

A COLLEGE OF ARCHITECTURE AND DESIGN
FOR
KANSAS STATE UNIVERSITY

by

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INTRODUCTION

Kansas State University is representative of the great state institutions that distinguish modern American higher education. As a "university", it incorporates the activities of numerous schools and departments; it offers an undergraduate program closely related to graduate and professional studies. It is located in Manhattan, Kansas, a town of approximately 20,000 population. The campus is northwest of the city proper and is situated on a higher elevation.

Kansas State University was founded on March 3, 1863. The story of the Department of Architecture at Kansas State University begins in 1877, when President Nichols invited John D. Walters of the College staff to teach "industrial drawing". Working in this field gradually shifted into industrial design and then into home planning and farm structures, finally emerging as a full fledged Department of Architecture, which was officially established by the Board of Regents in 1904.

In 1925, the curriculum in architectural engineering was added and so were new courses in the arts related to architecture.

The School of Architecture and Allied Arts was a part of the College of Engineering and Architecture. In 1964, the College of Architecture and Design was established as independent division of the University.

The College is accredited by National Architectural Accrediting Board and is a member of the Association of Collegiate Schools of Architecture.

As the College became as an independent division of the University, it ranked as the sixth largest accredited school in the United States with an enrollment of 555 students. This figure does not include graduate students and over 200 students in other curriculums enrolled in drawing, painting, design and graphic courses. Present facilities are becoming hopelessly inadequate. In order to properly train future architects and artists, it is necessary to design a new environment to match the present acute need. The purpose of the thesis is to create a logical and esthetic campus environment for the College of Architecture and Design.

THE CURRICULUM OF ARCHITECTURAL EDUCATION

From a general survey of the curriculum of architectural education, one finds it contains five major fields:

1. Liberal Studies.
2. History and Theory of Architecture.
3. Technical Studies.
4. Studio Workshop.
5. Design Studies.

Liberal Studies.*

The first two years of the curriculum deal with education. The last three deal with professional training. First the question is, "Why?" then, "How?" The first two years of college are the most important and perhaps the most difficult in the young architect's life.

The classic picture of the liberally educated man is described in General Education in School and College: "The liberally educated man is articulated, both in speech and writing. He has a feeling for language, a respect for clarity and directness of expression, and a knowledge of some language other than his own. He is at home in the world of quantity, number, and measurement. He thinks rationally, logically, objectively, and knows the difference between fact and opinion. When the occasion demands, however, his thought is imaginative and creative rather than logical. He is perceptive, sensitive to form, and affected by beauty. His mind is flexible and adaptable, curious, and independent. He knows a good deal about the world of nature and the world of man, about the culture of which, he is a part, but he is never merely "well-informed." He can use what he knows with judgement and discrimination. He thinks of his business or profession, his family life, and his avocations as parts of a larger whole, parts of a purpose

*Bulletin of Washington University. St. Louis, The school of Architecture March 31, 1961.

which he has made his own. Whether making a professional or a personal decision, he acts with maturity, balance, and perspective, which come ultimately from his knowledge of other person, other problems, other times and places. He has convictions, which are reasoned, although he cannot always prove them. He is tolerant about the beliefs of others because he respects sincerity and is not afraid of ideas. He has values, and he can communicate them to others not only by word but by example. His personal standards are high, nothing short of excellence will satisfy him. But service to his society or to his God, not personal satisfaction alone, is the purpose of his excelling. Above all, the liberally-educated man is never a type. He is always a unique person, vivid in his distinction from other similarly educated persons, while sharing with them the traits we have mentioned."

Liberal education is literally education for free men. "Liberal education and the democratic ideal are related to each other in a thousand ways. They stand and fall together."

History and Theory of Architecture.

Alfred North Whitehead says of the knowledge of the past that "The understanding which we want is an understanding of insistent present." We look to history to discover architectural principles to guide us in our work. The historic change in architectural form may first mislead us into

believing that such principles do not exist. But a closer examination shows that all fine buildings were, when built, modern buildings. The Greek temple was a modern building, and the Gothic Cathedral was a modern building. And careful study reveals that there are indeed principles of design, great recurring themes.

Architecture has always symbolized human aspirations. It has always reflected social needs. It has always exploited the limits of technology. Architects have always been concerned with elegant use of material, expression of structural forces, order, geometry, rhythm, the play of light and shadow.

The fact that there are changeless architectural principles is precisely the reason why architecture changes; why the Gothic Cathedral looks different from the Greek Temple, and why an airport does not look like a Gothic Cathedral. If architecture is shaped by social and technological forces, then, when society and technology change, the shape of architecture will change.

Recent social and technological changes have been profound, and we should therefore expect profound changes to be occurring in architecture. This is the case; and history suggests that we are at the end of the first great age of architecture and we are on the threshold of the second.

In all past ages buildings were made of stone, brick, and wood; to-day they are made of steel and reinforced concrete. In the past buildings were built by handicraft techniques; to-day we are beginning to use machine techniques.

In the past buildings were built by trial and error design; to-day they are built by scientific prediction. Buildings were once built for few people; to-day they are built for great masses of people. Architecture was once the creation of autocratic, aristocratic societies.

It is this fact of change and challenge that makes architecture in the twentieth century an exciting profession, and the extraordinary growth of both our cities and our technology promises that the challenge will continue.

Technical Studies.

The young architectural student is in the position of the man who wishes to compose music though he does not know scales, or who wishes to write poetry though he has no knowledge of grammar or syntax. He must first master many fundamental skills before he can create architecture. He must learn, among other things, such technical principles as the way buildings perform under the forces of wind and gravity, and the nature of materials and the methods of construction.

In determining the emphasis of a technical course we must remember that the special techniques one learns in school will be out of date by the time the student gets a chance to use them. This leads us to emphasize principles over techniques, and explains our concern with mathematics, physics, and engineering analysis.

Architectural design must be recognized as the total

integration or synthesis of structure, materials, acoustics, color and light. Students and staff must be able to experiment with these "Professional tools" to design a "total environment" for the ever increasing activities of man.

Foundamental knowledges are such as:

1. Structure (construction method).
2. Physics (light, heat, electricity, sound).
3. Illumination (emotional and founctional aspect of light).
4. Air conditioning (physical comfort).
5. Acoustics (noise control and proper sound projection).
6. Materials (to provide shelter and assist 3, 4, 5).

These are important basic material to be used in design.

Studio Workshop.

It is obviously important that the architect learn to draw well. The pencil is the architect's tool. Through sketches he communicates with himself and with others, and through sketches he records his visual experiences.

A less obvious, but even more important function of drawing, sculpture, painting, and graphic disciplines is the manner in which they sharpen the perceptions. The architectural student must learn to see. His eyes must be opened to the fact that this is (we choose to think) an ordered universe. We all thrill to the order and the patterns of nature and to the universal forces that this order reflects and reveals.

The architect must learn also to recognize the patterns in the man-made environment, and the fact that these patterns mirror the values and insititutions of the society that produced them.

Students begin studio work in their first year and continue until graduation. During the first two years they explore many techniques and mediums. Drawing is emphasized, particularly in the third year. During the last years many advanced projects are possible, such as drawing, painting, sculpture in various materials, shop work in metal or wood, and photography.

Design Studies.*

"At the heart of the creative architectural process lies something called 'design'; and despite the importance of all the other parts of the process - programming, cost study, engineering, planning - the architect's function is to be found when he sets pencil to paper and draws a line which will ultimately become a wall, or a roof, or a floor. But the image that many of us have in our minds of the solitary man at the drafting board 'creating' is oversimplified."

"For the architect, like most artists, is creating all the time, and it is not possible to break him up into parts and say 'Now he is businessman, considering the economic

*Bulletin of Wahington University. St. Louis, The School of Architecture, March 31, 1961.

requirements of the client; now he is planner, figuring out how to get all the functions of a building into a certain area; now he is sociologist, studying the human requirements for a public building; now he is technician, working out the equations of structure; now he is artist, making beautiful forms.' He possesses the unique quality of combining these qualities into one person for the sake of creating a building. This is what is meant by the word 'architect'."

"And the architect is engaged in the business of designing the building from the first meeting with the prospective client to the last detail of construction. Design is a way of hearing what the client is saying about himself and of translating what is heard the architects study traffic flow, when they come to know the unique spirit of this city, as distinct from all other places, when they consider what kind of space feels best to large numbers of people gathered together, when they investigate materials and techniques of structure - when they do all these things, they are designing the building. The evolution of a final design, therefore, results from a continuous activity of proposing, considering, rejecting, revising, accepting and experimenting."

Training in this design process is at the heart of the curriculum. Design should be taught by a "case study" method in which the student designs building, groups of buildings, or elements of buildings. Four (at least) long problems are issued each year, interspersed with special projects and six

to eight sketch problems, and culminating in a thesis in the last semester of the last year. Most of the student's design work is done in his design studio. He meets with his design instructor in individual conferences four or five times a week. He also attends design lecture and special meetings with other faculty member.

At completion of each problem each class presents its solution to the student body, the faculty, and visiting architects. In these "juries" each student describes his solution and it is then criticized by the faculty and visiting architects.

Team Work in Architecture.

José Luis Sert observes that the team work in architecture is the future way of working. If the team is composed of people who know different things, then the work will be done in a faster and more intelligent manner.

In order to satisfy professional demands, we should integrate the following areas of study into one college:

1. Architecture
2. Architectural structures
3. Regional Planning
4. Landscape Architecture
5. Interior Design
6. Industrial Design
7. Allied Arts

8. A four year course to provide proper training for various demands of the building industry (material manufacturers, contractors, building engineering firms, etc.) this curriculum should be administered by Architecture but developed with Business Administration.

SPACE REQUIREMENTS

After investigation, the present area in Seaton Hall, including class rooms, design studios, offices, and library, etc. is 27,536 sq. ft. According to the report "Academic and Space Requirements for Training Students in Architecture, Kansas State University 1961-1971.", the total additional area will be 21,800 sq. ft. This figure does not include the landscape Architecture Department in Waters Hall and the Engineering Lecture Hall.

The total area should be 91,000 sq. ft. approximately, this area does not include the service and circulation spaces. The future space requirements in a new building for the College of Architecture and Design should be very carefully taken into consideration.

From the enrollment statistics of the College of Architecture and Design, there was an increase of more than 100 students in the past few years (1961-1965).

What the Future Space Will Be?

According to the Report "Academic and Space Requirements for Training Students in Architecture Kansas State University", a conservative estimate of the 1970 professional enrollment in Architecture, Art, and Planning will be 750. The future enrollment in Landscape Architecture, Interior Design, Industrial Design, etc., was not included in the estimated enrollment figures for 1970.

By general estimation, the total enrollment in the College of Architecture and Design will be 1000 to 1400 in 1976.

The faculty members will increase as well as the students enrollment in 1976.

The future space requirement will be based upon the following three factors:

1. The present spaces use in Seaton Hall (2nd & 3rd floors).

offices	-----	3,407 sq. ft.
class rooms	-----	2,796 sq. ft.
drafting rooms & studios	-----	13,730 sq. ft.
library	-----	1,783 sq. ft.
story	-----	600 sq. ft.
rest rooms	-----	420 sq. ft.
sculpture studio	-----	960 sq. ft.
architecture assembly hall	-----	3,840 sq. ft.

Total = 27,536 sq. ft.

2. Additional spaces needed in 1971 (sources from "Academic

and Space Requirements for Training Students in Architecture").

offices	-----	2,000 sq. ft.
class rooms & studios	-----	8,000 sq. ft.
graduate students	-----	3,000 sq. ft.
administration	-----	1,500 sq. ft.
space for judgement & exhibition of student work	-----	1,500 sq. ft.
library	-----	2,300 sq. ft.
area for the manipulation of full scale "space form" materials laboratory	-----	2,500 sq. ft.
		Total = 21,800 sq. ft.

3. The proposed area for the new building.

Administration & offices	-----	7,000 sq. ft.
class room & studios	-----	*61,600 sq. ft.
architecture lecture hall (500 seats)	-----	5,000 sq. ft.
library	-----	6,000 sq. ft.
graduate students	-----	4,000 sq. ft.
arts lounge & students work	-----	3,600 sq. ft.
exhibition space		
materials lab. & sample room	-----	4,000 sq. ft.
		Total = 91,200 sq. ft.

(approx.)

*School of Architecture, University of Manitoba, Manitoba, Canada, suggest that each freshman will have about 34 sq. ft. and each senior 55 sq. ft. of drafting room space.

Space Analysis

1. PUBLIC CIRCULATION

Entrance lobby

Concourse

Art lounge

Exhibition

Lecture Hall

Library

2. ADMINISTRATION CIRCULATION

Reception

General office

Dean's office

Heads' offices

Secretary pool

Jury room

Conference room

File

Faculty lounge

Faculty offices

3. STUDY CIRCULATION

Class rooms

Drafting rooms

Model making rooms

Graphics drawing and painting studios

Life painting studio

Oil painting studio

Sculpture studio
 Woodworking studio
 Photography studio
 Metal shop
 Student lounge

4. SERVICE CIRCULATION

Coats
 Washing rooms
 Storages
 Freight elevator
 Mechanical
 Janitory

Public Circulation

- | | |
|---------------|---|
| Entrance Hall | <ul style="list-style-type: none"> - 0.8 to 1.2 sq. ft./student - occupancy is for short time
(transition space) - direct access to concourse - should be considered for economy
and convenience. |
| Concourse | <ul style="list-style-type: none"> - entered from entrance hall, and
access to all other specify spaces - 0.8 to 1.2 sq. ft./student - relation of virtual circulation,
(such as stairs, freight elevator)
should be arranged in a smooth flow |

Arts Gallery

- as a central distributor
- for exhibition use of both student works and faculty members.
- spaces for this purpose should themselves exemplify good art forms and should at all times be attractively furnished and arranged.
- should be amply supplied with electric outlets for indirect lights for individual pictures - for their best visual advantage.
- a working space should be in which object may be packed for shipping.
- a small storage should exist

Total area approx. = 3,600 sq. ft.

Lecture Hall

- capacity for 500 seats at 7 sq. ft. per student (including circulation)
- a small stage (platform) should be added in - the storage floor should be $3\frac{1}{2}$ - 4 feet above the level of the auditorium floor.
- a projection booth should be provided.
- the lecture hall floor should be inclined and the desired results may be obtained by inclining the floor of the back two-third or one-

half of the lecture hall.

- seats should be of the auditorium type with tablet arms which fold back to permit passage along aisles.
- an economic arrangement of seating and gangways is essential.

Total area approx. = 4,800 sq. ft.

Library

- one of the most important facilities related to our design studio.
- to serve as efficient liaison officers to connect instructor and student.
- to develop general reading interests through open shelves, browsing rooms, attractive bookstores, booklists, and a stimulating readers' advisers service.
- a working space (for the use of repairing & packing) is necessary.
- 50 volumes per running foot of single stacks 7 feet to 7½ feet high
- to meet the best illumination result
- the floors should be covered with battleship linoleum, cork or rubber tile, or some other sound absorbing composition.

Total area approx. = 4,500 sq. ft.

Material Library - better connected with library.

(sample room) - where full scale (or at least large scale) mockups demonstrating combinations of new materials such as metal curtainwall, luminescent ceiling panels and other modular materials, can be combined for student examination.

Total area = 1,000-1,500 sq. ft.

Administration Circulation

The administration spaces include the offices and related workrooms of those whose duties are concerned with the administrative, managerial, guidance, or operative functions of the institution.

Reception - where faculty student, and visitor wait to discuss, interview, and visit

- near secretary pool

Total area approx. = 300 sq. ft.

Secretary pool - the secretary's office should have a counter or railing to which persons may come who desire information obtainable from the secretary.

- It should also have display cases for material available, such as bulletins and special announcements

Total area = 250-300 sq. ft.

- General office - the general office should meet the use for assistants, and clerks who record and file grades and other record.
- space should be large enough to handle such environment.
- Total area = 400-450 sq. ft.
- Dean's office - the dean's office suite should consist of a private office, a combination waiting room and assistant to the dean.
- Total area = 350 sq. ft.
- Heads' offices - these offices should have either a suite of two rooms or a large single office accommodating the head and secretary.
- Total area = 2100-2400 sq. ft.
- Jury room - the jury room is for the use to judge the students' master works.
- a display board and table should be included.
 - seatings for instructors or jury members should have a clear view to the student's work.
- Total area = 600 sq. ft.
- Conference room - the faculty conference and committee room should be furnished with a large conference table or several smaller

tables of the same size which may be arranged to serve large groups.

- comfortable upright chairs and several large chairs of the clubroom type should be provide for informal conferences or discussions.

Total area = 600 sq. ft.

Faculty lounge - faculty lounge should be equipped with easy chairs and couches.

- the space should have a drinking water cooler and should have an adjoining lavatory and toilet room.
- there should be one or more work or reading tables, several writing desks, bookcases, and magazine racks.

Total area = 600-800 sq. ft.

Faculty offices- in general an office or office suite should contain a desk, swivel chair to match, filing cabinets, a work table matching the desk, two or three chairs for visitors.

- should be centrally located for their service requirement.
- in order to reduce the noises from adjacent office, sound proof partition have to be used.

- each office should have an area of about 120 sq. ft. which is adequate for study and interviews.
- if 50-60 sq. ft. of floor area will be added to each office which will accommodate drafting or grading of graphic assignments.

(total 170 sq. ft./office)

Total area = 4,600 sq. ft.

File

- this space should better adjoin to general office as it possible.
- to store the important records and students' grade cards etc.

Total area = 500 sq. ft.

Study Circulation

Class rooms

- the majority of college classrooms should be sufficiently large to accommodate from 25-40 students - allowing 18-20 sq. ft./student.
- a room 20 ft. x 30 ft. will accommodate a class of 25-30 students.
- the width of class rooms should be such as to assure adequate natural lighting of all points in the rooms.
- when square-headed windows on long side of the room have an area of at least

20 percent of floor area, the width of the room should not exceed twice the distance from the floor to the window head. Where possible the width should be reduced to one and one half times the window height.

- the seats, desks and chairs for college classrooms should be specially adapted to the needs of the subjects usually taught in the rooms - most recitation rooms should be equipped with movable chairs with tablet arms and undershelves for books and briefcases.
- bookcases, filing cabinets, apparatus cabinets, map and chart-racks and similar pieces of furniture should be provided for classrooms.

Total area = 8000 sq. ft.

Drafting studios-this drafting studios should be large enough to provide from 40-50 sq. ft. of floor space per student (approx. 34 sq.ft. for each freshman and 55 sq. ft. for each senior).

- the drafting rooms should be equipped with 25 ft. fixed black-metal tables, on to which drafting boards and drawer

units may be fastened.

The number of students at each table varies from six to three, depending on the level of instruction.

- the chief requisites of these studios should have good natural & artificial lighting and ventilation.
- movable partitions with tackboard and chalkboard panels are installed to separate the class.
- there should be a sink with hot and cold water.

Total area = 32,000 sq. ft.

Model Making Rooms

- student work benches should be heavy-topped worktables with solid raised back and a shelf for models at about eye level of students when seated.
- the model making rooms should be adjacent to drafting studios for students most convenience.
- a heavy workbench should be near the motordriven pulverizers for the preparation of glazes.

Total area approx. = 1,000-1,200 sq. ft.

Graphics drawing & painting studios

- it is desirable that all fine arts

- studios should have north light -
- unobstructed by vine or trees which may cause irregularities in the light.
- the studios should equip with chairs, tables and then each student should have separate lightweight but strong easel.
- the studios should have two or more sinks with hot and cold water.
- drawing and painting studios should have separate tables and stands for displaying objects.
- art studios should be provided with artificial light of the semi-indirect type for students' work and also with indirect lighting for pictures or class work displayed on the walls.
- storage space should be available for students work.

Total area approx. = 6,000 sq. ft.

Life painting studio

- in general, equipments and specifications for life painting studio should be same as graphics and painting studios.
- there should have a model stand for life painting studio
- there should be locker space for smocks,

paints, brushes and personal equipment and supplies.

- a small dressing room with washbasin and toilet should be connected with this studio for models use.

Total area approx. = 3,000 sq. ft.

Oil painting studio

- general facilities shown on graphics and painting studios.
- there should be several different types of background drapoes for still life and life models.
- the oil painting studio should have a paper cutter, a metalcovered container for paint rags, and storage space for oils, turpentine, school and other inflammable materials.
- 40-50 sq. ft. floor area for each student.

Total area approx. = 3,000 sq. ft.

Sculpture studio

- the student benches for this studio should have openings for the knees so that students may work either seated or standing.
- tops of the benches should be heavy enough to supply solid foundation for

hammering.

- workbenches, tops 24 inches by 24 inches, 32 inches to 36 inches in height are desirable to work.
 - student lockers for aprons and smocks and individually owned tools should be conveniently placed.
 - there should be a storage for storing materials (plasters, screens, marbles).
 - there should be two or more sinks with hot and cold water and drainboards on each side.
 - a first-aid kit should be readily accessible.
 - 50 sq. ft. floor area for each student.
 - there should be some movable spot-lights to give special light and shadow effects.
- Total area at least = 2500-3000 sq. ft.

Woodworking shop

- there should be an outside entrance at least 8 ft. wide to facilitate the removal of large objects which may be constructed in the shop.
- mill equipment should include surfacer, lathes, sander, jointer, mortiser, band saw, and universal saw bench.

- there should have a adequate tool cabinets.
- there should be provisions for washing and lockers for work clothes and other personal effects.
- 100 sq. ft. (at least) floor area for each student.

Total area = 3000-3600 sq. ft.

- Metal shop
- the student benches for this studio should have also openings for the knees so that students may work either seated or standing.
 - a small metal vise for each desk is very desirable. Desks should also be equipped with gas and with electric outlets.
 - there should be special storage outside vent for acids and also a separate well-protected space for storing metals.
 - there should be two or more sinks with hot and cold water.
 - 50 sq. ft. floor area for each student.

Total area = 1800 sq. ft.

Photography studio

- there should be provided a dark room in this studio for handling picture development.
- work benches should be divided by partitions which may reduce disturbance between workers.

- there should be one workbench equipped for use in enlargement.
- there should be several cabinets for storing development solutions.

Total area approx. = 500-600 sq. ft.

Student lounges

- there should have several reeling chairs and couches or day beds.
- relaxation, comfort, enjoyment, are the principal functions of the student lounge.
- soft drink machine may be installed as required.
- it is not only a place for rest but also for meditation.

Total area approx. = 1200-1800 sq. ft.

Service Circulation

- Coat rooms - one closet should be provided for each classroom, drafting studio and special room.
- closet should also be provided when necessary in such other places as the corridor, waiting room, entrance hall and etc.
 - one linear feet may serves for six coats space.

(hanging space $(1000+6) \times 2$ ft. wide = 333 sq.ft.

- circulation about $\frac{3}{4}$ hanging space = $340 \times \frac{3}{4}$ = 255 sq. ft.

Total area = 600 sq. ft.

Washrooms - washrooms for men and for women should be located on each floor.

- washrooms should be conveniently placed with respect to stairways and corridors.

- Men - 10 urinals, 10 basins, 8 water closets (approx. 12 sq. ft./fixture).

- Women - 8 basins, 8 water closets and powder rooms.

Total area = 600 sq. ft.

Storages - each floor of the building should have storage rooms for the supplies and equipment needed by custodians for the care of the interior of the building.

- storage room should be free from dampness and dust.

- storage space should be provided for the supplies needed by sculpture studio, metal shop, woodworking shop etc.

Total area approx. = 1200-1400 sq. ft.

Janitor - janitor room should be provided on each floor. (approx. 80 sq. ft. per janitor room).

Total area = 320 sq. ft.

Elevator - for building of more than two stories, adequate elevator service may be required for passengers as well as freight.

- consider the adequacy of vertical service for transfer of persons, equipment, books and supplies.
- clear interior demension of elevator 9 feet x 6 feet; carriage-way 11'-0" x 8'-0"
Total area = 100 sq. ft.

Mechanical service

- hot water boiler and central airconditioning should be installed in accordance with modern standards (see American Society of Heating & Ventilating Engineers).
- easily read and conspicuously placed thermometers in all class rooms and offices.
- approximate square footage for airconditioning of this college cuilding and their service is about 4000 sq. ft.
Total area = 4000-4500 sq. ft.

THE SITE

The proposed site is located on the west side of the campus and on the north side of the Ahearn Field House.

The immediate surrounding of this site are worth characterizing briefly.

In the east, Seaton Hall (the Building of the College of

Engineering) is located along North 17th street and beyond it lies the electrical resources of the Power Plant.

In the north, an existing parking lot is reserved.

South of College Height Road is the indoor athletic activity center - Ahearn Field House.

Boys' dormitories and Fraternity Houses are located in the west bound just across the Denison Avenue.

The final site dimensions would be 540 feet in the north and south sides, and 560 feet in the east and west sides.

The total area is 235,200 sq. ft.

The site was the original Base Ball Field.

The elevation is 1084 feet above sea level in the north west corner, 1072 feet in south west corner, and 1084 feet in the east edge and a part of south edge of this site.

The sharp slope along 2/3 south edge is about 8 feet difference.

GENERAL DESIGN CONCEPT

The designer considered that the school is the student's first step in his education as an architect or artist, therefore, the school should be the one place where the student is in a creative atmosphere. In order to satisfy professional demands, he should integrate the following areas of study into one school:

Architecture

Architectural Structures

Regional Planning

Landscape Architecture

Industrial and Interior Design

Allied Arts

In general, there are two major groups, one is the Architectural group and the other is the Allied Arts group. The Architectural group consists of Architecture, Architectural Structures, Regional Planning, Landscape Architecture, Industrial Design, and Interior Design.

The Allied Arts group contains the Fine Arts and Commercial Arts. These curricula are the educational frameworks that are provided by the College of Architecture and Design for the training of professional people.

The administration should be the control center of the College. It has the responsibility to its staff, employees, and students. It should also have good public relations with the university faculty, employees, students, alumni, the university guests, as well as visitors to Kansas State University.

The architectural and art library is one of the most important facilities related to the design studios. It serves not only the college faculty and students but also offers a great deal to the community.

A recent survey of the tremendous increase in enrollment

indicates that a lecture hall is needed.

As the school is a creative environment, an adequate art gallery should be established within the college. It should display the fine arts executed by students or faculty. It plays an important part in stimulating student's ideas and techniques.

According to the basic elements the designer's study leads one to recommend a cluster-type site plan for the total environment. Functional relationship and circulation are the major considerations for the site selection.

The character of the building should identify the College of Architecture and Design. It was conceived as six separate buildings surrounding a rectangular shaped central court. The court itself is used as a large living area which is linked to the surrounding building. It is one of the major contributions to the development of physical environment.

The Administration building should be the control center of the college. Its first floor includes a main entrance which passes through under the south end, a reception space with dean's office and secretaries. The second floor has a conference room, a secretaries and offices for staff.

The Architecture building, a four story high structure, is the training center for future architects and planners. The first floor has main concourse, an exhibition or jury space and class rooms. The second and third floor are typical design studios. The fourth floor contains graduate study studios and

work rooms for planners. Faculty offices are distributed on each floor which provides a pattern for close contact between students and faculty. The penthouse has a student lounge, not only for relaxation but also for meditation. The basement floor has a metal and woodworking shops, a photographic studio, a manipulation of materials space and mechanical room. One elevator on the west end and two elevators on the main concourse give good vertical service.

The two story high Allied Arts building becomes the art center. It contains, a reception space, a secretary's desk, faculty offices serveral studios distributed on each floor.

The Architectural and Art Library is one of the most important facilities related to design studio. The main library level is free standing above the ground floor, its main floor has an entrance lobby, a reception counter and a general reading space. Two side stair-ways lead up to the mazzanine level, it contains a slide room, a library office and serveral research cubicles. The ground floor has an arena shaped platform, a grilled storage wall. The basement includes a big storage area.

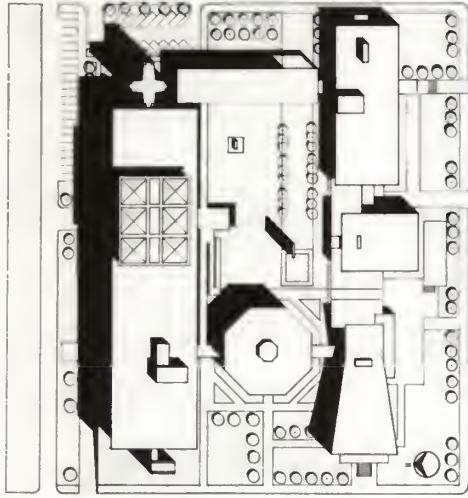
The Lecture Hall contains 528 seats, such capacity provides a multi-purpose uses.

The Art Gallery has a general exhibition space, a reception desk, a stair leads to the mazzanine floor which permits student to experience the effect of various colored and textured shapes and volumes.

PRESENTATION



S I T E P L A N



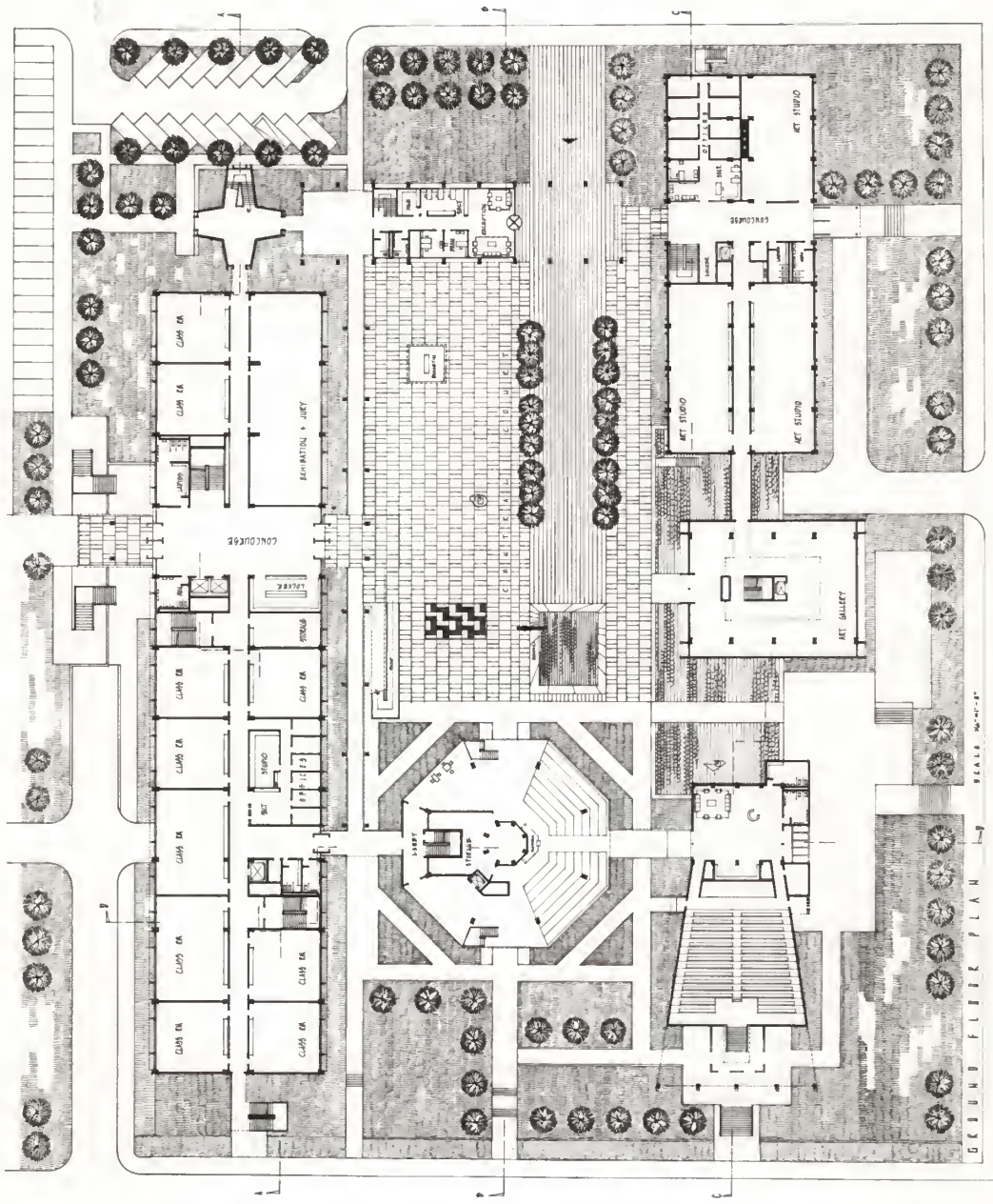
F L O O R P L A N S C A L E 1/8" = 1'-0"

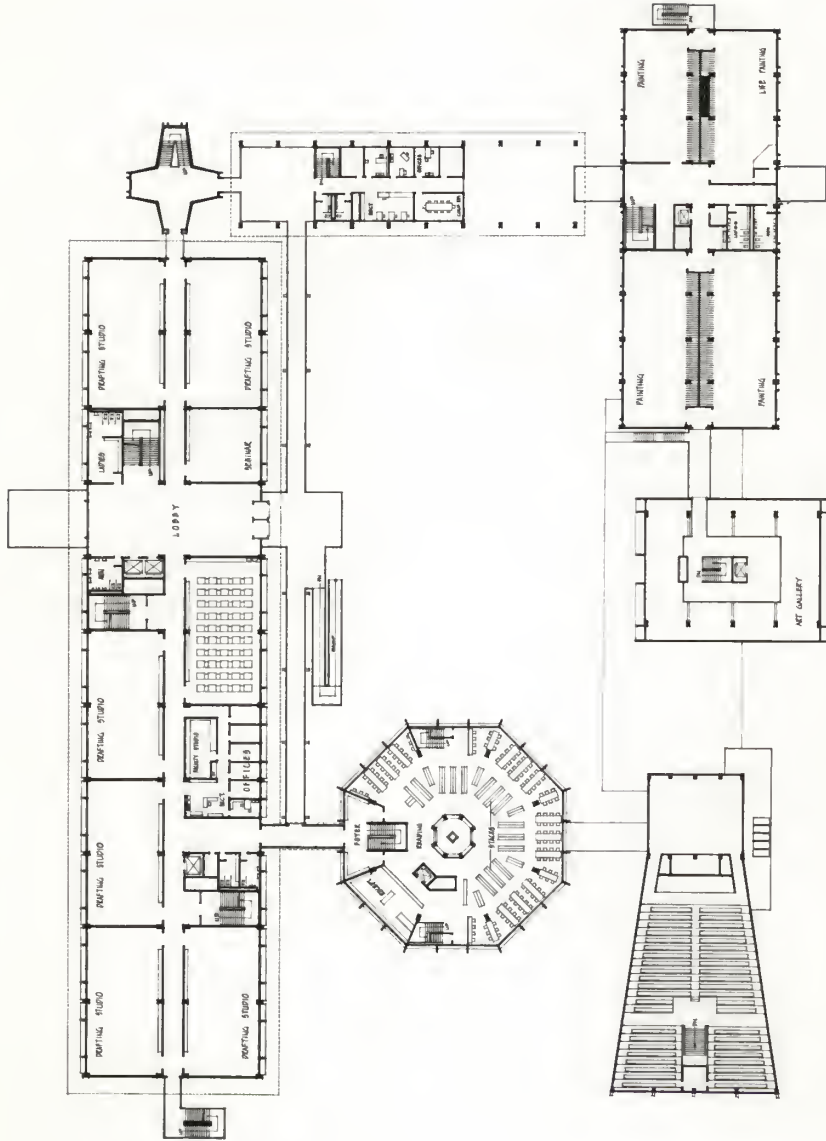
A COLLEGE OF ARCHITECTURE & DESIGN
FOR K.S.U. MANHATTAN, KANSAS

MASTERS' THESIS

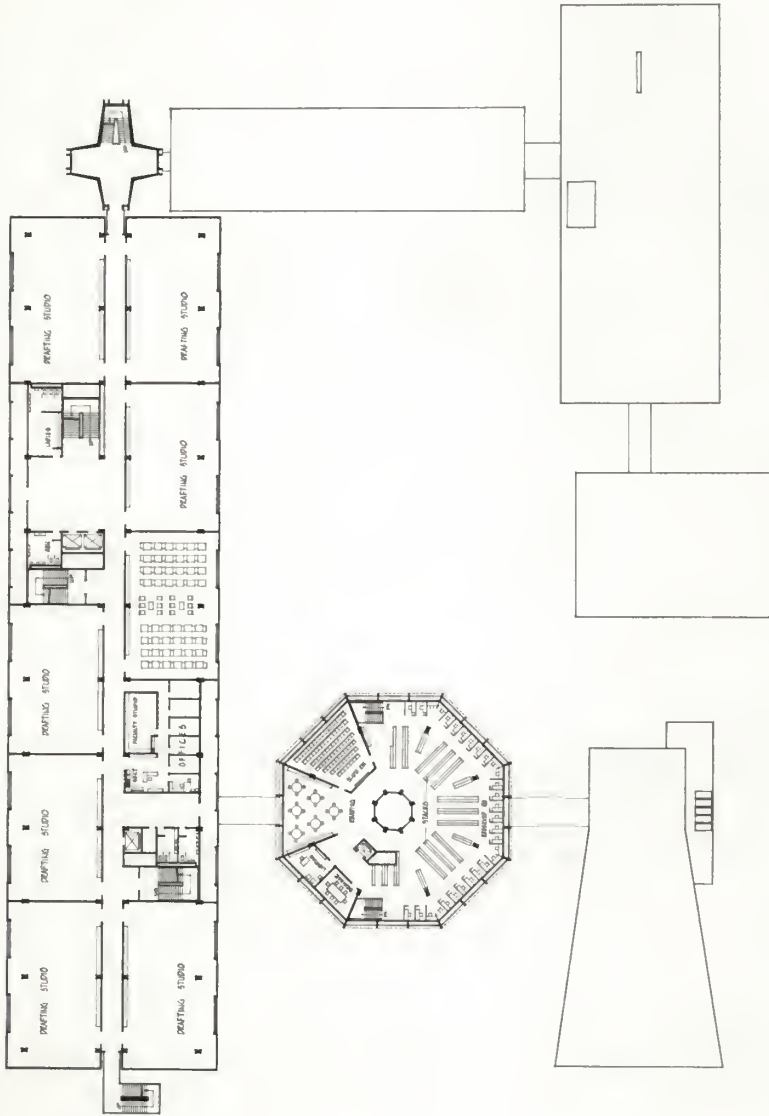


designer : augustine k. h. yvan
prof. J. spanston heintzelman

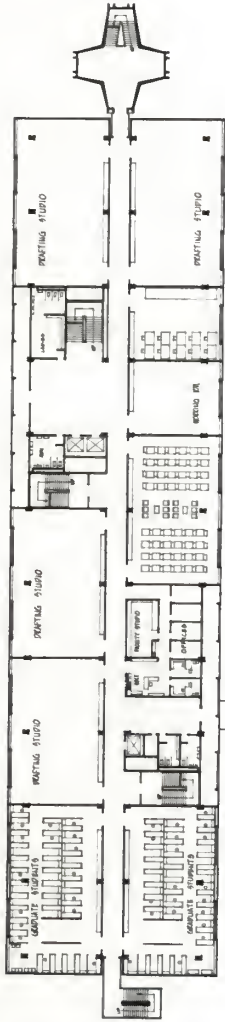




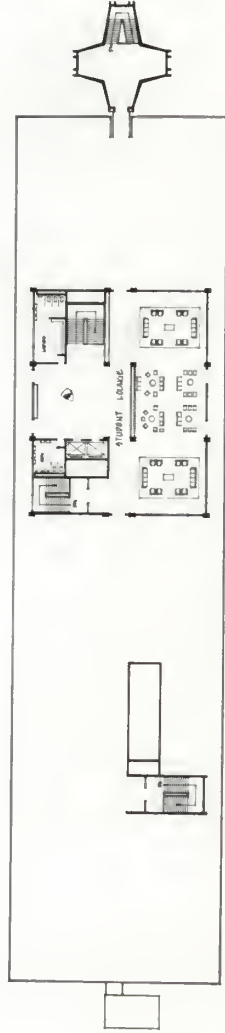
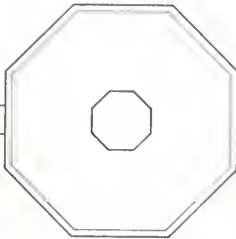
SECOND FLOOR PLAN



THIRD FLOOR PLAN SCALE 1/8" = 1'-0"



FOURTH FLOOR PLAN



PENTHOUSE FLOOR PLAN

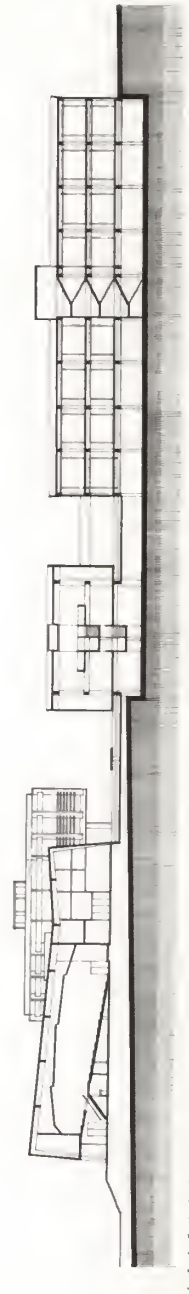
SCALE 1/8" = 1'-0"



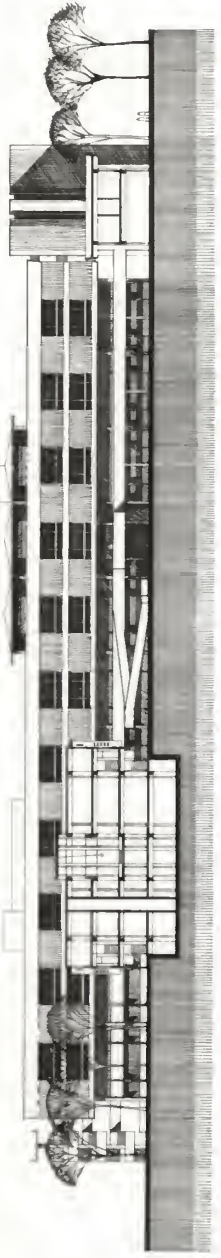
EAST ELEVATION 1/8" = 1'-0"



SOUTH ELEVATION 1/8" = 1'-0"



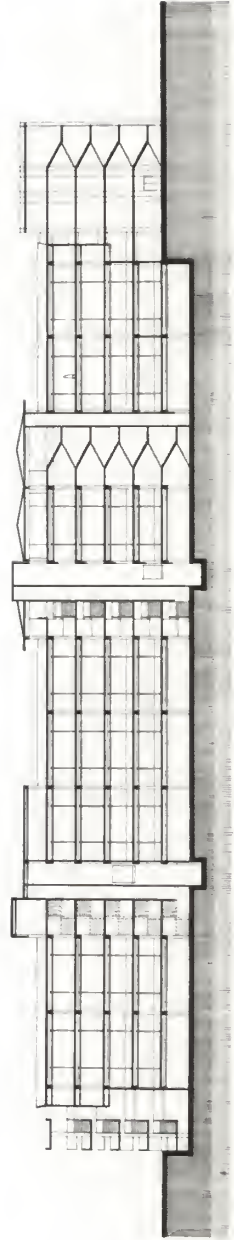
SECTION C-C 1/8" = 1'-0"



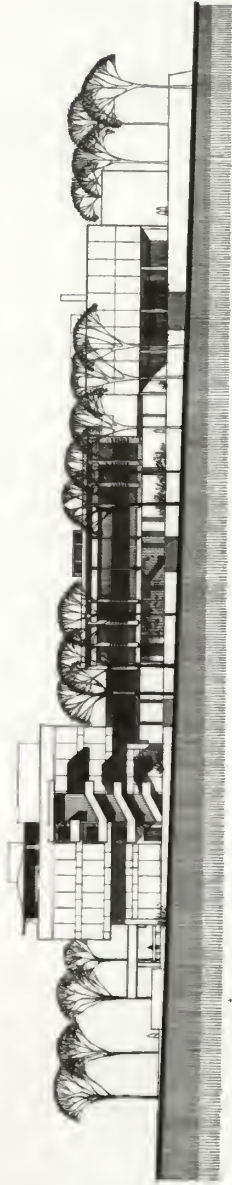
SECTION D-D
SCALE 1/8"=1'-0"



NORTH ELEVATION
SCALE 1/8"=1'-0"



SECTION A-A
SCALE 1/8"=1'-0"



WEST ELEVATION SCALE 1/8" = 1'-0"

B. AND FINISHED FLOOR

DESCRIPTION	AREA	FIN.	W.E.	FIN.
1. FLOORING	10,000	0.00	0.00	0.00
2. PARTITION	10,000	0.00	0.00	0.00
3. CEILING	10,000	0.00	0.00	0.00
4. WALL	10,000	0.00	0.00	0.00
5. ROOF	10,000	0.00	0.00	0.00
6. EXTERIOR FINISH	10,000	0.00	0.00	0.00
7. INTERIOR FINISH	10,000	0.00	0.00	0.00
8. TOTAL	10,000	0.00	0.00	0.00
TOTAL	10,000	0.00	0.00	0.00

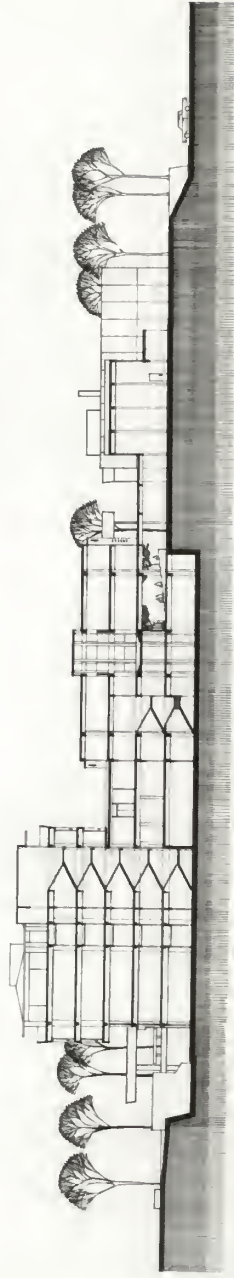
CALCULATION OF ACOUSTIC DESIGN

1. ROOM	17,000 SQ. FT. (10,000 SQ. FT.)
2. NO. OF SEATS	100
3. PROPORTION	100 / 10,000 = 0.01
4. TOTAL ACOUSTIC	100 / 0.01 = 10,000
5. TOTAL ACOUSTIC	10,000
6. TOTAL ACOUSTIC	10,000
7. TOTAL ACOUSTIC	10,000
8. TOTAL ACOUSTIC	10,000
9. TOTAL ACOUSTIC	10,000
10. TOTAL ACOUSTIC	10,000

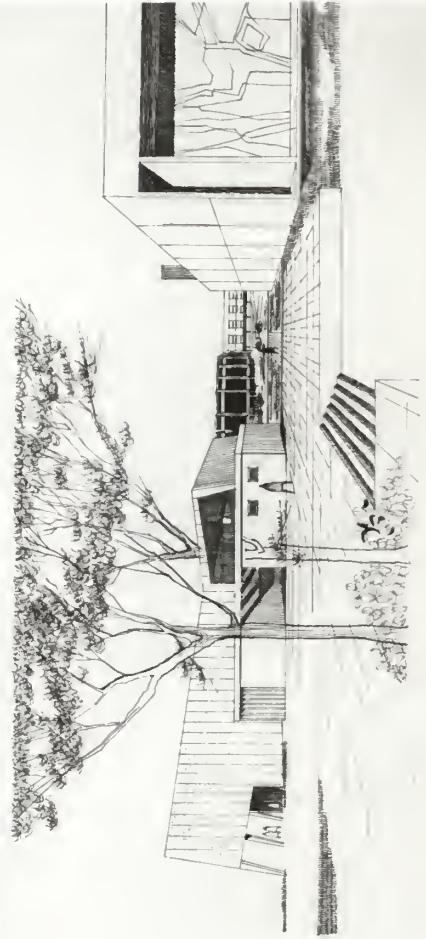
A. ACOUSTIC DESIGN

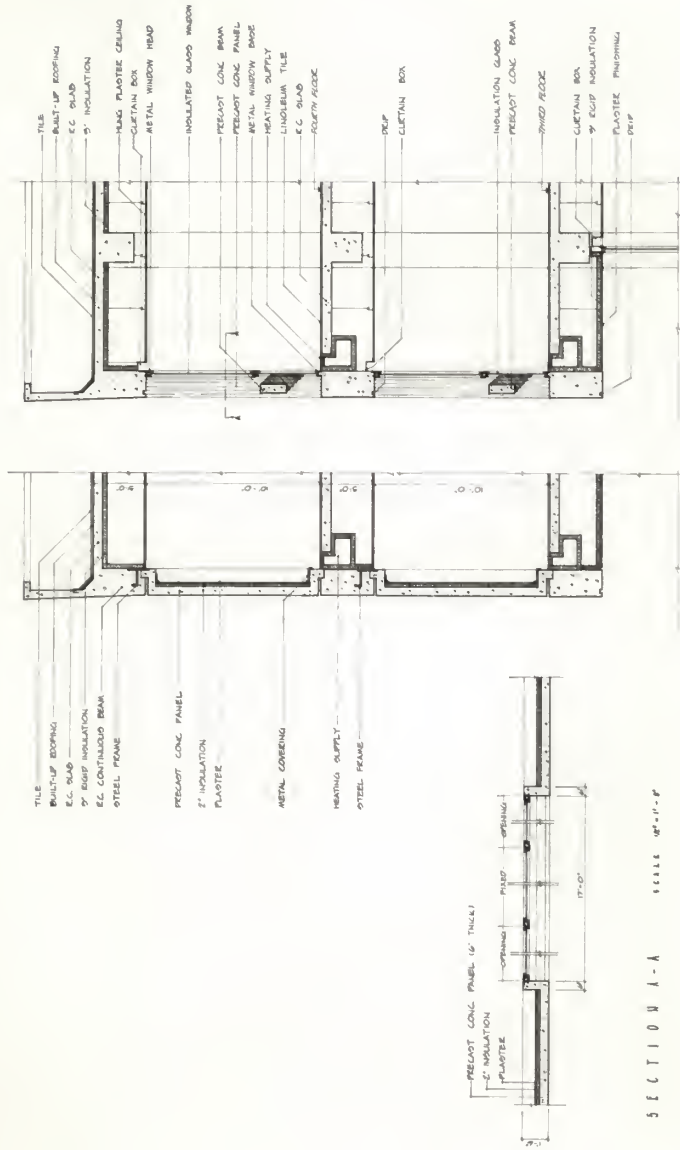
DESCRIPTION	AREA	W.E.	FIN.	FIN.
1. FLOOR	10,000	0.00	0.00	0.00
2. WALL	10,000	0.00	0.00	0.00
3. CEILING	10,000	0.00	0.00	0.00
4. ROOF	10,000	0.00	0.00	0.00
5. EXTERIOR FINISH	10,000	0.00	0.00	0.00
6. INTERIOR FINISH	10,000	0.00	0.00	0.00
7. TOTAL	10,000	0.00	0.00	0.00

CEILING TREATMENT



SECTION D-D SCALE 1/8" = 1'-0"





WALL SECTIONS SCALE 1/8" = 1'-0"

CONCLUSION

In summing up, architecture is the art above all others which depends on honesty of expression, excellences of execution, and a consideration of aesthetics. In order to achieve this, the designer has used his ability to understand nature, the character of a college community and its needs. Finally, the designer hopes the result will present a satisfactory and pleasing solution to this problem of an architectural school.

ACKNOWLEDGMENT

The author wishes to take this opportunity express his deepest appreciation to Professor J. Cranston Heintzelman of the College of Architecture and Design for his guidance and encouragement. Also thanks to Professor G. Alden Krider and Professor Emil C. Fisher, Dean of the College of Architecture and Design for their thoughtful suggestions in the supervision of this project.

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A COLLEGE OF ARCHITECTURE AND DESIGN
FOR
KANSAS STATE UNIVERSITY

by

AUGUSTINE KUO-HONG YUAN

B. Arch., Taiwan Provincial Cheng Kung University 1957

AN ABSTRACT OF MASTER'S THESIS

Submitted in partial fulfillment of the
requirements for the degree

MASTER OF ARCHITECTURE

College of Architecture & Design

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1966

The purpose of this thesis is in an attempt to create a logical and aesthetic campus environment for the College of Architecture and Design at Kansas State University.

The designer considered the school to be the student's first step in his education as an architect or artist, therefore, the school should be the one place where the student is in a creative atmosphere. In order to satisfy professional demands, he should integrate the following areas of study into one school:

Architecture

Architectural Structures

Regional Planning

Landscape Architecture

Industrial and Interior Design

Allied Arts

In general, there are two major groups, one is the Architectural group and the other is the Allied Arts group. The Architectural group consists of Architecture, Architectural Structures, Regional Planning, Landscape Architecture, Industrial Design, and Interior Design. The Allied Arts group contains the Fine Arts and Commercial Arts. These curricula are the educational frame-works that are provided by the College of Architecture and Design for the training of professional people.

The administration should be the control center of the college. It has the responsibility to its staff, employees,

and students. It should also have good public relation with the university faculty, employees, students, alumni, the university guests, as well as visitors to Kansas State University.

The architectural and art library is one of the most important facilities related to the design studios. It serves not only the college faculty and students but also offers a great deal to the community.

A recent survey of the tremendous increase in enrollment indicates that a lecture hall is needed.

As the school is a creative environment, an adequate art gallery should be established within the college. It should display the fine arts executed by students or faculty. It plays an important part in stimulation student's ideas and techniques.

The site for the College of Architecture and Design is on the west side of the campus. The west and east side of the lot is bounded by Denison Avenue and North 17th Street. College Heights Road runs between the Ahearn Field House and the proposed College of Architecture and Design. To the north, is an existing parking lot. The dimensions are 540 feet north and south, and 560 feet east and west.

According to the basic elements, the designer's study leads one to recommend a cluster-type site plan for the total environment. Functional relationships and circulation are the major considerations for the site selection. The character of the building should identify the College of Architecture

and Design. It was conceived as six separate buildings surrounding a rectangular shaped central court. The court itself is used as a large living area which is linked to the surrounding buildings. It is one of the major contributions to the development of physical environment.

In summing up, architecture is the art above all others which depends on honesty of expression, excellence of execution, and a consideration of aesthetics. In order to achieve this, the designer has used his ability to understand nature, the character of a college community and its needs. Finally, the designer hopes the result will present a satisfactory and pleasing solution to this problem of an architectural school.