DESIGN REVIEW
Alternative Models of Administration

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This thesis seeks to identify the critical attributes of design review models and of the environments in which they operate, and to explore the relationship between model features and environmental considerations.

Design review has evolved out of a relatively short history of design controls and reached its current state of development during its application on urban renewal projects. Design review can serve many purposes and can be conducted by a variety of agencies. The nature and content of design standards and the approach to their administration varies with specific purposes and review settings. In all cases, however, design review standards are based on the goals of some "community" of interests. Design review is a process for regulating segments of the built environment in accordance with the objectives of those interests.

Three cases illustrate the manner in which design review is conducted in three different situations in the city of Boston. The cases can be related in a proposed typology of review situations. The experience of the cases and the opinions of actors involved are useful in formulating observations on the review process.

Six examples of design review models analyzed in this thesis demonstrate how different constituent aspects of design control systems are applied in a range of spatial settings and institutional contexts. A summary analysis focuses on common themes and on those conditions which differentiate between models.

This thesis concludes that there are several factors which can be identified in an environment that suggest the appropriate approach, nature, and content of review models for that environment. These factors include purpose of design review, project program and scale, external context, institutional review context, and review process objectives.

The findings of this thesis will be useful for practitioners seeking to improve the administration of design review at the municipal level.
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Of course, the author alone takes full responsibility for the factual accuracy, the interpretations, and the opinions expressed in the text of this thesis.
Preface

The purpose of this study -- This study is not intended to persuade the reader of the need for design review, though justification for its use will be discussed, nor does it deal extensively with the process of drafting and enacting an ordinance for design review, nor will it attempt to define "design quality" or describe measures of its attainment. Those issues are addressed in detail in other sources.

The aim of this study is to identify the critical attributes of design review models and of the environments in which they operate, and to explore the relationship between model features and environmental considerations. This objective will be accomplished by presenting three case studies of design review and the analysis of six examples of generic review models. The findings of this study will focus on a list of factors which influence the selection of design review models that are appropriate to their situations.

Organization of the study -- The Introduction places design review in the context of land use control regulations. It also provides an overview of review describing how it is practiced by several reviewing agencies. Part I of this study will analyze three cases of review in the city of Boston. The range of cases will be limited to a few situations that are rich in detail and suggest issues that arise under different conditions of site, design program, and institutional context.
To document the cases, interviews were conducted with the principal actors involved, and a survey made of files and documents related to each case. In Part II, model examples of design review processes used in a number of cities illustrate several approaches that can be taken to control the shape of development under a range of spatial and institutional settings, and review program objectives.

From the analysis of these cases and procedural models, from discussions with the participants involved in the cases, and from a survey of the literature on design review, Part III of this study will identify a set of factors relating to the selection of review administrative models for a range of situations.

 Audience -- This study is directed toward an audience of design professionals, public officials, and concerned lay citizens who are involved in the administration of design review at the municipal level. It will provide those persons with information on how to choose the appropriate administrative framework for conducting design review or how to modify their existing process to better accomplish their objectives.

The task for those who would use the information provided in this study for those purposes is to identify the conditions that exist in their setting which correspond to the factors described in Part III. By assigning priorities to the factors which are most significant in their own situation, and
by making clear what the intended purposes of design review are, the users of this study can employ its findings as an aid to the construction of an appropriate overall design review model from a series of constituent methods.

In serving a relatively diverse audience of practitioners and concerned laymen with varying backgrounds and different levels of experience in architecture or planning, this study has been organized to be read at several levels of detail.

The Introduction provides a common base of knowledge on the general functions and purposes of design review. It breaks ground for the following parts and is directed toward all readers of this study.

Part I describes a range of several review environments and cases which are of general interest to all involved in design review. It is written in a style and language that should make the cases interesting to read, and its concluding observations on the review process in these cases are informative for the entire audience of readers.

Part II proposes a framework relating constituent elements of design review models, and it analyzes six examples of review procedures in a somewhat more technical writing style than that used in Part I. It uses professional jargon more frequently, and it may be less easy to follow for the casual reader. Part II is aimed more toward the professional than toward the concerned layman.
Part III can be read independently of the preceding parts although it gains support from the documentation presented in Parts I and II. The practitioner who wants guidance on the selection of review models may want to read Part III first and then work back to locate the foundations of its findings.

**Viewpoint** — The author's perspective in preparing this report is partially based on his own background and experience as an architect and planner. This view biases the direction of the study toward a concentration on the physical consequences of the administrative decision making process rather than toward questions of legality, for instance. Examples have been selected for discussion primarily because they lead to better urban design solutions. Their administrative or legal elegance are of secondary concern to this author. Too often the acts of regulating the built environment have been biased away from design concerns, or have been aesthetically idealistic and politically naive. This study seeks a balance between the two perspectives.
Design review can serve many purposes and it can be administered by many different types of agencies. The Introduction to this study presents a brief overview of some purposes behind design review, and it examines the objectives of several agencies conducting design review. The intention of the Introduction is to provide a common base of understanding on which the analysis of the remainder of this study is based.

Design controls in the United States evolved out of the institution and development of zoning as well as from some examples of nineteenth century master planning. Design review as a formalized process, however, has been extensively used only in recent years. Review of urban renewal projects, planned unit developments, and design modifications in historic districts have laid the groundwork for the application of environmental design review in more far reaching situations.

Some agencies may use design review to control development initiated or financed by the public sector, while other agencies may seek to control private developments that impinge upon the public's experience of the environment. The police power of the state, which is used to enforce restrictions that mitigate the adverse external effects of a development on its surroundings, is the basis for public control of private projects. The kind of sanctions that an agency can use to enforce its controls depends largely on the sources of power and authority available to it.

The nature and content of standards used to guide designs and the approach to their administration also varies among agencies conducting design review. Some situations are addressed with narrow, tightly defined guidelines, while in other cases, broad, discretionary standards are applied.

In all cases, however, design review standards are based on the goals of some "community" of interests. Design review is a process for regulating segments of the built environment in accordance with the objectives of those interests.
One Federal

The Shawmut National Bank Building located at One Federal Street in the Financial District of Downtown Boston is a structure thought worthy of much praise by some critics. Architecturally it responds well to program and site by its massing, its articulation of parts, and its use of materials. The shape of the building responds to its unique, wedge-shaped block by projecting the eight floors located below a 30 story tower out to the street front line. It thus continues the pattern of nearby buildings and avoids the creation of redundant, wind-swept plazas. The architecture of One Federal works well when viewed as a formal object, and according to some, seems to meet the functional needs of its owner and users.

As a piece of urban design, however, One Federal may be a mixed blessing for the city of Boston. Architecture critic Robert Campbell of the Boston Globe has written, "The questions come, as usual, at the seam where the building meets the public..." He feels that the additional building bulk permitted by design controls beyond the base zoning is excessive, considering what amenities the public has received in return for its concessions to the owner. He also feels that the absence of commercial shops on the ground floor detracts from the potential street life of the area. Branch banking operations and empty lobby space do not attract
shoppers or activity to fill the sidewalks.

The contention here is that there is more to good urban design than good building architecture and visually pleasing forms. The public users of Boston's streets who contributed benefits to the bank building through tax concessions, zoning exceptions, and public services have not been given all they could hope to expect for their contribution. One Federal does not offer the sense of urbanity to Downtown Boston that is seen as desirable by Campbell.

If the design of One Federal Street does not fully measure up to generally held community standards of urban design, if indeed such standards exist, then the fault lies in the process of public design review which permitted the building to be built as it was. An overall aim of that public review process should be to protect the interests of the user public which are not represented in the private review transactions between the owner and the architect of the building.

While the obligation of design review to protect the public interest is most clear when public resources or concessions are involved, it may also be used to protect public property rights in more general cases. When private development decisions have a potentially adverse affect on the public's experience of its spatial setting, a public regulatory agency may take on the task of reviewing those private decisions to protect the public good.

For a further discussion of this view of urbanism as it relates to One Federal, see Robert Campbell's architecture column on page C10 of the Boston Sunday Globe, August 15, 1976.
The Shawmut Bank example illustrates one of the fundamental issues of design review: how can the public obtain good urban design in return for the benefits they make available to private developers?

The manner in which the design review process is conducted may determine how well the public and private interests involved are served. Some models for administering design review are more appropriate than others in certain situations. These appropriate models will better serve the objectives or participants in the process of review than ill-suited models.

An appropriately constituted and administered process of design controls and review will promote good urban design for the public and an acceptable solution for the building's users and its developer.
Evolution of Design Controls

The history of public regulation of development in the United States is short. New York City enacted the first comprehensive zoning ordinance in 1916, and zoning as an instrument of the "police power" of the state was upheld by the United States Supreme Court in 1926. The restrictions placed on private property rights by zoning were justified by the state's power to make regulations protecting public health, safety, morals, and general welfare. In New York zoning was intended to impose minimum standards of light and air between structures and to separate activities that were viewed as incompatible.

As zoning ordinances were adopted in towns and cities across the country, two major components of the ordinances were restrictions on activities -- those uses permitted and those prohibited -- and on structures -- measurable limits on height, setback, coverage, floor area ratio. While it was not the stated intent of these regulations to control the aesthetics of building design, they clearly did have spatial consequences in terms of building form and location on a site.

Even before zoning emerged as a common means of land use and development regulation, setback and height restrictions were applied in a few cases to control the form of new development in many cities. For instance, in the development of Boston's
Back Bay during the last half of the nineteenth century, buildings on Commonwealth Avenue were to be a minimum of three stories in height and had to be set back 20 feet from the sidewalk. Even today zoning codes continue to include setback requirements. Physical master plans of the "City Beautiful" movement around the turn of the century generated grand design schemes which relied on a unity of plan and architecture to create a pleasing overall effect. The development of design control methods, however, was not an objective of that movement.

In recent years more sophisticated regulations have joined zoning and physical master planning as methods used for controlling designs. Subdivision regulations on previously undeveloped areas set forth street widths, sidewalk construction standards, drainage requirements, and the provision of other amenities. Planned Unit Developments (PUD) suspend some of the density and setback restrictions of zoning, thereby allowing developers to lay out projects that are better suited to site conditions and the existing natural landscape. Both PUD master plans and subdivision applications may be subjected to site plan review. The reviewing body, usually the local planning board, evaluates the submissions against predetermined standards, often negotiates details and ambiguous points using their discretionary powers, and issues a permit allowing the applicant to proceed.
The urban renewal process has also used design guidelines and review of proposals as a means of design control. A high degree of control is possible in this instance because the city owns the land offered for development. It can place detailed restrictions on land use and the form that development takes. Design review of structures became a formalized process under urban renewal. Procedures developed for use in that application serve as models for review of incentive zoning and special development area proposals which have replaced urban renewal as urban redevelopment techniques.

Conservation and preservation oriented ordinances also attempt to control the form of architectural designs. In rural settings billboard control regulations have been established to keep views clear of roadside advertising. Sign ordinances in urban settings place restrictions on the size, location, and design of signs to minimize streetscape "clutter and confusion" in commercial areas. Individual landmarks and whole areas containing many stylistically significant, unique, or historic buildings have been protected in historic districts. Changes to existing structures or new construction in these districts are controlled by guidelines and design review procedures administered by local historic commissions or special review boards.

Finally, in the past several years, many municipalities have instituted "Environmental Design Review" as a process separate from zoning or subdivision regulations. Often these de-
sign review ordinances have been enacted to include controls on development in sensitive areas, or controls have been applied to certain kinds of uses believed to have significant influence on the design of the public environment. The overall townscape has become an issue of public concern, and has been upheld by the courts as a legitimate object of public regulation.
An Overview of Design Review

This overview seeks to define the scope of review activities by discussing what kinds of agencies conduct design review. The following descriptions focus on the purposes behind review process and relates these purposes to the institutional structure and operations of a range of agencies. The list of agencies involved in design review which follows is by no means exhaustive, but it does help to establish the boundaries of the practice of design review. All these applications deal with the visual or sensory environment to some degree. Most of them also deal with functional concerns that relate design features such as pedestrian amenities and building massing or shadows to the sensory environment. The use of the term "design review" in these examples and throughout this study is broadly defined. It includes both functional and aesthetic concerns.

**Boston Public Facilities Department** -- The Public Facilities Department (PFD) is responsible for overseeing design and construction of all police and fire stations, public libraries, municipal health facilities, and public schools built in the city of Boston. Its specific duties include preparing the city's capital budget, selecting and acquiring sites for facilities, choosing architects and reviewing the progress of their designs, making construction contracts, and performing major renovations on existing city owned facilities.
The process of guiding school design is the function most pertinent to this analysis. The architectural staff of PFD is the group that reviews and coordinates architectural work done by private architects for new schools to insure the design's compliance with its functional program -- prepared by a specialized consultant -- as well as its conformity to budgetary and safety requirements. This staff not only has the school program to guide their judgment, but also has its own experience in building schools and an acquired body of knowledge of what "works" in practice and what does not. The knowledge and experience of the staff is conveyed to the architects during the process of design review. This process is related to the schematic, design development, and contract document phases of design, with formal submissions and review that coordinates the actions of local and state level actors involved.

The purposes of the PFD design review process are to monitor and control the functional and aesthetic performance of public facilities designed for the city, and to guide the architects' work through the series of approvals required at the state level for public schools. A more fundamental reason for the existence and operations of the Public Facilities Department is to remove the selection and control of architects from the political process and place them in a more professional management context -- a move aimed at depoliticizing the massive school building program now underway.²
Massachusetts Housing Finance Agency -- MHFA makes construction and permanent loans at below market interest rates to limited dividend and non-profit sponsors of moderate- and mixed-income housing projects. It raises money for loans by issuing tax-exempt bonds. Independent state housing finance agencies, like MHFA, conduct review to insure a level of design competence which will: 1) protect its bond holders' financial investment in projects, 2) determine that projects they support are responsive to their occupants' needs and tastes, and 3) see that these projects are constituted to promote desirable social ends such as social and economic integration. All of these purposes have both physical and non-physical components. While some aspects of a proposal submitted to MHFA such as the composition of the development team, the sponsor's financial statement, or the project's management plans do not involve "design" review per se, many other aspects do.

The Agency's Operations Handbook states, "It is the intention of MHFA to finance housing of the best quality possible." Staff architects review proposals submitted to them at several stages of the approval process, and informal review of progress is encouraged at convenient stages during the design development and working drawing stages.

The Design Review Staff uses a brief list of specific features as a basic standard of minimum performance rather than elaborate and detailed design guidelines. These features are
directed toward the functional needs of tenants. In addition to these specific features, a more informal agenda of concerns for design quality is expressed by the MHFA design review staff. Requirements often come out during the course of review sessions on a specific proposal. The lack of formal design guidelines to be used in evaluation reflects an agency policy to avoid dysfunctional bureaucratic systems.  

The principal incentive or sanction that MHFA has for enforcing these concerns is their financial support for a project -- both the amount offered and the speed with which it is made available. Delay is the most potent sanction short of denial of funds. When their bonding capability is adequate and the bond market is good, MHFA can provide lower interest rate loans than are available on the open market. At a time of tight money for housing construction, MHFA has been described as, "The only game in town". Developers who seek to build under those conditions have to play by MHFA's rules -- including submitting to design review -- or not play at all.

Brookline Planning Department -- The town of Brookline, Massachusetts, an affluent inner suburb of Boston, has conducted a program of "Environmental Design Review" since 1971. The initial impetus for instituting design review in Brookline was the construction of two apartment buildings along Beacon Street -- one of the town's major boulevards. Although both designs conformed to existing zoning regulations, members of
the community and its Planning Board considered them as demonstrating insensitivity to their surroundings. Instituting design review may also have been a response to a general increase in density resulting from new apartment development in the town.⁶

The purpose of the Brookline review program is to allow the Planning Board to evaluate proposals having a potential impact on Brookline's townscape -- defined as "the relationship of buildings, shapes, and spaces on the street".⁷ The town is concerned with conserving the existing townscape and enhancing the town's character.

These aims are to be achieved by staff review of proposals beginning early in the design process and by approval of the Planning Board and the Board of Appeals. New construction proposals and commercial facade renovations are evaluated against twelve design review standards. These standards deal with such issues as the relationship of new construction to existing buildings, the preservation of the landscape, vehicular and pedestrian circulation, signage, safety, and microclimate. The specific guidelines are left open to considerable interpretation by town officials. To make the standards more understandable, the Planning Board has published a Guide to Environmental Design Review which illustrates interpretations of the broad guidelines and offers a commentary which helps to clarify their intent.
What makes the Brookline example different from other cases discussed here is the broad scale of its application in nearly all the visually prominent areas of town, and the far ranging scope of the review process which seeks to control a range of design issues that the Planning Board and the town's Comprehensive Plan Review Commission considered significant.

**Boston Redevelopment Authority** -- The BRA is both the planning and development agency of Boston. In that dual role it must often walk the line between promoting economic growth through the private construction of profit making development ventures, and protecting the public interest by discouraging development from occurring in an incoherent or unsuitable manner. In the 1960's the dominant form of redevelopment in Boston was Federally aided urban renewal, but in the 1970's new strategies for promoting urban development have been more widely employed.

Under urban renewal the city attempted to expand its tax and employment base by using Federal money to acquire property and "write down" land costs for the sale of parcels to private builders for redevelopment. Because the city owns the valuable land resource on which renewal redevelopment takes place, it is able to impose restrictions on the form and content of land use. Design controls on renewal projects can be characterized as either "tight" -- delineating setbacks, building lines, height limits, functional layout, entrance locations, and fenestration patterns -- or "open" -- leaving
more discretion to the architects to act within the formal statement of design objectives in the urban renewal plan as documented in the "Developer's Kit" of requirements. ²

Design review procedures conducted under these controls call for elaborate formal submissions at four stages. The Director of Urban Design and his staff may conduct the review themselves, or the Authority may select an independent review panel to make design evaluations and recommendations. Urban Design Staff architects also carry on an informal dialogue with the redeveloper's architect during review. The aim of this complicated and costly process is to insure that the proposal satisfies the development objectives and design controls laid out in the official Urban Renewal Plan.

In recent years while urban renewal projects have been closed out as Federal funding sources disappeared, new strategies for inducing development have been devised. Two of these strategies are administered by the BRA and require design review: Chapter 121A developments and Planned Development Areas. Granting conditional uses under zoning also requires submission to BRA design review.

All of these provisions offer developers greater flexibility in assembling their development packages increased permissible floor area ratio (FAR), and Chapter 121A also offers property tax advantages as well. The City is willing to offer these advantages to developers because that is the only
way any substantial development would take place in many parts of the city. It is the only feasible way to expand the tax and employment base without Federal urban renewal. The City believes that the safeguards provided by the development proposal review procedures are strong enough to guarantee that the public interest is protected in these cases. The design review process for conditional uses, 121A development, and PDA's is part of this more complex approval procedure, but design review is less formal and the submission requirements less stringent than those mandated under urban renewal.

Because of the many conditions under zoning and special development strategies that trigger the requirement design review, the BRA is able to exercise some control on a significant portion of the total development taking place in the city. The advantages to developers in terms of tax concessions and possible FAR increases create an incentive for them to submit proposals that come under design review. The sanction that makes review effective is the withholding of special permits or approval to proceed with the developer's project.

**Springfield Historical Commission** -- In the city of Springfield, Massachusetts there are three historic districts located in neighborhoods dominated by houses built in the late
nineteenth century. These houses are good examples of several prevailing styles of their day -- Italianate, Shingle Style, Queen Anne -- and are considered worth protecting from inappropriate alterations that may damage their stylistic integrity. Because of the vulnerability of this integrity to change, detailed design elements are subject to tight controls with changes in color, exterior architectural features and trim, and elements like porches subject to review by the Historical Commission. While the controlled elements are carefully listed, exactly what changes to them are permitted is less explicitly stated -- with most criteria stating that replacement elements must look as much like the original as possible. Each district has its own set of design criteria.

Any changes to the 1000 existing houses of the three districts initiated by owners must be reviewed and approved by the Commission. Approval may state that: 1) the change is appropriate, 2) the change proposed is not covered by the controls and thus permissible, or 3) that an otherwise inappropriate change is allowed due to hardship imposed on the owners by its prohibition.

The Commission has been preservation oriented and does not encourage contemporary design for new construction located in the historic districts. The stated purpose of this design review program is to preserve and encourage the con-
tinuing expression of the community through its architecture. In effect, however, the Springfield design review process has been used as a vehicle for neighborhood conservation and stability rather than exclusively for historic preservation.\textsuperscript{9} The city of Springfield, through its Historical Commission, has sought to maintain local control over its assets and aesthetics during a period of changing tastes and owner indifference to historically valuable designs.

**Common themes** -- Clearly, the nature of the design review process varies with the characteristics of the agency conducting it. The agency's overall objectives, its purposes for reviewing designs, its internal organization and staffing, the use type reviewed, the other actors immediately involved, and the absent future users all affect the agency's approach to design review. While each institutional setting is unique, there are several common themes that cut across these examples.

Both the Public Facilities Department and MHFA can exercise a great deal of control over the outcome of the process because each can exercise strong leverage over the designers and developers. PFD is its own developer, in effect, and hires its own architects. The ultimate PFD sanction of firing the architect is seldom used, but the lesser sanction of refusing to rehire an obstinate architect for city work is also a potent weapon -- particularly in times when work opportunities are scarce. Similarly, MHFA can discourage
developers from using certain architects for future housing proposals submitted to the agency. Reviewers can also delay the process or withhold financial support from projects which do not meet their design requirements.

Public planning agencies like the BRA or the Brookline Planning Department, on the other hand, often do not have as much leverage over the outcome of the design review process. Projects which are privately initiated and funded are not tied to locations in a particular municipality. Developers can seek out more favorable regulatory climates to build in, if these locations will also offer them favorable profit opportunities. Property rights cannot be restricted under design review ordinances to a point where regulation constitutes a taking without just compensation to the property owners. Both of these constraints place limits on what kind of design review local planning agencies can undertake, but for urban renewal projects, agencies like the BRA can impose tight design restrictions and enforce them because they own the land where development is to take place.

Agencies having a high degree of control and a narrow range of building use types in their domain may not prepare detailed design guidelines or articulate a specific comprehensive design policy at the outset of their work. MHFA uses loose guidelines and relies on the judgment of their reviewers to interpret what the agency’s design interests are in individual cases. In effect, whatever the reviewer says is agency
policy. PFD operates in a similar way with its design staff commenting on the issues that arise in the context of a particular design. In these two instances the agencies rely on the accumulated staff experience in specialized areas of expertise -- housing and schools -- to inform their judgment. This cumulative learning approach to review may not work successfully when the rate of construction is too slow for experience to build rapidly in a variety of circumstances, or if the review load is so heavy that reviewers lack time to reflect on what they are doing and to formulate a coherent set of policies. Objections can also be raised on grounds of due process and evenhandedness.

Review in the Springfield historic districts is administered under tight guidelines because the design ambience that the Commission is attempting to protect is susceptible to damage from even small scale deviations from the norm. Individual design decisions are tightly controlled in order to preserve the details on houses which when aggregated create the unique collective qualities of the neighborhood. In Brookline the aim is also to preserve and protect qualities of the overall townscape from erosion by insensitive design decisions at the small scale. Visually prominent locations and potentially obtrusive uses and structures come under the town's review; but the design guidelines are relatively loose allowing the reviewer discretion to meet a range of particular issues that arise under such a broad application.
All reviewing agencies consider the absent users in their deliberations, but housing agencies like MHFA have a much more tightly defined, identifiable user group in mind, which limits the range of people they need to consider. PFD also must keep the needs of absent users in mind -- the school teachers, students, their parents, and the community in which the school is located.

Finally, in this brief overview of agencies conducting design review, it is important to note that each body brings a hidden agenda to the review process. Some agenda have several items and others only one. The agenda may be largely concealed or merely an unspoken understanding among the participants. The issues of these agendas may arise out of the encompassing context of the agency and its relationship to its constituents, or they may come out of the agency's origins and history.

One can speculate on what the agencies' agendas are. PFD originally was established to depoliticize the school design and construction process and to attract competent architects to produce quality designs for the city. The agency reinforces those goals by maintaining a professional posture in its dealings. MHFA may be using design review as a means for socializing architects into the practice of producing housing which fosters the agency's social and design ends. The BRA may also see design review as a socialized process for acclimating architects to agency approaches to
development which place a premium on "good design" while not neglecting the larger issue of the wise use of limited urban land resources to promote economic development and increase the tax base. For Brookline one reason for erecting an elaborate design review structure may have been to provide a disincentive for further apartment development in the town. Having to undergo review for their projects might discourage developers from building there, and extract a price of design quality from those who do build. Neighborhood stabilization seems to be at least partially behind the historic preservation efforts in Springfield.

**Generalizations** -- Given these far ranging situations and common themes, what can be generalized about the nature of design review from these few examples?

First, we can say that design review is a process for regulating segments of the visual, sensory, and functional built environment of a defined "turf" in accordance with the values and goals of a particular "community" of interests. This community may be broadly diverse in its membership and values held or it may be narrow and homogeneous. Its turf may be spatial or functional in nature.

Second, design review focuses on those issues which are seen as significant to members of that community, and their reviewers, and it ignores other issues not elevated to a position of concern.
Third, within the context of these community held interests, design review deals with two levels of concerns: those concerns which have a direct impact on the users of a particular environment -- its regular occupants and visitors --, and the interests of the larger public who experience the environment only in passing or at a distance. The latter group suffers the off-site negative impacts of development or enjoys its positive externalities or both.

Fourth, design review is often an interactive process of negotiation and bargaining between representatives of the collective community interests -- the reviewers -- and those who seek to develop.

Fifth, design review takes place in a larger context of institutional constraints, hidden agendas, and continuing community issues which cannot easily be isolated from the review process.

This Introduction raises issues about the purposes of design review, the motivations and composition of the agencies conducting it, and the context in which review takes place. Building on these points, and using the generalizations as baseline assumptions on the character of design review, Parts I and II will elaborate on and further illustrate these issues. All of the issues come to bear to some degree on the selection of appropriate design review models discussed in Part III.
Design review can take place in a wide variety of environments or situations. Part I of this study examines three cases of design review processes set in the city of Boston. Each case is unique in its characteristics, but each can be related to a larger framework of attributes that describe a range of situations. We can draw inferences from the cases that tell us something about how to apply design review methods in different settings.

After introductory remarks on the purpose of conducting case studies and a description of the methodology used to gather and analyze information, a proposed typology of cases is introduced. The purpose of the typology is to clarify the relationships between possible review situations and to locate the three cases in a larger field of environments.

Next, the context, story, and analysis of each case is presented. A case context includes information on its location in the physical, functional, and social settings of the city; the background of events which influenced the actions of participants in the case and generated factors which partially determined the course of the review process and its outcome; and the regulatory context of mandatory and advisory controls that shape the institutional setting within which the activities of the case take place. The story of each case tells who did what to whom, where and when. It traces the sequence of events in the design review process and quotes the expressed thoughts and opinions of actors involved. Whenever possible the actors' motivations are probed -- the why. The analysis of each case relates the events of the case to larger concerns of design review and those of planning and architectural practice. It discusses the sanctions and leverage used, the attitude of the architect and other actors toward design review, their measures of success, their evaluation of the success of the case, and the implications of the case on future events in its environment.

Following each case is a transitional piece focusing on one participant's view of a larger issue of design review: the use of design review as a lever on developers to produce well designed projects, the architect-reviewer relationship, and
the reviewer-public relationship.

Finally, Part I closes with a list of general observations derived from the particulars of each case studied. The purpose of these observations is to provide part of the basis for the recommendations that link design review methods to particular situations, to be discussed in Part III of this study.
Introduction

Use of case studies -- Case studies are used to isolate a part of the complex world. Three cases are discussed here to illustrate some of the issues introduced in the preliminary part of this study. They provide a rich source of data and an opportunity for insight offered in real world situations.

Cases can be used in a rigorous academic analysis as a source of hard data and the basis for far reaching generalizations. The purposes of using cases in this study are more modest. These cases cover a limited range of situations -- not enough from which to generalize with much certainty. Data from these cases are used to illustrate some recurring issues of design review. Case information and the opinion of actors involved in the cases -- who also speak from their experiences in other cases of design review -- will provide the basis for some general "observations." These observations are not to be seen as applicable to all design review settings, but they may be reasonably descriptive of situations similar in some respects to the cases studied here.

These cases provide details on the day to day activities of design review in various agencies in the city of Boston. This city is unique in many ways because of the high level of commitment the local government and many community groups have made to urban design quality. The Boston-Cambridge area is the home for many architectural firms of national reputation,
and it has members of the media who are active in informing and enlightening the public on the importance of design issues. As a result, at least part of the public has become sensitized to design and environmental issues. Boston's heritage of historical architecture and the high level of popular concern for relics of the past also contribute to an interest in architectural preservation in some neighborhoods. All of these factors make Boston a leader in public concern for urban design.

While the lessons learned in Boston on design review may not be applicable in other cities today, it is likely that as design and environmental awareness grows across the country, other cities will face similar issues as they institute design review programs. These cases can illustrate examples of what approaches work and show instances where specific approaches ought to be avoided in order to promote a smoothly operating design review process.

Criteria for selecting cases -- Initially the author had three basic criteria for the selection of cases: 1) the availability of documentary information, 2) the accessibility of actors involved, and 3) the existence of a physical product to represent the outcome of the design review process. In addition, cases at three levels of scale and settings were sought: 1) a large scale project, in a highly visible prominent location, that had been involved in active and publicized debate; 2) a small scale project, in a visible but
not particularly prominent location, that had not been debated actively; and 3) a small or moderate scale project, in a residential neighborhood setting, where active debate took place among a small group of adjacent residents, but not among general interest groups. An example of the first level was Sixty State Street, a 40 story office building located beside Boston City Hall and Faneuil Hall. The second level might be a storefront renovation in the Downtown shopping district, and the third level could be a housing project in a neighborhood like Dorchester or Roslindale.

The reason for studying that range of cases was to illustrate how design review operated in settings that varied in "sensitivity" -- both of the physical surroundings and of the concerns of community groups. There were several underlying hypotheses or assumptions behind these choices: 1) the large scale case will have undergone considerable modification based on input from the reviewers' in-house studies; 2) interest groups and general public scrutiny would thus have greater influence on the final design than they would have in other cases; 3) small scale, downtown, non-prominent cases would encounter the fewest roadblocks from interest groups and abutters but may generate debate between the owner and his architect and the design review staff -- with the staff having the greatest influence on the outcome; and 4) the small scale, "neighborhood" case, if not located in an "architecturally sensitive area," would be most influenced by
the "functional" concerns (traffic, noise, etc.) of the local community residents than by purely visual or aesthetic concerns -- if the design review process was accessible and sensitive to these concerns, and if the reviewing criteria permitted these kinds of outcomes.

While it is not the intention of this study to "prove" these hypotheses, all of them have been generally supported by the cases analyzed, despite the fact that the three cases do not meet precisely the requirements of the original selection criteria.

**Cases selected** -- When the author tried to identify cases that met these three "basic" and three "setting" criteria, he was not able to find any suitable cases that made a perfect match. The larger scale case was discarded because those cases available were tainted by too many "political" issues and the high stakes economics of massive development. In other words, there were too many "deals" involved which people were reluctant to discuss candidly. There were no suitable neighborhood cases that did not take place in an "architecturally sensitive area" -- that is, in places where there was a high level of design concerns. Outlying neighborhoods in Boston had not been involved in design review cases that were rich enough in issues to be of interest. The middle case was better illustrated by a relatively large scale project which did not produce much public debate.
The first case described in this study, Suffolk University on Beacon Hill, best fits the description of the third setting of a small scale neighborhood case; but design issues shared the spotlight with functional issues. Ausonia Housing on Commercial Street in the North End is the second case. It too generated considerable public debate, illustrates a conflict in values between "designers", "preservationists", and factions of the "public", and, unlike Suffolk, it has actually been built. Charlestown Savings Bank on Summer Street in Downtown Boston adheres quite closely to the description and assumptions of the middle case setting. Overall these three cases do illustrate all of the originally sought circumstances except for a large scale project generating widespread public debate.

Methodology -- Information on the cases came from four sources: 1) documents, memoranda, meeting notes, and drawings; 2) interviews with the principal actors involved: owners, architects, reviewers, members of the interested community; 3) a review of newspaper articles and architectural criticism; and 4) on-site visits and documentary photographs.

In general all actors contacted were willing to talk about their roles in the cases although some were more candid and co-operative than others. Many seemed to play up the importance of their roles and the significance of their input, and others went off on tangents that demonstrated their own biases and preconceptions about the case.
Interviews were loosely structured around a schedule of questions that seemed appropriate to ask each particular actor based on his role and the nature of his expertise. Whenever actors had something interesting to say on a related topic, the author let him go on, but then tried to probe the nature of the connections to the specific case. The actors told their version of the whole story or focused on that part of the story in which they were most directly involved. Each actor was also asked a few general questions on design review. Their responses to these questions form the basis of entries in the "analysis" section of each case study.

The author has tried to make the case information readable and interesting, but often that has been done at the expense of academic rigor. A good deal of interpretation and gap filling assumptions have found their way into the cases. Any interpretation not clearly attributed to an actor (or not in the stream of ideas in a paragraph begun by a direct attribution) is that of the author. Statements labeled as feelings, thoughts, or beliefs of individual actors are actually based on quotations expressed by them in documents, newspaper accounts, and interviews with the author. Occasionally an actor expressed his view of the thoughts and motivations of others. Those opinions are usually labeled as such, but not in all instances.

The author circulated a preliminary draft of the cases to some of the principal actors. They responded with comments
on facts and attribution which helped to clarify each of the cases. One of the case studies was changed in several places to meet the suggestions of a participant.

In documenting and analyzing any story, the author must make a few assumptions. Whenever possible this author attempted to confirm his assumptions by raising the point with case participants or by discussing the logic of his reasoning with another third party. Hopefully, the data and interpretation offered in these case studies will be sufficient to let the reader decide how valid the author's assumptions have been.
Typology of Cases

Design review is conducted in many different kinds of settings. These settings or situations can be described in many ways, but this study will propose only one framework. This structure is intended to clarify the relationships between situations and to locate the three cases analyzed within a larger field of environments.

Framework for comparison -- Three categories of attributes can describe a design review situation: program, location, and context. The program of a development project includes those qualities that describe its scale, uses, and the nature of impacts of the program on its environment. The location of a project is described by the nature of its site, its visibility or prominence in its setting, the adjacent uses and their compatibility with the project, the scale of adjacent buildings and their compatibility, and the geographically based level of concern of the abutters and neighborhood residents. The context of a project describes the institutional resources and constraints on a development such as zoning, city-wide and local urban design policy, incentives and sanctions on development, the resources available to conduct design review, the pool of design talent available, the access of developers to the political process and decision makers, and the level of market pressures on a development.
This list of attributes of a situation may not fully describe the setting and some attributes may be more significant than others in differentiating between effective application of design review methods. The emphasis of this study is not on identifying definitively which attributes are most important in predicting the success of specific design review techniques, but rather its emphasis is on providing a framework for the comparison of case situations and for characterizing situations where certain kinds of design review may be more appropriate. Definitive choices depend on the particulars of a given situation and the interaction between attributes that may be too complex to discuss in a general way. Part III of this study will attempt to identify some links between design review methods and situations.

Each of the attributes of the proposed framework has a range of different values. Some can be measured on a continuous ordinal spectrum, and some are nominal and discrete. The accompanying table lists these variables in increments of five discrete steps even though some variables are continuous and others not comparable on an ordinal scale.

This study will not attempt to define precisely the terms of all attributes or their values, but the following section will look at two particularly interesting attributes in greater detail. The table does include local examples of what the author has in mind for several of the values. The three cases are also related to this framework of attributes by
tables in following sections to provide some common ground of comparison between them and the possible field of all design review situations.
## Values and Examples

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Values</th>
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</thead>
<tbody>
<tr>
<td>Typology of Cases</td>
<td></td>
</tr>
<tr>
<td>LOCATION</td>
<td>site, visibility, adjacent uses, compatibility of uses, adjacent scale, compatibility of scale, level of concern</td>
</tr>
<tr>
<td>CONTEXT</td>
<td>zoning, urban design policy, incentives and sanctions, resources, talent pool, political access, market pressure</td>
</tr>
</tbody>
</table>

### Typology of Cases

| PROGRAM | scale, use, impacts |
|LOCATION | site, visibility, adjacent uses |
| CONTEXT | zoning, urban design policy, incentives and sanctions, resources, talent pool, political access, market pressure |

<table>
<thead>
<tr>
<th>Values</th>
<th>Examples</th>
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<tbody>
<tr>
<td>scale</td>
<td>house, apartment, cluster</td>
</tr>
<tr>
<td>use</td>
<td>park plaza, industrial factory</td>
</tr>
<tr>
<td>impacts</td>
<td>hospital, office, store</td>
</tr>
<tr>
<td>site</td>
<td>local prom, distant prom, hilltop</td>
</tr>
<tr>
<td>visibility</td>
<td>local st.</td>
</tr>
<tr>
<td>adjacent uses</td>
<td>commercial, industrial, factory</td>
</tr>
<tr>
<td>compatibility of uses</td>
<td>large, low</td>
</tr>
<tr>
<td>level of concern</td>
<td>continuous, road, tight</td>
</tr>
<tr>
<td>context</td>
<td>zoning, Govt. Ctr.</td>
</tr>
<tr>
<td>incentives and sanctions</td>
<td>strong, spec. permit</td>
</tr>
<tr>
<td>resources</td>
<td>perm. staff</td>
</tr>
<tr>
<td>talent pool</td>
<td>expert staff</td>
</tr>
<tr>
<td>political access</td>
<td>high mayor</td>
</tr>
<tr>
<td>market pressure</td>
<td>1971-72, 1967-68</td>
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<table>
<thead>
<tr>
<th>Values</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>scale</td>
<td>large, small, moderate, ad hoc</td>
</tr>
<tr>
<td>use</td>
<td>house, apartment, cluster</td>
</tr>
<tr>
<td>impacts</td>
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Comparing levels of resources and concern -- Several of the attributes mentioned above appear to play a significant role in the way an effective design review program is constituted, at least based on experience and intuition. Two of the most critical attributes are the level of concern for design quality in a community, and the resources available to express that concern.

We can characterize concern as being of three ordinal levels: low concern where there is a general level of indifference over which designs get built in a community, moderate concern characterized by the formation of ad hoc groups in response to the more blatant design outrages perceived by the community, and high concern where continuing groups have been established to monitor the quality of environmental design.

Resources may also be described as having three ordinal levels: low resources where no funds or staff are available to monitor or regulate design, moderate resources where some funding is available but reviewing is done primarily by volunteers perhaps with the assistance of a small staff, and high resources where a well funded permanent staff has the primary responsibility for design review. Volunteers may also be used to supplement staff review in the latter situation.

We can devise a simple table to compare the three levels of values for each attribute. The accompanying tables illustrate conditions that prevail in a high concern, high
resource situation, for instance. In that case there are funds and staff available to conduct continuous review of all projects that arise. Support of the community in this effort is also high. In a high concern, moderate resource situation, however, a community that wants to conduct review must rely on volunteer work on a small budget. That condition may place a strain on the effectiveness of design review to accomplish what the community expects of it.

Some situations are more stable than others over time. An indifferent community with no resources to conduct review is likely to remain so, but a community with high concern and low resources will either seek out resources to monitor design or its enthusiasm will wane. The table illustrates the relative stability of different situations of resources and concern.

A similar analysis comparing two or more different attributes of situations could also be prepared in order to study the relationships and dynamics between design review programs and their environments. The information developed here should be kept in mind as a descriptive technique. The three cases that follow fit into three cells in the upper left corner of the comparative matrix. Beacon Hill has high concern but moderate resources, the Commercial Street case illustrates high concern and high resources, and the Charlestown Savings Bank case used high resources in a situation of moderate to low community concern. The reader should note the nature of
"success" of review effectiveness in each case and reflect upon the case's location in this matrix.

The use of this analysis as a normative tool will be explored further in Part III.
Comparison of Available Resources and Level of Community Concern

<table>
<thead>
<tr>
<th>RESOURCES</th>
<th>moderate</th>
<th>low</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>continuous review by permanent staff with adequate resources.</td>
<td>unstable situation; resources disappear under lack of community support or community concerns are elevated.</td>
</tr>
<tr>
<td>moderate</td>
<td>continuous review by volunteers with a tight budget. may seek more support.</td>
<td>some stability unless resources are used to increase base of community concerns.</td>
</tr>
<tr>
<td>low</td>
<td>ad hoc review by volunteers as critical design situations arise.</td>
<td>little of no review for an indifferent community.</td>
</tr>
</tbody>
</table>

(Brookline) (Beacon Hill) (Downtown Bost.)

Relative stability of positions on the matrix

- stable
- moderate stability
- low stability
- unstable

Note: Boxes in matrix at left indicate viable situations.
Three Cases

Each of the three cases illustrates some of the issues raised in the author's original four hypotheses, but each case also raises a series of issues that is unique to its circumstances. The three cases are arranged in increasing order of scale from a single building of 60,000 square feet to a 106 unit housing project to a ten story office building. Each case also is focused on a major actor whose decisions and behavior most influenced the outcome of the review process.

The Suffolk University case can be labeled "The Developer's Case" because it was the University and its President who took most of the decisive actions. More correctly, the case revolves around the relationship of the developer and the community, with the design reviewers playing a relatively minor part in determining the process outcome. This case raises issues related to high community concerns constrained by limited resources. It illustrates a decentralized process of review with the action taking place within an urban neighborhood and its local institutions rather than in a central office at City Hall. Local issues dominate this case and design issues take a secondary importance as events unfold. The City government is involved only indirectly through the zoning ordinance and the Mayor's policy on preserving the tax base from erosion by tax exempt institutional uses. Suffolk's case deals with the concerns of a single neighborhood with a
strong tradition of self-regulation and citizen activity. The Commercial Street case is "The Architect's Case." He was the actor who had to fight to achieve design success, and he was the only actor in contact with all the other principal actors. The design review process was difficult at times, but it did result in a product acclaimed as successful. While the process was somewhat decentralized in its focus -- being influenced by several centers of power --, the City did serve as a central, coordinating force. Strong community conflicts formed a backdrop to this case, but the design review process itself revolved primarily around design issues. Two neighborhoods, each with its own set of values and design sensibilities, formed the backdrop to this case.

Downtown Boston

Location of Cases

1 SUFFOLK UNIVERSITY
The first case is located in the residential district of Beacon Hill near the retail and office center of Downtown Boston. Nearby Cambridge Street links Government Center to Cambridge and the Charles River, and it separates Beacon Hill from the mixed uses of the West End.

2 AUSONIA HOUSING COMMERCIAL STREET
The second case is located at the edge of downtown on a street separating the established North End community from the revitalized Waterfront.

3 CHARLESTOWN SAVINGS BANK
The third case is at the heart of the retail Central business District at the corner of Summer and Chauncy Streets.
were in conflict over the Ausonia Housing project, but the conflicts were finally resolved to the satisfaction of both groups.

Charlestown Savings Bank is "The Reviewer's Case" because the Urban Design Staff member in charge of the project had the greatest power and affect on the outcome of the case. The BRA ran the review process from a central position, and there was a low level of concern among the abutters to the project though there was some public interest in the general issues of property tax agreements. This case illustrates a dispute over the qualities of good design among professionals, and it demonstrates differing perceptions of who were the ultimate clients. While there were no local residential neighborhood groups involved, a significant concern was the public interest on a city-wide basis. This case revolved most simply around the issue of what design amenities the public can expect in return for its granting developments tax subsidies.

Following the "Developer's Case" is a commentary on the role of design review as a lever on the developer's production of good design. A commentary on the relationship between architects and reviewers follows the "Architect's Case." And a discussion of the reviewer's relationship to the public follows the "Reviewer's Case." These commentaries relate some of the issues of each case to general issues of design review as a process. Each piece is based on the author's talks with an actor involved in each case.
Typology of Cases
Attributes

PROGRAM
scale
use
impacts

LOCATION
site
visibility
adjacent uses
compatibility of use
adjacent scale
compatibility of scale
concern

CONTEXT
zoning
urban design policy
incentives and sanctions
resources
talent pool
political access
market pressure
Suffolk

Suffolk University proposed the construction of a new eight-story classroom and office building on the site of an existing one-story university building on Cambridge Street. In order to promote community involvement and support, a Design Review Committee with volunteers serving as members was established by a local planning and development agency to review the design. The Committee and community in public meetings voiced satisfaction with the design but raised issues of the building's height, FAR, and external impacts, and expressed concern for University expansion. A local neighborhood group negotiated with Suffolk's President to make modifications to the proposal, but in the end the group disapproved it.
Context

Location -- Suffolk University is located on the north slope of Beacon Hill, a largely residential area close to Downtown Boston. The University proposed to build a new classroom and office building on the site of a former Stop and Shop supermarket at Cambridge Street between Hancock Street and Ridgeway Lane. Cambridge Street is a major gateway avenue leading to Government Center and the retail district from Storrow Drive along the Charles River and from Main Street in Cambridge. The building site is at the interface between the tight-knit residential community of Beacon Hill and the institutional, residential, and commercial area of the West End.

The West End was formerly a high density, working class area somewhat similar to the present North End. It was the home for many ethnic groups and an arrival area for recent immigrants to Boston, but in the late 1950's most of its old structures were torn down to make way for the first large scale urban renewal project in the city.

Now high rise luxury apartment buildings stand in broad fields of parking and open space where five story tenements once stood. On the southwest corner of the West End are three institutions -- the Massachusetts General Hospital, the Massachusetts Eye and Ear Infirmary, and the Suffolk County Jail -- which line the riverfront near Longfellow Bridge at Cambridge Street. At the other end of the street
are the office buildings of Government Center, built during the 1960's. Charles River Plaza lies between those two institutional centers along the avenue. The Plaza contains retail stores, a cinema, an office building, parking, and a 14-story Holiday Inn hotel. Beside the State Services Building of Government Center and Charles River Plaza are the Old West Church, designed by Asher Benjamin, and one of the Harrison Gray Otis houses, designed by Charles Bulfinch, -- now the home of the Society for the Preservation of New England Antiquities.

The north side of Cambridge Street is thus occupied by a mix of different uses and buildings, new and old, massive and small. In 1925 Cambridge Street was straightened and widened from Charles Street at the River to Cornhill Street in Scollay Square -- now Government Center. It thus became a broad thoroughfare separating the West End from Beacon Hill to the south.
Beacon Hill has a history, architectural fabric, and social composition far different from its neighbor across the street. The southern slope-- or front side -- of the Hill facing the Common has traditionally been the home of the wealthy upper classes of Boston. Even after many of the rich migrated to the Back Bay and the suburbs beyond, Beacon Hill maintained its image as a prestigious place to live. The northern slope-- or back side --, on the other hand, was originally a lower class area or servants quarters and workers' housing. Only in recent years has the back side become a fashionable home for upper middle class established professionals and a mix of students, a few upwardly mobile "young professionals", and many elderly residents as well as the working class.

While the Hill is known for its well maintained brick town-
houses and social homogeneity, it is not nearly as uniform in architecture or population as is commonly believed.

Many residents of Beacon Hill do, however, have a set of common values, shared interests, and a tradition of a high degree of involvement in the affairs of their community. Organizations like the Beacon Hill Civic Association have been formed to help residents control the destiny of their neighborhood. In 1955 Beacon Hill was established as a Historic District with changes in the exterior appearance of buildings controlled by the Beacon Hill Architectural Commission. Residents have long expressed a high level of concern over their physical environment. They want to preserve the traditional forms, quality of detailing, and kind of public life style that is appropriate to the decorum of the neighborhood.

Recent historical background -- In 1968 President John Fenton of Suffolk University proposed to build a seven story classroom and office building on Cambridge Street. The building would replace the vacant one story supermarket at Hancock Street with a single, bulky mass out of scale with the smaller area plan, three to six story buildings of the neighborhood. The site was zoned as "L-2" which meant that local business activities of an enclosed area of up to twice the size of the lot were permitted. While educational uses were not prohibited on that site, the proposed building's floor area ratio of 6.3 far exceeded the allowed density, and a zoning variance was needed in order to proceed.
A variance was granted by the Board of Appeals and upheld on judicial appeal to the Superior Court in April 1969. Abutting residents were vehemently opposed to construction of such a massive institutional intrusion on their neighborhood and had organized against the proposal.

The 1960's had brought a slow upgrading of the Northeast Slope area of Beacon Hill near Hancock Street, and with it a growing sense of community. Ten residents of Hancock and Temple Streets, Ridgeway Lane, and the Hancock Historic Trust -- a major land owner -- joined forces to attempt to preserve the scale and character of the area. They sought financial support from the Beacon Hill Civic Association (BHCA) and were able to raise money to cover legal fees and to post a $25,000 bond required to appeal the zoning ruling.

The plaintiffs argued that the variance had been granted illegally on improper grounds -- that the hardship claimed by Suffolk was not due to any unusual circumstances of the particular site. The site conditions were no different from any other sites in the L-2 district. They also believed that the proposal was not a worthy architectural addition to the area, and that the University acted with insensitivity in dealing with the neighborhood. Suffolk claimed in court that as an educational institution, they were exempt from the Boston Zoning Code, and that denying them a variance inflicted a financial hardship on the institution.
In 1970 the Supreme Judicial Court of Massachusetts ruled in favor of the community plaintiffs. In what has been called a landmark decision on zoning, the court said,

The special considerations which Suffolk seeks does not arise from any conditions affecting the land or existing building, but arises from the desire of Suffolk to construct a new building, not conformable to zoning requirements but conformable to a plan which will provide the accommodations for a substantially greater number of students at a substantially lower cost per floor area unit.¹

Suffolk was not exempt from zoning, and furthermore, a variance would derogate from the intent and purpose of the zoning ordinance. The SJC stated that the I-2 district was related to the preservation and enhancement of the adjacent historic district. The zoning district was designed to provide a peripheral area for local business serving the needs of the residents of Beacon Hill. The Court's decision was unequivocal: Suffolk University could not build its seven story building proposed in 1968.

Continuing issues -- The 1968 Suffolk proposal and the ensuing debate illustrates two related issues that concern residents of Beacon Hill: the issues of development versus preservation, and the issue of institutional expansion.

Since 1958 the West End has been under almost continuous redevelopment. Not only has new residential and commercial growth taken place, but also the institutions have been
expanding. The Massachusetts General Hospital (MGH) has grown by adding several new buildings to its old complex, including two new parking garages on Cambridge Street. In the mid-1970's plans were promoted for a new Ambulatory Care Center on block to the north of Cambridge Street, but the hospital was denied a "Certificate of Need" by the State, required before they could go ahead with construction. The Massachusetts Eye and Ear Infirmary (MEEI) was so confined in its land holdings, that it was forced to build a new structure over its old building. The Charles Street Jail was ordered closed by the Federal District Court, and several proposals for development arose that discussed what kinds of institutional and commercial uses could take its place.

On the south side of Cambridge Street, Suffolk University was also expanding its territory. From its origins as a law school early in this century, Suffolk had grown to a graduate and undergraduate university offering programs leading to seventeen different degrees. By 1976 its total enrollment had reached 6400 including many part-time and evening students, though only about 2000 were on campus at any one time. That "campus" had also grown from one small building on Derne Street behind the State House to several structures extending onto Hancock, Temple, and Mount Vernon Streets.

The Beacon Hill community was most concerned about development that threatened the pattern of use and occupancy in its
midst. The area along Cambridge Street was the locus of this
development activity, and so in late 1971 the Cambridge
Street Community Development Corporation was organized by the
Beacon Hill Civic Association, MGH, and Mass. Eye and Ear to
plan the future of Cambridge Street. Forming CSCDC was an
attempt to lessen long standing antagonisms between the in-
istitutions and the residential community.

**CSCDC** -- The hospitals and the Civic Association saw the need
to resolve conflicts in goals, and believed that a failure to
do so would permit Cambridge Street to continue declining and
would aggravate social problems associated with the decline.
The corporate purpose of CSCDC was stated
to further the rational development of the Cambridge
Street area in the City of Boston, Massachusetts, and
its environs by promoting the growth and development
of residential, commercial, hospital, educational and
other existing uses in said area so as to encourage
the development of a coherent, well-designed, func-
tional and attractive neighborhood along Cambridge
Street...2

Funding was obtained from the hospitals and private found-
ations, and CSCDC conducted several planning studies and pro-
posed several developments along Cambridge Street, none of
which had been implemented as of 1976. MGH offered to donate
a 80,000 square foot garage on the south side of Cambridge
Street to CSCDC for development of community uses to include
elderly housing, a day care center, and retail space. In
1974 architectural plans were drawn. HUD Section 8 rent
subsidies were arranged, the BRA had granted the project 121A status, and MHFA had made a commitment of mortgage financing; but the project was postponed when MHFA encountered trouble floating bonds. Across the street on development parcel 4B, CSCDC was planning a large scale commercial development similar in content to Charles River Plaza. A hotel, retail uses, an indoor recreation center, and parking were proposed to fill an entire 60,000 square foot block of parking lots and old tenements then in poor condition. The 4B proposal was related to MGH's work on the Ambulatory Care Center, and has been tabled pending State approval of their project.

As a development corporation, CSCDC had little to show for its efforts -- largely due to forces beyond its control --, but it had done some valuable planning for future private development along Cambridge Street. In October 1973 CSCDC issued a planning study prepared by consultant Richard Dober which examined the existing conditions and development potential of eighteen parcels on or near Cambridge Street. The report did not discuss the economic feasibility of development on particular parcels, but it did articulate three basic principles which were to guide development in the area. They were

the south side of Cambridge Street is to be preserved, enhanced, and redeveloped (in small strategic areas) essentially as a residential area complementary to the Beacon Hill neighborhood.
The north side of Cambridge Street from Blossom Street to Storrow Drive is to be developed, at reasonably higher densities than those there today, for new tax-paying land uses, a portion of which would be related to health care.

Throughout the area, particular attention will be paid to historic preservation, urban design and the encouragement of public and private sharing of opportunities within the policies described in CSCDC policy statements of June, 1973.

These principles satisfied both the BHCA and the hospitals. Each was allocated its own domain for future growth, but the presence of Suffolk as an institution with expansion plans on the south side of Cambridge Street seems not to have been considered at that time. In succeeding years CSCDC tried to prepare development packages that would make those principles more concrete. They needed a prototype development which would implement those ideals and provide a model of good design for the rest of the street as well.

In 1975 Suffolk University produced a proposal that could be used as a model for development, but there were several obstacles that had to be overcome before it could be built.

Regulatory context -- Any acceptable development along Cambridge Street not only had to fit into Dober's advisory land use guidelines, but also it had to comply with several other mandatory controls.

Although the Boston Redevelopment Authority has remained out of CSCDC's turf on Cambridge Street, they would have a say
in any variance, conditional use, or exception granted to developments under the Boston Zoning Code. The BRA must file a report with the Board of Appeals making its recommendations on the granting or denial of a variance. The Board of Appeals possesses the authority to grant variances. According to Article 7, Section 3 of the Boston Zoning Code, the Board may grant a variance only if: 1) special circumstances peculiar to the land but not to the neighborhood exist, and application of the Zoning Code deprives the appellant of the reasonable use of his land, 2) demonstrable and substantial hardship make a variance necessary for the reasonable use of the land, and 3) granting of a variance would be in harmony with the general purpose and intent of the Zoning Code and will not be injurious to the neighborhood or detrimental to the public welfare. In making its determinations, the Board of Appeals must take into account the character of the neighborhood. The presence of community opposition would surely influence the deliberations of the Board in a way unfavorable to the proposal; but consensus established by a body like CSCDC, which lacks formal legitimacy and the authority to make zoning decisions, would not necessarily insure a favorable response to a proposal before the Board of Appeals. Aside from recourse to judicial appeal, the Zoning Board of Appeals has the ultimate authority to rule on variances pertaining to use, height, setback, and other

Zoning Map for Cambridge Street and Beacon Hill
matters. In this case, however, the process of approval did not reach the stage where the Board had to make a decision.

Since 1970 the designation of the district along Cambridge Street had been changed to "L-2-65". It remains a local business zone with university buildings permitted as a conditional use. The maximum FAR is still 2, but a new 65 foot height limitation has been imposed on all new buildings and additions. This limit matches the height permitted in the adjacent H-2-65 residential district of Beacon Hill.

The zoning controls on Cambridge Street make the area unattractive to private developers who would find it difficult to build profitable buildings given the costly construction forms dictated by zoning and the small parcels. A Planned Development Area could be formed to qualify for an "exception" to the Zoning Code, but the Area must be greater than one acre in size under single ownership or a corporate agreement among several owners. In any case, development would be difficult under these restrictions, and that is exactly what many people from Beacon Hill want.

John Codman, a long time resident and realtor on the Hill, has been a driving force behind BHCA's sponsorship of the 65 foot height limitations. He has said, "One of the charms of Beacon Hill is the low rise," and that "charm" should be preserved at all costs. To him the 65 foot limit is an inviolable standard which cannot be modified within the
district. There can be no case made, he has written, for variations in application of a standard within a zone, or else unconstitutional spot zoning would result. There was strong community sentiment to back up this height restriction in its application to any development that might take place on Cambridge Street.

The Beacon Hill Architectural Commission (BHAC) has jurisdiction over changes in the exterior design of buildings in the Historic District that begins forty feet south of Cambridge Street. Any development site on the edge of that district that straddles the border must be approved by the Commission. The BHAC's authority comes from the same legislation as that which established the Historic District in 1955. Their standard for review is the discretionary interpretation of a published set of guidelines (to be discussed further in Part II) which must be satisfied for the Commission to issue a certificate necessary before the Boston Building Department can issue a building permit. Almost any proposal for new development on Cambridge Street must pass BHAC review.

One more informal regulatory device had been proposed under CSCDC auspices. In 1973, Charles Rogers -- partner in the architectural firm of Perry, Dean, and Stewart -- and two of his staff worked for three months to prepare an Urban Design Workbook for Cambridge Street. They spent several weeks in the field, operating from a room at MGH, studying
The basic urban design pattern of historic Boston and Beacon Hill lies in three areas: scale of buildings, use of materials, and open space/street relationships. The urban design goals of CSCDC and the community speak clearly to the requirement that new buildings along Cambridge Street be in harmony with this pattern.

Consistency and regularity rather than historical reproduction were the means of achieving that harmony. Any new buildings on Cambridge Street should address themselves to these patterns and goals in order to assure their sensitivity to the surrounding context.
### Parcel 1B

#### Guidelines from
Urban Design Workbook
prepared by
Charles Rogers and staff
Perry, Dean, & Stewart
January 1974

<table>
<thead>
<tr>
<th>GIVENS</th>
<th>GOALS</th>
<th>DESIGN GENERATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Existing one story building</td>
<td>• Maximize use of roof areas for terraces etc.</td>
<td></td>
</tr>
<tr>
<td>• Existing Chinese restaurant, fairly new, one story building with vestigial roof ornament</td>
<td>• Complete the block respecting scale, cornice lines materials &amp; window patterns of surrounding Beacon Hill area.</td>
<td></td>
</tr>
<tr>
<td>• Pitched roof buildings at #9 Temple, #8 Hancock reflect Beacon Hill vernacular</td>
<td>• Enhance quality of ridgeway lane and its connection/definition at Cambridge St.</td>
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<tr>
<td>• Windows in north wall of building at #11 Temple St.</td>
<td>• For maximum design continuity, encourage one developer for all 3 parcels.</td>
<td></td>
</tr>
<tr>
<td>• Desire by some people to close Temple &amp; Ridgeway to cars.</td>
<td>• Enhance views of historic building across Cambridge Street.</td>
<td></td>
</tr>
<tr>
<td>• Suffolk university owns portion of parcel between Hancock St. and Ridgeway Lane.</td>
<td>• Encourage development of Ridgeway Lane as a positive pedestrian place</td>
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#### ALTERNATIVES 1

- **MAXIMUM BUILDING VOLUME WITH ROOFTOP TERRACES**
  - 4 Stories (13,560 SF)
  - View of Old West Church Facade
  - Cambridge St.
  - Hancock St.
  - Temple St.

#### ALTERNATIVES 2

- **HAMS RIDGEWAY LANE A LIMITED ACCESS STREET**
  - Increase pedestrian use, landscape and pave with brick
  - Hancock St.
  - Temple St.
  - Cambridge St.

#### COMMENTS

- Brick paving, planters on pedestrian streets.
- Will such developments be economically feasible? Would a potential developer or current owner of one of the 3 parcels be willing to tear down a one story building to build a 5 or 6 story building?

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Cambridge Street, West End, and Beacon Hill from west
The Story

Thomas Fulham, former member of Suffolk's Board of Trustees, succeeded John Fenton as President of Suffolk University. Fulham had always been sensitive to community concerns. When the community protested the expansion plans of 1968, Fulham was the only trustee who attended their protest meetings. He was aware that the University and the neighborhood had to coexist in harmony so both could prosper. During the first several years of his tenure as President, Suffolk had tried to establish good relations with Beacon Hill, and it was generally considered to be behaving as a good neighbor to the community.

Suffolk students did not fit the conventional image of rowdy youths attached to many college students. They are rather conservative in their politics and their demeanor, considered comparatively well behaved, hard working, and remarkably peaceful. Certainly these attributes of the student body, as well as the affable personal style of Fulham contributed much to the tranquility on the surface of the prevailing town-gown relationship.

But beneath the surface calm, there remained an underlying distrust of the University's motives and a concern over its increasing enrollment. When Suffolk purchased buildings owned by the New England Law School on Mount Vernon Street in 1972, the Civic Association wanted Suffolk to agree to

SIGNIFICANT EVENTS
Suffolk's first proposal to build at Cambridge St.
Court decision on case.
Formation of CSCDC.
Suffolk agreement to vacate Mount Vernon Street.
CSCDC planning studies and development plans.
New Suffolk proposal.
Formation of ad hoc Design Review Committee.
Kallmann's first design.
Committee recommendations.
Public meetings on design.
Formation of Planning and Zoning Committee.
Growing community opposition to Suffolk proposal.
NESNA given power of decision by BHCA and CSCDC.
Fulham negotiates with NESNA.
Proposal disapproved.
sell those structures eventually so that they could be returned to tax paying residential use. Occupancy of those buildings was seen by Suffolk as a temporary solution to their growing space needs, but Fulham conceded that the university use was not appropriate in that residential area near the center of the Hill. While both parties were not able to reach a binding formal agreement, there was an understanding that Suffolk would leave Mount Vernon Street as soon as it could find adequate space elsewhere.

After several years of improving relations with the community and with the animosity of Fenton's Cambridge street row fading as well, Tom Fulham decided it was time to make a new proposal for development on the Hancock-Ridgeway parcel. Pressure to find additional space had not abated even with makeshift solutions plugging the gaps. Suffolk had renovated the old Stop and Shop -- renamed the Ridgeway Building -- on Cambridge Street for use by student activities, and administrative offices were housed in space rented in Charles River Plaza; but what Fulham needed was more efficient, modern space -- preferably located in a more compact "campus" on one block.

A new proposal -- In Fall 1975 Fulham spoke to the Civic Association about building a new structure on Cambridge Street. They referred him to CSCDC's President Christopher Lee, who was also a director of BHCA. Fulham believed that the best strategy was to seek community involvement to ratify
his proposal and gain support for a zoning variance. He felt that he could obtain a variance if local reaction was favorable. Based on past observations, he thought that the Board of Appeals would go along with community wishes on development, and he hoped he could ride out the opposition of a few individuals. But he needed CSCDC backing in his moves.

Perhaps Fulham held a misperception of the mood of the community -- their objections to Suffolk's expansion were submerged but not gone. While Fulham could make the case that his actions constituted a spatial contraction rather than expansion -- he would vacate space on Mount Vernon Street and Charles River Plaza and build on land already occupied by Suffolk --, many in the community were averse to any new construction by the University. There was potential for an emotional response that could not be abated by Fulham's rational arguments. Fulham simply did not anticipate the vocal and well organized opposition that would later develop in response to his proposal.

Fulham was not entirely blind to the situation. He first wanted to test the waters at BHCA and CSCDC before committing himself to an all out campaign. "I want to determine," he said, "if it would be possible to erect a building which would be satisfactory to the neighborhood...There is no sense in spending a lot of money on these problems (architectural, engineering, legal) if the neighborhood is not

**PRINCIPAL ACTORS**

Thomas Fulham  
President of Suffolk Univ.

Gerhard Kallmann  
design consultant architect

Knight, Bagge, & Anderson  
Suffolk's regular architect

James McNeely  
plaintiff in 1969 suit, member Design Review Com.

Charles Rogers  
director BHCA, prepared urban design study, member Design Review Com.

John Bok  
member Design Review Com.

Ester Maletz  
Manager for Development, CSCDC

Paul Graziano  
CSCDC staff member

Christopher Lee  
President of CSCDC, director BHCA, member Design Review Committee

Stephen Oleskey  
President of BHCA

Phil Boyle  
President of NESNA
going to approve it."7 According to Lee, Fulham expressed a willingness to use the PDS Urban Design Workbook as a framework for the design of their building, and agreed to the establishment of a Design Review Committee composed of neighborhood residents.

The Design Review Committee -- CSCDC has a small staff and limited technical resources. It has little design expertise in-house, but Beacon Hill offers a vast pool of design talent since many architects live on the Hill. The community involvement needs of Fulham as well as CSCDC's own inclinations dictated the use of a citizens' committee. The committee membership included Christopher Lee, Charles Rogers, and James McNeely an architect who was the plaintiff of record in the 1970 SJC case.

John Bok was also an original member of the review committee, and his discussions with Tom Fulham helped to bring it to life. One of the motivations in Bok's mind was that the successful completion of the Suffolk proposal could provide a visible improvement in the area during a period when it was difficult for private enterprise to do much development. The building could set a standard for architectural excellence and design sensitivity, and it could serve as the development prototype that CSCDC wanted in the area.8 Ester Maletz, CSCDC's Manager for Development, concurred with that view. This opportunity was seen as a potential for setting a positive design precedent. CSCDC's 1974-1975 Report saw

John Codman
former director BHCA

Gladys Shapiro
abutting owner

Debbie King
abutting resident
Suffolk's proposal

as the first major structure to be built on the south side of Cambridge Street in fifty years, (and it) is considered highly significant in terms of standards it sets for mass, scale, and quality of materials and construction.9

It was clearly in CSCDC's own best interest to get something built, but that something had to be of good quality and to be sensitive to community desires. CSCDC had to make the design review process work in a way that made many conflicting interests happy.

Most members of the review committee were architects -- abutters were underrepresented -- and in the beginning the committee took an architectural tack. The committee believed that a prerequisite to a good design was selection of a good architect, so it submitted to Suffolk the names of three

Proposed Suffolk construction site on CSCDC development Parcel 1B
architects acceptable to the community. The architects were Paul Rudolph, design coordinator of the State Services Building on Cambridge Street (the Hurley Building), Ben Thompson, architect of numerous educational buildings in Massachusetts and of the renovation of Quincy Market, and the firm of Kallmann and McKinnell, architects of Boston City Hall.

In April 1976 Suffolk selected Gerhard Kallmann and Michael McKinnell to serve as design consultants for the exterior of their new building. Gerhard Kallmann was to work in association with Suffolk's regular architects Knight, Bagge, and Anderson, who were responsible for the use program and the interior layout.

The Wall Concept -- Several members of the Design Review Committee as well as people affiliated with CSCDC shared an image of Cambridge Street's form known as the "Wall Concept". That concept has been described in various ways, but essentially it proposes a line of tall buildings built on the southern edge of Cambridge Street to serve as a noise buffer and formal transition between the residential area of Beacon Hill and the West End. Fulham saw it as "a line of buildings to give a demarcation between the intensive activity of Cambridge Street and the residential nature of what is behind it." Stephen Oleskey, President of BHCA, was not fond of the idea because he felt that the area was already walled in by tall office buildings to the east. He saw the concept as part of CSCDC's view of Cambridge Street as a monumental en-
trance to Downtown Boston. Charles Rogers said that he considered the idea in his PDS urban design study, but discounted it as being inappropriate. In a later interview with the author, Rogers suggested that perhaps a park along the street on parcels occupied by low post-1925 infill structures might be another idea to consider as a transitional zone.

At least to some participants in this case, the Wall Concept was a design idea in good currency that was seen as an appropriate determinant of the design of the Suffolk site. Despite the differing opinions regarding the idea, Kallmann adopted the Wall Concept as one of the influences guiding his design thinking. He saw it as "taller buildings on Cambridge Street (which) would provide stability, supply a noise..."
barrier, and help to develop the street as a boulevard." It was that concept of urban design which was used to justify constructing a building that exceeded the 65 foot height limit on Cambridge Street.

The first design proposal — Gerhard Kallmann had taught architectural design at Columbia University before he and his partners won the competition for City Hall. He currently teaches at Harvard while he maintains a small practice with Michael McKinnell. One could characterize his approach to design as "academic" as opposed to pragmatic. His standards of quality are high and the logic of his reasoning rigorous.

Kallmann sees both the architect and his client as active participants in the design process. The architect submits propositions to his client. Then he tests the propositions by probing their interpretations by the client. What do you really mean? is the question repeated again and again.

During the first few weeks of their assignment, the architects spent their time studying the setting. They wanted to determine urbanistically what belongs on the site. On the one hand there was the question of overwhelming bulk, and on the other a question of appropriate use of detail. They made studies of roof forms and made several propositions that they tested on themselves. The Knight, Bagge, and Anderson program called for 35,000 square feet of space to be laid out flexibly, but given the site and the relatively small floor
areas possible, much of the space would be taken up by building services and stairs. Only 65% of the space was usable for classrooms per floor. All of those factors dictated a tall building even if the design took advantage of the sloping site and placed two stories underground.

Kallmann saw configuration and not height as the primary problem. He tried to break down the mass of the volume by dividing the structure into three parts. A tall section could be located at Cambridge Street to take advantage of the wide open space it provided and reinforce the Wall Concept. Services, stairs, and elevators could be placed in the tallest central bay. A lower third bay would step down nearly to the height of the existing buildings up the hill on Hancock Street. The reason behind this "up and down" roof line was a desire to repeat the pattern of varied roof heights that existed in the area. There are no wide, flat roofed buildings nearby, and that kind of roof would make the new building seem out of place. Kallmann wanted to "tone up" the neighborhood with a decent building, and to spend money on a "noble wall" that would create a firm edge at Cambridge Street.

It was not until mid-May that Kallmann was ready to present his first design ideas to the Design Review Committee.

In a meeting held at Kallmann's office, he described the details of the design to Lee, McNeely, Rogers, and Maletz.
The building was to contain 66,380 square feet for an FAR 7.2. At Cambridge Street the front bay was seven stories or 98 feet high, the middle bay was eight stories or 114 feet high, and the third bay was six stories or 81 feet high, plus a basement and sub-basement. In this first presentation Kallmann had only a tiny model and no elevations of the building's relation to the existing structures stepping up the hill on Hancock Street. Although they were somewhat dismayed at the height of the building presented to them, the Committee members were generally pleased with the overall concept of the design -- its articulated massing, varied roof heights, and orientation. They were particularly pleased with the use of red brick walls and brownstone lintels and sills, a detail which repeated the form of

Proposed design along Hancock Street
construction used in the area. The design showed all the sensitivity the Committee had been seeking.

After some discussion of alternatives, they all agreed that deliveries should be from a passage through the building located in the third bay away from Cambridge Street. In that scheme trucks would be off the main street and hidden behind arches, but it would mean some additional truck traffic on Hancock Street and Ridgeway Lane. Kallmann had to move the building away from the Lane by seven feet to accommodate the trucks' turning radii, and that move slightly opened up more of the view down Ridgeway Lane to the Old West Church and the Otis House across the street -- an idea that Rogers had suggested in his study. The main student entrance was also placed in the third bay on Ridgeway Lane which was at the corner of the site allowing the shortest access path for most students, thus reducing the amount of student traffic to a minimum around the rest of the building. At the first meeting Committee members made a few more suggestions and Kallmann promised to incorporate them into his design.

One week later the Committee met again with Kallmann, and they were joined by Stanley Smith of SPNEA. Smith recommended that the ground floor along Cambridge Street ought to contain activities that would be interesting for pedestrians to see through the tall windows. He suggested a store or bookshop to add more life to the street rather than the offices
that were planned there. In response to a suggestion, Kallmann said that it was impossible to fit in a colonnade along the street because there was no room to spare inside the building. The Design Review Committee suggested raising the cafeteria up from the basement and locating it on the first floor behind the tall windows. They too were not happy with lifeless offices and thought it would be depressing for students to eat in a windowless room.

Kallmann began preparing this case to support the design when it went before the community. What he believed was most important was the way the buildings broke down its volume to relate to the profile of buildings on the Hill -- something the blocky 1968 proposal did not do. He later said, "This new design has a broken-up silhouette at the top and the kind of windows and materials familiar to the Hill. All this is much more important than height." Kallmann also considered some of the external effects of the design. Shadows were cast onto Cambridge Street to the north and not on any residential properties. Security would be increased in the area by the presence of more people walking on Ridgeway Lane.

Charles Rogers was happy with the proposal as an isolated design, but was still concerned over some of its other external effects. It was a good formal solution, but it did not address other community concerns that arose out of Suffolk's expansion. Rogers realized that the committee had no real
power, and he felt it was time for them to step back and let the neighborhood come in to express their concerns in public meetings.

Concerns of community leaders -- Even before the public meetings took place in July 1976, members of the BHCA who were following the progress of the proposal began to raise questions about the design.

The height was what troubled many of the long time residents like John Codman. He was adamant about maintaining the 65 foot height limit and felt that granting a variance to Suffolk for a 114 foot high building on Cambridge Street would set a bad precedent. No matter how sensitive the design was to its setting, if the building was too tall it should not be built. If the first new building constructed under L-2-65 zoning was to be 114 feet high, it made a farce of those regulations that BHCA fought so hard and long to get enacted.

Ester Maletz countered by saying, "The height of a building is a neutral condition. I don't think five (stories) is good and seven bad, unless you are losing some aesthetic or environmental criteria." She believed 65 feet was an arbitrary limit. James Sharaf, a director of BHCA, thought that the height of buildings on the Hill side of Cambridge Street ought to be considered as a whole. Suffolk's building would be higher than anything else on the street except the Saltonstall Building at Government Center which is 25 stories high.
He was worried that the building would be cutting off a large piece of the sky from Hancock Street and Ridgeway Lane.15

James McNeely believed one of the motivations behind Suffolk's proposal was to make the University more visible. It needed to change its image as "some law school behind the State House," and located an outpost on busy Cambridge Street would provide it some prestige and an address. The problem McNeely saw was that Suffolk was also trying to solve its space problem at the same time -- dictating a more massive building than would have been necessary for image quality alone. If the building had been four stories, he said, abutters would not have protested so loudly, and the project might not have been linked to the continuing issue of expansion.

Thomas Fulham, in an interview, confirmed that visibility was a concern, but he also had to meet his space needs so Suffolk could vacate the Mount Vernon Street properties. He needed a large enough building to justify its cost and to make effective use of the valuable land.

Each of these neighborhood leaders was speaking from his own broad perspectives, but the abutters themselves had a more limited perspective and raised entirely different sets of issues about the design of Suffolk's new building.

Public meetings -- Two public meetings were held in July 1976 to discuss Kallmann's design. The Civic Association had
publicized the meetings well in advance, and there was a very good turnout for meetings held in mid-summer. People from all over Beacon Hill came to the meetings, but residents of the Northeast Slope did not come out in full force; therefore, community-wide rather than immediate local issues dominated the discussion.

Ester Maletz had hoped that design review would proceed based on the merits of the proposal itself. She did not want it to become entangled in long-standing issues of dispute between the University and residents of the Hill, but the results of the public meeting demonstrated that that was a vain hope. Fulham described the design, explained his notion of the "Wall Concept", and said that one of his primary motivations was "to clear out of Mount Vernon Street."16

Connie Green, a local resident, said that the height was the principal issue. She was afraid of the precedent that would be set by a tall building. "It's the same issue the Back Bay has been fighting for 15 or 20 years, and it's the same issue in Park Plaza," she said.17 Christopher Lee said it was a well thought out solution, but it offered a "Pandora's Box" of problems if it were approved.

A list of design issues arose in the meeting: height, the precedent that would be set, fear of creating a wall on the edge of Beacon Hill or fear that a single tall tower would stand out of place alone, the increased density to FAR 7.2, the
problems of obtaining a zoning variance, and the opinion that it was unlikely the BRA would grant the project 121A status because it would be difficult to demonstrate blight at that location. Members of the Review Committee suggested that CSCDC ought to prepare an overall development plan for Cambridge Street to look at Suffolk's proposal in a context. Then Suffolk's zoning application could become part of a phased development plan. That suggestion was noted to be taken up later in the Fall.

Members of the community also raised a set of non-design issues which arose partially out of this proposal and partially from unresolved continuing issues. Students were said to be monopolizing parking on neighborhood streets to the detriment of residents. Suffolk ought to take the responsibility for trash pickup and improved lighting and landscaping in the area. Although Fulham pledged to vacate other property when the new building was completed, the question of further expansion remained an issues of community concern. Old wounds were reopened and some people in the community saw this proposal as an opportunity to renew their opposition to Suffolk's presence and its detrimental effects on the community.

BHCA's President Oleskey said that the next step in the evaluation process would be "the normal Civic Association committee process," but the persistence of local Northeast Slope opposition was to modify that process in upcoming months.
Growing community involvement -- Gladys Shapiro grew up in the West End, but in 1976 she was a lawyer and property owner on Hancock Street -- and a long time opponent of Suffolk University. She would rather see Suffolk move to a piece of open land in the suburbs or to the abandoned Chelsea Naval Hospital site than have it remain on Beacon Hill. Suffolk was consuming valuable taxable property, and it did not belong in a residential area.

Shapiro said that the design of the new building was not the issue. The impact of the building was the issue. Trucks on Ridgeway Lane making deliveries and hauling away garbage from the cafeteria, the student street life, student parking in the streets -- these were the real issues not building height. The site ought to be used to meet community needs as the location for a dry goods store. When asked by the author, Shapiro said she could not accept a 65 foot high, well designed, university building even if it had community oriented retail on the ground floor. She was opposed to Suffolk, period.

Tom Fulham believes that Gladys Shapiro still entertains romantic notions of the past -- the West End with a dry goods store on every corner. He says that Suffolk already spends a large sum on trash collection, and that the streets they patrol are the cleanest in the area. Students are an easy target for blame on parking problems. Most violators, he
says, are state employees from the nearby office buildings not students. The proposed cafeteria was small -- only 200 seats -- and great numbers of students were not likely to walk all the way down the hill and back to eat when there were plenty of restaurants near the center of campus on Derne Street. While Fulham was able to counter every community argument, that did not stop local opposition from gaining momentum.

In August and September 1976, Shapiro and Phil Boyle, President of the Northeast Slope Neighborhood Association (NESNA), began to speak in opposition to Suffolk's proposal, and people listened to them. Two Ridgeway Lane residents, E.P. Kilby who one year previously had moved into the only single family carriage house in the area, and Debbie King a tenant, began to get people worked up over the potential impacts of the building.

**Cambridge Street Planning and Zoning Committee** -- In October 1976 CSCDC convened the first meeting of the new Planning and Zoning Committee which was to take a comprehensive look at all of Cambridge Street. The committee was formed partially in response to the Suffolk case and the perceived need for an overall view. The purpose of the committee was to develop guidelines for Cambridge Street to insure that future development is compatible in scale, design, and materials with the adjacent historic district. It was to select and refine a legal device for implementing those guidelines. Many members
of the original Design Review Committee were also members of Planning and Zoning. This committee soon became the CSCDC vehicle for attempting to resolve the remaining design issues of Suffolk's proposal.

The committee's second meeting in November was a critical one for Suffolk. Kallmann again presented his designs -- essentially unchanged since July. James McNeely then discussed a study he had done of buildings heights on Cambridge Street that pictured new buildings stepping up in height to meet Suffolk's proposal above 65 feet.

Once again the problem of exceeding the 65 foot limit was discussed in detail. Fulham said reducing the height by two stories across all three bays would raise the unit cost of the building because of the high costs of foundations and roofing that would remain constant. Kallmann said in order to meet the 65 foot limit the building would have to be designed as a single, flat roofed mass, and that solution was not aesthetically feasible. Someone suggested eliminating the 2500 square foot delivery drive-through and reducing the height at that point by one story. Another idea was to keep the serrated roof line, but build to a maximum 65 feet instead of 114. Suffolk would then need to acquire an additional site for space elsewhere, which Fulham was willing to do, but he feared charges of further expansion from the community and the Mayor -- who was fighting to preserve
the city's tax base.

The arguments became circular. A solution that reduced the height increased the need for space elsewhere. Any expansion was opposed by many people and the immediate abutters of Hancock Street and Ridgeway Lane were still opposed to impacts from any new building.

Christopher Lee felt that people would accept the proposal if it were reduced in height by one story in each bay (to six, seven, and five stories). Fulham thought that might be possible if the drive-through were eliminated. Lee said the abutters would be most affected by elimination of the drive-through, and they must decide on the trade off. McNeely and Boyle would take the issue to the NESNA meeting scheduled later that night.

McNeely feels that review of the Suffolk proposal was delegated to the BHCA and NESNA when CSCDC felt they were no longer able to deal with the issues of interest to the abutters. He was concerned that the Design Review Committee, with its architectural bias in membership, may have been leading Suffolk down the path toward approval on design when other issues which were more significant to the community would hold up any final approval.

The Civic Association, with its Beacon Hill-wide scope of interests, had a very different point of view from that of the Northeast Slope community. BHCA members from the front side
of the Hill wanted Suffolk to vacate the Mount Vernon Street properties and relieve the impacts of traffic, students, and noise it brought them. But approving the Suffolk building on Cambridge Street would merely shift the disruption to the Northeast Slope albeit to the edge of Beacon Hill on a major street where it could be better accommodated. Politically the BHCA felt it must let NESNA decide whether it was willing to accept that disruption. The older organization did not want to appear high handed in its dealings with the fledgling Northeast Slope group. Oleskey gave NESNA the option to approve or disapprove Suffolk's proposal based on the localized issues of impacts as they affected the immediate abutters.

NESNA -- James McNeely thinks that NESNA works very well as a neighborhood organization. It runs its meetings smoothly and is highly representative of its small constituency -- much better than the Civic Association or any other local groups he has seen in operation. Their membership was not dominated by architects, and they expressed a much greater concern for "housekeeping" issues of trash collection and maintenance rather than design issues. In the last set of meetings with NESNA in the Fall, Kallmann stayed home and Fulham made all the decisions -- even those affecting design.

At the mid-November Planning and Zoning Committee meeting, Suffolk's case again dominated the agenda. Debbie King and Gladys Shapiro wanted all trucks banned from Ridgeway Lane,
though King conceded that pedestrian activity did improve the area's security. Phil Boyle suggested that the concensus of the abutters should be written into a variance that placed restrictions on the use of the property, but Ester Maletz felt those conditions would be binding on the site but not the University. Finally, in this meeting control of the process was delegated by CSCDC to NESNA to work out the final disputes and vote to approve or deny their support.

The Suffolk case was raised once more at the December 6 committee meeting, when Boyle reported that NESNA was still negotiating with Fulham over issues of parking and location of the cafeteria. Someone raised the question: should NESNA's opinion be decisive; but by that time no one could wrest control of the review process from the local residents. Finally, they had Fulham talking about issues that concerned them, not the issues of the Beacon Hill community leaders.

The final decision -- The evolving sentiments of the community are well illustrated by the changing views of James McNeely, the former SJC plaintiff. In the Spring and Summer he was pleased with Kallmann's design solution and backed Suffolk, though he was still concerned over the height in relation to the precedent it set on Cambridge Street. He did not want to see a wall of seven story buildings lining the southern edge of the street in the future. But he did want to see a handsome building designed by a reputable ar-
chitect added to the area. With Suffolk's agreement to move from Mount Vernon Street, McNeely saw the whole package as a reasonable trade off against the height.

In the Fall McNeely listened to the points made by the Northeast Slope residents. He had moved from Temple Street some years ago, but his former wife and family still lived there and he owned property in the area. Fulham was beginning to lose patience, but he kept trying to justify the design to the community in frequent NESNA meetings. McNeely was sympathetic, but in the end he decided to join with the abutters and vote "no" against the proposal.

Fulham wanted to force a vote as soon as possible -- it was costing the University money to wait and delay construction. In January NESNA decided to vote at the February 3, 1977 meeting. Debbie King had drawn up a list of demands the community wanted Suffolk to meet regarding "housekeeping", the impact of student activities, and community representation on the Suffolk Board of Trustees before they would approve the building, but these demands were never formally adopted by NESNA.

In the February 3 meeting, the issue became emotional. One of the opponents threatened to "move to New Hampshire" if the Suffolk proposal passed. By then the building had been drastically reduced in size, it had no loading drive-through, and McNeely said its once noble proportions had been reduced
to "only a building with a bump in it." The meeting room was packed as the vote was taken. The Hancock Historic Trust, who were viewed with suspicion by many as "speculator types" supported Suffolk, and that did not help Fulham's cause.

The vote was 24 to 14 in opposition to Suffolk. The abutters had spoken, and all that was left in the drama was Fulham's angry response to Debbie King's demands. He "nailed the lid on the coffin" when he said that the University could not have met the demands anyway.

**Future prospects for Suffolk** -- Suffolk University is still occupying space on Mount Vernon Street that is ill-suited to its needs. That property as well as the site of the present Ridgeway Building remains off the tax rolls. President Fulham is disappointed but no longer bitter. He says if King and Kilby had not moved to Ridgeway Lane the proposal would have passed through CSCDC's and the Civic Association's review process. He is confident that Suffolk could have obtained a variance despite the buildings overwhelming height and high floor area ratio.

Meanwhile, Suffolk still needs more space and the Civic Association still wants it out of Mount Vernon Street. When asked whether or not the Cambridge Street proposal would be revived, Fulham responded, "Universities have long lives, people do not." If he does not revive the proposal himself, it will be revived again by his successor.
Analysis

Some of the lessons of this case are clear and illustrate problems that arise in nearly every planning process. A constellation of issues revolve around the concern of community involvement in the design review process. Who represents legitimate views that should be heard? What kinds of issues should be covered in a design review process? and When in the process should those issues be considered?

Part of the problem that Suffolk University encountered in this case is characterized by James McNeely's comments on the architectural bias of the Design Review Committee. Their concurrence with the early part of the design evaluation may have given the appearance of smooth sailing for the proposal, but later in the process as community groups became more involved, it was clear that design issues were not as critical to the proposal's success as the issues of the proposal's impact. Had the Northeast Slope community been involved earlier in the process and expressed their concerns, the proposal might have died an earlier death before so much effort had been expended on both sides.

It is not necessary to dwell here on the shortcomings of the participatory process in this case. The story and some of the actors' comments quoted in this analysis provide many indications of where that process went wrong. Observations on
these participatory difficulties and similar issues in other cases will be included in the overall analysis following the final case study.

Another general lesson of this case is that non-design issues easily become entwined with architectural issues during a design review process set in a context of continuing conflicts. How they are sorted out may depend on the character of the participatory process discussed above. Whenever issues like the "Wall Concept" and trash on the streets are discussed simultaneously, it is clear that actors are addressing a complex problem on many levels. A review process must have a way of relating to the entire system of issues that complicate a project. The trade-offs between the Wall and building height and student disruption and Mount Vernon Street properties ought to be made clear by someone so that informed decisions can be made by representatives of the community affected. Some issues like building height had a neighborhood-wide constituency, but the issue of trash in the streets was a major concern only to the abutters. Both concerns were tied to Suffolk's pledge to leave Mount Vernon Street. These connections all affected the viability of Suffolk's proposal, but they were understood only after a long period of discussion and confrontation among the actors and groups. Community based design review ought to facilitate the discussion and minimize the confrontation by clarifying the connections early on in the process.
Another set of concerns which complicated this case -- though they are by no means unique to this situation -- were the motivations and needs of CSCDC. That relatively young organization seemed to be seeking credibility as a planning body in its orchestration of the Suffolk-community conflicts. CSCDC's purpose is related to resolving community conflicts and to promoting the redevelopment of Cambridge Street, and this case offered them the opportunity to do both. Unfortunately for them, CSCDC was able to accomplish neither. Suffolk was not able to provide them with a prototype development, and the Design Review Committee was unable to provide an adequate forum for the resolution of conflicts on building height and institutional expansion south of Cambridge Street. The Planning and Zoning Committee grew out of a dissatisfaction with the ad hoc approach to the Suffolk problem. It became clear to many community leaders that a more comprehensive view toward urban design was needed, and CSCDC devised an institutional mechanism for dealing with those concerns.

All of these lessons are identified with this case, but they are not unique. They suggest concerns that may arise in similar situations. Some of the issues discussed here will appear again in the summary of observations at the close of this part of the study.

There are several more general issues that cut across each of the three cases. These questions of sanctions and leverage,
the opinions of the architects involved, ideas on more appropriate methods of design review, measures of success used by actors to evaluate design review, and an evaluation of the success of each case's process. The remainder of this analysis is organized around these topics.

Sanctions and leverage -- The abutters to Suffolk's development site on the Northeast Slope held the most powerful sanctions in this case. President Fulham needed their support before he could hope to obtain a variance that would let him proceed with his proposal, but their support alone would not assure his success. The Supreme Judicial Court's McNeely decision was not binding on the current proposal except as it clarified the possible grounds for obtaining a variance. Fulham would still have to prove the hardship of zoning arose from the special circumstances of the particular site, and that his proposal did not violate the intent of the zoning ordinance. Those points might have been difficult to prove, and the establishment by the City of a Planned Development Area or Special Zoning District sponsored by CSCDC might have been a more appropriate strategy. In any case Fulham could not get anywhere without community concurrence with his aims.

Suffolk was not without some pressure sources of its own. If permitted to build, Fulham offered to vacate the Mount Vernon Street property and return it to taxable residential use. That move would please the City and BHCA, but it had little
influence on NESNA's view of the matter. It would merely transfer Mount Vernon's impacts to Ridgeway Lane.

Christopher Lee saw a benefit to using design review as a lever. He said, "By using a Design Review Committee of concerned neighborhood people, we have been able to convince a major land owner to invest some money in a superior design." Gerhard Kallmann also saw review as a lever on the owner on behalf of good design. His views will be discussed further at the end of the analysis.

The architect's attitude -- Kallmann offered some general opinions on design review as well as his comments on the Suffolk case during an interview with the author. Since his comments on the case are scattered in appropriate places throughout this study, it would be useful to concentrate on his general views here.

Kallmann believes it is essential for the architect to work in harmony with the design review board. Each side must understand the other's position before a meaningful dialogue can result. While members of the board will understandably have their own stylistic preferences, they must be able to say, "It's not my cup of tea, but it is a really good design." Standards of design quality must be independent of their personal preferences, or at least those preferences ought to be articulated so the architect knows what he might be up against.
The basic approach to design review could be either discretionary or under strict a priori guidelines. The success of the process depends on the people who judge at either time -- in establishing guidelines or while the case is considered. A discretionary approach would not be productive or helpful to the architect if reviewers try to redesign the entire building presented to them.

Many conflicts that take place in a review process could be avoided if the owner chooses a good architect when buildings are located in sensitive locations. Kallmann said that the selection of an architect is more critical than the design review process itself. A basically sound design can be "toned up" by a review committee, but they can do little to salvage an architectural disaster.

In working with a design review committee, Kallmann would ideally use an approach similar to the one he uses with an individual client -- making propositions and probing their meaning. That was the method he seemed to use in the early work on the Suffolk case, but as more and more people became involved, and when design was being done in a public forum, that method broke down. It appears that Kallmann was not able to find another satisfactory way of working under the circumstances, but by that time design issues had taken a secondary position behind issues of the development's impacts.

Other approaches to review -- Thomas Fulham was asked to
address the concerns a developer has in a design review process. As a developer, Fulham would like to see an existing organization for review that he could go to and ask what they wanted out of a design. Responding to specific guidelines that were established beforehand rather than in response to the presented design would be preferable to Fulham. Guidelines give the developer a larger measure of predictability, particularly if they are specific enough and not open to substantial reinterpretation by the review committee.

He puts some credence in the old saying that "A camel is a horse designed by a committee." It is the architect's task to create a good design. The committee should not force their preconceived ideas on him if he believes they are inappropriate to his design concept. Design review must be conducted in an overall atmosphere of professionalism, with each actor having respect for the other's views. The professionalism of the architect is most important. One needs a good designer to produce a successful design.

James McNeely has somewhat less confidence in his own architectural profession. He believes that for a review committee to represent its constituency of interests well, it must be composed of both laymen and professionals. The perspective of laymen is needed to deal with all issues of development in an appropriate way with proper emphasis. The diversity of experience that a "mixed" review panel has makes it a better judge of the needs and desires of its community.
McNeely has no illusions about the problems a committee constituted in that way would have. Setting up a successful process with volunteer laymen is hard to do.

McNeely agrees with Fulham that an ad hoc committee is less effective than an ongoing reviewing body. One of the advantages to a reviewing body with a continuing relationship to a piece of turf is that its membership may have a better understanding of the larger issues that pervade each individual case. One difficulty that arises out of selecting people for a review committee from a small territory like Beacon Hill is that the continuing community issues may overwhelm design issues. McNeely said that, "Zoning issues on Beacon Hill are incendiary." There are such diverse opinions which no one seems to be neutral on, that there may be need for an outside body to arbitrate disputes. Perhaps the BRA could serve that function, but they may have conflicting interests of their own.

On the question of people versus standards (discretion versus guidelines), McNeely would rather see a few wise men with talent and sensitivity use their judgment, and get along with fewer strict standards that might inhibit creativity. The burden of the men in this instance is to make it clear to the developer what they are after, but it is hard to determine goals.

Charles Rogers agrees that determining goals is not easy,
but it is essential to a successful review process. Good people are needed to run a design review process, and they must set up the rules in advance. First, they must decide what they are trying to do -- set goals, and next decide how to do it. There must be an overall plan approved by all concerned parties.

Rogers takes issue with CSCDC's approach to planning. Planning agencies cannot rely on community volunteers to do technical work. Volunteers have little time in any community, and few places have as many skilled, available volunteers as Beacon Hill. There must be a proper staff in an agency to do technical work. Brookline's design review process with its strong citizen support and skilled professional staff is a good model for Beacon Hill, Rogers believes, though the BRA administered urban renewal design review under Charles Hilgenhurst in the 1960's was also very good. Design review could work just as well in a centralized approach taken by the BRA Urban Design Staff, or in a decentralized way in city neighborhoods with local planning agencies like CSCDC. What is most important is that good people with appropriate skills are available to make the process work.

The author will leave it to the reader to reflect on the actors' opinions expressed here and their positions taken in the case to see the correspondence between the actors' espoused views and their actions. The parallels seem clear and
there is little need to discuss them further here.

**Measures of success** -- Paul Graziano of the CSCDC staff said that a design review process is successful if the project gets built -- if it is approved by the consensus of the community. Kallmann said jokingly, a process was successful, "if the architect gets his way," but he added what is important is that the suggestions made by reviewers are incorporated into the design. Rogers measures effectiveness of a design review process by how well it meets its initial goals -- whatever they are: developability, aesthetic quality, detailing.

Both Thomas Fulham and James McNeely see design review as a balancing process which must serve conflicting needs. Fulham would measure review's success by asking does the design accommodate needs of both the owner and the community. McNeely says design review must have looked at the community and the area served, but it must also see if the developer is pleased. Can he make money on the project under design restrictions placed on it or will design review force him into an unfeasible solution?

**Process evaluation** -- Given these expressed measures of success, we can ask how some of the actors would rate the Suffolk design review process. Both Fulham and Kallmann thought that the process was good because it produced a good design. Kallmann said the process surfaced design issues that he had
to deal with, though he was not able to meet all of the wishes of the review committee or the community. People were almost universally pleased with the design, and so that part of the process was a success.

Christopher Lee felt that the process was a success because Suffolk made a commitment to superior design and submitted to a process that generated worthwhile community input. McNeely agreed that the design portion of the process produced a sensitively designed building, and the community had an opportunity to judge the proposal and reject it based on their own issues and standards which went beyond design alone.

Paul Graziano and Charles Rogers were more critical of the process. Graziano felt problems were encountered because of the failure of the review process to deal with and resolve non-design issues appropriately. Rogers said flatly that the process was not a success, but rather a waste of time and money for all involved. Design review was fine as far as it went, but it alone could not get to the root of issues that led to the downfall of Suffolk's development proposal.

The long run effects of this case -- Dissatisfaction with the ad hoc nature of Suffolk's review process was largely responsible for the establishment of the Cambridge Street Planning and Zoning Committee of CSCDC. That committee was
to conduct a comprehensive study of urban design options which Suffolk's case demonstrated were unresolved. Issues of institutional expansion relating to Suffolk's needs remained to be worked out in another forum.

The framework that the Planning and Zoning Committee was to devise would deal both with formal issues of urban design and with questions of market feasibility of development programs. For the first time those two, often conflicting, concerns were being brought together under one study. As Suffolk's case has shown, political feasibility must also be a consideration in any study of development and urban design. Politics and implementation will be a part of the Committee's work as well.

While Charles Rogers remains skeptical that CSCDC can accomplish much while relying on volunteer community help, he does believe a comprehensive view is necessary to deal effectively with Cambridge Street development and design problems. Perhaps a formally adopted plan acceptable to the community will remove the uncertainty that has turned developers away from Cambridge Street. Perhaps future proposals by Suffolk and others in the area will face a less forbidding and frustrating design review process.
Commentary

Design review and the developer -- Gerhard Kallmann believes that design review provides the architect with an opportunity to convince his client to spend more of his budget on good design.

A developer is usually motivated by profits. A development project can serve as a way of making a "fast buck" in short run return, or more often, it is seen as a mid-range or long term investment to produce tax shelter losses and rental revenue. For institutional developers like Suffolk, the goal may be the creation of more usable space and not dollar profits, but the principle is the same -- Suffolk was building to produce a maximum return for the lowest possible outlay.

Often -- but not always -- good design adds to a project's cost. The use of more expensive materials and higher standards of workmanship that are required to meet the dictates of good design may reduce profits by increasing costs. Unless a developer can charge premium rents based on the prestige value of "good design" -- as the Seagram Building in New York has done -- and thus generate increased revenues to cover higher costs, there is no financial incentive for him to produce a good design. In fact, well designed buildings using expensive materials are often taxed more than conventional structures, creating financial disincentives for good design. The Seagram Building was a victim in this way.
Most idealistic architects care less about a developer's profits than they care about the attainment of good design. Architects like Kallmann are concerned about their professional reputation. They aim to produce a potential award winner with every building they design. The leverage that design review offers them on their clients can be very great. They can use review, or the threat of the denial of approval, as a source of power to convince the owner to use the expensive materials or costly structural forms that the architect and reviewers feel will produce a better design.

Kallmann believes a good building must be sensitive to the urban fabric in which it resides. Design review helps him to persuade his client to produce more sensitive designs. In that way design review is a beneficial method for the upgrading of the public design environment by improving the quality of privately financed design.
In an atmosphere of tension created by an urban renewal controversy, the Knights of Columbus sponsored an elderly housing project to be built on Commercial Street. The winner of a design competition underwent review by the Boston Redevelopment Authority, a historic advisory board, the Housing Authority, and members of the North End and Waterfront communities. Each group placed conflicting demands on the design, arguing over details and massing. The architect was able to reach a consensus on design after acrimonious review sessions by consulting with each group separately. All involved are now pleased with the completed building that responds with sensitivity to its neighbors.
Context

Location -- The Ausonia Housing for the Elderly Project is located on Commercial Street at the edge of Boston's downtown core. The surrounding area is densely built with old multi-story structures containing mixed uses. The former warehouse and industrial buildings of the Downtown Waterfront are being converted to commercial, office, and luxury residential uses while the nearby older residential areas continue to decline in density.

The housing project is on a block that lies between the Waterfront community and the North End, one block removed from Waterfront Park at the edge of Boston Harbor. The block was once occupied entirely by three, four, and five story granite and brick warehouses which were built to serve the activities of a thriving port in the nineteenth century. Now the activities of the working port have relocated primarily to expansive industrial areas on filled land at the periphery of the central city, rendering the Downtown Waterfront obsolete and ripe for redevelopment for more productive urban uses.

Two communities of differing social composition are located on each side of Commercial Street. To the south and east is the Waterfront community made up largely of young professionals and businessmen. They are generally well educated, articulate, and financially well off. Their affluence permits
the Waterfront residents to afford the luxury rents of new and rehabilitated housing units recently built among the former warehouses.

On the other side of Commercial Street is the North End, long serving as an entry point for waves of immigrants to Boston. Italian families now occupy the area, but the overall population is becoming older as grown children move away to the suburbs and other nearby cities, and as new immigrants locate elsewhere in the metropolitan area to be near relatives and friends. The population that resides in the North End is predominantly blue collar working class. Those who have remained there tend to be less well educated, less upwardly mobile, less affluent, and less articulate than those people who have moved away. Some members of the North End are politically well connected in city government and use those connections to maintain their survival in a changing world.

While Commercial Street does serve as an edge of sorts between these differing communities, it is not a hard edge. Many of the old industrial loft buildings of the North End have been occupied by uses such as architects offices, and some buildings have also been converted to luxury apartments. But as the Waterfront Renewal Area was conceived in the 1960's, Parcel C-2, site of the Ausonia housing project, along Commercial and Fulton Streets was seen as the link between the Waterfront and the North End.
Background history -- The overall Waterfront Plan underwent several changes over its life span. At first both the Boston Redevelopment Authority and a planning group assembled by the Greater Boston Chamber of Commerce proposed a grand facelift of Boston's frontage on the sea. The monumental urban design concepts prevalent in the 1960's suggested that towers to the north and south, near the sites of Revolutionary War gun batteries, serve as gateways to the city. In between new construction was to replace the declining and abandoned warehouses and wharf buildings.

In the original plan all the buildings on Parcel C-2 were to be demolished except the Commercial and Mercantile Blocks, which were to be retained and renovated for commercial and residential use. Eventually, after the controversy and debate which accompanied nearly all renewal in Boston, the "grandness" of the overall schemes was somewhat reduced and a new approach to development was proposed.

Two events outside of Boston affected this change in approach. In the early 1970's the Nixon Administration reversed the housing policies of the previous Administrations and eliminated the subsidy program which was to fund the new moderate income housing units proposed for C-2. Also at about the same time a new attitude toward rehabilitation and architectural preservation started to grow in the design professions and to filter down from the taste makers to the general public. Tenets held by the founders of the Modern Movement
that old architecture was corrupting and new was uplifting began to fade with the passing of the Masters in the middle and late 1960's. Then rehabilitation became an idea in good currency in architectural circles, and design solutions reflecting that view were winning awards across the country.

The original Developer's Kit prepared by the BRA for Parcel C-2 suggested that new construction take place on almost the entire parcel, but of the four serious proposals submitted in the first competition for the right to develop the site, all combined new and old construction in various ways. Tim Anderson, an architect with offices in the North End, submitted a design that linked some of the sound old structures with an infill of new construction. Members of the BRA staff considered it to be an economically feasible and aesthetically pleasing solution.

Local events also brought changes to the redevelopment of the Waterfront, but these changes were often motivated by political as well as economic reasons.

After the first competition for development of C-2 had been run, Mayor Kevin White's Administration decided it would be more politically appropriate to promote individual ownership of rehabilitated warehouses on Commercial Street. Results of the competition were voided. A new set of guidelines for rehabilitation was prepared by the Urban Design Staff, and individual building shells were offered for sale at $2500
each. Federal funds were scarce for rehab and in the early 1970's market rate bank construction loans were available only at 10% interest, this dictating that only luxury units renting for $300 per month and over would be produced by this program.

A few North Enders who could assemble small development and construction teams of local carpenters and brick masons were able to realize a substantial profit by selling or renting completed renovations to outsiders at rates which priced local residents out of the market. As a result of increasing property values, market demand, and the forces of land and development economics, change was encroaching on the North End -- eroding away its unique life style and ethnic culture.

Federal housing policy, the national economic picture, the dictates of local politics, and the emerging market for luxury urban living combined to squeeze the North End residents out of their home, and they did not like that. They brought their political influence to bear and broke into the Waterfront Project.

Eventually an elderly housing project was to be located on part of Parcel C-2 as the North End's "piece of the pie" in the Renewal Area. With the community's aging population there was a growing demand for public housing. In many respects, the elderly made ideal tenants: few owned cars, so there was no pressing need to provide parking; maintaining their local roots would help to reinforce the neighborhood's
cohesiveness and also continue their own ties to the past; and the project's location was convenient to the shops and street markets of the neighborhood, so residents could rely on their own energy to get along. The project was to be sponsored by the Ausonia Council of the Knights of Columbus as a Turnkey project built for the Boston Housing Authority.

Despite these sound reasons for building elderly housing in the area, some Waterfront residents objected to any new construction built on the Commercial Street site. Like many members of the architectural profession, they too thought it was chic to save old things. A few people in a long, drawn out process acted to list the original warehouses on the site and those on several adjacent blocks on the National Register of Historic Places. Though of poorer architectural quality than adjacent buildings and of less than sound structural condition, the existing buildings were valued on that particular site to preserve the detailing of an older style of architecture and to preserve the scale and "flavor" of construction in the neighborhood.

The BRA opposed this move toward preservation, and amid growing controversy inflamed the situation even more by beginning to demolish the warehouses in the early morning hours of a Saturday in June 1974. The outcry over C-2 "lit the spark" of conflict between the Waterfront and the North End.

What several persons have characterized as a "Class War".
erupted over the use of the land on Commercial Street. It was a war over the control of turf. That war escalated from verbal hostility to violence and threats of violence. Fires were set in vacant buildings awaiting rehabilitation. Waterfront residents were threatened with arson. North End residents on the neighborhood project area committee were intimidated to vote "the right way" on issues of dispute -- that is, what was right for the neighborhood bosses.

The affluent Waterfront residents chose the courts as their battleground. They obtained an injunction to halt demolition, and eventually they got the BRA to establish a Waterfront Restudy Committee which was to reexamine the overall plan for the Renewal Area.

Throughout the conflict over a range of issues, the North End held firm on the need for elderly housing on Parcel C-2, and finally an acceptable resolution was found. They were given the go ahead on the elderly project, and Italian-Americans developed the majority of the buildings on Commercial and Fulton Streets, with a few warehouses sold to members of the Waterfront Community. Not everyone, however, is satisfied with how events worked out.

Moritz Bergmeyer, an architect with his home and office on Fulton Street, believes that the process administered by the BRA was a sham. He alleges vindictiveness on the part of the BRA toward those who opposed them, and he says that the
overall handling of the Waterfront Project leaves hard feelings that still persist on both sides in the communities.

Although Bergmeyer believes that the dominance of owner occupants in the area ensures that the renewal project will be a success, it will be difficult to settle past differences. He believes that Waterfront residents had to fight to win their points and turn the BRA heads around on rehabilitation, and now that the project seems to be successful, the BRA has taken full credit for that success.

It is within this volatile context that design review for the Commercial Street project took place. Many events in the larger scene set up pivotal considerations in the Ausonia design process. Given the chaotic nature of the overall setting, it is truly amazing that the elderly housing project has been acclaimed as a "success" by almost all parties concerned. In a few moments, we will examine the process that made that success possible.

Regulatory context -- As with most urban building projects, the Commercial Street housing was shaped by many regulations -- some generally applicable to all buildings and many unique to this case.

The Boston Building Code laid out requirements for egress, fire resistant construction, structural performance, and the like. The height of the building and its location in a densely built area dictated the class of construction and the
accompanying building techniques to be used which influenced
the project's cost. Because it was a Federally funded Turn-
key Public Housing project for the Boston Housing Authority
(BHA), Ausonia had to meet Federal Department of Housing and
Urban Development (HUD) Minimum Property Standards on items
such as living unit area, kitchen layout, common facilities,
and the minimum window size. The BRA's Developer's Kit pre-
pared for the competitions included broad guidelines on the
color of materials, and signage. In renewal areas the Bos-
ton Zoning Code could be superseded by establishing an "Ur-
ban Renewal Area" district with its own design controls dic-
tated by the renewal plan, so zoning provisions did not af-
flect the design of the project.

Finally, because the site and adjacent buildings were on the
National Register of Historic Places and the development was
Federally financed, members of the National Advisory Council
on Historic Preservation had to pass judgment on the design.
Section 106 of the National Historic Preservation Act of
1966 states that any Federal project that affects National
Register sites is subject to review by the Council to see
that historic concerns are given "proper consideration." A
review process prescribed by the regulations under the Act
called for representation by three parties: 1) the Federal
agency involved (HUD) and its local agents -- in this case
BRA, the K of C, and their architect, 2) the Advisory Coun-
cil from Washington, and 3) representatives from the state
level -- in this case the Massachusetts Historical Commission of the Secretary of State's office. These participants had no veto power over the design, and their standards for evaluating historic impacts were discretionary rather than spelled out in detail in the legislation.

The procedure for review followed four steps: 1) a finding of adverse effects had to be made to trigger design review, 2) steps had to be worked out to mitigate any adverse effects, 3) a Memo of Agreement must be prepared by the parties which spelled out the design objectives to be met, and 4) the final project had to be reviewed for compliance with the conditions of the Memo. In identifying appropriate mitigating steps, several options were possible from no demolition of the remaining buildings to replication of the old structures to the design of a replacement building that was sensitive to its historic neighbors. The process of negotiating agreements on the choice of options was the "historic review" of this case.

Each of these regulatory devices entered into the design review process, and along with the influence of the political and social context -- as embodied by the renewal process -- determined many aspects of the design of the Commercial Street housing.
North End and Waterfront from Customs House Tower, April 1977
Ausonia Housing Project in center
The Story

Carmen Garufo grew up in the North End and knew the area and its people well. He was working for Tad Stahl -- an architect of both high rise office buildings and small scale rehabs -- before the second competition for elderly housing on Commercial Street was announced. His firm, Garufo, Roberts Associates, decided to enter the competition, and Carmen was about to design the first major building on his own.

The Competition -- In the sixty days available for schematic design during the competition, Garufo prepared two alternative schemes because he was not satisfied with the restrictions imposed by the guidelines. The first scheme followed the requirements of the Developer's Kit and provided a twenty foot wide easement open to the sky between the end of the new building and adjacent structures on the block. The easement was for a cross block passage which intersected a narrow alley running the length of the block. The passage was to be open for reasons of safety and security. Garufo proposed an alternate scheme which built units over the passage, thus reducing the height of the tower needed on the northern end of the block at Lewis Street. A lower tower was more in keeping with the scale of the area, and it cast a smaller shadow on the street. Both schemes used horizontal ribbon windows to admit as much light as possible into the deep apartment units which were necessitated by the requirement

SIGNIFICANT EVENTS
Waterfront Urban Renewal Project established.
First competition for Parcel C-2.
New program for Parcel C-2 prepared.
Commercial Street placed on National Register.
Second competition for Parcel C-2: elderly housing program. Garufo wins.
Demolition of warehouses begins.
Suit and court injunction.
Waterfront Restudy Committee established.
Active historic review of design development.
Informal design discussion.
Garufo proposes compromise design.
Compromise accepted by all parties.
Public hearing.
Construction and occupancy.
to preserve the frontage of the sidewalk line. Both schemes also maintained a continuous flat roofline 4 stories above the street leading to a tower at Lewis Street. One hundred twenty five units were accommodated in the competition design.

Garufo and the Knights of Columbus won the competition, but not without some controversy. One of the other competitors raised a protest and claimed the jury's decision was wrong, but Garufo went ahead with his design. Work on massing studies and advanced schematics was already underway when the neighborhoods blew up over the site demolition.
Historic review -- After tempers settled down the next phase of design review after the competition began with Garufo submitting design development drawings for review by members of the National Advisory Council on Historic Preservation (NAC). Garufo feels that this phase was the most difficult of the whole review process. Several members of the Council who came to Boston from Washington were unfamiliar with the local environment. Garufo believes that though the reviewers were well intentioned, they were not competent to do the job they were attempting. They were unqualified, unprofessional, and came to the process with preconceptions of what constituted a good solution that were inappropriate for that site.

Bob Rettig, who represented the Massachusetts Historical Commission staff in the review process, disagrees with Garufo's assessment of the situation. Rettig believes that enough competence was there, but that competence may not have been evident because of the confusion of the situation, its highly politicized nature, and the lack of unanimity in the reviewers' objectives. The local and national participants did not speak with one voice, and held their positions with varying degrees of flexibility.

The first set of meetings were held in a small room at the offices of the Massachusetts Historical Commission on Beacon Street during the Summer of 1974. The room was packed with people, and the stifling heat of the setting merely added to

PRINCIPAL ACTORS
Ausonia Council, Knights of Columbus project sponsor
Peabody Construction Co. co-developer
Carmen Garufo Garufo, Roberts Assoc. architect
Dick Joslin Director of Urban Design, BRA
John Dobie Urban Design Staff, BRA
Sam Otis Urban Design Staff, BRA
David Weiner Waterfront Project Director, BRA
National Advisory Council on Historic preservation reviewer
Bob Rettig Mass. Historical Com.
Moritz Bergmeyer member of Waterfront Re-study Committee
Tim Anderson member of Waterfront Re-study Committee
the heated exchanges between participants. Marathon meetings were held debating small points in an attempt to identify measures to mitigate adverse impacts on historical sites. The reviewers' approach was reactive rather than initiative. Being non-professionals in architectural design and lacking adequate technical support staff to review all aspects of the elderly housing design, they prepared no design studies of their own, but only responded to proposals made by Garufo and others. It was a slow and costly process as the architect prepared dozens of studies of the Commercial and Fulton Street facades altering window size and spacing, and brick detailing. It was a tedious process, but the broad BRA guidelines had provided limits to debate and eliminated fruitless disputes over fundamental design issues like choice of materials and massing.

At first some members of the NAC wanted to duplicate exactly the design and detailing of the buildings that had previously stood on the site. It was a case of preservation for preservation's sake alone. When that proved to be an untenable position, some found a common cornice line in the existing street facades and demanded that it be continued on the new building. Garufo was not convinced that a single cornice line existed and tried to argue the point. For a while Carmen felt that he was losing control of the process and was merely responding to the shifting demands of the reviewers. Their preferences were not informed by formal
professional background, and they did not seem to realize the larger design consequences of their requirements.

After a period of changing opinions moving toward a compromise, the NAC members finally agreed upon and articulated three demands in their Memo of Agreement. In addition to the continuous cornice line, they wanted granite lintels over the openings of the first floor, and a low building without a tower at the end. They also expressed a preference for windows that appeared cut out of the flat masonry walls rather than ribbon windows, but this point was not mandatory.

Given HUD glass area standards for apartments, it was impossible to duplicate the same size window openings as those on the existing buildings nearby, but all of the other demands that grew out of a respect for the contextual structures could in theory be met by a compromise design. There were some compromises, however, that Garufo was unwilling to make.
The positions of actors in the process -- Garufo as the man in the middle was under enormous pressure to keep everyone happy and move the process along. The project was already hopelessly behind schedule due to litigation brought by the Waterfront residents -- the suit and injunction on demolition. Design review slowed the process even more, so that by the time the project was ready for occupancy in 1977, a process that should have taken two years from the start of the competition had been stretched to four years.

In most instances of delay, it is the developer who exerts the greatest pressure to move the project along. Developers typically have the most to lose from delay as construction costs rise each month, and as financing and land carrying costs mount up without revenues generated from a completed project to offset them. In this case, however, the Knights of Columbus sponsors were fortunate to have selected Peabody Construction Company as co-developer. Peabody is a reputable firm with helpful political connections -- its president is a good friend of Mayor White -- though these connections did not help much in this case. They were sympathetic to the architect's wishes and sensitive to community desires. Peabody wanted to produce a good design that served its users well.

The developer may not have been motivated by entirely altruistic reasons. Peabody had two other projects with construction...
tion pending in the area. One can speculate that they needed to establish good relations with both communities involved to avoid future pitfalls. Both projects were larger and potentially more profitable, particularly if the design and construction phases went smoothly. Ausonia Housing was a three million dollar job, but renovation of the Mercantile Block was to cost nine million, and a new housing project between Commercial Street and Atlantic Avenue fronting on Waterfront Park was budgeted at four million. Nevertheless, Peabody receives credit from Garufo and John Dobie, an urban designer at the BRA, for sticking with the Ausonia project during times of adversity, and for accepting a more costly design than in similar projects that would also be hard to build technically. It was fortunate for the project that it had such a sympathetic developer.

The North End community, as another interested party, did not fare well during the historical phase of review. The review procedures of the Preservation Act provided them no representation in that little room other than that of Carmen Garufo. As a native of the area sensitive to its culture and the needs of its people, he felt that he could act to uphold the community's position. Of course he could speak only from his own perceptions of that position which were undoubtedly colored by his professional experiences and biases. While Bergmeyer argues that the community need not be represented in consideration of technical matters, one could
argue that the issue of exterior appearance of a prominent, publically financed building is not technical in nature. The whole design should respect the values of the community it is intended to serve. The lack of community involvement in all phases of the design review process in the Waterfront area seems to be a serious flaw which further damages the credibility and responsiveness of the whole renewal process. This shortcoming may be as much of a "sham" as the BRA's dealings with members of the Waterfront community.

Even the seemingly powerful BRA frequently found itself on the outside of the historic review process looking in. As the Summer meetings continued, BRA staff was often not even invited to sessions held at the Massachusetts Historical Commission offices. Throughout the process members of the BRA Urban Design Staff like Dick Joslin, its Director, and designers Sam Otis and John Dobie were supportive of Garufo and what he was trying to do. They ran interference and tried to insulate Carmen from some of the unreasonable demands being placed upon him. During sessions held at the BRA throughout the review process, Joslin and his staff got Garufo to sketch out his own ideas on yellow tracing paper over his drawings. Carmen appreciated their concern and liked their approach to criticism. They made him feel that he was doing the design -- making his own creative decisions.

Later in the review process the BRA staff members were able to move the location of historic review meetings to City Hall.
to reduce some of the pressure on Garufo and perhaps to gain more control over the meetings for themselves. This change of venue seems not intended so much to affect the outcome of review directly, but rather to calm the charged atmosphere of review sessions and thus alter the process in a way that might lead to a more rational outcome. Whatever the reason, Carmen apparently was more comfortable working outside that sticky little room on Beacon Street.

Representatives of HUD and the BHA played a minor role in the Commercial Street review process. HUD's primary concern was that Garufo "meet the book" by complying with the published standards applicable to all elderly public housing sponsored by them. When Carmen tried to give the kitchens windows and make them open to the dining area the way most North End kitchens are laid out, HUD would not abandon their national standards to adapt to local lifestyles. They were willing to bend some on the connection between kitchen and dining areas and permit a small pass-through -- a minor victory for the architect.

The Boston Housing Authority was constrained by statute from allowing commercial activities on the ground floor although they were willing to accept many of Garufo's suggestions. Steve Demos of BHA -- who in 1977 was a reviewer for the Massachusetts Department of Community Affairs and had revised that agency's standards for housing projects -- was pleased with Ausonia's design and interior layout. Garufo
and his sponsors had to convince the BHA to accept a costly building -- the most expensive structure per unit they have ever bought -- as a Turnkey project. Garufo was successful and the agency seems pleased with what they have purchased. Except for the question of window size, the exterior design was not a great concern for these housing agencies.

Exterior appearance was, however, the major concern of several of the architects who practiced in the area. Tim Anderson and Morey Bergmeyer, both members of the Restudy Committee, claim credit for suggesting constructive changes in the design. Bergmeyer states that they discussed several design issues with Carmen, and that they came up with the idea of an "up and down cornice" to better reflect the real silhouette of the streetfront. They would also like to have seen a brick corbel detail at the cornice to match a similar detail common to existing warehouses instead of a simple flush wall and flat coping, but they did not press Carmen on that point. Garufo plays down their contribution. It appears to the author that several people want to take credit for what has been praised by architectural critics as a successful design decision.

Garufo does praise Bergmeyer for the support he gave the architect and the good job of liaison Bergmeyer performed with the Waterfront residents. Morey was able to convince his associates that even though the old warehouses were being removed, they were to be replaced by a sensitively designed
addition to the neighborhood. For the most part, he appears successful in his job of promotion since Waterfront opposition to the new building began to fade away and now seems to be nonexistent. Bergmeyer believes that the most effective bargaining and compromise in the Waterfront Project took place in informal settings behind the scenes -- away from situations where public gestures were made to save face. It seems clear that informal meetings and quiet negotiations were the key to the success of the Ausonia housing project.

**Design revisions** -- Carmen Garufo working quietly over his drawing board absorbed all the advice and demands presented to him and made several changes in the design. The role of the National Advisory Council had shifted into another phase. While they no longer held marathon meetings at frequent intervals, the Council did retain approval power over the design changes. Their demands were clear, but exactly what compromises they were willing to make were not clear.

After the long series of review sessions, Carmen had reached two basic conclusions: 1) the tower at Lewis Street was too high, and 2) the single continuous cornice line was fictitious. He demonstrated from on-site photographs and judiciously drawn street elevations that there was no continuous cornice line, and therefore, there was no need for him to meet it. Garufo was then able to match the five story high cornice of the building next door, in the third bay extend
the face of the building to six stories, drop down to a
five story terrace again in the fifth bay, and terminate
the building with a seven story tower at Lewis Street.
Thus more units were located on the Commercial Street
frontage in a relatively low block. He could lower the
tower from ten to seven stories after he convinced the BHA
that common rooms could be relocated from the courtyard to
locations set back from the facade line on the roof. The
courtyard, which closed off the alley, but was quiet and
airy could accommodate several more one bedroom apart-
ments than would have been placed in the tower above. All
of this squeezing of the form reduced the number of units
accommodated to 106, but that number was acceptable to
the BHA and the developer.
Once the height was reduced to seven stories, the build-
ing code permitted a less stringent class of construction,
and so a masonry bearing wall and precast concrete plank structure could be used -- reducing construction costs considerable. Peabody was thus convinced to support Garufo's altered cornice line.

The other actors involved in review were also pleased with the design modifications. The Boston historic review participants were consulted and expressed their satisfaction, HUD agreed it was a better design, and the BRA was overjoyed. Dick Joslin wanted "cut out" windows all along, and the revised design provided them. The windows were larger than those of existing structures, but they were subdivided with frames that copied the proportions of the older openings. Joslin was also happy with the lower tower height and with facades that were flush with the facade line of existing buildings on the block, leaving no useless setbacks on the sidewalk. Bergmeyer and the
Waterfront residents were also pleased when Carmen showed them the drawings. Finally Garufo had produced a design which seemed to answer all the objections.

In the public hearing required before final BRA approval could be granted, there were 6½ hours of sometimes heated debate. Many of the issues discussed were not related to the design at all but rather pertained to the overall renewal process. The BRA took the heat and Carmen stayed in the background, limiting himself to discussing strictly design issues. People were willing to compromise except on livability issues such as the need for adequate sunlight in the apartments.

After nearly three years of work, the Ausonia Housing Project was given approval to begin construction.
The final design -- Robert Campbell wrote in the Boston Sunday Globe that the Ausonia Project is "a building willing to speak the visual language of the territory it inhabits." It does so with a broken silhouette, smaller windows than originally proposed, and carefully worked out details such as the vertical slots at the structural bays. These slots cast shadows that simulate the line formed by downspouts at the party walls of the older buildings. Brick soldier courses express the location of the concrete deck at each floor, and concrete lintels span ground floor openings with enclosure walls set back just like adjacent buildings on Commercial Street. Campbell regrets the absence of shops on the street but praises the design of the courtyard which copies other outdoor spaces in the North End. In keeping with some of the ideas of Philadelphia architect Robert Venturi -- a critic of unnecessary flamboyance in design of ordinary structures --, Ausonia is a plain background building serving as a foil to its neighbors. According to Campbell, this approach is exactly what is appropriate for a building located at that site.
On April 15, 1977 the Ausonia Housing Project was officially dedicated in the presence of City Councilors, elderly residents, Italian music, and piles of food assembled in the courtyard. The project was already fully occupied, and the tenants seemed pleased with their new home. They finally had the building they had been awaiting for so many years.
Analysis

There are many lessons to be learned regarding the role of design review in producing a successful design like that of Ausonia Housing. Different actors attribute the success to a range of sources, but certainly the architect's views are important. Many actors also have differing opinions as to what approaches to review are appropriate in this kind of situation. It is useful here to analyze some of these issues before we attempt to draw generalizations from what is illustrated in this case.

Sanctions and leverage -- The question of who exerted influence on whom at what stages of the review process is an important one. From observations of this behavior we can identify the mechanism by which compromises are reached during review, and perhaps suggest ways by which compromise and consensus formation can be facilitated.

The Boston Redevelopment Authority played a coordinating role in this case and thus exerted some leverage over all the actors involved. First, it wrote the original design guidelines and chose the winner of the development competition. In a way this stage not only picked the best design-development package, but also it served as a kind of designer selection process. From their dealings with him during the competition, the BRA knew that Garufo was a competent architect, willing to put in enough effort to produce a
good design. More discussion on the BRA's relationship with architects follows later in this analysis.

Later in the process when it looked as if the BRA was losing control, they shifted the meeting place for review to their own offices. That move may have affected the calm which led to the resolution of conflict. Finally, the BRA held the final approval of the project in their hands. They would not let the project continue if they were not satisfied that it met the public objectives of the Waterfront Renewal Plan.

The Boston Housing Authority and HUD possessed similar powers in this case as those powers held by the Massachusetts Housing Finance Agency -- described in the Introduction of this study. They could withhold funds or refuse to accept the project for purchase if the design did not satisfy them. In this case their role may have been relatively minor because of the other local issues involved, but in other cases where BHA plays the role of coordinating agency and other agencies and interest groups are relatively weak, they have a potential of wielding a great deal of power at any stage of the review process.

Because of the unsettled background of conflict in the Waterfront urban renewal process, both the North End and Waterfront communities could have channeled their belligerence into the Ausonia design review process. For the most part neither group chose to do so, even though public meetings were
used as a means of venting anger over other issues. The North End community's influence over the review process was tenuous due to their lack of representation in the historic review meetings. What the waterfront people lacked in representation they compensated for in their sharpness and understanding of the process. It was their action of seeking historical designation in the project area before the housing project was even under design that triggered the difficult process of historic review.

In an ironic twist, some of the benefit of this action to the Waterfront residents was lost by the performance of the reviewers. Members of the National Advisory Council, who had considerable power and ability to influence the shape of the project, destroyed their own credibility in the eyes of the architect and the BRA by performing in what was perceived as such an unprofessional manner. Perhaps it was their unfamiliarity with the overall design process which created enough slack for Garufo to fashion a compromise design acceptable to all parties.

This case is written largely from the perspective of the architect. He was clearly the central figure in the entire process because he was the one actor in constant touch with all the other principal actors -- even representing the community and future users in their absence --, and he was the one who did all the significant design studies. He held the pencil and he drew the lines. These simple facts gave Carmen
Garufo more leverage over the process than he had a right to expect.

In other cases, particularly when highly profitable speculative ventures are proposed, it is the developer who plays a central role -- they have the most to gain in doing so --; but in the Ausonia case, Peabody and the Knights of Columbus, for various reasons already stated, chose to remain in the background. Perhaps Peabody thought in the long run it was in their best interest to let Garufo take the heat and fight for their common cause with the company's support. No matter what the reasons, Carmen Garufo is the "hero" of this case.

The architect's attitude -- Garufo was young and energetic working on his first major independent job. He may have been willing to sacrifice financial rewards for building a reputation for good design -- people at the BRA doubt that he made a dime's profit on the project. Using his own experience in the North End, Garufo tried to project community and user needs into his design, and to fight for them when those concerns were ignored by insensitive officials.

Garufo believes that it is the architect's role to deal with design issues during the urban renewal review process and let the BRA deal with issues of the larger controversy. In this case he magnanimously states that the BRA deserves more credit than they have received for the success of the design review process. This is one time, he says, when they should
not be seen as "the bad guys." Of course, Garufo is referring to people like Urban Design Director Joslin and not necessarily to the other administrators of the whole renewal project with whom Bergmeyer is annoyed.

In speculating on the best approach to design review in similar situations, Garufo outlines the following ideal process:

For public projects in residential neighborhoods, the program must come from the community. The type of community serving activities provided ought to be described by those who will use them. Their needs ought to take precedence over bureaucratic regulations. In the first step of design, before design review begins, the architect should talk to his real clients in the community and familiarize himself with their values and needs. It may be the designer's responsibility to speak for them as the design comes before regulatory reviewing bodies. An ideal review process would establish explicit criteria to be used before the design process begins rather than in response to the design as it develops. With a detailed program from the community and a fully worked out set of standards, it is the responsibility of an agency like the BRA to be sure that the architect does his homework and to confirm that fact by evaluating the design in those terms.

This statement illustrates the lessons that Carmen Garufo has found in this case and communicates a great deal of what he thinks a designer should do. Other participants in the case offer somewhat different views which reflect their own experiences.
Another approach to review -- Morey Bergmeyer has been involved in the Waterfront controversy for many years. He communicated to the author a perspective apparently influenced by the inconsistencies and frustrations of the public bargaining process. Bergmeyer believes that in a political situation there is a need for fair citizen participation with representatives being elected from the community to an advisory body, rather than their being appointed by a public agency with an interest in having their own plans approved and implemented. Appropriate citizen involvement should not deal with technical issues -- like sizing a beam --, but should focus on common sense issues -- like locating seating areas in a park. The process should be logical, but positions taken should not be dogmatic. There is room to negotiate on most issues. Due process is a key to successful design review. While Bergmeyer said in another context that behind the scenes negotiations are most effective in a volatile situation, he also presumably believes that whatever deals are made must be validated in a public forum.

Measures of success -- The success of design review processes can be measured in a variety of ways. John Dobie believes that any measures are necessarily subjective, but that these measures should be addressed to the product and how people relate to it. A successful design is one that is appropriate to its situation. Sometimes a "background" building may
be right, and then "there are times to build a monument."
Design Review should help to identify when each approach is correct.

Carmen Garufo would also judge the success of a design review process on the basis of the product. What matters is the design's massing, "if it fits its function, if it is well constructed," and "if the design speaks to people" -- that is, "if it says where it is and who occupies it." Garufo believes that a process conducted in the manner that he outlined to the author would ideally lead to design products that achieve these ends.

Project evaluation -- Given their own explicit and implicit measures of success, the three architects interviewed about the Commercial Street housing each offered somewhat different appraisals of its success.

John Dobie considers Ausonia Housing to be "a triumph" in responding to many inputs. "It may not be great architecture," he said, but it is good, responsive urban design. The architect, despite a few reservations over minor details, said it was successful because "it fits well where it sits." It serves people of the North End and the Waterfront -- who he says both were his clients -- and both groups are satisfied. As a member of one of those groups, Motitz Bergmeyer was somewhat less enthusiastic in his praise. Overall, he believes, the design is successful though he would rather have
seen some of the details reworked. But it was a success in spite of the BRA actions -- it came together well because of behind the scenes work.

Bob Rettig -- now working in Washington --, who visited the completed building for the first time with the author, was especially pleased with the sensitivity of the design to its surroundings and with the quality of its detailing. He was enthusiastic when he saw the result of the review process first hand.

Each architect offered answers one would expect to hear from them. Perhaps a better indicator of the success of a design review process is the effect it has had on other nearby projects.

The effects of this case -- The housing project being built by Peabody Construction in the Spring of 1977 across Commercial Street from Ausonia is a parallel case in many respects. This project is larger than Ausonia -- five stories high on all sides containing 151 units --, and it is free standing on a block fronting on Atlantic Avenue and Waterfront Park. It is in a visually more prominent location, but it has no existing warehouse structures abutting it to provide cues on detailing or articulation. Ausonia provides a good model for inspiration.

Designed by Cy Mintz, the project is built in the same vernacular of materials, detailing, and fenestration pattern
as Ausonia. It extends to the edges of the site and provides an open courtyard in its center. Mintz is "one of the club" of architects well acquainted with BRA preferences and procedures. The review process of the Mintz project was less complicated than Garufo's, but it profited from its predecessor's lessons. Bergmeyer was able to get the cornice detail he wanted -- though not without a fight with the strong-willed Mintz --, and the North End is getting even more elderly units added to its housing stock. Without the Ausonia project as a prototypical model to point to, the second process might have been as difficult and time consuming as the first.
Commentary

BRA reviewer - architect relations -- John Dobie, who played a role in the Commercial Street case, offered some insights on what constitutes effective behavior for architects and reviewers during the design review process. These lessons were learned in urban renewal cases similar to that of Commercial Street, but they are applicable to cases like the Charlestown Savings Bank case as well. This commentary serves as a transition between cases.

Dobie states that "Boston is a small town." Every designer knows every other designer, particularly those working on renewal projects. It sometimes seems that the same architects keep coming back for review on several different projects, and that the same BRA urban designers conduct the review sessions. Each side has come to know what the other side is after, and some overall consensus on what constitutes "good design" emerges for a range of situations. While this form of "clubiness" may seem to exclude young designers or discourage design innovation, there are many advantages to this kind of interprofessional relationship.

At times BRA designers and architects on proposed projects form a "conspiracy" against the developer. With the BRA staff and the architects sharing similar values that place a premium on good design -- often above considerations like financial return --, design architects often find themselves
at odds with their own clients. Frequently, in cases where this conspiracy is acted out, the BRA is set up as "the goat" standing firm in opposition to a particular design feature or pressing for a design amenity. The architect puts up a fight, defending the developer's position, but then is forced to yield to BRA pressure. The developer and his architect then ride down the elevator from the ninth floor of City Hall shaking their heads in commiseration, but the next day the architect calls the reviewer to say how well their ruse has worked. He tells the urban designer what modifications in design the developer has consented to.

As Gerhard Kallmann suggested in the Suffolk case, design review gives the architect leverage with the developer to press for design quality. The BRA has found a way to persuade designers to use that leverage. Appealing to the desire for peer approval, reviewers tell the architects, "If you go along with our suggestions, you'll win a design award." While that kind of statement indicates some arrogance on the part of the Urban Design Staffer -- that he knows what wins awards and, furthermore, that he can contribute to a design those qualities that it lacks to make it a real winner --, that strategy is nevertheless effective in persuading the architect that his near-perfect design can be tuned up a little to achieve greatness.

This plying of each other's egos that often takes place at
the BRA works best when personal contact has developed a rapport between participants. In a discretionary situation, personal relations between reviewer and reviewed may be a significant factor. It never hurts to be friends with your reviewer, though it is conceivable that some review processes may damage a shaky friendship.

As long as designer and reviewer share a common view of what makes good design, this kind of personal diplomacy can work. But as we will see in the next case, reasonable men can differ on many issues that concern design, and that can lead to unfriendly relations between review participants. The ultimate effect of these disagreements, however, may not be directly manifested in the final design.
Charlestown Savings Bank

Charlestown Savings Bank proposed a ten story office building to be located at the center of Boston's retail district. The Boston Redevelopment Authority's Urban Design Staff was pleased with the overall design of the structure, but a conflict developed over the detailing of the plaza in front. The reviewer wanted a design which repeated successful details of other downtown plazas, but the architect believed that his design solution was better. Each side used the power and leverage it had to win its point, but in the end the reviewer held the power of final approval. The Bank and plaza have been built according to the reviewer's concept of what best served the public.
Context

Location -- The Charlestown Savings Bank headquarters building is located at the heart of Boston's Central Business District, one block from the retail "100% Corner" of Washington and Summer Streets. Boston's two largest department stores, the Jordan Marsh Company and Filene's, face each other there across Summer Street. The dominant ground floor use at that part of Washington Street is retail with some retail uses in the upper floors as well. Office uses occupy the upper stories of the older buildings in the area, but the concentration of new office buildings in Boston is in the Financial District, centered several blocks to the northeast of Washington and Summer around Post Office Square.

Charlestown Savings is at the corner of Chauncy and Summer Streets opposite the 1949 addition to Jordan's. There is a secondary entrance to the Washington Street station of the MBTA at that location. That station serves two subway lines and has the greatest number of daily passenger entries on the entire system. Summer Street extends to the southeast and connects the heart of the retail CBD to South Station, the terminus for commuter rail lines serving the southern and western suburbs and the point of entry for Amtrak passengers arriving in the city. Eventually a 2000 car parking garage will be located at South Station as well as the terminal for all intercity buses. All of these transportation connections make
Summer Street an important functional link in the CBD, and Summer Street's prominence makes the site of Charlestown Savings a highly visible location.

Future plans to construct a major retail, office, hotel, entertainment, and parking complex called Lafayette Place on several blocks to the south of Summer Street will make Chauncy Street an important connector as well. Chauncy will penetrate the center of Lafayette Place and provide valuable retail frontage for new stores. Running parallel to Washington Street, Chauncy will become even more significant as a traffic carrier as plans to widen Washington Street's sidewalks and narrow its vehicular lanes extend south of Summer Street. The increased traffic Chauncy will be required to bear as a result of this diversion and the construction of Lafayette Place have triggered plans of the Boston Redevelopment Authority to re-align Chauncy with Arch Street, into which it feeds traffic across Summer Street.

Background history -- Boston earned a reputation in the 1960's as a city reborn largely because of the new office construction that took place downtown. Urban renewal projects like Government Center were joined by early private development projects like Prudential Center in the Back Bay and the State Street Bank headquarters at the edge of the Financial District. Before these developments were built, there had been little development activity in the city for decades. Even the many
financial institutions controlling billions of dollars of capital from headquarters in Boston did not see construction in the city as a good long term investment. Boston's tax rate was among the highest in the country. It offered all the expensive municipal services provided by other Northeastern cities, but its tax base was relatively small. About half of Boston's land area was owned by educational, religious, and governmental institutions that do not pay property tax. As expenses continued to rise, the tax base was actually shrinking due to the expansion of tax exempt uses and the exodus of business and industry to the suburbs.

In the late 1950's the Prudential Insurance Company announced plans to construct a 200 million dollar complex of office buildings, apartments, and stores on an abandoned railroad yard. Prudential was reluctant to proceed, however, due to the uncertainty of Boston's tax picture.

Chapter 121A of the Massachusetts General Laws (mentioned in the Introduction) was originally promulgated to stimulate new housing production in the cities by allowing a developer to organize a project built in a blighted area as a limited dividend corporation. Profits were limited to 6%, but in return a tax agreement was made with the city which would tie the corporation's property tax liability to a percentage of its gross annual income instead of the assessed valuation of its land and buildings. Tax rates based on assessments were continually rising, but rental incomes and taxes based on them
were relatively stable and predictable. In order to insure that Prudential would be built in Boston, an amendment to the 121A bill was passed in the legislature which permitted commercial properties to qualify for the 121A tax agreement.

After projects like Prudential and State Street broke ground in Boston and turned up a fertile field for new office space, many more office buildings were proposed, and the mid-1960's office boom was on. Many of these projects were built by 121A corporations to take advantage of the tax provisions of the law. They also could take advantage of zoning provisions that encouraged development in the central city.

Most of Downtown Boston is zoned as a "B-10" district. That designation means that commercial office buildings or apartments may legally be built to a density of ten times the area of their lot, that is, to FAR 10. Most new office buildings constructed in the last 15 years, however, have been built at a density far in excess of FAR 10 -- some as high as FAR 25.1 Because of the high costs of construction and the high tax rate in Boston, it is generally unprofitable for developments to be built within the existing B-10 zoning envelope. They need increased revenue generated by construction at higher densities to produce a profitable development package. Chapter 121A and Planned Development Areas (discussed in the Introduction) provide the means of attaining those higher densities.
Chapter 121A developments which also qualify as Planned Development Areas -- parcels greater than one acre in size, submitted to BRA review of ownership structure, finances, and design -- and are built at higher than mapped FAR not only cost the city additional tax revenue, but also impose the costs of increased density on city services and infrastructure. Additional floor area granted to developments translates into more people occupying the land, using more transportation facilities to get to work and more police and fire services for protection than would be needed by a smaller building.

These direct and indirect costs to the city and its taxpayers constitute a form of public subsidy to developers of downtown office buildings. In return these buildings provide the city with more workplaces and potentially more jobs -- jobs which generate salaries, some of which will be spent in the city --, and the jobs create demand for service industries ranging from consulting work and legal services to printing and catering. On balance, the city government has made a judgment that the benefits of new development outweigh its costs, and have made it a policy to grant 121A status to office developers to encourage new construction.

The BRA Board, which in the City of Boston has the power to approve 121A applications, has had no objection to granting 121A's for the construction of low and moderate income subsidized housing. This use serves a clear public purpose
which few people dispute. Recently, the BRA has become more reluctant to approve 121A office projects. Typically, the tax agreement for office buildings calls for an annual payment of 20 to 23% of gross income to the city for a period of 40 years, an amount far below what would be paid if the property were subject to regular taxation based on assessed valuation. Several members of the Board as well as organized interest groups believe that these rates of taxation are too low. Chapter 121A is said to shift an unfair burden of taxation to the homeowner in Boston, and it has been labeled a "tax dodge" benefiting only wealthy corporations. In defense of using Chapter 121A for commercial property, Robert Kenney, former BRA Director, stated in 1975, "It is the present policy of the city, and one which I have strongly advocated, along with the mayor and assessors in order to encourage development. We would not consider it a tax dodge."³

Because of the power and privileges granted to 121A and PDA projects, the BRA has established a formal review procedure which these projects must undergo before approval. The city has the right to demand the kind of development it wants, and the purpose of the review process is to see that its demands are met. The public interest is involved in these cases, and the process is intended to protect that interest. As discussed in the Introduction, design review is an integral part of this approval process.
The provision for Planned Development Areas comes from the Zoning Code, so the process of review is related to the process used in seeking other exceptions and variances. The Zoning Staff is responsible for coordinating BRA activities on PDA's as well as reviewing and making recommendations on petitions for conditional use permits, variances, and exceptions to the Zoning Code that go before the Board of Appeals. The BRA Board must vote approval of all staff recommendations made to the Zoning Board. Chapter 121A developments are subject to BRA staff review, a public hearing, and BRA Board approval before application to the Mayor for final approval. A Development Plan for PDA's must include information on the proposed uses, densities, traffic and parking arrangements, and a description of the structures to be built. Design matters are subject to review by the Urban Design Staff.

The Charlestown Savings Bank case takes place within this context of Boston's downtown office development. Many of the procedures established to control the explosive private growth of the late 1960's, however, have laid underused during the slowdown of office construction prevalent in the mid-1970's. At that time Boston was experiencing a glut in the market for office space, and few forty story, high rise structures like the Shawmut Bank headquarters were being proposed. Charlestown Savings represents a much smaller scale development project than most 121A office buildings, and the amount of public goods at stake were less significant in comparison. The case
turns much more on design issues than issues of development economics, thus it is a case well suited to the analysis of this study.

**Regulatory context** -- The design controls on Charlestown Savings Bank were quite broad. There were no specific design guidelines for its site, but there were several general requirements to be met.

In the 1960's planner-architect Victor Gruen prepared a plan for the development of Boston's Washington Street retail area. It called for the closing of that street to vehicular traffic and the creation of a pedestrian environment for shoppers. That plan was never funded or implemented, but the concern for pedestrians remained as it had before Gruen's plan. By 1976 the BRA was proceeding with sidewalk widenings along Washington Street and the construction of a glass covered canopy along the street. A small park was created at Washington and Franklin Streets when Filene's demolished an old, inefficient structure to build a smaller new addition. School Street was re-aligned at Washington to direct traffic onto Milk Street, creating a triangular traffic island developed as a small park. The park is bordered by the new curved front of the Boston Five Cent Bank headquarters. The bank contributes to the maintenance of the park that forms an extension of its lobby onto the street.

The design policy of the BRA in the Shopping District is to
provide or encourage developers to provide small "vest pocket mini-parks" and other pedestrian amenities to relieve some of the congestion of the area's narrow sidewalks. While there is no formally adopted comprehensive plan for this open space, developers are generally aware of the City's pedestrian policy Downtown.

Charlestown Savings Bank, unlike most new office buildings in Boston, was to be built at a floor area density less than the zoned maximum FAR 10; therefore, it did not require a zoning variance for density. Its plan did include parking which is a conditional use, and there were also several other minor variances needed before it could be built. It is almost always the case that some variance or special permit is necessary to build Downtown. In addition, the Chauncy-Arch realignment called for negotiations between the BRA and the Bank even before the Bank decided to apply for 121A designation. The Bank was thus subject to design review.

In contrast to the Suffolk and Commercial Street cases, the regulatory context in which the Charlestown Savings Bank case resides established very few strict requirements. The interpretation of whether or not the project's design was acceptable was discretionary. It was up to the BRA Urban Design Department alone to review the design to determine its acceptability.
The Story

The Architects Collaborative was the firm commissioned to design the Charlestown Savings Bank headquarters. TAC is a well known and respected architectural firm which can be classified as one of the "prestige architects" -- that is, a firm that has a reputation for good design, whose work has been published frequently in professional journals and has won many awards, and who has been hired by corporations and institutions to design architectural showpieces. These showpieces are intended to demonstrate the client's concern for design quality and reflect favorably on both owner and architect. There are many prestige architects with offices in Cambridge, and several of them began their careers at TAC.

TAC was founded in the late 1940's by Walter Gropius -- one of the Masters of the Modern Movement who first gained prominence from his work done in Germany in the 1920's -- and several of his students at Harvard, where Gropius was Chairman of the Architecture Department of the Graduate School of Design. Over the years TAC has designed thousands of buildings across the United States as well as many abroad, and it has grown to become the largest architectural firm in New England. In the mid-1970's as most other firms found their work load declining due to the depression in construction activity, TAC continued to expand by designing buildings and new towns for the oil rich countries of the Middle East.

SIGNIFICANT EVENTS
Adoption of Chapter 121A tax agreements and approval procedures.
Application of BRA pedestrian open space policy.
Plans for Chauncy-Arch Streets re-alignment.
Initial TAC design for Bank and plaza proposal.
Negotiations produce first design for plaza.
Bank seeks designation as 121A development.
Second design for plaza unacceptable to Sloan.
Dispute over plaza design.
Attempt to override Sloan's decision.
Sloan calls Harkness.
First plaza design approved.
Public hearing.
Construction and use.
At that time the staff peaked at about 300 persons, most of whom were working on foreign projects.

Unlike many other large architectural firms which have separate design and production staffs, TAC operates under a team structure. All of the design and working drawing preparation for a project is handled in a single team of architects that expands and contracts in size as the job follows its cycle of tasks. The organization of the teams is modeled after that of a small office, with the principal- or associate-in-charge at the top handling the overall administrative and "political" tasks -- that is, dealings with clients, government agencies, the community, and other interest groups -- that accompany each project. The job captain is in charge of the day to day operations of the project, assigning team personnel to tasks and checking their work. Designers and draftsmen fill out the complement of each team. A number of functional departments such as specifications, interiors, landscaping, and field supervision support the work of the project teams. There is no engineering department at TAC because all structural, mechanical, and other consulting engineering work is done by firms specializing in those areas.

Charlestown Savings was designed under Chip Harkness, one of the original partners of TAC, a former president of the Boston Society of Architects, and a design advisor to the BRA. While Chip was not directly involved with the detailed design
Existing building on site of Charlestown Savings
of Charlestown Savings, he and the other directors of TAC do conduct in-house review of most projects at the weekly directors' meeting. That approach to review acts to promote the high level of design quality that TAC is noted for. The assembled design talent at these meetings often provides the sharpest direct criticism that one of their projects ever has to face. If the design passes the scrutiny of these critics, it will probably be acceptable to any public reviewing body whose purpose is to promote design quality.

The early phases of design -- When the existing building at Chauncy and Summer Street was slated to be removed for construction of the new Bank headquarters, the BRA saw it as the opportunity to implement their re-alignment plans for Chauncy Street. The Bank agreed to donate a triangle of about 850 square feet of their property to the City to widen the curve of Chauncy onto Summer. That action meant that the Bank building could not be built to the corner, and because the BRA would not permit the structure to overhang the street, TAC designers began to develop schemes that cut back from that corner of the "L" shaped site.

The Bank owned about 22,000 square feet of property between Chauncy and Kingston Streets. The new structure was to front on the Chauncy Street corner permitting six and eleven story masonry buildings to remain at Kingston Street. An off-street loading dock and small parking area were to be located behind these buildings on Kingston Street.
The architects studied several design alternatives that proposed a building facade which cut back from the street at various angles. A curved facade along the new property line was also considered. Finally, TAC decided that given an unbuildable corner on their site, they should cut the building well back away from that corner at a 45 degree angle. They suggested that the resulting open space in front of the building be made accessible to the public as a shoppers' park. Bob Swain, of TAC's design team, submitted proposals to the BRA for design of the mini-park in March 1974, but the designs were tentative in nature and several issues remained to be resolved.

During the early phases of informal design review conducted by the BRA, Skip Smalldridge of the Urban Design Staff was in charge of the review. He determined that the massing and overall design of the bank building was in keeping with the scale of the area. Most of the tallest buildings nearby were from eight to twelve stories high, and Charlestown Savings' ten story height fit in without any problem. The architect and the city were satisfied with the design.

Smalldridge left the Urban Design Department in the Spring of 1974 before all of the details of the design had been worked out. John Sloan replaced him as the urban designer responsible for the Downtown shopping district, and it was up to Sloan to resolve the problems still pending. The most difficult task he faced then on Charlestown Savings was to
coordinate action on the design of the mini-park and the realignment of Chauncy Street. The Boston Public Works Department (PWD) is in charge of public street and sidewalk construction, and Fred Garvin of their staff became involved in negotiations between Sloan and Bob Swain of TAC. Many administrative as well as design obstacles had to be overcome. Boston Edison, for instance, was opposed to relocating their transformer vault at the sidewalk. The PWD had to coordinate its activities with those of the Bank in paving sidewalks and installing curbs. In addition to dealing with a range of technical problems, Sloan was concerned that the design and detailing of the open space and its amenities meet the needs of its future users.

By September 1974 after considerable work and many meetings, an acceptable design solution had been found for the layout of Charlestown Savings Bank's plaza. Bob Swain had worked during the review process to produce a design that Sloan believed was very good. Eighteen trees were arranged in an informal but careful considered pattern, grouped where they would provide areas of effective coverage. The tree trunks rose directly from the ground with only small patches of soil to interrupt the brick paving pattern. People could walk right up to the trees without crossing any barriers. Sloan was satisfied with the results of the lengthy negotiations process and turned his attention to other matters.
Layout of trees and benches in September Plan
The Urban Design Staff -- In 1977 there was a staff of 15 people at the BRA to deal with questions of urban design in Boston. That staff included landscape architects, draftsmen, and architects. The senior architects on the staff were all experienced registered architects, and all had degrees in either planning or urban design as well. They believed that they were highly competent designers -- as good a design staff as in any city -- and said that they have proved their competence by what they have achieved.

Urban designers at the BRA not only conduct design review, but they also serve as design consultants for the city on many of its own projects not under the jurisdiction of the Public Facilities Department. John Sloan, in his capacity as Downtown designer, was responsible for the design of the canopy being built along Washington Street in 1977. Other urban designers are in charge of monitoring design in urban renewal areas like the Waterfront, the Markets, South Station, and Park Plaza. Each conducts the design review process for individual projects originating in his area. John Dobie, whose area of responsibility includes Government Center and the Waterfront, also serves as advisor to the Board of Appeals on small projects throughout the city.

Staff members conduct design studies when necessary in preparing components of plans initiated by the BRA or in response to issues related to individual proposals as they arise. When Jordan Marsh decided to demolish their original
nineteenth century building to make way for a modern addition, John Sloan and others prepared a study demonstrating the feasibility of their retaining the old facade. Many people were concerned with preserving the scale and detailing of that facade, but their efforts left Jordan's unconvinced and the facade wall came down.

BRA urban designers also serve as design trouble shooters who can be called away from their desks at a moments notice to deal with a pressing issue in their area of responsibility. Whether it's someone putting up an illegal sign or obstructing the use of the sidewalk, the urban designers are vigilant so they can nip design indignities in the bud. They serve as the City's front line in its battle to protect the desirable qualities of its old architecture, and to enhance the contribution of new construction to that heritage. The Urban Design Department seems to see its mission as that of preserving the qualities of Boston's environment that make the city attractive and livable.

Members of the Urban Design Staff like John Sloan hold strong opinions about what makes good urban design. While it is not possible to mold entire sections of the city to fit their image of what good design should be, the construction of small scale City financed improvements as well as the completion of well designed individual private projects implement design policy incrementally. If each piece of work is
sensitively designed and related to its setting, then it will advance the cause of their comprehensive design view. Reviewers often find themselves making policy and interpreting it in specific cases as they arise. Design review is the technique at their disposal for seeing that this incremental design sensitivity prevails in Boston.

Conflicting opinions -- John Sloan thought that the Charlestown Savings Bank review process was under control and proceeding well. TAC was preparing working drawings and specifications. Dick Puffer, associate-in-charge of the job, began to take a more active part in the review process than he had during the previous few months.

In September 1974 the Bank's administration decided to apply for 121A designation for its office building project. It is not unusual for developers to apply for 121A after their projects are well along in the planning stages. Often they discover that their developments will not be as profitable as they had hoped; it may then make economic good sense to accept a limited profit ceiling in return for the tax advantages of 121A. In this case Charlestown Savings was required to submit a new set of design drawings for review along with their 121A application.

A new set of plans was delivered to Sloan for his review and approval in early October. These drawings did not include any details in September, and John Sloan had reason to be-
lieve that the amenities might have been eliminated for budget reasons. In mid-October Sloan again requested a set of plaza plans, and received a set of progress prints that shocked him. In a memo to Joe Berlandi of the BRA administration, John Sloan wrote that

the previous design has been eliminated and in its place a watered-down version has taken form. The proposed revision of this park leaves almost everything to be desired considering the far superior plan that came before as well as our urban design criteria for that area.  

The September plan, according to Sloan,

was consistent with our understanding at that time that this design would enhance work we are doing in the area on pedestrian movement as well as creating a highly attractive and positive urban space on Summer Street.

Not only had the plaza plan been "watered down" in Sloan's opinion, but also the loading dock and parking area on Kingston Street lost its landscaping buffer at the sidewalk. Sloan believed that these deletions were cost cutting moves that would save only about $6000 -- an insignificant amount on a nine million dollar job.

Specifically, Puffer submitted a plan that placed the proposed trees in raised planters rather than in depressed wells protected by grates set flush with the plaza paving. Based on bad experiences with similar solutions on other Downtown plazas, Sloan believed that TAC's proposal "did not look
urban," because it broke with the traditional way trees are located in Boston, and that the planters consumed valuable plaza space that could be used better by pedestrians than by plants. Sloan thought that people should be able to walk freely throughout the plaza area and not be required to dodge planters or curbs. He was convinced that the users of the space would be much better served by the September design and its uninterrupted paving.

Dick Puffer had a different opinion. He argued that the October submission was a much better solution functionally. He felt that the second plaza treatment was superior to the first because its detailing created a better environment for growing trees. Puffer's explanation for the changes in design was that when TAC prepared more detailed drawings for the 121A application, the architects and landscapers decided it would be safer to protect the trees with an eight to ten inch high curb around their base. By placing the trees behind curbs there would be less of a maintenance problem for the plaza and the trees, and there was less chance of excess ice melting salt seeping in to harm the trees.

John Sloan felt firmly that given the 121A advantage that the Bank was seeking, he had a right to expect a superior design for the public's use. To him the September design was superior, and there could be no compromise because of the public interest issue involved.
The review sessions -- Review sessions were attended by Sloan, Puffer, and representatives of both the Bank and Vappi Construction Company, the general contractor. Puffer was acting as an advocate of the Bank's position, and the Bank admitted to Sloan that they were motivated by an attempt to cut costs. At that stage all there was left to cut was landscaping. That situation is not at all unusual for any construction project.

Arguments broke out during the sessions, and the participants developed a less than friendly attitude toward each other. Sloan was sure that Puffer was really trying to cut costs though he persisted in arguing his case on design grounds. Puffer felt that people at the BRA were enforcing design standards which came from their own heads rather than from a documented source. He also felt that the BRA was not fully competent in carrying out its duties. It was a very difficult period of negotiations, and the opinion that bargainers held of each others skills did not help matters at all.

According to Sloan, TAC's landscape department -- which he feels is excellent -- believed all along that the original design was better and asked him to fight to preserve it. Sloan felt that Puffer found himself in an uncomfortable position, but Sloan thinks Puffer could have extricated himself -- were Puffer to feel the same way -- if he played the game the way other architects did.
Hypothetically, if an architect were not convinced that a design with planters was not better, and he had been willing to give in to BRA pressure, he could have made a deal with Sloan to fight for his client's position for a while but yield to Sloan's demand for the "superior design." The architect could have invoked the BRA-architect conspiracy for a good design.

The lack of agreement on "planters" or "no planters" was prolonged by a series of moves over the following two months.

The review process -- At a series of meetings in late November 1974 Puffer produced a TAC interoffice memo to him and Larry Zuelke, head of their landscape department, which documented the argument against leaving the plaza trees unprotected by curbs. The memo was on the effect of snow melting salt on plant materials. It stated that salt runoff poses a threat to plants at grade unprotected by a barrier because salt draws water from plant roots. The plants can then die from dehydration.

Sloan was unconvinced and asked Puffer to submit a breakdown on the difference in cost between the current design and the planting and paving layout submitted earlier. No report was forthcoming although on December 12 a new set of progress prints was sent. Sloan noticed that the specifications called for an automatic snow melting device on the plaza and questioned why that feature had not been mentioned in
previous discussions. At the same meeting Puffer agreed to use the original submitted drawings as the approved set for landscaping in the Kingston Street parking area.

Meanwhile, someone from the Bank tried to go over Sloan's head and asked the BRA Director to overrule Sloan's unyielding position on the planters. That ploy was not successful and the plaza matters stayed unresolved. Sloan received support from above, and eventually, as the impasse persisted, he took the initiative and made a few phone calls himself.

Sloan called Chip Harkness at TAC and asked him to restrain Dick Puffer. Sloan argued that Puffer was in an indefensible position. Puffer says that Harkness liked both designs and preferred the design without planters over the design with trees in planters. By March the revised plaza design was a dead issue.

Resolution -- In early March 1975, John Sloan wrote a memo of comments for the design review phase of Charlestown Savings Bank's 121A application. Only two zoning code deviations remained outstanding: 1) the Urban Design Department recommended acceptance of a variance on the parapet setback requirement, and 2) they recommended acceptance of the surface parking lot as a conditional use, subject to compliance with drawings submitted for approval in December 1974.7

The public hearing on the 121A application was anti-climactic from a design point of view. Before the meeting a member of
the BRA Board said that he found it difficult to perceive
the site at Summer and Chauncy Streets as blighted⁸ and the
usual assembly of individuals and groups came forth to pro-
test the tax deal being made, but none of them protested
that the design itself offered an inadequate return on what
the City was giving away. For these protestors it was not
the clear case of a public subsidy being granted in return
for long run economic benefits and a few design amenities.

There was no real interest expressed on the part of the abut-
ters. No one from Jordan's or Kennedy's of New England --
located across the street -- or Filene's came to speak in
favor of the mini-park and what it would offer their custom-
ers. Unlike residential areas with architectural traditions
and character -- Beacon Hill or the Back Bay -- and unlike
the North End where neighborhood control of turf is an issue,
there is no strong constituency that feels it benefits from
good design Downtown. There is no one with enough at stake
to motivate him to speak in favor of the creation of more
open space at the cost of an implicit tax subsidy -- although
there are plenty of people who are opposed to a subsidy of
any kind for commercial buildings. What this case also dem-
onstrates is that there is a lack of consensus -- even among
design professionals -- about what constitutes good urban
design Downtown.

Without a strong base of support on either side of the issue,
neither John Sloan nor Dick Puffer could appeal to a larger
audience to swing their case. The resolution of the conflict over design remained internal to the design review process, and the outcome was determined only after each side played out all of its moves.

Construction of the Bank proceeded according to the agreed upon plan, and in March 1977 the new Charlestown Savings Bank headquarters was officially opened. The eighteen honey locust trees graced the plaza as planned, and the brick paving ran nearly up to the base of the trunks at grade. There were only two remaining problems. The City was about to install lighting fixtures along the street which did not meet with the architect's approval, and the Boston PWD had not begun work on the new sidewalk at the edge of the plaza.

Robert Campbell, writing in the Boston Sunday Globe in April 1977, praised the Bank as "a welcome example of good urban design." He feels that the building solves the problem of meeting its older neighbors well and that the design successfully turns the corner from Chauncy to Summer. The plaza serves as an active forecourt for people watching and its openness extends into the banking floor beyond. Overall this critic is pleased with the design and its plaza for the contribution they make to the Downtown urban fabric.
Completed brick plaza with trees, lighting, and seating outside banking floor.
Analysis

Sanctions and leverage -- John Sloan won his point largely because he had the final word on approval of the design, and because he could hold out longer than the other side. He had the power to get his way and he used it. While he was fortunate to have executive support from above in this case, it is unlikely that the BRA Director, or the Mayor for that matter, would risk damaging his own relationships with the staff over what seemed to be as trivial an issue as planters on a plaza. While the issue obviously was not trivial to Puffer or Sloan, it does pale into insignificance when some of the larger economic issues of downtown office development are considered. Charlestown Savings Bank raised issues that were not worth losing respect over.

Sloan also used whatever leverage he had over other participants in the review process. He appealed to Chip Harkness' sense of good design in trying to remove the roadblock that Puffer placed in the path toward resolution. It is not clear whether or not this action actually made a difference on the outcome of the process or even on the duration of the impasse, but it does illustrate one route of influence that Sloan had open to promote his position.

Dick Puffer had fewer means available for exercising his leverage. He relied on his own sense of good design, produced "expert technical opinion" on the effect of salt on
trees, and he used his relationship with the client to press his points. None of these tactics worked because Sloan, who had the power to decide, was not persuaded to change his own opinion by Puffer's opinions or his information.

Even the Bank officials in this case were relatively impotent. They could not make good on every developer's ultimate threat: walking away from the project and letting the deal fall through with the City. Certainly they did not want to risk their 121A status or squander the effort expended in preparing the project over a difference in cost of only a few thousand dollars. They did try to use their political connections to override Sloan, but it may have been only a final gesture to save face. No matter what strategy Puffer or the Bank tried to employ, Sloan appeared to be holding the trump card.

This case illustrates another fundamental issue besides power relationships and sanctions: the issue of differences in professional opinions and its effect on the review process.

Professional disagreement -- Both The Architects Collaborative and the BRA Urban Design Staff have an espoused commitment to design quality. TAC seeks to maintain its reputation for design by continuing to produce well designed buildings, and the Urban Design Department is striving to promote superior design in projects built under public review throughout the city. Several changing institutional
constraints on each of these organizations makes it increasingly difficult to maintain previous standards of quality.

First of all, some believe that TAC may be getting too big to produce uniform excellence on every project. When the author worked at TAC several years ago, there was an expressed concern among some members of the staff that TAC could no longer operate as if they were a small firm as they had in the past. While the team structure was intended to simulate the atmosphere of a series of small offices, it also acts to fragment the firm's coherent design philosophy and to increase the diversity of professional perspectives within the organization. While a diversity of viewpoints helps to avoid blandness and to create opportunities for innovation in an organization, it inevitably leads to the production of some poor designs along with the good. One could safely presume that not all design teams are equally skilled and not all partners share the same level of commitment to design quality. The pressure for expediency and the blunting of ideals afflicts any organization that must face the dictates of the marketplace to survive. There has been some talk among architectural circles that a large firm like TAC may have to compromise its ideals in order to attain commercial success.

Some directors of TAC recognize the danger of abandoning the very ideals that have established TAC's position of prestige.
They struggle to make every project one that the firm can be proud of, and the internal review of projects by the directors is one way of maintaining high design standards.

It is generally conceded among those participants and critics like Robert Campbell familiar with Charlestown Savings, that its design does measure up to TAC's high standards of quality. The architects were justly proud of the design. But when John Sloan confronted Chip Harkness with the choice between alternative design schemes, Harkness' own prestige was at stake, as well as his working relationship with the BRA. When faced with a choice in this case, TAC eventually followed the BRA concept of "good design" even though there was no clear consensus on exactly which proposal was "better" urban design. TAC chose to yield to Sloan's opinion rather than drag out the conflict in professional opinions.

All along TAC maintained a commitment to an abstract ideal of design quality -- based on user satisfaction -- while Sloan and the BRA committed themselves to their interpretation of design quality as embodied in a broad overall policy on pedestrian amenities. That policy, however, may not have been articulated in a clear, detailed, and explicit way; and it may not have been communicated adequately to architects of individual development projects. There may have been no clear commitment on the part of TAC to the specifics of that policy because, according to Puffer, they were not able to identify any design criteria applicable to
the specific situation, except those criteria that came out of John Sloan's head.

In recent years the BRA has been shifting away from its role as an agency making large scale urban renewal plans which they could control down to the most minute detail. Under urban renewal their discretionary powers were based on ownership of the development sites. These powers enabled reviewers to pick over the details of a proposal and to withhold approval if they were not satisfied. They could hold another competition if they were not happy with the results of the first, as the BRA did in the Commercial Street case.

The powers that the BRA exercises on 121A applications, Planned Development Areas, and zoning conditional uses are based on the police power of the state. Under those circumstances it is more difficult to justify control of development details if the requirements are not spelled out more completely beforehand. Levels of control that can be easily justified in the first instance may require more definitive support in the second. Puffer disputed Sloan's authority to work from discretionary criteria which may not have been adequately documented, but those disputes might have been avoided if the criteria had been spelled out in greater detail before the review process began.

A lack of perceived authority and level of expertise in regulating certain aspects of design leads to increased grounds
for disputes over professional opinion. It may be that if the BRA wants to maintain the same level of control to promote design quality as it had under urban renewal, the agency needs to spell out its design objectives applicable to private development sites in greater detail.

The BRA Urban Design Department is now spending more of its time regulating the designs of privately initiated and implemented projects than it is regulating the publically initiated, privately implemented designs of urban renewal projects. That change in development emphasis suggests an accompanying change in regulatory approach may also be in order. Promulgating more explicit design standards based on studies is one way to avoid future disputes based on differing professional opinions. There may, however, be other approaches to regulation which will produce a similar result.

The architect's attitude -- Dick Puffer was the architect most directly involved in the Charlestown Savings Bank controversy at TAC. His feelings about this design review process in this particular case are generally negative.

Puffer saw John Sloan as a bureaucrat using the power of his position to advance his ends in the case. Although he feels that the BRA has often used its power to accomplish some good, Puffer is opposed to their use of power for its own sake. He feels that Sloan "had them over a barrel" on
a matter of "personal opinion", but because Sloan has the power he used it to get his way.

Some design review is good, Puffer believes, but it can be a painful process. Maybe review should be limited to its control of form and massing and not extended to control of design details as it was on this case. Those issues ought to be left to the architect who knows more about the particulars of the situation. Puffer was not sure if design review by the BRA contributed to the quality of the Charlestown Savings Bank design.

It is not unusual for an architect, particularly one who has had a bad experience, to be skeptical about the virtues of design review. What Dick Puffer seems to be saying echoes some of the sentiments of Denise Scott Brown, partner of architect Robert Venturi, who experienced a difficult review process in Washington. She objects to the subjective nature of review when judgments are made at the discretion of staff or design review boards. She contends that in some applications, review should be limited to aspects of the design that can be measured and quantified, thus removing unnecessary reviewer discretion. An alternative approach would be to have three review boards of differing stylistic preferences. The architect would choose the board with a preferences closest to his own. In that way the decisions will turn on issues other than concerns for style.10 Even assuming Brown's suggestions, it is not likely that the
professional difference of opinion in this case would have been avoided.

Measures of success -- John Sloan thinks that one must judge the success of a design review process by the end product. The measures to use are how well it fits where it is built, people's reaction to it, and, in Boston, the reaction of the architectural community. This city is characterized by two attributes that make it different from most other cities: 1) an intelligent and concerned collection of designers and critics, and 2) a distinctive, recognizable architectural fabric. Members of the design community can easily pick out a discontinuity in that fabric and call attention to it. No designer wants to be identified as unskilled or insensitive by his peers, and Boston's aware professional setting acts to support the intentions of design review and to reinforce the high quality design standards that a review process is established to enforce.

Dick Puffer takes a somewhat different approach to defining a successful design. A design is a good one if it serves its direct users and the public. What is important in design review is the product and how well it meets user needs rather than whether or not it earns the acclaim of the architect's peers. Of course any architect would enjoy the praise of other designers, but that should not be his primary motivation. The measures to be used are the product's appropriateness, its user impacts, and what the product will be like
over a number of years. There is no one correct answer to successful design; it depends on the opinion of the observer.

Both of these views sound to the author like answers one would expect to hear given the way each of these actors behaved in the Charlestown Savings case.

Evaluation of the case -- Overall Dick Puffer feels that Charlestown Savings Bank's design is very successful as it has been built, even without the planters, but he cautions us to "look at it four years from now." See then if the trees are still in place and healthy. Sloan is also pleased with the design although he feels that the process followed in reaching it was long and difficult. He believes that the Bank would be willing to replace any trees that succumb to salt poisoning, because the plaza is the Bank's front door image on the city. It will act to keep up the quality of that image. Neither participant made any concrete suggestions for improving the review process in this case, but each agreed that the approaches actually taken were far from perfect.

Determinants of the course of the case -- At first glance, this case may seem to have turned on personalities. One wonders whether having a different person in a particular position playing a role in this case might have altered the process or outcome of the review. It is difficult to assess the
effect of the change in personnel in the case. Both Dick Puffer and John Sloan became active in the design review process in mid-stream, may have been less familiar with the early phases of the process than their predecessors, and may have brought different outlooks and a different sense of commitment to the issues involved. The author feels it is likely, however, that the changes in individual personalities were not as significant as the overriding policy issues of the case -- issues which did not change over time. At the points in the process when the new actors entered the scene, the agenda for negotiations had reached a stage where the most knotty issues were being discussed. Those controversies may have brought some conflict no matter who was involved, though the duration of that conflict might have varied with the tenacity with which the individuals held to their positions.

Taking a larger view of this type of municipal design review process, it is probable that institutional forces play a much larger role than personalities. It is the institutions which create the positions that individual actors hold, and it is often the structural nature of those positions which determine the range of effective behavior that actors can undertake. Sloan's power to approve or disapprove projects comes first and foremost from his position; his own individual skills affect how well he performs his assignments but have less influence on which assignments he assumes. The
nature of the positions themselves does much to attract or repell certain personalities to take on those roles. A person who seeks to control situations may be attracted to the role of reviewer, while the creative individualist seeking self expression may be more comfortable in the role of architect. The latter type may not be attracted to the team approach to architecture practiced by TAC. Still another type of person may be attracted to Puffer's kind of role -- perhaps one not reluctant to take a combative stance.

Organizations like TAC and the BRA are more than the sum of the actors and roles that inhabit them. They take on a personality of their own, with their own motivations, collective values, and manner of effective operations. When these institutional personalities are overlaid onto the regulatory context of zoning, tax agreements, and review procedures, still another level of "personality" results.

In short, it is the concurrence of individuals, organizations, and regulations that combine to influence the process and outcome of any design review case. It may be difficult to isolate the contribution of any one element because many of the elements interact with each other. In any single case or small group of cases there are no clear cut dependent and independent variables. All the cases must be examined from a bias or point of view which focuses on a limited number of related issues.
Skills of a design reviewer -- Because the reviewer held the most central position in this review process, it is useful to examine the kinds of skills he used in order to be effective in this situation. John Sloan identified two general types of expertise that a successful reviewer must have -- they can be labeled technical skills and political skills.

Some of the technical skills needed are based on the reviewer's experience as an architect. He must know how things are built and how much specific design elements should cost. Before he can determine whether or not the amenities he requires are feasible, the reviewer must have a thorough understanding of construction cost and development economics.

The political skills needed by an effective design reviewer, according to Sloan, revolve around an understanding of the way decisions are made and how coalitions of interests are formed. He must know who to call at what time in order to put pressure on decision makers. He also needs to lobby for his own position with an understanding of power relationships that are potential sources of opposition or support. A reviewer needs the self assurance that he is doing the right thing, and he must have the ability to make deals.

Bargaining is the activity common to nearly all discretionary review processes. Whether it is the ability to form a covert conspiracy with an architect who shares the same opinions on good design, or it is a skill at horsetrading favors for amenities, a successful reviewer must know how
to "play the game." He must be sensitive to how much he can push a developer before that developer goes over the reviewer's head to his superiors. The reviewer must understand the costs of making trade-offs as perceived by the developer. The cost of delay may be as real a cost as the price of providing an amenity, and the foregone revenues of lopping off a few square feet of rentable space per floor adds up to affect the complexion of the balance sheets.

In dealing with architects the reviewer faces a different relationship than the one he faces opposite the developer. A reviewer can choose to play the role of "regulator" -- a hard nosed watch dog of the public interest, unwilling to compromise on any essential point. Or a reviewer may decide to work with the architect as a "joint learner" -- with each participant respecting the skills and opinions of the other as they work together to find a common solution to a design problem. In the first mode an adversary relationship can develop which may make any concession a loss of face. Each side may be convinced that it is right and will not budge except under the force of power. In the second mode urban design becomes a cooperative effort. Two professionals share their insights into a problem and set aside their egos for the good of the process.

Neither approach is appropriate to all situations. There are times to be hard nosed and times to be open to suggestions, and the balance may shift over a series of sessions on a
single project. A thoughtful reviewer will be sensitive to the times when he can advance his own case by using either mode. That sensitivity comes partially from experience, but that experience can be informed by some basic principles which will be discussed later in this study.
Commentary

The reviewer and the public -- John Sloan has some definite views on the responsibilities a design reviewer has in protecting the public interest. Some of these views are demonstrated by his actions in the Charlestown Savings case, and others must be taken as his espoused theories expressed in response to general questions. The author will leave it to the reader of this study to identify inconsistencies or contradictions, if indeed any exist.

First of all, a reviewer needs self assurance -- he must have enough ego to believe that he knows what is right for the public, even if they hold no obvious consensus. A reviewer, or any public official for that matter, cannot know for sure what is best, but he can develop a sense of what the public wants. He can develop that sense by talking to people and asking them what they want in specific situations. Becoming familiar with the public's desires means talking with many interest groups, absorbing their divergent opinions, and combining them in a synthetic way. Sloan proposed no specific participatory techniques that could be used in a setting like Boston's to help inform that synthesis. He also suggested no specific way of accounting for opinions of inarticulate users or those absent from the scene.

The essence of Sloan's stance with respect to the public is professionalism. The reviewer is the representative who is
looking out for the public good. He is often faced with a common dilemma: should he help the public obtain what it thinks it wants, or should he provide it with what, in his professional opinion, it ought to have? There is no simple answer to this recurring question, but being aware of the implication of his choices is at least the first step a reviewer must take in assessing his public role.

One can suggest that a reviewer is the public's representative in a process of collective design decision making. Some reviewers may be better representatives than others. The critical variable that differentiates between a good and a poor representative may be his understanding of the desires and needs of his constituency and, even more fundamentally, a knowledge of exactly who his constituents are.
The processes, events, and outcomes of the three cases examined here illustrate a variety of issues pertaining to the administration of design review. The cases suggest a number of general observations on the design review process based on the special circumstances of each situation. While these observations may not be generalizable to all cases of design review, they can be considered representative of these and similar cases. The observations suggest which aspects of these cases worked well and should be repeated elsewhere, and they highlight problems to be avoided in similar situations.

The observations made here fit loosely into six categories. These categories are: 1) context issues, 2) community behavior, 3) developer behavior, 4) architect behavior, 5) reviewer behavior, and 6) measures of success. Information offered in each of these categories will be useful in describing how the design review process ought to operate and in determining what design review methods should be used in different situations. These points will be discussed in Part III where the overall findings of this study are offered.

Context issues -- The Suffolk case has shown that the political, social, or economic context may generate powerful concerns that dominate design issues in an open community review forum. Context issues become entwined with architectural issues during a community based design review process, especially one set in a history of continuing conflicts. In that kind of situation, hard earned community victories on issues such
as zoning or controls on development expansion may be held as unchangeable givens, even when the particular circumstances surrounding those victories may have changed. While a review process may need to relate to an entire system of issues and interests that complicate a proposal, a design review process alone cannot be burdened with the task of resolving all underlying continuing issues. Design review cannot substitute for a more comprehensive planning process aimed at resolving larger issues.

The Commercial Street case also took place in the context of larger issues, but in that case the architect and the BRA reviewers sought as much as possible to separate design issues from issues related to the overall redevelopment process. In that respect they were more successful than the actors in the Suffolk case, though the Ausonia project may have been more independent of the issues than Suffolk's classroom building proposal. The second case does illustrate, however, that context issues may be overcome or side-stepped when architects or reviewers are able to turn the agenda of the review process toward concentration on design issues.

Another context issue pertains to spatial location rather than community groups. Both Suffolk and Charlestown Savings Bank illustrate cases in which design projects sited in highly visible or prominent locations are required to undergo more careful review than they might if they were sited in less visible locations. Poor design in prominent places may be less tol-
erated by the community than if it were hidden on obscure sites.

Community behavior -- Shared values and interests in a neighborhood like Beacon Hill offer a strong basis for a unified community position on design review issues. Mixed heterogeneous neighborhoods that do not share common values or design concerns may provide a weak basis for consensual design review.

Divided communities like those of the Waterfront and North End may lead to conflicts in review objectives or opinions on proposals. In some instances, the concept of neighborhood "turfs" or domains of substantial community control may enflame a situation if a project lies on commonly claimed ground. On the other hand, an overall community consensus on a particular case may result when one group with power defers to the wishes of another on the basis of territorial claim or an agreement of reciprocal support in future cases. The issue of territorial control may work either way.

A downtown, non-residential area may not provide a setting that fosters the creation of a constituency for local urban design quality. In that case development, financial, or real estate interests may attempt to dominate the design control of a Central Business District, to the detriment of the diffusely organized population that uses the area. In the Charlestown Savings Bank case, the BRA reviewer saw his role...
as protecting the interests of these unrepresented users among the interests of the established business and land development community.

In other instances of diffuse communities, the concerns of "community leaders" may not coincide with those of immediate abutters to a development project. This was an issue in the Suffolk case. To avoid a confrontation staged by a small group of dedicated persons who are concerned about the impacts of a nearby development project but who were not included in negotiations, a design review process should consider concerns of all interested parties in order to render an informed, fair decision. The exclusion -- either by accident or by design -- of a segment of the community in the review process can lead to dissatisfaction and, if community concerns are high, to active protest, either of which reduces the credibility of the review process and could lead to challenge of its decisions in the courts.

Public hearings open to the whole community, such as those first held on Beacon Hill, may be an inadequate means of promoting community involvement. These meetings may focus on issues that are not the primary concern to immediate abutters of a project. If they or any other alienated segment of the community lacks the power or influence to get their way in such a hearing forum, they may attempt to strengthen their position by "going public" and appealing to like minded sympathizers for support. Such a move is a gamble. Actions of
the Waterfront community to hold the BRA's renewal process up to public scrutiny did not appear to change the outcome of the Ausonia project.

Developer behavior -- Developers seeking a predictable setting in which to conduct their business, as President Fulham has suggested, would rather face a standing review body using pre-determined guidelines than face ad hoc review on randomly raised concerns. While a patient, sympathetic developer like Peabody Construction that supports its architect through design review can contribute toward a favorable resolution of design disputes, developers can also be the source of design impasses. A developer with a reasonably valid case and with good political connections may be able to overturn a reviewer's decision by appealing over his head to appointed or elected officials. But as the Charlestown Savings case demonstrated, such an appeal may not be successful if the developer's case rests on weak foundations or if the official does not wish to strain his own working relationships with the reviewer.

Architect behavior -- The architect, like the developer, may favor predictable, explicit design criteria expounded by a competent review body. Conflicting regulatory guidelines proposed by a number of agencies may make it impossible for an architect to please all reviewing bodies completely, but clearly stated "rules" and an honest attempt to meet them on the part of the architect can provide the basis for compro-
mise. Architects skilled at making design and technical trade-offs may be able to work out a compromise solution that is acceptable to reviewers, the community, and the owner-developer.

Architects and reviewers may share the same view of design ideas in good currency. Concensus on what constitutes good design may arise if the same architects and reviewers share similar values and stylistic preferences, and if they are involved in several cases over a period of time. That is the way the BRA and architects undergoing review operate most comfortably.

In the BRA experience and elsewhere, architects who place a premium on design quality and agree with the preferences of the reviewers may form alliances with their co-professionals to promote their common view of good design against opposition from developers or from the community. Architects may use design review as a lever on their clients to produce buildings having high standards of design quality.

If informal discussions with reviewers and concerned actors in the process do not lead to agreement on design, then the architect may use expert opinion to promote his position. These opinions may not be convincing to reviewers, however, who trust their own judgment. Reviewers having the final decision making power may not choose to give expert opinion much weight.

The institutional behavior practiced by large architectural
firms may change the nature of the architect-reviewer relationship from one of negotiations between individuals. The institutional motivations and goals of both the architectural firms and the reviewing agency may be at odds and thus complicate the interactions between individual participants in the process.

Reviewer behavior -- Good architect-reviewer relations can be cultivated in an atmosphere of professionalism, mutual respect, and shared design values. The absence of these qualities may lead to problems such as those experienced in the Commercial Street and Charlestown Savings Bank cases.

Institutional factors may enter into the design review process and play a large part in determining the character of the process and its outcome, but personal interaction during a discretionary review process makes the skills of the reviewer a significant factor as well. A reviewer needs competence in both technical and political skills to be effective in a design review process. He needs personal attributes of self-assurance, receptiveness to community wishes and needs, the ability to synthesize often conflicting views, bargaining ability, and political good sense. An effective design reviewer must also know who to call and what interests to consult or mobilize in order to support his position in a case. Reviewers should be thoroughly familiar with the specifics of site and surroundings, and well acquainted with the values of the political and architectural
community as well.

Reviewers lacking professional design credentials or who are unqualified to render expert advice in a professional manner, lose credibility in the eyes of other participants in the review process, and may ultimately lose control of or influence in that process. Design reviewers without technical expertise and an available support staff may be able merely to react to the designs presented to them without considering the full implications of their suggestions.

Volunteer reviewers may not have the time, knowledge, or resources to prepare technical studies that conform or counter studies of architects they are reviewing. Relying on skilled or professional volunteer reviewers to assume the responsibility for technical work as well as decision making can reduce the quality of design review. An expert technical staff supporting volunteer reviewers, or the presence of review board members with time and commitment to conduct design may improve the performance of volunteer review boards.

Because urban design is not an exact art or science, differences in professional opinion may often arise between architects and reviewers that lead to impasses which are hard to resolve by logical argument alone. To avoid such situations, behind the scenes, informal negotiations may be a most effective design review approach in volatile situations. In relating to the architect, the reviewer may choose to play the role of regulator or that of joint learner, exploring
the design problem and working out solutions together. Either approach may be effective depending on the characteristics of the case, personalities involved, or the setting.

In a discretionary situation, personal relations between reviewer and reviewed may be a significant factor in the effectiveness of the design review process. Reviewers may promote their ends by psychological games such as building the egos or self esteem of architects or developers undergoing review. That tactic may be manipulative and counterproductive; but reviewers who let the architect feel he is making his own design decisions under the influence rather than the command of the reviewer may promote a smoother review process. The designer may be less likely to feel alienated by the process and may be more personally satisfied with the results. A discretionary approach may not be productive for the architect if the reviewers try to redesign the entire building presented to them. In that instance, it is the reviewer's responsibility to communicate the overall design policies and guidelines clearly beforehand. He must be sure they are understood by the architect to avoid later disputes over decisions on details.

When there is a difference of opinion over design matters between the reviewer and an architect, the actor who is able to muster the strongest political support, hold out the longest, or make the final approval decision will win his case. The logic of one's design argument may not convince the other
actor if the bases for dispute are too far apart.

Finally, in relating to community interests, the Suffolk case has shown that design review committees that are composed of architects, either entirely or predominantly, may focus on issues of design and may lose sight of or de-emphasize other functional issues which are of greater concern to the community that they represent. Review committees that neglect community concerns are likely to be overruled if the community has a mechanism for expressing its opinions. All sides must work toward an understanding of the issues at stake in review. A community based design review process that facilitates discussion of issues while minimizing hostile confrontations by clarifying trade-offs and consequences, may have a greater chance for success in reaching a concensual resolutions than a process that does not.

Measures of success -- There was general agreement among actors in the cases that the success of a design review process should be measured by the quality of the product that comes out of that process. The quality of the product can be measured by how well it meets initial goals or user needs; if it meets developer and community needs; if it reflects its function, occupancy, and neighborhood setting; the appropriateness of the design based on how it fits where it is built as perceived by the local community; the reaction of the architectural community; and the anticipated future appearance of the product after years of use.
Design review can be administered following one of several possible models. A discretionary approach can entrust staff or review board members with the task of evaluating submitted proposals using their own judgment, or review can take place under detailed guidelines prepared during a comprehensive study of an area's characteristics and needs. Either performance or prescriptive standards can be used as evaluation criteria. The proposal can be measured against an overall prototype, or it may be examined as an assemblage of component parts. The content of design review may deal with coarse concerns of siting and massing, or with fine grained architectural details and the way they relate to the whole structure.

The purpose of Part II is to examine these various design control formats through the analysis of several models proposed or in use in a few cities. This analysis will provide an insight into what kinds of methods for administering design review are appropriate in a range of given situations, and it will illustrate how the choice of individual review methods relates to the intent of the overall review model.

The introduction to Part II explains the usefulness of studying models, the choice of models examined here, and how they have been analyzed. The following section proposed a three-tiered framework for relating several aspects of design control models. These aspects are the approach, nature, and content of design review.

The major portion of Part II is the analysis of six review models that range from a model which quantifies the significant elements of housing design and the criteria for the automatic administration of review, to models which present broad guidelines within which reviewers can exercise considerable discretion. Following the analysis of these models some concluding comments focus on their common themes and those aspects which differentiate between the models. These comments are organized along the lines of the models' approach, nature, and content.
Introduction

Use of models -- Models, as used in this study, are collections of methods employed to conduct design review. A single method may deal with only one or two aspects of the design review process, such as a method for encouraging community involvement or a method for evaluating a project against a set of design criteria. In this sense a "method" is a single purpose device tailored to perform a specific role in the review process. A "model", on the other hand, is more holistic in its use and generally deals with a range of aspects in the entire review process. For instance, a model might include the derivation of guidelines, the method of evaluating proposals, as well as the administrative procedures to be followed in making applications for review. A set of methods are related to create a system of design review.

A design review model considers most or all aspects of the review process in its composition. This part of the study will focus on a few holistic models for conducting design review.

The purpose of Part II is similar to that of Part I on design review cases. After discussing the components of several generic model types, this part will describe when and how review model examples have been prepared and applied. It will also attempt to identify where those applications have
been effective in attaining their objectives. It will note whether or not the objectives were appropriate to their environment. The intention is not, however, to be thorough in this evaluation, but rather illustrative in spelling out what to look for in the administration of systems of design review methods.

While each of the models analyzed here is embedded in the environment which generated its origins and influence its application, the emphasis of this part of the study will be on the characteristics of the models themselves rather than the characteristics of their environments. Connections between design review models and environments have already been discussed in Part I and will be explored further in Part III.

Another aspect of design review models which will not be fully discussed here is the issue of the life cycle of a model. Like all works of man, a review model is devised to serve some purpose. Over time the purposes may change or the setting in which the model functions may be modified. Even the need for review may disappear. Design review models may be slow to adjust to changing market conditions or institutional contexts, or an increased level of concern in the community may suggest that a more stringent design review model could be applied. A model which does not evolve and adjust to those kinds of changes may soon become obsolete in a changing environment. The accompanying diagram illustrates one view of the life cycle of models or "tools". Many other descriptions are possible.
sible, but the fundamental point is that components of models must evolve over time in order to remain effective in their environments. Depicting a static picture of the use of a model at only one point in time inadequately describes the full situation.

This study will deal with issues of obsolescence, evolution, and modifications only peripherally. The origins and early history of individual models are discussed, but in most cases their actual applications have been limited and the process of adaptation and obsolescence are only in their beginning stages.

Choice of models -- The criteria used for selecting models and examples for analysis are less rigorous than criteria used for selecting cases in Part I. The list of models discussed here is illustrative rather than exhaustive. Examples were chosen to represent a range of applications, but because of the complexity of the possible typology of models discussed in the next section, it was not possible to find superior examples for every case. The six model examples were chosen in an informal manner: they are all cases familiar to the author and are believed to be interesting and informative around a range of possible points.

The six model examples are applied in a range of contexts from one of the densest parts of New York City to a small scaled urban neighborhood in Boston. Rural and suburban ex-

Serge Chermayeff and Christopher Alexander in Community and Privacy discuss several other "Cycles of Design Processes" as they apply to physical and organizational structures. One suggested sequence is: need, tool, research, programming, development, obsolescence, need...(pages 99-112)
amples are underrepresented in these models, but adaptation of parts of these models to those kinds of environments will be discussed in Part III.

The models are arranged in generally increasing order of reviewer discretion, with one exception, and are matched in similar pairs for the purpose of making comparisons. The examples are: the "Housing Quality Program" of New York City (HQP), the "Matrix of Interface" prepared by the Boston Redevelopment Authority, the "Special Greenwich Street Development District" of Lower Manhattan, the "Tremont Street Special District" of Boston, the "Beacon Hill Guidelines", and the "Brookline Environmental Design Review" program.

The Housing Quality Program represents an attempt to quantitatively define the range of design and siting trade-offs a developer must make in a housing project. Providing specific amenities chosen from a list of possible options gains "quality points" which translate into allowable FAR densities in each residential zoning district of New York City. The Matrix of Interface in Boston is also intended to be applied city-wide, but its approach to specifying design requirements is much broader, leaving more discretion in the hands of the reviewer and offering less predictability for the developer and his architect.

Greenwich Street is an incentive zoning program which deals with design issues and density trade-offs related to the
provision of site amenities. Tremont Street resembles its New York City counterpart in many respects although the nature of its spatial, economic, and institutional setting in Boston requires many specific adaptations. Both models use the special district format to respond to the particular needs of a unique location in their respective cities.

The Beacon Hill guidelines have already been mentioned in the Suffolk University case in Part I. These requirements are applied in a discretionary manner to maintain the desirable qualities of a historic district sensitive to small changes in building appearance. Brookline's Environmental Design Review has been outlined in the introduction. This model has been applied for several years in areas of Brookline which are seen as visually and environmentally fragile, and thus requiring design controls on new construction and modifications to existing structures for the preservation of the town's current townscape qualities. Brookline's approach is also largely discretionary within a set of broad design guidelines.

Method of analysis -- The major sources of information on most of these models have been written documents and published articles rather than interviews with participants in their design and application. For this reason the data used are more remote from the action and less current than the case studies. This remoteness is acceptable because Part II is less concerned with particular events, actors and their roles, and differing viewpoints than is Part I.
Typology of Models

There are many ways to look at the various models for conducting design review. One might think of a series of dichotomies -- opposite characteristics that represent end points along a continuum. This study has already raised the distinction between discretionary versus non-discretionary, self-administering (or "automatic") review. Several more dichotomies are: objective versus subjective standards, quantifiable versus non-quantifiable, systematic versus focussed, verbal versus graphic, and performance versus prescriptive. This list has been suggested by work done by Gary Hack and James Batchelor of MIT. Batchelor lists fourteen different formats for design guidelines under three basic categories. These categories were derived to correspond to the increasing level of specificity inherent in the progression of the typical design process. More detailed criteria applicable to smaller design elements are needed to guide decisions at the working drawing stage than during early schematic design.

Another typology for relating design control methods will be described here. It will be structured around the purposes, organization, and capabilities of the reviewing body rather than the progressive stages of the architects' design process.

Three basic levels of components of a design review process

James Batchelor in an MCP thesis completed at MIT in 1974 describes a detailed study of design criteria used by three public housing agencies -- MHFA among them. He explains the origin and basis for their criteria and places them in a larger context. Batchelor describes a "Catalogue of Guideline Formats" originally devised by Gary Hack. There are three basic categories of formats: conceptual determinants which provide a holistic sense of a design problem and are most useful in the early stages of design and at larger scales; solutions which describe a design solution to be incorporated.
are proposed and defined in this study: the approach, nature, and content of design controls. This three tiered structure is related to attributes of the reviewers and their institutional settings. It provides a matrix for the analysis of components of different design review models in a common framework even if the model itself is not deliberately structured along these lines. This framework will also serve as the basis for matching review models and situations in Part III.

This typology, however, does omit hybrid combinations from the basic framework, and it does not consider examples such as exhortatory models which suggest desirable courses of action but do not require specific moves for compliance with the law.

The following paragraphs define each basic category and outline some of their possible attributes. The attributes will be illustrated in the analysis of the six examples that follows, and they will be discussed further in the closing sections of Part II.

**Approach** -- The approach to design review refers to the choice between discretionary administration giving the power of interpretation and judgment to the reviewer, and the use of detailed guidelines which spell out beforehand the criteria by which the proposal submitted to review will be judged. These guidelines are intended to be administered into a project and are useful at middle or small scales whenever a problem occurs frequently and is amenable to a structured solution; and specifications which provide detailed tests of environments at a small scaled level of analysis. These categories may be useful to keep in mind while reading about this author's framework. See Batchelor's Thesis, Public Agencies as Managers of Housing Quality, pages 50-52.
without the use of reviewer judgment on each individual case. Convenient descriptive labels for these differing approaches are "capital intensive" for the detailed self-administering guidelines, and "labor intensive" for the discretionary interpretation.

**Capital intensive** does not necessarily mean that a comprehensive "master plan" with all design details must be worked out initially. Overall design guidelines may be implemented incrementally under "automatic", self-administering controls with detailed choices left to be made at a later date by the developer or the designer. The distinction being made here is that self-administering guidelines -- in their most essential form -- spell out the terms of the potential design trade-offs beforehand, usually as a result of a comprehensive planning study or after calibration by a pilot negotiating process of a leading case. Discretion is left to the developer and his architect to make the specific choices on which trade-off options to select within a prescribed range.

**Labor intensive** approach refers to the labor of the reviewing body, and not necessarily the labor of the development team. Staff or design review board members make discretionary choices within a broad range of authority laid out by the enabling legislation and the specific design review ordinances or regulations. In order to make informed choices, individual design studies or site visits may be needed to see how the broad guidelines may be applied in a case.
Somewhere in between these two opposites lies an approach which attempts to formulate design policy from the decisions made in individual cases. This approach may consume even more costly labor than the "labor intensive" approach because general policy guidelines are drawn from the specifics of often complex individual cases. Such an approach can be seen as analogous to the case law approach of the judicial system.

The continuum that lies between self-administering, capital intensive -- "plans" -- and discretionary, labor intensive -- "people" -- approaches can be divided into several discrete increments. Some positions are: 1) detailed guidelines, automatically administered; 2) review with detailed guidelines narrowly interpreted; 3) review with broad guidelines interpreted; 4) discretionary review making policy with decisions; and 5) discretionary review without guidelines. The distinctions between these increments may become more clear after the analysis of the six models. This framework will be discussed in greater detail at the end of this part.

**Nature** -- The nature of design review guidelines refers to two dimensions: 1) whether guidelines are defined by performance or prescriptive standards, and 2) whether these standards are illustrated by a comprehensive prototype or by reference to specific design components.

**Performance** standards state a requirement to be met without
specifying the exact means by which it must be met. They are usually stated in terms of a goal, a criterion or quantifiable standard to be met, and a test that measures compliance with the criterion. Performance criteria are sometimes used in such regulations as building codes that specify the need for a "two hour" rated wall and prescribe the recognized tests which must be met to assure compliance of a wall assembly. **Prescriptive standards** specify the characteristics of the final design without requiring tests to assure a particular level of performance. A building code which requires an eight inch concrete block wall as a "rated" partition is an example of a prescriptive standard. Design Review guidelines may be either performance or prescriptive in nature, or they may combine some aspects of both.

The nature of design controls is also determined by the level of detail at which guidelines or discretionary review is applied, and by the examples which are offered to illustrate what is required. Entire **prototypes** or complete design solutions may be held up for emulation. Architects could be told to make their designs look like "the building at Fifth and Main Streets" -- or Cambridge Street and Ridgeway Lane. The difficulty with using prototypes is that the designers may not be sure exactly which aspects of the design he should copy, and where he is allowed greater freedom to express his own creativity. This is particularly the case when reviewers do not offer any further clarification of the content of their
controls. To deal with this problem, they may be shown slide analogues of acceptable solutions with a description of what elements of the solutions make them desirable. At the other end of the spectrum, review guidelines could focus on minute components of the design -- stating (in a prescriptive way) that "all houses on Main Street must have shutters, and they must be painted white," or (as a performance standard) that "window openings must be large enough to admit an average 200 footcandles of natural daylight into all interior spaces."

Between individual components and prototypes, varying scale elements of a design may be controlled under design review, or perhaps "patterns" of use or elements may be dictated by design standards.

Content -- The content of design controls refers to the question of what elements of a proposal are controlled -- from architectural details to questions of siting and massing. Two aspects of the content are: 1) what issues are of concern for particular applications of design review and, 2) what is the scope or concern; that is, are guidelines prepared to cover a range of issues in a systematic or a focussed way. The distinction between content and the nature of control scale is that "scale" in the first case refers to the level of detail of the guidelines themselves -- their grain in terms of components versus prototypes --, whereas the content is related to what kinds of issues are controlled and how they are related to the other issues.
The aspects of issues of concern refers to a nominal list of attributes of a proposal that range from height, bulk, and FAR through pedestrian amenities (such as plazas, benches, or street trees) to detailed elements such as color of materials and window patterns of a facade. Any of these elements may be controlled under design review depending on the intent of the guidelines and degree of control held by the reviewing body or review ordinance. Toward the "upper" end of the scale are issues which can be labeled programmatic or issues concerned with functional roles of particular design elements (like arcades used for shopping and circulation), and sources of impacts like traffic generators or loading docks. Farther down the scale are aesthetic, formal, or architectural detailing issues. These issues include color, texture, fenestration patterns, and scale of detailing.

The related aspect of scope of issues refers to the range or extent of elements controlled along that nominal continuum. The questions to be answered in determining scope are: do controls focus on a few elements -- like height, FAR, coverage, and use as zoning does --, or are controls applied across a broad range of elements -- like height, color, detailing, and signage as are included in urban renewal developer's kits.

Following the discussion of six examples, they and other design control models will be compared by their context, and the composition of a nominal scale of twenty issue types will be specified.
Generic model types -- Given this typology of three tiers, several additional dimensions, and a range of values between the polar opposites of those dimensions, it would be difficult to describe all the possible models that could result from all the combinations of values. Fortunately, in practice the attributes of most models cluster along a few common dimensions. Discretionary models may frequently be combined with prescriptive standards and aesthetic concerns, while they may only rarely be linked to performance standards dealing with programmatic issues.

The reasons for these prevalent combinations will be implied in the analysis that follows and explained by a list of derived situational factors described in Part III. At this point, however, it is useful to highlight several generic model types which are linked to the six examples which are analyzed in the following section.

One generic model in its pure state combines a self-administering approach, performance standards, and programmatic content. It represents a circumstance in which the purpose of review is best served when a "capital intensive" study works out the standards and trade-offs between then before being confronted with an actual design proposal to be reviewed. The Housing Quality Program is an example of this type of model.
A second generic model takes a self-administering or automatic approach and deals primarily with programmatic concerns, but it uses prescriptive standards to specify the solutions which are acceptable. Both the Greenwich Street and Tremont Street special districts are examples of this model type. Each example takes a slightly different slant because of the differing city environments in which they are located; thus this pair draws attention to the way generic models can be tailored to their particular contexts.

A third commonly occurring model is one which uses a discretionary approach, but attempts to use a combination of performance and prescriptive standards to address a range of programmatic and architectural detailing issues. Brookline's environmental design review process is an example of this broadly directed system of controls.

Another generic design review model takes a discretionary approach and uses predominantly performance standards also to deal with a wide range of programmatic and detailing issues. The BRA's Matrix of Interface has these characteristics as it has been prepared to apply to projects across the city of Boston.

Finally, at the opposite end of this limited spectrum of generic models from the first is a discretionary review model that uses prescriptive standards to address aesthetic design issues. The guidelines of Beacon Hill and Back Bay in Boston
use this system in their two historic districts. All of these models and examples deal primarily with components rather than prototypes, and so that dimension is not a significant aspect here.
Each of the following six examples is analyzed under a consistent set of categories. First in an introduction which outlines the purposes of the model and summarizes what the model demonstrates. Next follows a section on the model's origin -- how the need for the model was recognized and studies initiated. The environment of the model -- primarily its location of application and the kind of development it is directed toward -- is discussed. The regulatory context focuses on the model's institutional setting and the way it relates to existing regulatory devices like zoning and building codes. The meaning of approach, nature, and content of controls have already been discussed in the preceding section of this part. Who is likely to use the guidelines in preparing a proposal is the model's audience addressed. The format or communication medium describes the way the guideline document is laid out and how it conveys a message to its audience. A brief history of the studies that preceded the design of the model is under preparation. The administration deals with the mechanisms by which trade-offs are made or performance is measured. The evidence of effectiveness in use and examples of controls on specific cases are discussed under application. Finally, a critique on how well the model fits in its environment, addresses its intended audience, measures performance, and so forth concludes the analysis of each model.

Six Examples

Housing Quality Program
Urban Design Council
New York City, New York

Matrix of Interface
Boston Redevelopment Auth.
Boston, Massachusetts

Special Greenwich Street Development District
Office of Lower Manhattan Development
New York City

Tremont Street Special District
Boston Redevelopment Auth.
Boston

Beacon Hill Guidelines
Beacon Hill Architectural Commission
Boston

Environmental Design Review Planning Board
Brookline, Massachusetts

If the reader is interested in particular facets of these examples he can cut across these cases horizontally by using these categories as a guide through the text.
Housing Quality Program

"The Housing Quality Program is essentially a program for accommodation and balance which incorporates goals rather than minimum standards."¹ So states the Urban Design Council of New York City in their original publication describing the recommendations of their 1973 study. An overall aim of the study was to produce a client oriented program to define the problem of urban housing in a way that will structure the solution and offer a foundation for additional innovation. HQP was to serve as a design review device and evaluative tool to codify the variables of design choice, and give architects and developers assistance in their own decision making process. Its broader goals were to improve the quality of New York City's new housing, making it more livable and more humane. Clearly, HQP could not accomplish these ends independently, but its authors saw the program as a step in the right direction.

Origin -- In 1972 Mayor John Lindsay created the Urban Design Council as an advisory body in the Mayor's Office. Members of the Council were professionals -- architects, builders, and lawyers -- and laymen who took on the task of developing a method for reinforcing neighborhood values and accommodating them in various architectural forms of new housing. The Council approached the problem from two directions: 1) that of the neighborhoods having a diversity and distinctiveness

"What is important here is not the specific procedure for assigning points, but rather the concept that design standards can be made quantifiable and convertible into numerical units that reward a developer for compliance with the standards."

--excerpt from analysis
which give them a sense of place and a sense of community that must be protected throughout the city, and 2) that of individual tenants' needs. The Council had to define housing environmental quality in terms that made sense for both the neighborhoods and the individual.

Environment -- Before one can understand the conditions that generate the need for a new approach to regulating housing quality, and before examining the process of derivation that resulted in HQP, one must look at the particular setting of New York. The Housing Quality Program is closely tied to the

High rise slab housing prototype
New York City context. This close connection may make many aspects of HQP ill-suited to some design review applications elsewhere.

First of all, New York is big, dense, and complex. Each of its five Boroughs has its own set of unique qualities making them almost independent cities. The Urban Design Council's work was based on the prerequisite of equity in application across all five Boroughs, with its thrust aimed largely where most new construction was taking place, outside of Manhattan. In those locations a high rise slab that would be lost among towers in Manhattan might dominate a neighborhood, even if the local zoning permitted that density. At the same time, the density of most New York neighborhoods is greater than that of comparable areas in other cities. HQP chose to promote alternatives to high rise solutions which offered desirable amenities to both tenants and nearby residents. Housing quality is not independent of neighborhood quality, and so a design review method that recognized both the perspective of

Low rise housing alternative prototype encouraged by HQP
tenants and neighbors was necessary to produce a satisfactory balance.

**Regulatory Context** -- Another characteristic of New York is its large and complex regulatory structures. The Urban Design Council chose zoning as the instrument of implementation for their program, thus dictating an approach with emphasis on legal language that spelled out the program's provisions in detail beforehand. Such an approach would be consistent with the way regulatory controls are formulated in a setting like New York, though that may not be the case in other cities.

**Approach** -- HQP follows a capital intensive, self-administering approach. Its intent is to provide developers and architects with a flexible set of elective controls based on definitive studies made while preparing the program. Detailed measurable standards are employed to avoid the appearance of making subjective value judgments during the application of those standards to individual cases.

**Nature** -- Performance standards are specified for elements of the program, all of which lend themselves to measurement in an objective way. HQP scorns the idea of the high rise slab housing prototype -- or any other prototype -- and leaves it to the designer to select components that satisfy the requirements of the program and that suit the details of the development project being proposed. The Council recognized that there was no ideal housing project prototype for all situations.
encountered in New York. There were too many variables to consider, so HQP did not prepare a set of solutions and neither did it specify a particular architectural style or details to be used.

Content -- Comparing the design control elements proposed in HQP with a list of issues running from small to large scale (to be discussed in detail later in this part), the Program's elements cluster at the two opposite ends of the scale: the issues dealing with bulk, setback, and siting, and at the level of interior space and unit design. All of these issues, however, are predominantly programmatic in concern. This divergence reflects HQP's dual concerns for neighborhood quality and the individual residents of the new housing projects.

The Housing Quality Program has been organized around four basic "programs": neighborhood impact, recreational space, security and safety, and building interior. Systematic rather than tightly focussed on a few issues in its content, 37 specific measurable elements make up the four programs. The elements range from restrictions resembling those of zoning on setback, to the amount of visual privacy and daylight provided in apartment units.

The aim of the neighborhood impact program is to assure that new housing will be perceived as beneficial rather than disruptive by the surrounding community. It would meet this
aim, in part, by requiring new construction to respect the prevalent scale of the context and by maintaining New York City's dominant emphasis on orientation to the block and the street. The recreation space program relates the nature and extent of facilities provided in a project to occupancy characteristics of its intended residents -- their age as suggested by the mix of apartment unit types. Private space for residents as well as semi-private space accessible to the community would be offered on the ground, on roofs, and over parking decks. The security and safety program is based on the concept that organizational decisions regarding public, semi-public, and private spaces can be made which tend to foster recognition of neighbors and outsiders, and that such an organization will increase the feeling of security among residents. Elements of the building interior program present a catalogue of reasonable considerations for programming sound living unit design including such aspects as sunlight, unit size, and cross ventilation.

**Audience Addressed** -- All of these design considerations are presented to developers and architects who are to work out the specific design trade-offs themselves. The focus is on the decisions these participants must make in determining project size, mix, and design. Joint negotiations among sponsor, builder, and architect are seen as the method by which these specified trad-offs are made.

**Format/Medium** -- Verbal text, diagrams, mathematical formulae,
and a glossary of definitions are the means by which the content of the HQP is communicated. Each element is stated in the form of a goal and set of standards for determining the degree of compliance with that goal.

All of the standards are measurable -- though the basis for measurement is not always substantiated and can appear arbitrary in the text. For example, to qualify for credit in the quality evaluation formula, seating in outdoor space must: 1) be within 15'-0" of a deciduous tree, 2) be visible from ¼ of the apartments, 3) receive sun for two consecutive hours between 10 AM and 2 PM on December 21, 4) be at least 15'-0" from a parked car, and 5) be 18" wide and 18" deep. Some justification for these specific measures may add credibility to their standing.

Other elements may need less justification to those persons already sensitive to what constitutes appropriate design in the city. Neighborhood impact elements, for instance, are based on accepted urban design ideas, deal with building height, street trees, and transparency ratios (of glass to opaque walls) at the ground floor. The aim of the street wall setback element is "to maintain neighborhood scale by matching new and existing setbacks." A glossary of definitions and diagrams help to clarify some of the more confusing requirements. The original 93 page book prepared by the Urban Design Council has been translated...
into a 28 page illustrated zoning text which has become a part of the New York City Zoning Resolution.

Preparation -- The staff of the Urban Design Council conducted an exhaustive two year study of current housing design practices, building costs, and the potential effect of applying these standards on New York's neighborhoods. The staff recognized the problems of setting evaluative standards on design, and they saw their role as that of programmers providing the basis for architectural expression. Their intent was to promulgate measurable standards which incorporated cost implications as well as the benefits offered to the users by the amenities provided. Site visits to recently completed housing which included some of the desirable design features gave members of the study a chance to see how those amenities performed in use.
The Urban Design Council's report was submitted as an inter- 
rum document to Mayor Lindsay for debate and review by city  
agencies like the City Planning Commission and by interest  
groups and citizens. Workshops were run with civic, profes-  
sional, and citizen organizations as an educational effort  
and a means of collecting comments and criticism. The pro-  
gram was finally adopted as part of the Zoning Resolution in  
February 1976.  

Administration -- The program was originally designed to be  
administered "automatically" -- that is, without the need  
for discretionary rulings by the City Planning Commission  
or for individual public hearings or special permit proced-  
ures with legislative involvement of the Board of Estimate.  
Later it was decided to have the Department of City Planning  
issue a "Housing Quality Special Permit" in districts zoned  
at densities greater than R3-1 which would waive height, set-  
back, and coverage restrictions when the program's provisions  
were employed.  

Use of the program may be complex and confusing the first  
time through, so the Department of City Planning will aid  
the applicant with technical advice to help practitioners  
learn how to apply the HQP properly. Because the standards  
are objective and quantifiable, the applicant must prepare  
calculations similar to those required for building code re-  
view, and he must submit them for certification of compliance  
before the issuance of a permit.
Each of the four "programs" is worth a possible 25 quality points with portions of the 25 points allocated among the elements under each program. Points awarded for each element are calculated by a formula based on percentage of compliance with the standard, and the points are summed for all elements under each program.

For instance, "winter sun" in outdoor space is worth a maximum 5.00 points out of 25 for the recreation space program. Defined shadow calculation measurements yield a figure for an average amount of space that receives sun during the Winter Solstice. When divided by total outdoor space and multiplied by 100, a percentage of compliance is produced. Compliance at 0% produces .00 points, 20% gives .35, 40% gives 1.00, 60% gives 2.15, 80% gives 3.45, and if 100% compliance is attained, then 5.00 points are awarded. Maximum compliance for each of the seven elements under recreation space yields 25 points. Less than full compliance will produce fewer points. Similar calculations are done for each program category.

No project could realistically achieve full compliance with all elements, so the designers must make trade-offs in selecting the amount of amenities to provide. High priority amenity elements have been assigned more points in HQP, and some elements have required minimum levels of compliance. Quality rating determines the permissible intensity of de-

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<table>
<thead>
<tr>
<th>NEIGHBORHOOD IMPACT</th>
<th>MAXIMUM VALUE</th>
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</thead>
<tbody>
<tr>
<td>1. Street wall setback*</td>
<td>4.55 n.a.*</td>
</tr>
<tr>
<td>2. Sunlight in open space*</td>
<td>3.60 4.70</td>
</tr>
<tr>
<td>3. Length of street wall*</td>
<td>3.60 7.55</td>
</tr>
<tr>
<td>4. Shadow on buildings*</td>
<td>3.05 5.40</td>
</tr>
<tr>
<td>5. Height of street wall*</td>
<td>3.05 n.a.*</td>
</tr>
<tr>
<td>6. Street trees*</td>
<td>2.85 4.15</td>
</tr>
<tr>
<td>7. Height of building*</td>
<td>2.15 n.a.*</td>
</tr>
<tr>
<td>8. Transparency ratio at ground floor*</td>
<td>2.15 3.20</td>
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<thead>
<tr>
<th>RECREATION SPACE</th>
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<tbody>
<tr>
<td>1. Type and size*</td>
<td>8.50</td>
</tr>
<tr>
<td>2. Winter sun</td>
<td>5.00</td>
</tr>
<tr>
<td>3. Landscaping</td>
<td>2.75</td>
</tr>
<tr>
<td>4. Covered parking</td>
<td>2.65</td>
</tr>
<tr>
<td>5. Visibility of parking*</td>
<td>2.65</td>
</tr>
<tr>
<td>6. Trees*</td>
<td>2.45</td>
</tr>
<tr>
<td>7. Seating</td>
<td>1.00</td>
</tr>
<tr>
<td>8. Transparency ratio at ground floor*</td>
<td>25.00</td>
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<tr>
<th>SECURITY AND SAFETY</th>
<th>MAXIMUM VALUE</th>
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<tbody>
<tr>
<td>1. Vis. from public space to elevator door or general circulation stair</td>
<td>3.90</td>
</tr>
<tr>
<td>2. Vis. of private outdoor space from lobby*</td>
<td>3.90</td>
</tr>
<tr>
<td>3. Surveillance from large apartments</td>
<td>3.30</td>
</tr>
<tr>
<td>4. No. of apts. serviced by lobby</td>
<td>2.90</td>
</tr>
<tr>
<td>5. Vis. of parking area from lobby</td>
<td>2.25</td>
</tr>
<tr>
<td>6. Vis. of parking from exit point*</td>
<td>2.20</td>
</tr>
<tr>
<td>7. Distance from elevator to apt.*</td>
<td>1.85</td>
</tr>
<tr>
<td>8. Road separation*</td>
<td>1.80</td>
</tr>
<tr>
<td>9. Vis. from elevator door or general circulation stair to apartment door*</td>
<td>1.80</td>
</tr>
<tr>
<td>10. Visibility of mail room</td>
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<tr>
<td>11.程度</td>
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</table>

<table>
<thead>
<tr>
<th>APARTMENTS</th>
<th>MAXIMUM VALUE</th>
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</thead>
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<tr>
<td>1. Size of apartment*</td>
<td>3.75</td>
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<tr>
<td>2. Sunlight in apartment*</td>
<td>3.20</td>
</tr>
<tr>
<td>3. Window size*</td>
<td>2.20</td>
</tr>
<tr>
<td>4. Visual privacy--apt. to apt.*</td>
<td>3.20</td>
</tr>
<tr>
<td>5. Visual privacy--street to apt.</td>
<td>3.75</td>
</tr>
<tr>
<td>6. Balconies</td>
<td>1.70</td>
</tr>
<tr>
<td>7. Daylight in hallways</td>
<td>1.50</td>
</tr>
<tr>
<td>8. Distance from parking to garage exit*</td>
<td>1.50</td>
</tr>
<tr>
<td>9. Daylight in kitchen</td>
<td>1.50</td>
</tr>
<tr>
<td>10. Parking and bicycle storage</td>
<td>1.30</td>
</tr>
<tr>
<td>11. Waste storage facilities*</td>
<td>1.20</td>
</tr>
<tr>
<td>12. Garbage pickup facilities</td>
<td>1.20</td>
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</tbody>
</table>

*Minimum compliance levels established
**n.a.--not applicable

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development for a given site. The reward for accumulating more quality points is increased maximum permissible FAR density.

<table>
<thead>
<tr>
<th>COMPLIANCE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>((A/B)100 = %): when the proposed setback is more than the existing setback</td>
<td></td>
</tr>
<tr>
<td>((B/A)100 = %): when the proposed setback is less than the existing setback</td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>PREFERRED (A)</th>
<th>PROPOSED (B)</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>edge of the existing building</td>
<td>edge of proposed building nearest</td>
<td>Built Up</td>
</tr>
<tr>
<td>nearest the existing building</td>
<td>existing building</td>
<td>Non Bui</td>
</tr>
<tr>
<td>proposed building is set back A</td>
<td>in A is set back</td>
<td>*50% = .00</td>
</tr>
<tr>
<td>feet from the street property</td>
<td>70% = .79</td>
<td>NOT</td>
</tr>
<tr>
<td>line (see street wall setback #1)</td>
<td>80% = 1.51</td>
<td>APPLIC</td>
</tr>
<tr>
<td></td>
<td>90% = 2.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100% = 4.55</td>
<td></td>
</tr>
</tbody>
</table>

*Minimum permitted

Formula measuring compliance with "Street Wall Setback" element
In summary, points awarded for each element are added to produce a total of program points. These are converted to a quality rating which then yields -- from a table for each zoning district -- a density FAR for each project.

What is important here is not the specific procedure for assigning points, but rather the concept that design standards can be made quantifiable and convertible into numerical units that reward a developer for compliance with the standards.

Application -- Because the Housing Quality Program was only recently enacted by the City, there is no documentation available on how well it is working. When it is used, however, what will be critical is the cost associated with its application. Some construction costs will be reduced as more

<table>
<thead>
<tr>
<th>COMPLIANCE</th>
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<tbody>
<tr>
<td>(B/A)100 = %</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>WORST CONDITION (A)</th>
<th>PROPOSED (B)</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = sq. ft. of off-site</td>
<td>B = sq. ft. of off-site</td>
<td>Built Up</td>
</tr>
<tr>
<td>windowed building walls which could potentially be in shadow</td>
<td>windowed building walls which are in shadow</td>
<td>60% = 0.00</td>
</tr>
<tr>
<td>*Maximum permitted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Formula measuring compliance with "Shadow on Buildings" element

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flexibility is offered in zoning restrictions, but other costs of construction may increase as minimum amenity levels beyond what are presently required must be met. The design and evaluation process will undoubtedly increase costs for the design team. Designers will have to develop a "feel" to predict the outcome of their decisions. Details dictate the permissible density and that density affects the kinds of details possible.

Critique -- Jonathan Barnett has written, "This study represents a long step towards the goal of replacing (discretionary) design review with a flexible system of standards that has been codified and published in advance of the design of individual buildings, and is generally applicable throughout the city." 5 Certainly HQP has potential in controlling some design attributes better and in a more explicit manner than some current discretionary practices, but it is also clear that this approach will not work everywhere.

First of all, not all components of design can be put in quantifiable terms for which percentage levels of compliance can be determined. The Urban Design Council has chosen to omit several elements which could not be adequately quantified but which may have a significant effect on the quality of the design solution. In many situations, unquantifiable attributes may be more important than those which can be quantified. At another level of criticism, many of the measures and formulae presented in the HQP pub-
lications lack documentation as to their origins and substantiation of their validity.

Overall, the Housing Quality Program is an ambitious attempt to make the process of design review a predictable one. While one can dispute the judgment of values and priorities set, at least the assigned values are clear and were contestable during the debate before adoption. Whether or not the program will work in its environment is open to question. If the developers who try to use HQP recognize the potential advantages to them, and if the Department of City Planning is able to make the evaluation process clear and understandable, then HQP may succeed. This model does not depend on a strong market to propel it as incentive zoning does, but it would work best in a setting where there is some incentive for builders to attempt innovation in return for some tangible reward.

The Housing Quality Program uses design controls as a programming device. Performance standards are laid out which designers and developers can use as targets rather than as minimums. It is up to the design team to make the trade-offs which determine the form of the final design.
Matrix of Interface

The Urban Design Staff of the Boston Redevelopment Authority believes that urban design at its most basic level is a question of relationships between buildings. Staff members have written that urban design operates at various levels of organization: at the city scale, at the district scale, and at the individual development scale. In the latter case, "Urban Design at this level deals with functional relationships between the various parts or systems within or adjacent to the project. When two or more of these systems are in a relationship to each other an interface occurs."¹

Based on this concern for relationships, the Matrix of Interface was prepared by the staff. It focuses on transitions between uses and its aim is to give developers a place to start in preparing development plans.

In contrast to the Housing Quality Program, the Matrix is more discretionary in approach, and it does not attempt to quantify its evaluative standards. In fact, many of the statements that make up the Matrix are not even recognizable as standards. Some seem to be observations of design choice consequences. The Matrix of Interface is still in a state of development, though not active development. Some recommendations for improving the Matrix will be offered in the Critique section at the end of the analysis, and some minor criticisms will be made along the way.

"The Matrix is actually more of a negotiations tool than a formal set of review guidelines. It lays down a baseline of issues to look for, then leaves it to the skill of the architect and the reviewer to work out the details and to adapt the Matrix statements to the circumstances of a particular site."

-- excerpt from analysis
Origin -- John Sloan, of the Charlestown Savings Bank case, and other members of the BRA Urban Design Staff felt that it was important to quantify, or at least specify, attributes of good urban design. They were often as frustrated with the way that the design review process worked as were some of the developers and architects who came before them with projects for review. Under Dick Joslin, head of the Department, staff members took the initiative and began to prepare a list of characteristics of acceptable designs.

Environment -- The setting in which the Urban Design Department operates has already been described in detail in the Charlestown Savings Bank case. The Matrix, like HQP, was intended for application throughout the city, wherever the juxtapositions of new and old construction it examined exist, most of its use would take place in urban or dense suburban areas rather than in Downtown Boston, where individual case negotiations would still be the dominant form of design review.

Regulatory Context -- The Matrix applies at the project scale within the overall urban design policy of the area or city. It is broadly applicable in all market conditions, and would be triggered by design review requirements of 121A applications; zoning variances, conditional uses, and exceptions; and the area plan of Planned Development Areas. The Matrix is not as comprehensive a model as HQP in terms of describing the administrative procedures needed to carry it out.
It is a more limited method employed as part of the existing design review procedures of the BRA.

**Approach** -- The Matrix of Interaction depends on the discretionary interpretation of broad guidelines rather than on replacing individual review with a set of detailed standards. While some of its statements are detailed, overall a considerable amount of "labor intensive" interpretation would be needed to relate the "standards" to particular applications.

**Nature** -- The Matrix is a "mixed bag" of performance and prescriptive guidelines applied to components of varying sizes. It does not deal at all with comprehensive prototypes except in very generally worded terms. Some standards are prescriptive in their wording but lacking in specific dimensional or organizational requirements. It would be hard for designers to know if they had met the standards without some detailed interpretation by the Urban Design Staff.

An example of prescriptive standards is: "Preserve in their natural state the few remaining areas that have not been developed by man." A partially formed performance statement says, "The scale of residential development should respond to the scale of the open/public space it abuts." Exactly what is meant by "responds to" is not clear, and obviously not testable in this case. No standard of performance has been specified.

Several statements seem to be observations rather than stand-
ards. For example, "Plazas or parks located in the shadows cast by large buildings are unpleasant for the users." Yes, but so what? What should the developer do about it in his design? Some statements are formulated in descriptive rather than normative or imperative terms that command a certain action.

Content -- The issues covered under the Matrix of Interface are broad in scope, spread across the full spectrum of possible issues. In that way the content is more systematic than focussed, covering matters from height and bulk to materials and textures to signs.

Audience Addressed -- The Matrix is addressed primarily toward developers to give them a sense of what is desirable before their architects begin the design. Ideally, developers would come to the BRA at the start of the process for advice, though it seldom seems to work out that way in reality. Good architects should already be aware of all the concerns of relationships expressed in the Matrix, but they too may need some reminder of what factors ought to be observed.

Format/Medium -- The draft Matrix of Interface is entirely verbal in a typed layout with no explanatory diagrams or photographs of examples in its present form. Such diagrams may be useful to clarify some of the ambiguity of the text. That text also needs to be more consistent in its tone. When stating a requirement it must be clear exactly what is being demanded.
The organization of the model follows a matrix relating 11 uses -- residential, commercial, open space, arterial streets, etc. -- opposite each other as new and existing activities, thus forming a grid of 121 cells. With duplications of symmetry, 66 "sections" or descriptions of requirements from the text of the publication. Each section has a list of standards which vary in length from no entries or a few up to 30 entries under the residential-residential interface. The relationships which tend to occur more frequently or have external effects that tend to spill over -- commercial uses that require parking and generate traffic in a residential area, for instance -- have more statements under them.

There is some repetition of entries across sections where similar issues recur in many interface situations. This repetition is intentional. There is also some redundancy within sections. The Matrix document needs more careful editing to produce concise, discrete statements having a minimum of non-intentional overlap.

Preparation -- Perhaps some of the redundancy of statements is due to the process by which the Matrix was prepared. Several members of the Urban Design Staff wrote down their ideas for relationship criteria on cards. The cards were sorted by uses to which they applied. Multiple authorship with many people saying nearly the same thing in different words may have been a source of some redundancy.
The authors of these criteria based their statements on their own experience and judgment than on any formal "capital intensive" studies. The Matrix was really an attempt to write down and assemble the criteria the reviewers used daily on projects coming under design review. They do not claim that the list of criteria is exhaustive, but it does attempt to organize experience in a systematic way.

It appears to this author that the Matrix requires another stage of refinement and editing before these guidelines, as stated in their present form, can become a useful design tool to developers or a reviewing aid for the Urban Design Staff.

Administration -- The Matrix of Interaction was never intended to stand alone or to be administered without some discretionary interpretation. It was not meant to be self-administered in the manner of the Housing Quality Program. The Matrix does spell out the substance of design trade-offs beforehand, but without being specific. It warns the developer to look for the rhythm of the street, but it leaves to the reviewer the task of describing exactly what that rhythm is or to determine when it has been "respected."

The Matrix is actually more of a negotiations tool than a formal set of review guidelines. It lays down a baseline of issues to look for, then leaves it to the skill of the architect and the reviewer to work out the details and to adapt
the Matrix statements to the circumstances of a particular site.

The authors knew they could not foresee all possible review situations and that they would inevitably leave out some issues in preparation of the Matrix. The Matrix needs the reviewer to provide continuity between the list of independent issues and interpretation to determine how well a project deals with the issues.

The document illustrates a sample application in its introductory pages. Two steps of administration are: 1) a developer or reviewer for a project first must look up the sections related to interface relationships of the project's uses and those of its surroundings; 2) next, a developer's program would be written or instructions to his architect would take the list of concerns into account, or perhaps the reviewer could write a memorandum listing items cited from the cells of the Matrix.

Application -- The Matrix of Interaction has not been published by the BRA, and it has not really been applied except informally by the Urban Design Staff. Further refinement is necessary before it can be issued as a document that states the design policy of the BRA. Implicit in the intent of the document is that the Matrix would not apply for large or complex projects sited in prominent locations which generate numerous special conditions. It may apply to cases like
Charlestown Savings but not to Sixty State Street or Park Plaza. The Matrix might also save time and design resources in the review of small projects in the outlying residential neighborhoods of Boston, or any similar cities. What is a prerequisite for its successful application, however, is the availability of sensitive, intelligent development project architects who are able to fill in some of the blanks left for interpretation. Even the presence of such an enlightened architectural community would probably not put a discretionary design review staff out of work operating under this Matrix of Interface.

Critique -- In addition to some specific critique of the way the Matrix is organized and written, there are a few more possible comments that are more fundamental in nature.

The Matrix looks at the relationships of uses and some transportation facilities rather than building forms. Some issues of relationship may be unrelated to use, though those use categories may serve as a worthwhile checklist for developers to employ to pre-test their proposals before all of the formal relationships are worked out.

The authors have acknowledged that they cannot anticipate all issues in preparing the Matrix, but because its documentation is based primarily on reviewers' experience, the Matrix could build on that approach to extend its scope. Reviewers could use cases of design review to update the Matrix by incorpor-
ating decisions on unforeseen issues as they arise. As an alternative to a capital intensive study or discretionary oriented approach, the Matrix is well suited to making design policy as it processes cases over time. A valid approach is to begin from the best position of knowledge based on reviewers' experience and then to augment it with further case experience. Translating cases into guidelines is already done informally in the Matrix and during conventional discretionary review, but that process could be formalized to provide not only a set of publicized examples, but also to justify certain requirements based on successful precedents.

Finally, a comment which cannot be avoided is that the content and application of the Matrix of Interface in its present form would not have prevented the Charlestown Savings Bank controversy because the plaza details that remained unresolved for so many months are not covered in the Matrix. The case would still turn on a matter of discretionary interpretation.
Special Greenwich Street Development District

The Greenwich Street Special District is an incentive zoning mechanism applied to control urban design in a small area of New York City. It consists of mandatory controls on design as well as methods to employ the energy of private developers to implement an area-wide improvement plan.

Greenwich Street is located in Lower Manhattan near Wall Street in an area where development is anticipated over the next ten to thirty years. That part of Manhattan is already congested with pedestrians and traffic, and new development would increase that congestion. The premise of the special district assumes that the controlling factor in determining a suitable population density is the capacity of the area's circulation infrastructure (streets, sidewalks, transit). An increase in density is possible by increased infrastructure capacity. The aim is to get private developers to pay for that infrastructure in return for increased development rights and allowable density. The public would gain from the added increment of development.

Greenwich Street's relationship to design review is that it represents a set of design and development controls which are "automatically" administered without a need for extensive reviewer discretion. The authors of Greenwich Streets plan hope it can serve as a prototype model for other development controls in New York and elsewhere. While some scale "The essential lessons of this model are that it was able to identify specific amenity elements that are needed to reinforce the desirable design attributes of an area or that can facilitate pedestrian movements between buildings. Then the model laid out an automatically administered mechanism for achieving the provision of those elements through the actions of private developers in accord with the overall plan."
-- excerpt from analysis
and density factors may be unique to New York, many of the principles of automatic administration may be transferable to other settings and are, therefore, worthy of note here.

**Origin** -- In 1966 the New York City Planning Commission hired consultants to prepare a report on the future of Manhattan below Canal Street. That report projected continued growth in the area that would outstrip the capacity of the infrastructure to accommodate it. Mayor Lindsay established the Office of Lower Manhattan Development (OLMD) headed by Rich Weinstein and gave it power to coordinate action taken by city agencies in the area. The World Trade Center was under construction nearby, and a large housing community on filled land in the Hudson River called Battery Park City was under study. Across the street from the WTC, the Fisher Brothers developers proposed to construct an office building which was to have a FAR of 18 in a zone with a base FAR of 10. OLMD decided it was time to take a comprehensive look at the area in anticipation of future large scale developments.

**Environment** -- Lower Manhattan has one of the densest concentrations of jobs of any office center in the world. This density is imposed on a street pattern laid out in Colonial days and a network of transit, pedestrian amenities, and open space already incapable of serving existing needs well. The late 1960's were times of high development market pressure, and speculative real estate activity was directed toward the
expansion of the Lower Manhattan office center. Uncontrolled new development would probably overwhelm the infrastructure networks and lead to an even more congested pedestrian environment.
Regulatory Context -- Design controls were being prepared for Battery Park City, but additional controls were needed in the area between the Hudson Riverfront site and Wall Street. That area had been assigned relatively low FAR's in the 1961 revision of the zoning resolution, which gave the City some control over future growth. OLMD decided to use the medium of zoning to implement design controls. Special district legislation was to be prepared.

Approach -- New York already had some experience in incentive zoning special districts in the Theater District near Times Square, around Lincoln Center, and along Fifth Avenue in Midtown Manhattan. Based on that experience, OLMD felt an automatic or self-administering ordinance was the best approach for controls. A capital intensive design study along with debugging of the guidelines by a leading case -- the Fisher Brothers' proposal -- would be used to generate specific guidelines on design and trade-offs of amenities for increased allowable FAR or coverage. The aim was to eliminate cumbersome case by case administration that had become unattractive to developers around Times Square. Only four of ten developments there in the first years of the Special Theater District took advantage of the bonus option, with most buildings built under "as of right" development permitted by the 1961 zoning provisions. An alternative approach using well defined trade-off options for the developer was seen as appropriate to the existing development market and institu-
tional setting.

Nature -- Greenwich Street's design and incentive controls are all prescriptive in nature -- the size, location, and "value" of FAR bonused elements are all specified without recourse to performance evaluations for alternatives -- and deal with specific components of amenities and building design.

Content -- OLMD was concerned with issues of massing, servicing, retail activities, and pedestrian circulation amenities rather than fine grained details of architectural design. Specific street wall continuities and circulation improvements were mandatory on all new structures in the district, while other amenities considered less essential were optional though encouraged by the potential bonuses available to developers for providing them.

Audience Addressed -- Sophisticated large scale developers and their architects were the audience for Greenwich Street's legislation. Clarity and unambiguous explanations were needed, not so much to promote understanding of the guidelines, but rather to close any loopholes the developers may seek out in order to increase their revenues or to reduce their costs. The audience did not need "guidance" as much as it needed control.

Format/Medium -- The legislation meets the challenge of effective control and scrutiny probing for loopholes by using
diagrams and a clear, specific text in the Zoning Resolution. The legislation enables an urban design plan to be implemented incrementally for the whole area, with the specific requirements of that plan documented on a block by block basis. The plan makes clear what is required of developers and what options they can exercise in order to gain the rewards of development density bonuses.

**Preparation** -- A careful, well documented design study was conducted before the Greenwich Street Special District legislation was drafted. Each block was studied to determine which improvements were necessary to make the overall amenity plan work successfully and which other desirable amenities could be made optional. Jonathan Barnett has written, "The need to put the whole Greenwich Street plan into legal language forced the designers to define exactly what their most important objectives were."¹

Their concerns were functional in origin related to the movement of people through the district and the acceptable size of buildings. An ideal circulation plan mandating access to subways, traffic and pedestrian improvements at street level, and an upper level pedestrian concourse plan were provided to establish the framework for amenities needed. Amenity elements like arcades, galerias, plazas, and bridges were defined and located on that framework. OLMD conducted a cost analysis to assign FAR bonus amounts or bonuses in site coverage which permitted construction of a shorter, bulkier
building at a lower cost to build than a tall, slender tower.

Bonus amounts for each amenity were set by estimating the private costs to the developer of providing the designated amenity element and the public costs of increased density, and by equating those costs to the public benefits of the new amenities and the private benefits to the developer of the bonus. Construction cost escalators established a sliding scale indices for trading off some amenities for bonuses, but the basic pattern of bonuses was the awarding of "X" square feet of rentable floor space for providing "Y" square feet of pedestrian concourse or "Z" linear feet of bridge.

Administration -- The structure of bonuses and amenities for automatic administration is complicated and need not be explained in great detail here. Within the framework of required design guidelines and mandatory circulation and lot improvements, the developer can make specific trade-offs in order to attain a maximum development envelope.

Required design guidelines are intended to preserve the continuity of the streetscape by holding building lines and cornice heights. Dictating minimum amounts of retail space and designating certain streets for parking and loading areas are also part of the required standards. Specific urban design criteria were used to determine where it was necessary
Greenwich Street District Plan
to build out to lot lines reinforcing a sense of spatial enclosure along the streets. All of these required elements receive no bonus for their provision because they supposedly contribute no additional cost to the development. **Mandatory** pedestrian circulation improvements such as elevated shopping bridges and pedestrian decks are necessary to complete the continuity of the area improvement plan on each lot. The design receives an FAR bonus for providing the elements prescribed in position and dimension by the plan. **Elective** circulation improvements which may be selected from a list of possible bonused elements are off site pedestrian and subway entrance improvements to facilitate movement through the area. **Mandatory**, **preferred**, and **discretionary** lot improvements such as arcades, pedestrian connections, and street trees are also bonused items available to a developer to increase his buildable floor area. To fill out the development envelope up to the maximum permissible ceiling of up to FAR 18, developers can contribute toward a District Fund earmarked for specific subway improvements and thus receive FAR bonus amounts in return based on a trade-off formula.

All of these design guidelines and amenity bonuses are administered automatically by the developer who can look up in the ordinance what is applicable on his own site. The procedure reduces the potential for delay -- and thus reduces development costs -- for obtaining bonuses by removing discretionary review procedures. The aim is to encourage ap-
propriate private redevelopment in the Greenwich Street designated growth area.

Rather than requiring a legislative special permit from the City Planning Commission and the Board of Estimate -- with a public hearing necessary -- the Greenwich Street legislation lets a developer seek an administrative "excavation" or "building permit" issued by the City Planning Department once the plans have been certified for compliance with all the provisions of the ordinance. Completion of development as certified is conditional for the issuance of a "certificate of occupancy." The City Planning Commission does hold some discretionary power within delineated limits to allow minor modifications in dimensions or locations for an element of the district plan.

Thus the Greenwich Street model provides for the administrative certification of an individual development provided it satisfies the mandatory and elective requirements of a detailed district plan that has been legislatively adopted.

**Application** -- The Banker's Trust Building developed by Fisher Brothers at Greenwich and Liberty Streets was the case that first demonstrated the feasibility of the Special District plan. The developers took advantage of the required, mandatory, and elective pedestrian amenity bonuses to raise the adjusted basic maximum FAR to 15. Next, lot improvement amenity bonuses and contributions to the District Fund granted them an FAR 18 and coverage increased to 53% of the lot.
area. In return, the city received a building that met its urban design criteria as well as provided a shopping arcade, elevated plaza, and pedestrian bridges to the World Trade Center. The developers enjoyed some flexibility of choice and a minimum of delay. While the market for development in Lower Manhattan has currently waned, the production of amenities will take place in stride with any future high rise construction as it takes place.

Critique -- Unlike the first two design review models outlined in this part, Greenwich Street has been successfully implemented and produced tangible results that can be evaluated against the intentions of the program. Its weaknesses match those of any incentive zoning process: amenities will not be provided in the absence of strong development market pressure that will absorb the bonus in floor area offered. Greenwich Street has integrated design review with larger economic and development controls in a complementary approach to determine the significant aspects of new buildings constructed in the area.

The essential lessons of this model are that it was able to identify specific amenity elements that are needed to reinforce the desirable design attributes of an area or that can facilitate pedestrian movements between buildings. Then the model laid out an automatically administered mechanism for achieving the provision of those elements through the actions of private developers in accord with the overall plan.
The characteristics that make Greenwich Street an apparently successful design review model are: 1) its predictability both for developers and, perhaps to a lesser extent, for the city; 2) the fact that trade-offs are clearly specified; 3) specific amenity elements are defined and designated on a priority basis; and 4) the low cost of administrative review once the initial study of needs and allocation of potential benefits has been made.

The concept of this model is applicable in other situations, even where development density, strong markets, and bonus incentives are not present. As a model of self-administering design review procedures, Greenwich Street presents an example that has clearly defined its limited public objectives and then described specific means of achieving those objectives while leaving some flexibility and choice in the hands of private developers.
Tremont Street Special District

"Gone are the renewal days" with their major public subsidies, and so a city still in need of redevelopment must find alternative ways of implementing its plans. The Tremont Street Special District, like Greenwich Street, proposes to direct the energy of the private development market toward the provision of design amenities in a specific area of the city. Tremont Street combines mandatory urban design controls with bonus incentives to promote the construction of specific pedestrian and circulation amenity elements. It takes an incremental approach to redevelopment through the zoning process in an area where disaggregated ownership patterns make the small owner, rather than the large scale developer, the primary agent of potential change. Tax incentives as well as FAR bonuses are available to developers by self-administered formula in return for providing public amenities that fit into an overall district development plan.

Origin -- With the passing of Federal urban renewal and the contraction of the development market during recent years in Downtown Boston, new methods had to be found to implement a coherent development plan. In 1975 as a new Downtown Development Plan was under preparation at the Boston Redevelopment Authority, a subsidiary study was being made of the eight block area between Washington Street and Tremont Street on the Boston Common. The solution that evolved

"Tremont Street coordinates public and private development actions in a way that follows an overall improvement plan for the district. All new construction must adhere to mandatory design controls, and are encouraged financially to provide specific lot improvements and pedestrian amenities, as well as to contribute toward the preservation of existing noteworthy buildings. The claim of the proposal's sponsors is that its automatic features will eliminate the need for the discretionary administration of variances in the area."

-- excerpt from analysis
"builds on public policy experience in San Francisco and (the) special district approach pioneered in New York," and it adds some unique innovations suited to the Boston setting.

Environment -- The Tremont District is a part of the core retail Central Business District described in the Charlestown Savings Bank case in Part I. Specifically, the district is among the "ladder blocks" of short streets running between the parallel streets of Washington and Tremont. It stretches from near Government Center on the north, past the site of the Lafayette Place development to the east, to the Adult Entertainment District -- or "Combat Zone" -- to the south. Those blocks contain many small specialty shops and some theaters, but no large department stores like Jordan's or Filene's. A few new structures have been built there in recent years -- like the Provident Bank headquarters on Winter Street and "Tremont-on-the-Common" apartments near West Street --, but the area is predominantly filled with older commercial and office buildings, generally less than ten stories high. Several noteworthy historic buildings or structures of architectural significance are also located in the district.

Much of the office space is older and less prestigious than some of the new structures in the Financial District. The average density of FAR 5.5 is lower than the permissible FAR 10, making the area potentially ripe for development. The
district is served by six subway stations, is close to open space, and has many visual and pedestrian links to landmark buildings. Despite the crowded narrow sidewalks and congested streets caused by heavy traffic and inadequate off street delivery facilities, the area remains attractive for some large scale development if the relatively small sites can be assembled.

Regulatory Context -- The Downtown Plan, when and if it is published, will designate Tremont Street as a "Controlled Growth Area," which means that new construction will be permitted there but only under street development controls. The BRA sees the zoning mechanism in combination with the special district format as the best means of control for the Tremont Street area.

Approach -- The Tremont Street Special District Zoning Resolution, as it now stands in draft form, calls for the automatic administration of design controls and bonus incentive provisions. The developer is given the choice of elective elements, his design is reviewed for compliance with the specific guidelines, and he is awarded a bonus according to a predictable formula. The draft resolution for the district is the "capital intensive" product of an urban design study.

Nature -- The provisions of Tremont Street are generally prescriptive when it lays down the elective and mandatory pedestrian and lot amenities by components, but some provisions,
such as its sun-angle limitations are performance oriented in their tests and measures. The validity of the derived elements and measures is convincingly documented in a volume of appendicies.

Content -- The distribution of controlled elements across the spectrum of possible controls resembles that of Greenwich Street. Tremont Street provisions are focused on issues such as massing, use, pedestrian amenities, and transit connections rather than design issues of detailing, fenestration, texture, or color. The form and overall scale of the buildings are important, but not the character of their surfaces or detailing.

Audience Addressed -- The Tremont Street proposal when enacted will be addressed toward sophisticated developers and architects -- who may probe it for loopholes -- as well as current owners of small holdings in the area. Its language is clear and unambiguous as to what is required of the developers and what their options are.

Format/Medium -- At present the documentation of information for the Tremont Street District exists in three forms: a draft resolution to become part of the Boston Zoning Code; a volume explaining the studies and analysis of the area done in 1975; and a slender volume of commentary and explanation dated January 1976 which summarizes and explains the purpose, proposal, and means of implementation of the District plan.
Both the commentary and the appendices are well illustrated with drawings, photographs, tables, and maps which make clear the basis for the proposal and its potential consequences if enacted.

**Preparation** -- The proposal came out of studies done by a consultant for the BRA, William Fain, a recent graduate in Urban Design at Harvard. Fain and the BRA staff conducted land use, land value, pedestrian flow, and other urban design studies in the Tremont Street area as well as some economic analysis to demonstrate the feasibility of the bonus amounts assigned to amenities. The BRA preservation staff applied a historic building evaluation methodology to determine the relative historic value of the area's landmark structures. The thrust of all these studies was to make the trade-off of FAR for amenities more visible than it is under the process of obtaining 121A tax agreements or Planned Development Areas, and to determine the extent to which the existing system needed administrative reform.

**Administration** -- The Tremont Street Special District concerns itself with building conservation, the location of certain retail uses to encourage street activity, street improvements like delivery areas and trees, lot improvements like through block arcades and corner sidewalk widenings, special projects like paving and lighting improvements, and envelope design of the building's shape. The latter category
includes building to the street property line; maintaining a mean parapet height; preservation of views, vistas, and sight lines; and imposition of sun-angle limitations so that no new construction blocks Spring sunlight from reaching the Park at the Five Cent Savings Bank, Old City Hall, or the Park Street Station area of Boston Common.

A combination of public and private sector actions are responsible for implementing these improvements. Mandatory private controls are imposed on use, bulk, height, setbacks, sun-angles, and sight lines. Elective private actions in the form of circulation and lot improvements are induced by...
both FAR square footage and property tax abatement bonuses. Tax bonuses are used in hopes that they will provide an incentive for action when there is not enough development pressure to use FAR bonuses to their fullest. Tax abatements are aimed at property owners of holdings unsuitable for larger site assemblages. They too are able to enjoy the financial benefits of providing the public with a needed amenity.

Priorities and weight have been applied in order to promote what are seen as the most desirable amenities -- such as through block arcades in preferred locations at mid-block. The accompanying diagrams taken from the BRA commentary publication illustrate the way the bonuses can be applied at the developer's option on large and small parcels, and on

<table>
<thead>
<tr>
<th>MANDATORY LOT IMPROVEMENTS</th>
<th>ELECTIVE BUILDINGRETENTION CONSERVATION =0</th>
<th>USE</th>
<th>LOT IMPROVEMENTS</th>
<th>BUILD OVER ALLEY WAYS</th>
<th>SPECIAL PROJECTS DEVELOPMENT FUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000 SG FT LOT</td>
<td>10 FA.R.</td>
<td>10.04 FA.R.</td>
<td>10.04 + 30.80 = 10.34 FA.R.</td>
<td>10.34 + 6.80 = 11.14 FA.R.</td>
<td>10.14 + 0.34 = 10.48 FA.R.</td>
</tr>
<tr>
<td>25,000 SG FT LOT</td>
<td>15 FA.R.</td>
<td>15.06 FA.R.</td>
<td>15.06 + 10.31 = 15.37 FA.R.</td>
<td>15.37 + 6.17 = 15.54 FA.R.</td>
<td>15.54 + 0.34 = 15.88 FA.R.</td>
</tr>
<tr>
<td>50,000 SG FT LOT</td>
<td>20 FA.R.</td>
<td>20.04 FA.R.</td>
<td>20.04 + 3.60 = 20.34 FA.R.</td>
<td>20.34 + 2.12 = 20.46 FA.R.</td>
<td>20.46 + 0.34 = 20.80 FA.R.</td>
</tr>
</tbody>
</table>

New Construction bonus calculation

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new developments which contribute toward the retention or rehabilitation of existing landmark buildings.

The developer consults the special district legislation and map before planning a project. He can then see the mandatory design restrictions and what bonused amenities are elective on his site. He chooses the form of the bonus that suits his own situation best, and calculates the permissible FAR up to a ceiling of 16. Public actions to construct transportation improvements would proceed as funding is available, although some special projects can be financed by contributions of developers to a special fund.

Tremont Street coordinates public and private development actions in a way that follows an overall improvement plan for the district. All new construction must adhere to mandatory design controls, and are encouraged financially to provide elective specific lot improvements and pedestrian amenities, as well as contribute toward the preservation of noteworthy buildings. The claim of the proposal's sponsors is that its automatic features will eliminate the need for the discretionary administration of variances in the special district.

**Application** -- While the Tremont Street District resolution has not yet been finally proposed or adopted, informal negotiations with a developer having future plans in the Bromfield and Winter Streets area have demonstrated that the resolution's provisions are probably feasible. Cost consultants
will be used on the first major project actually proposed in the area to work out further details on trade-offs and to analyze the absorption of land costs.

Critique -- Many of the same comments made in evaluating the Greenwich Street District are also applicable here. Tremont Street places a premium on developer predictability, the low cost of automatic administration, and the usefulness of a predetermined plan to be implemented incrementally. This proposal demonstrates that some of the concepts of incentive zoning and design guidelines developed in New York are adaptable to a city like Boston, but the proposal still needs to be tried out on a leading case in the area to work out all of the details.

Smaller cities may also be able to use this kind of approach on similar sensitive design areas. If the Tremont Street innovation of using property tax incentives as well as FAR bonuses does indeed work as anticipated in the absence of a strong development market, then it may be applicable to a broad range of situations. That predicted success, however, remains to be demonstrated.
Beacon Hill Guidelines

Instead of having an orientation toward new construction, the Beacon Hill architectural Commission's guidelines have a preservation bias. Beacon Hill is already fully built, and new construction like the Suffolk proposal is rare. The Beacon Hill Historic District, created by an act of the Massachusetts General Court in 1955, was proposed to promote educational, cultural, economic, and general welfare concerns of the public through the preservation of Beacon Hill. The intent was to maintain the area as a landmark of the history of architecture. As has been shown in the Suffolk case, the Beacon Hill Civic Association (BHCA), established long before the Historic District, seeks compatible ends: to promote Beacon Hill as a mixed residential neighborhood served by designated commercial areas.

The purpose of the handbook of guidelines published in March 1975 is to set forth the procedures and technology for maintaining property on Beacon Hill. The hope of the handbook sponsors was to eliminate ignorance and confusion concerning the regulations.

Origin -- The Beacon Hill Civic Association was founded in 1922 to monitor changes in the area, but there was no formal power to enforce review procedures until the creation of the Beacon Hill Architectural Commission (BHAC) in the 1955 Act.

"After a hearing, the Commission can issue a certificate approving the requested changes as appropriate. It forwards its certification to the Boston Building Department which can then issue a Building Permit. The application and review procedure is uncomplicated and appears capable of handling the number of requests for architectural changes made in the Historic District."

-- excerpt from analysis
The Architectural Commission proceeded with its design review work according to its own discretionary standards dictated by the Act, but by the mid-1970's BHCA and the Commission decided to set down the guidelines of the Historic District in a coherent form. That decision led to the preparation of the guidelines handbook.

Environment -- Beacon Hill and its residents are described in detail in the Suffolk case study in Part I. The most important points to recall are the facts that portions of the Hill are occupied by a relatively homogeneous population and an architecture of similar scale, detailing, and styles. Members of that population seek to preserve the area's architectural harmony and consistency.

Regulatory Context -- The Beacon Hill Architectural Commission is part of the Boston Building Department. Approval by the Commission is a prerequisite to obtaining a Building Permit for new construction or alterations to structures within the Historic District. The Commission's review is not a part of zoning, and, for instance, the granting of a variance to Suffolk would not have assured approval of the Architectural Commission or vice versa. Membership of the Commission comes from nominees of the Civic Association, Boston Real Estate Board, the Boston Society of Architects, the Society for the Preservation of New England Antiquities, and an at-large member, all appointed by the Mayor.
Approach -- The decisions of the Architectural Commission are discretionary, and the guidelines that they follow are broad in detail. The standards are advisory rather than mandatory as noted by a caveat in the handbook:

It should be emphasized that conformance to the Guidelines alone does not necessarily insure approval. The Commission's Design Approval is only granted after careful review of each application after a public hearing, in accordance with the law.\footnote{1}

Nature -- Both components and prototypes describing an overall effect are used in the handbook, but the standards used are almost entirely prescriptive rather than performance in nature. Prescriptive models for emulation and the Commission's prescriptive sign standards for Charles Street are articulated by component. Architectural details which may be modified during renovation are the focus of the guidelines and not an overall model useful to copy for new construction.

Content -- The issues that concern the Architectural Commission and the Civic Association are focussed in the middle range of the spectrum of content -- issues of architectural detailing and articulation. Their concerns extend from window boxes, trees, and paving to window rhythms and security against burglars. The legislated jurisdiction of the Architectural Commission extends to: facade changes, doors, windows, air conditioning units, lights, fire escapes, fences, signs, color of paint, roof decks, and greenhouses.
Audience Addressed -- Laymen such as homeowners and small scale developers are the main targets of the handbook of guidelines. A significant portion of the handbook is devoted to how-to-do-it techniques of preventative maintenance. It describes materials and methods -- care of wood, brick, ironwork, roofs, painting -- in clear terms. A glossary explains architectural and technical terminology. These features undoubtedly meet an important information need in the community.

Format/Medium -- The handbook itself is in a handsome two color layout illustrated with photographs and drawings. They are accompanied by a clear text laced with a minimum of jargon. A history of the area traces the evolution of architectural styles and demonstrates Beacon Hill's unique role in American architectural history. It thus helps to justify the kinds of controls imposed in the Historic District. A few photographs of good examples clarify what is said in the text.

Preparation -- The preparation of the handbook was supervised by the "Handbook Subcommittee of the Architectural Committee" of the Civic Association working with the Architectural Commission and the Boston Redevelopment Authority. Skilled volunteers with professional help wrote the commentary of guidelines and assembled the handbook based on their knowledge of the area rather than on a massive new study of issues and needs. Such an approach seems
suitable for a small, already established setting having a large measure of architectural consistency and a consensus about what is appropriate design.

Administration -- The Civic Association reviews all applications made in the area and makes its recommendations after an informal hearing. The application and documentation -- architectural plans and specifications accompanied by three cost estimates -- provided by the owners are reviewed for "appropriateness" in a one month period allowed by the Architectural Commission. After a hearing, the Commission can issue a certificate approving the requested changes as appropriate. It forwards its certification to the Boston Building Department which can then issue a Building Permit. The application and review procedure is uncomplicated and appears capable of handling the number of requests for architectural changes made in the district.

Application -- It is uncertain exactly what effect the availability of the handbook has made on the nature of the review process by the Commission, but the power of BHAC has influenced the character of the Hill. The handbook states, "... the Commission...has the effect of controlling the rate and quality of change that affect exterior architectural features by approving applications for exterior alterations of buildings within the Historic District."²
Back Bay Guidelines -- Similar in intent and application to the Beacon Hill architectural controls are the Back Bay Guidelines. The Back Bay Architectural Commission was established by the General Court under Chapter 625 of the Acts of 1966, with design review based within the BRA instead of the Building Department. Controls have been applied to the Residential District between Newbury Street and Back Street and from Arlington Street to Charlesgate East. The purposes of the controls are to encourage architectural preservation and high design standards in the Back Bay and to increase the compatibility of rehabilitation and development efforts with existing structural forms and building patterns.

The Back Bay handbook itself is more profusely illustrated than that of Beacon Hill, and its standards applied to components of design are more specific and detailed than Beacon Hill's. The concerns of the Architectural Commission relate to proposed forms, arrangements, relationships, materials, and color of exterior architectural features, and other pertinent factors. They too are concerned with preventative maintenance, and include material on techniques in the handbook.

The Guidelines were prepared with the assistance of the BRA staff and are used to inform the discretionary standards of appropriateness used by the Back Bay Architectural Commission. Their fundamental standard is that "Traditional building forms and material must be respected and characteristic
features including proportional relationships, facade compositions, and textural qualities maintained or restored."³

**Critique** -- Both the Beacon Hill and Back Bay architectural commissions have the power of discretionary approval over changes in exterior appearance. They have an advantage over other models analyzed in this part because the areas in which they operate are already filled with examples of appropriate, well designed buildings which can be used as models to supplement the descriptions of the guidelines. Their advice of "make the changes like that building" may be more valid in a coherent Historic District than similar advice given in Lower Manhattan or even Tremont Street. The stakes of the small builders and homeowners of Beacon Hill are lower than that of developers of high rise buildings.

While the Beacon Hill guidelines do not give a lot of information on what specific alternative solutions are appropriate and are likely to be approved, those characteristics are more inherently obvious on Beacon Hill than they may be elsewhere. For that reason the level of detail in the guidelines and the discretionary approach of design review seems suitable to this situation. Other historic districts or architecturally consistent neighborhoods imposing design controls may find Beacon Hill or the Back Bay guidelines useful models to copy.
The aims and procedures of the Brookline Environmental Design Review process were briefly described in the Introduction to this study, but the Brookline model is worthy of more detailed analysis here as well. Design review in Brookline arose in response to a growing concern for the visual environment and the necessity to develop effective measures to preserve community identity and built environmental quality. A generally held feeling was that a townscape was greater than the sum of its parts -- that each building should look as though it belonged in and contributed toward its surroundings. The purpose of design review in Brookline was to allow the Planning Board to evaluate proposals having a potential impact on the townscape -- that is, the relationship of buildings, shapes, and spaces on the street.

Origin -- As mentioned in the Introduction, the movement toward town-wide design review began in 1971 as a reaction to examples of poor environmental design built along Beacon Street -- a major town boulevard -- that had not been prohibited by zoning. The feeling among some residents and members of the Planning Board was that action was needed to deal with development pressure on an area threatened with a reduction of architectural and environmental amenity. Nine design standards were imposed on Beacon Street, and in 1973 these controls were extended to other major streets.

"Rather than controlling the design of all development, Brookline concentrates its energies on areas of high visual prominence and on large projects of potentially great visual impact. Exactly where to draw the line on prominence depends on the amount of resources a town is willing to commit based on the kind of development it anticipates and the complexity of controls it wants to impose."

-- excerpt from analysis
Environment -- Brookline is a suburban town immediately to the west of Boston. While it covers only about six square miles, it has a wide range of density conditions from urban residential to nearly rural estates surrounded by open space. The town has maintained political independence from Boston, and it is generally affluent, though it also has many relatively low income elderly residents. The many professionals who live in the town may be responsible for the high level of concern over design issues and for the high level of resources devoted to preservation of Brookline's positive visual qualities.

Regulatory Context -- Design Review in Brookline is a special permit procedure of the Zoning By-Law. The Planning Department staff and the citizens on the Planning Board and Board of Appeals are responsible for administering design review.

Approach -- Broad guidelines administered with discretionary interpretation constitute the approach taken by the Planning Board. A study which related information that already existed was used to establish the rules for a "labor intensive" approach of flexible controls. The success of the program depends on the skill of staff reviewers and Board members who must adapt the controls to the conditions of each case as it arises.

Nature -- Some standards are slanted toward performance but without measurable tests than subjectively defined "harmon-
iousness" and "appropriateness". Some prescriptive standards are also used though they are lacking in specific dimensional or relational requirements. Most controls are applied to components of buildings and site plans although several prototype examples of buildings and whole blocks are used to illustrate how component controls operate in specific cases. The overall effect is emphasized in the prototype.

Content -- The content of design controls is spread quite evenly across the spectrum from controls on height and bulk to architectural details like window patterns, wall details, and use of materials. There are few specific requirements beyond general compatibility to existing adjacent conditions.

Prototype design for Coolidge Corner

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Preferred elevation

Shows how coordinated awnings and signs improve the architectural appearance of Coolidge Corner. The signs have been lined up but retain the original lettering style. Also by removing old billboard frames a "cleaner" appearance is achieved. "Street trees contribute to the visual improvement of the street."
The twelve standards relate to: 1) relation of the building to its environment, 2) preservation of the landscape, 3) open space, 4) circulation, 5) surface water drainage, 6) utility service, 7) advertising features, 8) special features, 9) safety, 10) heritage, 11) microclimate, and 12) Beacon Street controls on building line, cornice, color, scale, materials, and detailing.

**Audience Addressed** -- Laymen as well as developers and their architects are the audience for the published Brookline guide. The environmental design review guidelines are presented in a way that is intended to increase understanding and acceptance of the design process and issues of built environmental quality.

**Format/Medium** -- The handbook consists of a concise text accompanied by line drawing illustrations -- rather than photographs -- of good and bad examples and of details. It is divided into two sections which present the twelve design review standards and explain how they apply to commercial facade renovations. In the latter section the components of a facade -- doors, windows, colors, arches, signs, etc. -- are defined and their relationships to the overall composition are explained. Case studies in the three major commercial centers of the town -- Coolidge Corner, Brookline Village, and Washington Square -- show the implications of the standards on real buildings.
The line drawings are somewhat more abstract than photographs or photo montages, and they communicate the message of the guidelines without attracting undue attention to extraneous details. They do not take the place of the text, but the illustrations add concreteness to the rather broad wording of the guidelines. Captions and descriptions with the drawings add another level of explanation and commentary to the text.

Preparation -- In 1972 the "Comprehensive Plan Review Commission" was formed by the Board of Selectmen to study the af-

"Illustration for Preservation of the Landscape"

Always try and fit a new building into the existing landscape. Incorporate natural features into your plan and try and relocate those you have removed onto another part of the site.

Existing Building

Fig B

New Building on same-site--the mature tree growth was preserved making an attractive and pleasing site.
ect of increased density in some parts of the town resulting from growth in apartment and condominium construction. The Commission recommended revisions of the zoning map and by-laws to downzone the densest apartment district from FAR 4 to 2.5. Design review which had been instituted at about the same time along Beacon Street was extended in scope and jurisdiction to lots within 100 feet of Boylston Street, Commonwealth Avenue, Harvard, and Washington Streets.

Apartments having ten or more units and non-residential uses

Illustration for "Heritage"
greater than 10,000 square feet of floor area in business zones also came under review. To explain the new design review controls that had been prepared by the Planning Board, the consulting firm of Vision, Incorporated of Cambridge was hired under a HUD 701 planning assistance grant to produce the guideline handbook in 1975. The consultants, the Planning Staff, and Planning Board members worked in collaboration to resolve the details of the guidelines document.

Administration -- The design review special permit procedure

Comparison of prototypes
follows six steps. The steps are: 1) explanation of the regulations before design begins, 2) informal design review meetings with staff and the Planning Board during preliminary design, 3) submission of plans to the Building Department, 4) application for a special permit under the Zoning By-Law, 5) final review by the Planning Board in a public meeting out of which come comments and an advisory report to the Board of Appeals, and 6) the final decision of the Board of Appeals and issuance of a permit.

Discretionary evaluation of the project allows the adaptation of standards to the special conditions of each case, while due process is observed through adherence to the procedural and public hearing format. The cost of labor intensive review of each case is relatively high for the town, but it is reduced somewhat by the use of competent citizen boards.

Application -- Over 80% of the design review caseload in Brookline are facade renovations. Due to a declining development market, there has not been a substantial amount of new construction since the review procedure was instituted, so there is little evidence to support or refute design review's effectiveness in Brookline. Because sign review has been involved in a majority of cases, a streamlined process for obtaining special permits for signs has been established. It makes the Planning Board responsible for granting permits rather than the Board of Appeals, unless the applicant makes a further appeal. This modification has saved the applicant
and Board members time in processing proposals. There is some delay inherent in any design review process, but in times of slow development activity such delays are not a significant issue.

Critique -- Brookline's review process may be a good model for other towns or cities with high levels of concern for design quality. Rather than controlling the design of all development, Brookline concentrates its energies on areas of high visual prominence and on large projects of potentially great visual impact. Exactly where to draw the line on prominence depends on the amount of resources a town is willing to commit, based on the kind of development it anticipates and the complexity of controls it wants to impose.

In measuring the effectiveness of Brookline's design review in meeting its objectives of improving the overall townscape, one could say that review has had little effect on changing the overall environment. Townscape changes take place slowly as a small percentage of all buildings are added or removed from the overall stock in any given year. If the goal were stated as improving the whole environment, design review may not be a greatly effective strategy. But if the goal is re-stated to apply only to the contribution of new construction and renovations to the overall environment, then review's effectiveness measure is more reasonable.

As a general comment on all design review applications, one
can say that design review cannot change the state of the world overnight, but it can help to change attitudes toward design if coupled with an educational effort, and it can gradually make incremental changes in a cityscape, townscape, and the experience of the built world.
In the examples examined here the discretionary approach is used most often in applications that concentrate on the review of architectural details which are not easily specified in advance before design proposals are actually made. Broad guidelines used in Brookline, Beacon Hill, and by the Matrix of interface describe some general directions to be considered in design details, but leaves the measurement of attainment of acceptability up to the discretion of the reviewers using the guidelines.

A more automatic, self administered, non-discretionary approach has been applied by models which concentrate on programmatic elements that can be more easily specified. A particular use or design element can be clearly described in size or location before it appears in a design proposal, and its effect on the overall project composition can be predicted more easily than the cumulative effect of many architectural details. The Housing Quality Program, Greenwich Street, and Tremont Street are concerned mainly with programmatic features rather than details of architectural design, and so their non-discretionary approaches are generally suited to their overall aims.

Difficulties could arise were HQP's point system applied to Brookline's broad guidelines. In that case the flexibility desired by the town would be lost to complex procedures that demand careful measurement of compliance with controls. In
many cases automatic review in any form cannot adequately substitute for a discretionary approach.

The approach taken in these examples also relates to the environment in which they are applied. New York City's planning bureaucracy may find it easier to certify each special permit case by reviewing a set of quality point calculations than by attempting to examine how well each housing project measures up to interpretable standards. Concern for graft or corruption of the review process is no small matter in a setting where stakes are high and professional ethics could be lax. A smaller scale review organization like that of Beacon Hill or in Brookline may have, or be willing to create, more opportunities to review cases individually against broad discretionary guidelines.

The mandatory and explicit design requirements of the Greenwich and Tremont Street special districts are consistent with their attempts to rationalize the bonus incentive approach. Discretionary review of design aspects may not work well in combination with a rigid economic formula for the awarding of bonuses. As part of the move to eliminate discretion in awarding development bonuses, it is logical -- though by no means necessary -- to remove the need to negotiate design concerns like setback, cornice height, and view corridors.

In none of these cases was discretionary review without any guidelines employed, and it is likely that such an extreme
case is rare. At the other extreme, completely automatic review may not exist in practice either. Even Greenwich Street leaves provision for minor dimensional adjustments on amenity elements. The Housing Quality Program, with all of its emphasis on automatic administration and developer choice of options, still reverts to a special permit procedure for large scale developments.

Between the ends of the discretionary spectrum, discretionary review and guidelines are used in conditions which can be adapted in balance to best serve the dictates of the situation and the purposes of the review process. One can see from analysis of these models that several approaches to design review are valid and can lead to effective results. The selection of one depends on the specific task review is asked to fulfill.
Prescriptive review guidelines are made convincing when accompanied by extensive studies that can justify their specific requirements. Greenwich Street and Tremont Street were prepared after studies determined what elements were needed to fulfill a specific overall district plan. Even when the review process allowed for developer options, they were options limited to a scope to choices that met the predetermined needs of the areas to some degree. Prescriptive guidelines seem to be on more shaky ground when used in the Matrix of Interface and the Brookline guidelines where there is little documentation offered to substantiate the requirements.

While prescribing specific solutions or parts of solutions may make it easier for reviewers to measure compliance, these prescriptive standards reduce the design options available to architects and developers. On Beacon Hill that may be a desirable situation. A small deviation from the norm may lead to a discordant note in a highly consistent area. In most of Boston and Brookline, however, the limitations of design options by strict, ill-conceived prescriptive standards may be undesirable for the townscape and frustrating for the designers. Blandness and excessive homogeneity can result from prescriptive standards poorly applied. Competent designers under the control of inflexible reviewers using rigid prescriptive standards may object to limitations on their creativity in formulating responsive design solutions.
Performance standards are more difficult for reviewers or guideline designers to prepare, especially if a replicable, valid test must be used. The Housing Quality Program is clearly the only example analyzed here in which performance standards were used in combination with rigorous performance tests. Partially formed performance standards, lacking valid measures and rigorous tests, appear in several of the examples. In some applications discretionary, subjective like "harmony" or "appropriateness" may be sufficient, but even then better definitions of these terms would lead to more consistently applicable tests. HQP's kind of performance tests may not work everywhere -- and even some tests employed in New York may need more substantiation as to their validity --, but these tests are a step in the right direction for some applications. Performance standards controlling some elements of design issues do offer developers a choice in how to meet the requirements and may even stimulate innovation toward more economical solutions.

The basic problem in the use of prototypes for design guidelines has already been discussed: a designer may not know exactly which aspects of the prototype design to focus on in the absence of further explanations. No prototype built or proposed for a particular location can serve as a successful model for all sites in a varied setting. A further danger in using prototypes is illustrated in the HQP case in New York. High rise slabs, which have become an accepted model
for housing, have replaced consideration of any other prototypes in large areas of the city. A low rise/high density solution has not been perfected and applied to rival it.

Brookline's guideline book uses prototypes in an appropriate way: to illustrate, rather than take the place of, design guidelines applied to design components. While the use of components, or groups of components, to form larger pieces of a design as the basic unit for design controls is generally preferable in most situations, prototypes may be useful to demonstrate the overall effect of design controls.

The use of components in design review guidelines is closely related to the content and purposes of the design controls. Greenwich and Tremont Street district controls focus on components because that is the unit best used to allocate bonus awards. Each amenity element is worth a certain amount in FAR or tax incentives. HQP's components are actually the nuggets that comprise the content of its controls. In each of these examples where components were successfully used, the size of the component relates to both a logical subdivision of the design and a specific issue that is placed under control.
Perhaps the aspect of design guidelines of most immediate concern to architects and reviewers is the list of design elements that are controlled -- the guideline's content. These are the points around which potential design disputes will center because these are the points of contact between the controls and the design proposal itself. These are the blades that carve out the form of the final product.

As a means of comparing the kinds of design elements controlled by various design review models, the author proposes a list of twenty categories of issues which is displayed on this page. While the elements do not relate to each other in a direct ordinal relationship, there is a general narrowing of scale as one proceeds down the list. Items 1 through 3 relate to issues of massing and siting; items 4 through 9 are concerned with issues of project external effects, outdoor space, and use; items 10 through 17 deal with architectural detailing issues, openings, surfaces, and signs on a building itself; and items 18 through 20 relate to interior design elements such as lobby space and apartment unit layouts.

The analysis of the models has shown that each example covers a slightly different range of issues and places emphasis on different portions of this continuum of twenty controlled issues. The first table in this section compares the six models and several guidelines used in the cases of Part I and the Introduction against the list of 20 issues to il-

Content

CONTENT ISSUES
1 height, bulk, FAR
2 street line, views, sun angle
3 coverage, setback
4 traffic, access, parking, loading, service
5 landscaping, drainage, paving, lighting
6 pedestrian amenities
7 recreation, sunlight
8 surveillance
9 use
10 scale, styles
11 roof, cornice line
12 projections, awnings
13 arcades, stairs
14 wall details
15 materials, color, texture
16 window size, pattern
17 signs, storefronts
18 lobby, circulation, common rooms
19 service
20 apartment units

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<th>Suffolk</th>
<th>PDS UD Mitk</th>
<th>DR Com.</th>
<th>Commercial</th>
<th>BRA Dev Kits</th>
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**Content Issues**

1. Height, bulk, FAR
2. Streetline, views
3. Coverage, setback
5. Lands., paving
6. Pedestrian amen.
7. Recreation
8. Surveillance
9. Use
10. Scale, styles
11. Roof, cornice
12. Projections
13. Arcades, stairs
14. Wall details
15. Mat., color, tex.
16. Windows
17. Signs, storefronts
18. Semi-public space
19. Service
20. Apartment units
illustrate their areas of primary focus.

From that table we can see that models which emphasize programmatic concerns like the Housing Quality Program tend to focus more on the two ends of the spectrum -- on siting, massing, use and external effects issues and on issues of interior design. For the most part, the two incentive zoning controls, Greenwich and Tremont Streets, do not address issues of architectural detailing or interior layout, and focus on the external effects and siting end of the scale.

The Brookline guidelines and those of the Matrix of Interface are more systematic in the distribution of their controls, having some controls on nearly all issues of the list except those related to interior layout. The two examples of historic districts, Beacon Hill and Back Bay, mainly concern themselves with the issues of architectural detailing and some issues of external effects.

The other examples from the cases and Introduction follow a similar pattern, with the concerns of the Suffolk guidelines and the Commercial Street Developer's Kit spread across most of the spectrum except interiors. The concerns of the National Advisory Council on Historic Preservation lie mostly at the level of architectural detail. Of course, from this limited evidence one cannot conclude that all design guidelines of similar slants will follow the same patterns of concerns; but clearly, the purposes that the design review
processes are meant to fulfill have a large influence on the content of the controls used.

The last five pages of tables take a somewhat more detailed look at the advisory, mandatory, and discretionary controls used in each of these examples. The tables provide an easy reference for comparison of the approach, nature and content of the models analyzed in Part II of this study.
Content Issues:
Siting and Massing

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1 height
bulk
FAR

2 Street line
views
sun angle

3 coverage
setback
### Content Issues:
#### External Effects

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### Content Issues:

**Architectural Detailing**

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**Scale**

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- DR Com

**Commercial**

- BRA Dev Kits
- Historic
- Charlestown

**HQP**

- Matrix
- Greenwich
- Tremont
- Beacon Hill
- Brookline

**MHFA**

- Waterfront
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Content Issues:
Architectural Detailing
Interior Design Elements

|        | 16 window size
|        | window pattern
|        | door locations
|        | 17 signs
|        | storefronts
|        | 18 lobby
|        | circulation space
|        | common rooms
|        | 19 building services
|        | 20 apartment unit design
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Describing how to match design review models to applications in specific situations is the task of Part III. The preceding parts of this study have documented descriptive information on the characteristics of design review environments and the attributes of a range of models. Part III makes the link between cases and models.

Attributes common to a successful design review process in any setting include responsiveness to community goals, the importance of stating intent, guidelines that relate to review objectives, due process, community participation, a common level of relative ability between participants, and a sound legal justification. But not all review methods meeting these prerequisites can work effectively under a full range of conditions.

The experience in the case studies and analysis of models in this study has demonstrated that there may be several factors which can be identified in a situation that suggest the appropriate approach, nature, and content of design review models. These groups of these factors relate to: the purpose and intent of the review process, project program and scale, the external context or constraints of the situation, the institutional review context, and the process objectives for review.

It is necessary to disaggregate the constituent elements of review and examine their relationships to these factors before selecting the appropriate review model for a particular situation.

After an introduction that explains the use of situational factors in selecting models and outlines some common attributes of desirable design review processes, the next section of Part III briefly re-examines design review in the Boston setting. The following section lists the factors involved in matching design review models with appropriate applications in a range of situations. The final section lists some sources of further information on issues relating to the process of design review.
Introduction

At this point in this study of design review it is time to make the "normative leap." It is time to shift the perspective of this report from a descriptive statement of the way design review is to a normative statement of the way design review should be. The recommendations included in Part III are based on evidence from the case studies and model analysis plus informed speculation of the author.

The purpose of Part III is to match design review situations and the appropriate models for conducting review. The approach, nature, and content of design review models will be linked to characteristics of the review environment. This part will bring together information on review settings generated in the study of three cases in Part I, and findings from the analysis of six model examples in Part II. Some of the issues which surfaced in each of those parts are useful in differentiating between appropriate and inappropriate application of design review methods. Other issues suggest characteristics which should be present in any design review process no matter what the situation.

The correspondence between design review situations and the approach, nature, and content of models which are well suited to them cannot be adequately summarized in a table without being superficial or oversimplifying the picture. To present a neat table here would be misleading. There cannot be a tight
match which states, "In all cases of 'A', design review should use approach 'Z'." If nothing else, this study has demonstrated the complexity of the design review process and its relationships to the setting in which it takes place. A description of situation "A" would necessarily contain so many interrelated factors with complex, overlapping, and often contradictory effects on the review process, that any simple statement of correspondence would either be too broad to be meaningful or qualified by a number of limiting statements.

The strategy of this part is to isolate some of the factors that influence the choice of design review models. This analysis will leave to the reader the task of sorting out the factors operating in his own environment and of selecting the appropriate review technique. While this analysis does not purport to be definitive, it can offer some guidance on how to make a choice.

Factors useful in selecting design review methods -- The core of Part III focuses on the question of what factors to consider in choosing design review models, or rather, which approach, nature, and content characteristics of models are suitable to what environments. A list of factors or considerations that appear to be important in most situations is shown later in this part. The presence or relative importance of each factor in a setting depends on the specifics of the local situation. No general weights or priorities can be assigned to them in the absence of more information about their setting.
A description of what constitutes these factors and which approaches to review the components suggest will be discussed in the fourth section of this part.

**Design review in Boston** -- Before discussing the considerations to be made in selecting review models or the characteristics that should be present for all applications, it would be useful to recall the characteristics of the Boston setting and the models which are employed to review development proposals there. This section will serve two purposes: 1) it will pull together information on the cases and models to examine how the various review procedures relate to each other, and 2) it will lay a concrete groundwork for the recommendations made in the following section.
The Boston Setting

The cases and model examples described in this study which occur in Boston illustrate an overall design review system that is administered in local settings rather than city-wide. An integrated city-wide administration of design review may attempt to apply a uniform set of standards -- perhaps conditional on particular site or program circumstances -- under a single institutional framework. Because of the historical evolution of design controls in the city and because of the varied local circumstances, Boston finds itself with a mix of local processes like that of Beacon Hill, or sets of geographically applied standards as in the Tremont Street example. Some of these controls are administered centrally by the Boston Redevelopment Authority, but others involve participation by agencies above -- HUD and the National Advisory Council on Historic Preservation -- and below -- the Beacon Hill Civic Association and CSCDC -- that level.

While the Matrix of Interface proposes a city-wide set of broad guidelines to be administered with discretion by the BRA, there is no overall framework that relates all of these review processes across the city. Perhaps such a structure is not necessary, but some increased coordination by the BRA may be beneficial.

The following brief descriptions of the examples of Boston design review mentioned in this study are arranged in gener-
ally increasing order of discretion. This overview will serve as a reminder of the critical issues of the cases and will help to ground the discussion of common attributes and factors of choice that follows.

**Inventive zoning: Tremont Street** -- The concerns of the Tremont Street Special District are primarily related to programmatic issues -- the location and size of particular design elements -- rather than to issues of architectural design or aesthetics. These elements could be carefully defined in a prescriptive way, and the review and bonus assignment process could be self-administered without any discretionary provisions. Some issues like sun-angle limitations were performance based, and when combined with the use of elective improvement options, these provisions gave developers a wide range of choice on what to offer the public in their projects. This combination of circumstances leads to a predictable process for the developers. It will not necessarily produce predictable results for the public, but will lead to results that are acceptable within a range defined by the controls. Focusing on a defined geographic area in the city means that a comprehensive study could anticipate most of the possible solutions to design problems and provide for them in the content of the controls.

**Developer's Kit: Commercial Street** -- The Developer's Kits for the Ausonia project competition spelled out specific performance and prescriptive guidelines, but it was up to the
judges of the competition to use their discretion in determining the degree of compliance of the entries. The requirements left room for the architect to negotiate a slight change in the design guidelines, and for the participants in the historic review phase to reinterpret the design requirements to fit their own preferences. This model suggests that design standards with a broad, systematically organized content can still leave room for negotiations as unanticipated solutions and issues arise.

**Matrix of Interface** -- The Matrix was intended to be applied to projects undergoing review in all parts of the city, and thus the guidelines are broad and somewhat vague in nature. The authors of the Matrix were aware that they could not anticipate all situations. As a result, the Matrix is more useful as a negotiations tool than as a replacement for discretionary design review. This model illustrates some of the problems inherent in a city-wide review system, and provides ammunition for those who argue in favor of locally focused design review.

**Beacon Hill and Back Bay Guidelines** -- These two sets of guidelines are focused on specific neighborhoods, each with its own distinctive character. Both guidelines are aimed at the preservation of historic districts, through the control of architectural detailing. Prescriptive guidelines administered in a discretionary approach by locally based Commissions is the medium of control. Each Commission is tied to
the central city administration and to local neighborhood groups which aid in the operation of the controls and the monitoring of design proposals.

**Review Committee and Community Meetings: Suffolk** -- The emphasis of control in the Suffolk case shifted from issues of massing and FAR to that of architectural detailing to programmatic issues of use and its external impacts. These shifts took place along with the increasing involvement of community groups in the process and a reduced role for the Design Review Committee. The participatory process broadened the scope of concerns as the participants redefined the problem in their own terms, independent of any predetermined guidelines of the zoning provisions applicable to the area. One lesson of this case is that no matter what a priori guidelines are prepared in a loosely legitimate institutional setting of controls, they can be superseded by the concerns of a group of impacted neighbors who obtain access to the review process. A nondiscretionary approach may be difficult to difficult to establish in this particular setting even with the active participation of residents in the process of drafting self administered controls.

**Discretionary Review: Charlestown Savings Bank** -- The major controversy in the Charlestown Savings case was over the discretionary approach to review and the lack of accepted standards against which to measure the design. There was no community concern in evidence over the details of the design.
Selection of these details was debated between the reviewer and the architect, and there was no mechanism for soliciting user opinion in mid-process, even if there were community concern. This case illustrates the need for more detailed performance or prescriptive standards in the Downtown area which are accepted as legitimate and which can be administered in a manner acceptable to both designer and reviewer.

Historic Review: Commercial Street -- The most discretionary and least local politically accountable guidelines were used in the historic review of Commercial Street. The reviewers held no consensus on design objectives or even on the values which underlaid them. As a result, the architect and reviewers were frustrated, by the process and the concerns of the community and future users were not specifically involved in the process at all. In this case, discretionary review with very broad standards and no agreed upon objectives were used in a process that was difficult but eventually led to a successful product.
Common Attributes of Design Review Models

There are several qualities of design review that ought to be present no matter what the specific environment.

**Responsiveness to community goals** -- The relationship of a design review process and its objectives to overall community goals and objectives ought to be clear. While community objectives are not always well articulated and consensus on community goals may not be evident, the existence of an adopted comprehensive plan may serve as a surrogate for those conditions. Design review, along with zoning, can be seen as a method of insuring adherence to a comprehensive urban design, land use, or overall development plan as they are implemented incrementally by public and private actions. Models such as the Greenwich Street Special District in New York are tied closely to an overall development plan, while the Brookline review process is more loosely connected. Both review processes, however, take the overall design and development objectives of the community into account. They enforce the design preferences and values of their setting.

**Clearly stated intent** -- The intent and objectives of a design review process should be stated clearly at the outset. Both for the purposes of generating a clear set of standards by the reviewer, and for promoting understanding on the part of the developer applicant or his architect, the aims of review must be documented and accessible. The Brookline review...
guidelines state its aim -- the objective of preserving the townscape -- and the means for attaining that aim and communicate them to all participants in the review process. The objectives in the Charlestown Savings Bank case may not have been so clearly laid out.

**Standards related to intent** -- The connection between the stated intent of design review and the standards used for implementing the intent must be explicit. Whether standards are performance or prescriptive, or the approach self-administering or discretionary, the links between desired ends and the means for attaining those ends -- the review standards -- must be direct. Using direct linkages promotes the guideline's credibility and may protect them from legal challenge on the grounds of capriciousness. A chain of logical steps may be needed to establish these links, such as the progressive stages illustrated in the derivation and presentation of the Housing Quality Program. But even a less pre-determined, "labor intensive", discretionary review process must also be grounded in a sequence of logical stages. In the latter instance, where decisions may be more likely to appear arbitrary, the need to link standards to intent may be even more important than under an a priori set of guidelines.

**Due process** -- Due process is an essential part of any design review procedure. In some cases the outcome of design review may be more predictable than others, but in all cases design review must be fair to all parties concerned including abut-
ters and the general public as well as owners, developers, and their architects. If design review is a regulatory device established to protect the public interest and to promote community values, then that interest and those values can be preserved only by a fair and open process.

Community participation -- Community participation in design review is related to and is an essential part of due process. Individuals and community groups ought to be involved in the preparation of a design review ordinance either at the design study stage or before the ordinance is enacted. The Housing Quality Program's approach of using workshops to explain and gather suggestions on its recommendations may be a good one in some situations. Informal and formal hearings during the review process for each discretionary case may often be essential to the acceptance of a design review committee's decision, and it may add constructive comments useful in improving the proposed design solution. The course of the Suffolk case changed drastically after open neighborhood meetings were held and open negotiations with an established community group took place. Without those meetings the proposal might have proceeded even further down the path of acceptance before community input could be heard and their suggestions incorporated into the project's design. Clearly, active and productive community participation is easier to obtain in small communities with an ongoing tradition of involvement as on Beacon Hill; but some form of community involvement
can be devised for nearly any circumstance.

**Common level of ability** -- The relative abilities of reviewer and the architects subjected to review ought to be on an equal footing. A "high powered", prestigious, or highly regarded architect may attempt to overpower a less skilled or esteemed reviewer. Conversely, a reviewer having autocratic power with little recourse available for appeal of his decisions by the applicant would not only be inadvisable, but may not stand up to a judicial challenge. The Commercial Street case shows some problems related to questions of professional competence, and the Charlestown Savings Bank case illustrates aspects of both sides of this issue. It demonstrates the difficulties of process which may arise when mutual respect and a perception of equal stature are in short supply. Productive give and take during negotiations may degenerate into a stalemate or worse. In a situation in which design credentials are absent or deficient on a volunteer review board, a professional consultant or staff member may be needed to raise the perceived level of professional competence to that of the architects involved in review.

Several other common concerns relating to all design review settings, such as legal justification and limitations on controls, will be discussed at the end of Part III where it will be accompanied by a guide to further information.
Factors in Selection of Design Review Models

These considerations should be taken into account in the choice of review models for specific situations. Some factors influence all three aspects of review models while others are limited to one or two questions of approach, nature, and content. Most factors cannot be taken in isolation, and the choice of models depends on the way these factors act in combination.

PURPOSE AND INTENT -- The reasons behind design review applications influence the choice of review characteristics. When design review is initiated in response to a particular event or case of design controversy, the circumstances of that event often enter into the structural aspects of the review system that is established. Purposes underlying design review are varied, but at this time it is most useful to focus on two general categories of functional and aesthetic or formal purposes. Each of these slants suggests a somewhat different emphasis for design review.

Functional Purposes -- If design review focuses on the operational behavior of design elements, uses, or activities, such as pedestrian amenities, loading facilities, or shadows, then it is considered to have a functional bias. Functional issues can lead to a list of specific objectives and specific standards for acceptable solutions of levels of performance. Performance standards directed toward functional...
ends may be used with a goal, measurable requirements, and a replicable test determining compliance with the guidelines. When it is important to encourage innovation and creativity at the same time that specific objectives must be met, performance standards are appropriate. On the other hand, prescriptive standards could be used in cases where discrete, easy to specify or describe elements are required to satisfy the functional needs of a design or an overall plan. Listing the elements, their locations and sizes, and the relationships among elements and to the entire design may be a valid strategy if the needs of a situation can be identified and described at the outset, although this strategy may lead to some lack of flexibility to respond to unique or changing circumstances.

**Programmatic Concerns** -- Functional requirements may be stated as programmatic concerns. As has been shown in the preceding parts, design guidelines which can be programmed may be self-administered by automatic methods, performance or prescriptive standards usually at the component level, and address content issues that are not detailing or aesthetically based. The content may be focused on particular issues of systematically applied to general concerns. Programmatic concerns refer to the content of the controls, but they are derived from the purpose of design review systems. HQP and the Public Facilities Department focus on programmatic issues of housing and schools respectively, but other reviewing bodies
could conceivably address other use types as well. The essential quality of design review having a programmatic emphasis is that it is easier to write design rules in advance than it is for aesthetic issues.

**Aesthetic Purposes** -- When the intent of design review is primarily to address aesthetic or formal issues, the opposite approach is more appropriate. Aesthetic or visual concerns are hard to specify by component in isolation because so much depends on the relationships of the overall composition. Unless design reviewers can isolate the specific qualities of a setting which give it architectural distinction -- the use of red brick or the rhythm of a particular window pattern, for instance -- then an automatic or specific performance approach may not be appropriate. It is not likely that a successful designed environment would be built on such simple principles, and so a more complex and subtle, specification of design requirements may be necessary. In that case a discretionary approach which can adapt to the particulars of each case or specific small scale setting and adjust the standards to meet a complex situation is better. If it is hard to anticipate and define all possible design situations presented by architects how the solutions should behave beforehand or to articulate a discrete set of specific performance standards, then the appropriate review model would be discretionary, use prescriptive standards, employ prototypes as overall models but not without the accompanying component standards that point out
which aspects of the prototypes are to be emulated, and focused in its content on architectural detailing concerns. In this way the solutions that architects can receive approval for are strictly limited by prescription. Performance standards may be applicable if particular elements of an overall solution can be anticipated, and several potential designer solutions are acceptable.

**Architectural Detailing Concerns** -- Historic districts and other locations with reviewers seeking to protect a fragile visual environment tend to focus on questions of detailing rather than on issues of massing, external effects, or interior design of a proposal. What is most important in these situations is how the building's mass is articulated; how it is affected by light and shadow; its color, texture, and scale of openings and subdivisions. Discretionary, prescriptive standards that can be adapted to specific cases work best in combination with these design controls when not all requirements or possible submitted solutions can be foreseen and specified in advance.

**PROJECT PROGRAM AND SCALE** -- Large scale projects which are unique, one of a kind cases may not be adequately accommodated under automatic review procedures that work for the majority of cases in a locality. If some triggering device is used to initiate a discretionary review process, then large projects may be given the special attention they require. The trigger may be sensitive to number of apartment units involved, floor
area ratio, commercial uses in a residential zone, or an activity which generates particular adverse external effects. Whatever concerns the reviewers can be used as an indicator to trigger this kind of review. Discretionary review with performance standards and tests specified beforehand for all special review cases of a particular type may be the fairest way to deal with "special cases" of use, size, or some sensitive locations. The content of review in special cases may differ from the issues of concern in other cases and may be focused on particular issues of concern. Content issues may also be triggered by a specific set of circumstances. Small scale projects of uses compatible with the prevailing existing use may be exempt from review altogether, or may be handled by automatically administered performance or prescriptive checklists.

EXTERNAL CONTEXT -- The situations of the case typology presented in Part I relate to questions of site, program, and institutional setting. Several factors of site and non-physical setting may be significant in the choice of review models. All of these factors cannot be controlled by the reviewer, project developer, or the architect. They are thus a part of an external context for design review.

Market Activity -- The level of market activity may have several effects on design review. First of all, the capacity of discretionary procedures may be overwhelmed by rapidly coming applications. The rate of review processing may be used as
a check on rapid growth, but it is not an appropriate mechanism to do that. There are many other methods to deal with growth that are better suited than design review. What design review can do in periods of rapid growth is to assure that standards of design quality are maintained. Market activity can also dictate the kind of developments that are proposed to meet demand. As fashions change, the content of design controls may have to change to deal with shifting design issues. Automatic review procedures with assigned weights or priorities must also adapt to cyclical and long run changes in market pressure. A self-administering, automatic procedure has an advantage in circumstances of slow growth in that a developer can count on a predictable process and standards of evaluation. Predictability thus will not act to deter desirable development and may even encourage desirable development under some conditions. If the rules are clearly spelled out with prescriptive standards, then the developer can minimize delay, and thus reduce holding costs. If the developer also has the option to submit to a process of discretionary review for exceptions to automatic prescriptive controls, development in the area may become even more attractive. In circumstances of slow growth, discretionary review focused on a limited number of issues may permit compromises to be made on what is acceptable, while maintaining the essential qualities that are necessary to meet the intent of design guidelines. From the point of view of the munici-
pality or reviewer, in a fluid, uncertain situation, discretionary design which can adapt flexibly are more likely to work successfully than rigid, unadaptable controls. The question remains how many potential long term benefits should be compromised for short run gains. Adaptive controls may have disadvantages in this case.

Spatial Setting -- The influence of spatial settings, in general, have more impact on the content of controls than on their nature or approach. The specific influences of sites or surrounding spatial contexts influence what design features are appropriate and should be controlled on a building. To establish a design review model that can adapt city-wide to varied settings, performance standards of systematic content with some option for reviewer discretion -- at least in some specific circumstances -- seems to be the best strategy. In that way new buildings on all hilltop locations, for instance, may be asked to perform in the same way, or some specific hilltops that meet other predetermined characteristics could be handled by other design standards. A performance strategy allows a range of acceptable solutions, but a prescriptive standard of different rules for different locational circumstances may be appropriate if only certain solutions are predetermined to be satisfactory.

Vulnerability of Setting -- A vulnerable setting may be a historic district, or be in an area with a fragile set of common elements to be preserved. Disruption of any of those
elements may damage the positive impact of the whole composition. An example of a visually vulnerable situation is a street lined with fine old houses all painted white and fronted with a white picket fence. Repainting a house blue and replacing the fence with a privet hedge disrupts the unity of the composition, which may be unique in the city, or valued for some other reason. In fragile settings vulnerable to damage by specific changes, tight controls focused on critical issues may be necessary. Tight prescriptive controls could be used to describe specific elements or physical dimensions that are needed to reinforce the setting. Performance controls could operate in conjunction with these controls at the general level. They may deal with overall effects of proposed designs, and their relationships to the existing setting. Prototypes with an accompanying explanation may serve to illustrate acceptable solutions in vulnerable settings. Tight controls may be self-administered if there should be no provision for discretionary appeal. Vulnerability need not be limited to visual or detailing concerns, but most examples of fragility arise in visually harmonious settings.

Measurability of Performance -- The ability to measure performance and to predict the design consequences of imposing controls determines what guidelines can be prepared in advance of application to specific cases. If a standard of compliance is measurable, then a performance test is possible which would permit a range of solutions an opportunity to
demonstrate their acceptability. If the objectives of design review lend themselves to translation into specifiable solutions or parts of solutions, then a prescriptive standard can be used. In either case, self-administration is possible if one can describe before review exactly what it is that one wants. The inability to describe and anticipate the desired results may suggest a discretionary approach is needed which permits interaction between designers and reviewers. These parties can then work together to develop a satisfactory solution that is responsive to the qualities of its environment. As long as the architect is aware at the beginning of the review process that it will be an interactive exchange, and if the reviewer is skilled enough to manage the process fairly, then a discretionary approach to review in certain situations can be productive and appropriate.

**REVIEW CONTEXT** -- Many aspects of the institutional context in which review takes place can be controlled, or at least influenced, by the actions of the reviewer. While not all of these factors are controllable to the same degree, the presence of each one helps to determine what review models are appropriate.

**Resource Availability** -- As discussed early in Part I, the amount of resources available to conduct design review in an agency is an important consideration in the selection of design review techniques. The analysis there focused on nine combinations of resources and concerns and the dynamics of
movement among them. It is useful to concentrate here on just two possible conditions, with variations and combinations left to the imagination of the reader.

In a high resource situation, funds and talent are available to permit a wide range of choice in review models. Consultants or staff can be obtained either to conduct detailed studies to devise "capital intensive" self-administering controls or to devise broad guidelines which can be administered by "labor intensive" discretion. In the best of all worlds, both approaches could be taken and adapted to particular portions of the review environment or the demands of different projects.

In a more realistic, limited resource situation, some choices of review approach and nature must be made. If functional, programmatic purposes are to be served, and if the desired outcome can be specified in measurable terms, then limited resources should be applied toward producing a "one shot", definitive study which leads to the implementation of automatic, non-discretionary controls. On the other hand, if aesthetic, architectural detailing purposes are important, and if specific control objectives are not easily measurable and cannot be specified in advance, then the best use of limited resources would be to hire a competent staff and recruit a review board of sensitive people to administer a discretionary review process. Prescriptive checklists may be easier and less costly to administer than performance evaluation
guidelines, but some costs of monitoring performance can be shifted to the developer if he must certify his compliance by using outside consultants.

Limited resources may also dictate the content of design review guidelines. A tight review budget may dictate that more easily specified or measured basic concerns like color, texture, or building height be substituted for more sophisticated derived concerns like meeting mean cornice height or measuring shadows cast on adjacent property. Surrogate measures that are easy to obtain may replace performance concerns that are harder or more expensive to monitor. Focused content will help to limit the costs of review.

The availability of only limited resources need not cripple design review, but it does challenge the reviewing body to be inventive and efficient in the approaches it does take.

Level of Concern -- Concern for design issues has less influence on the choice of review models than does the availability of resources. If a small group of residents shows high concern, and if they are representative of the values and design preferences of the community, then they may be asked to volunteer for a discretionary review board. When such an approach is inappropriate to an environment, this citizen energy can be applied to monitor a non-discretionary procedure in an advisory capacity. Low community concern does not necessarily rule out design review, but it may place its usefulness into
question and reduce its possible lifespan due to lack of com-
community support. In a low concern community the best overall
model would be self-administering based on a capital inten-
sive study, use prescriptive standards that can be easily
monitored, and deal with a content limited to the most sig-
nificant programmatic or design issues. In that way, the sys-
tem would be bought once with the intensive study, put in
place, and then continue to operate even if community inter-
est wanes.

Level of Review Activity -- As suggested above under "Market
Activity", an active development market can strain the capac-
ity of an agency to cope with its review caseload. Delays
may result and the quality of review procedures may suffer.
On the other hand, a low level of development activity can
present opportunities for "fine tuned", sensitive review
work, but it may lead to problems in holding interest of a
competent staff or may encourage the compromise of standards
in order to promote desired development activity. At an op-
timum level of activity in between these extremes, proposals
come at a rate which lets reviewers learn from past experi-
ence and adapt current standards to meet the changing con-
cerns of their setting. The design review process can be an
adaptive one which reformulates design policy to changing
conditions.

In a high activity situation, the most productive design re-
view models would be automatically administered, review
components by a concise prescriptive checklist, and focus its content on a few most critical concerns. At the other extreme, low activity would permit discretionary review of performance or detailed prescriptive standards of disaggregated components and prototypes along a systematic range of concerns. While these attributes are possible, other conditions may suggest different approaches. In selecting review models, one must remember that busy times and idle times each present problems which may be addressed by certain aspects of design review models.

Potential for Corruption -- Public officials can be corrupt in nearly any situation; but in high stakes settings or when the institutional context condones misconduct or does not open its workings to public scrutiny, the potential for corruption is greater. In those situations, automatic review with prescriptive, easy to confirm measurements can minimize the effects of unethical behavior on design review. Performance tests can be misrepresented and discretionary negotiations are clearly susceptible to "under the table deals."

Personalities -- The characteristics of individuals enter into any discretionary negotiations process and may even become a part of institutionalized non-discretionary procedures. In addition to the level of skills, experience, and competence or review participants, their motivations, degree of determination, and other personality traits enter into a negotiations process. Some people are better bargainers than others. In
selecting a design review model, some consideration must be
given to who will operate it and who will come under its con-
trol. Non-discretionary approaches minimize the personal ele-
ment in review, but that circumstance is not necessarily de-
sirable. An agency with a skilled negotiator -- or with a
competent design staff available -- may seek to capitalize
on his skills, and build a discretionary process around him.

Institutions -- As discussed at the end of the Charlestown
Savings Bank case, individuals and institutional settings in-
teract. Certain types of people may tend to gravitate toward
particular roles. The structural position of those roles in
a design review process may affect the choice of design re-
view models as suggested in the preceding section.

At another level, the institutional context as whole clearly
influences the selection of models. In New York City the
Housing Quality Program and Greenwich Street District were
designed to fit into the administration of zoning, although
they may really be reactions to the excessive discretionary
processes in use at earlier times. In those cases an automatic approach with prescriptive and performance standards
were seen as appropriate, but in Brookline a discretionary
approach to granting special permits under zoning was seen
as the appropriate institutional location for design review.
With the evidence available, it is difficult to formulate a
general rule except to say that in a more complex institu-
tional setting a more straightforward approach to design
review may more readily survive. Simpler, smaller institutional contexts like Brookline, or even Boston, may leave more space for ambitious, discretionary design review.

**Legal Constraints** -- A subject not discussed in much detail in this study is the question of legal constraints on review. The amount of control that may be exercised relates to the sources of authority a reviewer has. Site ownership, contractual or covenant restrictions, financial control, and the police power of the state all represent different levels of control that dictate how far design review can go in its requirements. The question of what constitutes a taking of development rights is an important issue in zoning law and may be important for certain applications of design review. The answer to this question affects the content and approach of controls -- what is controlled and how it is done -- and not so much their nature. Additional discussion of this issue and a guide to further information will be offered in the last section of this part.

**PROCESS OBJECTIVES** -- Design review can be directed to address a wide array of possible objectives. The questions of how design review is to operate are its process objectives. While meeting process objectives well was not mentioned by the actors interviewed in this study as a measure of success for design review, it is nevertheless important that a review process operate smoothly and effectively. Several of
the objectives mentioned here are potentially in conflict with others, and the value placed on each depends on the particular perspective of the actors -- developer, architect, reviewer -- in the process. But if a review process is skewed to serve one or more of these objectives well, then that skew suggests an identifiable set of attributes such a model must possess.

**Predictability** -- Any developer values predictability for his project. The most predictable approach to design review for developers would be under self-administration of predetermined prescriptive controls. But as stated above, reviewers and ordinance designers who cannot anticipate or define desired results in measurable terms would seek to take a discretionary approach. When these two goals are not in conflict, and when it is desirable for the public to promote private development, a non-discretionary approach is in order. If that cannot be allowed, the discretionary approach must be fair and at least the procedure for review must be predictable and not appear capricious to its participants.

**Delay** -- Unpredictable review practices and poorly defined standards can lead to disputes or misunderstandings that can produce delay and increase the project cost. If an objective is to minimize delay, then self-administered, prescriptive approach is correct. When other considerations do not favor that approach, a predictable procedure will allow the participants to anticipate and prepare for delay.
Developer Options -- The most favored model for a developer would be one which is predictable, minimizes delay, and gives the developer the greatest freedom of choice within the confines of the design standards. Offering developers a set of elective components or performance criteria focused on critical issues would permit him to pick and choose elements and solutions so that he can adjust to shifting market conditions or can produce projects in line with his own capabilities. He would retain his own free choice on issues not placed under control. While an automatic approach to review like that of the Housing Quality Program may be more predictable for developers, in some cases he may prefer a discretionary approach that leaves him room to negotiate trade-offs in the context of a particular proposal. In some instances, when dealing with a straightforward project, a developer may value predictability and lack of delay, but in other cases he may place a greater premium on choice of design solutions. In each case a major consideration is to minimize development costs or to maximize potential revenues -- by producing a design which meets a market demand -- in a way that will maximize the profits he can realize from the project.

Architectural Creativity -- A related concern of the development team is the amount of choice that a project's architect has in devising a design solution. He may seek to produce a creative solution, but tight prescriptive guidelines systematically applied to a full range of issues may mitigate a-
gainst that end. Although in the opinion of Gerhard Kallmann and members of the BRA Urban Design Staff developer's and architect's objectives may often be at odds, both review participants would readily agree that they should have a high degree of choice in the way they meet design guidelines. An architect may seek to express his own stylistic preferences or may want to implement a particular response to site or program which stretches the limits of tight controls. Functional and formal concerns each suggest a different nature for appropriate controls that allow designer freedom. **Focused performance** standards on **components** of designs may give the architect some freedom of choice in meeting the functional intent of design review, but narrowly expressed aesthetic concerns may necessarily place restrictions on some stylistic solutions.

When design creativity and aesthetic controls are potentially in conflict, only a **discretionary** approach will permit negotiations to work out an acceptable compromise. As we have seen in the Charlestown Savings case, however, an architect's choices may still be overruled in a discretionary process if the reviewer has power to make a final ruling on design.

**Innovation** -- Design creativity need not be limited to stylistic or architectural issues. Functional innovations may be a desirable product of a review process, and in fact fostering innovation was a stated objective of the Housing Quality Program in New York. Innovation may not be viewed favorably by
developers or architects who are set in their ways or want to keep costs within predictable bounds by using traditional techniques, but in the long run, new solutions can lead to reduced costs. The public and users of a project may benefit from innovations that better meet their needs, and reviewers may favor innovation as a desirable end in itself.

Design review can be structured to encourage -- or at least not inhibit -- innovation by using performance standards and allowing discretionary negotiations to permit the derivation of new solutions. Focused content will permit room for innovation in non-critical, uncontrolled issues. Some building types or locations in a city with particular problems or potentials may be targeted by agencies seeking development for the public good as special "innovation review" districts while more conventional situations come under less flexible standards or no review.

How to use factors in selecting review models -- The basic message of Part III is that someone preparing or modifying a design review process must sort out what design review is trying to do in a given situation. He must question the why, how, and where of review, and he must determine what is to be controlled and who will conduct the review.

It is necessary to disaggregate the constituent elements of review before one can select the appropriate approach, nature, and content of design controls which are reassembled into a
coherent model for conducting design review.

Some locally applicable factors may have been overlooked, or some significant factors de-emphasized, but this analysis of considerations does provide an initial framework for the selection of appropriate design review models. The framework suggests what to look for in a setting, and how to respond.

The following summary list of factors arranged under approach, nature, and content categories should serve as only a guide for what questions to ask. Some items on the list are limiting; that is, they should be present if the model aspect is to apply. Other items imply that the model aspect is permissible but not necessarily essential to situations characterized by the item's presence. This list appears to simplify the choices and is not the definitive word. Many nuances of choice are glossed over. Different values or priorities can counteract the influence of some factors, but this list offers a starting point on which to build logic before making a selection of appropriate aspects of design review models.

The final section of this study which follows the list is a brief guide to further information on the use and application of design review.
APPROACH: SELF-ADMINISTERING
- if programmatic concerns emphasis
- for small scale projects without unusual uses
- if predictable market activity
- if slow growth market
- in vulnerable or fragile settings
- if objectively measurable performance possible
- in high or limited resource situation
- if low concern community
- if high level of review activity
- if high potential for corruption in setting
- to minimize personality influences
- in compatible institutional setting
- to promote predictability of process
- to minimize potential for delay

APPROACH: DISCRETIONARY
- if aesthetic concerns emphasis
- for large, atypically scaled project
- if unique use types
- if unpredictable market activity
- as an elective option in slow market situation
- if city-wide review covers varied spatial settings
- in less fragile settings
- if hard to measure performance objectively
- if outcome of controls difficult to anticipate
- if moderate resources and skilled board available
- if high or moderate level of concern
- if low level of review activity
- if low potential for corruption
- to increase personality influences
- in compatible institutional setting with discretion used
- if legal constraints and enabling legislation allow
- to permit developer opportunity to negotiate
- to permit architect opportunity for creativity
- to permit innovation
NATURE: PRESCRIPTIVE
- if functional or programmatic concerns emphasis
- if aesthetic concerns emphasis
- if desired detailing can be closely specified
- for small scale projects
- if not unusual use type
- if rules can be specified in local circumstances
- in vulnerable setting if elements can be specified
- if solutions can be anticipated and specified
- if resources are limited and checklist review possible
- in low concern communities
- if high level of review activity
- if high potential for corruption
- to minimize personality influences
- in complex institutional settings
- to promote predictability
- to minimize opportunity for delay
- to limit developer choice of options
- to limit architectural creativity
- to limit innovation

NATURE: PERFORMANCE
- if functional concerns emphasis and innovation desired
- to describe overall aesthetic performance
- for projects of unique program or scale
- in vulnerable setting to describe overall effect
- if measurable test for performance possible
- if high level of resources to prepare tests available
- if moderate resources and cost of tests to developer
- if moderate or low level of review activity
- if predictability of outcome not required
- to permit developer choice of options
- to permit architectural creativity
- to permit innovation
**NATURE: PROTOTYPES**
- to illustrate desired overall solution
- if commentary to explain salient points available
- if aesthetic concerns relate to overall effect
- to illustrate good solutions in vulnerable settings
- in low review activity settings with discretionary

**NATURE: COMPONENTS**
- in all other situations in conjunction with prototypes or where prototypes do not apply, especially:
- for specific programmatic or aesthetic elements
- for discrete elements in vulnerable setting
- if high level of review activity
- to permit developer choice of options
- to permit architectural creativity
- to permit innovation by component
CONTENT: FOCUSED
- to address only specific programmatic or aesthetic concerns
- for projects unique in program or scale
- in a slow market situation to minimize obstructions
- in vulnerable settings to highlight critical issues
- if limited resources available for review
- if high level of review activity
- to minimize potential for delay
- to permit developer choice of options, architectural creativity, and innovation in areas of concern that are not critical for design controls

CONTENT: SYSTEMATIC
- to address general programmatic or aesthetic concerns
- to deal with a range of market conditions
- in city-wide review applications
- if high resources available
- if low level of review activity
- to promote predictable outcome of review process
- to limit developer choice on critical issues
- to limit architectural creativity on critical issues
Further Information Sources

There is a growing literature of information on urban design and design review techniques. In the 1960's when urban renewal was at its zenith, many articles were written in planning publications. Much of that literature is somewhat dated by now, but many of the basic principles it discusses are still valid. One quite recent, concise guide to design review was published by the American Society of Planning Officials. In addition to a brief discussion of issues, it has a long bibliography of sources and a list of communities currently conducting design review across the country. It serves as a basic guide to sources on the application of design review.

Some of the sources listed in the ASPO publication are also listed in this section, with full citations appearing in the Bibliography of this volume. The intention of this section is to mention some general issues of design review which have not been covered in great detail in the rest of the study. Each source listed under the issues provide further information on the subject.

Legal Aspects -- The previous sections alluded to the constraints that the law might place on design review. The question of the basis for "aesthetic controls" has been settled by a number of cases, foremost among them a Westchester County, New York case of People v. Stover in 1963. R. Lisle

Legal Aspects
Aesthetics as an Issue
Relationship to Overall Plan
Institutional Location of Design Review
Design Review under Urban Renewal
Design Review and Zoning
Decentralization of Design Review
Community Participation
Model Ordinance
Evaluation of Review

ASPO
"PAS Memo", January 3, 1977
Baker of Suffolk University Law School has compiled a list of cases dealing with a set of commonly occurring legal issues in design review. It is based primarily on the experience in Massachusetts, but most local cases have parallels elsewhere. Lewis Mansotti and Bruce Selfers have written an informative article on aesthetic zoning. Carl Lindbloom has written a basic guide to municipal design review, which is a useful source on many aspects of the subject. He covers the basic legal considerations that a town initiating design review must face. Several other articles on legal considerations are listed in the ASPO bibliography.

Aesthetics as an Issue -- Richard F. Babcock, a well known zoning lawyer from Chicago, has written an interesting piece on design controls in Harper's Magazine. He takes a dissenting view on the imposition of almost any restriction on aesthetic expression or controls on design. His primary contention is that because no one can define "good taste", it should not be regulated by a government body. While his criticism should not be read as a condemnation of all types of design controls -- particularly those with functional concerns --, the article does sound a warning against controls that are too broadly applied or unfocused in their objectives.

Relationship to Overall Plans -- The point has been made in the introduction to Part III that design review programs should be related to overall community values and goals as expressed in a comprehensive urban design plan or other formal
expressions when available. The questions are how to produce an overall plan study responsive to community values and how to generate appropriate guidelines from it. There is no general rule, and many approaches may be valid. The literature in this area is spotty and incomplete. Jonathan Barnett's well known book Urban Design as Public Policy is more of a manifesto spreading the lessons learned in New York City than a how-to-do-it guide, but many of Barnett's points are well taken. He says:

It isn't necessary to design all the buildings, if you have reached an understanding of the salient points of the overall design (of the city), know exactly which ones are most crucial, and understand the steps required to make sure that what is most important will actually be done.

Barnett goes on to illustrate how those aims were accomplished in New York. Robert F. Dannenbrink has written about community identity and how design review can reinforce it in smaller cities and towns. In a somewhat out of date ASPO guide, John L. Kirken and Irene P. Torrey survey characteristics of urban design processes and the way design review relates to overall objectives. Several case studies briefly examine plans and processes in San Francisco, New York, Cincinnati, urban renewal design review in Boston, and several other cities before elaborating on urban design work done in San Antonio.

Jonathan Barnett
Urban Design as Public Policy

Robert F. Dannenbrink
"Guide to Planning Practice: Developing Community Identity"

John L. Kirken, Irene P. Torrey
Developing Urban Design Mechanisms
Some localities take a city-wide approach to review, while others focus on the neighborhood level. San Francisco's Urban Design Plan was a city-wide effort, but it based much of its work on studies done and workshops conducted at the neighborhood level. At the other end of the scale, Kevin Lynch has recently examined how a regional design agency could be established and conduct design review on local projects within that larger context.

**Institutional location of design review** -- Carl Lindbloom devotes several pages to a discussion of existing forms of design review and the appropriate location of a review ordinance. He examined several options including ordinances under zoning, as a supplement to zoning, as a separate ordinance, and the establishment of special districts; and he concluded that environmental design review should be administered separately from zoning. Brookline based much of its review process on Lindbloom's model, but the Planning Board decided to make design review a special permit procedure under zoning. There appear to be convincing arguments on both sides, and the choice of location should be based on the particular situation.

**Design review under urban renewal** -- In the 1960's urban renewal was seen as a tremendous opportunity to rebuild cities, and design review was used to ensure that reconstruction met criteria of good design. Philip S. Will in an MCP thesis
completed at MIT in 1966 described some of the latent functions of design review as providing flexibility to planners under uncertainty, and as offering a model of good design for private projects. Roger Montgomery focused on the distinction between tight plans, open plans, and a comprehensive process in his AIP Journal article on urban renewal in 1965. This article is a good source to show what the major design concerns were at that time, and how design review was constituted to meet those concerns.

Design review and zoning -- As has been discussed several times in this study, new forms of redevelopment have arisen with the passing of Federal programs for urban renewal. Incentive zoning special districts like that of Greenwich Street in New York City use design review to direct the form of private developments. Barnett discusses incentive zoning applications in New York, and in a study prepared for the BRA, David Barett explains how incentive zoning could be applied in Boston to replace ad hoc procedures like 121A corporations and other zoning exceptions. Design review would be a part of any incentive zoning program adopted in Boston to insure the design concerns of the public interest would be considered.

Some larger issues of land use control also apply to design review. Michael J. Meshenberg's article explains how mechanisms like planned unit development regulations and incentive zoning programs operate to offer more flexibility for municipalities and developers. Regarding the limits to

Philip Sinclair Will
Design Review in Urban Renewal: A case Study of the Boston Redevelopment Authority
Roger Montgomery
"Improving the Design Process in Urban Renewal"

David R. Barett
Incentive Zoning For Boston

Michael J. Meshenberg
The Administration of Flexible Zoning Techniques
zoning or design controls, A. Sax and R.C. Ellickson discuss issues of private property rights, takings, and methods of compensation.

Decentralization of the review process -- the possibility of decentralizing the design review process has been mentioned in this study. One model for establishing a city-wide control system for signs that allows local neighborhoods to establish their own standards and review procedures is proposed in City Signs and Lights, prepared for the BRA by Ashley/Myer/Smith. A less structured ad hoc decentralization approach for review already operates in Boston as the cases have shown, but it lacks a coherent framework to relate all of the parts.

Community Participation -- At a symposium on design controls sponsored by the SPNEA in November 1976, Ronald Lee Fleming, of Vision, Incorporated said that design review should be built on an accumulation of values which suggest an identifiable visual vocabulary. Lisle Baker at the same symposium said that design review should search for a shared perception of what a community should be. By implication then, design review is a mechanism for implementing the physical manifestation of that perception, but it can function that way only if it reflects genuine community values. Gerald R. Mylrole discusses some methods of incorporating community values in design controls. Beyond that example there is not much literature on this specific concern, though there are many articles on participation in review administration.
Model ordinances -- Lindbloom's guide includes a model ordinance for discretionary design review that was applied in Princeton, New Jersey, and was adapted for use in Brookline and elsewhere. It is clearly not applicable in all situations. William Weismantel has proposed an alternative review procedure to the one recommended by the Standard Zoning Enabling Act. His approach relies primarily on the discretion of a staff "design examiner" rather than on that of a review board. Its intention is to streamline the procedure and expedite applications processing.

Evaluation of review -- The issue of the effectiveness of design review methods in attaining their objectives has not been addressed by the literature. Feedback on the performance of a design review product to test the predictive validity of the design review process is not often done in a formal way. Measuring effectiveness and identifying the aspects of design controls that produce desirable or undesirable results would be useful in the development of new control systems and the reform of existing methods. A thorough examination of what aspects of design controls actually do produce the desired results is a worthwhile topic for further inquiry.
Notes

Introduction
1. Bainbridge Bunting; Houses of Boston's Back Bay; p. 374, 391.
6. Adele Fleet Bacow; Environmental Design Review in Brookline, or Why Have Design Review, Anyway?; p. 5
11. Donald Schon; Beyond the Stable State; p. 119ff.
12. Bender; op.cit.
13. Ibid.
14. Ibid.
15. Ibid.
17. Ibid.
18. Ibid.

Commercial Street
1. Robert Campbell; "A good 'fit' in North End"; Boston Sunday Globe; February 6, 1977; section D; p. 1.
2. Campbell; op.cit.
3. Charlestown Savings Bank
1. Boston Redevelopment Authority; Downtown Design Workbook; p. 1.
10. Bender; op.cit.
and Development Study, Summer 1969; p. 5.
3. Ibid.
4. Boston Redevelopment Authority; Fact Book; pp. 5f, 9, 14.
5. John Sloan; BRA memo to Joe Berlandi; October 24, 1974.
6. Ibid.
7. John Sloan; BRA memo to George Weidenfeller; March 7, 1975.
8. Yudis; op.cit.
2. Ibid.; p. 42.
4. Charles Reiss, Michael Kwartler; "Housing Quality Program Puts Human Scale into Residential Zoning; New York City Develops Guidelines for Builders"; Planners Notebook; volume 4, number 6; p. 4.
1. Boston Redevelopment Authority, Urban Design Staff; Matrix of Interface; p. 1.
1. Brookline Planning Department; op.cit.; p. 16.
Further Information
Part III: Selection

Housing Quality Program

1. James Batchelor; op.cit. p. 50 ff.

Typology of Models

2. Ibid.
3. Ibid.; p. 42.

Matrix of Interface

1. Boston Redevelopment Authority, Urban Design Staff; Matrix of Interface; p. 1.

Greenwich Street


Tremont Street

Bibliography

American Society Planning Officials; 
PAS Memo; 

Ashley/Myer/Smith; 
City Signs and Lights; 
Boston, Massachusetts; Boston Redevelopment Authority; 1971.

Babcock, Richard F.; 
"Billboards, Glass Houses, and the Law"; 

Back Bay Architectural Commission; 
Back Bay Residential District; 
Guidelines for Exterior Rehabilitation and Restoration; 
Boston, Massachusetts: undated.

Bacow, Adele Fleet; 
Environmental Design Review in Brookline, or Why Have Design Review, Any Way?; 
Cambridge, Massachusetts: Department of Urban Studies and Planning, Massachusetts Institute of Technology; December 1975; unpublished paper.

Baker, R. Lisle; 
Design Controls for the Built Environment: Legal Issues in Design Review; 

Barett, David R.; 
Inventive Zoning for Boston; 
Boston, Massachusetts: Boston Redevelopment Authority; 1973.

Barnett, Jonathan; 
Urban Design as Public Policy: Practical Methods for Improving Cities; 

Batchelor, James Putnam; 
Public Agencies as Managers of Housing Quality; 
Cambridge, Massachusetts: Department of Urban Studies and Planning, Massachusetts Institute of Technology; 1974; unpublished MCP Thesis.

Beacon Hill Civic Association; 
Beacon Hill Architectural Handbook: Guidelines for Preservation and Modification; 
Boston, Massachusetts; 1975.

Bender, Susan; 
"Suffolk Plan Controversial"; 
Beacon Hill News; September 1976.

Boston Building Department; 
Boston Zoning Code & Enabling Act; 
Boston, Massachusetts; as amended through December 9, 1975.

Boston Redevelopment Authority; 
The Design Review Process and Redeveloper's Architectural Submissions for Housing Parcels; 
Boston, Massachusetts; 1967.

Downtown Design and Development Study;
Boston, Massachusetts; 1969.

Fact Book; Boston, Massachusetts; 1972.

Standards for Renovation; Waterfront Renewal Project; Boston, Massachusetts: undated.

The Tremont Street Special District; Boston, Massachusetts; 1976.


Brookline Planning Department; Brookline: A Guide to Environmental Design Review; Brookline, Massachusetts; 1975.


Campbell, Robert; "One Federal: good, not great"; Boston Sunday Globe; August 15, 1976.

"A good 'fit' in North End"; Boston Sunday Globe; February 6, 1977.

"Charlestown Bank a welcome example of good urban design"; Boston Sunday Globe; April 10, 1977.

Chermayeff, Serge; Alexander, Christopher; Community and Privacy; Garden City, New York: Doubleday Anchor Books; 1965.

Dannenbrink, Robert F.; "Guide to Planning Practice: Developing Community Identity"; Practicing Planner, American Institute of Planners; volume 6, Number 4; December 1976.

Design Controls for the Built Environment; Symposium Sponsored by the Society for the Preservation of New England Antiquities; Boston, Massachusetts; November 12, 1976 Personal Notes of Proceedings.


Markus, Marvin; West, John Pettit III; "Urban Design Through Zoning: The Special Greenwich Street Development District"; Planners Notebook; American Institute of Planners; volume 2, number 5; October 1972.

Massachusetts Housing Finance Agency; Operation Handbook for Financing of Multi-Dwelling Housing; Boston, Massachusetts; 1971.


Montgomery, Roger; "Improving the Design Process in Urban Renewal"; Journal of the American Institute of Planners; volume XXXI, number 1; February 1965.


Perry, Dean, and Stewart; Urban Design Workbook; Boston, Massachusetts: Cambridge Street Community Development Corporation; 1974.

Quinn, Francis X.; "Neighborhood 'buffer' on Hill?"; Boston Ledger; July 23, 1976.

Reiss, Charles; Kwartler, Michael; "Housing Quality Program puts Human Scale into Residential Zoning: New York City Develops Guidelines for Builders"; Planners Notebook; American Institute of Planners; volume 4, number 6; December 1974.


San Francisco Department of City Planning; The Urban Design Plan; San Francisco, California; 1971.


Schon, Donald; Beyond the Stable State New York: Random House; 1971.
Simmonds, Roger; 
The Development of the Downtown Waterfront, Boston; 
Cambridge, Massachusetts: The Laboratory of Architecture and Planning, Massachusetts Institute of Technology; 1974

Smith, Stanley M.; 
Design Controls in the Urban Renewal Area of Salem, Massachusetts; 

Urban Design Council of the City of New York; 
Housing Quality: A Program for Zoning Reform; 

Weismantel, William; 
"Legislating the Urban Design Process"; 
Urban Law Annual, School of Law, Washington University; 1970.

Welch, Kathryn; 
Historic Districts of Springfield, Massachusetts; 

Will, Philip Sinclair; 
Design Review in Urban Renewal: A Case Study of the Boston Redevelopment Authority; 
Cambridge, Massachusetts: Department of City and Regional Planning, Massachusetts Institute of Technology; 1966; unpublished MCP Thesis.

Yudis, Anthony; 
"121A looms larger with full valuation"; 
Boston Sunday Globe; 
Photograph and Illustration Credits

12 TR, BR
the author

52 BRA, Downtown Plan

55 CSCDC, 1974-1975 Report
the author

58 PDS, Urban Design Workbook

66 BRA, Downtown Plan

70 PDS, Urban Design Workbook

71 PDS, Urban Design Workbook

76 PDS, Urban Design Workbook

78 TR
the author

79 B
PDS, CSCDC

81 CSCDC Newsletter, number 10
the author

88 the author

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110 BRA base map,
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121 the author

123 Carmen Garufo

127 Carmen Garufo

134 TR
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134 B
Carmen Garufo

135 TR
the author

135 B
Carmen Garufo

136 the author

137 the author

138 TR
the author

138 B
Carmen Garufo

151 BRA base map,
the author

152 the author

161 TAC rendering,
Boston Sunday Globe

164 TAC drawing

165 TAC drawing

167 TR, BR
the author

168 TAC drawing

173 the author

175 the author

179 Ulrike Welsch
Boston Globe
JB, Urban Design as Public Policy

HQP publication

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Abbreviations

T  top
M  middle
B  bottom
L  left
R  right

BRA  Boston Redevelopment Authority
CSCDC  Cambridge Street Community Development Corporation
JB  Jonathan Barnett
HQP  Housing Quality Program, New York Urban Design Council
PDS  Perry, Dean, and Stewart
TAC  The Architects Collaborative
TSD  Tremont Street District commentary

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