



---

CITY OF CAMBRIDGE  
COMMUNITY DEVELOPMENT DEPARTMENT

---

IRAM FAROOQ  
Acting Assistant City  
Manager for Community  
Development

To: Planning Board  
From: Jeff Roberts, Land Use and Zoning Planner  
Suzannah Bigolin, Urban Design Planner  
Date: July 21, 2015  
Re: **PB #299, Proposed Mixed-Use Project at 2551 Massachusetts Ave**

This memo contains an overview of the proposed development, the special permits being requested, and comments related to planning, zoning and urban design. Comments from the Department of Public Works are attached.

### Summary of Proposal

The proposed project is a four-story, primarily residential building with five dwelling units and about 924 square feet of retail use at the ground floor. Five parking spaces and five long-term bicycle parking spaces are proposed within the building at the ground floor, and short-term bicycle parking spaces are proposed outside. The existing lot is mostly paved with a small building that was most recently used for a laundry business.

### Requested Special Permits

The site is at the corner of Massachusetts Ave and Richard Ave, at the very northern end of the Business A-2 / Massachusetts Avenue Overlay District. As proposed, the project would conform to the base zoning requirements and would not trigger any project review thresholds based on size. However, the project seeks modifications to some provisions of the Massachusetts Avenue Overlay District, particularly the special provisions of the North Massachusetts Avenue Subdistrict that were adopted in 2012.

The intent of the North Mass Ave Subdistrict is to encourage a continuous retail frontage along Mass Ave and to encourage a residential-above-retail urban building form. The zoning requires ground floors of new buildings to contain offices, retail, consumer service or other non-residential uses that interface with the public, like community centers, museums or galleries. Those uses must occupy at least 75% of the Mass Ave frontage of the building, to a minimum average depth of 40 feet from the street, and with a minimum height of 15 feet. In exchange, the North Mass Ave zoning allows greater flexibility than the base zoning in terms of height (up to 50 feet allowed) and FAR (maximum of 1.75 for all uses, rather than just for residential).

The Planning Board, upon issuing a special permit, may modify the exact dimensional requirements on a case-by-case basis, if the project otherwise meets the intent of the requirements. The relevant criteria are summarized on the following page.

| <b>Special Permit Request</b>  | <b>Summarized Findings</b><br>(see appendix for zoning text excerpts)  |
|--|--|
| <p>Modification of Dimensional Requirements in the North Mass Ave Subdistrict:</p> <ul style="list-style-type: none"> <li>• Minimum depth of ground-floor use is less than 40 feet from Mass Ave</li> <li>• Minimum frontage of ground-floor use is less than 75% of Mass Ave frontage</li> <li>• Minimum height of ground-floor use is less than 15 feet</li> </ul> | <ul style="list-style-type: none"> <li>• Modified dimensions do not substantially derogate from the intent to provide for a reasonably continuous active ground floor frontage along the public street</li> <li>• Overall floor area of required active non-residential ground floor uses is not substantially reduced</li> <li>• Modifications are the minimum necessary to reasonably accommodate the new construction on the lot</li> </ul> |

The Board would also need to find that the proposal meets the general standards for issuance of a special permit, as summarized in the attached document, and would be guided in its review by the North Massachusetts Avenue Urban Design Guidelines Handbook (1986), also attached. The primary goals of the Urban Design Guidelines are to:

1. Maintain a sense of diversity in use and physical character along the Avenue.
2. Encourage new development to be compatible in scale and character with abutting residential neighborhoods.
3. Improve pedestrian environment. Encourage active uses at the ground level and physical improvements to the streetscape.
4. Set forth general architectural guidelines for both infill and larger scale development.
5. Encourage the retention of existing historic structures.

The site is located in the *Trolley Square – Alewife Brook Parkway* sub area, which is recognized as a transitional district. The specific strategies for the sub area include:

1. Upgrading the existing uses to be compatible with the residential uses in the surrounding areas.
2. Improvement of public space by planting trees, repaving sidewalks, and providing street furniture.
3. Use of small scale architectural elements to tie new development to the neighborhoods beyond.
4. Use of a variety of street edges, landscaping, and small front yards to soften the Avenue as it makes a transition to the residential neighborhood beyond Richard Avenue

### **Area Planning and Zoning**

The zoning provisions particular to the North Massachusetts Avenue Subdistrict of the Massachusetts Avenue Overlay District (set forth in Section 20.110 of the Zoning Ordinance) were developed through a community-intensive planning process that began with issues identified by community members in the 2008 North Cambridge Neighborhood Study Update. The zoning was developed by CDD staff with participation from many North Cambridge residents, and ultimately adopted by the City Council in 2012.

The issue raised at the time was that while the zoning for the area encouraged residential development (consistent with the objectives of the 2001 citywide rezoning process), some of the zoning provisions unintentionally disincentivized the inclusion of ground-floor retail, which would provide neighborhood shopping and services and support a more active streetscape. As a result, over time many residential buildings were built without ground-floor uses that would make them more consistent with the desired urban character along Mass Ave.

The zoning now requires new residential development to include retail or other active non-residential uses at the ground floor. Strict dimensional requirements were put in place so that projects could be built without requiring relief, provided that all other requirements were met. However, the zoning also provides the ability for the Planning Board to approve modifications based on a review of the particulars of the site and the project, to ensure that the intent of the requirements are best met in a way that fits the unique conditions of that site.

If the requirements are met, or if the Planning Board approves modifications, the zoning provides some flexibility in the base zoning requirements. First, the required ground-floor uses can be incorporated into the overall residential FAR (limited at 1.75) rather than being calculated using the mixed-use formula, which effectively results in an FAR “penalty” for any non-residential use included in the project. Secondly, the maximum height is increased from 45 feet to 50 feet, mainly to accommodate the additional ceiling height often desired for ground floor commercial uses.

### **Site Characteristics**

There are a few features of this site that make it unusual when compared to other sites in the district.

1. It is located at the very northern end of the business district. Directly to the north of the site and across Mass Ave, the uses are predominantly residential houses with 1-3 units (although the immediate neighbor is a house that had been previously converted to an office) and the zoning is Residence B. While the site is fully within the commercial district and has had a commercial use for many years, it is at a transition point between the mixed-use Mass Ave corridor and the more residential portion of the corridor that extends toward Arlington.
2. The lot is relatively small and shallow compared to other developable lots in the Mass Ave corridor. The zoning district extends 100 feet back from the edge of the public way, and while many lots extend close to 100 feet back and occupy 100 feet (or more) of frontage along the avenue, this lot only extends about 50-60 feet from Mass Ave and occupies about 90 feet of Mass Ave frontage.

The size of the lot presents some practical issues in implementing the zoning requirements. The density limitations restrict development to a relatively small amount of housing compared to other developable lots. Open on-grade parking or underground parking, which might be more easily provided on a larger lot, would be difficult to provide given the constraints of this lot.

The location of the lot at the edge of the business district also presents practical issues, because the zoning requires a 35-foot height limit within 50 feet of an adjacent residential district. For most lots in the district, this step-down occurs at the rear of the lot, away from Mass Ave. In this case, the stepped-

down height means that the height is effectively limited to three stories for nearly half of the building's frontage along Mass Ave.

Finally, the location of the lot somewhat complicates the subdistrict's objective of a continuous Mass Ave retail frontage. The adjacent lot is in a residential district, where retail is not allowed. Therefore it may be more appropriate to think of this lot as a terminal point along the retail frontage, rather than a connecting element.

## **Proposal**

For a building on the given lot, the zoning requirement requiring 40 feet of retail depth along 75% of the building frontage would effectively require retail on the entire ground floor of the lot, which would correspondingly reduce the amount of residential development that could be built.

The proposal takes a different approach, where instead of distributing retail along the Mass Ave frontage, it tries to capitalize on its corner lot position by creating a small retail node with frontage along both Mass Ave and Richard Ave, with a space of just under 1,000 square feet. Though the retail space is smaller than required, it covers approximately half of the Mass Ave frontage plus nearly all of the Richard Ave frontage, therefore covering about 75% of the total street frontage and providing a space that is highly visible and accessible to people traveling up Mass Ave.

One way to think about this approach is that it applies a form that is generally consistent with the North Mass Ave requirements, but oriented toward the Richard Ave corner of the site rather than the Mass Ave frontage. Considering the site's characteristics, including its location at the terminus of the business district, its orientation with a shallow depth along Mass Ave, the limited height requirement across half of the building, and the requirement to accommodate off-street parking for the residential units, there is a logic to this approach.

The size and shape of the retail space – about 1,000 square feet on the ground floor with functional basement space below – might also make it attractive to smaller, local retail operators. The renderings suggest a café, with the potential for outdoor seating. The application does not specify the uses that could be included, so the Board may seek to clarify what range of options may be considered.

The other key special permit consideration is the reduction in height of the proposed retail space. The North Mass Ave requirements specify 15 feet, which was chosen as a height that would be attractive to a range of potential commercial operators. The proposed retail floor-to-ceiling height is about 9.2 feet, which is somewhat low for commercial uses. Although the reasoning is not explained in the application, part of the complication of a taller ground floor height is that it would require lowering the first two residential stories to meet the 35-foot height limit over half of the lot. The lower ground floor height also allows the height of the entire building to remain at just over 45 feet (except for a small portion above the elevator).

While there is logic to the ground-floor retail approach given the constraints of the site, it is still critical to ensure that the project creates as attractive and welcoming a streetscape along Mass Ave as possible. The proposed building provides parking in an enclosed area occupying about half of the Mass Ave frontage. Given that very little traffic would be generated, the proposed vehicular access and egress on

Mass Ave is acceptable and preferable to the alternative of providing it on Richard Ave where it would have greater impacts on residential abutters and on the viability of the detail space. While enclosing the parking provides a continuous building form on Mass Ave, the architectural treatment of that enclosure and associated landscaping are critical to ensuring that the project meets the area's planning and design objectives. More detailed design comments are provided in the following section.

### **Urban Design – Comments**

The scale and massing of the project is generally consistent with the character of surrounding residential development. The building punctuates the corner with a strong urban form, which is a dramatic improvement on the existing single-story dry cleaning store, expansive curb cuts, and large areas of pavement. The retail space includes good levels of storefront glazing and architectural detail, which celebrate the building's corner and encourages pedestrian activity.

In terms of site planning, the key areas of consideration are the proposed landscaping and parking. New street trees on both streets, and upgrades to the Mass Ave sidewalk are proposed, which will contribute to the tree-lined boulevard character of the Avenue and a more desirable pedestrian environment. Further review of the proposed planters and outdoor seating on Mass Ave will be required to ensure there is a minimum 5-foot wide sidewalk clearance zone.

Landscaping is also proposed to soften the parking area, as well as the building frontages, which helps create a sense of the landscaped front and side yards nearby. It would be useful to see a perspective view of the building from the west on Mass Ave to determine how successful the proposed fence and plantings will be at screening the west elevation. This side of the building exposes the first floor columns needed for the parking area, which is a specific architectural outcome that is discouraged in the guidelines.

The transparency of the windows in front of the parking area is also an important element of the pedestrian experience. The balance between shielding an undesirable view of the parking area and creating a blank façade is an important consideration for this project and should be further examined. A combination of frosted glass that has some translucency, and taller plantings or vines, may be the best response.

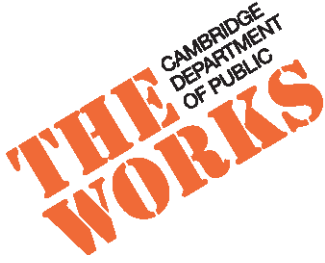
The Design Guidelines encourage use of bays, architectural details and smaller scale design elements to break down the scale of buildings and relate to the nearby housing. In this regard, the Architect has utilized a combination of small recesses, a strong cornice line, and a variety of window openings and other details to break up the mass of the building. Further articulation of the brick facade on Mass Ave could perhaps enliven this façade, which as proposed appears somewhat flat, particularly at the building entry and circulation zone.

Traditional materials, such as brick and wood, have been used in a combination that reflects the existing context of the Avenue, and generally responds to building setbacks or changes in plane. Staff note that the specifics of building materials have not been called out in the plans, and would request that this information be provided by the Applicant.

### **Continuing Review Items**

The following is a summary of issues that staff recommends should be further studied by the Applicant, either in preparing revised materials if the Planning Board continues the hearing to a future date, or as conditions for ongoing design review by staff if the Board decides to grant the special permit:

- Further study of the Mass Ave elevation with a view to incorporating additional articulation, and improving the treatment of the interface with the enclosed parking area.
- Review of the west elevation and screening of the first floor columns.
- Details of all external materials, colors and finishes.
- Landscape details.
- Review of the use and design of the retail space once a tenant has been selected.
- Review of the proposed bicycle parking to ensure that it meets zoning requirements. In particular, the location of required short-term bicycle parking is not shown on the plan. Two short-term bicycle parking spaces will be required (one for the retail use and one for the housing use), which could be provided by installing one bike rack in a location near the retail and residential entrances.



City of Cambridge  
Department of Public Works

*Owen O'Riordan, Commissioner*

147 Hampshire Street  
Cambridge, MA 02139  
theworks@cambridgema.gov

Voice: 617 349 4800  
TDD: 617 499 9924

June 23, 2015

TO: Planning Board

FROM: Katherine F. Watkins, PE  
City Engineer

**RE: Commercial Space and 5-Unit Development at 2551 Massachusetts Ave**

We are in receipt of the Special Permit Application materials for the above mentioned project, dated June 8, 2015. We have reviewed the materials and have presented below some comments related to the interests of the Department of Public Works.

The DPW encourages the Applicant to review the comments below and to arrange for a meeting with our staff discuss the development in advance of the Building Permit filing. The project will be subject to thorough and complete engineering review at the time of the Building Permit Application.

As the project is further developed, DPW will work with the applicant to ensure the following requirements are met:

**Public Infrastructure:**

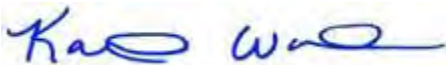
1. The Richards Ave roadway is currently scheduled for resurfacing in FY16 as is shown on the Five Year Street and Sidewalk Reconstruction Plan. This street is anticipated to be under construction as soon as spring of 2016. Once resurfaced there is a five year moratorium for utility cuts into the roadway. The Applicant is encouraged to evaluate the need for utility infrastructure connections in the Richard Ave right-of-way and to consider prioritizing any connections in advance of the City resurfacing project.
2. Requirements for temporary and permanent alterations to the Public Right of Way will be considered as part of the Building Permit review process, once a full understanding of the scope of the utility and surface work is presented.
3. Proposed tenant use of the City sidewalk will need to be reviewed and approved by the DPW.

**Stormwater Management:**

1. Under the City Land Disturbance Regulations, the Applicant will need to obtain a Stormwater Control Permit from the Department of Public Works. The permit requirements cover the design standards and long term operation and maintenance of a management system for the project site, as well as the construction phase erosion and sedimentation control plans. The permit requirements also include the standard to mitigate the stormwater runoff from the site from the proposed 25-year storm to a rate below the pre-redevelopment 2-year storm event.

Please feel free to contact me with any questions or concerns related to the comments provided above.

Sincerely,

A handwritten signature in blue ink that reads "Katherine Watkins". The signature is fluid and cursive, with the first name "Katherine" and the last name "Watkins" clearly distinguishable.

Katherine F. Watkins, P.E.  
City Engineer



## Massachusetts Avenue Overlay District: Modification of North Mass Ave Subdistrict Requirements

[Note that the following requirements apply to portions of the Massachusetts Avenue Overlay District north of Porter Square and may be modified by the Planning Board as set forth on the following page. The highlighted text indicates the provisions that are proposed to be modified.]

**20.110.21** *Required Ground Floor Non-Residential Uses.* The ground floor of any building that fronts directly onto Massachusetts Avenue shall consist of at least one (1) active non-residential use meeting the following requirements:

1. *Range of Qualifying Uses.* The required ground floor active non-residential uses shall be limited to one or a combination of the following uses, to the extent permitted in the base zoning district:
  - a. Section 4.34 a (office of a physician, dentist or other medical practitioner not located in a clinic listed under subsection 4.33(d)), b (office of an accountant, attorney, or other non-medical professional person (includes properly licensed massage therapists), c (real estate, insurance or other agency office), d (general office use), e (bank, trust company or similar financial institution (retail banking only));
  - b. Section 4.35 a (retail sales), c (barber shop, beauty shop, laundry and dry cleaning pickup agency, shoe repair, self service laundry or other similar establishment), d (hand laundry, dry cleaning or tailoring shop), e (lunchroom, restaurant, cafeteria), f (restaurant or bar), g (entertainment), h (theater or hall for public gatherings), i (commercial recreation), k (printing shop, photographer's studio), l (veterinary establishment, kennel, pet shop or similar establishment), o (fast order food establishment), q (art/craft studio), r (bakery, retail);
  - c. Section 4.36 a (sales place for flowers, garden supplies, agricultural produce conducted partly or wholly outdoors; commercial greenhouse or garden);
  - d. Section 4.56 a(4) (religious or social recreation center), c(4) (college theater), e(4,5,6) (medical clinics), f (social service or community center), g(3) (museum), g(5) (public park, playground, or public recreation building), i(2) (museum or non commercial gallery).
2. *Minimum Depth.* The required ground floor uses shall have a minimum depth of forty (40) feet measured from the Massachusetts Avenue frontage of the building (or the full depth of the building if less than forty (40) feet).
3. *Floor Elevation.* The floor elevation of the required ground floor uses shall be at the mean grade of the adjacent public sidewalk.
4. *Minimum Linear Frontage.* The required ground floor non-residential use shall occupy a minimum of 75% of the linear frontage of the building facing Massachusetts Avenue.

5. *Individual Store Size.* Any separately leased required ground floor non-residential use shall contain no more than 5,000 square feet of Gross Floor Area, which shall include any floor area located below grade.
6. *Minimum Ground Floor Height.* For any ground floor portion of a building containing a required non-residential use the minimum ground floor height shall be fifteen (15) feet measured in the manner described in Paragraph 20.110.42. If the ground floor height is reduced below fifteen (15) feet by special permit or variance, there shall be a commensurate reduction in the total height of the building.
7. *Maximum Bank Frontage.* No bank, trust company or similar financial institution may occupy a building frontage of more than twenty-five (25) feet.

**20.110.22** *Modifications to Standards.* As set forth below, the Planning Board may grant a special permit to waive certain requirements of Subsection 20.110.21 above. A project receiving a special permit pursuant to this Subsection 20.110.22 shall be considered to meet the requirements of Subsection 20.110.21 for the purpose of applying the other provisions of this Section 20.110.

**1. Modifications to the Dimensional Provisions of Subsection 20.110.21**

The Planning Board may approve modifications to the dimensional requirements set forth in Subsection 20.110.21 Paragraphs (2-7) upon making a determination that (a) the proposed modified dimensions do not substantially derogate from the intent of the requirement to provide for a reasonably continuous active ground floor frontage along the public street and (b) the overall floor area of required active non-residential ground floor uses is not substantially reduced and (c) the modifications are the minimum necessary to reasonably accommodate the new construction on the lot.

**2. Additional Non-Residential Uses Not Otherwise Permitted in Subsection 20.110.21**

The Planning Board may approve active non-residential ground floor uses not specifically listed in Subsection 20.110.21 Paragraph (1), to the extent permitted in the base zoning district, upon making a determination that an alternate ground floor use will provide services or amenities to the general public and will promote an active, pedestrian-friendly street front consistent with the objectives of this Overlay District and Subdistrict.

## General Criteria for Issuance of a Special Permit

**10.43** *Criteria.* Special permits will normally be granted where specific provisions of this Ordinance are met, except when particulars of the location or use, not generally true of the district or of the uses permitted in it, would cause granting of such permit to be to the detriment of the public interest because:

- (a) It appears that requirements of this Ordinance cannot or will not be met, or
- (b) traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character, or
- (c) the continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would be adversely affected by the nature of the proposed use, or
- (d) nuisance or hazard would be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City, or
- (e) for other reasons, the proposed use would impair the integrity of the district or adjoining district, or otherwise derogate from the intent and purpose of this Ordinance, and
- (f) the new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30. **[SEE FOLLOWING PAGE]**

**19.30 Citywide Urban Design Objectives [SUMMARIZED]**

| Objective  | Indicators  |
|--|---|
| New projects should be responsive to the existing or anticipated pattern of development.   | <ul style="list-style-type: none"> <li>• Transition to lower-scale neighborhoods</li> <li>• Consistency with established streetscape</li> <li>• Compatibility with adjacent uses</li> <li>• Consideration of nearby historic buildings</li> </ul>   |
| Development should be pedestrian and bicycle-friendly, with a positive relationship to its surroundings.                                   | <ul style="list-style-type: none"> <li>• Inhabited ground floor spaces</li> <li>• Discouraged ground-floor parking</li> <li>• Windows on ground floor</li> <li>• Orienting entries to pedestrian pathways</li> <li>• Safe and convenient bicycle and pedestrian access</li> </ul>   |
| The building and site design should mitigate adverse environmental impacts of a development upon its neighbors.                            | <ul style="list-style-type: none"> <li>• Location/impact of mechanical equipment</li> <li>• Location/impact of loading and trash handling</li> <li>• Stormwater management</li> <li>• Shadow impacts</li> <li>• Retaining walls, if provided</li> <li>• Building scale and wall treatment</li> <li>• Outdoor lighting</li> <li>• Tree protection (requires plan approved by City Arborist)</li> </ul> |
| Projects should not overburden the City infrastructure services, including neighborhood roads, city water supply system, and sewer system. | <ul style="list-style-type: none"> <li>• Water-conserving plumbing, stormwater management</li> <li>• Capacity/condition of water and wastewater service</li> <li>• Efficient design (LEED standards)</li> </ul>   |
| New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically.                     | <ul style="list-style-type: none"> <li>• Institutional use focused on existing campuses</li> <li>• Mixed-use development (including retail) encouraged where allowed</li> <li>• Preservation of historic structures and environment</li> <li>• Provision of space for start-up companies, manufacturing activities</li> </ul>   |
| Expansion of the inventory of housing in the city is encouraged.   | <ul style="list-style-type: none"> <li>• Housing as a component of large, multi-building development</li> <li>• Affordable units exceeding zoning requirements, targeting units for middle-income families</li> </ul>   |
| Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city.                     | <ul style="list-style-type: none"> <li>• Publicly beneficial open space provided in large-parcel commercial development</li> <li>• Enhance/expand existing open space, complement existing pedestrian/bicycle networks</li> <li>• Provide wider range of activities</li> </ul>  |

---

**North Massachusetts Avenue  
Urban Design Guidelines Handbook**

Cambridge Community Development Department  
Wallace, Floyd, Associates, Inc.

*July 1986*

---

**North Massachusetts Avenue  
Design Guidelines**

**City Manager**

Robert W. Healy

**Cambridge City Council**

Walter J. Sullivan, Mayor

Frances H. Duehay, Vice Mayor

Thomas W. Danehy

Sandra Graham

Sheila Russell

David Sullivan

Alfred E. Vellucci

William H. Walsh

Alice Wolf

**Cambridge Planning Board**

Paul Dietrich, Chair

David Kennedy, Vice Chair

Joyce Bruchner

Alfred Cohn

Arthur Parris

Carolyn Mieth

John Woolsey

**Assistant City Manager  
for Community Development**

Micheal Rosenberg

**North Mass Avenue Urban Design  
and Land-Use Study Team**

Betty Desrosiers, Project Director

Lester Barber, Land-Use and Zoning

Roger Boothe, Urban Design

**Consultants**

**Wallace, Floyd, Associates, Inc**

Gorden Brigham, Project Manager

Deneen Crosby, Landscape Architect

Richard Nugent, Urban Design

Linda Ross, Planner

**North Mass Avenue Advisory Committee**

**Business Representatives**

Reginald Franklin

Charles Laverty

Karen Swaim

Alex Twining

Peter Wasserman

**Resident Representatives**

Rob Barber

Joel Bard

Fred Levy

John Lowry

Florence Mountain

**Publication**

Wallace, Floyd, Associates - Text,

Photography and Illustration

Robin Shore - Graphics Director

---

## **Table of Contents**

1.0 Intent

2.0 Study Area

2.1 General Objectives

2.2 Design Elements

2.3 Historic Preservation

3.0 Sub Areas and Design Guidelines

3.1 Cambridge Common - Porter Square

3.2 Porter Square

3.3 Porter Square - Trolley Square

3.4 Trolley Square

3.5 Trolley Square - Alewife Brook Parkway

---

## **1.0 Intent**

The purpose of this report is to establish a set of design guidelines for the North Massachusetts Avenue corridor.

It has been prepared in response to both public and private concerns about the quality of the environment along North Massachusetts Avenue and its relationship to the neighborhoods surrounding it.

The corridor has been undergoing rapid redevelopment due to increased market pressure resulting from the opening of the Porter Square Transit Station and the business climate of the Boston Metropolitan area in general. The City of Cambridge has conducted an urban design and land use study of the corridor. The results of this study are set forth in the North Massachusetts Avenue Urban Design and Land Use Study as prepared by Wallace, Floyd, Associates Inc. (WFA). Material used in this report has been taken, in part, from the North Massachusetts Avenue Urban Design and Land Use Study. The latter study was undertaken to prepare recommendations for specific changes to zoning regulations affecting the study area.



## 2.0 Study Area

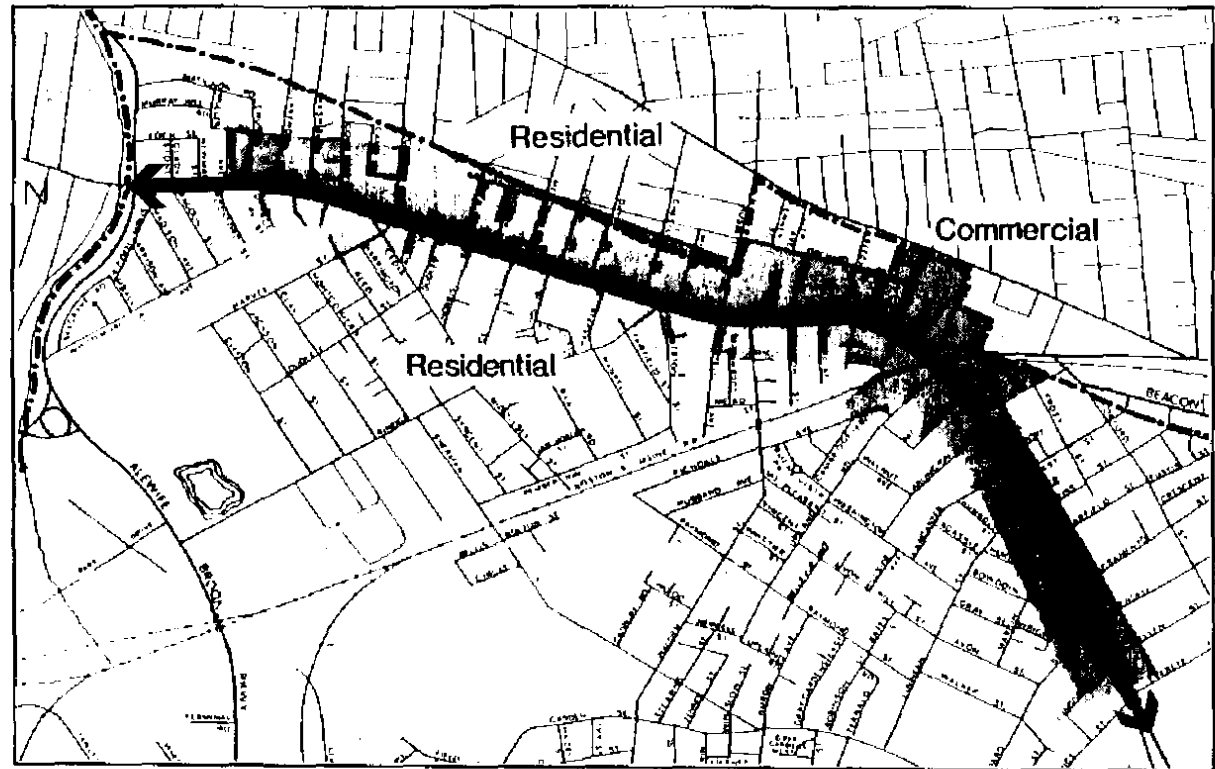
The study area for this report extends along Massachusetts Avenue from the Cambridge Common to Alewife Brook Parkway at the Arlington line. It includes all of the zoning districts through which the Avenue passes.

The study area corresponds to the study area as identified in the Urban Design and Land Use Study as prepared by WFA.

## 2.1 General Objectives

Massachusetts Avenue, which passes through a diverse group of Cambridge places, is more a reflection of these places than an entity in itself. At any location along the Avenue, a mix of local and city-wide uses can be found. This mix varies as the Avenue links up with other major features of Cambridge such as the MBTA Red Line, Alewife Brook Parkway, Harvard University, etc.

This report is intended to reinforce the mixed-use nature of the Avenue while encouraging a general level of quality in new and rehabilitated construction throughout the corridor.



The overall goals for this study are as follows:

1. Maintain a sense of diversity in use and physical character along the Avenue.
2. Encourage any new development to be compatible in scale and character with abutting residential neighborhoods.
3. Improve pedestrian environment. Encourage active uses at the ground level and physical improvements to the streetscape.
4. Set forth general architectural guidelines for both infill and larger scale development.
5. Encourage the retention of existing historic structures.

• **Landscaping** - as mentioned above, landscaping can be used to screen parking, loading areas, or other undesirable areas of the site from the passerby. Along much of the Avenue landscaping in the form of small front yards can be used to break up the hardness of the Avenue edge and to keep a sense of the front lawns of earlier houses. Landscaping can also be used to help make the larger buildings along the Avenue compatible with the neighborhoods beyond; in addition, plantings can help screen the light and noise of these buildings from the neighborhoods.

• **Parking** - wherever possible a parking lot should be situated so that its entrance and exit do not add traffic to the residential streets behind the Avenue. In order to improve the pedestrian space of the Avenue, parking lots should be screened from the sidewalk by landscaping, a low wall, or both. Parking lots should not be placed in front of buildings or on corner lots where they will not be screened by buildings. Front yards can be landscaped or added to the sidewalk where they might serve as a place for a cafe or some other sidewalk related activity. Buildings should not be raised up on stilts or sit on blank walls in order to accommodate parking.

### **The Building**

The existing buildings along the Avenue contain a variety of shapes and details. Regardless of their age, the buildings which contribute to a lively streetscape have two common features. These features are the use of a variety of building surface textures and the use of small scale architectural articulation. Both of these ideas can be used to break up the mass of repetitive buildings, relate newer buildings to older ones, and to make larger buildings along the Avenue compatible with smaller ones in the neighborhoods beyond.

These two ideas are explored further below:

#### **Architectural Articulation**

- **Bay windows** - use of projecting bays on the front or side walls is encouraged.
- **Facade modulation** - portions of the building can be set back at different depths from the property line to break up the mass of longer buildings or to emphasize a special part of the building such as an entrance.
- **Building massing** - buildings along the Avenue should be designed to step down

to residential areas beyond so that they do not overwhelm the smaller structures in the neighborhoods.

- **Roof forms** - use of a variety of roof forms to add interest to the skyline of the Avenue and avoid the monotony of rows of flat buildings. These forms include turrets, detailed cornices, roof shapes, dormers etc., and are currently found in great variety along the Avenue.
- **Small scale elements** - elements such as porches, entrance ways, balconies, and awnings are encouraged as a way of relating the architecture to its inhabitants and helping to give the Avenue a more human scale. This is especially true along commercial frontage where a long uninterrupted wall could be enlivened by a number of the above elements without harming its function as a retail facade.

#### **Building Materials**

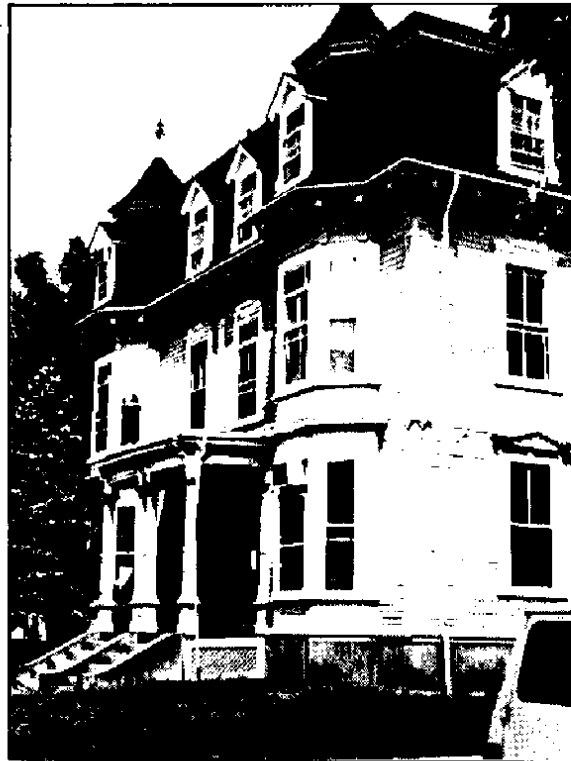
- **Traditional materials** - materials such as brick, stone or wood should be used to relate to the existing context of the Avenue. These materials should be used to highlight architectural features of the building such as bays, etc. This could be achieved by breaking up the larger surfaces of a building (as string cornices and other types of molding might do), or by dividing the

building into several pieces (as a stone base might do). Large blank walls of any materials should be avoided.

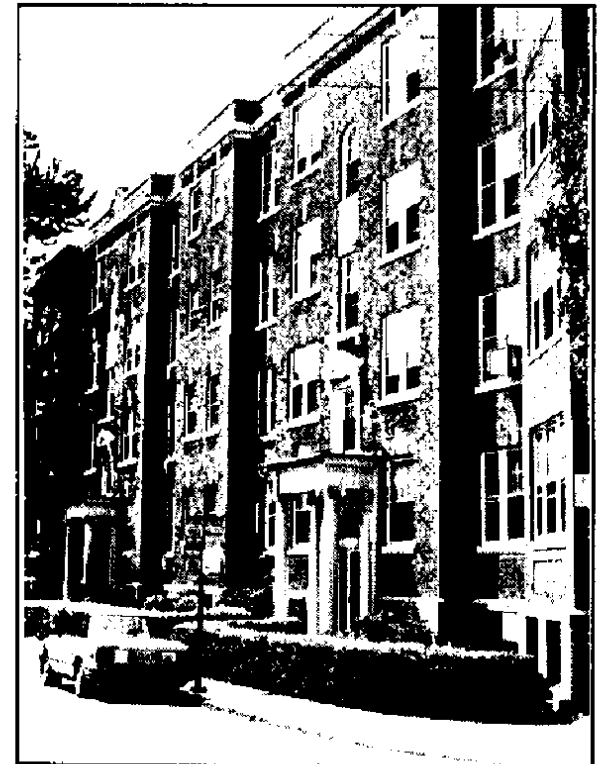
- **Glass area** - glass openings should be kept similar to the traditional types which can be seen along the Avenue. These include a variety of proportions, but in any case the windows should be seen as distinct elements within a wall and should not blend together into a "window wall." The only exception to this might be the ground floor of a commercial building. Reflecting glass should not be used regardless of the window size or shape.

### North Massachusetts Avenue Context

The design elements above have been taken in part from the existing context of the Avenue. Below are several examples of these elements as they are found along the Avenue.



A Victorian building with large bay windows, a porch, and an abundance of details along the roof.



Apartment building in traditional materials broken into several smaller pieces by the use of setbacks of various depths and entrance porches. Small lawns help relate this building to adjacent smaller houses.

Multi-use buildings with a variety of traditional window openings, small signs, and a horizontal cornice.

## 2.2

### Design Elements

The character of Massachusetts Avenue varies greatly as one moves along the Avenue. In places, it is a pleasant tree-lined boulevard; however, at other places, it is dominated by strip development and parking lots.

The whole of North Massachusetts Avenue could become a tree-lined boulevard with a lively pedestrian streetscape. This boulevard, anchored at Porter Square with the MBTA Station, could be supported by a variety of local uses along its length. A strong residential presence along the Avenue would be important in order to encourage pedestrian traffic and to insure compatibility between the activities of the Avenue and those of the neighborhood beyond. The newer buildings along the Avenue should take account of the rich architectural language and the attention to detail which characterize many of the older structures along the Avenue.

This vision of North Massachusetts Avenue would be realized as a product of many individual decisions rather than as the product of an overall design plan for the Avenue. This section is intended to serve as a reference catalog of most of the design elements along North Massachusetts Avenue. It can be used for a guide-

line for making design decisions concerning various aspects of the Avenue. These elements make up the context of North Massachusetts Avenue and are described in the three categories below. Several examples of this context follow to illustrate these elements as they can be found along the Avenue.

#### The Streetscape

The streetscape of North Massachusetts Avenue should be an inviting place for pedestrians as well as an efficient route for autos. Its present character varies greatly as one moves from the Cambridge Common to the Arlington line. Several aspects of the streetscape could contribute to make all of the Avenue feel like an inviting boulevard. These are listed below.

- **Street trees** — used wherever possible to provide shade, as a relief to large areas of pavement, and as a way to provide a continuous rhythm as one moves along the Avenue.
- **Street lighting** - can do more than provide illumination. Smaller scale light fixtures can be used along with street lights to relate to the pedestrian and tie the architecture along the Avenue to the public space of the sidewalk and street. Architec-

tural features can also be lit as landmarks, contributing both to their own image and that of the overall streetscape.

- **Signage** - signs which are in character and scale with their surroundings can be used to enliven the streetscape as they convey information. Examples of signs which are worked into the architecture of the Avenue abound. Larger signs, billboard types, and freestanding signs should be avoided.

- **Paving** - uses of small scale materials for paving all non-traffic areas such as parking spaces, median strips, and crosswalks could further enhance the pedestrian environment of the Avenue. These materials include brick, stone, and small concrete pavers.

#### The Site

The land along the Avenue which is not covered with a building is generally used for either landscaping or parking. Traditionally, buildings along the Avenue were either built up to their property lines or surrounded by landscaped yards. This historic sense of place can be maintained with sensitive site planning while still accommodating today's need for parking. Below are several suggestions for ways to approach this situation.

---

### **2.3 Historic Preservation**

The structures along North Massachusetts Avenue represent a broad span of Cambridge history. Although some have been maintained in their original condition, many have been razed or altered substantially.

A study is currently underway to identify those structures which may qualify for historic designation.

Although relatively few structures may be designated as historic properties, the historic character of the Avenue is drawn from all of the structures along it. Any changes made to existing properties should demonstrate sensitivity toward the historic quality of the property and its surroundings regardless of its status as an historic property.

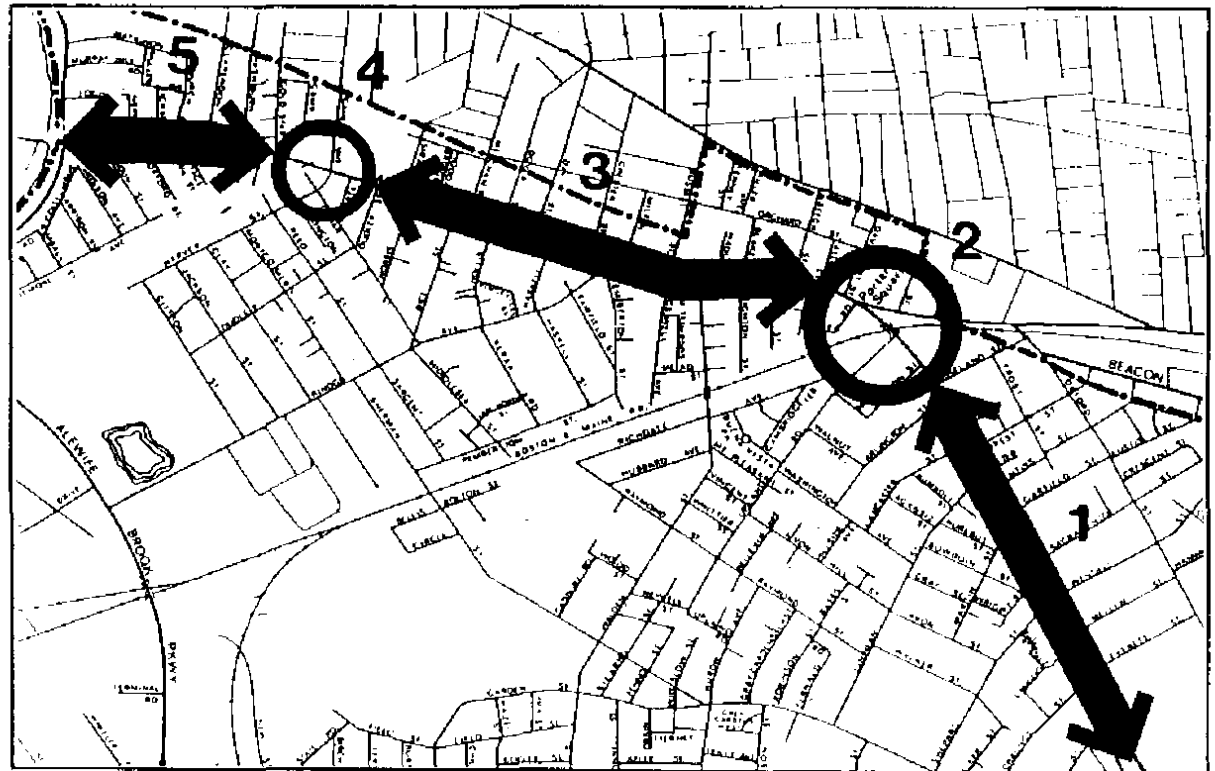
### 3.0 Sub Areas and Design Guidelines

The corridor can be broken down into several sub areas. In each case the divisions have been determined by the general character of the Avenue and therefore do not necessarily correspond to the present zoning boundaries along the Avenue. They are consistent with, but somewhat different from, the areas defined in the Urban Design/Land Use Study, to relate to existing zoning.

The sub areas are as follows:

1. Cambridge Common to Porter Square
2. Porter Square
3. Porter Square - Trolley Square
4. Trolley Square
5. Trolley Square - Alewife Brook Parkway

These sub areas delineate two nodes, Porter Square and Trolley Square, which include larger parcels along the corridor otherwise characterized by small parcels.



### 3.1

## Area 1 - Cambridge Common - Porter Square

### General Description of Existing Conditions

**Use** - this area is primarily a residential area with some local shopping.

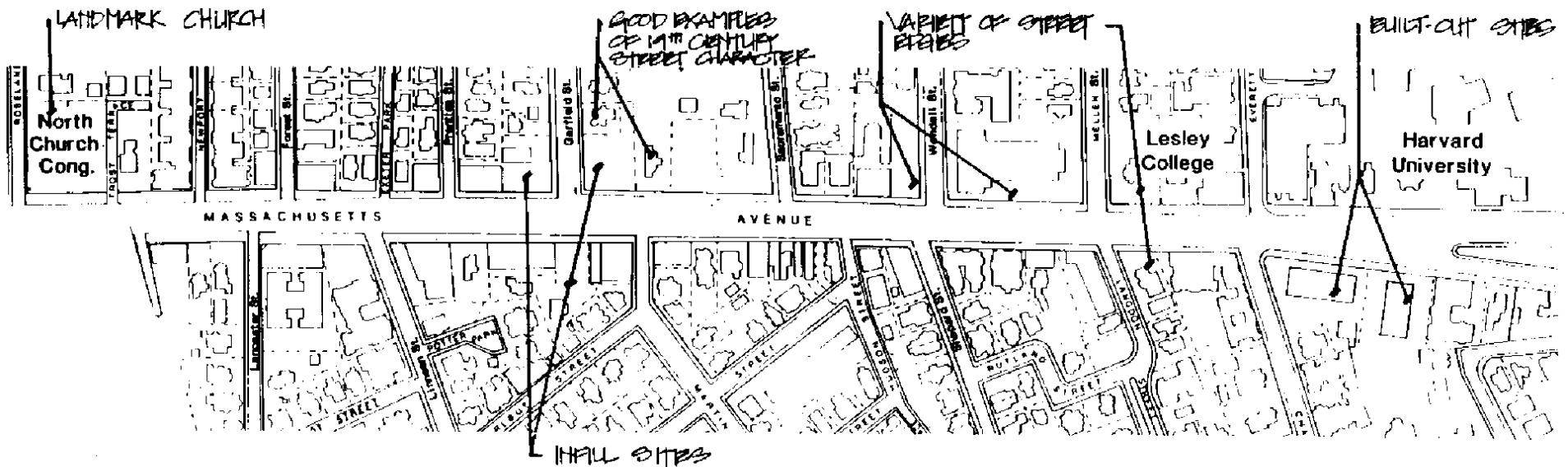
**Physical Characteristics** - except for the lower end (along the Cambridge Common), the area is fairly open. A loosely defined streetscape is maintained by one-story commercial rows and several free-standing houses.

**Activity** - except for the lower end (along the Cambridge Common), the area is fairly busy because of its intense retail activity and its location between two subway stations.

**Development** - due to the size and configuration of the sites, most new development is likely to occur on a parcel by parcel basis in an infill manner. There are few available sites along this stretch of the Avenue.



A variety of building typologies with small scale articulation & details.



## Area 1 Strategy

Maintain this area as a local link between the Common and Porter Square. This includes:

- encouragement of infill development which faces directly on to Avenue.
- the use of small scale architectural elements such as balconies, porches, and roof forms to maintain compatibility with the neighborhood behind, especially where older Victorian houses are to remain.
- the use of some setbacks with room for landscaping or outdoor seating would be appropriate here to maintain the diversity which currently exists along the street fronts of this part of the Avenue.

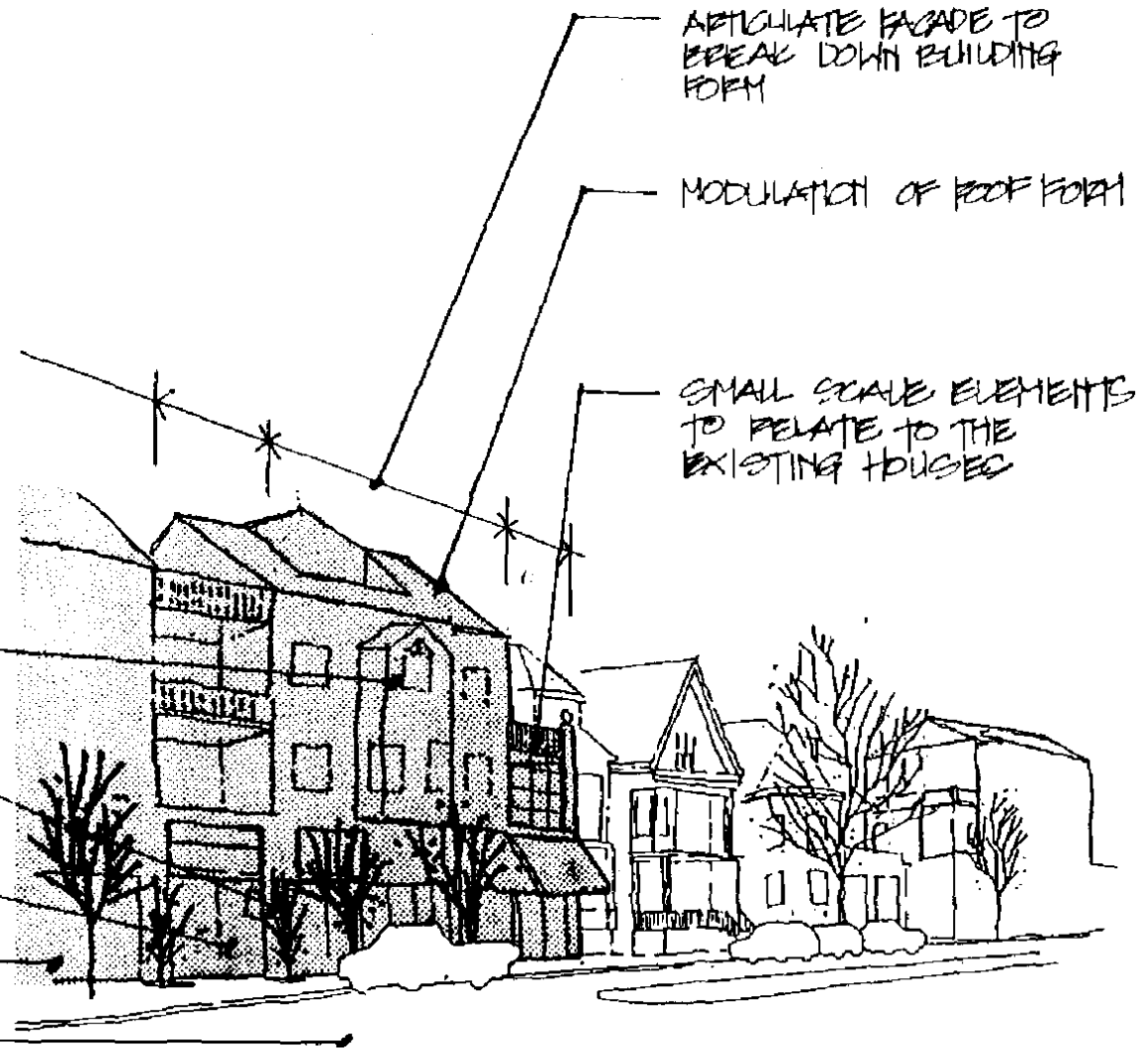
USE OF BAYS & OTHER 3-DIMENSIONAL ELEMENTS TO REFER TO SMALLER SCALE

SOME LANDSCAPING AT SETBACKS

ACTIVE GROUND FLOOR USES CONNECTED TO THE STREET

NO PARKING ALONG AVENUE FRONT

MASSACHUSETTS AVENUE





### 3.2

#### Area 2 Porter Square

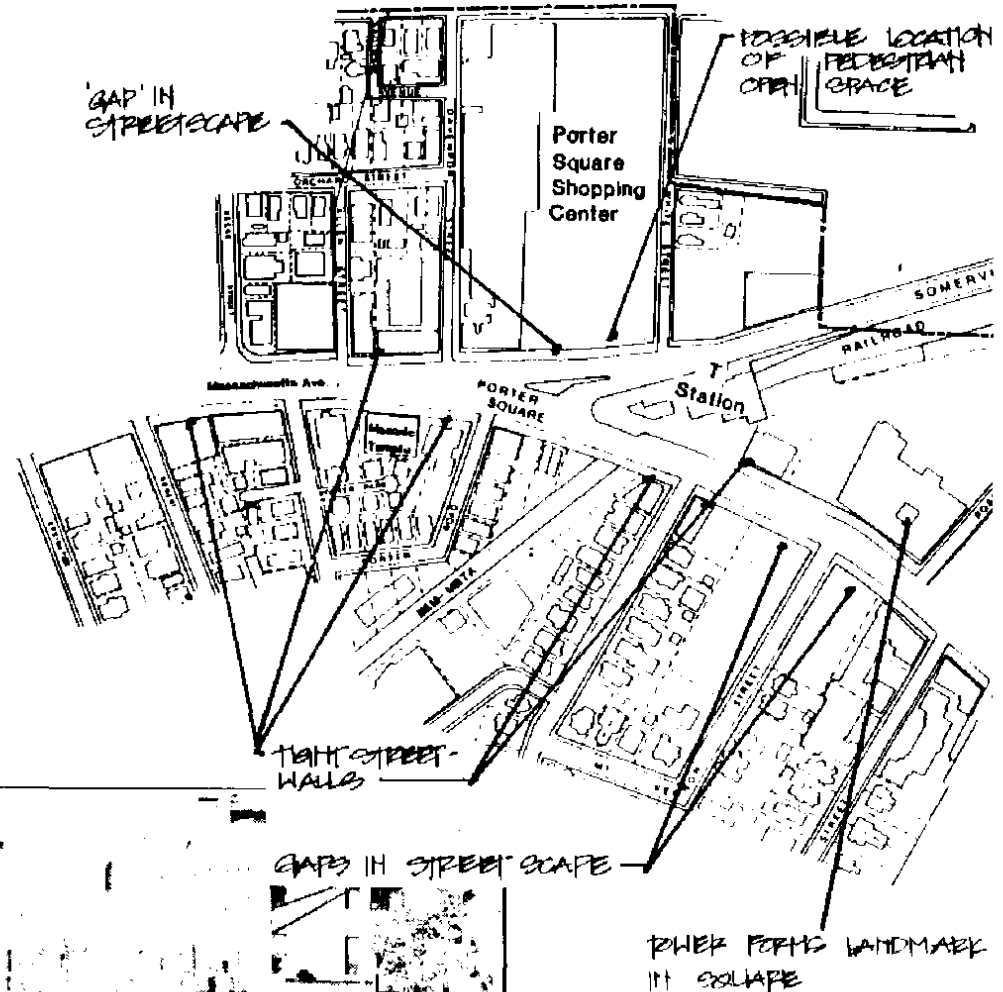
##### General Description of Existing Conditions

**Use** - this is primarily a commercial area with some nightlife which draws on a larger surrounding than its immediate neighborhood.

**Physical Characteristics** - present under-developed land gives this place an open feel - however a traditional urban character has been set up by streetwalls and building typology on most of the developed parcels along the southwest side of the Avenue.

**Activity** - there is intense pedestrian and auto activity due to the Porter Square T Station which serves the Subway and Commuter lines, and the intersection with Somerville Avenue.

**Development** - the future use of several large parcels such as those on Mount Vernon Street and the Porter Square Shopping Center is likely to change the character of this area.



Dense urban character of Porter Square

## Area 2 Strategy

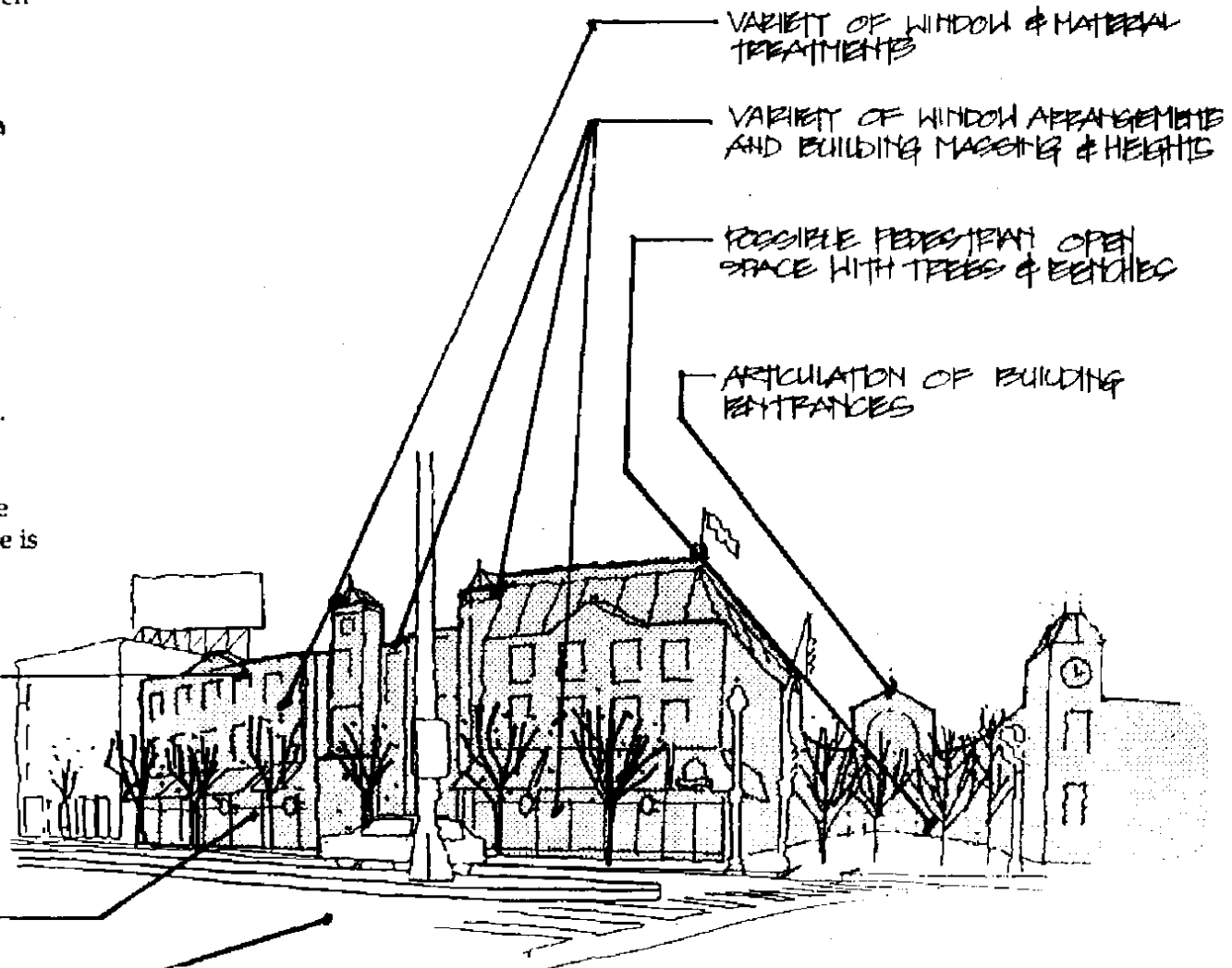
Maintain Porter Square as a commercial node along Massachusetts Avenue in the tradition of other Cambridge squares such as Harvard Square and Inman Square. This includes:

- encouragement of an active retail area which could serve local interests.
- development of a physical fabric to support pedestrian activity such as strongly defined street edges with shop entrances or outdoor cafes. A variety of building heights will complement the existing landmarks such as the Porter Exchange and the MBTA Station mobile.
- Construction of a small pedestrian square. Presently the area does not have many pedestrian amenities and therefore is not an inviting place for pedestrians to linger.

STREET WALLS - NO SETBACK

ACTIVE GROUND FLOOR  
USES CONNECTED TO THE  
STREET. USE OF CANOPIES,  
SIGNS, ENTRANCES, ETC.

MASSACHUSETTS AVENUE



3.3

Area 3 Porter Square - Trolley Square

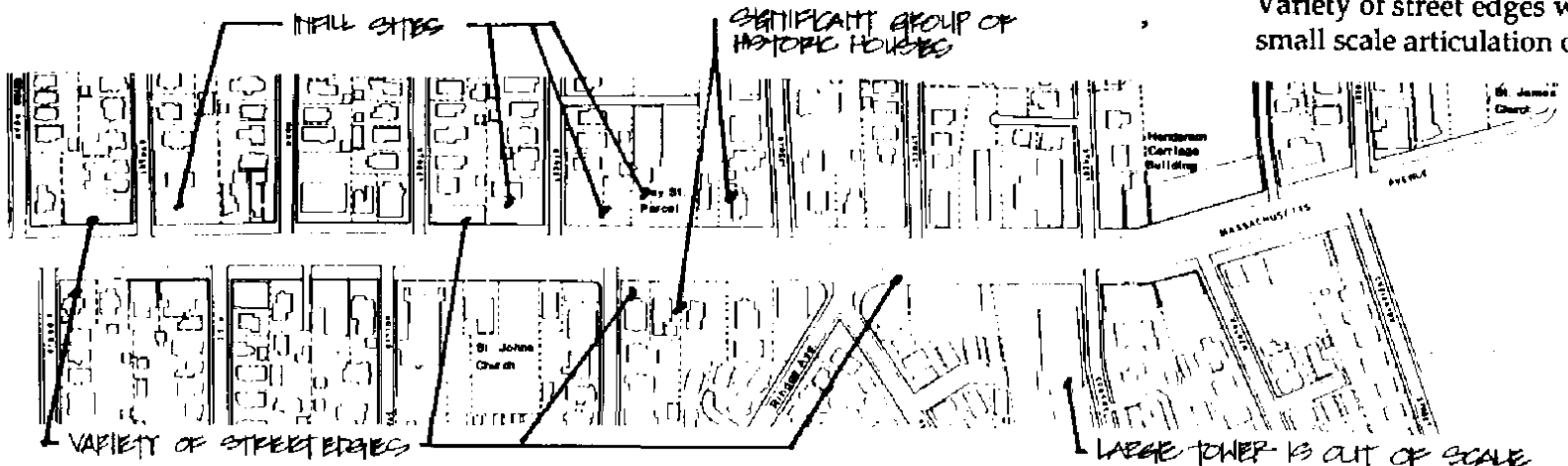
General Description of Existing Conditions

Use - the area contains a mixture of residential and local business uses.

Physical Characteristics - except for one or two residential towers this open area is characterized by low scale buildings. A loosely defined streetscape is maintained by one story commercial rows and several houses which are set back from the street. The most notable feature of this area is a group of large Victorian houses between Rindge Avenue and Haskell Street.

Activity - pedestrian activity tapers off here as one moves away from Porter Square toward the less developed blocks between Rindge Avenue and Trolley Square.

Development - several infill sites and a larger site at Day Street are available. New development is likely to occur on a parcel by parcel basis.



Variety of street edges with small yards and small scale articulation of buildings.

### Area 3 Strategy

Maintain this area as local link between Porter Square and Trolley Square with a variety of street edge conditions. This includes:

- encouragement of infill development which faces directly on to the Avenue.
- the uses of small scale architectural elements such as balconies, porches and roof forms to maintain compatibility with the neighborhood behind the Avenue.
- the use of some setbacks with room for landscaping or outdoor commercial uses in front of buildings would be appropriate here to maintain the diversity which currently exists along the street front of this part of the Avenue.

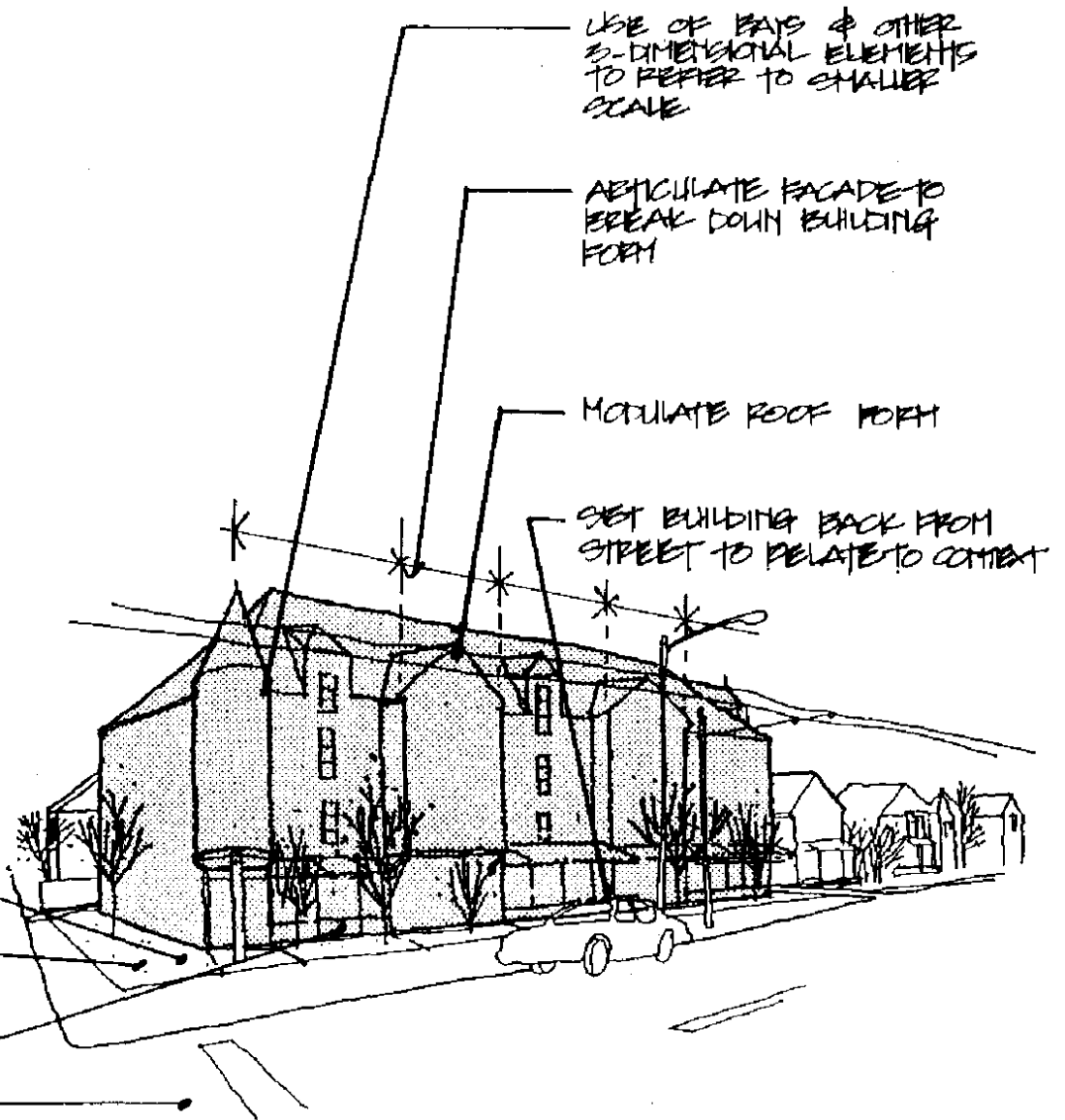
DAY STREET

NO PARKING AT CORNER OR IN FRONT OF BUILDING

LANDSCAPING AT SETBACKS

CONNECT GROUND FLOOR USES TO STREET

MASSACHUSETTS AVE





## Area 4 Strategy

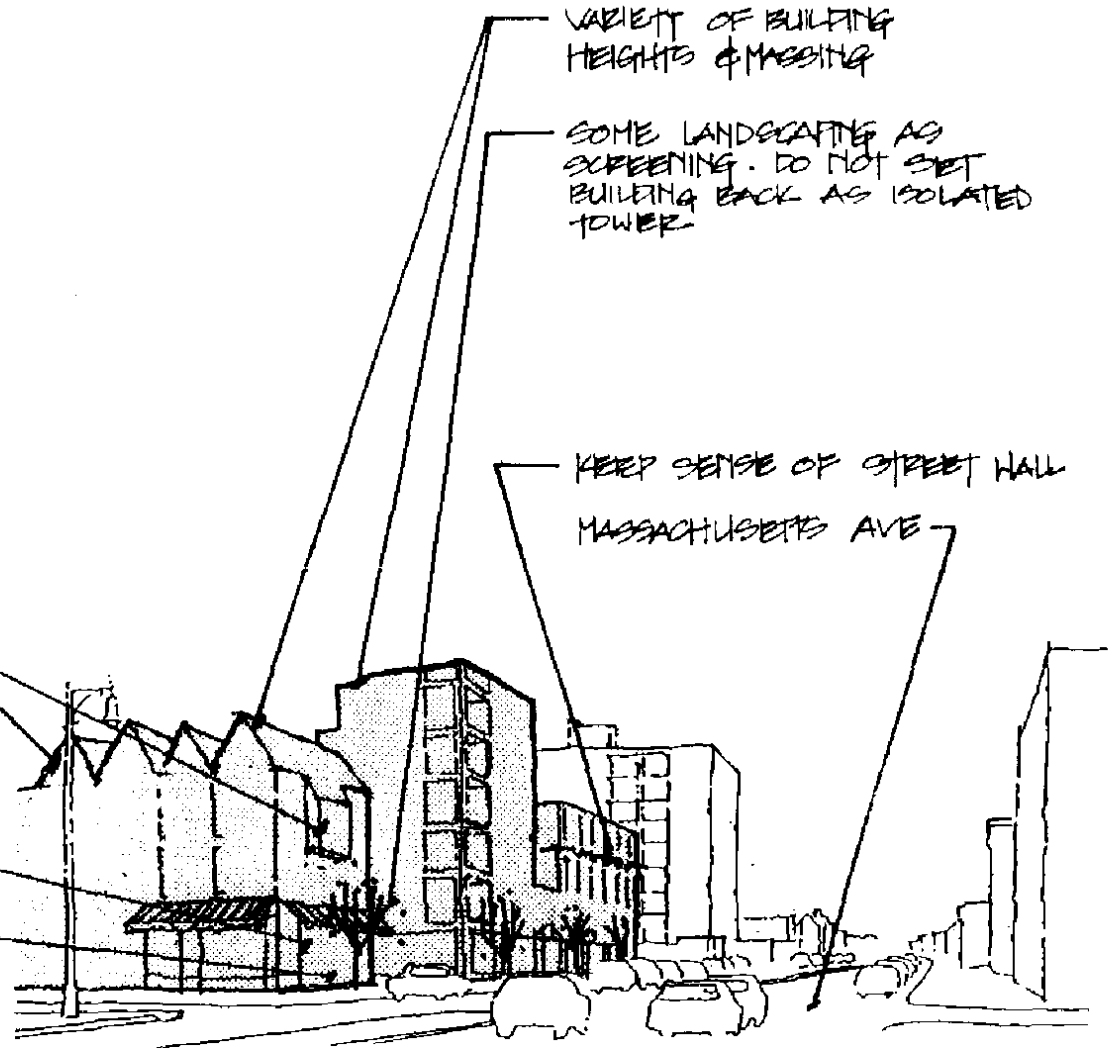
Allow Trolley Square to develop a strong neighborhood identity with residential infill along this part of the Avenue. This would include:

- development of links from the new residential fabric to the Linear Park.
- the use of creative massing studies to allow for higher densities and compatibility with the surrounding neighborhoods.
- development of a diversity of building forms along the Avenue which have small scale elements to relate to the pedestrian environment.
- some commercial uses at the ground floor of larger developments.

EXPRESS INDIVIDUAL DWELLING UNITS WITH MASSING & FACADE ARTICULATION

ALLOW SOME GROUND FLOOR COMMERCIAL USES

NO PARKING ALONG BUILDING FRONT

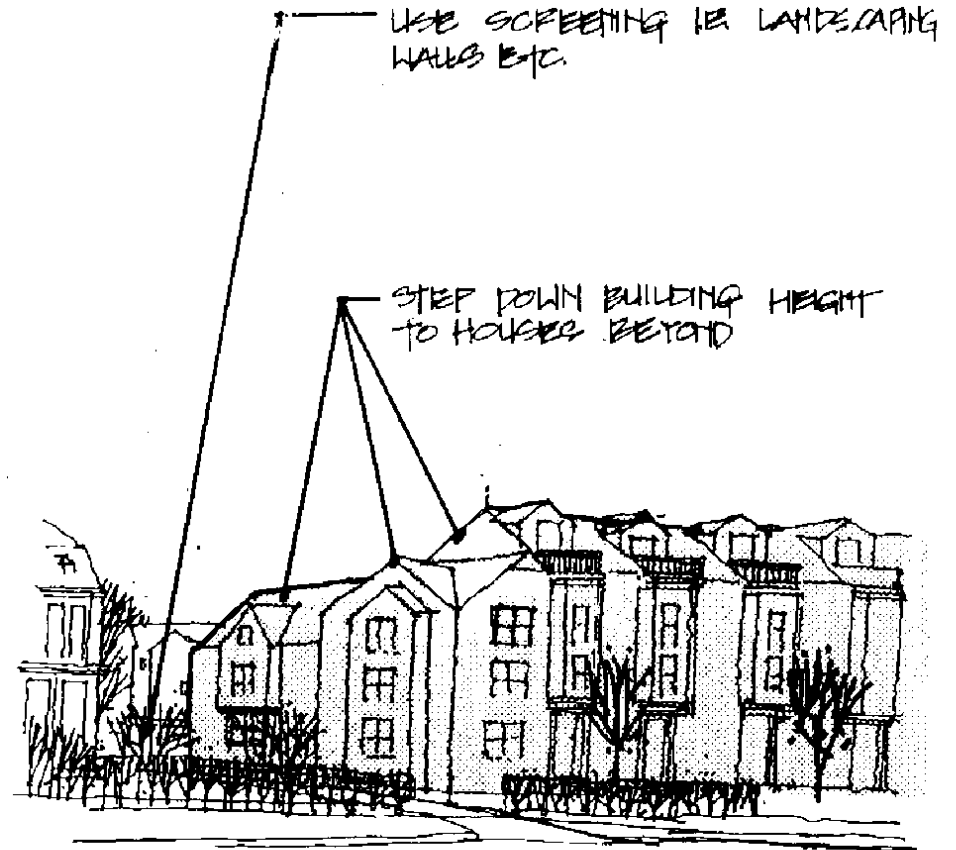


VARIETY OF BUILDING HEIGHTS & MASSING

SOME LANDSCAPING AS SCREENING. DO NOT SET BUILDING BACK AS ISOLATED TOWER

KEEP SENSE OF STREET HALL MASSACHUSETTS AVE

Small scale residential neighborhoods exist behind each sub area and at the north end of Sub Area 5 (pictured below). Careful massing and setback configurations should be used in all areas to minimize the impact of new construction along the edges of these neighborhoods as illustrated.



### 3.5

## Area 5 Trolley Square - Alewife Brook Parkway

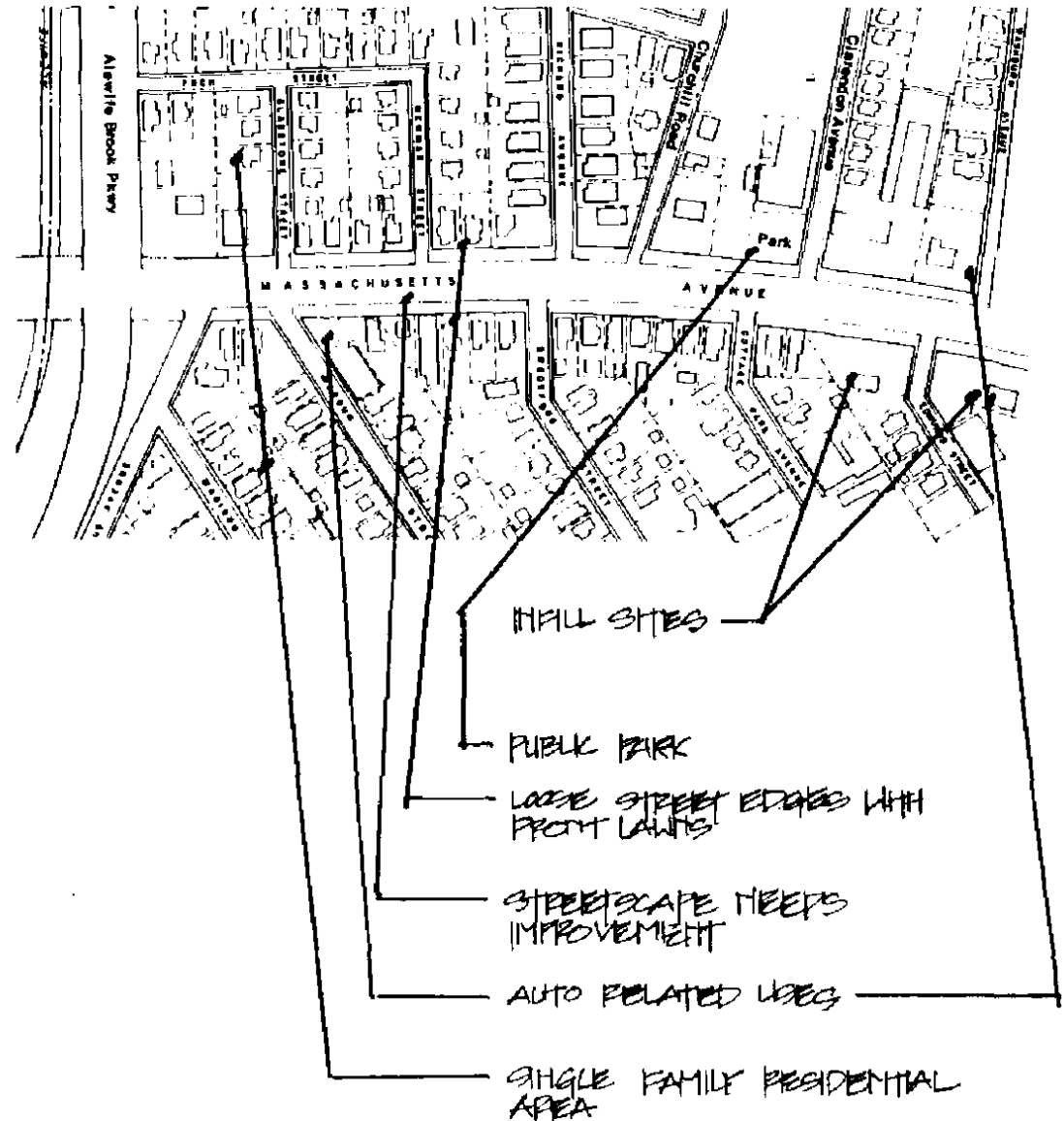
### General Description of Existing Conditions

Use - a mixture of residential and auto related business uses are found here.

Physical Characteristics - auto service areas (such as gas stations and drive-in stores) dominate the character of the Avenue here. This area most closely resembles a suburban retail development with its low rise, loosely defined streetscape.

Activity - little pedestrian activity occurs along this stretch of the Avenue. The most notable exception is the park between Clarendon and Churchill Roads.

Development - due to the size and configuration of the sites most new development is likely to occur on a parcel by parcel basis in an infill manner.



Auto related uses dominate this area.



## Area 5 Strategy

This area should form a transitional district between the single family structures at the Arlington line and the dense residential fabric of Trolley Square. This includes:

- upgrading the existing uses to be compatible with the residential uses in the surrounding areas.
- improvement of the public space by planting trees, repaving sidewalks, and providing street furniture.
- the uses of small scale architectural elements to tie new development to the neighborhoods beyond.
- the use of a variety of street edges, landscaping, and small front yards to soften the Avenue as it makes a transition to the residential neighborhood beyond Richard Avenue.

USE OF BAYS & OTHER  
3-DIMENSIONAL ELEMENTS TO  
RELATE TO SMALLER SCALE HOUSES

LANDSCAPING AROUND FREE STANDING  
BUILDINGS

NO PARKING ALONG AVENUE FRONT  
FRONT & SIDE YARD SETBACKS

