

GRADUATE STUDENT HOUSING FOR VPI. & SU

A DESIGN PROPOSAL

by

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INTRODUCTION

Successful architectural design is a total environment response. The spatial and psychological requirements of the dwellers shape the design on one level while similar requirements of those occupying the outside spaces must be met on another level. This second level of concern is particularly important in an urban setting where the built forms interact to become the sole generator of spatial experience.

Unfortunately, the primary concern of designers had been on level one, and the potential for urban elements reinforcing and respecting one another is missed. The result is visual clutter, confusion, and inefficiency of inter-built spaces.

The campus / town interface at VPI & SU exemplifies this condition. Intermittant expansion to university facilities with concern only for increased square footage has created an architectural void at the most frequently traveled entrance to the campus. Both vehicular and pedestrian traffic is awkward and entangled. Parking facilities have not expanded in conjunction with the buildings they serve. They remain overcrowded lots in leftover places, locationally unrelated to the users destinations.

The need for graduate student living facilities presents an opportunity to deal with these issues. The objective is to organize a large interbuilt space using building masses, and to deal with a multitude of perceived inadequacies at the site. To this end, the potential of a curved structure is explored. The ever changing nature of a curving surface provides for more space defining opportunities than a flat plane and gives a fluid quality that can more clearly define an amorphous site.

PROGRAM

- Approximately 150 living units with a variety of floor plans to accomodate disparate tennant needs.*
- Management and rental office space
- Laundry
- Community lounge space
- Additional lodging and conference space for the Continuing Education Center (CEC)
- Commercial space
- Parking for tennants
- 150 space parking for CEC
- 50 space parking for downtown

* Note: The particular desires and needs of graduate students are used as a basis for decision making. Single occupancy and married couple occupancy are presumed.

SITE

- A 300' x 400' rectangular plot bounded by the student union, continuing education center, campus infirmary, two classroom buildings and the commercial district
- The site is 90% level and 10% moderately sloping. The level area is part of the 100 year floodplain.
- Includes existing 150 space parking lot
- Sloping areas are wooded with 30' to 60' deciduous trees

EXISTING PROBLEMS AND CONDITIONS

VEHICULAR TRAFFIC - The site includes a primary traffic route from town to campus that has been redirected upon the recent addition to the library. Now there is no direct vehicular connection between the commercial district and campus, while the truncated route makes a 90 degree turn in the central pedestrian area.

PARKING - Besides the inadequacy of space, the general parking requirements for all adjacent buildings are met by the single lot at the center of the site. There is no functional relationship between parking and served areas.

PEDESTRIAN TRAFFIC - There are no pedestrian oriented traffic areas. All pedestrian flow is merely a parallel of vehicular flow, except where the library addition has prevented auto traffic. Travelling on foot from campus to town requires crossing vehicular flow, and this occurs along the entire length of Campus Drive.

INTER-BUILDING SPATIAL DEFINITION - The periodic additions to the student union, the library, the CEC, the infirmary and the construction of a new university bookstore have resulted in haphazard creation and recreation of inter-built spaces.

- The protrusion of Squires Student Center onto the street, and the parking lot directly across negate the completion of a spatial character begun by the old CEC building.
- The CEC lawn, bounded by hedges, uncomfortably bisects the visual space between the major buildings.

- In both directions of pedestrian or vehicular travel, there is little sense of entering or leaving campus or town.

- The potential for pleasant spaces exists in wooded areas between Squires and the infirmary, and on the slope north of the two classroom buildings. Lack of enclosure and definition nullifies their potential.

DESIGN PROPOSAL

- Enclose Squires "mall" with a building mass that extends the strong space defining quality of the old CEC. p. 10
- Raise the building above the floodplain by introducing parking below. Thus parking becomes functionally related to the tenants above. Parking on the first level is localized by restriction of access. Parking on the second level is more general due to access of the entire facility from both ends and the middle. p. 12, 14, 15
- Separate vehicular and pedestrian traffic with an elevated road that defines the hypotenuse of the present 90 degree pathway and allows passage of pedestrians below. The hypotenuse road becomes an experience between town and campus, and empties directly into the campus circulation behind the CEC. p. 11
- Create a "square" at the juncture of campus and town to signify the entrance to the university for both pedestrians and vehicles. Bend the building mass to meet the square and present a frontal reception for traffic. p. 9
- Provide a pleasant experience for visitors and guests of the university who stay at the CEC by improving the approach to the building. This is achieved with a new structure that brings parking closer and under cover, reaches out to the visitor at the entrance point, hides the stark and boring facade, and defines pedestrian atria where the two structures meet. p. 9
- Define pedestrian circulation between Squires mall and the

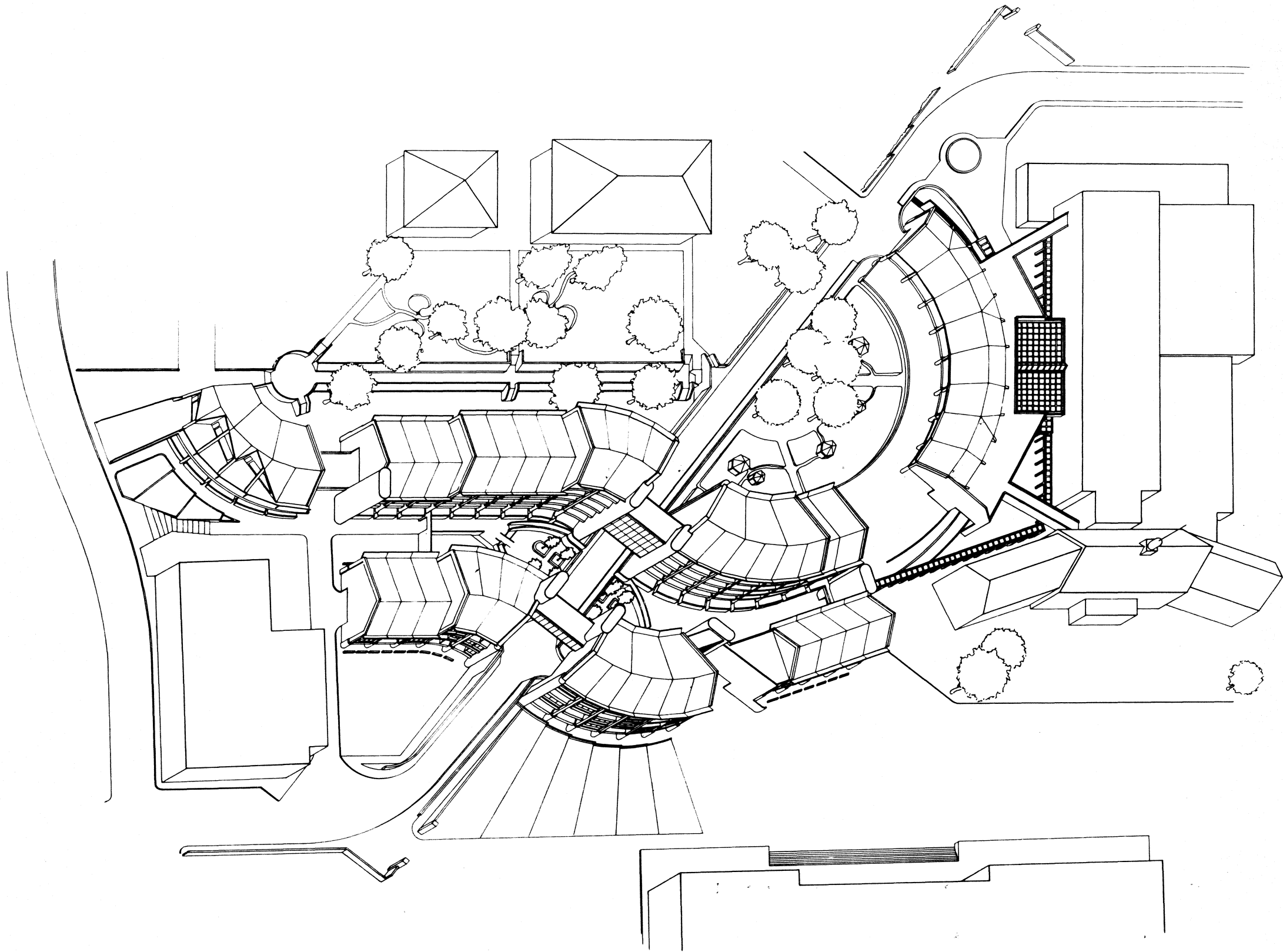
classroom buildings, between CEC and downtown, and between Squires mall and downtown. p. 11

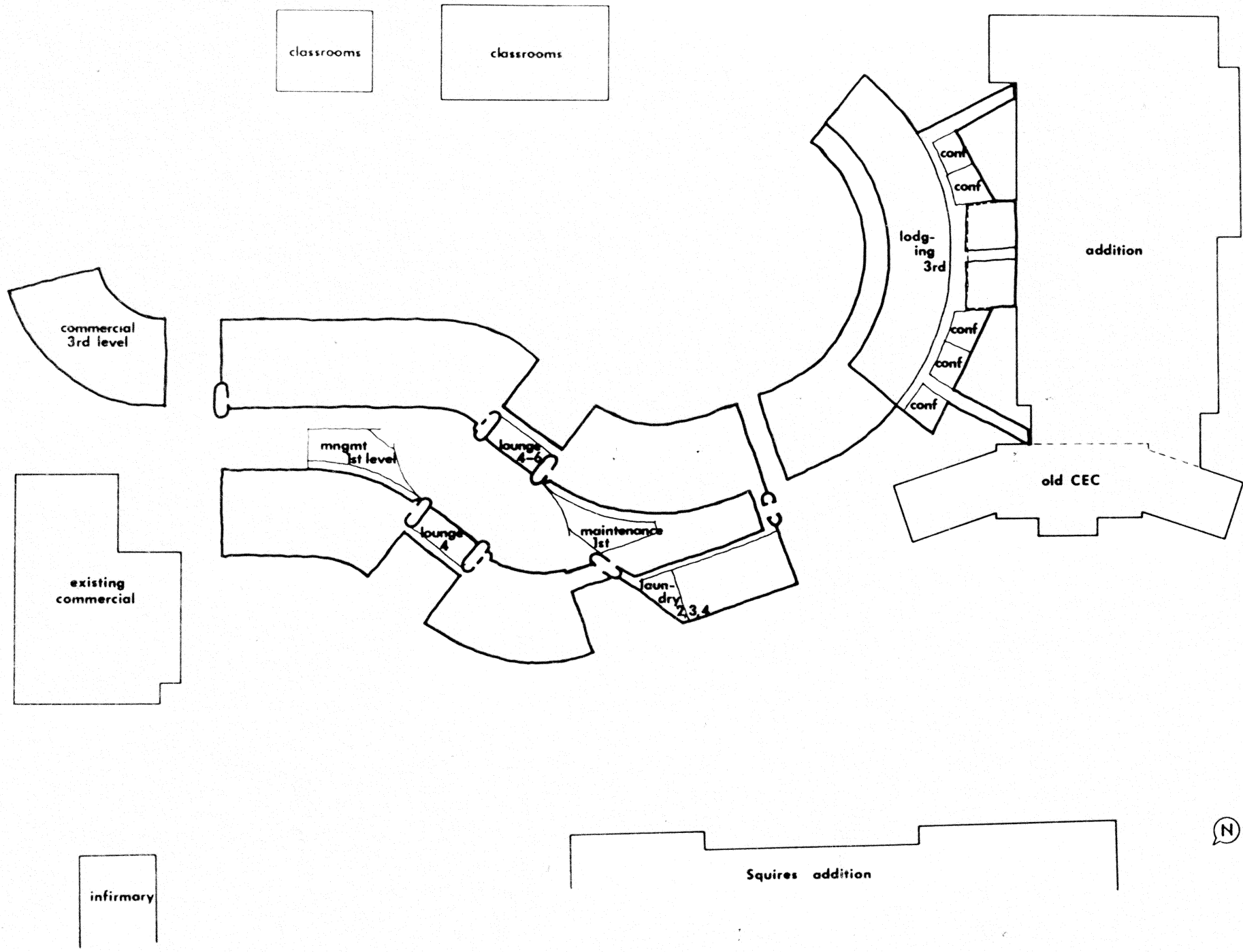
Allow the commercial space and parking below to become both a transition from campus to town and a delineation of pedestrian entrance to campus. p. 9, 10, 11

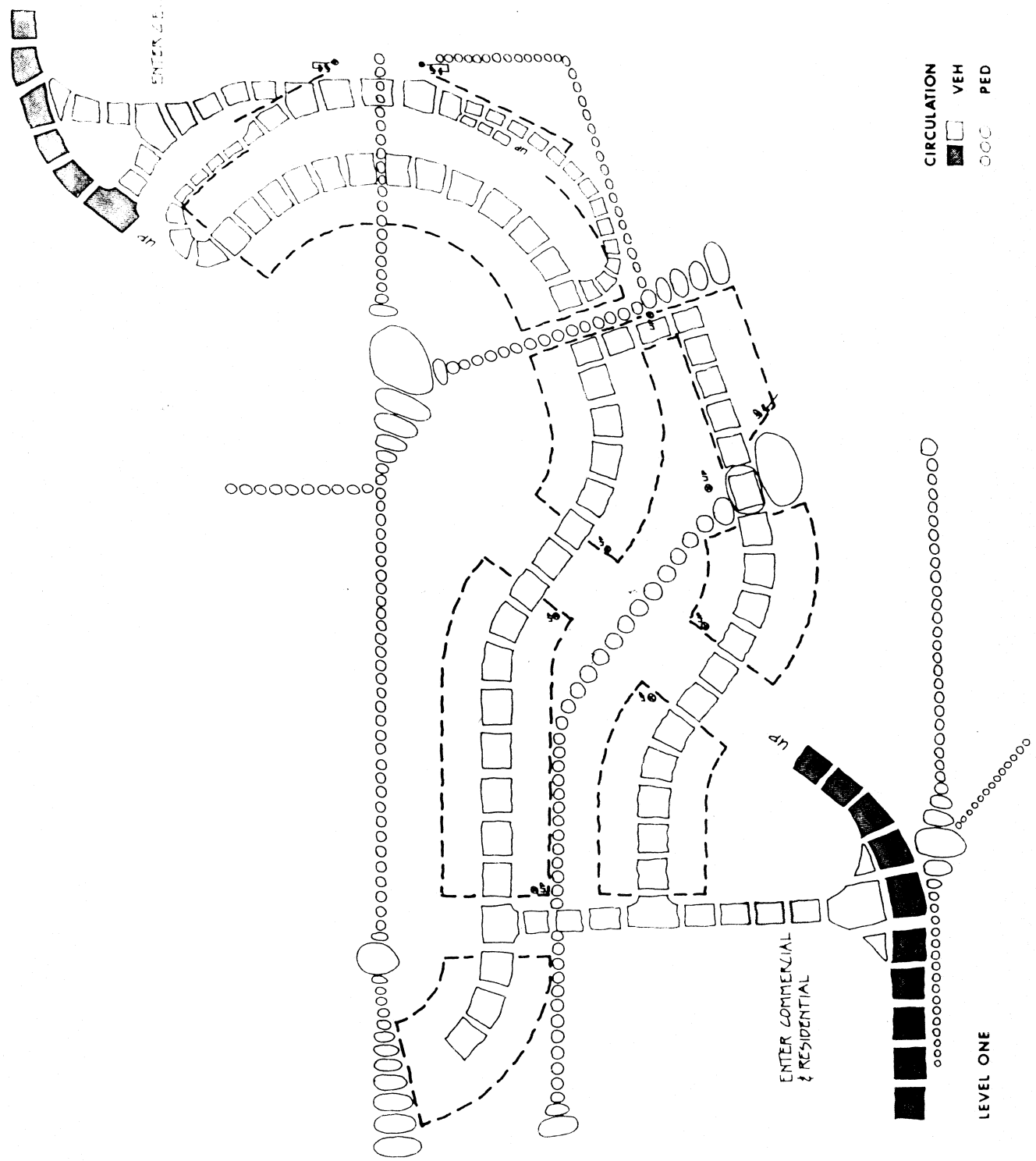
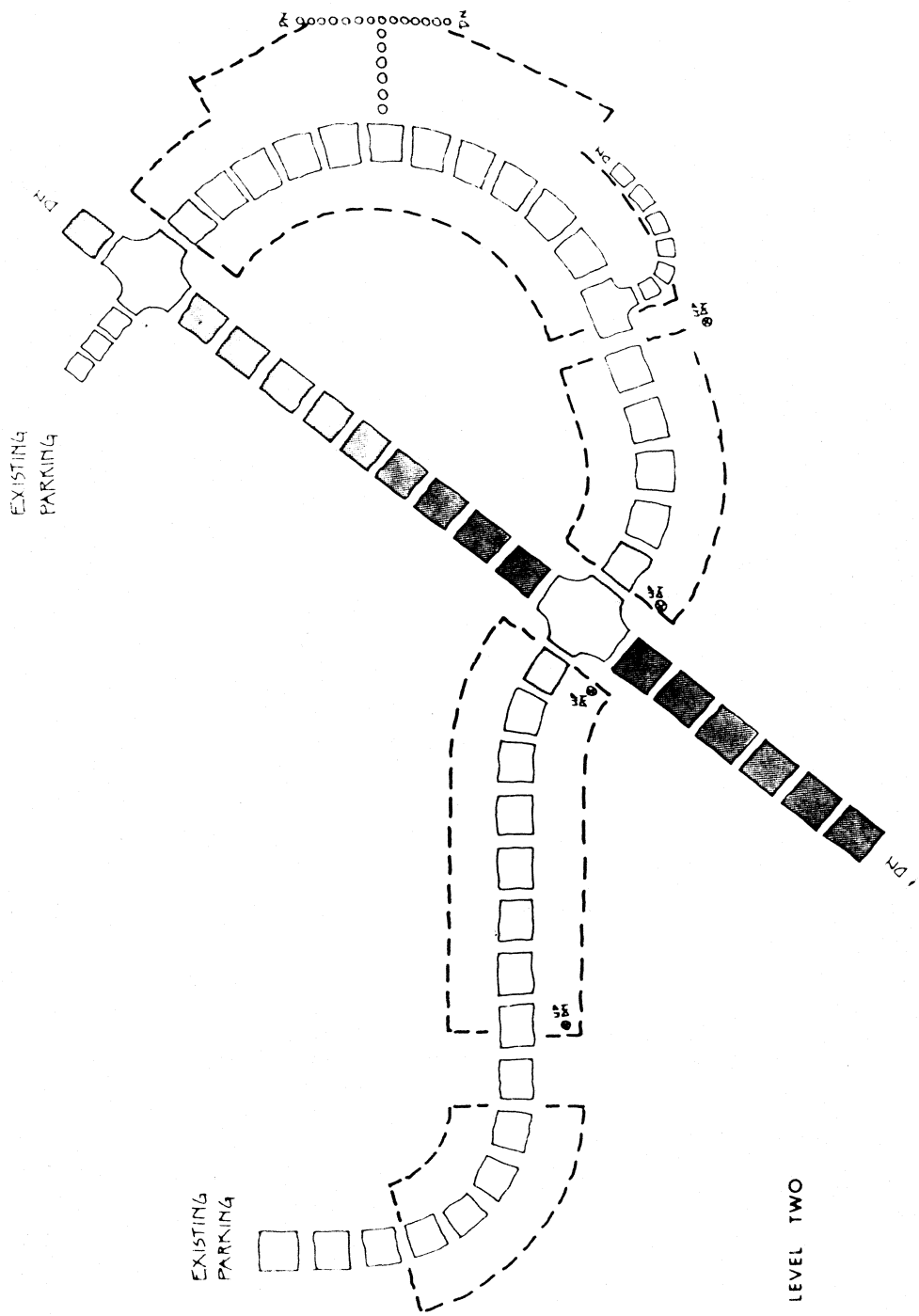
CONCLUSION

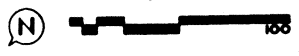
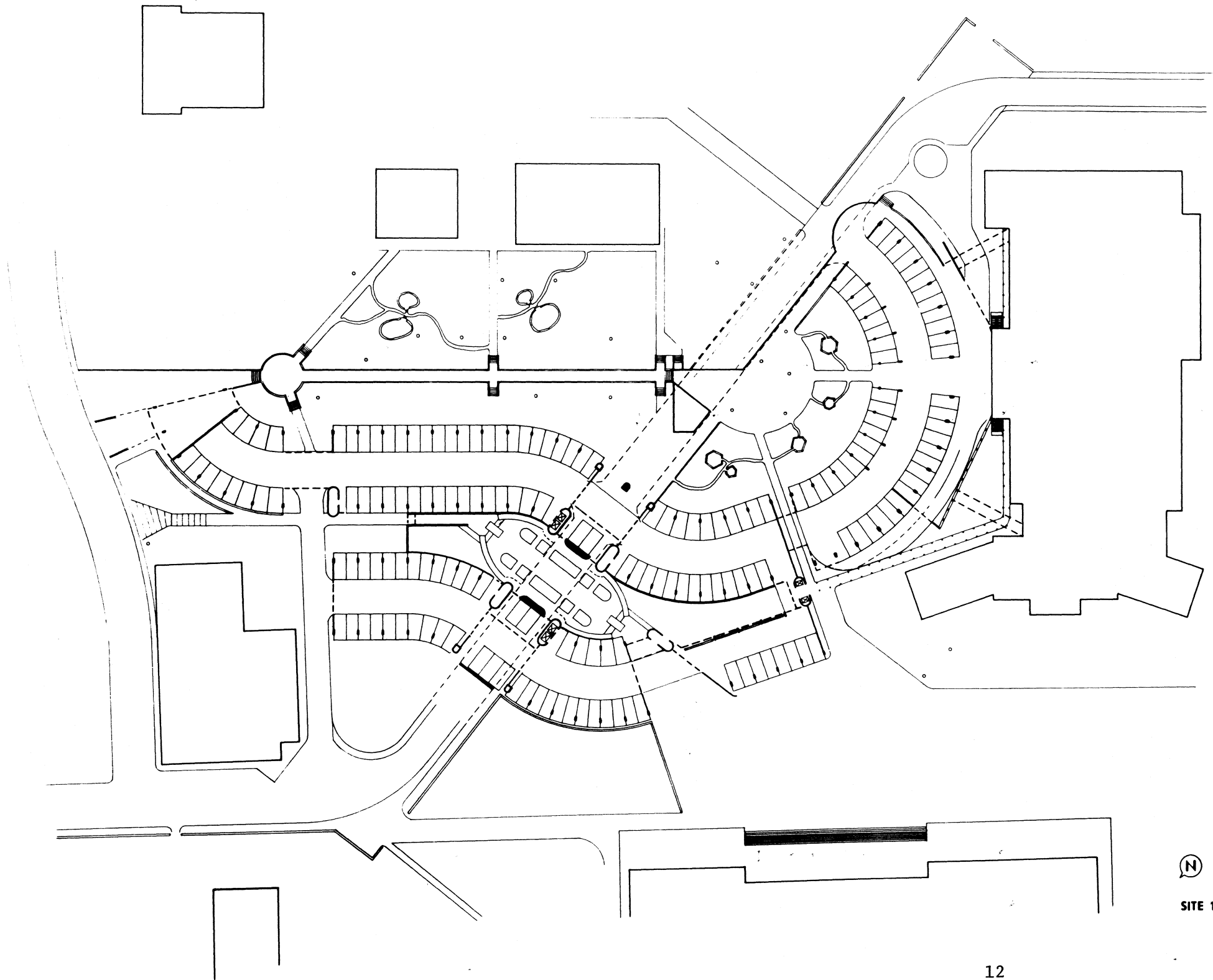
A site with little organizational character and widely diverse boundaries can be successfully handled with curved building masses. Major architectural elements of oblique nature become important contributors to the overall design. The new elements can bend to accommodate numerous criteria and create lively interaction with an otherwise static environment.

The transition space between VPI & SU and Blacksburg shows how this approach can be beneficial. The curves accommodate unusual elemental relationships and organize the vehicular and pedestrian circulation. The buildings are for living AND parking. They represent the meeting of town and campus and are the gateway between.

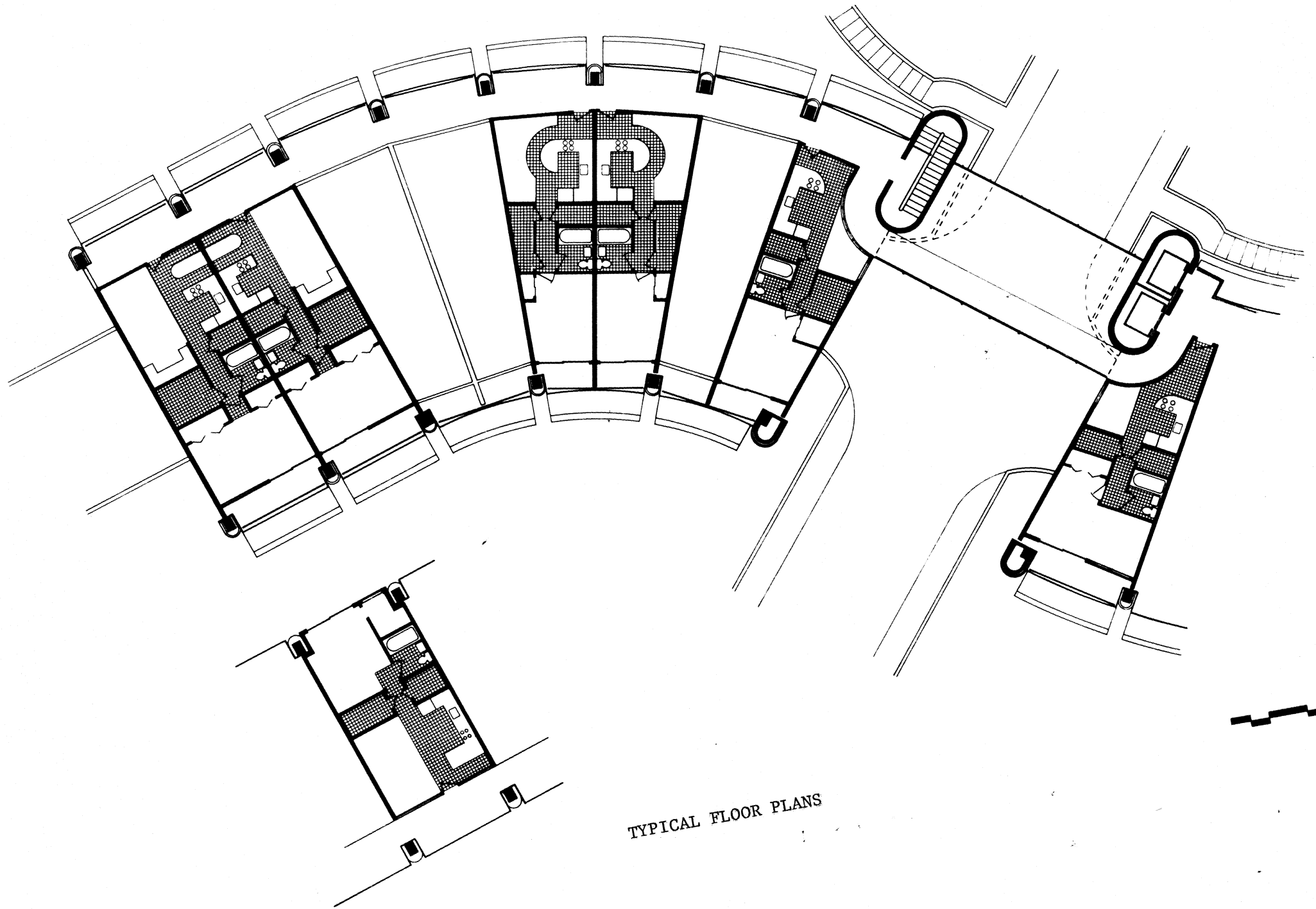




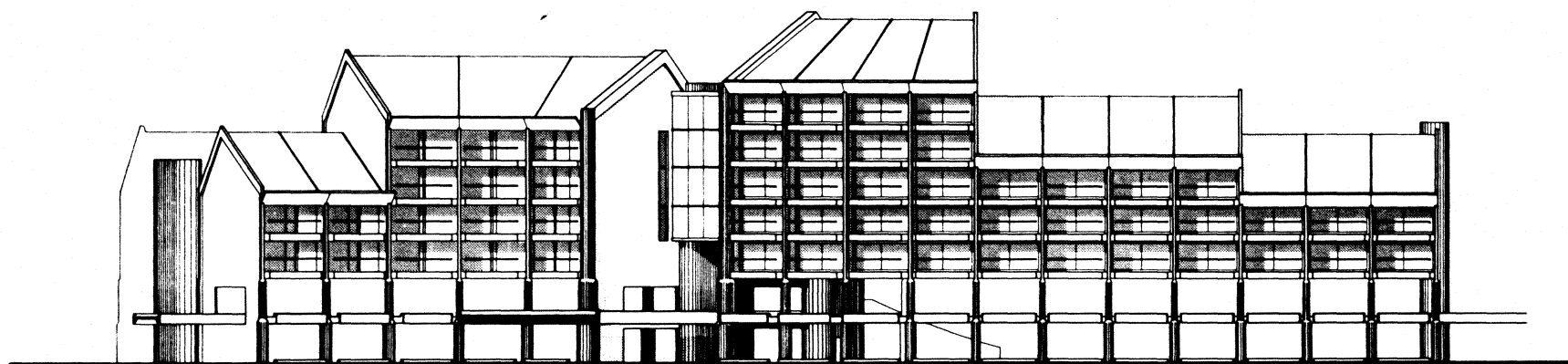




SITE PLAN LEVEL ONE



TYPICAL FLOOR PLANS



SOUTHEAST



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NORTHWEST

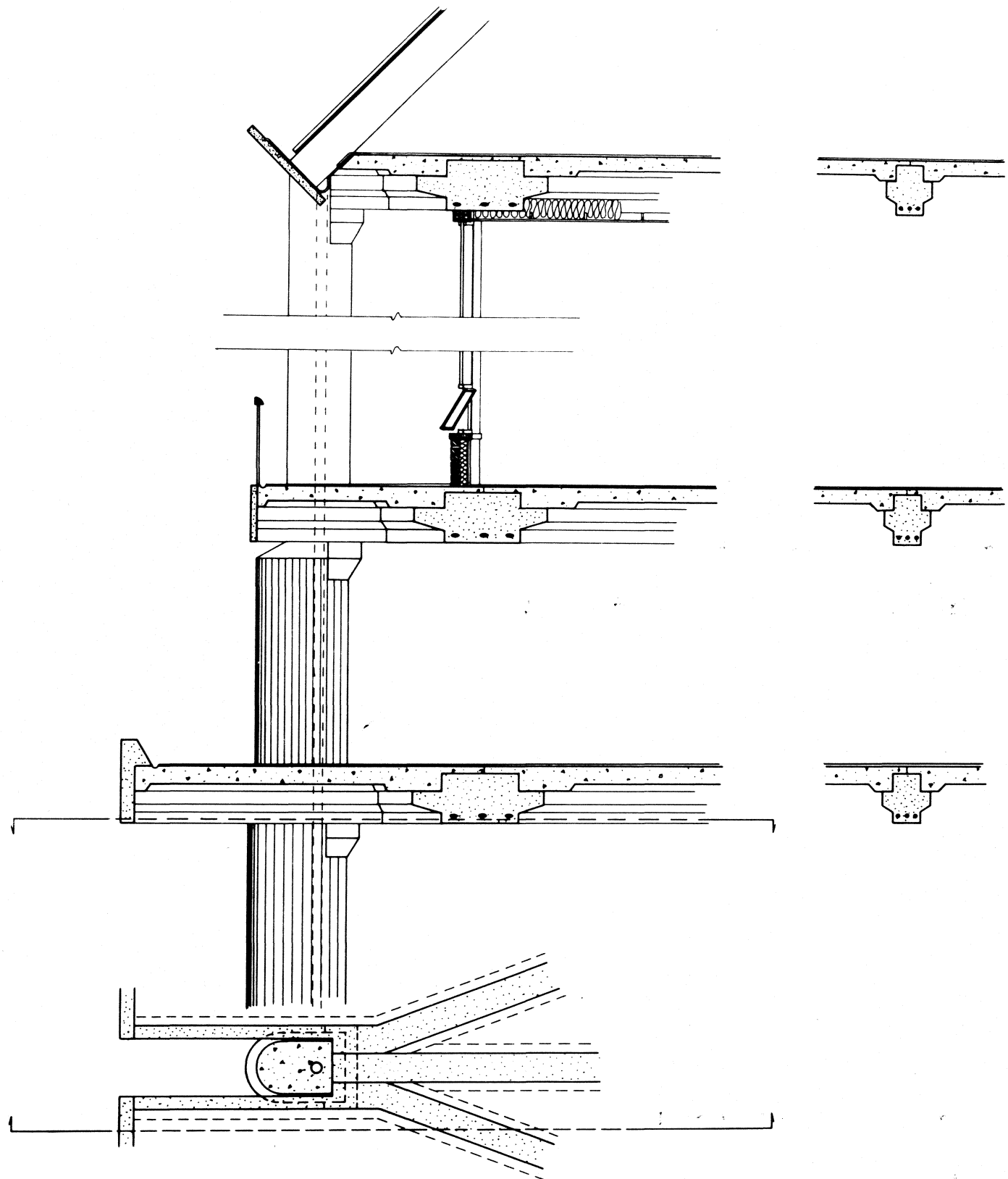




EAST



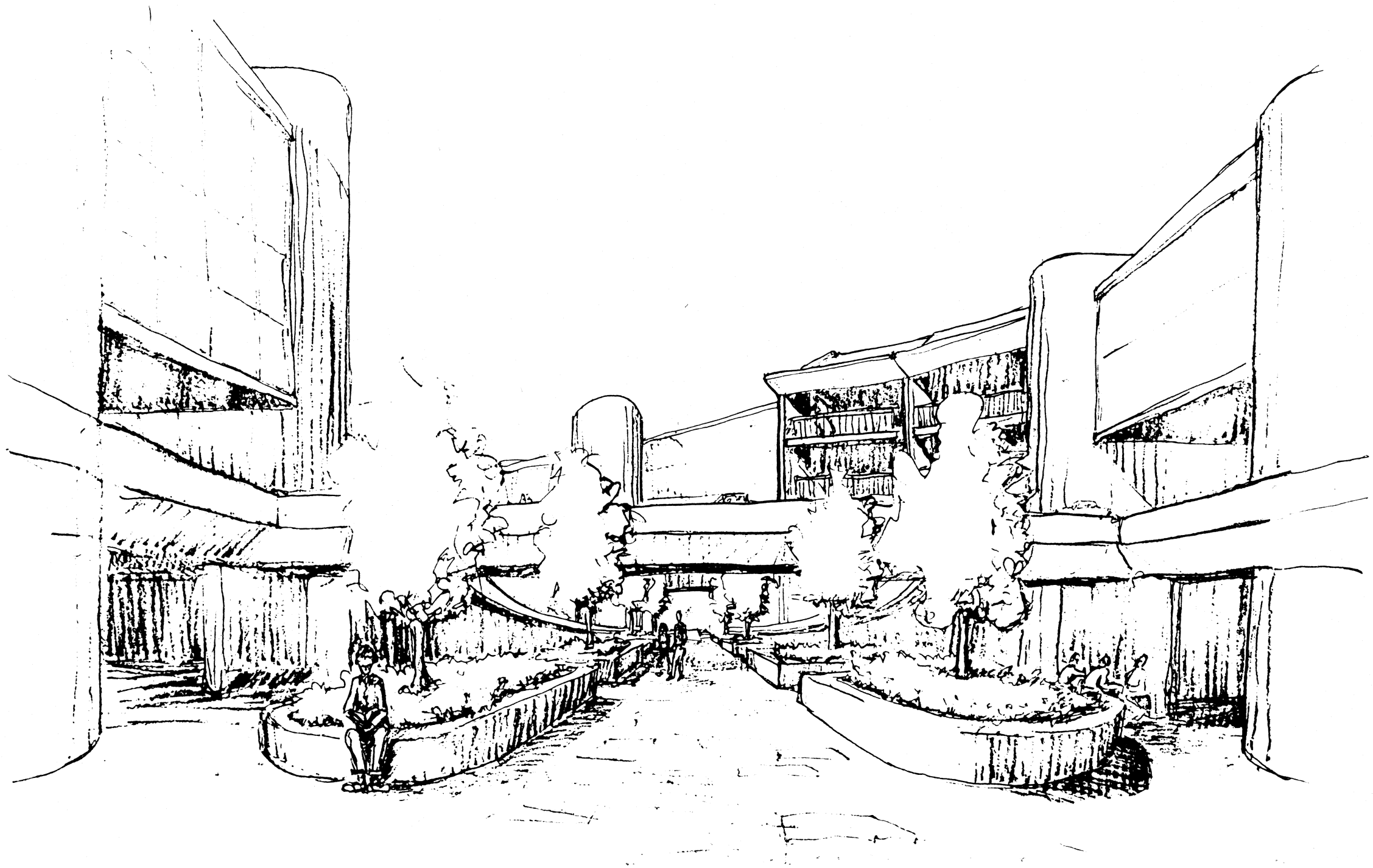
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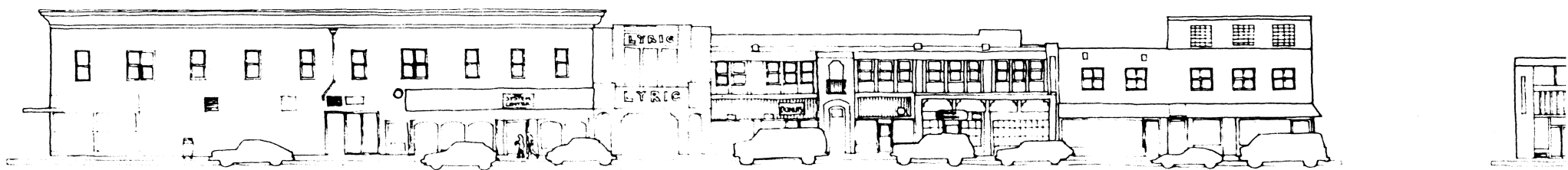


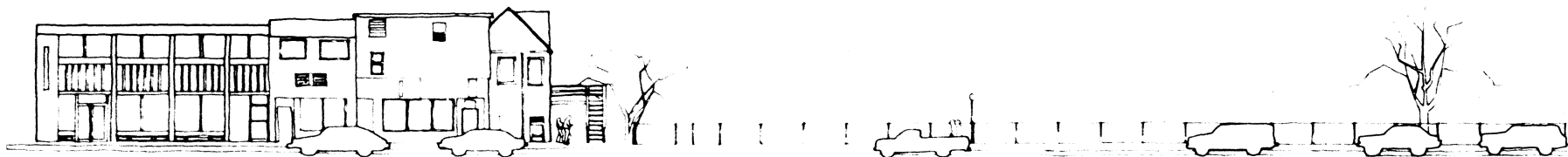
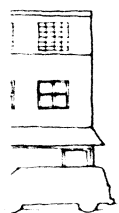
TYPICAL WALL SECTION

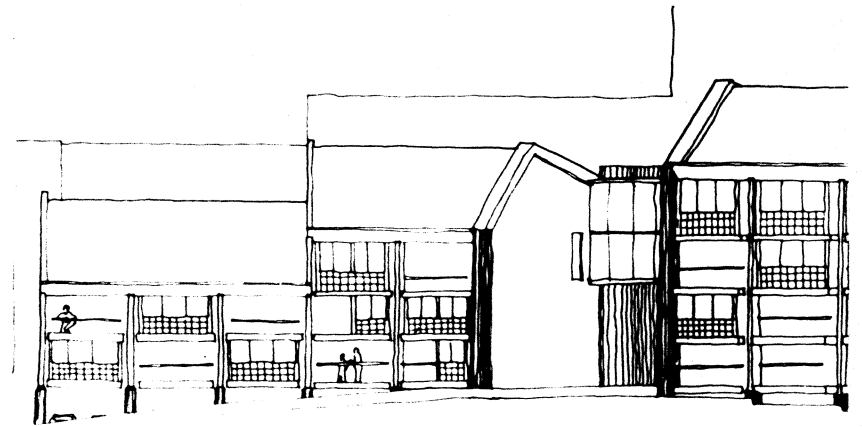
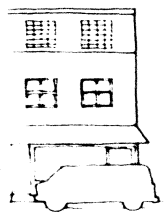


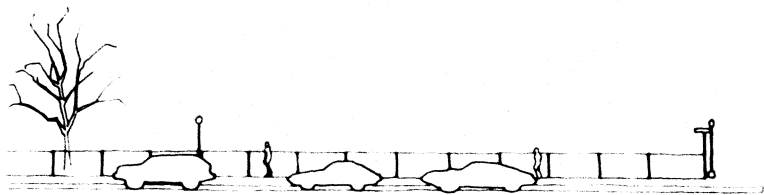
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SUMMARY

By capitalizing on existing architectural and spatial features of the site, an interconnected set of curved structures simultaneously defines several important spaces.

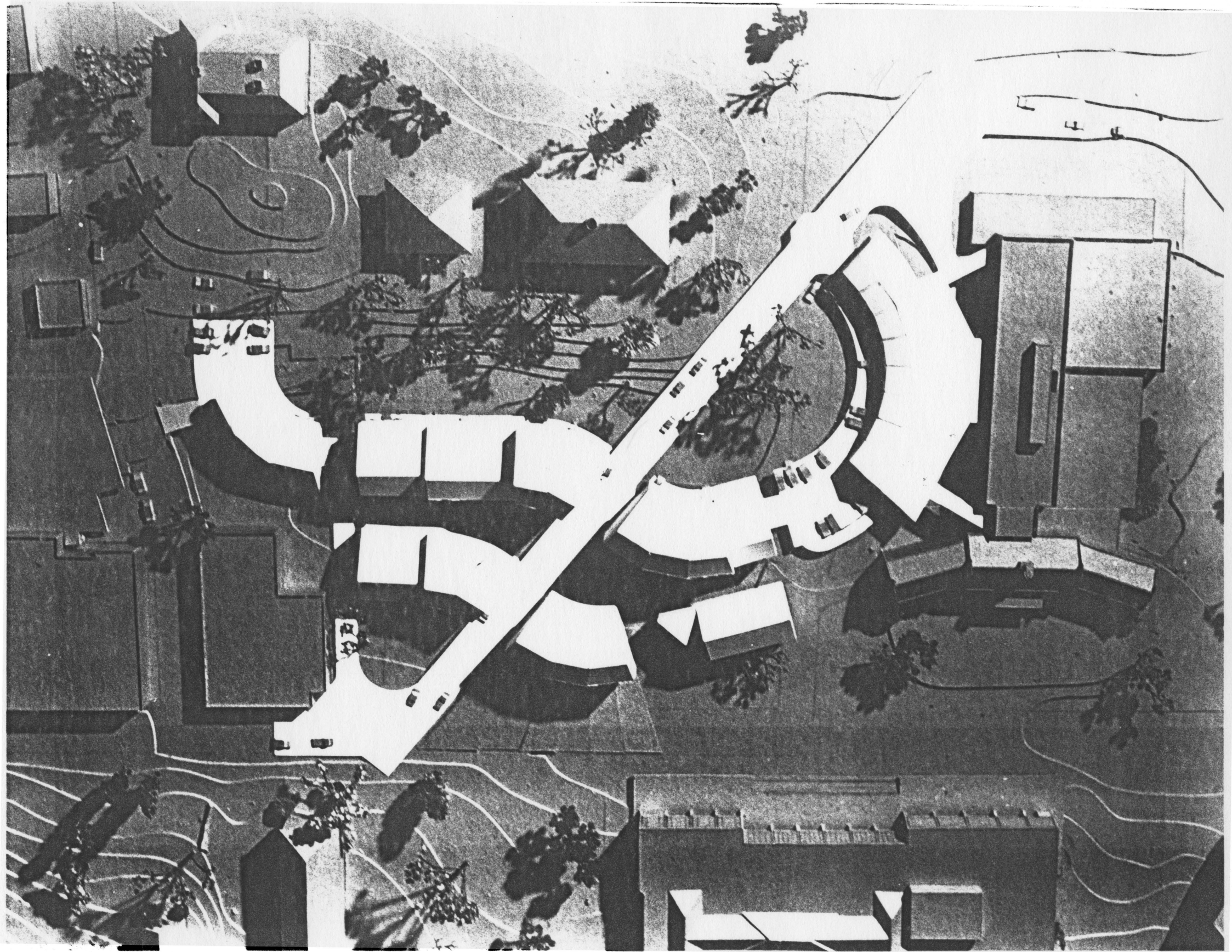
The regular and ordered facade of the old CEC carries through to the adjacent building of the new complex. This begins to enclose the mall in front of Squires while it defines the pedestrian circulation on either side.

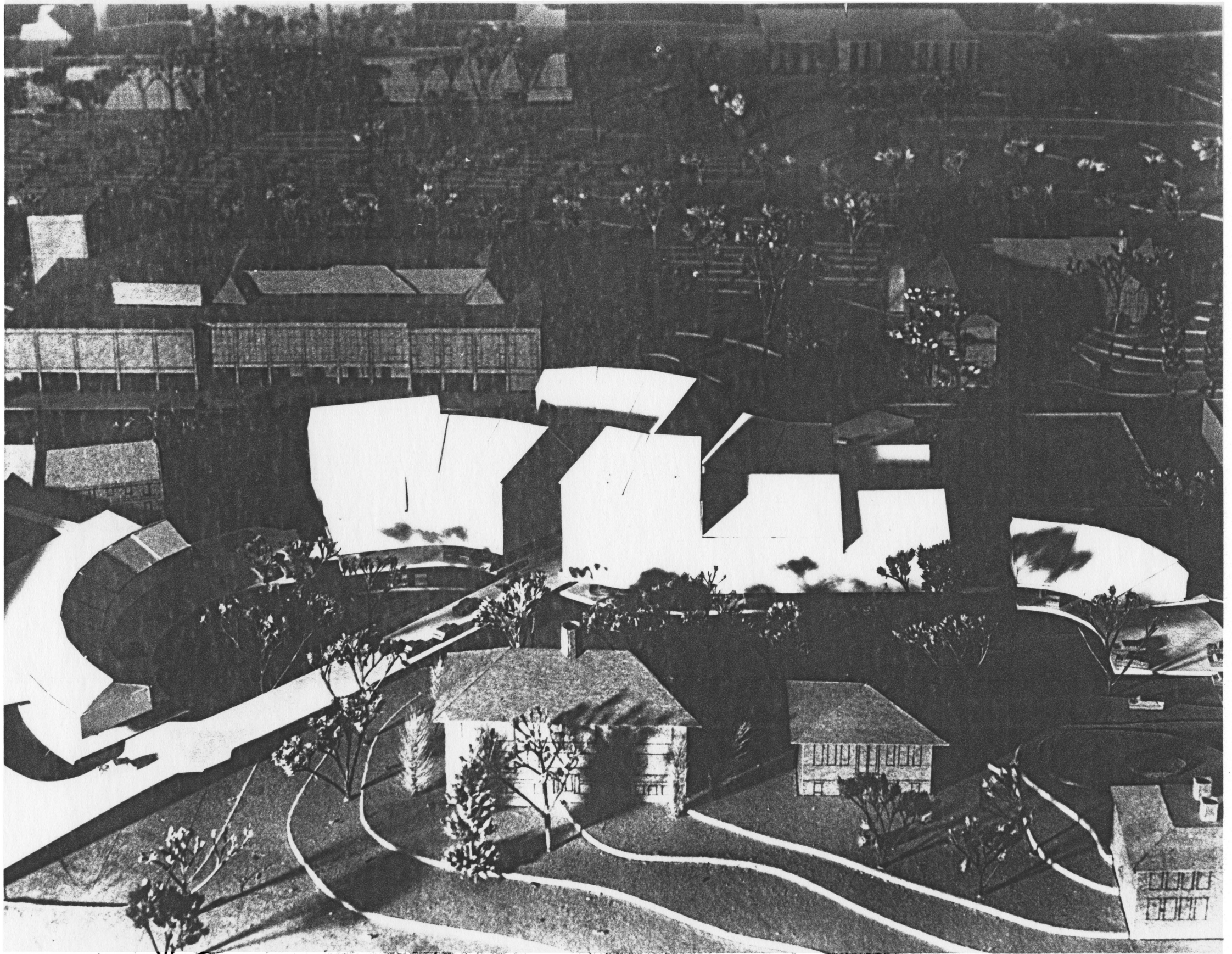
The curve of the next building strengthens the mall enclosure on one flank and turns to meet the approaching traffic from town on the other. In tandem with the third building, a gateway is formed facing the now diverted traffic. The gateway becomes a focal point for the north "square", one of two terminals for the new road.

The reciprocal condition occurs at the south end where campus traffic turns at the CEC entrance and rolls toward town. The curve of the buildings on this approach surround and create a pedestrian park on the left, and straighten along the promenade toward town at right.

Both north and south facades employ the same curve to organize four different spaces on the left and right. Simultaneously, the curve allows a frontal condition with the oblique roadway.

Within the building cluster, curves interact to produce a lively courtyard cityscape. This space is pedestrian oriented, and leads those on foot through several mini-spaces, both open and closed, dark and light.





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(ABSTRACT)

Successful architecture responds to user function on one level and its environment on another. A design for graduate student housing that operates on both levels is shown.

The potential of curved building masses is explored. The structure for housing is the structure for parking, and the whole complex defines and separates vehicular and pedestrian circulation.

Existing features of the site are employed and enhanced to create a tie between the old and new.

The spaces are as important as the space makers.