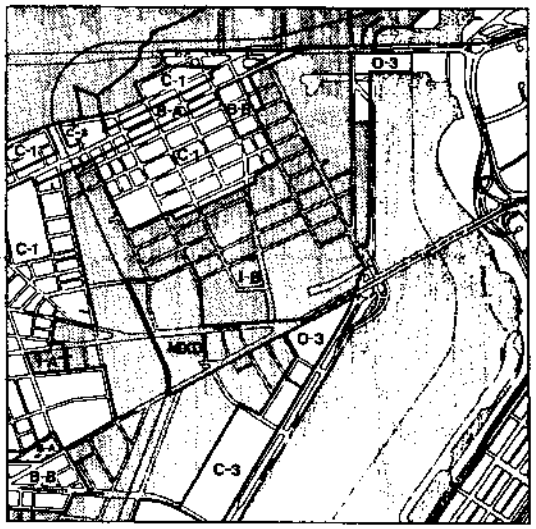
Existing Industrial Zoning

About two-thirds of East Cambridge is zoned for industry and comprises one of the major industrial districts in the City of Cambridge. The current industrial zoning, dating from the 1950's, is extremely permissive; all types of land use except residences are permitted; high density development is allowed; and the zoning prescribes very few site design requirements such as controls on landscaping, building height, building setback and parking/loading area layout. This flexibility (allowing development of activities to much greater density than that required by most manufacturing firms) has contributed to land speculation and the inflation of property values. This land price inflation has in turn contributed to the exodus from Cambridge of those industries which have traditionally provided blue collar jobs.

Another problem with the existing zoning is that excessive permissiveness in the industrial district provides no protection for abutting residential properties. Transitional height limitations, landscaping requirements and building setbacks could enhance the value of adjacent properties in the residential district. Furthermore, the zoning ordinance's use, density and parking requirements are not sufficiently flexible to enable the adaptive reuse of 19th century industrial and institutional buildings in the neighborhood.

29. Railroad Right-Of-Way
Much of East Cambridge's industrially zoned land is barren; spreading decay threatens the stability of abutting residential neighborhoods.

In summary, the area's zoning pattern encourages uses other than those which it intended to encourage. It does not provide the protection necessary to safeguard viable industrial activity. It does little to assure quality new development. It does not differentiate among the locational differences in East Cambridge; large land areas are treated uniformly. Zoning has encouraged an uncertain future.



30. Existing Zoning.
- 1-A *Warehouse Storage, Light Manufacturing, Hotel & Office; FAR = 2.0, Unlimited Height*
- 1-B *Heavy Industry, Hotel & Office; FAR = 4.0, Unlimited Height, No Transitional Requirements*
- C-1 *Multi-Family Dwellings (Apartment House, Dormitory); FAR = 0.75, Maximum Height = 35'-0".*
- C-3 *Multi-Family Dwellings (Apartment House, Dormitory); FAR = 3.00, Unlimited Height*
- O-3 *Business & Professional Offices and MultiFamily Dwellings; FAR = 3.0, Unlimited Height*
- B-A *Local & Drive-in Retail Business, Multi-Family Housing; FAR = 1.0, Maximum Height = 35'-0".*
- B-B *General Business, Multi-Family Housing; FAR = 4.0, Unlimited Height. (Residential Requirement, see C-3)*

Interest Group Perspectives

Various groups have legitimate interests in the future of East Cambridge. Certain of these interests are compatible and can reinforce one another, while others are contradictory. The challenge in planning for the future is to reach a reasonable compromise among these interests. Seven principal interest groups have been identified. They are: 1) East Cambridge residents; 2) the property owners and tenants in the commercial area; 3) landowners and tenants in the industrial zone; 4) the City of Cambridge; 5) Middlesex County; 6) Regional Agencies (the MDC and MBTA); and 7) the Commonwealth.

Most residents of East Cambridge fear new development. There has been widespread disapproval of most recent growth in the neighborhood. New buildings are taller than those built in the past, with the new courthouse reaching a height of over 200 feet. Development on this scale is viewed as incompatible with the traditional pattern of 2-3 story structures found in the neighborhood.

Other community desires include a solution for the courthouse parking shortage and an elimination of through-traffic now disrupting the neighborhood. Residents support the objectives of new job opportunities, better open space and recreation facilities and convenient linkages to new riverfront development. But most importantly, the neighborhood wishes to preserve identity. Neighborhood residents have requested a buffer between the existing residential area and new housing at the riverfront. One additional concern is the preservation of the Bulfinch Courthouse structure, in part as a neighborhood facility.

Commercial property owners and tenants desire to be good neighbors, but must remain competitive with similar businesses in other locations. In order to remain competitive, they need to maintain their visual identity and must have easy access and sufficient parking to attract customers.

Industrial property owners and tenants wish to maximize their profit. In order to do this they desire good transportation access, adequate services, a good supply of labor and a favorable tax situation. It is becoming increasingly apparent that for industries to compete satisfactorily in the labor market, they must offer workers various amenities such as nearby shopping and entertainment facilities.

The City's goals are straightforward: 1) creation of more jobs; 2) expansion of the tax base; and 3) enhancement of the physical environment. But the City does not favor new economic activity at the expense of destroying an existing residential community.

Improving the physical environment should provide amenities for the people of East Cambridge and for city residents generally. One important aspect of physical improvement is the preservation and maintenance of historically and architecturally significant features of the neighborhood, including the Bulfinch Courthouse.

Middlesex County's interests are those of an organization which must carry on day-to-day business in East Cambridge: sufficient space to operate efficiently, convenient access, and adequate parking for its employees and visitors. Additional parking facilities for the new courthouse are badly needed. The county's proposal to demolish the Bulfinch building for a parking lot had met stiff opposition. While the county is aware of the building's historic importance, an appropriate and feasible reuse proposal had not been advanced before this study.

Two regional agencies will play an important role in the future of East Cambridge. The Metropolitan District Commission (MDC) is seeking ways to improve the quality of its waterways, to increase open space, and to improve the traffic carrying capabilities and aesthetics of its parkways. The MDC opposes future landfilling in the Charles River Basin and connecting canals. The height of new development along the river is another MDC concern. Both the MDC and MBTA are concerned about the blighting and disruptive influences of the Lechmere transit station. Prior to the urban design study no specific improvements had been programmed for the station area.

The Commonwealth's policy is to promote economic development in urban centers. This policy seeks to concentrate new development and to encourage investment in the state's older cities to take advantage of the existing infrastructure.

4 Pressures for Change

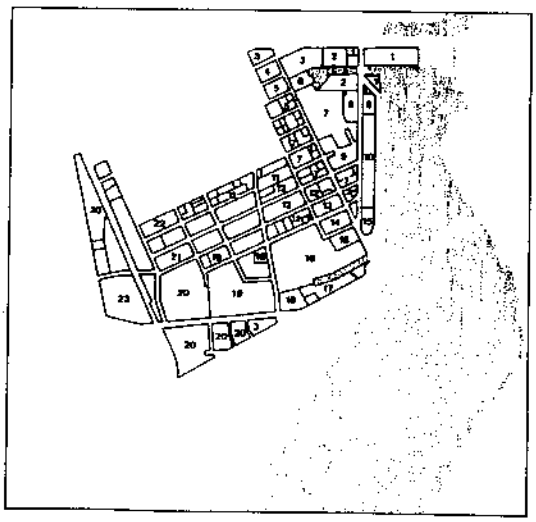
31. Hard/Soft.
- *Hard (Structure Very Likely to Remain in the Future)*
- *Soft (Structure Subjected to Developmental Pressures)*
- *Presently Vacant and/or For Sale*
- *Unknown Status at this Time*

Analysis of current conditions in the study area indicates that much of the land is likely to undergo change during the next several years. The likelihood for change has been predicted by evaluating the relative "hardness" and "softness" of individual parcels of land. The results of this analysis are shown in Figure 31.

The hard parcels are those which are unlikely to change due to physical condition, economic value, or political pressures. The soft parcels are those considered less stable and therefore more likely to change. Soft parcels include vacant land, one-story structures, dilapidated buildings, a location next to parcels where substantial new development is predicted.

The factors considered in rating each piece of land are: 1) parcel size; 2) excess development potential (relationship of what exists on the lot to what could be built under present zoning); 3) ownership; 4) age of building; 5) rehabilitation/reuse potential of existing buildings; and 6) expressed development interests of property owners.

Large land parcels are prevalent in the industrially zoned sections of East Cambridge. Lechmere, Real Estate Investment Trust of America, the National Casket Company, Carter's Ink and Cambridge Electric all own parcels of land in excess of one acre; several exceed three acres. A large portion of the remaining land is in the hands of public agencies, including the Cambridge Redevelopment Au-



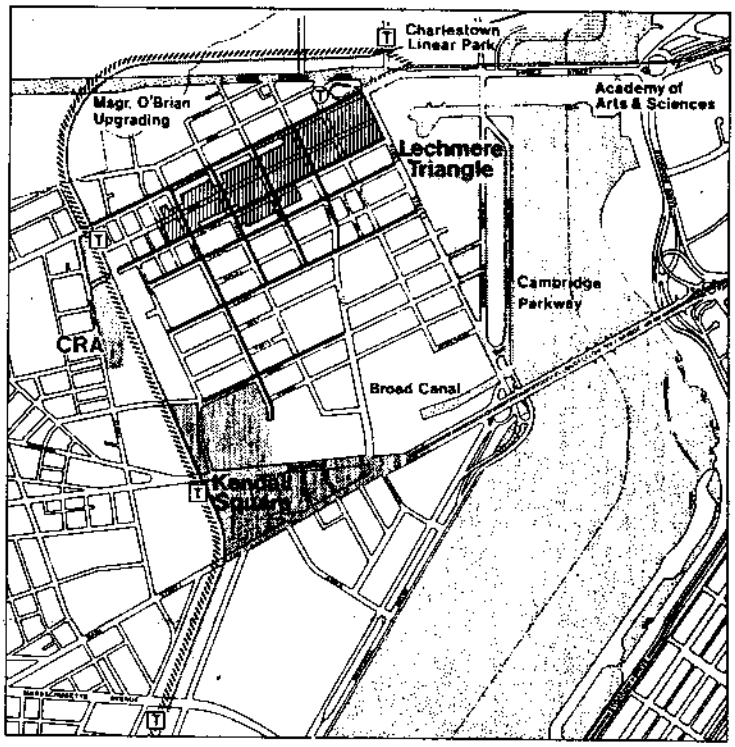
32. Ownership.
1. *Commonwealth of Massachusetts*
2. *Boston Society of Natural History*
3. *Mass. Bay Transit Authority*
4. *Sultana Realty Trust*
5. *Charles Webb*
6. *Canal Realty Trust*
7. *Mezuries Realty Trust*
8. *Charter House of Cambridge*
9. *National Casket Co., Inc.*
10. *Real Estate Investment Trust of America*
11. *Enterprise Moakler Co.*
12. *William Crane Properties Trust*
13. *Binney Realty Trust*
14. *Northwestern Mutual Life Ins. Co.*
15. *Carter's Ink Co.*
16. *Commonwealth Gas Co.*
17. *Cambridge Electric Light*
18. *The Badger Co., Inc.*
19. *United States of America*
20. *Cambridge Redevelopment Authority*
21. *Industrial Stainless Steel, Inc.*
22. *Busch & Co. of Massachusetts*
23. *Boston Woven Hose & Rubber Co.*

thority, the Metropolitan District Commission, and the Massachusetts Bay Transportation Authority. Land owned by Carter's Ink and the Museum of Science has been for sale during the course of this study.

Currently there is substantial discussion concerning new development in the study area. The City, landowners and developers are actively considering potential development projects in the area. Preliminary discussions indicate a strong willingness to redevelop. The Cambridge Redevelopment Authority is about to begin development at the nearby Kendall Square urban renewal area. Within the residential area certain streets and sidewalks have been programmed for rebuilding and for improvements such as lighting and trees.

Part of the residential neighborhood has been nominated for designation as a National Register Historic District. If the nomination is accepted, substantial funds could become available for historic preservation, rehabilitation and building reuse. The MDC has plans to upgrade Monsignor O'Brien Highway and to build a linear park along the Charles connecting East Cambridge with the new Charlestown Navy Yard development and park system.

A conservative estimate indicates that more than 100 acres of land in the study area are soft. New development (programmed and under consideration), easy access, proximity to downtown Boston and MIT, the availability of a ready work force, and a high percentage of land being held in large available parcels valued at prices generally ranging from $5.00 to $8.00 per square foot all increase the likelihood for change in East Cambridge.



33. Opportunities

Areas presently under study.

Proposed National Register Historic District

Roadways and/or sidewalks slated for improvement utilizing block grant funds

Extension of Mass Transit

Possible station locations

34. Aerial Photograph of East Cambridge.
Numerous large vacant parcels of land surround historic East Cambridge.

5 Development Policies

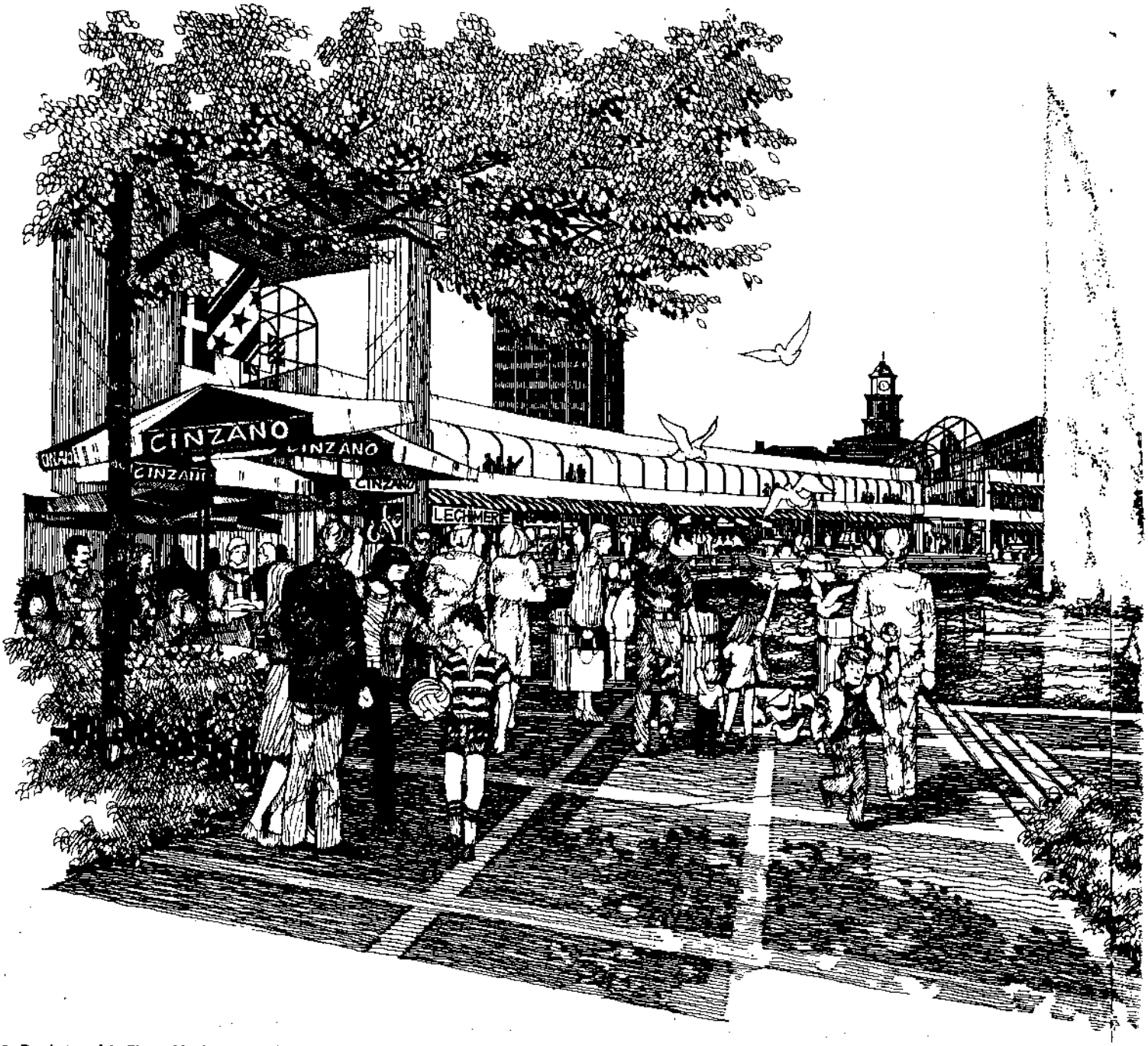
The urban design analysis of East Cambridge has identified four development districts within the neighborhood (see Figure 36). The shape of these districts evolved during the study, based on land ownership, existing development patterns, and perceived possibilities for the future. The district lines shown on the map are not proposed zoning districts and do not necessarily represent fixed boundaries. They are intended to identify areas with common characteristics in which similar themes for the future seem to make sense.

A set of development policies is proposed for each of these areas. These policies should shape public and private development decisions by providing a framework evaluating both specific development proposals and public actions such as zoning changes or roadway improvements.

Development objectives and design guidelines are specified in the appendix for each of the districts. These are guidelines on preferred land use, scale of development (amount and size), form of development (location, arrangement and massing of buildings), linkages (traffic patterns and physical interrelationships within and among areas) and design details.

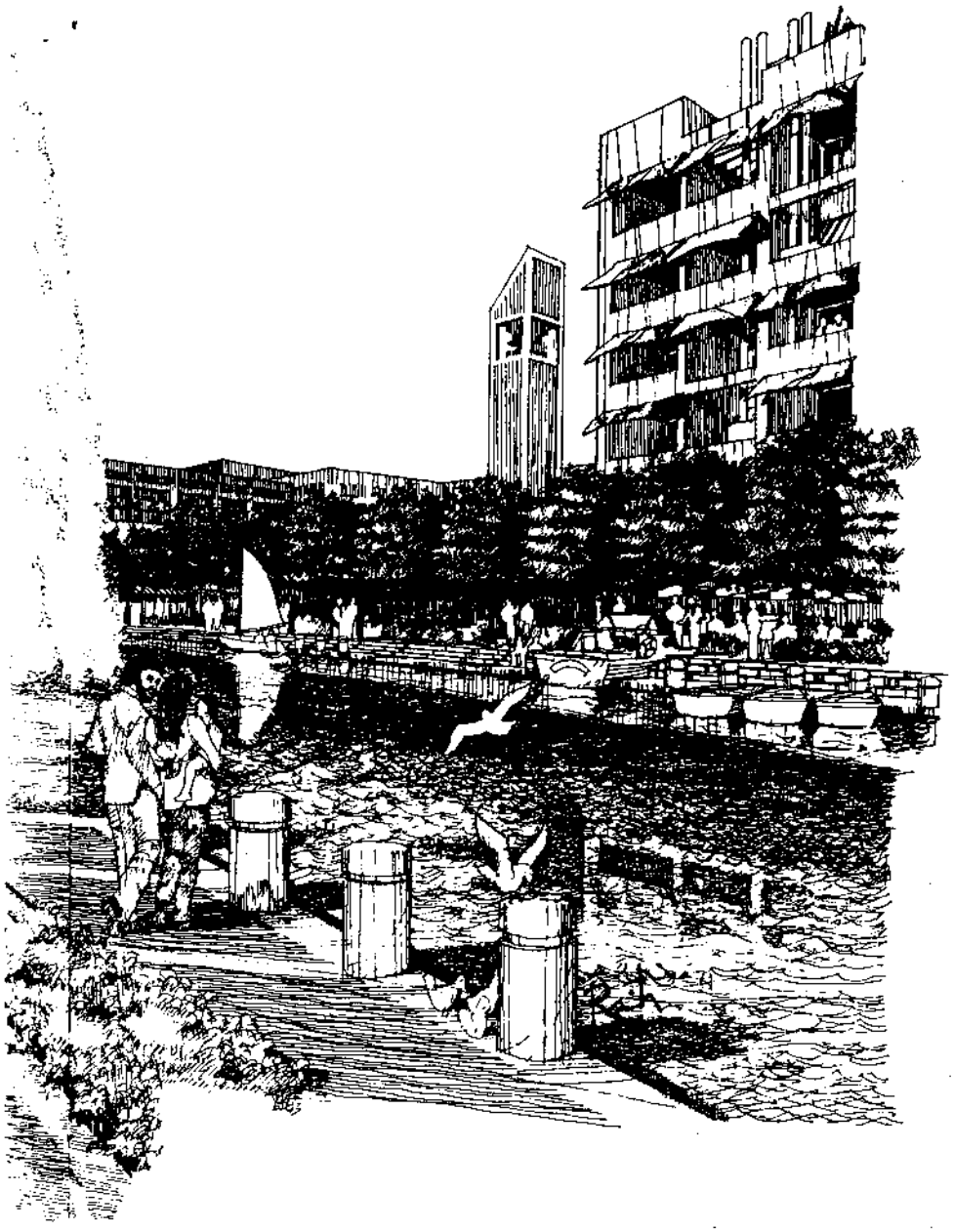
Transcending the district policies are several fundamental design principles which have emerged during the study and which form the underlying basis of the East Cambridge Riverfront Plan. These principles are:

- Recognize and exploit the inherent value of the riverfront as an environmental and economic asset of city-wide significance.
- Create a new positive and exciting physical image for the City's eastern edge and entrances.
- Create new opportunities for tax and job producing development.
- Preserve the physical and social characteristics of the East Cambridge residential community.
- Create focused centers for new commercial, residential and industrial activities.
- Create major new open spaces and a greenway system connecting them.
- Develop strong physical, visual and functional interrelationships within and among development areas.
- Encourage the preservation and reuse of worthwhile older buildings.
- Reduce the role of the automobile in East Cambridge by encouraging transit use and by creating better opportunities for pedestrian and bicycle travel.
- Divert and reduce truck traffic.



35. **Rendering of the Planned Lechmere Canal Development.** *The Canal's fountain is the open space focal point of the mixed use development. This development incorporates retail, office, and residential uses as well as public parking facilities. Strong pedestrian linkages to historic East Cambridge, the Riverfront, and a new re-located Lechmere Square transit station form the basis of the plan.*

6 Design Proposal

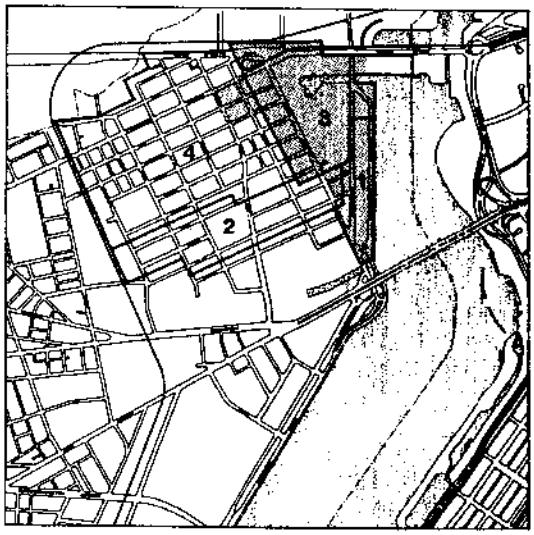


The analysis of the historical perspective, opportunities and needs of interest groups provided the basis for designing an appropriate physical image for East Cambridge. This image has become the standard by which individual development projects and public improvements will be judged and approved.

The part of East Cambridge most critical and subject to strong immediate development pressure is the Riverfront area from Lechmere Square to Longfellow Bridge. Designated as the target area for the design proposal (see Figure 36), the Riverfront consists of four development districts set up by this study as follows:

1. The Front
2. Front Street (presently Rogers Street)
3. Lechmere Square and Canal (The Triangle)
4. Bulfinch Square (in Historic East Cambridge).

The districts are tied together and given form and importance by the proposed open space and transportation systems.

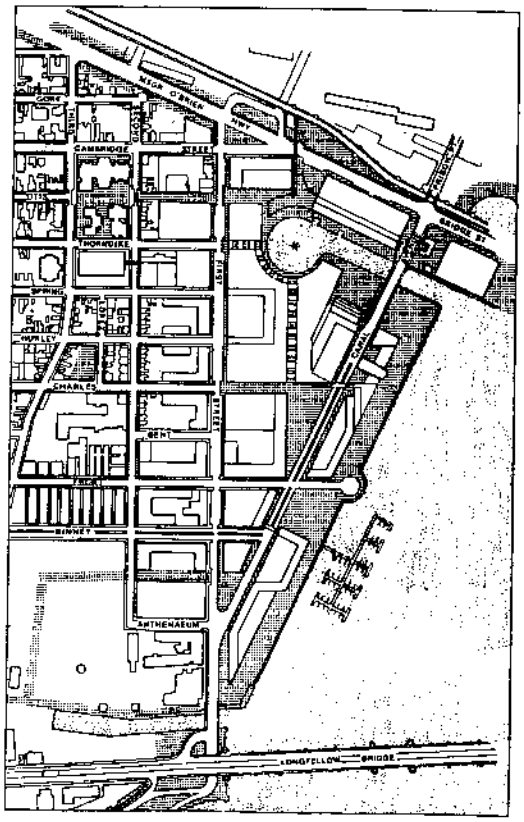


36. Development Districts.
The target area is the grey-toned triangle along the River Basin.

Open Space Improvements

The overall framework of the urban development proposal is a new 16-acre public open space system which provides the existing neighborhood with access to the river and with a connection to the new development. The proposed open space system answers historic East Cambridge's urgent need for open space by locating one-half of the new park space adjacent to the existing residential community. Furthermore, the plan assists in improving the city's visual image through the rediscovery and embellishment of its forgotten assets, the River and Canal.

There are two major pedestrian focal points, The Riverfront and Lechmere Canal and a series of related spaces offering variety in size, shape and use. The projected building volumes and configurations give form and structure to the open space system, while maximizing the hours of sunlight bathing the public spaces. New housing borders the open space system, insuring 24 hour activity and effecting an informal means of surveillance by residents. Factors of both sunlight and territoriality give a sense of security to the open space system that would invite users day and night.



37. Planned Open Space System.

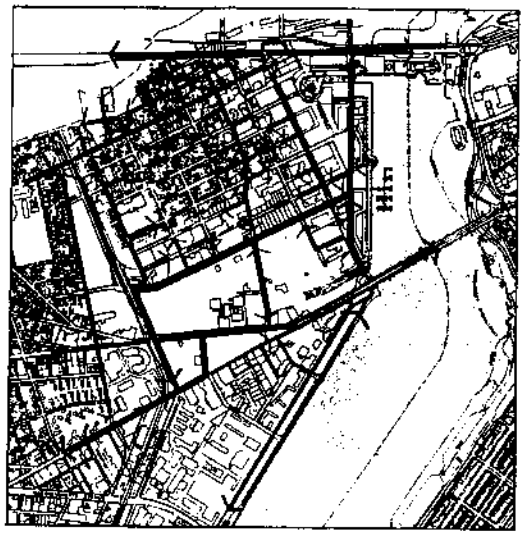
Transportation Improvements

The plan for roadway improvements is primarily based on the City of Cambridge's East Cambridge by-pass plan, now undergoing environmental analysis for state and federal approval.

The following roadway improvements recommended by this study are intended to improve the traffic flow and environment of East Cambridge, encouraging high quality development in the target area. These recommendations include:

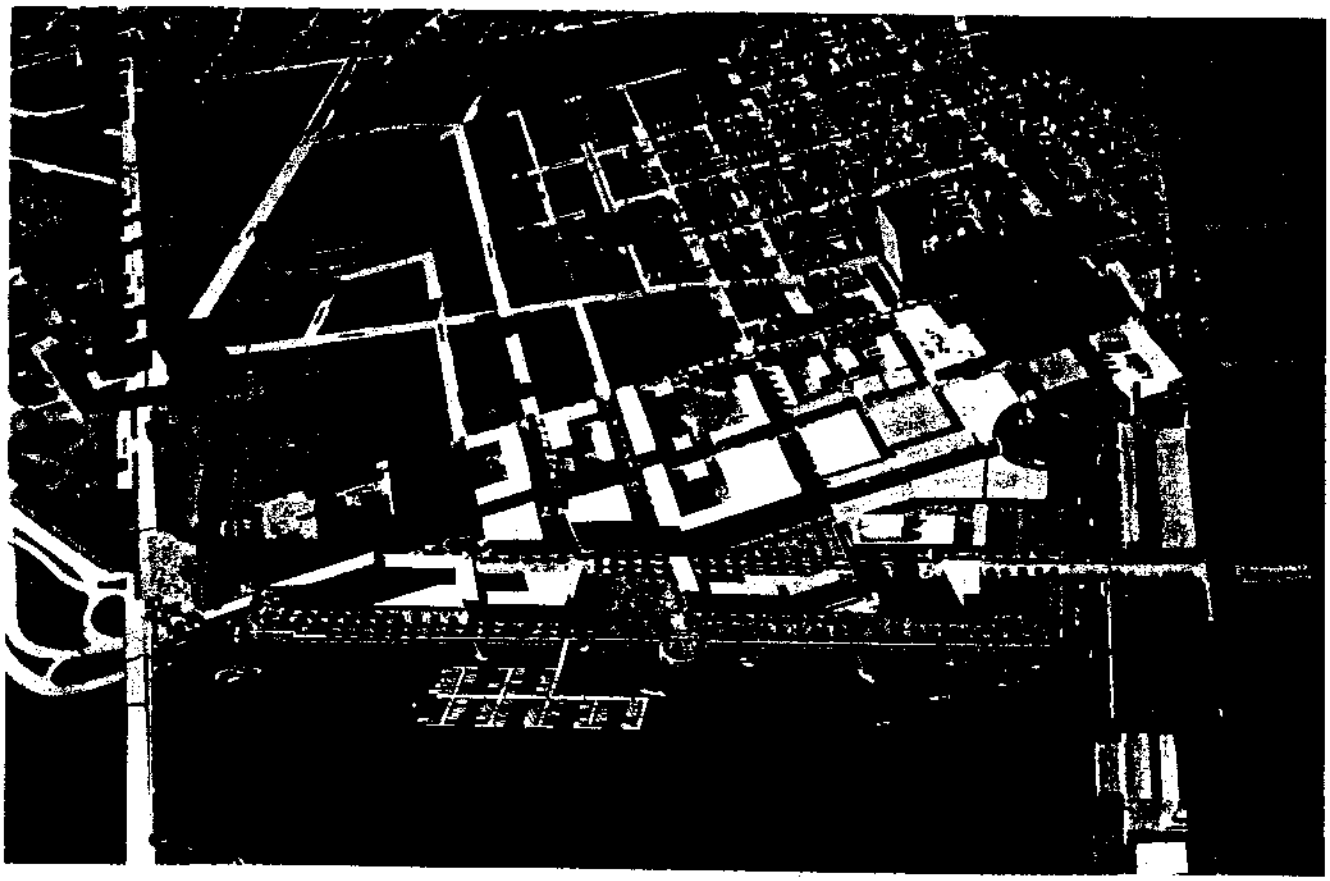
- Widen Binney Street (to 4 lanes with median) from Third Street east to Commercial Avenue; add new signals at the Binney Street/Commercial Avenue intersection (The Binney Street traffic collector is intended to discourage traffic through the East Cambridge residential neighborhood, as well as to direct traffic around the Kendall Square Urban Renewal project);
- Widen Commercial Avenue, the new Canal Street, (to 6 lanes with median) from First Street north to the Monsignor O'Brien Highway, including a new Lechmere Canal Bridge;

38. Eliot Bridge, Charles River
The new Lechmere Canal Bridge will be designed to be a graceful addition to the Charles River Basin.



39. Planned Traffic Circulation.
A one-way circulation system in the residential neighborhood would discourage unnecessary through-traffic.

- Widen the Monsignor O'Brien Highway from Lechmere Square east to Commercial Avenue;
- Improve the approach capacity at the Monsignor O'Brien Highway/Commercial Avenue intersection by the addition of new lanes and signals coordinated with those at Lechmere Square;
- Modify the northbound connection of Memorial Drive to Commercial Avenue in the southern portion of the project area (the road network at the Longfellow Bridge approach should be altered in a manner which links Memorial Drive's open space with that of the Front);
- Close the five-lane Cambridge Parkway to through-traffic and replace it with a more suitable access road and public open space (the low-speed road would allow emergency/service access when required).



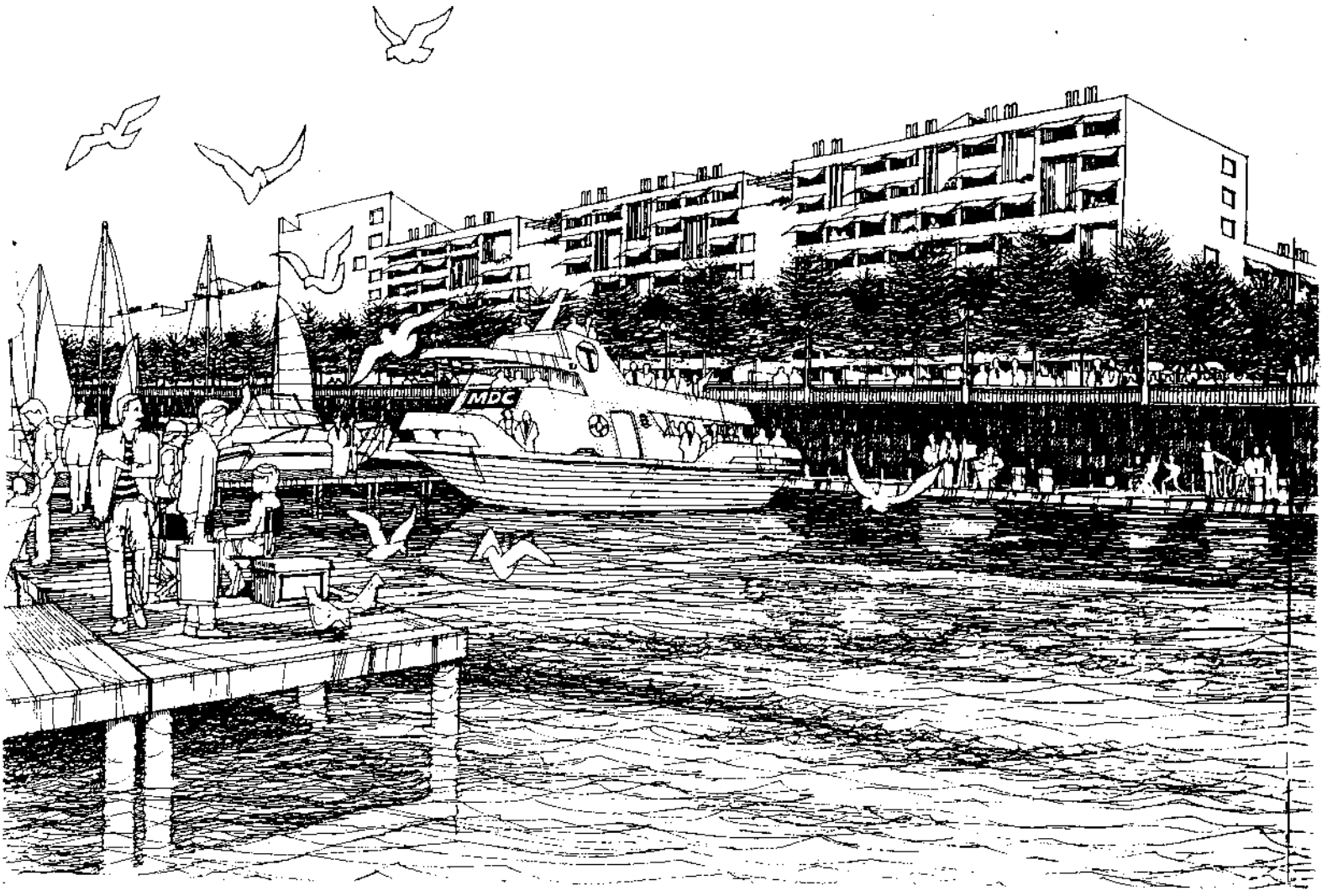
40. Photograph of East Cambridge Riverfront Model.
New planned development is represented by the lighter buildings in the center of the photograph. This view clearly shows the open space system linking the neighborhood directly to the Canal and River.

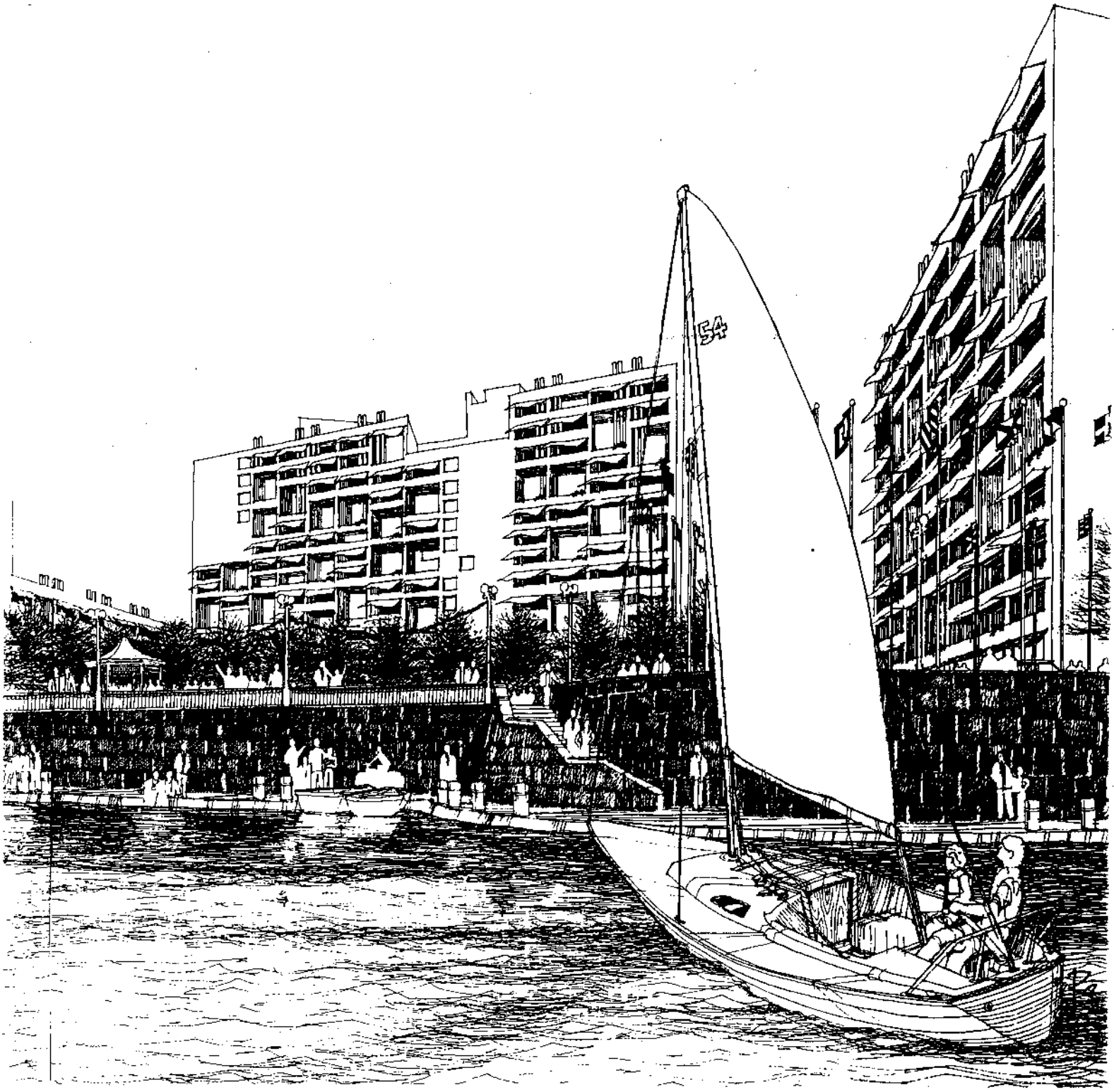
The Front

The Front draws its name from Charles Eliot's unfulfilled vision of East Cambridge's Riverfront Park, as related in the chapter on history. The overall concept of this development district is a major public river front park combined with new housing. This will enable East Cambridge to present an exciting new positive face toward Boston and the Charles River.

It is virtually impossible to recapture "The Front" proposal of 1895 in detail, because only one-quarter of the area of the original proposal is still in public hands. (That area is the Cambridge Parkway under control of the Metropolitan District Commission). However, the creation of an important public open space on the riverfront, a "jewel" in Eliot's terms, can be realized with the closing of the Parkway to through traffic. The design proposal extends the open space back to Commercial Avenue at a central point, forming Eliot Park, enlarging the riverfront park and providing a needed focal point along the 2400 foot long front.

This focus is emphasized by both the construction of the Overlook at the end of Front Street and the creation of a new public marina jutting out into the river. Furthermore, Eliot Park enables a driver on Commercial Avenue, the new extension of Memorial Drive, to enjoy visual access to the Charles River Basin.

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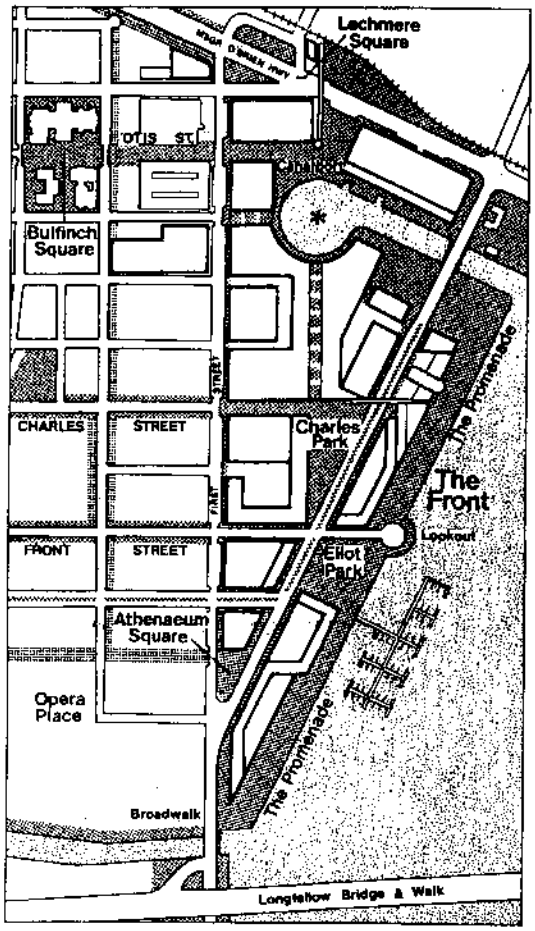
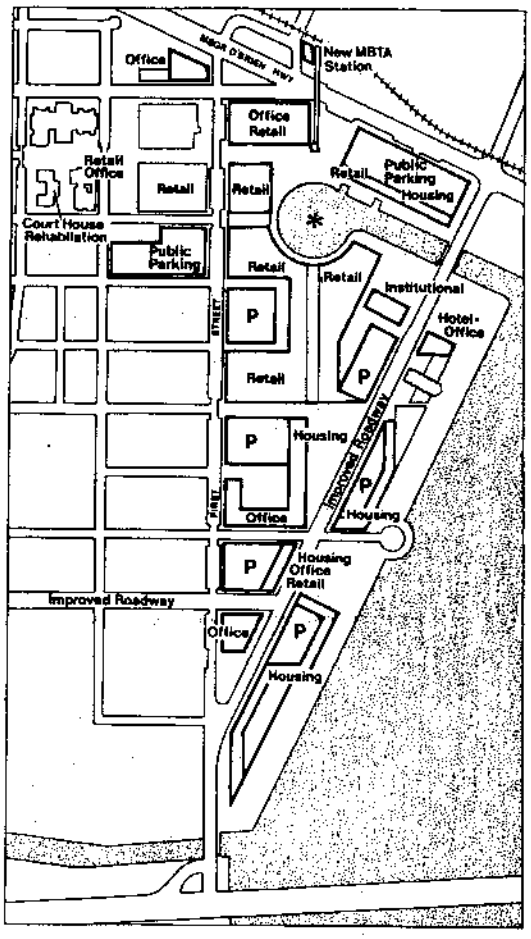


41. Planned Open Space.



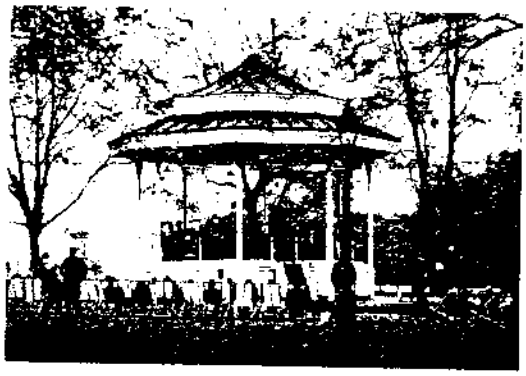
42. Planned Land Use.

The most suitable use for new private development at The Front is residential with limited retail and office space at Eliot Park and Broad Canal.

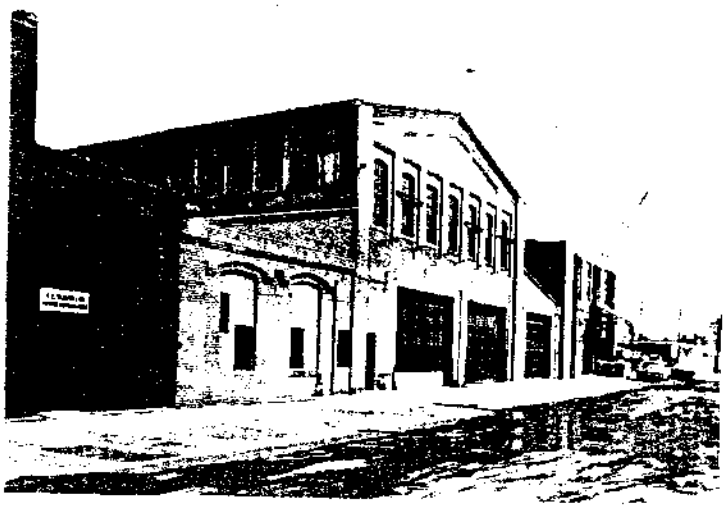
The massing of the housing responds to the river and open space system, historic East Cambridge's fears about excessive height, sun/shadow configurations, and views of the Charles River, Longfellow Bridge and Boston. The massing of structures builds in intensity and height toward Eliot Park; the tallest building abuts Eliot Park furthest from the river on the western side of Commercial Avenue. (This building will have office and retail use in its lower floors and offer impressive views of both The Front and the Charles.) The housing collectively hugs the open space system and visually contains the Charles River, much like the buildings across the river in Boston's Back Bay.

43. Castle Combe, England.
The beauty of an elegant architectural silhouette has long been treasured by the public. The importance of such silhouettes is increased when bordering an important public open space system such as the Charles River Basin.

44. York, England.
Many of the most successful riverfront parks are passive in nature and are simply designed with materials that reinforce the human scale.



45. Hyde Park Gazebo, London, England.
Designed focal points within the open space system give structure and identity to the public domain. More importantly, they encourage activities, planned and spontaneous, to occur.



46. Rodgers Street.
Many fine turn-of-the-century industrial buildings can be re-used as high-quality technical office space

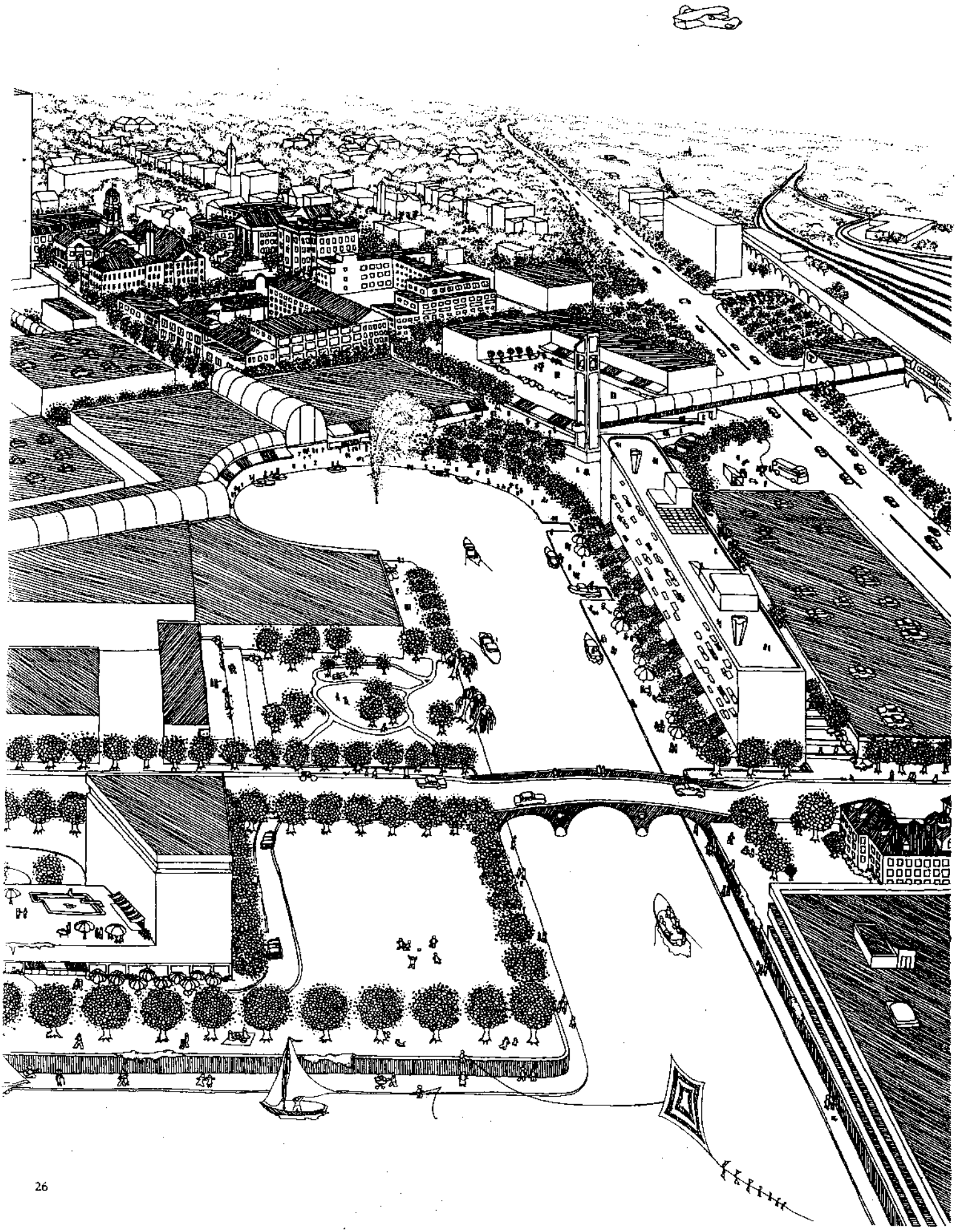
47. Boston Waterfront.
Successful downtown waterfront revitalizations celebrate the human presence and scale, not only in well-designed housing but through additional features which emphasize and animate the water's edge.

Varied and articulated roof lines are intended to form an appropriate silhouette along the river. (Skylines continue to be one of the few characteristics of architecture that holds the public's interest and delight.)

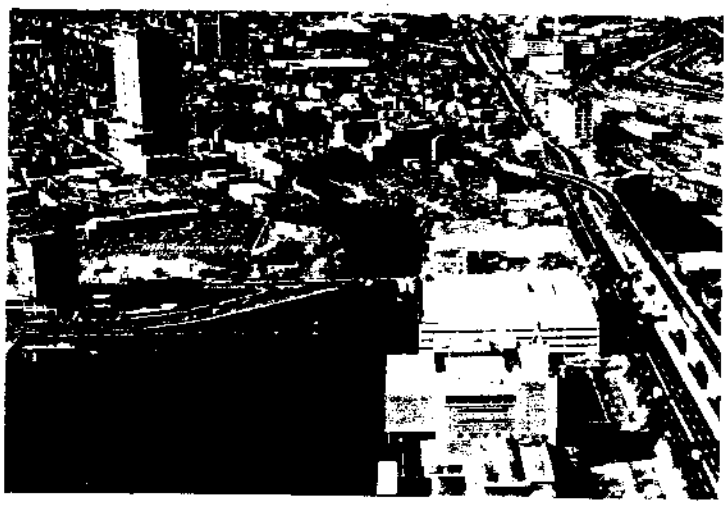
The Front's realization can only have a great beneficial effect on the image of the Charles River's lower basin and the City nf Cambridge and it will serve as a catalyst for new development further inland along Front Street.

Front Street

Rogers Street, renamed Front Street, is planned to be an important new prestigious boulevard for technical industry and office use. Front Street will be redesigned with new landscaping and street furniture as the major linkage between this development district and The Front. With Binney Street widened for east-west through-traffic, Front Street will serve local traffic, as well as pedestrian and bicycle access to the Overlook on the river. Front, Bent and Binney Streets define the technical office district. Planned uses are compatible with the East Cambridge residential neighborhood. Reasonable height and setback regulations, as well as possible street closings, are needed to minimize impact on the existing housing stock.



49. Bath, England.
Bath's river park is an excellent example of open space that respects and beautifies an existing body of water, making it an integral part of a great city. Lechmere Canal will be of similar scale and can be of equal significance to Cambridge.



50. Aerial Photograph.
The photograph, taken in late 1977, shows: the unsightly entrance to Cambridge by car and mass transit, acres of parking and largely vacant buildings surrounding Lechmere Canal, and the proximity of historic East Cambridge to the canal area.

48. Aerial Rendering of Lechmere Canal.
The public open space system focuses on the canal area and creates a unique port image for East Cambridge. (Note the restructuring of Lechmere Square, re-aligning Monsignor O'Brien Highway and the Green-Line Transit Station, the lower pedestrian walkway at the base of the granite wall.)

Lechmere Canal and Square

The objective of the Lechmere Canal and Square Development District is to attract new high-quality private development through: 1) the public initiative of a major upgrading of the Lechmere Square entrance to the city and 2) the reclamation of the Lechmere Canal as an important focal point in the planned open space system.

The Lechmere Canal development is designed as a 24-hour activity center of retail, institutional, office and residential uses, oriented primarily toward pedestrians. The design completes the shape of the Canal by terminating it in a circle almost 300 feet in diameter. The focal point of the Canal development is a fountain rising 100 feet in height at the center of the circle. The pedestrian bridge from the new transit station is on an axis with the fountain.

The axis is reinforced with a tall bell tower which serves as an entrance to the Canal Park. (The tower is reminiscent of the large church bell towers lost in East Cambridge.)

Encircling the southern edge of the Canal is a high quality diversified retail center. The low two-story profile of the retail structures will not intrude on the existing community. This allows East Cambridge's silhouette to remain visible and also permits a great deal of sunshine to bathe the Canal area. The retail use intensifies activity at the water's edge, creating an exciting port image, and provides a sheltered link between the Canal and The Front through an enclosed shopping arcade.

With the construction of the new Charlestown Dam, the River Basin's water will be stabilized to within an 6" variation (compared to the 10 foot variation now existing), thus permitting the entire development to be lowered to within inches of the water, eight feet below adjoining street levels. One can walk to The Front from the Canal by going under a new Lechmere Canal bridge (see Figure 48) on the planned lower walkway.

The housing block with retail (restaurants, cinemas) at ground level is physically the backbone of the Canal. All dwelling units enjoy both an overview of the Canal open space and a southern exposure. The higher massing of the housing block and proposed Canal office structure help subdue the strong winter winds' effect on pedestrian areas.

Lechmere Square's future as a major entrance to the city rests almost totally in the hands of public agencies — the MBTA, the

MDC and the City of Cambridge. The design proposal incorporates a new auto and bus circulation system which is feasible by relocating the Lechmere transit station to the north side of Monsignor O'Brien Highway. Safe pedestrian access to Lechmere Canal and historic East Cambridge is obtained by an enclosed pedestrian bridge to the Canal. A new transit station location not only improves circulation, but also gives Cambridge additional open space at the Square where the MBTA elevated railway will be removed.

The beautiful Green Line viaduct, designed by Peabody & Stearns, would be extended to the new station, relieving an unsightly eyesore on Monsignor O'Brien Highway and the entrance to the city. With this transformation, future office use at Lechmere Square is appropriate because of renewed visibility, improved transportation and transit links and open space improvements.

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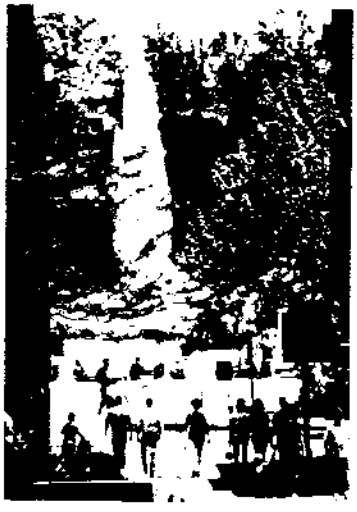

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51. **Lechmere Canal.**
Even in its forgotten state, Lechmere Canal's potential is evident. A portion of East Cambridge's historic silhouette can be seen in the background, with the Bulfinch clock tower rising one hundred and thirty feet, just left of center.

52. **Dubrovnic, Yugoslavia.**
Dubrovnic's beauty and excitement come not only from its pedestrian emphasis and colorful port, but also from its sense of scale, continuity, and focus. Uniformity of materials (granite walls and orange tiled roofs) creates a greater sense of a unified community. The two- and three-story structures along the port are human-scale. Their relatively low profile at the water's edge allows the viewer to be well-aware of each structure and its importance. Imaginative building silhouettes give further variety and life to the scene.

53. **Burlington Arcade, London, England.**
The Burlington Arcade is one of the most successful enclosed shopping streets in the world. Its success is due to its direct integration with the urban environment of London, unlike most shopping malls in America. It is elegantly designed to be an attraction in itself. The Lechmere Arcade connecting the Canal to the Front has a similar potential.

54. **Reston, Virginia.**
The presence and celebration of water is made an integral part of Reston's Lake Anne Center by aligning the public gateway to focus on the fountain.

Bulfinch Square

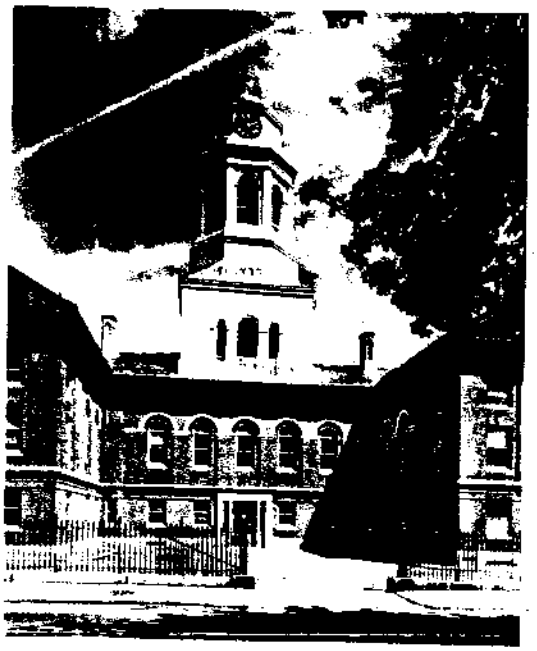
The objectives of the Bulfinch Square design are: to link historic East Cambridge with the Lechmere Canal open space system and transit station, to find an appropriate adaptive use for the Bulfinch Courthouse complex, and to answer the area's urgent need for public parking. These goals will benefit both the Middlesex County Government and the existing neighborhood by creating a transition area of land uses between the neighborhood and the new riverfront development.

As mentioned earlier, the fate of the Bulfinch Courthouse complex has been a major concern of the County, City and community. Previous studies have indicated that high renovation costs make the reuse of the Courthouse by a private developer extremely unlikely. All concerned parties agree that the only alternative to demolition is the renovation of the exterior with public funds, followed by private sector development of the interior. A similar method of preservation and adaptive re-use was used in Boston's highly successful Quincy Market.

The 30,000 square foot Bulfinch-designed portion of the Old Superior Courthouse is now under active study for use by the East Cambridge neighborhood and the City at large as a multi-ethnic cultural arts center with possible library use. The remainder of the Courthouse complex, the 60,000 square foot Clerk of Courts addition, could be privately developed at a reasonable cost into shops, restaurants and high quality professional office space.

The urban design plan reinforces the feasibility of renovating the Courthouse by creating Bulfinch Square as an integral part of the open space system. The Square, located between the Courthouse and Registry of Deeds and Second and Third Streets, is created by the closing of Otis Street. Bulfinch Square will be an elegant public space, sensitive to the historic architecture. County employees, neighborhood residents and visitors to the library and arts center will have the opportunity to share a quiet relaxing moment in the one-acre park. The block-long connection between the canal and Bulfinch Square will be upgraded with widened sidewalks, new planting, street furniture, and proposed building improvements on Otis Street. The owners of the Irving and Casson building plan to increase ground floor retail activity, reusing the building's neglected arcades. Deran Confectionary Company would then have the potential for similar retail upgrading and for making their chocolate-making process visible to passersby.

Little of this is possible without a workable solution for a desperately needed public parking facility (parking needs will be increased with Bulfinch Square's completion). The urban design plan proposes a new parking



55. Bulfinch Courthouse, the Old Superior Courthouse
This view is from Third Street, facing Quality Row.

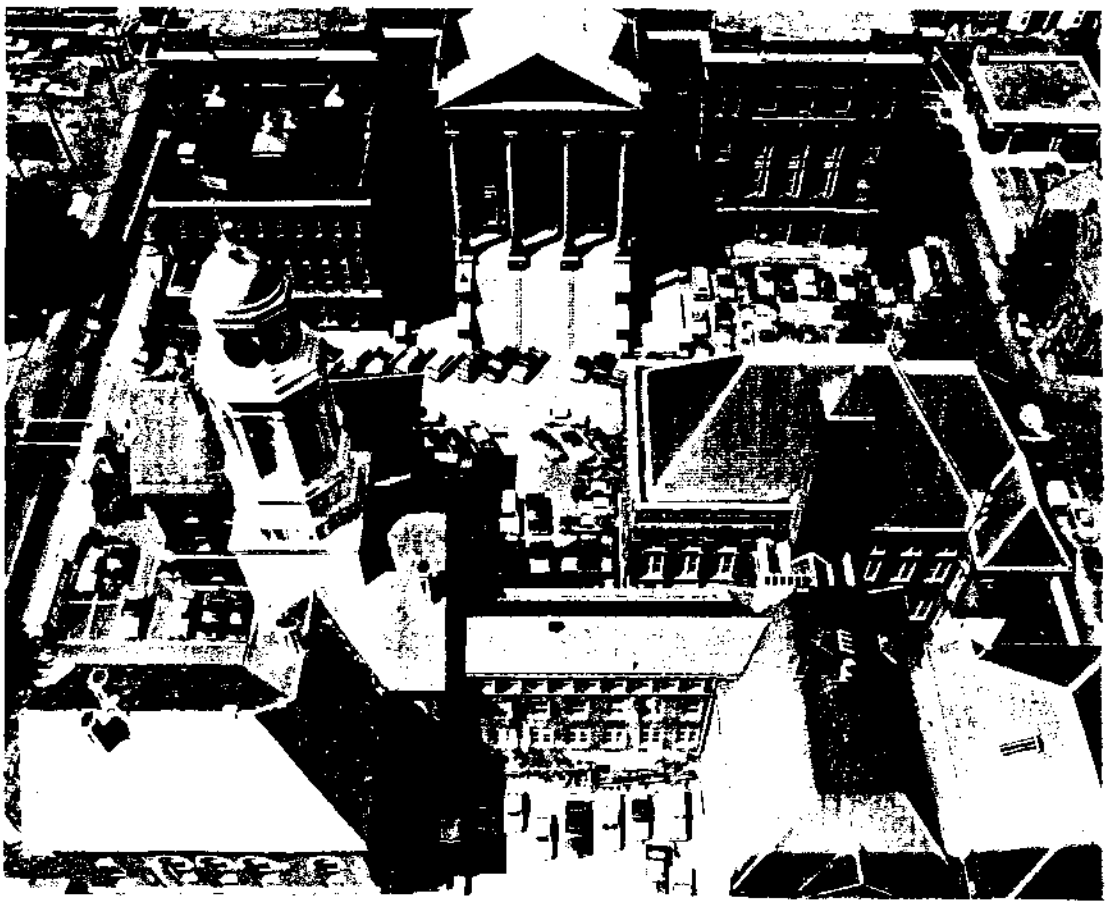
56. Clerk of Courts Addition.
Exterior detail.

garage to be located between First and Second Streets and between Otis and Spring Streets (across the street from the new Courthouse). This location not only serves the needs of the County and historic neighborhood, but could also serve as evening, weekend, and holiday parking for the Canal's retail development.

The urban design plan for East Cambridge cannot be fixed at any one point in time. It will evolve in response to the interests of involved groups and to changing conditions. The stated goals of the plan are increased employment opportunities, improved tax base, a quality environment, and preservation of historic East Cambridge; these goals can only be achieved through a carefully considered, coordinated development effort. Toward that end the urban design plan has formulated detailed district development policies (found in the appendix) and an implementation strategy necessary to make the plan a reality.

57. Bulfinch Courthouse.
Interior stairwell detail.

58. Aerial Photograph of Otis Street.
Otis Street, bordered by the Registry of Deeds at the top of the photograph and the Bulfinch Courthouse below, will be closed to traffic and redesigned into Bulfinch Square. All existing on-grade parking will be moved to a new adjacent public parking structure.



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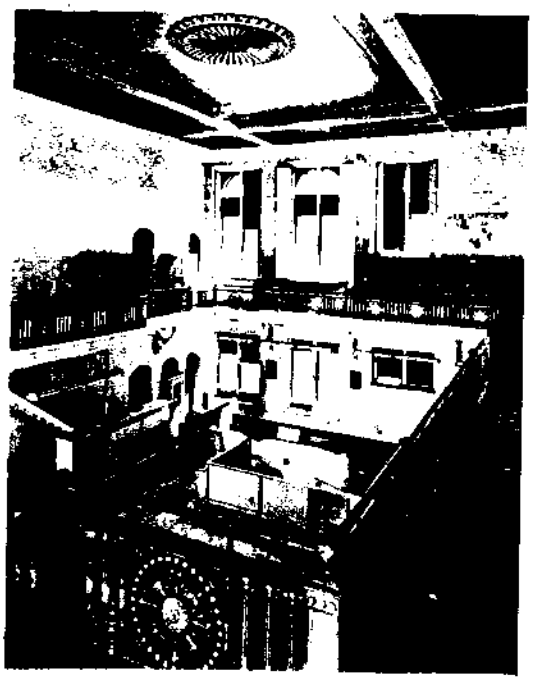


59. Clerk of Courts Addition, Interior.
A number of beautiful spaces with elegant detailing exist in the Bulfinch Complex. Their suitability ranges from restaurant and retail use to quality office use.

60. Courthouse and Square, Circa 1860.
Before the Clerk of Courts Addition in 1887, the Bulfinch Courthouse's significance was expressed by its position on the public square facing Second Street. The Riverfront Plan aims to restore its honored position in the public's eye once again.

7 Plan Implementation

The East Cambridge Riverfront Plan will be implemented in phases over a number of years; the implementation will include public facility improvements, private investment, development controls, promotional efforts, and, possibly, fiscal and economic incentives. The plan will involve governmental agencies at all levels, private property owners, developers, and community groups. The key to success will be a coordinated, cooperative effort between the public and private sectors; neither can do the job alone.

Public Improvements and Actions

The City will be responsible for implementing a wide range of public improvements. The major actions are discussed below. A more detailed list of actions and improvements is presented in a separate appendix.

As part of its current work on the East Cambridge/Lechmere Project, the Community Development Department is preparing a series of rezoning amendments to the City's Zoning Ordinance. The proposed amendments would replace the current industrial zoning of the project area with new development controls which will be consistent with the East Cambridge Riverfront Plan. The new regulations will be based on the four design districts delineated by this plan. They will include: 1. a residential and office district along the Front; 2. a technical office district along Bent, Rogers and Binney Street; 3. a mixed use district in the Lechmere Canal area; and 4. a limited commercial, transitional district along Second Street.

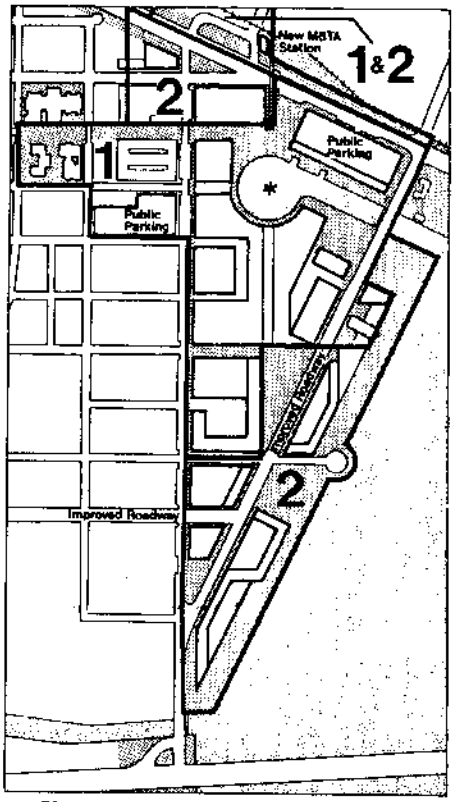
The City will develop various proposals for State and Federal funding to implement the urban design plan. This effort will involve applications for funding from Urban Development Action Grants (UDAG), Block Grants (CDBG), the Bureau of Outdoor Recreation (BOR), Urban Systems, Urban Mass Transit (UMTA), State Self-Help, and the National Park Service Historic Preservation Grants Program.

As illustrated in Figure 61, the construction phasing of the major public improvements begins first at the northern part of the triangle in the Lechmere Canal area and in the area around and including the Bulfinch Building. Major park improvements, improvements to the Bulfinch Building, improvements to the Lechmere Canal,

parking facilities, and roadway improvements will be initiated in this phase. Design, acquisition and relocation for the mass transit station will begin also, although the completion of this aspect of the project will take four or five years.

The second phase will include open space development along the river, "The Front," and the nearby parks. Public improvement in this phase will also entail improvements to the Lechmere Square area. Several improvement efforts will continue throughout the project. These include street and sidewalk improvements, various open space improvements and the Neighborhood Stabilization program.

The specific public improvements planned for the project area, the estimated cost of these improvements, the five year capital improvement program and the detailed budgets for each improvement are presented in Figure 65. The planned improvements would represent close to $50 million of public commitment to the project. Detailed information on the open space and roadway improvements is presented in a separate appendix. (The design scheme presented in this publication is a guide; it is anticipated that aspects of the scheme might change. The capital improvement program and time schedule outlined in Figure 63 are included to serve as a guide. Changes in the program and timing are expected as the project is implemented.)

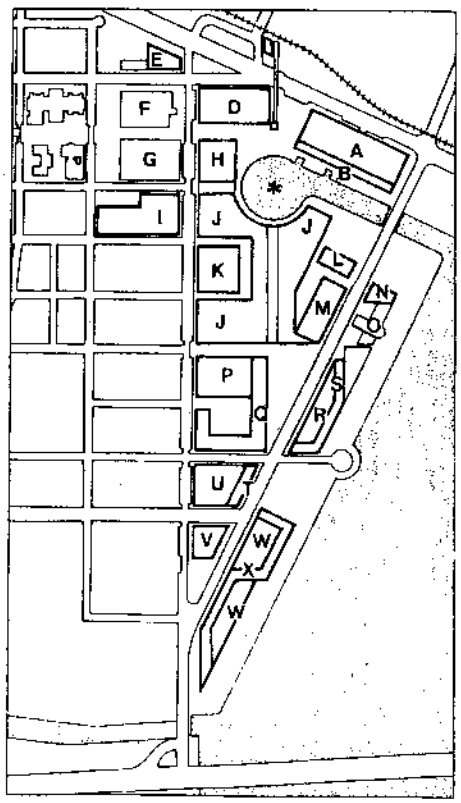


61. Phasing.

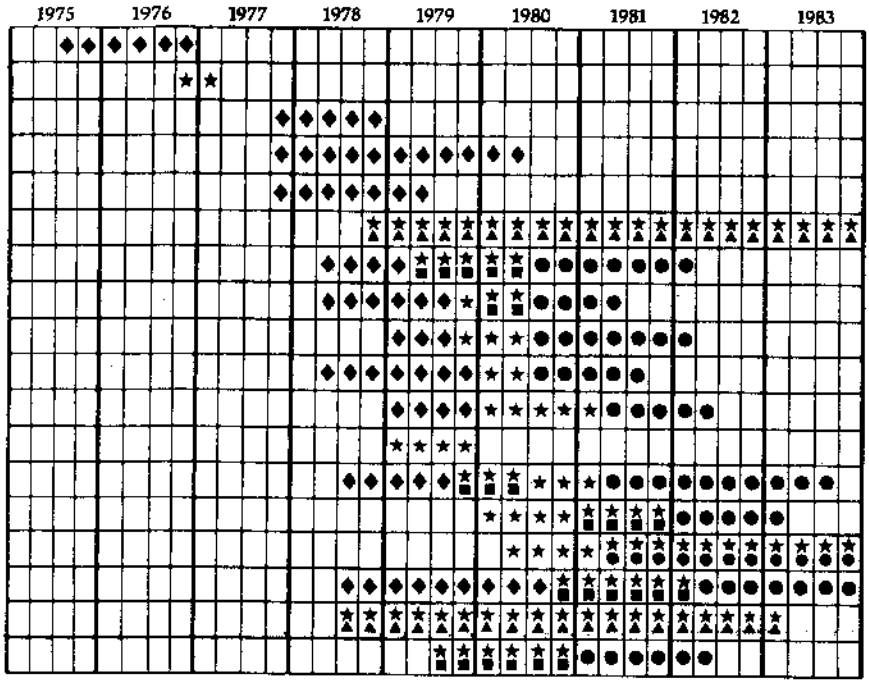
Private Improvements

Private development activities are anticipated as a result of increased opportunities, public actions, and negotiations and agreements between the City and private developers. While it is not possible to anticipate the exact form of all private development that will take place, this project assumes an economically feasible and likely form that meets the intent of the development policies and reflects private commitments to date. These policies prescribe development objectives and list design guidelines that any acceptable private development must follow.

Private improvements planned for the project are identified on Figure 62 by letters that correspond to letters on the Descriptive Private Improvements Summary Table 64.



62 Planned Private Development. (Revised December 1979) see page 36



63. Phasing Chart *Planning* ◆ *Design* ★ *Acquisition* ■ *Implementation* ▲ *Construction* ●

Site A
A four-level parking garage and cinema complex is located near the intersection of Commercial Avenue and Monsignor O'Brien Highway. The garage provides parking for the cinema, buildings on Sites B and D, and (exclusive) replacement parking for the MBTA.

Site B:
A six-story condominium apartment building containing 120 housing units and ground floor retail is located between the parking garage (Site A) and the Lechmere Canal. Potential location for several Section 8 rent subsidy units.

Site D:
Four levels of general office space over a two-level retail "galleria" are located near the intersection of Cambridge and First Streets.

Site E:
A six-story general office structure attached to a smaller three-story general office structure with surface parking is located at the site of the present MBTA transit station in Lechmere Square.

Site F:
The present Deran Confectionary Factory is located on Cambridge Street between First and Second Streets. Improvements are planned.

Site G:
The existing building located on First Street will be used for retail stores, artisans' shops and professional offices.

Site H:
A retail complex is located at the end of the Lechmere Canal with two levels facing the Canal and one level facing First Street.

Sites J, K:
A major regional shopping center with a parking garage-delivery building at Site K is located along First Street from the Lechmere Canal to Charles Street. The center contains two "anchor" stores, smaller stores, restaurants, and a luxury food store. Two levels of shops face the Canal. The anchor store at Charles Street is also two levels high with the remainder of the center being one story. A large pedestrian arcade links the Canal with "Charles Park" and Charles Street Extension.

Site L:
A small institutional use facing "Lechmere Canal Park" at Commercial Avenue is ideal for this location.

Sites M, N:
An addition of 200 rooms and support facilities for the hotel is located at Site N on Commercial Avenue. Two-thirds of the space in a parking garage across Commercial Avenue at Site M is to be used by the hotel and one-third by the shopping center.

Site O:
The existing Sonesta Hotel is located at Site O on Commercial Avenue.

Sites P, Q:
A six-story technical office building is located at Site Q on Rogers Street between Commercial Avenue and First Street. It is served by a three-level parking garage at Site P. This site may also be integrated into the Retail J, K.

Sites R, S:
Condominium housing and office uses in a structure following a varied silhouette of 7, 6, and 11 stories and containing 184 units; located along "The Front" at Site S. Ground floor convenience, retail, basement parking, and a two-level parking garage is located at Site R facing Commercial Avenue.

Sites T, U:
A 17-story, mixed-use building is located on Commercial Avenue at Site T, opposite the "Front Park" at Rogers Street. Retail uses are on the ground floor, general office space occupies the second to fourth floors, and 100 condominium units are on the fifth through seventeenth floors. Parking is in the basement of building Site T and in 2½ levels of a garage at Site U.

Site V:
A seven-story general office building is located at Binney Street between Commercial Avenue and First Street.

Sites W, X, Y:
Condominium apartments and rental offices in a structure with a profile varied at 5, 6, 11, and 13 stories is located along "The Front" from Binney Street to the Broad Canal (Sites W and X). The structures contain 358 housing units, ground floor convenience retail, basement parking, and a two-level parking garage at Site W. The currently vacant Carter's Ink Building located on First Street at Athenaeum Street (Site Y) is to be preserved and reused.

Site Z:
The Bulfinch Court House Building will be restored with a combination of cultural, small retail and office activities in the building.

64. Descriptive Private Improvements Summary Table. (Revised December 1979) see page 36

The construction phasing of the private development will generally follow that of the public actions. New development would first take place at the northern end of the project near the Lechmere Canal, followed by second phase along the river, and by a third phase at the lower end of the Lechmere Triangle at the southern end of the project. Timing of construction in the Lechmere Square area would be dependent upon the timing of the MBTA Lechmere Station relocation. (See Phasing Chart Figure 63.)

It is anticipated that all land acquisition, construction of facilities and site improvements will be carried out by private landowners and developers with no public participation other than development guidelines and limited technical assistance. The City may formulate a corporation which would have the power to take property by eminent domain should this become necessary to implement a specific and integral private development project. It should be emphasized that the City does not anticipate the necessity of eminent domain proceedings to implement the private development aspects of the project, since the most important parcels of land are in the hands of six private landowners and in public ownership.

Public policies, to assure that private development is realized in a desirable form and content are part of this project. The authority behind these policies depends on zoning. A Planned Unit Development provision added to the zoning ordinance as an overlay district is proposed as a means of enforcing the development guidelines.

Coordination and Responsibility for Implementation of Public Improvements

All public improvements involving land acquisition, construction of facilities and site improvements will be coordinated by the City and implemented by the public agency responsible. Where necessary specific operational agreements will be developed.

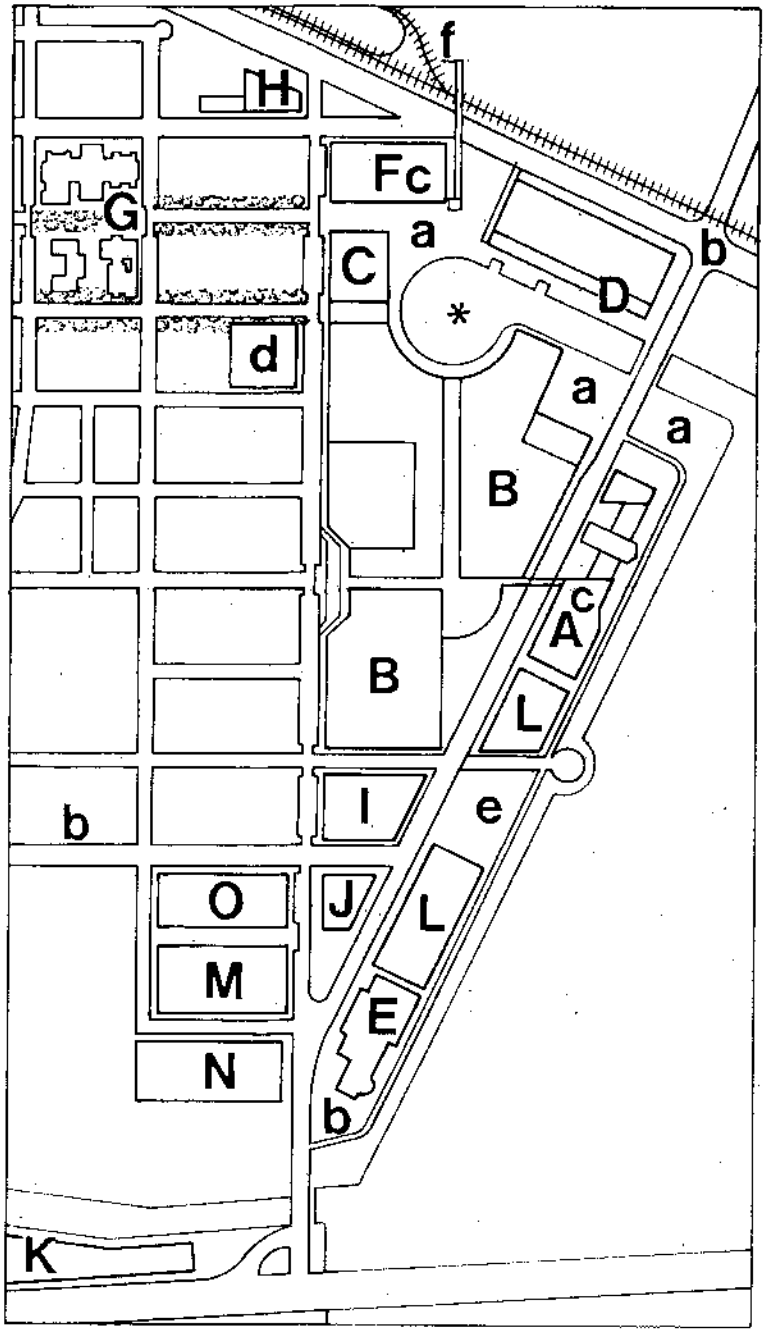
- The Metropolitan District Commission (MDC) will work with the city on certain open space acquisitions, roadway improvements and operation of facilities.
- The Massachusetts Bay Transit Authority (MBTA) will work with the City to implement the transit station project.
- The State Department of Environmental Affairs and the State Department of Public Works will work with the City in finalizing grant agreements and in implementing open space and roadway development.
- The County will work with the City on the renovation of the Bulfinch Building.
- The City will implement most of the open space acquisition and development, the Neighborhood Stabilization Program, roadway designs, development controls, creation of urban street and sidewalk amenities and new roadways, landtakings by eminent domain and other administrative affairs.

(Figures in thousands)

	Cost	77-78	78-79	79-80	80-81	81-82	82-83	Acq./Dem.	Reloc.	Design	Construct.	EIS
MBTA Transit Station	20,827				800 (a, r) 1,000 (e, d)	200 (a) 2,827 (dem)	16,000 (c)	3,527	300	1,000	16,000	
Parking Garage (200 spaces)	1,980			500 (a, r)	1,480 (d, c)			420	80	80	1,400	
Parking Garage (300 spaces)	3,200				1,200 (a, d)	2,000 (c, d, r)		1,200	100	200	1,700	
Parking Garage (600 spaces)	4,840			250 (d) 390 (a, r)	4,200 (c)			350	40	250	4,200	
Neighborhood Stabilization Program	1,250		250 (c)	250 (c)	250 (c)	250 (c)	250 (c)				1,250	
Historic Rehab. for Bulfinch Courthouse	6,200			700 (d)	5,500 (c)					700	5,500	
Open Space Program	10,321			1,692	3,151	2,310	3,168	3,408	300	489	6,124	
Street Improvements	11,675	75 (EIS)		600 (d)	4,000 (a, r)	3,500 (c)	3,500 (c)	3,500	500	600	7,000	75

(d) Design
(c) Construction
(a) Acquisition
(e) Engineering
(r) Relocation
(dem) Demolition
(EIS) Environmental Impact Statement

65. Public Improvement Program. (Revised December 1979)



East Cambridge/Lechmere Area
Planned Development
(December 1979)

Private & Public Improvements
Summary Table — December 1979

Private Improvements

Site A:
A Hotel expansion. The expansion includes approximately 250 Hotel rooms, restaurant, conference facilities, and structured parking.

Site B:
A major regional shopping center. The center will contain 450,000 to 600,000 square feet of space and consist of two major anchor stores, smaller retail stores, restaurants and parking.

Site C:
A retail office complex of about 60,000 square feet.

Site D:
A condominium apartment building containing 120 housing units, 40,000 square feet of office, ratail and parking.

Site E:
A 75,000 square foot research institute with on site parking.

Site F:
A 200,000 square foot building with office, retail and housing uses. Will be constructed on air rights to the 200 car public garage.

Site G:
The renovated Old Middlesex County Courthouse Building. This 90,000 square foot building will contain office, retail and community activities.

Site H:
A six-story general office structure with surface parking.

Site I:
A mixed-use building opposite the planned "Front Park" at Rogers Street. Uses will include office, retail and housing. Parking would be provided on site.

Site J:
A retail/office site to be used by existing businesses relocated due to public improvements.

Site K:
A 600,000 square foot Riverfront Office Park.

Site L:
Housing sites for market rate housing with the possibility of limited subsidized housing.

Site M:
Renovation of the 340,000 square foot Atheneum Press building for office and retail.

Site N:
Renovation of the 140,000 square foot Carter Ink building for office use.

Site O:
Retail/office uses. Preference to relocated businesses.

Public Improvements

Site a:
Lechmere Canal Park

Site b:
Project area roadway improvements

Site c:
200 car public parking garage

Site d:
600 car public parking garage

Site e:
Public Park "The Front"

Site f:
Site of proposed new MBTA Lechmere Station

8 Benefits from the Riverfront Plan

It is clear that the Riverfront Plan will bring major benefits to Cambridge and the region, giving life to a declining industrial area while protecting a valuable and historic neighborhood. The public and private improvements at the core of the plan are its most important benefits; further, those improvements will generate other fiscal and economic benefits for the city.

The public improvements have been discussed in full. The rejuvenated waterfront and Lechmere Canal will be part of a sixteen acre park system. A new transit station, a more efficient roadway system, and new public parking facilities will be much-needed additions to the area. General beautification (such as new street and sidewalk paving, lighting, and street furniture) is planned; historic preservation and reuse of important area buildings are an essential part of the plan.

In addition to the public amenities, over $130 million dollars worth of private development will take place including:

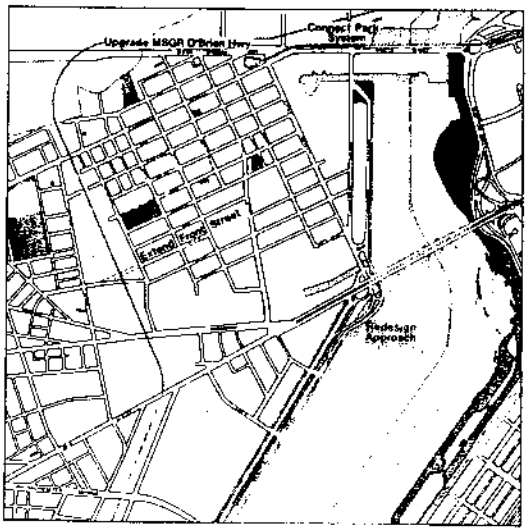
- Rehabilitation of up to 500 existing housing units which will help stabilize the East Cambridge neighborhood
- New construction of up to 650 housing units on the river
- Construction of over 300,000 square feet of new retail space
- Construction of up to 600,000 square feet of new office space

These public and private improvements will promote further fiscal and economic benefits:

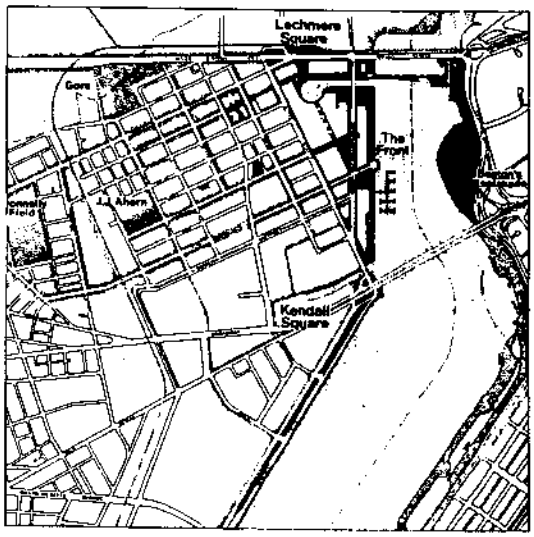
- Over 4,000 construction jobs will be created during the development phase.
- Over 4,000 retail, office, restaurant, and service jobs will be developed.
- A net increase of $5 million per year in city property taxes from the planned development area is projected. This could mean that the 1985 tax rate for the entire city will be up to $20 less than it would be without the Riverfront Plan.
- The economic benefits in general will act as a catalyst for further growth and upgrading far beyond the target area.

There are several major recommendations that are presently beyond the scope of this project; if implemented, these improvements would add greatly to the quality of the plan and would create more efficient links between the target area and adjacent areas. These improvements should be considered in future area-wide planning:

- Implement the MDC's plans for a linear park along the North Terminal's waterfront. This would connect the East Cambridge riverfront with the Charlestown Navy Yard Park System.
- Upgrade Monsignor O'Brien Highway to parkway status. The MDC's long-range plans would help to eliminate blight along



67. Further Recommendations.
Four additional improvements beyond the target area would successfully link it to adjacent areas.



68. The Riverfront Plan Fulfilled.
The East Cambridge Riverfront becomes a major part of a much larger system of development.

69. Longfellow Bridge Approach.
The Approach, designed as the link between Memorial Drive's Esplanade and Longfellow Bridge, once offered dramatic views of the Charles, Beacon Hill and Back Bay for Cambridge promenaders. The Esplanade's beautifully detailed railing, curved granite walls and mature trees still exist at the Approach, but its relationship with the river and its unobstructed views of Boston were lost in the 1950's. A highway addition connecting Memorial Drive to Cambridge Parkway was built to improve traffic flow. The flow of traffic has been improved, but at a great cost of turning a significant public place into a no man's land.

this roadway and create a more cohesive edge to the residential neighborhood. The possibility of eliminating unnecessary and dangerous intersections by closing connections with Second and with Sciarappa Streets should be considered.

- Extend Front Street (presently Rodgers Street) to Portland Street. This would give Neighborhoods 3 and 4 safe access to "The Front" park and the river.
- Redesign riverside roadway ramps at the Longfellow Bridge and Broad Canal. The existing situation has created an unsightly and unused area along Memorial Drive between Wadsworth Street and the Longfellow Bridge. This condition prevents a safe and attractive open space connection between the East Cambridge's riverfront and the existing park land along Memorial Drive (see figure 69).

70. Cambridge, England.

71. Amsterdam, The Netherlands.

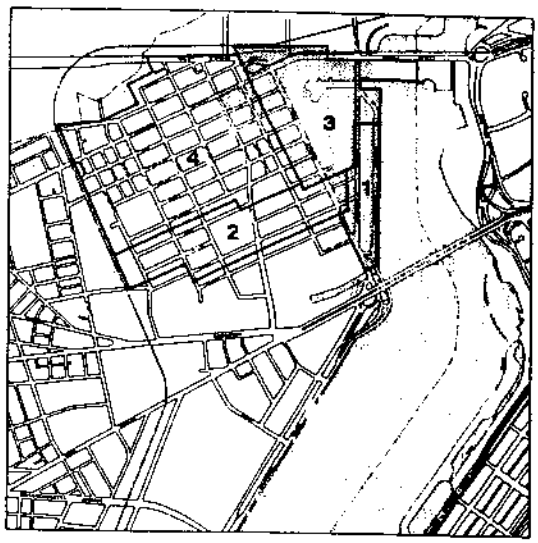
The presence of the Charles River gives added meaning to the entire plan; in a general sense, the development triangle is an innovative link between the river and all of Cambridge. The waterfront has always had a special significance for the city dweller. Historically, it has been a center of activity, commerce, meetings, and romance. From the magnificent waterfront plazas of Venice to the playful river lights along the Thames, cities have treated the waterfront as a ceremonial space. Amsterdam, famous for its canals, magnifies the water's beauty by lighting the outline of its elegantly-curved bridges. It must not be forgotten that the waterfront of Cambridge can become just as beautiful.

The strongly pedestrian-oriented open space will include both passive and active areas. Quality planting, park furniture, granite paving, and riverfront lighting are planned to enhance the waterfront space. One section of park will be terraced to within one foot of the canal, linking up with a lowered walkway along the riverfront. The scene can be enriched by the use of color in awnings, signage, sculpture, and planting. A fountain will become an exciting visual focus for the entire canal area. The plan calls for massing of buildings that is sensitive to wind and to exposure for sun; also a background of housing will offer informal security for the parks nearby.

New and exciting opportunities for East Cambridge have been proposed in this plan; yet dedicated and coordinated effort will be essential to bring these proposals to reality. Strategies might shift and new opportunities appear, but the basic intentions of the plan must be respected to take full advantage of East Cambridge's situation on the Charles River and in the Boston area.

9 Appendix:
District Development Policies

This urban design plan sets forward aspirations and conceptual proposals for the East Cambridge Riverfront. Though future development may depart from some of the details presented in this document, the spirit of the plan should be continued during the actual project execution phase. The following principles and design guidelines have been prepared for the four development districts delineated during the study. These principles and guidelines are intended to provide a policy framework for evaluating proposed public and private actions in the four riverfront districts.



District 1: The Front

Principles

Stress development of the riverfront area that would present a new, exciting face toward Boston from across the Charles. Create a positive entrance to the city.

Upgrade Cambridge's major neglected physical asset, the riverfront between the Longfellow Bridge and the Museum of Science, and make it an integral part of the city.

Provide for new residential development of the Front that is set apart to avoid interference with the fabric of urban life in the East Cambridge residential community.

Develop new amenities along the Front that are easily accessible to and inviting for present East Cambridge residents.

Design Guidelines:

Use:

Advance the Olmsted, Olmsted & Eliot concept of a major public park, "The Front." Consider altering Cambridge Parkway to accomplish this purpose.

Encourage a residential mixture of all incomes small and large units. A combination of housing and commercial use is less desirable but is possibly an economic necessity.

Use building materials and imagery that reflect proximity to water. Encourage brick facing on riverfront buildings and colored canvas awnings.

Riverfront park should include a walkway along the river at the base of the granite retaining wall, uniting the Broad and Lechmere Canals.

Scale:

Encourage a variety of building heights between 5 and 14 stories. Locate lower buildings at the north end of the area and nearest to the existing residential community. Place the highest buildings around the focus point, away from and at angles to the river.

Anticipate a maximum overall floor area ratio of 2.5.

Encourage residential densities of 85 units per acre.

Form:

Maximize potential views of the river and Boston through building arrangement and orientation.

Roof lines and elevations should be designed to create visual interest and avoid the monotony of a uniform development wall along the river.

Design building massing and orientation to minimize shadows on the riverfront park and on the rest of the neighborhood.

The riverfront park should have varying width and a major focal point to create elements of interest and strong visual impact.

Use development to create a strong edge delineating the land/water interface and providing a sense of containment.

Linkages:

Widen and improve Commercial Avenue and make it two-way to serve as the major north-south traffic artery in East Cambridge.

Provide for clear, safe and convenient pedestrian and bicycle traffic flows across Commercial Avenue and through riverfront development to the river.

Create a continuous open space link between the Memorial Drive greenway and the proposed Charlestown Navy Yard and Paul Revere Park to the north.

Design Details:

Reinforce riverfront focal point through creation of an active port image. Accomplish this by consolidating scattered docking into a single public facility including space for the MDC proposed water taxi.

District 2: Front Street

Principles:

Encourage development on individual parcels that contributes to an overall upgrading of economic activities and job opportunities within the area. Build an image of a unified, high quality employment center.

Arrange buildings and open spaces within individual development projects so that they contribute to a unified open space corridor leading to the Front.

Provide an interface with residential area that is a gentle, non-disruptive transition between districts.

Maximize reuse of existing buildings.

Design Guidelines:

Use:

Stress technical office and research and development activities.

Consider wholesale trade activities and special construction trades as secondary, less desirable, uses.

Scale:

Limit maximum floor area ratio in the area to 2.0.

Limit building height with tighter restrictions nearer to residences:
35' in the blocks between Charles and Bent
45' between Bent and Rogers
65' between Rogers and Binney

Form:

Build to the street line except for lots abutting residential lots or districts.

Urge new development to respect the existing street grid.

Linkages:

Upgrade Binney Street as a two-way truck and auto route.

Develop a pedestrian/bicycle oriented open space corridor to provide a district connection between use in the area, neighborhood 3 and 4 and the riverfront.

Let Rogers Street serve more as a corridor providing access to the riverfront for local, bicycle and pedestrian traffic.

Design Details:

Encourage articulated roof lines (as in 19th century industrial buildings).

Set back non-residential development abutting residences 20 or more feet or buffer them with a substantial landscape screen.

Locate new loading areas completely off-street and out of view from neighboring properties.

District 3: Lechmere Canal and Square

Principles:

Restructure Lechmere Square to be a handsome entrance to the city by encouraging appropriate development and by creating a safe, more efficient pedestrian and vehicular circulation.

Upgrade the quality of the existing regionally oriented commercial center.

Reclaim the Lechmere Canal as a significant visual element in the urban environment.

Create a functionally diverse and active urban focus with the Canal reclamation and surrounding development.

Create a strong and inviting pedestrian environment around the Canal.

Reuse old buildings which have some distinctive architectural character, historical value or economic value.

Encourage development along the western edge that provides a compatible and sensitive physical interface with District 4 — especially the residential community.

Design Guidelines:

Use:

Require development in the area that provides expanded shopping facilities, general office space and new housing. Stress commercial uses.

Increase the amount of recreational space.

Reinforce existing commercial activity along First Street with additional commercial establishments.

Construct structured parking facilities sufficient to meet needs of new development.

Further limit uses of lots abutting residential neighborhoods.

Scale:

Limit height and bulk of buildings to minimize their shading and visual dominance. Place stricter limitations closer to the residential area.

Limit building height around southern and western edge of canal.

Restrict overall floor area ratio of the district to 1.75.

Make density higher along Bridge Street and away from the existing residential area.

Form:

Enlarge and strengthen the Canal, redefining its edges and reducing the vertical distance between water level and abutting land.

Arrange new development so that it respects the First-Sixth Street grid.

Orient new development to interrelate activities in the Canal area and Bulfinch Courthouse area.

Locate new housing away from existing residential area.

Linkages:

Provide direct pedestrian linkage between relocated transit station and new development at First and Bridge Streets.

Upgrade Commercial Avenue as a two-way auto and truck route.

Design open space corridors that provide connections between the Lechmere Canal area and riverfront and the residential community.

Create a visual and access corridor between the canal and the old county courthouse buildings.

Create a major pedestrian corridor through the commercial area parallel to First Street connecting the canal to new Rogers Street open space axis.

Construct a walkway on the riverside of the Museum of Science connecting the Lechmere Canal open space with open space on the Boston side of the Charles.

Design Details:

Construct an aerated fountain at the head of the Canal to create an exciting visual focus and to cleanse canal-port water.

Orient and design new housing to oversee newly created open space.

Encourage development around the canal that is colorful in details and rich in open space amenities.

Preserve the old MDC stable and boathouse.

District 4: Historic East Cambridge and Bulfinch Square

Principles:

Protect residences from adverse impacts of non-residential activities.

Preserve and creatively reuse historically and architecturally significant buildings in the area.

Avoid development which displaces existing residences or which disrupts the present social mix of the community.

Generally encourage development within the area that is neighborhood-oriented rather than city- or regionally-oriented.

Preserve the physical scale and grain of the East Cambridge residential neighborhood.

Design Guidelines:

Use:

Maintain dominance of residential uses.

Encourage business uses in the area that are generally neighborhood-oriented.

Preserve and reuse the Bulfinch Courthouse and nearby buildings that may become vacant. Use some of the space for public institutional activities such as cultural facilities.

Avoid encroachment of industrial uses into residential areas by selectively extending residential district zoning boundaries.

Scale:

Avoid further incongruous development by reducing permitted building bulk around new Middlesex County Courthouse.

Maintain a .75 floor area ratio limit for residential areas.

Limit maximum building height to 35'.

Business districts within the area to a 1.0 floor area ratio limit.

Form:

Prefer reuse and rehabilitation of existing buildings over new construction.

Encourage new construction that respects and relates to the form, character and detail of the historic housing stock.

Linkages:

Eliminate through traffic and truck routes through the residential neighborhood.

Provide convenient pedestrian linkages between residential neighborhood and new public open space along the riverfront.

Upgrade the Monsignor O'Brien Highway.

Design Details:

Buffer commercial and industrial facilities, parking areas, loading areas and other incompatible or unsightly activities from residences.

Avoid destroying or disrupting architectural details in any use, maintenance and rehabilitation of significant old buildings.