

A CAMPUS PLAN FOR ROXBURY COMMUNITY COLLEGE:  
A CONTINUED URBAN "STREET" NETWORK AS A FRAMEWORK FOR  
A COMMUNITY COLLEGE ORGANIZATION

by

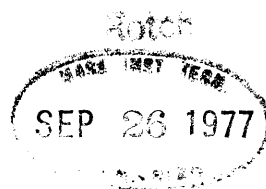
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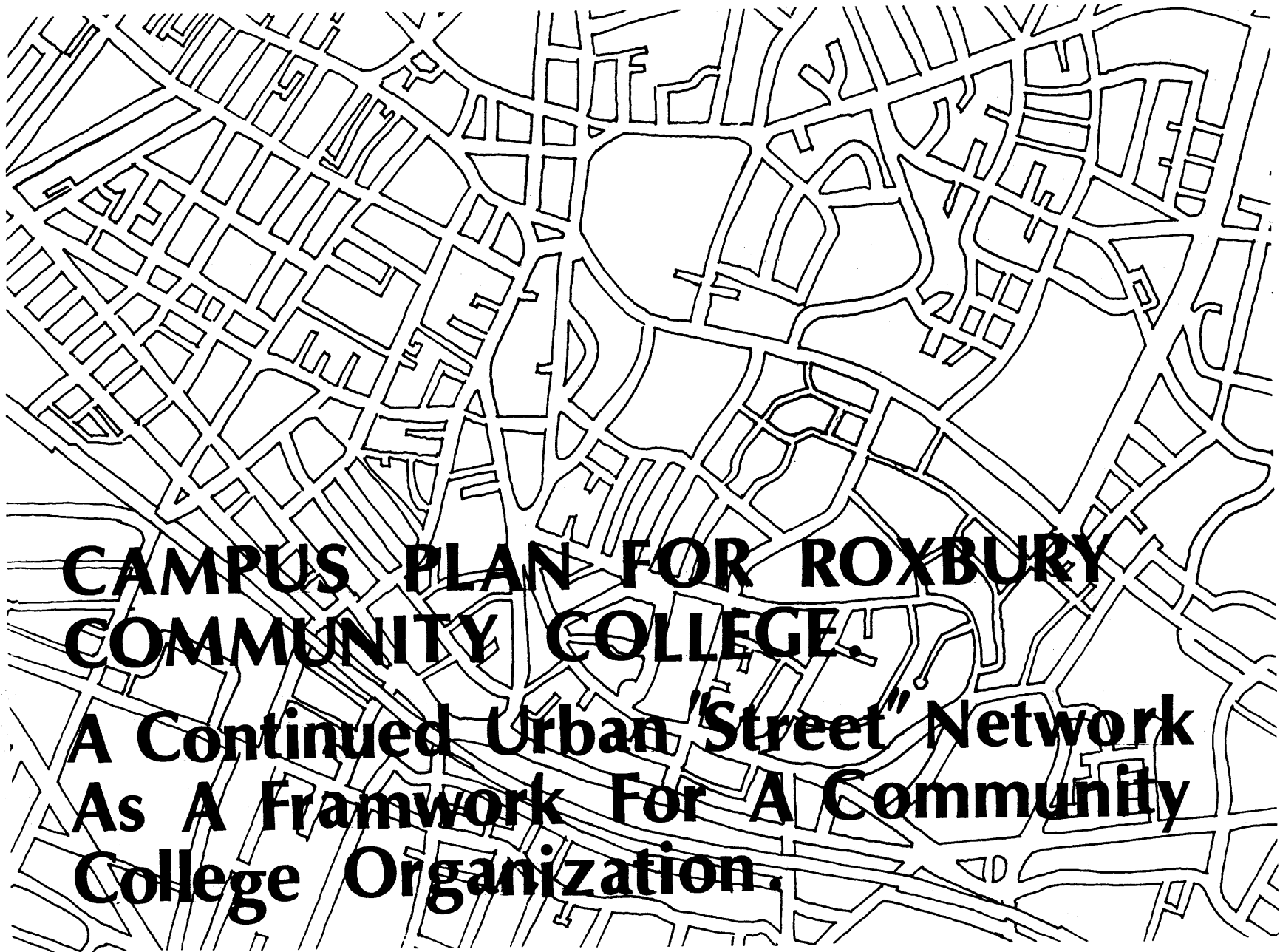
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**CAMPUS PLAN FOR ROXBURY  
COMMUNITY COLLEGE.**

**A Continued Urban "Street" Network  
As A Framework For A Community  
College Organization.**

ABSTRACT

A CAMPUS PLAN FOR ROXBURY COMMUNITY COLLEGE: A CONTINUED URBAN "STREET" NETWORK AS A FRAMEWORK FOR A COMMUNITY COLLEGE ORGANIZATION by JENNIFER KERR SHAKESPEARE

SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE 15 JUNE 1977 IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARCHITECTURE

The intention of this work is to use the site, program and context of a new campus for Roxbury Community College to explore vehicular and pedestrian movement networks as a means of creating a framework for a community/college exchange. The study includes a look at the physical, social and political context of the greater Highland Park community in order to derive design guidelines for the planning of the 8 acre sloping site on the western bank of Highland Park. It also includes a brief history of the south-west corridor highway construction project and the status of present plans for that area.

Design references drawn on include circulation characteristics of Italian Hill towns, scale juxtapositioning as seen in Teatro Marcello and Trajanus Market in Rome, the writing of Chris Alexander on the distillation of formal patterns in the urban environment, the studies of Stanford Anderson on the publicity of streets in Paris.

The study culminates in an architectural testing of a circulation network at 40th scale on the northern third of the site and a more specific testing of a pedestrian street/college building interface at 1/16th scale using the program of the student center. The working method and design intention was influenced by a conviction that the layering of physical systems, none of which are complete in and of themselves achieves a spatial organization with a greater range of use possibility; that the incompleteness of such a built framework invites the participation of people other than architects in the "inhabiting" process.

Thesis Supervisor: David Lee  
Title: Assistant Professor of Architecture and Urban Planning

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# INTRODUCTION

I suppose at the outset I should attempt to explain why I chose to undertake a project with such a broad scope for a four month thesis study. The reason is fairly simple. Roxbury Community College offered a programmatic intention, a site and a context which easily lent itself to a more long term interest of mine in the implementation of systems of movement as a primary architectural means of generating form. The idea of a community college specifically programmed to mesh with the needs of its immediate and extended community offered a vehicle for exploring the continuation of existing urban movement patterns as a means of achieving integration. This meant that my concerns would not be so much with the specific elements of its program, but rather its general intentions. It also meant that I would not begin to spend the four months in an advocacy role with the Roxbury community. My intention was to explore the implementation of a specific movement network. This I chose to do by exploring the physical components of such a network as soon as possible in the process. In other words this is not a planning study nor an orthodox urban design approach, but rather, and some may say prematurely, a look at the architectural implications of an urban design concern for movement across and within the site. The hope was that in exploring the architecture immediately rather than at the end, as in more orthodox urban design methodology, valuable information would be derived at the outset, to inform the creation of urban design guidelines rather than having those guidelines tested only at the time of actual project design. In taking a physical approach to the problem, I am trying to make the case for integrating an architectural "testing" into urban design methodology early in the process as a means of bringing about better urban space.

Specifically, the R.C.C. site with its linear, strung out shape and its steep topography offered clear choices as to ways and means of moving across it. The physical context of a once highly defined 19th century Victorian residential neighborhood on the high side of the site and a major arterial access to Boston on the low side demonstrated two very different systems of movement which would have to be resolved

somehow in the treatment of the site. The social context of Highland Park, (the site location), as a community in political and physical transition informed the college project with a very loaded political mission for which its physical scale and architectural rendering would be the hallmark.

As a further lead-in to this study, I spent the fall in Urbino, Italy, again using an educational program to explore movement systems as a means of bringing about an urban/university integration. The problem there was trying to find a physical means by which the branch of the Italian university system at Urbino, housed in large but opaque renaissance buildings on dark and narrow medieval streets might be made more inviting to the local population, who are economically dependent upon, but unable (or uninterested) in taking advantage of the university. Capitalizing, among other things, on needs for more publically accessible urban "green" space and a need for sunlight, we proposed a new "street", or rather "amble", through back gardens of the university, where in fact a public way had once existed in the 16th century. The idea was to link this way back to the existing street spine by short connecting streets through the university "territory" rendering it transparent, comprehensible and hopefully over time, attractive to community involvement. The hope was that the interface created along this network by academic and public concerns would be a first step in precipitating a mutual curiosity and understanding which might eventually spark the question on the part of both students and the public: why was this branch of the university, located in a culturally and artistically significant renaissance hill town, surrounded by a declining farm economy, sought after by the tourists in the summer, why was such a university specializing in linguistics and pharmacology; why could it not have a more symbiotic relationship with the town by restructuring its curriculum to focus, to some extent, on the town as a resource and leave pharmacology to a less distinctive setting.

The Roxbury program is yet a step further along in this integration process due to its being a community college by definition. But certainly the physically reciprocal nature of the Urbino model (moving the community into the university and the university into the community) has some application.

Another premise on which my working method is based is a notion that there is such a thing as an architectural competence that is compatible with a "user participatory" process. In such a process designed to be about physical intervention or alteration in the range of structures from playgrounds to communities, each participant represents a competency whether it be the very fact of where he lives, his knowledge of the whereabouts of funding, or any number of other interests. The architect, too, has a competence. It is not as a spokesman for the community, nor in procuring of funding; rather, it is an important role as a coordinator and formal consultant. Recently there has been a growing emphasis on the role of the architect as a coordinator and advocate of grassroots community generated projects. In this thesis I would like to presume his/her role as coordinator and specifically address the sensitive issue of the architect as formal consultant.

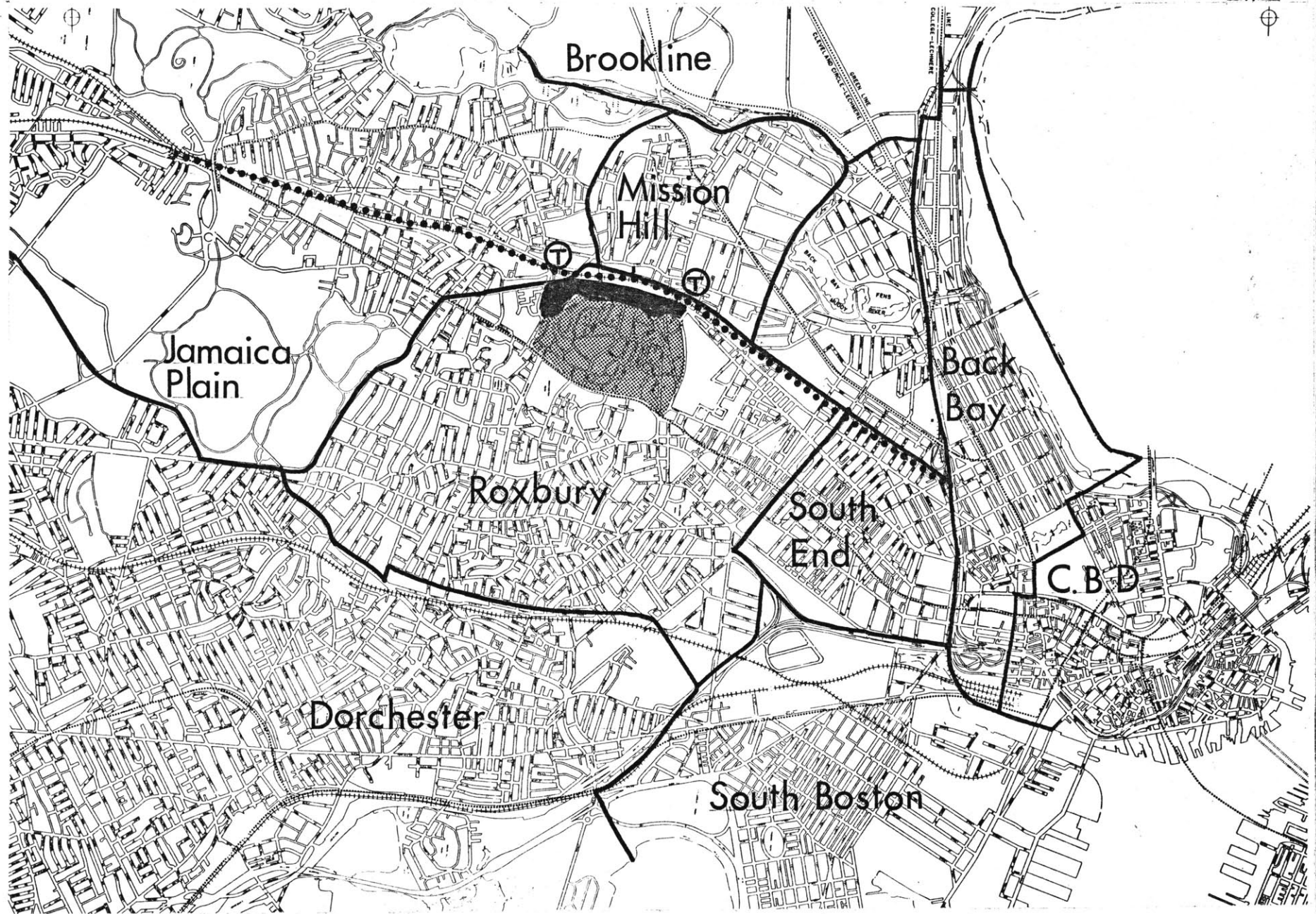
Work has been done in this vein by Chris Alexander, John Habraken and Maurice Smith to name but a few. In opposition to Modern Movement premises of monolithic, completely designed wholes, research into the development of a vocabulary of physical "parts" seems to lend itself more appropriately to a design process in which others will participate. So often well researched clearly expressed concerns painstakingly assembled over months of deliberation in what is coming to be known as "participatory" process, are in the end insensitively translated into physical form by an architect and are void of any group interaction characteristic of the process up to that point. This, I think, is the result of the very nature of a design methodology based on a fairly singular notion of form (the parti)



developed by a chief designer with a team of subordinates who by definition are incapable of incorporating a large range of people in the architectural design process. It is important for an architect to have a facility for translating ideas into physical form; but this does not necessarily imply a totalitarian method. Rather, for an architect to develop "kits" of workable physical pieces at varying scales allows a much greater number of people to take responsibility for their final assemblage with the architect only acting as a consultant in that phase.

For R.C.C this would mean investigating such physical components as building systems, materials, methods of closure, etc. to find ways in which they physically symbolically, psychologically enhance a kind of site, and building organization that allows for the architectural input of many people; in essence to suggest some "parts" which best lend themselves to a framework for growth, a framework for infill, a framework for varied use, a framework for "participation".

# **SETTING THE CONTEXT.**



Brookline

Mission Hill

Jamaica Plain

Back Bay

Roxbury

South End

C.B.D.

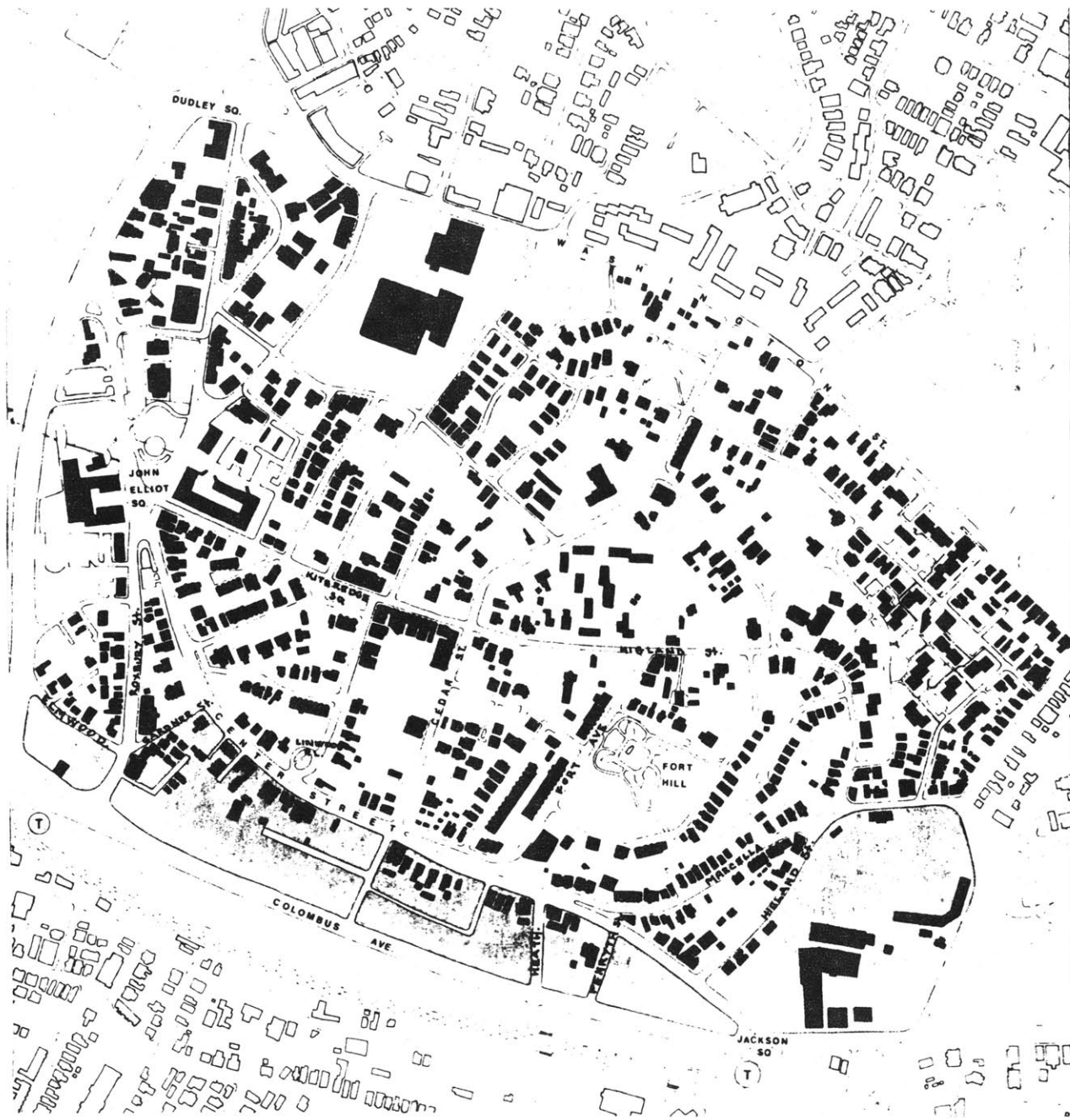
Dorchester

South Boston



## History

Highland Park, where the college will be located, is one of Boston's 19th century streetcar suburbs. Originally settled as farm land during the Revolution, its village centers were at John Eliot Square and Dudley Square. High Fort atop Fort Hill was strategic in driving the British out of Boston. In the 1800's, as wealthier Bostonians began to take on second homes, Highland Park was a convenient and picturesque setting with its highlands overlooking Boston. It became a fashionable location for country estates. As the streetcars extended out further from Boston, the wealthy were superceded by the up and coming middle class. There was a strong feeling at the time that the city was a bad influence, and new lifestyles precipitated by women and children achieving their rights, made the suburbs with their open air and greenery, popular for family life. At the turn of the century the influx of mill workers serving the mill industry in the Highland lowlands warranted the introduction of the row house tenement, the subdivided house and, of course, the 3-decker. By 1915 the industry had begun to bring the ethnic population to Highland Park. Today it is the heart of the ethnic and racial population in Boston.

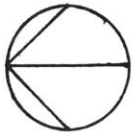
Because of its hilly topography it, like its neighboring Mission Hill, has remained a residential community. It is bordered on the east by Washington Street, a main artery of Roxbury, on the south by Jamaica Plain, on the west by the tracks of the Penn. Central Railroad and Columbus Avenue which is a major access to Boston from the outlying southern suburbs. This artery separates Highland Park from the neighboring Spanishspeaking residential community of Mission Hill, the site of two large and run down housing projects, Mission Hill and Bromley Heath. On the north Highland Park is bordered by land that was cleared in anticipation of the construction of I-95 (but more of that later). To the northeast is Dudley Station, a major bus and MBTA transfer point. Its presence on



### HIGHLAND PARK

-  Site
-  Existing Buildings

### ROXBURY COMMUNITY COLLEGE



Washington Street has supported the commercial heart of Roxbury there between Dudley Street and Ruggles Street. At present Highland Park is serviced commercially by this district.

### Transportation

Highland Park lies at the juncture of some of the most important cross town and arterial streets in greater Roxbury. I have mentioned Columbus Avenue. The recent construction of New Dudley Street now affords a major cross-town line connecting Huntington Avenue to the west with Dorchester to the east via Tremont Street, which at its intersection with Columbus, continues as New Dudley Street and then Dudley Street. Centre Street, which in pre-revolutionary times was the only route out of Boston, now connects Jamaica Plain and the Fenway to the west with Dudley Station business district by intersecting Columbus Avenue at Jackson Square and continuing on through Highland Park on a north-south access to Dudley Street. Cedar Street locally connects Washington Street to the east and Columbus Avenue to the west by bisecting Highland Park.

Highland Park was at one time slated to border a new southwest expressway, I-95, a major eight lane limited access elevated highway, connecting the suburbs and Route 128 with the downtown central business district, and an access to the Southeast Expressway at Ruggles Street. Land was cleared in anticipation of this project from Northeastern University on the north to Jackson Square to the south. After considerable community resistance in Roxbury, Jamaica Plain and Forest Hills in 1970, Governor Sargent halted construction and since then, a variety of modified development packages have been proposed, among them (and for only a small portion), Roxbury Community College.

### Southwest Corridor Projects

The southwest corridor, as it is now referred to, lies as a strip of cleared land 150 feet wide, creating a major discontinuity between the two halves of Roxbury. To the north of the R.C.C. site (parcel 18) the Boston Redevelopment Authority has proposed zoning for hotel, restaurant, and cinema construction - an entertainment block bordering on Northeastern University and hoping to compete with Boston's downtown entertainment center. Also north of the site on New Dudley Street the \$30 million dollar Campus High School project

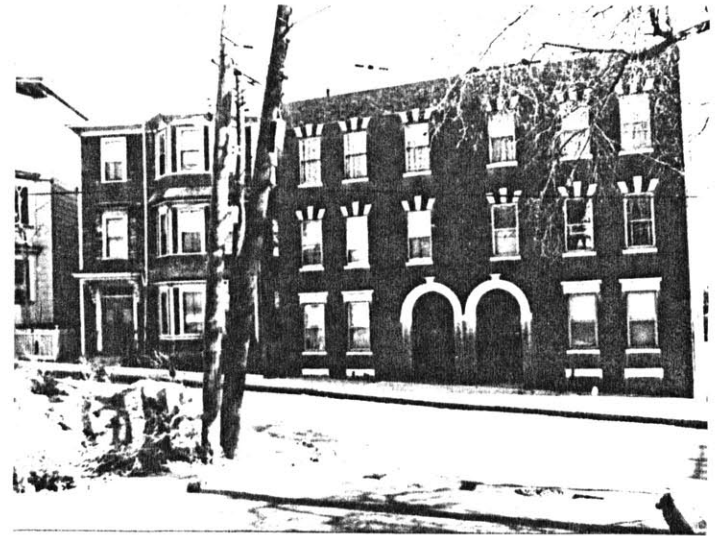
has recently been constructed and will eventually draw 5000 high school students city-wide.

The proposed projects along the corridor have recently been linked with a major restructuring of the transportation network in Roxbury. The Orange line MBTA, until now an elevated transit line on Washington Street, effectively feeding the commercial district there, will be moved to the southwest corridor and coupled with additional tracks of the Penn. Central line in a depression paralleling Columbus Avenue. The target date is 1984. For the meantime the Penn. Central tracks will be relocated on the midlands branch, a parallel line further east. When the construction of the depressed tracks in the corridor is completed they will be transferred back with the relocated Orange line. The "EL" will then be removed from Washington Street. In many respects this would appear to be a death blow to the Dudley Station commercial district. But the presence of the telephone company, insurance companies and several banks suggest a degree of stability.

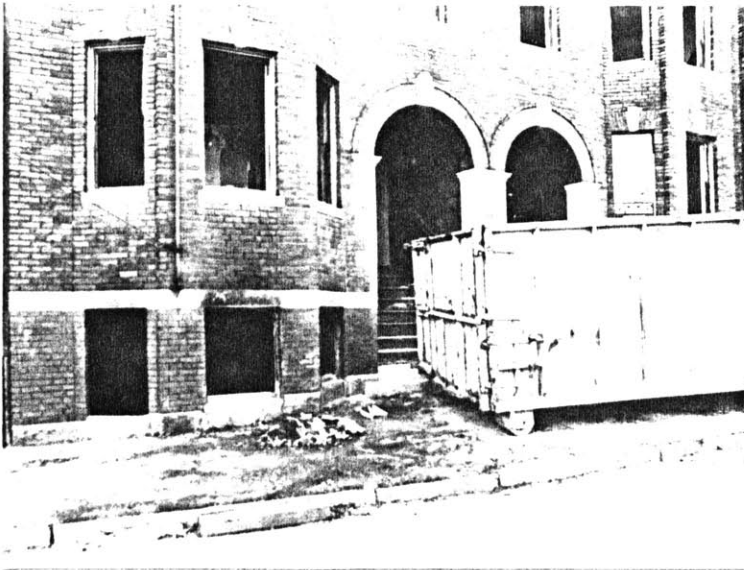
Coupled with replacement of the Orange line will be the re-alignment of Columbus Avenue which will remain a six lane artery, accessed at Jackson Square, Centre Street and Roxbury Crossing.

#### Neighborhood Profile

The Highland Park neighborhood itself is 183 acres of land, 37% of which is residential, and 27% of which is vacant or unimproved. There are 22 acres available for new building, 10 acres of underutilized land, 100 structurally sound buildings for rehabilitation. According to a report by Jacki Crichlow (Highland Park--A Development Plan, 1976), the neighborhood could sustain 1260 new and rehabilitated housing units. The housing typology consists of 3-4 story attached row houses and triple deckers both containing 3-6 units each, and conventional Greek Revival, and Queen Ann detached houses. Its ratio of residential land to community facilities and open space is low enough to indicate a need for small scale recreational facilities dispersed throughout the community. 80% of present open space is concentrated in the underutilized High Fort Park and the well utilized John Connelly Field (part of the R.C.C. site). For a population of 5000 there is one junior high school, the Timilty School, four elementary schools, and the Highland Park Free School, all constricted by site inadequacy. There is a large population of elderly people in need of plazas, parks and indoor social and cultural activities. There is also a need for more day care facilities due to the limited capacity of present facilities.



THE ROMAN MODE IN AND AROUND HIGHLAND PARK





Highland Park, as a community, is in the process of trying to regain ownership of its land and restore its original residential density. R.A.P., the Roxbury Action Program which is a neighborhood based group headed by George Morrison, is presently responsible for the restoration of 300 housing units, the planning of 130 new MHFA housing units and the restoration of John Eliot Square as a commercial center. The aim is for John Eliot Square to contain the Roxbury Headquarters of the Museum of African American History, housing by R.A.P., new parks and plazas, a branch bank, a grocery, professional offices and restaurants, and the Contractor's Association of Boston.

Other resources available to the Highland Park include:

Roxbury Civic Center

Roxbury Courthouse and library complex

Dimrock Community Health Center

Roxbury YMCA and Boys Club

Shelburne Recreation Center

Roxbury Medical Technical Institute

Opportunities Industrialization Center

Southwest Corridor Coalition with Field Placement Services

National Association of Afro-American Artists  
(the cultural focal point of Roxbury)

Unity Bank

Greater Roxbury Development Corporation

Highland Park and Roxbury as a whole share problems of increasing poverty, residential abandonment, urban renewal and the havoc of highway construction projects. Accompanying these problems is Boston's shift in economic base from one of manufacturing to a more service oriented base. This change highlights a need for more professional and clerical education. The context is thus set for the introduction of a community college onto the slopes of Highland Park; a community college which by its very site and nature will effect the outcome of these many pending issues.

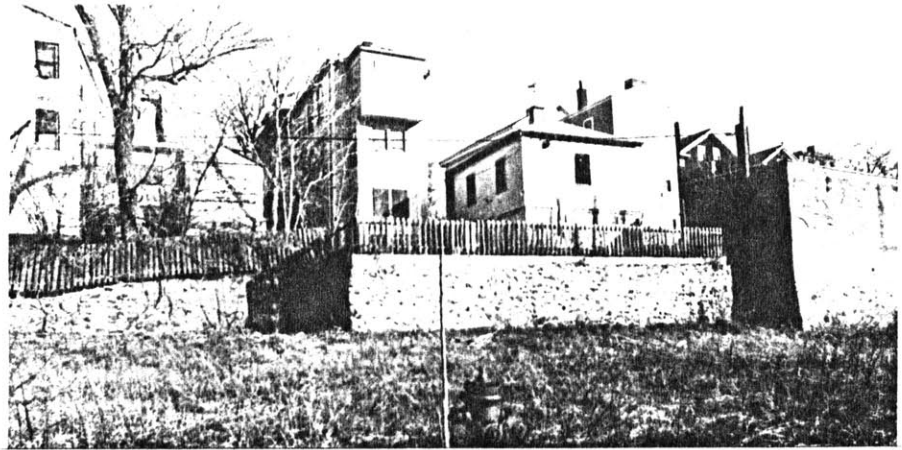
**A COMMUNITY COLLEGE**

The proposed college will serve up to 5000 students from the South End, Roxbury, Jamaica Plain, Dorchester, Mattapan, Hyde Park, Roslindale, and West Roxbury. It is designed to be an occupational program for those not wishing more than two years of college, and a transfer program for those wishing to enter four year colleges. It is a day, evening and weekend facility. Originally opening in 1973 with 400 students, the college adapted a storefront in Grove Hall. It moved to a larger site in 1975 with 939 students. Typical of the 12 existing Massachusetts community colleges, it is again bursting its seams and is in need of the more spacious site on the banks of Highland Park.

The program calls for studies in business administration, science and math, humanities, social science, occupational training as well as a major audio-visual center. An optional proposal which I am adopting includes day care facilities, an "Over 50" club, food co-op, legal aid and social welfare offices, a community kitchen, well baby clinic and a preventative health clinic. Its educational objectives include providing higher education at low cost, continuing education to adults, high school equivalency programs, bilingual programs, involvement programs for the elderly, career counseling and job placement services to all students and acting as a liaison to business, industry, health agencies and civic groups.

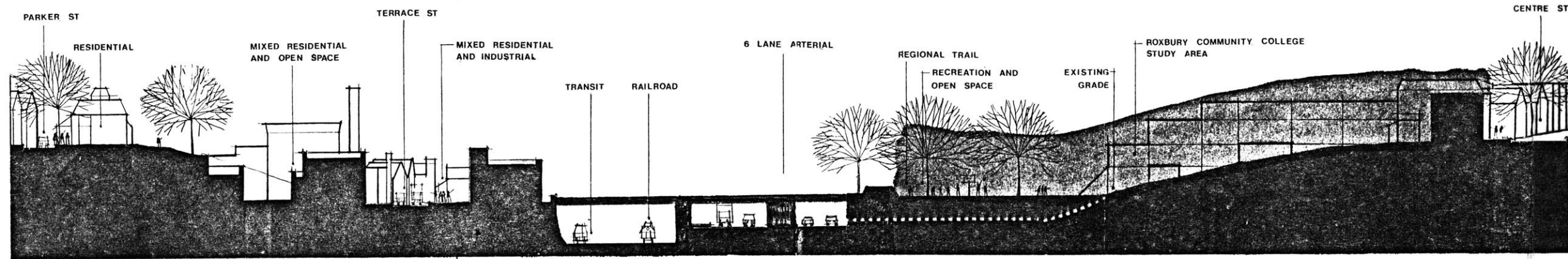
Access to the college will be largely pedestrian from 10-15 minutes away. The Orange line will serve the college from both Jackson Square and Roxbury Crossing. There will be a combination transit and commuter line station at Ruggles Street and Northeastern, one and two stops north of Roxbury Crossing. Bus service is provided on Centre Street, Heath Street, Columbus Avenue, Washington Street and Tremont. Columbus Avenue, Tremont and Dudley Street, Centre Street and Cedar Street will provide the major vehicular accesses. From statistics compiled on the 12 existing Massachusetts community colleges the indication is that two-thirds of the students at R.C.C. will be night students.

# **SITE ANALYSIS**



THE SITE

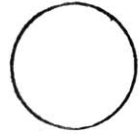




SITE SECTION

ROXBURY AT CEDAR STREET FH5

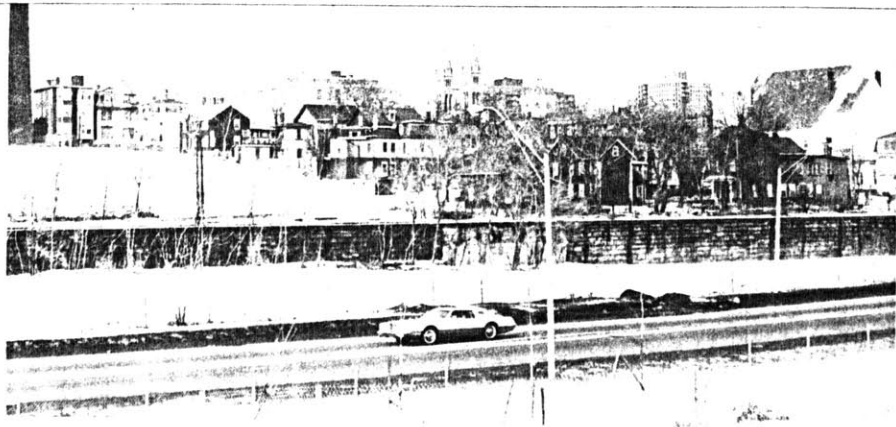
ROXBURY COMMUNITY COLLEGE



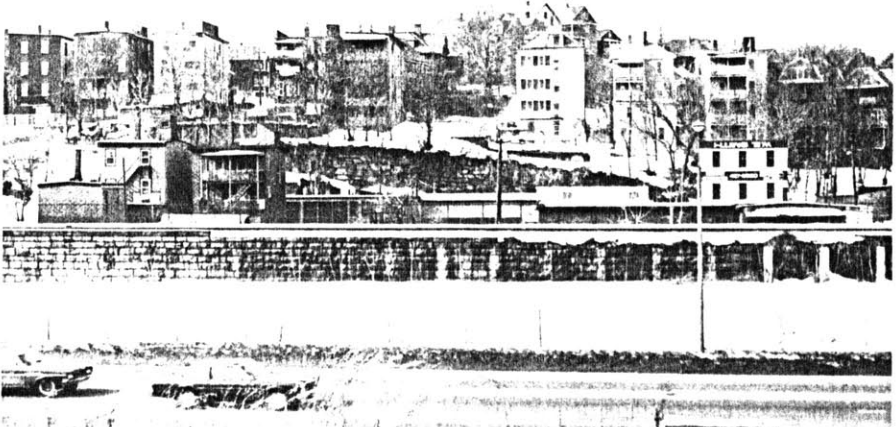
Probably the most outstanding feature of the R.C.C. site is the topography. It consists of approximately 4 1/2 acres of steeply sloping land (10-36% slope) between Centre Street and Columbus Avenue. 3 1/2 acres of more gradually sloping land compose the south end of the site. This area, known as John Connolly Field, is a very popular playground for residents of Highland Park and the Mission Hill and Bromley Heath housing projects across Jackson Square. With the realignment of Columbus Avenue the Boston Redevelopment Authority is proposing to add to the level ground of the first 4 1/2 acres of the site not only by moving the highway further west, but also by infilling a portion of the low lying site parallel to Columbus Avenue. There is virtually no large vegetation on the site. This affords a very open view across Columbus Avenue to Mission Hill. To the north there is an outstanding view of the skyscrapers of downtown Boston.

Centre Street offers a fairly permeable eastern border to the site. Lined on both sides of the street with detached, and for the most part, single family Greek Revival houses, it is the most active thoroughfare in Highland Park. It is one of five streets that intersect the site on an east-west axis. All of these streets access Columbus Avenue and one, Heath Street, passes beyond through Jamaica Plain eventually to Huntington Avenue. This will be one of the main vehicular accesses to the site. The others as I have mentioned in Chapter 1, will be Tremont and Dudley Streets with connections to Warren Street for cross-town travel, Broadway, Gardner Street, Centre Street and Marcella Street as accesses from Highland Park, and Columbus Avenue with connections to Washington Street as regional access. Pedestrian access will be primarily from Roxbury Crossing and Jackson Square and in Highland Park at Roxbury Street, Linwood Place and Centre Street. There is a further penetration of the site by four dead end streets about 80 feet long, three near Linwood Place, (Harrington Avenue, Centre Place and one without a name), one between Cedar Street and Heath Street (Merton Place) and one off of Broadway (Anita Terrace). Harrington Avenue and Centre Place and Anita Terrace now access housing. Although views from the site are very open, those same vistas observed from Centre Street are usually framed by these dead end streets and their adjacent houses. Merton Place used to extend further and with a 90 degree bend eventually intersect Cedar Street. Before the clearing of the southwest corridor there was housing along both sides of this street. The standard condition at the high side of the site along Centre Street is a zone of 30-70 feet occupied by a house and back yard and then a retainer wall with an average drop of





VIEWS FROM THE SITE ACROSS COLUMBUS AVENUE







CEDAR STREET



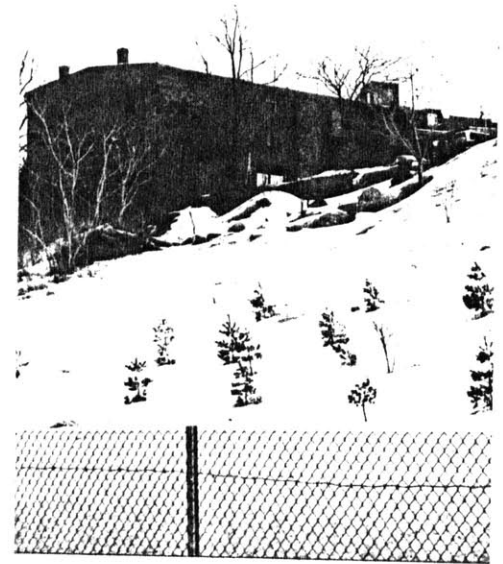
CENTER STREET

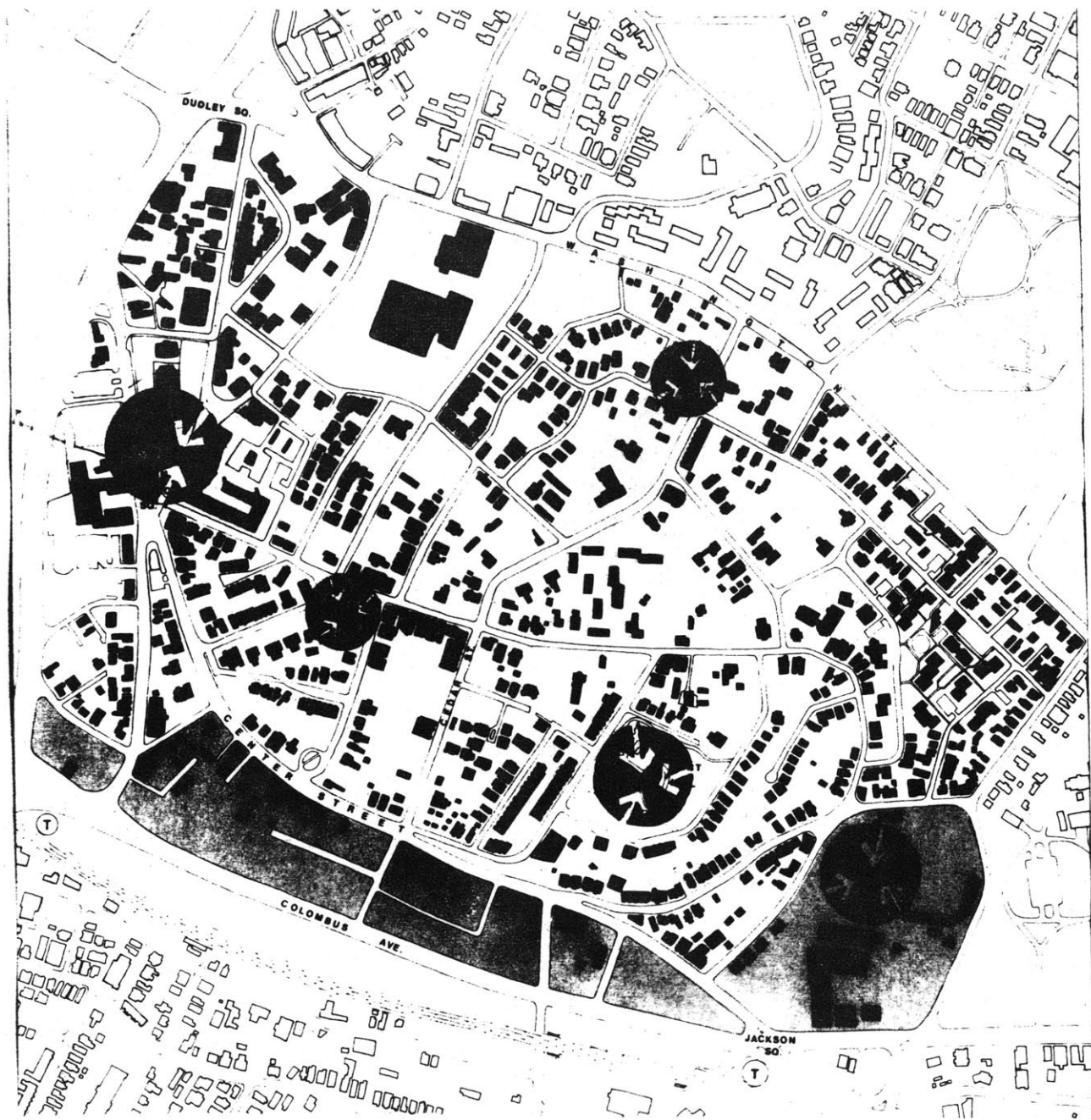
of between 10-20 feet and then the most precipitous part of the site ending in a short stretch of flat land before Columbus Avenue.

There are several existing buildings on the site. All those fronting on Centre Street will remain. I propose to remove several large abandoned brick buildings near Cedar Street, as well as one at the end of Centre Place. Another large brick building just below Centre Place I will retain as a community theater. An Italianate house on Penyrith Street housing Project First will also be retained.

The present transportation belt consisting of the four tracks of the Penn. Central Railroad and six lanes of the Columbus Avenue surface artery is all but a visual barrier between the sloping site of the college and the Mission Hill neighborhood opposite. Just beyond the railroad tracks on the Mission Hill side is a belt of light industrial structures further buffering the two neighborhoods from one another. The major interfaces at present take place at Roxbury Crossing, Heath Street and Jackson Square.

John Eliot Square is accessed from the site on both Broadway and Centre Street about two blocks northeast. If it is revitalized commercially as R.A.P. is proposing it will, in conjunction with the college, create an active linkage along Centre Street and Broadway. This activation could make Linwood Place, a large open space at the crest of the hill, a more vital gathering place. Kittredge Square, behind Linwood Place to the east, is one of the existing gathering places of the neighborhood. R.A.P.'s offices are located there. It, too, is an open space with row housing bordering two sides and an abandoned apartment house to the east. Together the two nodes of Kittredge Square and Linwood Place begin to suggest pedestrian access to the site across Centre Street and down Centre Place. A connection between Merton Avenue and Fort Avenue suggest a similar kind of pedestrian access from the residential area surrounding the high fort park. A minor activity zone at the intersection of Heath Street and Cedar Street is flagged by the D.C. Market, which is something of a local hang-out for teenagers. Cedar Street is the spine of the neighborhood. It is the most heavily used street by vehicle traffic in Highland Park due to its direct access to Columbus Avenue from the heart of the neighborhood as well as the Washington Street area beyond. Broadway, another street accessing Columbus Avenue from John Eliot Square, has several renovated office buildings as well as the beginnings of a small commercial node where it intersects Gardner Street. My sense is that these two streets, despite the parallel

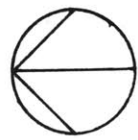




### HIGHLAND PARK GATHERING PLACES

-  Site
-  Existing Buildings

### ROXBURY COMMUNITY COLLEGE

- 



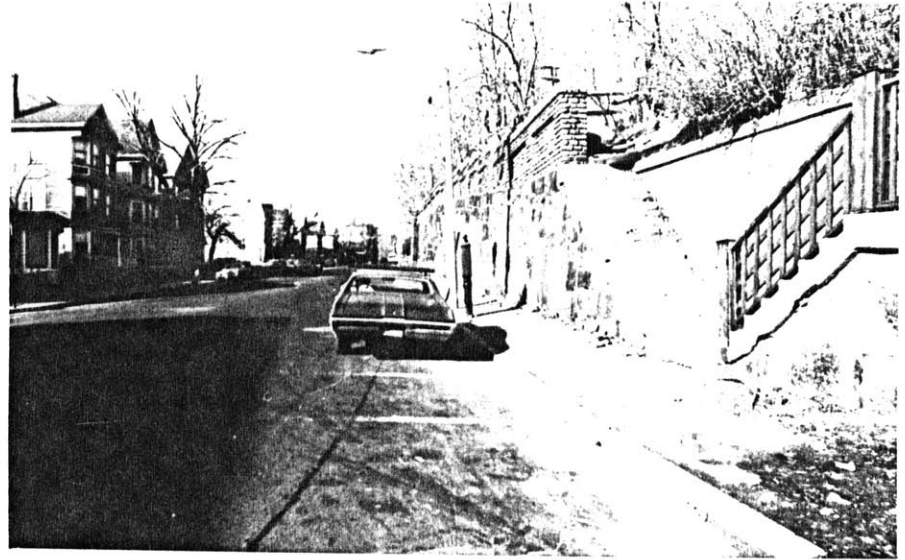
ROXBURY CROSSING



KITTREDGE SQUARE

access to the north by New Dudley Street and Heath Street to the south, should remain through streets continuing to access Columbus Avenue; Broadway, in order to support the commercial node beginning there which might help to create a commercially active strip between Gardner Street and John Eliot Square; and Centre Street because it is already a well used convenient access to Columbus Avenue, a ready-made potential interface zone between the community and the college.

Although the general character of Centre Street is residential there is one place along it where I felt that the college might physically enter the community. Linwood Place once surrounded by five houses now appears vacant with only the three smaller of the original houses flanking the south side. The remaining two lots offer approximately 5600 square feet, that if built upon by the college (in a residential scale and character), might, by being accessed from Centre Place, begin to be an element in a physically reciprocal diagram between the college and the immediate community.



VEHICULAR AND PEDESTRIAN STREETS  
IN ROXBURY

# **DESIGN OBJECTIVES**

Early on the design issues presented by the site were fairly clear. The juxtaposition of a distinct residential community with its diverse ethnic, social, architectural and political history, and the anonymous sweep of railways, cars, and subways in the valley was a relationship that would have to be resolved in the design of the college. In a similar duality, it would have to address the needs of the smaller community of Highland Park to which it would be added, while at the same time meeting the needs of the greater Roxbury, Jamaica Plain, South Boston area.

Although the existing program called for 5000 students, examples of other, soon outgrown, community colleges indicated that the design must be a growth framework allowing local growth to each aspect as well as long term expansion across more of the site. Other examples of community colleges indicated the viability of adaptive reuse of existing structures. Highland Park offers an abundance of historically significant buildings as well as civic centers and community action centers that might be receptive to housing parts of the college. A physically "open" organization would not only reach out into the neighborhood, but also bring community agencies and services into the heart of the new complex. With a physical reciprocity as a premise for the design of this growth framework, a continuity might be maintained between the old and the new, the residential and the institutional, the public and the private, the small scale and the large scale.

The first decision was to limit the study to what would take place on the site itself. This piece, then, of the greater college organization might serve as evidence of a much greater programmatic reciprocity happening neighborhood-wide between the community and the college: the possibility of aspects of the college program being housed in rehabilitated buildings in John Eliot Square and Kittredge Square as well as along Cedar Street; local program sharing with the Roxbury Medical Technical Institute, Opportunities Industrialization Center, National Association of Afro American Artists, R.A.P. and Campus High School; regional program sharing with Northeastern University, Children's Hospital, Boston English and Latin High Schools, The Museum of Fine Arts, Roxbury YMCA and Boys Club. The piece I chose to explore on the site would evidence this kind of exchange model by providing community support services within the college proper and establishing a network for outreach.

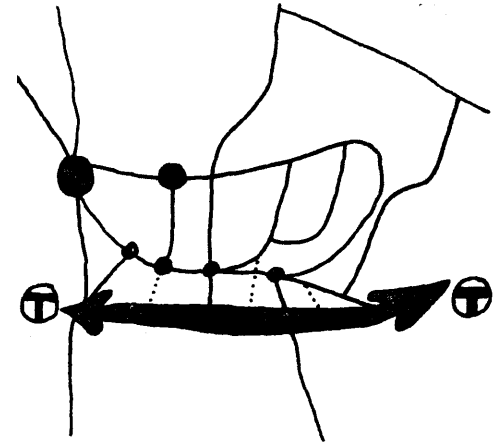
Such a network would have to emerge from a clear set of priorities as to whether the site would be treated as an urban or an institutional property. The problem with the southeast expressway project had been that it, like most highway con-



struction, had been regarded as an institution in and of itself that was to be overlaid onto the urban fabric, a fabric which existed at another scale with a delicate set of priorities, most of which would have gone ignored causing insurmountable discontinuities much the way railroad tracks have traditionally functioned in the urban environment. It seemed that a college program also had the potential of deriving its own institutional organization for a large urban site at the expense of those small delicate urban networks (a continuation of the existing adjacent circulation network) on the site before even considering the introduction of a college circulation network.

If this urban network could be designed to function with urban attractions as incentives for cross site traffic then the more institutional organization or the college could be later introduced in a piecemeal fashion to support and punctuate this urban network. This sequencing model would be advantageous to the college as well because it could selectively intercept the site's activity rich urban network to create viable interfaces with the community. If the through streets across the site were closed the college would have to create from scratch a vehicle for a community college exchange.

In this light the program of Roxbury Community College presents the challenge of reinstating a continuous urban network that could act as a framework for the reunification of Roxbury across Columbus Avenue. If the site were treated as a buffer zone between Highland Park, the discontinuity in the urban fabric would be further reinforced. The college program requirements for community outreach make the permeability model even more viable.



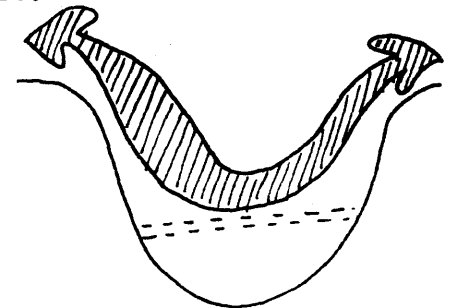
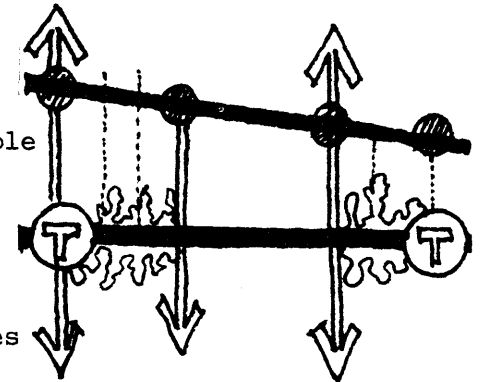
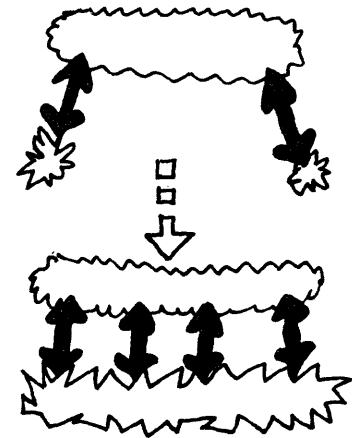
### Means of Achieving an Urban Network

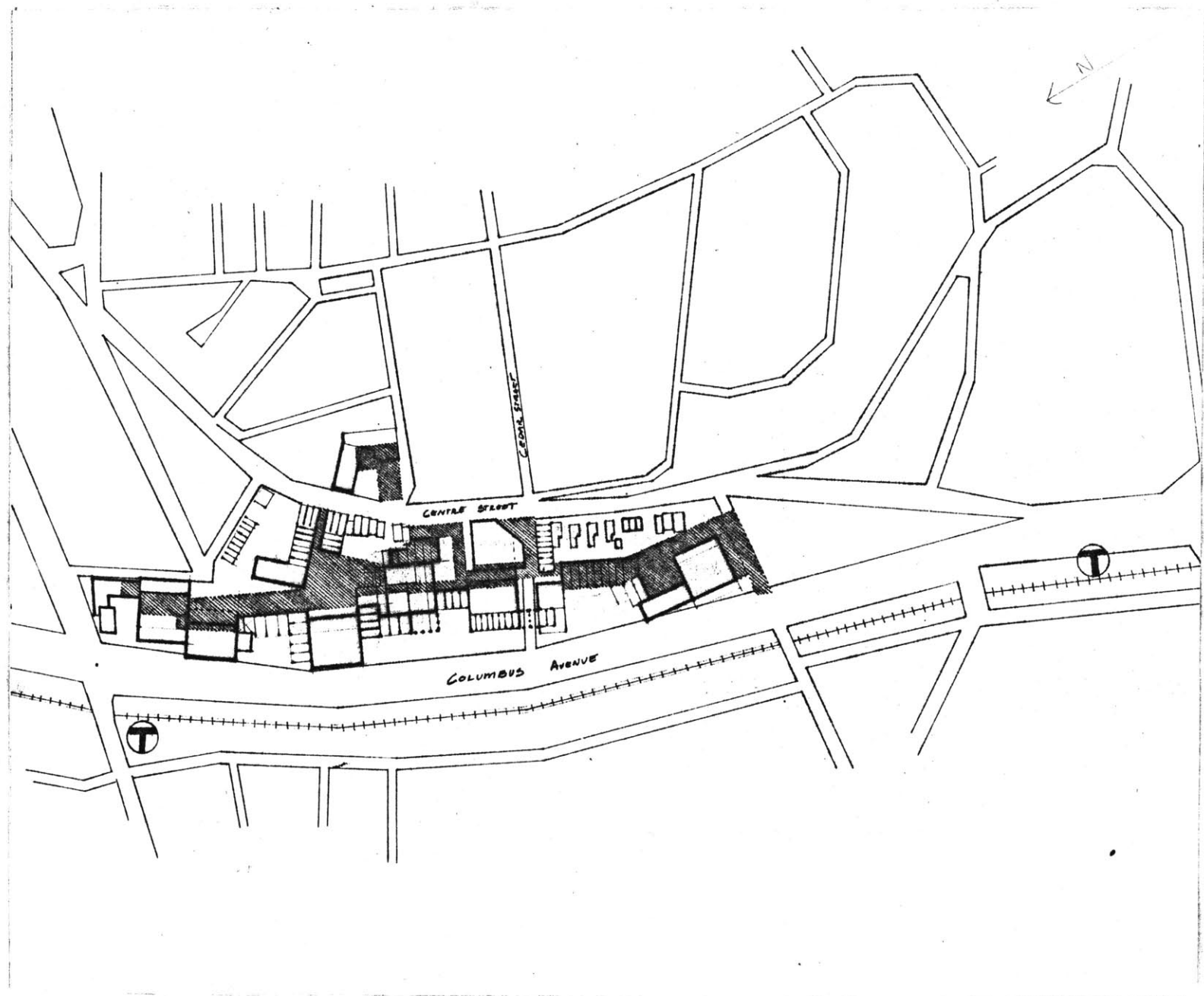
The presence of the new Orange line stations at Roxbury Crossing and Jackson Square would be strategic in creating pedestrian traffic across the site. Their proximity to major through streets like Broadway and Centre Street, however, meant that most likely these streets would be used as the paths of the traffic versus any real intra-site crossing. In order to create general cross-site movement the urban attraction of the two stations would have to be extended into a zone between them - a zone that offered an incentive for urban movement across the site from all along Centre Street.

Taking into account both the need for additional open space and recreational facilities, as well as the problem of the physical rift created by the transportation belt discouraging pedestrian traffic between the two Roxburys, a possibility offered itself for creating this urban attractive zone - a park built over Columbus Avenue and the tracks of the Penn. Central. Respecting a city-wide network that had been ruthlessly imposed on Roxbury seemed more and more academic. Mission Hill was visible from Highland Park, similar in its residential fabric, why shouldn't there be a direct exchange made possible through the creation of a common facility between them which also might provide a physical bridge between the communities. A park built over the highway (and taking advantage of the 15'-20' of fill that the BRA was proposing anyway for the valley) would be unique in that it would be the only flat land suitable for softball fields, tennis courts, etc. between the two hills. These facilities would be a dispersion of the athletic facilities already existing in the south end of the site.

If regional attractions could cause cross-town and cross-site traffic on New Dudley Street, Heath Street and Centre Street, and Columbus Avenue could provide the incentive for local cross-site vehicular traffic on Broadway, Gardner Street and Cedar Street, then, continuing to descend in scale, the park combined with the MBTA stations could act as the incentive for cross-site pedestrian traffic. The logical paths for this pedestrian movement seemed to be the dead end street accesses to the site due to their proximities to activity nodes along Centre Street.

The north-south vehicular access along Columbus Avenue also was in need of a more intimate interface with the site. There was no real way to get off it and move across the site in a secondary fashion along a north-south access. Nor was there a way in which one could leave Centre Street and move in a parallel fashion within the site. The next aspect of the "continued urban

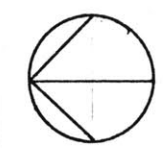


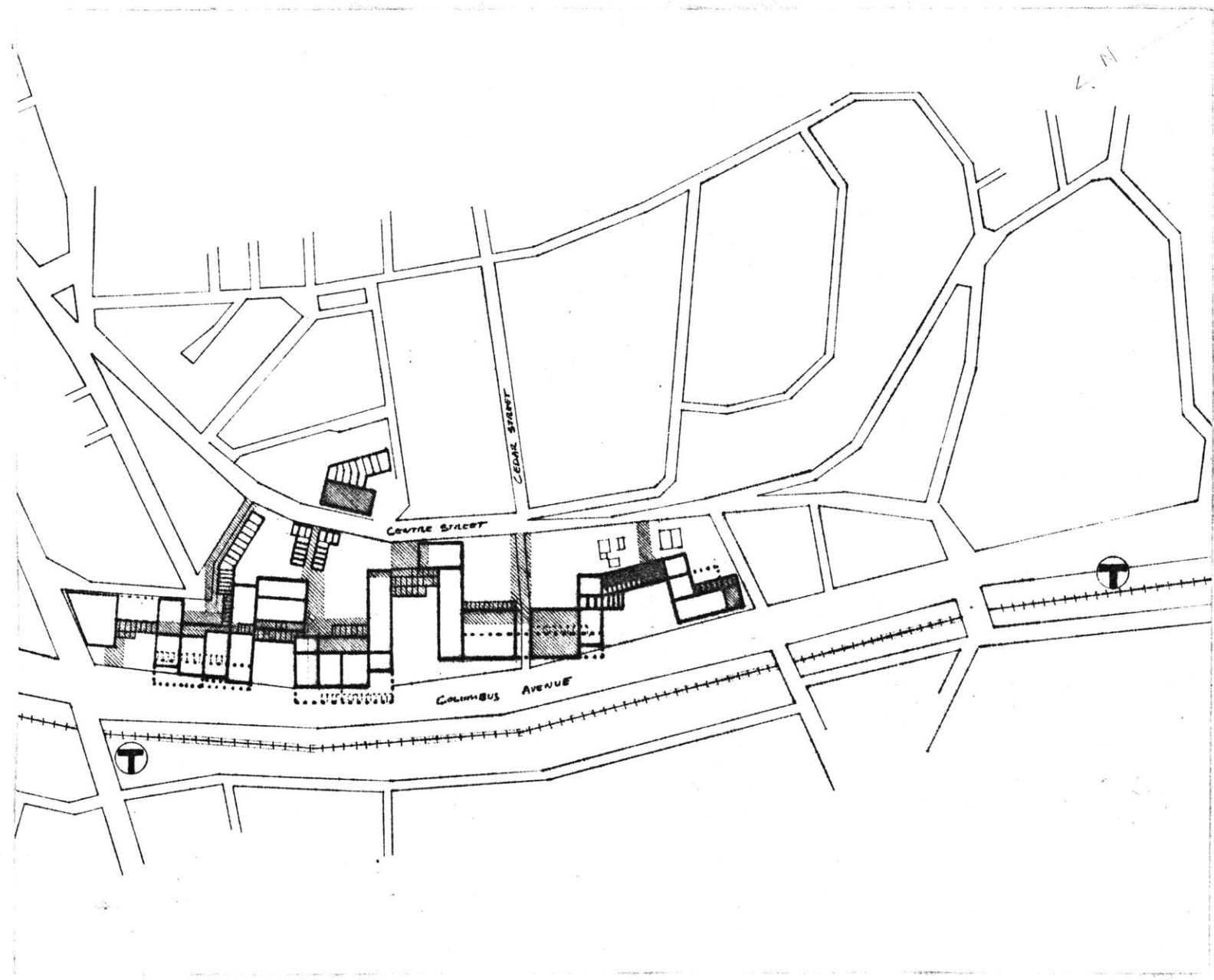


LINEAR  
DISTRIBUTION  
MODEL

 Distribution

ROXBURY  
COMMUNITY  
COLLEGE

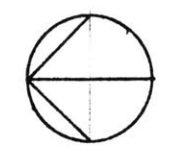




# NODAL DISTRIBUTION MODEL

 Distribution

# ROXBURY COMMUNITY COLLEGE



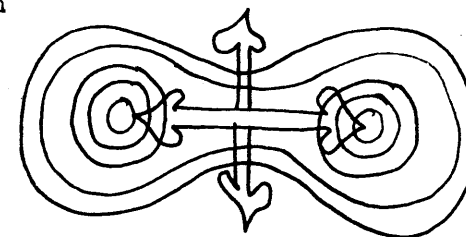
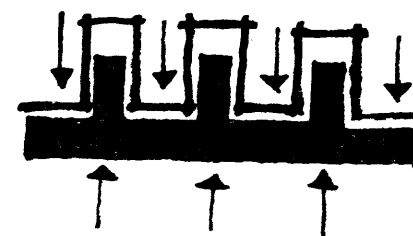
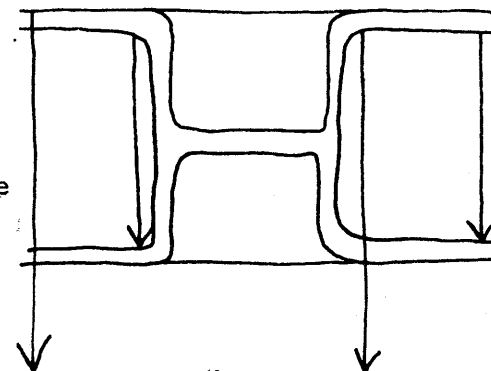
network" then might be a new street (really the revival and extension of Merton Street) between Cedar Street and Heath Street.

The entire proposed network at this point (sans college) would offer primary and secondary north-south vehicular interfaces with the site, regional and local scale east-west vehicular interfaces, and east-west pedestrian interfaces. This would leave for the college circulatory organization the possibility of supplying the north-south pedestrian interface. In this sequence of network-making the college organization would be forced to recognize and support an urban network versus imposing yet another institutional network on a site which has not yet established its urban definition.

#### Means of Achieving an Urban-Supportive College Organization

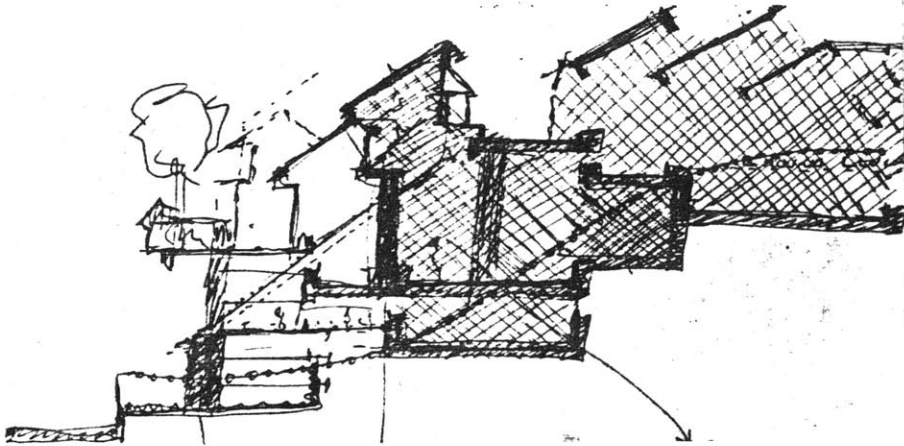
This site being as long and narrow as it is immediately suggests a linear organization for the college. The steep grade up to Centre Street reinforces this model by affording easy circulation with the contours and more difficult circulation against them. The only trouble with this model is that it suggests an autonomous "college" street which would have little interplay with the community activity zones running parallel on Cedar Street. A trade-off is soon evident between a strictly linear organization for the college (in keeping with its urban function as a north-south pedestrian path) and a more nodal organization encouraging east-west penetration of the site (more in keeping with the diagram of reciprocity between the college and community). To establish a compromise, the east-west pedestrian streets can be strengthened and built along as strong elements of the college organization supplementing their role as community paths.

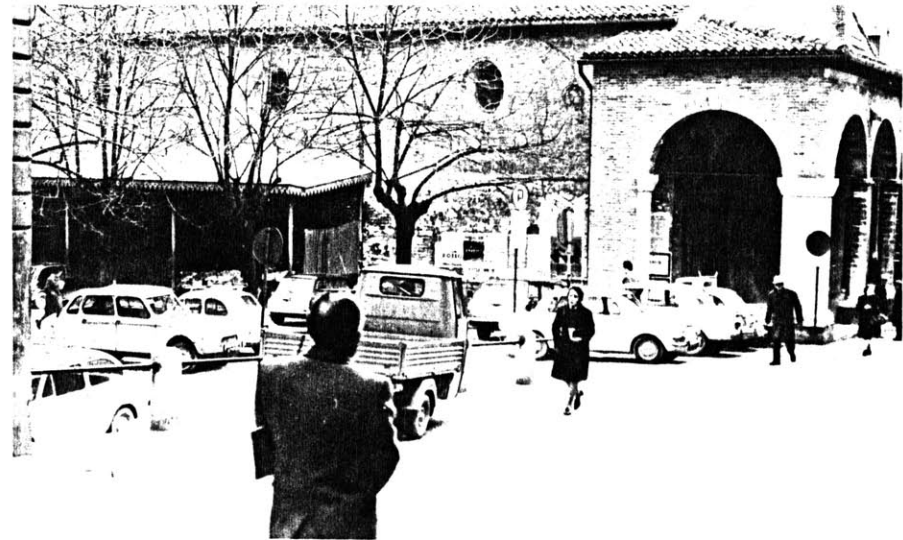
The problem then arises as to whether establishing across-contour pedestrian movement, especially on the steeper grades is viable. Here, Urbino, Italy offers precedents and further information on how, in fact, movement is perpetuated along streets. Urbino is a small, but physically dense town built on two hills with a saddle in between. The major axes of circulation are directly from the top of one hill to the top of the other and perpendicularly between the hills across the saddle. The streets confront the contour directly. In their most active areas there are means of getting off the street and traveling secondarily along side it or actually turning 90 degrees off it into a larger or smaller static node.



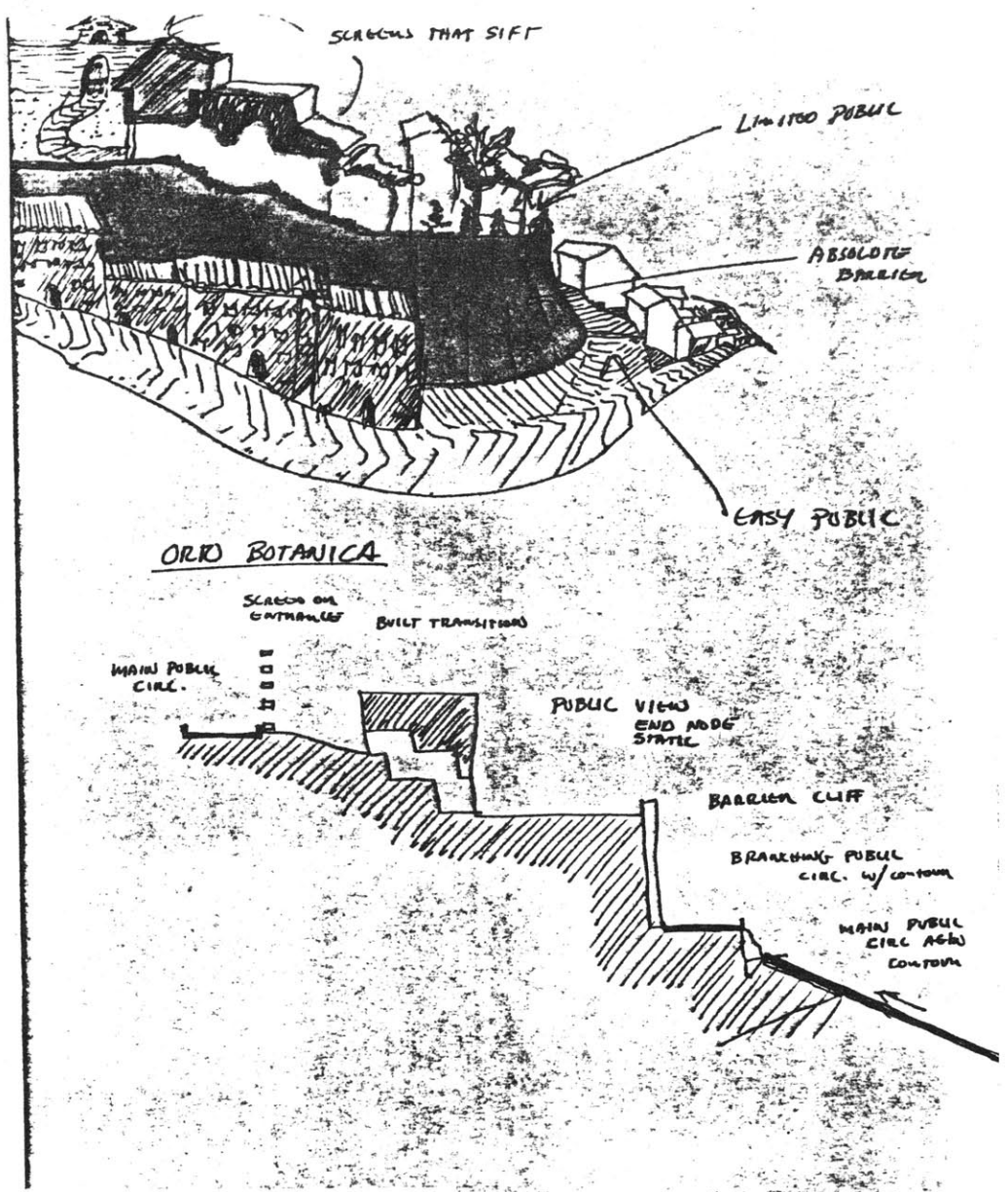


INITIAL MASSING MODELS



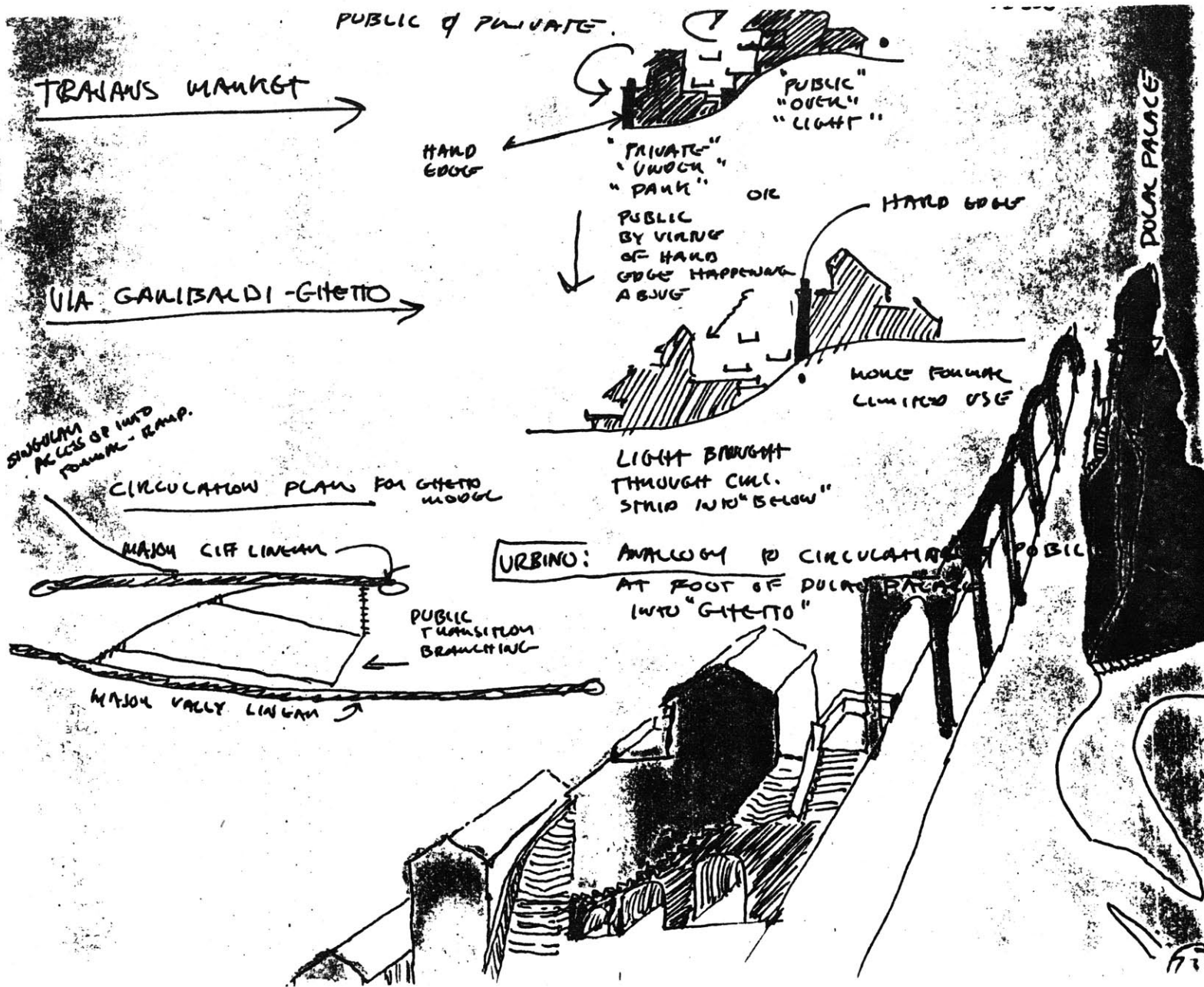


URBINO STREETS



URBINO STREET ANALYSIS





URBINO STREET ANALYSIS

MODELS

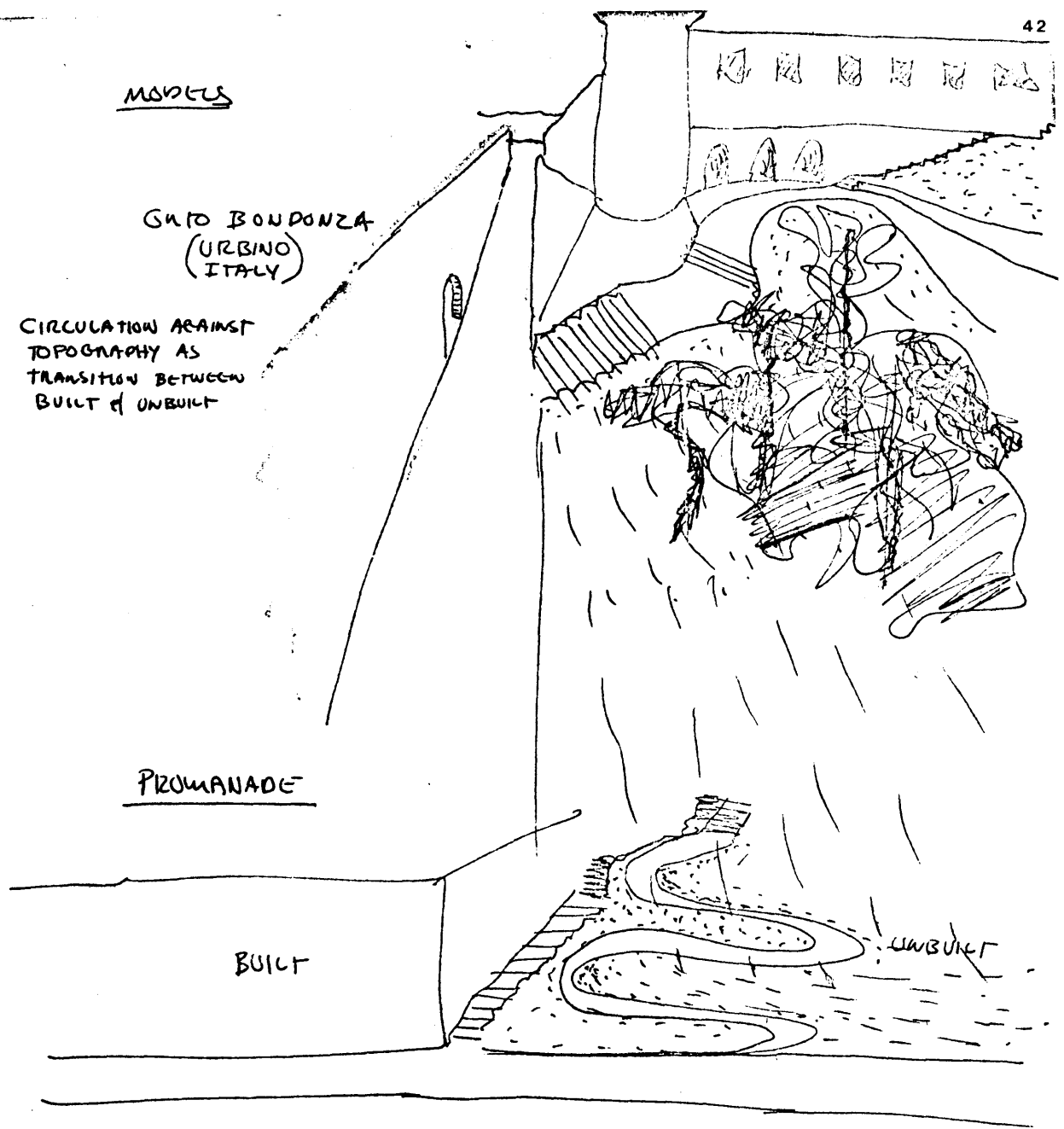
GIULIO BONDONZA  
(URBINO)  
(ITALY)

CIRCULATION AGAINST  
TOPOGRAPHY AS  
TRANSITION BETWEEN  
BUILT & UNBUILT

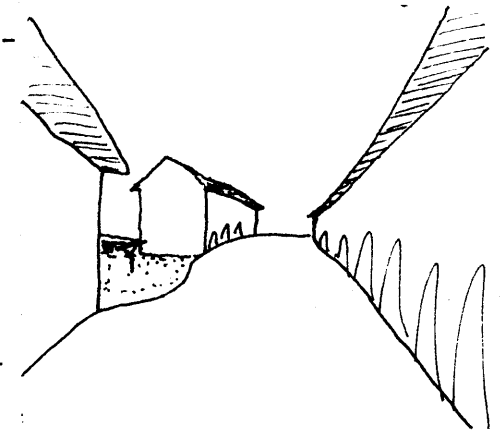
PROMANADE

BUILT

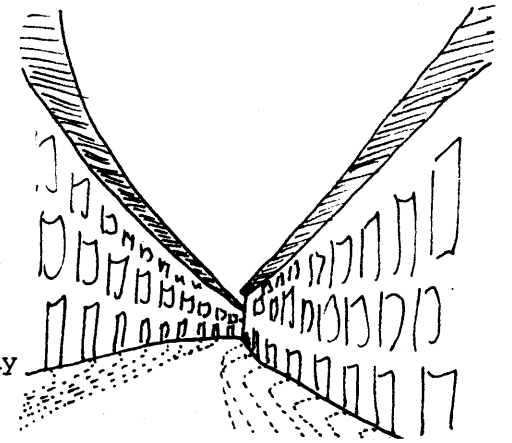
UNBUILT



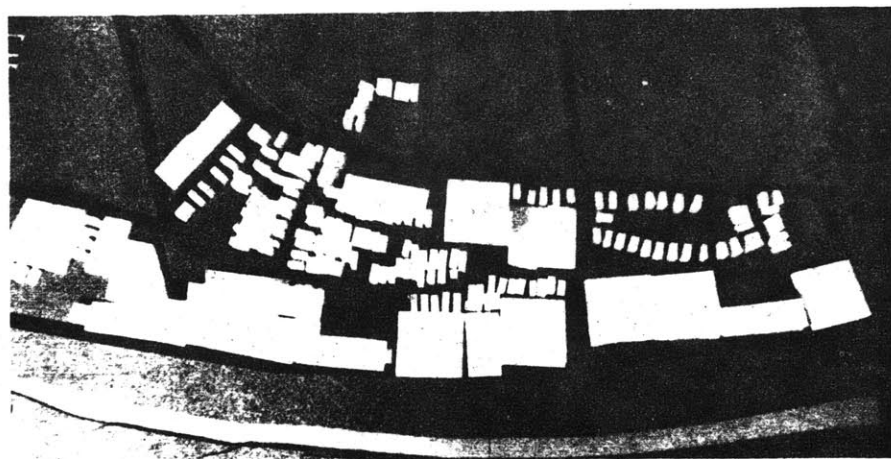
Aside from their being clear incentives for movement between nodes there is also local "strip movement". By "strip movement" I mean movement incrementally perpetuated by local sequential attractions: moving down the street to the bakery and then "ah yes" the shoe store, and then "well, why not" the cafe, versus moving from the center of town to the outskirts for the purpose of picking up the laundry. One mode of travel is more meandering, one more purposeful. If the pedestrian linkages through the college are to be actively used by the community the possibility of both these modes have to be built into the site. The MBTA stations and the park offer incentive for the purposeful traveler, while the college's built front on these paths should provide the more local incentives for the meandering traveler. Both these modes are means of overcoming the deterrent of cross-contour movement.



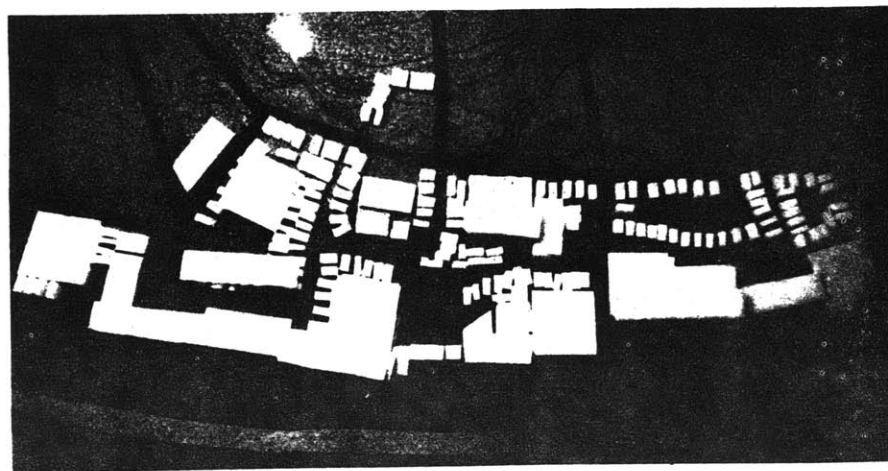
In Urbino, Italy there are certain characteristics of the street which help it work for the meandering traveler. The buildings, for one, are all attached so a certain continuity is immediately established. As one walks down the street there are no disturbing breaks in the continuity like vacant lots which could act as cues to turn back. There are only building fronts on the street, no sides of buildings exposing impenetrable (party) walls which in essence announce that one's next 90 degree turn will take him into someone's private domain - an inhibiting prospect. Rather, each of the building fronts offers a door, windows and often some sign of a commercial or public zone just behind the wall. For every door one has the sense that someone has gone before, adding a certain kind of publicity to the street. These penetrations add up to a rhythm of penetrability as one gazes down the street; the rhythm again supports the continuity that will invite rather than discourage meandering travel. If this density and continuity of built edge can be maintained until the street either drops, moves up or turns out of sight the viewer can be left with the impression that publicity and activity continue out of sight.

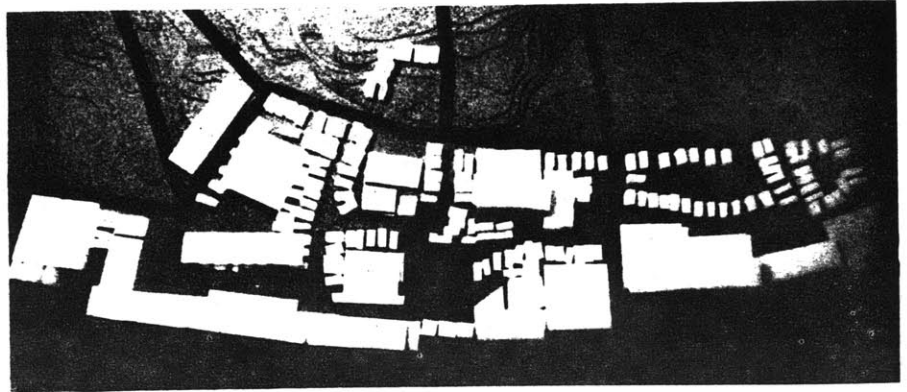
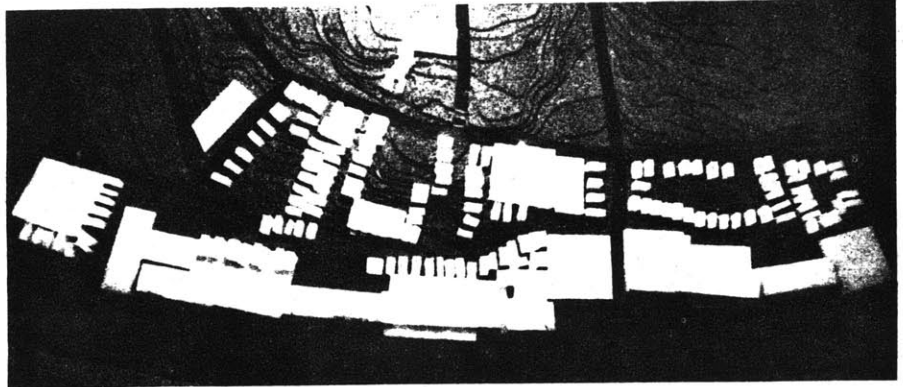
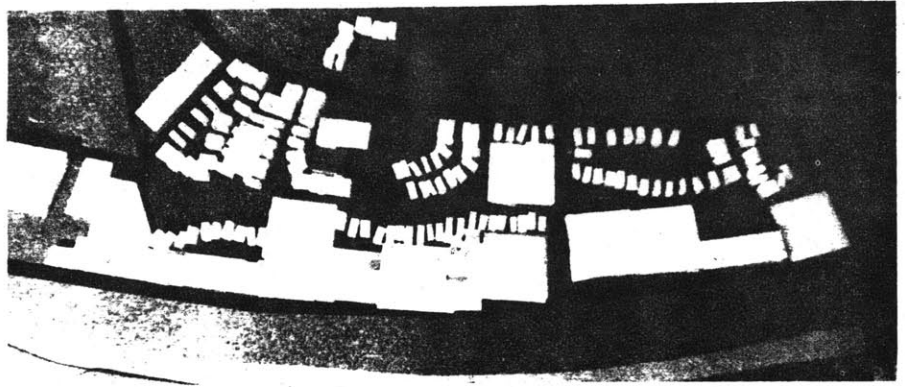


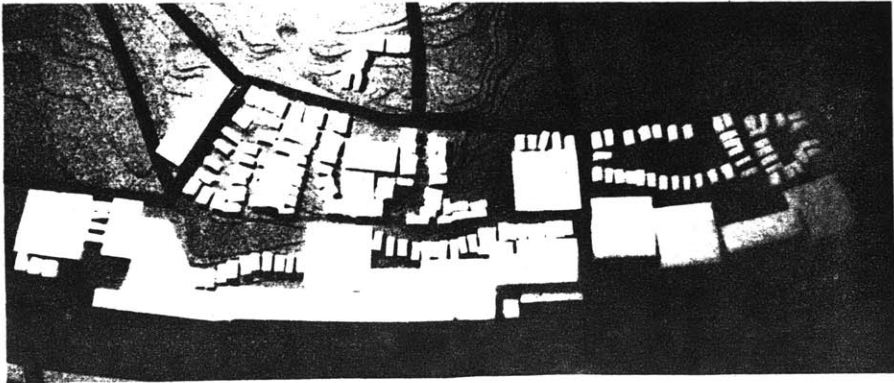
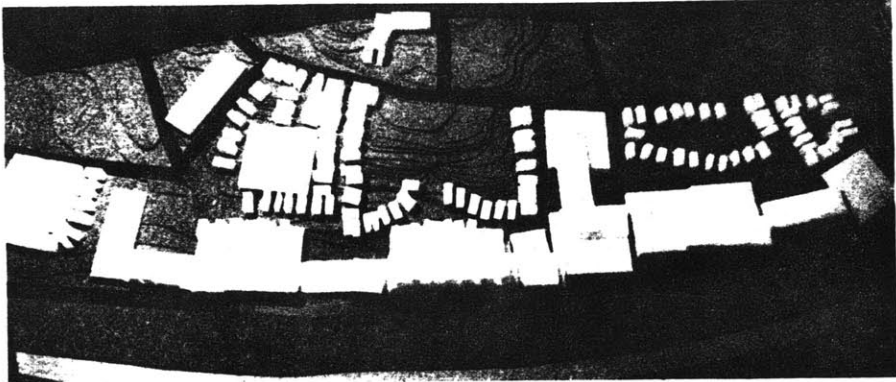
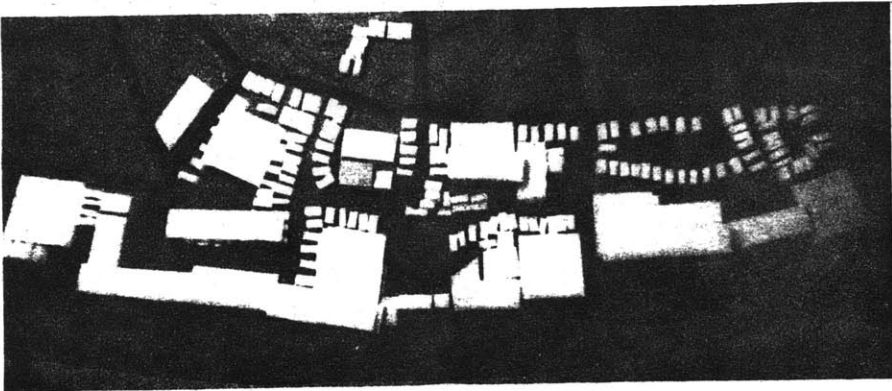
These are all physical characteristics that the college might employ in its built front along the east-west pedestrian paths. If these paths are to be meaningful exchange zones between the college and community the building fronts there should house specifically community services (supports) as well as the most publically attractive aspects of the college program as a means of inviting the ultimate community penetration of the college. The first goal is seen as getting the general public to move through the college on the east-west pedestrian paths; the second is to ease the transition of general public movement from these cross-contour paths to



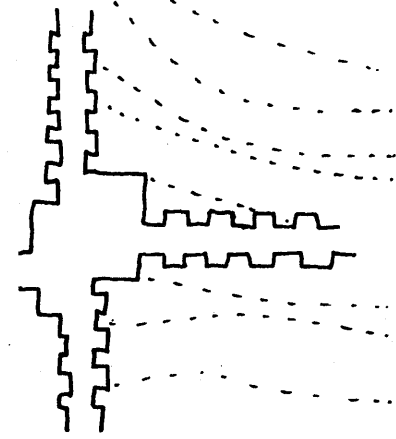
CIRCULATION NETWORK STUDIES





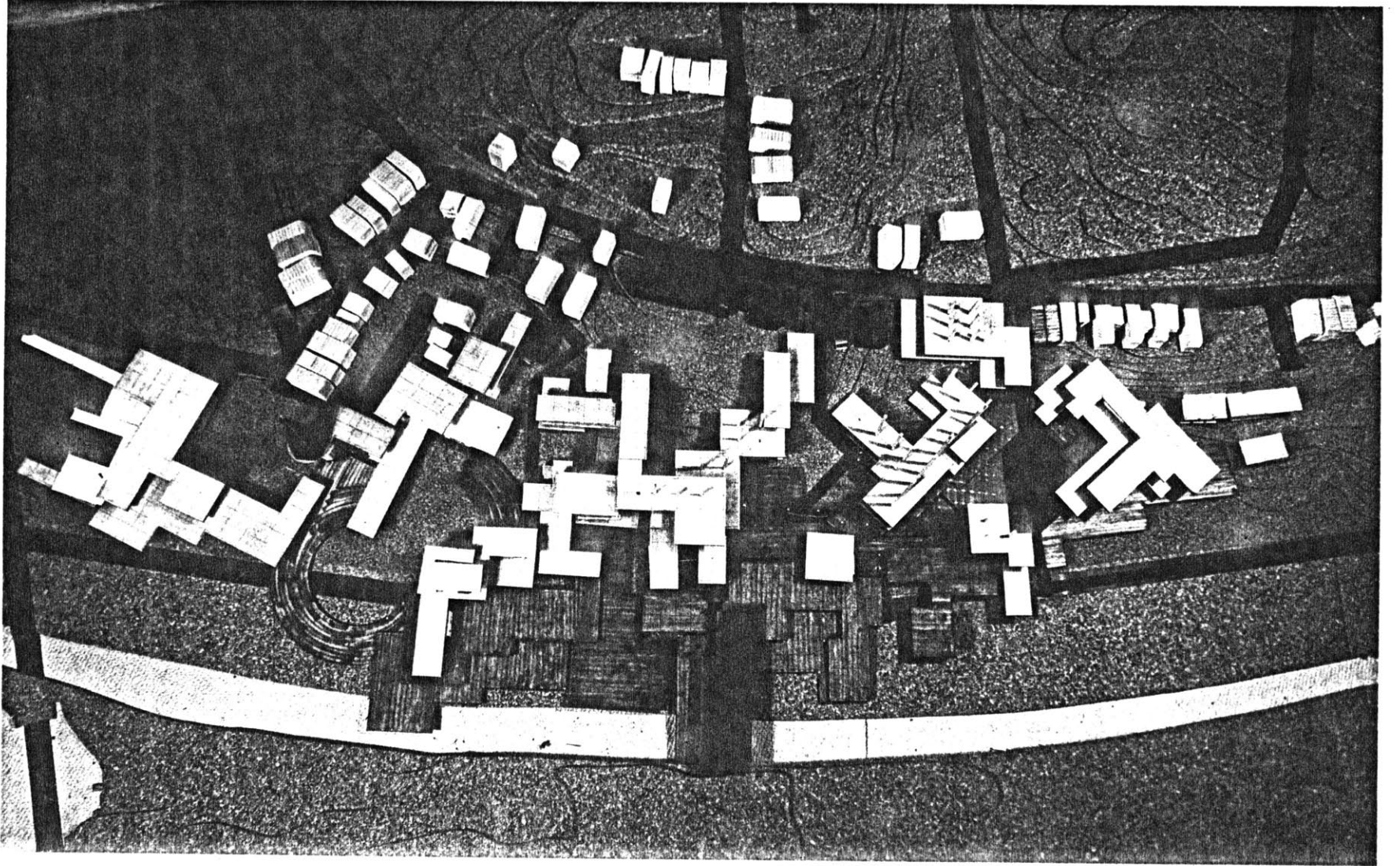


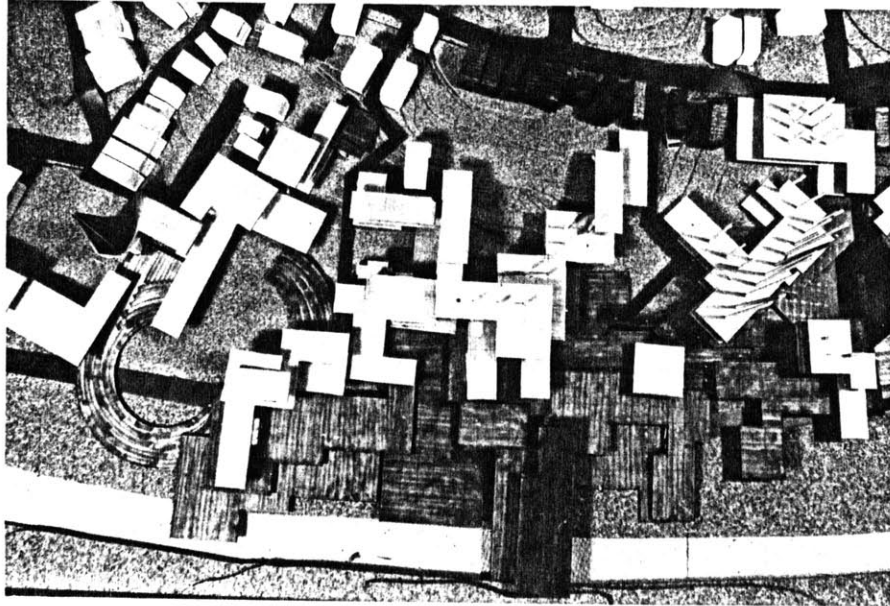
the on-contour north-south pedestrian path which really is the spine of the college proper. The circulation modes can help to break down the traditionally increasing degrees of institutional inhospitality. If the most private aspect of the college (academic department headquarters, laboratories) can be penetrated by the easiest mode, on-contour paths with public fronts then the community outreach that the college wishes to achieve might be possible.



# THE DESIGN



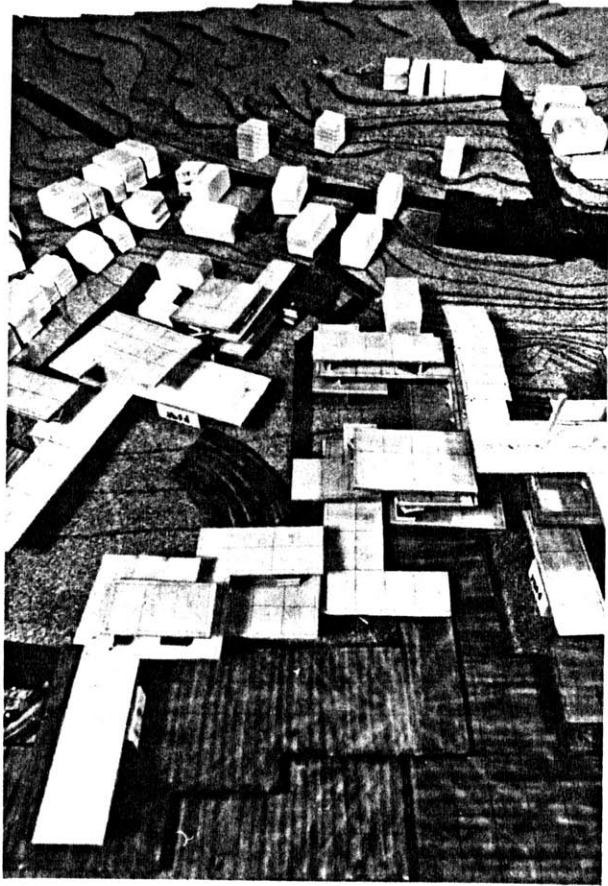




WORKING MODEL OF THE PROPOSED CAMPUS  
PLAN BETWEEN CEDAR AND GARDNER STREETS



PEDESTRIAN ACCESS FROM THE STREET WITH  
NO NAME



PEDESTRIAN ACCESS FROM CENTRE PL.

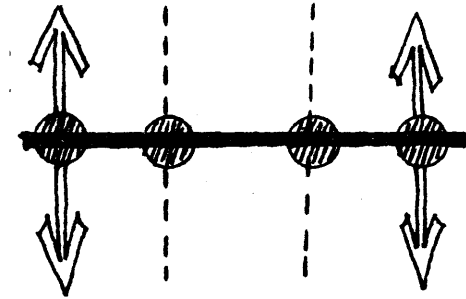


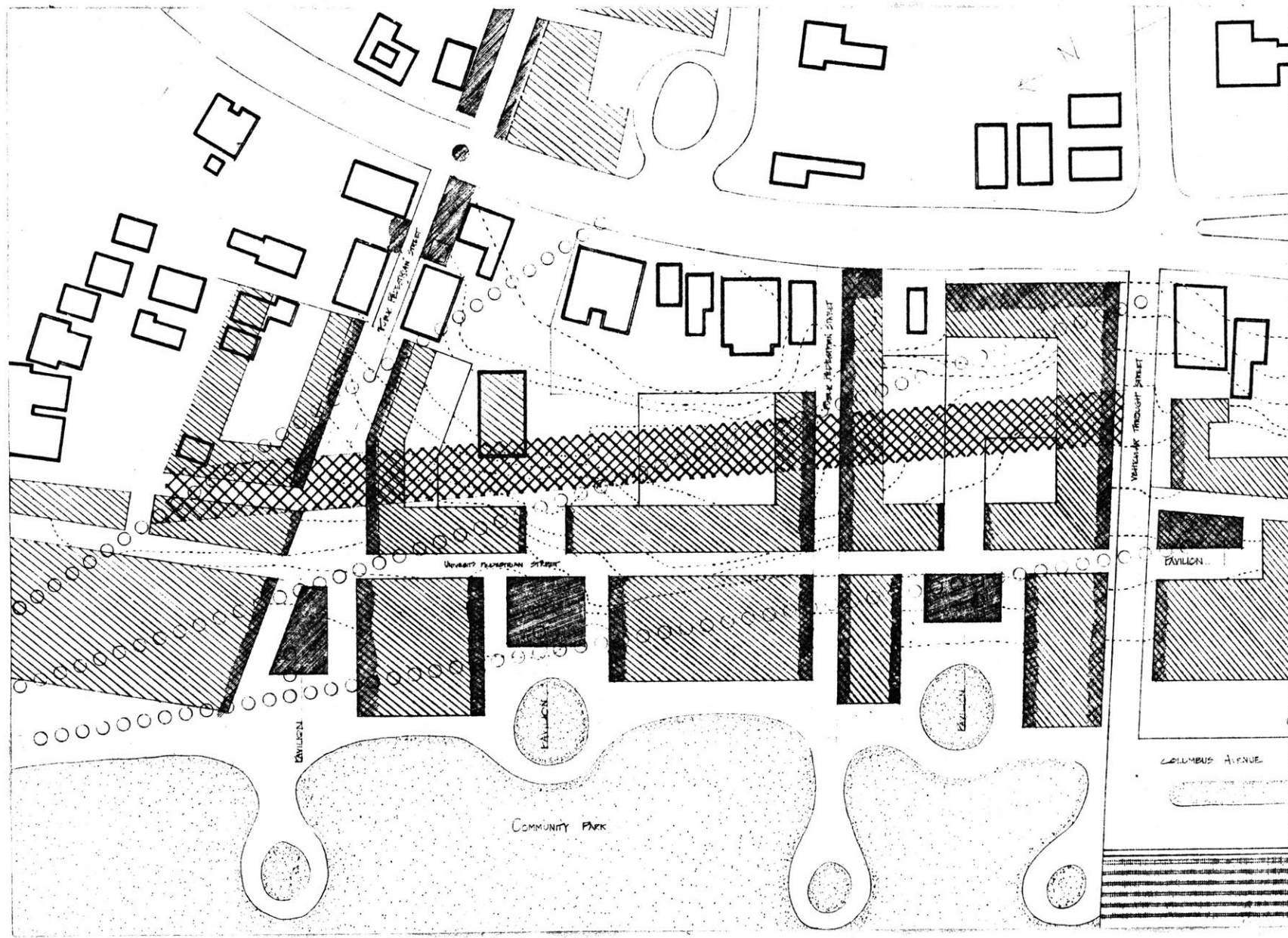
VEHICULAR ACCESS DOWN CEDAR STREET

### The Site






For the implementation of these networking ideas the area of the site between Centre Street and Broadway can serve as a testing ground at 40th scale. In this area the college intersects the urban network four times, at Broadway, at the pedestrian access at Centre Place, the pedestrian access just south with no name, and at Cedar Street. Each of these intersections creates a node of a different kind. The two nodes at Broadway and Cedar Streets, due to their being on vehicular streets, are best suited to the most public aspects of the college. Broadway being close to New Dudley Street, is more of a regional node and probably best suited to housing the college face - the administration. Although the administration in general would be decentralized throughout the college, its central offices could be found here. Cedar Street is the main artery of Highland Park and therefore most suitable to local community support facilities that are best accessed by car; well baby clinic, preventative health care, community kitchen, legal aid and welfare offices and food co-op.

The two pedestrian streets pose different sorts of requirements. The one at Centre Place, being a direct access to the MBTA from Linwood Place, would be suitable for community support activities that do not require vehicular access but address the pedestrian traveling from his home in Highland Park to the subway. These activities might include eating, drinking, sitting, reading, games, hang-outs etc.; activities that would enliven the "street" at all hours of the night affording some degree of safety for night students. In keeping with this character the student center complex could be located there as an activity generator as well as giving students a profile on the "street" that passers-by might find engaging. The pedestrian street continuing from the street with no name (a street which now accesses a mechanic's garage) while being a less direct access to the subway is a direct community link to the park with its locker and changing room facilities. This is probably a somewhat less intense "street" with a less dense built edge. It would feature enough open space to afford play areas for a day care center. Much of the college academic space could front on this street with an "over 50" club at the top still near Centre Street. Athletics would be the attraction at the end of this street while the academic space would intersect those sports minded travelers in an inviting way.

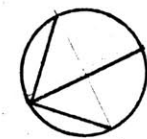




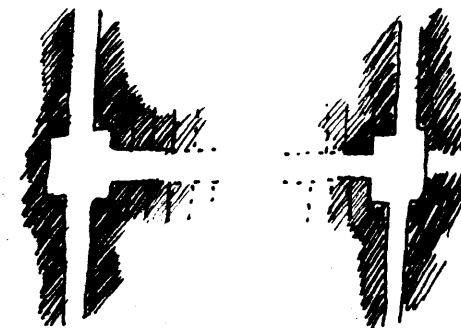
### SITE DIAGRAM

-  University
-  Exist'g Bldgs
-  Parking
-  Community Access
-  Community Paths

### ROXBURY COMMUNITY COLLEGE

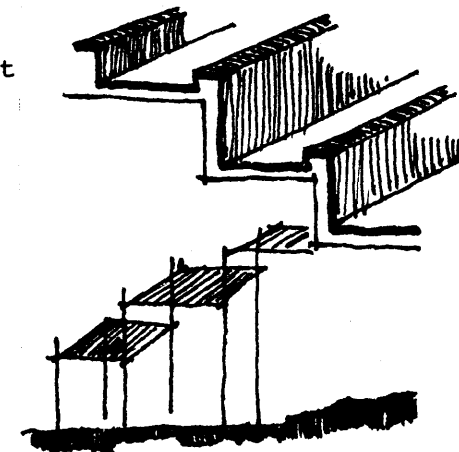


This network of streets and nodes offers a model for growth. Initially nodes would be built at the intersections of the east-west "streets" and the perpendicular college organization. Local growth would consist of filling in the links between these nodes on a north-south axis gradually creating the college "street". Longer range growth would consist of building new nodes further south along the site. The initial nodes would create instant streets with destinations at both ends and local attractions along the way. Depending on the distance between nodes the linkages would rather "become" built streets in the way that certain kinds of residential streets have always evolved - by progressively accessing consecutive spaces as they come into being-until finally they meet between nodes. This is a model for site-wide growth initiated by an architect designing the nodes and leaving the linkages up to the input of many over time.



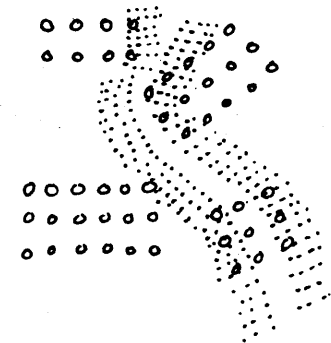
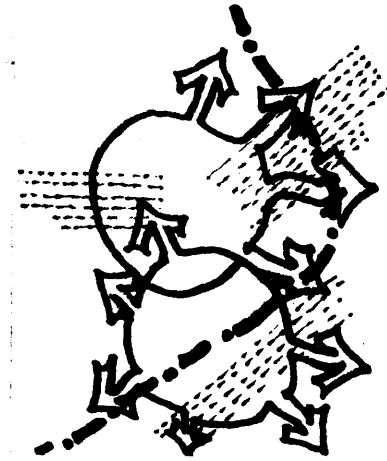
#### The Student Center Complex

At another scale, examining the design of the node itself, further possibilities of immediate popular participation in the design process suggest themselves. Here I think we have to begin to talk about physical systems. At the node which has been designated as the student center the site undergoes a change in direction. The contours sweep around toward Gardner Street and the street orientation at this end is generally more northward than at Centre Street. The combination of this direction change and the intersection of cross-contour and on-contour travel calls on the design of the node to produce a resolution. The resolution must be a physical as well as programmatic one. Physically, the various directions of the site can be acknowledged in several ways. A minimal way would be terracing the site. An even more suggestive way would be a 3-dimensional framework, one capable of housing the academic spaces required of the program. To illustrate this I have chosen to establish these nodes with the design of a 20'x30' and 20'x20' bay, prefabricated concrete framework. This would act as the college structural typology initially constructed in separate clusters at the nodes and maybe eventually continued across the linkages. The placing of this system on one side of the east-west pedestrian street in sympathy with the contour direction there, and on the other side of the street placing it in sympathy with another contour direction means that the elements trying to be resolved, the direction of the site, the directions of pedestrian movement, all confront each other in the exact same place.



The discontinuity from built to un-built to built would be very abrupt. Instead if the street could be placed such that it moves back and forth between the building systems that lie at an angle to one another the discontinuity would be softened and the ease with which someone could move down the pedestrian street and off into the built space would be increased. If the two directions of the building system are allowed to resolve themselves once in a large interior space and once in a large exterior space then we are beginning to create a spatial differentiation in which two different kinds of collective activity could happen. The interior activity might generate forces on the exterior and vice versa. The placement of the pedestrian street could take advantage of a range of conditions by being at one point receptive to activity generated from the interior of the adjacent built space and at another point generating exterior activity into the built space. By placing the dining room/cafeteria of the student center in the large space that resolves the two directions of the building system internally, I felt this would generate student activity outward onto the adjacent narrow pedestrian street, but further down the hill an exterior piazza (which in its space allows a resolution of the two directions of the building system) generates public activity of passers-by inward into the built space. This I felt was a local application of the physical and programmatic model for reciprocity mentioned above. This particular pedestrian "street" configuration could also be made to work in response to the immediate contours.

Having established, then, a large scale site/responsive, directional building system the next task would be to physically and programmatic-ally find a means of having it accommodate the pedestrian street at a local scale; in other words, add to the primary building system with a secondary one which would address the public by being of a vernacular typology, by address<sup>ing</sup> pedestrian movement and penetration (by being of a smaller base size and capable of influencing the direction of movement), and by being a smaller scale framework, or support structure, that could be infilled by people other than an architect-community vendors for instance who were interested in building a small store front to address the student and public passer-by. These directives suggest some kind of small scale "fingers" reaching out



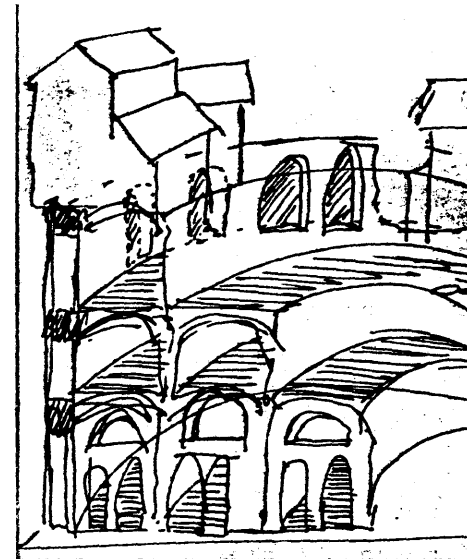
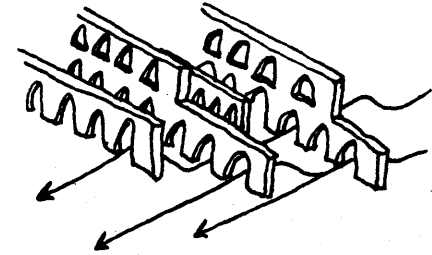
into the street encouraging penetration of the built space much the way stairs accessing three-deckers at half a story up stick out into the street interrupting passage by.

These fingers could not only encourage movement into the larger space framework behind but allow parallel movement, semi-enclosed, like the endless arcades of Bologna or even the main axis of Urbino.

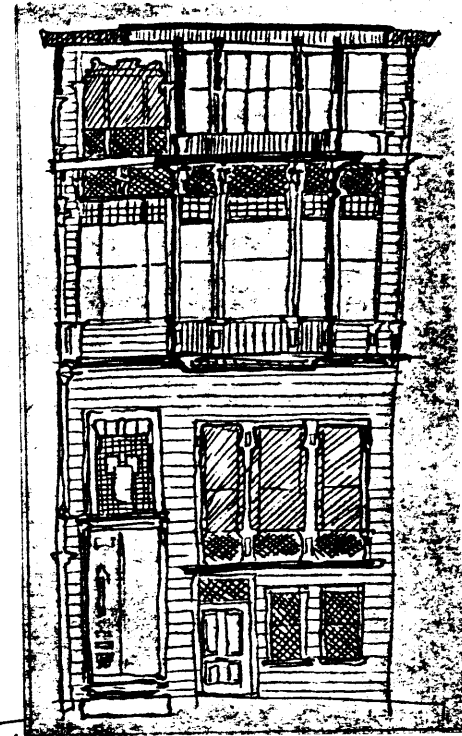
These perforated baring walls whose bay sizes might mimick those of the three-decker typology of Highland Park could act as structural support for any kind of facade treatment as well as for the infill of floor level changes and privacy definitions. They would act as the "soft" street edge inviting to public penetration or public ownership. As a smaller scale building system they would help knit the resolution between the two directions of the larger built framework. Trajan's Market and Teatro Marcello in Rome, suggest such a formal juxtaposition of scales.

Trajan's Market designed in the 1st century a.d. by Trajan himself places a vernacular typology of meandering market streets above and behind a very formal large scale hemicyclic public forum. What was designed as a fairly distinct functional separation, now in ruin appears much more interwoven and spacially continuous. Teatro Marcello, built as a coliseum in the same period, was added to in medieval times by one of the warring feudal families in Rome. Much of the interior and the entire top level were overlaid by small scale medieval domestic buildings. Here the transition from formal and public to private, domestic and even defensive is made not only in space but over time.

These form references suggest the importance of using a scale of architectural element to label, punctuate, even exaggerate differences on a site (build the coliseum! build the forum! make the statement!) to establish a range of environments, but then, as time forever does, introduce a range of human scale, accommodating architectural elements to relieve insurmountable discontinuities created by the first definition. When the architect has to build all at once something that should by rights be built sensitively by many people over time, as Teatro Marcello was, then the implementation of ranges of scale offering the possibility of ranges of input is imperative. Trajan as an architect designed for this possibility. To apply the

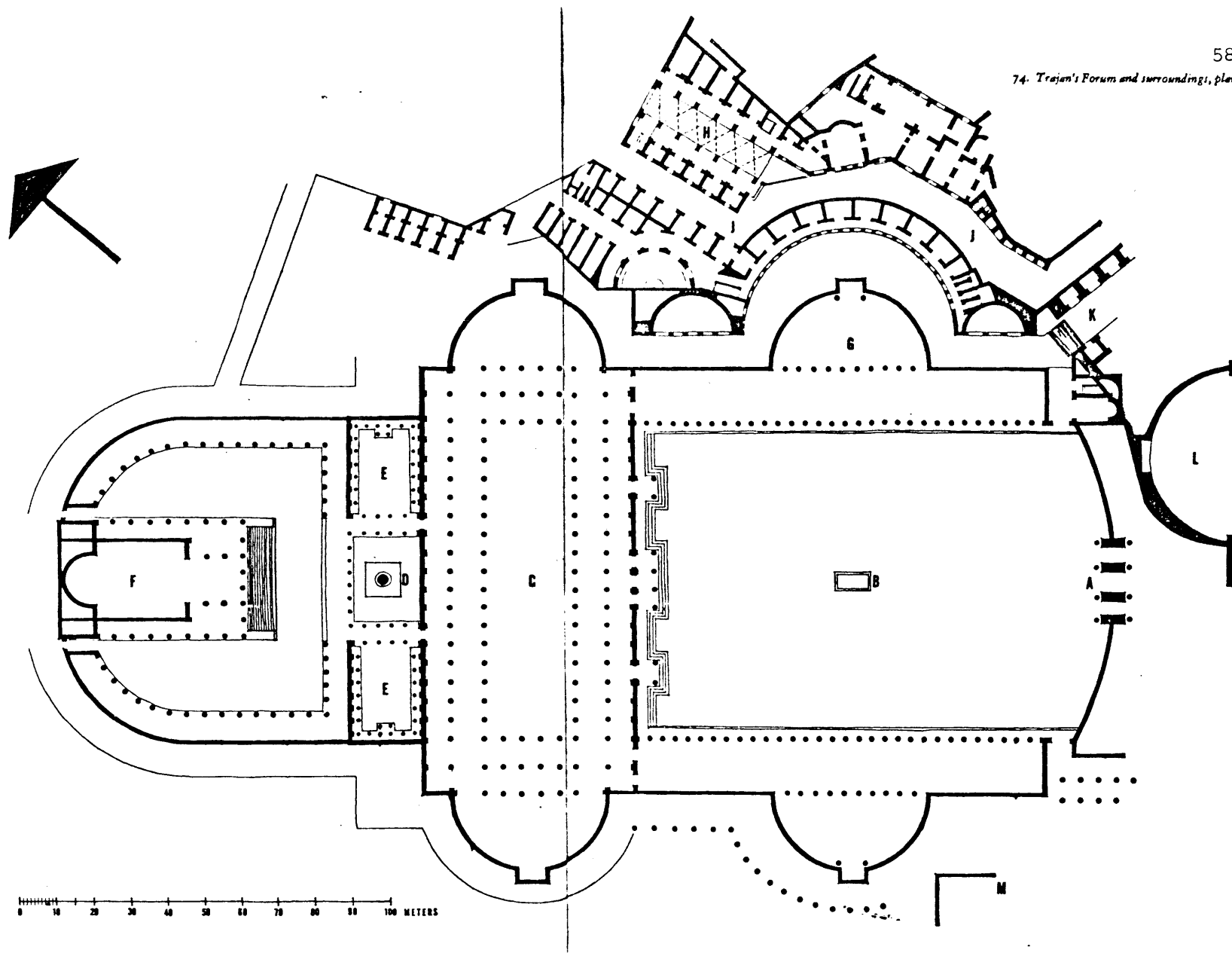




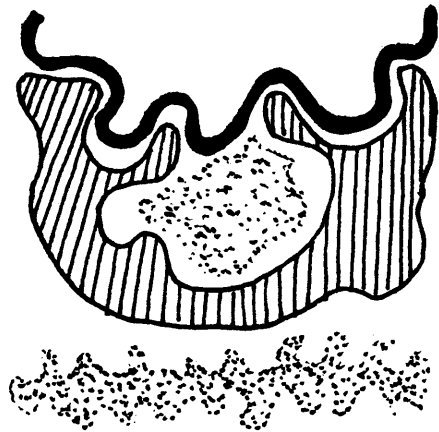


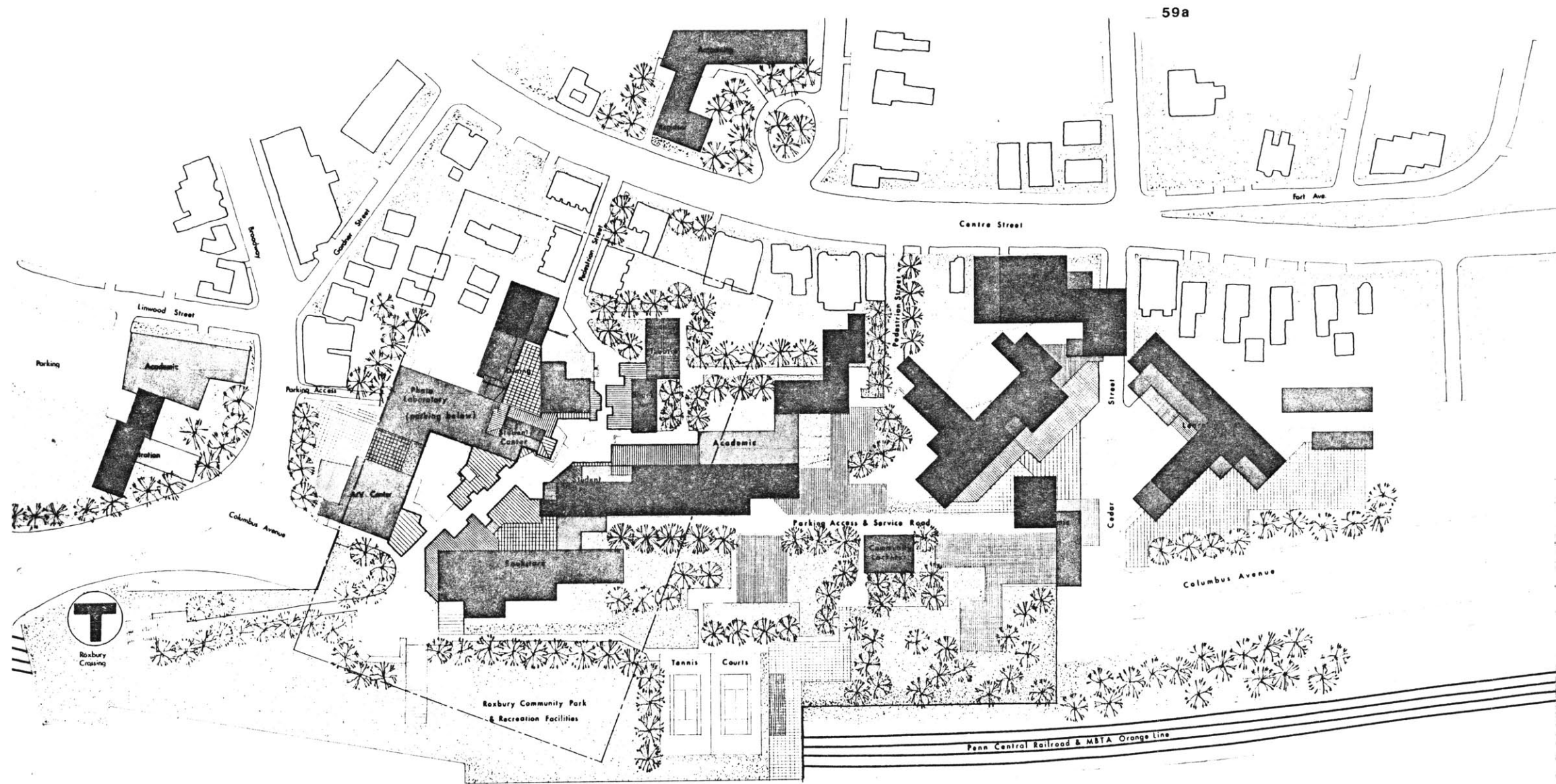
19TH CENTURY INFILL REFERENCES

74. Trajan's Forum and surroundings, plan



lesson at the regional scale, in Roxbury, we can build back and forth above an overstated transportation corridor with a "soft" landscape definition; at the scale of the R.C.C. we can build back and forth over a steeply graded no man's land with accommodating street networks; at the scale of one such street we can reach from the large scale built into the unbuilt with perforated bearing wall "fingers" - at every scale a physical reciprocity that aids an exchange between communities, between a landscape and a community, between a college and a community.





**ROXBURY  
COMMUNITY  
COLLEGE**



**SITE PLAN**

Student Center Complex  
dev. at VTB

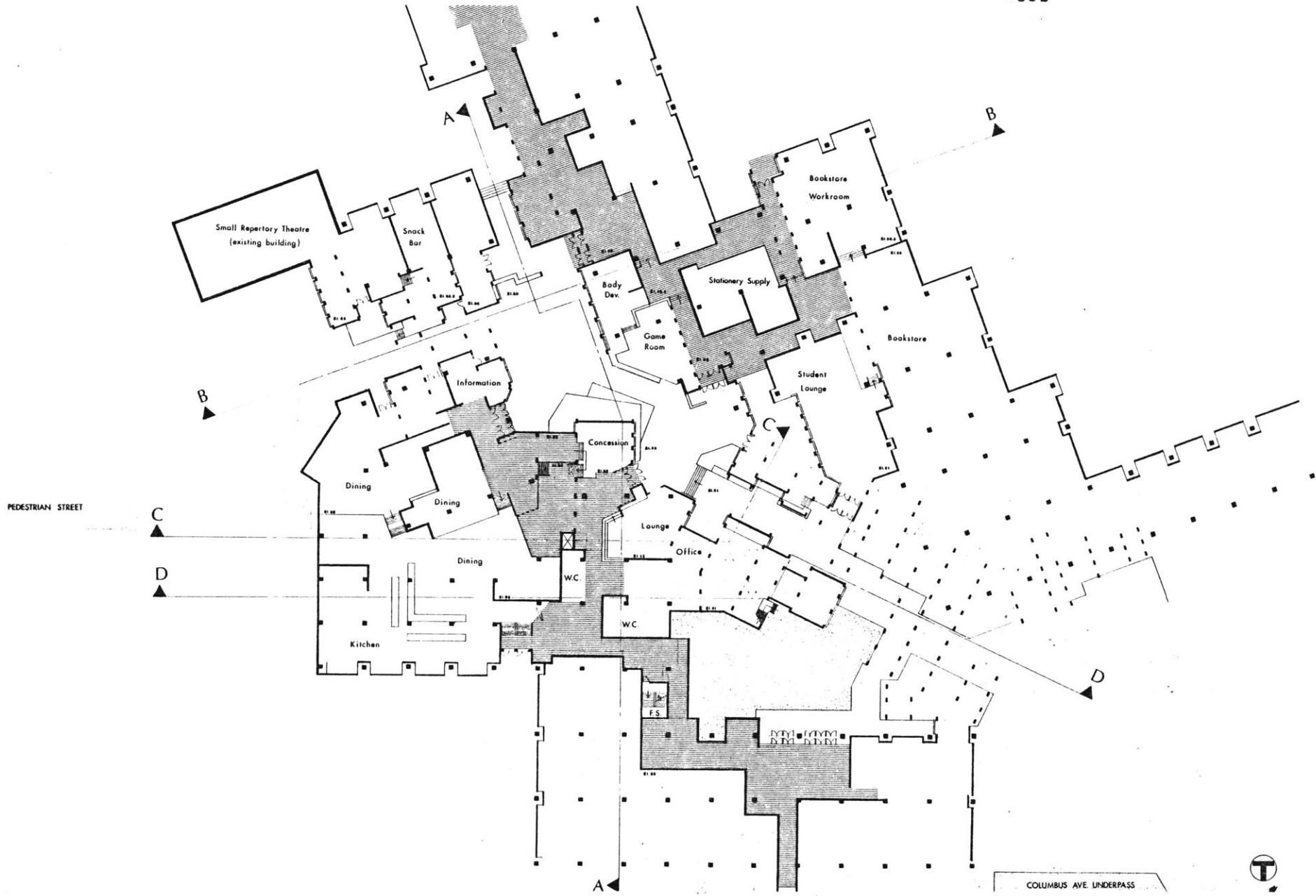
**Legend**

- high College Buildings
- low College Buildings
- high Small Scale Supports
- low Small Scale Supports
- Built Landscape

Jennifer Shakespeare



59 b



ROXBURY  
COMMUNITY  
COLLEGE



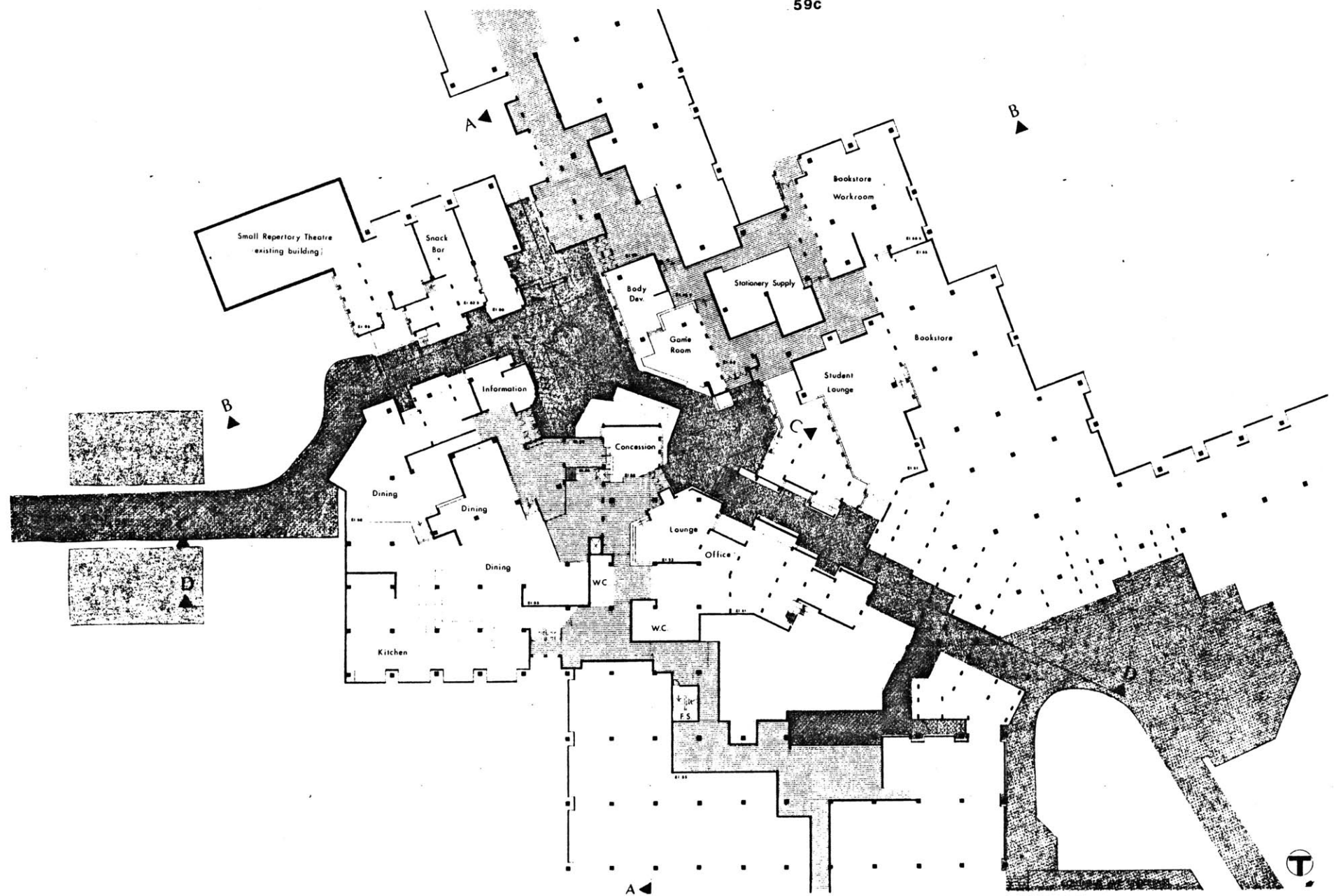
STUDENT  
CENTER  
COMPLEX  
on pedestrian  
street at 50-

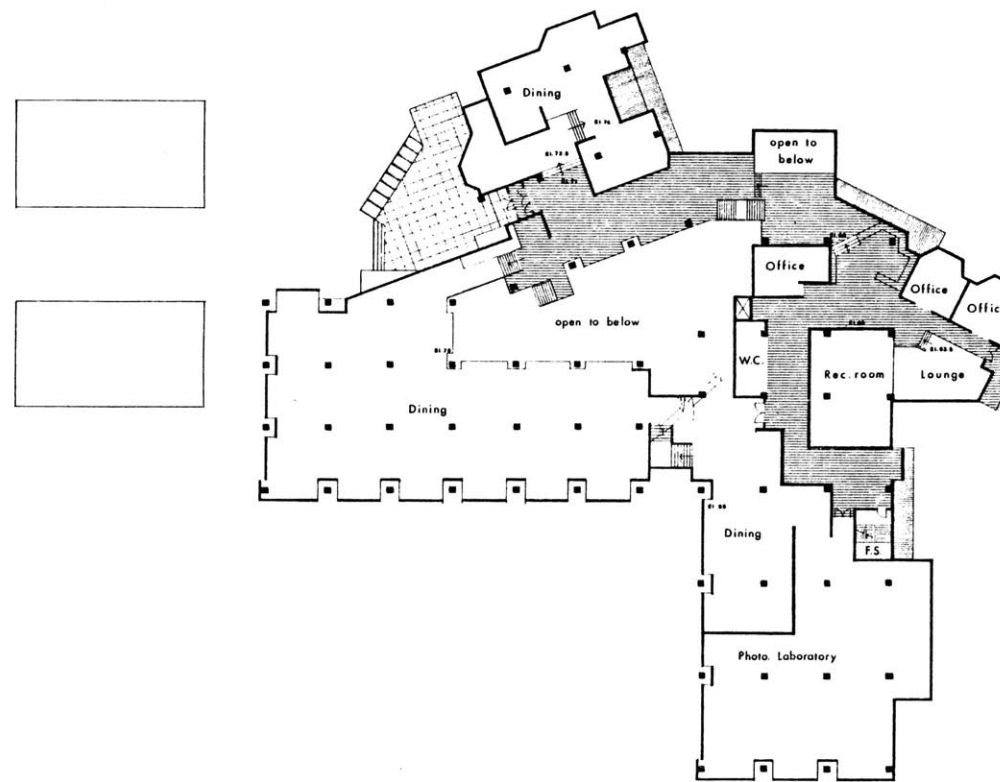
Legend  
Interior  
Circulation

Jennifer  
Shakespeare



59c



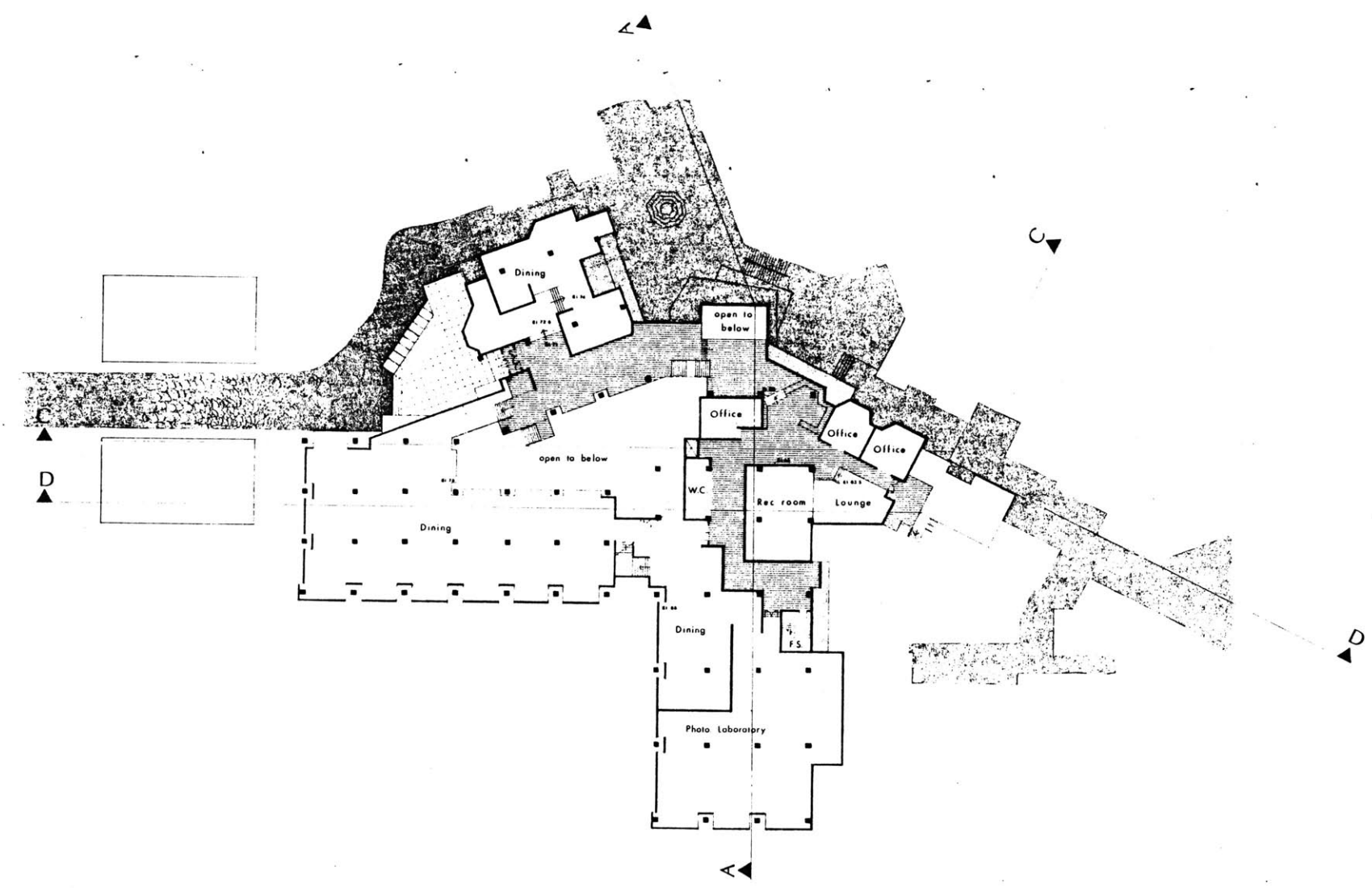


ROXBURY  
COMMUNITY  
COLLEGE



Jennifer  
Shakespeare





ROXBURY  
COMMUNITY  
COLLEGE



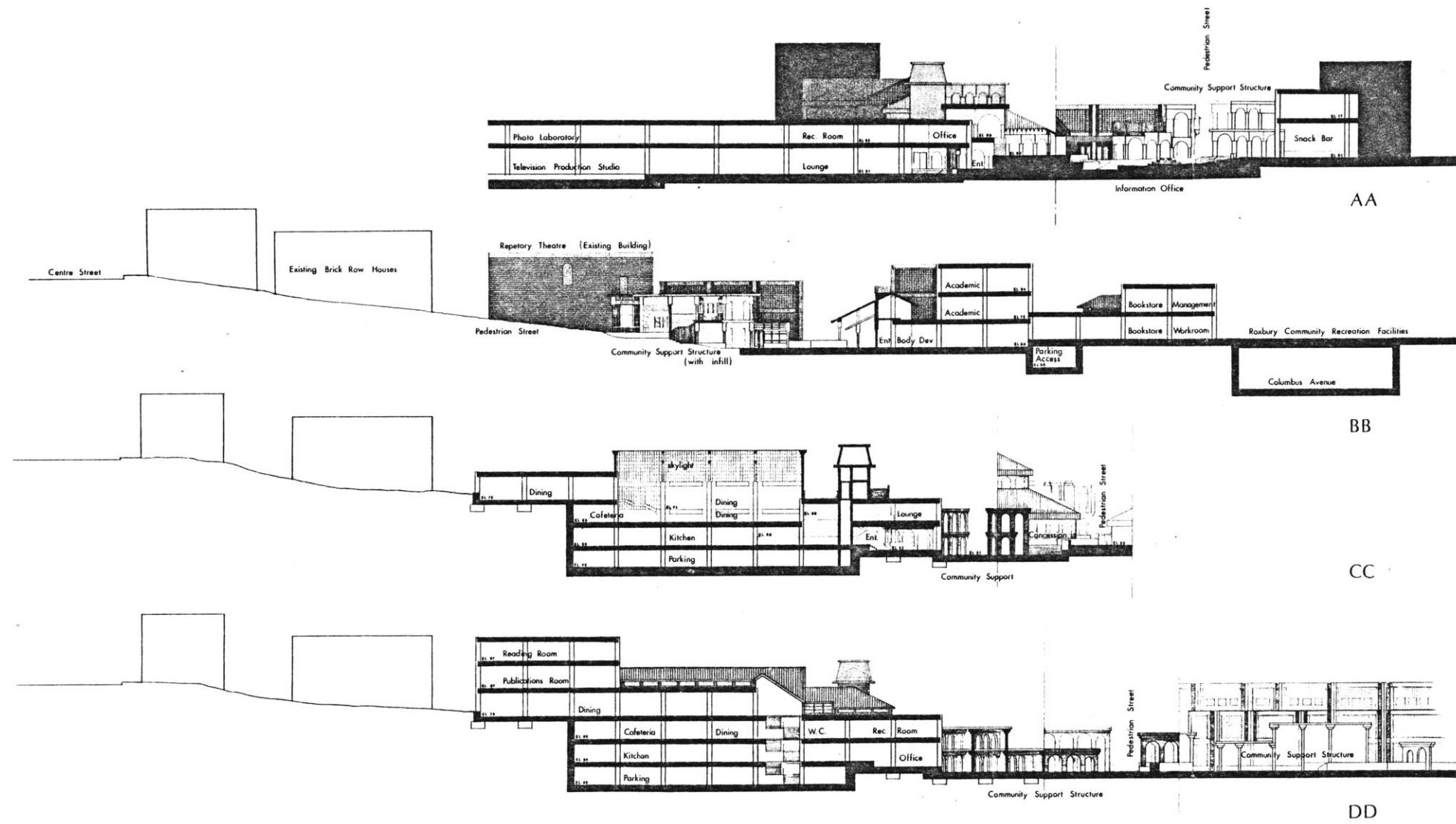
STUDENT  
CENTER  
COMPLEX  
on pedestrian  
street el. 65&75

LEGEND  
Interior  
Circulation

Jennifer  
Shakespeare







ROXBURY  
COMMUNITY  
COLLEGE



STUDENT  
CENTER  
COMPLEX  
SECTIONS

Jennifer  
Shakespeare



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# **ABBREVIATED PROGRAM**

ABBREVIATED PROGRAM:

|                                  |                    |                |
|----------------------------------|--------------------|----------------|
| Central Administration           |                    | 18,745 sq. ft. |
| Administrative Services          | 3,845              |                |
| Administrative Offices           | 6,345              |                |
| Secretarial                      | 1,030              |                |
| Clerical                         | 1,125              |                |
| General Service Circulation      | 6,500              |                |
| Learning Resource Center         |                    | 55,805         |
| College Center                   |                    | 71,245         |
| Student Activities               | 9,095              |                |
| Auxiliary Service                | 37,150             |                |
| General Services and Circulation | 25,000             |                |
| R.C.C. Optional Proposal         | not yet determined |                |
| Physical Education and Health    |                    | 67,051         |
| Physical Education Services      | 650                |                |
| Instructional                    | 36,546             |                |
| Support                          | 3,245              |                |
| Athletics                        | 1,490              |                |
| Visitors                         | 3,620              |                |
| General Service and Circulation  | 21,500             |                |