

A PROPOSED MUSIC FACILITY
FOR WESTERN MICHIGAN UNIVERSITY.

a discussion of the concepts.

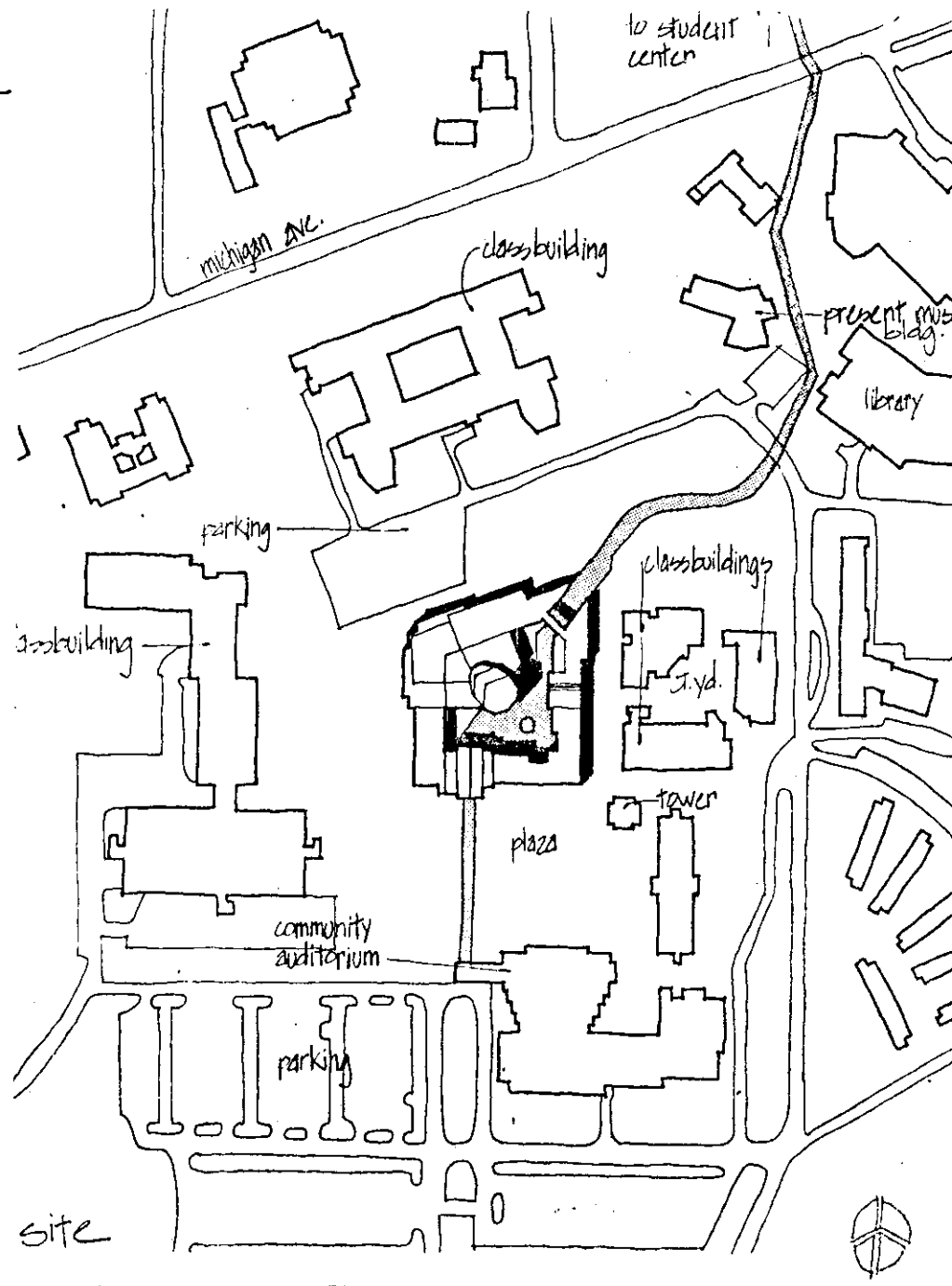
DAVID A. BUTLER

13 AUGUST '81

This proposal is an 82,617 sq. ft. music facility for Western Michigan University. The present music building is quite old & does not have the space to adequately support the school. This need became the basis for my thesis. Western Michigan University is currently building a new Fine-Arts building, upon which I modelled my program. The programs are similar, but for the sake of size & simplicity, I choose to omit the dance department. I chose to use the same site that the university selected, not only in order to compare my result with the universities architects', but also because the site has several amenities which provided a good opportunity to work with. It was with these thoughts in mind that I selected this thesis.

The music building occupies a site with unique qualities. One of these qualities is the site's relation to the rest of campus. Its location is on a heavily travelled pedestrian path, linking a large parking area to the bulk of the campus. Because of the importance of the site, I wanted the building to become a gateway for the campus, an area where a well defined pedestrian path could help link the campus together.

Two other aspects of the site are the courtyard formed by the classbuildings to the east, & the plaza to the south. By providing a courtyard, the music building could mimic the adjacent courtyard (hence, similarities in form), & by raising part of the building off the ground, provide a ground relationship to the plaza, & a continual ground plane on which to transverse the building.

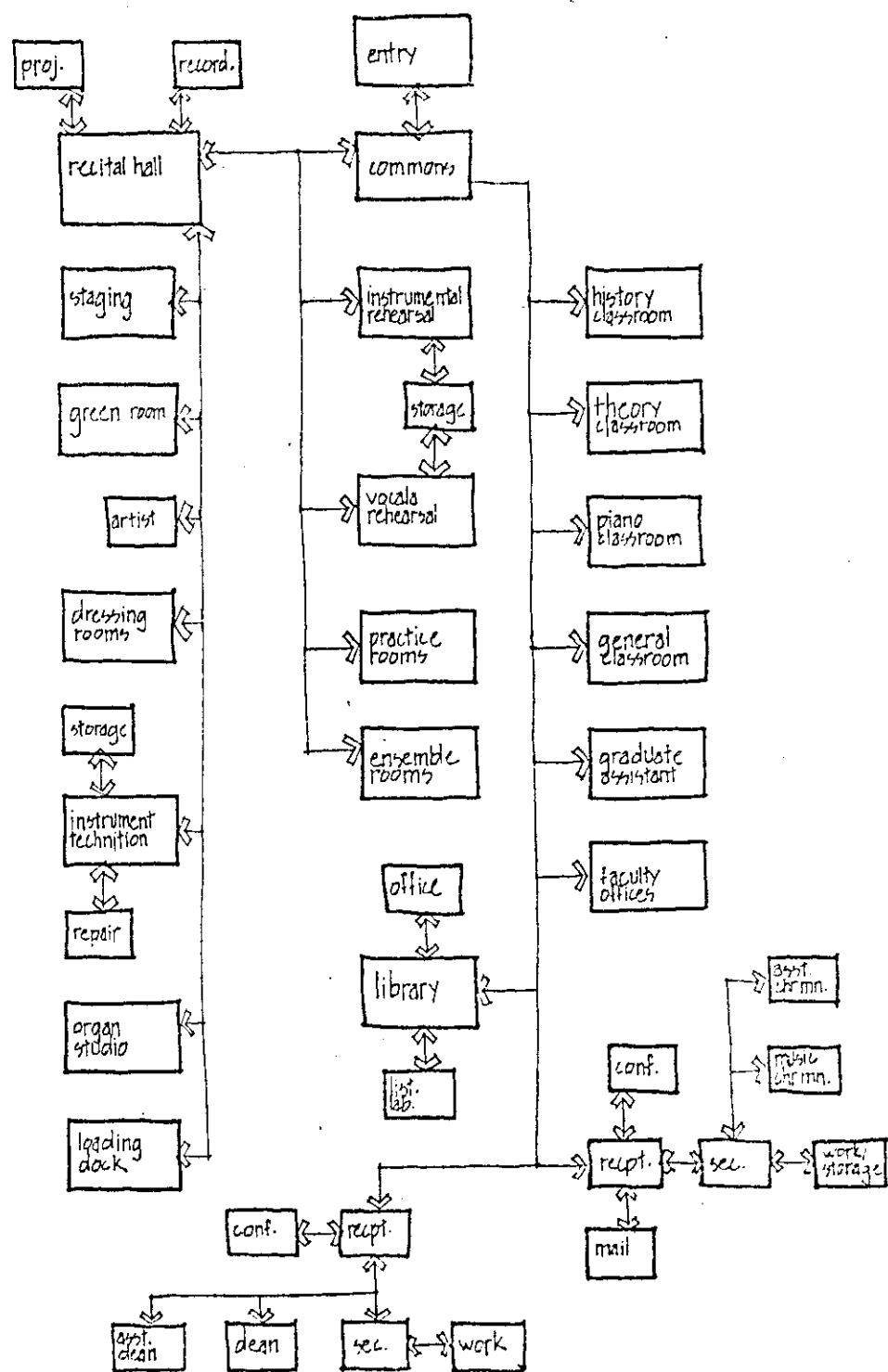


The program consists of three basic areas, instruction, performance, & faculty.

The instruction area consists of two areas; classrooms for history (1500sq ft), theory (600sq ft) piano (600sq ft) & general education (600sq ft); & a library (600sq ft), which contains facilities for study, reading, a listening lab, librarian's space, & storage.

The performance areas include practice rooms (appx. 70sq ft each), an instrumental rehearsal room (1000sq ft), a choral rehearsal room (1000sq ft), & a recital hall which seats 450 listeners (4000sq ft).

The faculty area consists of 3 graduate offices for 8-10 graduate students each, 46 faculty offices (200sq ft each) a music department office & deans office (600sq ft each). The entire building is 82,677sq ft, which includes mechanical, service, & circulation spaces.



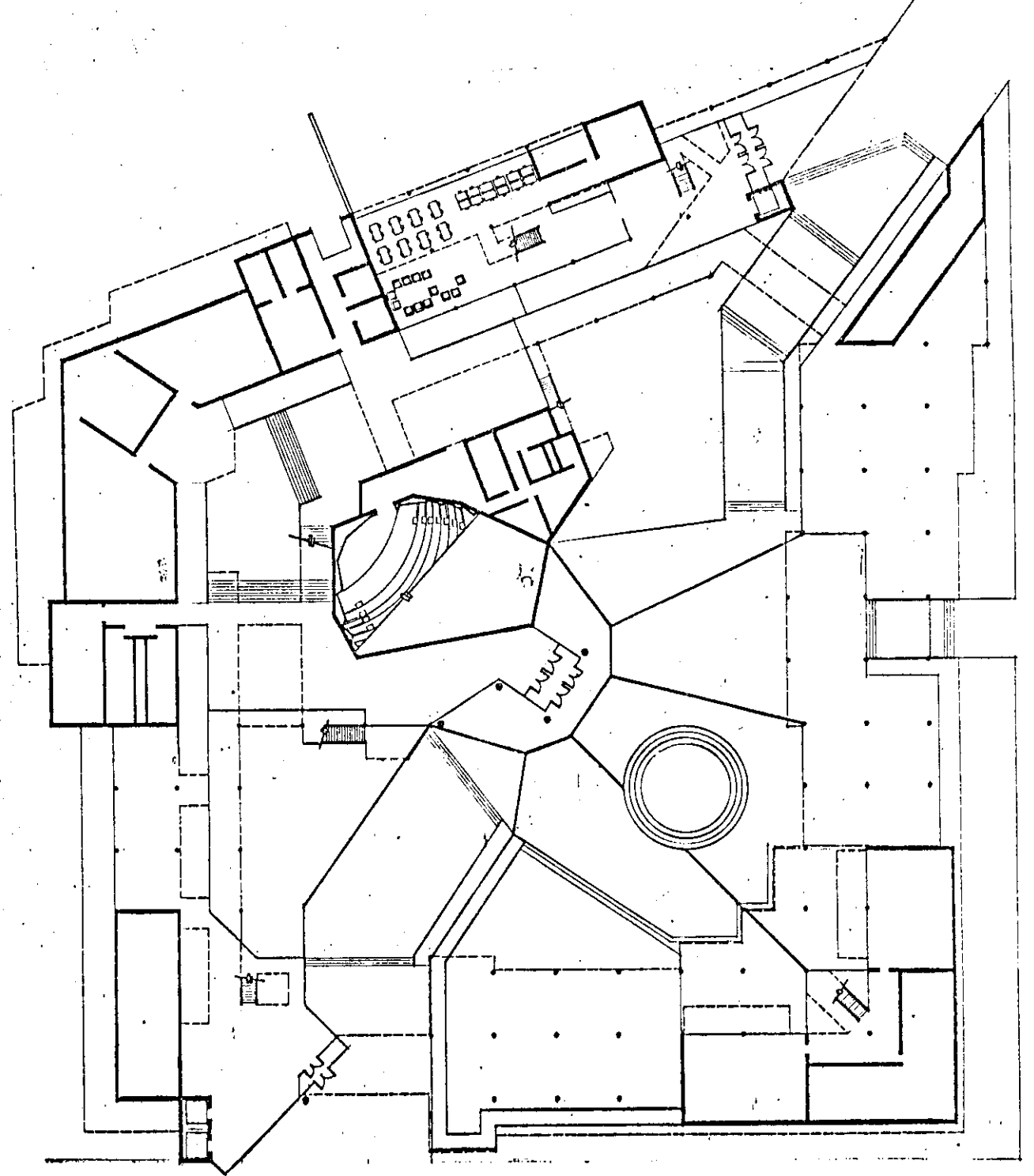
The last major aspect of the site is the collisions of two of the grids which lay out the campus. One of these grids follows the line of Michigan Ave. to the north. The other grid follows the points of a compass. The building lies at a point where both of these grids converge, & the building aids in the transition of these grids.

Generally speaking, the building is laid out as a doughnut, with the recital hall in the center. There are several reasons for this placement. I see the recital hall as being the most important space in the building; because of its priority, it is placed symbolically in the center, where it can be seen from many angles. It is also the tallest component of the building; not only to be able to seat people functionally, but also because of its importance, it wanted to be taller. Thus it can also be seen from a distance.

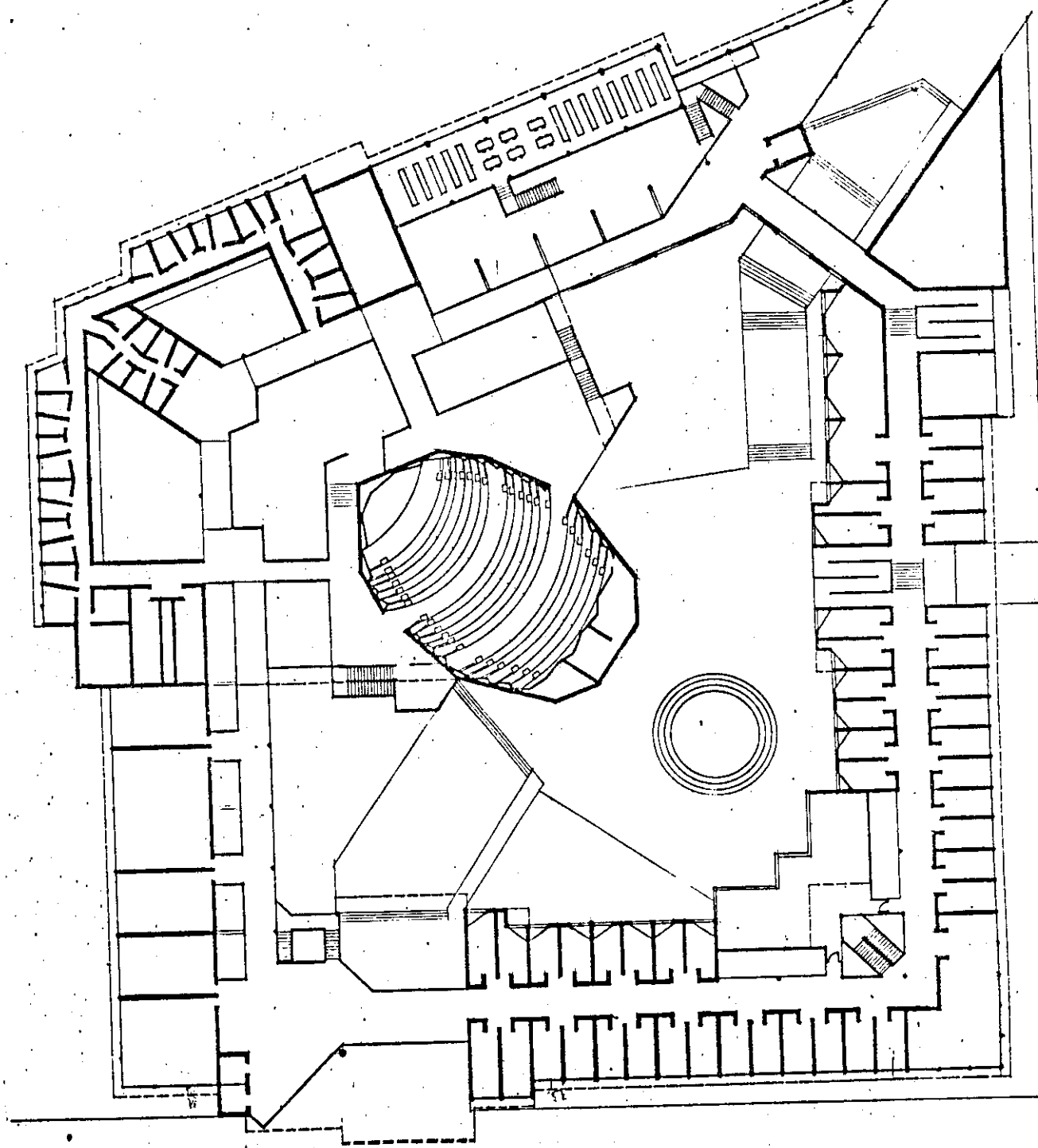
The practice rooms, rehearsal rooms, & recital hall lobby are set in the same corner as the recital hall, thus, all the performing areas are grouped together. This also helps to turn the corner & make the transition to the other campus grid.

The classrooms are at the west end of the building, & are located close to one of the main entrances. The south & east parts of the building contain the administration & faculty areas. These are located here for the benefit of grouping the area together, & are between the classrooms & the library.

The library is located to the north, where it can take advantage of diffused north light. Circulation is between the library & the courtyard, which helps to diffuse the south light by shading the library.



lower level



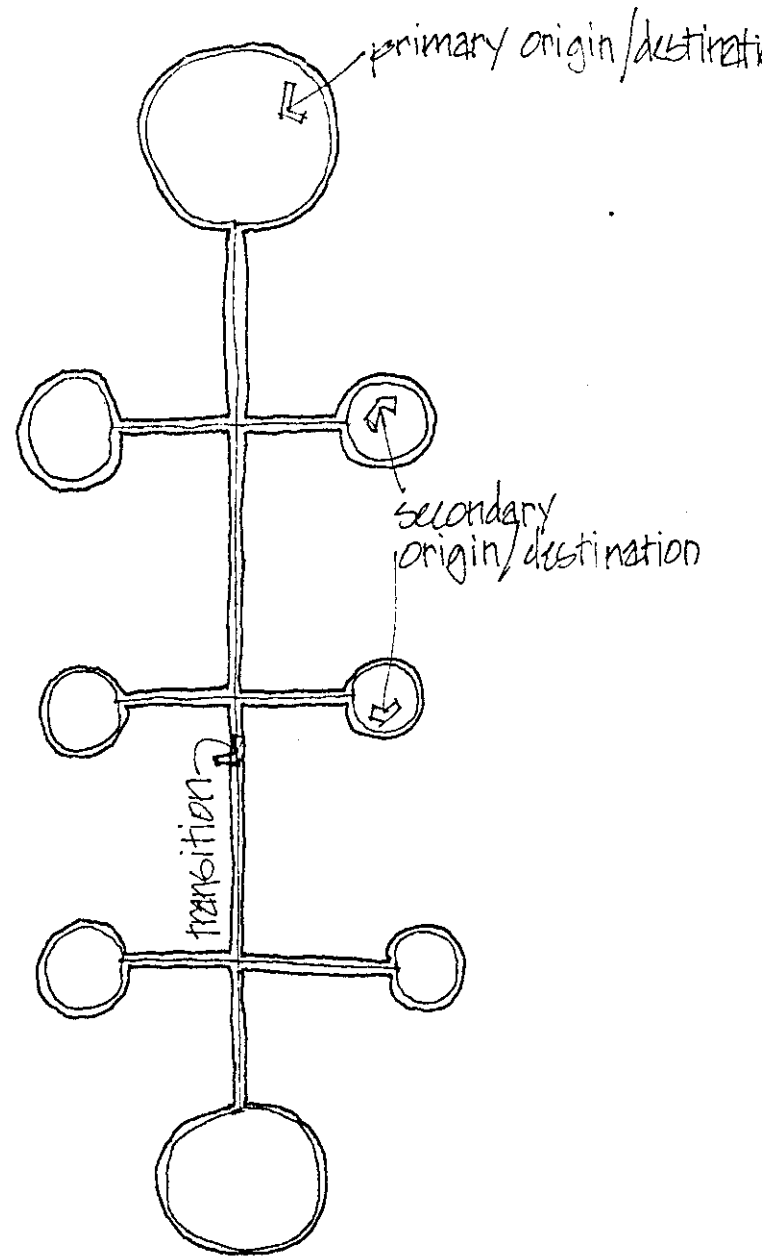
Upper level

I see circulation as movement through a sequence of spaces during time. These sequences of spaces begin with an origin, & arrive at a destination through a transition.

The origin & departure sequences can be best understood by thinking of them as arrival & departure points; the transition sequence links the two together. Each of these sequences has its own identity, however the origin & destination can be interchanged, depending on whether or not one is entering or leaving the space.

There is also a system of scale involved with circulation concepts. This scale can include a long distance travelled between two major points, which can also have within it several other secondary origins & destinations within the context of the larger transition sequence.

These three terms become the organizers for my circulation, & occur at many different



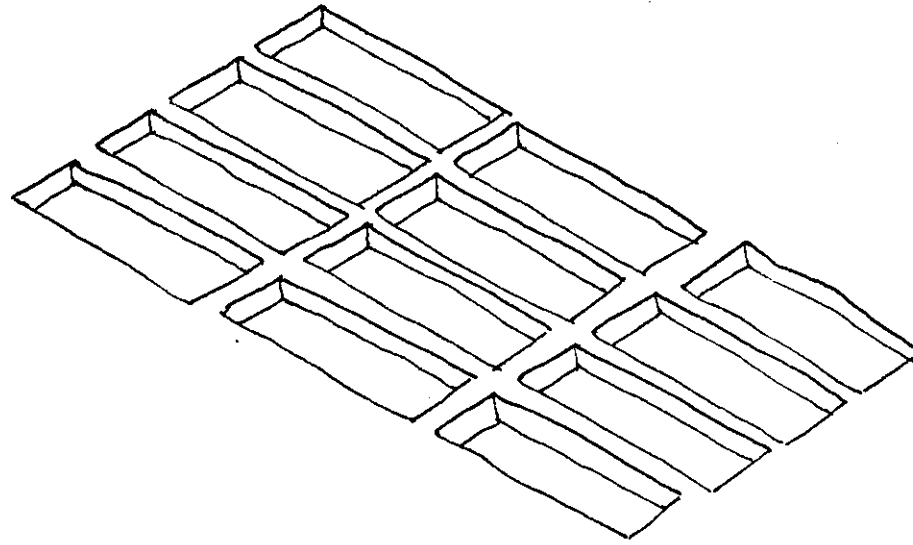
scales. At a large scale, the building can be seen as an origin & destination as a whole.

To break this scale down further, the two entrances & the recital hall lobby can be seen as origin/destination spaces, with the corridors running between as the transition zone, which has a tertiary scale to it; the origin/destination spaces into the classrooms, library, & faculty offices.

Up to now I've been discussing the concepts which had the greatest impact upon the building form. I would now like to talk about some secondary concepts which had a lesser impact on the overall building, but still contributed to the design.

For the structural system, reinforced concrete was chosen due to its density & weight which would reduce the amount of sound transmission. A one way slab (waffle), on a 5' x 2' module, determine the floor & roof systems. The size of the columns are 1'-3" in diameter, which was chosen for its aesthetic proportion.

The mechanical rooms are located in the north-east & south-west corners of the building, & each serves two quadrants. The mechanical system for most of the building is a single duct

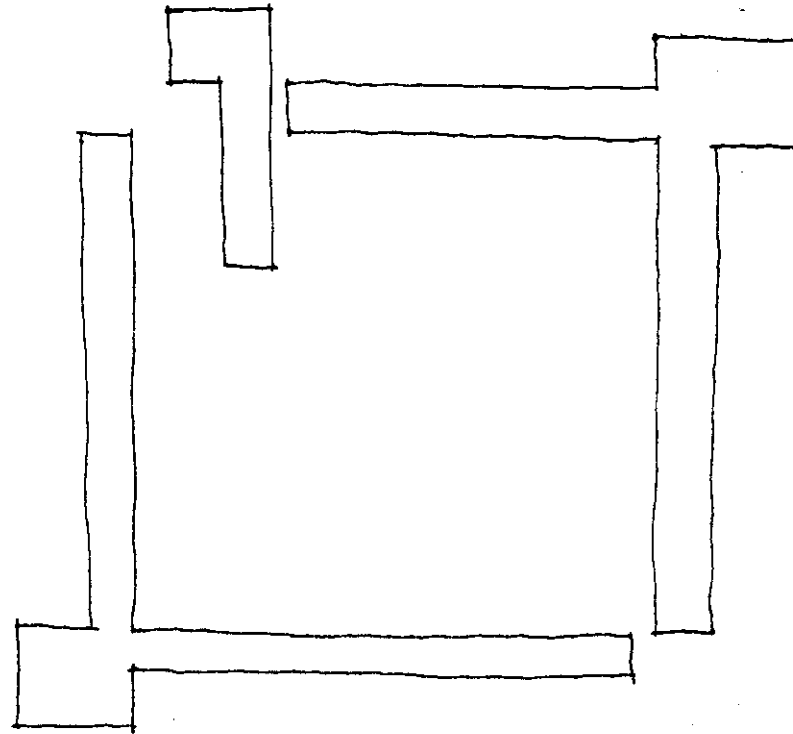


low velocity system, with acoustical dampers to cut down on sound transmission.

The recital hall has its own mechanical system, located above the service area. This system operates on a very low velocity convection system, where the air is given just enough push to get it into the recital hall, where it is diffused through several diffusers, & collected by convection currents & returned. This system reduces the amount of equipment & air rush noise in the recital hall, & also reduces the amount of sound transmission to other parts of the building.

To clad the building, a stone-like material was chosen because stone is a material historically associated with university buildings, due to its monumentality, permanence, etc.

I chose two types of concrete; one an



architectural concrete, & the other an exposed, colored aggregate concrete. The third major material chosen was a light red granite.

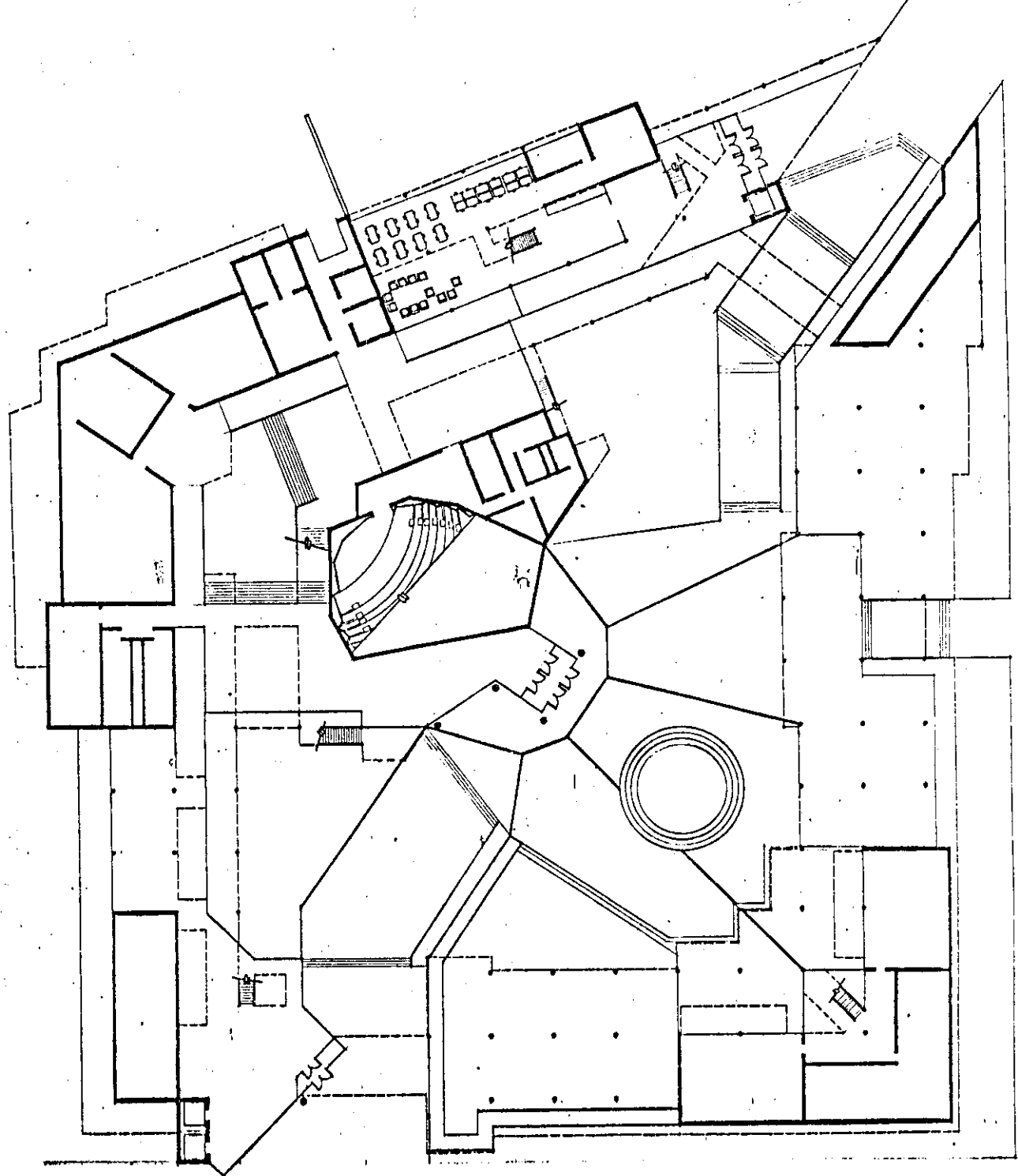
The placement of these materials on the building was determined by assigning a hierarchy to the building form, then assigning a dominant material to that form according to how refined the material is.

Thus, the recital hall was clad in light red granite, due to the fact that the recital hall is the most important space. The interior courtyard was mostly clad in the exposed/colored aggregate, & the exterior was mostly clad in architectural concrete. However, the other materials appear on the facades as well. On the exterior, the exposed, colored aggregate concrete becomes the window mullions, acting as a secondary material & introducing itself. On the interior courtyard, this arrangement

is reversed; the architectural concrete becomes the secondary material to the exposed, colored aggregate concrete.

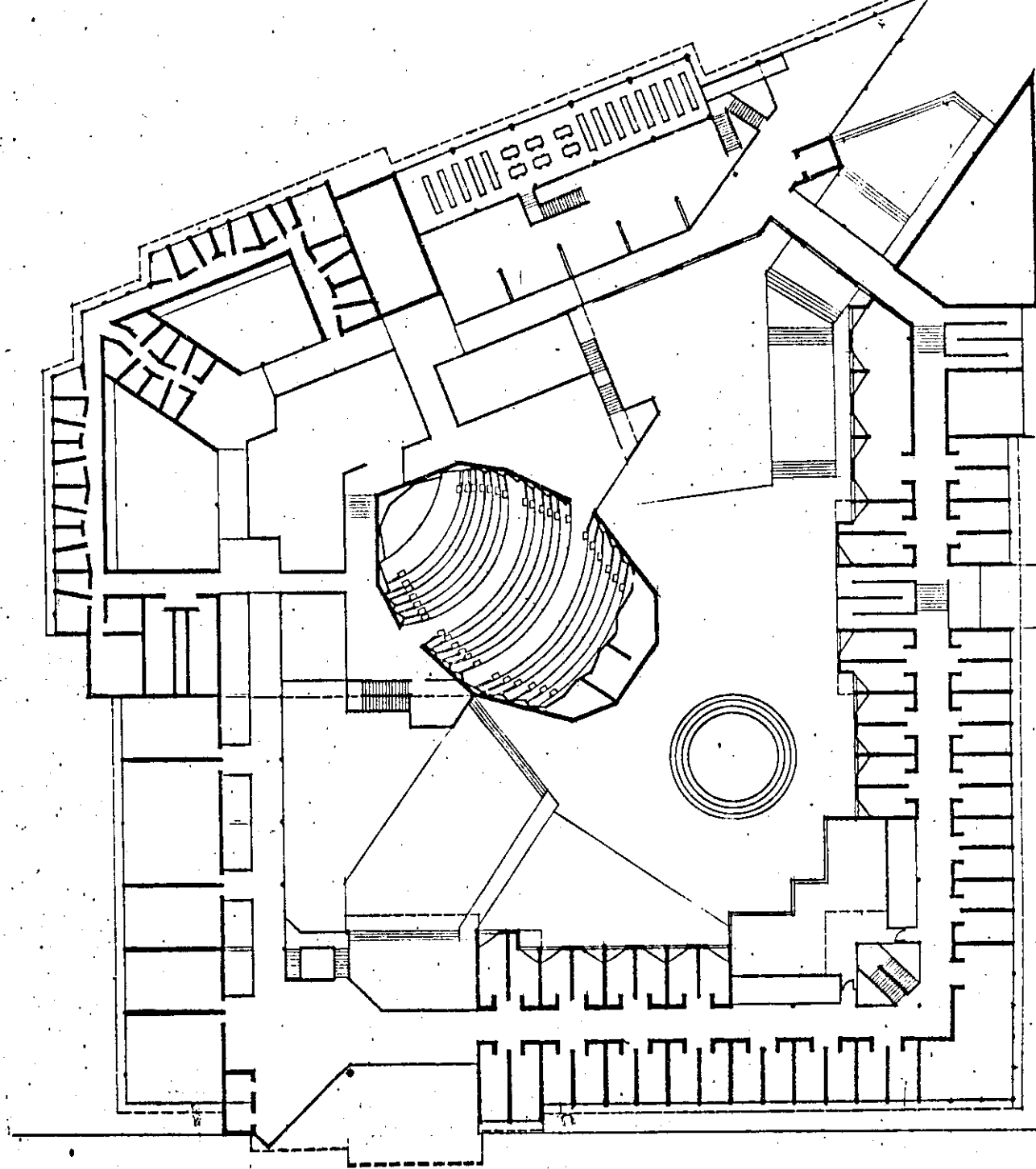
The pedestrian path which runs through the site was conceived on the idea of terraces (which become origin/destination points). These terraces respond to the slope of the site, & points where the building intersects the path; such as at both of the main entries, & the entry to the recital hall.

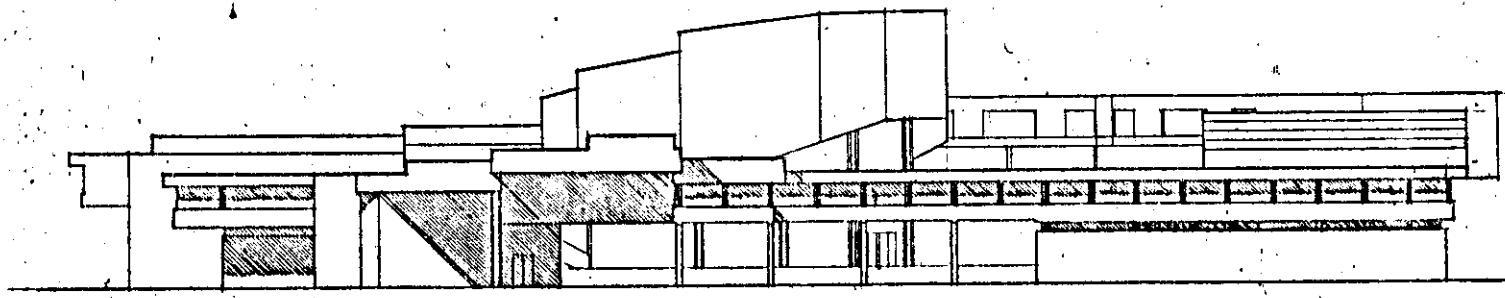
The rest of this book contains the drawings of my building. Most of the conceptual development should be obvious in the resolution of the building.



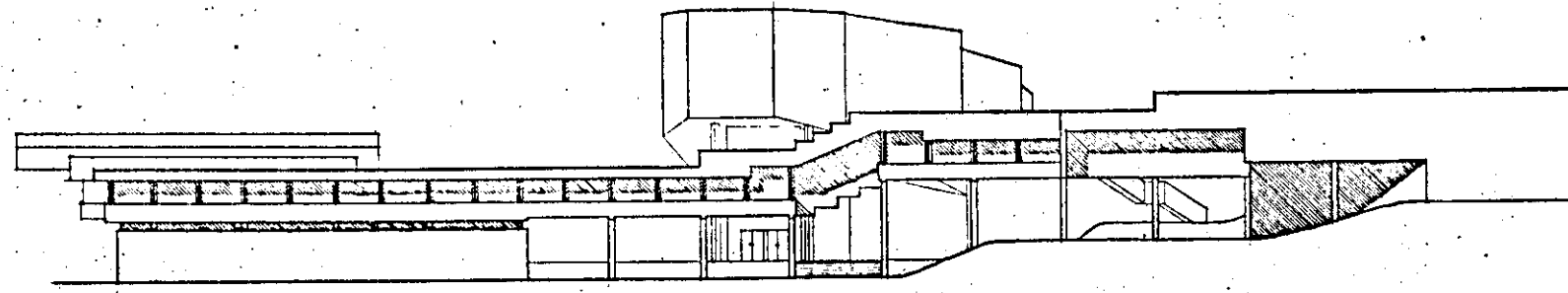
lower level

upper level

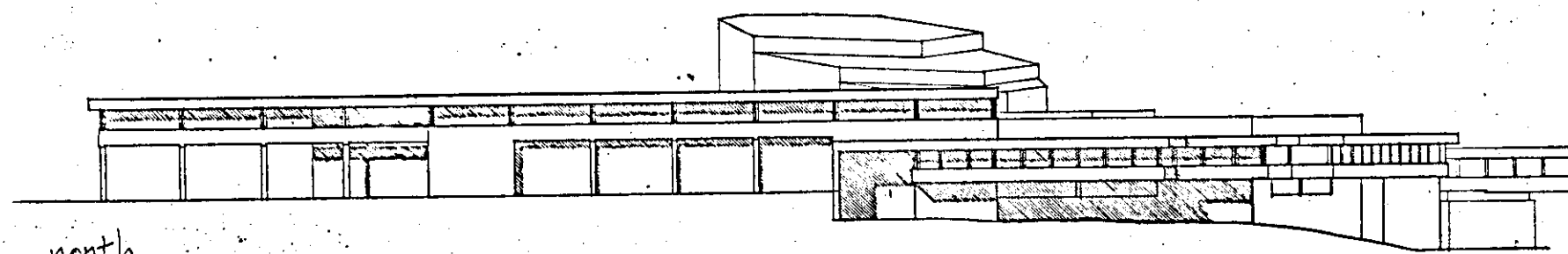




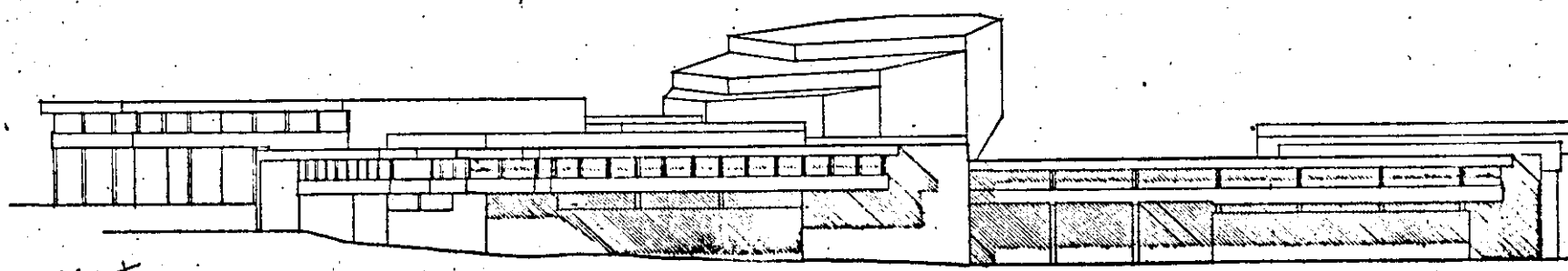
south



east

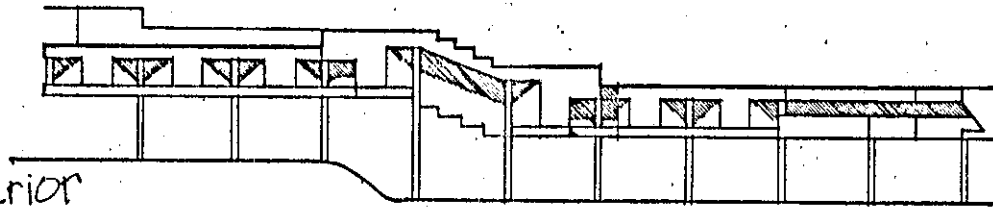


north

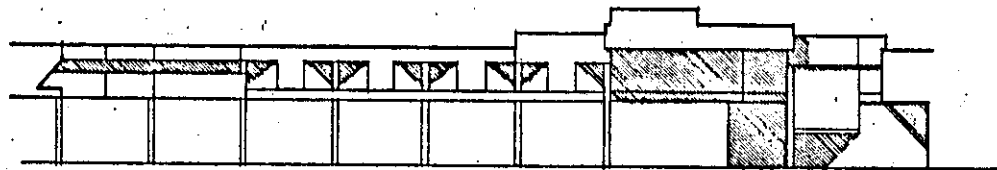


west

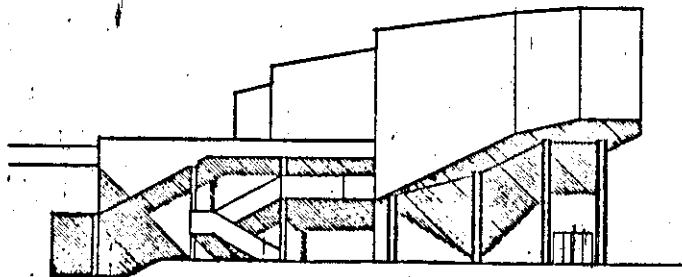
west interior



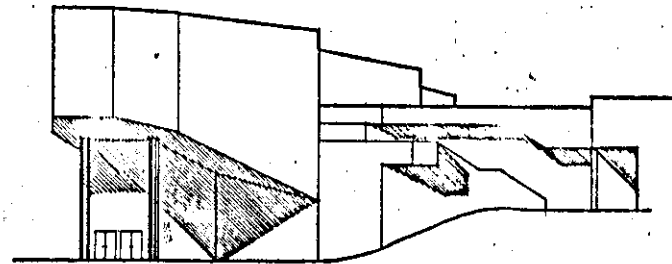
north interior

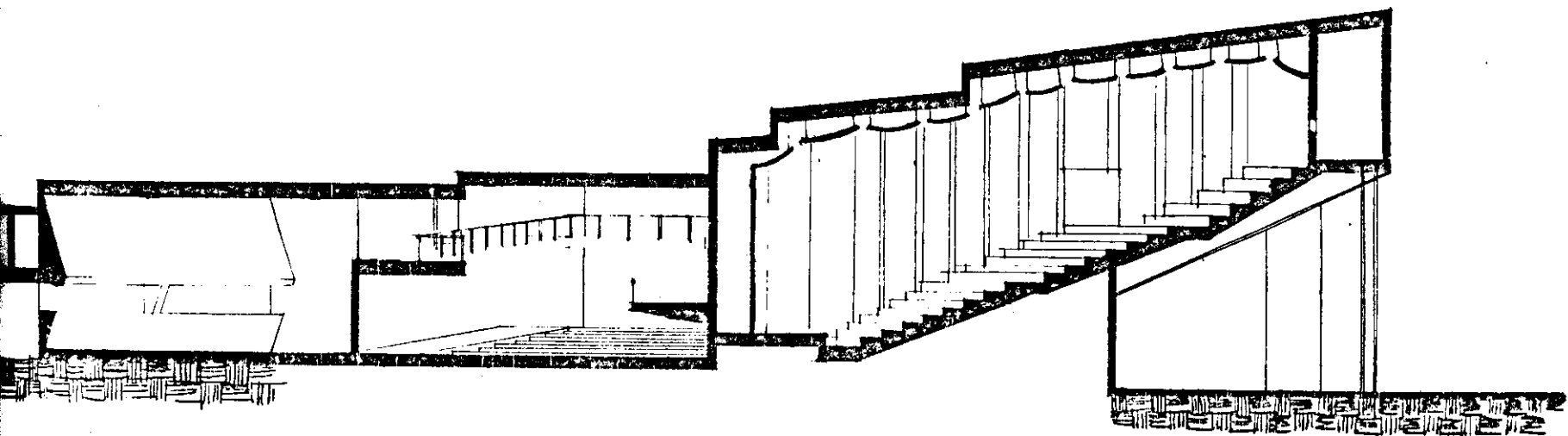


south



east





Section through recital hall, lobby, rehearsal hall & practice room.