AN ARCHITECT'S HOUSE AND OFFICE FOR DANVILLE, VIRGINIA

by

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SECTION ONE
INTRODUCTION AND OBJECTIVES

INTRODUCTION AND OBJECTIVES

A successful architect often finds, during the course of his life and practice, that he needs to expand both his office and his house. The object of this thesis is to investigate various ways of satisfying these needs, for an anonymous architect of considerable repute, in order to arrive at the desirable and economical solution under present economic conditions in Danville, Virginia.

Two possible solutions have been considered. In one case the house-and-office are built as a unit; and in the other case the house is built in the suburbs and office space is rented downtown. The writer has made a study of the conditions affecting each solution, and has developed plans for the more desirable one.

The writer spent much of his time in an investigation of office rents, zoning laws, interest rates, taxes, the availability and value of real estate, and the present cost of building in the Danville area. This information was then tabulated and compiled. Approximate square foot estimates were worked out for the house and for the house-and-office units.

At the same time the writer made a survey of architects in

other areas who had moved their offices away from the center of town, to determine if such a policy had proven satisfactory, and from what standpoints. A survey was also made of the local Danville architects to determine their opinions concerning their office locations. The survey questionnaire also sought information on desirable office layouts and conveniences.

The house-and-office unit proved to be a more economical solution, because of the high office rents in Danville. This unit was also more satisfactory, because of its convenience for the architect and his clients.

In selecting the site, careful consideration was given to economy, accessibility, and topography. These considerations varied with each lot. The final site combines all three qualities, with accessibility having the greatest influence on the decision.

In developing the design of the house-and-office, consideration was given to the fact that here the architect would have a material example of his work, and that as such it should express his design ideas and attitudes. Therefore, careful consideration was given to the functional and esthetic design of the building.

Economy in this situation was not a matter of limited invest-

ment, but a matter of the largest feasible return on the investment. In other words the initial outlay was not strictly limited, but was to be based on the final value of either venture.

SECTION TWO
FINANCIAL STUDY

FINANCIAL STUDY

Space requirements for the house and for the office were considered separately at first. Rough square-foot estimates were made for each, based on generous room sizes taken from architecturally designed houses.

House		Office	
Rooms:	Square Footage:	Rooms:	Square Footage:
Master bedroom	192	Private office	168
Children's bed room	240	Reception room	192
All purpose room	120	Blueprint room	120
Living room	396	Storage room	100
Dining room	160	Drafting and file room	500
Kitchen	160		
Carport	140	Total office	1080
Covered outdoor area	18		
Heater room	80	Total house	1590
Total house	1590	Total house and office	2670

Next, the writer contacted several contractors in the Danville area to determine the approximate cost per square foot for private houses. The results were as follows:

Square footage	Cost	Cost per square foot
2800	$41,627	$14.90
988	16,108	16.20
2559	27,560	11.50
3124	44,609	14.30
2817	32,204	11.70
3181	37,840	11.90
		180.50
	Average	$13.50

To the average cost of $13.50 per square foot an additional dollar was added to cover the cost of any new construction

methods as suggested by the contractors. A cost of $14.50 was thus selected for the purpose of determining the estimated cost of the buildings. These costs were:

House
1590 square feet @ $14.50 per square foot $23,055

House-and-Office
2670 square feet @ $14.50 per square foot $38,715

Checking land availability and cost was the next step. Suitable lots for the house ranged from $1200 - $3000, but those for the house-and-office unit were from $3000 - $10,000. A lot was selected for the house at a value of $3000 and a value of $5750 was set for the house-and-office lot. This brought the cost of the house to $26,055 and the cost of the house-and-office to $44,465.

Then, using these figures, a check was made on the interest rates, monthly payments, and taxes. It was assumed that in either case the architect would have sufficient personal funds to make the 40% down payment required on a real estate loan covering both land and construction values. The loan is based on a monthly payment of $10.61 per $1000. The interest is computed each month on the amount still to be paid rather than on the original amount. Taxes were found to be $2.25 per $100 of assessed value, which over a period of ten years would amount to 50% of the original cost. The figures for the two situations to be considered are:

Unit	House	House-and-Office
Cost	$26,055.00	$44,465.00
50% of cost	13,030.00	22,233.00
60% of cost	15,633.00	26,679.00
Monthly payment	165.67	283.07
Monthly taxes	24.38	41.81

A study of office rents showed that the average rent for office space was $2.30 per square foot per annum. That is, 1000 square feet would rent for $2300 a year or $192 per month. Assuming that only 750 square feet of space would be absolutely necessary, this figure could be reduced to $144 per month.

Rough estimates show that $200 per year would heat a residence of this size easily and that an additional $70 per year would heat the office addition. This and other miscellaneous expenses are tabulated below:

Heat	$6 per month increase for office addition
Electricity	$3 per month increase
Janitor's service	$4 per month increase
Insurance	$8 per month increase
Total	$21 per month increase

The complete totals for each unit per month would then be:

Unit	House and rented office	House-and-office
Monthly payment and rent	$309.67	$283.07
Taxes	24.38	41.81

Miscellaneous expenses	-----	$21.00
Total	$334.05	$345.88

At the end of the ten year period of the real estate loan, the architect will have acquired an office area of 1000 square feet with an estimated value at that time, due to depreciation, of three fourths of the original value of $17,660 or $13,245. Assuming that there will be a cost of $4000 to rejuvenate the building, there is still a value of $9,245 for the building which has been acquired by an extra payment of $11.83 per month or a total of $1440.

From the $1440 above it was assumed that the architect would have $720 to use as an initial investment. To this $720 the original down payment of $7,367 was added. This total of $8,087 was then invested at 5% compounded annually which would show a return of $13,171.81 in ten years. Comparing this amount with the $13,245 value of the office area, it can be seen that there is slight difference in the return on either investment. However, the annual return on $13,171.81 (which would have been accumulated from the investment of funds equivalent to those required for the building) would be only $650 as compared with an annual rent saving of $2300 on the office space. From these figures it is apparent that under the present rent and building conditions in Danville, Virginia, it would be more financially desirable to build the house-and-office as a unit than to rent office space.

SECTION THREE
EFFECT OF OFFICE LOCATION ON PRACTICE

EFFECT OF OFFICE LOCATION ON PRACTICE

Along with the financial study, the writer felt that it would be necessary to determine whether or not it would be detrimental to the architect's practice to locate his office away from the downtown area. In order to do this two questionnaires were drawn up and mailed or taken to various architects.

The first questionnaire was mailed to a dozen selected architects, in different sections of the country and in various sized cities, who had moved their offices away from the downtown area. It was felt that their answers could be considered the general concensus of opinion for the nation. About half of this number have combined their houses and offices; the other half have suburban offices at a distance from their houses. The group contacted were unanimous in their acclaim of the idea of locating away from the center of town. Some of the more thorough answers have been included in this section later.

The second questionnaire, similar to the first, was carried to the heads of the two Danville architectural firms now located in a large downtown office building. This questionnaire was to determine whether or not they felt that moving away from the downtown area would injure their practice. They were agreed that it would not hurt their practice, and one felt that it would improve it. Their questionnaires are also included in this section.

The conclusion derived by the writer from both questionnaires is that the erection of the suburban house-and-office unit would prove satisfactory from the standpoint of the effect on the architects' practice.

The questionnaires enclosed in this section are designated by the area from which they came. Names are purposely omitted, as some of the information is of a type sometimes considered confidential by practicing architects. The questionnaires follow:

QUESTIONNAIRE FOR THESIS RESEARCH

HOUSTON, TEXAS

1. Do you feel that moving your office away from the center of town has proven satisfactory? Yes Unsatisfactory?____ In what ways? No traffic to fight. No building restrictions. Good investment in own building. Easy accessibility and parking for clients.

2. Would you still move out if you had the decision to make again? By all means, others have followed our example.

3. (a) What changes would you make in the design of your office if you were doing it again? None

(b) Have any new ideas you tried proved highly desirable? Yes, use of various materials gives clients actual picture of our design.

4. If your office and home are related or a single unit has this proven satisfactory?____ Unsatisfactory?____ In what ways? Not related

5. How many persons do you employ in your office? Ten to twelve

6. How far from the center of town are you? Four miles

7. Do you have any other pertinent information concerning your preference of office location and design? Close to partners homes (5 blocks). Near excellent residential district, numerous clients in this locality--heads of large corporations and businesses.

QUESTIONNAIRE FOR THESIS RESEARCH

KIRKWOOD, MO.

1. Do you feel that moving your office away from the center of town has proven satisfactory? Yes Unsatisfactory? ____
In what ways? _____

2. Would you still move out if you had the decision to make again? Yes

3. (a) What changes would you make in the design of your office if you were doing it again? None

(b) Have any new ideas you tried proved highly desirable?

4. If your office and home are related or a single unit has this proven satisfactory? Yes Unsatisfactory? ____ In what ways? Pleasant working conditions and a great saving of my time

5. How many persons do you employ in your office? Four to five

6. How far from the center of town are you? Ten miles

7. Do you have any other pertinent information concerning your preference of office location and design? Having an office of my own design enables me to show clients my work as my solutions of problems apply to their problems in a very convincing three dimensional way instead of by photographs. At least half of my work is closer to the office than to the downtown area. Also, less time is used on salesmen making routine calls, when I need a salesman or a material, I can quickly get service.

QUESTIONNAIRE FOR THESIS RESEARCH

SANTA ROSA, CALIF.

1. Do you feel that moving your office away from the center of town has proven satisfactory? Yes Unsatisfactory?____
In what ways? Ample parking space. Atmosphere is much quieter. Building can be built more inexpensively and designed to suit the exact needs.

2. Would you still move out if you had the decision to make again? Definitely.

3. (a) What changes would you make in the design of your office if you were doing it again? Easier means of expansion

(b) Have any new ideas you tried proved highly desirable?

4. If your office and home are related or a single unit has this proven satisfactory? Yes Unsatisfactory?____ In what ways? House and office on same lot.

5. How many persons do you employ in your office? Nine employees, 8 draftsmen and secretary.

6. How far from the center of town are you? Two miles

7. Do you have any other pertinent information concerning your preference of office location and design? My preference of a site away from town would be well landscaped, of sufficient size to provide ample parking and expansion. The building can be simply designed and provide for ample natural light, storage spaces and privacy.

QUESTIONNAIRE FOR THESIS RESEARCH

CHICAGO, ILLINOIS

1. Do you feel that moving your office away from the center of town has proven satisfactory? Yes Unsatisfactory?____
In what ways?_____

2. Would you still move out if you had the decision to make again? Yes

3. (a) What changes would you make in the design of your office if you were doing it again?_____
Do not know

(b) Have any new ideas you tried proved highly desirable?

4. If your office and home are related or a single unit has this proven satisfactory? Yes Unsatisfactory?____In what ways?_____

5. How many persons do you employ in your office?_____
four to eight

6. How far from the center of town are you?_____
Thirty miles

7. Do you have any other pertinent information concerning your preference of office location and design?_____
No

QUESTIONNAIRE FOR THESIS RESEARCH

MIAMI, FLA.

1. Do you feel that moving your office away from the center of town has proven satisfactory? Yes Unsatisfactory?____
In what ways?
Better parking--lower rental--more space

2. Would you still move out if you had the decision to make again? Yes

3. (a) What changes would you make in the design of your office if you were doing it again? Practically none, would try to locate all on one floor if possible

(b) Have any new ideas you tried proved highly desirable?

4. If your office and home are related or a single unit has this proven satisfactory? Yes Unsatisfactory?____ In what ways? Saving of time, overhead, and tax-wise

5. How many persons do you employ in your office?
Seven

6. How far from the center of town are you?
One mile

7. Do you have any other pertinent information concerning your preference of office location and design?

QUESTIONNAIRE FOR THESIS RESEARCH

FALMOUTH, MASS.

1. Do you feel that moving your office away from the center of town has proven satisfactory? Yes Unsatisfactory? ____
In what ways? My office is small and having it adjacent to my home has made it much simpler

2. Would you still move out if you had the decision to make again? Yes

3. (a) What changes would you make in the design of your office if you were doing it again? None-We have practically a new one

(b) Have any new ideas you tried proved highly desirable?

4. If your office and home are related or a single unit has this proven satisfactory? Yes Unsatisfactory? ____ In what ways?

5. How many persons do you employ in your office? One to four

6. How far from the center of town are you? Two miles

7. Do you have any other pertinent information concerning your preference of office location and design? Because I am situated in a vacation area, I find many of my clients prefer to come to the office either in the evening or on Sundays and holidays. Therefore it seems to work out very well to combine my office with my living.

QUESTIONNAIRE FOR THESIS RESEARCH

DEL MAR, CALIF.

1. Do you feel that moving your office away from the center of town has proven satisfactory? Yes Unsatisfactory?____
In what ways? Quieter

2. Would you still move out if you had the decision to make again? Yes

3. (a) What changes would you make in the design of your office if you were doing it again? More space

(b) Have any new ideas you tried proved highly desirable? Yes

4. If your office and home are related or a single unit has this proven satisfactory? Yes Unsatisfactory?____ In what ways? Close to work at all times

5. How many persons do you employ in your office? None at times--one to three at other times

6. How far from the center of town are you? Twenty miles to large town--one-half mile from small town

7. Do you have any other pertinent information concerning your preference of office location and design? As close to nature as possible is the best place for an architect

QUESTIONNAIRE FOR THESIS RESEARCH

PEORIA, ILLINOIS

1. Do you feel that moving your office away from the center of town has proven satisfactory? Yes. Unsatisfactory?____
In what ways? Parking for ourselves and our clients. No traffic problems. Ease of access to areas where building is being carried on.

2. Would you still move out if you had the decision to make again? Yes.

3. (a) What changes would you make in the design of your office if you were doing it again? Larger drafting room.
(b) Have any new ideas you tried proved highly desirable? Yes. Entire layout and circulation scheme has been very successful

4. If your office and home are related or a single unit has this proven satisfactory?____ Unsatisfactory?____ In what ways?

5. How many persons do you employ in your office? 28

6. How far from the center of town are you? One mile

7. Do you have any other pertinent information concerning your preference of office location and design? Office location at edge of business district is highly desirable.

QUESTIONNAIRE FOR THESIS RESEARCH

DANVILLE, VA.

1. In considering a new office location do you feel it would be detrimental to your practice to move away from the downtown area?

   No--It would improve the practice

2. How far do you think it would be feasible to move? Why?

   About a mile and in a good residential area. Parking facilities would be better.

3. What would be your feeling toward having your home and office as a unit?

   Am not sure I'd like this.

4. How many persons do you employ?

   Two full time and one part time.

5. What rooms and features would you like to include in a new office?

   Rooms for samples, files, and old drawings

   Small reception room. Small business office.

   Small plan room for contractors, etc.

   Small private drafting room--combination conference room.

   Large drafting room.

QUESTIONNAIRE FOR THESIS RESEARCH

DANVILLE, VA.

1. In considering a new office location do you feel it would be detrimental to your practice to move away from the downtown area?

No.

2. How far do you think it would be feasible to move? Why?

On outskirts--good parking

3. What would be your feelings toward having your home and office as a unit?

O.K.

4. How many persons do you employ?

Three

5. What rooms and features would you like to include in a new office?

Space

SECTION FOUR
THE HOUSE AND OFFICE AS A UNIT

THE HOUSE-AND-OFFICE AS A UNIT

There are numerous advantages and disadvantages in having the house-and-office as a unit, other than the financial advantage already discussed.

Advantages

The architect saves time making regular trips to the office, and is able to meet with clients at odd hours with a minimum of inconvenience. Ample convenient parking space is available for clients and employees. Quiet surroundings are conducive to good work. Overhead expenses are lower. The architect has the opportunity to show his clients his views on architecture in a three dimensional form.

Disadvantages

When the house-and-office are built as a unit, household and office activities may conflict. The architect's off hours may be interrupted unnecessarily. Property deeds would prevent the location of an office in some desirable areas.

The advantages definitely outweigh the disadvantages, especially as some of the disadvantages could be eliminated or cut to a minimum by careful design.

SECTION FIVE
PROGRAM FOR THE HOUSE-AND-OFFICE UNIT

PROGRAM FOR THE HOUSE-AND-OFFICE UNIT

The anonymous architect for whom this project is to be designed is assumed to need a larger house. The members of his family are the architect, his wife, a boy eight years old, and a baby boy three months old. The architect's income is highly adequate though not to be considered as overly large. There are two cars in the family.

Requirements of the family

Recreation

Father reads and studies (may be in office)

Active recreation of father and son

Mother plays bridge

Formal and informal entertaining

Cooking

Maid comes in every day to help

Kitchen should contain breakfast nook or counter

Kitchen not to be used for recreation but should be related to it

Dining

The boy does not eat lunch at home during the school session

Other members do have lunch at home

Everyone is present for the evening meal

Entertaining is sometimes formal and sometimes informal

Outdoor dining area is desirable, but not a necessity

Sleeping

Three sleeping areas needed: Master's, older boy's, and nursery large enough to become a bedroom later

Accommodations for overnight guests

Child's bedroom may utilize multi-purpose area

Hobbies and homework

Older boy should have study desk and hobby area in his room

Father will have his office

Sanitation

Laundry will be done at home in area off or in conjunction with the kitchen

Bath with the master bed room and another to serve the rest of the house

Storage

Should be spacious in conjunction with the bedrooms

There should be a general storage area

Transportation

Two cars

Heating

Heater room

From the preceding data the following areas were decided upon:

Master bedroom

Two children's bedrooms

Quiet living area for four couples

Noisy living area large enough for ping pong table

Dining area for four couples

Kitchen

Heater room for gas fired hot water radiant heat, domestic hot water heater

Storage as ample as possible

Baths

The office

Because of his expanding practice, the architect felt the need for a more spacious and satisfactory office. In determining the needs for the office, it was felt that it should be made slightly larger than at present necessary, to take care of future expansion.

Requirements of the office

Public

Area for the reception of clients, salesmen, contractors, etc., supervised by a secretary

Toilets

Semi-public

Conference area

Employer and employees

Private office

Drafting area

Toilets

Storage

Old drawing and contract files (possible vault)

Current drawing and contract files

Books and magazines

Samples

From the preceding data the following rooms were decided upon:

Reception area for receptionist and several visitors

Private office and conference room for six to eight persons

Blueprint room for black and white machine and work table

Storage room and vault for all drawings and contracts

Drafting for ten draftsmen and book, magazine, and sample storage

Toilets

SECTION SIX
ORIENTATION

ORIENTATION

Sunlight

The house-and-office unit presents several sunlight orientation problems. In the house, the major rooms should open toward the south or southeast. The windows of these rooms should be protected by an overhanging roof. This overhang will protect the rooms from the direct rays of the summer sun and will allow the lower rays of the winter sun to penetrate into the house. The correct overhang is calculated by the use of a solarmeter. In the office, the large drafting room requires a lot of light with a minimum of glare. Therefore, this room should open toward the north. The architect's private office should be oriented toward the south. Orientation of the other office areas is not a major consideration.

Prevailing winds

Prevailing winds present another orientation problem. In the Danville area, prevailing winter winds are from the northwest and the prevailing summer breezes are from the south. This information was gathered at the local weather station. Therefore, the house-and-office unit should be oriented to take advantage of the summer breezes. It should be also protected from the winter winds by a windbreak.

SECTION SEVEN
MATERIALS AND METHODS

MATERIALS AND METHODS

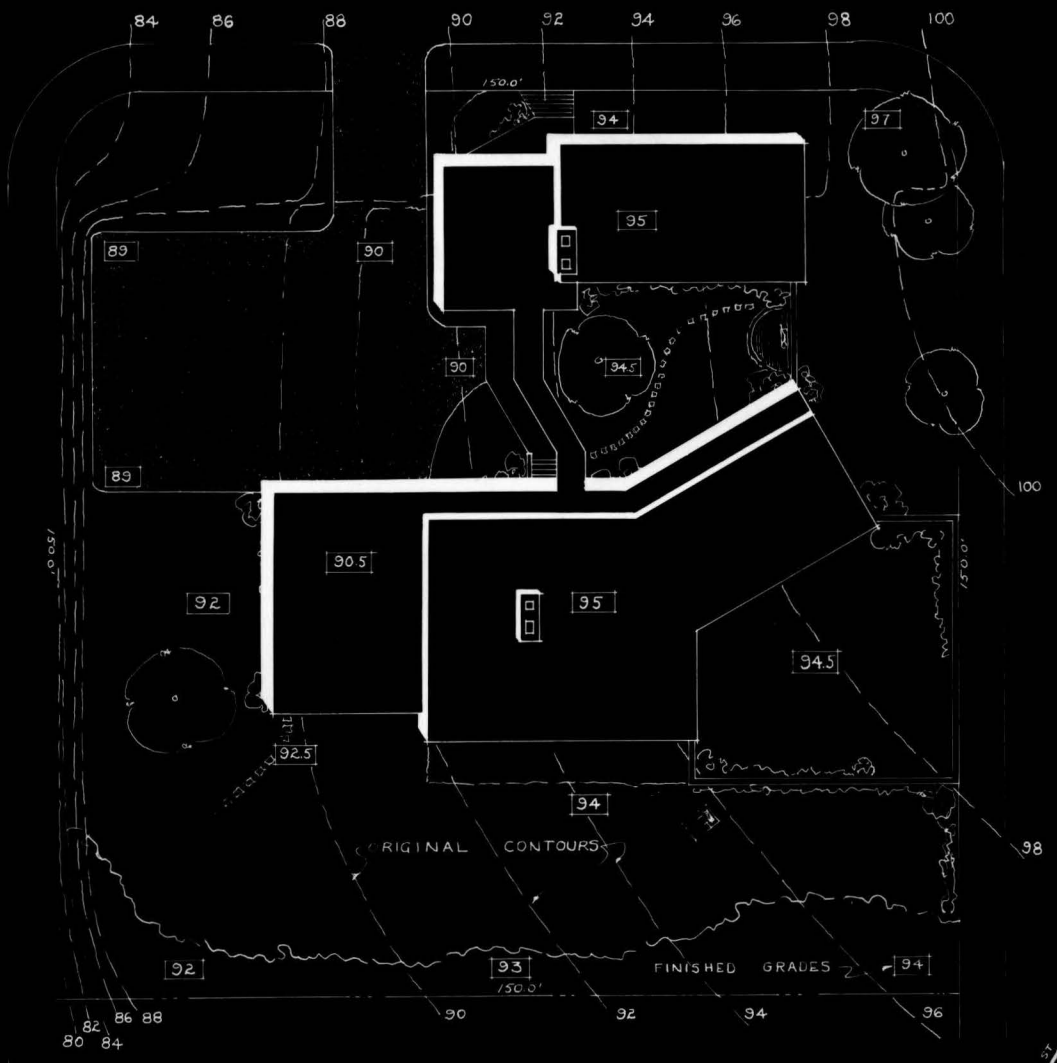
Construction: House-and-office

The foundation walls and footings will be of concrete to six inches above the finished grade line. The buildings will be of masonry and wood frame construction. Exterior surfaces will be of redwood siding and flagstone. Interior walls will be of plaster, of birch plywood, and of exposed stone. The floors will be concrete slabs with asphalt tile covering. Ceilings will be of either plaster or T&G redwood. Fenestration will consist of aluminum and wood casements with single and double glazing. Rockwool type insulation will be used throughout both structures. Doors will be birch plywood, tempered glass, or sliding glass panels. The roof will be five ply built-up tar and gravel.

Heating: House-and-office

There will be separate heating units for each building. Each system will be a gas fired hot water layout with radiant heating coils in the concrete slab. There will also be a gas fired domestic hot water heater for each building. Two systems were decided on, because of the distance between the two buildings and because of the different hours of operation.

SECTION EIGHT
DESIGN DRAWINGS



PLOT PLAN

SCALE: 1/32" = 1'-0"

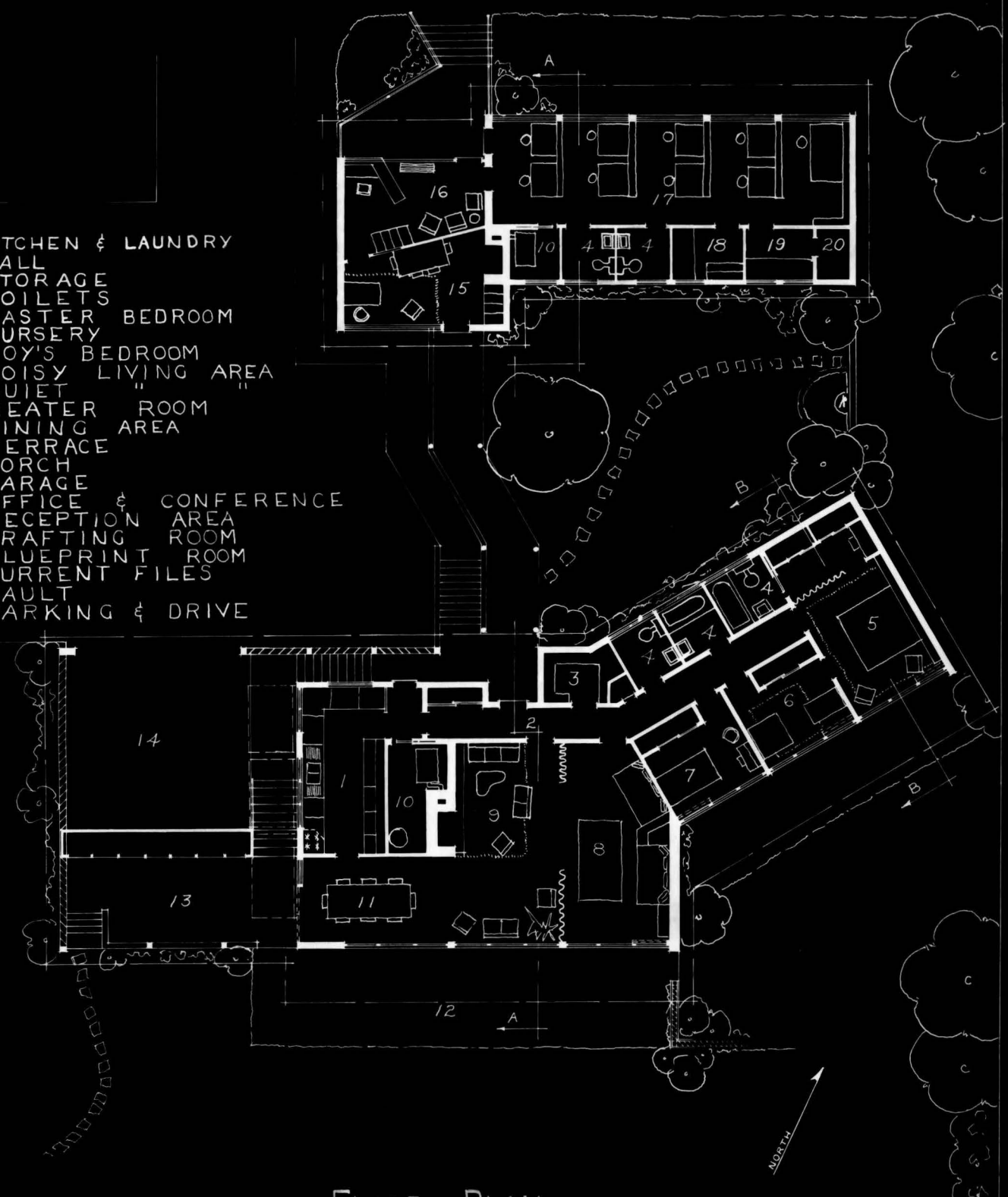
0 10 20 30 40 50

FEET

SITE LOCATION IN RESPECT TO BUSINESS DISTRICT

NO SCALE

1 KITCHEN & LAUNDRY
2 HALL
3 STORAGE
4 TOILETS
5 MASTER BEDROOM
6 NURSERY
7 BOY'S BEDROOM
8 NOISY LIVING AREA
9 QUIET " "
10 HEATER ROOM
11 DINING AREA
12 TERRACE
13 PORCH
14 GARAGE
15 OFFICE & CONFERENCE
16 RECEPTION AREA
17 DRAFTING ROOM
18 BLUEPRINT ROOM
19 CURRENT FILES
20 VAULT
21 PARKING & DRIVE

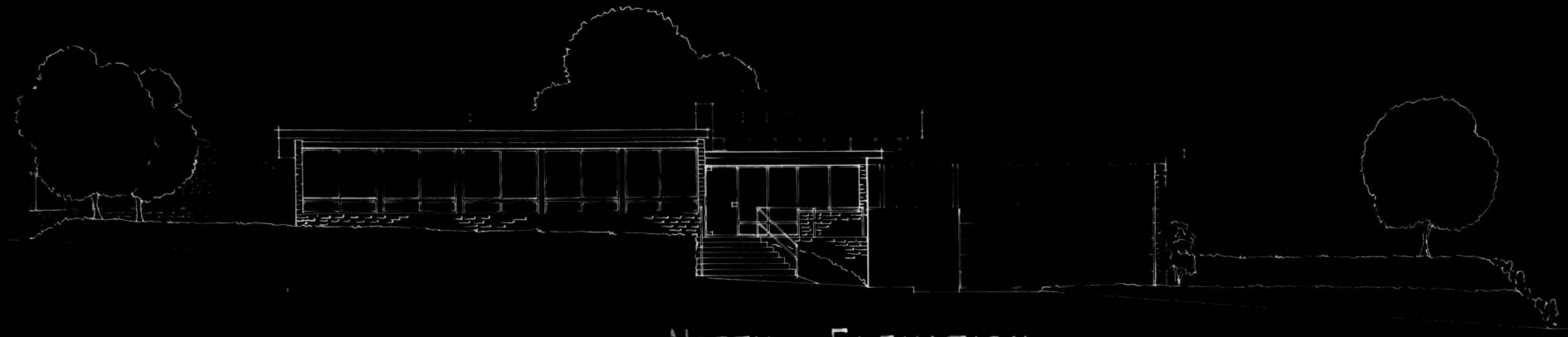


FLOOR PLAN

SCALE : 1/16" = 1'-0"

0 5 10 15 20 25

FEET



NORTH ELEVATION

SOUTH ELEVATION

SCALES: 1/16" = 1'~0"

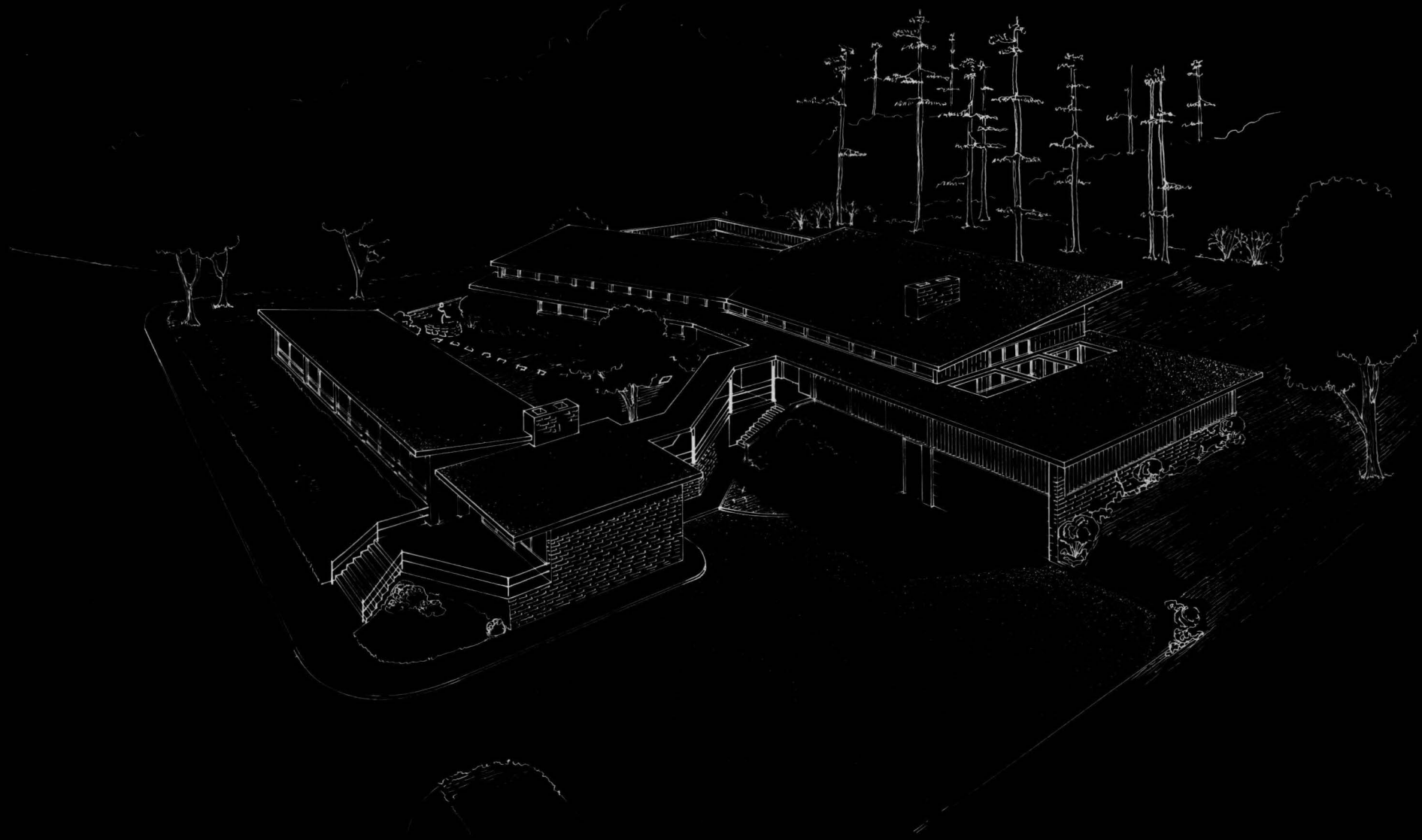
0 5 10 15 20 25 FEET

WEST ELEVATION

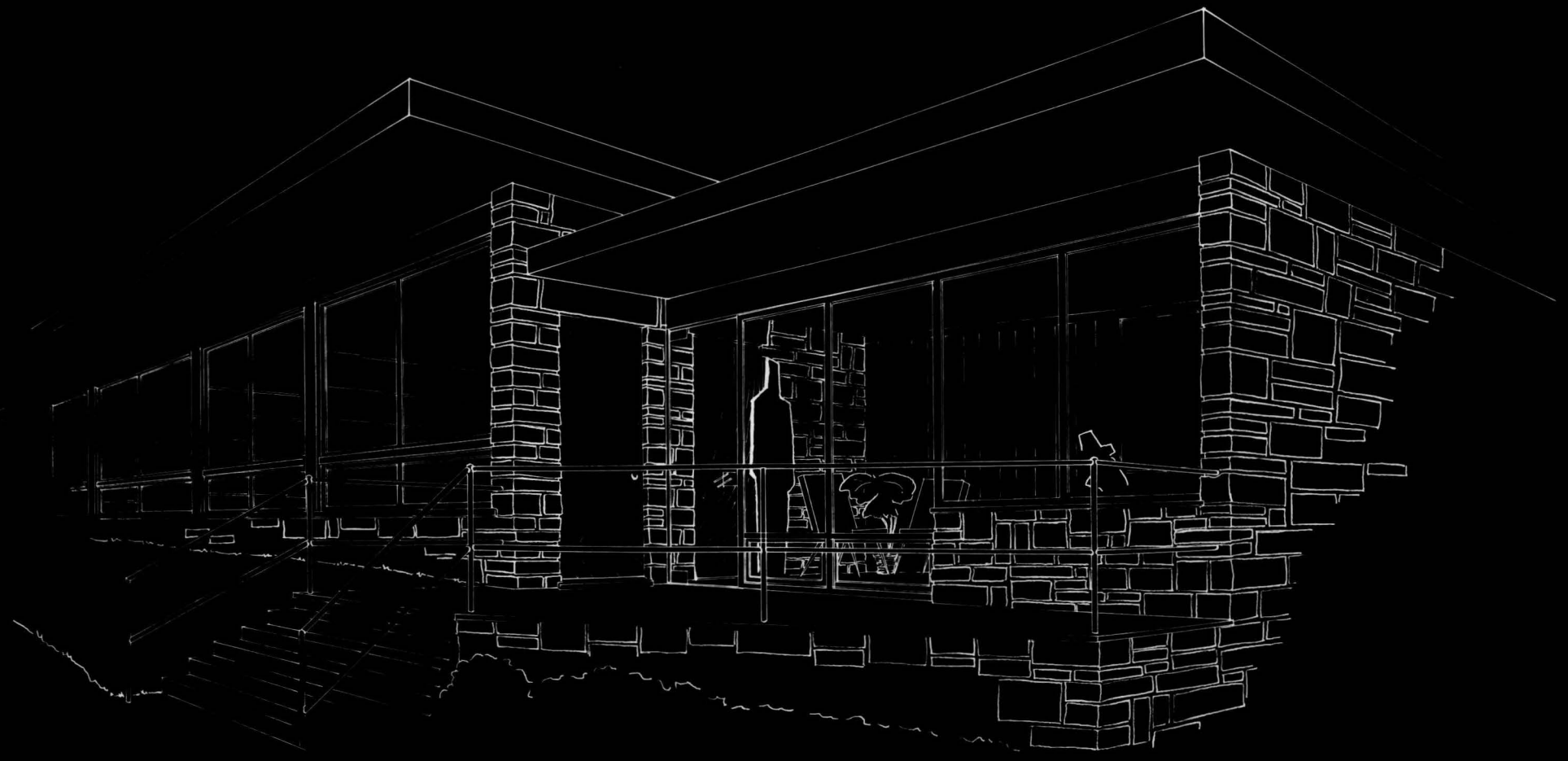
EAST ELEVATION

SCALES: 1/16" = 1'-0"

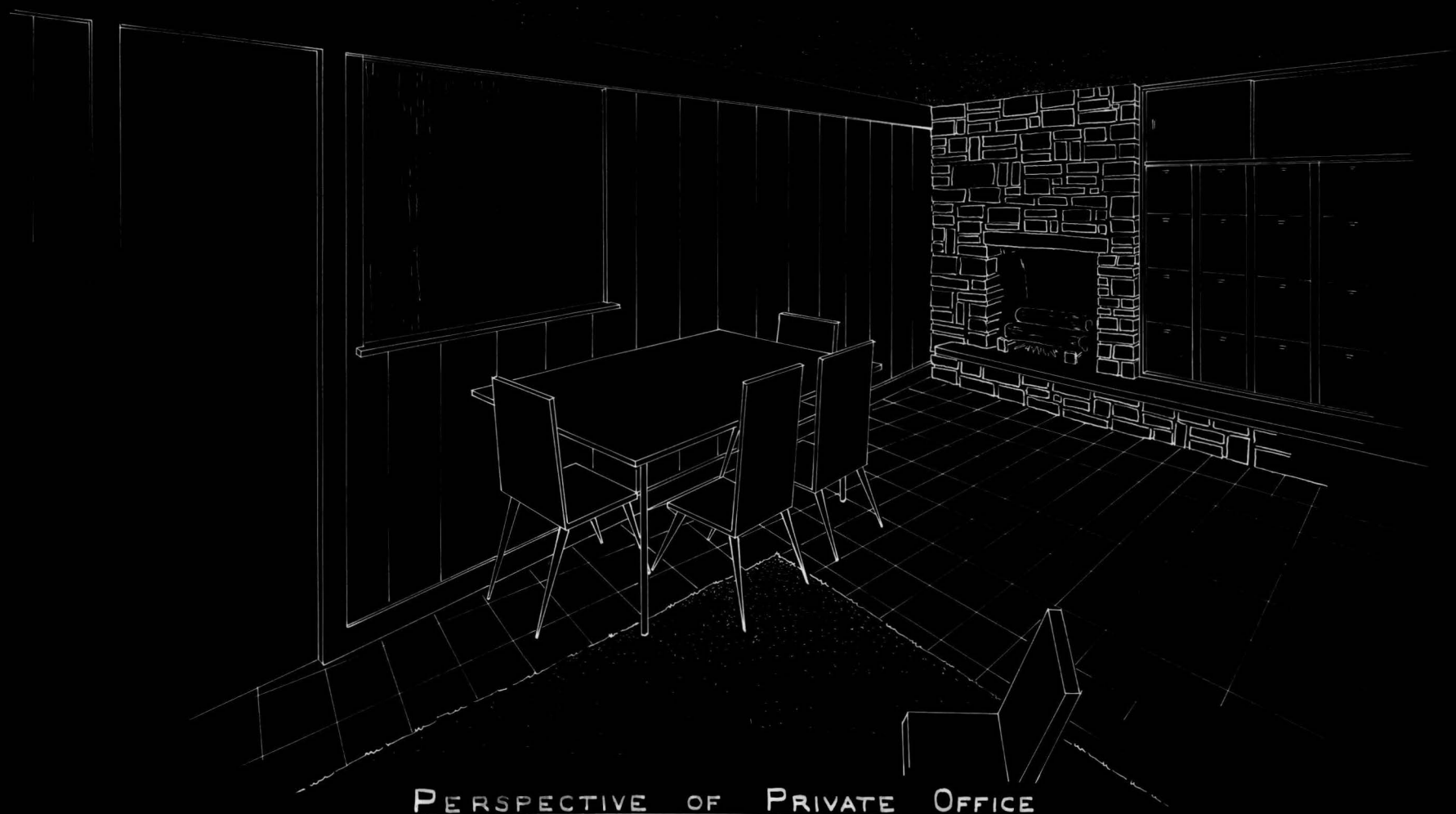
0 5 10 15 20 25 FEET



PERSPECTIVE FROM NORTHWEST

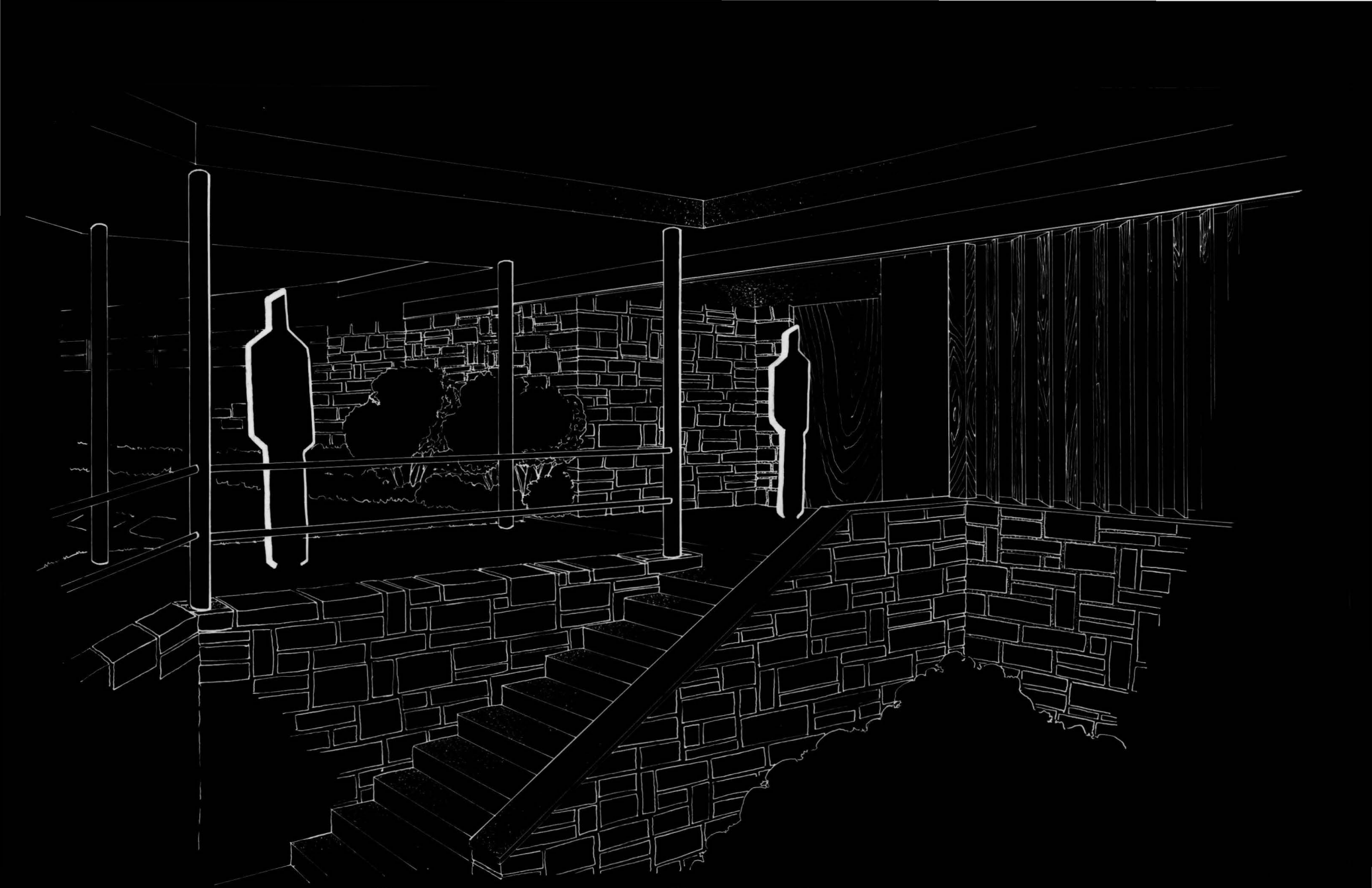


PERSPECTIVE OF OFFICE



PERSPECTIVE OF PRIVATE OFFICE

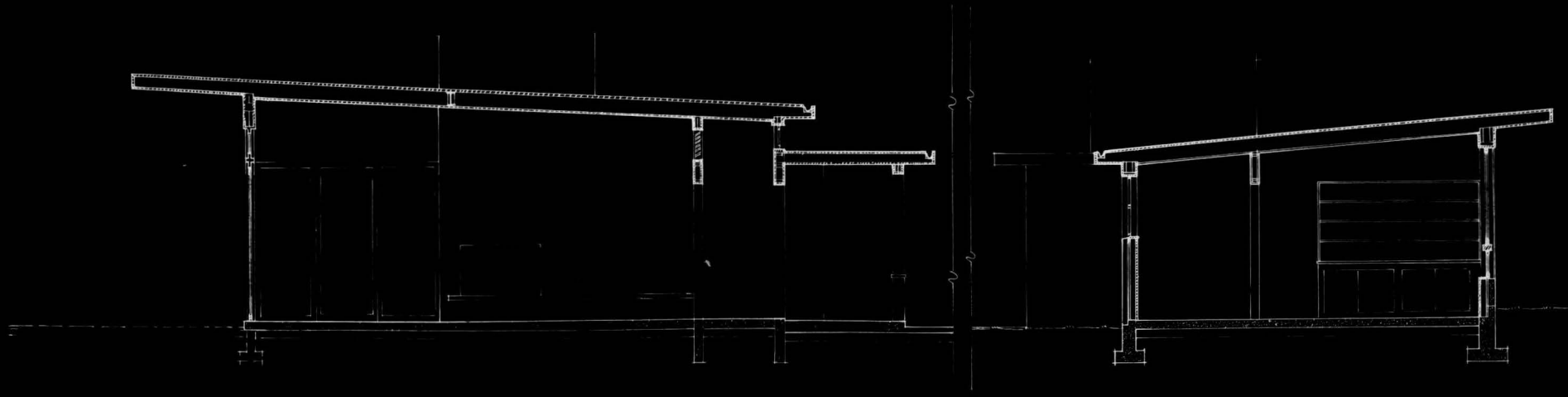
PERSPECTIVE OF DRAFTING AREA



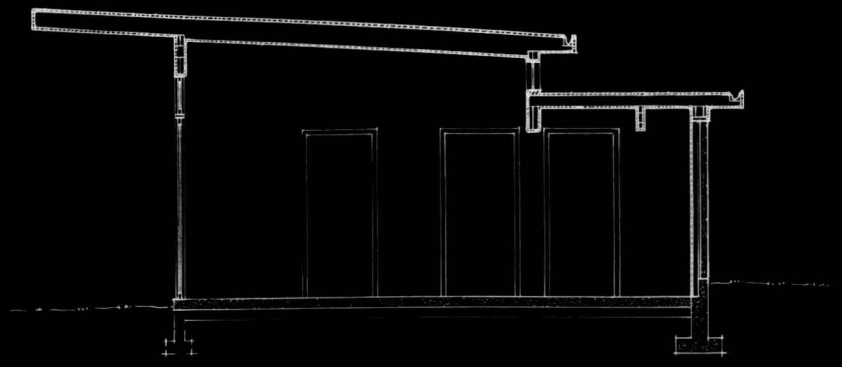
PERSPECTIVE OF FRONT ENTRANCE

PERSPECTIVE OF LIVING AREA

PERSPECTIVE OF MASTER BEDROOM



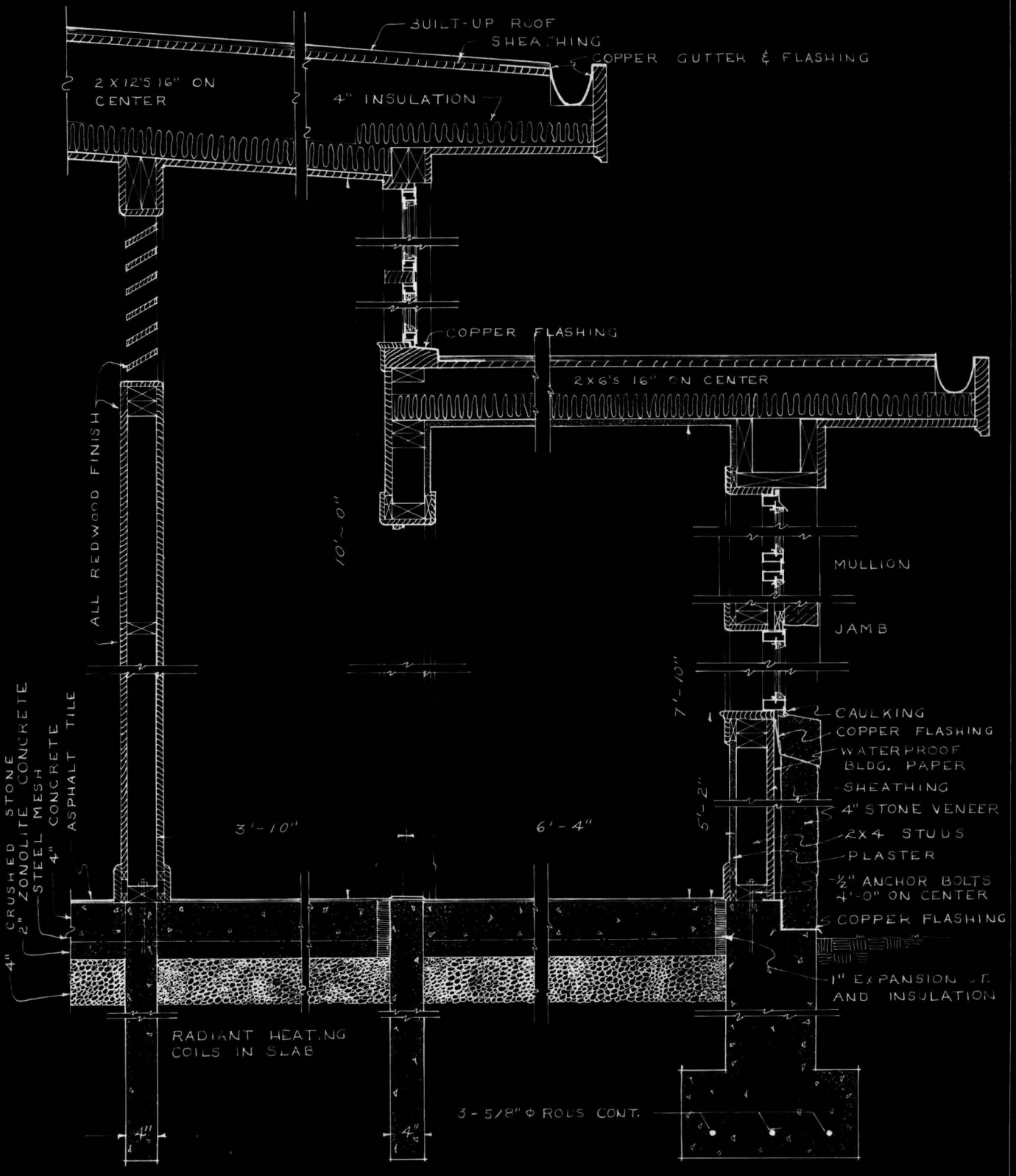
SECTION A-A



SECTION B-B

SCALES: 1/8" = 1'-0"

0 5 10 15 FEET



DETAIL WALL SECTION

SCALES: 3/4" = 1'-0"

FEET

SECTION NINE
DESIGN ANALYSIS

DESIGN ANALYSIS

The drawings in this thesis constitute only one solution for the design of an architect's house-and-office. There are other solutions which would prove as satisfactory. Some of the other possibilities will be considered in this analysis.

Site selection

The site for this design was carefully selected. In the selection of the site, consideration was given to "climate control" as covered in the 1951 issue of "House Beautiful's Home Maintenance and Building Manual." The site is on the southern slope of a small hill. Because of this location, the house-and-office unit receives the full effect of the winter sun and is protected from the cold winter winds. This location on the southern slope also takes advantage of the summer breezes. The hot summer sun is a problem in any location, but can be minimized by the use of a large amount of planting which will absorb the sun's heat rays. Another consideration in the selection of the site was accessibility to the client. A corner lot was chosen, and although the office fronts on the secondary street, it is clearly visible from the heavily traveled thru highway. The office could be easily located by verbal directions as recommended by one of the architects in his reply to the questionnaire. The third consideration, in the selection of the site, was the topography of the site. The lot

has a slope of approximately one foot in every fifteen feet. A high bank on the highway side provides seclusion for the living areas of the house. The office, however, is easily seen by motorists coming from town. Other sites could have been selected, but the one chosen was felt to be the most desirable.

General layout

The general layout or relation of the house-and-office to its site is an integral part of the design. Here as in the other aspects of the design there could be several solutions to the problem. In the solution used, the house is almost completely separated from the office. This will help to prevent conflicts between the functions and activities carried on in either the house or the office. The unity of the house-and-office group is maintained by the intimate relation of the buildings and the materials of construction. The formal patio is therefore as much a part of the design as either building. The complete layout tries to present a pleasing relationship of space and mass.

Office design

The office is located to attract the public view in much the same manner as a show window. It is designed to invite the client into the reception area and at the same time to impress him with the function and activity of the drafting room. The client is ushered from the efficiency of the reception area

into the architect's private office. The office gives the feeling of a quiet, comfortable study with its fireplace, smart furniture, and simple arrangement. This gives the architect a definite advantage in selling the client on his work. The drafting room has desirable north lighting. Its long narrow shape allows all of the drafting tables to be placed close to the windows. Drafting alcoves are formed by book and magazine reference shelves. The wall opposite the drafting tables is occupied by the blueprint room, file room, and the toilets. This minimizes the number of steps the draftsmen must take to consult old drawings, to have prints made, or to clean up at lunch or quitting time. This is not the only solution of the office design, but should prove very satisfactory.

House design

As in any design, the plan of the house is not perfect nor is it the only possible solution. The house is designed with what would seem to be an excessive amount of hall. However, this hall provides cross ventilation for all the major rooms, seclusion for the living areas, and circulation between the rooms, not through them. The hall to the bedroom wing could be shortened by placing the bed rooms on opposite sides of the hall. This would spoil the orientation and the cross ventilation of the rooms. In the design of the living areas, the contemporary concept of the "front" or formal parlor and the informal parlor is developed. The quiet living area is symbolic of the

formal parlor, and the noisy living area is symbolic of the informal parlor. In this design the two areas may be combined into one large area by the use of folding partitions. The kitchen is closely related to both the carport and the front door. In its design the kitchen is an assembly line for the production of meals. An open breezeway provides both light and ventilation for the kitchen. There is no view from the kitchen, but this was felt to be a minor consideration since most of the kitchen work will be done by a servant. The overall plan of the house flows smoothly together.

SECTION TEN
CONCLUSIONS

CONCLUSIONS

There are two conclusions that the writer has drawn from the preparation of this thesis. The first is that under present rent and building conditions in Danville, Virginia, it would be more financially desirable to build a surburban house-and-office unit than to build the house and rent office space downtown. This conclusion is based on the following information considering the Final Design of the office alone:

Financial Analysis

Capitalization

Cost (57' x 19' x 14.50)	($5750 - 3000)	=	18,352.00
Mortgage	60% of 18,352.00	=	11,011.00
Equity	40% of 18,352.00	=	7,341.00

Analysis of Payments

Monthly Payment	$10.61 x 11,011	=	116.83
Amortization	11,011/10x12 per mo.	=	91.76
Interest			25.07

Monthly Fixed Charges and Maintenance

Taxes	18,352 x 0.0225/2x12	=	17.20
Depreciation	15,602 x .025/12	=	32.50
Insurance		=	8.00
Interest on mortgage	(see above)	=	25.07
Interest on equity	7,341 x .05/12	=	30.50
Heat		=	6.00
Electricity		=	3.00
Janitor		=	4.00
	Total		126.35
Reconditioning Allowance	4000/10x12	=	33.33
	Total		159.68

Rent in office building	750 sq. ft.	$144.00
	Difference	15.68

However as seen from the comparative figures in the original financial study the following situations exist.

During the first ten years:

There would be a loss of approximately $460. per year in interest on the money invested in the office. The architect will have to make a slightly higher monthly payment for rent and charges on the house-and-office unit. However, he will have a bigger and better office than he would have otherwise been able to afford during this period.

After the first ten years:

The money used as a down payment on the office and the difference in the monthly payments compounded at 5% for ten years would amount to approximately $13,170. The value of the office building depreciated 25% for the period would be valued at $13,245. However, if the office building has been built, there will now be a savings in rent of $2300. per year as compared with an approximate return on the investment of the $13,170 of $650 per year.

The second conclusion, drawn from the questionnaires in this thesis, is that an architect would find it advantageous to design and build himself an office away from the downtown area.

APPENDIX
VITA
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The vita has been removed from the scanned document

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