A new approach to public housing: redesigning the Mission Hill Housing Projects

by Ahmed Hussein Idris

Submitted to the Department of Architecture on February 8, 1994 in partial fulfillment of the requirements for the Degree of Master of Architecture

ABSTRACT

In the coming years there will be a need to revisit the question of public housing in general and dealing with existing housing projects in particular. This thesis attempts to provide a new approach to the redesign of existing projects. This new approach will be applied to the Mission Hill Main housing project and surrounding area.

The main ideas behind the thesis are, that any attempts at redesigning existing projects should be done, with the goal of integrating the public housing with its surroundings at both the urban and site scales. Also an effort should be made to provide clearly defined zones of public, semi-public, and private spaces throughout the project. Socio-economic issues and the future demographics of the public housing as well as the surroundings, should also be addressed as part of the redesign of the units and the programming of the buildings in and around the site.

A new urban plan for the area around the Mission Hill Main housing project will be discussed in chapter 2. Chapter 3 will deal with the housing project at the site scale. Chapter 4 will look at a block on the site in more detail, as well as some proposed unit types. Due to the wide scope of this thesis and the limited time available there will only be a perfunctory discussion on the history and theory of public housing provided in the introductory chapter.

Thesis Supervisor: Michael Dennis
Title: Professor of Architecture
Acknowledgment

I would like to thank my family for all their support.

I would also like to thank my friends, Sid and stike, mike c, larry and chris, for helping me maintain my sanity.

I would also like to acknowledge the following people: Linette Robinschamp, and Stephanie Winfield, from the Boston Housing Authority, Mr. Alberto Cardenas of Domenech Hicks & Krockmalnic Architects.

Special thanks to my thesis committee, Eric Dluhosch, Roy Strickland and Michael Dennis for their great insight.
Table of Contents.

Abstract.......................................................................P. 3
Acknowledgement...................................................P. 5
Chapter 1
Introductions................................................................P. 9
Chapter 2
Urban plan...................................................................P. 19
Urban Design Strategy............................................P. 21
Final Proposed Urban Plan........................................P. 27
Chapter 3
Mission Hill Main...................................................P. 37

Comparison.....................................................................P. 39
Chapter 4
Buildings and Units................................................P. 49
Units..........................................................................P. 52
Domenech Hicks & Krockmalnic
Unit Proposal............................................................P. 54
Chapter 5
Conclusion...................................................................P. 61
Appendix.......................................................................P. 67
References.....................................................................P. 84
Chapter 1
Introduction

The principal ideas behind this thesis were first developed during Michael Dennis' Urban Design studio in the spring of 1993. In that studio the area around the Mission Hill Housing projects was the site chosen for study. We prepared an urban plan for a fairly large area that was bounded by Massachusetts Ave., Huntington Ave., Washington and Tremont streets. After extensive redesigning a precinct was chosen for further study and then a typical block was chosen for study at a more architectural scale. I had then decided to use the studio methodology and some of the results in my thesis, specifically, the process of going from the larger urban scale to a more architectural scale.

The redesign of the public housing was done in the context of the urban plan developed in the urban design studio.

The idea of approaching public housing by first studying it at the urban scale is one of the main points in my argument. The idea came as a result of a preliminary analysis of the Mission Hill Housing projects. The first thing that struck me was how isolated the project felt from the rest of its surroundings; it was like going into another world. The lack of through-going streets within the project contributed greatly to the sense of isolation. The distinct architectural forms of the housing along with its repetitive nature give the project an institutional appearance that
Fig. 1. Southwest corridor 1983

Fig. 2. Aerial view of MHM

Photo by Michael Charney
distinguishes it from the typical housing found in the lower Roxbury and South End. The development of the area around the project in the following years only reinforced the seclusion of the housing project.

The Mission Hill Housing project was designed by George E. Robinson in 1939 and built in 1940. It was conceived during the period in which "modernism" as a style of architecture and a view of the world was making its way to America from Europe. The project was based on the superblock, with no vehicular streets going through the project; the only vehicular access was provided for parking. The project did include pedestrian streets and was designed with a great deal of trees and other landscaping features. However over the years the landscaped areas were asphalted over due to a lack of funds, and are now barren or filled with rubbish. Mission Hill was also intended to be temporary housing for poor and working class Irish immigrants, and as such, the units were designed using standards that are now inadequate. The project, as with other housing projects of that period, was designed with good intentions, however the designers did not foresee the social and economic changes that came about after the war.

The Mission Hill housing project has been maintained in a piecemeal fashion over the years. However this summer the Boston Housing Authority (BHA) received a fifty million dollar grant from the Department of Housing and Urban
Fig. 3. MHM dilapidated conditions of outdoor spaces, illustrating lack of definitions.

Photo by Michael Charney
The grant is part of the Urban Revitalization Demonstration (URD) program. The grant will allow planning agencies to develop comprehensive strategies for revitalization. I was able to gain access to the BHA’s URD application of May 1993, and used the goals stated within as guidelines for my design. I was also able to see preliminary design proposals that were done by Domenech Hicks & Krockmalnic (DHK) the architects that will redesign the housing project. Because this is a design thesis, a great deal of the necessary background work was borrowed from the BHA application. The guidelines developed by the BHA will be discussed below, and the proposed site designs of DHK will be presented in a later chapter.

**BHA design guidelines.**

The BHA lists six goals for the redevelopment of the Mission Hill Main housing project, which are: make Mission Hill safe, make the housing sound and attractive, improve BHA responsiveness, reward personal responsibility, integrate the development into the neighborhood, and reinforce community. The fact that only two of the listed goals deal directly with architecture, reflects the fact that in the case of public housing there more important issues. The present condition of the housing also cries out for a more comprehensive approach. The BHA and HUD are finally realizing that piecemeal renovation of existing projects is not sufficient. If the forthcoming revitalization effort is successful it will serve as a model for the country.
The non-architectural guidelines will be briefly illustrated below; more attention will be given to the architectural elements. Of the $50 million dollars, $38 million are earmarked for design and construction, $8.4 million for supportive and community services, $2 million for security, $1.3 million for management, and $200,000 for evaluation. The moneys designated for community services will go into providing services designed to promote family self-sufficiency and empowerment. The programs will be run by community service companies, for example the ABCD company will run the Head Start program and the Whittier Street Health Center will operate a satellite on-site. A community center will house most of the programs envisioned such as job training and placement, Head Start, health clinic, and offices for management and support staff.

One of the major concerns for the residents of Mission Hill is security. There were 183 drug-related crimes reported in Mission Hill Main, in 1992. The Police responded to an average of eleven incidents per day at Mission Hill Main and Extension for 1991-92.

Like most of the "inner-cities" the housing project is being devastated by drugs and the associated crimes. From an architectural point of view there are several elements that can be modified to help increase the security. However, the greatest effort should be applied towards reducing demand, rehabilitation and policing. The BHA proposes to designate four policemen specifically for the
project, with support given by the Boston Police Department and the BHA police force. The hope is that community policing, which is now being tried throughout the country would create a partnership between the police and the community. Community organizations will be formed to help increase cooperation between the residents and the police.

The best solution to the drug problem is to reduce demand by providing the residents economic opportunities. Sixty-eight percent of the families have no earned income and the average household income was $9,088 in 1992. The BHA hopes that the community service section of the proposal would help the residents in terms of treatment, job training and placement, and by providing daycare so that parents can seek employment. I think that the BHA should attempt to use the institutions that surround the site of the project in providing economic opportunities to the residents. The site as will be discussed later is bordered by Harvard University teaching hospitals, Wentworth Institute of Technology (WIT), and nearby are Northeastern University, the Museum of Fine Arts, Madison Park High School, and Roxbury Community College. A Partnership for Economic Development will be established to try and accomplish greater cooperation between the project's residents and the institutions. However at the moment, there is not enough detail on the specific role and scope of the partnership.
Architectural improvements on the site could also help with some of the "non-architectural" solutions. The BHA provides guidelines for improving condition of the buildings on the site. The Project consists of 39 buildings containing 822 units with a density of 42 units per acre. The BHA will reduce the number of units to 538 with a density of 24 units per acre. The size of the units will be increased and an effort will be made to maximize the number of individual entrances to units. The number of large units will be reduced to match the current need for smaller units. The number of 5 bedroom units will be reduced from 19 to 10, the number of 4-Br units from 124 to 38, and the number of 3-Br units from 244 to 143.

The BHA also requires the reintroduction of a street system, which will greatly reduce the isolation of the project from the community and help reinforce the distinction between public, semi-public, semi-private, and private areas. These improvements will also help in securing the site. Because there are no through streets the police can not properly patrol the project, and the lack of "defensible space" creates great hideouts for criminals. The increase of individual entrances will help reduce the access to common stairwells which are currently being used for criminal activities.

The guidelines also include specifications for improving the image of the housing. Pattern-book architectural elements, porch stoops, roof
treatments, color and window treatments are to be used to soften the institutional quality of Mission Hill Main. A community green space and green spaces with play areas, in the rear courtyards, will also be provided. Improving the image of the housing not only provides a better living environment but also help improve the self image of the residents which will induce them to better maintain their homes.

The guidelines established by the BHA will be used as a starting point for my work. While the planning agency should be commended for their comprehensive approach towards revitalizing Mission Hill Main, my argument is that the scope of the effort should be more extensive at the urban scale. This argument will be discussed further in the next chapter.

*note: BHA guidelines and site data were obtained from the URD grant application of May 26, 1993.
Chapter 2
Urban Plan

Due to Urban Renewal in the 1960's the Lower Roxbury and South End area underwent a great deal of demolition in preparation for future building and transportation projects. Although the amount of demolition that occurred might seem drastic, at the time there was a high vacancy rate (11.5%) in the area. Mayor Collins founded the Boston's Development Program in 1960, in an attempt to improve the slumping economy. The strategy at the time was almost total demolition and redevelopment, primarily due to declining population and the fact that
55% of the housing was considered inadequate (Rowe, P. 1993). Cities in U.S. experienced a great depletion of their populations in the period following W.W.II. There was a great movement from the cities to the suburbs facilitated by the affordability of cars and the inadequacy of housing in the cities at that time. As the population of the cities decreased, jobs and economic opportunities followed. These socio-economic forces shaped the present condition of the Lower Roxbury area. Unlike other affected "inner-cities" the Mission Hill area has great potential for improvement, due to existing the infrastructure and institutions.

Fig. 7. Urban design area
The transportation infrastructure in the site makes it a prime location for improvement. The site has both Green and Orange subway lines, as well as three major streets (Huntington Ave., Tremont and Washington streets) that connect it with downtown Boston. The availability of public transportation and prominent streets will give the residents the ability to access the many amenities of the city. The location of nearby institutions will make the site attractive for future development.

**Urban design strategy.**

The urban design strategy is to reconnect Lower Roxbury with the South End, and connecting the Longwood medical area, WIT, Northeastern, the MFA and the Mission Hill Main housing projects. The housing project will be the vehicle through which these connections will be made possible. The urban design strategy will attempt to repopulate this section of the city, by providing a variety of public spaces, more coherent forms of housing, accessibility to academic, cultural and commercial institutions. Increased density will help fill the barren areas that resulted from earlier attempts at development, and will help reunite the communities of Lower Roxbury to the South End. At the moment you can see a marked difference between the fabric of the South End before and after Massachusetts Avenue.

Extending a building fabric similar to that of the South End was the first attempt to reconnect the lower portion of the site to the rest of the city. Typical block dimensions approximately 200 by
Fig. 8. Longwood Medical Area, MHM High school, and South End.
400-1000 ft, were used to replace some of the superblocks of public housing that exist currently on the site. The siting of some of these buildings, was almost exclusively based on the orientation of the sun instead of on defining public areas and creating a hierarchy of spaces.

A new street system will be introduced throughout the site, in an attempt to relate the site horizontally to the South End, and vertically to the Longwood Medical area. Tremont street and the larger streets will be used to help define neighborhoods within the site. A similar grid to that of the medical area is extended into the upper part of the site because it is closely related to the layout of the housing project, WIT, and the Mission Hill and Greek Orthodox churches in the area. The grid is also similar to that of Madison Park High school. The site is currently bisected by the Orange Line which makes (vertical) connections between the site almost impossible, in the proposed plan the train lines will be covered over to facilitate correlation within the site. The Mission Hill Extension which was built in 1950 will be torn down and replaced. While the Mission Hill Main provides opportunities for improvement, the Extension does not offer much with which to work. It is one of those projects mentioned earlier in which the main concern was with the correct placement of the buildings on a superblock. The Extension will replaced with a variety of housing that is of similar typology to that in the rest of the city. The area between the Extension, WIT, and Northeastern will be used to relate the institutions with the Ruggles St. Station.
Fig. 9. Major streets, landmarks, and superblock housing projects.

Fig. 10. Proposed urban plan illustrated in superblocks to highlight the commercial center, and blvd.
It will contain apartment buildings, dormitories and offices for Northeastern, as well as commercial facilities.

Although housing predominates the new fabric it is interspersed with commercial and institutional buildings. The commercial areas will be concentrated on major streets, with a multipurpose center situated in front of the Ruggles Street Station. The multi-use center will act as the knuckle that relates the distinct neighborhoods to each other. Currently there is a lack of commercial facilities in the lower area of the site (below Tremont street). Commercial facilities in the site will be more convenient to the residents and may provide them with economic opportunities.

Even though there is a great deal of existing open space in the site, it is either in poor condition or unclaimed due to a lack of definition. The open spaces should have their own character, yet related to other public spaces in the city. The largest green space, in the proposed plan, is that adjacent to Madison Park High school which has one of the largest vocational programs in the city. The concept is to employ open spaces to give relief to the housing fabric, to resolve awkward angles, and improve the physical and psychological environment for the residents. Madison Park will serve as the anchor for the open spaces in the site. The area to the right of the T-Station will contain a green space that can buffer the housing from the train lines and serve as a community green, accessible not only to the local residents but to all.
A variety of housing types is envisioned for the site. The variety is to be controlled by simple guidelines such as a maximum height, curb and setback dimensions. There will be no stylistic guidelines, which is consistent with most of the neighborhoods in Boston. Currently there is sentimentality for some of the forms of the past, however architecture should be forward looking.

The buildings throughout the site should be a maximum of four stories along narrow streets and a maximum of seven stories on major streets. The heights are chosen in the hope of wide

Fig. 11. Preliminary proposal for urban plan.
helping define the streets, while allowing all of the buildings some access to sunlight and views. If the buildings are too high on a narrow street, the street becomes dark, cold and claustrophobic. Low buildings on a street do not help define the boundaries of the street from an experiential viewpoint.

**Final proposed Urban Plan**

After completing the preliminary urban plan for the site, the Mission Hill Main housing project was redesigned within its new context. The resulting final
Fig. 13. Preliminary design of MHM and its relationship to surroundings.

design grew out of a long process in which work done in a smaller scale reflected itself in the larger context. Most of the changes, on the preliminary urban plan, occurred in the area immediately surrounding the housing project.

While the preliminary plan addressed the issues of continuity, and interconnection, the housing project was still isolated from its community. Even with the introduction of through streets and the additions to the buildings, that helped claim the open space, the project was not integrated with its community. In the
redesign process, emphasis was placed on expressing the ideas of integration, interconnection and hierarchy more clearly.

The first move was to extend the boulevard in the preliminary plan through the project, in an effort to increase the relationship between the medical area, the project and Wentworth, and also to create a connection between the Fenway and the large proposed park associated with Madison Park High school. Furthermore the boulevard will provide a physical as well as a

Fig. 14. Final design of MHM with extension of blvd. and redesign of surroundings.
programmatic interrelationships. The buildings on either side of the boulevard will contain laboratories and residences for Harvard teaching hospitals, and dormitories, classrooms, and offices for Wentworth. Reinforcing the idea of integration and linkages, extensions of Madison Park high school and Roxbury Community College, as well as, retail and other commercial facilities will be located along the boulevard.
The introduction of the boulevard and redesign of the housing project required the reconfiguration of other areas in the site. The area immediately below the housing project had to be redesigned after the final design of the housing project, which will be further discussed in the next chapter. The advantage of jumping from small to large scale and vice versa during the design process is that it offers one the opportunity to address issues that might have arisen at an earlier scale. The aforementioned area was redesigned to bring it in
harmony with the new housing project. This area of the site can be seen as the edge between the city and the suburbs, and as such has the potential of becoming a transition zone between the city and suburbs. In the final urban plan the sizes of the blocks and buildings are smaller than those in the preliminary plan. Buildings similar to the redesigned housing project were employed to serve the dual purposes of providing transition and linkages. The new plan also provides WIT with a more coherent campus and tries to

Fig. 19. Diagram of suburban and urban fabric.
engage the Mission Hill Church and playground. Again emphasis is on providing variety and hierarchy of spaces. While it may be argued that the scope and expense of realizing the proposed urban plan is at best unrealistic, the main purpose of this thesis is to show what can be possible if revitalization of cities is the goal of all involved. There has been a lot of unfulfilled promises in regards to dealing with cities over the last twelve years. This is the first time, in a while, that a large grant has been given to help deal not only with the physical

Fig. 20. Redesign of WIT, and public places within project.
aspects of housing projects but the socio-economic as well. The $50 million improvement can be leveraged for much more from the surrounding institutions. The housing project is in a prime location which after improvement will make investors more likely to develop the surrounding area. Harvard has been rapidly expanding its teaching hospitals and support facilities, they have to undergo a community review committee before each proposed new building, giving residents an excellent bargaining position.
Over the next 10 years the BHA projects public and private investment of $1,619,240,000. With in the larger site the BHA is planning for expansion of the medical area, a Department for Motor Vehicles, and new Boston Police headquarters, and a new State High School Track Facility. A neighborhood retail mall is in the planning stages. The BHA is beginning a “walk-to-work” program, which promotes local housing for institutional employees, as well as, increase neighborhood resident employment by institutions.
Fig. 23. Mission Hill Housing Project, showing design module and bldg. types.
Chapter 3  
Mission Hill Main

The design of the Mission Hill Main housing project is based on and affected the urban plan discussed in the preceding chapter. The same principles that were used in the designing of the urban plan were employed in the revitalizing of the housing project. The existing project will be compared with my proposal as well as with the preliminary proposal of Domenech Hicks & Krockmalnic (DHK). Both my proposal and that of DHK attempt to follow the guidelines that were outlined in the opening chapter. The architectural guidelines set by the BHA included providing through-streets, a community center and green, senior housing, maximize private entrances reducing the number of and increasing unit size.

The site is in terrible condition at the moment, however it has great potential for improvement. The existing size and layout of the buildings are relatively easy to adapt. Unlike the Mission Hill Extension, Mission Hill Main contains within it certain qualities that make it more convertible. The projects buildings are all approximately three to four stories high, depending on the ground level. The buildings were also designed in pairs with dimensions that allow for through-streets. The project was generated from a few building types, which simplifies the redesign effort. The original elevations have some inherent architectural quality in terms of proportion and differentiation of window size with use.
Fig. 24. Existing site plan.

Fig. 25. Proposed site plan for Mission Hill Housing Project.
Comparisons

Using clues found in the original site plan, both the DHK and proposed site schemes, converted the pedestrian walkways of the original design into vehicular streets. Both schemes paired up the buildings, allowing for through-streets and creating controlled internal courtyards. Both designs allow for on street parking. The schemes differ in block sizes, and in the placement of the green space and community center.

Even though each proposal tried to satisfy the BHA guidelines, they differed in significant ways. The main differences result from the effects of the urban plan discussed in the earlier chapter. The extension of the boulevard into project reduced the dimension of the blocks and buildings on

Fig. 26. DHK site proposal.
Ward Street, producing an opportunity to introduce new building types and programs into the project. The boulevard allows for a transitional zone between the project, Wentworth Institute of Technology, and as illustrated earlier, Madison Park High school. The buildings along the boulevard will be taller than the housing in the project and will contain:

a. project housing  
b. senior housing and center  
c. dormitories for WIT  
d. Lab and offices for WIT  
e. Job training center run by Madison Park HS.  
f. shops and offices.

The introduction of the boulevard and new programming, into the project touches the heart of the thesis argument. While the DHK proposal produces a sound well conceived plan, which would be a remarkable improvement to the existing conditions. Their proposal does not take into consideration the bigger picture. Their proposal does provide the inhabitants with better landscaping, and a hierarchy of public to private spaces, but it does not integrate the project with its surroundings.

The DHK site plan fails to effectively deal with the monotony of the repetitive housing blocks. Their proposal does try to address this issue at the building level, but does not adequately deal with it at the site level. In the DHK scheme people can become easily confused trying to find their building due to the overall symmetry of the original design. While it may be a little unfair to criticize the DHK scheme, because it is still in the preliminary stages, it is not unjust to critique their
Fig. 27. Institutional programs
a. project housing
b. senior housing and center
c. dormitories for WIT
d. Lab and offices for WIT
e. Job training center run by Madison Park HS.
f. shops and offices.

- Community and shopping Centers
- Harvard labs, health and job training centers.
approach in tackling this difficult problem. While it is understandable that DHK could not realistically develop an entire urban plan before redesigning the housing project, but if they had expanded their field of study they could have produced a better scheme.

The approach advocated in this thesis, is a powerful design tool, even if it is seen as unrealistic to design at the urban scale considering all its political, social and economic factors. However if simply used as a tool during the design process, it generates so many unforeseen possibilities. The resulting design can take advantage of these opportunities and inform future development in the area. The product of this new approach will present never before imagined prospects to residents, governmental institutions and future developers.

Approaching the site plan with a broader outlook, helps unmask undetected potentialities. One such possibility was to integrate the community green space with the Mission Hill Playground. In the proposed site plan, a series of elements and events begin adjacent to WIT and end at the playground. In an effort to strengthen the connection between the project and the neighborhood, the community green was shifted from a central position, closer to the playground. In the proposed site plan the community center, supporting offices, and shops define the green space, thus making the green space an anti-room to the playground.
Fig. 28. Existing block plan.

Fig. 29. DHK scheme block plan.

Fig. 30. Proposed block plan showing connections to park and church.
The Mission Hill Church presented another chance to synthesize the project with its environment. An area facing the church was created to add another scale of public space. In an effort to relieve the repetitive nature of the housing project, different scales of public and semi-public spaces were deployed throughout the site. The area in front of the church complex will help create social contact between the church goers and residents. The buildings that define this space will house research facilities for the Harvard teaching hospitals, along with health care and job training facilities for project residents. Harvard has been purchasing buildings in the area to house its expanding programs, both the housing project and Harvard will benefit from a revitalized Mission Hill Main.

All these design interventions were done in order to create different experiences within the project, striving to relieve the repetitive nature of the project at the site level. At the building level additions and selective demolition were used as tools in order to better define the courtyards. Both proposals create semi-private courtyards, accessible only to the residents. But a stronger level of controlling the open space was achieved by adding and subtracting to the original building form.

The original building forms were generated from modules added resulting in four basic building types. Therefore deforming the original form, to adapt it to specific situations, was made with relative ease. All the new forms were generated by simply adding and subtracting a module.
Fig. 31. Existing buildings.

Fig. 32. Proposed site plan.

Fig. 33. Building additions and demolitions (dark).

Fig. 34. Overlay of existing and proposed site plans.
In the DHK scheme, the central buildings were demolished to create space for the community center and green. They also make a small addition facilitating senior housing and center. The courtyards in the larger size blocks are ambiguous spaces because they are only defined by gates. The proposal maintained most of the footprints of the original buildings.

The new design approach advocated in this thesis, clearly illustrated its power at the site level. In comparing the two proposals for the Mission Hill housing project. The obvious difference between the two schemes resulted directly from, the design process of working at different scales. The next chapter will explore a block in more detail as well as investigate unit plans.
Fig. 37. Diagram of courtyards, DHK proposal.

Fig. 38. Diagram of courtyards, proposed design.
Fig. 39. Proposed site plan.

Fig. 40. Chosen block.
This chapter explores a building block in more detail, using the same design principles used to create the urban and site plan. The block was chosen because of its location, which allows for the exploration of four different street conditions. The block location, therefore, allows the lessons learned during the building development, to be applied elsewhere in the site.

The block chosen is bounded by four streets that differ in size and importance. Saint Alphonsus street at the edge of the site, is a fairly busy street as it draws traffic from Huntington Avenue. It is lined with tall apartment buildings facing the housing project. McGreevey way will become a major street as it connects Longwood Ave. with the project and eventually to Madison Park HS. The importance of McGreevey way is emphasized by its size and the new programs of its aligning buildings. Horadan way will be slightly narrower than McGreevey way, reflecting its primarily residential nature. It is also narrower at the ends to control the amount of through-traffic and to distinguish it from the other streets. A smaller residential street completes the block.

The different conditions on each side of the block, were taken into account during the redesign of the buildings. The lower floor of the buildings along Saint Alphonsus St. and McGreevey way will be
used for small shops and offices. The lower floors on Horadan way and the residential alley way will be used for mechanical equipment and storage. The lower floor on McGreevey way will be lengthened making them deeper and more suitable for commercial use. On St. Alphonsus street the size of the lower floor was increased by combining two modules. On both streets, space was provided for the shops to expand onto the sidewalk during the warmer months. At the intersection of St. Alphonsus and McGreevey way, some attempt was made to architecturally express its significance.

The basic organization of the block is to have the entrances facing the streets and entrance courtyard and to provide private yards and a semi-private
court, in the larger courtyard. The organization is based on zones that range from the very public (the street) to the unit. More specifically the following zones were employed: street, sidewalk, front yard, entrance, bay window, unit, rear yard and semi-private court.

Due to the wide scope of the design process, the units were not going to be addressed in the redesign of the project. However, when the design process began investigating the housing project at the block level, preliminary redesign of the units was undertaken. Due to time constraints, the design of the units is not at the same level as the urban or the site plans. The approach to redesigning the units was to first find ways to enlarge their size. Converting three bedroom to two bedroom units and merging two units into one. Bay windows were used to add space to living rooms and also to enliven the elevations along the primarily residential streets. The units are primarily flats, with only one duplex unit used to better define the rear courtyard.

The building elevations were intended to reflect their specific context. McGreevey way second in importance only to the boulevard, has a more sober elevation. Its elevation also reveals its commercial first floor, through the use of larger wall openings. The elevation of Horadan way and the alley way are more animated. Bay windows, awnings and gates, were not only functional, but are features that add variety to the longer elevations. They are also elements that can be better appreciated by pedestrians.
The organization of the units was patterned after the original intend of giving all the major rooms access to a window, whenever possible. The typical unit can be accessed from the common stair well, the position of the door was changed from its original position, thus enlarging the usable space of the living rooms. The kitchen configuration was changed providing space for a dining area. The bedrooms were enlarged by either eliminating a bedroom or taking some space from a living room with a new bay window.

Upon further reflection and gaining access to a more complete listing of tenant wishes, the proposed unit designs are still inadequate. They are still too small, and do not comply with some of the residents needs. The major failure of my
scheme is that it does not provide private entrances to most of the units. Some of the proposed units do not contain separate dining areas, which I recently discovered is one of the major concerns of residents.

Although the proposed units are better than the existing, they could have benefited from a couple more passes through the design process. Even though some of the units are inadequate, I still feel strongly that the overall approach of attacking the redesign of public housing at several scales, is still valid. The process advocated in this thesis, remains a strong design tool, although some of the results are less than satisfactory. The inadequacy of the unit plans is not a function of the design process but an issue of time constraints.
Domenech Hicks & Krockmalnic unit proposal.

The unit plans and building sections and elevations are presented with the permission of the BHA and DHK. The DHK proposal cleverly addresses the wishes of the residents and BHA guidelines. They propose a complete gut rehabilitation of the interior maintaining only the original shell of the buildings. All of the interior partition walls, wiring, HVAC units, kitchen appliances and bathrooms will be replaced. The building is made of a simple concrete columns and slab frame, which facilitates drastic renovation.

In order to satisfy the BHA guidelines concerning private entrances, DHK proposed to convert the original units into duplexes over apartments and vice versa, and triplexes. By increasing the
Fig. 50. DHK first floor plan.
size of the units vertically, limits the number of units with common entrances. One of the advantages of reducing access to shared entrances, is that it will prohibit the stairwells from being used for criminal activity. It is also believed that private entrances increase the tenants sense of ownership, which results in better maintenance of their units. The use of different unit types not only maximizes private entrances, but also helps provides variation to the elevations.

In most of the units, the entrance of the units was placed in front of the kitchen, with the living room adjacent. A separate dinning room was created at the back of the units besides an internal staircase. In the upper stories, the bedrooms were placed towards the front of the buildings above the living room.
Fig. 53. DHK second and third floors.
DHK maintained some of the basic quality of the original elevation. The size of the window openings, and the original design of the stairwell facade were maintained. The architects introduced stoops, porches and bay windows in an effort to enliven the elevation. These elements give the elevation a set of different dimension that help add scale to the buildings. Exterior stairs are used as a second means of egress and access to duplexes over flats. The exterior stair also assist in mitigating the monotony of the existing facade. However, exterior stairs need to be handled carefully because they most often than not tend to be out of scale. The DHK unit plans do fulfill the requirements of the BHA, but some of the units seem awkward, however it should be recognized that these are preliminary designs.
Fig. 56. Existing elevation.

Fig. 57. DHK sections and elevations.
Fig. 58. Mission Hill Main.

Photo by Michael Charmey

Fig. 59. Proposed elevation.
Chapter 5
Conclusion

There are great numbers of public housing projects throughout the United States that will have to be either demolished or drastically improved because of their current dilapidated conditions. Some of these projects have become urban holding pens, isolated from their surroundings, in contradiction to their designers intentions.

Housing projects were seen, at the beginning, as great improvements over the cramped and unsanitary tenement houses of the first half of this century. However after the economic and social changes that resulted from the technological revolution after the second world war, the housing projects were transformed into urban jails. The great migration of people from the cities into the suburbs reduced tax revenues and services, as well as economic opportunities for those left behind. The inadequacy of basic services such as education in the cities, due to reduced revenues, has left certain sections farther behind economically and with no means to change their conditions.

Manufacturing jobs that were the heart of cities, have also moved to the suburbs and new technology has made a great number of manufacturing jobs obsolete. There is an increasing demand for highly skilled and more productive workers which will further isolate inner city residents, unless something is done promptly.
The redesign of existing housing projects, properly done, can become part of a greater effort to improve the lives of their residents. Even though there are national budget constraints, there exist a new spirit of hope in the cities due to Bill Clinton assuming the presidency. The people of Mission Hill Main housing project will have their hopes realized. The large grant that has been given to the BHA for the redevelopment of the housing project will hopefully be the first of many that can benefit those who have been forgotten over the last twelve years.

The desire of this thesis is to advocate the redefinition of the problem of revitalizing existing housing projects. The scope of the redesign effort should be widened to include and take advantage of the surrounding areas. Besides improving the basic living conditions at the unit level a strong effort should be made to physically integrate the housing projects with their environments. The BHA made a commendable proposal that for the first time will try to deal not only with the buildings within the project but also with the socio-economic problems. However, the scheme of the selected architects does not go far enough in integrating the project into its community. They produced some creative solutions at the unit and site levels, but fell short of utilizing the opportunities offered by the site's location and neighboring occupants. There seems to be no vision for the future of the site and its environs. A more comprehensive design approach, would have revealed unforeseen possibilities.
The advantage of attacking the problem by beginning at the urban scale is that it reveals undetected opportunities. It also clarifies the designers intentions at the city and site scale. My intention was to unify Lower Roxbury area and Mission Hill Main with the South End and the city at large. The urban design aspect of the design process made it clear that the project could become play a pivotal role in reconnecting the city.

During the design endeavor it also became evident that architecture alone could not deal with the myriad of issues involved. The social and economic programs of the projects revitalization will be more important. However, architecture can strengthen the social and economic aspects by helping with issues like security and territoriality. Through the introduction of new building types and programs, architecture can also aid in the socio-economic sphere. Also good design can alleviate the stigma that is attached to the forms associated with public housing, improving the physical and psychological environments.

The execution of the proposed urban and site plans is not very feasible given the current economic and social trends, but that should not diminish the importance of the advocated approach as a design tool. Presenting a comprehensive vision to the clients will allow them to think in broader terms, and while it probably will not produce the same urban interventions, it might influence future development at the conceptual level. At least the final design will affect the neighboring buildings.
Listening to the children

Half the people living in Mission Main Housing Development are children. Here's what they say they like and don't like about life there.

What we like:
"Food, summer programs, our group the Superkids, people who clean up, keeping animals alive, people who let plants grow, clean-up, when people take care of babies, kids in school, when we learn stuff, the alphabet, polite people, clocks."

What we don't like:
"Killing cats, killing people, trash on the floor, killer clowns, killing rats, shootings, drugs on the roof, fighting, drinking, needles, people who do karate and kill each other, gangs breaking windows, sticking needles in people, throwing eggs, fires in dumpsters, bad words, firecrackers, knives."

By Tom Mashberg
GLOBE STAFF

Fig. 60. Boston Globe article 8/26/93.

The urban plan proposed is based on the assumption that if a strong argument and economic incentives are made people will begin to move back to cities. The site plan is based on the hope that physical and economic integration should be the purpose of public housing as opposed to their current function as breeding grounds for poverty and crime. The architecture is hoped to improve the living conditions, increase the sense of community and reduce the monotony of the original buildings. The process allows the designs produced at different scales to inform each other and hopefully producing a more integrated scheme. The appendix will contain some of the preliminary designs which will show the extent of this journey, and some scenarios for phasing in the urban and site plans.
Fig. 61. Proposed urban plan.

Fig. 62. Drawing of Blvd. St. Michele from *Great Streets*, illustrates the types of streets envisioned for the project.
Fig. 63. Preliminary elevation.
Appendix
Preliminary Designs

Presented in this section, are preliminary designs for the urban and site plans. They will hopefully provide you with a glimpse of the design process and the advocated design approach. A theoretical urban phasing plan will illustrate a possible scenario for executing the proposed scheme. The phasing scenario is based on possible urban improvements caused by the redesign of Mission Hill Main.

Fig. 64. Preliminary elevation.

Fig. 65. Preliminary elevation.

Fig. 66. Early sketch.
Fig. 67. Drawing of Blvd. St. Michele from *Great Streets*.

Fig. 68. Early sketch.

Fig. 69. Section of area facing the church.
Fig. 70. Cheap Street

Fig. 71. Brock St. Bath

Fig. 72. Fairmount Blvd. Ohio

Fig. 73. Rambla de Catalunya Barcelona

Drawings from Great Streets, Jacobs.
Fig. 74. Early elevation

Fig. 78. Preliminary elevation.

Fig. 75., Fig. 76., Fig. 77. Early sketches
Fig. 79. Axonometric of final design

Fig. 80. Sketch of block facing church.
Fig. 81. Early urban plan, too severe.
Fig. 82. Preliminary block plan.
Fig. 83. First redesign of MHM.

Fig. 84. Early site plan.
Fig. 85. Early site plan.

Fig. 86. Early site plan, intro. of blvd.
Fig. 89. Early site plan.

Fig. 90. Final site plan.
Fig. 91. First phase of urban design.
Fig. 92. Second Phase.
Fig. 93. Third Phase.
Fig. 94. Fourth Phase.
Fig. 95. Final Phase.
Fig. 96. Mission Hill Main.
References


Rowe, Peter G. Modernity and Housing. MIT Press. Cambridge MA 1993


Sarin, Madhu ; Chowdhury et. al. "Chandigarh oggi". Casabella v52. p.16-25, Oct. '88.


