

STUDIO FACULTY

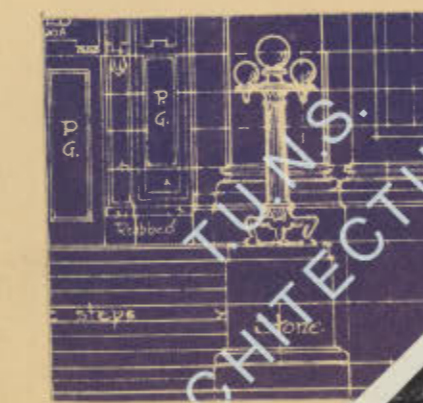
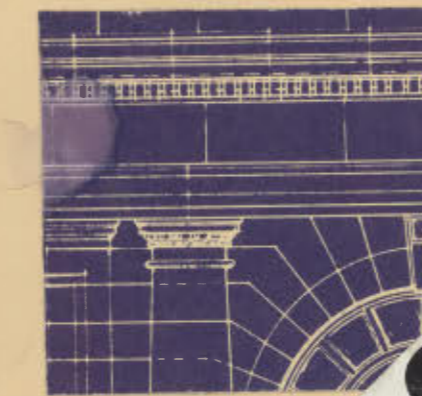
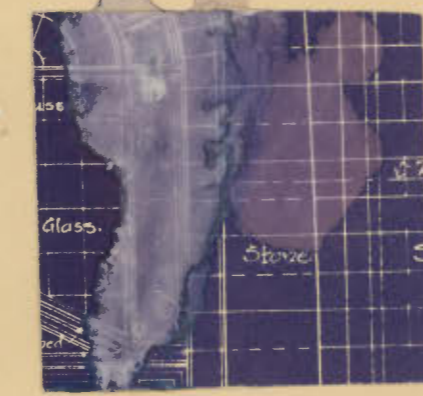
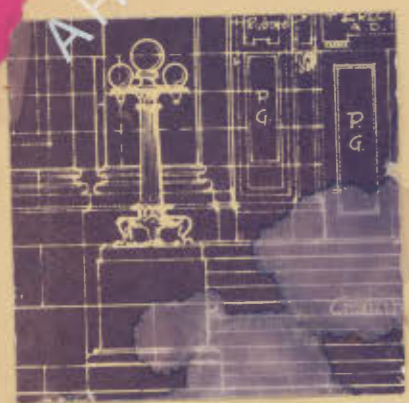
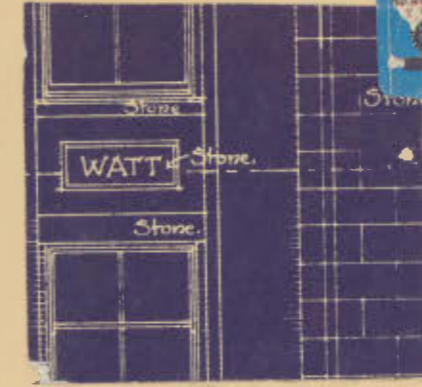
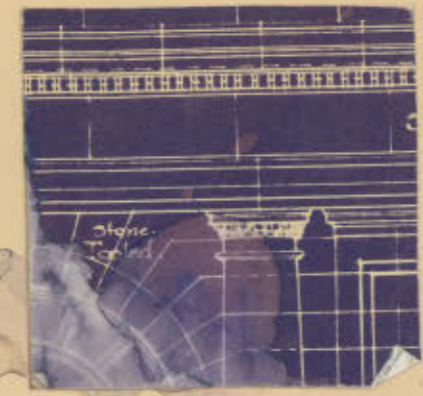
Please initial after having read this document and pass it on.

A.S	AP	AF	PA
P.T	PT	P.I	P.D.
P.M			



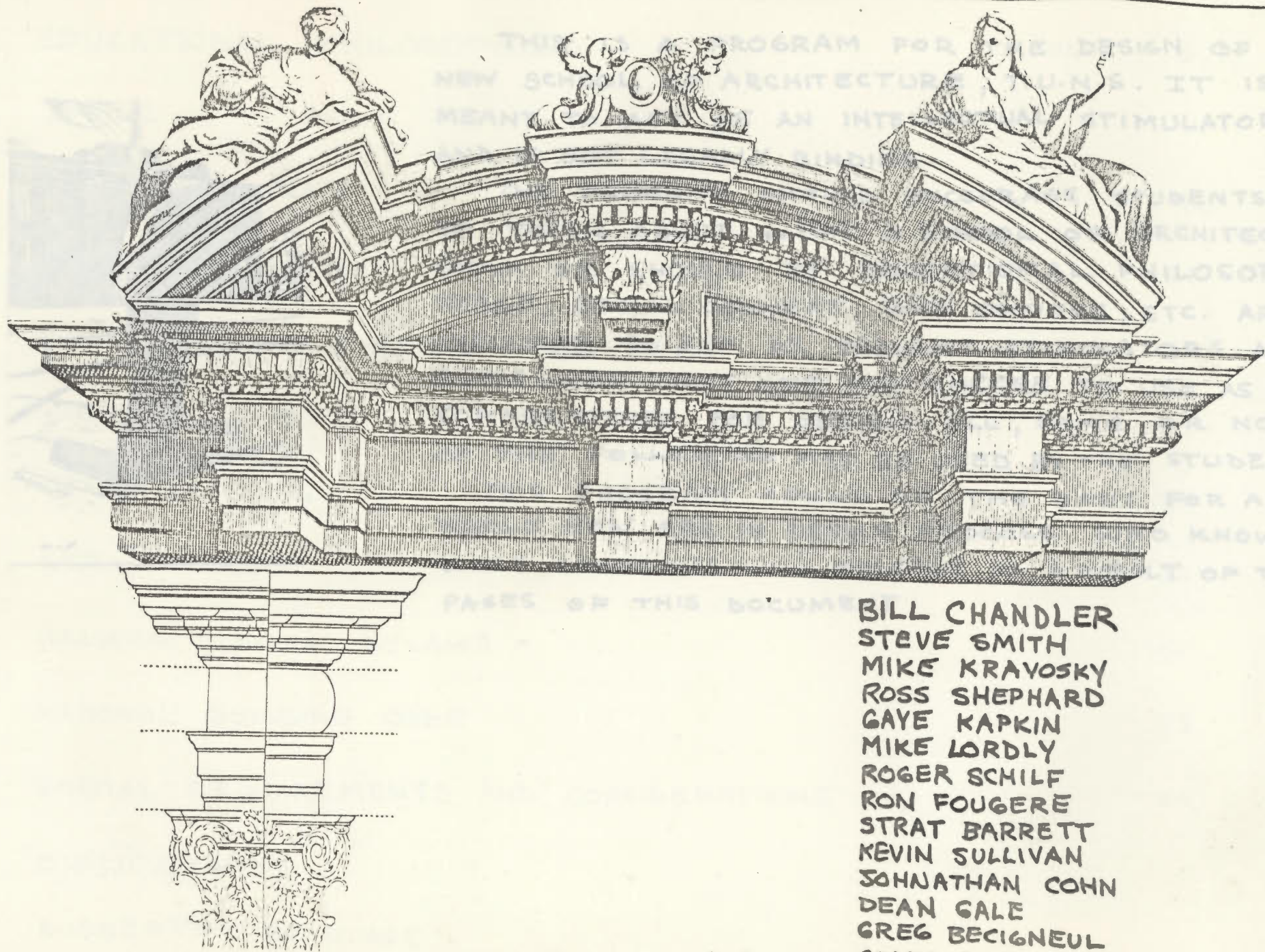
**Think of it as**

T five  
Design 81



In the following Figure is Shewn the Method of separating the inner Frame, from the Network of the outer Face; for the better understanding of which, make the Line HP in this Figure parallel to DC, and let the Line BC be divided into as many equal Parts, as the Line PC was.





PAGES OF THIS VOLUME

BILL CHANDLER  
STEVE SMITH  
MIKE KRAVOSKY  
ROSS SHEPHARD  
GAYE KAPKIN  
MIKE LORDLY  
ROGER SCHILF  
RON FOUGERE  
STRAT BARRETT  
KEVIN SULLIVAN  
JOHNATHAN COHN  
DEAN GALE  
GREG BECIGNEUL  
COLIN GOFF



THIS IS A PROGRAM FOR THE DESIGN OF A NEW SCHOOL OF ARCHITECTURE, T.U.N.S. IT IS MEANT TO ACT AS AN INTELLECTUAL STIMULATOR AND IS NOT LEGALLY BINDING.

THE PROGRAM SHOULD ENCOURAGE STUDENTS TO THINK ABOUT WHAT A SCHOOL OF ARCHITECTURE COULD OR SHOULD BE. EDUCATIONAL PHILOSOPHIES, IMAGE, SOCIAL CONTEXT, SITE OPTIONS, ETC. ARE INCLUDED TO ACT AS THOUGHT STIMULATORS AND GUIDELINES THAT ONE MAY CHOOSE TO USE AS A CORNERSTONE FOR DESIGN. ALL, SOME, OR NONE OF THE FOLLOWING MAY BE USED BY THE STUDENT.

THIS PROGRAM COULD BE THE BASIS FOR A WHOLE NEW ERA IN DESIGN PROCESS. WHO KNOWS WHAT CREATIONS WILL EMERGE AS A RESULT OF THE PAGES OF THIS DOCUMENT

HALIFAX ZONING BYLAWS

NATIONAL BUILDING CODE

SPATIAL REQUIREMENTS AND CONSIDERATIONS

BIBLIOGRAPHY

SUGGESTED READINGS

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## EDUCATIONAL PHILOSOPHIES

Would they be useful in a design? Depending upon what one means by an educational philosophy, one could answer yes or no.

While it may not be of much benefit to explore too deeply the work of educational theorists, certainly some rudimentary thought about what the school will - or should - do is essential. Whatever we design will show something about what kind of a school we think it should be. This can be illustrated in the studio space: one large open studio with individual work spaces approximately identical means something very different than a studio with a hierarchy of spaces, or a diverse range of spaces. The type of studio space in our designs should illustrate our attitudes - or philosophical base - of our schools.

Philosophy is not just that which Socrates taught. We all have a philosophical base, and we can all use it in our designs once we are clear about what the issues are. Should schools serve a function in society? Should schools be open to the community? To the street? Should schools be able to adapt to the individuals who will use them? Should meetings and discussion be encouraged? Even to state the issues clearly is to indicate an answer to those who share one's philosophical base. If we are unclear about the issues we will be unclear about intentions.



EDUCATIONAL APPROACHES

NOVELTY

APPROACH \*

APPROACHES

THE FOLLOWING APPROACHES ARE SUBMITTED FOR STUDY. A SCHOOL OF ARCHITECTURE MAY NOT (AND PERHAPS SHOULD NOT) REFLECT ANY PARTICULAR APPROACH TO ARCHITECTURAL EDUCATION.

NON DESIGN

JUST TALK ABOUT IT NOT

NEW



*Handwritten scribbles and faint text, possibly including 'Approach' and 'Design'.*

I'M SO DAMN BORED WITH STATEMENTS.

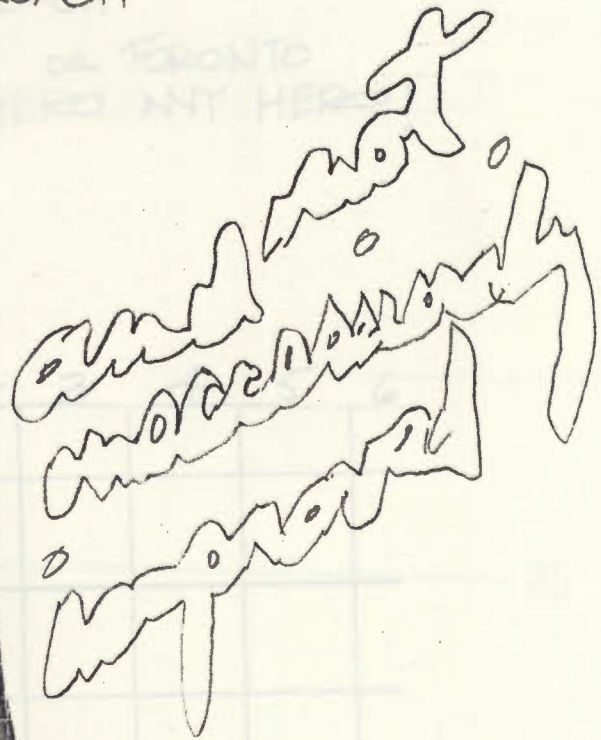
BUILDING? THAT'S NOT WHAT WE NEED HERE. WHAT WE NEED IS...

\*VERY POPULAR

EDUCATIONAL APPROACHES

NOVELTY APPROACH \*

NEW



\* VERY POPULAR

NON DESIGNING APPROACH  
JUST TALK ABOUT IT ALOT

I'M SO DAMN BORED WITH  
STATEMENTS.

BUILDING? THATS NOT WHAT WE  
NEED HERE! WHAT WE NEED IS ...

EDUCATIONAL APPROACHES

# HERO APPROACH

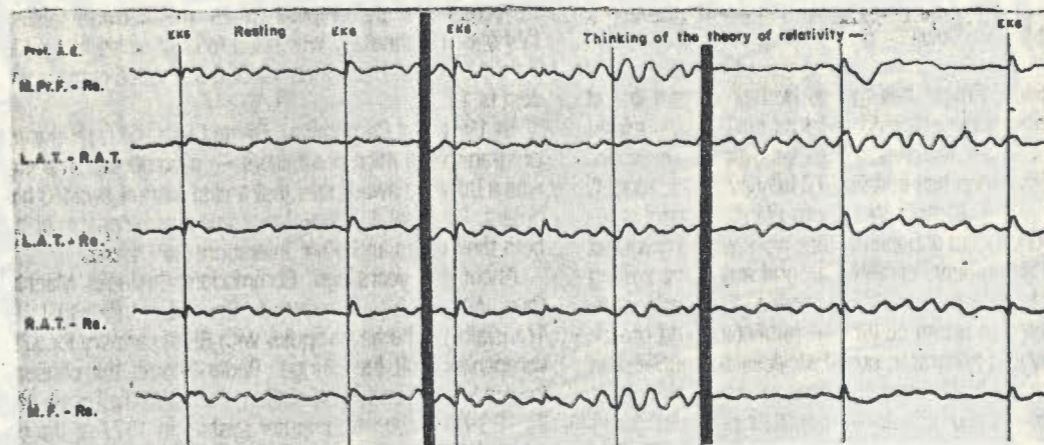
- IIT - MIES OR TORONTO  
 PICK A HERO ANY HERO!

	1	2	3	4	5	6
A						
B						
C						
D						
E						
F						
G						

# DESIGN WITHOUT THEORY

## ENGINEERING APPROACH

- TO SOME DEGREE MCGILL



$$x^2 + y^2 = \text{POST MODERN}$$

erosion erosion  
 erosion erosion  
 erosion erosion

osio

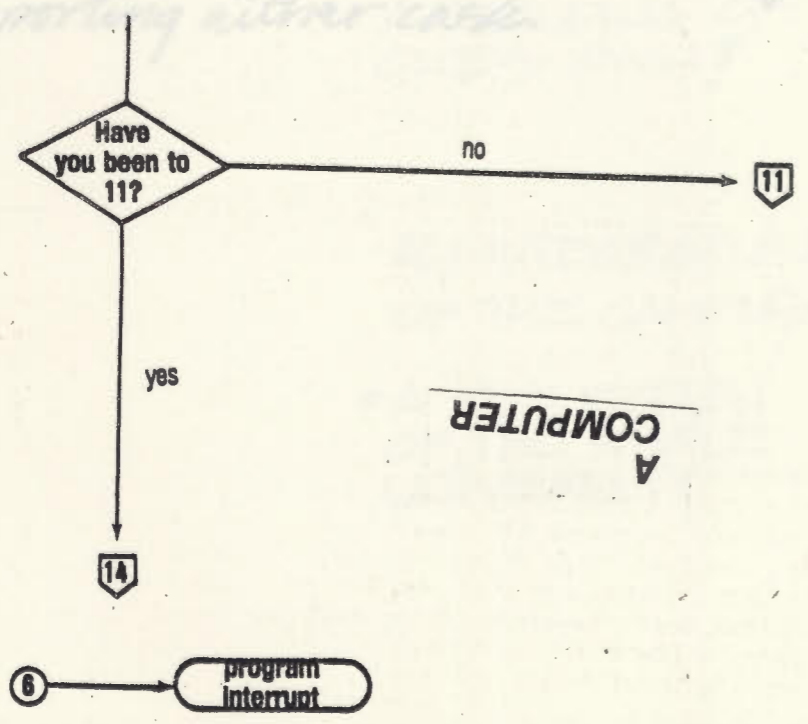
EDUCATIONAL APPROACHES



# IMAGES

## PROGRAMING

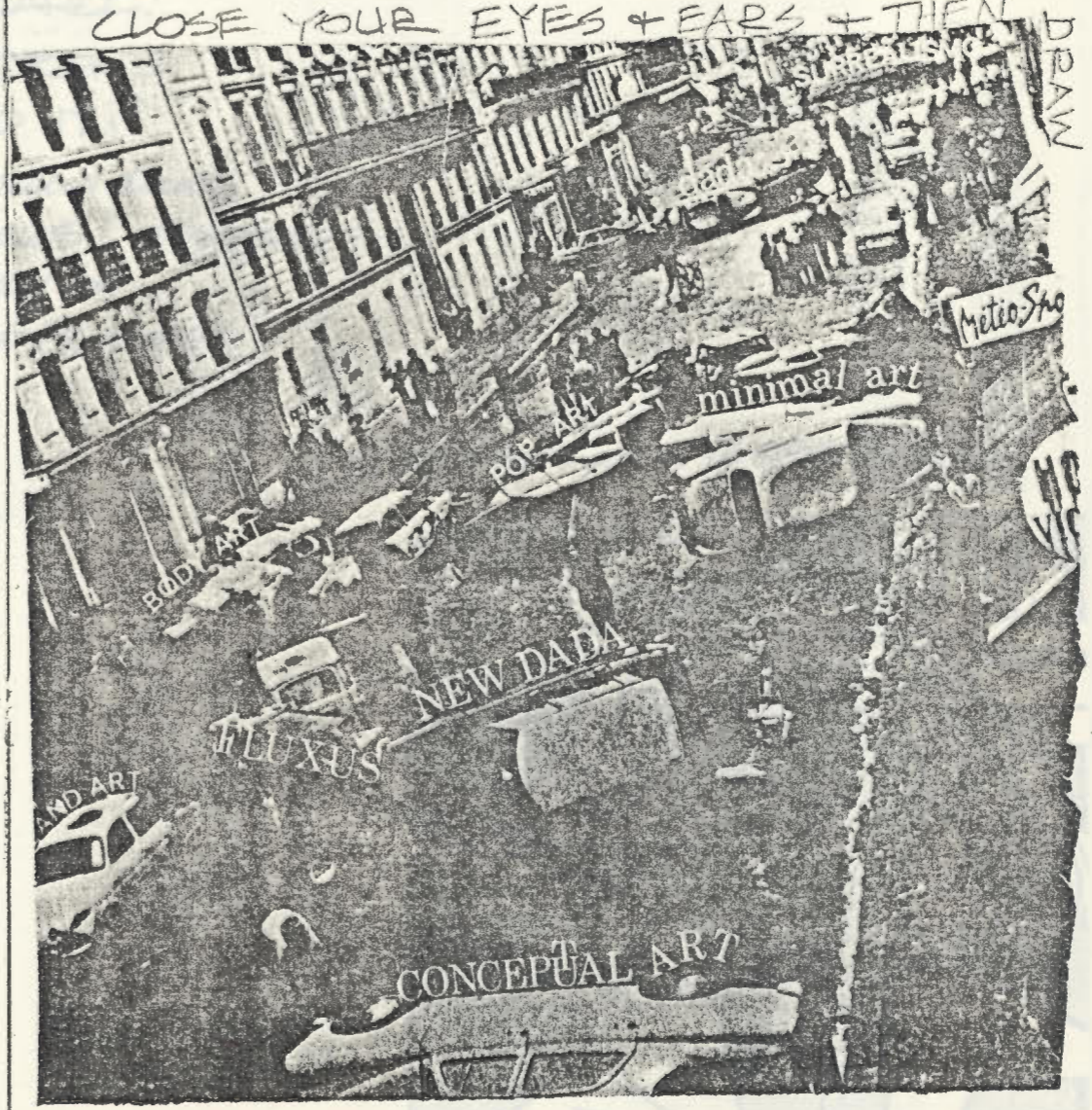
THE JIM LOVE APPROACH  
EG. UNIVERSITÉ DE MONTRÉAL



-DESIGN WITHOUT THEORY

EG. T.U.N.S.

CLOSE YOUR EYES & EARS & THEN



# EDUCATIONAL APPROACHES

# IMAGES.

OR - THE APPEARANCES AT FIRST GLANCE.

- A BUILDING SHOULD PRESENT A STRONG STATEMENT OF INTENT... OR, SHOULD IT?

these questions are left to individual interpretation but, regardless, "conscious" design demands questions be raised that may be pursued or left untouched with logical reasons supporting either case.

... all's not what it SEEMS to be...



GE, IMAGE, IMAGE, IMAGE, IMAGE

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image, image  
e, image, image  
mage, image, inc

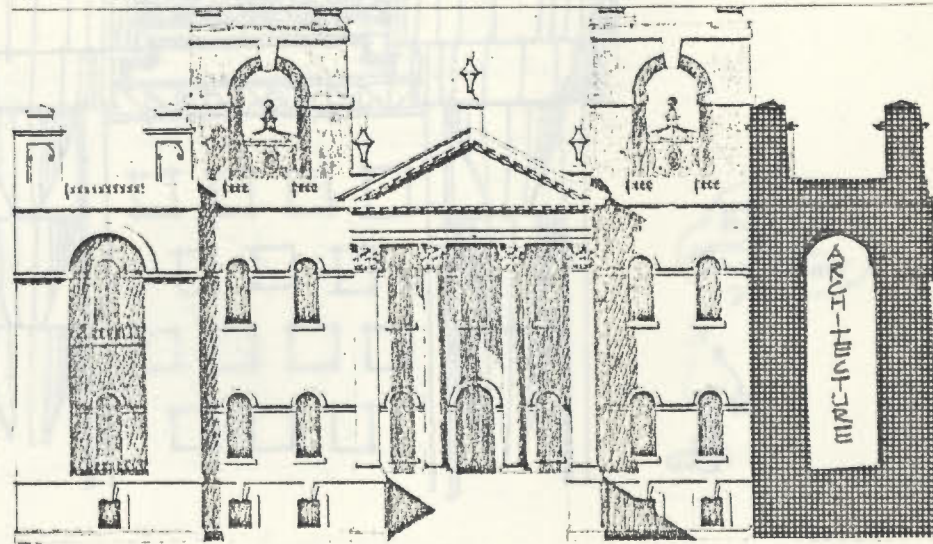
## ARCHITECTURE...

AN AUTONOMOUS  
STUDY -

AN AUTONOMOUS  
ENTITY -

A BUILDING OF  
ONE'S OWN!

Where can  
I register?



CONTEXTUAL  
AN INTEGRATION  
OF THE CAMPUS...

- A REFLECTION  
OF THE WHOLE  
UNIVERSITY.

Happy union  
at T.U.N.B.



GE, IMAGE, IMAGE, IMAGE, IMAGE, IMAGE



age, image,  
image, image,  
& image, image,  
image, image, image

HIGH TECH...

- slick, glossy...  
reflecting the  
1980's  
lifestyle.

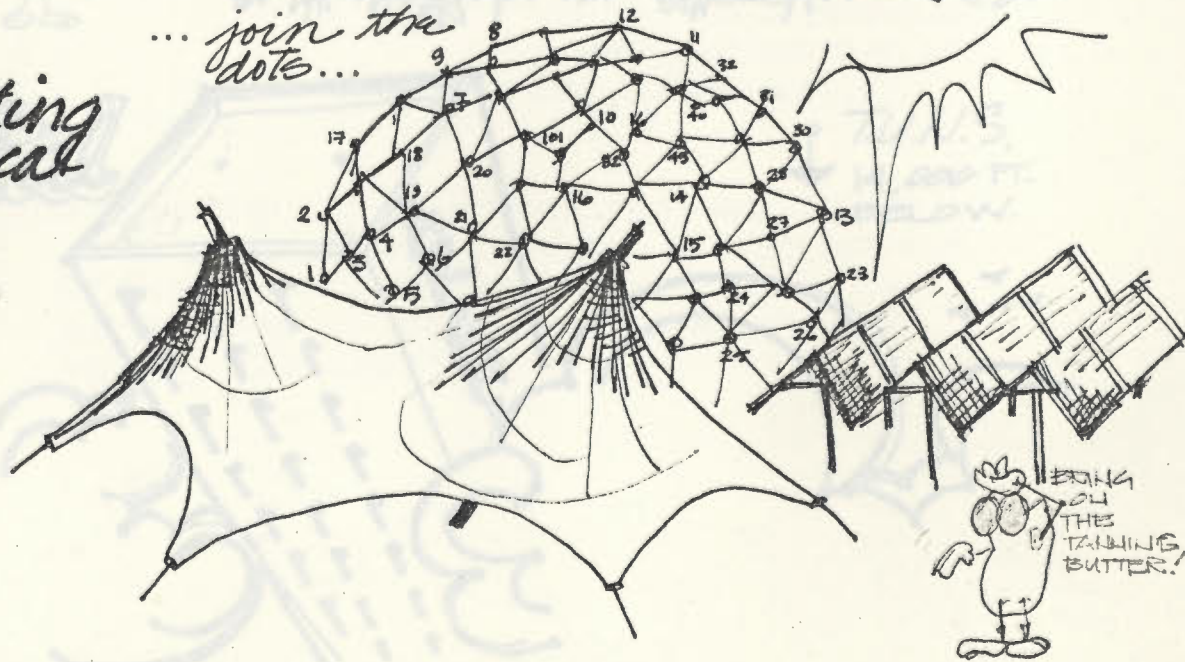
H19

School of Architecture  
& Disco night



- academic  
& concentrating  
on technological  
concerns  
for the future.

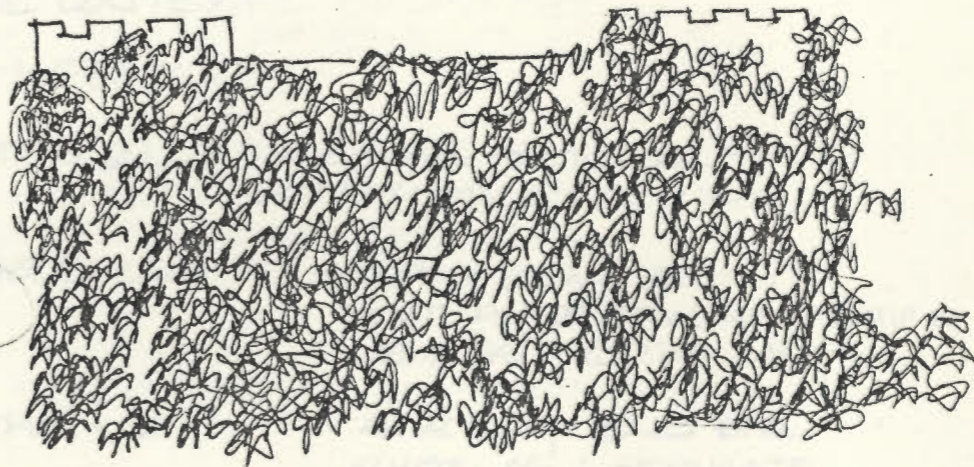
... join the  
dots...



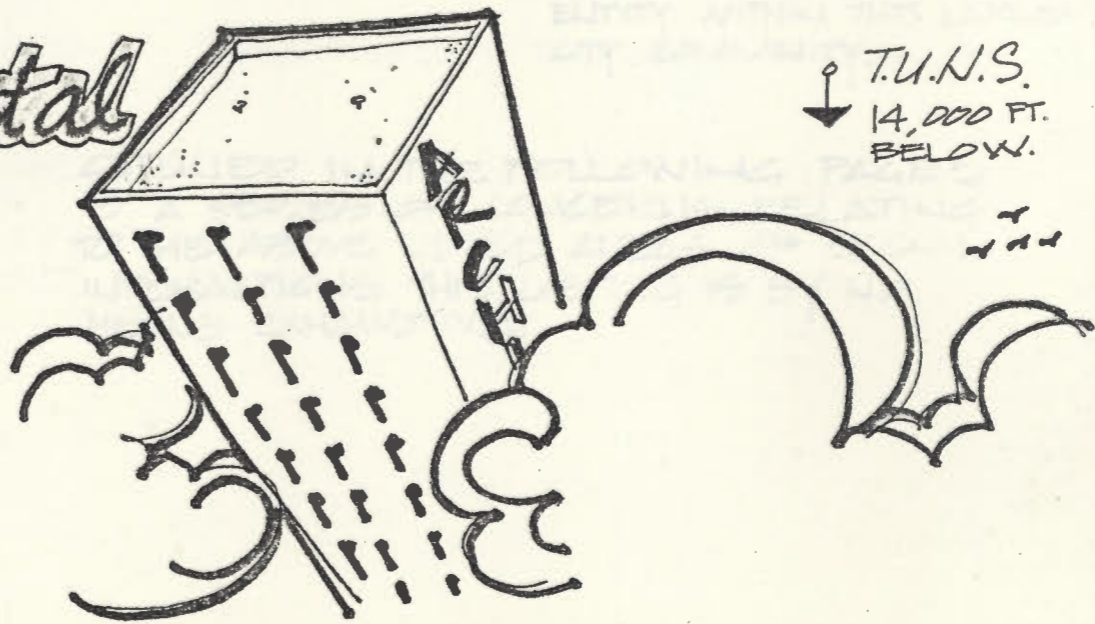
GE, IMAGE, IMAGE, IMAGE, IMAGE

age, image  
image, image  
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age, image

ACADEMIC  
TRADITIONAL  
IVY LEAGUE.



Monumental



AGE, IMAGE, IMAGE, IMAGE, IMAGE

# SOCIAL CONTEXT.

ARCHITECTURE WITHIN A SOCIAL CONTEXT

ADDRESSES THREE AREAS OF INTERFACES

OF SOCIAL INTERACTION: (i) INTERNAL - CONDITIONS PARTICULAR TO ACTIVITY WITHIN THE SCHOOL.

(ii) SCHOOL-CAMPUS - ACTIVITY SUCH AS MAY TAKE PLACE BTW. ARCHITECTURE PERSONS AND THE CAMPUS.

(iii) CAMPUS-CITY - AN ACTIVITY ZONE BTW. SCHOOL AS A SEPARATE ENTITY WITHIN THE LARGER CITY COMMUNITY.

OUTLINED IN THE FOLLOWING PAGES IS A SERIES OF CONCERNS RELATING TO THE ABOVE LISTED AREAS OF SOCIAL INTERACTIONS. THIS LISTING IS BY NO MEANS EXHAUSTIVE.

SOCIAL CONTEXT

## (i) INTERNAL SCHOOL CONTEXT.

TO A LARGE DEGREE, THIS QUESTION IS ONE WHICH WILL BE DETERMINED BY A PERSONAL STANCE ON SCHOOL PHILOSOPHY. HOW YOU SEE ARCHITECTURE AND THE MEANS OF EDUCATING STUDENTS WILL INFLUENCE YOUR DESIGN.

BELOW ARE POINTS OF SOCIAL INTERACTION AS OBSERVED IN THIS PRESENT SCHOOL; THEY ARE NOT REPRESENTATIVE OF ANYTHING OTHER THAN THEIR OWN SOCIAL CLIMATE. THEY MAY BE ILLUSTRATIVE OF CONSIDERATIONS IN THIS EXERCISE.

o STUDENT INTERACTION → CAN BE INTEGRATED OR SEGREGATED.

- SEGREGATED\* BY TERMS.
- SEGREGATED\* BY STUDIOS.
- SEGREGATED\* BY CLASSES.

\*(SUBSTITUTE INTEGRATED FOR ALL)

o STUDENT - STAFF INTERACTION.

- PLACEMENT OF FACULTY OFFICES
- " " STUDENT STUDIOS.
- CLASSROOM/STUDIO LAYOUTS.

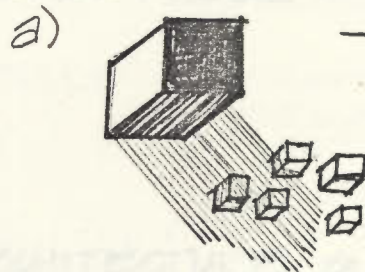
# SOCIAL CONTEXT



(i) INTERNAL SCHOOL CONTEXT (CONT.)

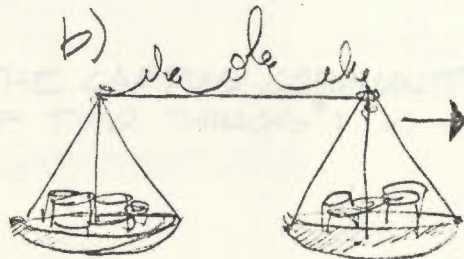
◦ STUDENT SCHOLASTIC ACTIVITIES

◦ HIERARCHY OF STUDIES



→ DOMINANCE OF PARTICULAR AREAS OF STUDY OVER OTHERS.

• this may be manifested in a hierarchy of student activity areas... large studios for heavy activity - small classrooms.



→ EQUAL WEIGHTING OF STUDIES

• this may be achieved by provision of work area for each particular academic concern - studios; classrooms; labs with equal weighting.

## (i) INTERNAL SCHOOL CONTEXT (CONT.)

o INTERNAL CIRCULATION PATTERNS.

o ZONING OF AREAS FOR USAGE/INTERFACE...

- STUDENT: GENERAL ACTIVITY; QUIET AREAS; RECREATION...
- STAFF: OFFICES; LOUNGE.
- GENERAL PUBLIC: THEATRE, EXHIBITION AREAS...

## (ii) SCHOOL OF ARCHITECTURE to CAMPUS.

WITHIN THE CAMPUS COMMUNITY, THE SCHOOL SHOULD DO EITHER ONE OF TWO THINGS\*: a) INTEGRATE and maintain the existing patterns of circulation and building relationships

b) ASSERT A NEW PRESENCE and establish new criteria for campus development.

\* ADMITTEDLY AN ACCOMMODATION OF BOTH THESE POSITIONS COULD ALSO BE ACCOMPLISHED maintaining existing attitudes in conjunction with new ones.

(ii) SCHOOL OF ARCHITECTURE TO CAMPUS.

O CONTEXTUAL CONSIDERATIONS.

- CIRCULATION - pedestrian and vehicular.
- FORCED OR FLEXIBLE.
  - LOCATIONS OF CIRCULATION.
  - PEDESTRIAN CONNECTORS.

- MATERIALS - maintaining existing material continuity.
- BRICK
  - WOOD FINISH - relating to city context (MORRIS ST.)
  - UNIQUE MATERIALS - those not currently used within campus.

- ARCHITECTURAL FORMS - COMPATIBLE
- UNIQUE and ASSERTIVE.

- COLOR/TEXTURE - to a degree, determined by materials chosen.

- SIZE/SCALE - determined by functional considerations.
- size also influenced by city zoning By-Laws\*  
\*(SEE PERTINENT SECTION.)

- ORIENTATION - INTROVERSION - oriented inward to campus.
- EXTROVERSION - addressing city interface.

- ENTRANCES - STAFF; STUDENTS; PUBLIC - AT-LARGE.
- AXES.
- MAINTAIN VISUAL ACCESS.
  - CONSIDER REMAINDER SCHOOL BUILDINGS.

EXCELLENCE  
TYPED

(iii) SCHOOL OF ARCHITECTURE, T.U.N.S. TO URBAN COMMUNITY.

o CONTEXTUAL CONSIDERATIONS.

THESE ARE THE SAME ISSUES WHICH THE SCHOOL ADDRESSES TO THE CAMPUS. EVALUATION OF THESE ISSUES WILL BE INFLUENCED BY CONCERNS OF LOCAL CITY FABRIC AND URBAN USAGE.

ADDITIONAL CONCERNS... OR ... ISSUES TO ADDRESS.

- 1) Interface between TUN's and city.  
What is the nature of this interface - in what manner does a school of Architecture address this interface?  
CONSEQUENCES...
- 2) Considering the nature of architecture as an educational subject. What would be an appropriate attitude or interaction between the community at large, the campus community and the "architectural" community?  
What might there exist as interactions between these diverse groups?

SOCIAL CONTEXT

LAND USE

LEGEND

commercial

residential

### CONTEXTUAL ISSUES (CONT.)

the immediate context of  
the area surrounding

the campus is  
simply general

residential to the  
and built with vertical  
and commercial use prevailing

along the north  
boundary

3) Considering existing FABRIC of the community in terms of ARCHITECTURAL CHARACTER. How can one deal with the nature of this fabric?

4) In terms of pedestrians (within the campus or along city streets) what are considered major VISIBLE landmarks? How would the building to a NEW School of Architecture rank with this idea of visibility and STATEMENT of INTENT - how should it?

5) ABOVE QUESTION IN MOTORIST'S EYES.




6) Are there city or campus proposals for changing the NATURE of the community existing at present? How will this affect the NEW SCHOOL?

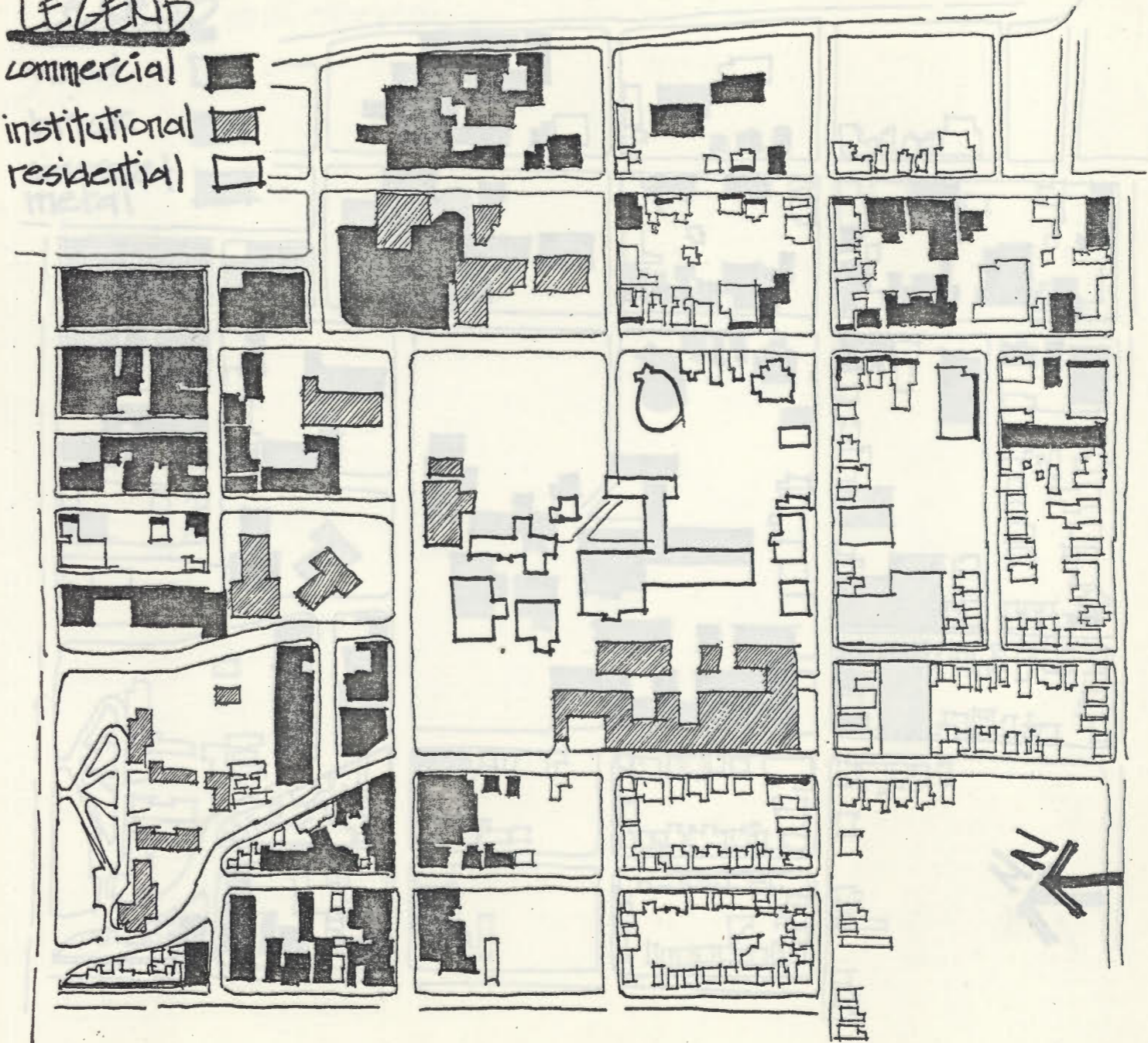
EXERCISES FOR ARCHITECTS

# LAND USE

- the immediate context of the area surrounding the campus may be simply generalized as residential to the east, west and south with institutional and commercial use prevailing along the northern boundary

## LEGEND

- commercial 
- institutional 
- residential 






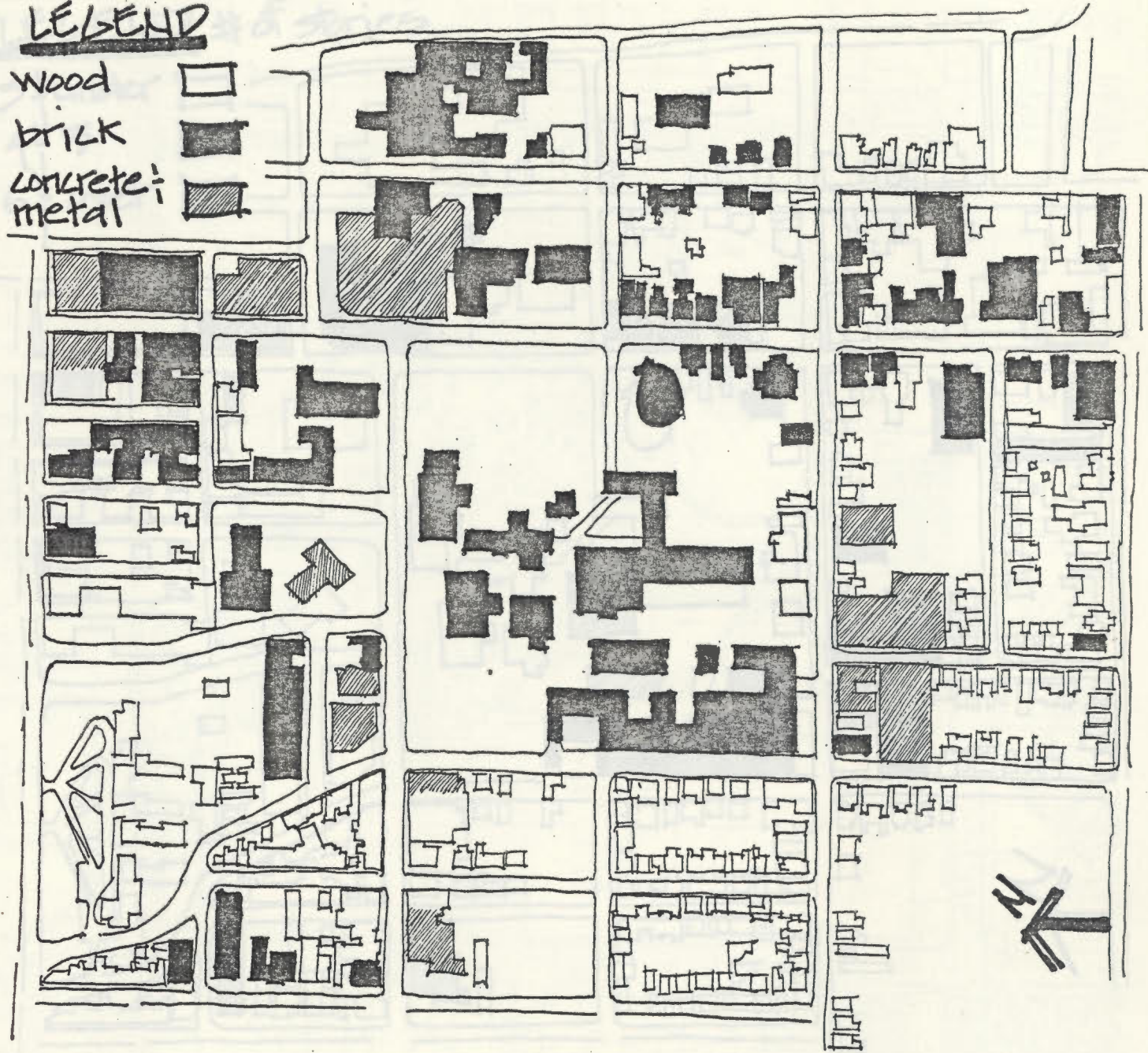
CONTEXT

# BUILDING FABRIC

- although wood cladded buildings are found all around campus, they are more prominent to the south & west. most of these houses are of a Victorian nature
- in the immediate area around the campus brick is more prominent to the north & east
- although concrete and metal cladded buildings are scattered lightly throughout the immediate area of the campus, they are more prominent to the northeast and southwest
- the campus itself has a severe case of "brick-mania"

## LEGEND

- wood 
- brick 
- concrete & metal 



CONTEXT

# SCALE

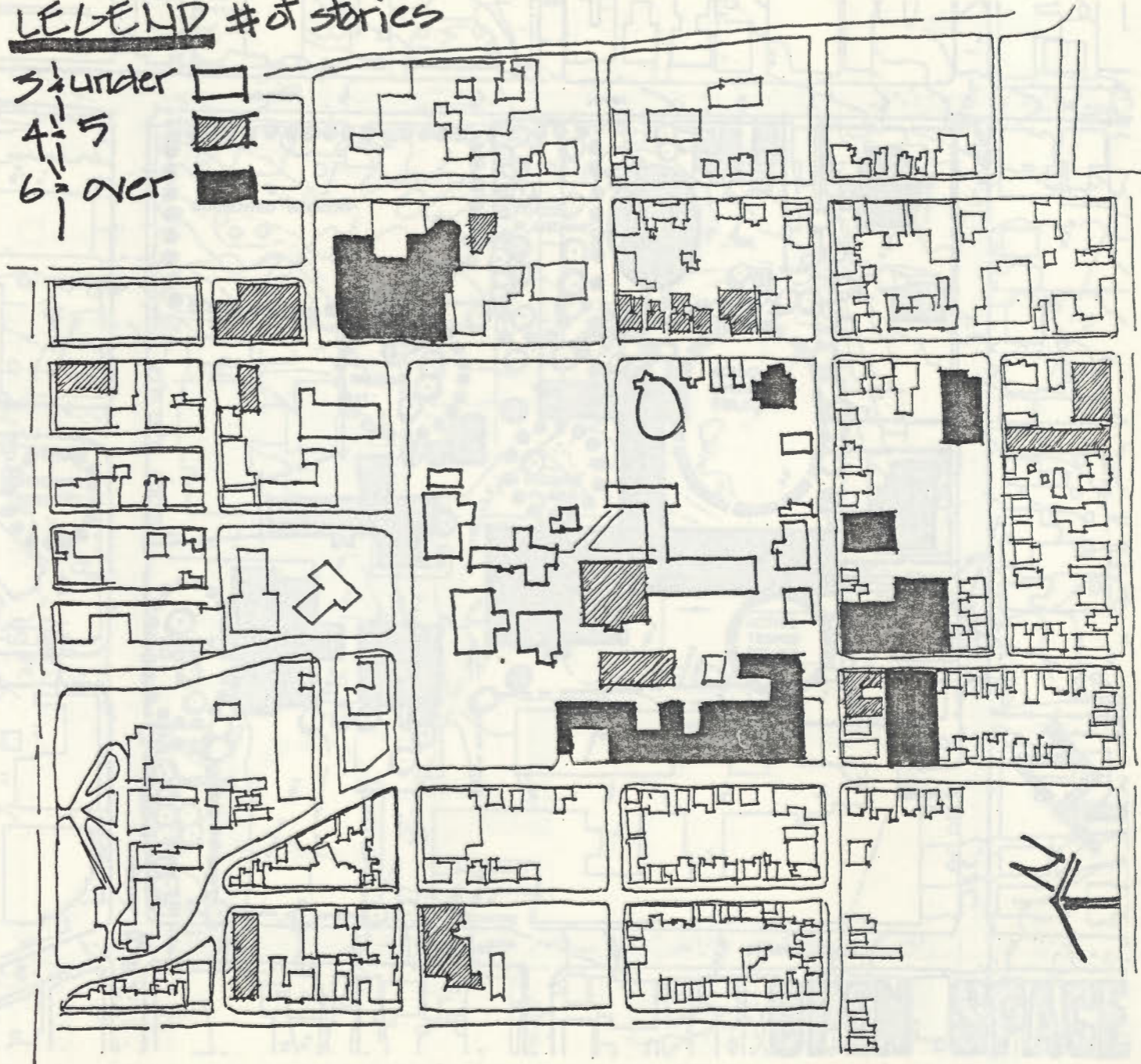
- there is an increase in scale to the west side of the campus.

- there is noticeable increase in large ~~scale~~ scale development to the northwest (office type) and the southwest (hi-rise residential type)

- generally the remaining area is of a small scale.

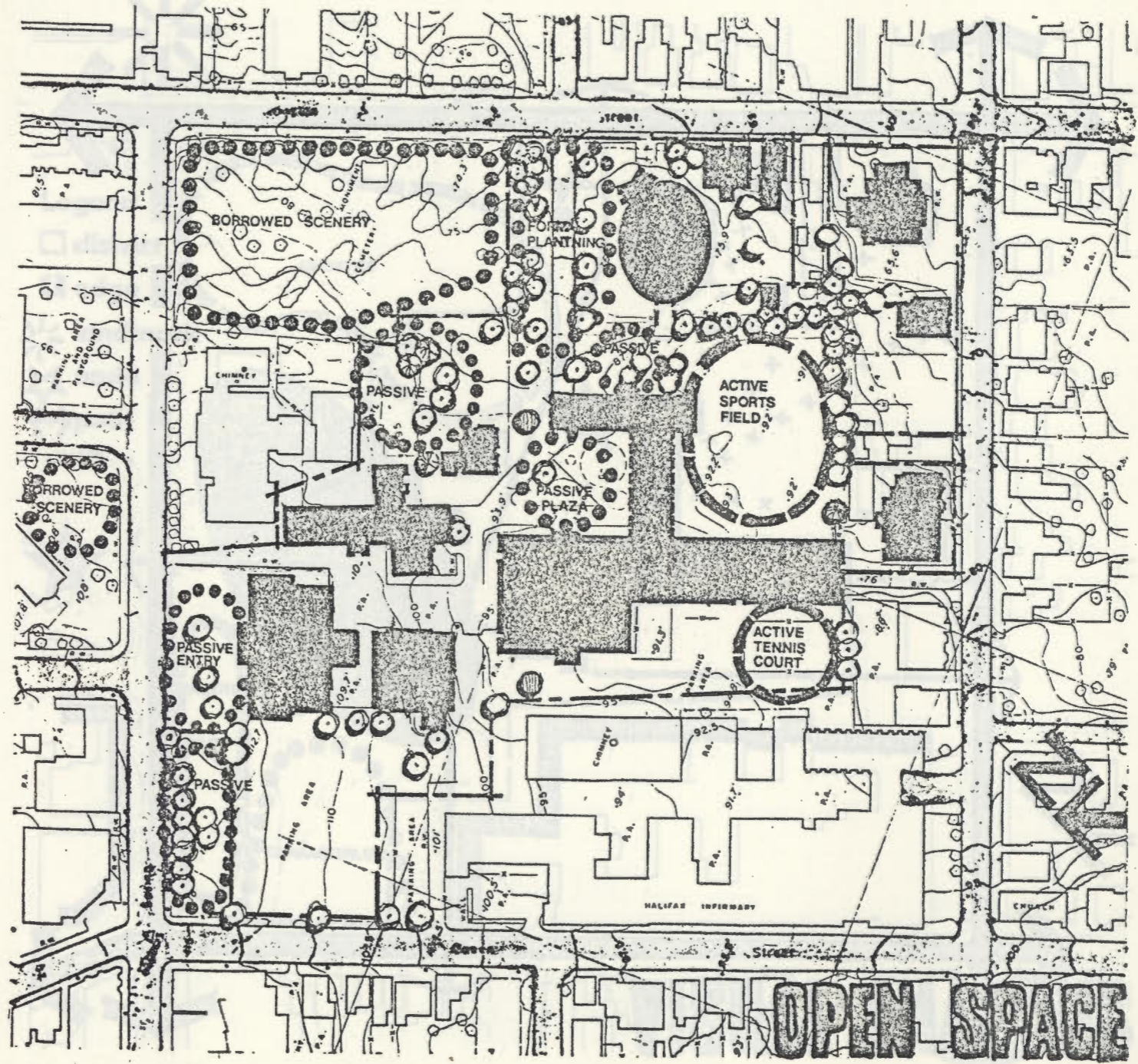
## LEGEND # of stories

- 3 & under
- 4-5
- 6+ over

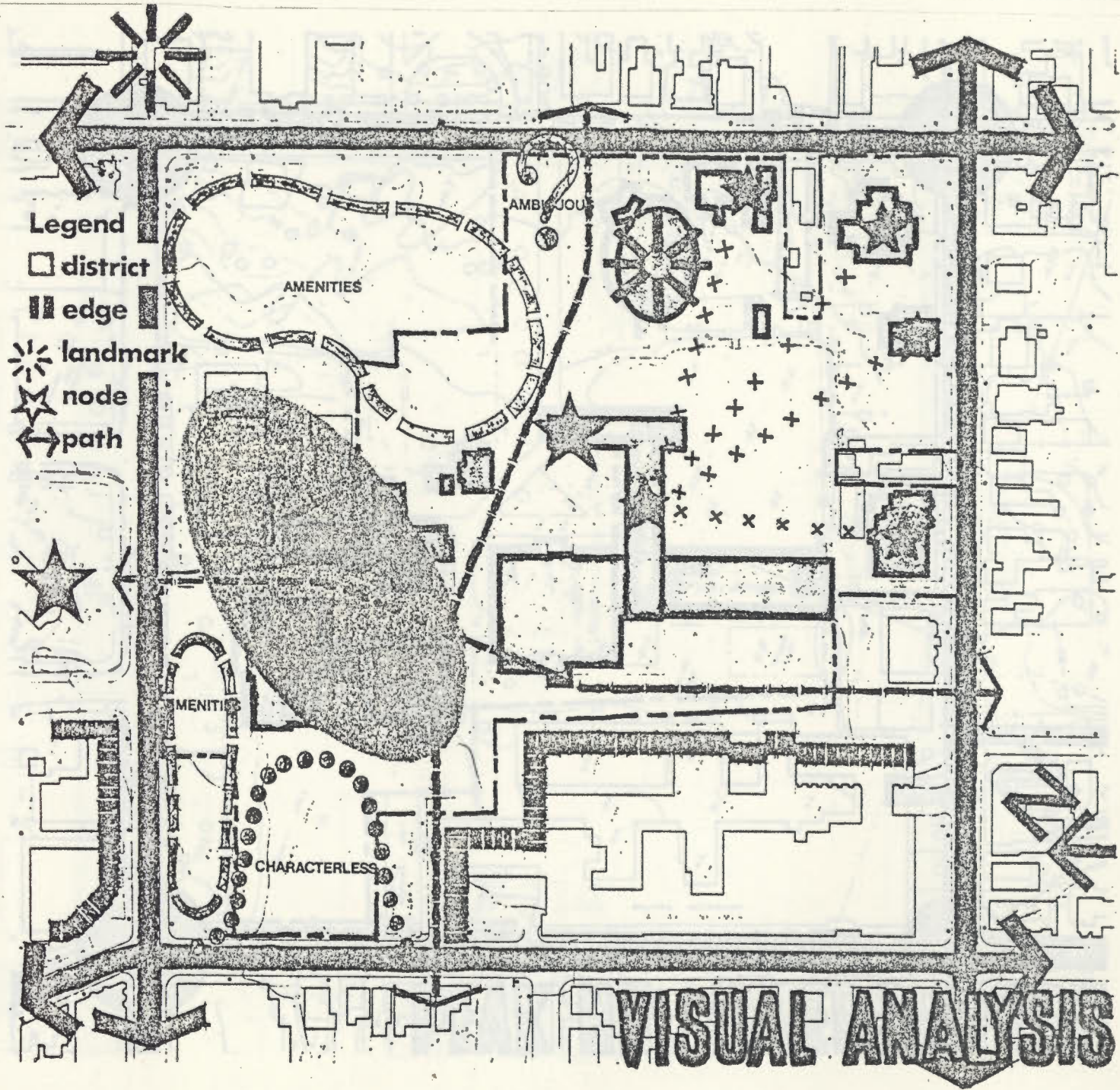


CONTEXT

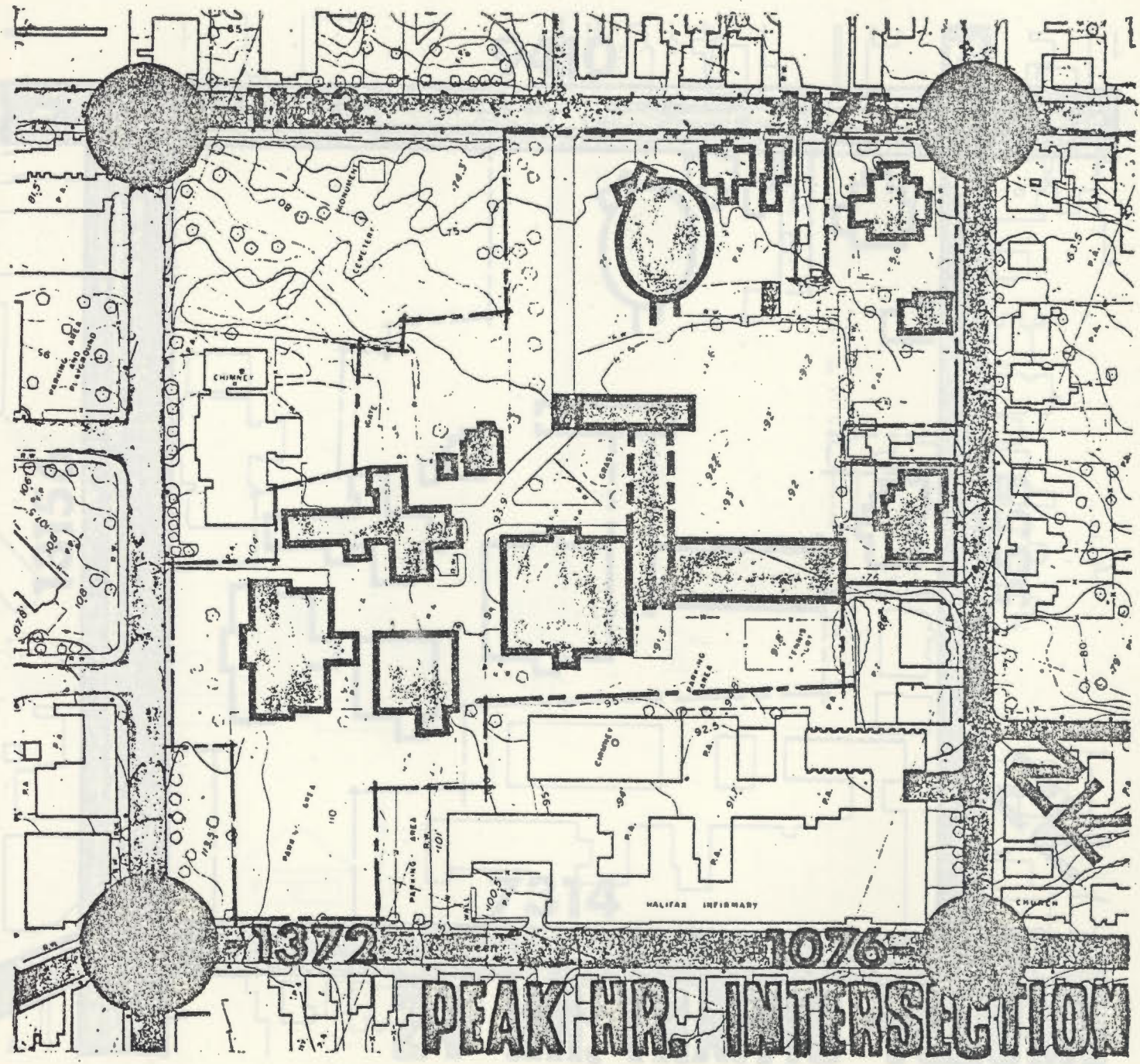




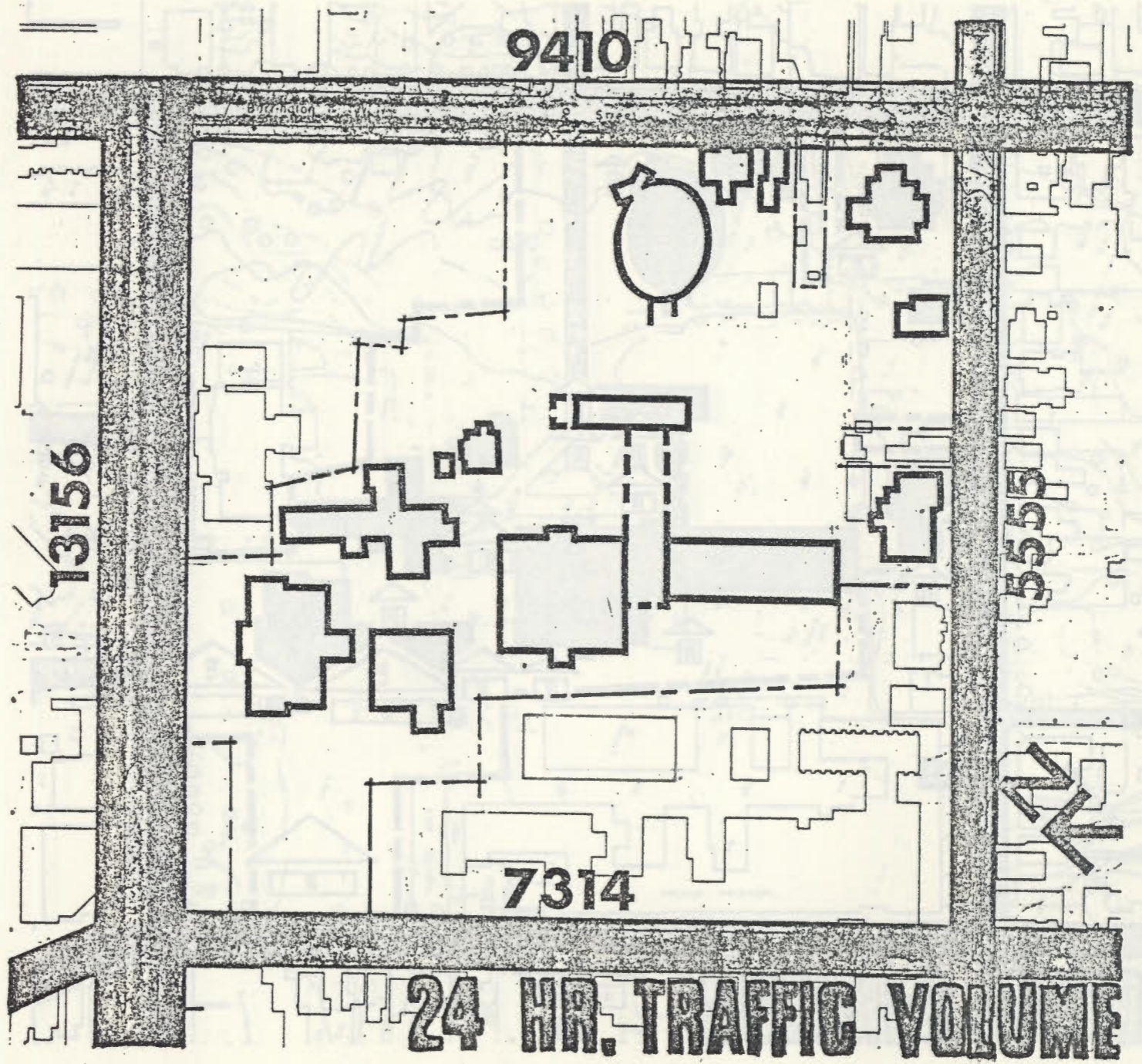
ENVIRONMENTAL  
 CONSIDERATIONS



ENVIRONMENTAL  
CONSIDERATIONS

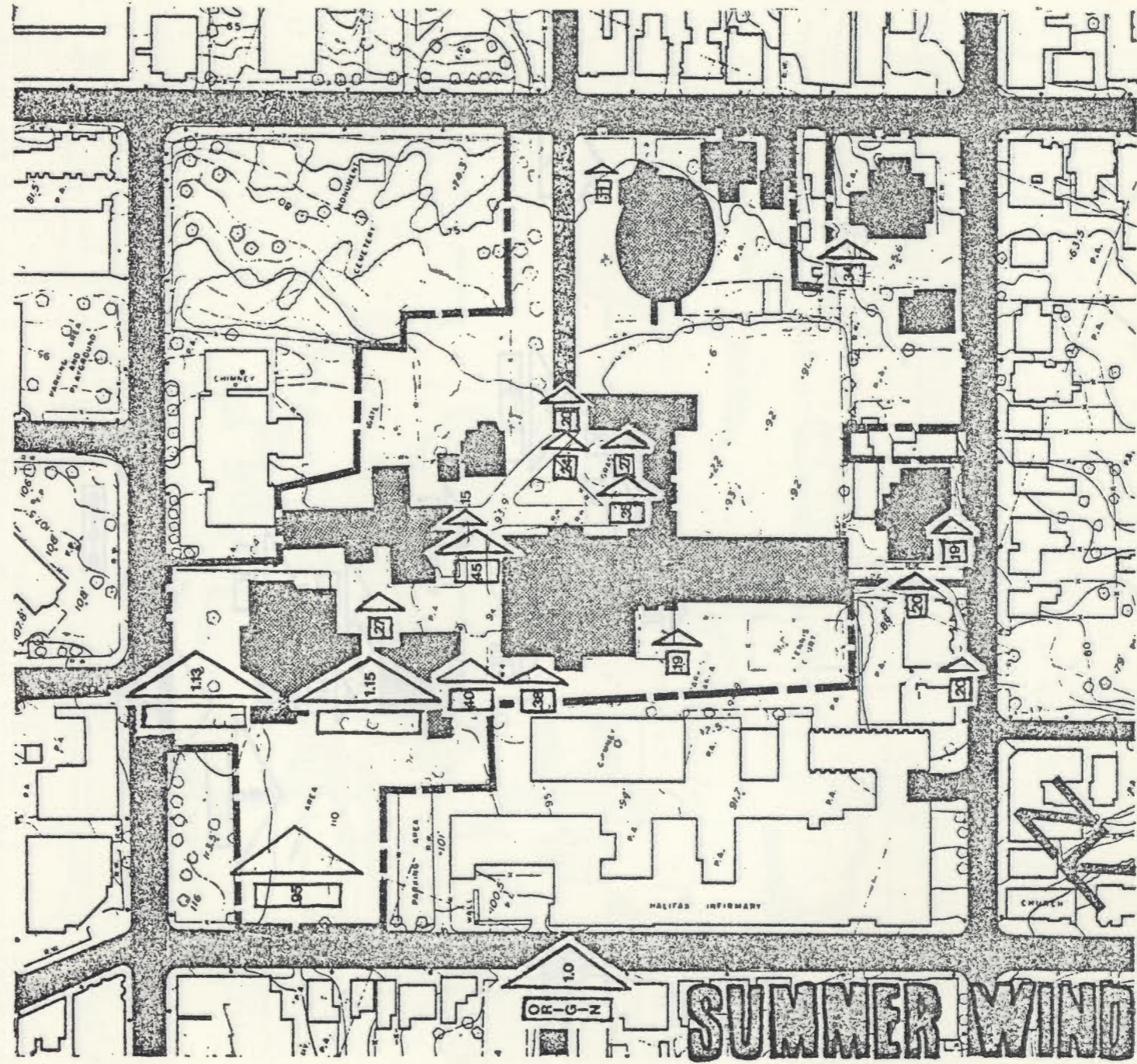


ENVIRONMENTAL  
CONSIDERATIONS

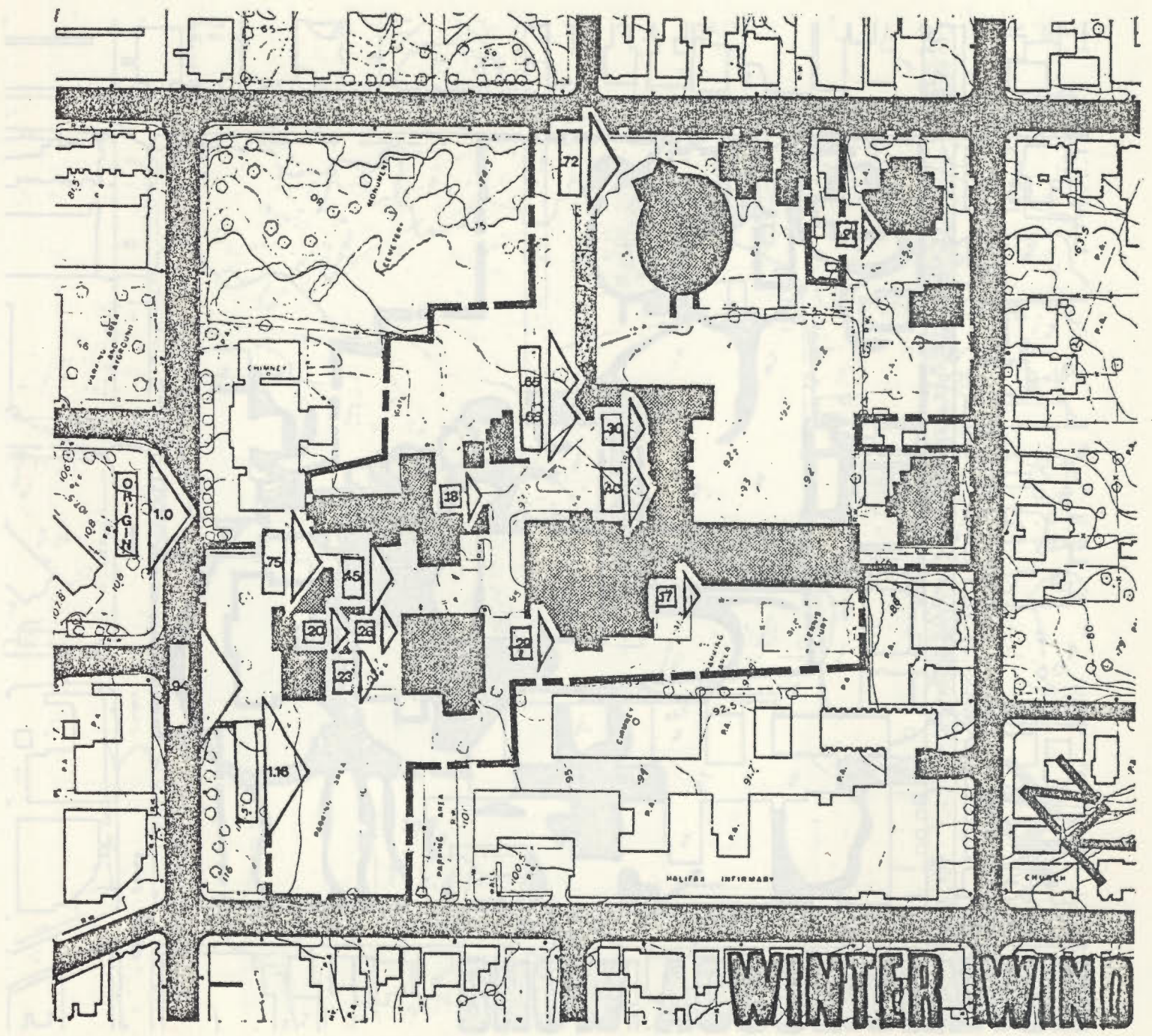


24 HR. TRAFFIC VOLUME

ENVIRONMENTAL  
CONSIDERATIONS

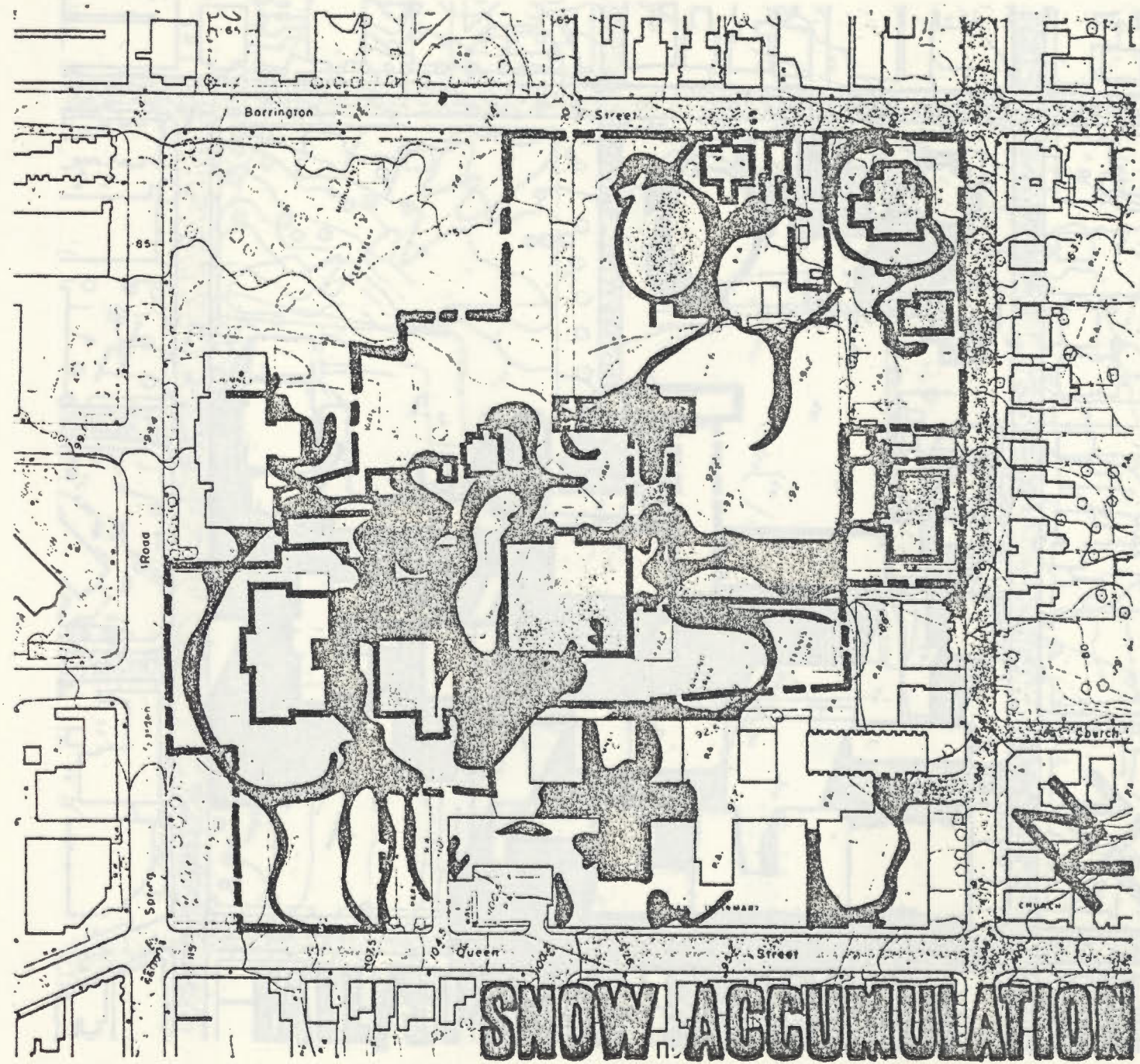


ENVIRONMENTAL  
CONSIDERATIONS

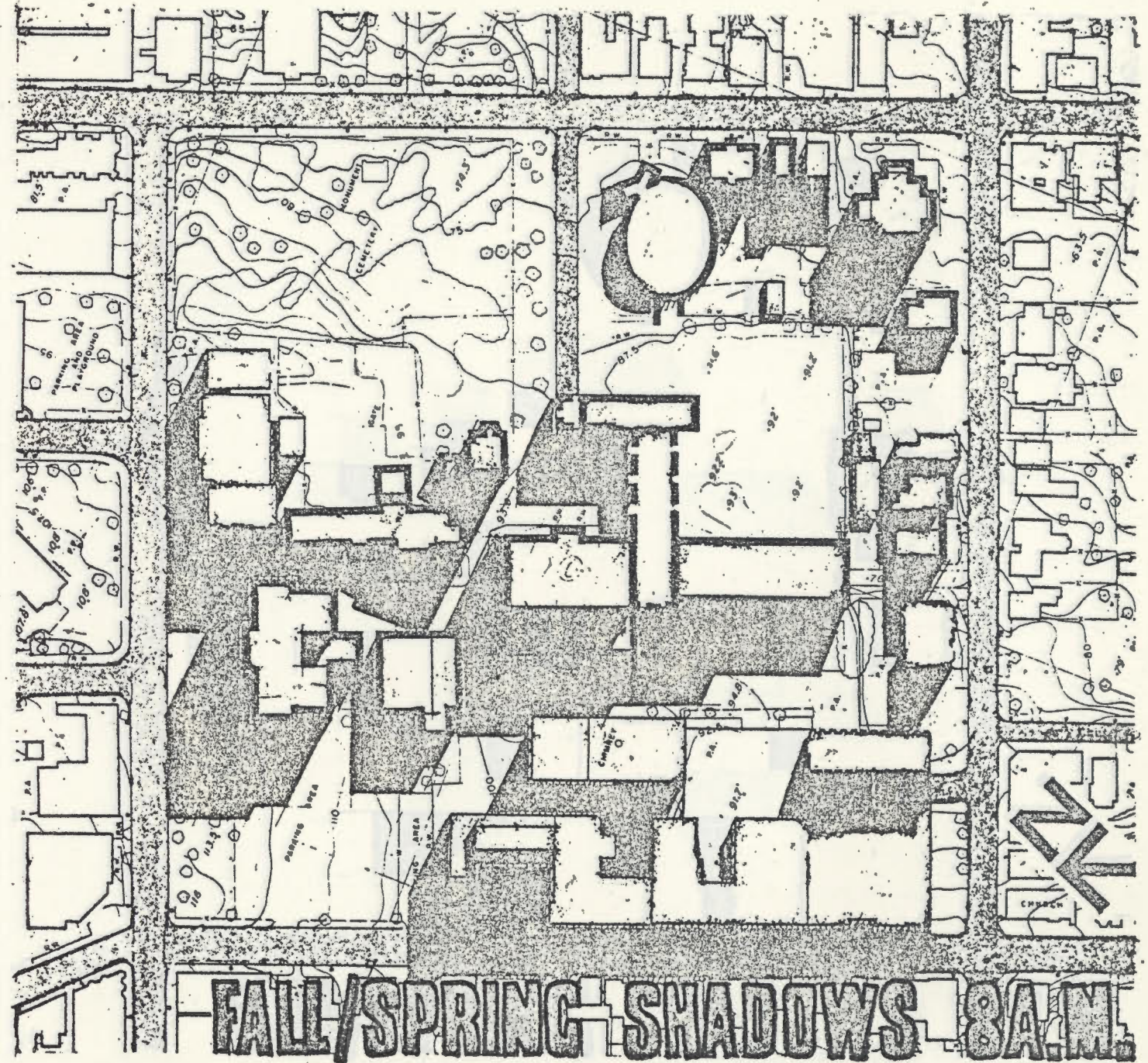


WINTER WIND

ENVIRONMENTAL  
CONSIDERATIONS

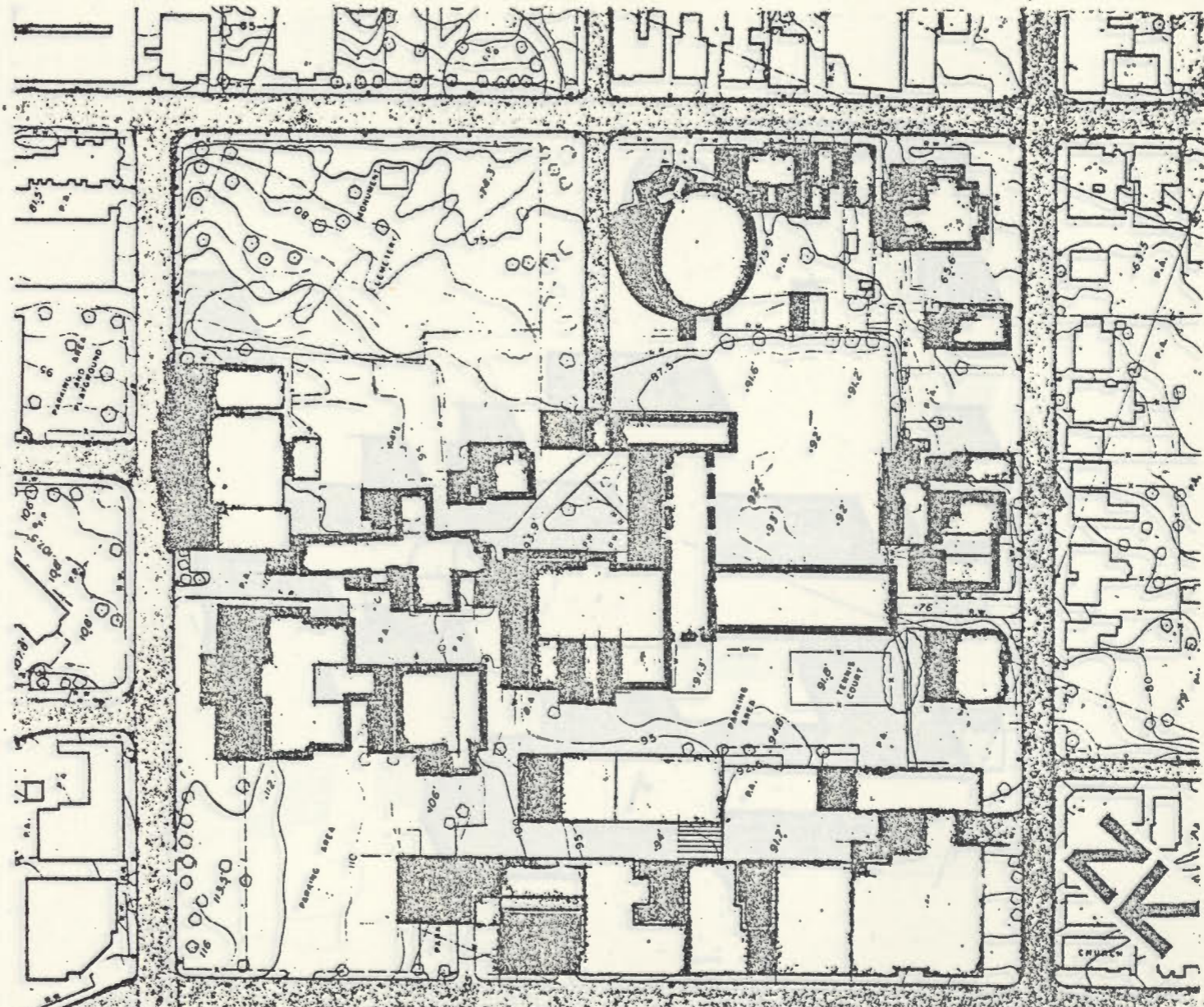


ENVIRONMENTAL  
CONSIDERATIONS



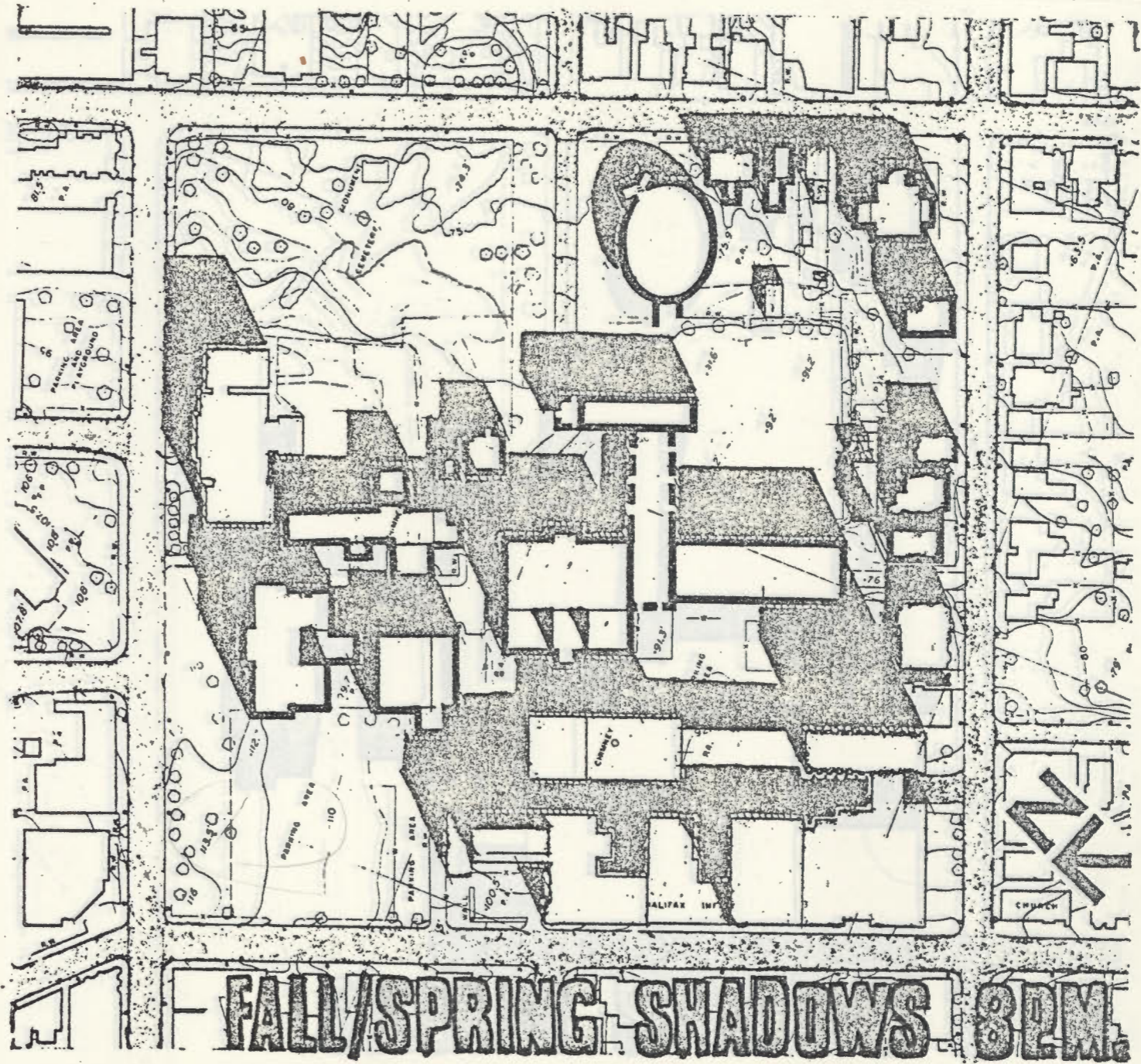
ENVIRONMENTAL  
CONSIDERATIONS



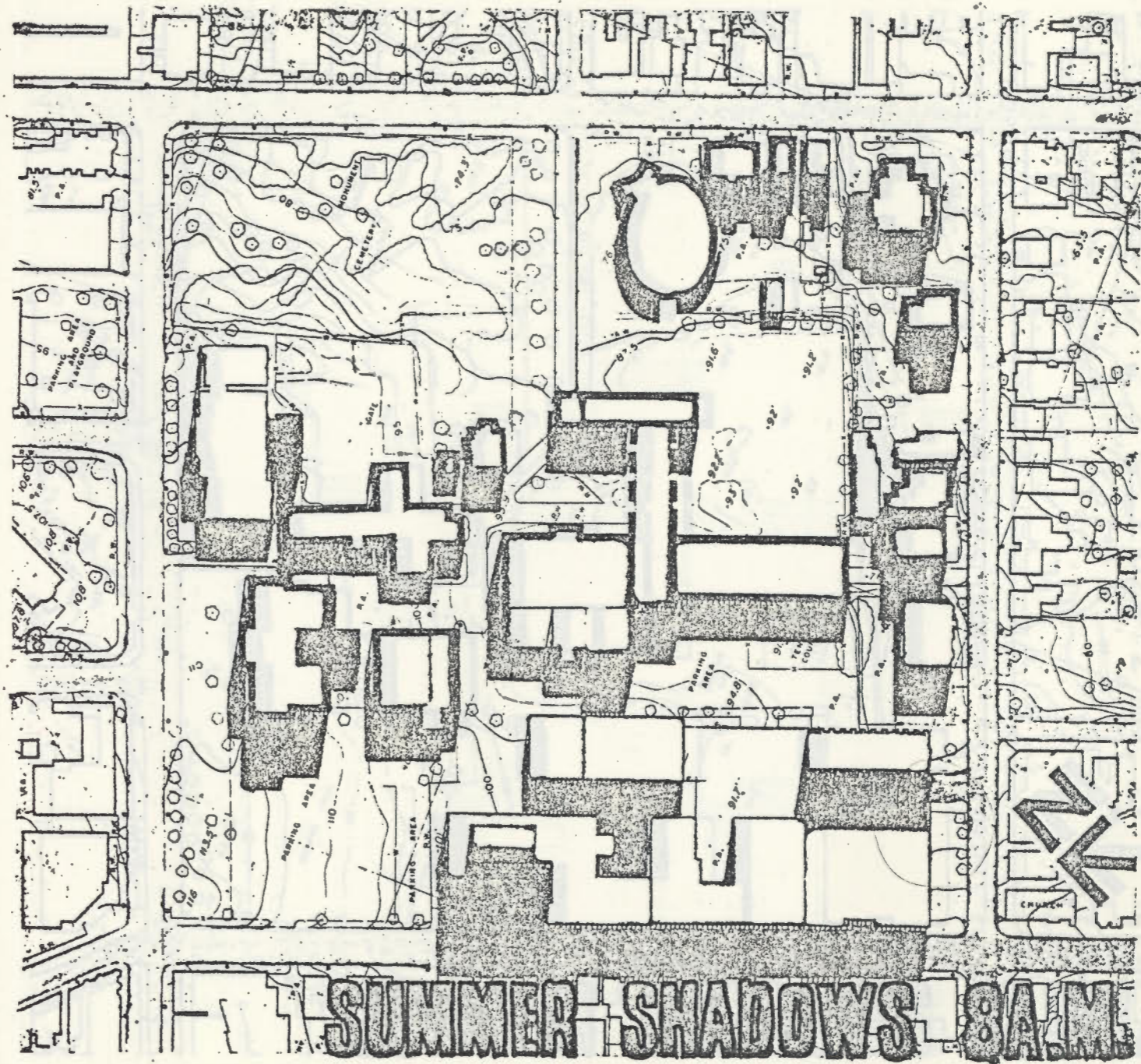


FALL/SPRING SHADOWS 12PM.

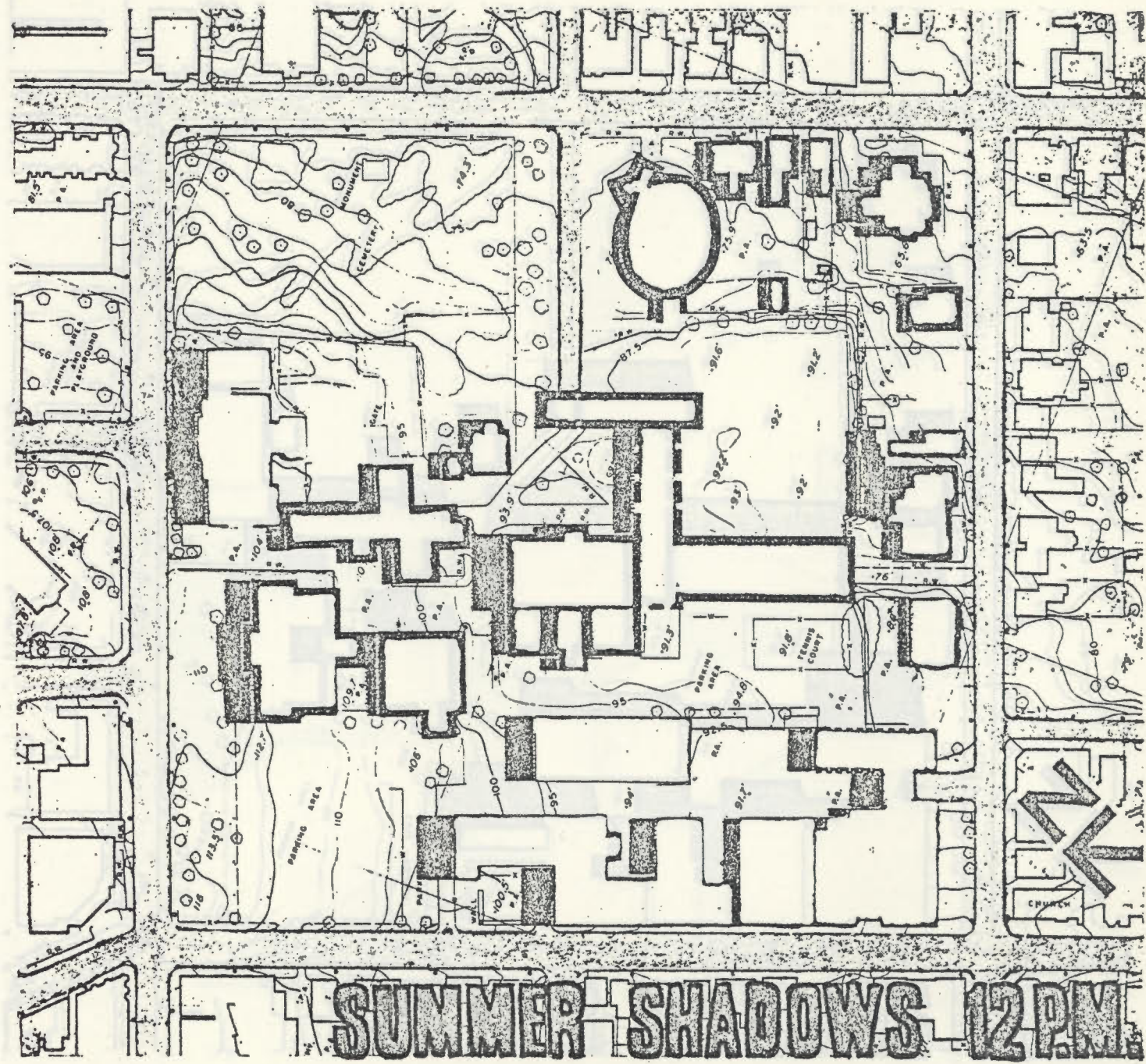
ENVIRONMENTAL  
CONSIDERATIONS



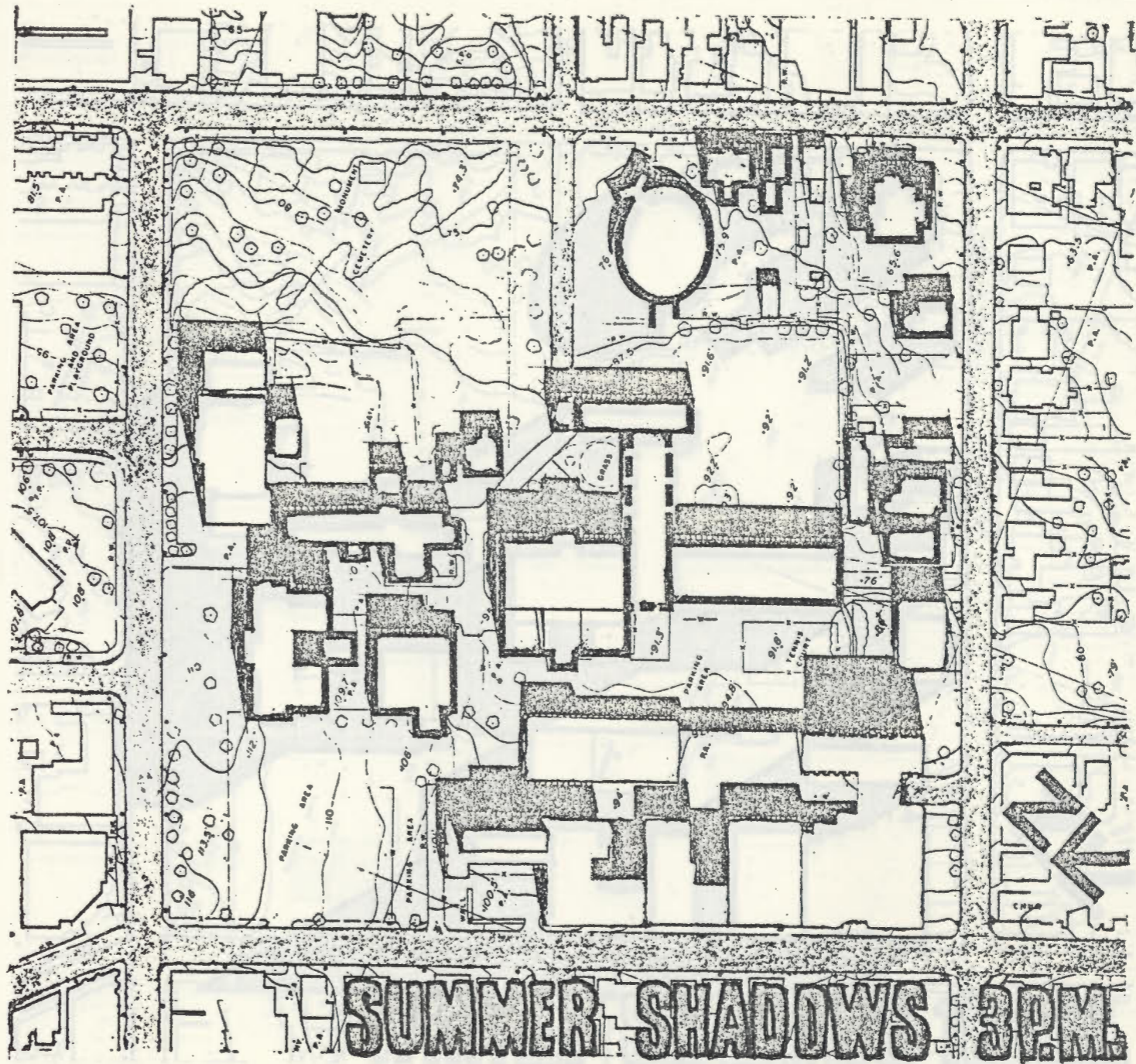
ENVIRONMENTAL  
CONSIDERATIONS



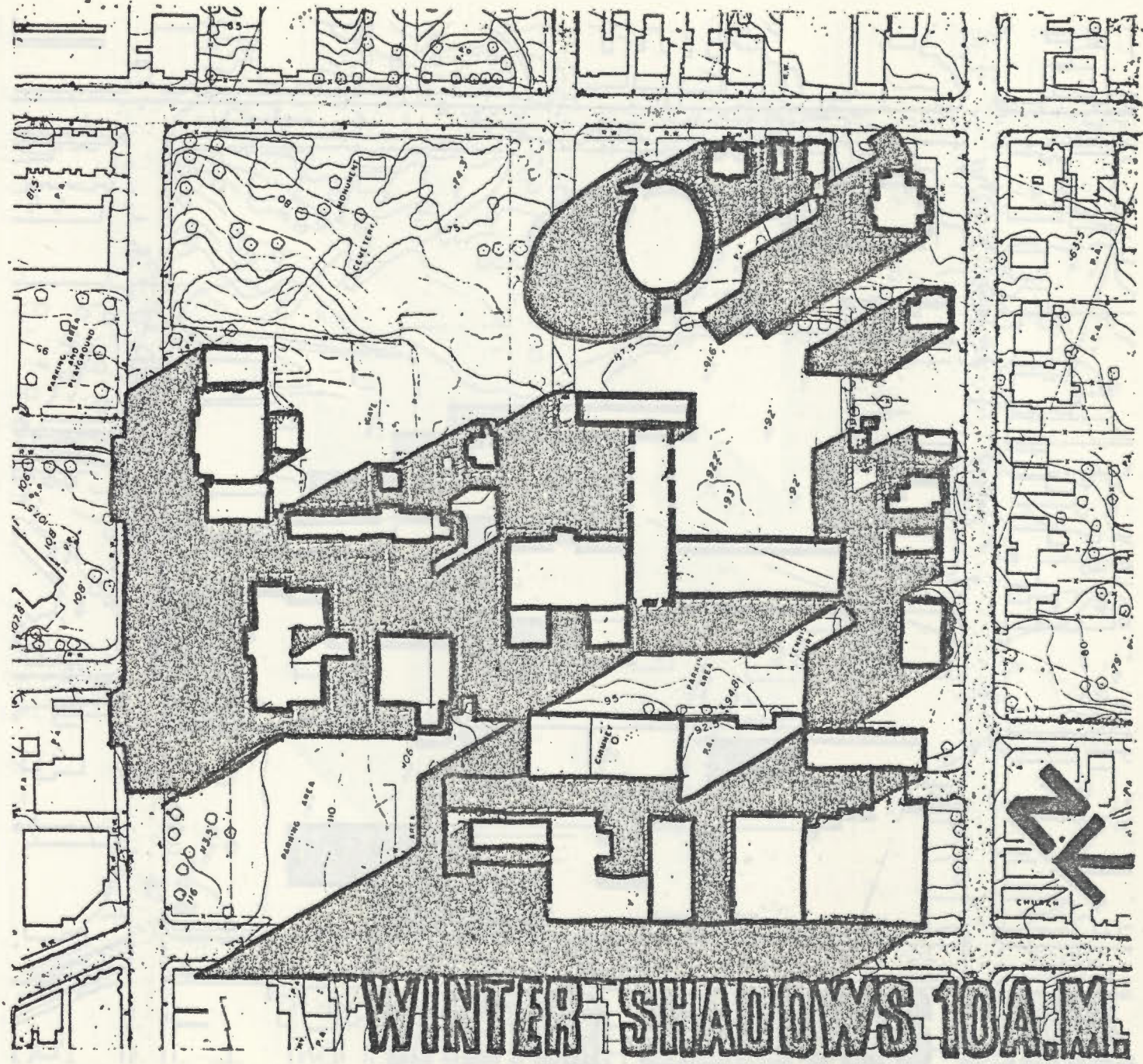
ENVIRONMENTAL  
CONSIDERATIONS



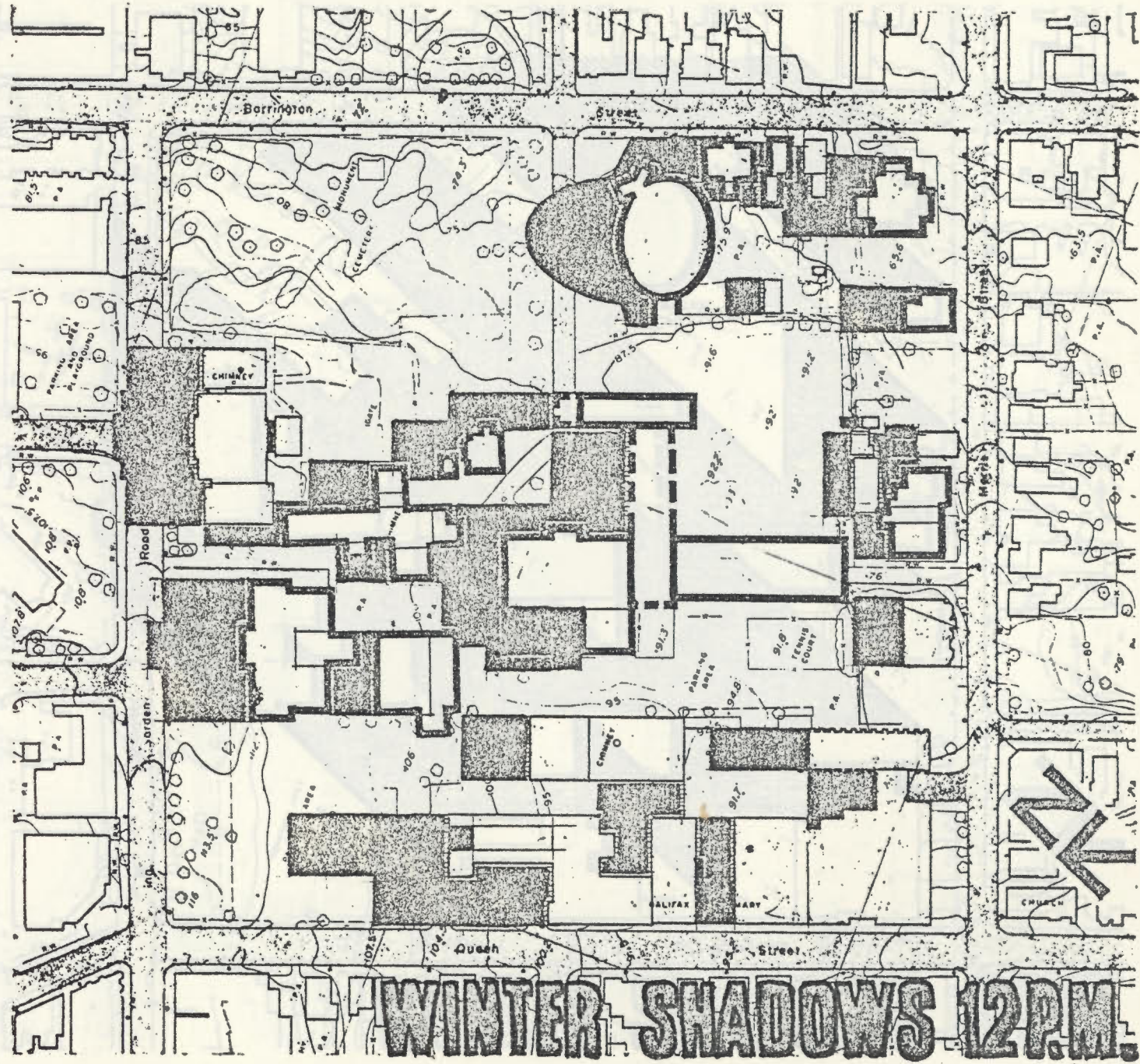
ENVIRONMENTAL  
CONSIDERATIONS



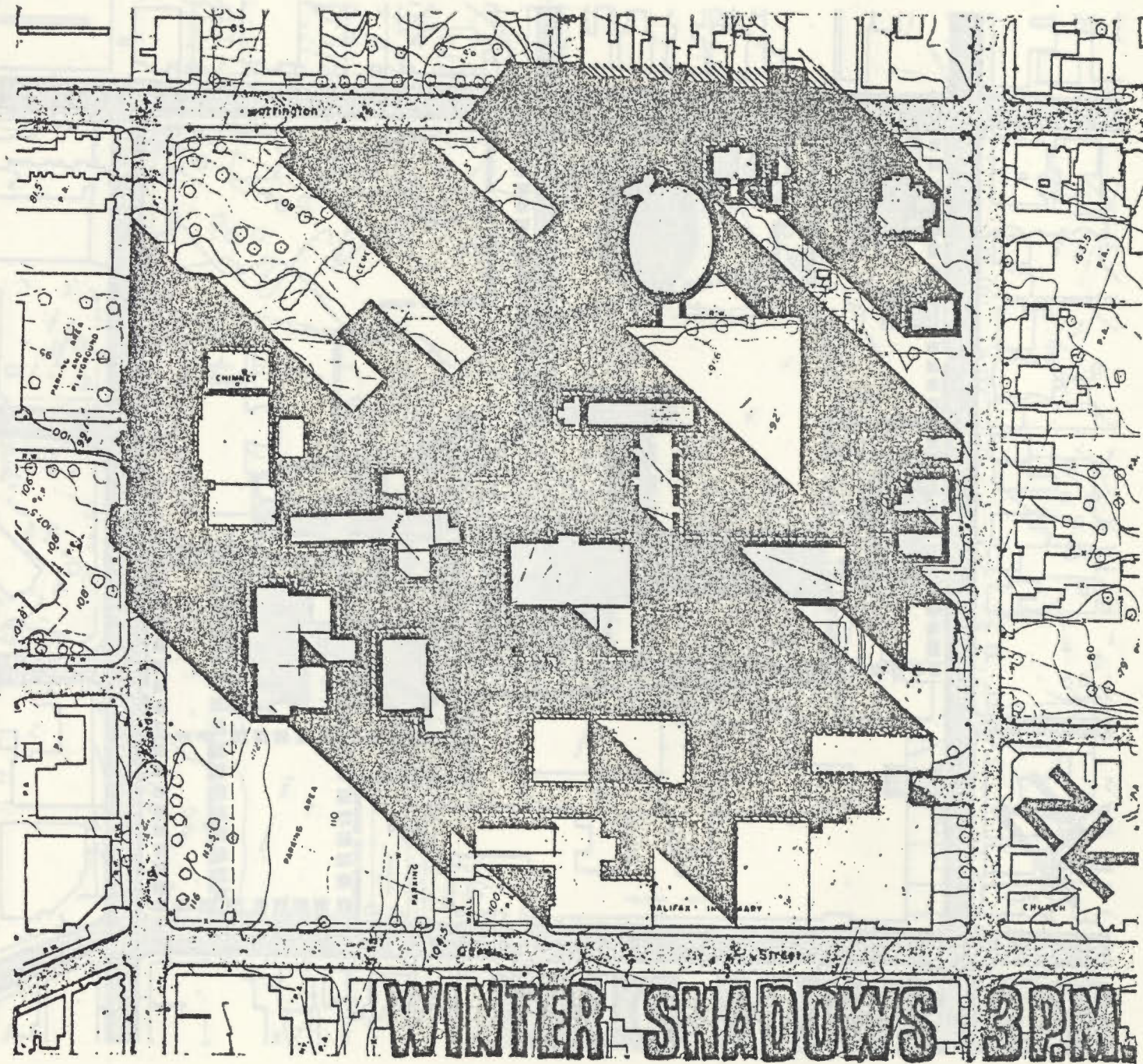
ENVIRONMENTAL  
CONSIDERATIONS



ENVIRONMENTAL  
CONSIDERATIONS

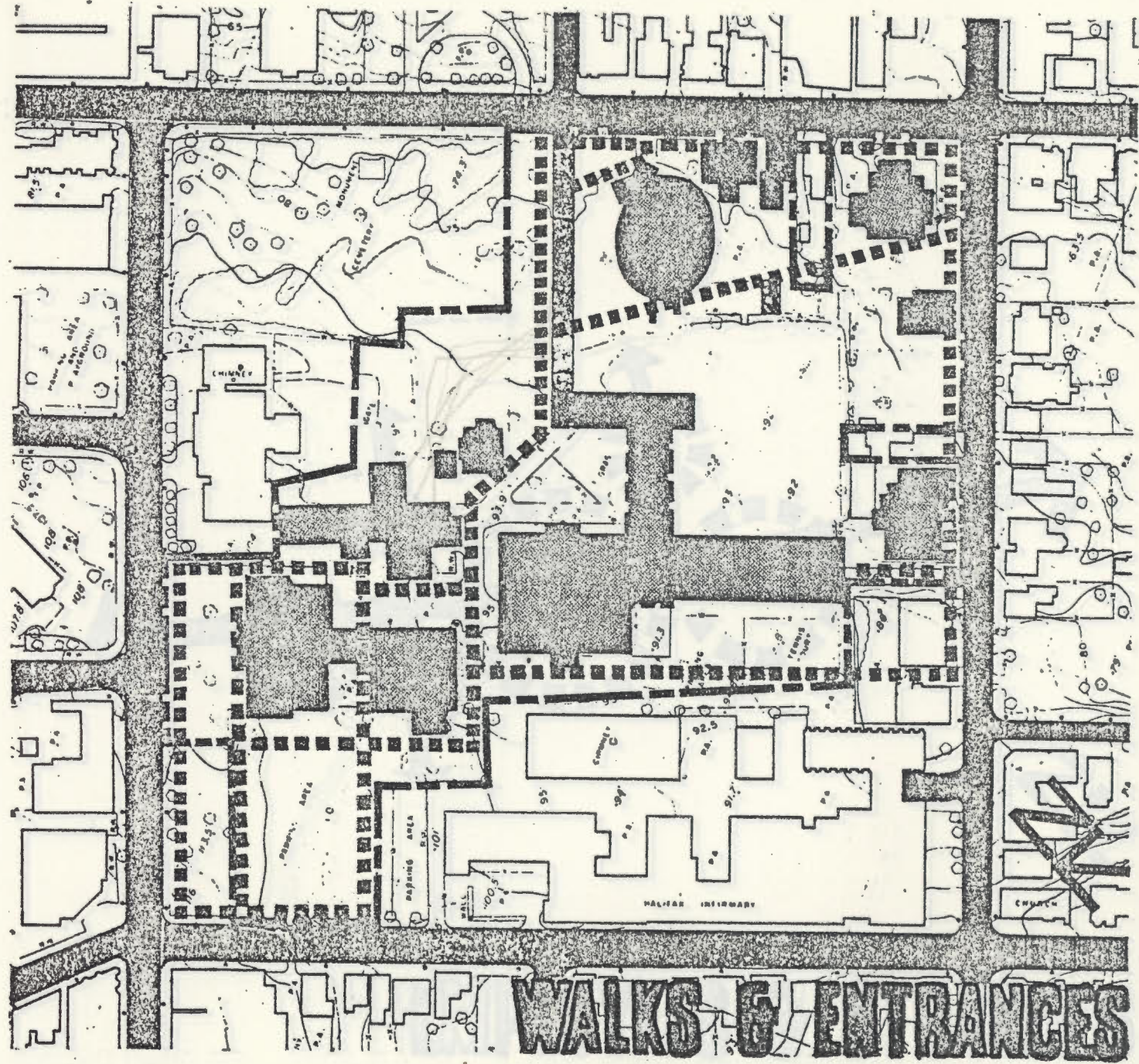


ENVIRONMENTAL  
CONSIDERATIONS

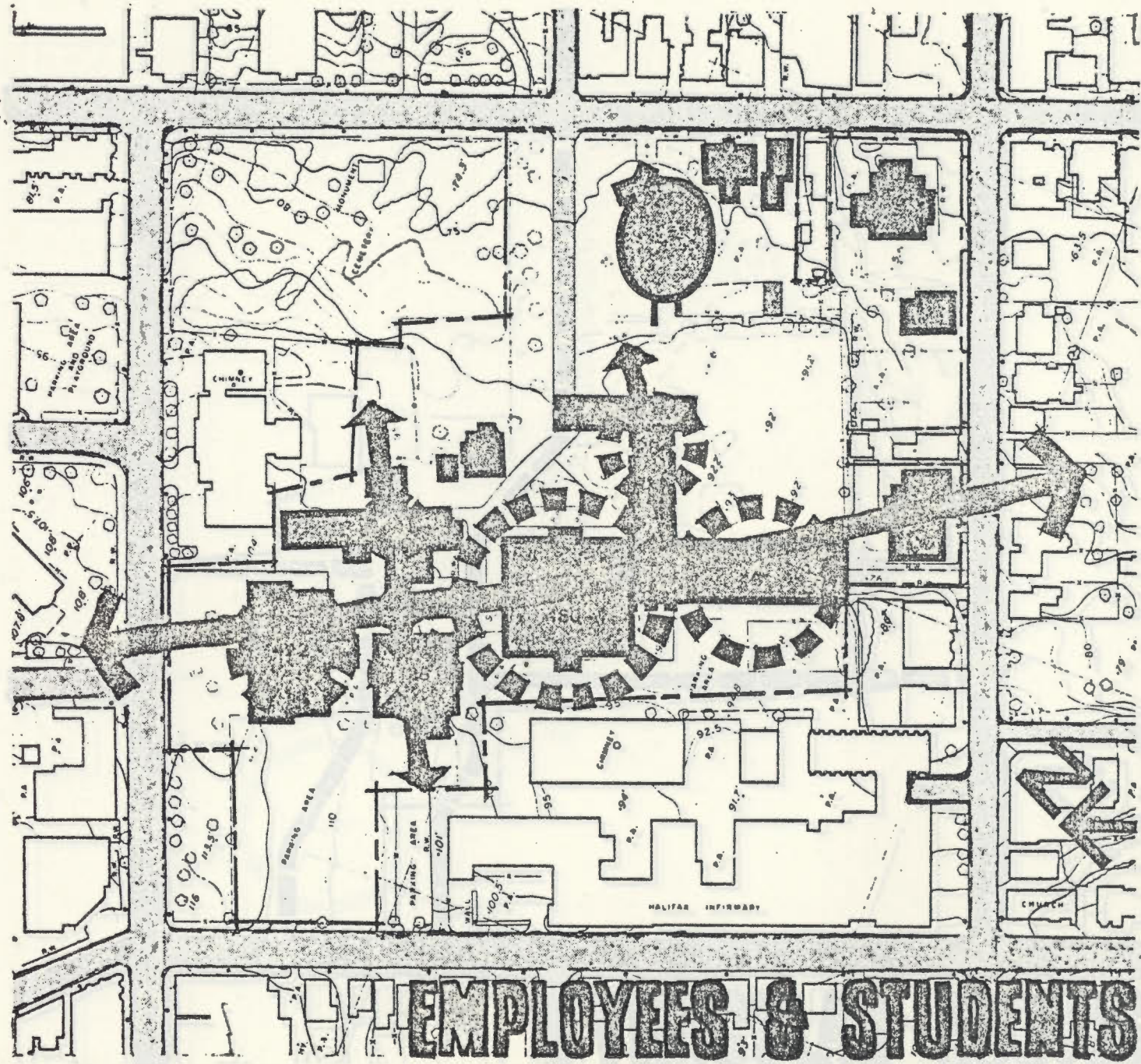


ENVIRONMENTAL  
CONSIDERATIONS

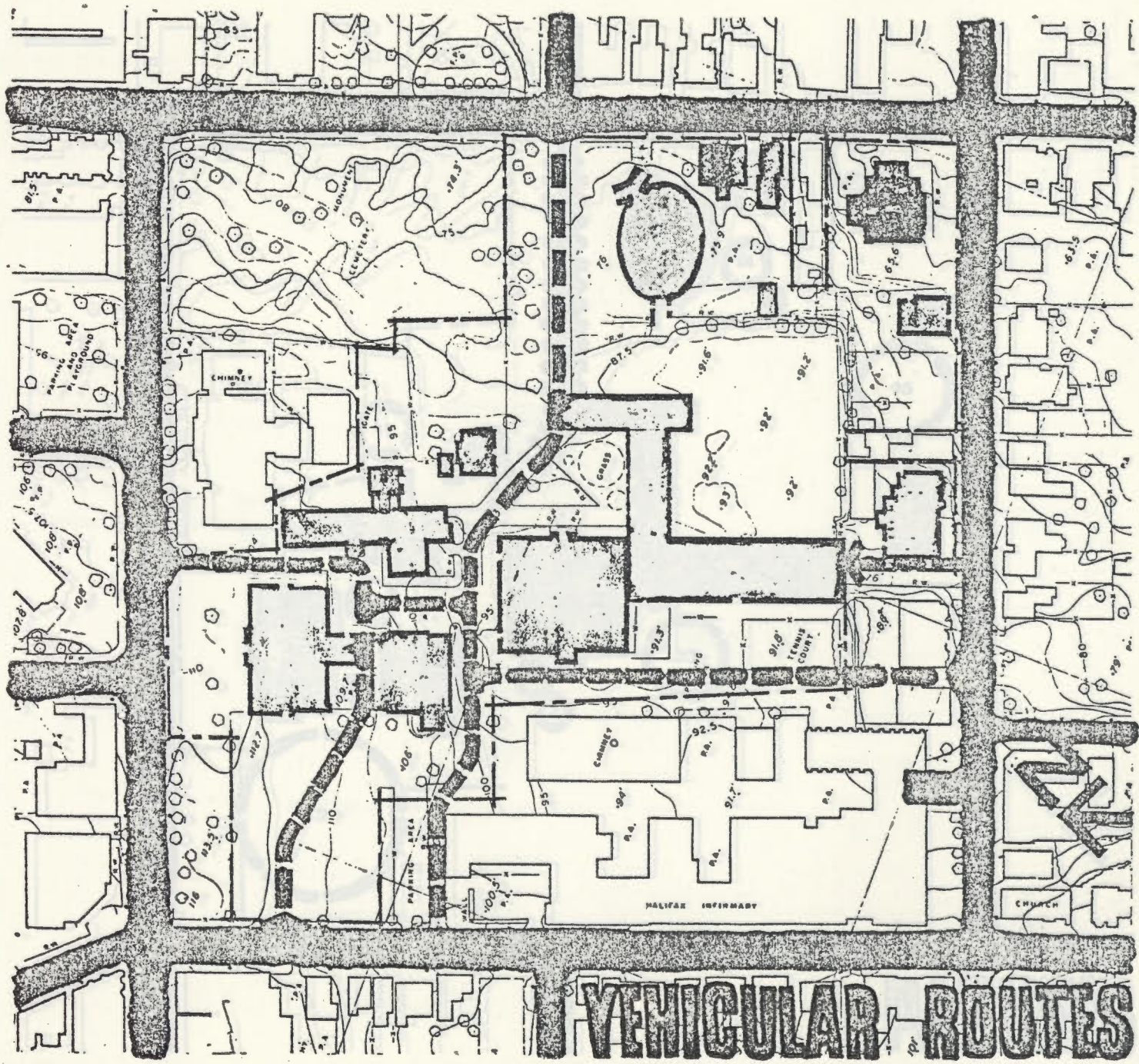




CIRCULATION

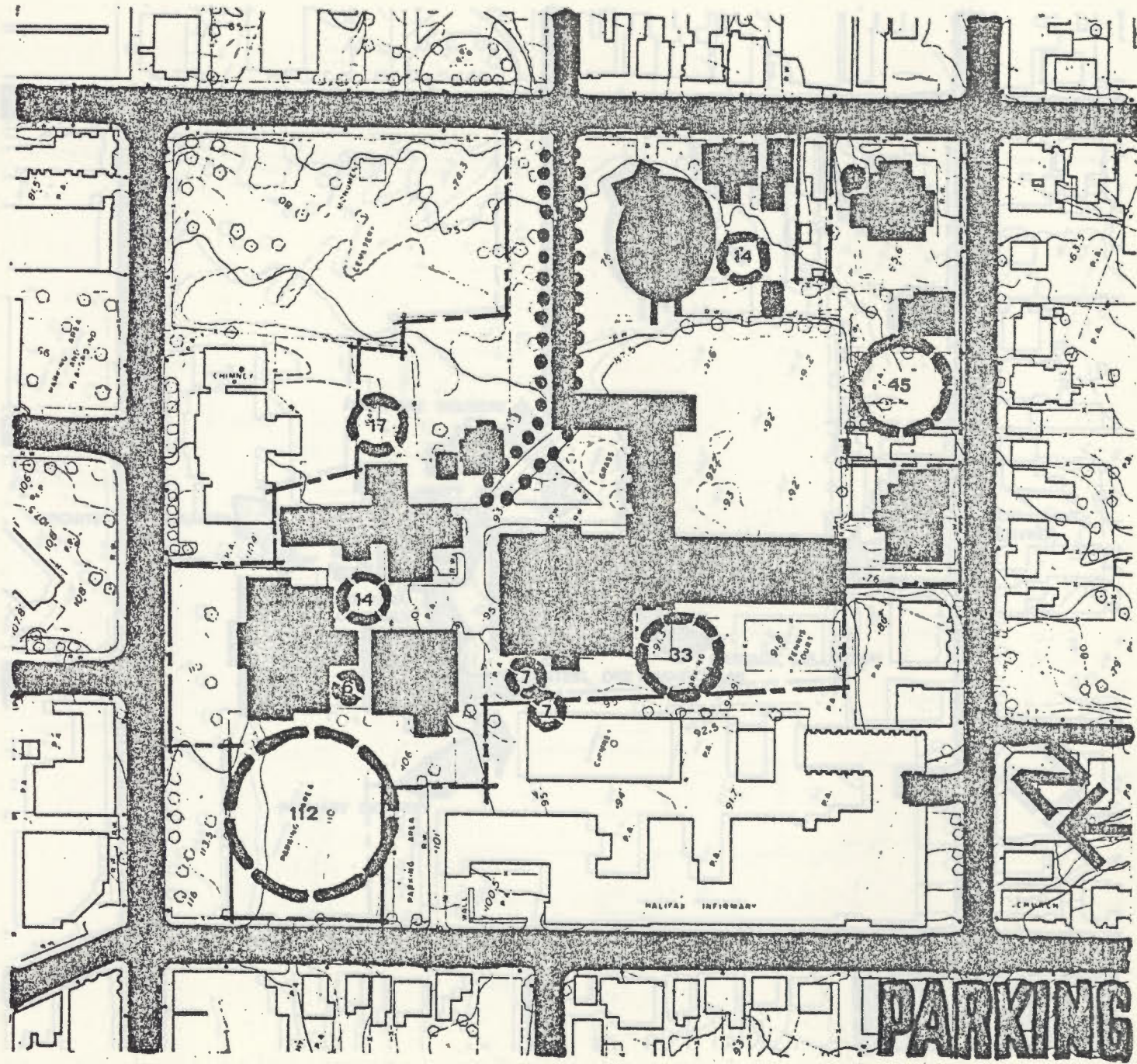


CIRCULATION



**VEHICULAR ROUTES**

CIRCULATION



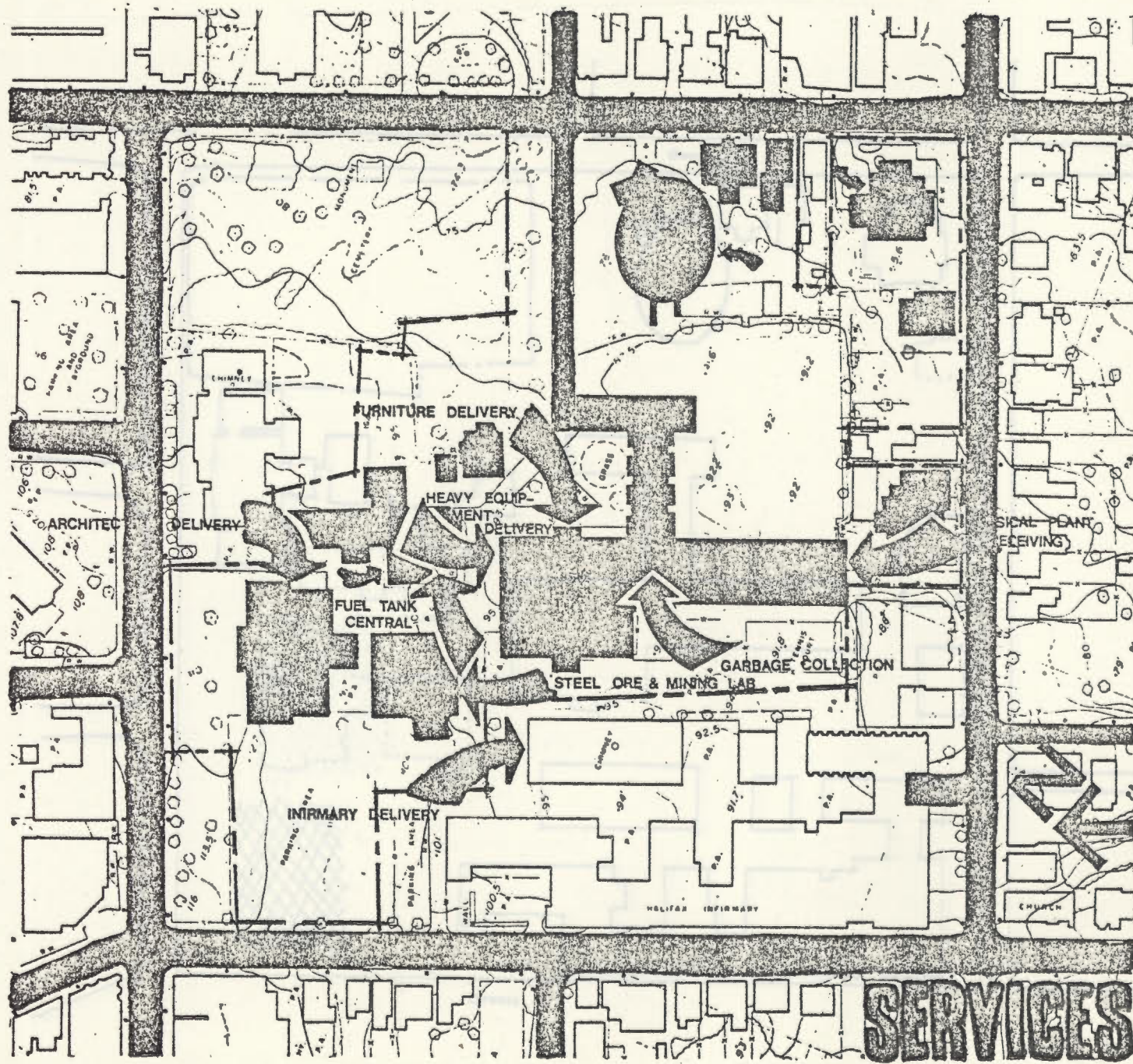
CIRCULATION

PRO

- OPPORTUNITY TO OPTIMIZE PARKING LOT & DEVELOP CONTINUITY OF SPAC UNDER 10'
- OPPORTUNITY TO DEVELOP QUAY ST. SIDEWALK
- EDGES UP BOUNDARY (A) FOR ACCESS TO CAMPUS CORE
- LEAVES COURTYARDS TO STAND ON ITS OWN

CON

- SWN FURTHER AWAY FROM CAMPUS KNOWLEDGE



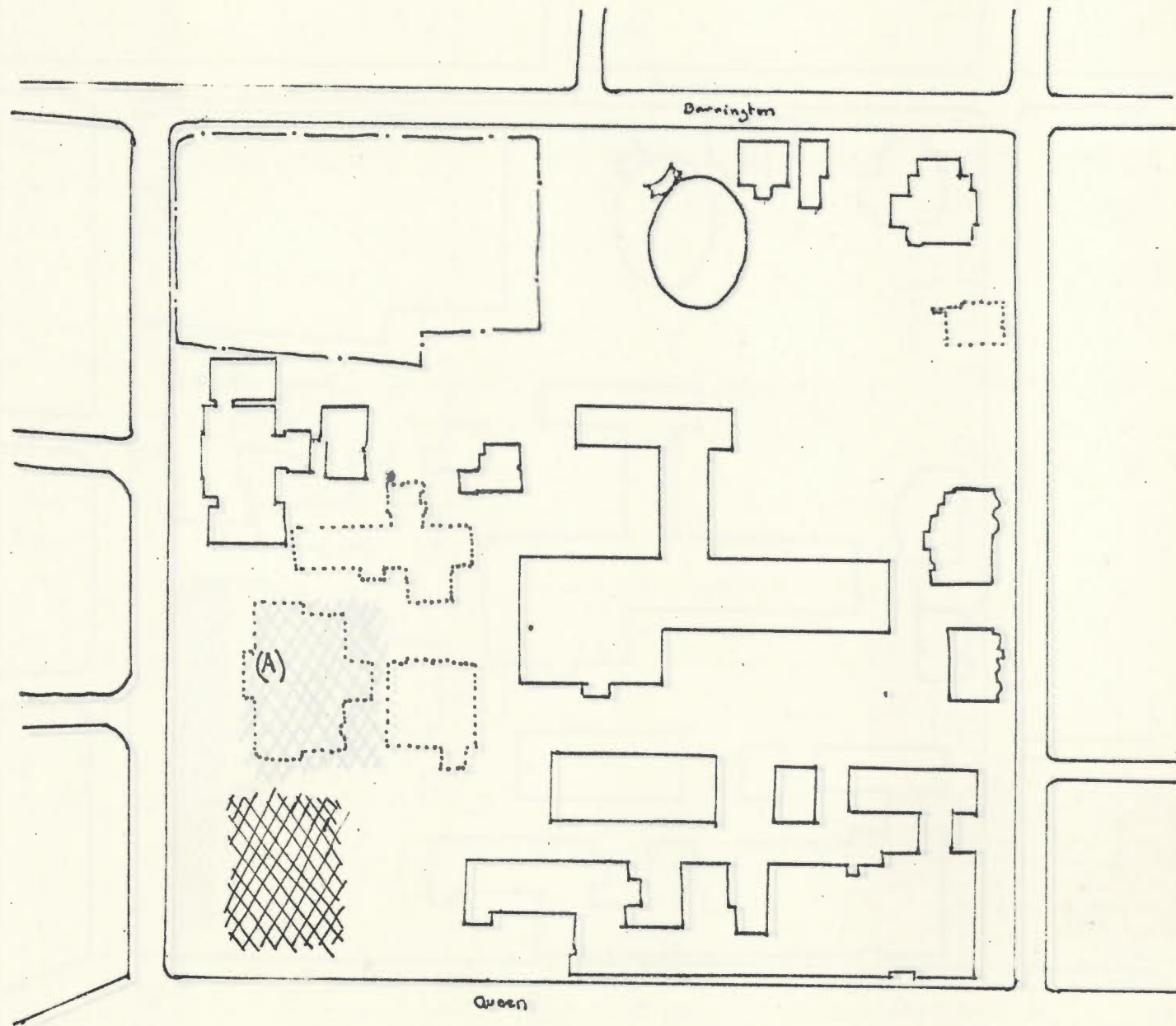
CIRCULATION

PRO

- OPPORTUNITY TO OBSCURE PARKING LOT A DEVELOP CONTINUITY OF SPR. GARDEN RD.
- OPPORTUNITY TO DEVELOP QUEEN ST STREETScape
- FREES UP GREENSPACE (A) FOR ACCESS TO CAMPUS CORE
- LEAVES COURTHOUSE TO STAND ON ITS OWN

CON

- EVEN FURTHER AWAY FROM CAMPUS ACTIVITIES



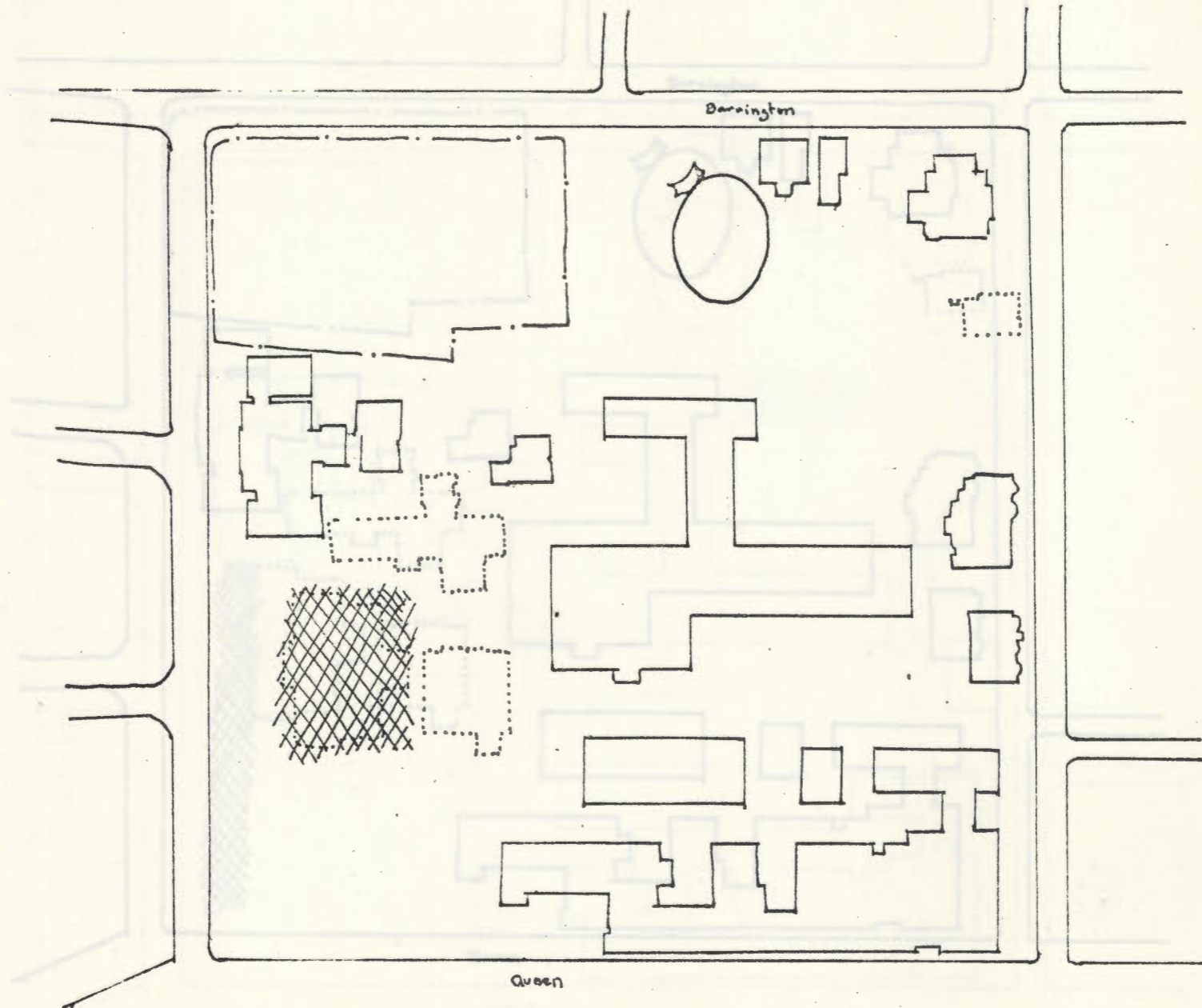
SITE OPTIONS

PRO

- COMPLETES BRUNSWICK ST AXIS
- OPPORTUNITY TO MAKE SOCIAL NODE → THEREBY COMPLEMENT EXISTING STREET ACTIVITY

CON

- CUTS OFF UNIVERSITY CORE FROM SPRING GARDEN
- DOESN'T ALLOW COURTHOUSE TO STAND ON ITS OWN



SITE OPTIONS

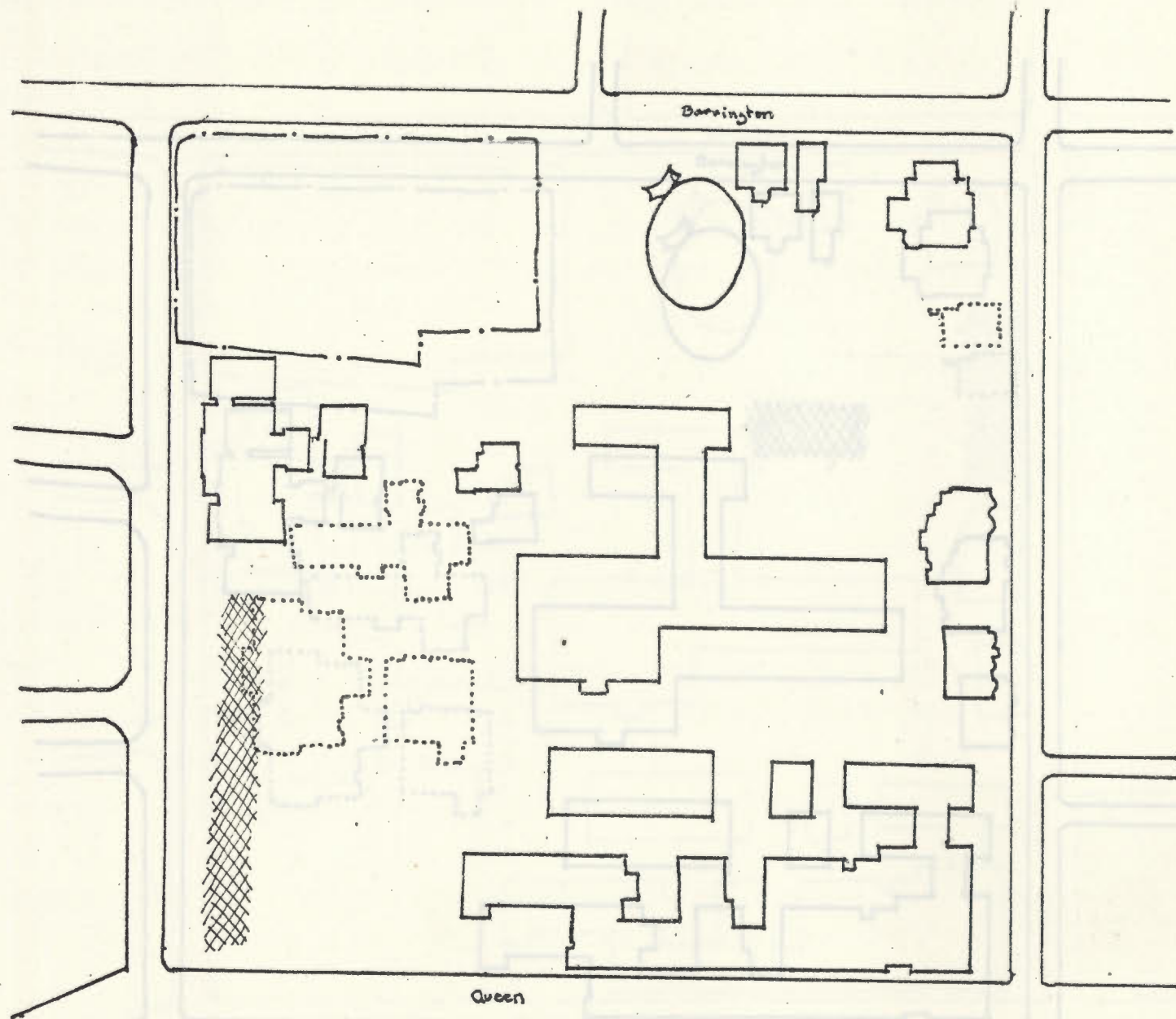
PRO

- SPRING GARDEN RD. CONTINUITY
- OBSCURE PARKING (POSSIBILITY OF UNDERGROUND PARKING)
- OPPORTUNITY TO INCORPORATE CAMPUS ENTRANCE



CON

- PROBLEMS WITH INTERNAL CIRCULATION + PLANNING



SITE OPTIONS

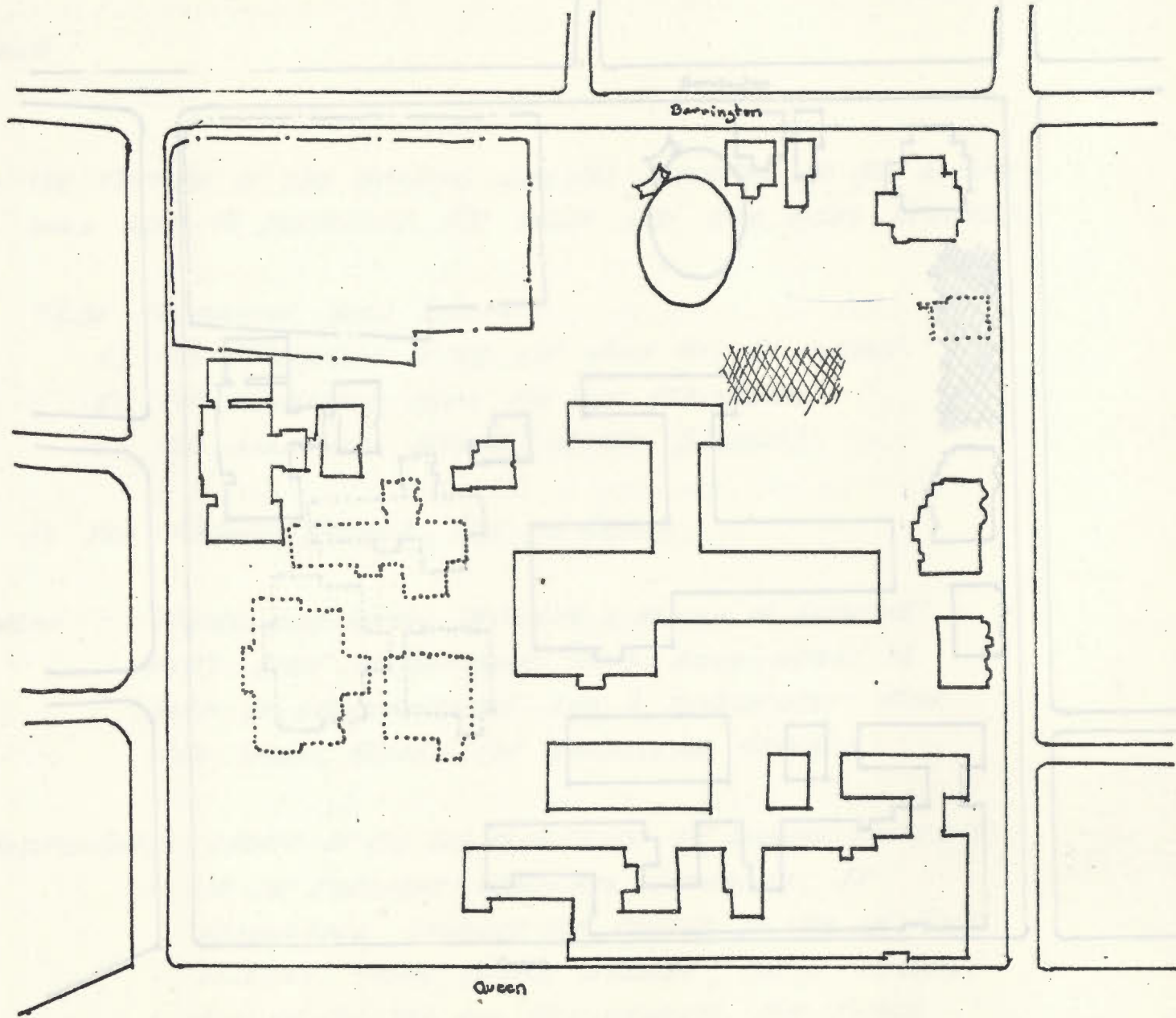


PRO

- CLOSE TO OTHER CAMPUS ACTIVITIES
- OPPORTUNITY TO USE SLOPE OF LAND

CON

- DESIGN LIMITATION ie CONTEXT
- LOSS OF SPRING GARDEN OPPORTUNITIES
- LOSS OF INDEPENDENCE



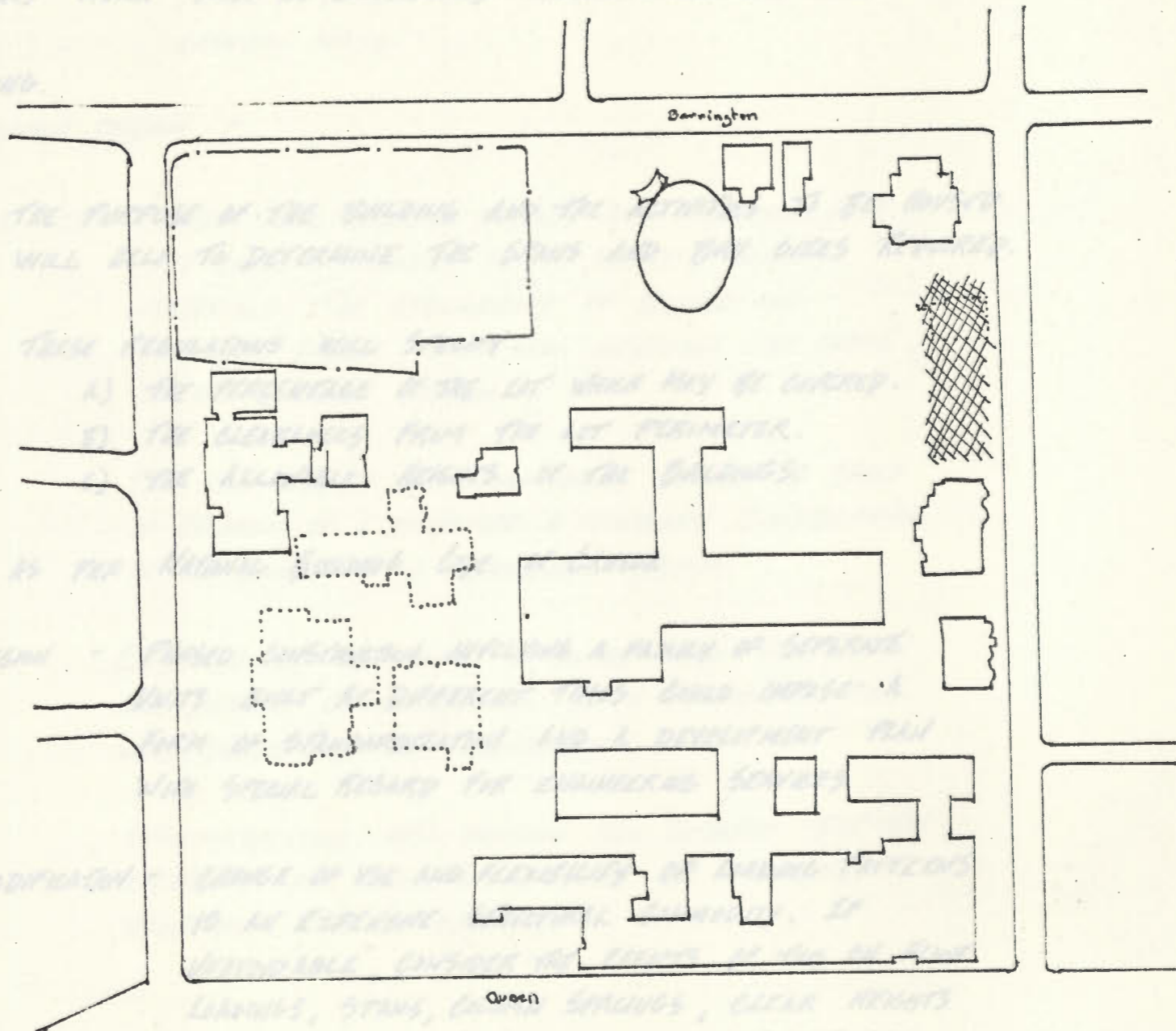
SITE OPTIONS

PRO

- COMPLETES CAMPUS QUAD
- OPPORTUNITY TO DEVELOP CAMPUS HEART
- INCREASED PROXIMITY TO OTHER CAMPUS ACTIVITIES

CON

- MORRIS ST HEIGHT RESTRICTIONS
- SITE OF NAVAL RESEARCH OPPORTUNITIES
- LOSS OF SPRING GARDEN
- REDUCED LIGHT



SITE OPTIONS

THERE ARE MANY FACTORS WHICH MUST BE CONSIDERED WHEN CHOOSING A STRUCTURAL SYSTEM FOR A BUILDING.

**FUNCTIONAL LAYOUT** - THE PURPOSE OF THE BUILDING AND THE ACTIVITIES TO BE HOUSED WILL HELP TO DETERMINE THE SPANS AND BAY SIZES REQUIRED.

**ZONING REGULATIONS** - THESE REGULATIONS WILL SPECIFY:

- THE PERCENTAGE OF THE LOT WHICH MAY BE COVERED.
- THE CLEARANCES FROM THE LOT PERIMETER.
- THE ALLOWABLE HEIGHTS OF THE BUILDINGS.

**FIRE REGULATIONS** - AS PER NATIONAL BUILDING CODE OF CANADA

**PLANS FOR FUTURE EXPANSION** - PHASED CONSTRUCTION INVOLVING A FAMILY OF SEPARATE UNITS BUILT AT DIFFERENT TIMES COULD IMPOSE A FORM OF STANDARDIZATION AND A DEVELOPMENT PLAN WITH SPECIAL REGARD FOR ENGINEERING SERVICES.

**PLANS FOR INTERIOR MODIFICATION** - CHANGE OF USE AND FLEXIBILITY OF LOADING PATTERNS IS AN EXPENSIVE STRUCTURAL COMMODITY. IF UNAVOIDABLE, CONSIDER THE EFFECTS OF THIS ON FLOOR LOADINGS, SPANS, COLUMN SPACINGS, CLEAR HEIGHTS AND ON THE USE AND REQUIREMENTS FOR FUTURE

STRUCTURES

SOUTH END DEVELOPMENT IS ADJACENT TO  
SERVICES, DEMOUNTABLE PARTITIONS AND NON-LOAD  
BEARING WALLS. 1980

## SOIL CONDITIONS AND FOUNDATION DESIGN -

AVAILABILITY OF MATERIALS - CHECK LOCAL BUILDING METHODS AND MATERIALS. NOTE ANY LOCAL DIFFICULTIES IN THE SUPPLY OF BUILDING MATERIALS. THE AVAILABILITY OF SKILLED AND UNSKILLED LABOUR WILL ALSO INFLUENCE THE CHOICE OF THE BUILDING SYSTEM.

SPEED OF ERECTION - THE HIGH COST OF BORROWING MONEY MAKES THE SPEED OF ERECTION OF A STRUCTURE A NECESSARY CONSIDERATION IN THE CHOICE OF A STRUCTURAL SYSTEM.

COST OF MATERIALS - CLOSENESS TO THE SOURCE OF SUPPLY AND THE SUPPLY AND DEMAND CHARACTERISTICS AT A PARTICULAR TIME WILL DETERMINE THIS COMPONENT.

COST OF FABRICATION - STANDARDIZATION WILL IMPROVE THIS SITUATION BUT THE NECESSITY FOR USING LARGE SCALE OR SPECIALIZED EQUIPMENT WILL BE EXPENSIVE.

STRUCTURES

# SOUTH END DETAILED AREA PLAN 1980

POLICY 4.5.1 . WHERE UNIVERSITY DEVELOPMENT IS ADJACENT TO RESIDENTIAL AREAS, CITY TO ENSURE THAT SUCH MAINTAINS SCALE OF AREA. PROPORTION, SET-BACK, AND BUILDING LINES ALSO TO BE COMPATIBLE.

POLICY 4.5.2 . ACADEMIC AND CULTURAL FACILITIES, AND STUDENT CENTERS SHALL BE ENCOURAGED TO LOCATE WITHIN THE INTERIORS OF EXISTING DESIGNATED UNIVERSITY AREAS.

POLICY 7.5.3 . ANY NEW UNIVERSITY DEVELOPMENT ON MORRIS STREET OR BARRINGTON STREET SHALL NOT EXCEED 50 FEET IN HEIGHT.

DEVELOPMENT ON REMAINDER OF CAMPUS  
SHALL NOT EXCEED 70 FEET.

POLICY 7.5.4 • THE CITY SHALL PERMIT UNIVERSITY USE OF PARKING  
LOT AT CORNER OF QUEEN STREET AND SPRING  
GARDEN ROAD PROVIDED SAID USES DO NOT EXCEED  
70% OF GROSS SQUARE FOOTAGE OF DEVELOPMENT,  
AND THAT SAID USES ARE BELOW ANY RESIDENTIAL  
USES CONTAINED IN THE BUILDING.

POLICY 7.5.4.1 • ON SAID PARKING LOT, THE CITY SHALL PERMIT  
A MAXIMUM HEIGHT OF 8 STOREYS OR 70 FEET,  
ENCOURAGE THE RETENTION OF MATURE TREES,  
AND REQUIRE A MINIMUM SETBACK OF 40  
FROM SPRING GARDEN ROAD STREET LINE.

## PROGRAM OF SPACES-ZONING

### THE NATIONAL BUILDING CODE OF CANADA 1977:

In the N.B.C. classification by group or division of typical occupancies Tech Con is classified as:

Assembly occupancies group A Division 2.

- 3.1.3.A. All group A division 2 buildings require a fire separation of one hour.
- 3.1.4. Combustable construction up to two storeys.
- 3.1.4.5. Non combustable construction.
- 3.1.5.(5) Suspended ceilings.
- 3.1.8. Fire walls.
- 3.1.9. Fire stopping.

A building classified as group A division 2 occupancy that does not exceed one storey in building height and in which the building area is not greater than 2974.4 sq. m if unsprinklered or 5948.8 sq. m if sprinklered, may be constructed with a roof of heavy timber construction and have columns of heavy timber construction.

- 3.2.6.5. Venting to aid firefighting.
- 3.2.7. Provisions for physically handicapped persons. i.e. entrance, public spaces and washrooms.
- 3.3.1.2.(1) Access to Exits.  
For group A with a max. of 139.4 sq. m floor area the max. distance to egress door is 15.24 m.
- 3.3.1.6.(1) The min. width of every public corridor shall be 1.118 m.
- 3.3.1.7.(1) Occupancy over 60 people ... door must swing in direction of exit travel.
- 3.3.2. Assembly occupancy
- 3.3.2.4. Fixed seats. (applies to lecture room etc.)  
Floor area max. gradient 1 to 8.  
45.72 m max. length of travel to exit.
- 3.4.6. Exit signs.
- 3.4.8. Type of exit facilities.  
Finish for treads, free of ice & snow, 3 risers min., 3.658 m max.  
vertical rise between floors or landings. Handrails etc.

# PROGRAM OF SPACES-ZONING

## A. PUBLIC ZONE

1. RECEPTION AREA / FOYER
2. EXHIBITION ROOM
3. GENERAL OFFICE / DEANS OFFICE
4. RECEPTION

## B. STUDENT STAFF ACTIVITY ZONE

1. STAFF / STUDENT LOUNGE
2. COFFEE SHOP
3. SPECIAL PURPOSE AREA / A/V MEETINGS
4. A/V OFFICE

## C. RESOURCE & INFORMATION ZONE

1. RESOURCE ROOM
2. ARCHITECTURAL SUPPLY STORE
3. BUILDING MAT'L. CENTRE
4. FACULTY OFFICES

## D. GRAPHIC ARTS ZONE

1. A.V. LAB (PRODUCTION)
2. PHOTO LAB
3. DRAWING STUDIO
4. SPECIAL PURPOSE RM.

## E. PROJECT FABRICATION

1. WORKSHOP
2. MODEL ASSEMBLY
3. SCULPTURE STUDIO
4. RESEARCH FACILITIES

## F. CLASSROOMS & SEMINAR AREA

1. CLASSROOMS / LECTURE THEATRES
2. SEMINAR ROOMS
3. THEATRE & PROJECTION ROOM
4. JURY SPACES

## G. STUDENT WORK ZONE

1. GROUP WORK AREAS
2. STUDIO SPACE / INDIVIDUAL SPACE
3. DESIGN STAFF OFFICES
4. OUTDOOR WORK SPACE
5. STUDENT LOUNGE (SMALL)
6. MURP STUDIO
7. DUPLICATION ROOM

## H. BUILDING SCIENCE ZONE

1. ENVIRONMENT LAB
2. WIND TUNNEL
3. CONSTRUCTION LAB
4. TECHNICIAN'S LOUNGE
5. COMPUTER CENTRE

## I. MECHANICAL & SERVICE ZONES

1. MECHANICAL ROOM
2. SPECIAL STORAGE
3. ELEVATORS
4. MAINTENANCE / JANITORS ROOM.

## J. WASHROOMS

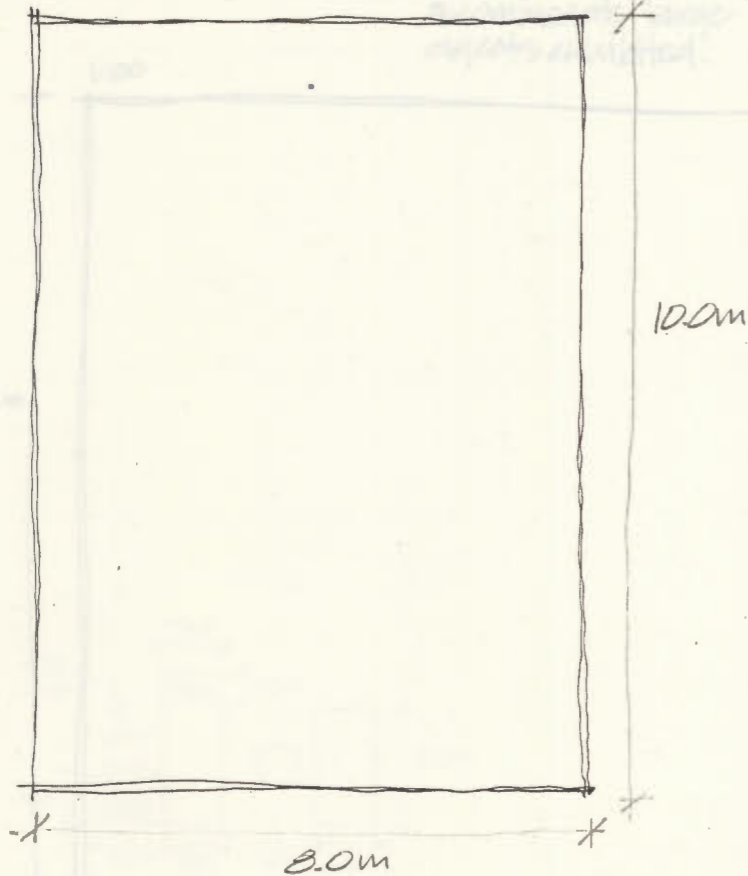
SPATIAL REQUIREMENTS  
AND CONSIDERATIONS



# RECEPTION

A1

APPROX AREA = 80.0 m<sup>2</sup>

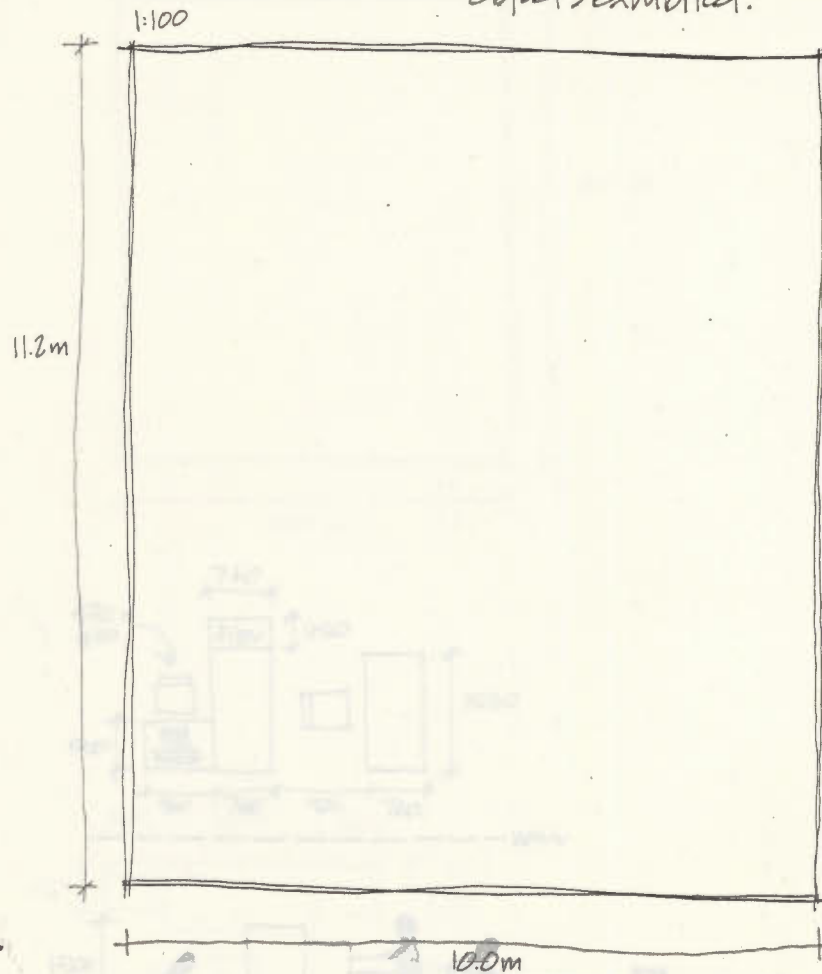


- PURPOSE - To provide a general entrance to the school. Space for: School receptionist; display and notice boards; public telephones; waiting area (with some seating); meeting area
- LIGHTING - Moderate ambient with highlighting
- ACOUSTICS - Potentially noisy
- THERMAL - A/c & heating - general, humidity control
- OTHER ENVIOR. NEEDS -
- EQUIPMENT/FURNITURE - seating area; control desk with switch board; display boards, telephones
- FUNCTIONAL RELATIONSHIPS - could double as lobby for theatre
- SPECIAL REQUIREMENTS -

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS

# Exhibition Space

**APPROX AREA** = min. 112 m<sup>2</sup>  
Ceiling height to accommodate large objects exhibited.

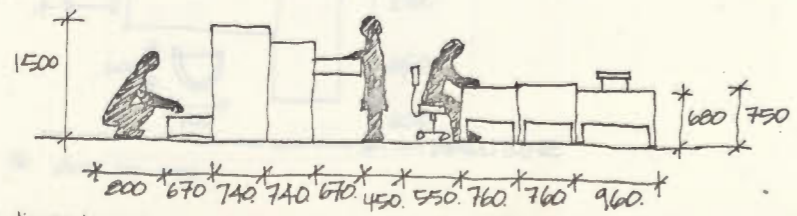
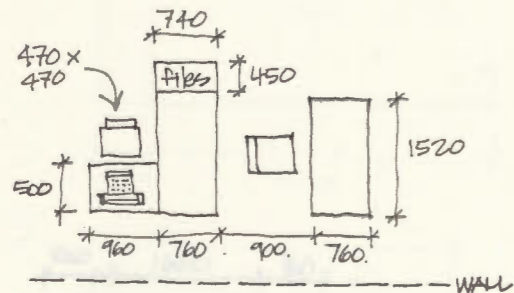


- **PURPOSE** - To provide display and exhibit area for student, staff and public use. To display: artwork, sculpture, photography student/professional architectural renderings & models.
- **LIGHTING** - No direct sunlight - natural light not excluded; Uniform artificial light - variable; Track lighting; Possibility of special colour and time controlled lamps & floor lamps.
- **ACOUSTICS** - Materials to be sound absorbent and durable - easily maintained.
- **THERMAL** - Separate thermal control, humidity control.
- **OTHER ENVIOR. NEEDS** -
- **EQUIPMENT/FURNITURE** - Moveable & attractive: panels for hanging display, circulation control; modular ceiling hooks for hanging displays, modular electric outlets; seating for relaxation - moveable grouping.
- **FUNCTIONAL RELATIONSHIPS** - Public entrance off major exterior traffic axis; student circulation through exhibition area. The space should be able to be entirely locked off from public but not necessarily from the students.
- **SPECIAL REQUIREMENTS** - sophisticated lighting system with a high degree of flexibility; Intercom and/or public address system required; Moist & atmosphere should be variable subject to theme & character of exhibit; Double doors 6'-0" x 8'-0" (1.8m x 2.4m) for service. Projection Room (2.0m x 2.0m)

**SPATIAL REQUIREMENTS AND CONSIDERATIONS**

# General Office

APPROX AREA = 30.0 m<sup>2</sup>  
 ceiling height = 3.0 m



\* dimensions in mm.

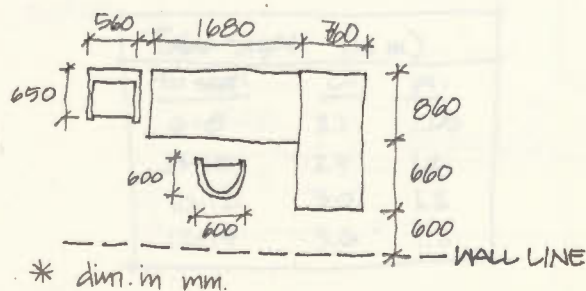
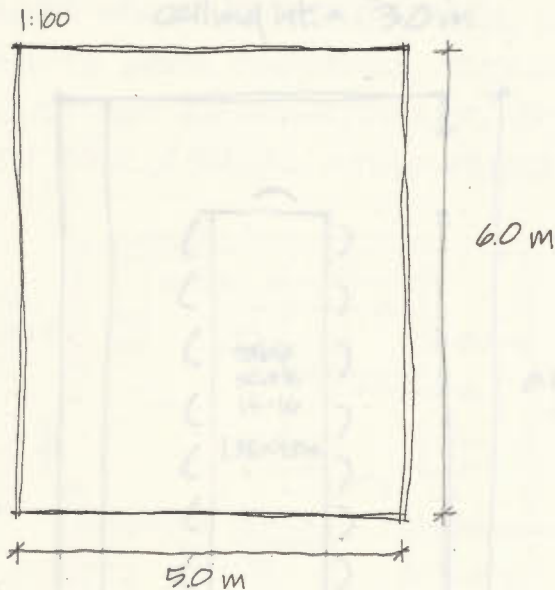
- **PURPOSE** - To provide space for the carrying out of business functions - four (4) secretaries
- **LIGHTING** - General artificial lighting - intense enough for office work & typing. Natural light desirable - windows for visual relief.
- **ACOUSTICS** - Area is a noise generator - separate acoustically from other areas/private offices.
- **THERMAL** - Standard temperature requirements. Provisions for natural ventilation.
- **OTHER ENVIOR. NEEDS** - Efficient office layout, easily cleaned - should have business like atmosphere.
- **EQUIPMENT/FURNITURE** - Desk, typing stand, filing cabinet for each secretary; general filing space & storage; coat hanging space; chairs for waiting (6-8)
- **FUNCTIONAL RELATIONSHIPS** - Access to service areas & public spaces; near washrooms, reception area; Adjoining duplication room(s) and stationary storage.
- **SPECIAL REQUIREMENTS** - Intercom terminal; provision for possible future communications machinery

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# DEAN'S OFFICE

A3

APPROX AREA = 30.0 m<sup>2</sup>  
 ceiling height = 3.0 m



- PURPOSE - Provide office space for the dean: general administrative work; meetings; visitors (up to 5-6)
- LIGHTING - General overhead lighting, supplemented by desk/floor lamps. Natural light desirable - controllable.
- ACOUSTICS - acoustically separated from general office; acoustic privacy; quiet individual office conditions.
- THERMAL - Standard-own control; provision for natural ventilation
- OTHER ENVIOR. NEEDS - Should be interesting; impressive; view of exterior/public
- EQUIPMENT/FURNITURE - Intercom, phone, drawing & book storage, desk, chairs, filing cabinets, <sup>PLUs:</sup> informal meeting area, sofa, credenza, conference <sup>table</sup> (note: these are optional)
- FUNCTIONAL RELATIONSHIPS - Access to conference/board room & secretarial areas; Easy to find
- SPECIAL REQUIREMENTS - private washroom

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# BOARD ROOM

APPROX AREA = 40.0 m<sup>2</sup>  
 (may be smaller)  
 ceiling ht. = 3.0 m

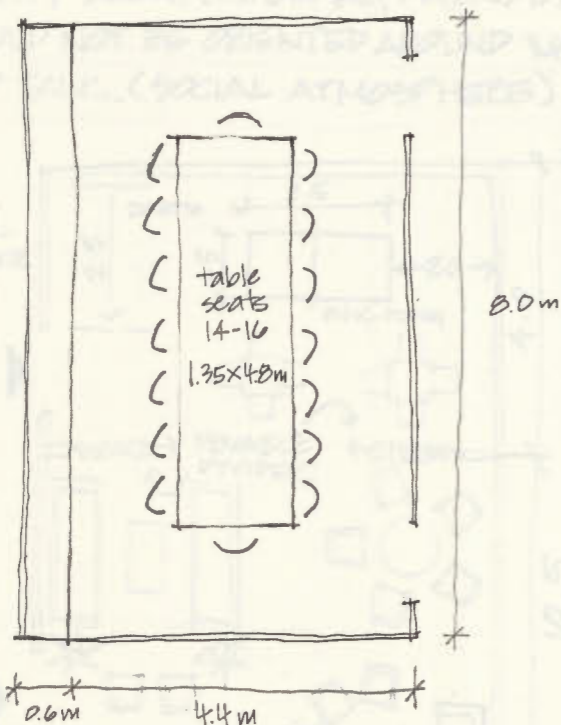


Table Sizes: (in m.)		
to seat:	L:	W:
6-8	2.1	1.05
8-10	2.4	1.2
10-12	3.0	1.2
12-14	3.6	1.2

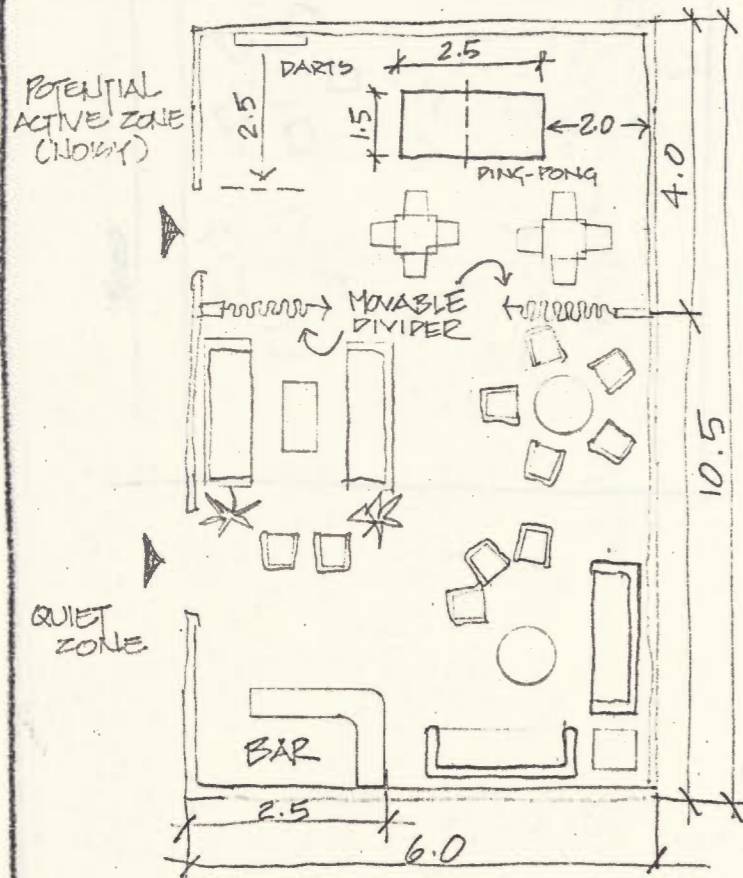
- PURPOSE - Faculty meetings; administration presentations etc.
- LIGHTING - moderate ambient lighting
- ACOUSTICS - acoustically isolated
- THERMAL - standard, provision for natural ventilation
- OTHER ENVIOR. NEEDS -
- EQUIPMENT/FURNITURE - board table, chairs ( ), credenza, projection screen, tack boards
- FUNCTIONAL RELATIONSHIPS - proximity to dean's & faculty offices; private,
- SPECIAL REQUIREMENTS - light dimmers

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# STUDENT-STAFF LOUNGE

APPROX AREA = 65 M<sup>2</sup>

MAJOR STAFF STUDENT EXTRA CURRICULA ACTIVITY AREA. (INFORMAL, FRIENDLY AREA) SHOULD NOT BE ORIENTED AROUND WORK OR SHOP TALK. (SOCIAL ATMOSPHERE)



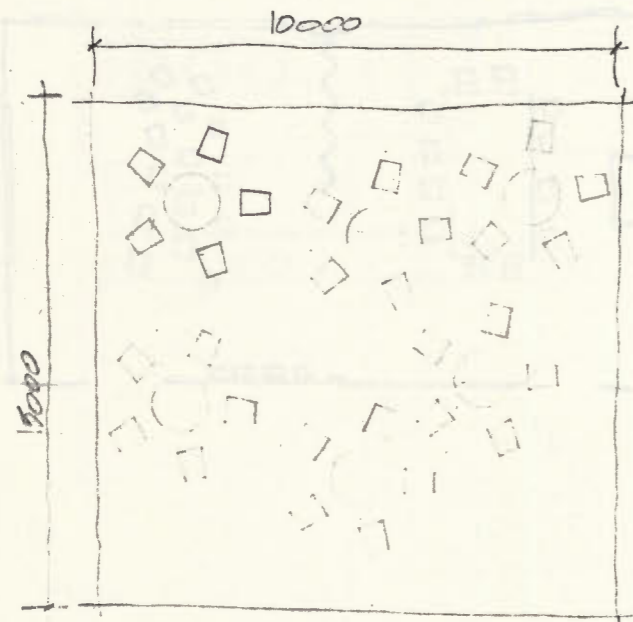
- **PURPOSE** - STAFF/STUDENT LOUNGE, REC. FACILITIES, BAR FACILITIES, SOCIAL FUNCTIONS, PING PONG, DARTS, GAMES
- **LIGHTING** - SPECIAL LIGHTING FOR PING PONG & DARTS  
ADJUSTABLE LIGHTING FOR LOUNGE/SOCIAL AREAS.
- **ACOUSTICS** - NOISE & QUIET AREAS SHOULD BE WELL ZONED.
- **THERMAL** - STANDARD THERMAL CONTROL
- **OTHER ENVIOR. NEEDS** - INDOOR/OUTDOOR LINKS, ACTIVITY. EASE OF MAINTENANCE. ACCOMMODATE DECORATIONS AND SPECIAL EQUIPMENT. ART. & NAT. VENTILATION
- **EQUIPMENT/FURNITURE** - 30-40 COMFORTABLE SEATS & TABLES IN LOUNGE AREA. PING-PONG TABLE, DARTS CARD TABLES & CHAIRS IN ACTIVITY AREA.
- **FUNCTIONAL RELATIONSHIPS** - POSSIBLY RELATE TO EXHIBITION AREA & LINK TO STUDENT WORK AREAS WASH ROOMS, COAT CHECK, STORAGE.
- **SPECIAL REQUIREMENTS** - PERMANENT WET BAR. INVITING ATMOSPHERE!

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# SPECIFIC SPACE COFFEE SHOP

APPROX AREA = 150 m<sup>2</sup>

50 m<sup>2</sup> / 30 PEOPLE; DESIGN FOR 100 PEOPLE  
∴ = 150 m<sup>2</sup> DES'D.

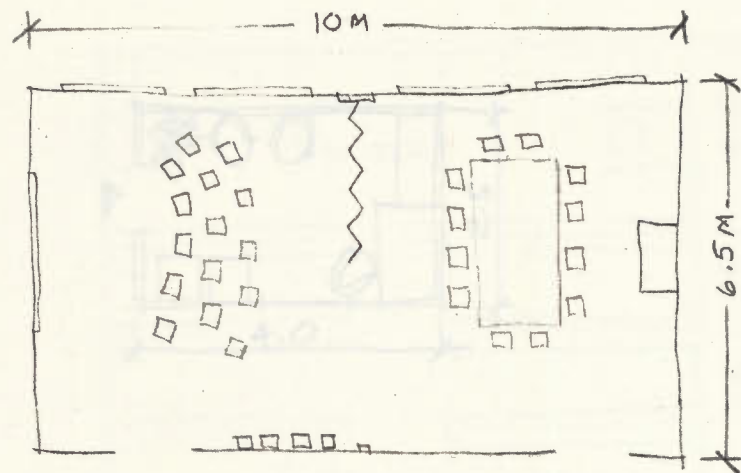


- PURPOSE - COFFEE BREAKS, LUNCH, CONVERSATION
- LIGHTING - INDIRECT NATURAL LIGHTING, MODERATE AMBIENT
- ACOUSTICS - MODERATE NOISE LEVEL
- THERMAL - STANDARD TEMP. REQ'T.
- OTHER ENVIOR. NEEDS - VIEW OUT FROM SEATING AREA
- EQUIPMENT/FURNITURE - CHAIRS, TABLES
- FUNCTIONAL RELATIONSHIPS - SHOULD BE CLOSE TO STAFF/STUDENT LOUNGE
- SPECIAL REQUIREMENTS - CONSIDERATION TO ACTIVITIES INVOLVED IN CLEANING OF TABLES CHAIRS

B2  
SPATIAL REQUIREMENTS  
AND CONSIDERATIONS

# SPECIAL PURPOSE SPACE

APPROX AREA = 65 M<sup>2</sup>



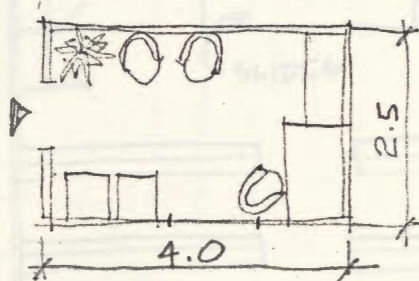
- PURPOSE - MULTI-USE: JURY ROOM  
SKETCHING  
A U.S. MEETINGS  
CLASS ROOM  
ETC.
- LIGHTING - GENERAL LIGHTING WITH SPECIAL LIGHTING  
ON AT LEAST ONE WALL FOR DISPLAY
- ACOUSTICS - GENERAL ACOUSTIC PROPERTIES
- THERMAL - STANDARD
- OTHER ENVIOR. NEEDS - VIEW TO OUTSIDE ?
- EQUIPMENT/FURNITURE - SEATS FOR UP TO 70 PERSONS  
TACK SPACE  
PROJECTION FACILITIES
- FUNCTIONAL RELATIONSHIPS -
- SPECIAL REQUIREMENTS - MAY POSSIBLY BE SUBDIVIDED  
FOR SMALL SEMINARS

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS



## A.U.S. OFFICE

APPROX AREA = 10 M<sup>2</sup>  
2.5 M CEILING



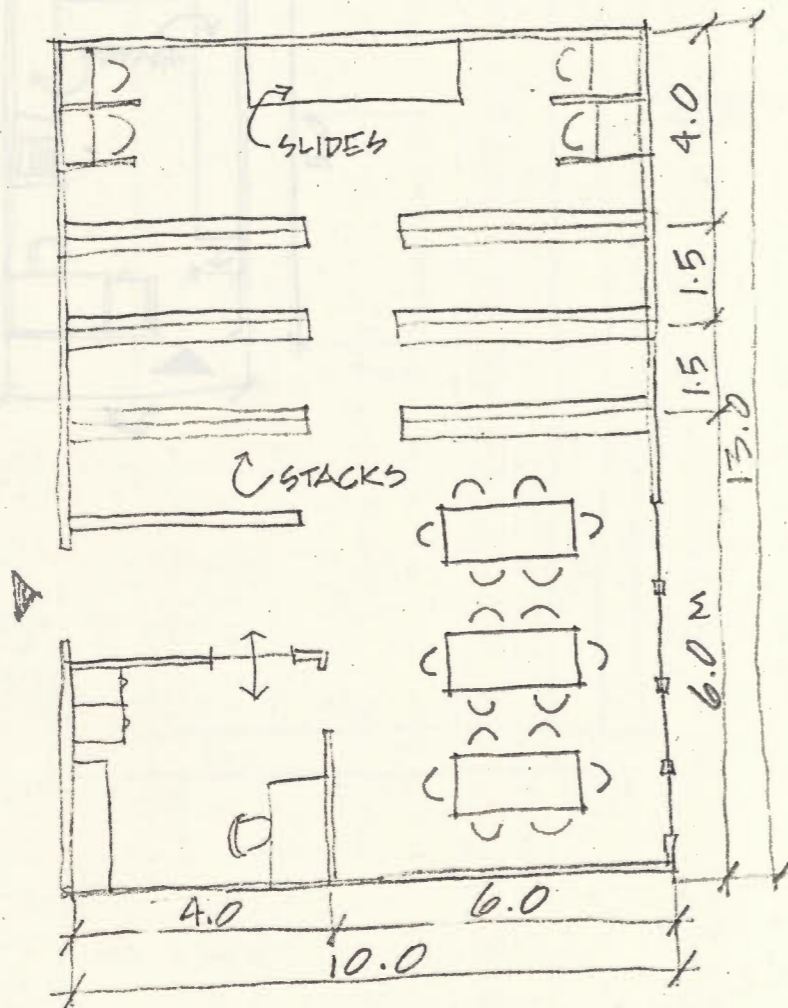
- PURPOSE - SPACE FOR EXECUTIVE TO KEEP FILES, HOLD SMALL MEETINGS
- LIGHTING - NAT. LIGHTING, GENERAL LIGHTING
- ACOUSTICS - PRIVACY FROM OTHER AREAS.
- THERMAL - PRIVATE TEMP CONTROL
- OTHER ENVIOR. NEEDS - NOT A HEAVY USE AREA
- EQUIPMENT/FURNITURE - DESK, 3 CHAIRS, FILE, SHELVING
- FUNCTIONAL RELATIONSHIPS - NEAR MEETING AREA  
IN STUDENT ACTIVITY ZONE
- SPECIAL REQUIREMENTS -

# SPATIAL REQUIREMENTS AND CONSIDERATIONS

# RESOURCE ROOM

C1

APPROX AREA = 120-140 M<sup>2</sup>  
2.5 M. CEILING



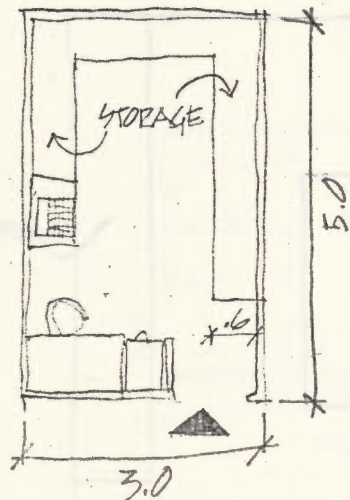
- **PURPOSE** - INDIVIDUAL AV CARRELS, TRADE CATALOGUES REFERENCE LIBRARY, PERIODICALS, READING AREAS EXCELLENT STUDENT WORK STORAGE, LIBRARIAN
- **LIGHTING** - DIFFUSE NATURAL (NORTH LIGHT), GENERAL LIGHTING, TASK LIGHTING FOR CARRELS.
- **ACOUSTICS** - HIGH ABSORBENCY MATERIALS. PRIVACY FROM OUTSIDE NOISE. ACOUSTICALLY SEPARATED AV. CARRELS.
- **THERMAL** - STANDARD TEMP. REQ., HUMIDITY CONTROL
- **OTHER ENVIOR. NEEDS** - SPACE CONDUCIVE TO READ/STUDY. VIEW OF OUTDOOR GREEN SPACE?
- **EQUIPMENT/FURNITURE** - AV CARRELS, STORAGE STACKS, TABLES & CHAIRS FOR READING & WRITING, SLIDE STORAGE PERIODICAL RACK. CARD CATALOGUE.
- **FUNCTIONAL RELATIONSHIPS** - PROXIMITY TO SUPPLY STORE STAFF OFFICES. CONTROLLED ENTRANCE. NO THROUGHFARES.
- **SPECIAL REQUIREMENTS** - SEPARATE OFFICE FOR LIBRARIAN WITH VIEW

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS

# ARCHITECTURAL SUPPLIES STORE

C2

APPROX AREA = 15 M<sup>2</sup>

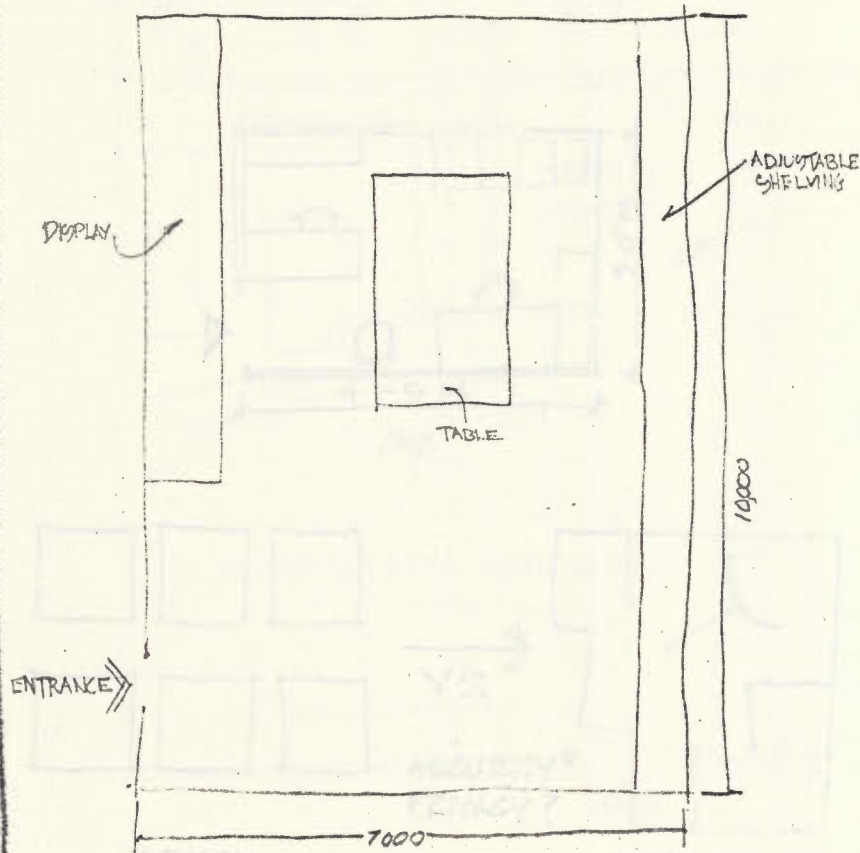


- PURPOSE - STORING STOCK & SELLING ARCHITECTURAL SUPPLIES
- LIGHTING - GENERAL OVERALL LIGHTING
- ACOUSTICS - SERVICE AREA LIKELY TO BE A NOISE GENERATOR
- THERMAL - STANDARD TEMP. REQ.
- OTHER ENVIOR. NEEDS - EASILY CLEANED
- EQUIPMENT/FURNITURE - DESK & CHAIR, CASH STORAGE, FILES STORAGE UNITS, CASH REGISTER
- FUNCTIONAL RELATIONSHIPS - HANDY TO STUDENT ACTIVITY ZONES. CLOSE TO SERVICE ENTRANCE
- SPECIAL REQUIREMENTS - SECURITY, SUPERVISION

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS

# BUILDING MATERIAL CENTRE

APPROX AREA = 70 m<sup>2</sup>

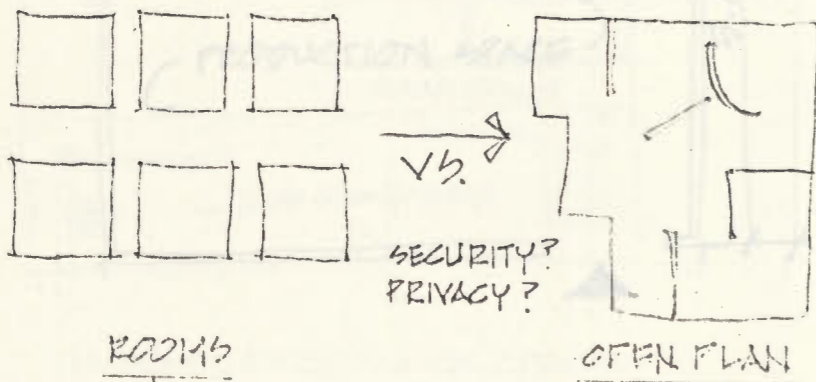
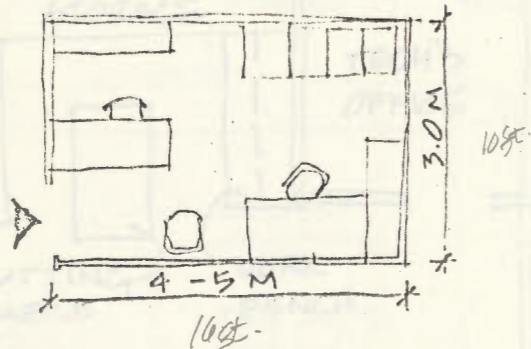


- PURPOSE - TO HOUSE LIBRARY OF ARCHITECTURAL MATERIALS  
PREPARATION OF MATERIAL, DAILY ACTIVITIES  
TALKING WITH STUDENTS IN OFFICE
- LIGHTING - GENERAL & ADJUSTABLE TO HIGHLIGHT DISPLAY  
TASK LIGHTING FOR STUDENTS & OFFICES  
NATURAL LIGHT FROM UP OVER (LIGHTS) OVERHALLS
- ACOUSTICS - STANDARD
- THERMAL - STANDARD TEMP. REQUIREMENTS
- OTHER ENVIOR. NEEDS -  
ADJUSTABLE TO EXISTING VENTILATION  
ADJUSTABLE AN INTERIOR OF ROOF AND AWAY  
COMPLETE ISOLATION FROM OUTSIDE
- EQUIPMENT/FURNITURE - MOVEABLE + ADJUSTABLE SHELVING  
FILING CABINETS, DISPLAY CABINETS  
DRAFTING TABLE
- FUNCTIONAL RELATIONSHIPS - CLOSE PROXIMITY TO ENTRANCE  
RECEPTIONAL CENTRE, STAFF LOUNGE, ETC.  
STUDY ROOM, PERMITTED STUDENTS, ETC.
- SPECIAL REQUIREMENTS -  
ACCESS TO OUTLET & VENTILATION

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS

# FACULTY OFFICES

APPROX AREA = 12-15 M<sup>2</sup> EACH  
 MINIMUM CEILING HEIGHT - 2.4 M



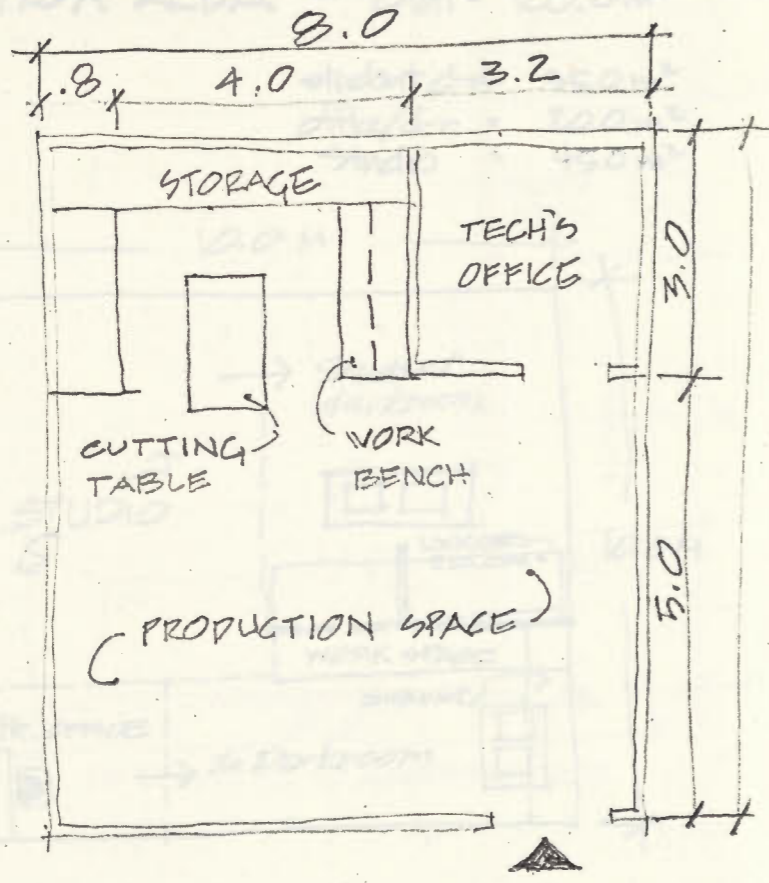
- ROOMS
- ADJACENT SPACES
  - SPACES LINKED BY COMMON SPACE
  - CENTRALIZED / DECENTRALIZED
  - LINEAR, RADIAL, OR CLUSTERED ORGANIZATIONS

- PURPOSE - PRIVATE OFFICE SPACE FOR PROFESSORS.  
 PREPARATION OF MATERIAL, DAILY ACTIVITIES  
 TALKING WITH STUDENTS IN PRIVATE
- LIGHTING - GENERAL ARTIFICIAL LIGHTING.  
 TASK LIGHTING FOR DESKS & COUNTERS  
 NATURAL LIGHT & VIEW NO GLARE (LOUVRES, OVERHANGS)
- ACOUSTICS - ACOUSTIC SEPARATION FROM OTHER OFFICES  
 LOW TO MODERATE NOISE LEVELS
- THERMAL - STANDARD TEMP. REQUIREMENTS
- OTHER ENVIOR. NEEDS - SUITABLE TO RECEIVE VISITORS.  
 ALLOW FOR AN INTERMIX OF STAFF AND AVOID  
 COMPLETE ISOLATION FROM STUDENTS
- EQUIPMENT/FURNITURE - PHONES & INTERCOMS, DESK, 3 CHAIRS  
 FILING CABINET, LOCKABLE STORAGE, SHELVING.  
 DRAFTING TABLE
- FUNCTIONAL RELATIONSHIPS - CLOSE TO RESOURCE ROOM,  
 SECRETARIAL CENTRE, STAFF LOUNGE, W.C.  
 STORAGE ROOM. PROXIMITY TO STUDIOS ???
- SPECIAL REQUIREMENTS - PRIVACY REQUIRED.  
 ACCESS TO OUTDOORS & VISITORS

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# A.V. LAB (PRODUCTION)

APPROX AREA = 60 M<sup>2</sup>



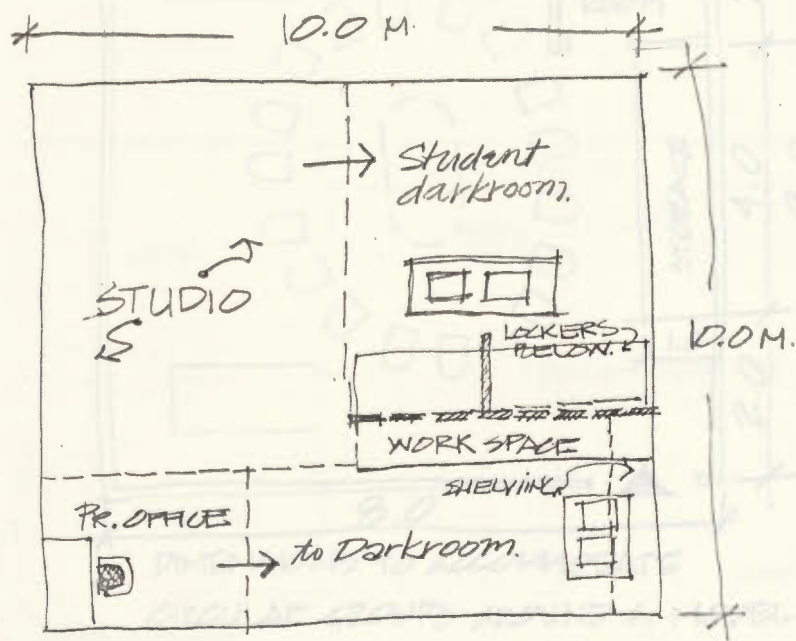
- **PURPOSE** - FACILITIES FOR THE PRODUCTION OF A.V. AIDS SLIDES, VIDEO, FILM, RECORDING. TECHNICIANS OFFICE REPAIR & MAINTENANCE OF A.V. EQUIPMENT
- **LIGHTING** - SPECIAL EFFECTS LIGHTING, GENERAL LIGHTING
- **ACOUSTICS** - ACOUSTICALLY SEPARATED FROM OTHER AREAS QUIET, ACOUSTICALLY CONTROLLED ENVIRONMENT.
- **THERMAL** - STANDARD
- **OTHER ENVIOR. NEEDS** - BLACK-OUT BLINDS ON WINDOWS
- **EQUIPMENT/FURNITURE** - WARNING LIGHTS OF IN USE COND. STORAGE RACKS FOR EQUIPMENT, DESK & CHAIR A.V. EQUIP. CUTTING TABLES, PROP. STORAGE
- **FUNCTIONAL RELATIONSHIPS** - CLOSE TO PHOTO LAB
- **SPECIAL REQUIREMENTS** -

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# PHOTO LAB

APPROX AREA = total = 100.0 m<sup>2</sup>

student d-rs = 35.0 m<sup>2</sup>  
 office/d-r = 20.0 m<sup>2</sup>  
 studio = 45.0 m<sup>2</sup>



- UNOBSTRUCTED WORK SPACE.
- RUNNING H<sub>2</sub>O.

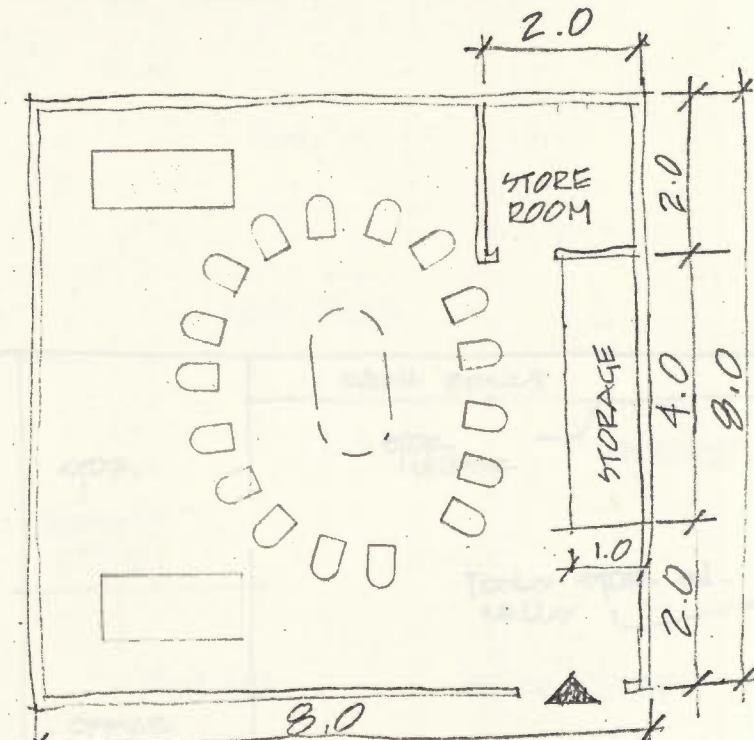
- PURPOSE - Series of spaces to satisfy the photographic needs of the school: Private office/darkroom for school photographer; Studio for photographing drawings/models - photo classes - display; Darkroom(s) for students
- LIGHTING - General overhead lighting throughout. - Natural in office; Strict light control in darkrooms - include safe lights. No natural light in darkrooms/studio.
- ACOUSTICS - noise isn't a problem.
- THERMAL - Temp. control necessary in darkrooms, humidity control advisable; natural ventilation possible in office. Studio lights are heat source → provide cooling.
- OTHER ENVIOR. NEEDS - Materials come in contact with chemicals water & heat, Easily cleaned.
- EQUIPMENT/FURNITURE - 2 chairs, 5 enlargers, dry mounting machine, developing sink(s), exhaust fans, cutting and layout tables, general storage; personal lockers 5 @ .5 m<sup>3</sup>
- FUNCTIONAL RELATIONSHIPS - locate away from main circulation, Possibly provide 2 small student dark rooms instead of one large.
- SPECIAL REQUIREMENTS - running water in darkrooms (H & C); Control system (security); darkrooms flood proof; Avoid proximity to vibration sources; double doors for darkrooms; power outlets for each station; Buzzer system for entrance requests; closet for drying negs

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# DRAWING STUDIO

D3

APPROX AREA = 60 M<sup>2</sup>



DIMENSIONS TO ACCOMMODATE  
CIRCULAR GROUPS AROUND A MODEL

- **PURPOSE** - USED BY STAFF & STUDENTS FOR: DRAWING, PAINTING, GRAPHIC PRESENTATION, MODELLING CLASS WORKSHOPS
- **LIGHTING** - GENERAL LIGHTING, ADJUSTABLE SPOT LIGHTING, NATURAL LIGHTING (NORTHERN EXPOSURE BEST)
- **ACOUSTICS** - SEPARATION FROM OTHER AREAS
- **THERMAL** - SEPARATE CONTROLS
- **OTHER ENVIOR. NEEDS** - FREE FEELING SPACE, DURABLE & EASY CLEANED SURFACES
- **EQUIPMENT/FURNITURE** - CHALKBOARD, EASELS, WORKTABLES, SINKS, COMPRESSED AIR FOR AIR BRUSH, STORAGE
- **FUNCTIONAL RELATIONSHIPS** - WASHROOMS HANDY, RELATED TO OUTDOORS (LINKED) VISIBLE FROM OTHER AREAS OF THE BUILDING
- **SPECIAL REQUIREMENTS** - PROVIDE FLOOR DRAINS, STOREROOM FOR EQUIPMENT, PROPS

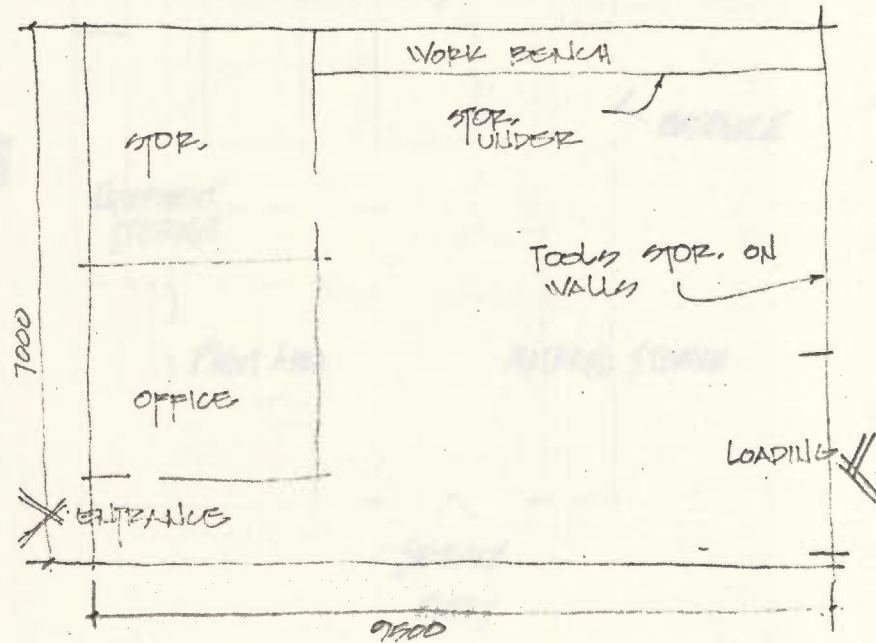
SPATIAL REQUIREMENTS  
AND CONSIDERATIONS



# WORKSHOP/OFFICE/STORAGE

E1

APPROX AREA = 66.5 m<sup>2</sup>



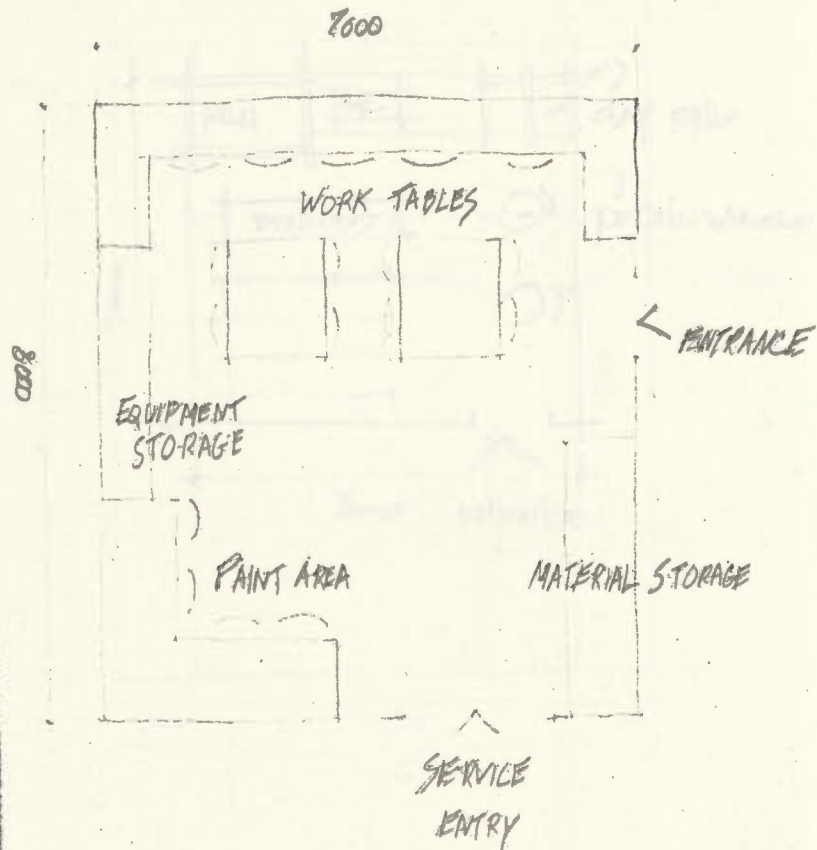
- **PURPOSE** - STUDENT PROJECT, REPAIR & MAINTENANCE OF UTILITIES FURNITURE, FABRICATING, ETC.
- **LIGHTING** - MODERATE AMBIENT LIGHTING (CARE TO AVOID SHADOWS) GENERAL LIGHTING ON SOME MACHINES
- **ACOUSTICS** - SEPARATE ACOUSTICALLY FROM OTHER AREAS
- **THERMAL** - STANDARD TEMP. REQ'TS., INDEPENDENT TEMP CONTROL
- **OTHER ENVIOR. NEEDS** - VAC. & EXHAUST SYSTEM
- **EQUIPMENT/FURNITURE** - WORK BENCHES, HAND TOOLS, MAT'L STOR. BINS, MACHINES, STORAGE SHELVES ETC.
- **FUNCTIONAL RELATIONSHIPS** - SHOULD BE CLOSE TO SERVICE ENTRY
- **SPECIAL REQUIREMENTS** -

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS

## MODEL WORKSHOP

E2

APPROX AREA =  $56 \text{ m}^2$

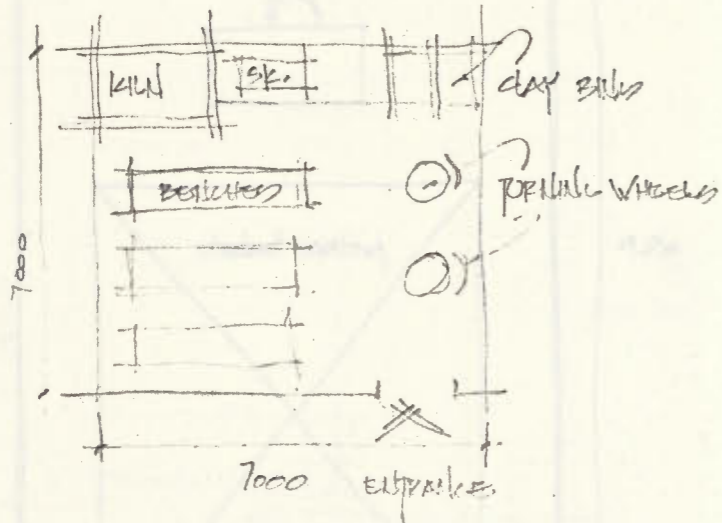


- PURPOSE - PROVIDE SPACE FOR CONSTRUCTION, ASSEMBLY, FINISHING, AND PAINTING OF MODELS
- LIGHTING - UNIFORM OVERHEAD LIGHTING
- ACOUSTICS - SEPARATE FROM QUIET ACTIVITY ZONES
- THERMAL - SEPARATE TEMPERATURE CONTROL
- OTHER ENVIOR. NEEDS - EXHAUST FANS TO VENTILATE PAINT & GLUE FUMES.  
DUST FREE AREA
- EQUIPMENT/FURNITURE - WORK TABLES, BENCHES, WOOD WORKING EQUIPMENT, MATERIAL STORAGE BINS, DUST FREE PAINT AREA
- FUNCTIONAL RELATIONSHIPS - ADJACENT WOODWORKING SHOP & SERVICE ENTRANCE
- SPECIAL REQUIREMENTS - INTERCOM FROM MAIN DESK

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS

# SCULPTURE STUDIO

APPROX AREA = 50 m<sup>2</sup>

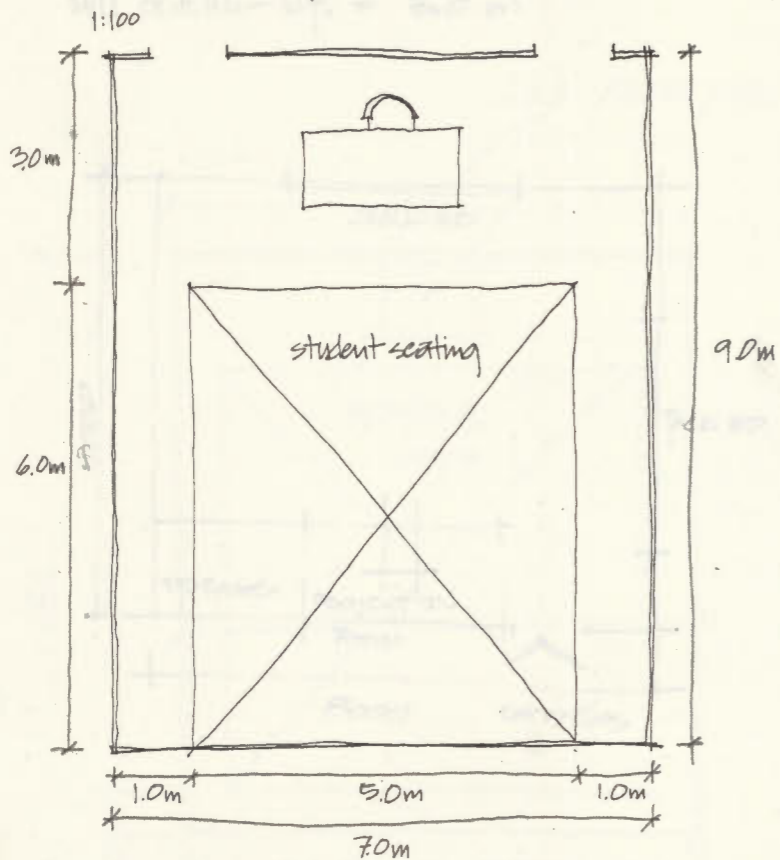


- PURPOSE - TO ACCOMMODATE SUCH ACTIVITIES AS SCULPTURE, POTTERY, CERAMICS, MODELLING, ETC
- LIGHTING - DIFFUSE LIGHTING W. PROVISIONS FOR SPOT LIGHTING - MODERATE AMBIENCE
- ACOUSTICS - ACOUSTIC ISOLATION
- THERMAL - STANDARD TEMP REQ'D
- OTHER ENVIOR. NEEDS - DURABLE, DUST REPELLING, WATERLIKE FREE MAT'L, WATER PERMEANT MAT'L'S, WAX RESISTANT MAT'L'S
- EQUIPMENT/FURNITURE - TURNING WHEELS, KILN, CLAY BILDS, SK. W. LARGE UTILITY DESKS, STOOLS, BENCHES, ETC.
- FUNCTIONAL RELATIONSHIPS - CLOSE TO OTHERS
- SPECIAL REQUIREMENTS -

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# CLASSROOMS (min. 3)

APPROX AREA =  $63.0 \text{ m}^2$   
 ceiling ht = min.  $3.0 \text{ m}$



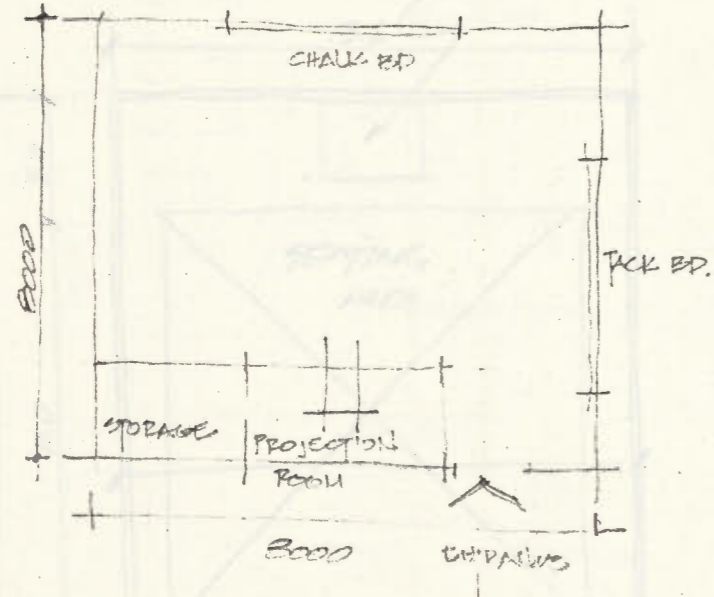
approx. area/student =  $0.6 \text{ m}^2$  ( $0.6 \text{ m} \times 1.0 \text{ m}$ )  
 for moveable seating

- **PURPOSE** - Classrooms for up to 50+ students, 1-2 staff for: lectures, group discussions, seminars, meetings.
- **LIGHTING** - standard classroom lighting; concentrated fluorescent on chalkboard & tackboards; dimmer controlled lights for slides/movies; natural light - north preferred
- **ACOUSTICS** - acoustic separation from other spaces;
- **THERMAL** - standard; provision for natural ventilation
- **OTHER ENVIOR. NEEDS** - atmosphere conducive to listening and discussion; unobstructed view of screen from all parts of the room.
- **EQUIPMENT/FURNITURE** - chalkboard, tackboards, lecturn, desk/chairs for students, table(s)
- **FUNCTIONAL RELATIONSHIPS** -
- **SPECIAL REQUIREMENTS** - Many classes make use of A.V. equipment - provide projection room & remote control. Floor of classroom may be tiered or flat - flat lends itself better to knit situations.

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# SEMINAR ROOMS

APPROX AREA = 65 m<sup>2</sup> (ea.) - 3 req'd. • PURPOSE - GROUP DISCUSSION & PRESENTATION  
 MIN CEILING HT. = 3.0 m

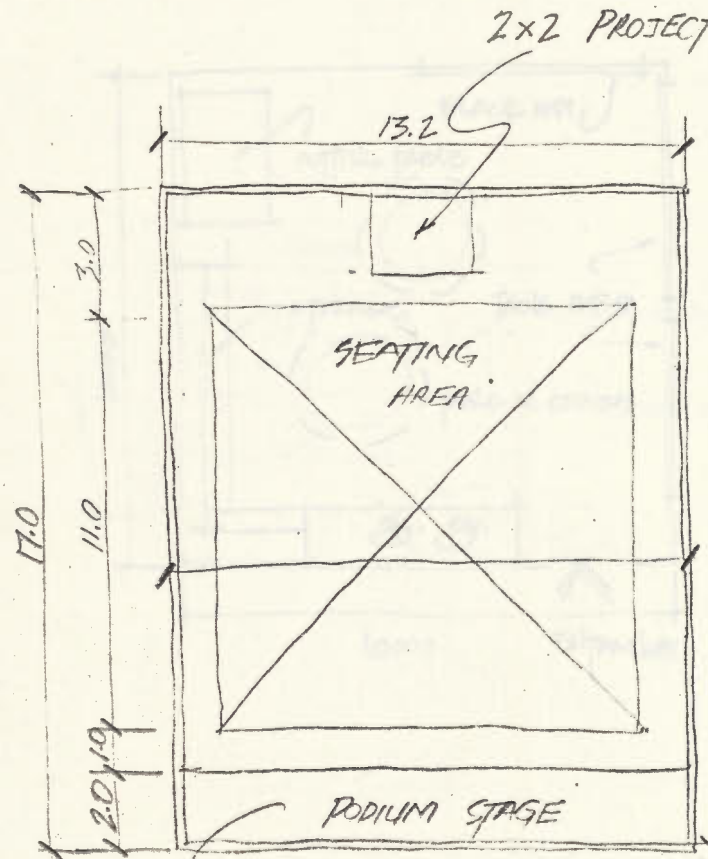


- LIGHTING - GENERAL ARTIFICIAL LIGHTING, RECYCLED LIGHTING
- ACOUSTICS - QUIET ENVIRONMENT - REQUIRE ACOUSTICAL TREATMENT
- THERMAL - STANDARD TEMPERATURES
- OTHER ENVIOR. NEEDS - A/C & VENTILATION
- EQUIPMENT/FURNITURE - CHALK BD, TACK BD, AUDIO VIDEO EQUIPMENT W. STORAGE, CHAIRS & TABLES
- FUNCTIONAL RELATIONSHIPS - SHOULD BE CLOSE TO STUDENT WORK AREAS TO PREVENT AC. PROBLEMS OR STUDY EMBARRASSMENT
- SPECIAL REQUIREMENTS - EMERGENCY EXITS, PROVISIONS FOR HANDICAPPED, FIRE EXTINGUISHERS, FIRST AID KIT

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# THEATRE / PROJECTION RM.

APPROX AREA = 224.4 m<sup>2</sup>



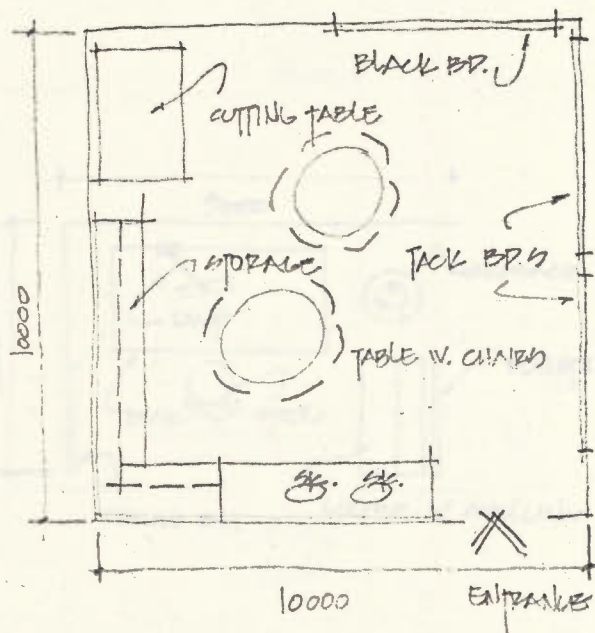
NOTE: PERHAPS LARGER STAGE AREA FOR EXPANDED SCHOOL PRODUCTIONS (MORE LIKE AN AUDITORIUM)

- PURPOSE - TO HOUSE SUCH ACTIVITIES AS LECTURES, TALKS, FILMS, MEETINGS, ETC. FOR 200 PEOPLE MAX.
- LIGHTING - PERHAPS SOME NATURAL DIFFUSE LIGHT MODERATE AMBIENT
- ACOUSTICS - LOW NOISE LEVELS DESIRABLE
- THERMAL - VENTILATION & A/C REQUIRED DEPENDING ON NUMBER OF PEOPLE IN SPACE, TIME ETC.
- OTHER ENVIOR. NEEDS - ~
- EQUIPMENT/FURNITURE - SEATS FOR 200 PERSONS, PODIUM, PROJECTION ROOM / FILM & SLIDE PROJECTOR, LIMITED FILM STORAGE, SPEAKERS SYSTEM.
- FUNCTIONAL RELATIONSHIPS - COULD BE USED BY THE PUBLIC ∴ LOCATE NEAR RECEPTION AREA
- SPECIAL REQUIREMENTS - EMERGENCY EXITS, DIMMING OF LIGHTS - SLOPED / STEPPED FLOOR SLIDE PROJECTOR, REMOTE CONTROL OUTLETS NEAR FRONT.

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# GROUP WORK SPACE

APPROX AREA = 100 m<sup>2</sup>  
 MIN. CEILING HT. OF 3M



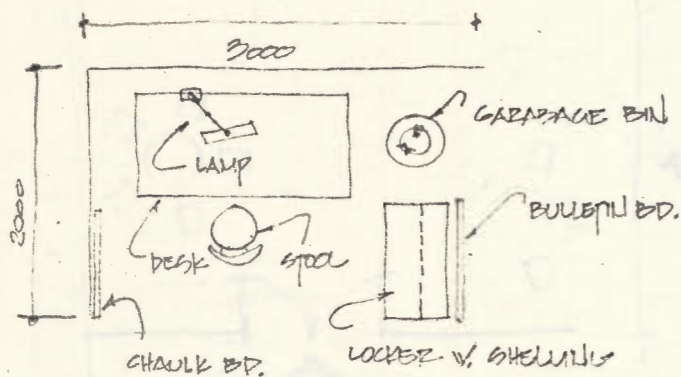
- **PURPOSE** - GROUP PROJECT AREAS; GROUP DISCUSSIONS, CUTTING, LAYOUTS. BULLETIN BR. SPACE, WASHING, STORAGE, DISPLAY
- **LIGHTING** - NATURAL LIGHTING SUPPLEMENTED BY ARTIFICIAL - MODERATE AMBIENCE
- **ACOUSTICS** - LESS ACOUSTIC PRIVACY - PARTIALLY ISOLATED FROM INDIVIDUAL STUDIO SPACES
- **THERMAL** - STANDARD TEMP. REQUIREMENTS
- **OTHER ENVIOR. NEEDS** - A./C.
- **EQUIPMENT/FURNITURE** - BLACKBDS, CUTTING TABLES, STORAGE (COLLECTIVE), SINKS, TACK-BDS, DISCUSSION REQUIREMENTS TABLES & CHAIRS
- **FUNCTIONAL RELATIONSHIPS** - ADJACENT TO DRAFTING & IND'L. PRIVATE SPACE, CLOSE TO W.C.'s, CLOSE TO JANITORIAL SERVICE RM's
- **SPECIAL REQUIREMENTS** -

SPATIAL REQUIREMENTS AND CONSIDERATIONS

## STUDIO SPACE / INDIVIDUAL SPACE

62

APPROX AREA = 5-6 m<sup>2</sup>/STUDENT  
3 m MIN. CEILING HT.



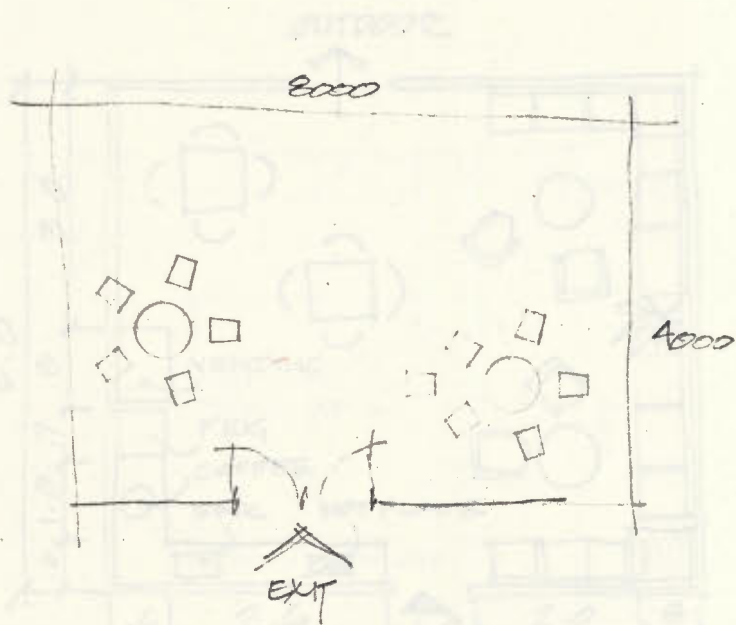
- **PURPOSE** - DRAFTING, DESIGNING, CUTTING, SEATING SPACE. LAYOUTS, MODEL BUILDING, SOME INSTRUCTIONAL ADVICE REQUIREMENTS, ETC.
- **LIGHTING** - NATURAL LIGHTING (DIFFUSE) CONTROLLED BY WINDOW COVERINGS. GENERAL LIGHTING - OVERHEAD (MODERATE AMBIENCE)
- **ACOUSTICS** - QUIET CLASSROOM LEVEL - MAXIMUM PRIVACY FROM OUTBOUNDING NOISE
- **THERMAL** - STANDARD TEMPERATURE REQUIREMENTS. SEPARATE TEMP. CONTROL
- **OTHER ENVIOR. NEEDS** - A.I.C.
- **EQUIPMENT/FURNITURE** - DRAFTING TABLES, LAYOUT TABLES, STOOLS, CHAIRS, LOCKERS, STORAGE COMPARTMENTS (DRAWERS), TASK LAMPS, BOOK SHELVES, CHALK B.D.'S, CUTTING TABLES, BULLETIN B.D.'S.
- **FUNCTIONAL RELATIONSHIPS** - SHOULD BE CLOSE TO WASHR.M.'S, DUPLICATING ROOM, SEMINAR & LECTURE ROOMS, DESIGN PRF. OFFICES
- **SPECIAL REQUIREMENTS** - POWER OUTLETS AT ALL DESKS, FLEXIBILITY TO ALLOW PERSONALIZATION  
150 STUDENTS - 3 ACADEMIC LEVELS

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS



## OUTDOOR WORK SPACE

APPROX AREA = 30 M<sup>2</sup>

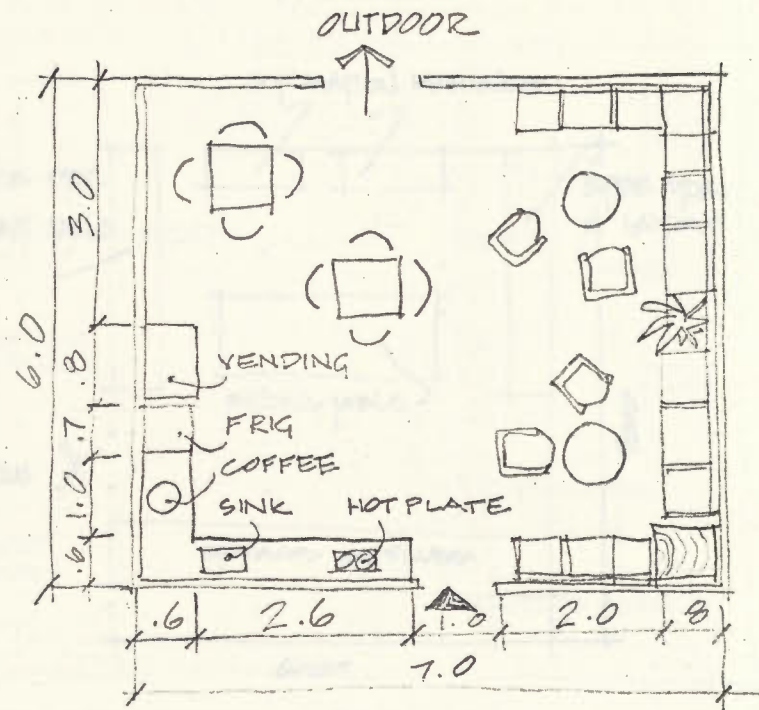


- PURPOSE - SKETCHING, READING, "CATCHING A FEW RAYS"
- LIGHTING - HOPEFULLY NATURAL. ARTIFICIAL LIGHT UNNECESSARY
- ACOUSTICS - N.E.
- THERMAL - U.P.
- OTHER ENVIOR. NEEDS - VIEW ALONG P OUTSIDE, VIEW JUST RELAXING ATMOSPHERE
- EQUIPMENT/FURNITURE - PERMANENTLY SET BEHIND 6 TABLES. CANTON PLANTS. THE 4TH TABLE UNNECESSARY
- FUNCTIONAL RELATIONSHIPS - SHOULD JOIN STUDIOS
- SPECIAL REQUIREMENTS - OUTDOOR LANDSCAPING

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS

# STUDENT LOUNGE

APPROX AREA = 40 m<sup>2</sup>

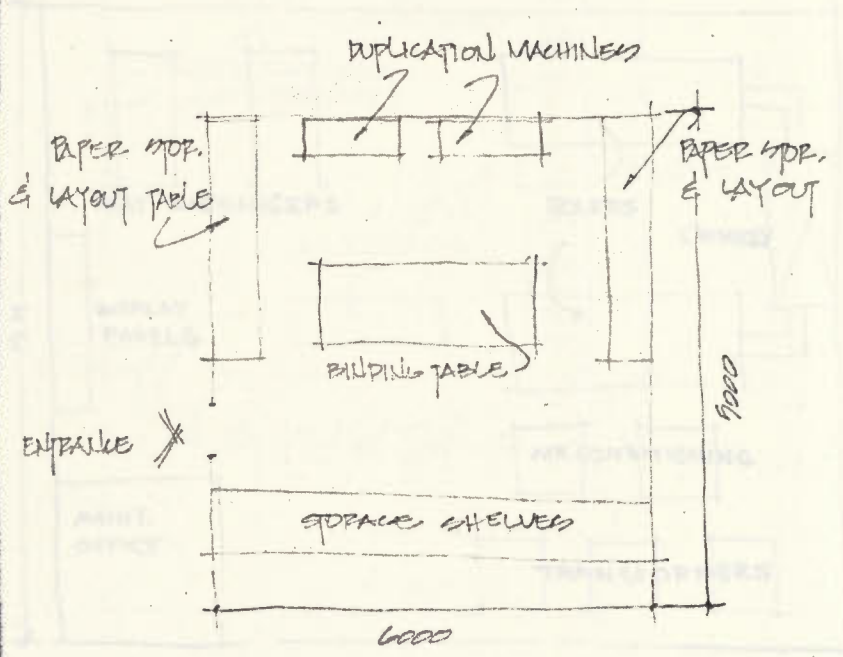


- PURPOSE - RELAXING, TALKING, READING
- LIGHTING - NATURAL LIGHTING DESIRABLE; STANDARD ARTIFICIAL LIGHTING
- ACOUSTICS - MODERATE NOISE LEVELS. ACOUSTIC SEPARATION
- THERMAL - STANDARD TEMP. REQ'TS, SEPARATE THERMAL CONTROL
- OTHER ENVIOR. NEEDS - A/C, ACCESS TO OUTDOOR, VIEW, QUIET RELAXING ATMOSPHERE
- EQUIPMENT/FURNITURE - COUCHES, CHAIRS, TABLES, TELEPHONE, CARPET, PLANTS, DSB ETC., VENDING MACHINES
- FUNCTIONAL RELATIONSHIPS - CLOSE TO HUB
- SPECIAL REQUIREMENTS - 20 PEOPLE (USER-CAPACITY)

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# DUPPLICATING ROOMS

APPROX AREA = 30 m<sup>2</sup>



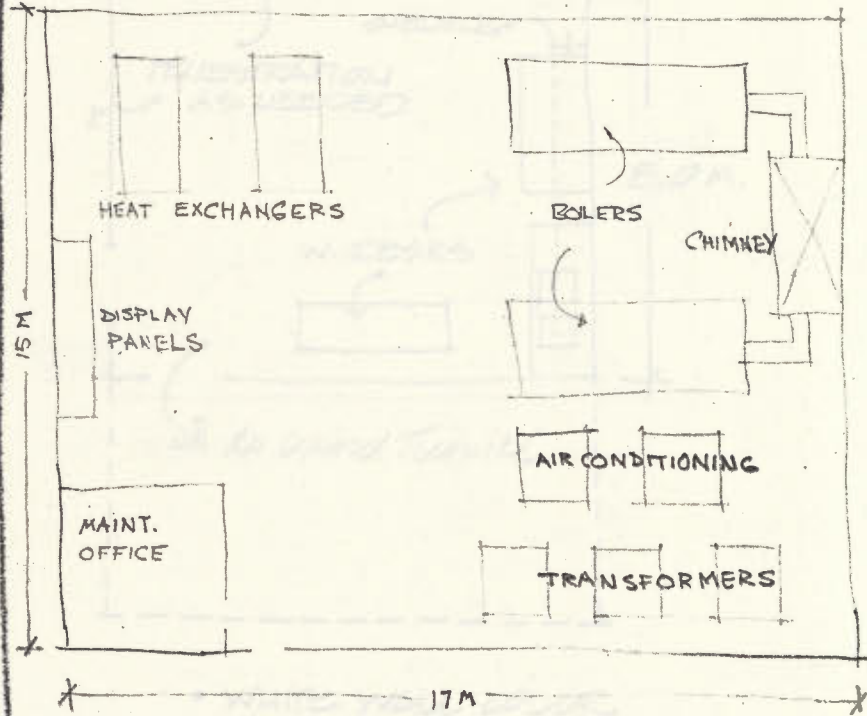
- PURPOSE - PHOTO COPYING OF PAPER, ETC.  
BINDING OF BOOKLETS
- LIGHTING - MODERATE TO HIGH AMBIENT LIGHTING
- ACOUSTICS - SOUND ABSORPTION AROUND MACHINES  
SOUND ISOLATED ROOM
- THERMAL - STANDARD TEMP. REQUIREMENTS
- OTHER ENVIOR. NEEDS -
- EQUIPMENT/FURNITURE - 2 COPY MACHINES, LARGE BINDING TABLE, GARBAGE BUCKETS, PAPER SUP. SHELF, BINDING MACHINERY & ASSOC. EQUIPMENT
- FUNCTIONAL RELATIONSHIPS - CLOSE PROXIMITY TO GENERAL OFFICE AREA, & INSTRUCTOR'S OFFICE
- SPECIAL REQUIREMENTS -

SPATIAL REQUIREMENTS AND CONSIDERATIONS

IDEALLY SHOULD BE LOCATED NEAR CENTER OF BUILDING FOR ECONOMY IN THE MECHANICAL SYSTEMS  
REQUIRES LARGE DUCT SPACE TO BE FROM ROOM

# MECHANICAL ROOM

APPROX AREA = 265 m<sup>2</sup> ?

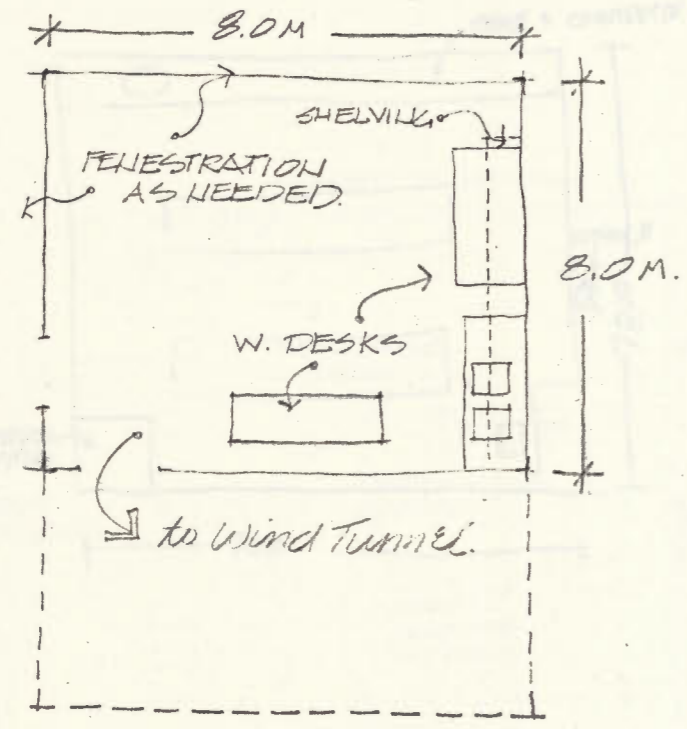


- PURPOSE - TO ISOLATE MECHANICAL EQUIPMENT
- LIGHTING - MODERATE AMBIENT LIGHTING
- ACOUSTICS - SOUND ISOLATION OF VARIOUS EQUIPMENT  
VIBRATION ISOLATION OF VARIOUS EQUIPMENT
- THERMAL - STANDARD
- OTHER ENVIOR. NEEDS -
- EQUIPMENT/FURNITURE - BOILERS FOR HEATING  
AIR CONDITIONING & POWER TRANSFORMERS  
CIRCULATION PUMPS, HEAT EXCHANGERS.
- FUNCTIONAL RELATIONSHIPS - REQUIRES EXTERIOR ACCESS &  
CLOSE PROXIMITY TO EXTERIOR  
OIL TANKS
- SPECIAL REQUIREMENTS - IDEALLY SHOULD BE LOCATED NEAR  
CENTER OF BUILDING FOR ECONOMY  
IN THE MECHANICAL SYSTEMS.  
- REQUIRES LARGE DUCT SPACE TO &  
FROM ROOM.

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS

# ENVIRONMENT LABORATORY

APPROX AREA = 65 M<sup>2</sup>



- WHITE WALL COLOR.
- VENTILATION HOOD.
- WORK COUNTERS
- ENCLOSED (LOCKABLE) STORE ROOM.
- HIGH CEILING.

• PURPOSE - ENVIRONMENTAL STUDIES supplementary to class work. LABORATORY.

• LIGHTING - STANDARD ELECTRICAL  
- NATURAL LIGHTING HEL. FOR SOME EXPERIMENTS.

• ACOUSTICS - STANDARD

• THERMAL - STANDARD

• OTHER ENVIOR. NEEDS -

• EQUIPMENT/FURNITURE - TEST EQUIPMENT AS REQUIRED (i.e. HELIODOME, LIGHTING, ACOUSTICAL, H<sub>2</sub>O FLUME.)

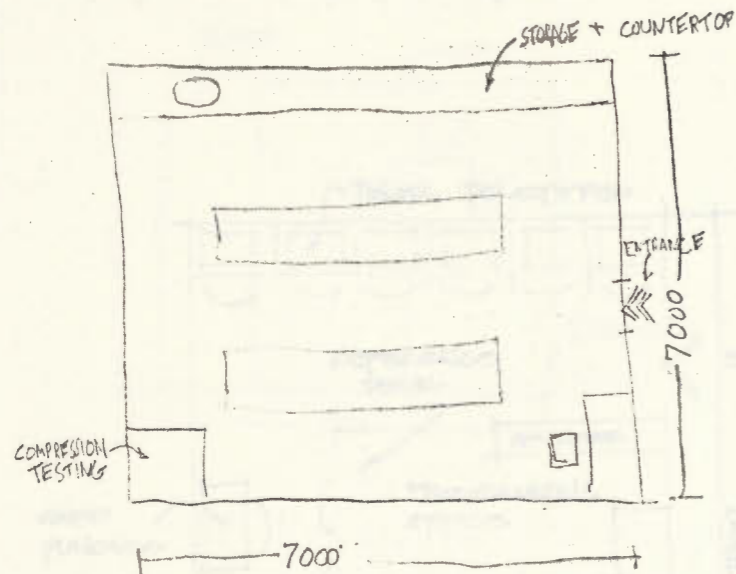
• FUNCTIONAL RELATIONSHIPS - ZONING: CLASS AREA.  
- CLOSE TO WIND TUNNEL.  
- FREE OF OBSTRUCTIONS

• SPECIAL REQUIREMENTS - SEPARATE ROOM FOR WIND TUNNEL - 12M X 12M  
- RECEIVING AREA.

SPATIAL REQUIREMENTS AND CONSIDERATIONS

# CONSTRUCTION LABORATORY

APPROX AREA = 50M<sup>2</sup>

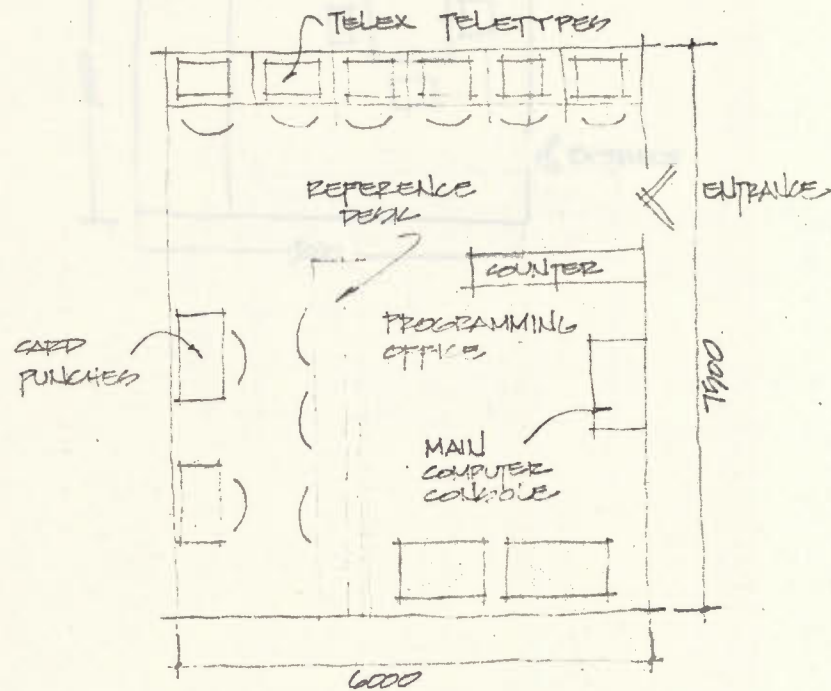


- PURPOSE - BUILDING OF CONSTRUCTION MODELS + TESTING
- LIGHTING - STANDARD, DAYLIGHT DESIRABLE BUT NOT NECESSARY
- ACOUSTICS - SOUND ABSORBING CEILING
- THERMAL - STANDARD
- OTHER ENVIOR. NEEDS - STANDARD VENT.
- EQUIPMENT/FURNITURE - LAB BENCHES BOOK STORAGE  
EQUIPMENT STORAGE SINK  
DESK
- FUNCTIONAL RELATIONSHIPS - REMOVED FROM QUIET AREAS  
CLOSE TO BUILDING MATERIALS  
RESOURCE CENTRE
- SPECIAL REQUIREMENTS -

SPATIAL REQUIREMENTS  
AND CONSIDERATIONS

# COMPUTER CENTRE

APPROX AREA = 45 m<sup>2</sup>  
 MINIMUM CEILING HT. = 2.4 m

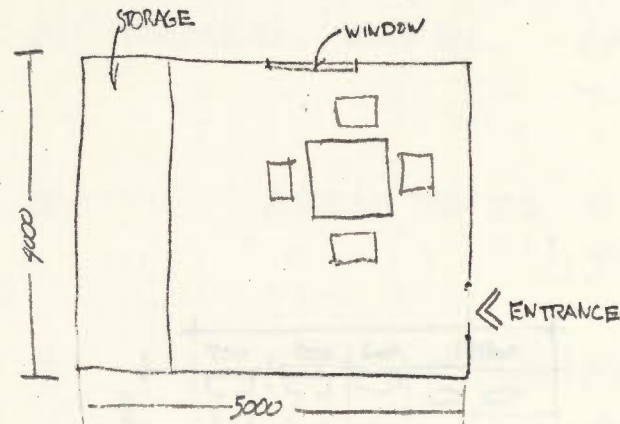


- **PURPOSE** - PROGRAMMING & KEY PUNCHING -  
 RUNNING PROGRAMS, PRINTING -  
 @ REFERENCE TABLES
- **LIGHTING** - MODERATE LEVELS W/TASK  
 LIGHTING AT TELETYPES
- **ACOUSTICS** - SOUND ISOLATION & CONSIDERATION AROUND TELETYPES
- **THERMAL** - STANDARD TEMP. REQUIREMENTS, INDEPENDENT  
 THERMOSTAT
- **OTHER ENVIOR. NEEDS** - A/C
- **EQUIPMENT/FURNITURE** - 6 TELETYPES & 6 CHAIRS, MAIL COMPUTER  
 CONSOLE, 2 FOOTRAN KEY PUNCHES, CARD READERS  
 REF. TABLE, 3 CHAIRS
- **FUNCTIONAL RELATIONSHIPS** -
- **SPECIAL REQUIREMENTS** - SPECIAL CONSIDERATION W.R.T.  
 LOADING CONDITIONS

SPATIAL REQUIREMENTS  
 AND CONSIDERATIONS

# JANITOR ROOM

APPROX AREA = 20 m<sup>2</sup>



- PURPOSE - STORAGE AREA FOR CLEANING SUPPLIES + AREA FOR CLEANING STAFF TO RELAX IN
- LIGHTING - STANDARD
- ACOUSTICS -
- THERMAL - STANDARD
- OTHER ENVIOR. NEEDS - IF POSSIBLE NATURAL LIGHT AND VENTILATION REMOVED FROM QUIET AREAS
- EQUIPMENT/FURNITURE - 4 CHAIRS + TABLE  
STORAGE CLOSETS FOR CLEANING SUPPLIES + EQUIPMENT
- FUNCTIONAL RELATIONSHIPS -
- SPECIAL REQUIREMENTS - LARGE UTILITY SINK

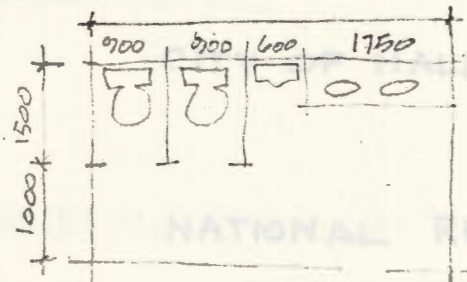
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SPATIAL REQUIREMENTS  
AND CONSIDERATIONS



# WASHROOMS

APPROX AREA = 10.25 m<sup>2</sup>  
 MIN. CEILING HT. = 2.4 m



- PURPOSE - TO ELIMINATE HUMAN WASTES AT THE DISCRETION OF THE USER, FULFILLING FANTASIES
- LIGHTING - MODERATE AMBIENT, HIGHLIGHTING VARIETY AREA
- ACOUSTICS - QUIET
- THERMAL - STANDARD TEMP. REQUIREMENTS
- OTHER ENVIOR. NEEDS - A/C. (INTRODUCING FRESH AIR / REMOVAL OF FOUL AIR)
- EQUIPMENT/FURNITURE - URINALS  
LAVATORIES  
WATER CLOSETS
- FUNCTIONAL RELATIONSHIPS - PROVISION OF WASHROOMS NEAR: GENERAL OFFICE, STAFF OFFICES, STAFF ROOMS, RECEPTION, CAFETERIA WORK AREA, MAINTENANCE, ETC.
- SPECIAL REQUIREMENTS - HANDI-CAP FACILITIES  
 FEMALE WASHRM = LOUNGE AREA  
 FULL LENGTH MIRROR  
 MAKE-UP AREA  
 NBCs - | WATER CLOSET / 100 MALES  
 | WATER CLOSET / 75 FEMALES

SPATIAL REQUIREMENTS AND CONSIDERATIONS

MATERIAL LISTED BELOW IS SUGGESTED

1. GILKIE, RON. STRUCTURES II NOTES,  
T.U.N.S., 1980.
2. HAMED, SAFEI. CAMPUS PLANNING STUDY,  
T.U.N.S., 1978.
3. ARCHITECTS 5X68, PROGRAM FOR SCHOOL OF ARCHITECTURE,  
T.U.N.S., 1968.
4. CITY OF HALIFAX PLANNING DEPT. DRAFT - DETAILED SOUTH END  
AREA PLAN, HALIFAX, 1980.
5. NATIONAL RESEARCH COUNCIL OF CANADA. NATIONAL BUILDING CODE,  
OTTAWA, 1980.

READING

BIBLIOGRAPHY

MATERIAL LISTED BELOW IS SUGGESTED  
FOR SUPPLEMENTARY RESEARCH.

CHING, FRANK

"SPACE, FORM and ORDER."  
VAN NOSTRAND RHEINHOLT.

JENCKS, CHARLES

"LANGUAGE OF <sup>1</sup>MODERN ARCHITECTURE."  
<sub>RO</sub>

DREXLER, et al.

"FIVE ARCHITECTS" EISENMANN (1975)  
GRAVES  
GWATHMEY  
HEDJUK  
MEIER.

"BEYOND MODERNISM" PROG. ARCHITECTURE .DEC. '79.

ROWE, C. et al.

"COLLAGE CITY." '78

SUGGESTED READINGS.

