

AN EPISCOPAL CHURCH FOR BROOKLYN, NEW YORK

by

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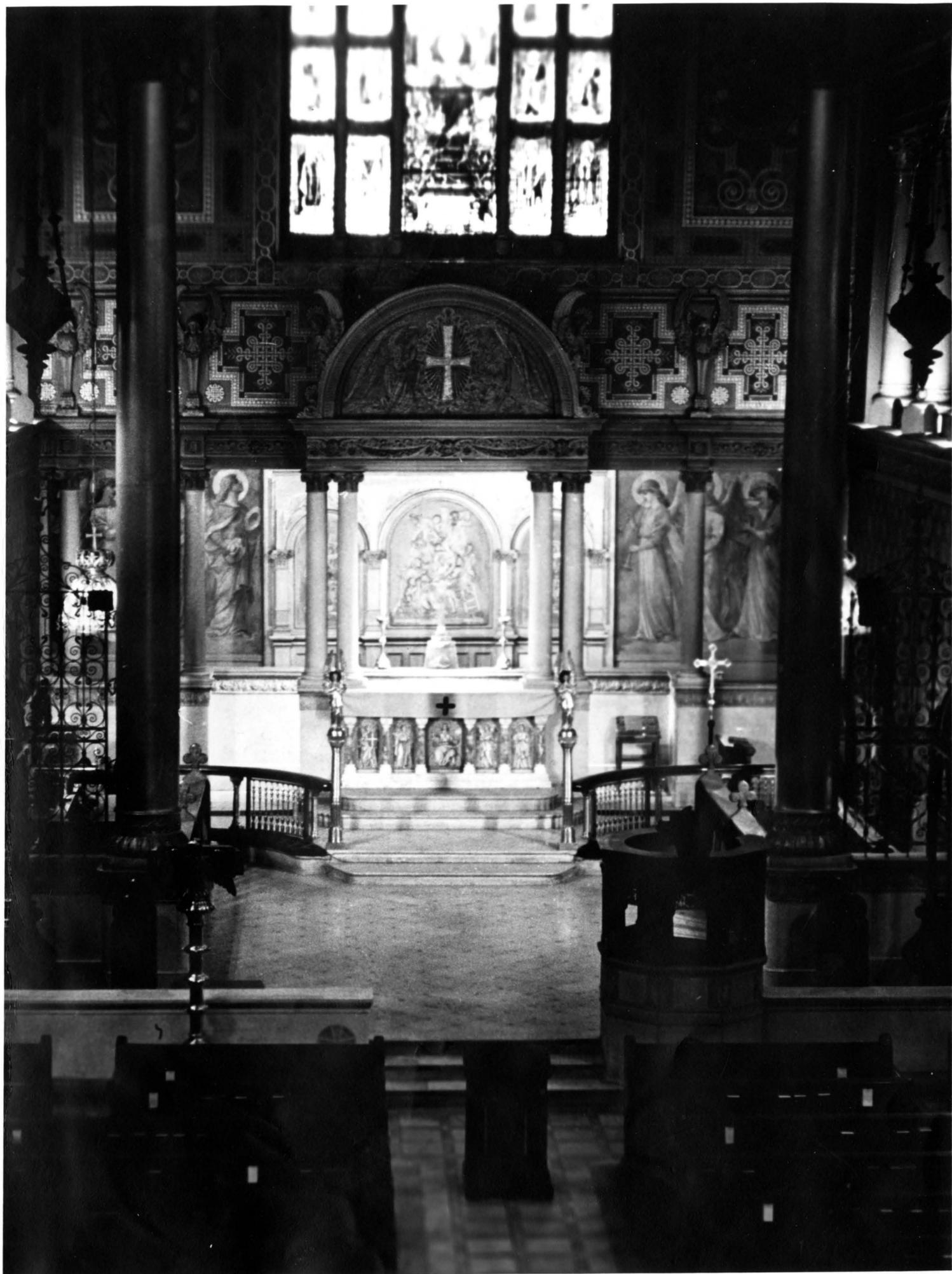
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Altar - Church of Messiah and Incarnation



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Part I Introduction

INTRODUCTION

The existing Church of the Messiah and Incarnation, Brooklyn, New York, is providing spiritual guidance for its parishoners, but in a limited way. Limitations on the church's activities are caused by the inadequate facilities the church has at its disposal. The Church of the Messiah and Incarnation, while still handsome, is much too large for its present congregation. The parish building is much too small to accomodate the many activities carried on by the parishoners. Many of the parishoners are moving out of the parish because they feel that they do not want to send their children to public schools with children of races other than white, and therefore, the program for the church will include facilities for an eight grade grammar school. It will be the purpose of this thesis to investigate the building requirements to house the physical and spiritual activities of the parishoners of the Church of the Messiah and Incarnation.

Part II The Church

CONSIDERATION

In Rome, early christian architecture was influenced by existing Roman art, and it was modified in other parts of the Empire according to the type of architecture already established as suitable for the geographical location of those parts.

The early Roman builders of Christian houses of worship continued old Roman traditions in their buildings. Because they were not wealthy they used, for their buildings, as far as possible, the materials from existing Roman temples which had become useless for their original purpose. In churches modelled after Roman basilicas, they used old columns which were brought to a uniform height by various devices. Although extremely interesting, these buildings do not have the architectural value of a style produced by the solution of constructive problems.

Basilican churches had either closely spaced columns carrying an entablature or more widely spaced columns carrying semicircular arches. The church consisting of three or five aisles covered by a timber roof was typical of the Early Christian style. The style was impressive because of the long perspective created by the oft-repeated columns which carried the eye along the sanctuary. This treatment combined with the relatively low height of the interior made the churches seem to be longer than they actually were.

CONSIDERATION

There are two schools of thought pertaining to what served as a model for the early christian builders. Some authorities believe that the halls of justice probably served as models, others believe Early Christian churches evolved from Roman dwellings. In all probability both the halls of justice and Roman dwellings played a significant role in the development of Early Christian churches.

Usually a basilican church was erected over the burial-place of the saint to whom the church was dedicated, and immediately over this burial-place was the High Altar covered by a ciborium.

Early Christian baptisteries were usually circular in shape and of considerable size because the rite was administered only at the three great Christian festivals - Easter, Pentecost, and the Epiphany. Until the end of the sixth century they usually adjoined the atrium or forecourt of the church.

Although no exact line separated Early Christian and Byzantine styles, the fourth century is usually taken as the dividing line.

The most characteristic thing about Byzantine architecture is the development of the dome to cover polygonal and square plans. The method of construction most often used was concrete and brick. The concrete and brick work

CONSIDERATION

were first completed and allowed to set before a surface of marble slabs was applied. "Byzantine domes and vaults were, it is believed, constructed without temporary support or 'centering' by the simple use of large flat bricks, and this is quite a distinct system derived from Eastern methods."¹ Many times small domes were grouped around a large central dome forming what is known as a Greek cross plan. Sometimes there were three domes, but more often there were five. Another architectural feature of the Byzantine period was the frank way in which builders expressed the structure. "Whilst hitherto the antique form of the roof had been preserved, it was now replaced by a totally different one: inasmuch as the vaulting, at least of the domes, was visible from the outside without any screen, or the only covering it had was one of polished metal."²

Richly colored marbles were used to a great extent in this style. Mosaics composed of very small precious stones or glass flowed without interruption over walls, piers, arches, domes, and apses. Unity was maintained in the interior by introducing the gold of the background into the figures.

The Romanesque style may be taken to date from the eleventh century onward to the twelfth century. The Early Christian Basilica architecture forms the basis of the

CONSIDERATION

Romanesque style, but Byzantine architecture was not without its influence.

Transepts were added to the plan in addition to lengthening the sanctuary which all went to making the church a cross in plan. Over the crossing of the nave and the transept a tower was usually erected. Many times the choir was raised on a platform above the level of the nave. This area was confined to the portion of the building formed by the elongation of the nave past the transept on the east end of the church. Another characteristic of the Romanesque style was the use of an ambulatory around the choir.

Structurally the Romanesque builder used all of the then known methods of building: trussed timber roofs, round arches, semi-circular barrel vaults, and groined vaults on square plans. The ribbed vault was developed at this time, but its perfection was one of the achievements of the Gothic period. Most of the vaulting of the Romanesque period was dynamic and had to be buttressed. The art of buttressing was not worked out too well in this period and builders had to rely on heavy walls thus limiting the height to which vaults could be raised. As with ribbed vaults, buttressing had to wait for the Gothic builder to perfect it.

Gothic was the style of the pointed arch, pointed

CONSIDERATION

vaults, spires, flying buttresses, sculpture, and stained glass. The style encompasses approximately the period from the twelfth thru the fifteenth centuries inclusive, but it varies in different countries.

Caen stone was one of the contributing factors to the development of the Gothic style. This stone is a light cream colored limestone which when it is first quarried is soft and can be carved, sawed, or chiselled. Only after it weathers and dries out is it hard. This stone admirably fulfilled the need for an elastic structure because the small Caen stones could be laid in thin courses with thick mortar joints, thus securing elasticity and stability.

In a Gothic structure, the wall system consisted of segments of walls on buttresses, set at right angles to their normal positions. The entire structure seems to be completely devoid of wall bearing construction. The walls were required only to afford protection from the natural elements, and not to support the structure. They were principally glass windows with vertical mullions.

The development of a system of vaulting which could be used over any area no matter what its shape; square, rectangular, trapezoidal, or triangular, was one of the greatest achievements of the Gothic builder. Although most of the forms to be found in the churches of this period

CONSIDERATION

were primarily functional and structural, others were the expression of artists. The characteristic spire served no structural requirement, but it did serve to lift men's minds to lofty aspirations and to direct his attention heavenwards.

The use of stained glass came into its own during the Gothic period. Brilliant transparent pictures of Bible stories were inserted between the buttresses. The soft diffused light that these windows allowed to penetrate the church helped considerably to soften the hard cold lines of the stone interior.

Renaissance architecture, which began in Italy early in the fifteenth century, is the revival of ancient Roman and Greek architecture.

The discovery of ancient writings and paintings, and the study of these works of art, as well as the renewed interest in classical literature, did not fail to bring Roman buildings to the attention of the people. "... the universal fascination of Antiquity was evidently both aesthetic and social, aesthetic in so far as the forms of Roman architecture and decoration appealed to artists and patrons of the fifteenth century, social in so far as the study of the Roman past was accessible to the educated only. So the artists and architect who until then had been

CONSIDERATION

satisfied with learning their craft from their masters and developing it according to tradition and their powers of imagination, now devoted their attention to the art of Antiquity, not only because it enchanted them but also because it conferred social distinction on them."³

Up to the Renaissance, architecture had been developed by evolution, a growth from simple primitive forms to the complicated forms of the Gothic period. The Renaissance, while it did not regress, refashioned and revised the forms of the past.

The outstanding characteristic of Early Renaissance was the use of very delicate detail arabesques and column capitals. Plans became more regular and more balanced. Round classic arches, columns, pilasters, and classic cornices were the fashion. The dome on pendentives was also frequently used. The High Renaissance was characterised by pedimented windows and doors, niches for classic sculpture, and domes.

According to Pevsner, "No church designed anywhere after 1760 is amongst the historically leading examples of Architecture."⁴

Up to the American Revolution, architectural styles in the colonies were provincial copies of styles in England and the Continent. After the American Revolution a movement

CONSIDERATION

began in America that is commonly called the Greek Revival, in which local carpenters, armed with newly published books on Greek styles, built thousands of buildings of all types. Gothic architecture was also revived at this time. This period did not attempt to make any new contribution to church architecture but rather it arrested inspired architecture. The Georgian style and the Greek revival had reached the point where altars had been taken out of apses and put down among the people. The builders of Gothic churches forgot all of this and tried to make every parish church look like a cathedral, with the altar buried in a deep chancel as far away from the people as it could possibly be placed.

Following the revivals was the eclectic period in which French Renaissance, Neo-Romanesque, Neo-Classicism, Neo-Gothic, and Neo-Byzantine were all combined and used together in varying proportions. This period was an attempt to express archeological discoveries in a functional way, but it failed because of the lack of discipline. It used too much of what it had at its disposal. Art Nouveau began to replace the eclectic period at the end of the first World War. Novelty for novelties sake ruined the period and the lack of discipline of functionalism produced a style that was more art than architecture.

CONSIDERATION

"In our generation the church is contributing little if anything to architectural progress, and contemporary architecture is contributing very little to the church."⁵ Architecture and the building of churches is a dynamic and constantly changing expression. Since the modern architect bases his building forms on the organic solution to the problem presented, he often arrives at a form that is strange to us. To be good, it must solve problems logically and intelligently with fresh qualities of imagination. An honest, logical, organic, and indigenous architecture can and will exert a leading and formulating force on the religious and spiritual life of today.

HISTORY OF EPISCOPAL RELIGION

"The Protestant Episcopal Church is merely the Church of England in America."⁶

The Reformation in England took seed when Wycliffe, in the fourteenth century, began to preach against the supremacy of the pope. Henry VIII gave England the honor of being the first nation to break away from medievalism and sever all relationships with the ecclesiastical empire of Rome. No revival or reformation of religion, however, had taken place. The spirit of the Reformation did not really enter the Church until the reign of Edward VI, when he made many radical changes both in doctrine and in practice.

The pope allowed Henry VIII to marry Catherine of Aragon, Henry's brother's widow. The King therefore, supported the pope and became known as the "Defender of the Faith." In 1527 Henry desired a divorce. Because the pope was slow in granting it Henry appealed to the universities of England to decide the question. The learned faculties met and declared the marriage between Henry and Catherine invalid. Having received this decision, the king saw fit to defy and repudiate the supreme authority of the pope.

In 1534 Parliament declared: that the King was head of the Church in England; that Princess Mary, daughter of Catherine, was illegitimate; that Princess Elizabeth, daughter of Anne Boleyn, the new wife of the King, was in

HISTORY OF EPISCOPAL RELIGION

the line of succession; and that all those who refused to accept the "Act of Succession" were under the jurisdiction of the "Treason Act", which provided punishment by death.

One of Henry's first "services" to the Church was the suppression of all monasteries and the confiscation of their property. His purpose was not to reform the church but rather to obtain money for his personal use.

During the period from 1536 to 1539 four papers were published: the "Ten Articles" (1536), the "Bishop's Book" (1537), the "Thirteen Articles" (1538), and the "Six Articles" (1539). The last of these papers provided for the abolishing of diversity of opinion, which resulted in a great deal of persecution. But fortunately for the nation, it resulted also in the King's death (1547).

Edward, the son of Henry, became king. From the very first Edward began a program of restoration for the Church. The three most significant contributions Edward made to the Church were the abolishment of the "Six Articles", the First Prayer Book of Edward VI (this is used, with a few alterations, by the Church of England today), the "Forty-two Articles" (nearly the same in all points as the "Thirty-nine Articles" of the present Church of England).

Just as things began to go well for Anglicanism, Edward VI died of consumption.

HISTORY OF EPISCOPAL RELIGION

Princess Mary, daughter of Catherine, became queen. Because she was a staunch Roman Catholic she set out to destroy the Reformation and restore Romanism in England. She abolished the Prayer Book and all the changes in worship which had been introduced by Edward. She strengthened her position by marrying Philip of Spain, a loyal Roman Catholic. Parliament passed a resolution favoring a reunion with Rome.

Mary died in 1558 of dropsy, a heart-broken woman, termed "Bloody Mary" by her people. Her persecution of the people had made the Reformation seem heroic, and many a man died to save his countrymen from Roman Catholicism.

When Elizabeth became queen, England was in a sad state of affairs. The treasury was empty, a war with France was taking place, the legitimacy of Elizabeth was questioned and the strength of Protestantism was diminished.

"Among the important events of Elizabeth's reign are the following.

1. Repeal of the Romanist legislation.
2. Restoration of royal supremacy over the Church.
3. Restoration of the Prayer Book of Edward VI.
4. The act of Uniformity (1559), which compelled all clergymen to use the Prayer Book and all people to attend church under penalty of censure and fire unless having 'lawfull or reasonable excuse'.
5. The revision of the "Forty-two Articles" of Edward VI resulting in the "Thirty-nine

HISTORY OF EPISCOPAL RELIGION

Articles (1536) which at the present time constitute the creed of the Anglican Church.

6. The rise Nonconformity.⁷

Elizabeth did not approve of the Reformation. She wanted the Church to retain images, crucifixes, holy water, and the celibacy of the clergy, but she was compelled to accept the Calvinist theory of the Lord's Supper.

Puritanism does not stand for any one sect but it was the name given to all those Protestants in England, from the time of Elizabeth onward, who held to the Calvinistic doctrines and practices.

The movement demanded a purity of life, a revision of the Prayer Book, simplicity in worship, and a Presbyterian form of government in Church affairs.

In 1642, the Puritan Revolution was precipitated and Charles I was overthrown and beheaded. On the accession of Charles II the Church of England was re-established and all other forms of religious worship were suppressed. The Act of Uniformity (1662) compelled over two thousand Puritan clergymen to withdraw from the Church of England.⁸ Many other so called Nonconformists were hanged, while others were sold into slavery in the West Indies. It was not until 1689 that the Nonconformists were granted their freedom by the passage of the Toleration Act, in the reign of William and Mary.

HISTORY OF EPISCOPAL RELIGION

The Church of England achieved success in establishing itself in America in the year 1607. The first service of Holy Communion was celebrated by Rev. Robert Hunt in Jamestown, Virginia, on June 21, 1607. Captain John Smith wrote of the first services:

"When I first went to Virginia, I well remember, wee did hang an awning (which is an old saile) to three or four trees to shadow us from the Sunne, our walls were rales of wood, our seats unhewed trees, till we cut planks; our Pulpit a bar of wood nailed to two neighboring trees; in foule weather we shifted into an old rotten tent, for wee had few better, and this came by the way of adventrue for new. This was our Church, till wee built a homely thing like a barne, set up cratchets, covered with rafts, sedge, and earth; so was also the walls; the best of our houses of the like curiosity, but the most parate farre much worse workmanship, that could neither well defend wind nor raine, yet wee had daily Common Prayer morning and evening, every Sunday two Sermons, and every three months the holy Communion, till our Minister died. But our Prayers daily, with an Homily on Sundaies, we continued two or three years after, till more Preachers came."⁹

After the American Revolution the first move toward the independence of the Church was made by Rev. William

HISTORY OF EPISCOPAL RELIGION

White when he published "The Case of the Episcopal Churches in the United States Considered". At Annapolis, in 1783, the name "Protestant Episcopal" was first proposed by a committee and adopted by the first General Convention in 1789. Changes were made to make the Church more suitable to the needs of our American life and culture, but "this Church is far from intending to depart from the Church of England in any essential point of doctrine, discipline, or worship; or further than local circumstances require".¹⁰

BELIEFS

In actuality an Episcopalian is both Catholic and Protestant. The Episcopal Church retains the ancient Catholic sacraments and professes the ancient Catholic Creeds. But it is a reformed church because during the sixteenth century the authority of the pope over the church was abolished, and many modifications were made in worship and doctrine.

Episcopalians recite both the Apostles' Creed and the Nicene Creed. Upon these two creeds is based the basic beliefs of Episcopalians. The Apostles' Creed is an ancient baptismal statement of faith. The Nicene Creed is a statement of Christian faith used at the service of Holy Communion.

Episcopalians believe that Jesus Christ is both God and man, united in one person. They also believe that He was born of Mary without human father. There has been considerable disagreement about the Virgin Birth in its biological detail. Most Episcopalians accept it as literally true; some regard it as symbolic.

The Trinity is the Christian teaching about God. Episcopalians believe He is God the Father, God the Son, God the Holy Spirit. But He is one and only one God.

Episcopalians may indulge in private confession of sins to a priest with the declaration of absolution by him.

BELIEFS

Confession is entirely optional, and it is not enforced as it is in the Roman Catholic Church. Many people do not care to avail themselves of this means of obtaining absolution for their sins but rather they find satisfaction in the general confessions and absolutions which are provided in the regular services of the Church.

The Bible is the great source and testing ground of Christian doctrine for the Episcopalian. But the Church does not hold to the literal accuracy of the Bible. The Bible is considered sacred for its inspiration and as the record of God's revelation. Freedom of investigation, restatements of the Christian faith, and incorporation of scientific truths are possible without causing violent controversies. The Episcopal Church has accepted the theory of evolution without disrupting its basic beliefs.

The Book of Common Prayer, compiled in 1549, is the result of combining, editing, and shortening the old service books of the Church. All regular services are taken from this book. Frequent revisions are made to meet the requirements of the succeeding ages. Worship in the Episcopal Church is not rigid; in the Prayer Book many variations are to be found.

Episcopalians do not believe in a physical heaven and hell. They believe that these are states of being of the

BELIEFS

mind and the spiritual body. Resurrection in the Episcopal Church means not the raising of the physical body but rather the re-creation by God of the complete personality of man with a body that is spiritual in form.

With a firm grip on the substantial elements of historic Christianity, the Episcopal Church faces a new era with respect for the past and hope for the future. Conservative without being reactionary, comprehensive without being shallow, the Episcopal Church values its heritage, recognizes its faults, and seeks to be an instrument in the hands of God for achieving His will.

LITURGICAL REQUIREMENTS

"There is no one sacred form for any piece of church furniture; there is no one sacred spot for it to occupy; the materials of worship must serve the purposes of worship and never become ends in themselves."¹¹

Every liturgical church must have an altar. It is usual to place the altar three steps above the floor upon which it stands. The area between the altar and the edge of the platform upon which it stands is called the footpace, with a suggested width of forty inches.

The communion rail marks the transition from the chancel to the sanctuary. It should have a 4'-5" opening to the altar to symbolize the way of access to the altar is open to the worthy communicant. The communion rail should have an exit adjoining both of its ends so that those who have received the Eucharist will not have to crowd past those who are approaching the rail.

A credence shelf to hold alms basins and the communion vessels between services should be on the Epistle side of the sanctuary.

The baptismal font should be near an entrance. The water used in the font should be emptied into a piscina, which should be connected to a dry-well.

A pulpit from which sermons can be delivered is a necessary piece of church furniture. It should be so

LITURGICAL REQUIREMENTS

located and designed that the preacher using the pulpit can be seen by the entire seated congregation at all times.

A lectern is an optional piece of furniture. It may be part of the pulpit or it may be a separate piece of furniture. If it is a separate piece of furniture it is suggested that it be located on the opposite side of the chancel from the pulpit.

Eight clergy seats should be provided in the chancel. Two of the seats should be located near the pulpit and the lectern, and the remaining six seats should be located near the altar behind the communion rail. These seats are used mostly for visiting clergy and bishops.

In addition to the eight clergy seats provided, six acolyte seats should be located in the chancel in front of the communion rail. Adequate seating for the choir must also be provided. The location of seating for the choir is optional.

Music plays a very important role in the Episcopal church and, therefore, an organ should be included in the church. Its location is optional.

The central aisle of the church should be wide enough to allow the passage of two persons carrying a casket. Side aisles should be wide enough to allow two vested persons to march side by side.

LITURGICAL REQUIREMENTS

It should be borne in mind that the suggestions that have been made in this section are not design standards to which the designer must live up to. They shall merely serve as guides to which the designer may refer without obligation.

Part III Survey of Existing Conditions

PRESENT CHURCH FACILITIES

The existing Church of Messiah and Incarnation is providing spiritual guidance for its parishoners in a meritorious manner, but it is hampered to a great extent by inadequate facilities. Many of the areas of the church, while adequate in size, are inadequate in all other respects. The church lacks small meeting rooms. At present all meetings are conducted either in the fellowship hall or in the dining room. There is only one area set aside for the exclusive use of the Sunday school. The church proper is open only during services. It is necessary to close the church at all other times because of the fear of vandalism. A chapel that can be closely supervised is needed.

Many of the parishoners are moving out of the neighborhood because they do not want to send their children to public schools with children of races other than white. Therefore, a grammar school supported by the church would be a great help in keeping parishoners in the neighborhood.

It is quite evident that the present facilities of the Church of Messiah and Incarnation are inadequate to continue to meet present and expanding needs of its parishoners.

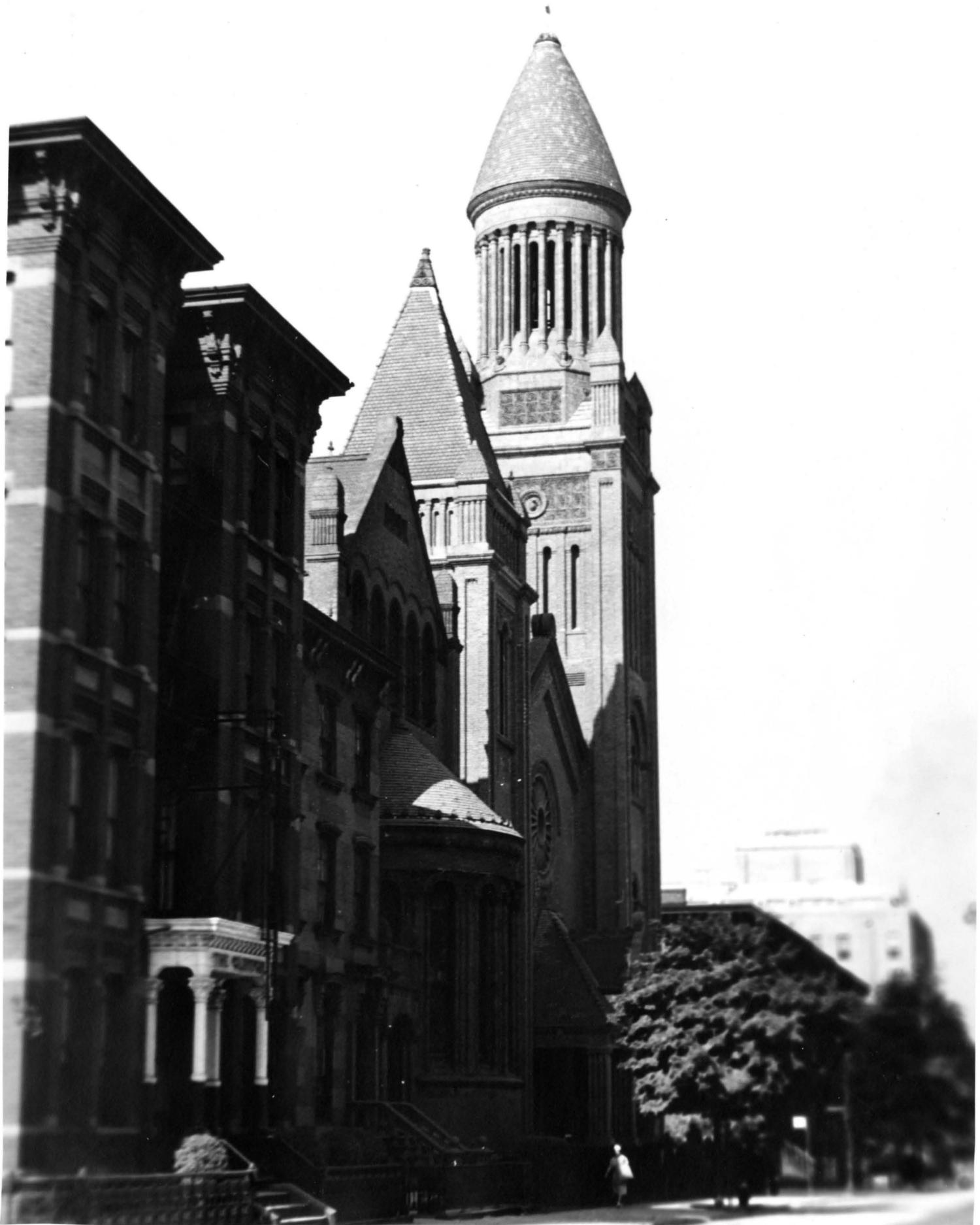
PRESENT CHURCH FACILITIES

AREA	SIZE	REMARKS
Nave	Seats 1200	Too large, need only about 500 seats
Sacristy	11' x 10'	Inadequate in size
Minister and Acolyte Robing	13' x 15'	Inadequate in size, should have separate areas
Choir Rehearsal	16' x 21'	Adequate
Rector's Office	13' x 14'	Adequate
Secretary	13' x 13'	Adequate as office alone
Fellowshiphall	33' x 50'	Adequate size, inadequate lighting
Altar and Chancel in Fellowshiphall	14' x 33'	Adequate
Dining Room	33' x 60'	Adequate in size, inadequate location, inadequate ventilation, inadequate lighting.
Kitchen	16' x 33'	Inadequate in all respects
Gymnasium	33' x 61'	Adequate size, inadequate location
Balcony over Gymnasium	24' x 33'	Adequate in size for static games
Kindergarten	33' x 33'	Inadequate in size
Braille	20' x 21'	Adequate in size but inadequate in all other respects
Shop	11' x 33'	Inadequate in all respects

PRESENT CHURCH ACTIVITIES

ACTIVITY	TIME					
	Sun	Mon	Tues	Wed	Thurs	Fri Sat
Services						
8:00 A.M.	*					
10:00 A.M.					*	
11:00 A.M.	*					
12:00 P.M. (Lent)			*			
4:00 P.M. (Lent)			*			
Education						
Adult	*					
Children						
Nursery	*					
Kindergarten	*					
Primary	*					
Intermediate	*					
Social						
Church Service League			11-4			
Evening Guild			7:30			
Young People's League	7:30					
Seman's Church Institute					1-4	
Braille Committee			8-5		8-5	
Junior Choir	12:00					
Choir Practice						7:30
Church School Mothers		7:30				
Parish Council				7:30		
Church Suppers	v	a	r	i	e	s
Food sale	v	a	r	i	e	s
Card Parties	v	a	r	i	e	s

Present Church from East



Aerial View of Present Church



NEIGHBORHOOD CONDITIONS

Brooklyn has a population of nearly three million people, almost as many as the entire metropolitan district of Los Angeles. More than one-third of the population of New York City lives in Brooklyn. Add the population of Pittsburgh and Philadelphia, and the sum is less than that of Brooklyn, which is larger than Buenos Aires, and almost the size of pre-war Paris.

The borough has continued to grow, but because of the increase in the foreign born and negro populations the available population of white Protestant background has declined sharply. There are fewer Protestants in Brooklyn than there use to be, and they continue to decrease in number and in proportion to the total population. The leading members of Brooklyn churches tend to live farther and farther from the churches to which they belong.

What chiefly creates the well known racial tensions in Brooklyn is the high degree of Negro and Puerto Rican concentrations in certain parts of Bedford Styvesant and adjoining neighborhoods, and the fact that the newcomers have so largely taken over a section of the city in which there were homes of culture and churches of national reputation, most of which have now given way to an incoming tide of relatively disadvantaged persons of a different race and social status.

NEIGHBORHOOD CONDITIONS

The people of so huge an urban area as Brooklyn cannot be satisfactorially studied as one vast mass of city dwellers. There are wide differences among its various sections. It therefore seems logical to break Brooklyn down into twenty-three neighborhoods as is recommended by the Brooklyn Church and Mission Federation. See Fig.

The Church of Messiah and Incarnation is located in the Fort Green area which includes the downtown business section, the Brooklyn Heights residential area, the deteriorated Navy Yard section, and the once fashionable Fort Green Park neighborhood (the Hill), all of which differ widely from each other.

Brooklyn, as a whole, gained 5.4 percent in population during the last census decade, Fort Green lost 8.6 percent. Its foreign-born white population, largely Italian, was 21.1 percent as compared with 28.4 percent for the borough; only three neighborhoods had a lower percentage of foreign born. Its non-white population, while only 6.6 percent, as the third highest for the borough, was exceeded only by Bedford Styvesant and Brownsville.

Nearly ten percent of the present Protestant church membership in Brooklyn belongs to Fort Green churches, while only 5.3 percent of the Sunday school enrollment belongs to these same churches. The reason for the high percentage

Attention Patron:

Page 38 omitted from
numbering



FIG. I
BROOKLYN BY NEIGHBORHOODS

NO SCALE

NEIGHBORHOOD CONDITIONS

of membership is a correspondingly high percentage of members who live at some distance; central churches almost always have widely scattered parishoners. For the same reason Sunday school enrollment is smaller than it should be.

Only one-third of the members of the Fort Green churches live in the neighborhood. The dispersal is more selective than general; the members are chiefly found in the more desirable districts of the borough. None of the churches has as many as half of its members living in its vicinity.

The Equitable Life Assurance Company has done much to help to save the Fort Green Park neighborhood. During the past ten years it has constructed ten thirteen story apartment buildings which house a total of 1,040 families. These apartment dwellings are rented for the most part to people who might be considered to be in the middle and upper-middle class.

Pratt Institute in conjunction with the City of New York is now planning to erect nine apartment buildings which will house an estimated population of 4,725 people. These apartments will be erected within walking distance of the Church of Messiah and Incarnation. The total number of families to be relocated in order to make way for the project will be 1,199, out of which 487 families will relocate in the project. This means that approximately 928 new

Equitable Life Assurance Apartment Buildings



NEIGHBORHOOD CONDITIONS

families will move into the parish. It is impossible to estimate how many of these new families will be Episcopalians.

Although the situation has looked rather dreary in the past, it is now the common belief that there is still a chance that the Fort Green Park neighborhood will regain its title of one of Brooklyn's better sections. If this is to be the situation, it will not be because of two housing projects but rather because the residents, businessmen, and religious organizations want it to be so. It will require a great deal of co-operation among the people. A new Church of Messiah and Incarnation with a new grammar school will be of a tremendous help in re-establishing the Fort Green Park neighborhood as one of Brooklyn's better neighborhoods.

Part IV The Site

THE SITE

The present site of the Church of Messiah and Incarnation will be used for the site of the new Church of Messiah and Incarnation. There is no available land within the vicinity of the present site which does not have some sort of structure erected upon it. The cost of a new site and demolition of existing structures would far exceed the cost of demolition of the present Church of Messiah and Incarnation.

Thirteen lots near the present site will be purchased, increasing the square footage of the site from 16,250 square feet to 43,050 square feet.

- The site is well located in regard to rapid transit and the city's arterial highway system. The Brooklyn Queens Connecting Highway is one mile to the west. Myrtle, DeKalb, and Lafayette Avenues provide routes east and west. Washington Avenue and Bedford Avenue are major north-south arteries. Lafayette Avenue is the route of the Independent Subway system. Myrtle, DeKalb, Green, Fulton, and Vanderbilt Avenues are bus routes. All parts of the city are easily accessible from the site. The author firmly believes that this will prove helpful in maintaining enrollment in the grammar school.

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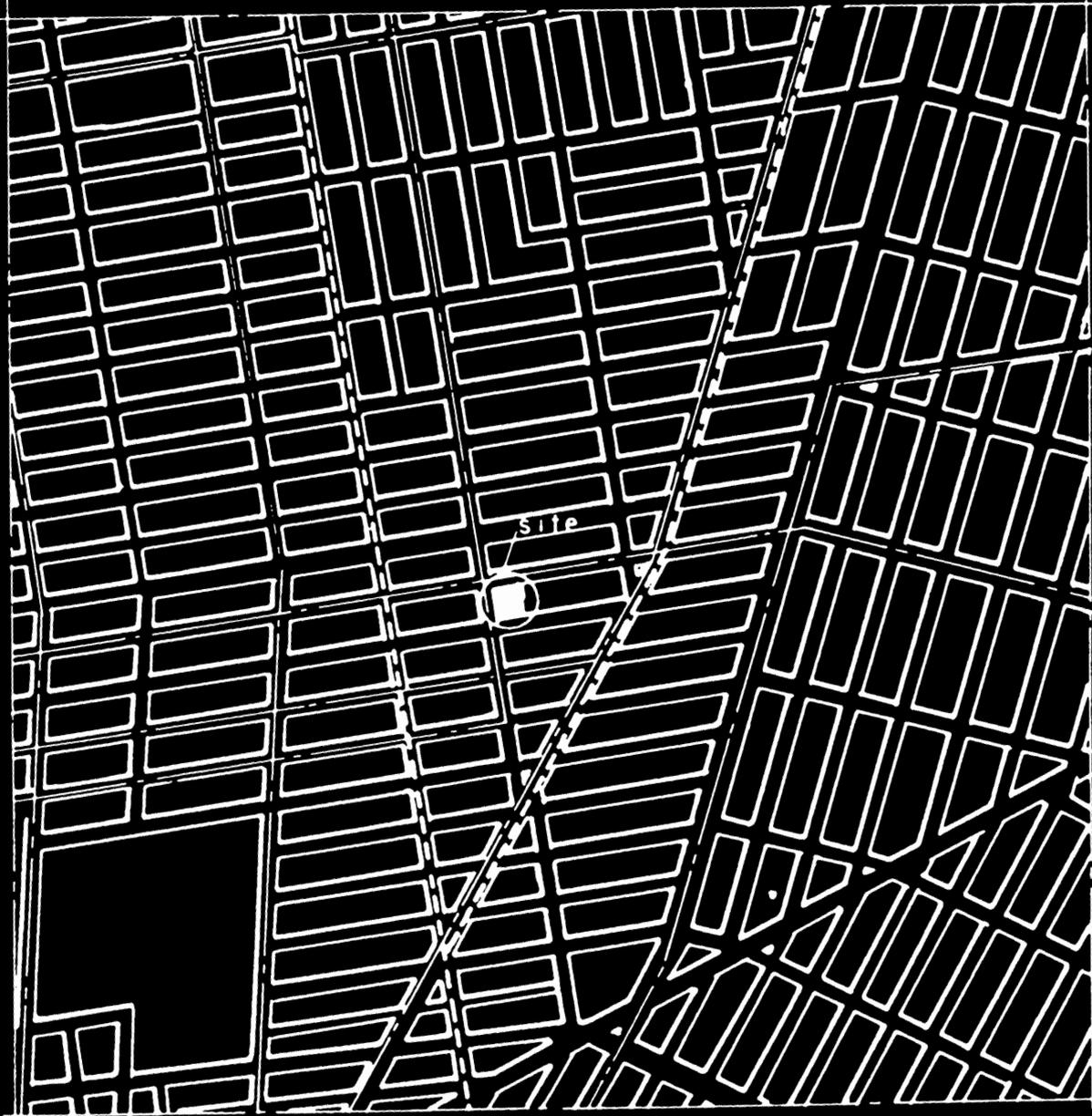


FIG.2
TRANSPORTATION

CODE:

NO SCALE

SUBWAY ————

BUS —————

V A N D E R B I L T

A V E N U E

G R E E N

A V E N U E

C L E R M O N T

A V E N U E

FIG.3
LOT PLAN

CODE:



LAND OWNED



LAND TO BE PURCHASED

SCALE  FEET

Part V Program Analysis

PROGRAM ANALYSIS

In addition to the activities listed on page 38 the Church of Messiah and Incarnation wants to incorporate in its program a few new activities. A complete list of the church's proposed activities is given on the following page.

PROGRAM ANALYSIS

ACTIVITY	TIME						
	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Services							
8:00 A.M.	*	*	*	*	*	*	
10:00 A.M.					*		
11:00 A.M.	*						
12:00 P.M. (Lent)			*				
4:00 P.M. (Lent)			*				
Social							
Church Service League			11-4				
Evening Guild			7:30				
Seaman's Church Institute					1-4		
Braille Committee			8-5		8-5		
Choir Practice							7:30
Junior Choir	12:00						
Church School Mothers		7:30					
Parish Council				7:30			
Church Suppers	v	a	r	i	e	s	
Food Sales	v	a	r	i	e	s	
Card Parties	v	a	r	i	e	s	
Young People's League	7:30						
*Youth Canteen							7-11
*Craft Group			7:30		7:30		
Education							
Sunday School							
Adult	9:45						
Children							
Nursery	11:00						
Kindergarten	11:00						
Primary	11:00						
Intermediate	11:00						
*College Group			7:30	7:30	7:30		
*Grammar School			cont inuo us	thru	ugh	week	

* Proposed new activities

PROGRAM ANALYSIS

The worship of God and the acknowledgement of His teachings is not an activity participated in only on Sunday. The church must maintain a seven-day-a-week schedule in order to be successful in bringing the family of God closer to Him. Therefore, it is necessary to include in the church group the type of space that will allow the church to include in its activities not only worship but also teaching, service and fellowship.

Many of the functions of the church do not overlap each other in time, and therefore, the author feels that dual use of space is a major consideration. Rooms and areas will be designed, in as much as is practical, to house as many activities as possible.

No accurate estimate can be made regarding the expected attendance at Sunday school because of the two following reasons: 1) It is difficult, if not impossible, to determine what psychological effect will be created by a new church, a new parish building, and a new grammar school. The author feels that many new parishoners will be attracted by the modern facilities provided by the new church group. The addition of a grammar school will undoubtedly increase the Sunday school enrollment, but to what extent the author feels that no accurate estimate can be made. 2) Many new apartment dwellings are being constructed in

PROGRAM ANALYSIS

the immediate neighborhood. How many new parishoners these new dwellings will yield can not be accurately estimated. Therefore, the anticipated attendance at Sunday school will be estimated to be equal to the anticipated grammar school attendance. The officers of the church feel that an attendance of 225 pupils in the grammar school will be the maximum number of pupils that the church could handle effectively.

In order to reduce building costs and to reduce land coverage, the Sunday school will use the classrooms in the grammar school for its activities.

PROGRAM ANALYSIS

WORSHIP AREAS

CHURCH

The sanctuary is the hub around which all church activities take place. A church can exist without provision for fellowship, service, and education but it cannot exist without an area for worship. The sanctuary must be designed in such a manner that it creates the proper atmosphere for inspired worship, expresses the aims and ideals of the church, and is pleasing aesthetically. The proper use of lighting, acoustics, materials, symbols, proportion, and space will achieve the designer's goal.

The minister of the Church of Messiah and Incarnation has suggested a nave seating of 500 people. Because many of the parishoners are elderly it is preferable to confine the seating to one floor thus eliminating the use of stairs and the possibility of accidents. The floor of the church should be level so that the possibility of sub-conscious association of the church with a theatre will be eliminated.

The chancel need be designed in such a manner as to enable all of the parishoners to see the entire chancel all of the time. Much of the Episcopal service is celebrated at the altar and in order to fully appreciate and to fully participate in the service the parishoners should have an unobstructed view of the chancel at all times. A pulpit and

PROGRAM ANALYSIS

a lectern must be provided one on either side of the chancel. There is no set pattern for the placing of the pulpit and the lectern, but the most usual place for them is in the forepart of the chancel near the people. As stated before, eight clergy seats must be provided in the chancel in addition to six seats for acolytes. Two of the clergy seats should be located near the pulpit and the lectern, and the remaining six clergy seats should be placed near the altar behind the communion rail. These seats are used mostly for visiting clergy and bishops. They are also used during the celebration of Holy Communion. The six acolyte seats should be placed near the altar outside of the communion rail. The choir and the organ are usually placed in the chancel, but there is no set rule as to their location in the church. The author feels that the choir and organ that are located in a balcony in the rear of the church are preferable to a choir and organ placed in the chancel. The congregation is theoretically supposed to be led in singing rather than sung to or at. With a choir in the chancel the congregation has a tendency to allow the choir to do their singing for them, while a choir in a balcony tends to become more a part of the congregation. No matter where the choir is located it should not occupy a prominent position in the church. Many churches, especially Episcopalian,

PROGRAM ANALYSIS

have made the mistake of allowing the choir to dominate the service.

In the nave, enough aisle space must be provided between the first row of seats and the chancel to allow for the passage of at least two people abreast. A central aisle is useful for weddings and funerals. A minimum width of five feet is needed for funerals.

A baptismal font must be included in the nave or in an area near the nave. The author feels that a font placed near the entrance door to the nave will help to express the function of baptism which is the receiving of a person into the family of God.

A narthex is an indispensable part of the church. It provides a place for the congregation to welcome each other, to renew acquaintances, for the minister to greet the congregation after the service, and it provides an effective barrier to the elements. The narthex also serves as a space in which the transition from the noisy street to the quiet of the church may be achieved.

CHAPEL

Services at eight a.m., services on saints' days, and some weddings do not require a nave seating of more than fifty people. Therefore, it is desirable to have a small chapel that will provide an atmosphere in which minister-

PROGRAM ANALYSIS

congregation contact is not lost. This chapel will also be open to all people throughout the entire day for quiet meditation. In addition to these uses the chapel may also be used by the school as part of its educational program. While providing an intimate atmosphere, the chapel will save the church money on its fuel bill by making it necessary to heat the 500 seat nave only when a large congregation is expected.

The furnishings in the chapel should include an altar, a lectern, a pulpit, an electric organ, and comfortable seating for fifty people.

MORTUARY CHAPEL

A problem is encountered when the urban apartment dweller loses a member of his family living with him. It is impractical and objectionable to keep the body in the apartment, and the only alternative is to either employ the services of a funeral home or to place the body in a church. Many people would rather have their relatives and friends placed in a church rather than in a funeral home, but many times the church is unable to provide adequate space because of church services. Therefore, it is necessary to include a mortuary chapel as a service to the urban apartment dweller.

The mortuary chapel will include an altar, a lectern,

PROGRAM ANALYSIS

a pulpit, an electric organ, and comfortable seating for fifty people.

SACRISTY

It is important that adequate storage space be provided for the storing of sacred utensils, vessels, and altar linen. The area in which these things are stored is commonly referred to as the sacristy. The sacristy should have storage cabinets, running water, a work table, a piscina, and a wall safe. This area should be located as close to the chancel as possible.

FLOWER ROOM

The altar in the Episcopal church is decorated a good part of the time with flowers. This practice makes it necessary to provide an area in which vases can be stored and flowers can be arranged. If the sacristy is large enough there is no objection to having the flower room as part of it. There must be running water, a refrigerator, and storage space for vases in the flower room.

PARISH ACTIVITY AREAS

The church staff includes a minister, a secretary, a director of education, an assistant director of education, a choir master, a sexton, vestrymen, and janitors.

MINISTER

The minister will require a private office and a

PROGRAM ANALYSIS

meeting room convenient to his office. The meeting room must have a seating capacity of at least twenty-five people. The purpose of the meeting room is to provide adequate space for the meetings of vestrymen and to provide adequate space for informal group instruction by the minister. The minister's office should be informal but dignified. The meeting room should be furnished with several easy chairs and one large table.

SECRETARY

The secretary will require an office adjoining the minister's office. Convenient to the secretary's office will be a duplicating room. The church does much of its own printing of bulletins, notices, and letters and, therefore, a duplicating room is indispensable. The secretary's office and the duplicating room should provide adequate space for files, and for storage of stationery and general supplies.

DIRECTOR AND ASSISTANT DIRECTOR OF EDUCATION

The director of education and the assistant director of education will each require office space. There must be adequate area for a desk, files, and book cases. There is no objection to combining the director's and assistant director's offices. It is important that these offices be convenient to the minister's office.

PROGRAM ANALYSIS

CHOIR MASTER

The choir master does not require an office, but he does require a choir rehearsal room in order to prepare the choir for services in which they participate. This room shall also be used by the grammar school for instruction in music. The choir rehearsal room will require seating for thirty people, a piano, and adequate storage space for sheet music. In addition to a rehearsal room, the choir will need two robing areas. If lockers are provided in the rehearsal room the male section of the choir can change their clothing there. The female section of the choir will require a private robing area separate from the male robing area because the outer clothing is removed and replaced by a cassock. The female section of the choir may change their clothing in one of the conference rooms. It is estimated that fifteen lockers should be provided for both the male and the female sections of the choir.

SEXTON

The sexton will require a small office, a workshop, and an apartment. The office need only include a desk and one file cabinet. The workshop should include a work bench, a circular saw, a band saw, a wood lathe, and the necessary tools to make general repairs to the church. An apartment for the sexton will be included in the church group in

PROGRAM ANALYSIS

order to reduce the fire insurance rates. The apartment should include a living area, a dining area, a kitchen, a bathroom, two bedrooms, and adequate storage space.

BOOKBINDING ROOM

A number of members donate two days a week to transcribing and binding books for the blind. This activity requires an area which cannot be used for any other purpose. The bookbinding room must contain presses and adequate storage space for supplies.

CRAFT SHOP

The church wishes to initiate a new activity which will be known as the craft group. The activities of this group will include woodworking, leathercraft, metalcraft, clay modeling, and basket weaving. The work space should include work benches, a circular saw, a band saw, a wood lathe, and storage space for tools and supplies. The grammar school will include in its educational program, as many public grammar schools do, a course in which handicraft is taught. Therefore, it is necessary that the workshop be located so as to be easily accessible to the grammar school.

DINING ROOM

During the course of the year the church sponsors numerous suppers and luncheons. It is estimated that approximately fifty percent of the grammar school will have

PROGRAM ANALYSIS

to be provided with space to eat their noon meal. Therefore, a dining room seating approximately 250 people will be provided. Adjacent to the dining room there must be a kitchen, and storage space for china, silverware, and linen.

KITCHEN

The kitchen shall consist of the following areas: a receiving area, a refrigeration space, a food preparation area, a cook's area, a serving area, a dishwashing unit or clean-up area, and storage space.¹²

The receiving area should have direct access to the street. It must also be adjacent to the storeroom.

Refrigeration should include 45 cubic feet of reach-in refrigeration, a 96" x 120" walk-in refrigerator, and one 12 cubic foot deep freeze locker.¹³ Ample refrigeration will insure that perishable supplies may be bought at wholesale prices.

Equipment in the food preparation area should include two heavy duty ranges, one bake oven, one potato peeler, one pedestal type mixing machine, one two-compartment vegetable sink, and two ice cream cabinets.

The serving area should include one serving counter with electrically heated food tables, storage for dishes under the counter, and storage for silverware.

After eating, the pupils should be required to bring

PROGRAM ANALYSIS

their soiled dishes to a pass window. The clean-up and dishwashing area should include a pass-window, a table for soiled dishes, one double tray dishwashing machine, one pre-rinse sink, and one pot sink.

In addition to the kitchen equipment outlined above it will be necessary to include two tables 48" x 24" x 28", one table 48" x 30" x 36", one table 60" x 30" x 36", and one table 72" x 30" x 36".

AUDITORIUM

Provision for school assemblies and plays, food sales and large group meetings need be supplied. It is estimated that a fellowship hall seating 300 people will be adequate. The fellowship hall should be acoustically treated, and it should have special darkening devices on all glass surfaces. It should contain a stage at least 20 feet deep. Adequate storage space for chairs and card tables should be provided.

GYMNAISIUM

A gymnasium to be used jointly by the young people of the church and the grammar school should be provided. It should include a basketball court, a juke box, a soft drink cooler, a pool table, and a ping pong table. Two bowling alleys should be provided in close proximity to the gymnasium. The gymnasium will be used during school hours

PROGRAM ANALYSIS

as a recreation area for the pupils in the grammar school while the young people of the parish will have the use of it during the evenings. It is proposed that dances will be held in the gymnasium.

It will be necessary to provide locker rooms for both sexes. It is estimated that twenty-five lockers in each of the locker rooms will be adequate. In addition to lockers there should be toilet facilities, showers, and a dressing area.

CONFERENCE ROOMS

Two conference rooms will be required in addition to the minister's conference room. These rooms will be for the use of the director of education, the Young Peoples League, the college group, the school principal, and various other church groups. It should be possible to convert the two conference rooms into one large meeting room. The conference rooms should each provide adequate seating for twenty-five people.

TOILET FACILITIES

Toilet facilities should be located near the administration suite, the fellowship hall, and the dining room.

JANITOR'S SINK CLOSET

At least one janitor's sink closet should be provided on each floor of the parish building. It should contain a slop sink, and adequate storage space for cleaning apparatus.

PROGRAM ANALYSIS

GRAMMAR SCHOOL

A school must not only teach knowledge and skills, but it must also help children to develop sound character, good citizenship, and strong personalities. Each child reacts in a different way to the same situation and it is the duty of the school to develop the assets of each child to the fullest extent. The school must provide an opportunity for children to touch, manipulate, operate, create models, collect, visit, and carry on other activities that will illustrate in a concrete manner the ideas with which they are dealing.

The functions of the school are flexible, and, therefore the design should also be flexible. Function and flexibility gain in importance when one thinks of the continually changing programs and curricula. The use of semi-permanent, lightweight partitions is a trend which has been brought about by the ever increasing demand for flexibility.

CLASSROOMS

The classroom is the center of activity for children for at least five hours out of each weekday. It should provide a general work area, a library or quiet individual study area, a focal point for dramatics, facilities for art, facilities for music, and a handworking area for wood,

PROGRAM ANALYSIS

cloth, metals, and crafts.¹⁴ Children are learning by doing rather than by sitting and listening. For the activities that they carry on in the classroom at least thirty square feet per pupil is required.

The classroom should be so located that there will be a minimum amount of noise penetrating the room from other areas. It should be convenient to the recreation unit, the administration unit, the assembly unit, and the library. It should receive first consideration for sunlight and breeze.

Moveable chairs and tables, or individual moveable desks, should be used in order to meet the increasing demand for flexibility. Other equipment should include a large work table, a large work sink, a drinking fountain, book shelves, tackboard, chalkboard, a small stage, and supply storage.

Toilet facilities can be provided in an area adjacent to each of the classrooms or they can be provided as gang toilets. In the Kindergarten and the primary grades, toilets adjacent to the classroom are most desirable.

Clothing storage can be provided either in the classroom or in a corridor adjacent to the classroom. No matter where the clothing is stored, adequate space must be provided for the confusion that naturally results in the putting on of children's clothing.

PROGRAM ANALYSIS

The control of noise is a major consideration in a classroom. The major sources of noise are, "from outside of the building, from surrounding spaces in the building, within the classroom, and from ducts or mechanical devices serving the classroom".¹⁵ Noise from the outside may be reduced by placing the school as far away from the noise source as is practical. Noise generating areas within the school should be placed so that they do not interfere with classroom activities. Sound reverberation within the classroom may be reduced by the application of sound absorbent materials on ceilings and walls, and by reducing the number of hard parallel surfaces within the classroom.

Audio-visual aids have come into great use as educational tools. The author believes that the greatest amount of flexibility is obtained when the individual classroom is used for the showing of motion pictures and slides rather than having a special room for this purpose. When individual classrooms are used there is no need for maintaining a complicated schedule for the use of the audio-visual aid room. The teacher may set up her educational program without co-ordination with other educational groups in the school. If the classroom is used for the showing of motion pictures it will be necessary to incorporate special darkening devices on all glass areas.

PROGRAM ANALYSIS

MUSIC ROOM

Music has become an important element in the elementary school program. For many years the piano has been standard equipment in the kindergarten and in the primary grades. The trend is to set aside a specially sound treated room in which music instruction and group singing can be participated in without disturbing other classes.

A special music room will not be provided for the use of the grammar school. Facilities for music have already been provided for in the choir rehearsal room. The grammar school may use this room for its music program.

MANUAL TRAINING SHOP

A special manual training shop will not be provided for the exclusive use of the grammar school. The school may use the craft shop for its instruction.

LIBRARY

The library should be centrally located in the church group because it will be used by the members of the parish as well as by the grammar school. It should be a quiet spot for contemplation and study, and it should provide surroundings in which the mind instinctively responds to the subject matter. The interior treatment should be intimate and light. East-west lighting presents problems of light control, therefore, it is advisable to maintain

PROGRAM ANALYSIS

north-south lighting if possible.

The library should include a reading room, which allows twenty-five square feet per person for at least ten percent of the enrollment,¹⁶ an adult reading room for eight people, a work room, a supply room, and a stack area.

Easy access to books is of prime importance in a grammar school. There is no need for a child to be discouraged from reading books because it is too difficult to acquire the books. The reading area should be arranged around a central stack area so as to decrease cross-movement on the part of the readers.

Library furniture should include an adequate number of tables and chairs; open, adjustable shelves no higher than five and one-half feet; a charging desk; a card catalogue; and storage cabinets for charts, maps, newspapers, films, slides, photographs, and books.

The library work room should be located near the charging desk. The work room will be used to prepare new books, magazines, and displays; to repair damaged books; and to store books until the librarian is ready to work on them. The work room should contain a sink, a work table, and adequate storage space.

ASSEMBLY AREA

In order to obtain maximum economy in the church group,

PROGRAM ANALYSIS

the auditorium in the parish building will be used for the school assembly. The auditorium should prove adequate for school assemblies because it seats 300 people and it contains a stage.

LUNCH ROOM

It is estimated that it will be necessary to feed approximately fifty percent of the enrollment of the grammar school their noon meal. Many of the pupils will live a distance from the school too great to travel for their noon meal. A special lunch room will not be provided because of the limitations placed on the building program by the comparatively small site being used. The children shall eat their noon meal in the church dining room.

ADMINISTRATIVE UNIT

The administrative unit will contain a general office, a principal's office, and a health suite. Ideally, the administrative unit should be centrally located on the first floor. It should be comfortable and inviting, a friendly, cheerful area with casual furniture and numerous pictures. A cold business office atmosphere should be avoided.

GENERAL OFFICE

The general office should include space for one secretary. Additional space must be provided for mail

PROGRAM ANALYSIS

boxes, storage cabinets for school records, and a general bulletin board. This area should be well lighted and sound controlled.

PRINCIPAL'S OFFICE

The principal's office should have direct access to the general office and the corridor. It should be as informal and inviting as possible. Enough area must be supplied for a desk, informal seating for five people, and storage of records.

HEALTH SUITE

In most grammar schools children are given at least one physical examination during the course of the school year. There are many instances when a child becomes sick or is involved in an accident during school hours. It is the duty of the school to provide trained personnel who can administer first-aid in such instances. The health suite can be located either near the administrative offices or near the gymnasium. It should contain a waiting room, an examination room, and a toilet.

TEACHER'S LOUNGE AND WORK ROOM

This room is used by teachers for the preparation of instructional material such as courses of study, lesson plans, instruction sheets, visual aids, special activities; the evaluating of students' work and recording and trans-

PROGRAM ANALYSIS

cribing statistical data. This room shall also be used by teachers as a rest and smoking lounge. It should contain a large work table and several easy chairs.

CUSTODIAL SPACE

Custodial services include servicing the heating system, lighting, and plumbing; keeping the building clean; making minor repairs to the building and equipment; and receiving and storing supplies. Inadequate custodial services will result in unsanitary conditions, fire hazards, inefficient use of supplies, and loss and damage of equipment.

In order to maintain proper custodial service it will be necessary to have a receiving and shipping room, a workshop, a supply room, a furniture storage room, a general storage room, janitor's sink closets, and locker space.

RECEIVING AND SHIPPING ROOM

The receiving and shipping room may either be a separate area or it may be combined with a storage room. The only requirement for this area is that it be easily accessible from the street.

WORKSHOP

In order to eliminate duplication of areas and machines the school workshop will be combined with the church workshop.

SUPPLY ROOM

The custodians' supply room should provide adequate

PROGRAM ANALYSIS

storage area for paper towels, soap, toilet paper, light bulbs, cleaning compounds, brooms, mops, and pails. This room must be fireproof.

FURNITURE STORAGE

The furniture storeroom should be near the receiving and shipping room. It should provide adequate area for the storage of furniture in need of repair. It should also provide area for the storage of new furniture which will be needed to replace broken furniture.

GENERAL STORAGE

Most of the storage space will be contained in the individual classrooms, but additional storage space must be provided for stationary, audio-visual aids, and exhibits. The author feels that a general storage area near the library will prove to be satisfactory and convenient. The librarian's time will not be entirely consumed by her duties in the library, therefore, she can easily handle the supervision of the issuing of supplies, audio-visual aids, and exhibits.

An additional general storage area should be provided in the basement.

JANITOR'S SINK CLOSETS

At least one janitor's sink closet should be located on each floor of the school. It should contain a slop sink,

PROGRAM ANALYSIS

and adequate storage space for cleaning apparatus.

LOCKER SPACE

Custodial locker space should be provided for both sexes. It is estimated that four lockers will be required in each locker room. In addition to lockers there need be a toilet, and a dressing area.

TOILET FACILITIES

Toilet facilities should be centrally located in relation to the areas that they serve. Toilet rooms should be well lighted, and have a positive means of ventilation.

In the kindergarten and primary grades it is desirable to have toilet facilities in direct connection with the classroom. An important part of the kindergarten and primary grade program is aiding children to learn how to assume the responsibility of personal hygiene. A toilet which is an integral part of the classroom unit will allow the teacher to maintain supervision over the classroom and the toilet simultaneously.

Toilet facilities for children above the primary grades may be planned as gang-toilets. The Building Laws of the City of New York indicates the need for sanitary facilities as follows:

PROGRAM ANALYSIS

No. People on Floor	No. of Waterclosets	Ratio
1 - 15	1	1 - 15 1/2
16 - 35	2	1 - 17 1/2
36 - 55	3	1 - 18 1/3
56 - 80	4	1 - 20
80 - 110	5	1 - 22
111 - 150	6	1 - 25
151 - 190	7	1 - 27 1/2

Part VI Design Presentation

Plot Plan

v a n d e r b i l t a v e n u e

g r e e n a v e n u e

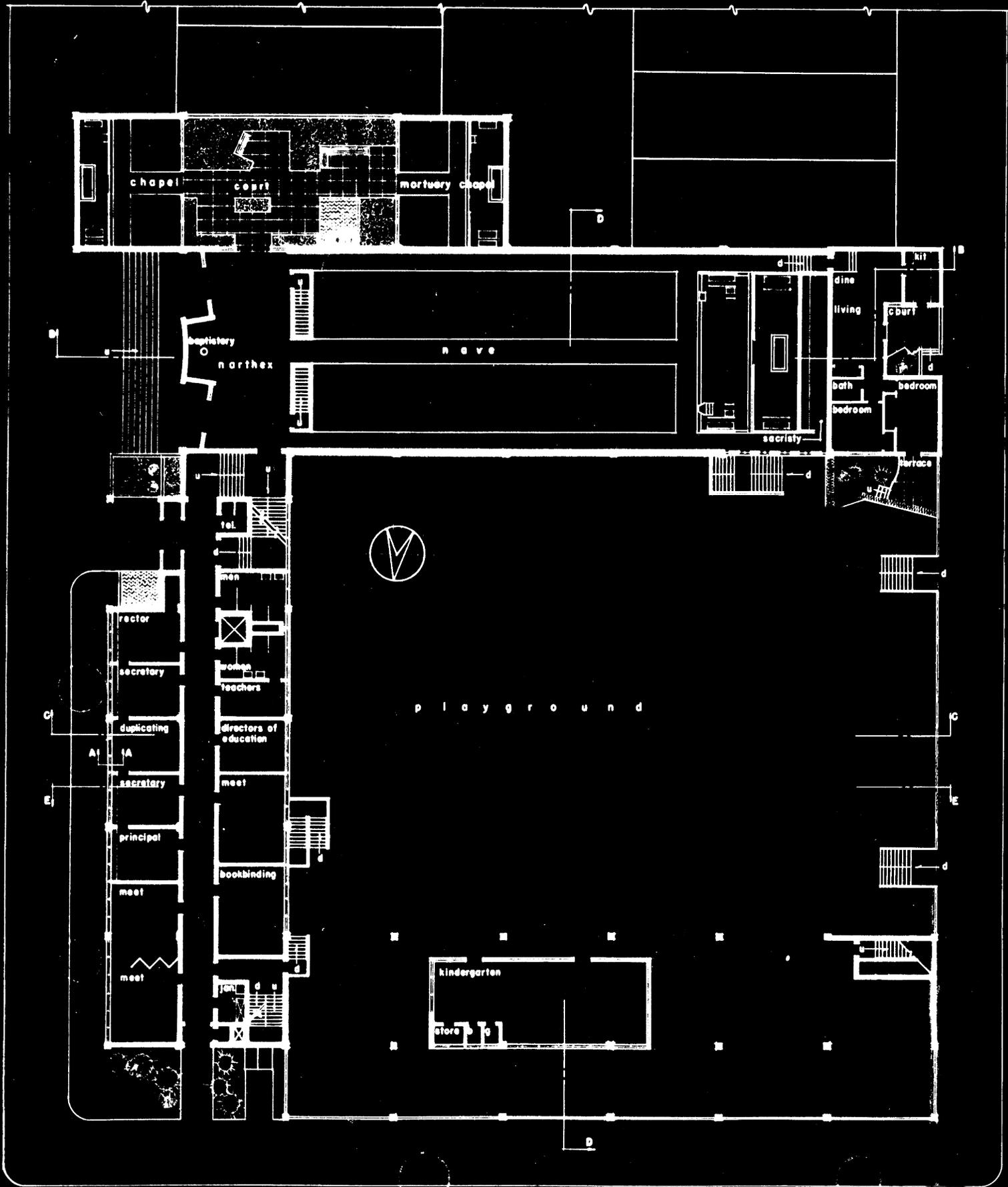


c l e r m o n t a v e n u e

p l o t p l a n



First Floor



green ave

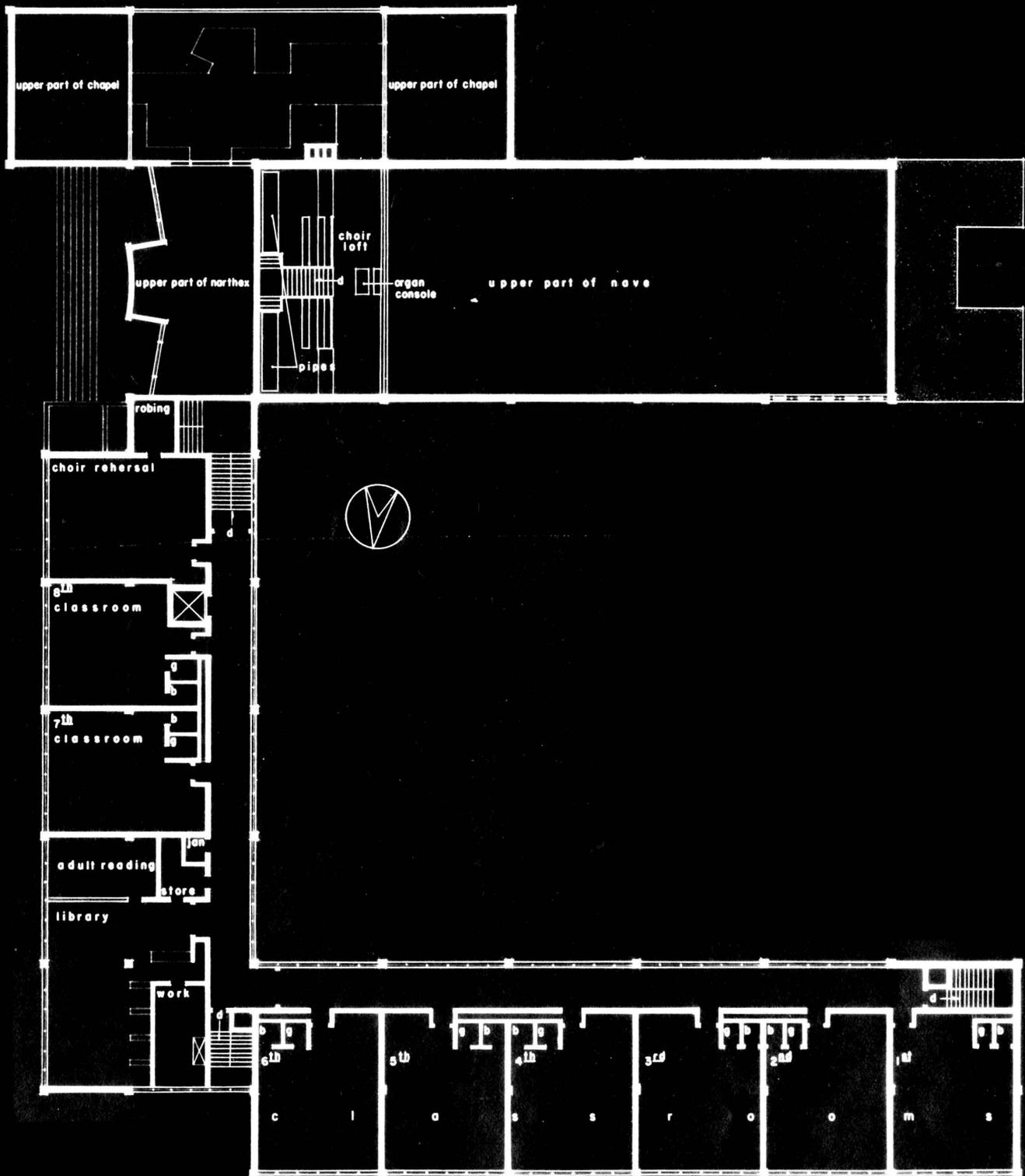
Clermont Ave

green ave

first floor

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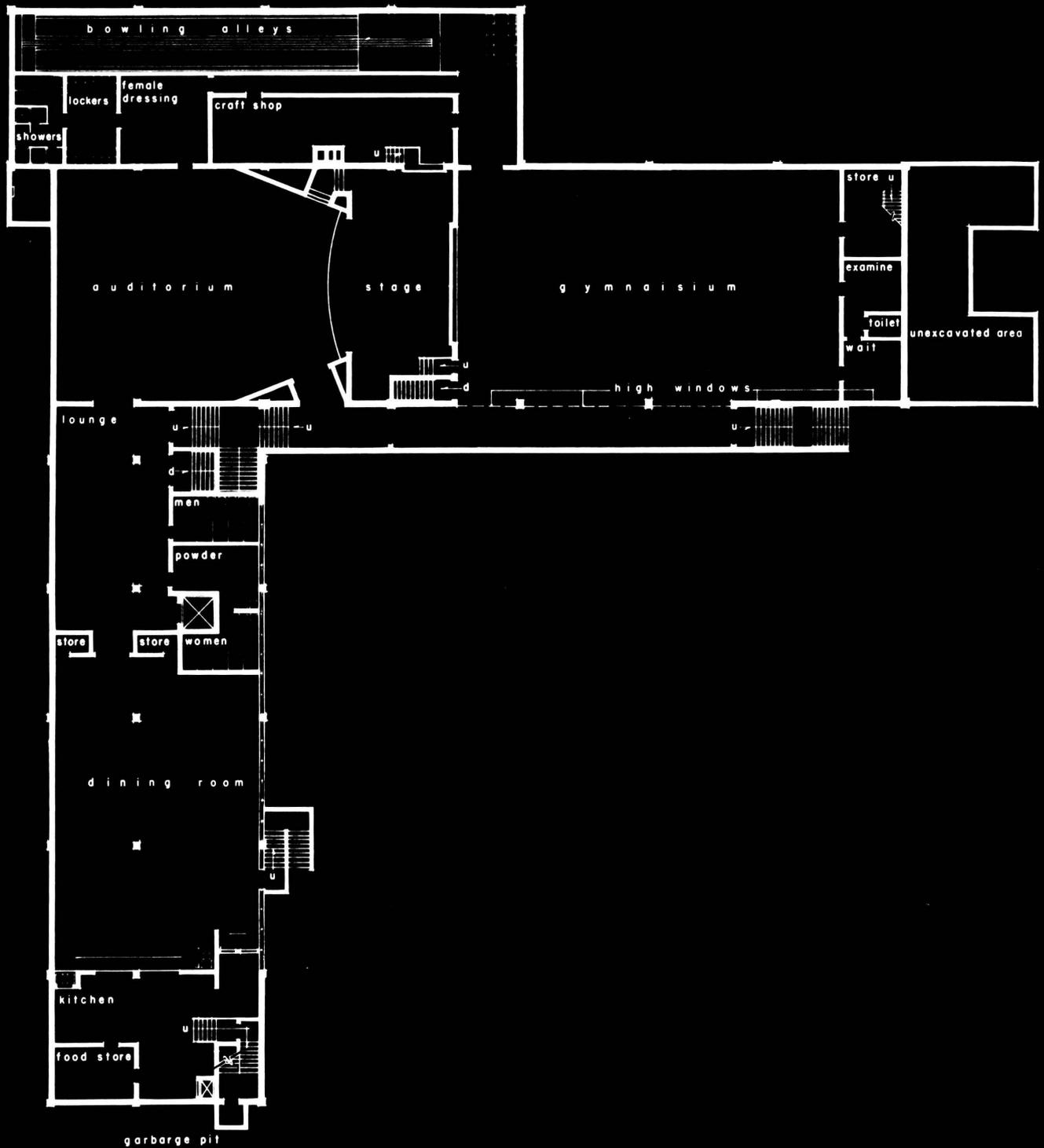
Second Floor



s e c o n d f l o o r

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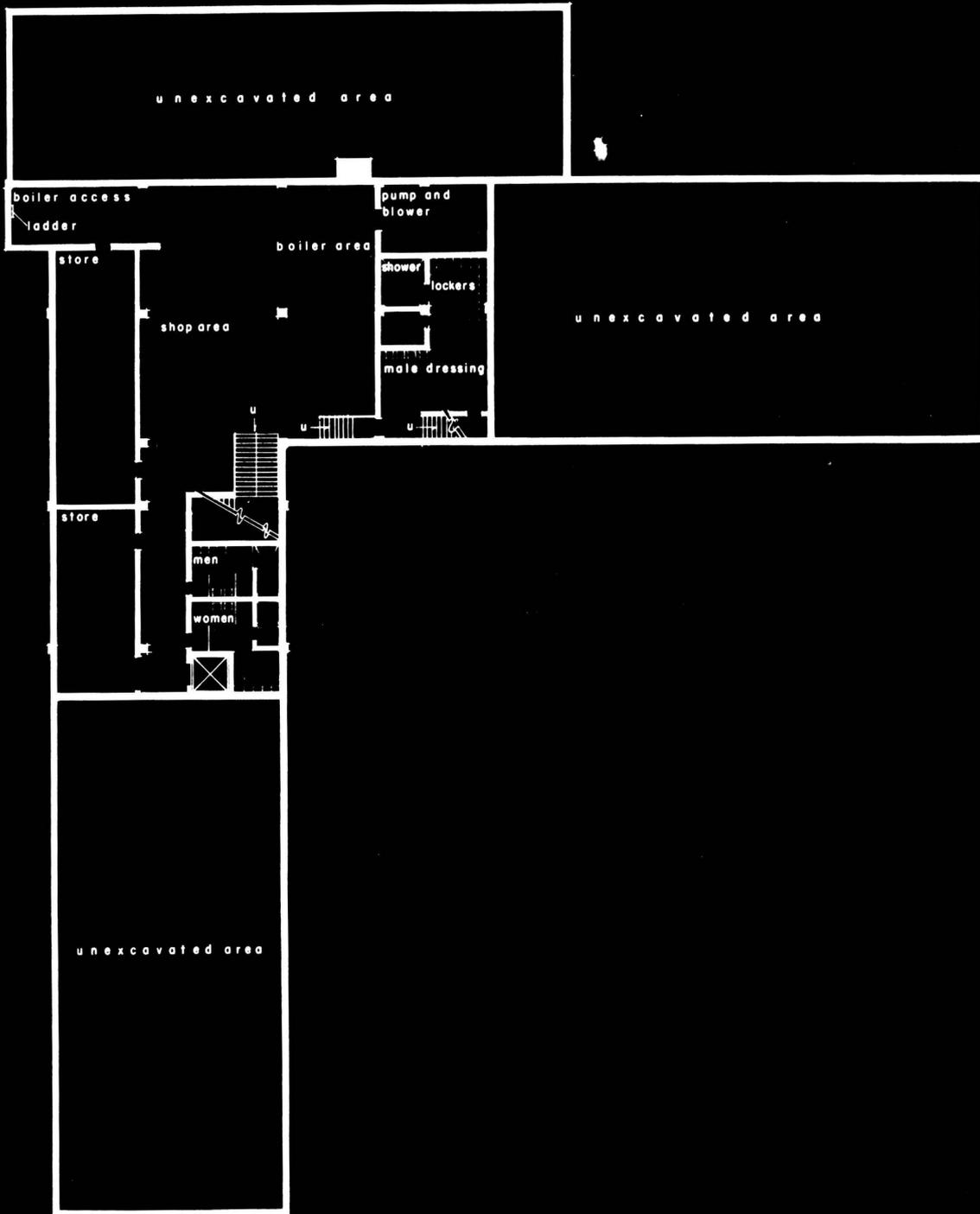
Basement



b a s e m e n t

scale 0 5 10 15 20 25 feet

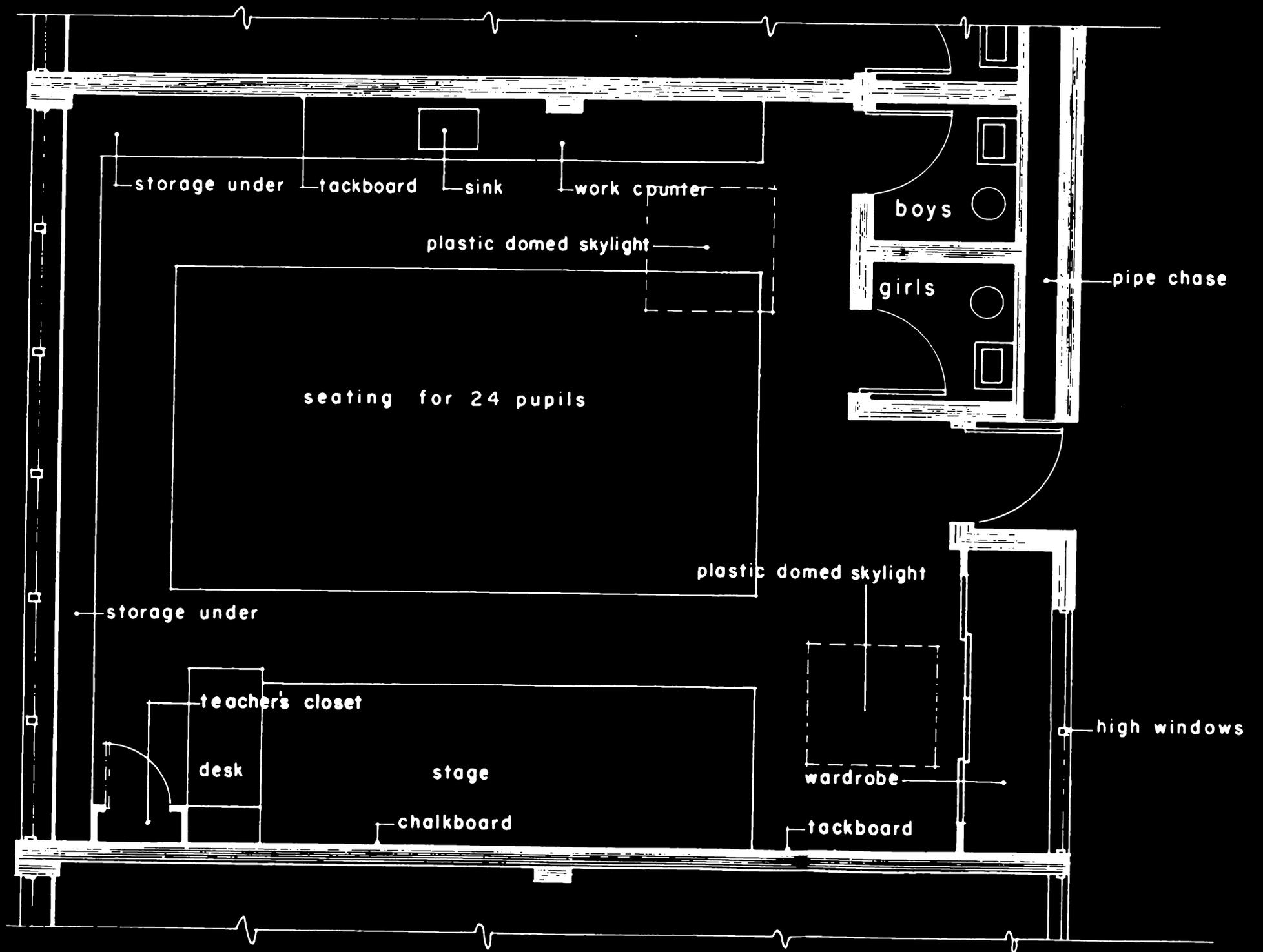
Sub-Basement



s u b - b a s e m e n t

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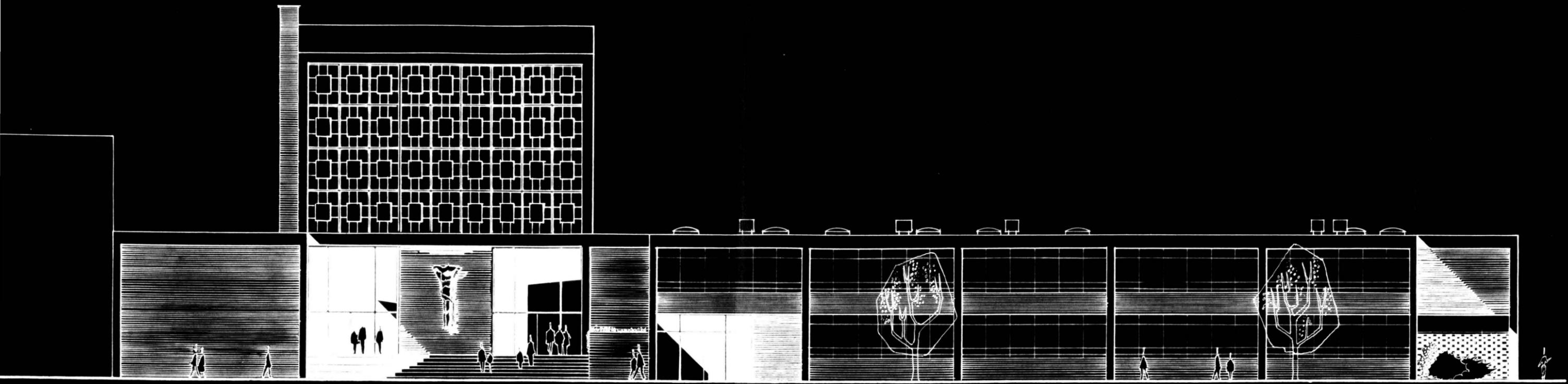
Typical Classroom



t y p i c a l c l a s s r o o m

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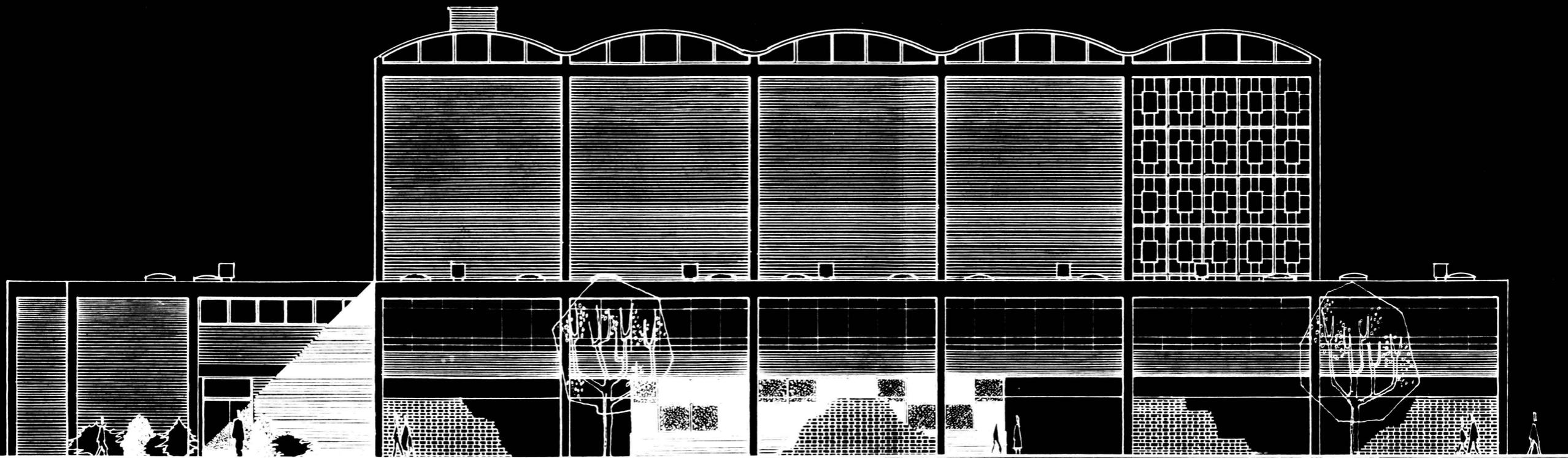
East Elevation



e a s t e l e v a t i o n

scale  feet
0 5 10 15 20 25

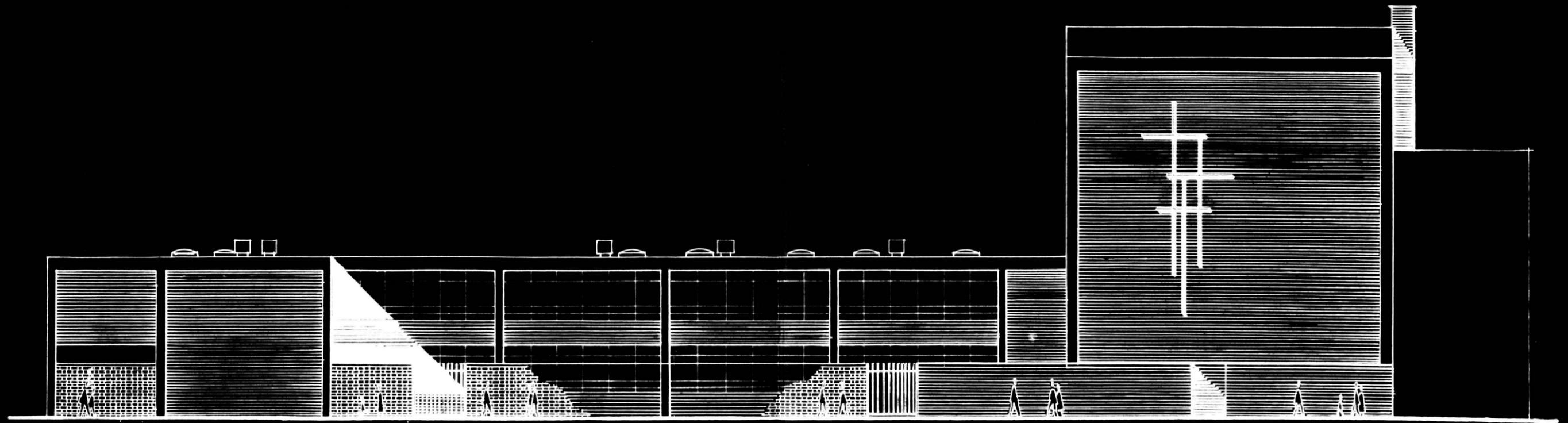
North Elevation



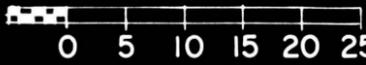
n o r t h e l e v a t i o n

scale  0 5 10 15 20 25 feet

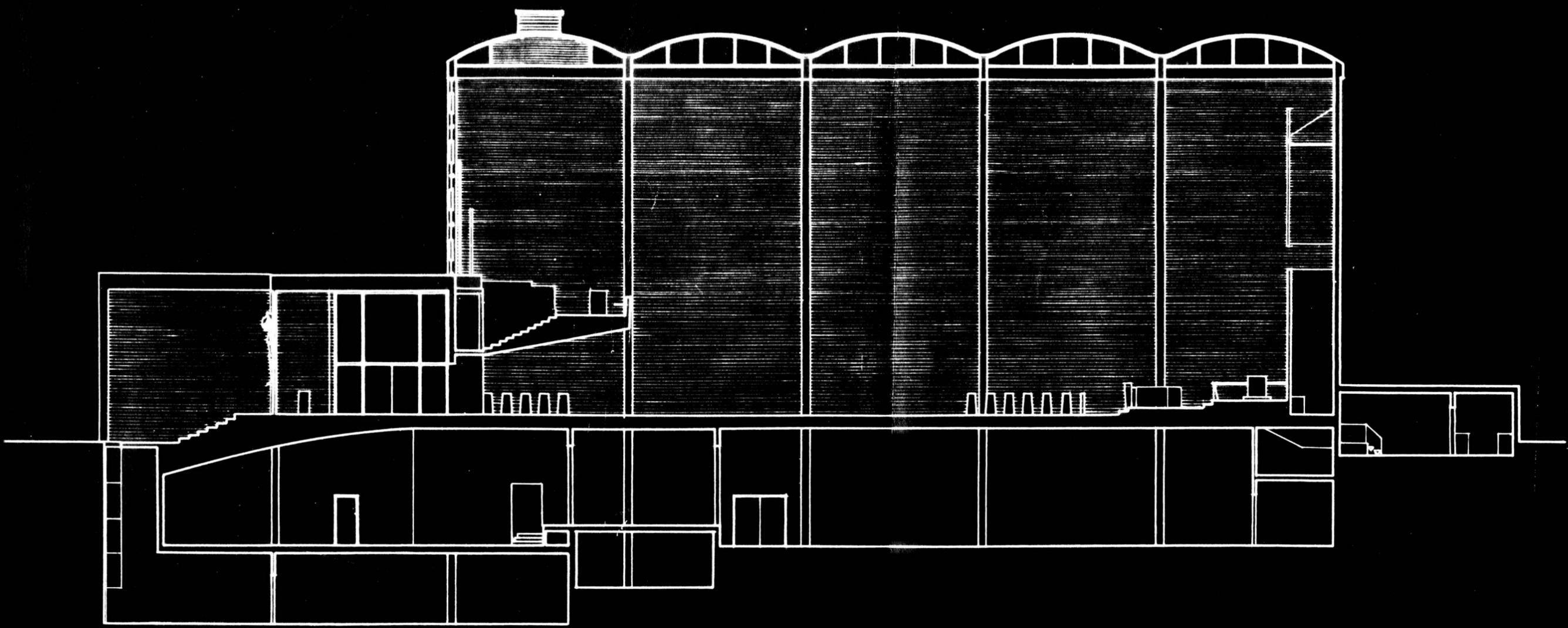
West Elevation



w e s t e l e v a t i o n

scale  feet

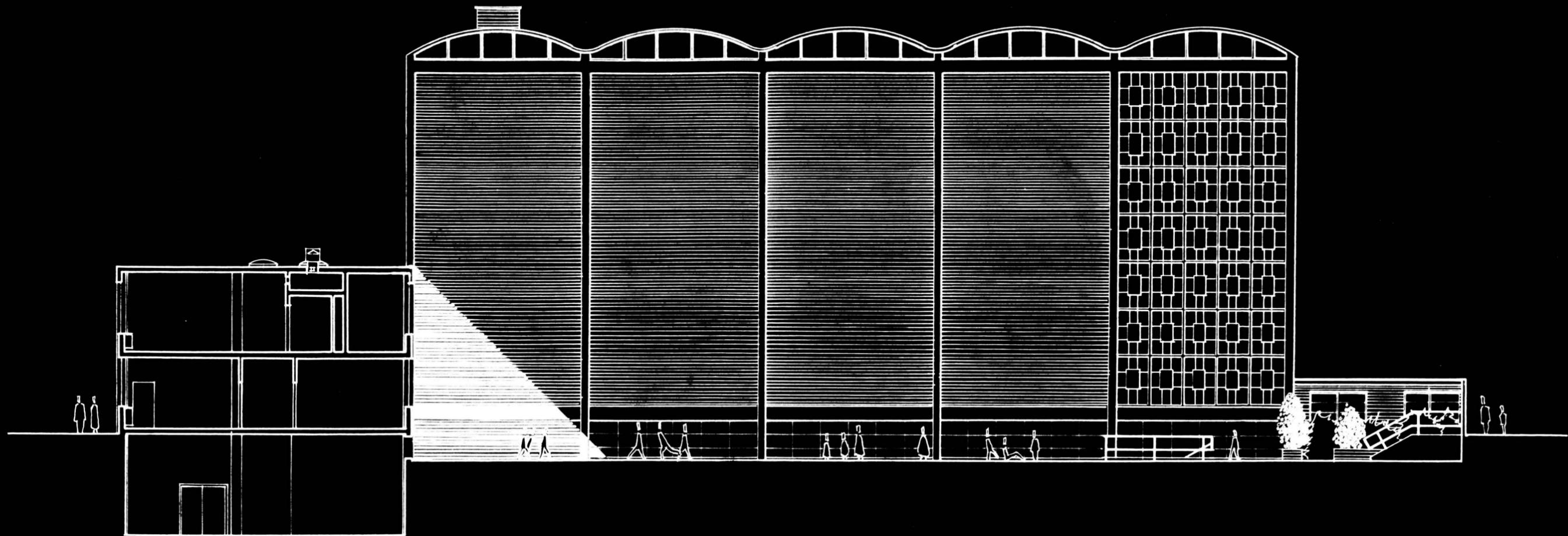
Section B-B



s e c t i o n B - B

scale 0 5 10 15 20 25 feet

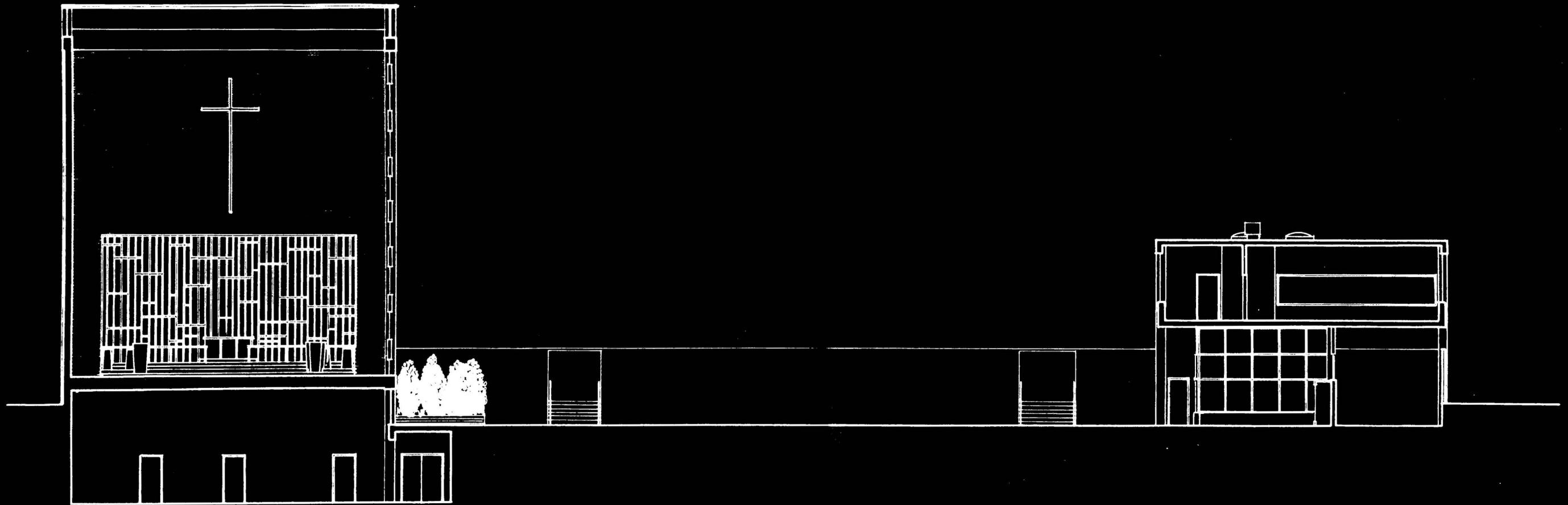
Section C-C



s e c t i o n C - C

scale  0 5 10 15 20 25 feet

Section D-D



s e c t i o n D-D

scale 0 5 10 15 20 25 feet

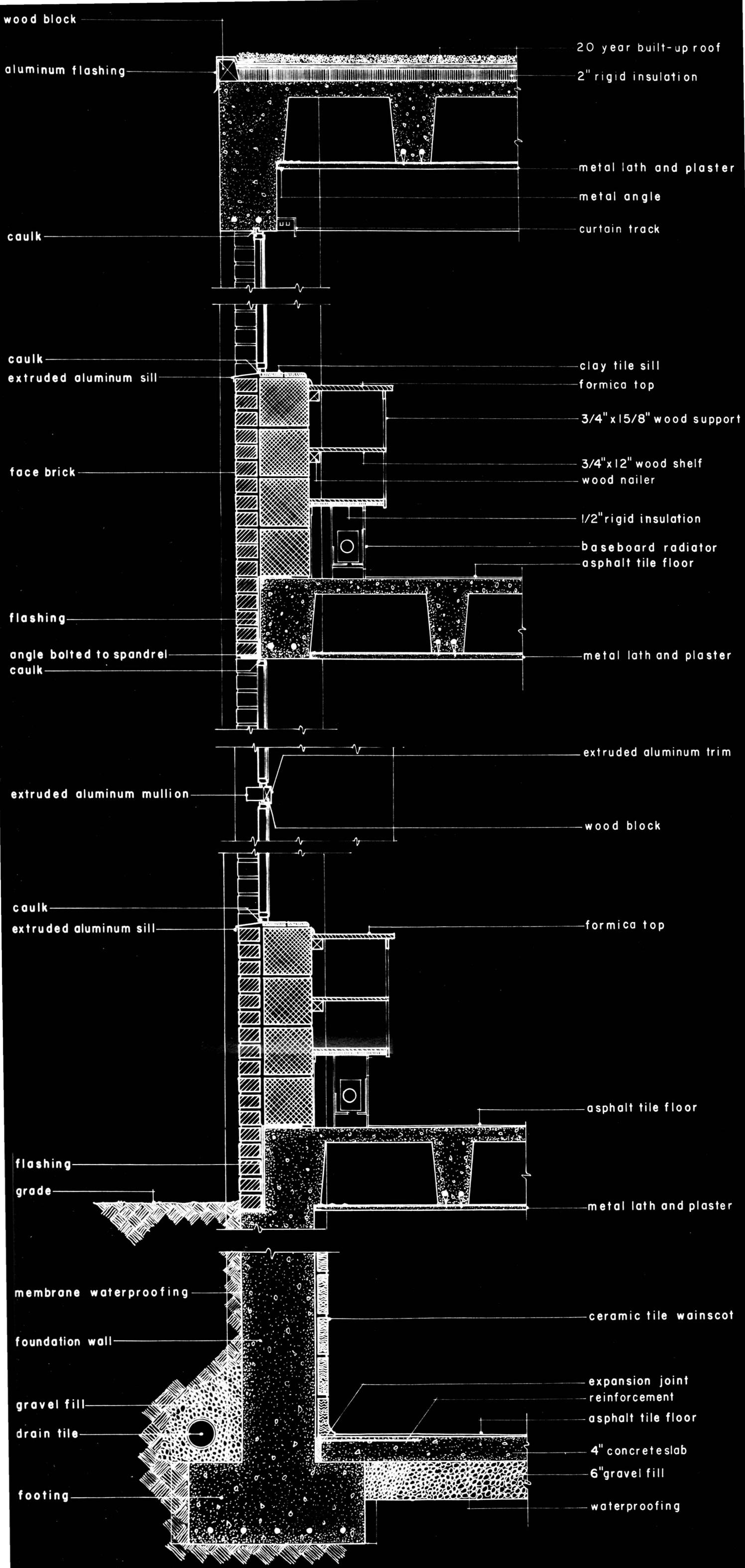
Section E-E



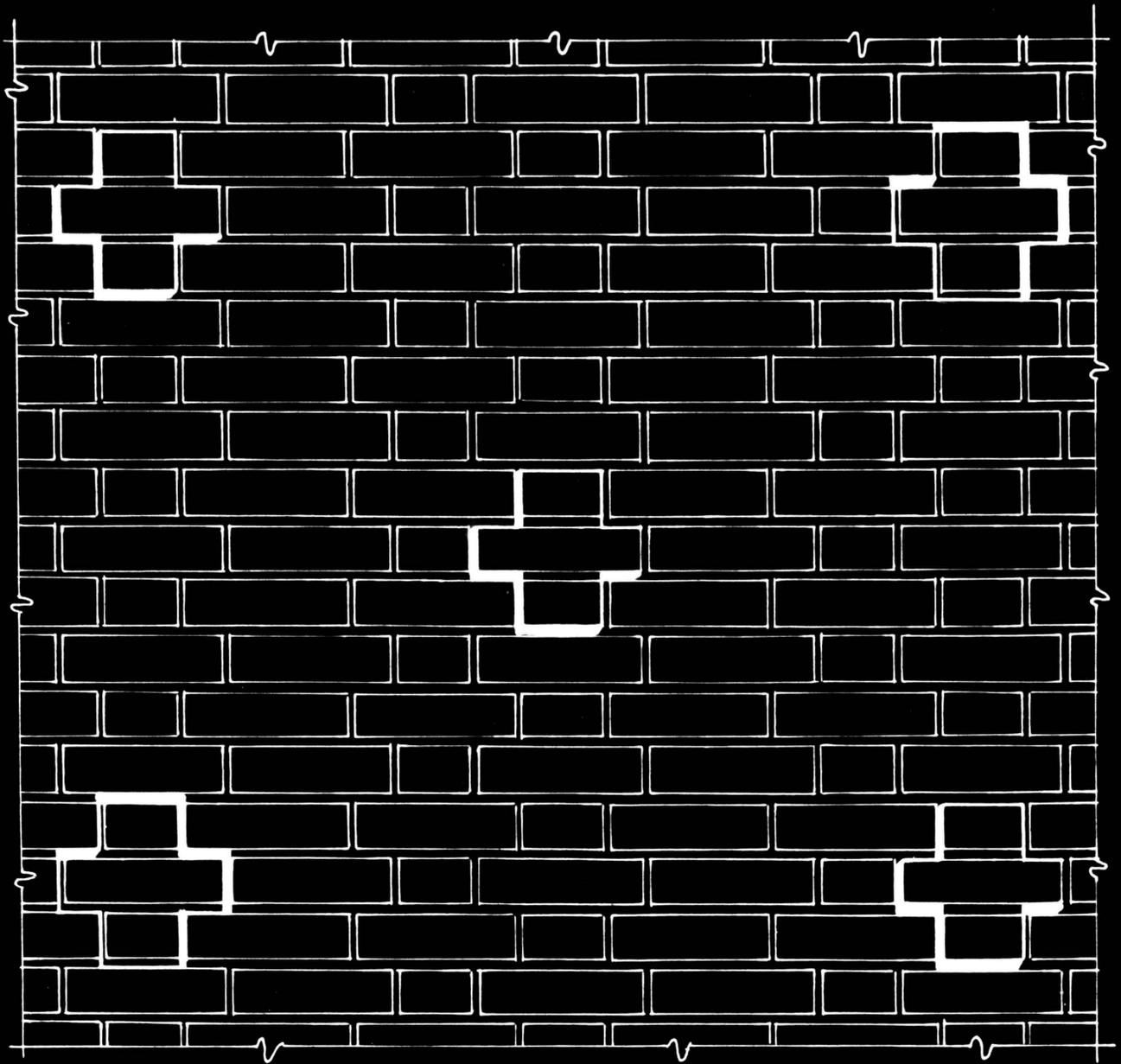
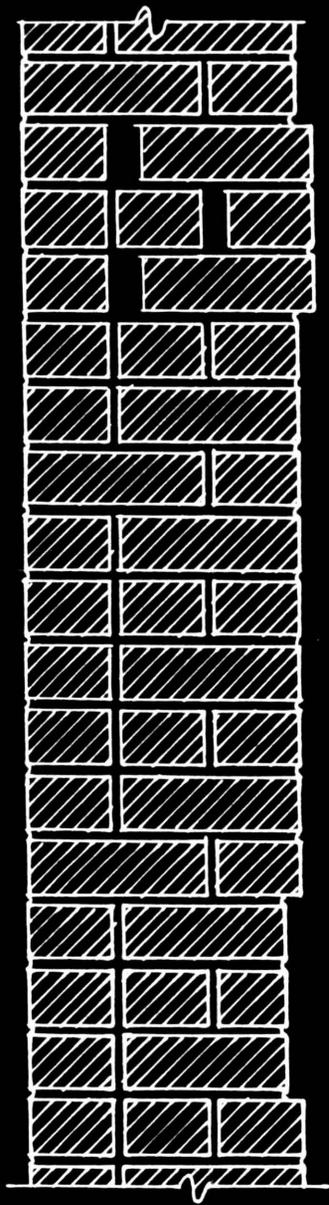
s e c t i o n E - E

scale  0 5 10 15 20 25 feet

Section A-A



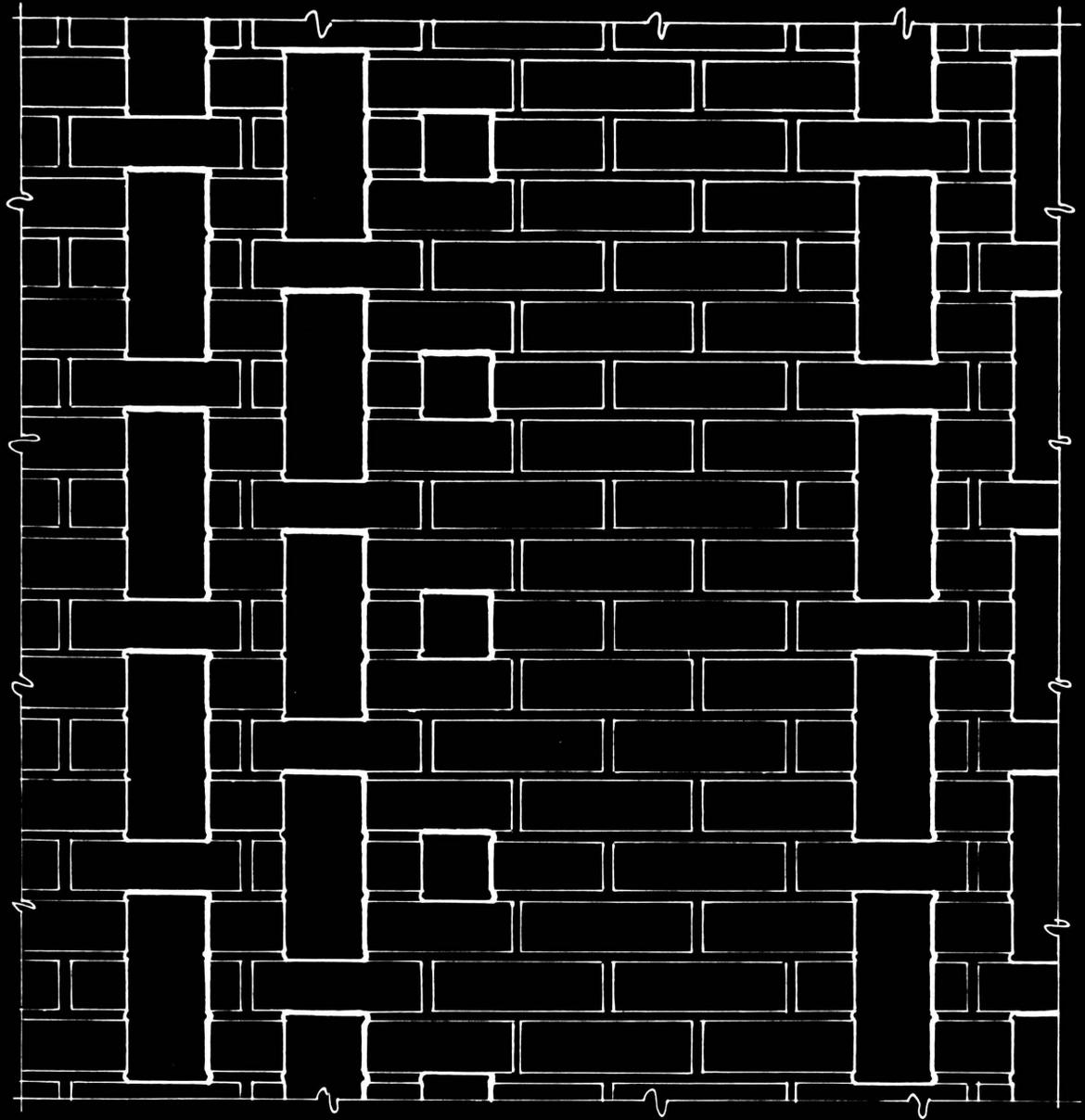
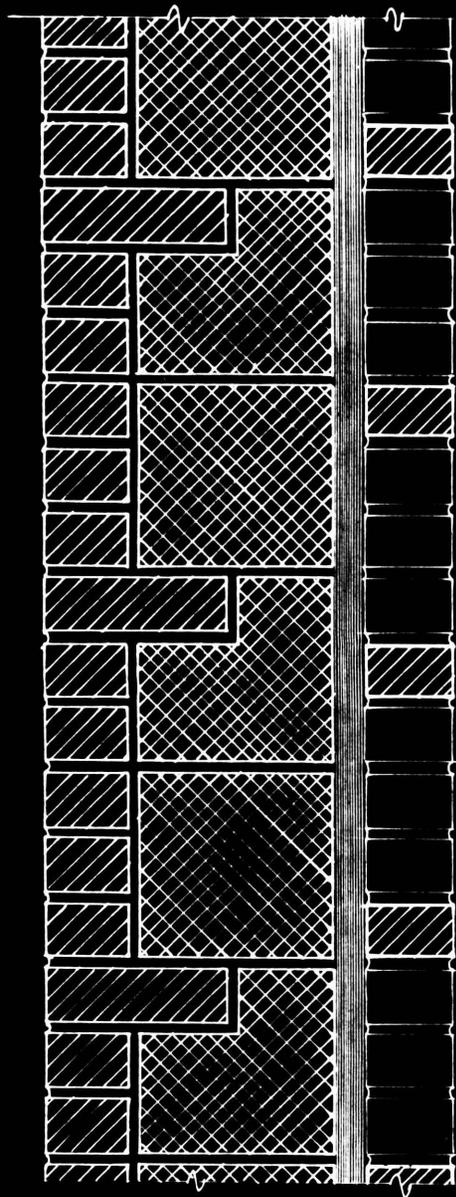
Brick Bond North Wall of Church



brick bond north wall of church

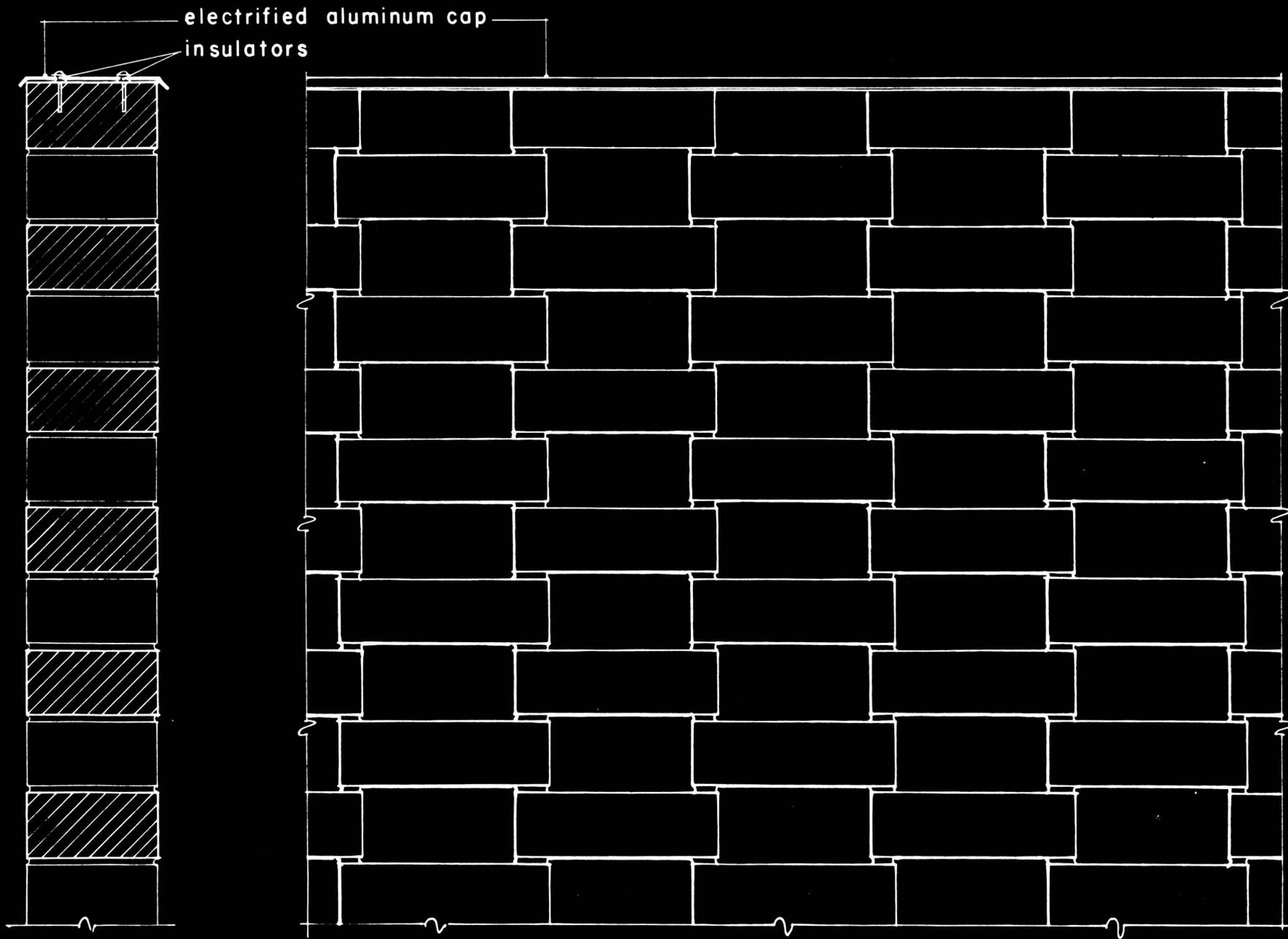
Brick Bond South Wall of Church

1" sound absorbent material



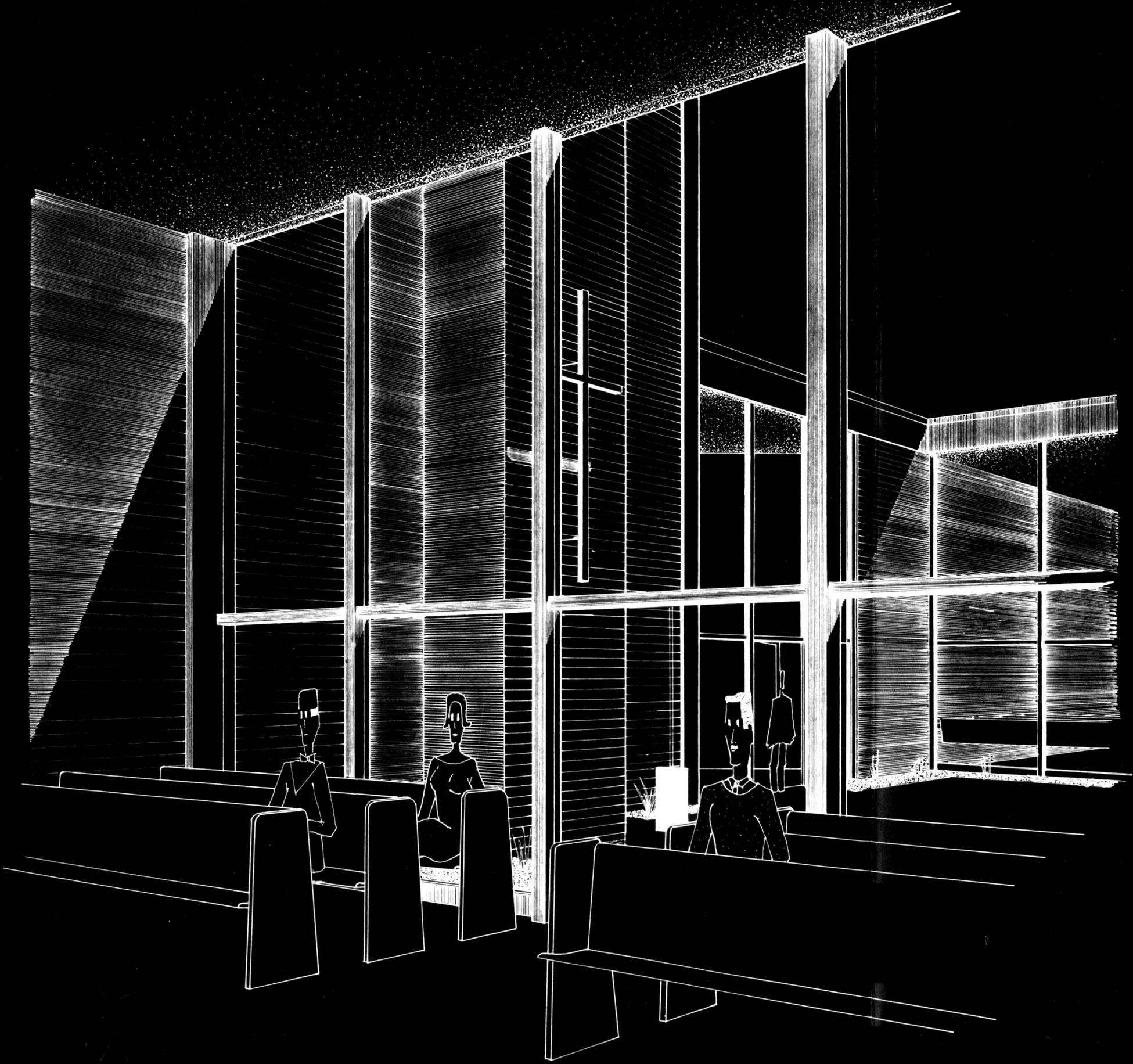
brick bond south wall of church

Brick Bond of Fence



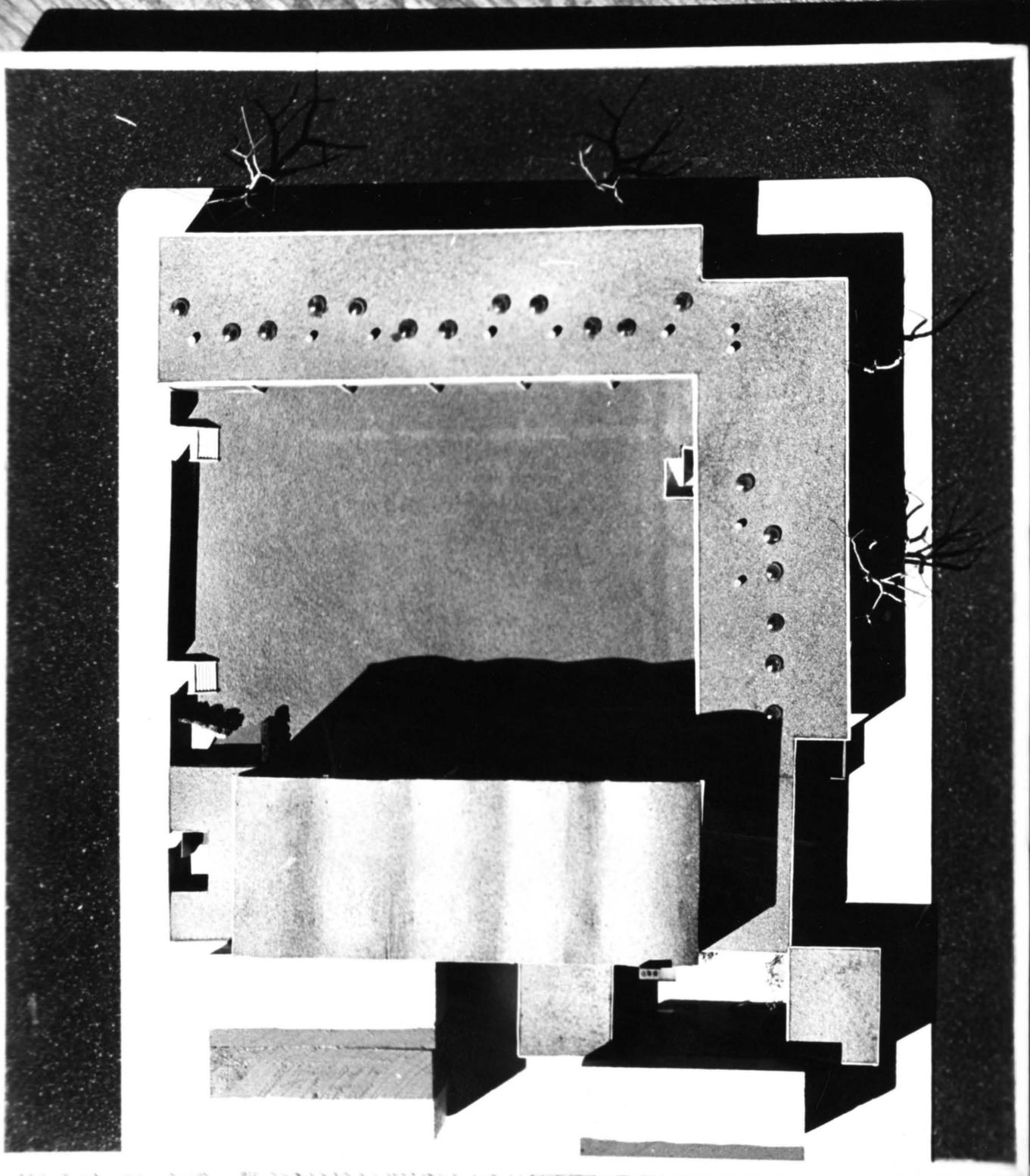
brick bond of fence

Snapshot of Court

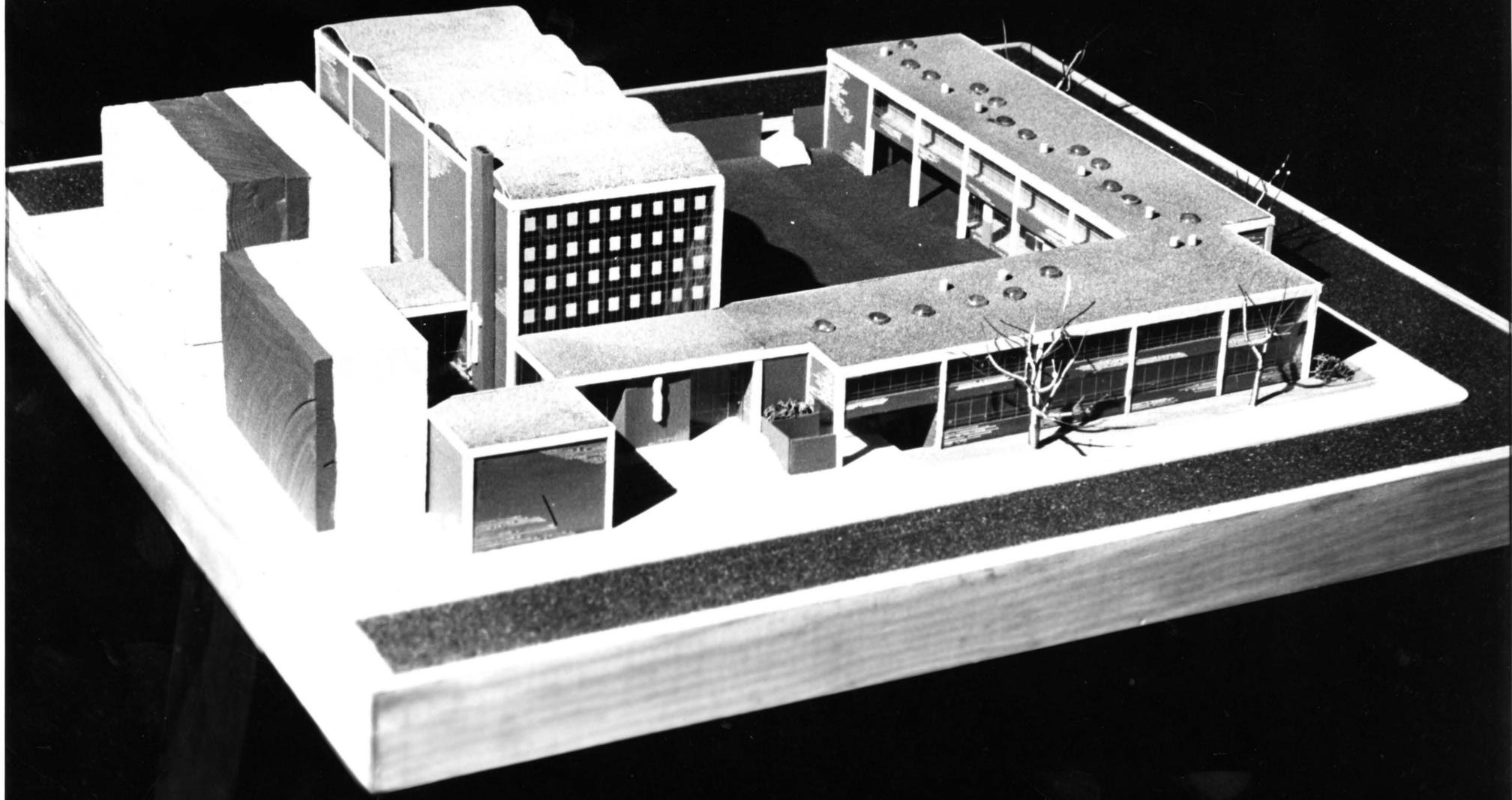


s n a p s h o t o f c o u r t

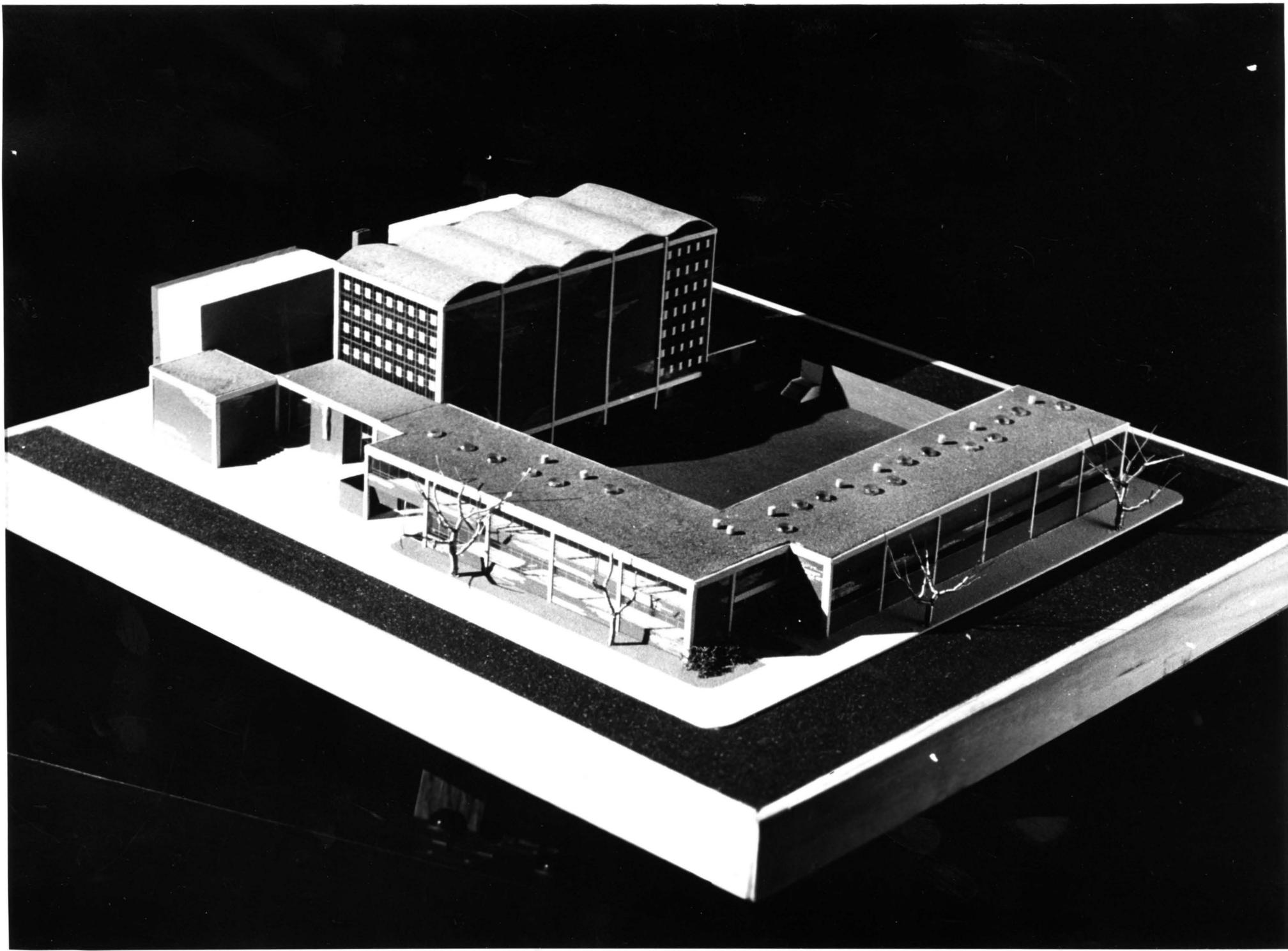
Plan View of Model



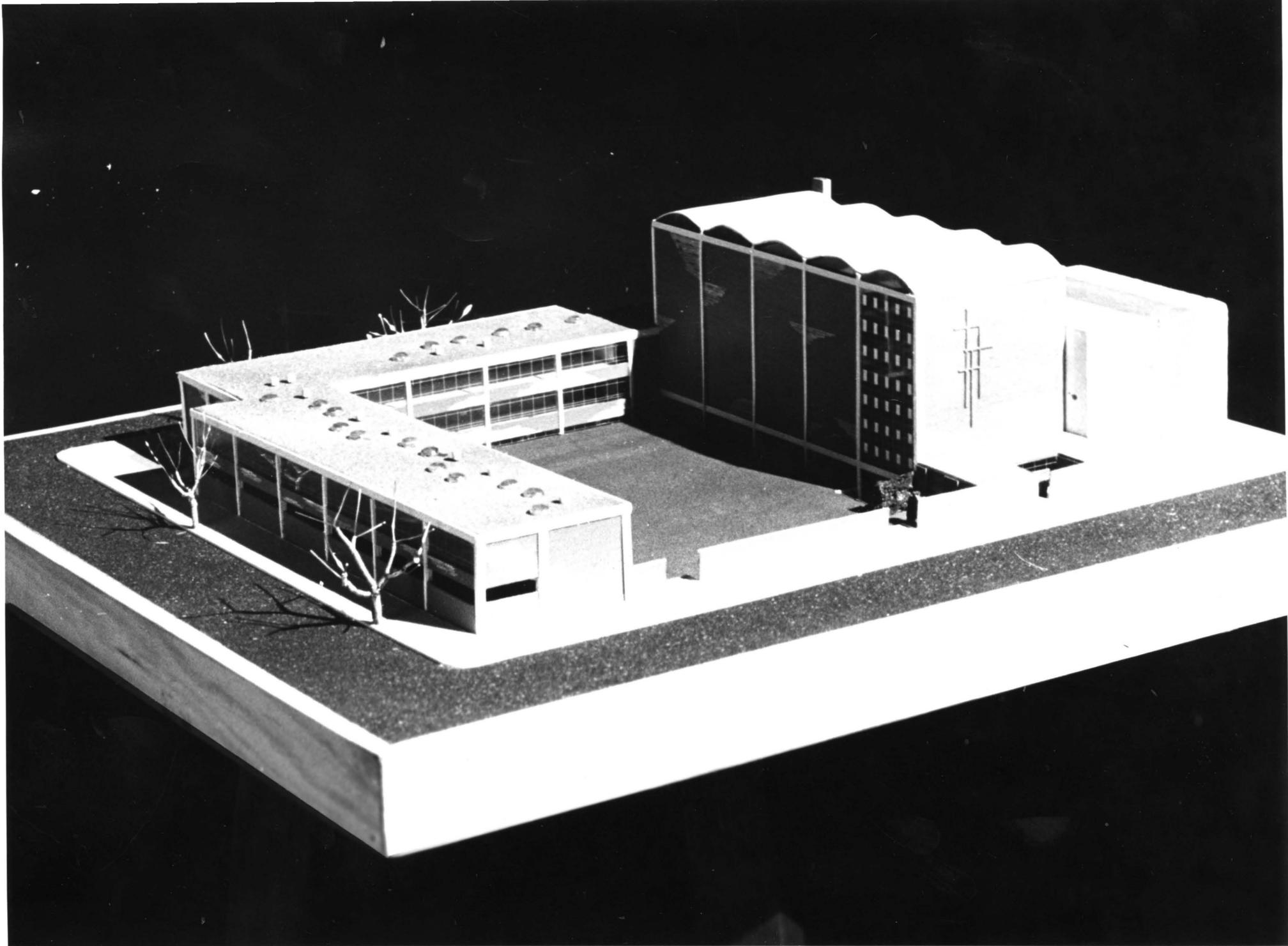
View of Model from Southeast



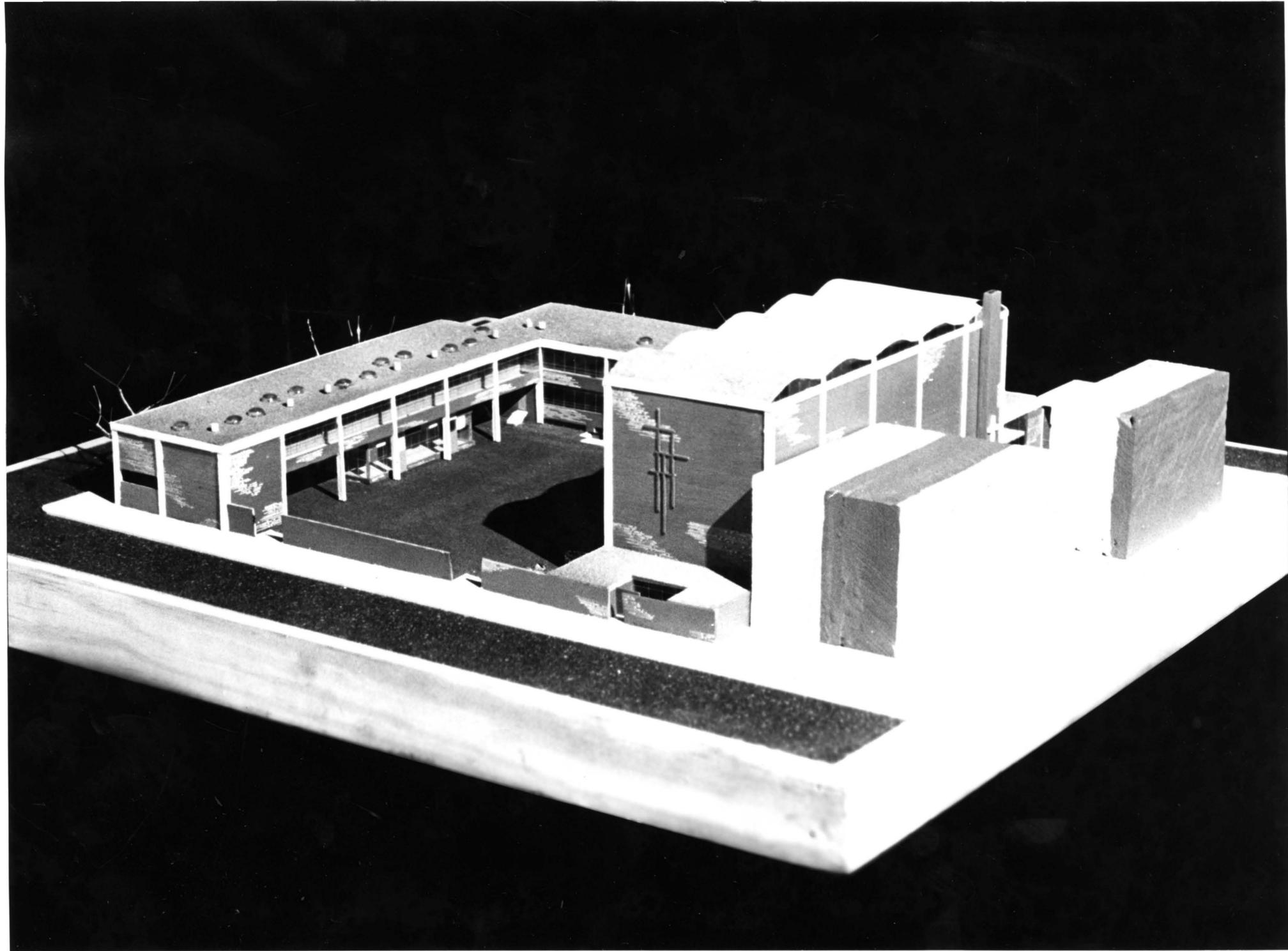
View of Model from Northeast



View of Model from Northwest



View of Model from Southwest



Part VII The Design

THE DESIGN

The proposed design is intended to be a preliminary study. Much more study would be required before the building could be built. A major part of the effort put forth on the scheme was concentrated upon the solution of many intricate planning problems, with merely complementary studies being made of the structure, the mechanical equipment, and acoustics.

The discussion in this section covers only the basic concepts of the design which may not be evident in the drawings.

The site selected did not provide sufficient property to allow the designer to locate all of the major elements above grade. Only those areas which do not require an abundance of light, or are comparatively seldom used, were placed in the basement.

The orientation of the building was determined by a series of preliminary studies to determine the best natural light, the best circulation, and the best relation of the masses of the building. The north wing of the building was raised off of the ground in order to provide a sheltered play area in inclement weather.

THE DESIGN

The type of construction used for the church group was dictated by the form of the roof of the church. Reinforced concrete seemed to be the material which was most suitable for light shell construction. Concrete was used for the entire structural system of the church group in order to maintain continuity of design.

The foundation, basement floor slabs, and main floor slabs are of reinforced concrete construction. All exterior walls are of brick.

Aluminum windows were used because of their long life with a minimum of maintenance. Although the cost of aluminum windows is high, it was felt that the savings in maintenance over the long life of the building would justify their use.

The interior partitions in the school and in the offices are made of eight inch cinder blocks. Ceilings are of suspended metal lath and plaster. The floor is covered with an asphalt tile having unusually good acoustical properties.

The interior walls of the church and the chapels are of exposed brick. The ceilings are exposed concrete. The floors are covered with the asphalt tile mentioned above.

THE DESIGN

Lighting in the school and the offices will be by recessed fluorescent fixtures. The church and the chapels will have special incandescent fixtures for general illumination and recessed spotlighting for feature lighting.

The entire church group will be heated by low pressure steam. It will be necessary to zone the heating system.

Air will be exhausted from the church, the auditorium, the gymnasium, and the dining room by means of an exhaust system located in the sub-basement. Air will be exhausted from the classrooms by means of individual exhaust fans over the toilet rooms in the classrooms.

The blower for the organ is located in the sub-basement. Air will be blown up the chimney through a duct provided for this purpose.

Part VIII Conclusion

CONCLUSION

The design presented herein is a graphic presentation of all the conclusions resulting from the execution of this work.

Part IX Appendix

APPENDIX

FOOTNOTES

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6. S. I. Stubben, How We Got Our Denominations, Association Press, New York, 1927, p.146.
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9. M. H. Shepherd, Jr., The Worship of the Church, Leabury Press, Greenwich, Conn., 1952, p.91.
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13. Ibid., p.116.
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