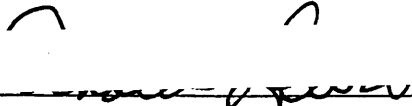


PLANNING THE NASA SITE:  
COMMUNITY PARTICIPATION

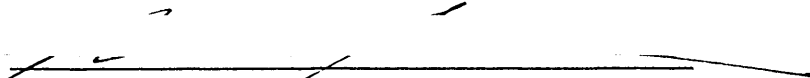
by Donald Lewis

B.A. Yale College (1969)  
Philosophy

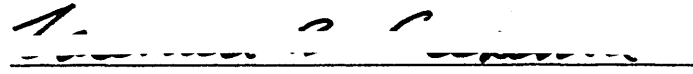
submitted in partial fulfillment of  
the requirements for the degree of  
Master of Architecture at the  
Massachusetts Institute of Technology  
January, 1973

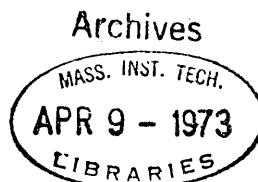
  
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Donald Lewis, author

certified by:

  
\_\_\_\_\_  
Tunney Lee, thesis advisor

accepted by:

  
\_\_\_\_\_  
Chairman, Departmental Committee  
on Graduate Studies



## ABSTRACT

This thesis reports and evaluates work done with a group of 6-10 residents of East Cambridge. The group was the Task Force on the NASA Site of the East Cambridge Neighborhood Planning Team. The group investigated the proposed development of Kendall Square and produced an alternate program and site plan for the Kendall Square Urban Renewal Area, a set of Neighborhood Performance Specifications for Kendall Square housing, a report of the Task Force work which is being widely distributed in the community, and a continuing interaction between the Task Force members and the City Council, the Cambridge Redevelopment Authority and the community-at-large to influence the development of Kendall Square.

The work was carried out in weekly meetings under the guidance of the author of this report using materials and research conducted mostly by the author.

Some conclusions about the participatory planning process and the media and methods appropriate to it are reported in the final section of the thesis.

## SPECIAL THANKS TO:

members of the Task Force on the NASA Site,  
Madalena Barbosa, Richard Brescia, chmn.,  
Dave Carter, Jean diPasquale, Tim Ford,  
Alice French, Elizabeth Kearns, Dave Kennedy,  
Joe Pavo, and Tom Walker, for giving so much  
of their own time for community goals and for  
being so friendly to an East Cambridge newcomer.

Hans Harms, Tunney Lee and Jan Wampler for  
showing me that there is still a rewarding  
way to use architectural skills.

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## WHAT HAPPENED

In 1964 the Federal government purchased and cleared 29 acres of industrial-use land in the Kendall Square area of Cambridge to develop a NASA Electronics Research Center. At this time, plans were approved by the City of Cambridge and HUD for the Kendall Square Urban Renewal Area, to include the NASA Center and nearly 30 acres more of adjacent land.

In 1969 NASA announced its decision to drop plans for the Research Center due to Congressional budget cuts. 14 acres of the NASA site, and the new buildings already constructed on them, became a research facility for the Department of Transportation. Secretary of Transportation Volpe agreed in principle that the remaining 11 acres should be returned to the City of Cambridge through the Cambridge Redevelopment Authority, but to date this has not been accomplished.<sup>1</sup>

Land still available for development in the Kendall Square Urban Renewal Area now includes these 11 acres of the "surplus NASA land" and 13 acres on the "golden triangle". (cf. fig. 1)

The Cambridge Redevelopment Authority hired Gladstone Associates, economic consultants from Washington, D.C., and Wallace, McHarg, Roberts and Todd, architects, to come up with a revised Urban Renewal Plan in light of the new situation. The plan they produced was to develop the area into an intense and densely developed prestige office, shopping and residential neighborhood.

The "concept" program included:

5

1750 apartments and townhouses, including three  
34 story towers on the NASA land.

400 motor hotel rooms on the triangle in a tower  
up to 40 stories high.

1,000,000 square feet of general and technical office space.

200,000 square feet of retail shopping space.

4,500 off-street parking spaces including a 2500  
car parking garage up to 5 stories high.

The C.R.A. presented this plan to several community and city-wide organizations in the Spring of 1972. The East Cambridge Neighborhood Planning Team, a CEOC sponsored residents' organization, was one such group. The Planning Team completely rejected the idea of more hi-rise buildings on its southern perimeter. This was communicated by letter to the C.R.A.<sup>2</sup> A survey of area residents was also taken. Of the 180 respondents, most favored use of the site for low and moderate income housing, industrial jobs and neighborhood shopping.<sup>3</sup>

One purpose of my thesis was to enable the residents of East Cambridge to articulate an alternate program for development of the NASA site. In fact, it became clear that the NASA site could not be considered apart from the whole Kendall Square Urban Renewal Area. Therefore, one product of the work was a program for the whole area, with special attention given to the homes planned for the NASA site.

Another purpose was to try out some methods of participatory planning. Despite attempts at points along

the way to formalize and predict the methods to be used, my expectations of what would need to be done hardly ever matched what was actually needed to complete the work.

At the beginning, my intention was to develop program and site plan simultaneously by means of intensive work on a site model with manipulable parts. In this way the group could immediately test preliminary decisions in a 3-dimensional diagram. Programmatic decisions about density, for example, could be immediately seen in physical form on the model. Similarly, physical site plan decisions could have their programmatic impact immediately felt. This kind of instant feedback seems to be necessary in group decision-making, especially when the group has very limited time to do its work: in this case only a few hours each week. Also, for the relatively untrained participant, instant feedback of consequences in physical form can substitute for the experience which a professional may have acquired. The model could also have been keyed to visual and verbal descriptions of place-qualities generated by the group.

In fact, however, the model-making became only one step in a much more complicated process. Decisions that I didn't know were needed became important; information that hadn't been gathered beforehand became critical; and new processes had to be created to carry out these tasks. This was due probably to my inexperience in guiding such a program and to the short time we had to work, but it also indicates the flexibility required of a professional no longer working only in the established manner of professional decision-making.

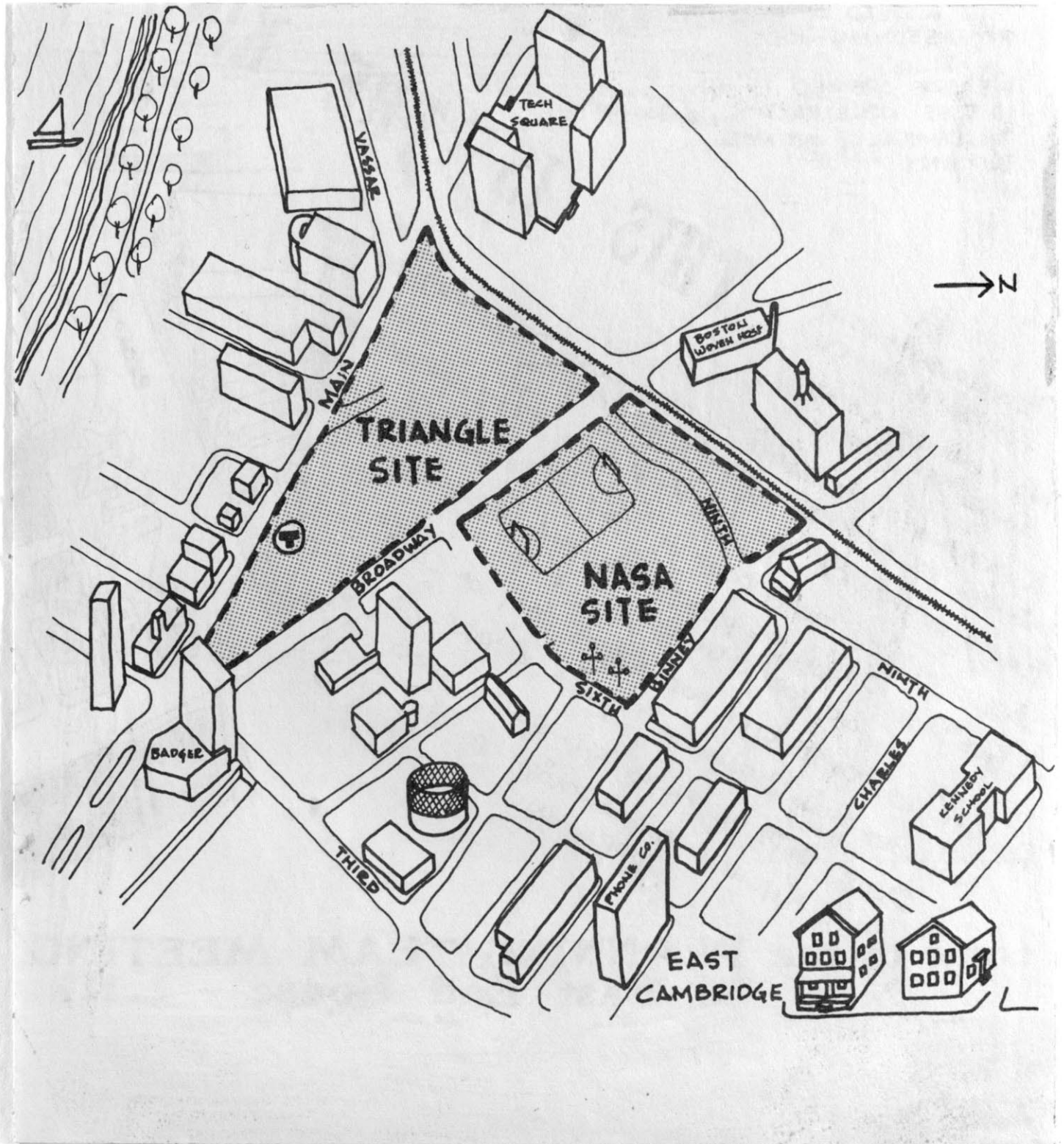
One assumption I made initially did not change. This was the decision to carry out a participatory planning process with a group of about 6 to 10 persons. The group was formed about the nucleus of the existing Task Force on the NASA Site of the East Cambridge Neighborhood Planning Team and other members of the Planning Team who elected to join us or were urged to do so to make the group more representative. The group included men and women, married and single, from ages 20 to 70, Portuguese, Italian, Irish, etc. This made the group a reasonable cross-section of the East Cambridge community.<sup>4</sup>

A small group was chosen to work with because there was not time to organize a bigger one and because the methods I wanted to explore required work in small groups. The Task Force's conclusions, however, could be checked by reviewing them at the larger Planning Team meeting every month and by exposure to the community-at-large at the end of the process. This wider consensus-forming from the work of a small group became an important part of the process.

The process carried out can be broken into nine steps. Each section of this report will explain and evaluate a step in that process. The concluding section will evaluate the process as a whole. It is important to remember, however, that the steps were only roughly sequential. There was a lot of overlapping in time, carrying out 2 or more steps simultaneously, and jumping forward or backward a few steps to get information or make a decision that was crucial for the work at hand.

The product of the process is a program and site plan for the Kendall Square Urban Renewal Area; a set of Performance Specifications for the housing component of the program; a report of the work of the Task Force which is being widely distributed in the community; and a continuing interaction between the Task Force members and the City Council, the C.R.A. and the community-at-large to influence the development of Kendall Square.

figure 1



## FIRST STEP - SITE ANALYSIS

PURPOSE - to familiarize myself with the site and its recent history.

### MATERIALS

- 1) documents and plans of the Kendall Square Urban Renewal Area
- 2) maps of the City of Cambridge
- 3) Statistics on neighborhood characteristics published by the Cambridge Planning and Development Department
- 4) 8" x 11" maps of the site for field notations
- 5) site analysis sketches a la Kevin Lynch
- 6) list of my initial assumptions

### METHODS

- 1) examining documents myself in the CRA office
- 2) walking around the site noting
  - +ecology of plants and animals
  - +topography of soil, rock, slope, surface and ground water
  - +climate - sun and weather orientation
  - +current uses - paths through and by hangouts, sports, human use
  - +traffic circulation
  - +noise
  - +smells
  - +surrounding uses
  - +views
  - +codes, easements, rights-of-way
- 3) sketching alternative edge conditions, circulation patterns on site maps.

### ISSUES

what features of the physical setting must be considered in planning the site?  
what other plans have already been made for the site?

### RESULTS

familiarity with CRA plan  
maps containing site information - the site was physically rather featureless but had important links to nearby areas and very different edge conditions. Also spectacular views of tall buildings in Boston and Cambridge.

## EVALUATION

Gathering information about the site could involve residents more; I didn't have the time to do this. Task Force members were not interested in discussing site information or site maps except in connection with specific alternative plans. Attitudes about the site came out only in later discussions and were incorporated into planning informally.

Some time was wasted analysing spots on the site where views of tall buildings should be preserved for locating oneself within the metropolitan Boston area. Other criteria completely overshadowed this analysis in later planning.

Edge analysis a la Lynch proved useful later, but was not interesting in itself to Task Force members. They discovered hard edges for themselves later in connection with locating specific uses in specific places. For example, they saw directly that a tot lot should not be next to the most heavily travelled road.



## SECOND STEP - ESTABLISHING THE GROUP

PURPOSE - to recruit a group of 6-10 people to plan the site.

to introduce myself and establish mutual understanding of roles in the process.

### MATERIALS

- 1) written statement of roles, tasks and expectations
- 2) phone list of Task Force members

### METHOD

I stood up and introduced myself at a Planning Team meeting; explained what we wanted to do; roles in the process; and asked for volunteers.

### ISSUES

How to establish a working relationship in a very short time?

How many people would be willing to devote at least 2 evenings a month to work on this project?

### RESULTS

There was very little response to my stand-up talk. But there was already an informal Task Force established to talk about the NASA site. I used the list of people who had previously expressed interest and invited people by phone to the first Task Force meeting. Three people joined after later meetings.

### EVALUATION

Introduction by stand-up talk is unsatisfactory. People need to meet you individually to have any trust. Also, commitment to the group grew substantially everytime some tangible work was completed. I was greatly aided in establishing a working relationship by the fact that I lived in the area. It would probably take much more contact over a longer time for an outsider to be accepted as a working partner.

## Roles

I am an architecture student at MIT with long-term interests in community participation in planning and design of neighborhoods. For a final project at MIT I am working on an alternative to the C.R.A. plan for the Kendall Square area and for the "surplus NASA land" in particular. I will be working full-time on this project from now until the end of January.

I would like to meet with some members of the East Cambridge Planning Team to discuss possibilities and preferences of East Cambridge residents about the NASA site. We might work together on a model of the site that expresses these possibilities and preferences. The model and drawings I will do can be shown to the C.R.A. or the City Council if it is approved by the Planning Team as a whole.

Lane Sarber of the C.E.O.C. Housing Development Team will help us out and other people working in this field will be available to help if necessary.

We can start by looking at maps and drawings of the area and discussing a tentative plan I've prepared. At the beginning we should discuss how the site affects the rest of East Cambridge. For example, who's going to live there, visit there, shop there, play there; and how people from East Cambridge will get to the area and through the area. Also how children will use the area and how they will get to school.

I would like to meet about once every two weeks for about two hours in October and November. The first meeting will be Tuesday night, October 10, at the East End House.

### THIRD STEP - GROUP ORIENTATION

PURPOSE - to familiarize the group with the site  
to articulate community attitudes toward the site  
to generate attitudes toward program possibilities

#### MATERIALS

- 1) 3-d axonometric map of East Cambridge at 1:200 scale
- 2) Site analysis map
- 3) Chart showing program alternatives and consequences

METHOD discussion of materials in small group meeting with 5 Task Force members.

#### ISSUES

- 1) Will people living here be part of any neighborhood? which one? why?
- 2) How to overcome isolation of neighborhood within factory belt?
- 3) What effect will development here have on East Cambridge?  
How will E. Camb. people use the site?  
How will people living there use E. Camb?
- 4) What should go on the site?

#### RESULTS

Housing alternative was reaffirmed. But major concerns about housing were:

- + Who will live there?
  - E. Camb. renters who want to buy their own homes, especially children growing up and starting their own families.
  - MIT faculty
  - professionals and executives
  - others?
- + Will additional children overcrowd schools?
- + Will it make taxes go up?
- + Will people living there look down on E. Camb. as an old, crummy neighborhood?

Links of NASA site to East Cambridge:

+Factory belt is not perceived as a physical barrier. Streetlight and sidewalk improvements will link NASA site to E. Camb. along 6th and 9th Streets. People walk through all the time, to get to the MTA stop. People formerly living on the DOT site used to walk to shopping and churches on Cambridge Street. Permeability of the factory belt is due to the human scale of the old factories.

ACTIVITY LINKS BETWEEN NEIGHBORHOODS ARE MORE IMPORTANT THAN PHYSICAL LINKS.

- + Residents don't want any more factories torn down to make a residential link. Perhaps additional housing could be built along the RR right-of-way.
- + Activities on the NASA site for E. Camb. residents could be
  - community hall, gym
  - supermarket, shops
  - movie theater
  - no athletic fields are needed, despite Cambridge Planning Board belief to the contrary.
- + Activities in E. Camb. for NASA site residents could be
  - churches, schools, library, East End house
  - Cambridge Street shopping

No outsiders are wanted in the neighborhood.

it was decided that disruption of the existing neighborhood could be reduced by making living patterns and physical setting on the NASA site similar to the existing E. Camb. residential pattern so that the type of people attracted to live there would fit in with the current residents. This meant that the current E. Camb. residents on the Task Force could act as surrogate user-clients for the people who would eventually live there. Thus the planning process must identify the living patterns and form preferences of current E. Camb. residents and apply them to the NASA site. It was important to discover the factors which make E. Camb. have such a strong and positive identity in the minds of its residents.

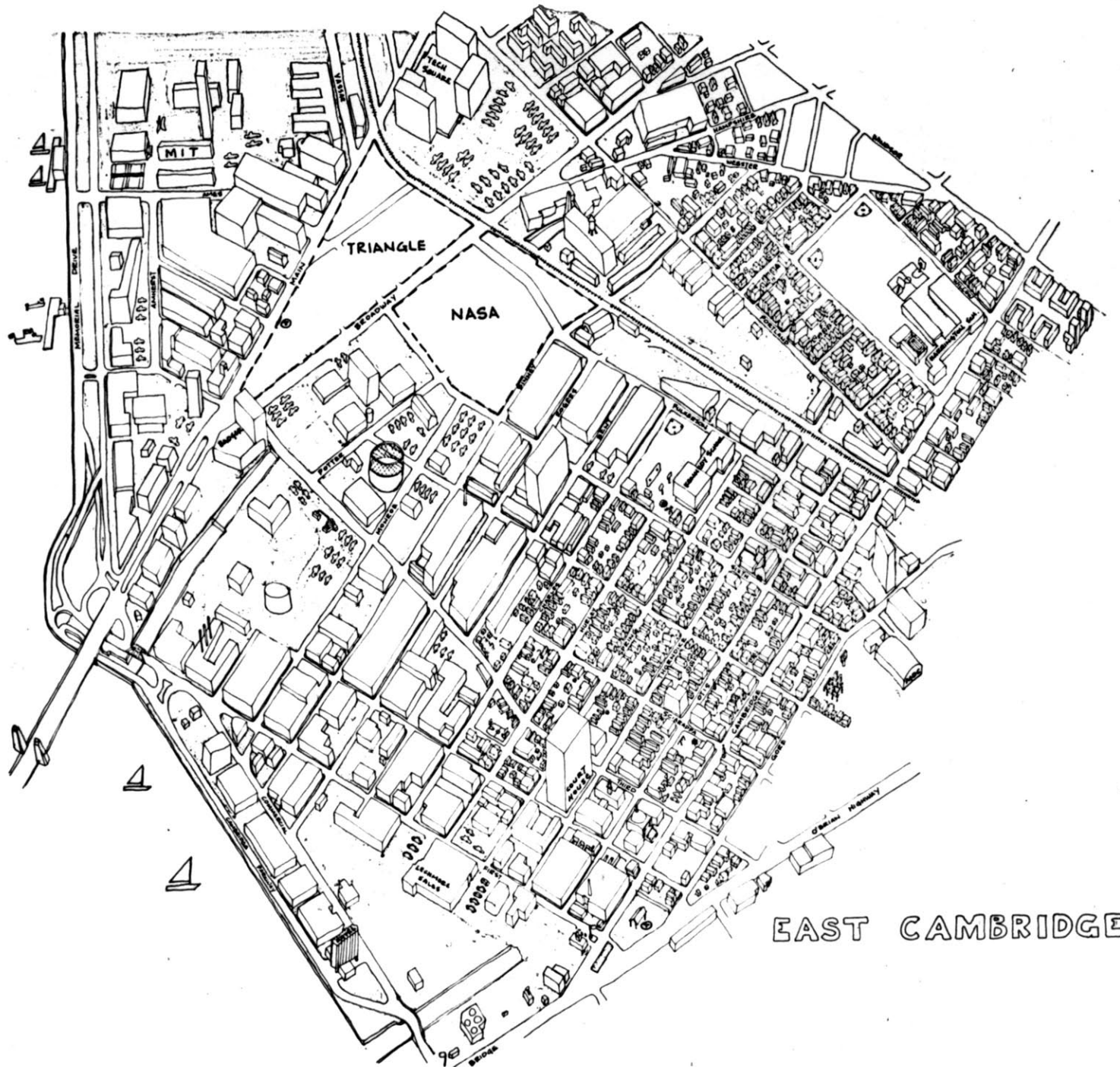
## EVALUATION

The axonometric map of the whole neighborhood was thoroughly enjoyed and generated a lot of discussion. People could identify and project into very easily. They filled in many details spontaneously. It was important for the Task Force to form a physical image of the whole neighborhood and of its physical proximity to Kendall Square.

Drawings generate most response when they are on the table in the midst of the group. Drawings on the wall, program chart and site analysis, drew little discussion.

The chart showing program alternatives and consequences was appreciated for its clarity but did not generate separate discussion of program issues.

I was very surprised by people's awareness that an activity link was more important than a physical link in overcoming neighborhood isolation. As architect-trained, I had been pre-occupied by solutions that would create physical links of homes or elevated walkways through the factory belt.



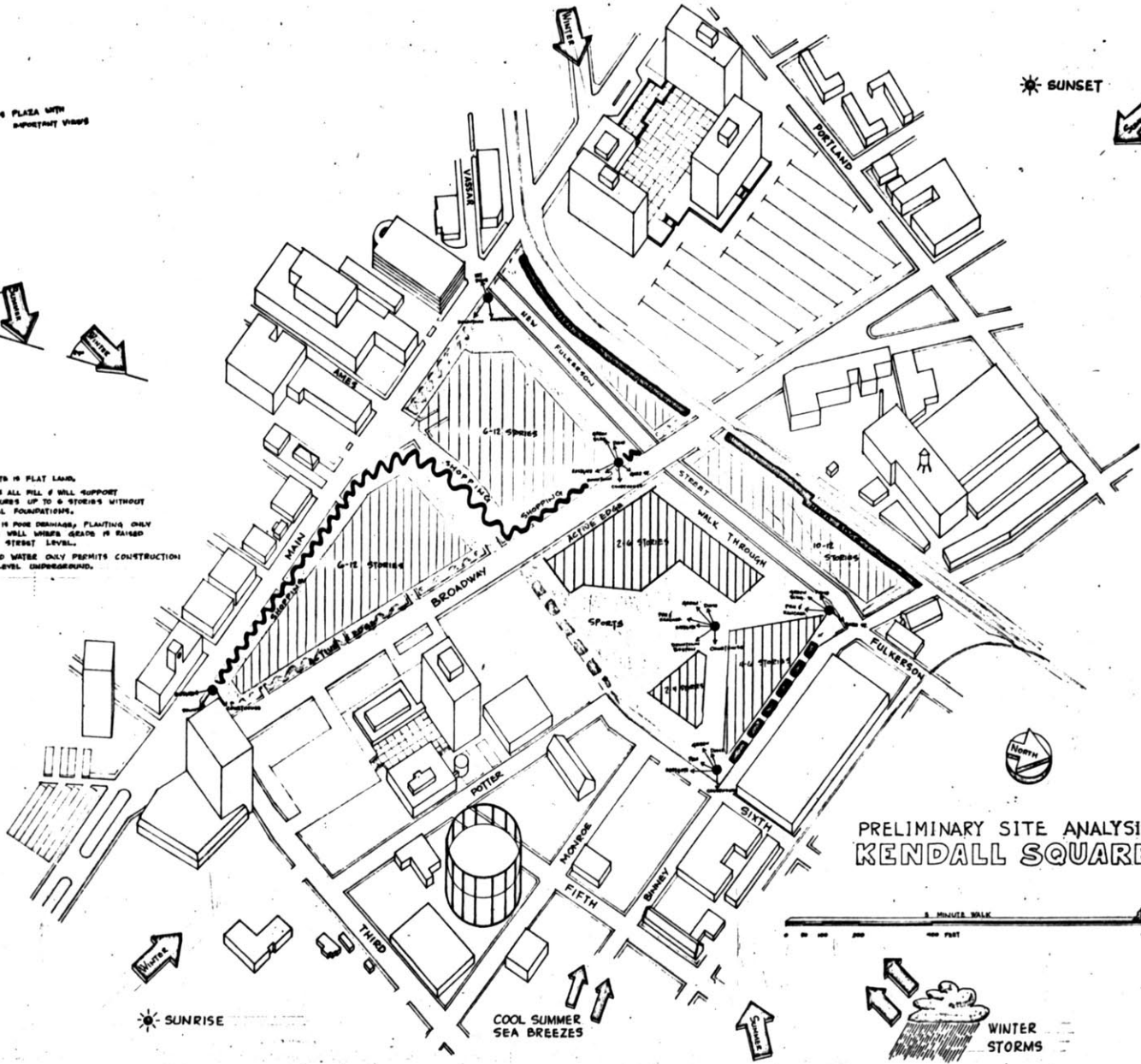
EAST CAMBRIDGE

NOON SUN

MAJOR PLAZA WITH  
IMPORTANT VIEWS

SUNSET

NOTE: THE SITE IS FLAT LAND.  
SOIL IS ALL FILL & WILL SUPPORT  
STRUCTURES UP TO 6 STORIES WITHOUT  
SPECIAL FOUNDATIONS.  
THERE IS POOR DRAINAGE, PLANTING ONLY  
BEYOND WALL WHERE GRADE IS RAISED  
ABOVE STREET LEVEL.  
GROUND WATER ONLY PERMITS CONSTRUCTION  
OF 1 LEVEL UNDERGROUND.



PRELIMINARY SITE ANALYSIS  
KENDALL SQUARE

# POSSIBLE SITE USES

USE		CONSEQUENCES GOOD & BAD	
<b>SHOPPING</b>	SUPERMARKET DEPARTMENT STORE SPECIALTY SHOPS	MORE CONVENIENT SHOPPING PROVIDE SOME JOBS	WILL HURT STORES ON CAMBRIDGE ST. & CENTRAL SQ MORE PEOPLE & CARS IN AREA
<b>RECREATION</b>	MOVIE THEATRE, PLAYHOUSE ATHLETIC FIELDS, PARK RESTAURANTS, ICE RINK	CONVENIENT ENTERTAINMENT CHILDREN'S PLAY	MORE PEOPLE & CARS NOISY LITTLE CITY TAX REVENUE
<b>INDUSTRY</b>	TECHNICAL RESEARCH PRINTING & PUBLISHING ELECTRONICS ASSEMBLY WAREHOUSING	PROVIDE SOME JOBS	MORE CARS TRUCKS
<b>MARKET RATE HOMES</b>	150-1400 FAMILIES CONDOMINIUM TOWNHOUSES RENTAL	MORE CUSTOMERS/BETTER SHOPS MAXIMUM CITY TAX REVENUE HIGHER PROPERTY VALUES	HIGH RENTS - \$250 up HIGH HOME PRICES - \$40,000 up
<b>SUBSIDIZED HOMES</b>	COOPERATIVE TOWNHOUSES RENTAL	MORE CUSTOMERS FOR SHOPS LOW RENTS LOW HOME PRICES	LITTLE CITY TAX REVENUE 250-500 NEW FAMILIES
<b>FAMILY HOMES</b>	YOUNG FAMILIES LARGE FAMILIES	NEW HOMES FOR E. CAMBRIDGE STABLE NEIGHBORHOOD	MORE KIDS IN SCHOOL HIGH COST TO CITY TRUCKS DANGEROUS FOR KIDS
<b>1 &amp; 2 BR HOMES</b>	JUST MARRIEDS SINGLES, STUDENTS RETIRED COUPLES	NO KIDS IN SCHOOL GOOD CITY TAX REVENUE	HIGH TRANSIENT RATE NO FAMILY HOUSING
<b>HOTEL</b>		MAXIMUM CITY TAX REVENUE MORE CUSTOMERS/SHOPS	MORE TRAFFIC
<b>OFFICES</b>		MAXIMUM CITY TAX REVENUE RESTAURANTS/SHOPS	MORE TRAFFIC
<b>PARKING</b>		SOME CARS OFF STREET	MAY ATTRACT MORE CARS



FOURTH STEP - PROGRAM AND SITE PLAN GENERATION

PURPOSE - to generate a preliminary program and site plan for the NASA site

MATERIALS

- 1) Chart showing extremes of program alternatives and their consequences for schools, taxes, rents, etc.
- 2) Two alternative programs containing:

community hall	8000 sq.ft.
movie theater	10000 sq.ft.
supermarket	20000 sq.ft.

and either A. 180 townhouses @ 1300 sq.ft. each  
or B. 450 flats and row houses @ 1000 sq.ft. each
- 3) Manipulable model on axonometric base at 1:50 scale  
with blocks color coded for buildings  
with cardboard moveable roads, walks, gardens, parking, playgrounds  
Polaroid photos of the model were taken.
- 4) Photos and drawings of some housing developments and photos of the model as I had put it together were shown as examples of what could be done.

METHOD

- 1) Research and calculation of rent, tax, and school consequences of different development alternatives.
- 2) cooperative model-building and discussion at a small group meeting with six Task Force members.

ISSUES

what zoning of activities on the site, esp. with regard to facilities connecting to other neighborhoods?

determine desired pedestrian and vehicular circulation.

determine program and site plan massing simultaneously.

discuss impact of development on E. Camb., esp. rents, schools and taxes.

RESULTS

- 1) family vs. non-family housing effect on schools and taxes was agreed to be of little significance.
- 2) program was decided to be a mix of alternatives A and B to provide a mixed neighborhood of family and non-family homes with no effect on schools or taxes.
- 3) who will live there? - not many from E. Camb. but "our kind of people".
- 4) some important elements in E. Camb. environment:
  - + family complexes of 2-5 apartments sharing one yard.
  - + small gardens, but the Task Force did not recognize the difference between large public open space and fenced yards!
- 5) site plan was generated with
  - + non-family apts. at hard edges of factories and roads
  - + supermarket at hard edge of railroad
  - + community hall by supermarket
  - + movie theater should be on triangle site
  - + ice cream store on corner of Binney and Fulkerson or in center of site on a corner.
  - + tot lots not located near roads.
  - + 2 tot lots and a basketball/hockey field are needed
  - + walkways not thru gardens to avoid tomato stealing.
  - + some houses located on pedestrian walkway
  - + some houses on the street, some on shared courtyard.
  - + pedestrian walkway can leave the street line.
  - + small 8 story apt. tower is OK.
  - + 6th Street and Fulkerson should continue through to Main St. and Broadway.
  - + Monroe St. should provide direct access to the supermarket from Third Street.

## EVALUATION

- + There is a great reluctance to work with the model on the residents' part. They need a lot of coaxing. Introducing activity-pieces like cardboard roads, walks, gardens, tot lots makes it much easier for them to locate buildings. The less abstract the model is, the easier to manipulate.
- + Massing model is very limited in what it can tell you. Only zoning of activities and a sense of building volumes.
- + Task Force members did a better job than I did in making a site plan! They were freer, looser, created more variety and were MORE PRACTICAL than I was. Especially in locating the supermarket by the railroad.
- + They were very proud of their work, and stayed around to see the Polaroid photos I took of the model.
- + Also, refer to discussion of types of model building techniques in Book I of the Thesis Journal.

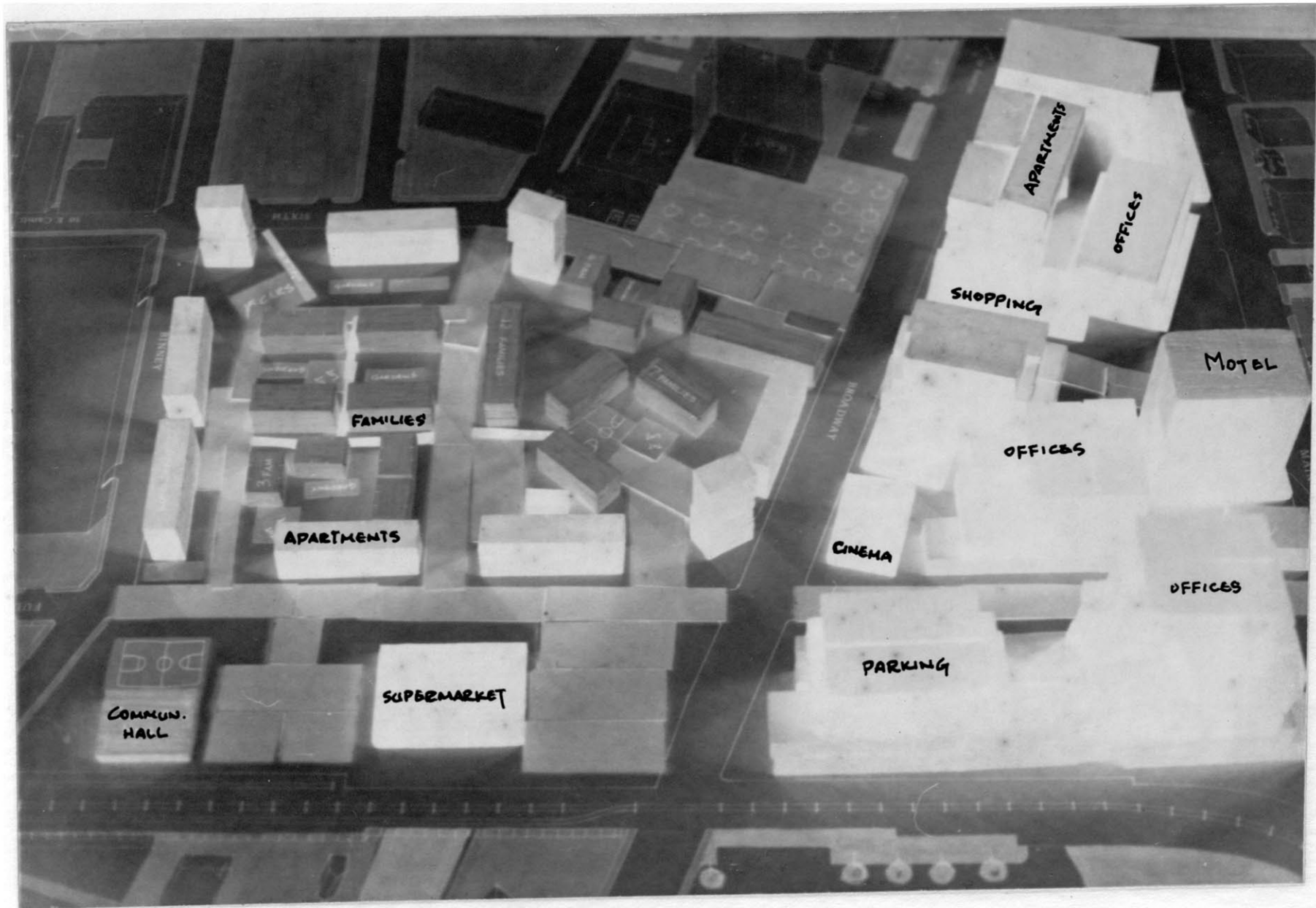
SURPLUS NASA SITE -- PROGRAM ALTERNATIVES

ALTERNATIVE	FINANCING	RENTS	NET CITY TAX INCOME (NET COST TO CITY)	EFFECT ON TAX RATE	IMPACT ON ELEM. SCHOOLS	WHO WILL LIVE THERE?	DOES IT MEET HOUSING NEEDS?	IMPACT ON E. CAMBRIDGE
180 3 & 4 BR units 2-3 stories	FHA & MHFA cooperative	\$230 up *	(\$300,000)	0.6% increase \$0.89 additional	150 new pupils	families; renters from E. Cambridge		
180 luxury townhouses	private	\$375 up	0	no change	150 new pupils	professionals univ. faculty		
450 eff. & 1 BR units 4 story walk-ups	FHA & MHFA cooperative	\$190 up *	0	no change	none	young marrieds singles elderly		
450 eff. & 1 BR units luxury 4 story	private	\$280 up	\$500,000	1.0% decrease \$1.49 less	none	young marrieds singles students		
C.R.A. Plan 1350 eff., 1 & 2 BR & townhouses	private	\$250-\$450	\$700,000	1.4% decrease \$2.09 less	100 new pupils	professionals univ. faculty		34 story towers lots of people for stores

\* some rents lower @ 25% of income by Rent Supplement Program

ELEMENTARY SCHOOLS ENROLLMENT

SCHOOL	OCT. 1972 ENROLLMENT	DESIGN CAPACITY
Kennedy	688	940
Harrington	921	900
Gore St.	120	211
Putnam	85	500
Roberts	553	690



COMMUN.  
HALL

SUPERMARKET

APARTMENTS

FAMILIES

CINEMA

PARKING

OFFICES

SHOPPING

OFFICES

MOTEL

OFFICES

APARTMENTS

## FIFTH STEP - CONSENSUS I

PURPOSE - to present the work of the Task Force to the Planning Team.  
to begin to generate awareness and energy for community action on Kendall Square.  
to receive approval or correction of the work of the Task Force.

### MATERIALS

3-d axonometric neighborhood map  
chart of chosen program and consequences  
axonometric site plan at 1:50 of the work done by model manipulation  
Polaroid photos of the model as constructed by the Task Force

### METHOD

stand-up talk in front of 20 people at Planning Team meeting using drawings on the wall.

### ISSUES

Will the larger group agree with Task Force conclusions?  
Can the group generate a consensus for future political action?  
Is an 8 story tower acceptable to the community?  
Is the program acceptable? consequences approved? any unexpected objections?  
Is the site plan convenient for residents of E. Camb? Will they use supermarket?

### RESULTS

+ renewed dislike of CRA plan  
+ general approval of Task Force conclusions  
+ agreement that tax and school issues are not significant  
+ against 8 story buildings  
+ liked home ownership, especially condominium instead of cooperative  
+ layout OK, including supermarket location

## EVALUATION

- drawings on the wall make the observer passive and more accepting
- charts on the wall make things clear but don't encourage creative debate; they tend to legitimize whatever is put up without real basis.
- was there consensus? - yes. will this energize them for future action? - ??
- not much reaction to a stand-up talk. in general the large Planning Team meetings are tightly run affairs with speakers and audience well defined. also leaders and followers. The Planning Team is not a politically loose group but is carefully controlled by its leaders.

# TASK FORCE PROPOSAL - NASA SITE

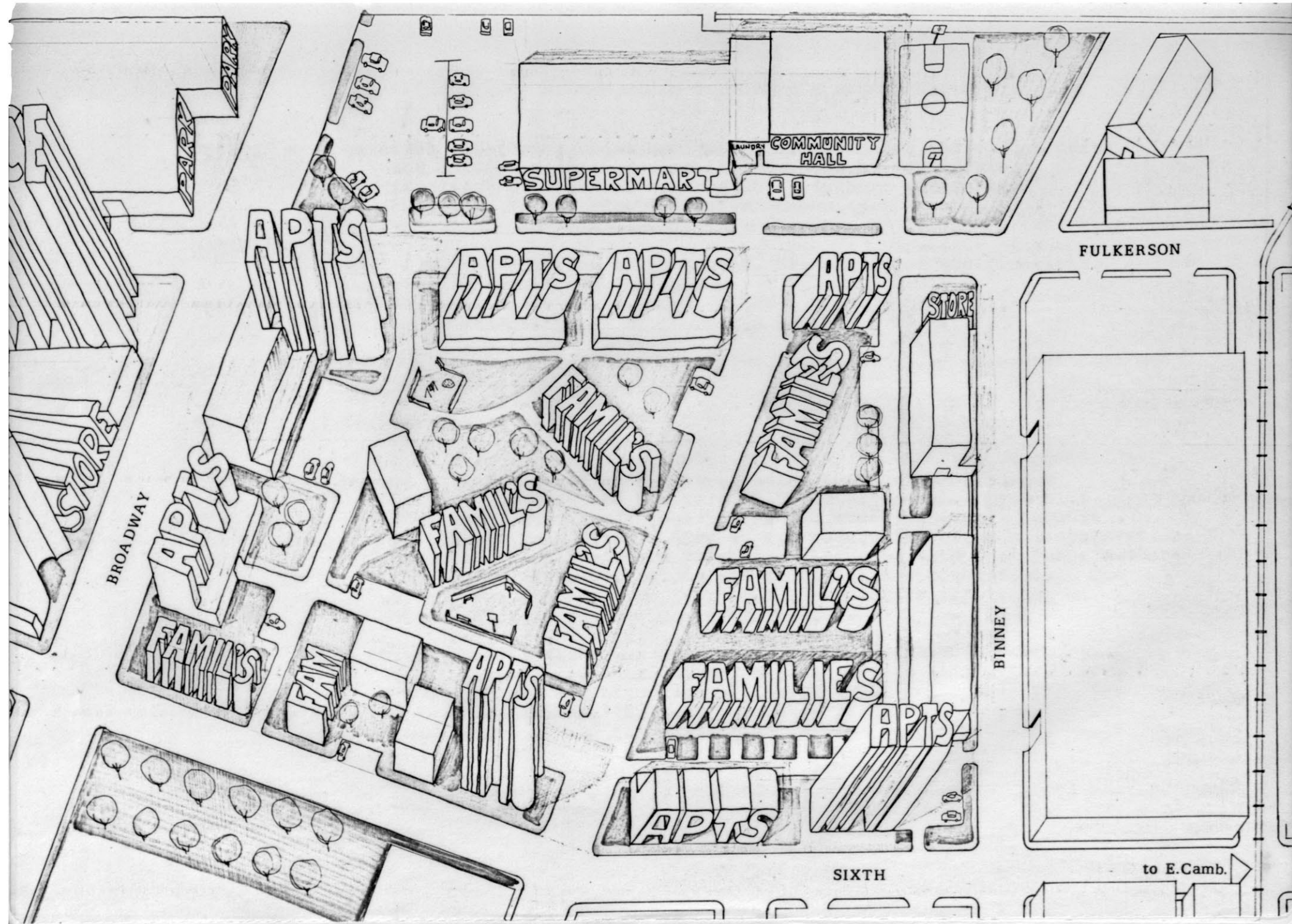
PROGRAM	HEIGHT	RENT*	Who'll live there?	TAX EFFECT	SCHOOL
150 APARTMENTS					
Efficiencies	4-8	\$ 60	Singles, young		
1 BR	STORIES	\$ 110	married with income		
2 BR		\$ 135	under FHA limit**		
100 FAMILY UNITS				45¢ increase on City Tax Rate	120 new elem. school children
3 BR	2-3	\$ 165	families, renters		
4 BR	STORIES	\$ 190	from E. Camb. with		
5 BR		\$ 220	income under FHA limit		
SUPERMARKET					
LAUNDROMAT					
DRUGSTORE					
ICE CREAM STORE					
COMMUNITY HALL					

\* RENTS FOR SOME FAMILIES CAN BE LOWER UNDER RENT SUPPLEMENT PROGRAM - 25% of family income

\*\* FAMILIES WITH INCOME ABOVE THIS LEVEL CAN BE INCLUDED IF SOME HOMES ARE NOT FHA SUBSIDIZED. RENTS WILL BE TWICE THE AMOUNT SHOWN. PROFESSIONALS & UNIVERSITY FACULTY WILL BE ABLE TO MOVE INTO THESE UNITS.

SCHOOL	1972 ENROLLMENT	DESIGN CAPACITY
KENNEDY	688	940
HARRINGTON	921	900
GORE ST.	120	211
PUTNAM	85	500
ROBERTS	553	690





SUPERMART

LAUNDRY  
COMMUNITY HALL

FULKERSON

STORE

BINNEY

SIXTH

to E. Camb.

APTS

APTS APTS

APTS

APTS

FAMILI'S

FAMILI'S

FAMILI'S

FAMILI'S

FAM

APTS

FAMILI'S

FAMILI'S

FAMILIES

APTS

APTS

BROADWAY

## SIXTH STEP - NEIGHBORHOOD PERFORMANCE SPECIFICATIONS

PURPOSE - to generate use-form couples and design criteria for individual units and for the Kendall Square neighborhood by identifying important patterns of environmental support for desired behaviors in the East Cambridge community.

### MATERIALS

- 1) slides of the existing neighborhood, especially of modifications made to existing buildings.
- 2) survey questionnaire of E. Cambridge residents by mail.
- 3) Performance Specifications drawn from discussion and interpretation of the slides and the survey results.

### METHOD

- 1) Observation of how the neighborhood has been tuned to particular patterns of use-form. Modifications of existing buildings will show misfits between desired behavior and form. Decoration of buildings will show an especially good match between desired behavior and the form of the environment. Both will show what the desired behavior is and what forms will support that behavior. First I drew my own conclusions from the observations and then the slides were shown and discussed with Task Force members to check my interpretations and to reveal new conclusions. The Task Force members also indicated the relative importance of different features of the environment.
- 2) A survey questionnaire was created by reviewing all activities that occur in and around the home. The survey was mailed to 14 Task Force members and asked for preferred forms and behaviors. The survey was intended primarily to seek information about use-form preferences inside the home, since it was not possible to visit all the homes.
- 3) The conclusions from both the slides and the survey were listed as a set of Neighborhood Performance Specifications.

## ISSUES

- + what layout of rooms supports E. Camb. lifestyles?
- + what is the desired relation of inside to outside space?
  - to public outside space?
  - to private outside space?
- + what is the desired relation of public to private areas in the neighborhood?
- + what is the appropriate parking arrangement?

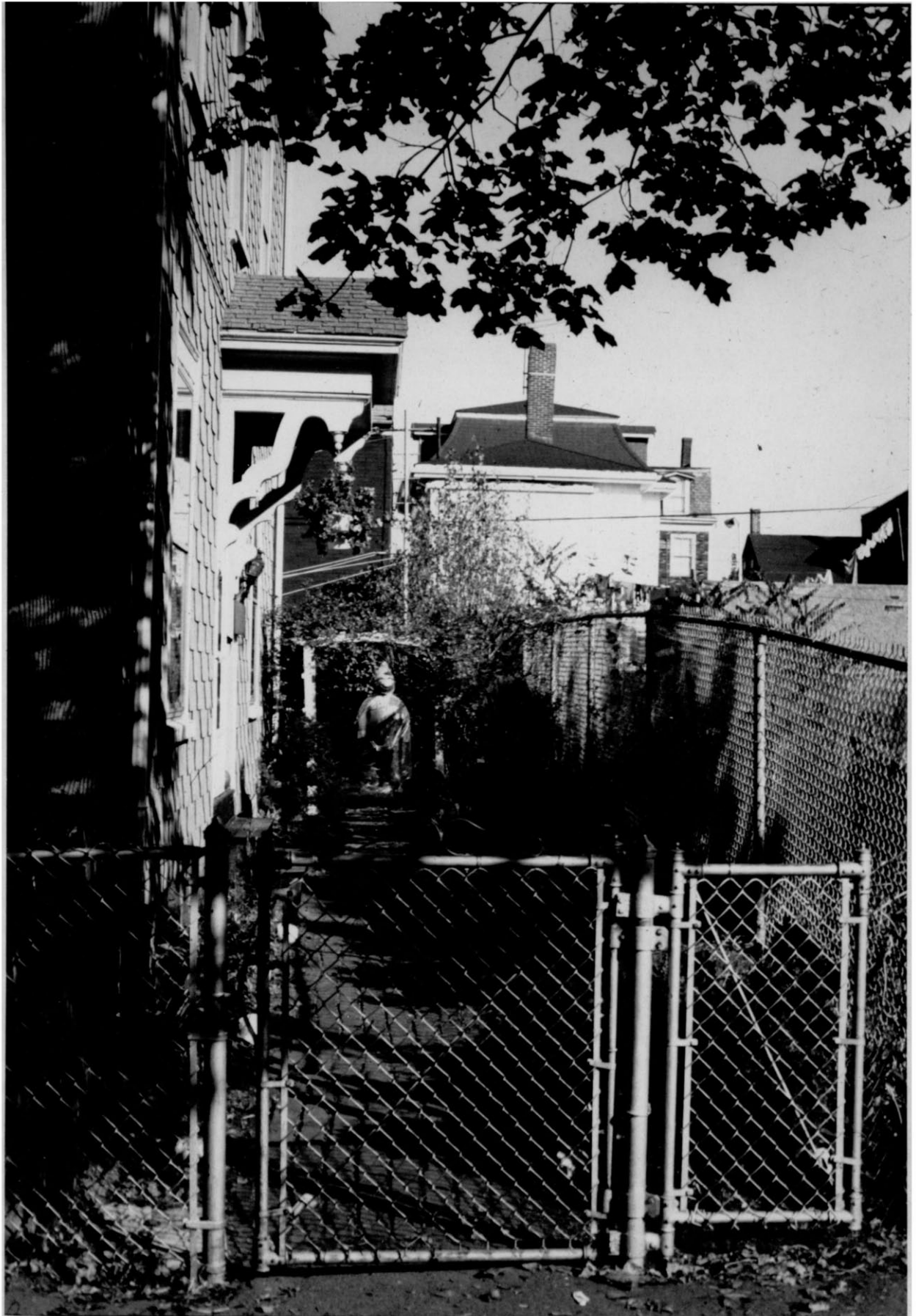
RESULTS: The results are a set of conclusions about the preferred environment of E. Camb. residents - i.e. rules-statements about forms that support the preferred behavior and attitudes of residents.

The results show an excellent tuning of the existing environment to the desired patterns and a high degree of satisfaction with the existing neighborhood. This is especially revealed by the number of decorations and modifications made by residents and by the social interaction which occurs among residents, including a strong sense of neighborhood identity.

## EVALUATION

- Both the survey and the slide-observation methods are very fruitful in yielding use-form patterns.
- The questionnaire must be very carefully designed to obtain the desired information while still allowing unexpected patterns to emerge. Ambiguously worded questions will probably be left blank, or questions with more than one variable. A mail questionnaire requires personal follow-up to get them returned.
- The conclusions must be tested by asking residents directly whether they agree and by showing them designs created from the Specifications.
- This method of planning cannot be called participatory except insofar as the residents are involved in creating the Specifications as conscious decision-makers. Such involvement could have been much greater than was actually carried out. Interpretation of the survey and observation of the environment by the professional alone can be misleading because the preconceptions of the professional are unquestioned.







11. Families on the 2nd or 3rd floor should have . . .  
 . . their own part of the yard on the ground?  
 . . a large porch on their own floor?

12. My favorite material on the outside of houses is \_\_\_\_\_.

II. ABOUT THE INSIDE OF THE HOUSE

1. A table in the kitchen is used for . . . eating meals?  
 family talks?  
 guests?  
 homework?  
 other? \_\_\_\_\_.

2. While cooking or washing dishes, I like to . . . talk to \_\_\_\_\_.  
 listen to \_\_\_\_\_.  
 watch the \_\_\_\_\_.

3. Pets . . . .shouldn't come into the kitchen when \_\_\_\_\_.  
 children  
 men  
 guests  
 others? \_\_\_\_\_

4. A separate room that can be rented out or used for overnight guests is ...  
 very important?            not important?

5. "Get-togethers" need . . . one large party area?  
 2 or more separate areas, one for \_\_\_\_\_  
 and one for \_\_\_\_\_  
 take place all over the house?

6. Guests should not see the \_\_\_\_\_.

7. I sometimes watch the kids playing outside from the \_\_\_\_\_.  
 what room?



8. I often have to supervise the small children playing in the \_\_\_\_\_.  
what room?
9. A place for teenagers to entertain friends should be . . .  
. . separate from the rest of the family?  
. . seen but not disturbed by the rest of the family?  
. . in the family area?
10. The infants' playpen should be close to the \_\_\_\_\_.
11. I like to see who is out on the street from the \_\_\_\_\_.  
what room?
12. A basement workshop can be shared by \_\_\_\_\_ families.  
how many?
13. Neighbors often \_\_\_\_\_ in the hallways?  
. . leave a lot of junk?  
. . meet to talk?  
. . make a lot of noise?  
. . other? \_\_\_\_\_
14. When doing quiet work, . . . I go to my own room?  
I like to see what everyone else is doing?
15. The children usually do their homework in the \_\_\_\_\_.  
what room?
16. To get to the bathroom, you shouldn't have to walk past the \_\_\_\_\_.
17. Most talking on the phone happens in the \_\_\_\_\_ room.
18. People sick in bed should . . . have a lot of visitors?  
be undisturbed?  
be able to see family activities?
19. In an apartment, there is usually no place to put the \_\_\_\_\_.
20. I don't like inside walls made of \_\_\_\_\_.



IV. ABOUT THE NEIGHBORHOOD

1. I usually talk to a friend on Cambridge Street / . . .  
every day?                      a few times a week?    once a week?    rarely?
2. My favorite place in East Cambridge is \_\_\_\_\_.
3. When I go for a walk, I like to go to \_\_\_\_\_.
4. What ages of children should play in the following places? . .  
    . . under adult supervision \_\_\_\_\_ years old.  
    in the yards? \_\_\_\_\_ years old.  
    on the front steps and sidewalk? \_\_\_\_\_ years old.  
    at a playground 2 blocks away? \_\_\_\_\_ years old.  
    at a playground 10 blocks away? \_\_\_\_\_ years old.

PERFORMANCE SPECIFICATIONS FOR DEVELOPMENT OF KENDALL SQUARE

by TASK FORCE ON THE NASA SITE  
EAST CAMBRIDGE NEIGHBORHOOD PLANNING TEAM

I. NEIGHBORHOOD

1. Kendall Square should be developed with activities and form that support the lifestyles of residents of adjacent neighborhoods. This will enable people now living in adjacent neighborhoods to move to the new development if they desire and insure that new residents in the area will not disrupt existing neighborhoods.
2. Kendall Square should be linked to adjacent neighborhoods:
  - physically, by improved sidewalks and streetlights on Sixth St., Ninth St., Binney and Broadway
  - by activities on the site for residents of adjacent neighborhoods such as
    - supermarket
    - laundromat
    - ice cream store
    - community hall
    - movie theater
  - by providing maximum number of full-time semi-skilled jobs for adults and part-time jobs for high school students.
3. No more industry shall be removed! Specifically, the Task Force is opposed to long-range plans to ~~replace jobs~~ with houses in the area bounded by Charles and Binney Streets between Sixth and Ninth Streets.
4. Provide the maximum number of home units reserved for low and middle income families compatible with the density of existing residential neighborhoods adjacent to the site.
5. No "wall" around East Cambridge! Maximum 4-8 stories on the NASA site and maximum 18 stories on the triangle.

II. OWNERSHIP RIGHTS

6. Development shall provide ownership of home units by residents to allow the responsibilities and privileges of home maintenance and modification that create a vital neighborhood.
7. The right to make modifications (partitions, porches, extensions, yards) must be written into the deed or lease so as to avoid conflicts between users of shared entrances and spaces. Only by such modifications to the original equipment of the home can the units be flexible enough to meet changing family needs while preserving neighborhood stability.

### III. INDIVIDUALITY

8. Home units should not be "all stamped out the same." Uniqueness can be created by legally and physically allowing modification to the outside and inside of units, and by providing private outdoor spaces for each unit that can be seen from the public spaces such as sidewalks.
9. Original equipment partitions should allow for rearrangement by the user-owners. This is especially necessary for established families and older people who will bring their furniture with them and must fit it into the new home.

### IV. STREETS

10. Sixth Street and Fulkerson Street should remain open at least to Broadway to allow pedestrian and vehicular access between East Cambridge and the Kendall Square development.
11. Homes should be located on very short streets which connect thru-street and neighborhood facilities like parks and tot-lots.
12. Thru-streets should have safe and protected pedestrian circulation along them, such as that provided by parked cars between the sidewalk and traffic.
13. The possibility of a gathering and talking place such as a corner store should be provided at every street intersection to help create a very local neighborhood identity.
14. There should be a place for trash collection by every house that does not interfere with pedestrians or children playing on the sidewalk.

### V. CARS

15. A parking place for each home unit shall be provided within 150 feet of each house. The privacy of the space must be clearly identified so that it will not be usurped by shoppers, visitors or workers in the area, but there should not be a gate which requires the parker to leave his car to open it.
16. There shall be a place to work on or wash the car near each unit so that the car is seen from the home and so that a hose can be attached.

### VI. PLAY AREAS

17. Children under 6 shall have an enclosed yard at the home in which to play under adult supervision from a window in their house.
18. A play area for children 6-10 shall be within 2 blocks of every home. There shall be a place for parents to meet, sit and talk at the play area. The play area shall be protected from street traffic, and homes adjacent to the play area should be protected from vandalism and noise.

19. A play area for children above 10 should be within 10 blocks of every home.
20. There should be a place for adults to meet in front of their own homes or in their yards, and to see activities, private gardens and open areas when they go for a walk.

#### VII. OUTSIDE SPACE

21. A small garden "under the windows in front of the house" shall be provided for show-off gardening, religious and seasonal displays, political signs, flagpole, etc.
22. A private outdoor yard shall be provided for entertaining, growing vegetables, and for small children's play.
23. Ownership and responsibility for every square foot of land shall be clearly marked by fences, gates, level change, or other means. This demarcation shall provide control of access to yards and define boundaries of ownership, especially to keep animals and children out of vegetable gardens. "Fences are not to say stay off or to hide things; they're not spite fences." They say this land is my land and this land is your land."
24. No more than two families shall share one yard.
25. There shall be trees in backyards and between yards.

#### VIII. HOUSE EXTERIORS

26. Houses shall be clad in wood or brick.
27. Exterior walls along public and semi-public paths shall be of undamageable and washable material and dark color for the lowest 5 feet to prevent marking up by children with sticks, fingerprints, etc.
28. Windows shall have ledges inside and out wide enough for flower pots, bottles, signs, etc.

#### IX. ENTRANCES

29. Formal guest entrance should not be thru private yard; preferably across sitting porch.
30. Families shall not share entrance halls; single people may share a hall if it has a meeting and talking place.
31. Small apartments shall have a door visible from the street.
32. There shall be weather protection at the door to keep cold wind, rain and snow off of people and to prevent cold air from entering the house.
33. Private entrances should not become hang-outs for uninvited people, especially children, to sit on the steps or get out of the weather.
34. There shall be a door from each kitchen to the outside yard and to the trash collection place.
35. There shall be a gradual but marked transition from public paths to private outdoor spaces by means of level changes, ground and plant materials, gates, partial enclosures, or direction changes, but not complete acoustic or visual separation.

#### X. PORCHES

36. Every home unit shall have a porch which can be used as a "retreat" from which to watch the street, containing hammock, chairs, etc.
37. Lower roofs shall be flat so they can become porches or be enclosed to add rooms. Porches shall be encloseable by the owner.

#### XI. BASEMENT

38. There shall be a private basement for each unit to provide storage and the possibility of a workshop or family room.
39. There shall be a direct entrance to the basement from the private yard to bring out lawn furniture, BBQ, or tools.
40. There shall be a direct entrance to the basement from inside each home unit to get to the tools, trash, storage or workshop in bad weather.

#### XII. STORAGE

41. A convenient place for keeping bicycles and baby carriages shall be provided in each family unit.
42. A private storage place for lawn furniture, BBQ, tools, etc. shall be provided for each single-person unit.
43. A place where a washer and dryer can be installed and a place for storage of extra clothes shall be provided in each family unit.

#### XIII. KITCHEN

44. Kitchens shall be large enough for people to eat meals, talk, do homework or hobbies in. A shelf and storage space shall be provided near a space for the kitchen table.
45. A place for small children's play inside shall be visible from the kitchen.
46. There shall be a window in the kitchen which overlooks the children's outside play yard, and also a window which overlooks the street.
47. The kitchen should be separable if desired from the guest area or living room, and it should be able to provide a separate party area if desired, for special groups.

#### XIV. LIVING ROOM

48. The living room shall have a window to look out on the children's outdoor play area and to the street.

#### XV. BEDROOMS AND BATH

49. Bedrooms and bath should be separable from guest areas.
50. Bedrooms should be large enough and acoustically private to permit quiet work such as reading, hobbies, music practice.
51. Circulation to the bathroom should not be through any other room, and should be private from activities in the kitchen and bedrooms and living rooms.

## XVI. ACOUSTIC PRIVACY

52. There shall be strict acoustic privacy between units and especially through party walls.

## XVII. ECONOMY

53. Greatest economy of original price should be employed consistent with quality construction. Some specific suggestions are:

much finish and partition work can be omitted to be completed by the owner in his own taste at his convenience. All plumbing, mechanical, structural and weather enclosure should be completed.

central heat shall be provided from Edison steam pipes with individual control by thermostat in each unit.

attempts should be made to have only one plumbing stack in each house.

## SEVENTH STEP - DESIGNING

PURPOSE - to produce prototype home units and neighborhood features

to check how well the Performance Specifications reflect residents' desires by discussing homes and neighborhoods that embody those Specs.

### MATERIALS

Polaroid photos of model  
Sketches of home units and neighborhoods  
Model of a typical home unit at 1/4 scale  
drawing of prototype neighborhood at 1/32 scale

### METHOD

Design prototype home and neighborhood from criteria of Performance Specifications.  
Discuss model of home and neighborhood drawing on table with Task Force.

### ISSUES

How well does my interpretation of survey questionairre and slide observation of neighborhood reflect the residents' preferences?  
What is the desired design of homes and neighborhood for the Kendall Square area?

### RESULTS

My conclusions about the slides and survey results were generally confirmed by the Task Force members. Some ambiguities in the questionairre were revealed. Some additional criteria not picked up by my observations were supplied by the Task Force and the difference between relatively unimportant and very important criteria were made obvious in discussion.

The designs were generally approved.

## EVALUATION

Consciously preferred design choices by the Task Force members are to be more heavily weighted than conclusions inferred by the professional from data that's been gathered.

Showing slides of their own neighborhood generates energy and commitment to the project and against the CRA plan.

Model of home unit generated discussion, but having three lift-off layers makes it difficult to see or discuss the house as a whole.

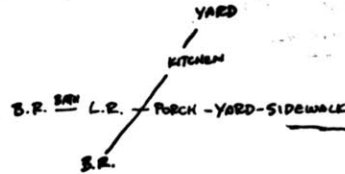
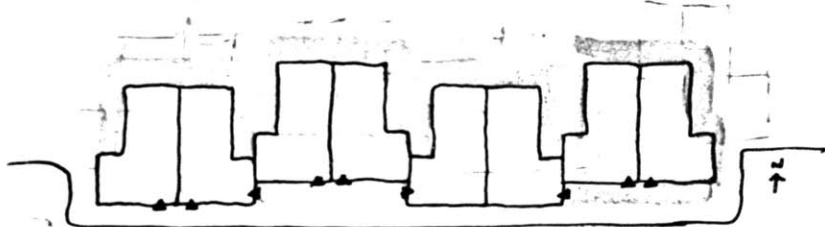
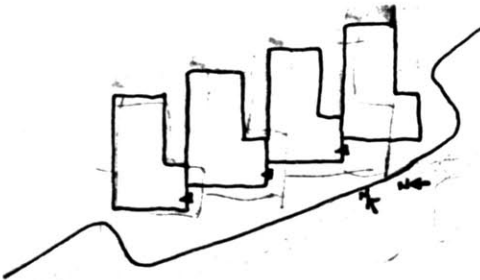
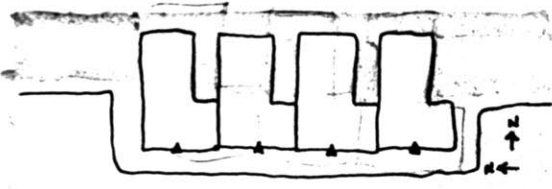
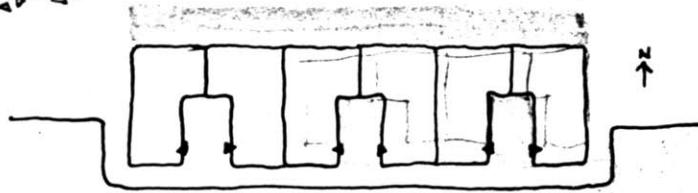
Materials on the table in the midst of the group generates much more involvement and discussion than exhibits on the wall.





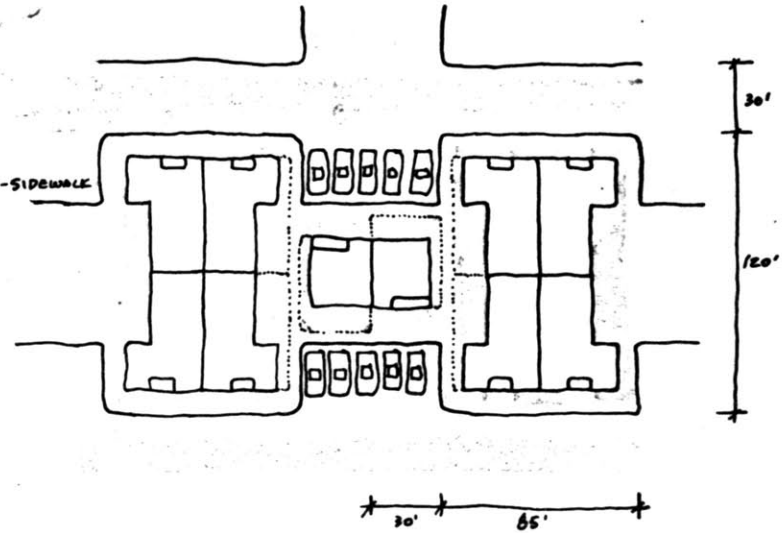
116  
150  
5750  
115  
17250

3

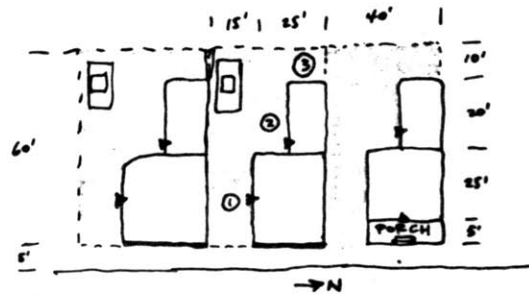


OUTDOOR	↑	T	↑	P
PRIVATE	↑	U	↑	R
OUTDOOR	↑	U	↑	L
PUBLIC	↑	U	↑	P

"ROW HOUSE"  
"ELL HOUSE"



25 units/acre



"THE ELL HOUSE"

- ① PUBLIC GARDEN
- ② FAMILY/GUEST USE
- ③ VEGETABLE GARDEN/STORAGE

VERY FORMAL STREET FACE/  
EITHER BLANK (WINDOW) WALL  
OR PORCH

FAMILY LIFE PRIVATE FROM STREET LIFE  
BUT ACCESSIBLE BY INVITE.  
PERMITS FAMILY CONTROL OF SPACE.

20 UNITS/ACRE

ALL ROW HOUSES - NO PENETRATION OF STREET WALL

- SUPER-PRIVATE BACK YARD
- SUPER-FORMAL STREET FACE
- NO RELATION OF FAMILY LIFE: PUBLIC LIFE
- NO COMMUNITY

"Do-It-Yourself" - INCOMPLETION

Make a house a home.

most fertile ground is in the suburbs!

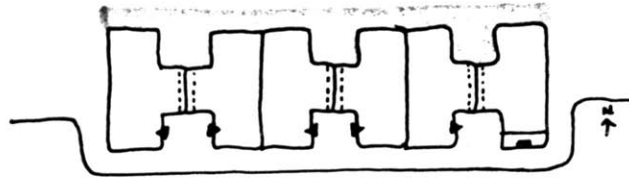
"Home Improvement Center"

where you can buy most anything to finish your home any way you want.

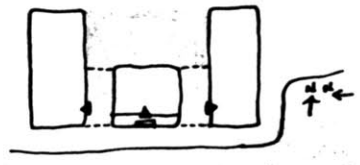
Why not build suburban houses to be customized by owners? They'd be cheaper - more diverse - better machines to live in -

As in everything else - the poor are the last to get the benefits.

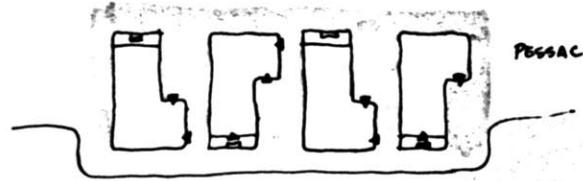
FHA still requires paint on the walls & locks on the windows, all fixtures & finishes in - minimal dwellings!



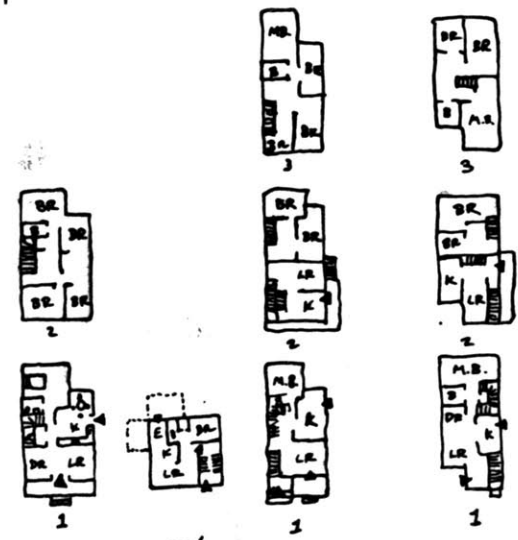
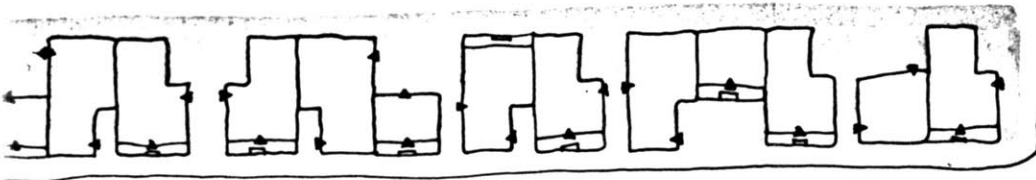
PESSAC ROW HOUSE SINGLE FRONT LEAD-TO



DOUBLE FRONTED LEAD-TO

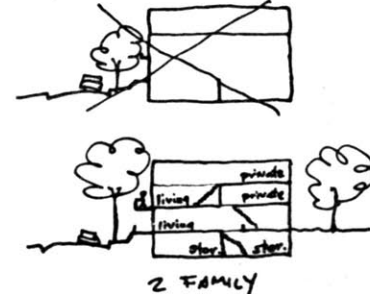


PESSAC



1 FAMILY 4-5 BR    1 BR/3 APTS    2 FAMILY 3 BR    2 FAMILY

- 8000 - 1BR
- 1000 - 2BR
- 1200 - 3BR
- 1400 - 4BR
- 1600 - 5BR



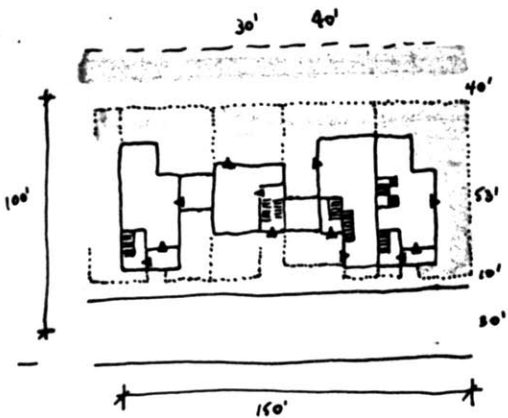
2 FAMILY



CONC. FRAME/WOOD INFILL

15,000<sup>#</sup>/9 units = 26 units/acre gross density

1, 2, 3, 4, 5 BR'S

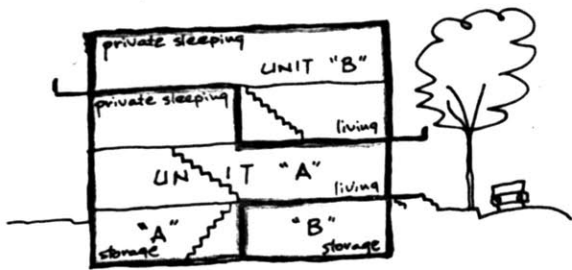
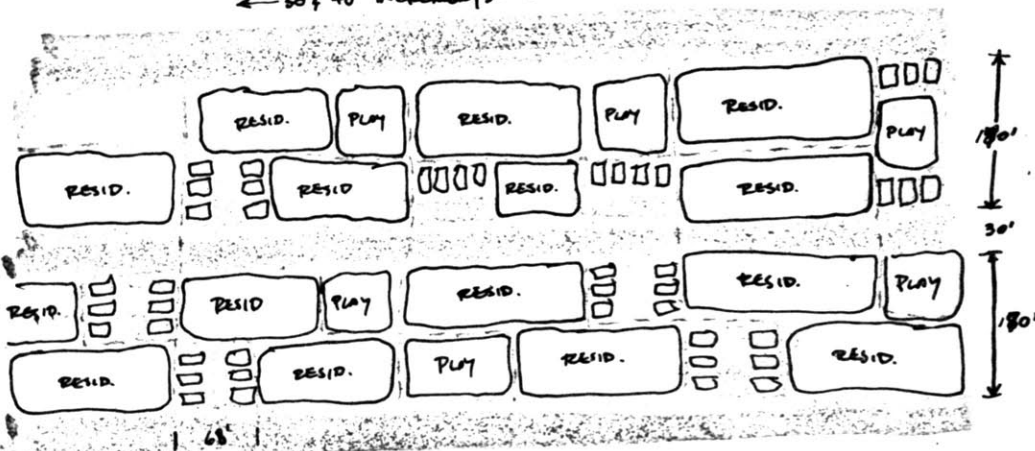


SITTING PORCH ENTRANCE

SIDE ENTRANCE F YARD

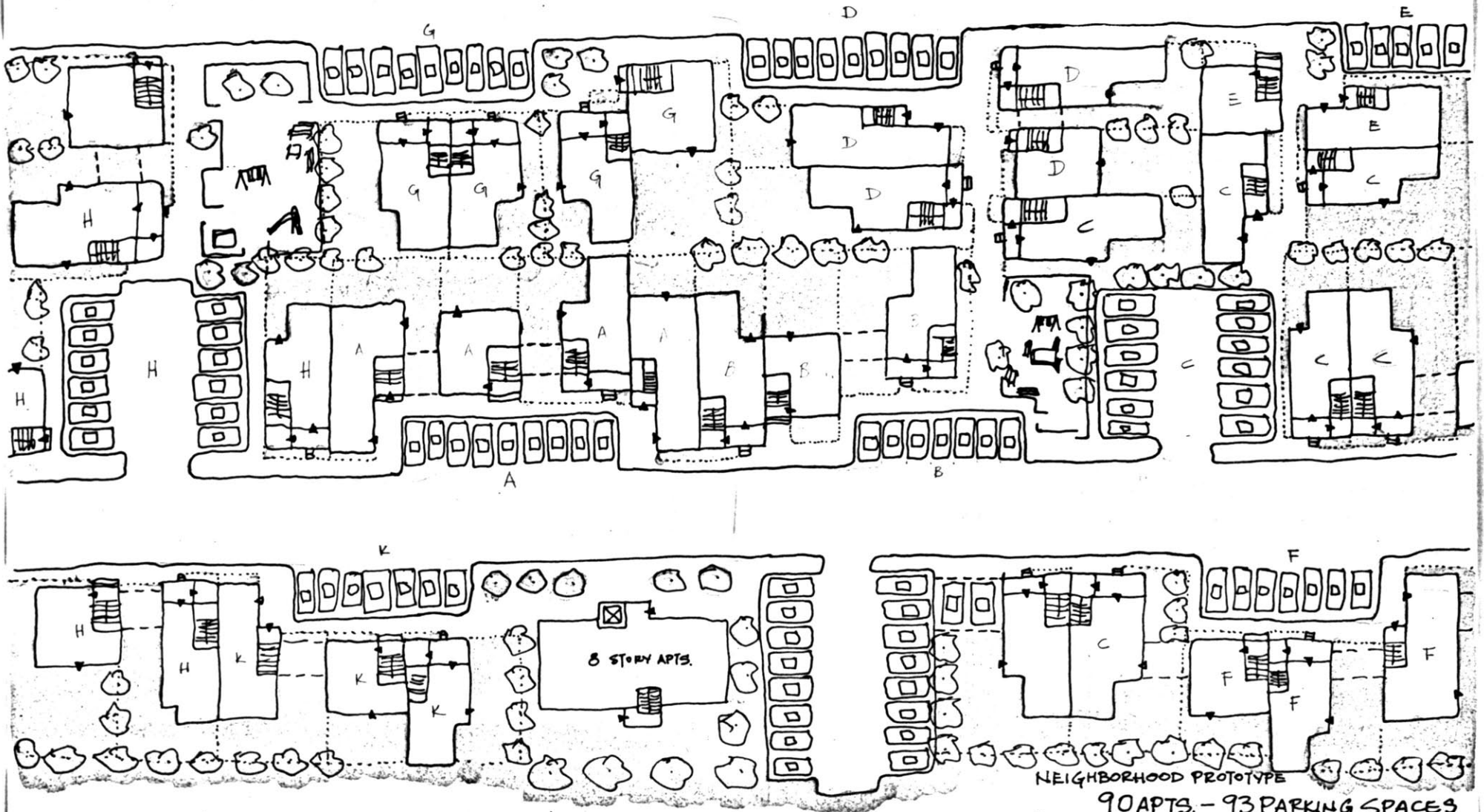
IN SINGLES APTS. - A MEETING HALL

← 30' & 40' INCREMENTS →



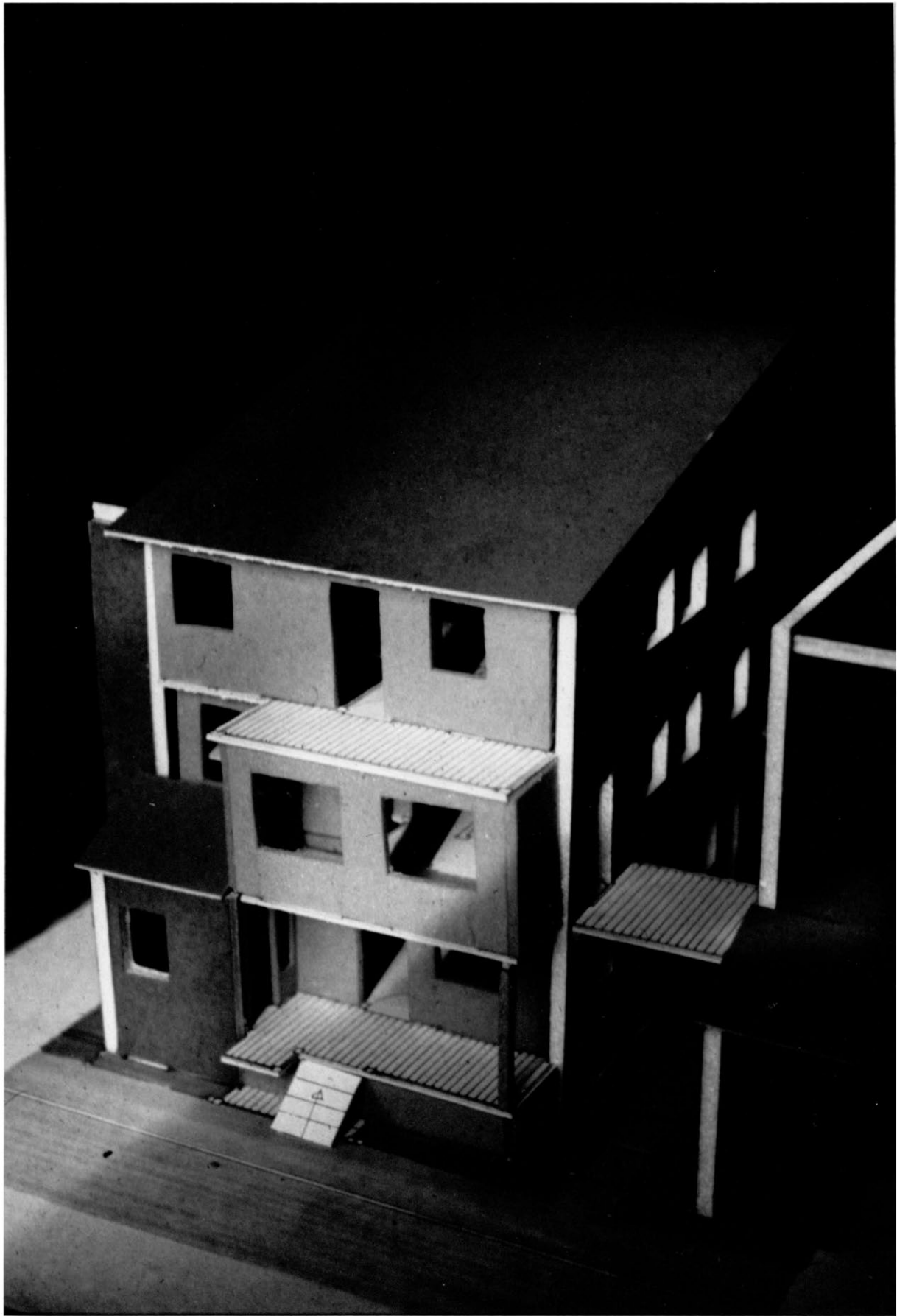
2 fams. per yard  
 sitting porch in front on 1<sup>o</sup> level  
 kitchen porch in front on 2<sup>o</sup> level  
 working/talking kitchen  
 working bedrooms  
 quest rm. for families

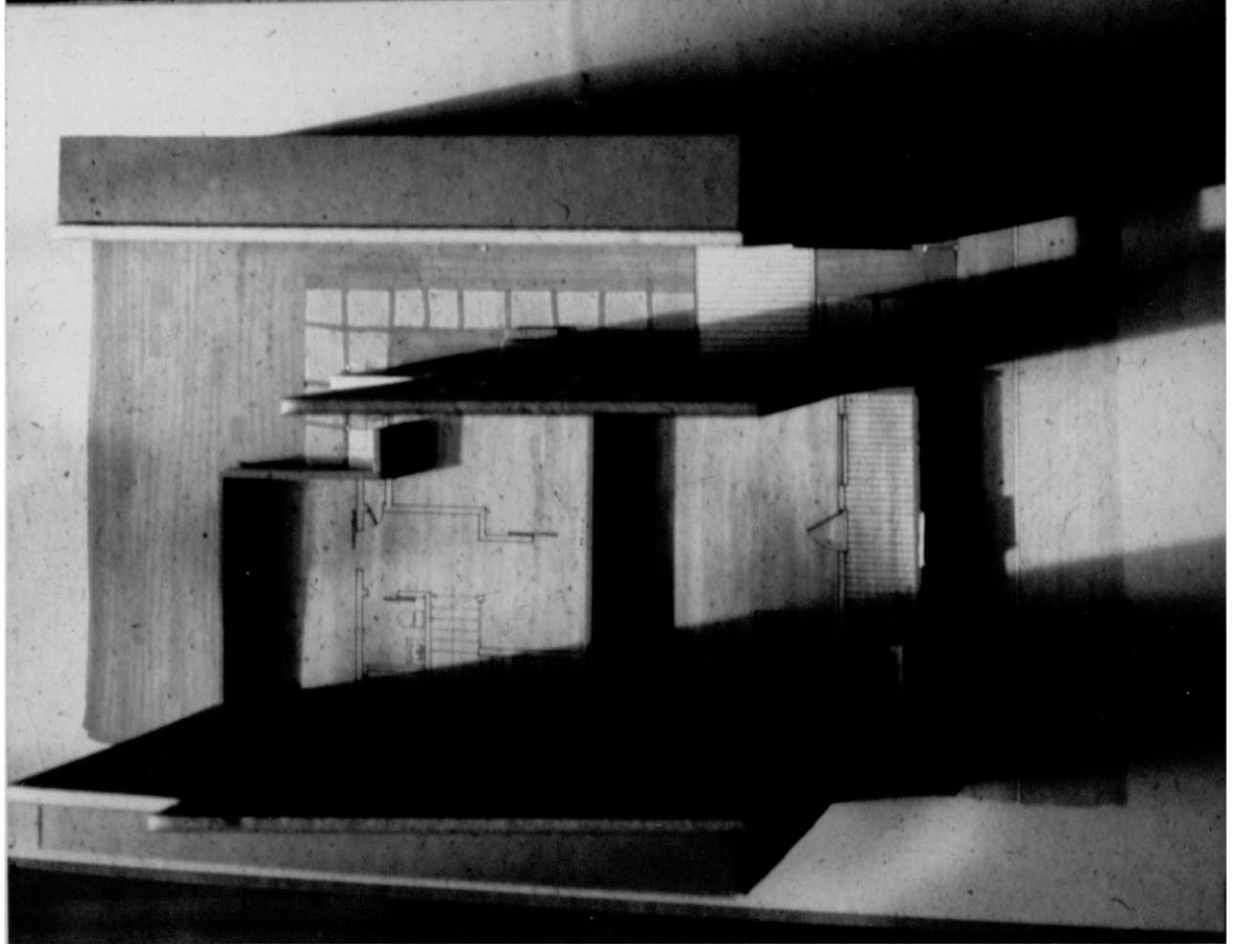
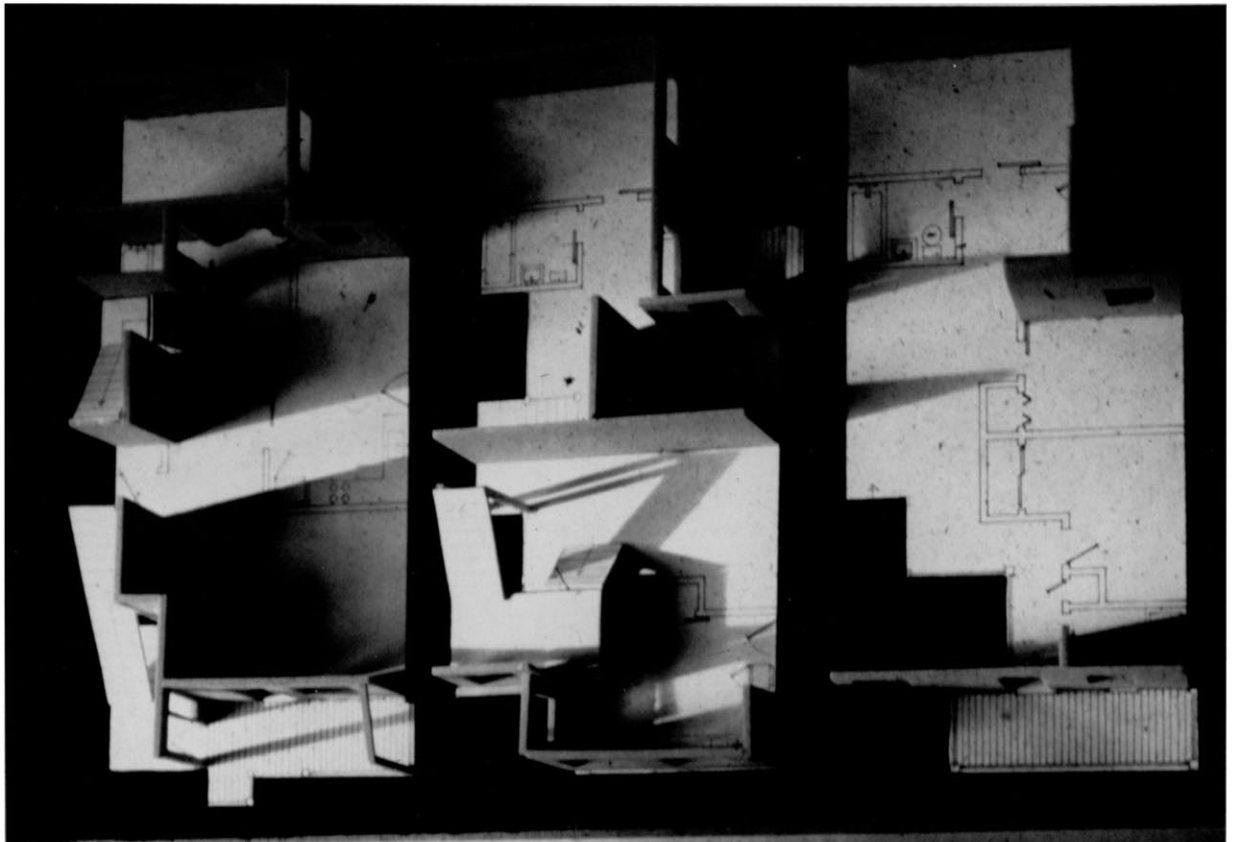
— play alcove  
 eating alcove  
 tv for singles



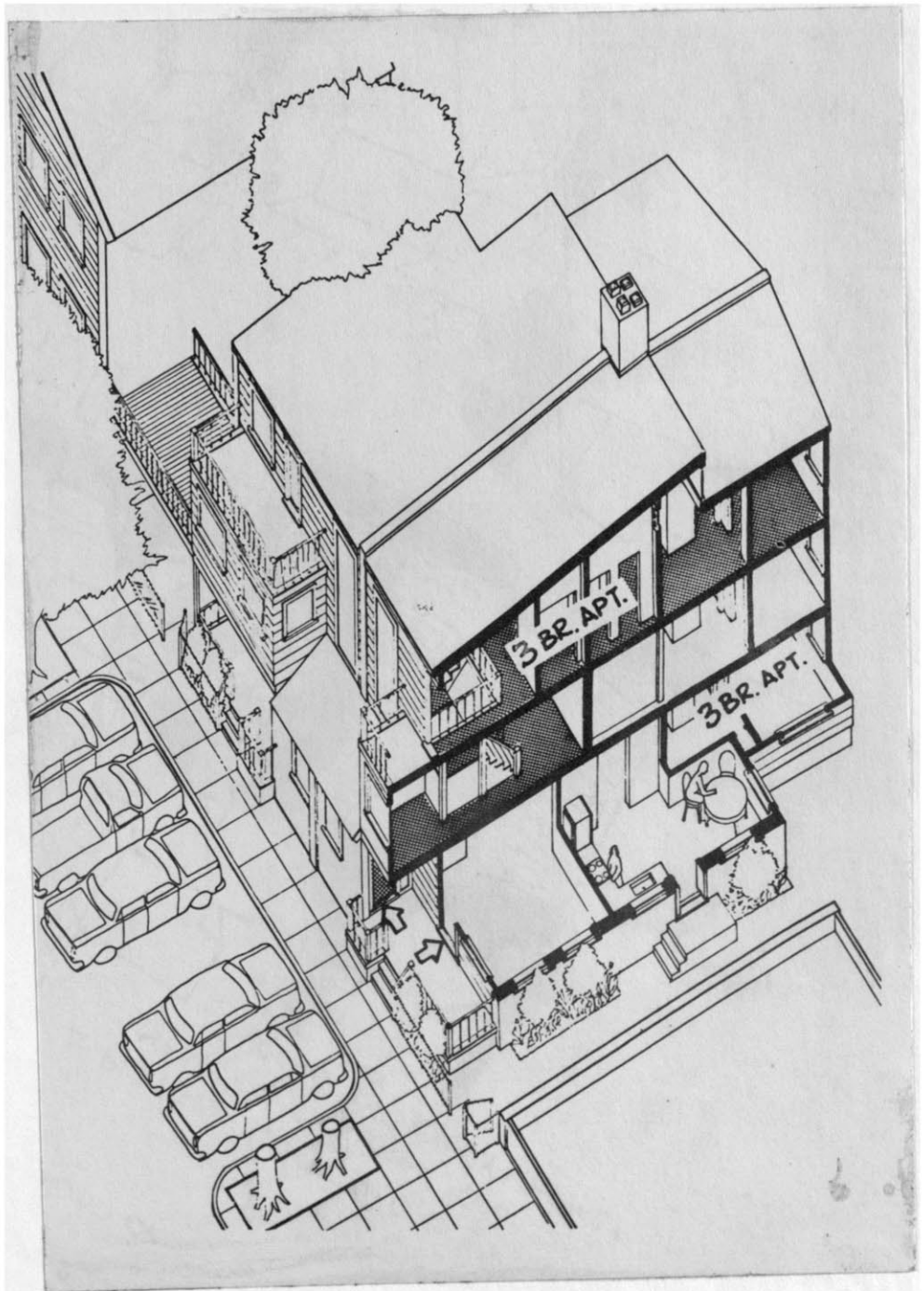
NEIGHBORHOOD PROTOTYPE

"B"  
 90 APTS. - 93 PARKING SPACES  
 3 ACRES TOTAL AREA  
 4300 \$ TOT LOTS









## EIGHTH STEP - CONSENSUS II

PURPOSE - to show the Task Force work to the community-at-large.

to generate a wider consensus that can result in community action.

### MATERIALS

3000 copies of a 3 color poster and flyer

### METHOD

- 1) design and print flyer containing results of Task Force work and urging people to come to a mass meeting. Review flyer content and style with Task Force members.
- 2) distribute flyer door-to-door
- 3) distribute flyer to community organizations and city councillors.
- 4) organize presentation by Task Force members at mass meeting.

### ISSUES

What is the best way to influence political decisions about the use of Kendall Square?

Will the work of the Task Force reflect the wishes of the wider community?

### RESULTS

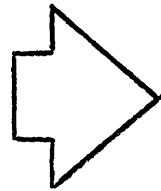
not yet determined; mass meeting not yet held.

### EVALUATION

It seems to be very important for the Task Force members to make the presentations at the mass meeting. If they have become familiar and confident about the issues to speak publicly, then my work has been successful in enabling them to articulate community wishes and influence the political process.



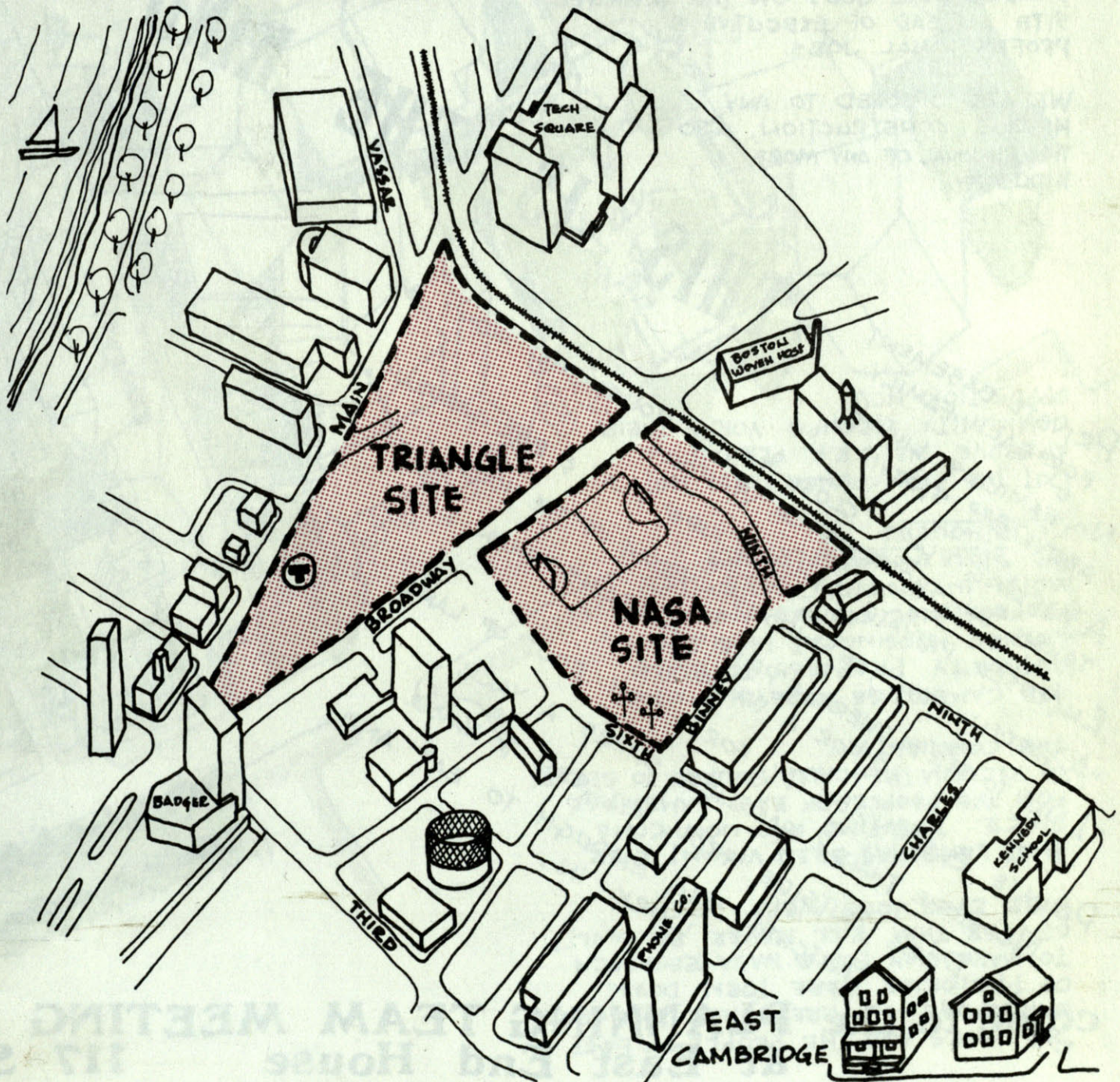
PULL OUT FLYER





# KENDALL SQUARE IS IN OUR BACKYARD!

what happens there will affect you.  
speak up before decisions are made.





THE CHOICE CAN BE YOURS

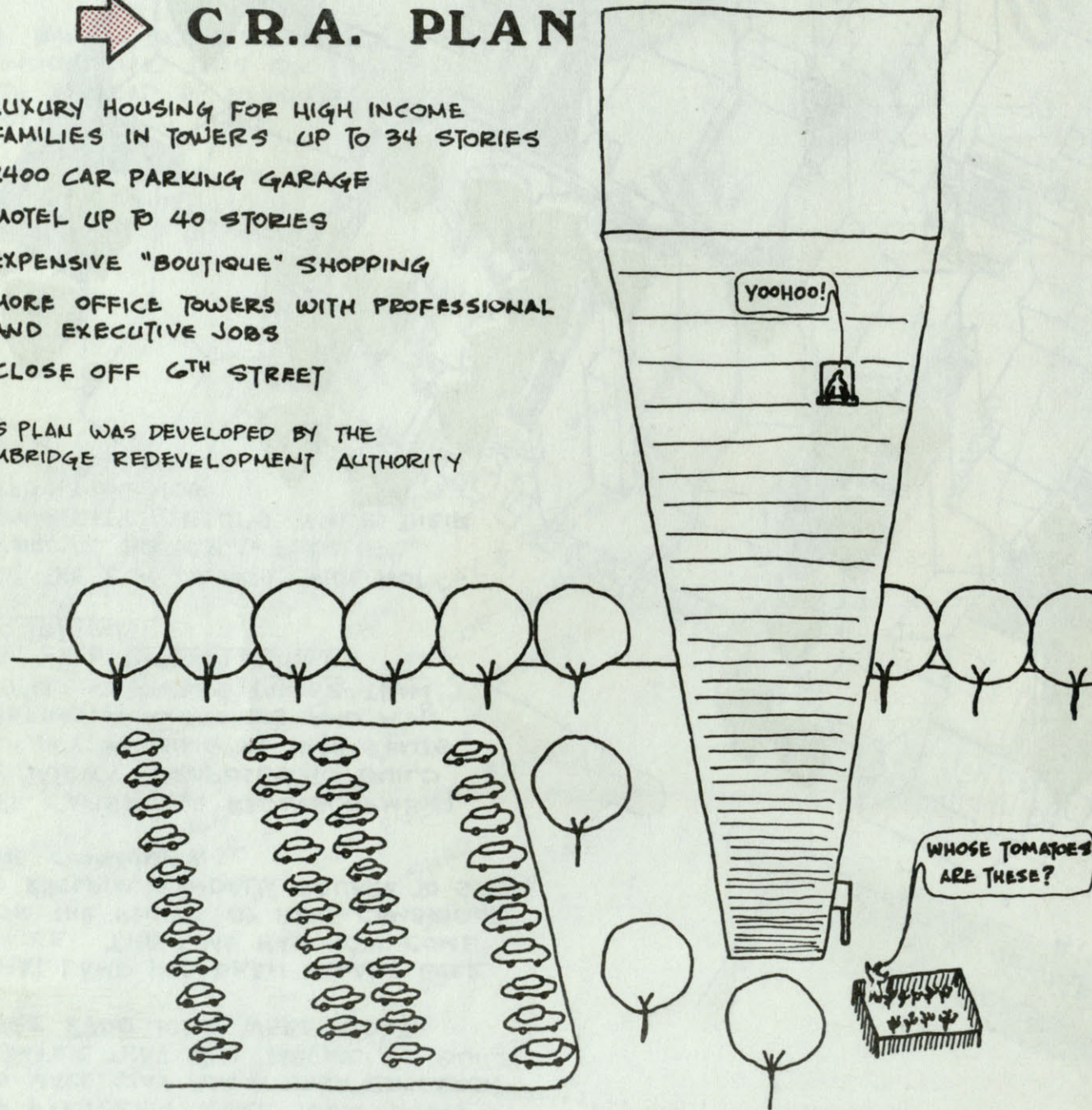
IF YOU SPEAK UP NOW!

# WHICH DO YOU WANT?

## ➔ C.R.A. PLAN

- LUXURY HOUSING FOR HIGH INCOME FAMILIES IN TOWERS UP TO 34 STORIES
- 2400 CAR PARKING GARAGE
- MOTEL UP TO 40 STORIES
- EXPENSIVE "BOULIQUE" SHOPPING
- MORE OFFICE TOWERS WITH PROFESSIONAL AND EXECUTIVE JOBS
- CLOSE OFF 6<sup>TH</sup> STREET

THIS PLAN WAS DEVELOPED BY THE CAMBRIDGE REDEVELOPMENT AUTHORITY

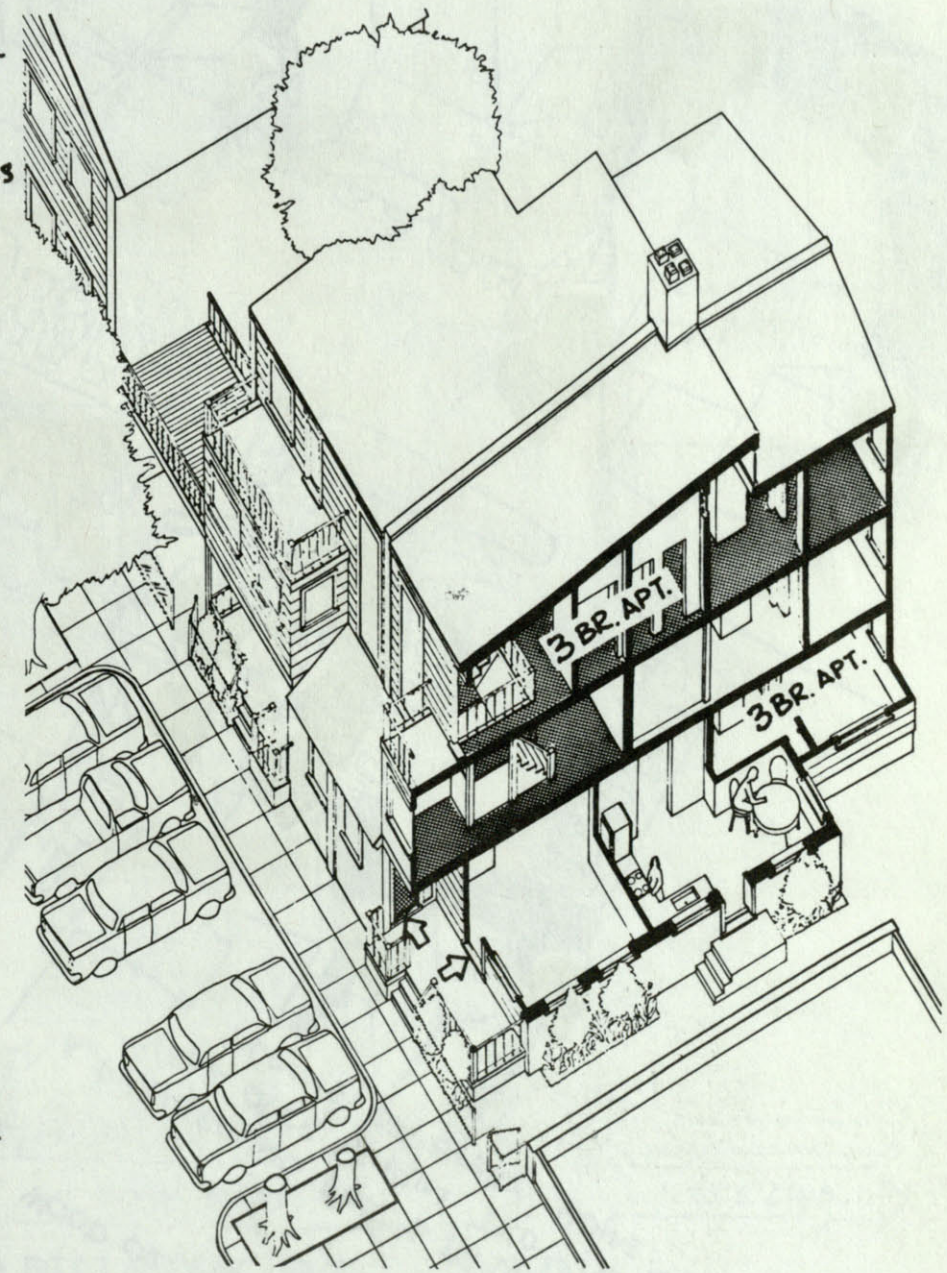


## ➔ TASK FORCE PLAN

- 100 LOW & MODERATE INCOME FAMILY DUPLEXES- 3 STORIES HIGH
- 150 EFFICIENCY & 1 BR APARTMENTS- 3 TO 8 STORIES
- SUPERMARKET
- COMMUNITY HALL
- DRUG STORE
- LAUNDROMAT
- ICE CREAM STORE
- MOVIE THEATER
- 6<sup>TH</sup> STREET & 9<sup>TH</sup> STREET OPEN TO BROADWAY
- IMPROVED SIDEWALKS & STREETLIGHTS ON 6<sup>TH</sup> STREET & 9<sup>TH</sup> STREET
- FACTORY & INDUSTRIAL JOBS ON THE TRIANGLE

THIS PLAN WAS DEVELOPED BY A SPECIAL TASK FORCE OF THE EAST CAMBRIDGE NEIGHBORHOOD PLANNING TEAM. THIS PLAN WOULD NOT SIGNIFICANTLY AFFECT THE CITY TAX RATE. IT WOULD ADD LESS THAN 100 NEW CHILDREN TO THE ELEMENTARY SCHOOLS.

No MORE FACTORIES TORN DOWN!  
No "WALL" OF TOWERS AROUND E. CAMBRIDGE!





SIX YEARS AGO THE PEOPLE OF EAST CAMBRIDGE SUFFERED WHEN 14 ACRES OF FACTORIES WERE TORN DOWN TO MAKE WAY FOR A NASA RESEARCH CENTER THAT WILL NEVER BE BUILT! OVER 2700 JOBS WERE LOST.

THAT LAND HAS BEEN VACANT EVER SINCE. THE TIME HAS NOW COME FOR THE PEOPLE OF EAST CAMBRIDGE TO RECLAIM KENDALL SQUARE TO SERVE THE COMMUNITY.

THE CAMBRIDGE REDEVELOPMENT AUTHORITY PROPOSES TO BUILD LUXURY HOUSING AT HIGH RENTS, PROFESSIONAL OFFICES AND A MOTEL IN TOWERS TALLER THAN THE STILL INCOMPLETE NEW COURTHOUSE!

BUT THE CITY COUNCIL WILL NOT APPROVE THE C.R.A. PLAN IF COMMUNITY GROUPS VOICE THEIR OPPOSITION NOW.

THE TASK FORCE OF THE EAST CAMBRIDGE NEIGHBORHOOD PLANNING TEAM HAS WORKED ON THE KENDALL SQUARE DEVELOPMENT FOR 4 MONTHS. WE WANT & BELIEVE POSSIBLE A WELL-DESIGNED, MIXED LOW & MIDDLE INCOME HOUSING AT MODERATE DENSITY UNDER A SUBSIDIZED PROGRAM LEADING TO HOME OWNERSHIP.

WE WANT & BELIEVE POSSIBLE FACTORY & INDUSTRIAL JOBS ON THE TRIANGLE SITE INSTEAD OF EXECUTIVE & PROFESSIONAL JOBS.

WE ARE OPPOSED TO ANY HI-RISE CONSTRUCTION, & TO THE REMOVAL OF ANY MORE INDUSTRY.

PRIVATE GUEST ENTRANCE FROM THE STREET FOR EACH FAMILY!

EXTERIORS OF WOOD OR BRICK!

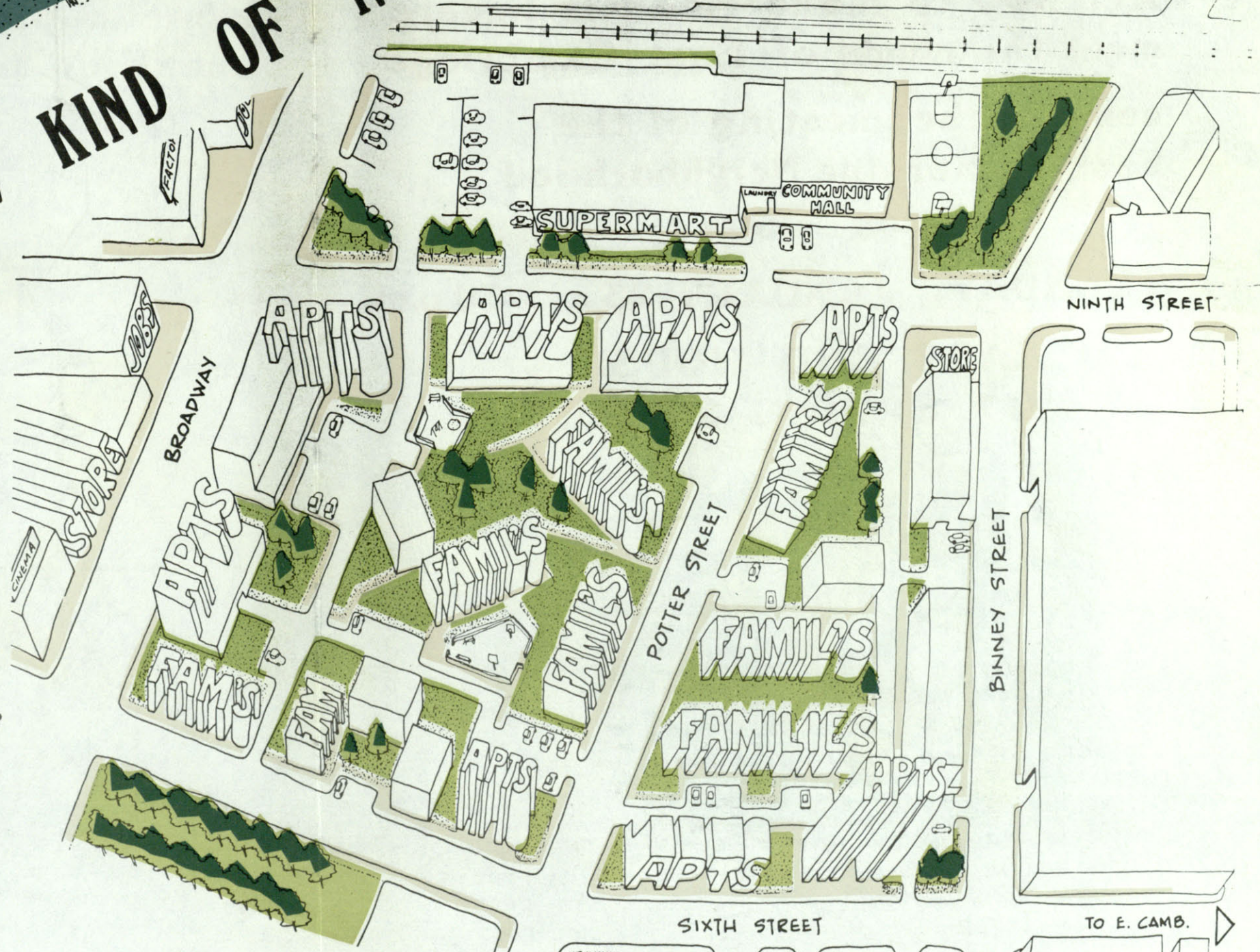
A PLAYGROUND FOR 6 TO 10 YEAR OLDS WITHIN TWO BLOCKS OF EVERY HOME!



# THIS IS THE KIND OF NEIGHBORHOOD WE WANT!

OWNERSHIP  
 "NOT ALL STAMPED OUT THE SAME."  
 SITTING PORCH FOR EVERY FAMILY.  
 FLEXIBILITY

PRIVATE BASEMENT FOR EACH FAMILY.  
 NO FAMILIES LIVING ABOVE 3RD STORY!  
 A PARKING PLACE CLOSE TO THE HOUSE THAT WON'T BE TAKEN BY SHOPPERS OR VISITORS.  
 ENCLOSED PRIVATE YARD FOR KIDS' PLAY & FOR GARDENS.  
 "A GARDEN UNDER THE WINDOWS IN FRONT OF THE HOUSE."  
 "I LIKE TO SEE FLOWERS & PRIVATE GARDENS WHEN I GO FOR A WALK."  
 PRIVATE RESPONSIBILITY FOR EVERY FOOT OF LAND.  
 NO MORE THAN 2 FAMILIES SHARE A YARD.  
 DOOR OUTSIDE FROM KITCHEN TO YARD.  
 KITCHEN BIG ENOUGH TO EAT AND WORK IN.



come to the **PLANNING TEAM MEETING TUESDAY, JANUARY 23, 7:30 p.m.**  
 at **East End House 117 Spring Street**



**Act now to make Kendall Square  
meet the needs of East Cambridge  
come to the meeting of the  
East Cambridge Neighborhood  
Planning Team**

**TUESDAY, JANUARY 23, 7:30 p.m.  
at EAST END HOUSE  
117 SPRING STREET**

**THIS REPORT WAS PREPARED BY:  
THE TASK FORCE ON THE NASA SITE,  
EAST CAMBRIDGE NEIGHBORHOOD PLANNING TEAM**

**MEMBERS OF THE TASK FORCE INCLUDED:**

**RICHARD BRESCIA, TASK FORCE CHAIRMAN**

**TOM WALKER, PLANNING TEAM PRESIDENT**

**MADALENA BARBOSA**

**DAVE CARTER**

**ALICE FRENCH**

**ELIZABETH KEARNS, EAST END HOUSE**

**JEAN DIPASQUALE, EAST END HOUSE**

**DAVE KENNEDY**

**TIM FORD, SR.**

**DON LEWIS**

**JOE PAVO**

NINTH STEP - IMPLEMENTATION

PURPOSE - to influence the political process that decides the use of the land in Kendall Square.

MATERIALS - neighborhood petition  
Presentation materials for the mass meeting

METHOD

Circulating petition at mass meeting and thereafter to get maximum number of community signatures supporting Task Force plan.

Meeting with C.R.A. and City Council officials and 4 or 5 Task Force members to present petitions and details of our proposal.

ISSUES How to maximize the effect of community-articulated desires on the political process?

RESULTS not in yet

EVALUATION not in yet

Draft of TAsk Force Petition

We, the undersigned, are opposed to the current C.R.A. plan for the development of Kendall Square and we urge the following:

- 1) We want and believe possible well-designed mixed low and middle income housing at moderate density (30 homes per acre) under a subsidized program leading to home ownership.
- 2) We want and believe possible factory and industrial jobs on the triangle site instead of professional and executive jobs.
- 3) We want and believe possible neighborhood shopping, including a supermarket, drug store, ice cream store, laundromat, movie theatre, etc., instead of expensive "boutique" shopping in Kendall Square.
- 4) We are opposed to any hi-rise construction, and to the removal of any more industry.
- 5) We believe it is the responsibility of the C.R.A. to produce a workable development program that will implement the above desires of Cambridge taxpayers.

signed. . . . .

# RESULTS OF KENDALL SQUARE DEVELOPMENT

	C.R.A. PLAN	TASK FORCE PLAN
TRAFFIC	LARGE NUMBER OF NEW COMMUTERS. CITY MUST BUILD 2500 CAR PARKING GARAGE	FEW MORE TRUCKS FOR NEW FACTORIES. CARS ON BROADWAY FOR SUPERMARKET.
SCHOOLS	400 NEW CHILDREN IN ELEMENTARY SCHOOL.	100 NEW CHILDREN IN ELEMENTARY SCHOOL CHILDREN.
TAXES	NO EFFECT ON CITY FOR 10-15 YEARS. E. CAMBRIDGE PROPERTY ASSESSMENT WILL RISE.	NO EFFECT.
WHO'LL LIVE THERE?	PROFESSIONALS, EXECUTIVES. RENTS \$400 UP	FAMILIES NOW RENTING IN EAST CAMBRIDGE. OTHER LOW & MIDDLE INCOME FAMILIES & SINGLES.
SHOPPING	EXPENSIVE BOUTIQUES	SUPERMARKET, NEIGHBORHOOD SHOPPING.
PROPERTY VALUES	EAST CAMBRIDGE PROPERTY VALUES AND TAX ASSESSMENT WILL GO UP.	NO CHANGE
JOBS	PROFESSIONAL, EXECUTIVE & CLERICAL JOBS	INDUSTRIAL, FACTORY & SUPERMARKET JOBS
HI-RISE	UP TO 40 STORIES - WILL BLOCK SUN AND INCREASE WINDS IN KENDALL SQUARE.	8 STORY MAXIMUM. MOST HOMES 3 STORIES.
STREETS	6 <sup>TH</sup> STREET CLOSED AT BINNEY ST. LESS ACCESS TO CHARLES RIVER.	6 <sup>TH</sup> STREET & 9 <sup>TH</sup> STREET OPEN TO MAIN STREET WITH IMPROVED SIDEWALKS.



## WHAT ABOUT IT?

One major product of my thesis work is the equipping of a group of community residents with awareness of the issues and alternatives regarding the Kendall Square development which will affect the neighborhood in which they live. This group is also prepared, as this is written, with the materials and ability to generate wider community involvement in the political process which will decide the future of Kendall Square.

The method by which a community position on Kendall Square has been formulated was far from my initial conception of what would happen. It involved 9 major parts, as described in the outline. Only one of these, the program and site plan generation with a cooperatively built model, was foreseen as a medium for participatory planning. But if participatory planning means direct control of the design decision-making by the user-client, then there is no hard line between the participatory potential of such "new" techniques as the manipulable model and such "traditional" techniques as the client interview, designing from specifications, or the clients' design review. All of these were used in a participatory way. They all involved considerable input from the professional: generating alternatives, explaining consequences, researching issues, making the abstract seem real, and provoking discussion.

What seems to make a difference between participatory planning, then, and a more traditional approach is first, that the professional's clients are the users of the

building instead of just the owner; and second, that the professional uses an open, flexible process of decision-making.

In an open process of decision-making, the professional must articulate his preconceptions about the issues and the reasons for and against decisions so that participants can judge for themselves. He must expose the reasoning behind every interpretation of information and the alternatives and consequences of every decision in a way in which the group can judge for themselves. The professional's tasks are not fewer but changed in focus. He must anticipate and articulate all the factors that go into design decisions; he must generate all the alternatives and consequences; and he must invent media to communicate this information in a way in which it can be discussed by the participating group.

One good test of whether the professional's attitude is flexible enough and his media of communication clear enough to allow participatory planning is whether or not he can be completely surprised by the information or decisions generated by the group. This happened several times in the course of my work on Kendall Square. For example, in my own site analysis, it seemed necessary to have a physical link between the NASA residential area and the East Cambridge residential area. I was thinking in terms of elevated walkways through the factory belt, or tearing down more industry to make residential links. But the Task Force showed me that the factories were not perceived as a barrier; that people walk through the area frequently; and that improved sidewalks and streetlights were enough physical link if there was an activity link that attracted people from one

neighborhood to the other. It had escaped my notice that many of the factories in East Cambridge are not objectionable to pedestrians and that they are very humanly scaled with interesting and very old brickwork details.

On the other hand, the planning of the C.R.A. for Kendall Square derived almost entirely from an initial "concept" of high density, high rise, highrent office, shopping and residential development. This "concept" was created by economic consultants from Washington, D.C. The preconceptions and information behind the decision to pursue this concept were never made clear even to the C.R.A., I suspect; although numerous studies were made after the initial recommendation, justifying the concept in response to objections raised against it. Perhaps the main reason this concept was chosen was simply that it had been proven feasible and profitable elsewhere. But the only reason the C.R.A. gives for this "concept" (that it will generate tax relief for the city) has proven doubtful at best. The supposed \$1.7 million tax income will not be realized for at least 15 years, by which time this amount may seem insignificant or the property tax may no longer be the main source of city revenue.

The C.R.A.'s planning and decision process has been thoroughly professional, done by out-of-town consultants, and it is obscure. Perhaps for this reason it has been shown by several community groups, with help from advocate planners, to have little relation to the specific needs of the City of Cambridge.<sup>5</sup>

The other major product of my thesis work is experience with the media and methods of participatory planning. First, it is clear that any group must have a clear understanding of its own role and the role of the professional in the process they are undertaking. They must know what commitment is required of them. Second, the group must have a clear concept of their group or neighborhood identity, perhaps a physical image of the whole of their neighborhood and its relations to neighborhoods around it.

Third, round table talks with the materials on a table in the midst of the group where everyone can touch them is the most successful way of generating involvement with the issues and creative discussion.

Finally, the materials which are offered for discussion must be as visually realistic and three-dimensional as possible. Color and realistic details showing function and scale are important to enable people to imagine and articulate possible changes or additions to what is offered.

In planning for the development of Kendall Square, the C.R.A. has ignored some of the issues which most affect nearby residential neighborhoods: schools, housing needs, community shopping and jobs, and tax reform. The vast array of statistics marshalled to support the C.R.A. concept plan have been shown by community-based groups<sup>6</sup> to prove only that the concept can produce profitable development opportunities. It required a participatory planning process to articulate community needs and the specific environmental qualities which can produce another successful community in Kendall Square.

## FOOTNOTES

1. Cambridge Redevelopment Authority. Kendall Square Urban Renewal Plan. notebook full of relevant documents available at the C.R.A. office, Main Street, Cambridge.
2. East Cambridge Neighborhood Planning Team. letter to the C.R.A. dated April 28, 1972.
3. East Cambridge Neighborhood Planning Team. letter to the C.R.A. dated June 29, 1972. survey results were as follows:
 

	1stchoice	2nd	3rd
shopping	55	47	18
low & mid income housing	58	20	20
industry	40	20	17
recreation (movie, parks, etc.)	13	19	23
office space	8	16	14
low, mid & high income housing	1	3	3
4. The Task Force was never intended to be statistically representative of the East Cambridge residential community. In fact the Planning Team, and even more so the Task Force, is more representative of the well-established homeowner in the community than of the recent immigrant or renter.
5. Cf. Stop the Kendall Square Project! published by Cambridge Tenants' Organizing Committee and The Hard Times
6. East Cambridge Neighborhood Planning Team, The Hard Times, Cambridge Tenants' Organizing Committee, Urban Planning Aid.

## BIBLIOGRAPHY

- Alexander, Christopher. Housing Generated by Patterns. Berkeley:Center for Environmental Structure, 1969.
- Alexander, C. & Chermayeff, S.I. Community and Privacy. Garden City, N.Y.: Doubleday, 1965.
- Arnstein, Sherry R. "A ladder of citizen participation". in AIP Journal, July, 1969.
- Bell, D. and Held, V. "The Community Revolution". in The Public Interest, summer, 1969.
- Boudon, Phillipe. Pessac: Lived-in Architecture. Cambridge: MIT Press, 1972.
- Burke, Edmund M. "Citizen Participation Strategies". in AIP Journal, September, 1968.
- Community Design Resource Center. Community Design Directory. Cambridge: Community Projects Lab, MIT, 1971.
- Cullen, Gordon. Townscape. New York: Reinhold, 1961.
- Doyle, J., Garafola, R., Rogers, R.E., Rosenbloom, B., & Shapiro, C. "East Boston/ Waterfront Development on the Mass. Port Authority Site". unpublished ms. Cambridge: MIT, 1972.
- East Cambridge Neighborhood Planning Team. letter to the C.R.A. dated April 28, 1972.
- \_\_\_\_\_. letter to the C.R.A. dated June 29, 1972.
- \_\_\_\_\_. results of community survey taken June, 1972.
- Gans, Herbert. The Urban Villagers. New York: Free Press of Glencoe, 1962.
- Gladstone Associates. "Benefit-Cost Analysis Kendall Square Project". report for the C.R.A. dated June 12, 1972.
- \_\_\_\_\_. "Development Opportunities & Market Support, Kendall Square, Cambridge, Mass." report for the C.R.A. dated Fall, 1971.
- \_\_\_\_\_. "Evaluation of Low-moderate Income Housing on Quadrangle Site: Kendall Square". report for the C.R.A. dated May 12, 1972.

Gladstone Associates. "Industrial Development Potentials Rectangle Site Kendall Square Project". report for the C.R.A dated May 2, 1972.

Goodman, Paul, and Goodman, Percival. Communitas. New York: Vintage Books, 1960.

Graduate School of Design. Housing Comparison Study 1. Cambridge: Harvard G.S.D., 1958.

\_\_\_\_\_. Housing Generated by User Needs. Cambridge: Harvard G.S.D., 1972.

Habraken, N.J. 3 R's for Housing. Amsterdam: Scheltema & Holkema, 1970.

Halasz & Halasz Associates. NASA E.R.C. Master Plan. Cambridge: Halasz & Halasz, 1968.

Hard Times & Cambridge Tenants Organizing Committee. Stop Kendall Square Project! Cambridge: Hard Times & CTOC, 1972.

Hoffman, Hubert. Row Houses and Cluster Houses. New York; Praeger, 1967.

Lynch, Kevin. Site Planning. Cambridge: MIT Press, 1971.

Moore, G., ed. Emerging Methods in Environmental Design and Planning. Cambridge: MIT Press, 1970.

Mundel, D.S. & O'Hare, M.H. Uses of the Cambridge NASA Site. Cambridge: Harvard G.S.D., 1971.

Newman, Oscar. "Defensible Space" in Progressive Architecture, October, 1972.

Pinney, Neil, and Harms, Hans. Toward Participatory Dwelling Design Process and Product. Cambridge: Community Projects Lab, MIT, 1972.

Planning and Development Department, City of Cambridge. Development Guidelines for the Surplus NASA Land. Cambridge: Planning and Development Dept., 1969.

\_\_\_\_\_. Ethnic Minorities in Cambridge, Volume I. The Portuguese. Cambridge: Planning and Development Dept., 1972.

\_\_\_\_\_. Social Characteristics of Cambridge, 1971, Vol. i. Cambridge: Planning and Development Dept., 1971.

Planning Board of the City of Cambridge. letter  
to the C.R.A. dated April 27, 1972.

Russel, Bertrand. "Architecture and Social Questions"  
in In Praise of Idleness by Bertrand Russel.  
New York: Simon & Schuster, 1972.

Spring, Bernard. Planning & Design Workbook  
for Community Participation. Princeton:  
Research Center for Urban and Environmental  
Planning, 1969.

Turner, John, ed. Freedom to Build. New York:  
McMillan, 1972.

Wallace, McHarg, Roberts & Todd, architects.  
"Development Plan for Kendall Square", 1971.  
drawings available at the C.R.A. office,  
Main St., Cambridge.