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Included are the texts of all available papers given at the Institute and Workshop, as well as the presentations of the panelists and the discussions that ensued between members of the audience and the program speakers. Floor plans and similarly important illustrative materials are reproduced. The following sessions were included--(1) general session, (2) public library session, (3) college and university library sessions, (4) school library sessions, and (5) the American Library Trustee Association workshop. (RK)

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LIBRARIES

Building for the Future

Proceedings of the
LIBRARY BUILDINGS INSTITUTE and the ALTA WORKSHOP
Conducted at Detroit, Michigan, July 1-3, 1965

Sponsored by the
LIBRARY ADMINISTRATION DIVISION and the
AMERICAN LIBRARY TRUSTEE ASSOCIATION of the
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Edited by ROBERT J. SHAW

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FOREWORD

The role of the trustee in library planning was the subject which linked the Library Buildings Institute, sponsored by the Library Administration Division and held July 1-3, 1965, at Detroit, Michigan, and the ALTA Workshop, sponsored by the American Library Trustee Association and held on July 3, 1965, at the same place.

More than one thousand librarians, trustees, architects, consultants, representatives of manufacturers supplying equipment to the profession, and others attended and participated in the discussion that followed presentation of the formal papers. The attendance was the highest on record of the Building or Equipment institutes held in the past fourteen years.

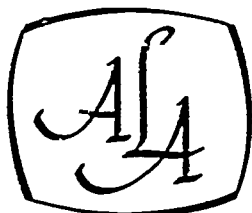
Grateful appreciation is due Howard Rowe, chairman, Section on Buildings and Equipment, LAD; and Lowell A. Martin and Raymond E. Williams, cochair-

men, ALTA Workshop Committee, for assisting in planning the Institute and Workshop.

This report includes the texts of all available papers given at the Institute and Workshop, as well as the presentations of the panelists and the discussions that ensued between members of the audience and the program speakers. In some instances the speakers used slides to illustrate their talks. Floorplans and similarly important illustrative materials are reproduced in the Proceedings, but it was not feasible to reproduce the many colored slides of buildings and other general subjects.

Program coordination, registration, and general arrangements were handled by the headquarters staff of the Library Administration Division and the American Library Trustee Association.

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I. General Session

4 GENERAL SESSION

interested in the results that they are not realistic in their estimates. I shall not attempt, in all cases, to give recent examples, but many of you know of buildings where one of the four following unfortunate consequences followed because costs were underestimated:

1. The whole project had to be postponed or given up entirely.
2. The size of the building had to be reduced at the last minute, and as a result it was inadequate from the day it was finished.

The reduction in size may have been made in an old fixed-function building, by simply reducing the size of all the areas and perhaps lowering the ceiling heights unduly. The Butler Library at Columbia is an example of this. In more modern buildings the required savings may have been made by leaving out enough bays so that the budget could be balanced, without understanding what this might do to the spatial assignments.

I know of a library in Australia where the appropriation was cut in two at the last minute, and a full floor of the building was left out. There was no time to rearrange assignments, and the building was finished with a fine main floor set up with adequate areas for the central services. But when it came to the stacks and the reading areas, there was room for only about a quarter of the seating accommodations and book capacity that the original plans called for, and the authorities could not understand how it happened when the size of the building had been reduced by only one half.

3. Sometimes the quality of construction was compromised, with unfortunate results and increased maintenance costs.
4. Sometimes considerable areas were left unfinished which meant that a large percentage of the construction costs was involved with no corresponding space made available.

It is important for all concerned to recognize the objectives of the library, and of the institution as a whole if it is an academic library; the relative importance of the functional operation of the building being planned; and the aesthetic requirements.

The Beinecke Library at Yale may be considered at one end of the scale. It was planned to be one of the most glamorous and exciting of library buildings. Those concerned want it to function as a library, of course, but in this case the glamor is of much more importance, as its primary objective is to attract gifts of rare books to the University. This is not to say that Beinecke is not functional. Ellsworth Mason in the May, 1965, number of *College and Research Libraries* reviews this library better than I can, and his article should be read by those interested in library building planning—it is a noteworthy critique. But Beinecke's collections are important enough so that readers will come to it, even if it were

inconvenient to use the books. Only time will tell whether its success in both objectives, glamor and function, is assured.

At the other end of the scale we may have a poor institution that cannot possibly build anything but the plainest factory type of building, because of lack of funds, and must obtain the largest possible useful square footage for the money available. We all know of situations like this. Are you planning, or should you plan, a Beinecke Library or one for a struggling denominational library? Keep this question in mind constantly.

While it is desirable, and at times an important requisite, for a building to be handsome, it is generally even more important that it be functional, and the problems that result from overemphasis on monumentality and aesthetics, and underemphasis on function in building, such as at the Widener Library at Harvard, are considerable. That library has many good points but many unfunctional aspects as well. We can all think of other buildings that have been handicapped by monumentality taking precedence over function. Form should follow function, as Louis Sullivan stated many years ago.

One of the problems in connection with aesthetics and monumentality—the two do not necessarily go hand in hand—are their effect on the financial situation. This effect may come from the additional cost due to the quality of the construction, but it is more likely to result from the undue proportion of nonassignable space found in too many of our handsome buildings. A library may have only 55 percent of its total area available for books, readers, and staff, with as much as 45 percent used for architectural and nonassignable space. Buildings like this are being planned today. Another may have up to 72 or occasionally even 75 percent of assignable space, which gives as much as one third more usable area in a given gross square footage. Keep this in mind, but with the full realization that there may be misunderstandings in regard to just how assignable space is figured. The State of California authorities are now reconsidering the definition of assignable space. At present different persons estimate it in different ways, and figures of assignable space should always be suspect.

Examples of a closely related situation are Yale's Sterling Library and Columbia's Butler Library, both built at about the same time and with similar capacities for books and readers, but with one costing nearly twice as much as the other. Both are fine buildings. Both are monumental, but one cost much more in terms of expenditures per unit of books and readers housed, as well as in gross square and cubic footage.

If you compare two libraries each of which has 100,000 gross square feet, costs 2 1/2 million dollars, and is equally well constructed, remember that it is not only the total square footage and the total cost in which you are interested, but also the number

Keyes D. Metcalf
Librarian Emeritus, Harvard University,
Cambridge, Massachusetts

THE USE OF HINDSIGHT IN PLANNING LIBRARY BUILDINGS

I will talk chiefly about academic libraries because most of my experience has been in that line. Much of what I have to say, however, applies to any type of library. In discussing this topic we are given an opportunity to make some very cutting remarks. For my part I shall try to avoid being unduly critical or unpleasant; I have rarely found this worthwhile. Occasionally a conclusion that is significant enough to make an impression and to be remembered may have a place, particularly if an architect or a librarian has failed to take account of a functional deficiency that has been called to his attention earlier. These remarks may be in terms of dollars that are lost or of decreased capacity for books or readers.

If, for instance, we say that a plan which requires unnecessary service desks means, directly or indirectly, the reduction of one in the number of professors on the institution's staff, those concerned may sit up and take notice. If we say that an unnecessarily large lobby means a loss of 25,000 volumes in bookstack capacity, or accommodations for sixty-five fewer readers, that can be more useful than saying, "What kind of a fool are you?"

We all make mistakes. I do not want to boast, but I probably have made more of them in library building planning than anyone else in this room, if for no other reason than that I have had more opportunity to do so. I have been told by an authority on the subject that one of the buildings on which I worked as a consultant was the worst-planned library building constructed in recent years!

I had realized that there were some unfortunate aspects about the building under consideration, but, taken as a whole, I thought and still believe that it was and is one of our better library buildings, and that in some ways it is a landmark in library building planning. So I was not too upset by the criticism. I meant well, at any rate. Some of the mistakes that I have made have been caused by ignorance, some by carelessness, some by lack of understanding of the

program on which I was working or of the needs of the library. I expect the same is true of other librarians, building consultants, and architects. Misunderstanding and lack of full knowledge of all of the factors involved are generally primary factors in poor planning.

No two institutions are alike. Planning is an art, not an exact science. What may be good for one institution would be bad for another. It is easy to criticize without knowing all the local circumstances, and some of my criticisms today may stem from a lack of knowledge about the libraries that I am criticizing.

My comments will deal primarily with a few of the basic types of problems to watch for, with examples, in some cases, of mistakes which I think have been made. My list will be very far from complete, but I hope it will stimulate discussion and help bring out additional "boners."

Let me repeat—it is well to remember that mistakes are often due to the failure of those who make the decisions to know just what is wanted, perhaps as a result of an incomplete or unsatisfactory program. A good program, understood by those concerned, is almost always a prerequisite for a good building.

Then there are always the problems that go back to the amount of money available. The Bible says that the love of money is the root of all evil, but the lack of it also presents problems, as we well know. Too many serious mistakes result from the fact that the architect and the librarian and those who control the funds do not completely understand one another and the financial limitations involved.

Librarians and presidents of governing boards are often wishful thinkers and do not realize that construction tends to cost more year by year. Architects, too, often have found from past experience that if they run short of funds because they have underestimated costs, the required money is made available in some way, and they are quite naturally so

4 GENERAL SESSION

interested in the results that they are not realistic in their estimates. I shall not attempt, in all cases, to give recent examples, but many of you know of buildings where one of the four following unfortunate consequences followed because costs were underestimated:

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If you compare two libraries each of which has 100,000 gross square feet, costs 2 1/2 million dollars, and is equally well constructed, remember that it is not only the total square footage and the total cost in which you are interested, but also the number

of readers and volumes comfortably housed without undue crowding. You may be surprised by the results.

The Lamont Library cost perhaps 10 percent more per square foot than other buildings of similar quality built at about the same time, but it had 15-25 percent more usable space out of its gross area than the others did, and it got it without crowding or cutting down on quality of construction and, therefore, was more economical. What many of us should be interested in primarily, then, is not the cost per gross square foot of floor space, not the cost of the net assignable space, but the cost per volume and reader satisfactorily housed in a building that is well constructed and acceptable aesthetically.

Most libraries today are built on the modular plan. Some librarians who have studied the problem say that no one module size will fit for all purposes, and so are inclined to let the architect pick a module size out of the air. I strongly disagree on this point. Most academic libraries use a considerable percentage of their space for bookstacks, and the column spacing, at least in any library with large collections, is of the first importance.

The Albany Branch of the State University of New York has a new campus which is built with a 20-foot column spacing throughout. The library will eventually house large collections. The stack ranges must fit the 20-foot column spacing, which means they must be 5 or 4 feet on centers. There are no other possibilities, unless ranges are to be unnecessarily short and the columns are to interfere with the main cross aisles. Four feet is too narrow and is impracticable for an open stack. Five feet is too wide but will have to be used, and this will automatically reduce the stack capacity by some 18 percent from what would have been available if a 25-foot, 6-inch column spacing had been used—something that would have been acceptable for this particular library.

I should add, however, that two very fine libraries built in recent years, Washington University, St. Louis, and the University of California at Los Angeles, chose their bay sizes on the basis of 4-foot, 3-inch or 4-foot, 4-inch spacing and 9-inch nominal depth shelving, and then installed deeper shelving which resulted in substandard-width stack aisles and much inconvenience. Check carefully on this point.

Watch the column spacing not only for bookstacks but also for seating accommodations. Carrels at right angles to the walls are used frequently. Many libraries with columns 22 1/2 feet on centers place only four carrels to a bay when five are possible without crowding. This is due either to careless spacing, to unnecessarily generous spacing, to an unfortunate window pattern, or to columns which get in the way and reduce the available space along the wall. Think of the difference it would make if your building had only 200 wall carrels in place of the 250 that might have been available without adding to the

construction cost or congestion or reducing the working-surface areas.

If you decide to use alcoves or small tables surrounded on three sides by shelving, make sure that the clear dimensions within the alcove are such that the space can be used to advantage. The thirty-six Lamont alcoves for which I have to confess I was responsible, have 9 feet by 12 feet inside measurements and will seat comfortably only two readers each. If they were one third larger, that is 12 by 12 or even 11 1/2 by 11 1/2 in dimensions, the seating capacity would have been doubled.

Four individual carrels in a pinwheel form would have been possible, and they would have been economical in space utilization. Even the 9 by 12 would have been possible if the fourth or open side could have been 12 feet wide and the depth in the other direction 9 feet. But remember that the alcove must fit the column spacing, and that 25 1/2- or 27-foot module size will do very well and 22 1/2 feet will not be so satisfactory for alcoves. There are, of course, other ways of making other bay sizes fit for alcove use, but this is too complicated a problem to discuss at this time.

Ceiling heights vary greatly in libraries. The Widener stack has only 7 feet 2 inches in the clear, and as a result only six shelves, 12 inches on centers, are possible with a 4-inch base. The capacity would have been increased by one sixth with from 2 to 4 inches in clear height added. This would have made a difference of well over 300,000 volumes in total building capacity and would have added only about one quarter to one half of 1 percent to the cost of the building.

Too many other libraries are in a similar situation. No way could be found to add to the Amherst College Converse Library satisfactorily, primarily because its clear stack heights were too low, as little as 6 feet 9 inches in some places, from which had to be subtracted the space required for lighting fixtures hung from the ceiling. I might mention in this connection Florida Southern University Library in Lakeland, Florida, designed by Frank Lloyd Wright, which has a main entrance lobby barely over 6 feet in height.

On the other hand, it must be remembered that every additional foot in height in a library floor may add approximately 1 percent to the cost of that level of the building. I am not advocating 8-foot or any other height ceilings throughout a library, but I urge you always to keep in mind what you are spending your money for. You should remember, for instance, that every corner you add to the outside wall may cost as much as 2 feet of extra wall. Many libraries have, as a result, outside walls costing twice the sum necessary, which may increase the total cost of the building by 10 percent as well as add to the cost of heating and cooling.

It should be noted, also, that many buildings have outside walls constructed from materials which add

10 percent to the cost of the building or of its operation in years to come, even without unnecessary corners, because of too much glass or stone construction. On the other hand, do not forget that it is often very much worthwhile to add to the total cost of the building to obtain a desired effect aesthetically or functionally. We do not want to build a factory if it is possible to build something more attractive. I am simply trying to emphasize that you should understand what it is that you are paying for, and too often the institution and its representatives do not understand.

Ceiling thickness may add to library costs, just as do unnecessarily high clear heights below the ceiling. I know of libraries with 5-foot-thick ceilings and rooms only 8 feet in the clear. Three feet by 8 feet would have been preferred, or better still, in some cases, a compromise with 9 feet in height and a 3-foot-or-less ceiling. It might require a little more planning on the part of the engineer, but costly blunders have been made too often by permitting unnecessarily thick ceilings.

Traffic patterns are another place where "boners" are all too common. Be sure that the patterns are kept as simple as possible. Some of us remember a library that installed a large number of alcoves which resembled a maze, and while they were not unusable they were not as useful as they might have been. Do not let any part of your building become a maze. A large bookstack can be quite baffling, particularly if the cross aisles are broken by small rooms or for some other reason and do not go all the way across the stack.

Compare the Princeton Library stack and the equally large stack levels in the National Library of Medicine, both planned by the same architect. This problem applies primarily to the large libraries with large book collections. I must confess, however, that the Uris Undergraduate Library at Cornell, which might be called a rabbit warren, is, in spite of this, very successful and popular, but it has a comparatively limited collection. The adjacent Olin Research Library with its large collections is fortunately very simple in its traffic pattern.

The entrance to a large reading room should not be placed on a short side, which will require readers to disturb nearly everyone in the area to reach the far end. You can all think of rooms of this kind. The large Lamont reading rooms, on the other hand, have entrances from five different places, connecting eight different corridors, and as the rooms are long and narrow, very few persons are disturbed when a student enters or leaves. Traffic is reduced to a minimum. In this same connection, bookcases housing the most-used books should not be placed, except under special circumstances, around the walls of a reading room, particularly if a good share of the walls is taken up by windows.

In the first place, walls are too valuable for shelving; seating can be placed in front of the

windows where books cannot be shelved. Of equal or greater importance, if the shelving is used continuously because the heavily used reference books are there, the room cannot avoid a restless feeling.

There is, at present, a tendency to build round libraries with radial shelving and circular reading rooms, which may waste up to 15 percent or more of the total area and result in bottlenecks, unused space, and also disorientation, particularly after one has been leaning down to consult lower shelves. Circular libraries have been tried again and again for many years, but none of them, so far as I know, has ever proved to be completely satisfactory to the user, particularly if there is a large book collection. The great British Museum reading room is perhaps the best of the circular library rooms, but if your architect proposes one, refer him to the Brotherton Library at the University of Leeds, the library at Florida Southern University with its reading room in the shape of an amphitheater, or any other circular library, and ask for a report.

Readers and services to readers occupy more space in a library than any other type of accommodation. It is of great importance to provide enough seating, but very difficult to estimate the requirements. If you build too large, it is wasteful of money which could be better used for other purposes. If too small, your whole building is a failure. One factor you can be reasonably sure of is that a comfortable, attractive building will result in much greater use than an old, unattractive, uncomfortable one ever had. Too many libraries have built new buildings only to find that they were too small the first year. Ask the librarian of the University of Connecticut or the University of Massachusetts, for instance, about what has happened to them.

The same situation holds for book capacity. A good library encourages use, and more readers give an excuse for more books, and the stack space soon gives out. If the student body doubles in ten years instead of twenty (and the book collections likewise) and you have planned on arithmetic growth instead of geometric, inevitable trouble ensues.

Think of the problem of the University of California at Los Angeles, growing at the rate of one or two thousand students a year and adding 150,000 volumes annually. This situation is not a question of the librarian or the architect making a mistake in planning. It is the financial limitations on new construction which permit institutions of higher learning in California to build for a period of five years ahead only. Always try to plan a building that can be added to without harming it functionally or aesthetically, so that you are not completely lost when space gives out.

Accommodations for the staff present a similar problem, except that it is one that generally must be faced sooner than that for insufficient book and reader capacity. In nine cases out of ten it is the staff space that gives out first. Consider three of our finest new university libraries: those at Cornell,

Washington University at St. Louis, and Louisiana State University at Baton Rouge. Each one of them has found itself short of space for the processing staff almost before it was well settled in its new building. I was involved in all three and must share the blame, if there is any. I might add that inadequate space for staff has often resulted from a first-floor setback in the outside walls, making the floor smaller rather than equal to or larger than the other levels.

Satisfactory spatial relationships, particularly for the central services, are of prime importance. It is bad enough for the catalog and order department searchers to have to walk 200 feet to reach the catalog, and even worse if they have to climb up or down a flight of stairs; perhaps worse still, as far as time is concerned, to wait for an elevator to carry them. If you have worked in the Library of Congress or Harvard or the New York Public Library or the Library of the University of Wisconsin, you will appreciate this fact.

A good production line is surely a requisite in the processing department in a great public library which adds perhaps 100,000 volumes or more a year, but it is far less important in a large university library where there are comparatively few cases of multiple copies of books. I have too often found that the one service elevator in a library was placed so as to connect the shipping room and the order department, with no thought given to the needs of the circulation desk where the number of books to be dealt with may be ten times as great. Watch for this, if you cannot have two service elevators in a large library.

I shall not attempt to discuss technical construction problems, except to speak of lighting and air conditioning. For lighting remember:

1. Quality, in my opinion, is more important than intensity; there are more complaints about glare and shadow than about too low intensity.
2. Direct sunlight is bad for books.
3. Too much glass, with the resulting high intensity around the outside walls in a large library with an open plan, makes necessary higher intensity in other parts of the building in order to avoid too great contrast; and in hot weather the heat intake through glass plus that from high intensity lighting can seriously complicate the air-conditioning problem.
4. The same intensity throughout the whole building is unnecessary. Most of us enjoy a change of pace. You do not need as much light in the browsing room as in the archives or the catalog rooms. The greater variety in seating, within reason, the better. Why not variety in lighting also, as long as it is adequate for the use to which it is put, and high intensity is readily available for the comparatively few who want it or need it?
5. Ceiling construction too often interferes with stack

lighting. A waffle ceiling or ribbed columns may play havoc.

6. The cost of lighting a large library building with high intensity throughout is very large. Let your building superintendent figure it out for you, and your eyes and those of your financial officers may be opened.

Harvard University as a whole spends well over 1 million dollars a year for electric current for lighting. Light intensity of 120 footcandles costs four times as much as thirty, other things being equal. Need I say more?

Successful air conditioning is a comparatively new development. The first completely satisfactory air-conditioned library is only some twenty-five years old. Many poor installations are still being used. Remember that complete air conditioning includes heating, cooling, humidifying, dehumidifying, filtering, and ventilating. Do you need all six of these? If your collections are valuable enough, yes. If you intend to use your building intensely through long periods of heat, yes. If you do not air-condition, you may find that you will have an outmoded and outdated building within a decade.

It has been very interesting to watch the progress of air conditioning northward throughout the country. Fifteen years ago the State of North Carolina would not permit air cooling in its buildings. Ten years ago this held true for New York City. But libraries on our northern borders and in Canada are now being artificially cooled. On the other hand, complete air conditioning is very expensive and may add up to 15 percent of your building costs, partly because of the space it takes.

Some of our most serious "boners" result from the lack of careful planning on the part of those responsible, among them inexperienced architects, librarians, administrators, as well as trustees; any of them may be ignorant and perhaps not really interested. It is sometimes difficult to find laymen who can be useful in library planning, but in an academic institution it is desirable to have the administration, the faculty, and the library staff represented on the planning team. Some of these representatives may be troublemakers as you go along, but if they feel they have had an opportunity to express their opinions, they will almost always be helpful in the long run.

I will close by mentioning a few minor building mistakes that I have encountered recently:

1. Glass windows or doors so placed and so clear that they are not noticed, and absent-minded persons, as well as others, run into them, often with serious consequences. It is said that 6000 persons are hospitalized each year by walking through unnoticed glass doors.
2. Water fountains so installed that paneled walls or books are spattered and damaged when they are used.

8 GENERAL SESSION

3. Two entrances placed in such a way that the library is used as a passageway by students going between other buildings, not only in bad weather but at other times as well in order to save a few steps.
4. Elevators so readily available that they are used by young students to go up or down only one level, thereby interfering with their use by the library staff and the transportation of books by others who have to use them because of their physical condition.
5. Buildings planned for vertical additions but in such

a way that they are unduly expensive or difficult to add to.

6. Buildings placed or planned, or both, so that they cannot be added to.

Finally, I will summarize what I have said very simply. The greatest mistakes are the result of decisions made by those who do not understand the implications of those decisions—functionally, financially, and aesthetically. None of us knows all of the answers, but we should at least try to figure them out intelligently or to find someone whom we can trust.

MODERATOR *Howard Rowe*
PANEL MEMBERS *William H. Jesse*
Edward Caswell Perry
Richard L. Darling
Eugene W. Fickes

MISTAKES THAT HAVE BEEN MADE IN RECENT LIBRARY BUILDINGS A Panel Discussion

WILLIAM H. JESSE

I still believe, and apparently Ralph Ellsworth agrees with me, that the greatest failure today in college and university library buildings comes from engineering problems. Once upon a time a donor and a president and an architect used to get together, and without consulting a librarian, let alone a library building consultant, went ahead to plan an unworkable library building. This rarely happens anymore.

Now everyone on the building team, generally speaking, is listened to and his contribution sought, considered, and usually adopted. Then, when adopted, bids are let for construction; the building is built and occupied; and usually—not always, of course, but usually—everyone settles down to several years of embarrassing, distressing, frustrating, living with a building with engineering failures which, with today's materials and know-how, are inexcusable.

The air conditioning does not work; the forced ventilation does not work; the humidity control is often so far from what is desired and necessary as to be more damaging than helpful, many items have to be replaced; maintenance is poor, with amateurs assigned to what should be engineering maintenance problems. This list could be extended indefinitely.

I think it is not only appropriate but probably necessary to give illustrations for each of the generalizations I will make regarding failures in new college and university library buildings. While I would like to use Georgia Tech, an old competitor of

ours, as an illustration because it is otherwise an excellent building, I must confess a better illustration can be found at the University of Tennessee, where I participated in every phase of planning through occupancy.

After about five years, some (but by no means all) of our engineering failures here are being corrected. Yet we got, or thought we were getting, what we wanted. Mechanically our building is just beginning to work, and not too well at that. Obviously I am using Tennessee as a safe illustration. By "safe" I mean I will attack myself first, and then perhaps I can attack a few other fellows and get by with it.

What makes engineering failures such a vital problem today is that with modular planning resulting in low ceilings, you simply have to have all this machinery working effectively, because you do not have light and air wells, and you should not depend on windows for ventilation for this type of building. One feels hopelessly trapped, entirely helpless, in one of these deep, fine, modern new buildings with nothing working mechanically. About all you can do is go home, and you can't go home because the students and faculty are in the library; of course, they are suffering, too. In this day and time no one can go home. You have to stay there with it.

Of all the generalizations that I would make regarding failures in modern buildings, this is the one I would put first. This is the one which is the most unnecessary. This is the one which I come to expect as I go back to visit libraries which otherwise have worked out pretty well.

Another generalization pertains to flexibility. Flexibility is a prime requirement of a college and university library building today. Not only do programs change, but the institution grows—student-wise, program-wise, and book-wise—whether you want it to or not. This flexibility is greatly decreased by the misuse or overuse of mezzanines.

I am going to use a beautiful, economical,

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successful, prize-winning little building to illustrate my point, although I could illustrate it from perhaps one third of the new college and university library buildings going up today. I choose, however, to use an AIA-ALA-NBC award building, so that you will not think I am taking some poor, beat-up library and beating it up further. I am taking a prize winner. These winners are presumably, and I believe for the most part, excellent buildings.

The otherwise excellent LeMoyne College Library at Memphis, Tennessee, which received its award because of its economy of cost and exploitation of space, nevertheless wastes tremendous space and creates considerable inflexibility for the future by having an entrance two modules high, which was quite unnecessary for the architectural, aesthetic, and inviting effect the architect desired to create.

Much worse sins in terms of mezzanines have been committed by having squares and rectangles cut out of the center of buildings, making everyone on the upper floors walk around these wells for a presumed improvement in aesthetics. Wells are for something other than libraries, just as, for the most part, mezzanines are. They are not functional, and while some people claim that they may save a dollar now and then (with which I by no means agree), the dollar saved defeats the flexibility of modular construction which is basic to the non-fixed-function building. We made a dramatic point of departure twenty years ago from the fixed-function building, but we are returning to it at a frightening pace.

Why anyone should want a library building to open upward when the wares to be displayed enticingly are down, or at least straight ahead, I do not know. If the design is to relate to the function, even psychologically or aesthetically, one's gaze should be brought down instead of up.

Yet in the *Library Journal* for December 1, 1964, I found that my mentioning of this factor and my reasons for it had been somewhat weakened by the wonderful architect, Richard Neutra, who described why he had done exactly the opposite of what I was recommending. I still think he is wrong, and not just functionally.

There is no doubt that some day, as so many building suppliers and architects tell us, they will come up with glass that will serve as walls in a library. I keep hearing there are such walls, but they do not seem to be working out from the point of view of the client. The use of glass still seems to result in glare and heat, and makes those parts of the building which should not have glass walls unusable. Again I want to use the AIA-ALA-NBC award winners as an illustration.

A few summers ago I took my class in Library Buildings and Architecture at Columbia University to the Douglass College Library. We found the librarian, who had not helped plan the building but was merely trying to run it, quite voluble. We found that the main floor of the building was, for about 40

percent of its space, unusable as a reading area during the warm afternoon.

Another prize winner is the University of South Carolina's undergraduate library. Yet the overuse of glass here makes an otherwise wonderful building one which some of the readers tell me is relatively unusable in many parts many hours of the day, many months of the year. I have not time in this brief statement to say how much glass can be used where, but merely to say that too much glass is used in too many wrong places.

Library lighting while excellent in part, improving rapidly, and given much attention today can still be generally considered a college and university library building failure. I understand that the same may be said of school and public libraries, but they are out of my scope at this time.

The stimulating, almost revolutionary, and for the most part correct critique of the new Beinecke Library at Yale in the May, 1965, issue of *College and Research Libraries* affords us another, not merely prize-winning, but first-honor AIA-ALA-NBC illustration. Not that I agree with the article in its entirety. While Ellsworth Mason does not say that all the lighting in this building is bad (because it is not, and he thinks some of it is excellent), he does say, especially for certain working areas, that "the lighting shortcomings in this building where they occur are naive and predictable."

I think at this point I had better interpose a comment and say that I am not trying to ridicule the AIA-ALA-NBC award winners. I served on their last jury, and after examining 117 plans I will say that while we were mistaken possibly in some conclusions, I have never worked with a more sincere, earnest, and competent jury in my life. I think the buildings we picked were the best buildings submitted. I do, however, think there were some better buildings, in some cases, which were not submitted. So the awards do not mean that these were the best buildings built during the period, but that they were among the outstanding ones built during that period and ones for which plans were submitted for the contest. One reason I am using prize winners for illustration is because I am partly responsible for them.

Monumental entrances are acceptable where extra dollars are available for this specific purpose. Extra dollars almost always mean private dollars rather than tax dollars. The reason is obvious. Any donor or alumnus can come forth with an extra dollar for a monumental entrance or outside treatment or a monumental interior if it does not disturb function, and that is his business. Those of us dealing primarily, or at least officially, with tax dollars must be very careful. This, however, is a distinction I wish to draw. Many buildings have been criticized because of their luxury features, which actually were made possible by private individuals or groups who said they would put up funds only for luxury items, defining luxury fairly broadly.

As long as these luxury items do not strike an incongruous note, I think it is acceptable, if not always wise, to incorporate them into the building. Remember it was only yesterday that a rug on the floor was something people laughed at, and deans, directors, and presidents were hesitant to have one. Today carpeting is considered by many to be more economical than some of the more mundane floors.

I wish I were able to use the University of Notre Dame as an illustration here, but I cannot because I was not a consultant on it and it has not won a prize as yet. Of course, it is not going to win a prize for austerity, but it may win a prize as a library building and an architectural feature in the dramatic sense of what it is supposed to do to and on the campus.

I can, however, use a building on which I served as chief consultant—the University of Miami library at Coral Gables. This was an award winner, yet it has a monumental stairway which I could explain to you historically, but never functionally. It does what monumental stairways always do—takes up space and creates noise, confusion, and distraction problems of a nature which, if I were younger, I would go into with greater zest than I am apparently able to summon at the moment. It also creates sound problems which make parts of the second level, a reference-study area, less usable than desired.

Another illustration, except that the building has a monumental stairwell instead of merely a stairway, is the library at Washington University in St. Louis, which is, as Keyes Metcalf, Ralph Ellsworth, and I seem to agree, one of the best university library buildings in the country today. If plans had been submitted for it, it might well have been a prize winner. It is an excellent building, and I send or take many of my clients there. And when we are planning something new at the University of Tennessee, I always try to get the staff and the architects to visit it. The building has faults, but not many.

You are going to say, but you are not quite right, that I am rationalizing my way into using a nonaward winner as an illustration. Well, maybe I am, but for a very good reason. Here in one of the generally recognized best university library buildings is a monumental, space-consuming, distracting, expensive, not nonfunctional but extraneous, stairwell which by no means destroys the effectiveness and appearance of the building, but to my way of thinking in no way increases it, either.

If Washington University had all its campus functions in one building, there might be reason to have this feature, but it does not. The stairwell detracts from the building, and while it is beautiful, I would rather see a fine picture in the lobby. It would be less in the way and serve about the same purpose.

In the aforementioned *Library Journal* article on building faults and good features, I mentioned that expansibility was a more difficult problem for a public library or a school library, as far as present attention and treatment are concerned, than it was

for a college or university library. Let me say that it still is a problem for college and university libraries, and higher education has gotten itself into a jam as far as physical space or the expansible nature of the building is concerned.

We are not supposed to tell what happened at the awards session in Washington, but just so the school librarians will know, I am going to say that my associate of the evening here, Dick Darling, made such a speech against misuse and overuse of glass in school libraries and the lack of expansibility that I have only recently recovered from it, and I suspect that the architects and some of the others have not recovered yet.

As much as I prefer to retain my fees for personal use, I would give a thousand dollars personally if we could have recorded that speech, published it, and given it wide distribution. No one ever made a better speech about library buildings. If it could be published, I would like to do a very un-Jesse-like thing and say, "I underwrite this in every respect," and would adopt for and commend to every college and university library consideration of exactly the same position regarding these two important factors.

As an illustration of expansibility, let me end on the note I began—the home note. At the University of Tennessee, the administration, architects, library committees, planners, and faculties did exactly what I asked them to do about ten years ago and put a science library at one end of the Chemistry Building, accessible to the Physical Sciences and Mathematics Building. This has been a much admired and widely copied, but far from original, solution to the difficult problem of compromise between departmental libraries and overcentralization of laboratory science collections in a university library.

This much-admired library finally reached its capacity of readers, books, and staff. We decided to expand it, but found that, being on the fifth floor at the end of the building, the library was literally left high and dry. If we had brought in an experienced consultant at Tennessee who would have foreseen this problem, we would now be facing up to the problem merely of expanding our widely acclaimed, carefully planned, almost spiritually conceived view of the future.

EDWARD CASWELL PERRY

Most of the buildings I am going to tell you about exemplify poor forecasting as to their potential use. It should be pointed out, however, that the area of the country in which they are located represents an area in which the expansion rate apparently is beyond the belief of the planners, councilmen, and personnel in city government who try to prognosticate their future needs. Other faults that I will take the opportunity to point out in these buildings are faults of poor allocation of functions, such as the placing of accessory functions on the main floor of the building, and of

important functions in remote parts of the building. Perhaps not all of these problems arise in other areas, but certainly some of them will.

I am not going to attempt any systematic treatment of these examples of faulty design. Some of the buildings will receive very casual and passing attention, but nevertheless I will cover, I hope, a great variety of material of interest to public librarians, which I trust will afford constructive pointers for other librarians as well.

The West Los Angeles Regional Branch of the Los Angeles Public Library was completed in 1956 to provide back-up service for the population in the West Los Angeles area. This area lies to the west and southwest of Beverly Hills, out toward the ocean. Although I lack exact data on this building, it is probably about 12,000 square feet and currently stacks about 76,000 books. The estimated population served at the present time is about a half million.

I am using this building merely to illustrate that a large library system cannot really consider size of building in any other light than the smaller city does when it comes to providing adequately for a given service area. The projection on this building in the light of current needs is surely no more than one fourth of the size required. The area of the building could have been used to far greater advantage had a full second floor been provided. The building has only a mezzanine floor at the rear of the building, where there are some offices, a storage area, and a small auditorium. It has insufficient expansion potential within the present structure to warrant much expenditure on remodeling. It would seem reasonable to forecast that a replacement would be in order sometime within the next five to six years.

The new Santa Monica main library building is not yet open for service, although dedication has been set for the near future. The city of Santa Monica has traditionally offered a high level of library service, and its library has become a regional reference center for the same area of Los Angeles to which I referred in commenting on the first library. The Santa Monica Library maintains two branches and a station in addition to its main library. This handsome 72,000-square-foot structure will certainly give a great boost to its services.

Santa Monica's population today is 88,511, and although a nonresident fee has been imposed in recent years to discourage excessive circulation of books to nonresident users, the level of nonresident reference use of the main library is high, especially among the student age group. The Santa Monica library staff estimates that twelve large senior high schools send students to their main library, irrespective of political boundaries. The space problem has been solved for Santa Monica for the present. I will comment later on one feature of interior planning which will cause problems later for the Santa Monica Library.

The Whittier Public Library is an attractive 23,210-square-foot building completed in 1959. In the

planning stages it was difficult to persuade the city fathers that the new structure being undertaken need be any larger than the old Carnegie building being replaced. Whittier then had a population of 33,000.

This building concentrates most of its area on the main floor. The mezzanine level, above the main floor, offers additional space, probably for future staff workrooms. There is also a basement area. Neither of these areas is very large, but there is some expansion possible.

Unfortunately, Whittier recently annexed an adjacent area almost as large as the original area of Whittier. Whittier's population now stands at 70,239, so that at one stroke the library building became inadequate. A branch library for the annexed area is projected for the near future, but it is hard to conceive how much can be done with the central building, because of its site in the city's civic center. A wing could be built on, but it would be difficult to incorporate very effectively into the present structure.

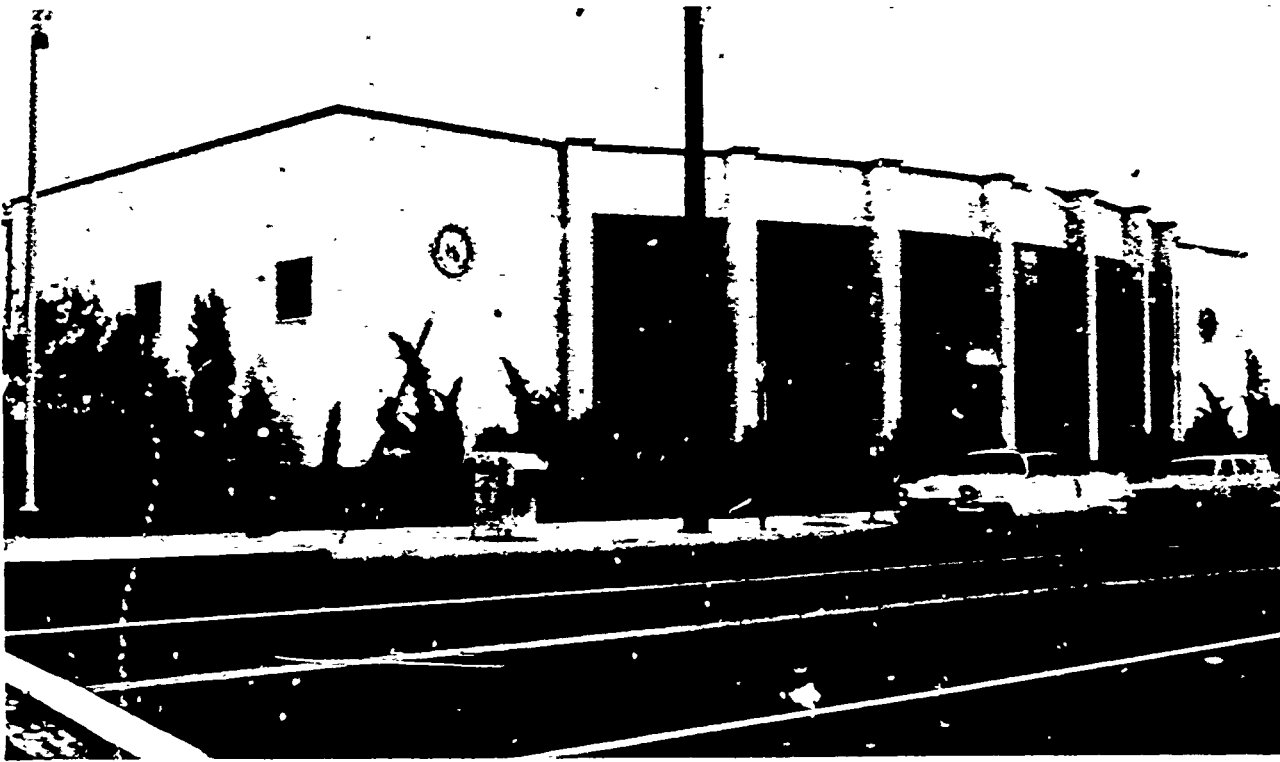
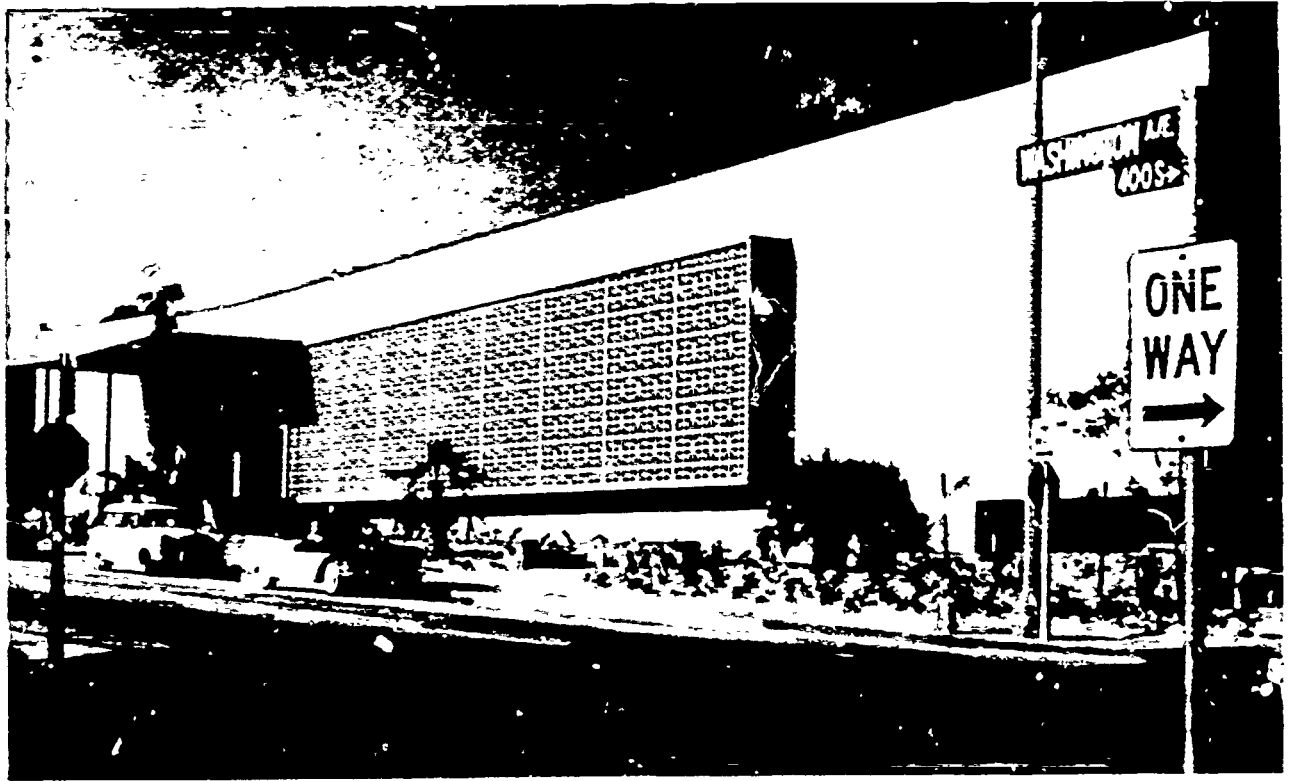
Santa Ana Public Library's new main building was completed in May of 1960 when the population served was 100,000. This library has 40,557 square feet, distributed as follows: main floor, 16,829; mezzanine, 11,490; basement, 12,238. The main floor provides adult and young adult service areas, a browsing alcove, a music and art alcove, an auditorium, the children's room, plus a technical services and office area. The mezzanine has a reference section, a periodicals section, and a business section.

The city of Santa Ana has reached approximately 150,000 in population and will very likely grow a great deal more in the next decade. This building, which was inadequate in most respects when completed, due to its poor arrangement, is going to become even more deficient as time goes on.

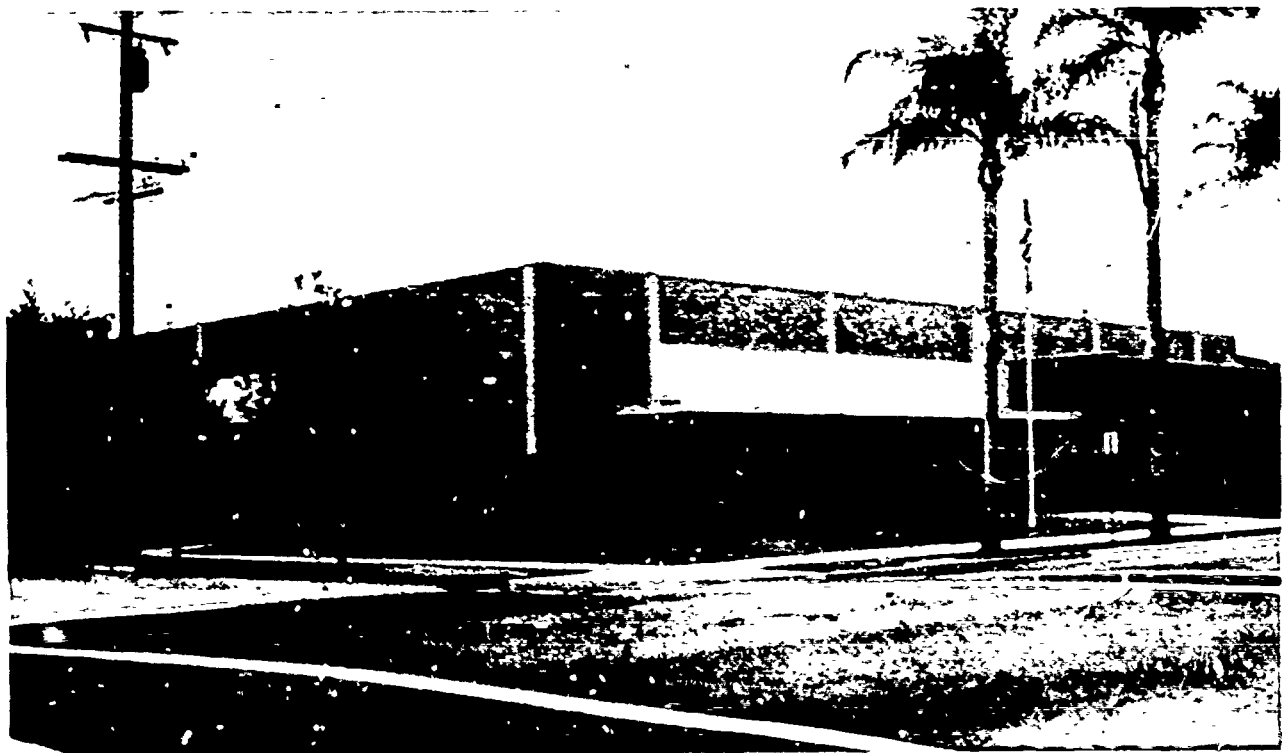
The Orange Public Library, which was completed in January, 1961, when the population of Orange was approximately 26,000, is a 22,000-square-foot building with about 17,000 square feet on the main floor and 4,800 square feet of basement storage area. The current population figure is 59,500, with every prospect of continued growth. In other words, Orange now has more than double the population it had when this building was completed.

The problem facing this library is the same as in the cases of Santa Ana and Whittier. The council has grudgingly allowed the planning of a branch library, but this will still leave the main library badly overtaxed for almost all types of usage. The building can be expanded to the rear into the parking area, but will require other and expensive remodeling.

The Downey Public Library exemplifies the extreme in economy planning. At the time the building was erected, the city of Downey had only recently been incorporated, and for the first year or so of municipal existence, most services continued to be provided by the county as contract services, including the library service.



Santa Ana Public Library
Santa Ana, California



Orrville Public Library
Orrville, California

Following a hasty evaluation of the cost of county services, the city canceled almost all their county services in the same year. I was called in informally as a consultant on their library services, as was Mr. Albert Lake of the Riverside Public Library. I failed to convince them that the 16,000-square-foot building they were planning was far too small and that a structure of about 42,000 square feet was needed. Downey's population at the time their building was completed was 82,500. It has not grown at quite the same rate as other cities in the area, but it is now 94,000.

Recently the architect who designed the Downey facility called on me and said that he had been commissioned to enlarge the Downey Library by adding a second story. Even with a second story of the same size, the library will not be adequate for this city. No branches were planned for originally, and I have heard of no plans for any form of extension service in Downey. This community has thought of nothing but economy and has made no adequate plans for the development of its library facilities.

The Burbank Central Library, which operates in a service area of slightly more than ten square miles, serves a population of about 95,000. A small main library of about 10,000 square feet and a branch library used to serve this area twelve years ago. We have increased our main library capacity considerably.

This building affords 42,000 square feet of space divided almost equally between two floors. It is well able to handle a modest increase in circulation load. Its chief burden today, like that of the Santa Monica library, is in student reference use, as it is becoming more and more a regional reference center for the adjacent Los Angeles area in the San Fernando Valley.

The main floor offers adult and young adult services, audio-visual services, a Western history section, and two small storage areas. The second floor has a children's area, an auditorium, staff quarters and offices, the technical processing area, and a large storage area. Projection for the future has allowed for the addition of another story, which will increase the building capacity to about 63,000 square feet without disrupting the present services at all.

Now, I will go back to discuss some of the details of these buildings. The Santa Ana Public Library has a number of faults which can be pointed out very readily. To begin with, the main floor accommodates technical services and office areas at the rear of the building. Since the depth of the building is not very great and since the stack area projects forward better than halfway through the open area, the seating capacity is held to no more than 75 to 80 at 12 to 15 tables in the entire adult and young adult areas. I might also point out that little is available in the way of artificial lighting except for two-tube fixtures way above the reading level. The auditorium, which uses valuable main floor space, should have been relegated

to the second floor. The children's room, which it is claimed would have been larger had the library not run out of funds, would hardly be adequate for a branch in any public library system.

The Orange Public Library building has three separate entrances. I think most of us are aware of the difficulties in having too many entrances. Within a very few months after this building was opened, it was necessary to close the entrance on the main street. An attempt has been made to secure control by placing shelving at right angles to the entrances. The focal point of the building—the receiving desk, the registration desk, and the charging desk—is very poorly located insofar as control is concerned, since it is placed in the center of the building. In other respects, the functional arrangement of the Orange building seems quite satisfactory.

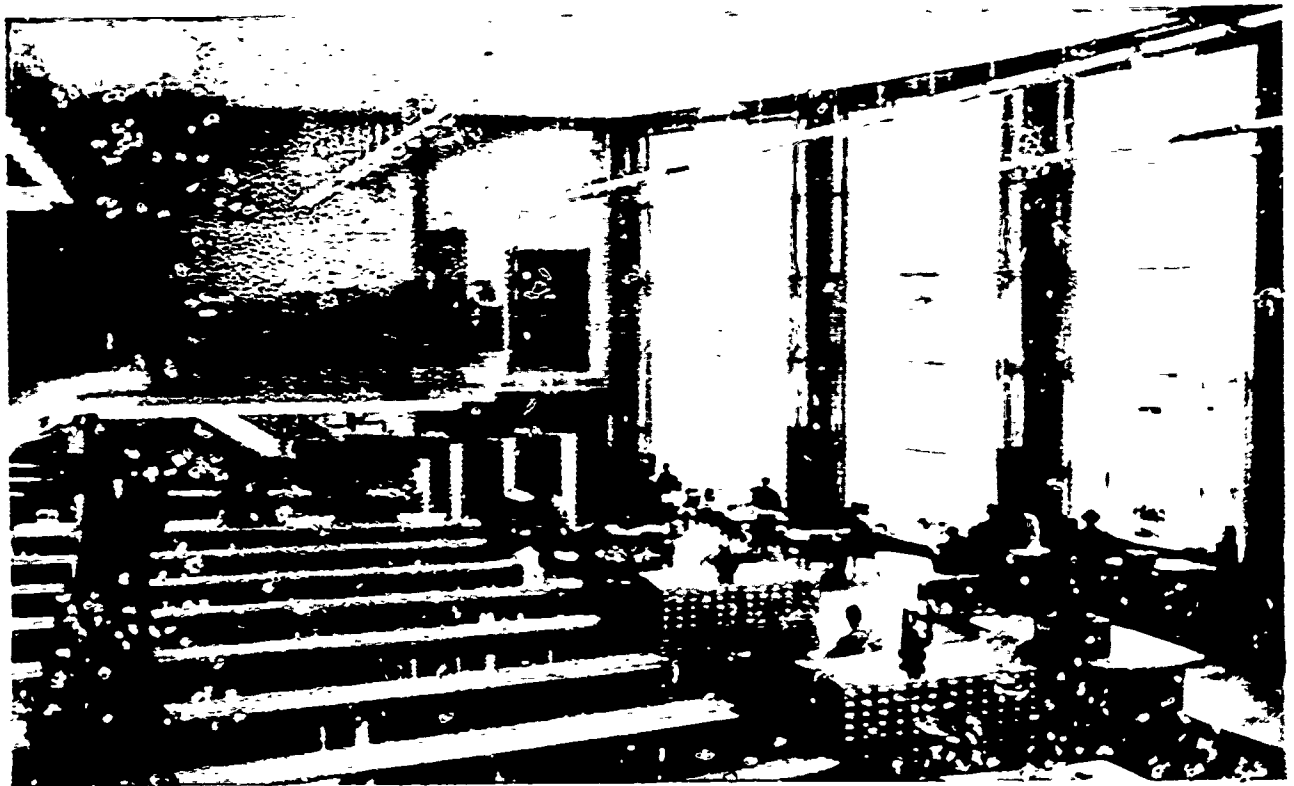
The cathedral-like window, running almost the full height of the two stories of the Santa Monica main library, and the balcony with a rather handsome sweep of rail are quite attractive from the architectural standpoint. However, they are a terrific sacrifice insofar as utilizing the area of the building is concerned. I would estimate that about 7,500 to 8,000 square feet of floor space on the second floor has been sacrificed by this two-story well.

Now to revert to the Burbank building. There are only one or two points that I want to comment on in critical fashion on my own building. It is, of course, always difficult to criticize your own building and be objective about it. Wherever you find extensive use of glass as part of a façade or wall in a modern building, as is found in this building, some means must be adopted to protect the building inside from excessive glare. An overhang of the second story or roof structure is a common solution. On occasion, tile screening is set out and independently mounted on posts or pillars away from the building. This was the solution used in the Burbank library.

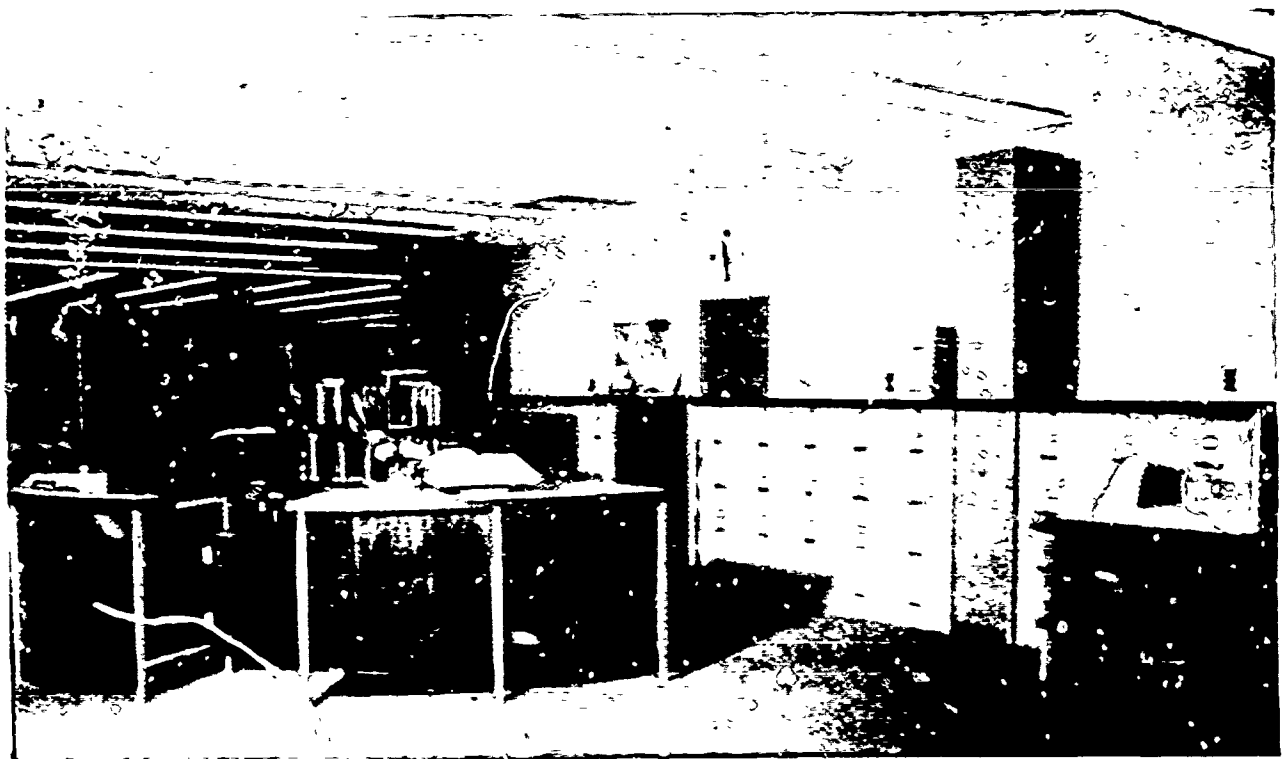
Our projection, as part of the plan that was developed, was to use this as an outdoor reading area. An outdoor reading area is a form of California mythology. It is a pleasant kind of mythology. But, in fact, during the daytime in hot weather it is just a little too hot on the patio, and you are much more attracted to the air-conditioned comfort inside the building. In the evening the temperature may drop 30 to 35 degrees, and then it is too cool for comfort. Certainly in our experience with this porch area, its value as additional or overflow reading room area is virtually nil.

The reference desk of the Burbank library illustrates an experience which many librarians have doubtless shared, namely that no service desk, regardless of the care with which you develop its layout in consultation with your staff, ever works out to the entire satisfaction of the staff. I have had frequent complaints from the reference staff that this desk should be taken out and replaced with a larger one. We cannot afford to do this, but we will undertake

Interior
Santa Ana Public Library
Santa Ana, California



Tile screening
Bertie K. Pettit Library
Berkeley, California



some modification, perhaps shifting the center portion back to give more space inside the desk, and adding to the shelving in the center part, to permit more storage of ready reference materials.

I am sure that in this and other details librarians have had similar experiences in appraising new public library buildings realistically.

RICHARD L. DARLING

It is probably easier to talk about mistakes that have been made in recent public or college and university libraries than it is to talk about mistakes in planning school libraries. Public libraries and college and university libraries are larger, they are built less frequently, and they tend to be more individual. Two or three years or more go into the planning of them, and they are planned usually as independent buildings. Each public, college, or university library of importance stands out, is criticized or admired, and is discussed by the profession. Its mistakes are discovered and other planners profit. Rarely does the public or university librarian make the same mistake in planning his library that his neighbor or colleagues have recently made. Perhaps it would not be too wise a remark to say that mistakes in big libraries are not often repeated because they are such large ones.

For school libraries we should be able to say that our mistakes are less important. We plan a dozen or even a hundred school libraries for each public college and university library. With such numbers we should learn quickly and soon reach a stage of perfection. Unfortunately this is not the case. We plan schools and school libraries and build them so rapidly that we often have a second group of schools under construction and a third group of schools on the drawing boards all with the same mistakes before we discover our original errors.

A second problem in catching our errors is that there are so many school libraries that it is rare for them to receive critical attention. Only a small number ever appear on the pages of professional magazines and then often for reasons other than effective design.

In many school systems mistakes are institutionalized. The school system adopts standards for school building including school libraries and then repeats its mistakes over and over until new standards are written. To compound the errors we frequently follow fads in school library design, copying what others have done—mistakes and all. Perhaps we should talk about recurring mistakes in school library design instead of recent ones, for some of them tend to be repeated year in and year out.

Our most recent mistakes are also the ones that continually plague us even though they may not always appear to be the same. One major error in school libraries is that they are frequently too small to accommodate effective services. Though building

budgets may dictate the size of the library, the saving is false economy and a mistake in its own right.

In Montgomery County, Maryland, we are remodeling and enlarging school libraries now at a far greater expense than would have been required to make them adequate in size five years ago. But the budget is not the only reason school libraries are too small. When the architect designs a school for an enrollment of 800 students, he designs a library adequate for student bodies of 800. Yet in the rapidly growing suburbs, where the majority of new schools are built, this school will almost certainly be enlarged to provide classrooms for children from new subdivisions. When the enrollment reaches 1600, with the number of classrooms doubled, the library is still only large enough for a school of 800. Enlarging the library costs far more than building it larger in the first place.

I recently asked a well-known architect why he and his colleague did not design larger libraries for schools in areas where the population was still growing. He replied, speaking only for himself, "I hope the architect designed a unified building for the appropriate enrollment. The school system had no business spoiling his design by adding extra classrooms to the building."

Whatever damage enlarging the capacity of a school may do to the integrity of architectural design, it destroys the ability of a school library to function effectively. The library should be planned large enough for the potential size of the school, not for what will obviously be a first phase in a building program.

Recognizing that schools grow, the next best planning we can do short of building libraries for the ultimate size of the school is to design school libraries that can be expanded easily. Standards for school library facilities have warned us not to place school libraries between stairwells or next to rooms with extensive plumbing because library expansion would then be difficult if not impossible. These mistakes we now usually manage to avoid, but our love of novelty has led us into accepting libraries designed in unique shapes which cannot be expanded except at enormous expense and then at the cost of total destruction of the precious architectural statement.

In the past half dozen years we have had school libraries designed in circles, in octagons, and in hexagons. They have been admired, and they have been copied. Here in the Detroit area it is possible to see several of these interestingly shaped school libraries. The Livonia Public Schools have both a circular library in the senior high school and a hexagonal library in a junior high school. The circular library is surrounded by corridors; any future expansion of that library is impossible. A second high school is now being designed with a library identical to and as impossible as the first.

The hexagonal library juts into a court and is equally impracticable to enlarge. It is only basic

honesty for me to admit that I was the library supervisor who, as a member of the Library Committee, worked with the architect who designed Livonia's hexagonal library. I cannot remember now whether it was our ego or the architect's which was so gratified by the novelty of the design. These patterns or variations on them have been used in countless schools.

In the senior high school in Pocatello, Idaho, the library is in a separate building. As school librarians we should be flattered—the importance of the school library finally commands a building of its own! But the Pocatello School Library is a handsome circle bound permanently to its limited circumference. In the Library Architecture Award Competition last year a large percentage of the school library entries were designed in these unusual shapes, and each one had the same fault—they could not be expanded unless the school was enlarged.

Montgomery County Public Schools, in Maryland, has a school in the Washington suburbs, Bushy Tail Drive Elementary School, in which the entire school building is round. The school was planned for an experimental program with no great division, with team teaching, and with other innovations. No expansion of the school is either contemplated or desirable. Here was a unique opportunity for an architect to plan a round library, truly in the heart of the school with direct access from the classrooms and large group teaching areas in a circle around it. The location of the library and even its shape should have grown logically from the shape of the building, but no, instead of a circular library as the core of a circular building, the library is a pie-shaped wedge with no organic relationship to the instructional program it is intended to support.

This example may illustrate a mistake larger than lack of imagination in the design of one elementary school library. I fear it is merely a symptom of our colossal mistake in the school library field of not making absolutely clear to the architect and to school building planners the function of the school library in the curriculum of the school.

Too many architects, schoolmen, and librarians, too, think of the school library as a place where children go to check out books to read at home, instead of thinking of it as the school's chief source of varied material and information to undergird the instructional program. Until planners understand the special function of the school library, we will continue to construct school libraries that are too small, too rigidly planned to accommodate change, and too little related to the role of the library and the school.

EUGENE W. FICKES

Recently, upon completion of a fairly good-size library, I turned over to each member of our staff a two-page "List of Goofs in a Recently Completed Library Project." This list was compiled during a

comprehensive and final inspection of the project. The list was received, of course, with mixed emotions by various individuals on our staff, and it should have been because it certainly struck home at a few of them. However, it is not likely that the same type of detailing or poor choice of materials would be made again.

Of course, the best evaluation of a facility is not merely to inspect the facility. The best way is to use it and to observe and ask questions of everybody from the janitor to the top executive. Following are mistakes which I have observed in some recently constructed libraries:

Planning. Building planning lacked wide participation by the planning team. Lack of knowledge of specific needs in the various departments was evident by the far less than optimum use being made of these areas. Equipment and furniture were obviously poorly arranged, requiring more space.

Flexibility was not made part of the integrated design. Changing requirements of the not-too-distant future would cause tremendous hardships, as well as some impossible situations. Bearing walls, plumbing, air conditioning, and electrical systems, to name a few, would provide "road blocks" if flexibility were not made a part of the design program.

Poor locations for library staff public service desks were noted—some situated where they were too off-center or too remote from the areas they were to serve and supervise. A professionally trained librarian should be within a reasonable distance to serve patrons asking for or requiring assistance. One library had a reference desk and a charge desk only about ten feet apart, with the main stack area on the opposite side of a very large reading room.

Poor relationship was noted between public service desks and the supporting staff workrooms. This is sometimes done to achieve a certain architectural effect. The result: Poor efficiency in operation and/or less service to the public.

Charging stations or checking points often were poorly located relative to the main public exit. Also, fire and other exits were poorly controlled either architecturally or by nearby supervision. Result: Considerable loss of books.

Overdepartmentalization was prevalent in smaller or medium-sized libraries, but was also found to exist in an 80,000-square-foot library, which was forced into it because of a meandering ranch-style plan.

No provision or inadequate provision was made for future expansion. Some of the restrictions were caused by the greater fire-resistive construction required for large buildings; odd-shaped buildings; no structural or other provisions such as elevator and stair locations for vertical expansion; shortage of land for horizontal expansion or additional off-street parking, aesthetic considerations, complications in exiting, difficult expansion of utilities, and moving of principal utility lines when they were initially in walls

that would be slated for removal if a public area expanded into a staff area, and the staff areas moved to a new floor.

Poor space utilization was evident, such as the construction of two-story monumental foyers or wasteful open areas adjacent to mezzanines, when the construction budget or the property available was considerably limited.

Poor coordination was evident between the architectural, electrical, and mechanical elements. The cause was often a lack of experience, knowledge, and/or wholehearted interest by the architect.

Poor coordination was evident between the architectural, electrical, and mechanical elements, and the space and functional requirements of the furniture and equipment to be used in the building. Preliminary layouts of the complete furniture and equipment should be developed prior to the processing of working drawings and specifications.

Off-street parking spaces for automobiles were inadequate, likewise parking provision for bicycles.

Exterior. Some buildings were too monumental in character—not inviting enough to encourage potential patrons to enter the library. Occasionally, a far greater portion of the budget was spent on exterior embellishment than would seem justified, considering the shortcomings in many of the basic functional requirements within the interior of the building.

No easy ramps or on-grade entrance were provided for the physically handicapped.

Building construction facing materials used on some libraries were expensive and/or difficult to maintain. Special emphasis should be given to use of low-maintenance materials adjacent to public walks and entrances.

Communications. Some buildings had too much duplication or overlapping of internal communication systems; some had inadequate communications for efficient operation.

Some PBX boards were poorly located with respect to preopening hours or during the evening hours.

Locations of some staff and some public telephones were such that the phone conversation was disturbing to the patrons.

Communication outlets were often poorly related to desk arrangements, and so forth, because the furniture and equipment placement was not determined prior to commencement of working drawings and specifications.

Lighting. Lighting in many buildings had poor diffusing lenses, resulting in too high a glare factor.

Fewer buildings had an insufficient amount of light, but one building with a marble façade had only 5 footcandles in the stack areas. The lighting fixture used produced a disturbing glare because the tubes were bare—not even the lowest-quality diffusers had been used.

Many libraries had used the cool white fluorescent tubes, thinking they were getting more light, when a much softer light is provided by warm white

tubes at practically the same cost and producing slightly more light.

Again, because of late decisions on furniture placement including bookstacks, exhibit cases, and so forth, electrical outlets were poorly related to their greatest use.

Switches for lighting fixtures often were found to be too available to the public, and not available to library staff and janitors when they left the building.

Electrical provisions for site lighting, the recharging of bookmobiles, and controls for landscape sprinkling systems were overlooked.

Use of automatic fire-sprinkler systems in libraries in my opinion is incorrect, although many building codes require it for certain buildings. Often much more damage is done to books by water than by fire. The use of the electrical heat activator for fire-alarm systems is a much better choice if the local fire marshal will approve.

Different lighting levels next to one another can create problems even though, individually, each area possesses a sufficient quantity of light. Persons working in an area having a lower quantity of light than adjacent areas may feel as though they do not have enough light.

Air Conditioning and Heating. Some buildings skimmed on the quality of their air-conditioning systems and spent money on items which could have been deferred until later. A cheap air-conditioning system is a poor investment.

Some air ducts were insufficiently sound-baffled to prevent noise from meeting rooms, business offices, board rooms, and so forth.

Mechanical equipment rooms, including compressors, were inadequately isolated from adjacent reading rooms and other areas requiring minimum noise or vibration.

Plumbing. Insufficient sinks were provided where often required, such as in technical processing and audio-visual workrooms, children's workrooms, and staff artists' room.

Provisions were inadequate for landscape sprinkler systems and for hose bibbs at outdoor walks and patios.

Foolproof key stops were not provided in public toilet rooms for plumbing fixtures.

Finishes. Painted walls along stairways, adjacent to drinking fountains, or in any area where the public might linger, proved to be too difficult and too expensive to maintain. Use of vinyl-fabric wall covering, low-sheen plastic, brick, or the like would be more practical.

Floors of cork were used in many libraries because of the quiet, resilient flooring they provide. It is, however, difficult and expensive to maintain; it will bleach to whitish color in areas exposed to sun and will often pull away from concrete slabs on grade where the slightest moisture exists, unless an expensive waterproof membrane is provided. Finally, the now popular women's pin heels damage cork tile.

Carpeted floors with separate backing are a

mistake since it is much more difficult to insert a satisfactory patch if damage is done to a carpet. A high-quality, 100 percent-continuous-filament nylon carpet with vulcanized rubber backing, containing a carbon additive, is the best all-around flooring for libraries.

Recesses were often forgotten for entrance door mats.

Hard floors were often carried into areas where noise should be kept to a minimum.

Some building interiors included very bold colors in large areas in permanent building materials, as well as in large painted wall areas. These greatly limited the colors to be used initially and in the future in the furnishings and equipment.

Shelving. The use of soft woods for shelving proved to be inadvisable where used for economic reasons.

Some shelving omitted a recess in the bottom for receiving the shelf brackets. It is possible, without the recess, for the entire shelf, including books, to tip over and fall onto the floor if a person leans on the shelf.

Furniture. Casters used on desk chairs, book trucks, and typewriter stands were frequently of black rubber. If left to stand for any time on vinyl or vinyl-asbestos tile, discoloration of the tile would take place.

Button glides or glides of too small a diameter were often used on chairs in carpeted areas, resulting in damage to the carpet. Glides at least 1-1/4 inches in diameter should be used, or else ball-type rollers.

Woods and natural finishes in the various segments of the library furniture often were not coordinated, resulting in uninteresting contrasts and/or incongruity.

The furnishing often did not do the most for the building, and vice versa. In most cases, it was the selection and lack of coordination, not the budget, that were responsible.

Some libraries had too much adult and out-of-scale furniture in the children's room. Some furniture used in the children's room tipped over too readily.

Some libraries used chairs with metal legs, which resulted in excessive noise when the legs were struck against one another.

Contracts. Many libraries had shelving or other contracts separate from their general contracts. This either delayed the project until the general contractor went on the job, or made difficult the determination of who was responsible for damage to walls, floors, and so on. If the shelving contract is included in the general contract, the general contractor has the overall responsibility. We have found that if we ask for an alternate bid on the general book shelving as part of the general contract bidding, we get bids with very little, if any, additional cost over the subcontractor's price. This is because the general contractor prefers to have the control over such an installer, and at the same time, not to be particularly involved in the actual installation.

Contracts for carpet installation had at times also been segregated, often creating problems which could have been avoided if the contract had been placed in the general contract.

Segregated contracts for paving off-street parking areas also caused problems. The basic problem relates to the condition of the subgrade at the time the paving contractor commences his work, in that the grade usually has been changed some since the original topographic survey. In any case, a separate contractor could claim extra charges from the owner, insisting that the grade was different from that specified as the subgrade for the work. No one could prove otherwise without another topographic survey. This is one of several reasons why this and most of the sitework should be included in the general contract.

II. Public Library Sessions

Jack Chitwood

*Director of Libraries, Rockford Public Library
Rockford, Illinois*

LIBRARY AND COMMUNITY: Community Analysis, Population Characteristics, Community Growth, Governmental Relationships, Library Site Criteria

It is my contention that the potential of the public library has hardly been touched, much less fully realized, and that all of us must share this guilt. Our people need what libraries *can* be more than what most libraries are, and it is our responsibility to plan for these services. If there is anyone who feels that his library is exactly what it should be, then we hope that he will take a fresh look at his institution. The look taken should be based on a thorough knowledge of his community and the possibilities his library has in serving it.

My topic is very broad, and though it is possible to be very specific about many of the factors which must be considered, the chances are that each of us will be very selective when we get around to using this information. We tend to select only that which we think will work to our advantage and play down all the rest. Most often we find, too, that this bow we make to logic and objectivity is only deferential in appearance; our concerns and decisions are emotionally based, and logic is twisted to provide an attractive curtain for this supposition—I do not dare say “fact.”

Wherever such an introduction may lead us, it would be better to move more directly to our subject—community analysis. Now I do not suppose that any library—perhaps any American institution—has ever been considered in any major way without many references to what the community thinks about the proposals being considered. Some of these references, I am sure, were accurate, even perceptive. Many *might* have been, but in the majority of instances they were suppositions.

The reason is that there had been no development of a body of authoritative knowledge, objectively collected, synthesized, and analyzed. The conclusions given were not based on information which was scientifically developed. Adequate documentation was lacking. Later I will suggest that this lack may not be as dire as I intimate at the moment; my purpose

now is to show that such a body of knowledge can be developed with the tools and information in existence, that the task is not onerous; and that it is well worthwhile.

The biggest problem facing the development of satisfactory library service, including the buildings, is the lack of a clear concept of library service. I am making no distinction here between the qualities of various concepts; there simply are very few boards who know what kind of programs their institution is carrying on or plans to develop—if it plans to develop—in the future. They are not alone in this predicament; most of us who are the managers of the libraries are just as unenlightened.

Most of us, when asked if we need a new building, will say yes, and when questioned further will indicate we need more space for more books or for more tables and chairs. But this need is not related to a stated library program, one which sets specific goals and develops a plan to achieve these in terms of activities, facilities, personnel, and costs. Perhaps we do not want to inspect our purposes too closely; so long as our present existence is not questioned, we may be better off simply to fertilize the status quo.

I should like to suggest, however, that any responsible body contemplating a library building should first determine what kind of library program is to be promoted. Then, all factors being considered, construct the facility to coordinate with that program. Maybe you will not need a library building at all; on the other hand, you may need one twice as large as the one you are contemplating.

Perhaps, however, I am naïve or, to be less generous, misinformed about the true depth of planning which takes place within library administrations. For purposes of the rest of this presentation I will assume you have determined that, like the rest of us, you are going to do the same thing your institution has done since 1870 except that you want more room for it and maybe a different location. But one word

of caution—what you are proposing to do should influence the plan of your facility, the equipment you need, and its location.

There are many facts you need to know about your community in order to plan an adequate program for it. Most of this information is fairly easy to come by in most communities. Probably first we should consider population characteristics.

The census bureau collects very detailed information when it takes the decennial census. Other sources for this kind of information are your planning commission—metropolitan, city, or county—and your school administration. These latter two may be able to give you what you need or want already analyzed and ready for your use. Your library should have at least the census publications relating to your area and, if the other two agencies are really functioning, copies of their studies. In any case, these are your best and most accessible sources.

The kind of population you are serving or expect to serve will determine the kind of service you will give, the type of collection you will develop, and even the kind of building you will construct. A community of low educational level and including few young people with children is not likely to be a book-reading, library-using one.

On the other hand, a community may be very concerned about its public buildings and their appearance, in particular, a community made up largely of European immigrants. In such a community public buildings are monuments in which the people take great pride; this pride also intensifies problems when you want to tear a library down. A community with many children will want and need extra attention given to children's services and eventually to those for young adults. A community with enlightened labor and industrial leadership will need facilities for group programs—not to promote plant or labor functions, but because a pattern of communication has been developed which will carry through to the families and their activities. The library can take advantage of this development.

Even dominant religious affiliations can be meaningful in relation to the present and potential pattern of library use. Although certain religious sects are known to be relatively uninvolved in reading, a knowledge of the community's religious attitudes will be helpful in planning the library's building activities and collection. This is also true of the political attitudes. While all these factors are going to be reflected to some extent within the board itself, their extension to the community cannot be made without a thorough analysis.

The economic development of the community is of primary consideration, since on it depends the financial support for the library program including building activities. Exceptions, of course, will occur where significant endowments or gifts may cover these expenses. These are rare, however, and even when available will seldom provide long-term support.

I would suggest that unless adequate supporting funds are available, it is unwise to use gifts for construction projects.

Many aspects of the community are the result of favorable or unfavorable economic conditions in the community. The educational level, the vitality, the general attitudes, the ability of the community to attract and hold quality residents, the healthy functioning of governmental offices, and a host of other factors all depend on the health of the economic situation.

It is difficult to separate these population characteristics into distinct, individual categories; they are all so closely interrelated. One derives from the other and reflects on another. This is why it is so important not only to be aware of their significance but to realize which in your community are the most prominent. As you will discover, the attitudes of the community and its leaders toward these factors bear much weight, and unless you actually know the specifics about which I have been talking, you have no basis for substantiation or refutation.

This thought leads us naturally to the most important consideration—the community power structure. As I am sure most of us realize by now, the real power in a community is seldom that which is apparent. I would even go so far as to say that if a particular individual or office appears to wield power, it is certain that this appearance is not real. The power lies somewhere else and is seldom, if ever, revealed as such even when the community knows where the power is. It is very important to know this, because if something needs to be accomplished in regard to the library, the power behind the scenes must be convinced to support the program; or, in too many instances, at least not to oppose it. Unfortunately, the library usually has made such an insignificant impression on the community that it receives no consideration from the power elite.

Within the last decade, however, libraries have been moving out of their caves of security, and have been making more noise and greater effort to be influential. They have also been becoming agencies with more money to spend, which always attracts attention.

Attracting the favorable attention of the power elite will vary in each situation. As librarians, we hope our board members will be able to do this, but too often they are too timid to try. This is unfortunate because one of the basic reasons for having a board of lay citizens is to provide communication between the library and the community power structure. We usually end that sentence after "community," but what I have said is what we mean. I think this is because the first loyalty of most board members is to something other than the library, and they do not want to jeopardize their standing with this elite group because they may want to use this contact for some project closer to their personal interests.

Other community institutions and their pattern of

use have major effects on library needs. The most important of these facilities to the library are the academic institutions and their methods of instruction. Current methods, which emphasize the use of many resources rather than the single textbook, make much greater demands on libraries. I personally favor this technique and am pleased that libraries are being used in ways hardly even thought of fifteen years ago. While it is true that the institutions should provide resources for the demands they create, the fact is they do not nor are they likely to do so.

Recognizing this, we must adjust our position to accommodate these demands within the limits possible without perverting our basic purpose of providing an informal approach to educational objectives primarily for the individual. This can be accomplished largely through simple administrative procedures and a more energetic and accommodating public relations approach. In relation to building programs it becomes a matter of recognizing increased use by providing additional space for collection and study areas.

If the physical location of one or more of these academic institutions is close, other problems arise mainly related to discipline. Other community facilities which have an effect on the library building program include museums and galleries, particularly when these have active public education programs but inadequate libraries. I am not speaking here of formal schools but rather of informal programs which try to interest the public in the museum and gallery activities. Like technical training schools, museums and galleries seldom maintain library facilities adequate to their needs. The more formal academic institutions do much better at this.

Other libraries in the community of a more specialized nature, such as legal and medical collections, will have little effect on public library planning unless the public library is undertaking to incorporate these types of collections in its services. Otherwise, public libraries collect and service the same limited range of these subject materials whether there are or are not such specialized collections available.

If the public library is attempting to service these specialized areas, including municipal reference facilities, then these factors must be accommodated in the planning. Consideration must also be given to other functions such as archival, local history and genealogy, or any other service which departs from the conventional. I am not making value judgments about these areas. I am simply saying that their inclusion as a part of the local library's program results in a need to take these into account when planning changes in the local facilities.

The presence or absence of physical recreation facilities in a community, or easily accessible to its population, has some effect on the library's use. Not only is the effect felt in terms of ordinary use, but also in terms of the nature of the collection. We do not usually think that physically active people have much use for books. This is a limited viewpoint.

Many persons with an active interest in sports make extensive use of the sports collection. This runs the gamut of how to perform better to how to build the facilities. Obviously, then, the extent of concern and availability of facilities must be considered.

If yours is an industrial community, you must know the level of development of the special libraries which these industries may support. The source of this knowledge must come from personal contacts. They are valuable not only in terms of the specific information gained, but also as the opportunity to develop a sympathetic rapport with a segment of the community not normally in close contact with the library. If the library has determined to try to serve the industrial segment, then it must know what those needs are and must plan services and facilities to accomplish the goals set.

The availability in the community of an active adult education program will be felt by the library. In speaking of adult education, I am not concerned with how-to-sew, how-to-weld, or how-to-play-bridge courses, nor even with the conventional academic class in an evening setting. These, of course, will send some people to the library, but not to the extent of the courses which will depend on intellectual participation. The library's acceptance of a responsibility to conduct, promote, and cooperate with such programs will be a major influence in planning library facilities.

Such activities require space, materials, and equipment not ordinarily included in the conventional library's plans. The adult education function, though not new, is receiving more and more attention as a major part of the library's program. Continued emphasis on the culturally illiterate, the intellectually deprived, and the low-level reader will make this function even more acceptable with our boards and staffs.

Preliminary studies seem to indicate that many of those who participate in these programs feel more at ease and prefer the noncompulsory setting of the library. An opportunity for the library to participate in such programs should not be neglected, and building plans for public libraries should incorporate the needed facilities.

Other facilities to be made available to the community would include electronic devices. Television and radio may be only the beginning; others might include the television telephone and the photo-facsimile machine. Building programs must consider these possibilities even if present thinking does not anticipate their use. Plans should not be adopted which would prohibit their inclusion later. The possibility of communication between industrial research offices and the public library through the use of these machines has great possibilities. Use does not have to be limited to industry, but at the present time such use appears to be the most fertile possibility.

Many libraries have been involved in the use of radio and television for public relations programs

for a good many years. Some libraries have developed programming to a level comparable to the best in the local community. In the future more of us are going to have the opportunity to participate in the local educational picture through these media to an extent we have never dreamed of. Our facilities are going to have to reflect this involvement. Again, if this service is not foreseen in your community, do not make it impossible for it to be supplied when the opportunity does appear.

Governmental organization in America is a potpourri of confusion to one who tries to observe the pattern. Even when the organization schedule is finally discovered, the actual relationships seldom follow the same lines. The library gains and loses from this situation; but there is no good reason why it cannot gain more than it does.

Community libraries have usually been developed as the result of a movement by a group of women, and also have come into being permissively rather than as compulsory institutions. There seldom have been—I do not know of any—groups of industrial giants demanding the establishment of a community library. Occasionally a retired industrialist has loaned his name to the organizing group, but this is not the same thing. On this basis the library becomes a part of the community governmental structure, but it does not really contribute to the power portion of the structure. Consequently, it is usually left to its own devices and operates in a semi-independent manner. About the only time it causes concern to the officials is when it wants more money than it had the year before or wants to make capital improvements. Even when the board of the library is chosen from or by another board, such as that of the schools, the conditions are little different.

The library's relation to other governmental units is very tenuous, and most of these units probably never consider the library as one of them. A tighter control is possibly exerted in communities having city managers, but this does not necessarily indicate a better situation. Whatever the condition in your own community, you must be aware of both the actual and the theoretical situation. The first, because this is the path to use to get things done, and the latter, because it can be used both by you and by your opponents for defensive purposes.

One of the most useful relationships the library can develop—other than with the city council, which must technically, at least, pass on the actions of the library board—is with the planning commission. The commission, in the course of its normal activity, collects and analyzes information useful to any institution which must consider service outlets. The location of branches, the development of plans for a central building, a warehouse, or even bookmobile stops, can be done in cooperation with the planning commission.

Most of the problems between governmental offices are problems of personalities. An honest

attempt to cooperate with your counterparts in other offices will usually result in benefits to you. The board can be especially useful in this regard since quite often they reside in the same political camp. If they do not, there is a reciprocity of back-scratching between the political outs and ins which is very useful.

The schools represent another unit of government—one which creates a need for library services and requires an extra effort at developing cooperative approaches. Again, a little extra effort and a thorough knowledge of your own operation will usually result in a better understanding. The effect of school plans on library plans is generally subtle and not realized until it is too late. Developing rapport with the school administration should make it possible to have a better understanding between the two institutions.

Any building program must take into consideration future growth. In years past we said that building plans should include sufficient space for twenty years ahead. This was before we realized how mobile our population is, how healthy our economy, and how unpredictable the future. We tend now to recommend the use of a ten-year forecast, but even this is doubtful. So we have adopted a rule of flexibility. Realizing that we are unable to predict the future, we try to incorporate unlimited flexibility. We have done away with features which prevent making changes as needs arise. Our light patterns, floor patterns, support members, are all planned so that they will not interfere with changes which are going to need to be made.

Growth is not limited to increases in population. Growth includes (1) the development of a higher level of intellectual sophistication in a larger proportion of the population, (2) the shifting of traffic patterns as a community creates new facilities and develops in unforeseen directions, and (3) the development of new technology to accomplish old and new tasks.

The library planner must be aware of all these possibilities and must recognize that there are others which are not yet within his realm of knowledge.

Another factor contributing to the problem of growth is the slowness of library personnel to take advantage of information and developments related to their operations. This is also reflected in the attitudes of their boards. A forward-thinking administrator may spend more energy on developing staff and board acceptance than he spends to convince the community. On the other hand, the administrator may be the obstacle. Nevertheless, comprehensive studies in depth of the community, most of which can be procured from planning commissions, the school officers, and businesses—particularly firms with nationwide operations—will provide a basis for planning for the future to the extent possible.

In dealing with the future, the best approach would seem to be to recognize that departmental relationships will change, new approaches to problems will develop, personalities will bring or develop new perspectives, and that all these factors need to be

accommodate. The foresight needed now is that which prevents the planner from eliminating change in the building in the future. Any factor which may be mentioned here has to be thought of in the present and in the future; we do not want an immovable wall between them.

The basic criterion for location is: is this location one where people cannot miss the library? If it is not, then there have to be compelling reasons for the site chosen. The library has to be more than convenient to users, it has to be in a location where potential patrons will stumble over it. This fact cannot be emphasized too much; we can go back to my opening remarks for support on this point. The best location for the library will depend on what you think its purpose is. If you feel that its best use is as a comfort station or a replica of a home library, then an isolated spot or perhaps grouped in a civic center is a reasonable location. But this will not allow the library to function as an active community institution. To do this it must be where the action is.

It will have to be on expensive property—property very desirable to commercial interests. It does not have to be at the busiest intersection but it should be very close to it, and it must be in a natural center of pedestrian traffic as well as near parking facilities for automobiles. With competition for time, the library is going to lose if it is inaccessible. A beautiful building isolated from natural traffic patterns will be a dead facility unless there are potent reasons which force its use. This has been proven a number of times and is adequately documented in library literature. There are exceptions, of course. A library serving a student population today can be more isolated than one not serving such, but even in this case it will receive more attention if it is near natural traffic paths.

Some may feel that making an effort to serve more people is not a valid goal. I think most of us recognize the need to make our facilities unescapable by the masses; the elite will come to us anyway. And the success of the American way of life depends on elevating more and more of its citizens into the educated groups.

The need to place the library in the heart of activities is not new, though it may be novel to some. Wheeler and Githens argued this position in *The American Public Library Building* of 1941. They documented their plea by quoting from a 1913 publication of the Wisconsin Free Library Commission, in which Matthew S. Dudgeon posed the question: "How can any intelligent person maintain that library sites are well chosen and buildings well planned to attract the public? The site should be such as would be selected by a keen business man locating a book store. Would he locate it one or two or three blocks off the main street to get sightly surroundings? Would he put his building twenty or fifty or one hundred feet back from the sidewalk, rendering it necessary for the passer-by to make a considerable

detour before even a casual inspection of his books would be possible? Would he put the main floor from four to ten feet above the sidewalk level, thus discouraging readers by a stair ascent? Would he place his windows high in the wall, far above the walk, so as to conceal the contents of the building?"¹

Placing a library in a civic center will generally be unsatisfactory. Such centers attract little traffic of the type which wants to use a library. Museums and other institutions relegated to this location will benefit more by the library's presence than the opposite. The courts usually found in these locations attract people on specific errands, generally of an unpleasant nature, of which they want to dispose hurriedly.

If you must accept a site outside the present business and shopping center, then I suggest that you try to trade it for a more desirable location, even if this means waiting for a better one. I would also say that you are justified in paying a premium price in order to get a more suitable plot in terms of the traffic flow. A possible exception would be justified when the business and shopping center is shifting location. This happens occasionally, and selecting a site in the expected new center would be wise. However, these contemplated changes do not always occur as predicted; unless you know for sure that the change will occur, then procrastination may be the best move.

While location is the basic site problem, there are others to be considered. The shape of the site is probably a minor one from the board's viewpoint, though an extreme departure from the norm can be costly in terms of architectural fees and construction costs.

Unusual subsoil problems may cause trouble. These can be determined to a limited extent by taking soil surveys, but if there is doubt about the accuracy of the surveys, adequate consideration for eventualities should be placed in the budget. Unusual contours may be difficult to handle satisfactorily and should be discussed with the architect before a decision is made. A lot which is high above street grade may result in undesirable steps, while one which slopes away sharply to the rear eliminates extra excavation.

The Seattle, Washington, Public Library solved its problem by creating two entrances, one on each of two levels, since a street running on one side was higher than a street running on the opposite. This solution, undoubtedly, is more convenient to many patrons, though it may be more expensive to administer.

Location on the site chosen is another decision which must be made. Most of us favor building as far forward as possible. We prefer this for three reasons, I think: the most important being that we are closer to where people are, and, second, that we

¹Joseph L. Wheeler and Alfred Morton Githens, *The American Public Library Building* (Chicago: American Library Association, 1941), p.45.

are using more of the site for the building. The third reason might be considered a negative one—we are eliminating the problems which go with garden maintenance. While most of us are attracted by well-landscaped public areas, very few landscaped public areas in America are well maintained, and we recognize that our limited funds are better spent on materials and conventional library personnel.

But to return to the first point, putting the building toward the rear of the lot (assuming it is large enough to have a choice) would appear to be defeating our criterion for having a site in the middle of shopping activity. I doubt that I need to say much in regard to size of the building in relation to the site. Very few of us have as much enclosed room as we would like, and giving up a part of the space to scrubby hedges, crabgrass, and reluctant petunia rows seems a monstrous waste.

Orientation of the building to the site can be solved by the architect and engineers. While this was a more important consideration in times gone by, the almost universal acceptance of year-round temperature and humidity control, air distribution, and artificial lighting has relegated the problem of exposure to a position of almost no concern. Even windows could be, and have been in some cases, eliminated except for their psychological function to the occupants and their importance to those on the outside who may be attracted inside by what they see through them.

The final problem in regard to site selection is

almost entirely a problem concerned with community pressures. The board must exercise its judgment and resist pressures which may be subtle and may result in the library's being located where it is impossible to fulfill its most important function. If the board allows this to happen, then it has reneged the trust placed in it. This situation is one in which the librarian must have the board solidly in front of him—not behind him.

Wherever the site is and whatever the orientation, consideration must be given to the entrances. The main entrance should be on the main traffic thoroughfare. Again, we are trying to make it inconvenient to miss us; and most of us would prefer only one public entrance. A service entrance is needed, too, however, so this must be considered in choosing the site and placing the building on it. There are numerous problems connected with entrances which would be better considered elsewhere. I mention the point here only to remind you of it.

A final consideration relative to site use is that concerned with the number of floors being planned. Most of us would like to have our facilities concentrated on one floor as much as possible. The larger the library, the less possible this becomes but, even so, with the increasing use of elevators and escalators this problem becomes of less importance. Most of us are accustomed to these devices and more libraries are finding them desirable and justified. They always have been, but it takes us longer to accept changes.

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THE PLANNING TEAM: Make-up and Function

The planning team consists of those people who put together what ends up being the operating library building. I am not talking about the planning team for the services that the building will render, nor am I talking about the planning commission of the city. I am talking about the planning team that plans the public library building and sees that it is constructed and finally moved into.

We must remember that any building is the product of many ideas and of many people. A planning team must obviously function very smoothly, for the lack of such smooth functioning will show up in the final building. One of the most important things that any planning team must learn is to disagree without being disagreeable. This is sometimes difficult.

Each member of the planning team must learn to question everything which everybody else on the planning team says. He must probe for the reasons, not just for the "what" of something. He must ask people to be able to substantiate what they say, because all of us find it much easier to say something if we do not have to substantiate it. When we do have to substantiate it, our opinions sometimes change. We have to remember that each member of a planning team cannot be proudly stubborn over his ideas, because perhaps his ideas are not the best solution in the final analysis. The best building very definitely results from a give-and-take of everyone involved in the building project.

We must always remember that each member of the planning team must not necessarily accept the first solution or the first answer proposed by anybody on that team including, above all, himself. All of us like to hear ourselves talk, and all of us like to see our speech reflected in some action or other, but we must remember we do not necessarily accept that first solution. It may be the best one in the final analysis, but we cannot automatically accept it.

Each member of the team has a very specific job and very specific responsibilities, and hopefully

brings to the project very specific skills which are or are not shared by other members of the team. I will try to discuss what these functions and responsibilities are and how they react to each other.

The first person that I would like to discuss is the librarian. To me he is the most important person on the team. I would, however, like to mention here the other people on the team. First is the governmental authority. I hope it means the library board, but I use the term "governmental authority" because sometimes it is the city council, sometimes the county commissioners or board of supervisors, or in some cases the board of education which actually has the legal responsibility. For the moment I will refer to this part of the team as the governmental authority.

Next is the architect, and then the consultants. I use this term not just for library consultants but for interior consultants, for design consultants. I use it for the engineers who are consultants to the architect in most cases: the electrical engineer, the mechanical engineer, the acoustics engineer. Some very large firms have a design consultant who is in effect an architect giving advice to the architect.

Now to return to the role of each of these. As I said, first I will discuss the librarian, whom I feel is the most crucial member on the team. He is the most crucial because he is, in fact, the funnel to the others. Generally speaking, information passes from one person to another through the librarian. When it does not, often an uncoordinated or poorly operating planning team results because there is no one person who has a grasp of everything being said or of what is going on.

The basic duty of the librarian is to prepare or be responsible for preparing the written building program, or the program statement as it is sometimes called. This will be discussed in more detail this afternoon. Another duty is to consult with the architect or interior specialist on the furniture and the interior furnishings. Still another, and the one

most people think of first of all, is to consult with the architect on developing preliminary plans. Obviously, he will also consult with the architect on the working drawings and final plans.

Normally the librarian represents the owner in the planning process. He is the representative of the governmental authority. There may be other representatives, but the librarian hopefully will be the most important of these and will represent the owner in all the transactions. The librarian must first of all know what he wants in the building and, sad to say, this is often not the case. The librarian, unfortunately, often does not know what he wants.

The librarian must know how the building is to work once it has been planned and is in operation. He must know how the areas within the building will relate one to another, this is the most crucial information he can give the architect. I have discovered that what many librarians have the most difficulty in explaining to the architect is how areas do relate to one another and the importance of each to the other. The librarian must be able to explain to the architect the operation of the building, sometimes in very fine detail.

Occasionally the problem arises where the architect and the librarian are using the same words but are referring to different things. It is the obligation of the librarian to explain his terms to the architect. For example, when an architect talks about circulation, in most cases he is talking about the movement of people in and out of rooms or in and out of buildings. But when the librarian talks about circulation, he is talking about books going in and out of the library. This is the most elementary example I can give. The same use of words with different meanings will occur continually in the planning process.

The librarian must be very specific. He must be concise, he must be knowledgeable, and he must be able to communicate. This is one of the most important aspects of any planning—this ability to communicate with the other people involved. The librarian must be able to justify not only what he wants but why he wants it to be a certain way. If he cannot justify why he wants it to be this way, it is time to take another look at his request.

In the planning process, as a member of the team, the librarian carries a heavy burden because he must not only understand this "why," but must also accept other people's opinions and judgments. This is something very difficult for most of us to do. We always feel our opinions or judgments are the best because they happen to be ours. We must learn to accept other people's opinions. I have seen many librarians change their opinion after the give-and-take of a planning meeting with an architect or engineer.

The second group in the planning team is the governmental authority—the library board. One of the important things to determine at the initial stage of planning is to determine who is going to make

decisions as far as the owner is concerned. I have seen communities talk about a new library building for three or four years. They get around to the point where they are finally going to hire an architect, and then for the first time they find they have a problem. The city council is planning to hire the architect at the same time the library board is planning to hire him.

You must determine beforehand who has this authority and who will exercise it. Some state statutes are quite specific. Fortunately, in my state the statute makes clear who has the authority, and that authority is the library board. For this we librarians are very thankful. In some other states the statute is vague, and you are never sure who the authority is.

I have seen building projects delayed or seriously limited because of a dispute among city, county, or library boards over who has the authority. This question must be resolved immediately. If it is the board, the board, as a member of the planning team, will have certain specific decisions to make and the responsibility for these decisions. Mr. Jenkin will cover this in much greater detail this afternoon. But as I see these decisions which the board has to make, they are, first of all, the decision to build. The board has the responsibility to secure the money, whether this is secured through a bond issue, a public vote, a resolution of a council, or a gift. Whatever the source may be, it is the board's responsibility to secure the money.

It is also the board's responsibility to select the architect and, generally, the consultant. It is its decision to approve the site. The board may not be the only factor involved in the site approval, for the city council may have to approve the site, or the city planning commission, but, above all, the library board should approve the site.

The board must approve preliminary plans after they have been developed and are satisfactory to the other members of the team. It must approve working drawings and bid documents. It must decide when and where and how to advertise for bids under the public statutes which in most cases actually govern such procedure, but it is their decision when to make this advertisement.

It must take the responsibility for awarding the actual construction contract as to what contractor or contractors will do the work. When the building has been finished and has been approved by the architect as being satisfactory, it is the board's final responsibility to accept the building and become the owner thereof either in its name or in the name of the city.

The library board, of course, must delegate all details to the librarian and to the architect. Nothing is more chaotic than to sit in on a board discussion while seven, eight, or nine people try to decide the colors for a specific room. Here, again, is the problem of hiring the right people, giving them the responsibility, and either accepting or rejecting their proposals, but not getting involved with the actual details.

The next element in the planning team is the architect. The architect is the most important person in the designing of a building. What is the architect? He is a specialist in planning and designing buildings. This is how he earns his livelihood, and this is how he makes or breaks his reputation. He is, above all, licensed, and occasionally, I must warn boards, you will be approached by unlicensed or unregistered architects. You must investigate his status before you actually hire an architect.

What does the architect do as a member of this planning team? First of all, he evaluates the client's needs in the sense that he either reviews the building program which has been prepared for him or, in some extreme cases, he will actually prepare the program himself. I am not in favor of the latter, incidentally, not because I function as a library consultant but because this means the architect is then getting involved not only in how the building will look but also in how the building will work. I think his function is to serve as a reviewer of the program statement, not as an author of the statement.

The architect evaluates a site, and I cannot impress this point strongly enough that you should hire an architect before you make a site decision. Site decision is part of his job, and there may be reasons why a site that to you seems excellent would be extremely difficult as far as the architecture or design of the building was concerned.

The architect advises you as to the potential problems you face in planning your building regarding local climate. You may think you know what the local climate is, but he may have a different idea. His is generally based on fact, while yours may be based on how it was last week. He will advise you as to local building codes. Code regulations may not allow you to do many things you would like to do. He will advise you as to how realistic your budget is, and in most cases it seems that budgets are unrealistic. It is his job to tell you how your budget and the approximate size of the building will relate to the way you can build this building in the sense of size and quality.

The architect plans the building as such. He establishes the beauty of the building through his design. He establishes and advises on the functional relations and spatial locations, and he does this to solve your needs, not to create a building for himself.

The architect begins the planning with what is called a schematic or preliminary plan. This is the easiest stage in which to make changes. After the preliminary plans are approved, he prepares the detailed working drawings and specifications. In most cases this is not done by the architect or designer with whom you have worked. It is done by people in his office: job captains, draftsmen, and other persons with whom you never come into contact individually.

When the working drawings and bid specifications have been prepared in detail and are ready for bid,

the architect will then advise you on the selection of a contractor. Unless you are building with gift funds, generally you will have to advertise these bids publicly because it is a public building. This means that virtually every contractor, whether he is capable or not, who thinks he wants to take a crack at the building will submit a bid. One of the responsibilities of the architect is to guide you in the selection of the contractor, who may not necessarily be the low bidder. The low bidder may be an irresponsible contractor or one whose experience does not meet the requirements which were set down in the building specifications.

During the bidding process the architect usually receives countless telephone calls to clarify matters for the bidding contractors. I would like to warn the librarians and boards present that one of the worst things they can do during the bidding process is to pass information out to the potential bidders. This should all come from the architect's office, because in this way all the bidders get the same information. You can get involved in some very difficult legal problems if some bidders have been told one thing and other bidders have been told something else. Be certain that during the bidding process all inquiries are directed to the architect and are not answered by the librarian or the board.

Once the bids are in, the architect advises you on the selection of a contractor and sets up a construction schedule with the contractor. During construction, normally the architect will serve as the owner-supervisor. By this I mean he is not there, with a hard hat on, day by day employing the people working for the contractors, but he makes periodic inspections of the job to see that it is being done as specified. Sometimes this means tearing down a wall because it was not put up the way it was supposed to be according to the specifications, and this is the responsibility of the architect. On larger buildings a clerk of the works is often employed as a full-time supervisor. He does not work for the contractor but represents the potential owner of the building. It is his job to make certain that the work is done as it has been planned and set forth in the various specifications. The architect also approves and advises the owner as to the payments to be made during the construction phases.

One of the biggest questions that seems to face most boards and one that bothers them most is—how do you select an architect? I suggest, first of all, that you get in touch with the state architectural society for possible names to consider. You should select an architect on three points: the service he can give you, the talent he has, and his own personal judgment. How do you decide how architects rate on these points? You must interview them. I cannot stress strongly enough that you should not interview so many architects that by the time you are through, you have only a vague idea of what any of them said. When you have decided whom to interview—and

perhaps this will take you more time than you expected—check with their former clients.

From that point on, the matter becomes quite objective. I have talked to many architects about the problem of interviews and selections, and there do not seem to be any hard and fast criteria. The Minnesota State Chapter of the American Institute of Architects puts out a pamphlet on the architect and how to select him. I hope that most states supply this type of publication. I heartily recommend the Minnesota one for required reading for all boards about to retain an architect. When do you select an architect? I mentioned earlier that if at all possible he should be selected before the site is finally decided, because he does have site sense.

Many people wonder if architects use other specialized personnel. They surely do. There are, for example, the engineers. Some architectural firms have their own engineering staff, they are both architects and engineers. Other architectural firms are solely architectural firms and do not have an engineering staff but contract out with an engineering firm. This is one of the questions to ask architects while they are being interviewed; there are advantages and disadvantages to each type of organization. Engineers may include the mechanical engineer, the electrical engineer, the acoustic engineer, a color specialist, and an interior designer. Engineers basically work for the architect. If they are not part of his office, they work for him and not directly for the owner.

Other questions frequently asked are: How do you pay an architect, when do you pay him, and what is his fee? Generally speaking, there is an established fee schedule within each state under which ethical architects operate. I heartily advise against retaining architects who offer to do the job for less than the standard fee. The fee is usually based on a percentage of the total cost, and the percentage varies with the size of the building. The percentage drops as the building becomes more expensive.

In the preliminary stages you may obtain an architect who works on a cost-plus basis. He charges by the hour or day for preliminary plans. Sometimes he will do this on a fixed maximum; this is something you can work out with the architect.

In summary, the architect advises on the program, he advises on the site, he actually does the preliminary plans and schematics, he prepares the final bidding documents, and he plans all the materials necessary for public bidding. He advises on the bidding procedure and the actual bidders. He performs, in one manner or another, supervision during the construction phases, and he finally signifies when the building is acceptable and should be occupied by you as the owner.

Another person on the planning team who seems to play a more and more important part each year is the library consultant. He is generally a librarian and ideally brings both the knowledge of librarianship

to a specific project and some kind of training or background in building and architectural problems. In effect, he speaks the language of each person involved.

The librarian-consultant can be involved in a project in many different ways at the option of the owner. He may be on a full-project basis and prepare the program for you. He may assist in hiring the architect, advising you how to go about interviewing one, the types of questions to ask, and the ways to find out about specific architects. He may be involved on a review basis, whereby he simply reviews preliminary or final plans as they are presented to him. This service will vary drastically from that of the consultant who is involved from the very beginning on a project and may be brought in to do a site study.

One of the major responsibilities of the library consultant is to protect the library board from the overzealous librarian, and to protect the librarian from the overzealous architect. The consultant must make certain that the final building will operate under more than one librarian's philosophy. He enjoys the obvious advantage that in many cases the architect will listen to a consultant more readily than he will to the local librarian, because the local librarian usually has never planned a building and has never dealt with an architect.

Many librarians are unable to spell out what they need in terms that the architect must have so that he can plan the building. This is another function which the librarian-consultant serves. You must remember that the amount of involvement for a librarian-consultant is entirely up to the library board which retains him. In the final analysis he can only recommend. The final decision still rests with the board. The basic duties of a library consultant can include the preparation of the program itself, or advice to the librarian on the preparation of one if it is prepared locally. The consultant may simply review the program and suggest additions or deletions. He may assist in the site selection or, when necessary, actually do a site study. He may interpret the service relationships within the building, not only to review them with the librarian but to interpret them for the architect. He may do an analysis of each floor plan as presented and review the various drawings and specifications as they are prepared. If there is an interior specialist, he may assist this specialist in the furnishings of the building or, in some cases, he may be the interior specialist. Above all, he will assist the librarian in developing an approved operating technique within the building.

One of the big problems is that many libraries are going from a 10,000-square-foot building to a 25,000-square-foot building, and all the local librarian wants to do is to make each area much bigger than it was in the old building. He is paying no attention to whether this is the correct way to do it or whether the plans he is making are so solely because

of the old building. The consultant should play an important role at this stage.

Now a word about the interior consultant. Usually the interior designer is a specialized professional. In some states he has the same professional status as an architect and belongs to the American Institute of Interior Designing. Many libraries use interior designers. Sometimes they work for the architect and sometimes for the librarian.

When you assemble the planning team, you must remember that you are going to have to furnish the building. You have various alternatives as to which member of the team is going to plan the furnishings. You can have the architect do it, you can have the interior designer or your librarian do it, or you can have a librarian-consultant do it. A local furniture dealer or manufacturer can also do it. No matter who does it, this is a very time-consuming and costly service. It will cost you money indirectly if you have a dealer or a manufacturer do it inasmuch as you are often obligated to buy his products, which may be more expensive than somebody else's.

When you contract out this service, the charges will vary considerably according to the needs, the volume of furniture involved, and the decision of the owners as to how much involvement is desired. The work is sometimes done on a percentage fee. The standard fee for interior designers or architects is 10 percent of the furniture specified and purchased. It is sometimes done on a cost-plus basis. For example, the Hudson Store here in Detroit has a large commercial credit division. It has a standard cost-plus fee of \$25 an hour for service and will negotiate a maximum payment for the owner. Thus you commit yourself to \$25 an hour plus X number of dollars based on the final agreement.

Sometimes the service is a flat charge. The new Oak Park, Illinois, Public Library was done by an interior designer on a flat-charge basis. The cost varies with the library and number of items involved.

You seldom get something for nothing. When someone offers to write all your furniture specifications free, you know the service will not actually be free.

The engineers are often somewhat mysterious people because you seldom see them. As I have said, they are either part of the architect's office, or they are a firm with which the architect contracts. They work either as a member of that office or they work for the architect. The contract you have is with the architect, and he represents the engineers and the planning. Whether you know it or not, there is an engineer in the background. Somebody has to engineer the electrical work and mechanical work. It is seldom that the architect does this. It is usually a licensed mechanical or electrical engineer. Buildings today have acoustics engineers, and the large commercial buildings even have kitchen engineers. Whether or not the engineer is known to you, he is there; you must learn to take his needs into account.

This, then, is the building team. It is composed of many individuals, each of whom has definite responsibilities. The size of the team will, of course, depend on the size of the building. You may have many architects at every meeting, or only one. You may have many engineers at every meeting or none; the architect is representing him. You may have a design consultant who is an outside architect. You may have a library consultant and an interior designer. Above all, you have the librarian. Each of these brings certain talents and experiences, and each has to learn to work with the others, to respect the others, and to bring about a smooth operating experience so that a good building will result.

We must remember that we are not planning just for ourselves as members of the planning team. We are not planning just for the people who are going to use the building next year. In most cases we are planning library buildings for thousands of people over generations of time. This is a frightening but exhilarating experience.

Joseph H. Jenkin
Trustee, Livonia Public Library
Livonia, Michigan

PROGRAMMING AND FINANCING LIBRARY BUILDINGS

My assignment is to discuss the development of the building program and methods of financing sites, construction, and equipment. I would like to start out by defining what the library program is. The library program is an initial statement of the idea and plan of service, prepared to provide a basis for the detailed planning of a library building.

Mr. Hoyt Galvin and Mr. Martin Van Buren in their book *The Small Public Library Building* define the program as: "a written statement prepared by the librarian or other competent authority describing the purpose, scope and function of the library building. It should state as comprehensively as possible the specific needs of the library and should outline in detail the areas, their requirements, relationships, and functions within the building. In addition, it should define the aesthetic character of the building and chart generally the type and nature of furnishings and equipment."¹

Although I think that it is desirable and more systematic to prepare the program in writing, it is not absolutely essential especially when very few people are involved. The same results can be obtained through a series of informal conferences at which the plan of service is related to the architect who makes notes and prepares a graphic expression of the program requirements.

Programming starts when library service first begins in a community, which in many instances is many years prior to a firm decision to build. It is an accumulation of decisions over a period of time, and original criteria may be revised many times with respect to site location and size of facility due to such factors as population growth, changes in overall master plans of the municipality, and changes in availability of funds (for construction or operating expenses).

There are differences of opinion as to who should write the program. My belief is that it is primarily the responsibility of the librarian to write the program, with direction from the library board and assistance from the branch librarian (as applicable) and staff members. Some authorities feel that the architect should prepare or assist in writing the program. Many library authorities recommend engaging a library building consultant at an early stage of planning. If this is done, the consultant would, of course, be an active participant in program preparation.

The program is not simple to write because it must be the result of an overall analysis of the needs of the community and should anticipate needs of library users for many years in the future. Since no two library situations are alike, there is no set pattern of requirements.

Some of the elements of service will be obvious, such as books and their related services. However, the specific categories of books to be provided may not be immediately apparent. Decisions must be made on areas such as reference books and rare book collections based on needs and funds available.

With regard to book services, specifications must be stated as to shelving needs, seating for readers, and area relationships. Various rules of thumb are available for calculating space requirements such as: 3-4 books per capita for the book collection; 15 books per square foot of bookstack space; 2-3 reader seats per thousand population; 25-30 square feet per seated reader; 100 square feet per staff member; and an addition of 40 percent of the book and reader space for mechanical operations, including heating and air-conditioning equipment, rest rooms, hall, stairs, and storage closets.

These formulas are given only as examples of how calculations can be made. When making these determinations, planners should use reference data

¹ Hoyt R. Galvin and Martin Van Buren, *The Small Public Library Building* (Paris: Unesco, 1959), p.29.

such as appears in the American Library Association's *Public Library Service: A Guide to Evaluation, with Minimum Standards*, 1956. Also, experience gained from existing buildings will in many cases indicate what will suit the needs of the community in future buildings.

In addition to book and reader space requirements, an analysis must be made of the need for the following areas: offices for librarians and secretaries; book processing and cataloging area, lending and reference desks, storage rooms, and staff lounge. Also, the need should be investigated for audio-visual facilities, display areas, and an auditorium or conference room. Although it may be determined these facilities are neither needed nor financially possible for the proposed library, the review of them may provide the initial impetus for providing them in future library buildings or building additions.

Other requirements that should be considered and stated in the program as applicable are: type of flooring (wood, tile, or carpeting), air conditioning, public telephones, fire alarm systems, lawn sprinkling systems, acoustical and lighting requirements.

As indicated in the definition quoted on programming, the relationships of areas should be stated. To illustrate what is meant by this I will cite two of the statements included in the program for our current library project in the city of Livonia:

1. Adult public service area of 4400 square feet with shelving for 25,000 volumes, 150 periodicals, 120 reader seats at tables plus 10 carrels. Area relationship: near main entrance, rest rooms, and circulation desk—separate from, but near, juvenile public service area.
2. Circulation desk and entry area consisting of about 1000 square feet with shelving behind circulation desk for about 500 volumes: Area relationship: near all other areas, especially main entrances and study areas which would be under visual observation from the desk. Near workroom for easy deployment of staff members. If possible, provide visual control of public rest room entrances.

The library should be planned to be supervised by one main centrally located station (probably circulation desk) plus two subcontrol stations (probably one each in adult and juvenile areas).

I cannot overstate the importance of critically analyzing the various service needs during the programming phase. Not only should the feasibility of providing new or expanded services be considered, but the necessity of existing functions should be reviewed.

Peter F. Drucker, in an article for the *Harvard Business Review*, stated, "Every product and every activity of a business begins to obsolesce as soon as it is started. Every product, every operation, and every activity in a business should, therefore, be put on trial for its life every two or three years."

I believe this philosophy can and should be applied to library operations and that the programming stage offers an excellent opportunity for analyzation of existing functions and services and elimination of unnecessary activities. The program, whether formal or informal, is the key to any successful library building project and can be developed only by intensive study of service needs.

I know of no shortcut to take in the development of a quality program. If it is to be developed properly, many hours of hard work are required by the people involved. These people can prepare themselves by:

1. Visiting libraries that are considered to be successful buildings by library authorities
2. Researching the needs of the community
3. Reading as much of the literature on the subject as possible
4. Deciding on a philosophy of service to be provided
5. Learning something about building and equipment costs.

The second subject I will discuss is the matter of financing of library sites, construction, and equipment. As you know, the best program in the world will never materialize into a library without the necessary funds.

In some instances, the approximate amount of funds to be available for the library may be known in advance of the program preparation, which would require that the building be scaled according to the funds available. More often I believe the program would be written first, followed by a cost analysis by the planning team or architect. Cost developed in this manner provides authentic backup for selling a bond issue or other financial proposal to the governmental body or voters.

I would mention the following items for which cost estimates should be prepared and outline some guides that can be used in making estimates:

Site. The breakdown of cost for the site includes: appraisal fees, value of the land, brokerage fees, surveying fees, subsurface testing if unusual conditions are suspected, and utility extensions or relocations such as water, sewers, and electrical. Architects' fees will generally be fairly uniform since most will follow the methods of determining fees recommended by their state societies or the American Institute of Architects. Most of the architects' fees that I am familiar with have been based on a schedule that varies with complexity of the building and the amount of construction cost. Nationwide, I believe, architects' fees today run from 6 to 10 per cent.

Building cost. This will usually be determined by the architect on the basis of an estimated cost per square foot, which will be dependent on the type of construction, season of the year when construction will

be performed, and economic conditions. Building cost covers actual construction, including heating, plumbing, air conditioning, electrical wiring and fixtures, and other mechanical equipment.

Landscaping. These costs cover grading and soil preparation, seeding or sodding, trees, shrubbery, and sprinkler system. If site space and building design will permit it, a garden court may also be considered. Since proper landscaping can add greatly to a building, I would strongly urge you to consider engaging a landscape architect. His fee would be another item of cost to be included in the landscaping budget or as a separate item in the cost schedule. These costs can be estimated by the building architect or determined by the librarian on the basis of information obtained from local nurseries.

Furnishings and equipment. These costs will cover shelving, tables, chairs, draperies, office machines, desks, carpeting (may be included in building cost), and possibly interior consultant fees. In recent years, figures from \$2 to \$3 per square foot of floor space have been used to estimate furnishing and equipment costs. Another rule of thumb is to use 10-15 percent of the overall building cost.

Contingency fund. It is considered wise to provide contingency funds of about 10 percent of the construction costs to cover unforeseen requirements, bids running higher than estimated costs, and so forth.

Bonding and notice of bond sale. The need for determining these costs will be dependent upon the method of financing to be used. After the complete estimate of cost has been developed, the most essential work of the building project begins, that is, obtaining the necessary financing. This, I believe, is where the library trustee can make the greatest contribution.

And where does the money come from? You have all heard the expression, "Gold is where you find it." This thought applies to financing of library construction. In a few situations the source of funds will be no problem. One of the suburbs of Detroit, for example, recently received a 3 million dollar gift from one of the large foundations for a new library. Most of us will never be so fortunate and, consequently, we must look to other sources.

Sources of construction funds are varied and multiple in number in some states. In other states the sources of construction funds are limited. The situation in each state is governed by statute, and the amount of authority for public financing is delegated to the local government.

The most common source of building funds authorized by state statute is the bond issue. The amount of bonding power is fixed by the state's constitution or statutes. Advantages of this method are that a referendum vote is not required, and the full amount of money is available immediately upon sale of the bonds. The bonds are retired over a long-

term period by an increase in property taxes. Bond issues can provide large sums of money in some cities.

The second most common source of locally produced revenue for financing library construction is the special tax. This tax is authorized and levied in the same manner as the operating tax. It frequently requires a referendum vote to approve a millage increase, since many municipalities have a millage limitation by city charter.

A disadvantage of the special tax financing method is that the total tax yield is not realized until the very end of the special taxing period. Also, there is the possibility that construction costs will rise at a faster rate than property values, thereby making the originally planned yield insufficient for the project. Whenever a bond issue or special tax is to be presented for voter approval, the strategy must be carefully thought out.

Generally, funds available at the state level are virtually nil for construction purposes. The small amounts allocated by most state governments for libraries are usually earmarked for operating expenses.

Several types of assistance are available from the federal government. One of these is the Public Facilities Loan Program which makes it possible for communities without a good financial base to sell general bonds at a reasonable interest rate. While this is a source of loan money for construction purposes, it apparently has not been used for library purposes. There may be exceptions, however, where this program would be useful.

Another program developed in 1962 is the Accelerated Public Works Program. This program provided a grant of 50 percent of the cost of the project, provided the community was able to finance the other 50 percent of the cost without too much delay. Because the emphasis of this program was on creating employment at the local level, a prerequisite for qualifying for the grant was that the project be placed under construction 120 days after receipt of funds, which would be very difficult for some communities.

Requests for the grant funds, as you can imagine, far exceed the appropriations available. At least five libraries in the Detroit area have obtained these funds, however.

A recent boon from the federal government was the passage by Congress in 1964 of the Library Services and Construction Act. This law authorizes a minimum of 20 million dollars per year for allocation to the states as financial assistance for library construction. The state library boards have full authority for allocating the funds to local libraries. The funds allocated by the state cover one third of the cost, with the remaining two thirds provided from the local level. Local governments must substantiate to the state board that local funds will be available before the grant is approved.

There are numerous other conditions that must be met to fulfil the requirements of the grant, such as providing a building program, a site survey, and architectural drawings and outline specifications. While the procedure is quite detailed, it is well worth the effort if the potential benefits are considered. I think of the detailed application procedure as being an advantage since it will discipline some applicants to perform far more analysis than would normally be the case.

The last source of funds that I will mention is that of memorial bequests and other outright gifts for library construction. I believe that this is a source of funds that could be exploited to a much greater degree by library boards in those cases where funds cannot be obtained by public financing.

A very good example of what can be done in this area is under way at the present time in Elyria, Ohio. Elyria is a city of 49,000 population located in Lorain County, with a library that is classified as an "association" library. This type of library, as I understand it, has had no legal authority up to the present time publicly to finance construction. Because of this, the residents have planned a campaign to raise \$265,000 in gifts to construct a new library. They are starting with a nucleus of \$160,000 built up through wise investment of gifts over the years.

It appears that the campaign will be very successful because it has widespread support from a 25-person advisory board, various service clubs including the Kiwanis Club that is spearheading the drive, the city administration, the public and parochial schools, churches, businessmen, and the general citizenry. The program in Elyria is an excellent example of what can be done if there is a unified effort behind the project.

Someone once said that the greatest force in the world is that of human beings working together in a cooperative effort. I believe that library boards can and should be the coordinating activity to generate whatever action is required to secure library funds. This can be in the form of lobbying with the city, state, and federal officials; selling bond or tax proposal drives to the public; or soliciting gifts, and so forth. Many library boards can do much more than they have done in this regard in the past. Most of the matters I have discussed on programming and financing can be accomplished if the parties involved will work hard and long and use some imagination and ingenuity.

In conclusion I would suggest that you do three things:

1. *Programming.* Prepare a written program and test it. Don't be content to say you need so much space for readers and books. Say who the readers are, what service they will need, and how this service will be given. Whatever is planned, remember that no program is ever complete and that constant updating may be necessary. Consequently,

there is a need for flexibility and a "give and take" attitude on the part of the planners.

2. *Financing.* Be familiar with the laws on financing for your state and community. Know the means of financing that are available and then choose the easiest method. Along with the planning of funds requirements for construction, site, and equipment must go the determination of operating costs for library personnel, maintenance, and books and supplies. As previously stated, the best program will never materialize without building funds. Likewise, the most beautiful and functional building will never provide library service without books and staff.
3. *Participation.* For you people that are trustees, I recommend that you be active in both the programming and the financing aspects of your library project. Your participation will provide a system of checks and balances for the thinking of the professionals. I have found that, despite the varied backgrounds and experiences of board members, each usually has a contribution to make.

MR. CHITWOOD: Certainly staff participation should be taken into account in planning the library. This may become a problem at some point along the way and you may not know how to handle it but, generally speaking, the staff needs to be involved. They have ideas which you do not have, and they can correct or add to the statement and the plan and make contributions which otherwise would not have been thought of.

The review of current activity, I think, is a very good thing. This should go on all the time not just when you are planning a building, mainly because you plan only one or two buildings within a century. A problem which was touched on lightly had to do with the special requirements which architects may sometimes design into the building. These become very costly unless you have workmen in the area who can handle them easily. Sometimes it becomes impossible to do what the architect wants to do, and somebody has to let him know this if he does not realize it himself.

Another possible source of funds which was not mentioned is from current income. This is not ordinarily available to many of us, but there are libraries which do not levy their legal maximum. It is possible to construct buildings out of these funds or the difference between your operating expense and your legal maximum. If you can take the time to do it and if you do not have any other way of getting your building constructed, then this is one idea.

MR. ROHLF: The percentage of Library Services Act construction funds is roughly one third—two thirds in Michigan. The percentage varies from state to state. It is based on the per capita wealth of the state and the formula which the Office of Education has worked out.

I would like to reemphasize some points about

programming. Be specific and review what you are doing. By all means, do not try to superimpose somebody else's program on your own building. Planning formulas vary widely, and we have to take this into consideration in programming. Sometimes formulas just do not fit. We have to make certain we not only have planned the spaces but have planned the shapes of the spaces.

Another comment is on the question of square-foot costs. This is really a loaded problem for all of us. It is almost impossible to transfer a square-foot cost from one building and make it applicable to another building because of the every conceivable variation that you can think of, not only that of locality but

material, location, the time of building, and who will build it. Even the extent and quality of the plan which the architect finally produces will change the cost of the building. The more thorough the plans, the less guesswork on the contractor's part and, therefore, usually a lower-cost building.

Another problem is the furniture costs. Furniture costs based on a square foot of X number of dollars, whether it is \$2 to \$3 or \$2.50 to \$3.50 per square foot, are difficult to transfer from one library to another. Some libraries will bring half their old furniture into a new building, and other libraries will start out from scratch. Yet, when they report the furniture costs, they do not explain this.

William Lyman
Jickling and Lyman Architects
Birmingham, Michigan

PRELIMINARY AND FINAL DRAWINGS, BIDDING, AND CONSTRUCTION

My assigned task was to speak about preliminary drawings, working drawings and specifications, and supervision. I want to go back first and talk briefly about the selection of an architect, because this is one of the most important steps in the whole process for those who are building libraries. The matter of design, working drawings and specifications, and supervision will not result in the kind of building you want unless you select the right architect.

The usual procedure is to ask interested architects to submit their brochures, and the library committee may go through a series of interviews at which the architect will show slides of buildings. The committee may even visit buildings. I recall a school-board interview that I went to when I was an employee of another office. This board allowed twenty minutes for every firm. Six firms were interviewed in one night. You can imagine what happened—they were backed up about three deep. This is not the way to select an architect.

I would suggest a different procedure. Let it be known you are going to build a library, and you will receive calls and letters from architects, maybe twenty-five or thirty, depending on your location. I would make each firm a copy of the program, suggest they visit the site, and give them some idea of the budget. Then I would follow up by asking three questions and have the architects submit the answers in writing. These are the three questions:

1. Why do you want to design this library?
2. In your estimation what are the most important design considerations in this architectural commission?
3. How would you proceed with a preliminary design?

If nothing more, having to answer these three questions will provide architects with sorely needed practice in putting their thoughts into words. Then you will have to narrow the field on the basis of the written answers to the questions. I would suggest you

narrow it down to maybe three or five architects, depending on how many are involved, and hold your interviews. Prior to the interviews visit buildings that these architects have done so that you can ask questions when you meet with them.

I would schedule the interviews no closer than two hours apart. Allow about a half hour for an interview and a half hour to catch your breath. I would tell the architects they had an hour to make the presentation. One half of this hour would be formal presentation, and the other half questions from the committee.

The question of fees is going to come up. I do not know what was said about fees this morning. I would make it very clear that the fee would not be a factor in the selection of the architect. I cannot overstress this point. Too many buildings, libraries included, are awarded because there is a slight difference in the fee. To give you an example, if you have a building that will cost \$200,000 and the fee is 7 percent, this amounts to \$14,000. Someone comes along and says he can do it for 6 percent, which is a difference of \$2000. Yet, when compared to the total cost of the building, it is not worth the risk of inferior work.

As to engineer services—many architects pride themselves on the fact that they are a self-contained office, with all their own specialists. We are not a self-contained office; we have a small office. We would rather hire independent consultants and tailor them to the actual job. We feel we can get better services this way. The best engineering consultants are in business for themselves just as architects are.

What attributes should you look for in an architect? I have listed ten:

Vivid imagination
No reputation for architectural stunts
Understanding of the meaning of humility
Genuine concern for people
Leadership but not domination. In other words,

your architect should be able to take as well as give

Respect for tradition

Respect for limitations imposed and opportunities afforded by nature

Respect for owner's practical needs or requirements

Broad interests, if possible

Record of satisfactory performance. In other words, talk with previous clients and contractors, particularly contractors. They are a good source of information.

I would say that no one of the preceding attributes is more or less important than the others. A final precaution—be wary of the polished salesman.

If you are to prepare a building program, I would suggest thinking of it in three basic parts:

1. *Broad community objectives.* What are you really constructing this building for? If you have any thoughts about the general architectural characteristics of the building, try to spell these out. I would not tell the architect what the style should be, but there may be some characteristics, due to the climate or other factors in the immediate neighborhood, that the architect should take into account.
2. *Detailed description of the facility that you want.*
3. *Fees.*

It used to be that an architect divided his fees this way: 25 percent for preliminary design, 50 percent for working drawings and specifications, and 25 percent for supervision. Now a building has become so complex mechanically that these figures have changed to 35 percent for preliminary design (because much more is involved), 40 percent for working drawings and specifications, and 25 percent for construction supervision.

On a \$200,000 building, the figure I used before, a 7 1/2 percent fee, works out to \$15,000. To some people this seems like a considerable amount of money. Why do you have to pay the architect that much? Here is how it works out. Of that fee 35 percent or roughly \$5000 is for design; 40 percent or \$6000 is for working drawings and specifications; and 25 percent or roughly \$4000 is for supervision.

Working drawings for a \$200,000 library would require about 12 sheets of drawings. We estimate in our office that the cost of making 1 working drawing is about \$500 in man-hours. 12 drawings x 500 is \$6000. There are your working drawings without anything left for specifications, overhead, or profit. So you are not going to make money on the working-drawing phase of the project.

On supervision, which involves field expenses and administrative work in the office, you take your \$4000 figure and spread it over 10 months. That is \$400 a month. If you work on the basis of twice your payroll, that means you have \$200 a month for direct

expense. So you can see that changes on a job during the course of construction are costly to the architect.

An example: if the owner decides he wants to add something to the job, the architect has to prepare a bulletin which goes to the contractor. If this is a request for price, it comes back to the architect. If it is approved, he has to write a change order, adding this to the contract. For all this work he gets a fee of, say, 7 percent of \$100 or \$7.

On the other hand, if the owner wants to take something from the job, say deduct a \$100 item, you have to go through the same procedure, and the architect's fee is reduced by \$7. He is doing all this work and is getting less money at the end.

To go back to design, where we figured we had about \$5000, this is where the architect has to make his profit. For this reason it is important from the architect's standpoint and yours, too, to arrive fairly soon at the proper solution.

I repeat, do not award a job on the basis of fee. It is better to pay an extra 1 percent. You get what you pay for, here as in anything else.

My assigned topic was the design phase, working drawings and specifications, and construction supervision. Some of this has already been covered. The design phase can be in two or three parts. If the program of the building has not been thoroughly worked out, it is in what we call a preliminary or preparing stage. This is where the architect is really working as a consultant for you.

The next stage is the schematic stage where the architect will make single line drawings, trying to organize the functions you have put into your program in terms of your particular site. He will make a rough estimate at this point. This is based on areas, nothing more.

The third stage is final preliminary drawings, which will include plans, elevations, probably a prospectus, possibly a model, outline specifications, a listing of all the materials to be used in the building and the mechanical systems, and more detailed estimates based on the more detailed drawings. This is what is sometimes called a "design package." Usually architects like to have these drawings approved. Any changes made after them are costly to the owner.

Working drawings and specifications are the bidding and construction documents, which are not drawn up so easily as some people think. Every building is a custom situation. These working drawings consist of dimensions and detailed drawings for the structural work, whether it is concrete or steel. The architectural drawings themselves—the plans, elevations, and cross sections—are the fourth type of drawings in a typical set.

The specifications first establish the conditions and requirements of the construction contract. This section can be very long if there is government money involved. The specifications then spell out the scope of the work, trade by trade—there may be 25 divisions. The more complex the building, the more divisions.

Next follows a detailed description of all materials and systems. We try to avoid the term "or equal" in our specifications. We list three products which we will accept, and we assume that bids are based on any one of these three products. But in the proposal form we have a substitution clause, and if the contractor wishes to substitute something other than one of these three, he can list it but his bid is based on one of the three and we hold him to it. Sometimes you cannot find three materials that you would accept so you list two, or maybe one, and call for substitutions.

I am not going to talk about materials except for one thing. That is the matter of carpeting in libraries. Birmingham has recently installed carpeting in its library, and everyone is pleased with it. It is easier to maintain and is cleaned more often. This is one advantage. The second is that the building is quiet. The teenagers go in there and because they are walking on a quiet floor, they feel they have to be quiet. So there is no problem with noise.

The Royal Oak, Michigan, Public Library is all carpeted, even under the stacks. All are very pleased with it. The library has not had a major cleaning operation since it moved into that building about three years ago. With just normal maintenance the carpet still looks good.

A frequent question is, should you have a single contract that includes all the architectural, mechanical, and electrical work or award separate contracts for the three trades? From our experience I would recommend separate contracts for any library of a quarter of a million dollars or more. If the building is smaller than that, I would be inclined to recommend a single contract.

Supervision consists of regular visits to the job at least once a week. On the larger jobs we actually take notes, duplicate them, and send them to all parties who are in attendance at meetings. On a small job this is not necessary.

The architect has to certify the contract in the monthly requests for payment. When these are approved, 10 percent is held from each request. In other words, the owner is always owing 10 percent to the contractor. He is holding this back to make sure the work is done properly; it eventually is paid off at the end of the job.

During the supervision, as I mentioned earlier, the architect has to prepare all the paper work for changes with two stages. The bulletin has to be written, and sometimes this has to have different drawings or revisions to the existing drawings. This goes out to the contractor, and he submits his figure for the additions or deductions, whichever it is. Then the change order is written, and it has to be signed by the owner who is authorizing the change. On a large project you may have twenty-five or thirty bulletins and change orders during the course of the job.

At the end of the job the architect visits the building and makes what he calls a "punch list," which is a list of things that need to be corrected. This can be a very long list. Sometimes, on a large job, it runs to

fifteen or twenty pages of typed material. The list goes to the contractor who orders his subcontractors to correct all the faults. Sometimes the architect makes a second punch list because there are so many things he thinks are not up to par.

Once the architect notifies the owner that in his estimation the job has been done to the best of the contractor's capabilities, the owner pays the contractor the final 10 percent owed him. There is usually a twelve-month guarantee on most of the work that goes into a building.

I think that the most important ingredient in this whole operation is mutual confidence between the architect and the library board as well as between the contractor and the library board. How well librarians, board members, and consultants are able to define building needs at the start will have as much to do with the final outcome as the selection of the architect.

MR. ROHLF: Another problem is the uncertainty library boards have about the relationship of the architect to the contractor and to the owner when disputes arise. Many boards seem to think that the architect is supposed to side with them automatically when there is a dispute with the contractor, and my understanding is that this is not necessarily the case. I wonder if you could go into that in some detail.

MR. LYMAN: It is unfortunate if the contractor gets the impression that the architect is siding with the owner. This makes for difficulties on the job. The architect somehow has to represent the owner, but he also has to be fair to the contractor. I am sorry to say some architects are not fair to the contractor.

MR. MUNN: I should like to have an explanation of the principle of performance bonding in order to protect the owner against the failure of the contractor.

MR. LYMAN: A performance bond insures that a contract will be completed. In other words, if something happens to the contractor, the bonding company will take over. The unfortunate thing is that you do not always get the best job when this happens.

A MEMBER: Would Mr. Lyman please tell us why we should get waivers of liens?

MR. LYMAN: A waiver of lien is a legal document which shows that every subcontractor has been paid by the contractor the full amount that he is entitled to under the contract.

A MEMBER: What are the pros and cons of setting a reasonable construction time with penalties?

MR. LYMAN: The only way you can do that is to give rewards if the contractor gets through ahead of time. Very few persons are prepared to do this. I think the penalty clause works against the mutual confidence I mentioned before. I would try to work without it.

TECHNICAL PROCESSING

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THE PLANNING OF A TECHNICAL PROCESSING AREA IN A LARGE PUBLIC LIBRARY

It is my role to discuss data processing in the Technical Services Department of the Cuyahoga County Library System, a large public library. This library is located in Ohio, with headquarters in Cleveland and 24 public branches located in suburban Cuyahoga County. It serves 54 communities spread over an area of 345 square miles, and orders and processes books for more than 150 school libraries. In order to set our current data processing program in better perspective, I would like to comment briefly on some of the needs and problems that have typically confronted a large public library of this kind.

In most public library systems there has been an explosive increase in the use of library materials since World War II. This has been directly reflected in the work loads imposed on order, catalog, and processing personnel in public libraries and, of course, in college and school libraries, too. The typical reaction, a few years ago, to increased work load was to hire more and more staff if funds and space allowed and force staff to work longer hours, or—lacking either of these—to accumulate backlogs of orders and books. Even with the best of these solutions, the result was often a technical services area which grew like Topsy with little or no coordination among the divisions of technical services. It was at this point in the history of Cuyahoga County Library that the administration decided it was time for a detailed study of the technical services operation. Therefore, in January of 1961, Dr. Tauber of Columbia University and Mr. Kingery of the New York Public Library were invited to come to Cuyahoga County Library to survey this area of library work. Their findings set the stage for a new approach in our technical services.

The new climate has been one of persistent search for more efficient ways of carrying through every operation in the Technical Services Department. The position of Technical Services Director to serve as a coordinator and to encourage this new climate

was recommended by the survey team and favorably acted upon by the library administration and the library board. In this capacity the Technical Services Director has served as innovator as well as adapter of methods used by other library systems and industry. In this way, many routines, methods, and pieces of equipment have been explored and tested and either accepted or rejected. The work has often involved journeys to other library systems as well as correspondence to see "how they do it" and if "they really like it." Expert advice from consultants within and without the library field has been freely utilized before any new systems, materials, or equipment was tested in our own Technical Services Department. Of course, the increasingly informative literature on the subject of library technical services has been very useful. I am sure we would all agree that the publications of our own ALA Resources and Technical Services Division have been most valuable to us in the planning and layout of the technical services work area.

After these general remarks, I would now like to mention and comment specifically on the needs and problems which confronted the Cuyahoga County Library prior to 1961—needs and problems which I am sure many of you have experienced and have perhaps solved in different or similar ways. The Cuyahoga County Library Technical Services Department was handicapped by greatly increased circulation, crowded work area, a somewhat inefficient staff organization, delay in delivery of catalog cards, an unreasonable time lag in book processing, a modified Dewey classification system which involved recataloging and reclassifying much of the work already done by the Library of Congress Dewey Decimal Classification Office, lack of coordination among the various sections of technical services, and a much lower per capita library income than several other library systems in the County of Cuyahoga.

These challenges have been met and largely

solved by our being willing to explore and experiment with new approaches to book ordering, cataloging, book processing, and card duplication. The Technical Services Director who was finally appointed late in the summer of 1961 has worked very closely with the administration in seeking solutions to these problems, and the program has realized some success. The library is currently processing approximately 200,000 volumes per year, with no backlogs. This volume is double the production of four years ago with essentially the same number of staff in technical services.

Specific solutions to the foregoing problems to date include doubling of the work space for technical services and installation of a conveyor to reduce handling and to organize the flow of books. Previously about 50-60 book trucks cluttered the catalog division, and a very uneven flow of material resulted. The conveyor was frankly an idea borrowed from Mr. Kaiser, here in Michigan. A major decision was also made to change to straight Dewey 16th Edition in 1961 and so ensure reduction of cataloger hours in the years ahead; the change also allowed for the delivery of catalog cards with the completely processed books. Staff was reorganized to function more efficiently—each cataloger, for example, formerly had her own typist whereas now the typists are all in a typing pool with a chief clerk as immediate supervisor. Finally, as I have mentioned earlier, the coordinator appointed during 1961 was in daily contact with the administration and reorganized all the divisions of the Technical Services Department with a high priority given to maximum cooperation among the divisions.

Because costs for maintaining a 55-60 staff in Technical Services seemed high, it was also deemed wise to run a cost-accounting survey. This was done on two different occasions with the staff keeping detailed records of the time required to perform ordering, processing, and catalog routines. These costs have proven to be an excellent source of reference for us, allowing us, in one case, to assess a reasonable processing fee for books ordered and processed for the 150 (plus) school libraries that participate in our book selection program, and, even more broadly, to assess the comparative costs of new routines or equipment.

It can be seen from the foregoing statements that Cuyahoga County's Technical Services Department was prepared and willing to explore data processing applications in the library. The spark for this interest came from our Library Director who became interested in the data processing displays at the ALA Conference in St. Louis in 1964. Soon after his return from St. Louis and several Technical Services-administration meetings later, we began to explore possible applications of this equipment in our system. Representatives of five computer companies talked with us, but our most serious discussions and studies were with IBM and UNIVAC. A field trip to Long Island was made in order to investigate two county libraries with data processing installations. Discussions were

held with the Documentation Center staff at Western Reserve University, and numerous clinics were attended. Many papers were read dealing with installations in libraries throughout the United States. Both IBM and UNIVAC finally submitted total systems proposals to our administration for consideration.

After considerable discussion, it was decided to install a mixed system using the UNIVAC 1004 as the central computer unit and IBM peripheral equipment. The UNIVAC 1004 was chosen because, at this point in time, it fills a unique gap in the computer field. It is relatively inexpensive, at a rental of \$1150 per month, and yet has high card-reading and print-out speeds, advanced calculating features, and the capability for upper- and lower-case print drums for the ultimate printing of catalog cards. Comparable IBM equipment available now (without an eighteen- to twenty-four-hour waiting period) rents for twice the above amount. When the IBM Series 360, Model 20 is finally available, it will be a strong competitor for the 1004.

I must tell you at this point that we have received only our IBM peripheral equipment, with the UNIVAC 1004 scheduled for delivery August 1. The emphasis, therefore, in this talk is on the planning and layout of the data processing system for the Cuyahoga County Library. The programmer, in consultation with the Technical Services Director, has been planning, flow-charting, and wiring program panels for the past six months. We know very well what we want done and how the tab card equipment should do it. We realize, however, that the actual use of the equipment will present many bugs for the first six to twelve months. We do not exactly plan "parallel" runs, but we will convert slowly by doing one phase of a program at a time. We do not expect operating costs to level out for two or three years.

I shall devote the remainder of my time this afternoon to the ways in which we have programmed the UNIVAC 1004 and the IBM key punches, sorter, collator, and reproducing punch to do certain operations in the Technical Services Department. The plans call for the computer installation to do new book and magazine acquisition work and label print-outs this year. Replacement book orders, catalog cards, payroll, magazine catalogs of total holdings, and audio-visual catalogs will be done in 1966. In the somewhat distant future we may do book catalogs and also use the equipment for circulation control.

Since we require a first copy of every new book for review by staff librarians in the Cuyahoga County Library, there will always be an advance copy for the key punches to check for preparation of the master order cards 1 and 2. The master order tab cards will contain author, title, copyright, publisher or jobber, price, and other information. The book selection lists will be printed-out on Multilith masters by using the master order cards in the UNIVAC 1004 and then running the masters on the Multilith 1250's. As many as 500 of these lists, containing up to 20 pages each, may be run off for new or replacement titles.

After the branch and school librarians have marked these lists for order, the Data Processing Division will cumulate the order which may run to as many as 8,000 copies.

Cumulation is done by key punching two or three characters (representing the title number on the list) into a cumulation tab card. The rest of the needed information is gang-punched into the cumulation card on the IBM Reproducing Punch 514 from the master order cards. These cards are then passed through the 1004, which adds up the total number of copies needed for a title and prints-out this information on the purchase order, showing also the exact agencies (by assignment number) that have ordered the title. Other forms are also printed-out in this way using either the master order cards or the cumulation cards. The branch quotas are debited and updated by using the cumulation cards. Since there is one cumulation card for every copy ordered, these cards are filed along with a copy of the purchase order in the outstanding order file. When the books are delivered from the publisher, the cumulation card becomes a processing card that goes along with the book on the conveyor.

By using the cumulation cards in another operation, it is possible to print-out on inexpensive 3 x 5 pin-fed card stock all the author and title cards needed for the agency outstanding order files. It is estimated that 6000 hours per year are needed manually to type outstanding order cards, by more than 180 clerks, showing the books on order. This operation can be done centrally on the UNIVAC 1004, printing 300-400 lines per minute, in about 30 hours per year. Not all operations will show such a dramatic difference between the manual approach and the computer,

but it is indicative of the tremendous time savings that we hope to realize from data processing applications. Magazine purchase orders will be printed-out on the 1004 in much the same way as books.

The printing of labels on the 1004 must be done from specially prepared punched cards. It is from these punched cards that catalog cards will eventually be printed directly on continuous forms on the 1004. It is estimated that 4000-5000 catalog cards and sets of labels must be printed each work day. This will take the 1004 less than 3 hours each day of actual printing time. The pressure-sensitive labels of which I have spoken are printed simultaneously in sets of four on continuous pin-fed strips. The two longer labels are used on the agency shelf card and the book pocket (these were previously printed from manually typed Multilith masters), and the two smaller labels are used for the verso of the title page and the spine of the book (one of these locations had a handwritten call number in the book and the other a call number gilded from handset type set up in heated pallets).

The preparation of catalog cards is a complex operation in itself, but we expect that our master punched cards will be able to print-out with the 1004 all the essential information now contained on our cards in upper- and lower-case characters. These same punched cards (or magnetic tape) will ultimately be able to produce author, title, and subject book catalogs. Catalogs for audio-visual materials and periodicals can easily be produced in the same way.

Future applications for the data processing equipment include accounts payable, payroll, personnel records, circulation, and undoubtedly data we have not even thought about at this time.

Willard Dennis
Head Librarian, Kansas City Public Library
Kansas City, Kansas

LAYOUT IN A NEW PUBLIC LIBRARY

In laying out the Technical Processes Department in a new building, background concerning the community and the library must be considered, as well as the library's relationship to total service in the city and cooperative service with other libraries in the state. The support and operation of the Public Library in Kansas City, Kansas, is historically an obligation of the board of education, dating from 1904. The head librarian makes recommendations to the superintendent of schools concerning policy, personnel, and budget for submission to the board of education. In addition to the management of the Public Library, the head librarian is responsible for the operation of the elementary school libraries and coordination of secondary school library service. This includes the purchase and preparation of school library materials, with charges made to the school budget for technical services. Funds to operate all library facilities in Kansas City, Kansas, are included in the school budget and appropriated to the library by the board of education.

This library serves primarily residents within the boundary of Kansas City, Kansas, school district, which is greater than that of the municipality of Kansas City, Kansas. In addition to the main library and one branch existing at this time, there are 38 elementary schools, 8 secondary schools, and 1 junior college. The population of the school district is 130,000. It is anticipated that there will be an annexation of most, if not all, of Wyandotte County within the next few years, which will add another 66,000 persons. The projected population for the Wyandotte County service area is estimated to be 225,200 by 1970.

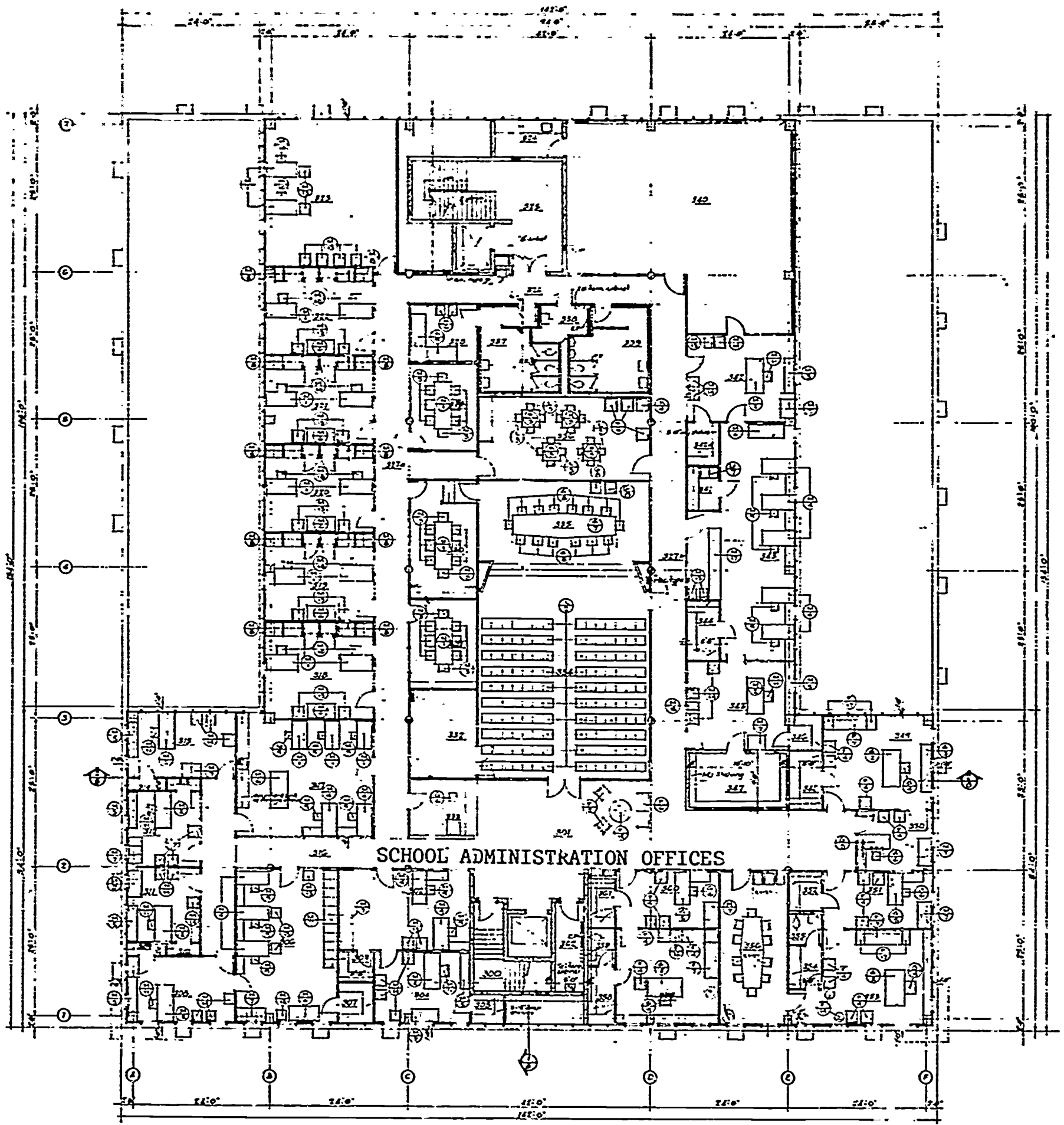
During the planning of areas and facilities in our new building, Mr. LeRoy Fox, Kansas State librarian, and myself discussed the possibilities of providing technical processing services for other public libraries in Kansas. To this end we recently accepted \$31,000 in federal funds from the state librarian for equipment in return for our willingness to negotiate with other public libraries for technical services.

As a member of the Regional Committee of the Resources and Technical Services Division, I have prepared a draft for final committee consideration of "Guidelines to Centralized Technical Services." The following provisions relating to quarters for such centers are, I believe, valid for any situation.

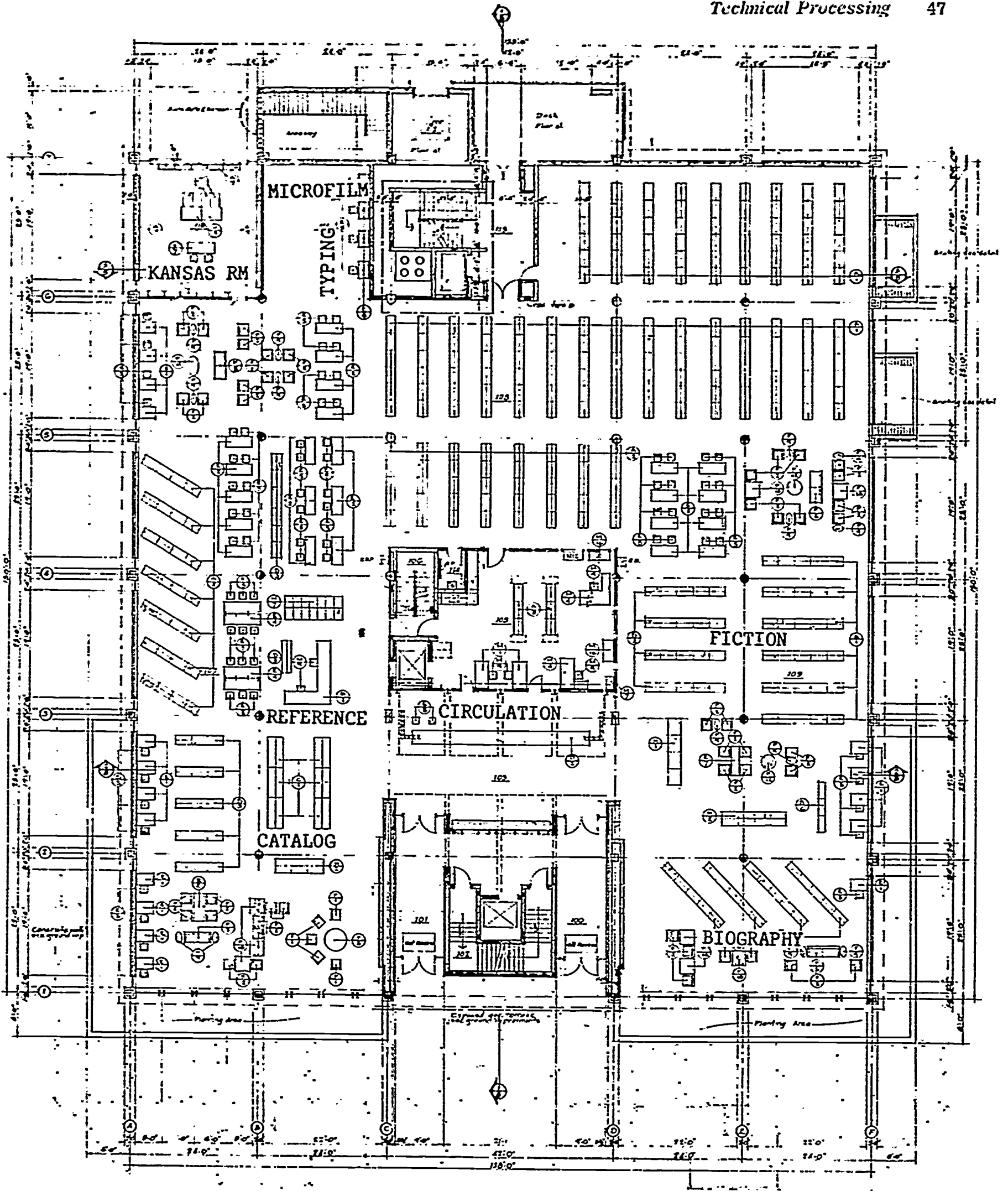
The space planned for a center should be adequate to allow for an efficient flow of work for the volume anticipated from member libraries. A checklist of desirable requirements related to good working conditions and production would include:

1. Location on ground floor or near service elevator
2. Convenient access to loading and shipping area
3. Parking facilities
4. Adequate floor space to assure continuous work flow on an assembly-line basis; space for equipment, files, and storage of supplies; and space for receipt of peak load shipments
5. Adequate lighting and provision for proper electrical circuits and outlets for mechanical and automated equipment anticipated
6. Telephones located at points of highest use
7. Proper heating and ventilation, including air conditioning
8. Acoustical treatment of working areas, including isolation of noisy machines in soundproofed areas
9. Provision for housing and use of extensive and bulky bibliographical tools, Library of Congress proof slips, order slips, and the like
10. Provision of private office or work area for the administrator
11. Provision for rest rooms and staff lounge
12. Provision for sinks in the work areas, adjacent to machines and near section devoted to physical processes.

The outside measurements of our building to be completed in December, 1965, are 138 feet across by 150 feet deep. The building is set back 70 feet from the sidewalk along Minnesota Avenue in downtown



Third-floor plan, Public Library, School Administration Building, The Board of Education, Kansas City, Kansas



First-floor plan, Public Library, Kansas City, Kansas

Kansas City. Since we are associated with the schools, the third floor houses the offices of the superintendent of schools and his administrative staff. Historic Huron Cemetery, an unusual point of interest immediately adjacent to the library property, is still used as a burial ground for older members of the Huron tribes.

The first floor layout is shown to relate the location of a covered loading dock to the rear entrance of the building and the service elevator. Personnel will have access through the rear door by key. Truckers or delivery men will ring a bell for a custodian to open the door. A fleet of flat-bed trucks will be available on the dock and in the final processing area to handle incoming and outgoing shipments of books.

The second floor plan shows the relationship of the Technical Services Center to the administrative offices, public service areas, and the staff lounge. The staff lounge area will be equipped with individual lockers, a quiet room with two beds, and a kitchenette arrangement for food service.

Note the location of the service elevator to the technical services area. Ideally the elevator would open directly into the Processing Department. State fire laws require isolation of stairs and elevators in a fire tower, which means that there is an extra 12 feet from the entrance of the elevator to the processing room. Passageways were designed to provide wide access for any type of materials delivered to the library. The technical services area illustrates our efforts to keep partitions to a minimum. The flexibility of this open area will allow for easy changes in arrangement of equipment and processes as new machines, ideas, or experience dictates in the future. It is located in this particular section of the second floor because of the accessibility for delivery and shipment to the elevator. Small windows will provide the staff with the opportunity to see the sky, trees, and other buildings, to prevent claustrophobia. The stair and conveyor shaft, serving from the basement to the second floor, is located in the center of the building providing easy vertical communications by any member of the library staff.

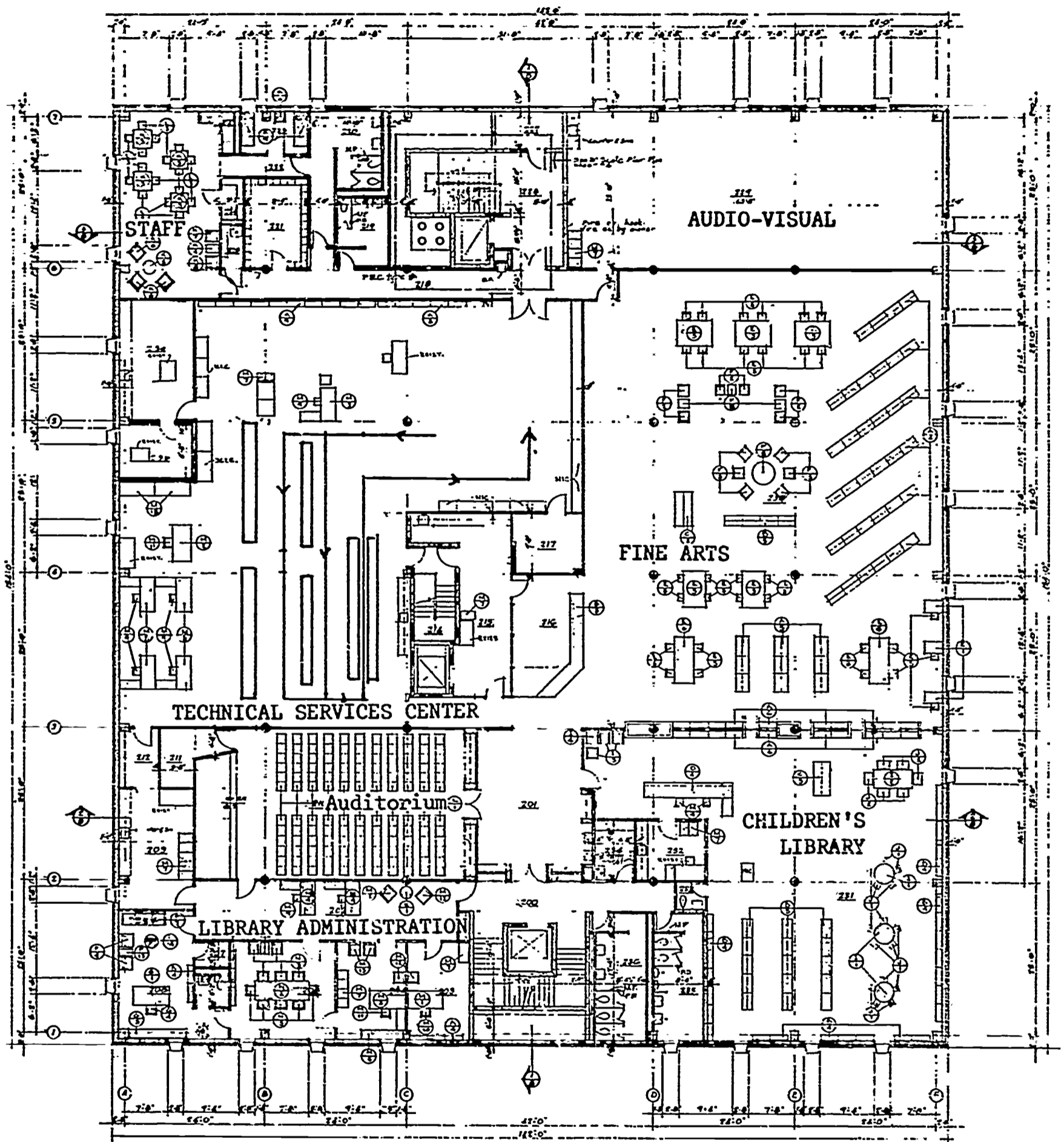
A single keyboard operation to produce and complete card catalog sets and to print book pockets, book cards, and spine labels at a reasonable cost was considered most desirable. In working with the salesman and an inventive young technician in the Kansas City, Missouri, branch of Addressograph, two adaptations were developed for the Addressograph Imprinter to meet our specifications: (1) a manual platen control, and (2) a combination card guide and ribbon protector to prevent overprinting, or what has been referred to as "chicken tracks." The only partitions in this room house the machines. The Graphotype, which embosses the metal plates, is to be enclosed in a heavily insulated soundproof room. The

Addressograph Imprinter also is enclosed. These rooms were placed in the corner to keep the rest of the room as open as possible and to utilize the windows for psychological advantages. These areas are large enough to add additional Addressograph equipment or other machines which may supersede this process in the time to come.

The heavy lines show the general direction of the flow of traffic into and out of the technical services room from the elevator. Deviations from the main traffic flow are necessary to provide pocket and card sets for each book. If these sets have been prerun, they will join the books at the receiving point and will proceed directly to verification with the shelf list, and then on to completion of the physical processes necessary. If a title has not been previously cataloged, one copy will move from the general flow of traffic to the cataloging station. After work slips have been prepared for reproduction of catalog cards, this copy will be temporarily shelved with other copies of the same title in the storage shelving. The work slip itself will proceed to the Graphotype and from there to the Addressograph Imprinter, after which the sets will rejoin the books on the general circuit as indicated by the broken line paralleling the general traffic flow.

Since the shelf list is a union record of holdings, every item must be recorded here. To facilitate this process, the present 60-drawer catalog units will be cut in half, and the halves placed upon existing library study tables. This arrangement will provide a working area along which a number of people may be employed. The materials, having been recorded on the shelf list, proceed to the physical process assembly line and there are sorted into compartments which we term "agency bins." These bins are 30 inches wide, 14 inches high, and 20 inches deep—large enough to house boxes in which books will be delivered as scheduled. To be added to this final stage will be a shipping preparation area, including scales for weighing materials being shipped via parcel post to libraries contracting for technical services. In the area of the agency bins is a box and other miscellaneous storage room. Especially designed equipment is anticipated to provide for LC proof slips and order forms, as well as for the Addressograph plate files.

In addition to the Technical Services Center, the new building will feature public service areas fully carpeted and furnished with Jens Risom walnut (natural linseed oil finish) one- and two-place tables, chairs, and loan desks, as well as Jens Risom-designed informal seating. The card catalog and intermediate and low wood shelving will be in matching oiled walnut. A standing invitation is cordially issued to librarians, trustees, and architects to visit Kansas City, Kansas, and inspect the new library and Technical Services Center.



Second-floor plan, Public Library, Kansas City, Kansas

Barbara Westby
Coordinator, Catalog Department, Detroit Public Library
Detroit, Michigan

ADVANCED PLANNING

For advanced planning I have no crystal ball. Had I one and the powers with which to use it, I would have foretold my predicament in appearing before you today and seen a way to avoid it. To give myself some protection I would like to take for the text of my sermon today, chapter 38, verse 2, in the Book of Job which reads: "Who is this that darkeneth counsel by words without knowledge?"

If there is a new library building in your future, don't just watch the Fords go by. Get busy and design the motor for it to take your Technical Services Department smoothly down the expressway of the new librarianship that is abuilding. You cannot stop the world and get off, but if you do not think far in advance, you may get knocked down and left to lie there. Someone has said that we tend to overestimate what can be done in a year but underestimate what can be done in five. Much advanced planning and thinking must be done before the architect comes. Mr. Ranganathan delightfully labeled cataloging at source as prenatal cataloging. I hope your building has a sufficient gestation period so that you have time to consider all the factors that may affect your procedures in the future and thus be able to plan accordingly.

One of these factors is the Library Services and Construction Act. A new building, and hence a new Technical Services Department, are perhaps more assuredly in your future because of its passage. More importantly and more immediately, it means more money for more books, and I do not need to tell the Technical Services directors in this audience what that means. But perhaps I should remind the administrators present that they must provide space and staff and that more abundantly. There is no such thing as providing the Technical Services Department with too much space. The standards recommend 100-150 square feet. Wheeler and Githens recommended that there be an allowance for a 50-percent expansion of one's present staff. Is this unrealistic? I think not. By what percentage has your library grown in

the past twenty to twenty-five years? How much will it, or do you wish it, to expand in the future? The Technical Services Department will grow by the same percentage. Miller and Metcalfe have both stated that one mistake that has not yet been made in planning a building is too much space.

Space costs money and budgets for new buildings are never as big as they seem, but please do not reduce the Technical Services Department just because it is a closed department. Too often in the past it has been allotted the space left over. I am not minimizing the needs of the public service departments. I am only asking that Technical Services be given equal treatment. The quality of library service is dependent on internal organization and efficiency; these, in turn, are promoted by a good physical plan. The public library standards recommend planning for twenty years, but large public libraries will remain constant longer than that. The Detroit Public Library opened its doors at its present location in 1921. Eight years later the Catalog Department, for example, had expanded into alcoves in the adjacent stacks. Seven more years found the official and shelf list moved into the corridor. Continuous consolidation throughout the years since had jammed our desks together like sardines in a can by last October when we moved.

Today this time schedule of expansion is being repeated. Denver Public Library has outgrown its allotted space in six years. Though Kansas City (Missouri) Public Library has 4200 square feet, it will soon need more. The Technical Services Department at the University of Houston was too small after two years. Recently I visited a library one year old whose Technical Services Department must have been too small on the day it moved in. It certainly is one year later. And this is a library where the librarian traveled extensively for ideas and presumably did much advanced planning; where it was when he laid out the floor plans for Technical Services I do not know. This proves that it does no good to plan

meticulously if you do not follow through. This director must never complain about the costs of cataloging. His administrative decisions in planning, which have resulted in inefficient and inadequate working conditions, will be a large factor in the costs.

Textual material in the future may not necessarily appear in book form. The Atomic Energy Commission has announced that beginning in September, 1965, its reports will appear only as 4 x 6 microfiche. Will you catalog these? If so, will you need to provide various types of microform readers for your catalogers if those in the public areas will be inaccessible due to location or to heavy use? We now have microfilms, microcards, microfiche, films, phonograph records, tapes, and so on. What will the future bring?

Another consideration in your advanced thinking is the future organizational and service pattern of your library. The standards for public libraries recommend larger units of service. Will your library be the central unit in a metropolitan, regional, or multicounty system? Then your Technical Services operations will be affected. The number of titles to be ordered and cataloged will increase, and the number of copies to be ordered and processed will multiply in proportion to the libraries added to your system.

Regionalization means cooperation. In the future we must do more than pay it lip service. The explosion in knowledge, the specialization of this knowledge, and the speed of communicating it mean that we must cooperate in the housing and processing of it. Perhaps your library will purchase one or two subjects in depth while a neighboring library will stress another area of knowledge. This may require more catalogers with particular skills. The cataloging or indexing information of these cooperatively acquired items must be interchangeable. What form will it take: accession lists, bibliographies, catalog cards?

This input and output problem leads to the discussion of another aspect to your advanced planning and that is mechanization. This is the \$64 question. It is *the* one which must be answered by any library planning to build in the future, for it affects all your procedures and organization. The critical part is to evaluate the influence of miniaturization and of electronic transmission systems on your future operations. Form follows function, but we are now having to give form to unknown functions. Automation is here and is inevitable. I admit I get tired of trying to keep up with the literature and to sift the wheat from the chaff. I am not interested in the plethora of words written on paper operations and how wonderful it is all going to be. I am not interested in a status symbol. I want to read honest appraisals about real, live operations so that I can analyze their value in my own procedures. I am disturbed about references to compromises made to accommodate the machine. I certainly do not approve of the perpetuation of inefficient methods, but I believe that the machine should do *our* bidding, not we bend to the will of the machine.

But that is another speech. We cannot bury our heads in the sand, ostrich fashion, and expect only to feel the breeze on our exposed posterior as it passes by. Like a good journalist we must answer the what, how, when, where, and why in order to plot our new building. How shall we automate? Shall we automate everything or only order and serials? Here I might state that we should plan for what we need but not add fancy extras we do not need. Will our automation produce catalog cards or book catalogs? If book catalogs, shall these be for the central library too or only for the branches and member libraries? Will copies be sold? Will you have full electronic data processing? Will it be based on disk storage of magnetic tape or on a file of punched cards? Then provision must be made for equipment and space to store 3 x 7 cards. Harry Bauer, in the *Wilson Library Bulletin*, once accused us of having a 3 x 5 complex. Now we can add a 3 x 7 complex.

We must depart from the traditional approach to our problems, but on the other hand we are not going to throw out the baby with the bath water. Various cataloging processes at the routine level will be aided by mechanization. However, the intellectual processes—the choice of entries according to ALA rules, verification of authors, assignment of subject headings and classification numbers—will still be the function of the librarian though he or she may be working with an unwieldy 5 x 7 or 8 x 11 sheet instead of a 3 x 5 slip.

Ralph Parker has stated that librarians of the future will have little direct contact with the machines. Others would have us using video consoles with key-punch input, light pencils, teleprocessing terminals with dial and dataphones, teletypes, facsimile transmission, and so on. Audio input of numerical data is only a year away, and audio output is here now.

Computers have been viewed by some as only glorified slide rules, while others have endowed them with man- or even godlike qualities. I suspect the truth lies somewhere in between. Computers, however, are stupid until told what to do. It is we in Technical Services who are going to tell them what to do. Catalogers, already a scarce commodity and in great demand, are going to be in even greater demand. Henry Ford's assembly line created more jobs, not less. I have never been afraid of unemployment. Richard Shoemaker of Rutgers, in the *Southeastern Librarian* for Spring, 1964, stated that we once chained or locked in cages books that were considered valuable or fearsome, and he suggested that catalogers, being valuable or fearsome or both, should also be chained or locked up before they were lured to richer or more persuasive libraries. Now there is an interesting sidelight on advanced planning!

Technical services are going not only to grow but also to get noisier in the process. This suggests separate quarters for the machinery. Humans may be smarter than machines, but they will put up with a lot more in their physical surroundings and working

conditions. The machine is more particular, though the present third generation of computers has become more tolerant. Transistors have replaced vacuum tubes, and further microminiaturization by solid state technology has reduced the weight and heat of computers. Fifty pounds per square foot is the present requirement. A raised floor is optional, according to one IBM man, since the arrangement of the equipment allows the cables to be laid out of the way, but another holds that it is best to raise or depress the floor to house the cables. The amount of air conditioning and humidity comfortable for humans is now acceptable to the machines—60°-80° Fahrenheit and 40-60 0/0 humidity. The present hardware is also equipped with acoustical covers so that no extra soundproofing is needed.

If you plan to mechanize, allow 800 square feet for the computer and peripheral equipment. This will allow for expansion. The fourth generation in 1970 will undoubtedly be smaller. The key-punch operations should be in a separate room. So, too, should the supervisor and the programmer. The machine operator can have a desk inside or just outside the data processing center. There should be a conduit outside the building leading to the room so that external storage machines in Washington or elsewhere can be tapped. If you wish to make the center a show place, use glass walls.

Any automatic equipment installed today must have several capabilities. It must be compatible, so that libraries can cooperate and exchange information via punched cards, tapes, teletype, or whatever the future holds, or we will be back where we are now, all repeating the same jobs in different locations. It must be capable of sending and receiving catalog information to and from the Library of Congress. At Detroit we do 40-50 percent of original cataloging, but if the Library of Congress can increase this coverage, I want to be able to get it. And let us not kid ourselves that we can precatalog all the materials we order. The original input at ordering time must be correctable at cataloging time.

The universities seem each to be riding its own horse its separate way. Perhaps they can afford this. They have computer complexes on their campuses to which they have access, and maybe even student programmers and research funds. But public libraries have no such luxury and are bound by city budgets. We need to pull together rather than compete. I would like to see the American Library Association or the public libraries or both furnish leadership in this area. We must analyze and devise the procedures best suited for public library operations and then suggest the hardware to carry out these tasks. Electronic data processing (EDP) requires standardization and uniformity, but let us devise these for the sake of the efficiency of our operations, not for the sake of the machine.

Minder and Lazorick have suggested the following in their paper on the "Automation of the Pennsyl-

vania State University Acquisitions Department." I have paraphrased their statement:

The traditional library organizational pattern may not be adequate in an automated system. Most technical service divisions are organized along the lines of the operation performed: acquisitions, cataloging, serials, binding, etc. A computer oriented system may work more efficiently if it is form oriented—books separated from periodicals, serials, etc. A book is a one purchase transaction which is cataloged as a unit and goes on the shelf as a unit. A periodical is a continuing type of transaction that theoretically has no ending and must be handled at predetermined periodic intervals. Serials too are continuing but somewhat irregular. These factors—unit transactions, continuity, and irregularity—are essential factors in computer utilization. Organization of work flow and programming by form allow for addition of other forms, such as Technical Reports, for example, later without disrupting the system. This is done by designing a separate system for each form. This does not necessarily mean that Technical Service Departments need be physically reorganized in an orientation. Records will be handled differently but output can be integrated—one listing of all forms or separate forms.¹

The data processing program suggested by IBM for the Detroit Public Library is a progressive one beginning with our present equipment: an 026 key punch, 514 reproducer, 557 interpreter, 085 and 077 collators, and an 082 sorter (650 cards a minute), and adding a 407 accounting machine renting for \$800 a month. This would be a card-file system, printing upper case only, mechanizing our orders and serials. It would progress to a card-based system using a 360/20 model renting for \$2500 a month. This would, in addition, produce book pockets and labels, and catalog cards in both upper and lower case, alphabetized in filing order. A final stage could be a 360/30 at \$5000 a month with both a card and a disk storage. In the beginning we would add to our staff a supervisor and a programmer at \$9000 and \$7000 respectively. We already have an operator, 2 key-punch operators, and a clerk-typist for our circulation control. This staff would increase as the operation increased. Since automation creates jobs, your budgets will never be less but more.

In the literature on the planning of library buildings, the Technical Services Departments have been sadly neglected. The chapter by Wheeler and Githens in their book *The American Public Library Building*

¹Thomas Minder and Gerald Lazorick, "Automation of the Pennsylvania State University Acquisitions Department," in American Documentation Institute, *Automation and Scientific Communication* (Washington, D.C., 1963), p.456.

and the paper by Robert A. Milner on "Technical and Administrative Functions in the Library" presented at the Building Institute in 1946 are still valid. There is an article by Maurice Tauber in the Summer, 1960, issue of *Southeastern Librarian*. Little else exists.

However, the suggestions in the literature on library buildings are applicable to us. The first step in planning is to write a program which is a statement of your philosophy and goals—your purpose, scope, and function—and the requirements for carrying out your goals. The factors I have discussed so far must be considered in this planning. Make a detailed checklist of all the tasks now performed and to be performed and the requirements of each as to staff, space, and equipment. Analyze your procedures and do not move an inefficient or outmoded practice into a new building. The new building may allow you to do an old job a new way. The organization chart resulting from this should reveal your work flow and the interrelationships of the various sections in your department.

Your program should also show your need for proximity to the card catalog, bibliographical tools, and business office. Involve the staff. Visit libraries and learn their good and bad features. Be imaginative. Frank Lloyd Wright once stated that a building grows out of conditions as a plant grows out of the soil. We must see that the soil is rich and fertile.

Following is a suggestive, though incomplete, checklist. I have already mentioned microform readers. Do you need a phonograph with earphones for the record cataloger? We have one. Once we even had a music cataloger who had permission to use the piano in the auditorium! I do not recommend a piano, but it illustrates that you must consider many things. Electric typewriters. Copying and duplicating equipment. Pasting machines. Shelving on all the wall space. Work tables. Trucks. Posture chairs. Telephones. Do you want jacks in the catalog cases? We have them in our public catalog. Storage space for supplies—they can look messy on the shelves. Do you want this to be a walk-in closet? A sink nearby. Plenty of electrical outlets.

The flow of work should follow an assembly-line pattern. As a matter of fact, I recommend an assembly line itself—be it roller, roller skate, or conveyor belt. It saves much tiring and wasteful lifting. In this geographical area both the Wayne County Library and the Detroit Public Library operate assembly lines. If you visit the Public Library, may I caution you that we are still experimenting with work methods, layout of desks and supplies, and the like. Maybe *you* can give *us* some ideas. We like our line very much and want to make it even better. It is "U"-shaped, with the straight end that closes the "U" being located in the shipping room. Yes, our processing section is next to shipping, though it is two floors and a half a block away from the rest of the department.

I worried about this, but supervision is no problem. The staff is too busy to need supervision. There is some inconvenience in its being so far from the

official catalog. In the shipping room, books are opened and invoiced on the line, placed on a piece of masonite, then pushed through a window into processing. After work on the books is completed, they arrive back in shipping through another window at the other end of the line and are distributed into agency boxes for delivery. In processing new materials it is well to have on one level the loading dock, the receiving area, and space for unpacking, invoicing, cataloging and classification, preparation, mending. The more that steps of the work progress—on one level and on wheels—in logical order with no backtracking, the more units of work will be performed per man-hour. Horizontal access is cheaper than vertical access.

The second phase of a building program, after the planning, is the preliminary sketch—the architect's graphic translation of your program. You now see the location and shape given your quarters. You should check its location in relation to shipping, administrative office, business office, public catalog, and other departments and the sections of your department to one another. Your work space must be planned for maximum economy and efficiency. As stated in the public library standards: "Efficient planning is obviously difficult if the work is physically hampered. Poor lighting results in a slow-down in work and increased error, too little equipment causes unnecessary handling of materials, crowding decreases concentration and increases irritation, poor machines produce poor work, distances between work-related areas mean wasted time and energy, and traffic through a work room brings confusion and disruption." Keep these points in mind and be critical. Watch particularly for traffic from outside the department.

Blueprints look impossible, but if you focus and take them slow and easy, instead of trying to understand them in one glance, they are not too difficult. Make a layout of the space. Cut pieces of furniture and equipment to scale and push them around. It is time well spent. I used a different color for each category, e.g., clerk desks, catalogers' desks, official, shelf list, and so on. Then I knew what I was looking at. Trying different arrangements shows the best utilization of space and supervisory control. If you were lucky enough to get extra space, do not lay it out. It will be easier then to expand it in the future.

There should be a minimum of fixed walls to allow for maximum flexibility. Since the mechanical and technological discoveries of the age will necessitate changes in procedure and room arrangement, one should plan for the most usable simplicity.

As a final check you should do some role playing. Wear several hats—that of the Technical Services director, the chief of the separate departments under you, one of the order librarians, one of the catalogers, clerks, and so on—and mentally move through their tasks and spot unnecessary walking, backtracking, or repetition. Most important, pretend you are a book. This is, after all, our stock in trade. Does the book

follow an orderly route from shipping carton to the shelf? If so, you have it made. Advanced planning requires more than a superficial overview. It is drudgery to study your problem, develop new methods, and assemble necessary data to clarify your wishes to the planner and the architect. But does not everything worthwhile require work?

From these working sketches come the detailed blueprints. This is your last chance before the mental image becomes mortar. You should check for the following: Is there an acoustical ceiling? What kind of floor covering? A soundproof room for equipment? Do the doors have thresholds (remember trucks cannot pass over them easily)? Where are the elevators? Are there booklifts? If so, will they hold a truck? Otherwise there will be much lifting of books off and onto a waist-high lift. Are there horizontal conveyors or vertical bookveyors? Are they located so that you can make use of them? Are there plenty of electrical and phone outlets? Where are they located? Where are the shelves? Where are the light switches—are they centralized or are they on several walls? How much traffic through your room (there should really be none)? Do not overlook the factor of human engineering. Francis McCarthy, in his paper at the Buildings Institute in 1961, had some charts on space needed for browsing, bending, pulling out trays, and other activities which you may find interesting and helpful.²

About lighting I have no advice, except to avoid glare and contrast. The footcandle discussion has found no agreement among illuminating engineers, architects, librarians, and ophthalmologists. I would hold out for windows and for north light if possible. I claim, but have no proof, that artificial light is better for the eyes if it is mixed with natural light. I have some support from Robert O'Connor, New York architect, who stated that there are both psychological and physiological advantages to such a mixture. Denver Public Library insisted on north light and has

²Francis J. McCarthy, "Human Mechanics in Relation to Equipment," in American Library Association, Library Administration Division, *Planning Library Buildings for Service*, ed. by Harold L. Roth (Chicago: A.L.A., 1964), p.27-37.

never regretted it. On the other hand, do not have too many windows. Kansas City, Missouri, has two glass walls and so loses that much shelving.

I have an interior room and might make a few comments on that. A 9-foot ceiling creates no hardships as far as I can see. Our walls are white, and with four walls of shelving some of the starkness is relieved. I would recommend a slight tint of color, however. Pale yellow or pale peach are suggested for interior rooms. My office is pale blue and is more restful. Another touch of color could be used in the book trucks. One writer suggested fire-engine red, Mediterranean blue, and so on. I like this. Each department could have its own color which would also identify ownership. The Technical Services Department should not be neglected in the interior decoration. Color and decorative features will improve morale. I am a firm believer in the Scandinavian formula of beautiful things for everyday.

I have mentioned nothing about binding. You must provide for mending and repair, pamphlet binding, bookplates, plastikleering, and the like, but if you do not have a bindery, the best advice is not to start one. The costs are high both in equipment and in union-scale wages.

In closing I am reminded of an incident that happened in our Language and Literature Department a few years ago. My friend on duty had a telephone request from a lady who was giving a dinner party and wanted the menu in French. She should have been satisfied with English as it turned out, but they got along fine until they came to green beans, *haricots*. "H" as in Henry; "a" as in Alice; "r" as in Robert; "i" as in Ida; "c" as in Charles. Here the difficulty began. The patron could not understand the "c". Other words were tried, and since she might understand better something having to do with cooking, she was told "c" as in cabbage, celery, cucumbers. By this time the patron had obviously forgotten the reason for the recital of vegetables and sternly announced: "Young lady, I did *not* ask you for cucumbers. I asked you for beans." Mr. Wright asked for advanced planning. I am not sure either he or you got what you wanted, but nevertheless I thank you for your attention and your time.

BUILDING PLANS AND CRITIQUES

PRESENTATION OF PLANS

Librarian: *William L. Emerson*

Architect: *A. Quincy Jones*

Critic: *Roger B. Francis*

*Director, South Bend Public Library,
South Bend, Indiana*

PALOS VERDES LIBRARY DISTRICT OF LOS ANGELES COUNTY

Rolling Hills Estates, California

WILLIAM L. EMERSON

The new facility planned as the main library for the Palos Verdes library district is in the major shopping center of the district which is, fortuitously, also close to the geographic center of the district. This shopping center is within the city limits of the city of Rolling Hills Estates, one of the three incorporated cities lying within the district.

Under the educational code of the State of California, there are possibilities for four different types of public library districts to be formed. We were incorporated in 1958 under what is the Unincorporated Towns and Villages Act of 1909. There were less than 400 people in the district. There were no incorporated cities. There are now three incorporated cities within our district, and there is also a great deal of unincorporated county territory. The district operates under a three-man board. The members are elected by the people of the district in a special election. The board is the taxing authority.

The library-experience formulas presented in Wheeler and Goldhor's book *Practical Administration*

of Public Libraries were used as a basic guide. In addition to shedding the proverbial blood, sweat, and tears, I plagiarized shamelessly, as often as possible, from the fine building programs developed by Cass Perry for Burbank, Ray Holt for Pomona, and Al Lake for Riverside.

The final program developed a plan for a 48,000-square-foot facility on two levels of 24,000 square feet each. This gross figure included a 10,000-square-foot area on one level for interior parking for bookmobile and staff. The program as developed proposed seating for approximately 215 persons at tables and carrels, and lounge seating in various areas for 40 persons. The building was to have a book capacity of 175,000. The program stressed very strongly that the two paramount considerations were flexibility and the possibility of expansion at the least possible cost and inconvenience. It also stated that, ideally, a one-level structure would be best since it is much easier to move staff, materials, and public horizontally than vertically. This ideal however, did not seem possible.

Under California law, even though the library district was a completely separate governmental jurisdiction, it would have to conform to the requirements set by the city of Rolling Hills Estates for off-street parking if the library were to be constructed in that city. There was no question that the shopping center was the best location and, indeed, a survey for the district in 1960 by Edwin Castagna also picked this center as the best location for a main library for the district.

Besides the interior parking area allocated on one level for staff and bookmobile parking, the program stressed that off-street parking for an absolute minimum of 100 cars was mandatory. That more than this might be necessary became apparent in early, informal discussion with the planning commission of the city of Rolling Hills Estates. At one meeting their planning adviser stated: "It is

STATISTICAL DATA

Architects: A. Quincy Jones and Frederick E. Emmons

Type of library: Public library—central building

Population to be served: 45,000; projected to 80,000-100,000

Area: 36,000 square feet

Book capacity: 175,000 volumes

Seating capacity: 255

Cost: \$1,374,535 (estimated)

Equipment: \$126,000 (estimated)

Building: \$1,007,719 (estimated)

Site development: \$42,313 (estimated)

Fees: \$73,502 (estimated)

Library materials: \$125,000 (estimated)

Cost per square foot: \$19.53

generally thought that a suitable parking requirement for libraries is one parking space for each 200 to 300 square feet of floor area. Therefore, a library having a floor area of 40,000 square feet should provide between 134 and 200 parking spaces.⁷

At this point I summed up the program for the architect. The district had an 80,000 square-foot site. A library was needed with approximately 35,000-40,000 square feet of floor space. There needed to be off-street parking for a bookmobile and for 25-30 staff members. Parking for the public required an absolute minimum of 100 spaces and preferably 150-200 spaces. The building must be highly flexible and have the possibility of expansion to about 45,000-50,000 square feet with minimum cost and inconvenience. Finally, an ideal library has all services, public and technical, on one level. With these restrictions and admonitions, I gave the program to the architect and waited fearfully for the solution.

A. QUINCY JONES

Land costs in California are a very crucial consideration. \$5 a square foot has already been quoted. By providing parking for 72 cars under the building, 88 cars on the roof, and 40 cars on the surface, the cost amounts to \$1,500-\$2,000 per car. Roof parking is accessible from a ramp on the west side of the building. An elevator connects the roof parking area to the parking lot at the basement or lower parking level. From any of the parking levels there is a maximum distance of 100 feet to the elevator.

The library has only one entrance. There are exits required by fire regulations, but they will be designed and installed in a manner so that a signal will go off if anybody uses them when they are not supposed to be used.

The mechanical equipment is in the rear of the roof parking area. To prevent this building from looking as if it were a parking garage or something other than a library, we have planned a 5-foot parapet around the perimeter of the parking level which is 5 feet above the upper street and 40 feet above the lower street so that the only cars visible will be seen by looking up the entry ramp or exit ramp. Otherwise the cars will not be visible from the streets.

The multipurpose room is the only two-story element, and that is accessible from the parking level although it is not intended to be accessible to the public. There is a door that leads to the balcony across the two-story element. The balcony will be used as a projection area for showing 16mm or 35mm film or 2 1/4-inch slides. We do not want to get involved in the problem of a projection room.

Moving past the public spaces or the library spaces down to the lower level is the walkway, which will be paved differently from the rest of the garage and will lead to the garage. Most of the covered parking, I would say some 30 or 40 spaces of the 72

covered parking stalls, will be used by the staff. The other elements on this level are additional mechanical equipment, telephone equipment, custodial storage, and a service area. There is also space for a bookmobile.

On the main level, from the entrance side, there are stairs that lead down to a patio 3 1/2 feet and into an entry court. The entry court and the courtyard garden are under a roof. The same roof that houses the multipurpose room houses both the entry court and the courtyard garden. Directly in front of the lobby is the circulation desk. There will be a turnstile with one person operating it, but under peak loads two people may operate it. At the same point is the entrance to the children's area.

The children's area has a story-hour space that takes one full module. The module in this case is 27 feet in both directions at the square, and the reason for selecting 27 feet is the result of two different factors: Mr. Emerson and I visited some libraries in the Southern California area and we found lesser modules, but we thought it was better to spread the columns as far as we could. The 27 feet works well with the parking situation; we get three cars per bay. It works well, also, with the stack and the furniture spacing.

In the story-hour area of the children's room are sliding partitions which slide back so that two thirds of each of those walls open to the children's area. The one third that is closed is the end of the tiers where the children can be seated above the person telling the story.

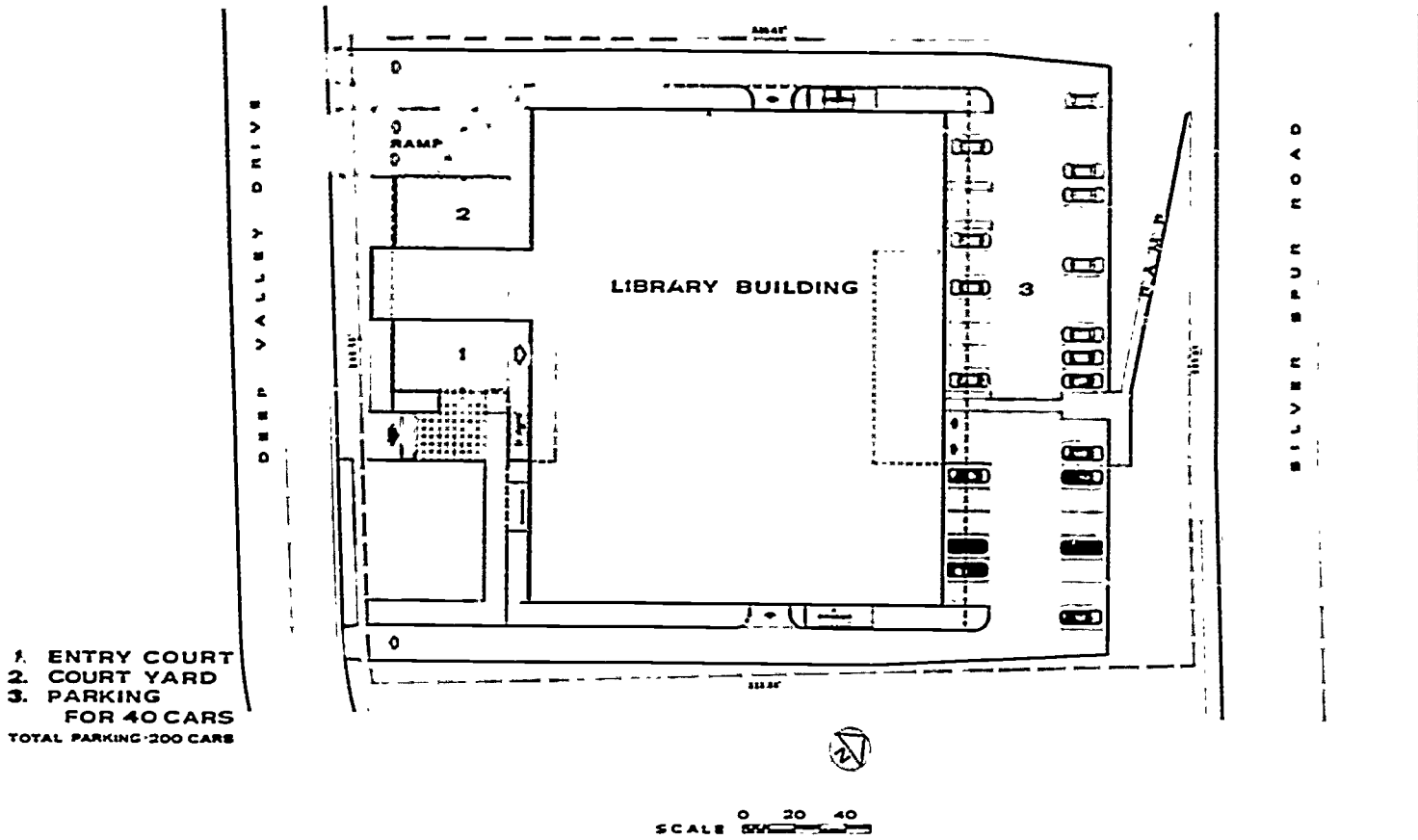
Just inside the lobby there is a roll-down partition that can close off the complete library so that if the multipurpose room is used at a time when the rest of the library is not functioning, there will be complete security.

Between the circulation desk and the workrooms behind it are three sections of 4-foot bookcases divided in the middle. As books are returned, they can be put on a 4-foot unit and, as the shelf becomes full, it is swiveled to the workroom. The empty shelves, in turn, become available to the circulation-desk side.

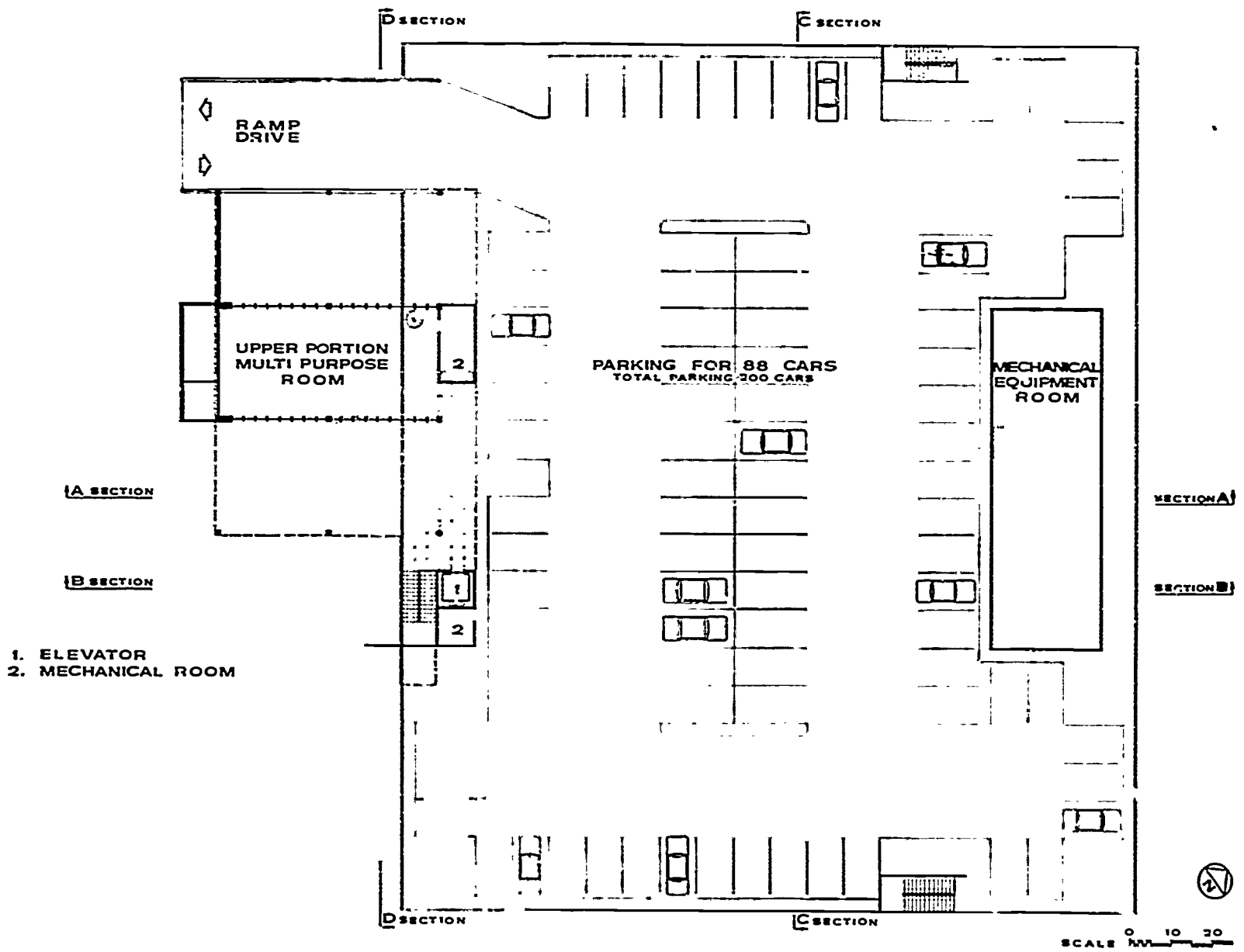
On this level are the staff offices, the librarian's office, and the assistant librarian's and business office next to that. A conference room is adjacent to the staff facilities so that the kitchen coffee facility works either way. The elevator from the lower level is convenient to the receiving area. The corridor adjacent to the elevator is about 7 1/2 feet wide. Thus there is room to leave material here before it goes on into the technical services area.

ROGER B. FRANCIS

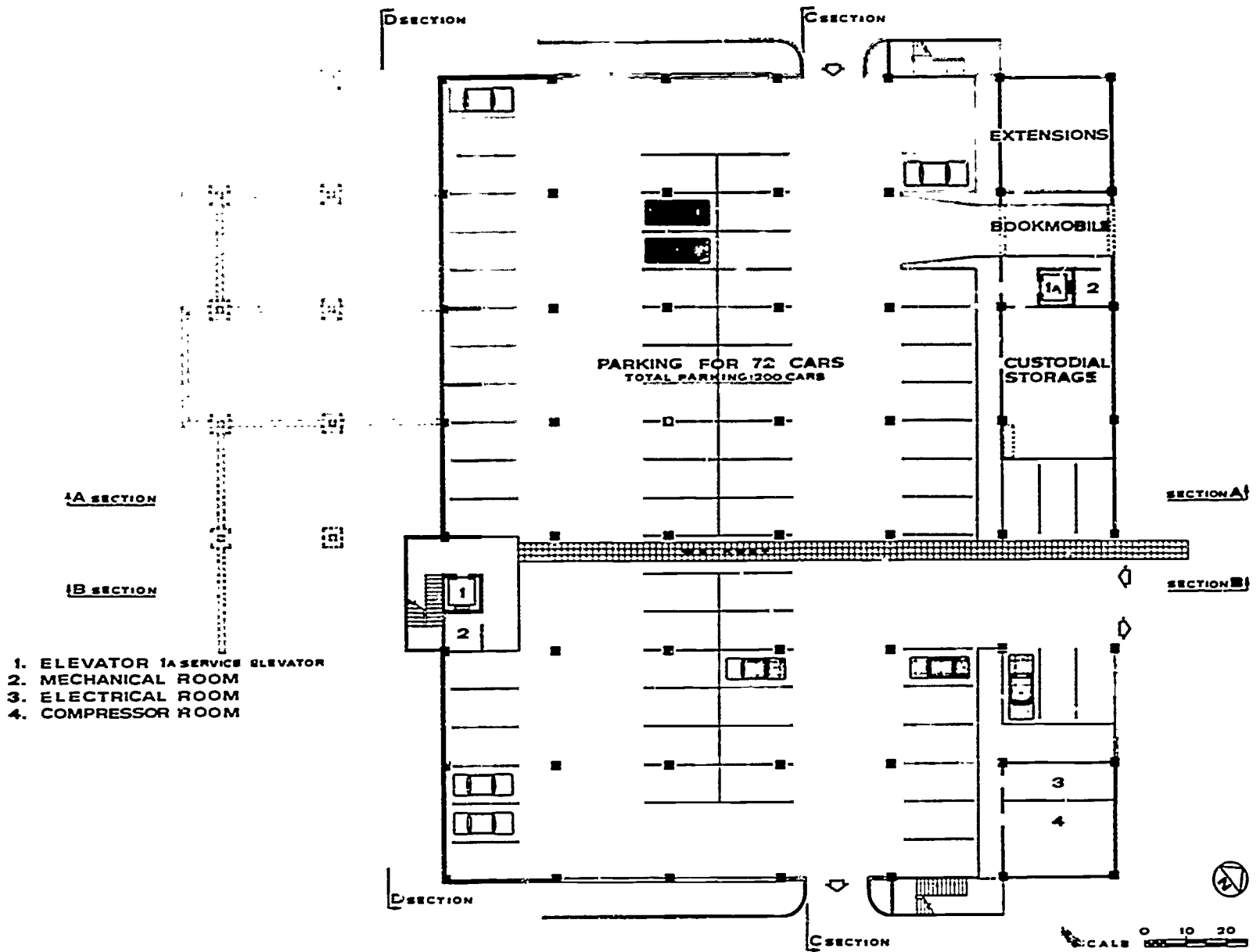
One comment the architect made is that the parapet on the roof would cut off the view of the cars so that the building would not look like a parking garage. I think you can readily gather that it does



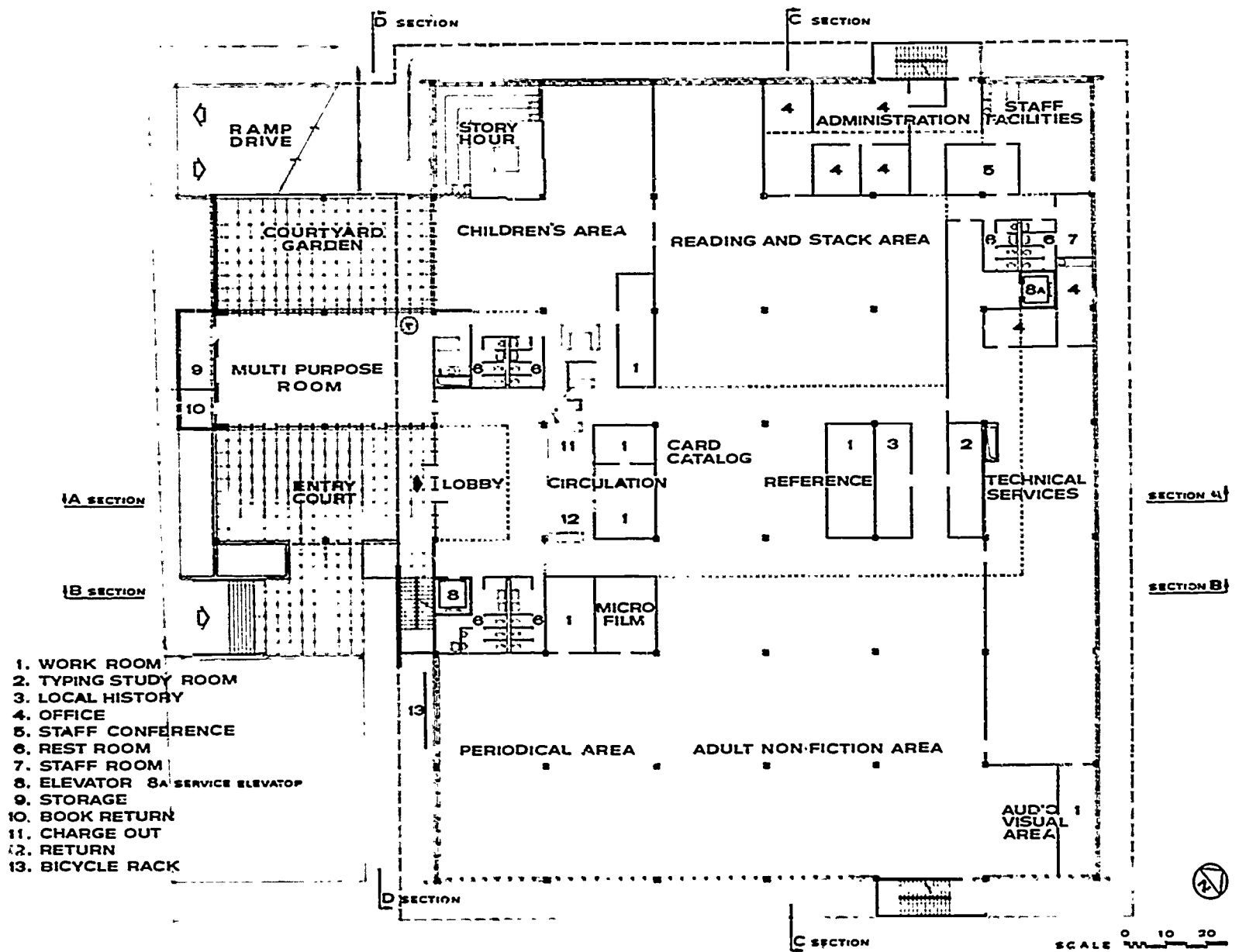
Site plan, Central Library, Palos Verdes Library District, California



Roof-level plan, Central Library, Palos Verdes Library District, California



Lower-level plan, Central Library, Palos Verdes Library District, California



Main-level plan, Central Library, Palos Verdes Library District, California

not look like a parking garage nor does it look like an office building. It is quite a lovely building as far as the exterior design is concerned.

Probably all of you are concerned about the parking facilities. This problem, of course, is something that the library can do nothing about. We all have these situations develop. It is of academic interest, perhaps, but if you figure the cost per square foot for the library operation it comes to about \$34 a square foot to get the library surface and also have parking for 200 cars. The total square-foot area is a more reasonable figure of \$19 a square foot, but the parking facility as far as we librarians are concerned is extraneous. The city fathers, however, have some other ideas and, of course, the library has to conform.

The architect spoke about the building program that the librarian submitted. It was a very complete document. Bill Emerson quite honestly confessed he borrowed material from other building programs. If you are contemplating a building and beginning a building program, I would suggest you read the Palos Verdes building program, because it is quite complete, quite thorough. It starts out with philosophical ideas about what libraries are to achieve. It defines certain essential goals the librarian wanted to accomplish and then goes into the details of the building itself.

The building is laid out in very pleasant surroundings. I would like to see it nearer the street, but this is the way the architect has proposed it and this is his prerogative. However, I do question the manner of entrance from the street, in that you walk down a short flight of stairs, then turn left and go under a covered entryway. It would seem to me more acceptable to have protection from rain all the way, by coming directly under the covered way and into the entry without making a left turn to get under the covered area. The building program did ask not to have steps, but steps are included in the plans.

I am not going to comment about the garage. This is an accomplished fact. Just one question I would like to raise because this was raised with me when I presented our building in Kansas City a number of years ago, and I was glad it was raised. The question to my mind is the division of the custodial storage area, which is supposed to be a custodian area and workshop. If the custodian is also responsible for the mechanical equipment, I wonder if those two areas should not be closer together rather than separated as they are.

I would also point out that the elevator is to

service the catalog department above. If the bookmobile is parked in the garage with the overhead doors closed, deliveries will have to be made to the main entrance and even go on down the elevator.

I saw nothing in the building plan suggesting that coin telephones would be installed. These might be placed in the entrance lobby near the elevator where there is a solid wall. People in the multipurpose room at night, when the library is closed, may need to make some calls. The building program did mention coin-operated lockers. This is the other coin device I think might be useful in this building.

The circulation desk, as you heard, has shelving on a swivel so that it can be turned around. I thought this feature quite unusual. It will be interesting to see how it develops. The one who thought this up should receive credit if it works.

In the building program mention was made of a community conference room, but I do not see one in the building plan other than the multipurpose room. If, as the building program states, the library is to be a community center, I think this is an omission you may regret. Our experience in South Bend may be of interest. We planned a couple of small community meeting rooms, and as of now we could use far more than we provided for. On the other hand, our sizable auditorium is not used as much as we anticipated. If the need in your community is for small community meeting rooms rather than for a large community room that is fine, but I noticed the absence of the community meeting room which the building program specified.

Let us now turn to the technical processing area. This room is 27 feet wide and 90 feet long. It seems to me to be a very long and narrow room, especially since the building program says that the shelf list should be centrally located. Wherever it is located, it is going to be a pretty long trek for members of the staff from either end.

In the administrative area, the conference room has a door leading into the staff lounge. This arrangement is very convenient as far as getting materials for the coffee breaks for the staff. But the other door would seem more logically placed leading into the administrative area rather than into a corridor because, I presume, it will be the librarian and the staff that will be coming in rather than the public from the public area.

The building program pointed out that we are in a mechanical and electronic age and that the library should be liberally supplied with electrical outlets. With that I heartily agree.

PRESENTATION OF PLANS

Librarian: *Edward B. Hayward*

Architect: *August J. Ignelzi*

Critic: *Charles E. Dalrymple*

*Director, Bennett Martin Public Library,
Lincoln, Nebraska*

HAMMOND PUBLIC LIBRARY

Hammond, Indiana

EDWARD B. HAYWARD

Hammond, Indiana, is a cluster of industrial establishments and residential neighborhoods segmented by the lines of nine railroads and several limited-access expressways feeding into Chicago thirty miles to the west. The population is diverse in national and ethnic origin, in type of occupation and place of work, and transitory in length of residence. It is a predominantly young population, 37 percent under eighteen years of age, with a median age of only twenty-eight years. The amount of formal education and family income is high compared to other United States cities comparable in size. There are six large high schools in the city. Many college-age residents attend the regional campuses of Purdue University, Indiana University, and St. Joseph College. The principal business district comprises about twelve blocks on the east-west axis near the Illinois state line, but there are several other sizable retail centers within the city limits.

The Hammond Public Library system is made up of a main library and eleven staffed branch libraries, five of which are located in elementary schools. The

present Main Library is a Carnegie building located in the original central park. It was constructed in 1903 when the population was about 14,000. Fourteen of the twenty-eight full-time staff positions are assigned to the Main Library. The library is organized according to service function with four departments: adult services, child services, technical processes, and administration.

The building and relocation of a new Main Library on a prominent site extending between two main downtown streets present an opportunity to provide a public building which will set standards in site planning, design, and construction. The site is of adequate size and appropriate shape. It is on one of the two main shopping streets, near the new main post office, two banks, and the principal department store.

The assignment given the architect was to plan a building of approximately 55,000 square feet with the provision for future expansion to as much as 85,000 square feet. A limiting factor was a bond issue which used all the present legal bonding power of the library.

Maximum flexibility was desired in order to allow for changing and growing patterns of service. Service areas were to be located at ground level as much as possible. Room for large and small group activities was to be provided. The building was to house the administrative, processing, and library materials storage functions for the system. The need for visual supervision of service areas with a minimum of personnel was stressed. The desirability of locating work areas adjacent to the service activities supported was pointed out.

The architect was asked to consider the design implications of the following policies: The bulk of the collection is relatively new and frequently loaned books and unbound periodicals. The library strives to promote the use of materials and services, selecting different subject areas and specific titles for

STATISTICAL DATA

Architect: Besozzi, Carpenter & Ignelzi

Type of library: Public library—main building

Population to be served: 111,698; projected to
243,000

Area: 60,000 square feet

Book capacity: 250,000 volumes

Seating capacity: 205

Cost: \$1,500,000

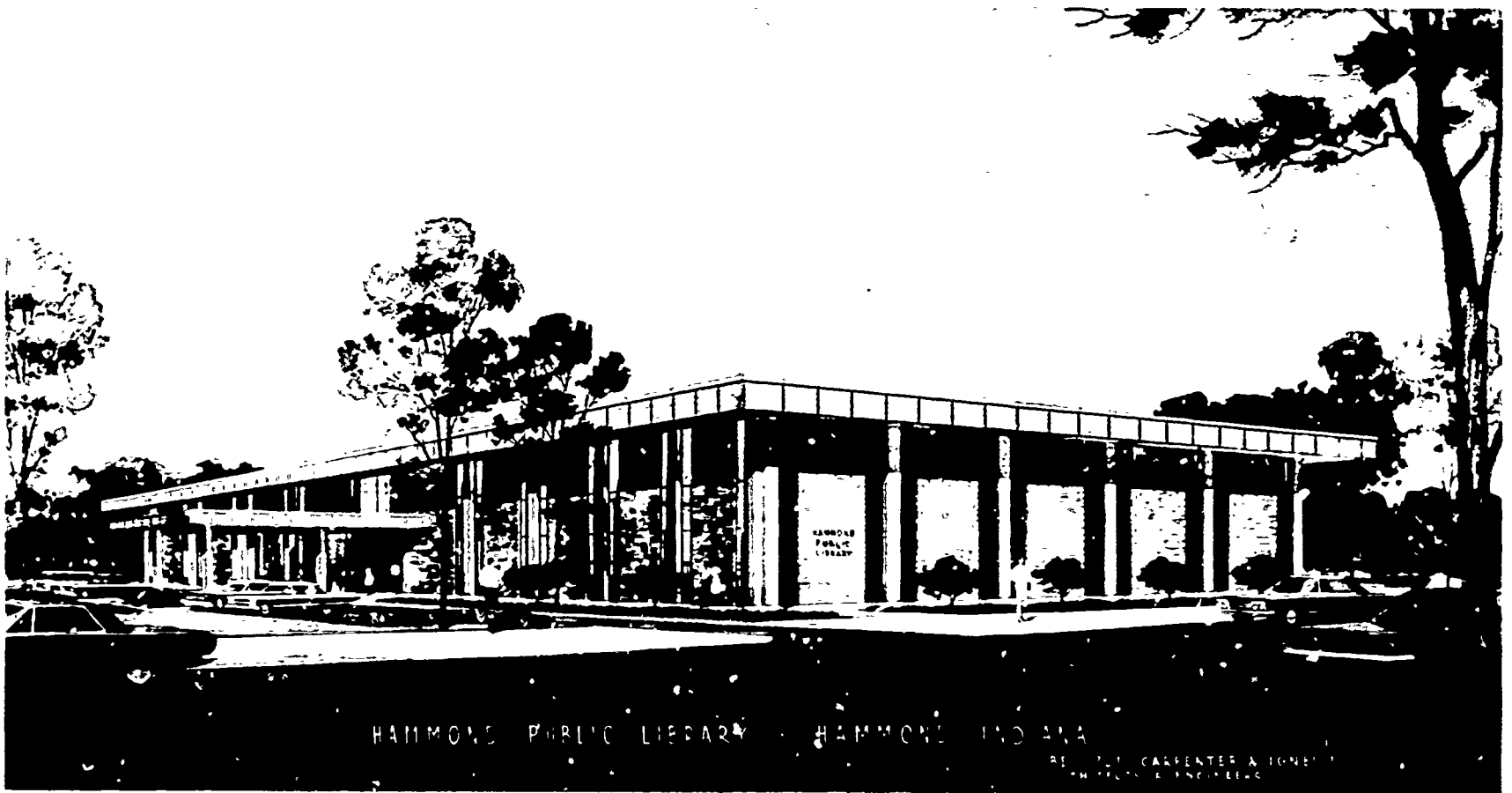
Equipment: \$150,000

Building: \$1,050,805

Site purchase and development: \$224,195

Fees: \$75,000

Cost per square foot: \$17.50 (construction cost)



Architect's rendering, Main Library, Hammond Public Library, Hammond, Indiana

QA Architectural Arts

display, publicity, and group discussion. As many items as possible should be readily available to different individuals and groups. Control of users should be effected as much as possible by the provision of adequate separate areas for different types of use and users, by appropriate acoustic and visual treatment, and by limitation of egress to one or two points past a check-out desk. No subject departmentalization was defined.

Because of the relatively large number of Hammond residents of high school and college age and the location of the Main Library near two large high schools, special provisions will need to be made to try to meet the needs of this group and at the same time give adequate space and service to people from business and industry, downtown shoppers, retired people, and other segments of the library's public.

AUGUST J. IGNELZI

The building will be located on a new site 250 feet by 230 feet, with additional area for parking 81 feet by 118 feet. The site is located in the downtown area and fronts on two one-way streets: State Street is one of the most important streets in town and is one-way going west; Sibley Street is one-way, going east. The building is to be located in the center of the property providing parking on each side. People will enter the building at the two main entrances under drive-up canopies at the east and the west sides of the building.

Exterior walls will be faced with a gray-buff

Indiana limestone, a split-stone veneer pattern. The columns and deep overhang, or fascia, are to be trimmed with machine-finished smooth Indiana limestone. Spandrels at the two-story level will be in black cleft slate. The deep overhang is intended to eliminate direct sunlight on the glass. The building height from grade to roof line will be 26 feet. The building is designed to provide ingress and egress without steps.

The proposed program called for 55,000 square feet. The building will contain 60,000 square feet, with a future third floor to provide an additional 20,000 square feet. Providing a full basement increases the square footage to 60,000 square feet.

The frame of the building will be constructed of reinforced concrete, flat slab, and columns poured in place. Bay area will measure 20 feet by 20 feet square. Width of the building will be 100 feet by 200 feet in length. Two main entrances are provided at each side in the center of the building. The two entrances are designed exactly alike.

The building is a general-office type and designed on a module. Our experience is that a 5-foot module is most satisfactory. The module runs perpendicular and horizontal to the walls and is designed to compensate for changing requirements. The module is taken into consideration for lighting, air conditioning, and heating. Lighting is to run in one direction.

The children's department is at street level with its own entrance and easy access for adult patrons, with a capacity of 10,800 volumes. A drive-up book

return and pickup is provided along the east drive so that books can be returned during closed hours or to an attendant when staffed.

The meeting room will have a seating capacity of 150 plus. It will be used for lectures, films, and small community meetings and be provided with film-projection equipment. Both library-sponsored activities and appropriate community programs will be accommodated here. There will be a stage with a storage area behind it for chairs and other equipment.

The service entrance is located at the shipping and receiving room connected with the elevator servicing the second floor and basement. The circulation desk is about 20 feet long and provides complete control of those entering and leaving the building. The popular reading room will contain 22,000 volumes. The adult service office is located in the center, and the audio center, a separate smoking room, and the card catalogs are located directly in front of the circulation desk.

The adult reference area with a capacity of 19,000 volumes will be serviced by a booklift leading to the basement below and to the periodicals located directly above on the second floor. In this area there will be microfilm readers and a room for public typing which will be treated to control sound.

The second floor, which will also be 20,000 square feet, will consist of the administrative offices at the south half and the student area at the north half with a capacity of 11,400 volumes. Around the center open area or balcony is the gallery for exhibits and displays with the two main stairs entering this area.

Along the east, west, and partial north wall the open area will form a balcony 10 feet wide or one half a bay. The exterior walls will extend 22 feet in height. The periodical area will be serviced by a page and will contain six years of unbound issues. Other periodicals will be kept in the basement or microfilmed.

The basement will provide a capacity of about 106,000 volumes. The classroom library collection is located there near the elevator. Booklifts rise to the first and second floors, and a circular stair leads to the circulation work area on the first floor.

CHARLES E. DALRYMPLE

Although I will not analyze the concept of service that the librarian proposes, I do think it is appropriate to suggest that we are in a condition of flux so far as public library services are concerned. A great deal of attention is paid to cooperative services with the public schools in Hammond. This is a well-established practice. With the \$100,000,000 grant that is being made for automating school resources, a prediction can be made that we are going to have some changing functions in any public library.

In going over these plans I visited with Ed and we went carefully into the details of the operation. I will analyze these plans from three points of view;

from the standpoint of the public library user, from the standpoint of the library staff, and from the standpoint of the architect.

I think part of the reason that I was asked to offer criticism on this particular building is because the kind of building we have at Lincoln is similar to the one planned in Hammond in that it is like a merchandising operation with an open-store-front appearance and with maximum ease of entrance.

I am concerned, first, with the location of the two entrances and with the fact that there *are* two entrances. It might be confusing as to which entrance to approach. Also, the parking lots are on both sides away from the building and the walk is adjacent to the building. This permits only a partial view of the main entrance. It is difficult to see immediately where you are going when you are walking up or down either of the streets.

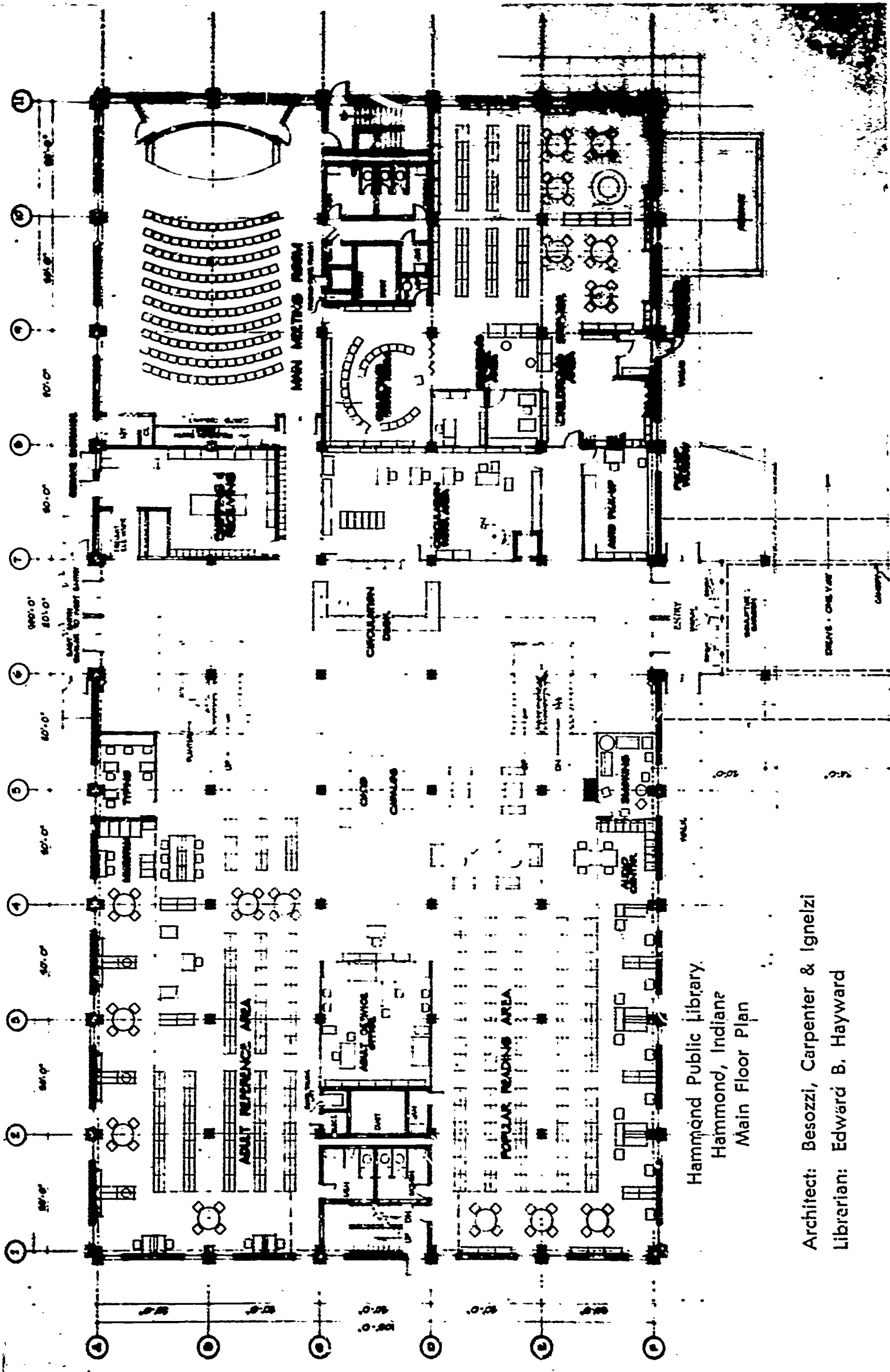
A patron may enter the building on either side. Upon entering he is 40 feet from the circulation desk. There is no indication that all of the major functions take place at this desk—the registration and information service that might be useful to him in determining where to go.

The auto pickup window is an interesting concept that might be adapted a little better to public service functions. The patron, in order to use this, has to park his car, get out and walk to the pickup window, perform his transaction, and return to his car. At any time he is either at almost equal distance to a main entry or closer to a main entry if he is parked on the same side as the pickup window. There is no pickup window on the other side so that he would have to circle the building to use this pickup facility after the library was closed. He can make a circle of the building on the drives.

The smoking room and the audio center might be relocated. The smoking area might very well be located in the vestibule area. The vestibules are large, and the benches would make it easy for it to be used for smoking, thus reserving space for some additional function.

I would suggest an audio center that would include films and recordings. There should be some opportunity for simple preview and selection and consultation with a librarian. I think I would convert this area to work area and office and a small enclosed workroom. Similarly, on the other side of the building where there is a typing room and microfilm center, I believe that microfilm usage would best be accomplished in a semiclosed area. As it is, I believe the intent is that the center room is actually the service area for all of these functions. I would anticipate that at some time in the future there would be less student reference service, more business and technical service, and probably a service desk prominently located in this area.

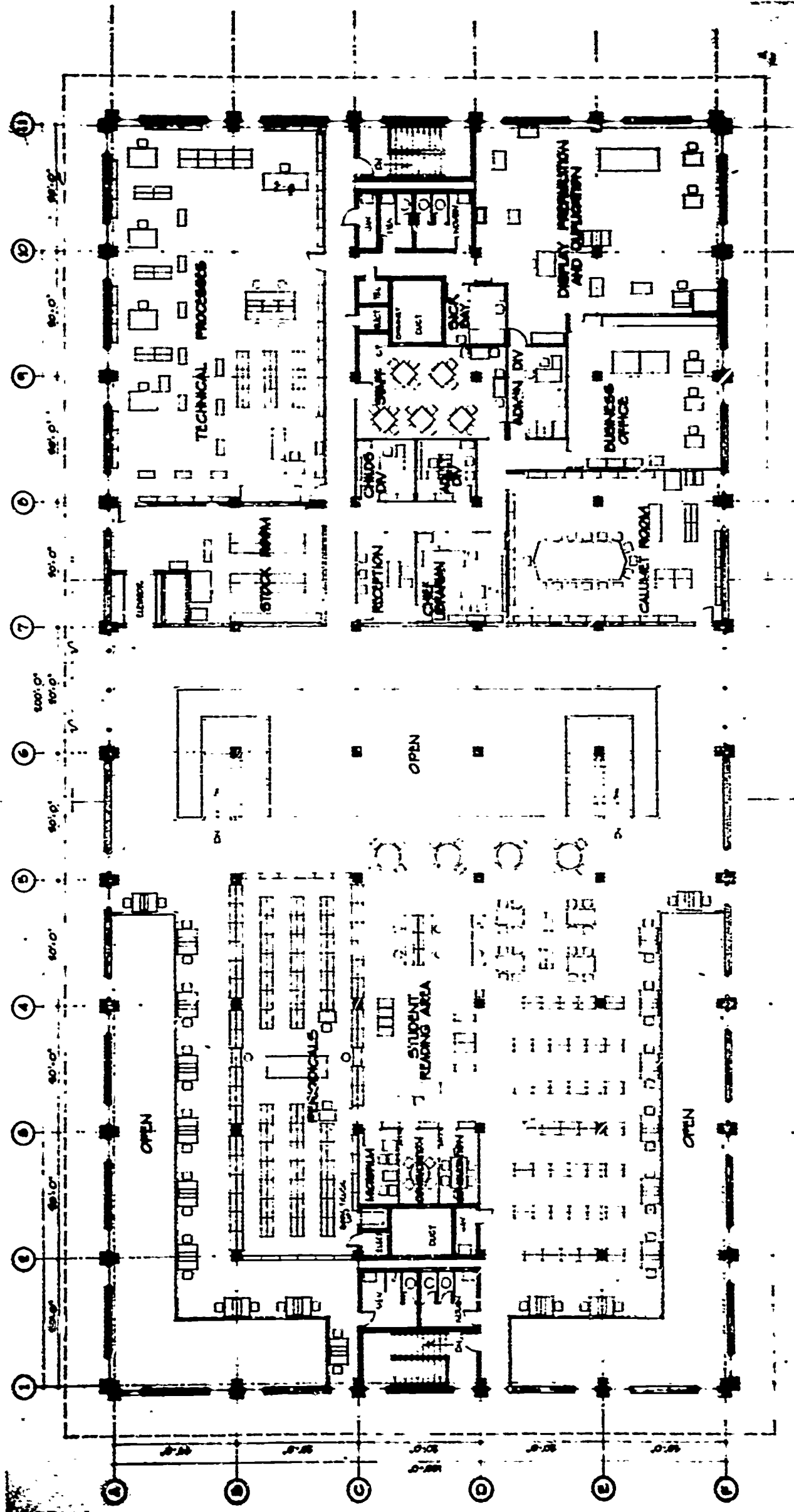
The main meeting room is a difficult place to get to. There is no free access from the outside. One must enter through one of the main entrances



Hammond Public Library.
Hammond, Indiana
Main Floor Plan

Architect: Besozzi, Carpenter & Ignelzi
Librarian: Edward B. Hayward

Main-floor plan, Hammond Public Library, Hammond, Indiana



Hammond Public Library
Second Floor Plan

Second-floor plan, Hammond Public Library, Hammond, Indiana

into the service area proper before reaching it. The meeting room is divisible by means of a folding screen. I would suggest that it is possible and probably the desirable thing to afford some public access to the meeting room directly from the outside.

Another area of concern is the large proportion of the total area devoted to children's service. This is consistent now and I believe will be a strong service point for a long time. However, the work in this area may diminish as schools assume their load of providing provisions for school library material.

The entrance to the children's area could very easily be relocated on the street side. It would then be a prominent and visible entrance.

Two stairways lead to the student reading area on the second floor. I doubt that it is absolutely essential to have two sets of stairs except at the very peak moments of the day. Traffic, so far as the public is concerned, is going to become accustomed to use one or the other. The flow will depend on the arrangement of materials.

Again, and this is still from the public user's viewpoint, we come to an area where the stacks are intermediate and the students use tables around the balcony. My question would be how can this area be supervised adequately. Students will be carrying materials through the stacks and back and forth to the center area where the service desk is located.

I would like to speak now from the standpoint of the staff. The circulation desk is in the center of the building. This gives fairly complete control of all the public service area and the entrance to the meeting rooms. However, staff members cannot see the desks and tables in all the areas. This will create a problem of supervision.

The facilities for the book-truck lift are from the first floor to the lower level or basement floor. My suggestion is an architectural consideration, but I think it would be wise to have a small passenger elevator instead of a truck lift, with full provision for it to be able to progress through the building to the future addition—in other words, through four floors. I believe it is advisable in anticipation of future growth to have at least two service elevators.

The only other concern I have on the first floor is in regard to the rest rooms. They are difficult to supervise. There is a set at both ends of the building, a considerable distance from the circulation desk.

On the second floor I am concerned with the work areas and what goes on here. There are some fairly

obvious points that may cause concern for relocation and future growth. I will mention these briefly. The stock room and business office might be brought into a closer relationship, likewise, the display, preparation, and duplication room and technical processes. It also appears to me that the display preparation and duplication area is rather large.

I would now like to suggest a third critique from the standpoint of the architect. I think we should start on the first floor because the elements here are basic and important.

The exterior of the building is a satisfying one. Esthetically it is a strong and dramatic building. However, the features of the long windows on the outside, from a functional viewpoint, will neither serve to let in light properly nor allow easy visual examination of the reading rooms. It will be impossible when you are walking on the sidewalk to see inside and to get an idea of what is going on. If you are driving, I doubt that your impression of the building will be more than the mere exterior. As I suggested earlier, an entrance to the children's department on the street side might dramatize the building and give some visual inspection of the inside.

The splitting of the bays along the perimeter of the main reading room is a good feature. It has tremendous appeal. I think that it will be a very dramatic feature and very satisfying from that viewpoint. However, it presents some problems in storage of materials and in supervision. If the balcony were able to support three sections of shelving, which I understand it could be made to do with some strengthening, it would give a great deal of storage area on this perimeter bearing.

The arrangement of the stacks in relationship to the lighting is awkward. Were they equally cross-wise, good lighting to the base of the stacks would be available. It was mentioned that a 20-foot-bay module was used. This is a rather small bay. It should be at least 22 1/2 feet—26 1/2 feet might be better. I recognize, however, that this module might suit other conveniences such as the air conditioning.

We have not examined some of the problems of the mechanical and electrical installations. There will be some because of the movement of heat in the area where there is a 26-foot ceiling.

A total of 25 percent of the space was assigned for architectural consideration; this might be as much as 5 to 7 percent more than usual. However, to achieve the beauty of the interior, this amount of space was necessary.

PRESENTATION OF PLANS

Librarian: *Oswald Joerg*
Critic: *Robert McClarren*
Director, Indiana State Library,
Indianapolis, Indiana

DAVENPORT PUBLIC LIBRARY

Davenport, Iowa

OSWALD JOERG

The site of the new Davenport Public Library is the same as the existing building—Fourth and Main streets, one block away from the downtown center of Davenport. The site dimensions are 130 feet by 150 feet.

The first stage of construction, the children's wing, was opened in September, 1963. It was planned to be incorporated into a main library building when additional funds became available. Floor levels, footings, and column loading were all designed to eventually fit into one main library building.

The 1965 estimated population of Davenport was 93,000, with a projected population of 120,000 in 1985. The 1965 operating expenditure amounted to \$2.85 per capita. The current book collection is 145,000 volumes, and the projected volume capacity is 250,000.

The new main library will have 62,700 square feet of floor space distributed as follows: basement 21,600 square feet; first floor 21,500 square feet; second floor 19,600 square feet. There will be seats for 200 adults and 50 children. The anticipated staff will consist of 50 persons including 16 professional librarians. The building, which will cost \$1,115,000,

STATISTICAL DATA

Architects: Edward Durell Stone and Stewart-Robison-Laffan

Type of library: Public library—central building

Population to be served: 93,000; projected to 120,000

Area: 62,700 square feet

Book capacity: 250,000 volumes

Seating capacity: 250

Cost: \$1,342,000 (estimated)

Equipment: \$150,000 (estimated)

Building: \$1,115,000 (estimated)

Architects fees: \$77,000

Cost per square foot: \$17.78 (estimated)

will be of concrete frame construction. Equipment and furniture will cost \$150,000.

Harry N. Peterson, of Washington, D.C., was the consultant on site and preliminary plans. Further consulting has been done by Bernard Schwab, Director of the Madison, Wisconsin, Public Library. Architects are Edward Durell Stone, architect of New York City, and Stewart-Robison-Laffan, associate architects, Davenport, Iowa.

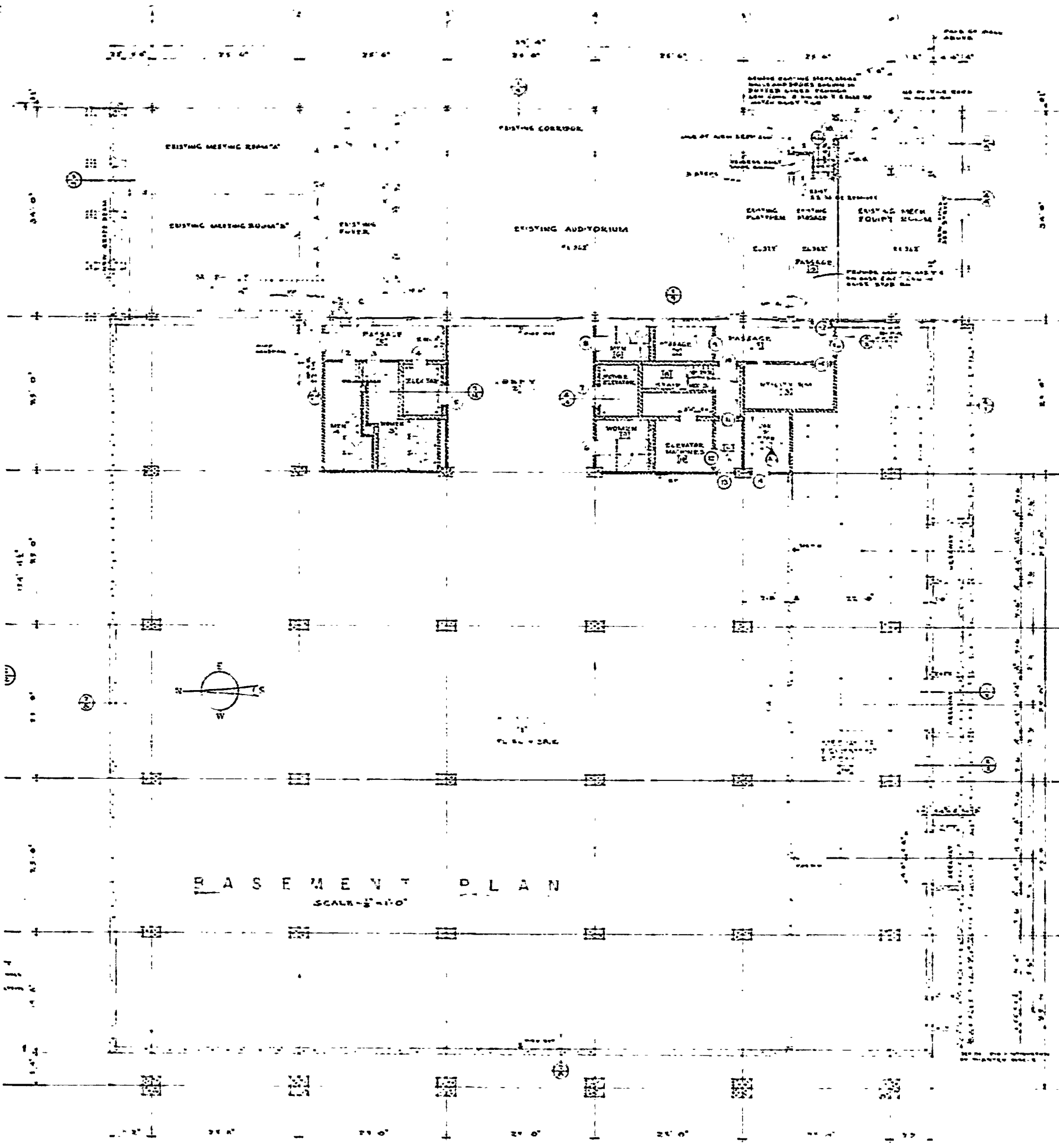
ROBERT McCLARREN

The plans of the Davenport Public Library were drawn up by the preeminent American architect, Edward Durell Stone of New York City. I commend the Davenport Public Library for securing Mr. Stone's services, and Mr. Stone for undertaking to meet the architectural requirements of a relatively small library, with limited building funds, with a portion of the new library already designed (by another architect) and built, and with a demanding librarian.

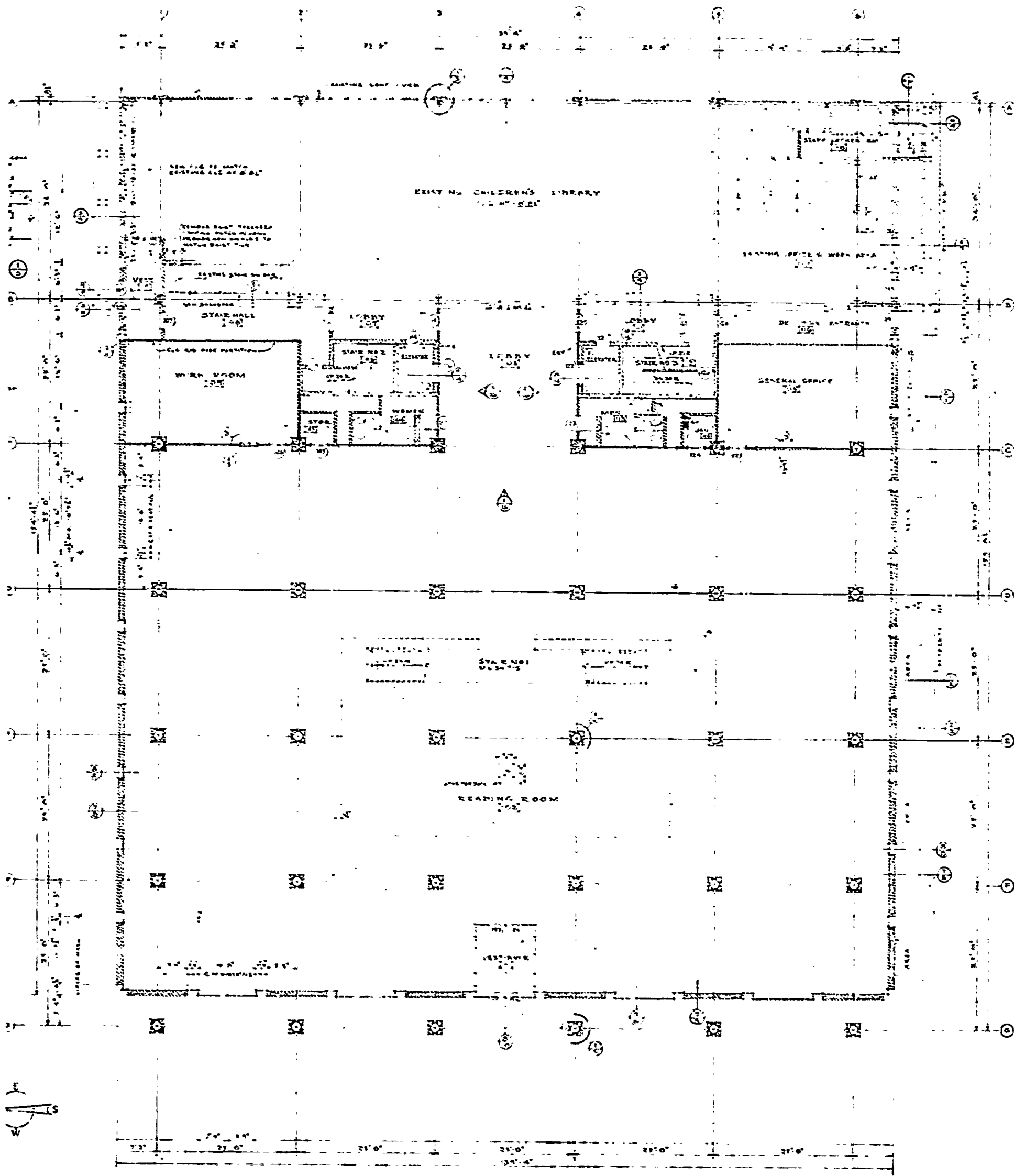
In preparing this critique I made a futile search for an architectural checklist to show the steps, sequences, and specific factors to be considered in planning a new library building. Since my fruitless search was what I would consider exhaustive, I recommend that individually and organizationally we discover and publicize such a list if it is already prepared but has remained hidden, or if a list has not been made, that we prepare such a list.

In considering building plans there are five areas of concern: (1) site, (2) size and space, (3) functional relationships and space assignments, (4) equipment, furnishings, and facilities, and (5) the psychological environment:

Site. While a consideration in the choice of site was the existence of the children's wing of the present library—a wing built in 1963 at a cost of \$175,000—the location of the present building had many other commendable qualities.

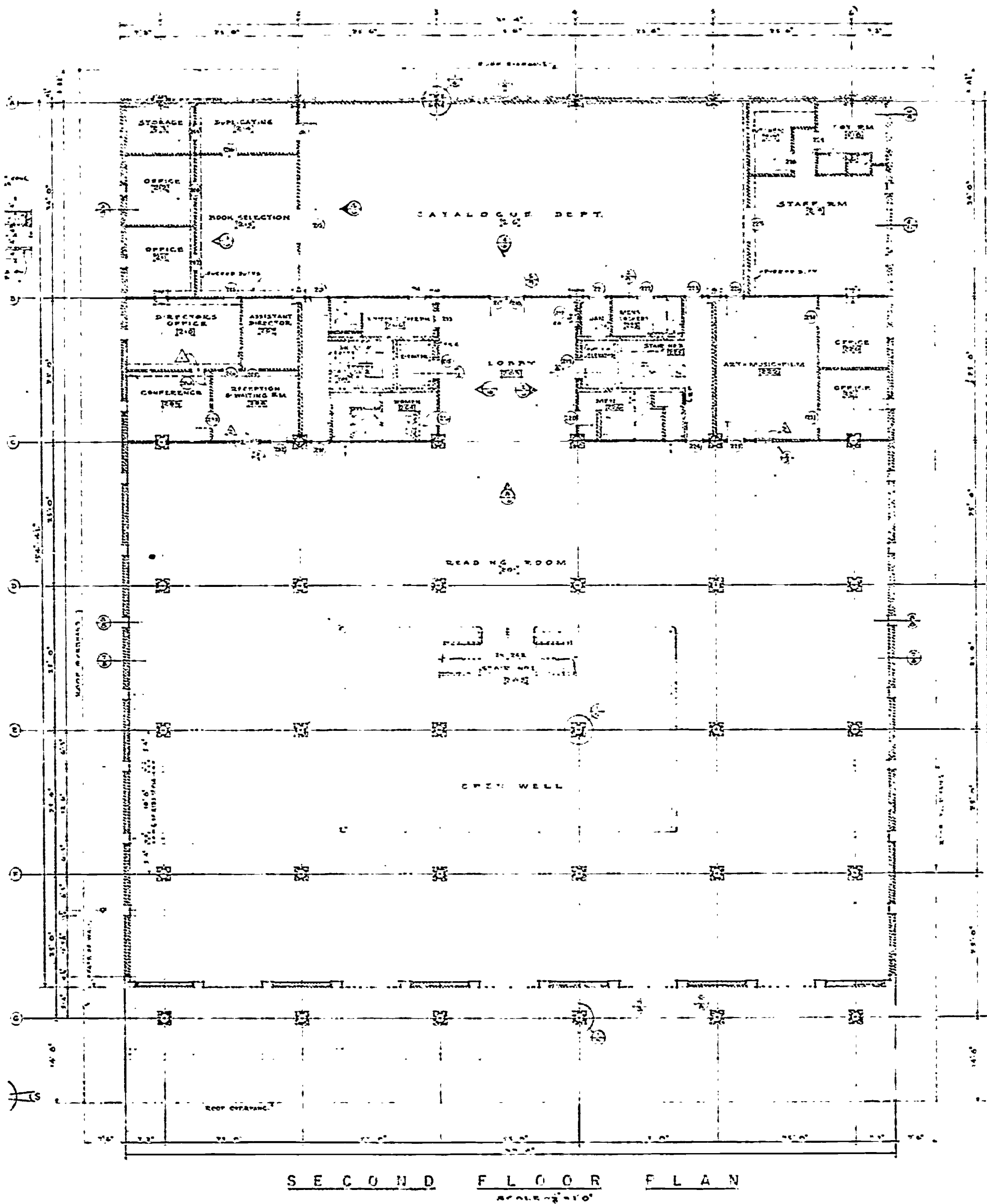


Basement plan, Davenport Public Library, Davenport, Iowa



FIRST FLOOR PLAN
SCALE 1/4"=1'-0"

First-floor plan, Davenport Public Library, Davenport, Iowa



Second-floor plan, Davenport Public Library, Davenport, Iowa

Located in the heart of town where architectural rejuvenation is underway, out of the high-water district, in an area of adequate parking facilities, with congruous neighbors, on a corner where the direction of traffic on the bounding streets gives maximum accessibility and visual emphasis, and at a location long and widely identified as that of the library and which today is witnessing increasing library use, the present location is an appropriate choice of site for the new library.

Size and space. Using the generally accepted formulas, Mr. Joerg has provided amply for his space needs. The 60,000 square feet in the planned building will more than meet the needs of the projected population through 1985. An extra margin will be provided by the present bookmobile service, the two branches projected for construction and, if necessary, the relocation of administrative and support activities to nonlibrary facilities. On the other hand, the trend to individual seating, the possibilities of county or regional responsibilities, the development of new library services, the greater use generated by a new building, and the certain increase in formal educational activity in the community all predict a possible ultimate need for space in excess of the planned footage. These plans make no provision for future expansion of the building either horizontally or vertically. Generally, the design is economical; very little of the site is left unoccupied, and more than 80 percent of the total space in the building is assignable for library purposes.

Functional relationships and space assignments. The modular construction provides maximum freedom in the not-yet-developed assignment and development of space in the new building. However, the already built children's wing is a restriction on assignment now and in the future.

The basement of this wing is at a lower level than that of the proposed building and precludes effective integration of the two basement areas. The desirable spatial sequence of children's-young adult-adult collections, with minimal barriers between each, is not possible in the present conditions. The design of the existing wing also makes difficult, if it does not preclude, the possibility of centralizing the

circulation control and collection servicing with these functions in the new building. Other problems are the distance of the elevators from the main entrance, the distance of toilets from positions of supervision, and the unobtrusiveness of the administrative offices.

Equipment, furnishings, and facilities. Since the planning had not yet proceeded to the consideration of this phase, I have no comment.

Psychological environment. From the plans available for examination, only the exterior of the building may be appraised; the proposed library, the lines of which are similar to Mr. Stone's often praised American Embassy at New Delhi, India, is most attractive. Especially commendable are the architect's exterior design, which successfully incorporates the design of the already built children's wing, executed by another architect, and his use of trees and other landscaping to give a feeling of depth to the building's location on the site. The proposed building is not a library stereotype; it neither looks like a library nor does it not look like a library. Since the building does not speak for itself to suggest that it is a library, extra attention to the provision of harmonious but eloquent signs—not indicated in the plan—should be given.

In summary, the problems apparent from the plans are the limitations imposed on use of space by the existing children's wing, the lack of provision for the expansion of the building, and the minor inefficiencies and waste of space caused by the interior design. These relatively minor problems noted, the proposed plans indicate that the library will be well located and planned, an aesthetically pleasing library of good design, and a fine contribution to downtown Davenport.

MR. JOERG: To answer some of the points mentioned—the basement was not excavated to the same level as the present wing because of cost, estimated at approximately \$100,000. Since the two elevators will open at each level, we do not feel there will be a problem. Public service desks will be located so that observation of rest rooms will be possible. Administrative offices will be well identified.

III. College and University Library Sessions

BUILDING PLANS
AND CRITIQUES

BUILDING PLANS AND CRITIQUES

PRESENTATION OF PLANS

Librarian: *Ruth E. Riggs*

Critic: *Donald Thompson*

*Librarian, Wabash College,
Crawfordsville, Indiana*

WITHERILL LEARNING CENTER Cazenovia College, Cazenovia, New York

RUTH E. RIGGS

Cazenovia College is a private, nonsectarian, two-year college for women, with a student body of 416. The college program as presently developed calls for an anticipated increase in enrollment to 500 in the fall of 1965, and to 600 in the fall of 1966, at which time it is expected that enrollment will level off and remain at this figure. Degrees granted from the college are the Associate in Arts (A.A.) and the Associate in Applied Science (A.A.S.) with specializations in art, merchandising, general secretarial, medical secretarial, and child study. A two-year program in nursing is also given in cooperation with the Upstate Medical Center in Syracuse, New York.

The college is located in the historic village of Cazenovia close to Cazenovia Lake, some twenty miles southeast of the city of Syracuse. The college was first established in 1824 as a Methodist Seminary, enrolling both men and women, and has been in continuous operation (under one charter) since that date. In 1935, it added a junior college department. In 1942, it concluded its relationship with the Methodist Church and became a private two-year college for the education of women.

The new library at Cazenovia is built around the "learning center" concept. It is here, after the student and the instructor have met together in the classroom, that the learning process actually takes

place. The usual division of study on the campus into tiny classroom segments is overcome by the unification of all resources of knowledge in this one learning center. Not only was the building constructed so as to be capable of handling all electronic equipment now known, but potential future needs were also anticipated by the provision of extra electric wiring and conduits to carry coaxial cables needed for TV installations and for remote control of tape decks and listening stations.

Since a two-year college is essentially a teaching college, the library in such an institution not only reflects this emphasis but of itself becomes an integral part of a student-oriented program. At Cazenovia everything possible is done to bring book and reader together. The Witherill Learning Center is so arranged that no reader is more than a few feet from a bookstack. A variety of study accommodations is provided, such as individual and group carrels, small and large tables, lounge furniture, a smoking study and a smoking lounge, single typing cubicles, group study rooms and a seminar room. With such facilities students may study in the quiet and privacy of the carrel, work together in the group conference rooms, or relax in the smoking lounge. Faculty studies are available for those instructors who wish to work in the library with their students or on their own research projects. Listening tables with both record players and tape recorders permit up to 30 students to listen to a variety of records and tapes at one time by the use of stereophonic headsets.

The group-viewing audio-visual room provides for the viewing of films and slides by small groups of students. Special equipment is also available here for group listening to tapes and records. In addition, this room is used as a teacher preparation area for the making of tapes for students to use in the listening area of the library or to be used in programmed instruction.

A special room is provided for the storage of

STATISTICAL DATA

Architect: Moore & Hutchins, New York City,
New York

Type of library: College

Population to be served: 600

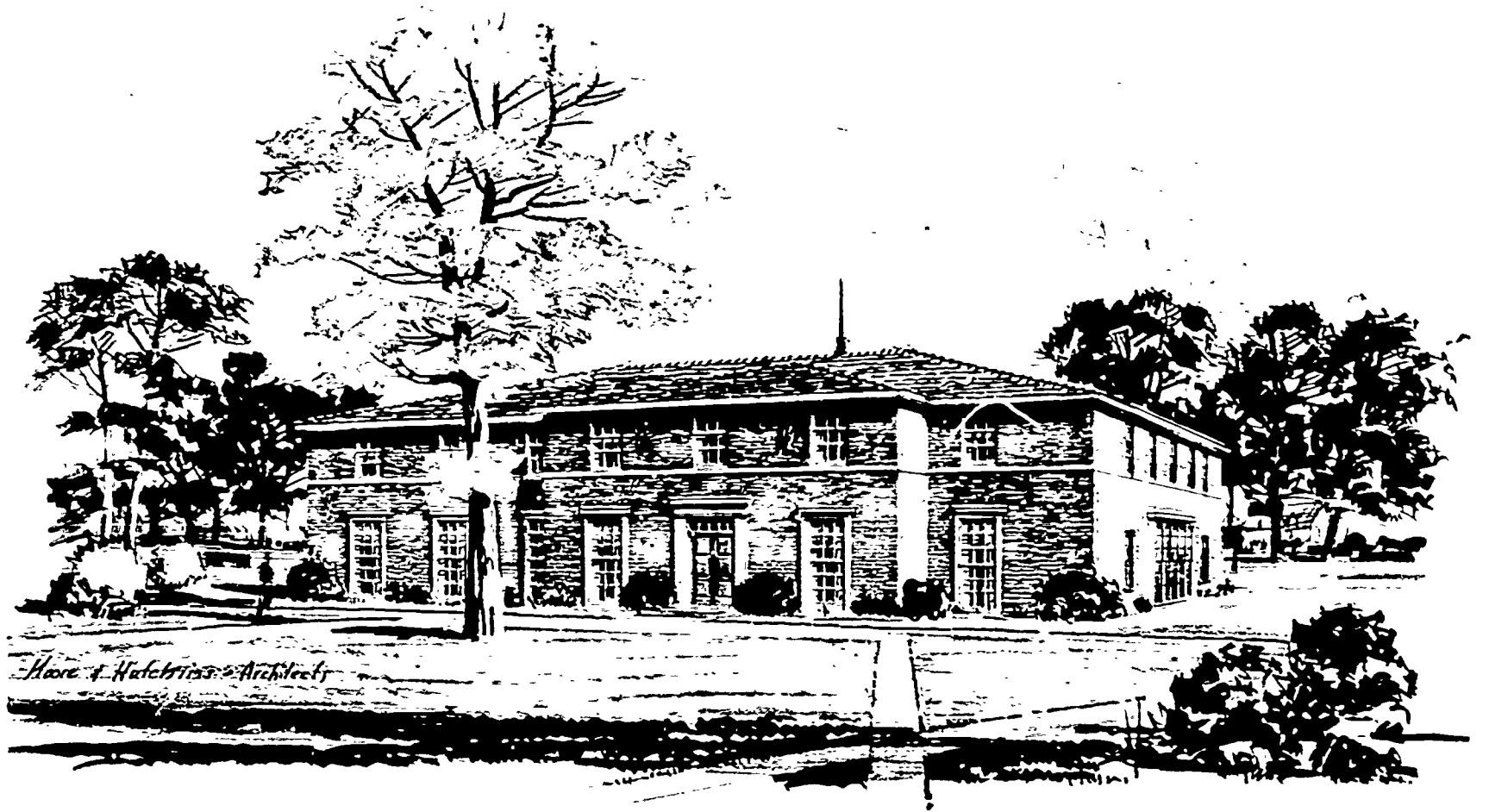
Area: 21,000 square feet

Book capacity: 60,000 volumes

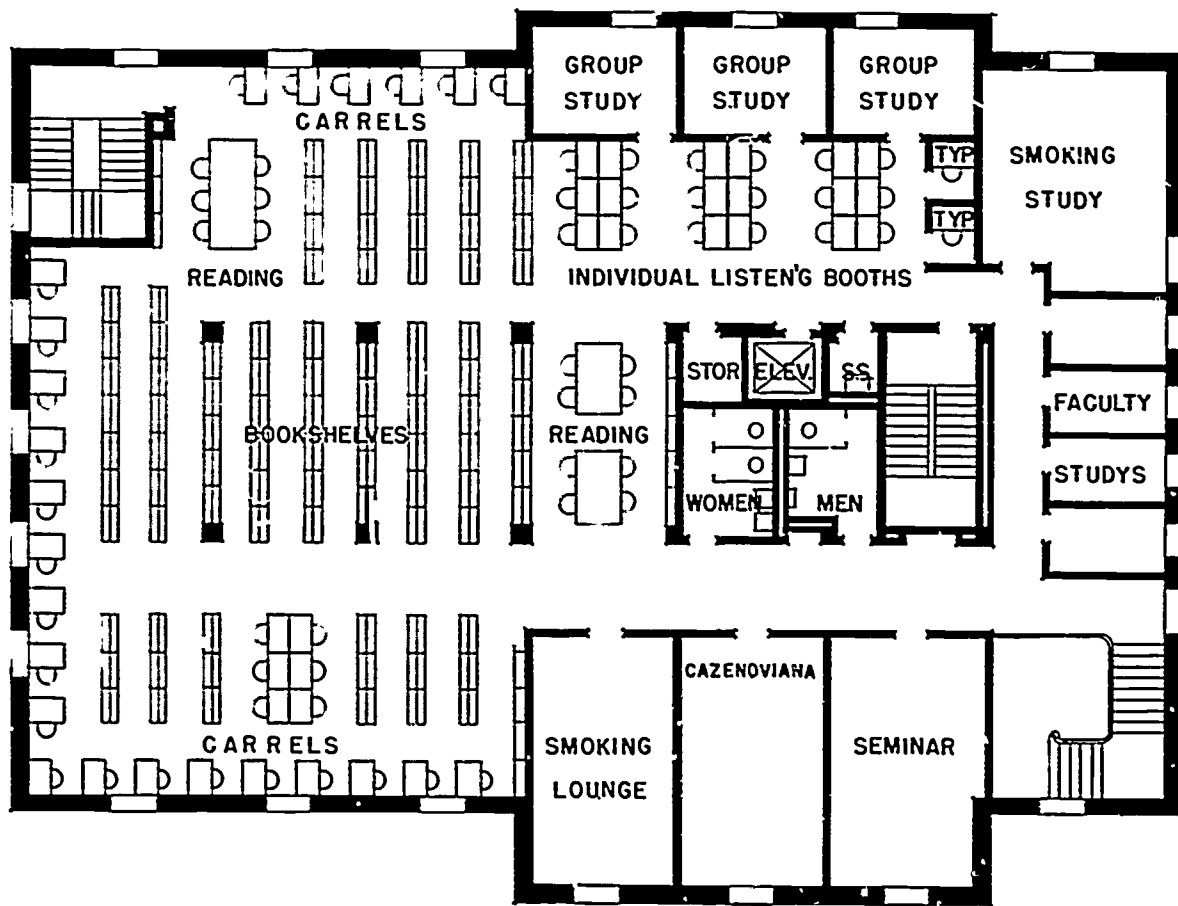
Seating capacity: 202

Cost (building): \$420,906.60

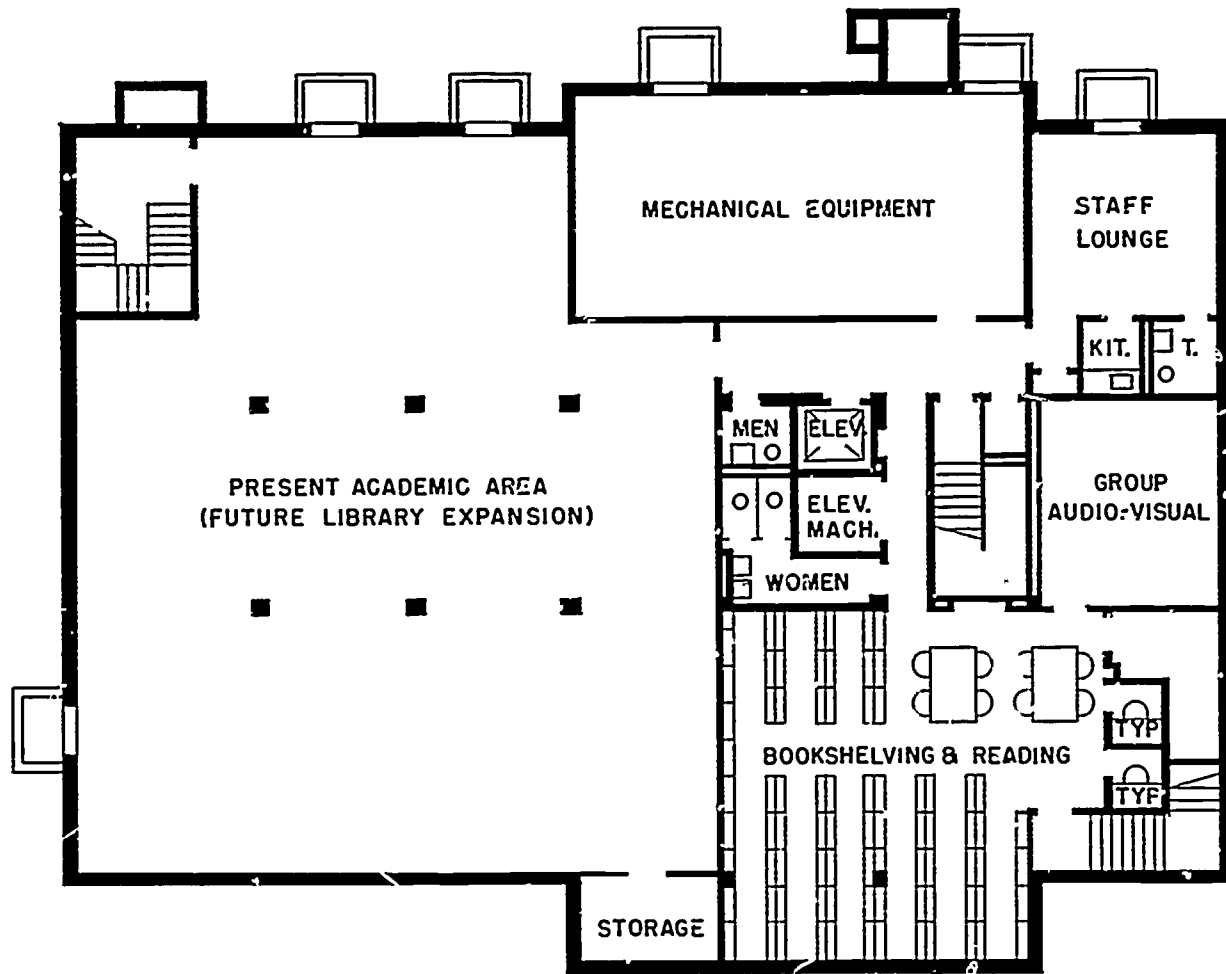
Cost per square foot: \$19.50



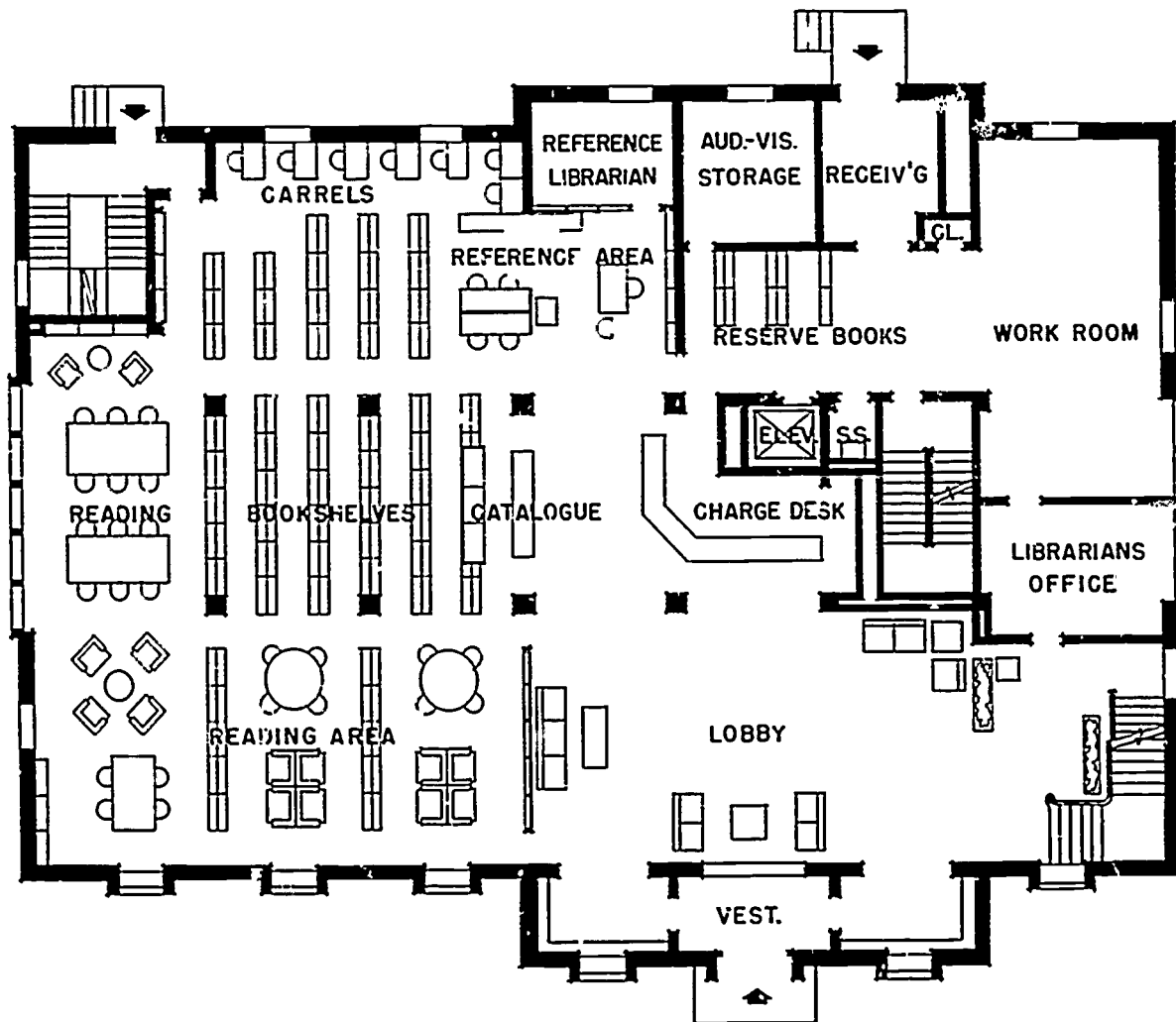
Library building, Cazenovia College



Second-floor plan, Cazenovia College



Basement plan, Cazenovia College



First-floor plan, Cazenovia College

audio-visual materials, such as records, tapes, headsets, portable record players, and tape recorders for circulation to students for use at the listening tables or carrels. This room is close to the circulation area, thus providing quick service from a centralized circulation control desk. It is also located near the processing area, so that it can be used to provide isolated space for electronic equipment when further automation of technical processes is desired.

The technical processes room, located on the main floor and next to the receiving and shipping room, is spacious, well lighted, and organized for an efficient, orderly, controlled processing of library materials. In addition to the usual equipment provided for such rooms, as sink, cupboards, properly spaced electric outlets, book trucks, and the like, there is a specially designed unit for bibliographies and reference materials. This room is so designed as to provide for future growth and varied needs. Adjacent bookstacks provide for periodical and book storage. A 10 passenger elevator, located adjacent to both the processing and the circulation areas, provides services for staff and equipment to all floors. A staff stairway, which opens off the technical processes area, provides additional private, direct access to all levels.

The planners having recognized that new electronic devices now make possible learning from other than the printed page, the new library was conceived with the purpose of tapping all learning resources now available. In practice, therefore, instead of the instructor using his valuable classroom time to show a film, for example, he can arrange for multiple showings of this film in the learning center during nonclassroom hours, thus freeing his classroom time for the discussion and reactions to the material covered in the film; or, by the provision of tapes of an instructor's major lectures, the needs of the slow or absent student are cared for and much valuable conference time is saved.

The library has thus become the resource center of the college where the student acquires the skill to use and interpret these educational tools, and thus becomes better prepared to live in an ever increasingly automated world. The philosophy of the Witherill Learning Center is based on the new role that comprehensive libraries play in providing facilities for the use of all learning materials, be they books, microfilm, records, tapes, films, slides, or open or closed circuit television.

The machines themselves (various projectors, readers, players, TV receivers, teaching machines, duplicators) which convey the knowledge stored in these materials are important primarily as carriers, but still provide the student with the means for a greater availability of resources for independent study than ever before.

This does not mean that the concept of the library as a collection of books is any the less im-

portant. The larger portion of the learning center is still devoted to the book library. But the traditional concept of the academic library is blended with the new concept of a learning center where learning takes place in a variety of ways and by the use of diversified tools, the selection depending upon the needs of the student and the direction of the faculty. At times, a student learns best from reading a book, or listening to a tape, or watching a film, or from a combination of all three. It matters not what carrier is used to convey knowledge to the student. What does matter is that all ways of learning are available and tapped by the student to be used for her total understanding. This comprehensive concept of a library is what the Witherill Learning Center at Cazenovia College seeks to provide.

DONALD THOMPSON

The Witherill Learning Center is generally a well-arranged library, but there are a few things that might be changed.

The library is located near the center of the campus. With some reservations, to be mentioned later, the general arrangement is good. The core services and functions, such as the circulation, reference, technical processes, card catalog, indexes, and librarian's office, form a unit on the main floor. Auxiliary services, such as seminar rooms, smoking rooms, group study rooms, listening rooms, and the Cazenovia Room, are located on other floors.

The total floor area is 21,000 square feet. 18,000 square feet is now in use with 3,000 square feet set aside for future expansion. In the finished part of the building there are 202 seats for a predicted future enrollment of 600 students. This amounts to 33 percent, which is good for a two-year college. In the finished part of the building there is shelving space for 60,000 volumes. The library now has 16,000 volumes and adds 2,000-3,000 volumes annually. At the present rate of growth, there is shelving for at least fifteen more years—no. counting the space for future expansion.

A wide variety of seating is available with emphasis on single seats. The seating is well distributed throughout the building and the bookstacks. The technical processes area has about 500 square feet of floor space. With only one full-time staff member now working in this room, there is enough space for the present and the future. The technical processes area is adjacent to the shipping room, loading platform, and a storage area.

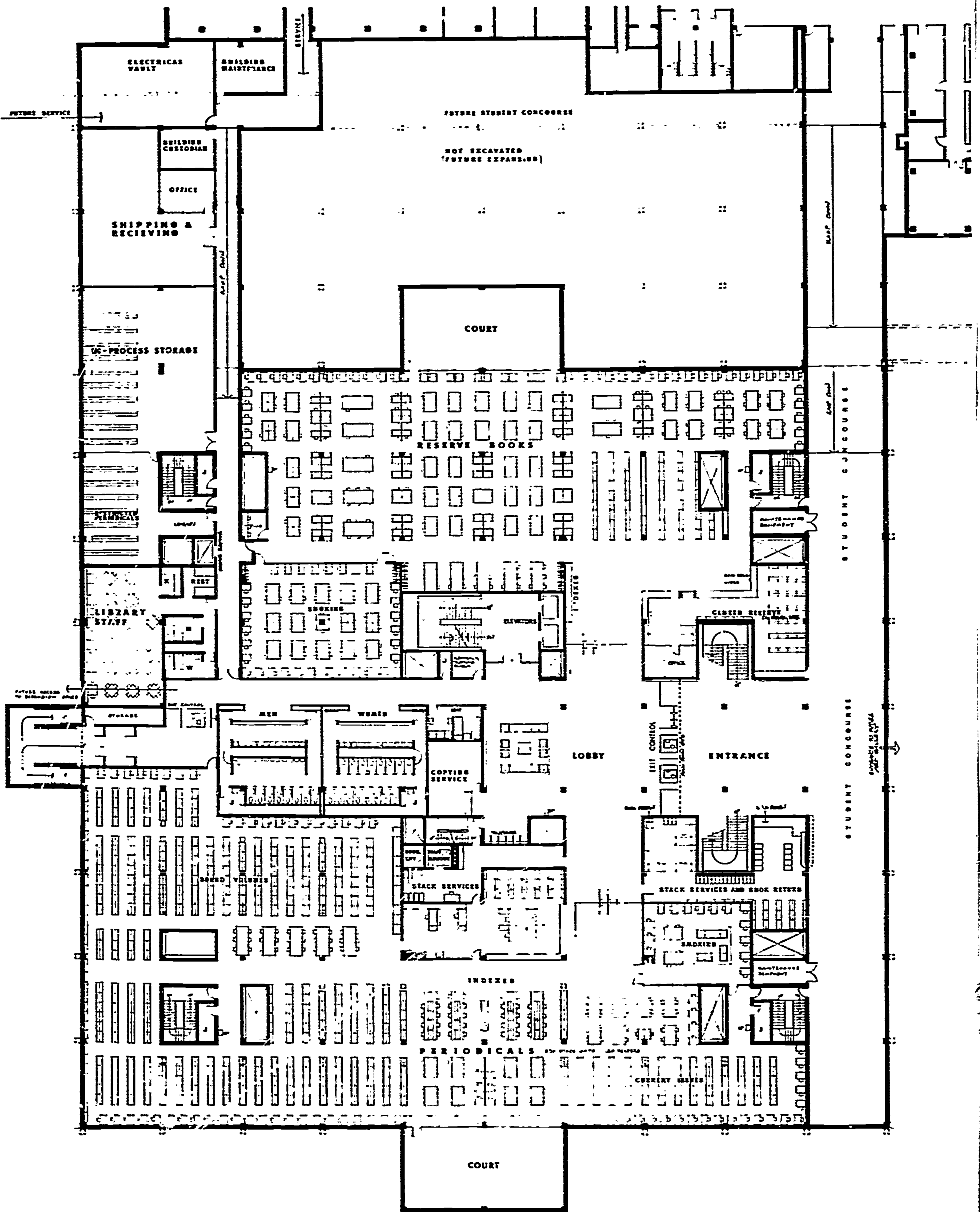
There are several other favorable points. There is a storage area for books. Carpet has been used throughout the library except in the work area. The front door is at grade level which gives easy access for wheelchairs. The work space seems to be sufficient for the present staff of four full-time people. There are ample special facilities and areas, such as seminar rooms, study rooms, faculty studies, and

typing rooms. As a learning center, the equipment provided is good and the space well distributed. Provision has been made for coats and boots. There is a good deal of display space. The traffic pattern is adequate. The library has been limited to three floors.

In a small library, it is generally necessary for all staff members to take turns working evenings and on Sunday. This makes it necessary for their primary work area to be adjacent to the circulation desk so that they can be available for information, reference work, and supervision. The present arrangement places the elevator and a stairway in the center of the core area. Thus the circulation desk is somewhat isolated from the workroom and the librarian's office. This is not a good arrangement. The circulation desk should be placed near the public entrance; and the workroom, card catalog, reference collection,

indexes, and librarian's office should be adjacent to the circulation desk and without visual barriers.

Since there are already two stairways, it is questionable if a staff stairway is needed because it takes good space on three floors that might be used for more important functions. The entrance on the northeast corner of the building should be locked where it enters the library since it is the entrance to the unoccupied part of the building. One smoking room might be moved from the second floor to another floor. The use of a glass screen just inside the front door has the effect of a barrier between books and readers. The science department will be using the unoccupied area of the library. Experience has shown that nonlibrary functions in a library are difficult to move when the library needs the space unless a clear understanding has been reached beforehand.



Basement plan, West Bank Library, University of Minnesota

PRESENTATION OF PLANS

Associate Director of Libraries: *Ralph Hopp*
Architect: *Robert G. Cerny*
Critic: *G. M. Abel for William H. Jesse*
Director of Libraries, University of Tennessee,
Knoxville, Tennessee

UNIVERSITY OF MINNESOTA WEST BANK LIBRARY

Minneapolis, Minnesota

RALPH HOPP

The present central library of the University of Minnesota was constructed in 1923, at a time when holdings of the University Libraries totaled 395,000 volumes and the enrollment in the University was less than 8,000 students. Today, in 1965, the Libraries have more than 2,250,000 volumes and the University's enrollment is already over 38,000.

In projecting campus building need for an expected 49,000 student population by 1970, the University made the decision to relocate the social science and humanities departments, the school of business administration, and certain other academic units in a new expansion area on the west bank of the Mississippi River, across from the present Minneapolis Campus.

The library has long felt an increasing pressure for more space for both books and readers, and consideration was given to several possible solutions. One would have been an undergraduate library, with mass study facilities, with the present main library (Walter Library) serving as a research library. Since the academic units scheduled for relocation were moving the entire scope of instruction and research activities—undergraduate and graduate—to the West Bank, the recommendation was made that

a major new library facility, housing the social science and the humanities collections, be constructed in the new campus area. The new West Bank Library will serve, also, as the central headquarters for the University Library System.

The University's system of libraries includes more than a dozen units on the Minneapolis Campus, six on the St. Paul Campus about three miles away, and separate libraries on the branch out-state campuses at Duluth and Morris.

The Walter Library has a capacity of 1,250,000 books and 1400 readers. Other library units on the Minneapolis Campus bring the total library capacities for this campus to 2,000,000 volumes and 3660 readers. In addition the library has an off-campus storage facility which has a capacity of 200,000 volumes, now about half filled. It has only 8 faculty studies and 108 stack carrels.

The new West Bank Library, scheduled for completion by late 1967, is designed in such a way as to provide easy access, at the basement level, to the most heavily used materials, namely, the reserve book and the periodical collections. Mass seating will be provided in these areas, accessible through an entrance from a 25-foot wide, enclosed traffic corridor connecting the library with the nearby office and classroom buildings.

The main entrance to the library will be on the plaza (or ground) level. Here will be the union card catalog, the technical service departments, a research and bibliography area, a general information desk, and the main circulation desk. This floor will be the information hub of the library, from which patrons may go either down to the basement level or up to the stack levels on the second and third floors.

The fourth floor will house the James Ford Bell Room, the special collections department, the documents collection, and the library's administrative offices. About 90 faculty studies and nearly 300 carrels will be located throughout the stack areas, with

STATISTICAL DATA

Architect: The Cerny Associates, Inc.

Minneapolis-St. Paul, Minnesota

Type of library: University

Population to be served: 38,000

Area: 328,276 square feet

Book capacity: 1,500,000 volumes

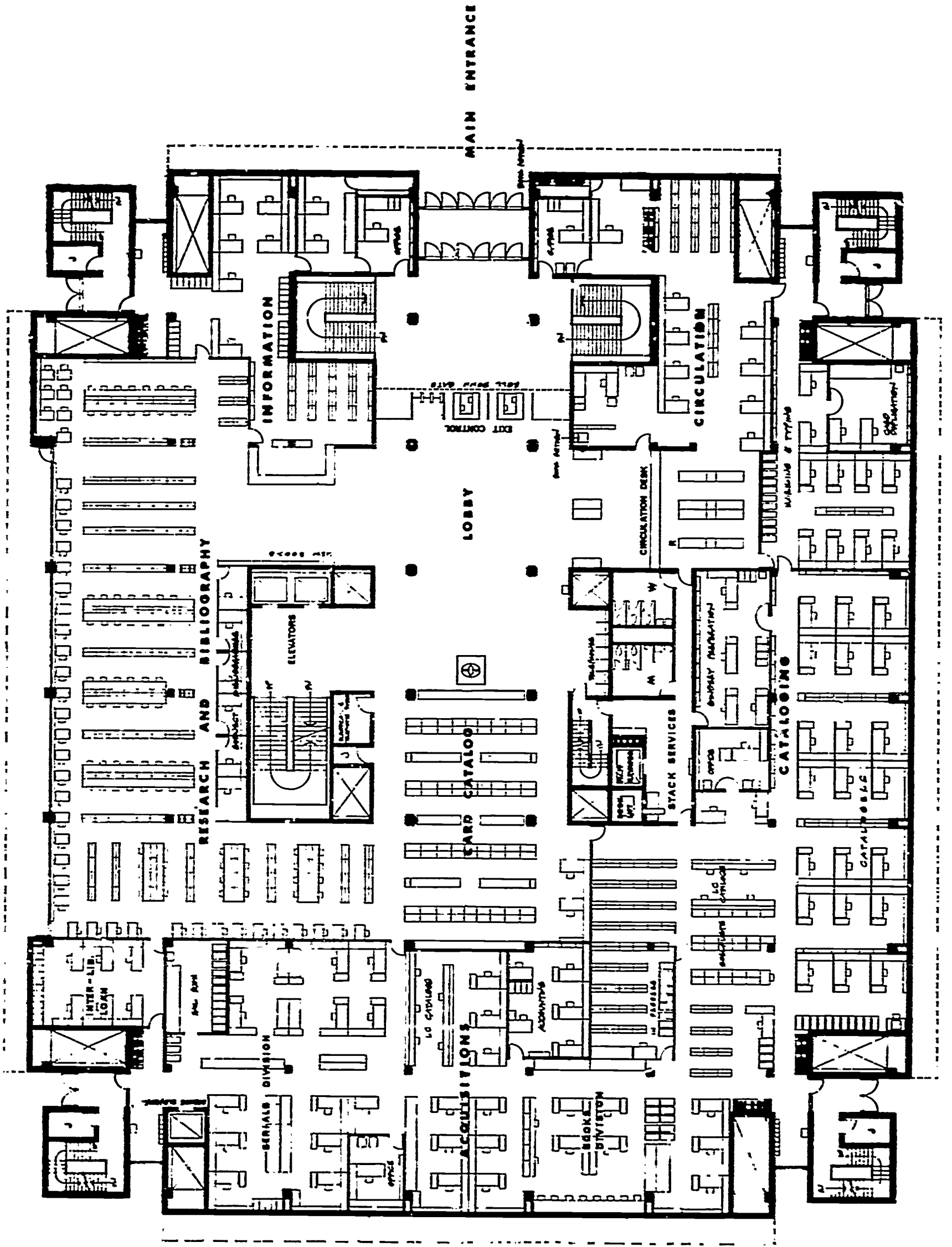
Seating capacity: 2,700

Cost: \$7,752,500 (building and equipment)

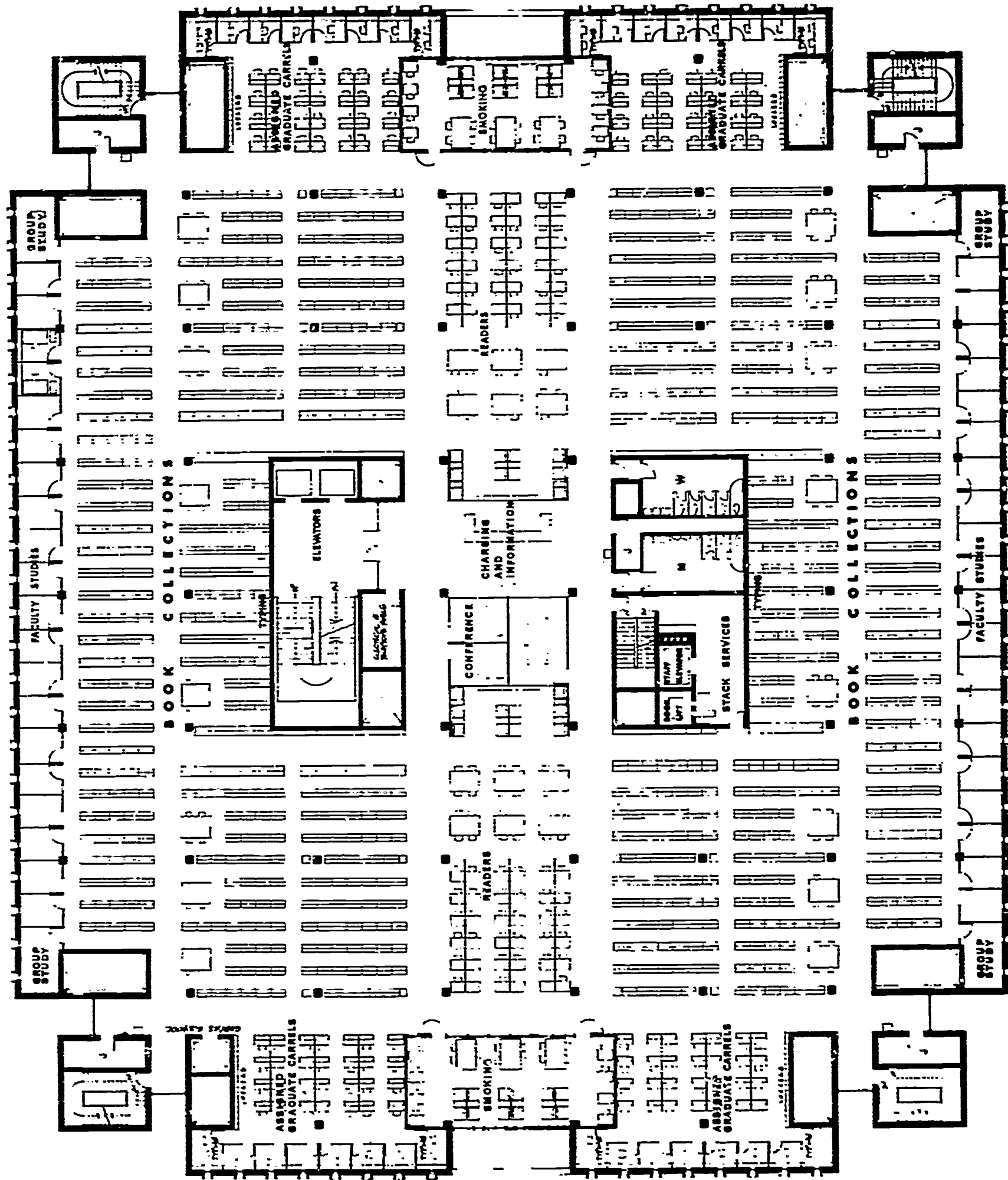
Building: \$6,802,500

Equipment: \$950,000 (estimated)

Cost per square foot: \$22.50 (construction cost)



Plaza floor, West Bank Library, University of Minnesota



Second and third floors, West Bank Library, University of Minnesota

an additional 40 faculty studies ultimately to be provided in walk-up space above the fourth floor.

The entire library, except for rare book areas, will have open shelf access, and only limited paging of books will be done. In general, undergraduates will find most of their library needs met at the basement level, where easy access and mass seating are provided. The research use of the library will tend to concentrate on the upper floors. There will be no restrictions, however, in the free travel and use among all of the various levels.

The new West Bank Library will have a capacity for 1,500,000 books and 2700 readers. About three fourths of the seats in the new library will be single reader units. The total seating will approximate 15 percent of the enrollment on the West Bank of the Minneapolis Campus. This additional reader capacity, coupled with that of the existing Walter Library on the East Bank, should provide a major improvement in the present overcrowded library facilities for the students, faculty, and research staff of the University of Minnesota.

ROBERT G. CERNY

The University of Minnesota has outgrown its original location, and the Mississippi River was always a great psychological barrier until we began measuring the distance, and in truth it is shorter to cross the river to a new West Campus than to extend with annual rings on the periphery of the old East Campus.

The new library is located in the center, really at the heart, of the new campus. A question was raised, during our planning, concerning future expansion and whether we had limited ourselves here. We also felt there really was no good way to add on top of a building. The construction operations required to increase the size of any structure vertically are expensive and enormously disruptive. So we have planned for future expansion underground, on two levels if this proves necessary.

It is important to emphasize the two major entrances to the library: one at the plaza or grade level, and one at the subplaza or concourse level. The plaza, or grade-level entrance, leads to the bibliography, card catalog, and technical services sections. At the next lower level, and entered from an underground concourse, are the "supermarket" functions of reserve reading, periodicals, and other services. The second- and third-floor levels contain book collections and reading areas. The fourth floor houses administration, documents, and special collections. There is also a subbasement which will contain maps, newspapers, microfilms, and the Ames Library of South Asia.

At this point it would be appropriate to point out that the basis for this plan developed from what we call the "Metcalf module," which in our case led to a 26-foot-square structural bay. Dr. Metcalf was in-

strumental in the development of our planning increments. This bay dimension allows space in either direction for 8 stack ranges for storage; 7 stack ranges for open stack usage; 6 stack ranges for periodicals or areas where there is more student activity; 4 faculty studies 6 feet, 6 inches on center; 4 student carrels of the same dimension in width but not so deep; and 2 group studies at 13 1/2 feet wide.

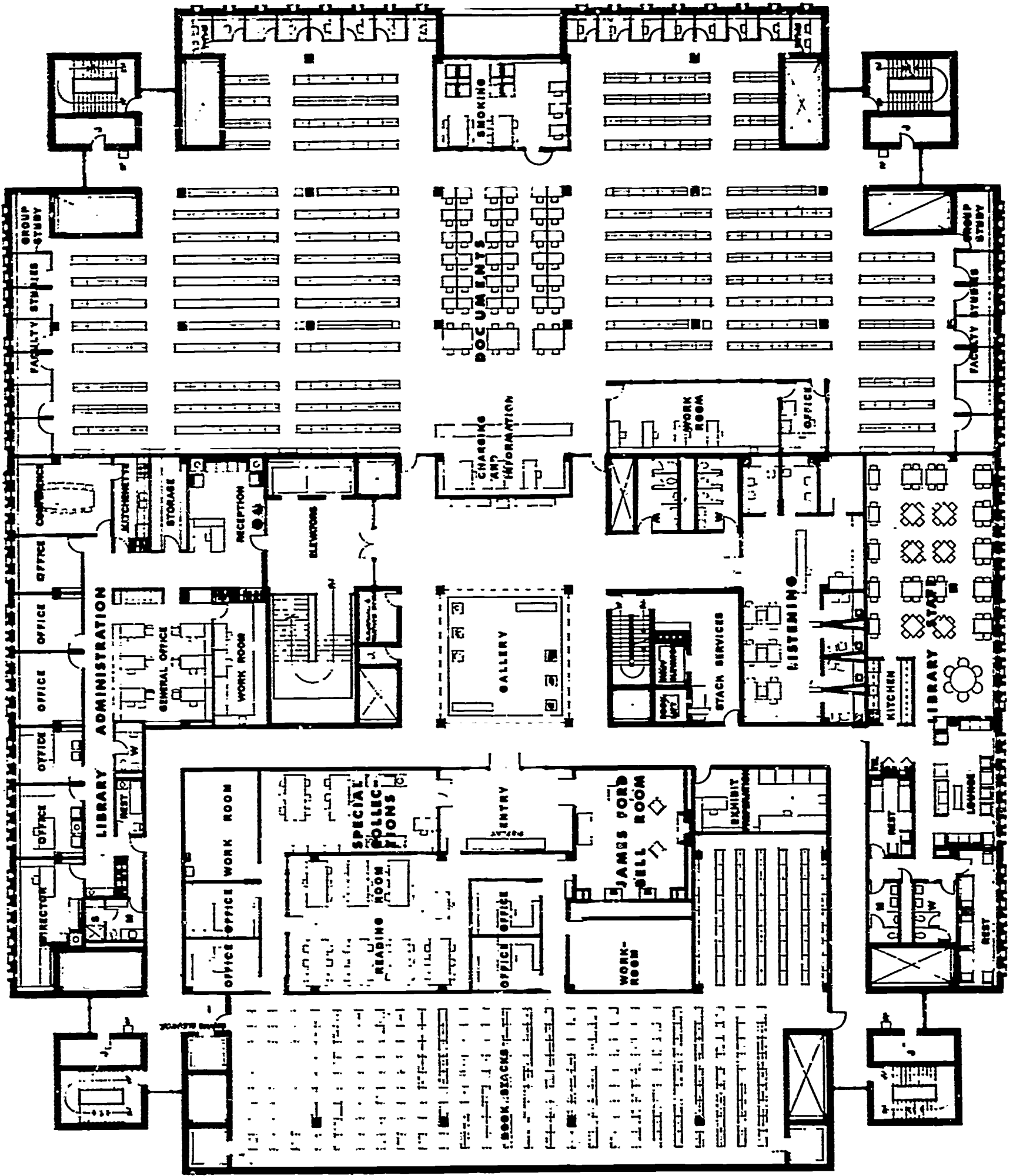
Since the module is square and the ceiling relates to the building module in both directions, the lighting and air-conditioning ceiling systems are also modular. In other words, they are located within every building module in such a way that library flexibility in either direction is possible. The system also includes various modular combinations of reading tables, individual desks, and carrels. With this system it is possible to interchange bookstacks with reading facilities as need arises, and we hope that the plan will provide ultimate flexibility.

We have also established an architectural design consisting of narrow windows on the exterior based on this 6-foot, 6-inch module, so that the window module relates to the interior carrel module and it would be possible to have carrels along any exterior wall. On the fourth floor, in the administrative offices where we feel we need more light, we have additional windows, and in other areas we have eliminated all windows.

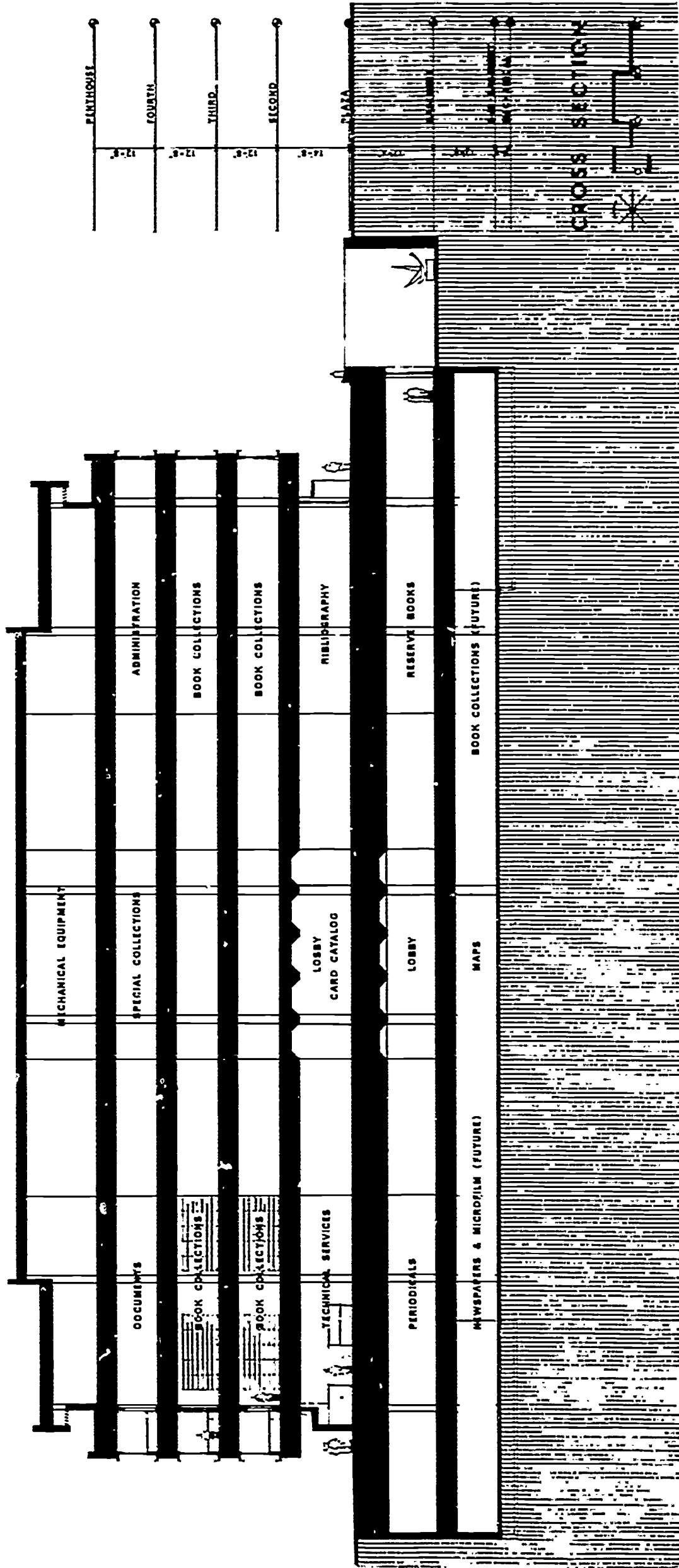
I have not mentioned our exit control. We have a library entrance on the lower level off the main concourse, and another at the plaza level right above. At each such main entrance there are entrance turnstiles and four check-out counters. Thus on the two levels we have a total of eight check-out stations. We also have one station at the rear for emergency purposes and overload periods, depending upon the capacity of the library at the time. I presume that in general the one at the rear would not be used except when the burden within the building increased to a point where it was necessary.

A stack service core consisting of a staff stairway, a booklift, a staff elevator, and pneumatic tubes is repeated on every floor. With our library module, we can take out stacks and add desks, or vice versa, wherever they seem necessary for present or future needs.

We have several interior and exterior areas for exhibits and art work, but they have been minimized because our librarians have found that the maintenance involved has been significant. However, in the plaza in front of the building, there will be an 80-foot-square sunken sculpture court at the underground or basement level. Between this sunken court and the underground concourse there will be a gallery or museum area, and students can walk past the entrance to the library and see straight through the gallery into the exterior sculpture court. It is our hope that with this prominent location for the gallery, the students will be exposed to many fine works of art and the library will be identified with the very heart of art and cultural interests on the campus.



Fourth floor. West Bank Library, University of Minnesota



Cross section, West Bank Library, University of Minnesota

G. M. ABEL

As far as overall planning is concerned, it seems to me that the decision to have a social sciences and humanities library for undergraduates, graduates, and faculty and to handle in this library the central technical services and the total library administration is a good one. Minnesota undoubtedly is facing up to a tremendous problem of growth, and could have decided on other possibilities, such as separate undergraduate libraries. While many of us have, or are planning, undergraduate libraries, not everybody needs one, as Keyes Metcalfe has pointed out time and time again.

The site of the new building could hardly be better. The architects have tied the library in well with the overall underground student traffic pattern. Students from Florida attending this institute may not appreciate the advantages, if not necessity, of the underground access. Plans for expansion are sound and would appear to be adequate. The decision to use the underground levels for future growth is good, as this allows the building to show more of an architectural entity than would otherwise be the case.

Basement Level

Shipping and receiving. It is unfortunate that shipping and receiving does not have direct access to the loading dock. It is also some distance to a service elevator. The location of the service dock makes it necessary to use the student circulation tunnel in order to enter the library and to dispatch materials to their receiving rooms.

Restricted periodical area. I cannot comment on the restricted periodical area, because I do not know what is meant by restricted periodicals.

Smoking area. There is an enclosed smoking area off both reserve and periodicals. Personally, I do not like enclosed smoking areas. They create all sorts of problems—physical and psychological. I much prefer to have the smoking lounges open so that the number of people who are to use them can be flexible. The engineers can carry the smoke away as long as they know where these lounges are to be located. There is not very much provision for smoking, and very little lounge furniture is used, not only in the smoking areas but throughout the library. Lounge furniture can be overused, but I believe there is too little of it in this library plan.

The *staff room* on this floor seems to contain only tables and chairs, with no lounge furniture to provide a relaxing atmosphere. Also, there seem to be no lockers for the staff.

Periodicals. Having the periodicals together, bound and current, has advantages, but they are at some distance from the research and reference area, placing the reference librarians far away from some of their most heavily used reference aids. Periodicals may have a separate staff, but I am talking about inconvenience to the general reference staff. This

distance may also require considerable duplication of indexes.

Exit control on this floor is good. Actually, it is good throughout the library, particularly so for a large open shelf collection.

Plaza Floor

I do not understand the roll-down gate. I do not recall seeing in the program any plan to provide for night study here, but this may be its purpose eventually. The relative locations of the functions on this floor are good. What is called "information" is really ready reference; research and bibliography are reference. The subject bibliographers' offices here are well located.

Circulation. While I know the plan is to charge books on each level, the central circulation on this floor will have to answer questions, since charges from all levels will be filed here. In the circulation area proper, as you may have noticed, there is a great deal of room. This may be to provide space for future automation, if employed. But I do believe that the circulation counter, recessed as it is, may become quite congested; it might best be placed so that more staff could be behind the counter and more customers in front of it. Also, the recess makes for an uneven flow of traffic.

The card catalog is well located, readily accessible to acquisitions, cataloging, reference, and circulation, and, of course, to the public. The binding area is small if all outgoing and incoming work is to be handled here. It might well be nearer the periodicals themselves; it might even be on a lower level.

Cataloging. I believe there is not enough space for typing and marking when compared with the number of catalogers being provided for. There are spaces for 18 catalogers and for 13 clerks. Student assistant help will be used for some marking and typing; nevertheless, I would say that more space than is now shown will be needed even if students are used. I asked my technical services personnel to study the plans, and they felt they would prefer, as many technical services people do, an opened-up rather than a walled-off technical services area. There is a wall between the catalogers and typists. The binding preparations area might be used for books in process, and the space now designated for that as possible extension of staff accommodations in the processing area.

Serials. Even though there are no plans to do cataloging in the serials division, it is probably not too large, since it also includes gifts and exchanges.

Acquisitions. The arrangement of the divisions in acquisitions, I feel, is good.

There are two LC catalogs, and the public has access to neither of them. Maybe West Bank plans to have a third one. Nor can the public have access to the shelf list, which may be something they would like to do at times. It seems to me the shelf list and

perhaps facilities like the LC catalog might be arranged to constitute a bibliography alcove in a more traditional sense, which can be opened to the public even when technical services are closed. I do not know where the *Cumulative Book Index* and similar tools are to be, but these, of course, should be readily accessible. In a library this size duplication of such sets is necessary.

The book division has very little shelving. Keeping the books on trucks and keeping them moving is exactly what should be done, but some shelving is required.

Elevators. Vertical transportation from shipping to technical services is all right. It is the horizontal that I think might not be too satisfactory. In a library this size (as at Cornell) there may be some justification for having an elevator just for technical services. Ordinarily, however, I think that all these elevators should be accessible to both public and the staff.

Flow of materials. Once the books arrive on this floor, their flow is good. They come through acquisitions, into cataloging, then to marking, typing, and on into circulation in a sensible way.

Expansion of technical services, if and when the traffic required it, would probably be from the plaza floor into the area immediately above, which is now assigned to graduate carrels. This area should be reasonably easy to convert to this use.

Public rest rooms. There are no public rest rooms on this floor, but they may not be absolutely necessary.

Second and Third Floors

I like the uniformity of these floors. The books are shelved in a good pattern, and it ought to be easy to follow the scheme. Also there is a good distribution of books and readers. Profuse interspersing of readers and books, while it might be all right in a small library, has proven to be quite confusing when the collection reaches proportions planned for this building. The reader simply cannot find his way about. Personally, I would prefer to have some lounge furniture on these floors, and not just enclosed smoking areas. The location of the graduate carrels, faculty studies, and group studies is good. This grouping of graduate carrels seems to be working out very well in new libraries. Actually, the partitions will give them the privacy they need. Since group study rooms are proving to be so successful in some of the new libraries, Minnesota might do well to provide for more than this plan calls for.

Fourth Floor

Special collections. I like the arrangement of the special collections area with its entry, display, and reading room facilities readily available, and another reading room where the library school classes

can meet and, I suppose, be lectured to without disturbance to the scholars who are working in the other reading area. The offices are central to everything. There is a separate workroom which is absolutely necessary, and an exhibits preparation which is also separate. All of this arrangement demonstrates much experience with what often causes confusion, inconsistency, and lack of order in a special collections facility. There are no windows, and there should be none. On this floor there is some lounge facility for the staff, which might well also be added to the first-floor staff room.

Listening facility. There is a listening facility on this floor, but on the whole there seems to be less of this than most new general libraries are providing.

Documents area is well located and the layout is good. Documents are always a headache, but having them in a closed area which nevertheless provides for readers, typing, group study, and faculty studies is excellent.

Administrative suite. As far as administration is concerned, I am afraid my comments will have more to do with library organization than with building. The large amount of space and number of offices provided for administration would seem to imply that the director, all division heads, and perhaps some department heads are to be housed here. Where this is done, I have noticed in many cases that the staff and/or department heads seldom seem to consult these administrative-level specialists. It is just too much trouble to go to see them, and they end up in administration per se rather than in area specialization.

I do not like a typist pool, either. I believe that some of these administrators would prefer to have their own secretaries in adjacent offices. Again, what follows is not a building comment, but an organizational one: I note that administration is on the fourth floor, and possibly the architect has followed his client's instruction that if the area cannot be on a floor readily available to the public, at least it should be obvious from the elevator entrance. If it could be on a lower floor, I think it would be better. It should be only one floor above the main entrance so that people could walk to it; if they are going to take an elevator, of course it does not matter how many floors are involved.

Items Applying to the Total Building

Windows. The windows are narrow, recessed, and otherwise treated to try to cut down on the sun which will disturb the reader. Nevertheless, windows create some problems. No damage is done on the east side in the building, or at least very little, by having windows. On the north side the same comment applies. On the west and the south, however, the windows are apt to give trouble in certain hours in the afternoon. On the west side the staff will suffer.

Ceiling heights. The 10-foot-8-inch ceiling in the subbasement is a good height. The plaza has 10

feet, 8 inches which is also a good height. The floors which have 8 feet, 8 inches I do not like so well. They are hardly high enough to permit shelving on top of the bookcases—an arrangement far superior to compact storage or distant deposits. In the installation of the shelving itself, the 8-foot-8-inch height can sometimes give trouble. Ceilings this low can often interfere with proper air movement and always create problems of light diffusion. The factor here may be the height of the building for the number of floors provided. Is it necessary to have 4 feet between floors? This space can be gradually reduced, with air traveling at a greater speed but in smaller ducts. Any space from 6 inches up that could be subtracted from this 4 feet and added to the 8-foot-8-inch ceiling height, I think, would be an improvement.

Staff assignments. An organizational rather than an architectural comment will be made at this point. The general impression I have is that the whole library is going to be rather heavily staffed. In many cases professional librarians are to be assigned in areas such as reserve, periodicals (with two), inter-library loan (with two), and so on. Many of these duties can be adequately handled by nonprofessional people.

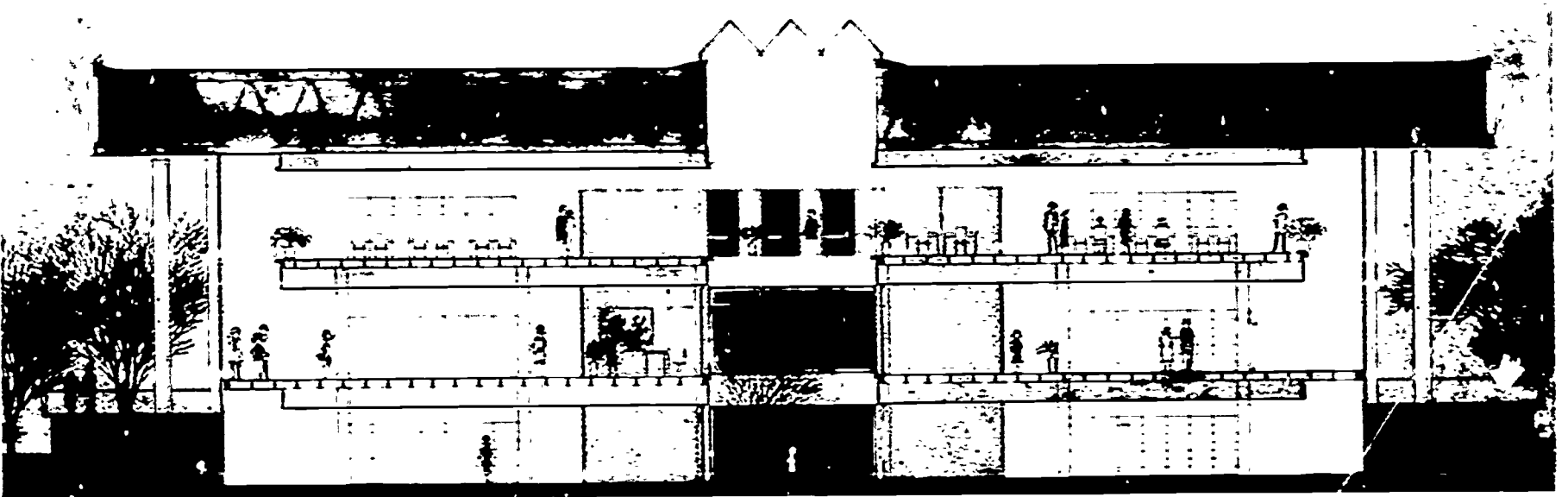
In general, I think the building is a fine one, and my staff and I had difficulty finding very much wrong with it, as you can see, without merely quibbling. One thing that bothered me from the start is that a general university library building of 272,000 square feet is going to accommodate only 2,188 readers and only 1,270,000 volumes. I realize no two buildings are alike. I further realize that formulas are for early estimates in planning. They cannot be applied with accuracy or sensibility much later as plans evolve and when the building is finally erected, occupied, and in operation. Nevertheless, a few formulas sometimes prove useful in a general check of

what is evolving from the plans. One I use frequently in such cases is to expect the library to provide at least 60 percent of the floor space for readers and books. This is not a useful formula in a large research library with a very few readers. Neither is it good in an undergraduate library with many readers and few books, but it often works out very closely for a general library such as the Minnesota West Bank Library.

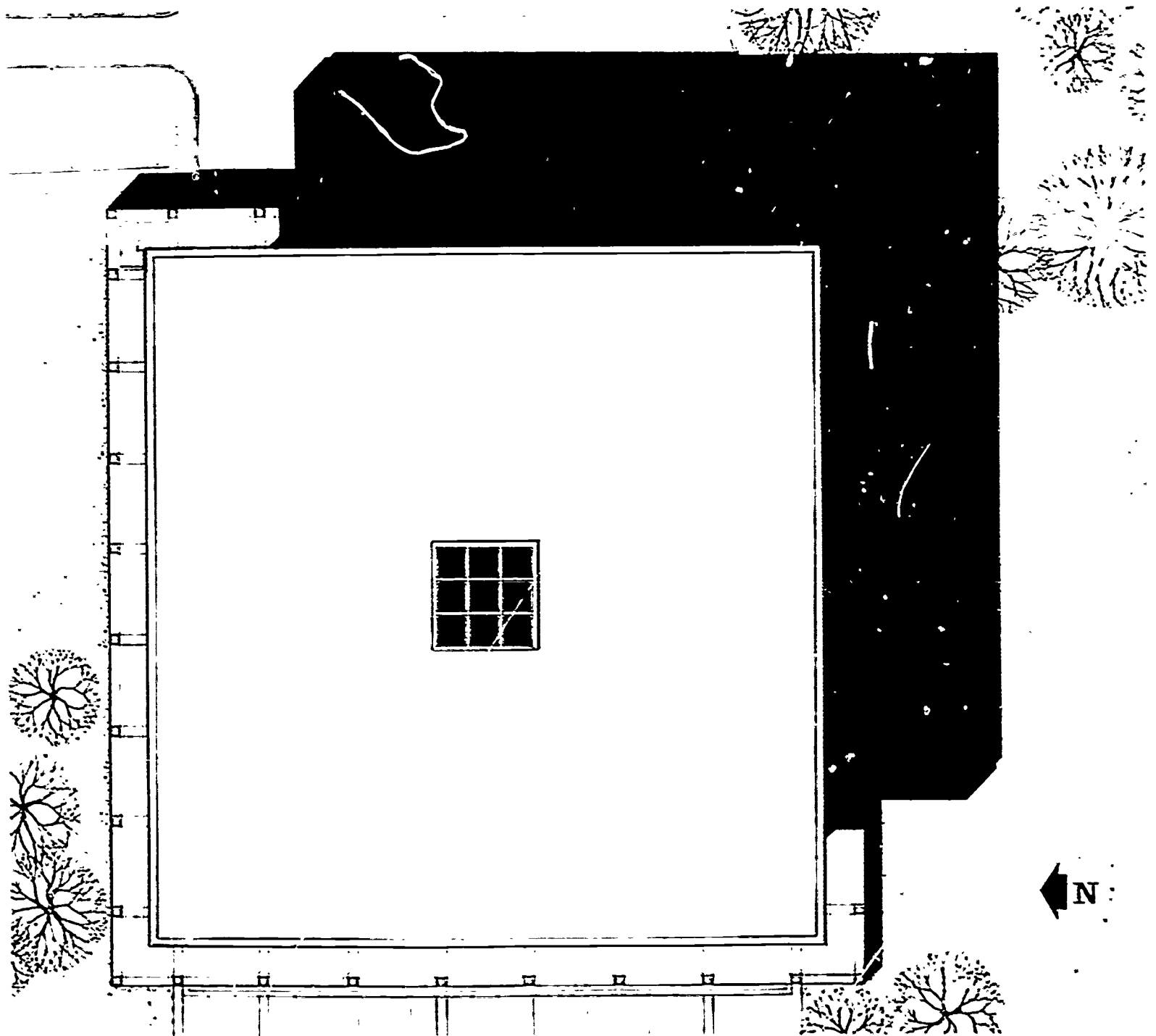
If the building provides for 2,000 readers at 25 square feet per reader (a figure which would probably work out in this building), 50,000 square feet would be assigned to readers. If the 1,500,000 volumes requested in the program could be housed at 15 volumes per square foot (which they probably could in such a collection), 100,000 square feet of floor space would be needed. The books and readers then would total 150,000 square feet, or less than 60 percent.

I am fully aware that, as I have tried painstakingly to point out, formulas cannot be blindly applied. But I worked on this angle because of my general feeling that a building of this size should indeed accommodate more readers and books than it apparently is going to.

Incidentally, in looking at the nonassignable area, which is approximately 96,000 square feet, I noticed that this is 35 percent of the total—a figure that I do not quarrel with, after checking the plans sent me and finding that the areas marked by the architect as unassignable are those which normally would be so defined. It is possible that somewhere in that assignable but nonreader, book total and the unassignable, there may be some space to round out the housing of the desired collection. Just where it lies is something which perhaps only a client and an architect could discover, if indeed it actually exists. I may be quite incorrect in my feeling about this aspect of the building.



Cross section, C. Y. Thompson Library, University of Nebraska



Site plan, C. Y. Thompson Library, University of Nebraska

PRESENTATION OF PLANS

Librarian: *Frank Lundy*

Architect: *Lawrence Enersen*

Critic: *H. Dean Stallings*

*Librarian, North Dakota University,
Fargo, North Dakota*

C. Y. THOMPSON LIBRARY

University of Nebraska, Lincoln, Nebraska

FRANK LUNDY

The University of Nebraska has three campuses. The City Campus in Lincoln is at the north edge of the downtown business district and occupies 146 acres. The East Campus is two miles northeast of the City Campus and occupies 340 acres. There are more than 40 buildings on each campus. The medical campus is in Omaha.

The City Campus in Lincoln houses the colleges of arts and science, business, dentistry, engineering and architecture, law, pharmacy, and teachers, and also schools of fine arts, journalism, and so forth. The East Campus houses the College of Agriculture, the School of Home Economics, and the Nebraska Center for Continuing Education. It soon will house the College of Dentistry in its new physical plant.

In 1964 the total full-time resident enrollment at the University reached 12,900; it is projected to more than 20,000 in the early 1970's. Enrollment in agriculture and home economics on the East Campus is 1200, and in dentistry approximately 150. Enrollments are presently increasing at the rate of 10 percent each year.

Looking to the future, the East Campus library, officially now the C. Y. Thompson Library, is located to be a centerpiece. The concept of the building is

very simple, but let me restate it, please. There are three floors in a square building. The upper two floors provide a continuous distribution of tables and lounges for readers around the entire perimeter. Inside this display of tables is a continuous formation of open bookstacks. All the library activities that require room enclosures are grouped into the center of each floor.

To make this arrangement feasible and attractive the architects made use of a light well in the exact center. Surrounding this light well on the upper floor are faculty studies; on the main floor the librarian's offices and workrooms; and on the lower floor seminars. The librarians requested seating for at least 500 readers, and open shelving on the upper floors for at least 100,000 volumes. Happily both figures have been exceeded.

One basic requirement was that the building should have internally an absolute minimum of fixed commitments, and that these should consist only of such features as stairs, elevators, and toilets. There are no load-bearing room partitions. This plan ensures a maximum degree of permanent flexibility in the use of the building in the future.

Another basic requirement was that the floors be strong—strong enough to hold any conceivable and reasonable weight load at any place and at any time, with structural strength approaching 200 lbs. per square foot. A third basic requirement was that the upper two floors be provided with continuous ceilings of good-quality light in order that books and readers might be given any desired arrangement at any time. In other words, floor strength or weakness and the location of lighting fixtures were not to dictate the location and arrangement of tables and bookstacks.

Then the architects added certain requirements of their own. As Mr. Enersen said: "A library should be self-evident to the reader." When the reader walks into the building, he should not have to wonder where he can go, or where he should go next. The main

STATISTICAL DATA

Architects: Lawrence A. Enersen, A.I.A.
Albert C. Hamersky, A.I.A.

Type of library: University

Population to be served: 14,000

Area: 58,456 square feet

Book capacity: 265,000 volumes

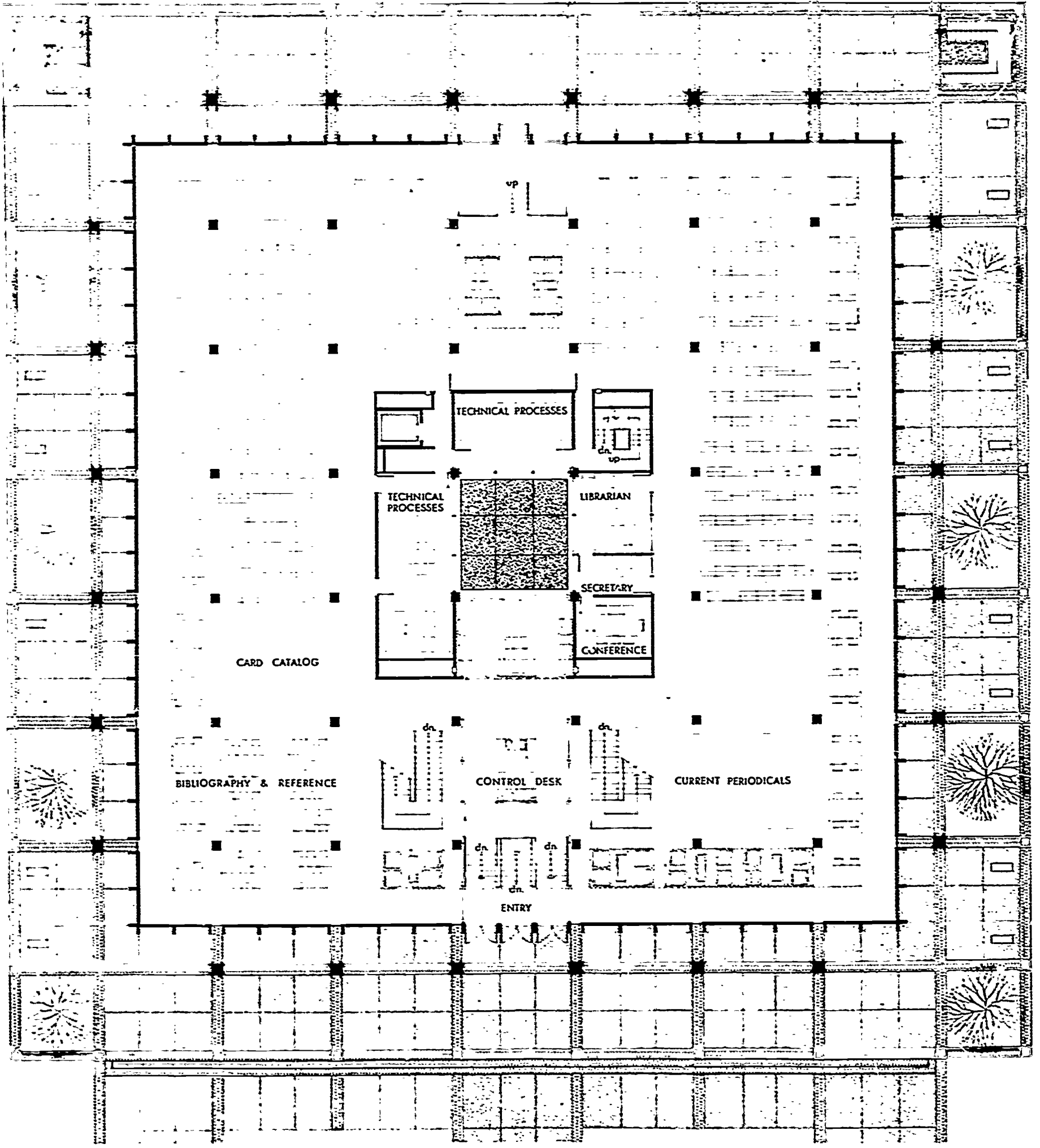
Seating capacity: 576

Cost:

Building: \$1,090,651.80

Equipment: \$151,368.18

Cost per square foot: \$18.65 (construction cost)



First-floor plan, C. Y. Thompson Library, University of Nebraska

floor is wide open. The card catalog, the indexes, the bookstacks, and tables are clearly in view on the left. Current periodicals, bookstacks, and tables are clearly in view on the right.

The architects also said that this library should be designed with a degree of transparency. The upper floor, planned to house research materials in agriculture and home economics, looks out through a continuous display of gray glass from floor to ceiling, and the surrounding landscape is one of beauty. Corridor vistas are provided on the main floor to focus the eye of the visitor on works of modern art, which will hang on the white walls.

The upper floor, the one that is surrounded by gray glass, sits on top of the modular columns below. There are strong structural supports at the four corners of the center light well, and the light well is one square module of space. Structural supports for the roof span from these center supports to columns which are outside the building. This feature leaves 16,000 square feet of floor space, except for the central light well of 500 square feet, permanently available with a maximum of flexibility. The only fixed structural building commitments on this floor are the front stairwells, the center core stairwell and elevator, the toilet facilities, and the light well. These commitments approximate 2,000 square feet, and the open space structurally uncommitted approximates over 14,000 square feet.

The upper floor contains 76 single tables; 12 tables 4 feet by 6 inches, each seating 4 people; and 16 lounge chairs. There are 24 single faculty studies, each with 2 tables and chairs. These faculty studies are walled inside and outside with glass. They are also draped on the light-well side so that the occupant has a degree of visual intransparency and still a high degree of privacy.

The various accommodations on this floor seat 188 readers, and there is convenient space now available for additional tables and chairs, adding 78 seats more for a total of 266. The open stack shelving on the floor totals 12,000 linear feet. At 6 volumes per linear foot this is a floor capacity of 72,000 volumes.

The main floor of the building is a typical modular construction with columns 22 1/2 feet apart, measured from center to center. Whereas the upper floor is an open tray 128 feet square, surrounded by a railing and 6 1/2 feet of open space, the main floor—somewhat larger, 141 feet square—extends from wall to wall. Instead of glass the walls on this floor are solid. There are 24 narrow slits from floor to ceiling just inside the exterior columns, and these are controlled with vertical Venetian shades.

In the upper floor, because of the continuous glass, one has a visual sense of being intimately related to the surrounding landscape. On the main floor, however, one is literally indoors. This makes it possible to satisfy a psychological state of mind for a variety of readers. Some students cannot

study, they say, and look anywhere, and other students do not like to study in a box or indoors.

The main-floor area totals 19,800 square feet, which is 3500 feet more than the upper floor. The structural commitments on this floor include:

- West-side main entrance
- Two front stairwells, extending upward
- Central core stairwell and elevator
- Light well
- East-side emergency exit.

No toilets are on this floor. The toilets are on the upper and the lower floors.

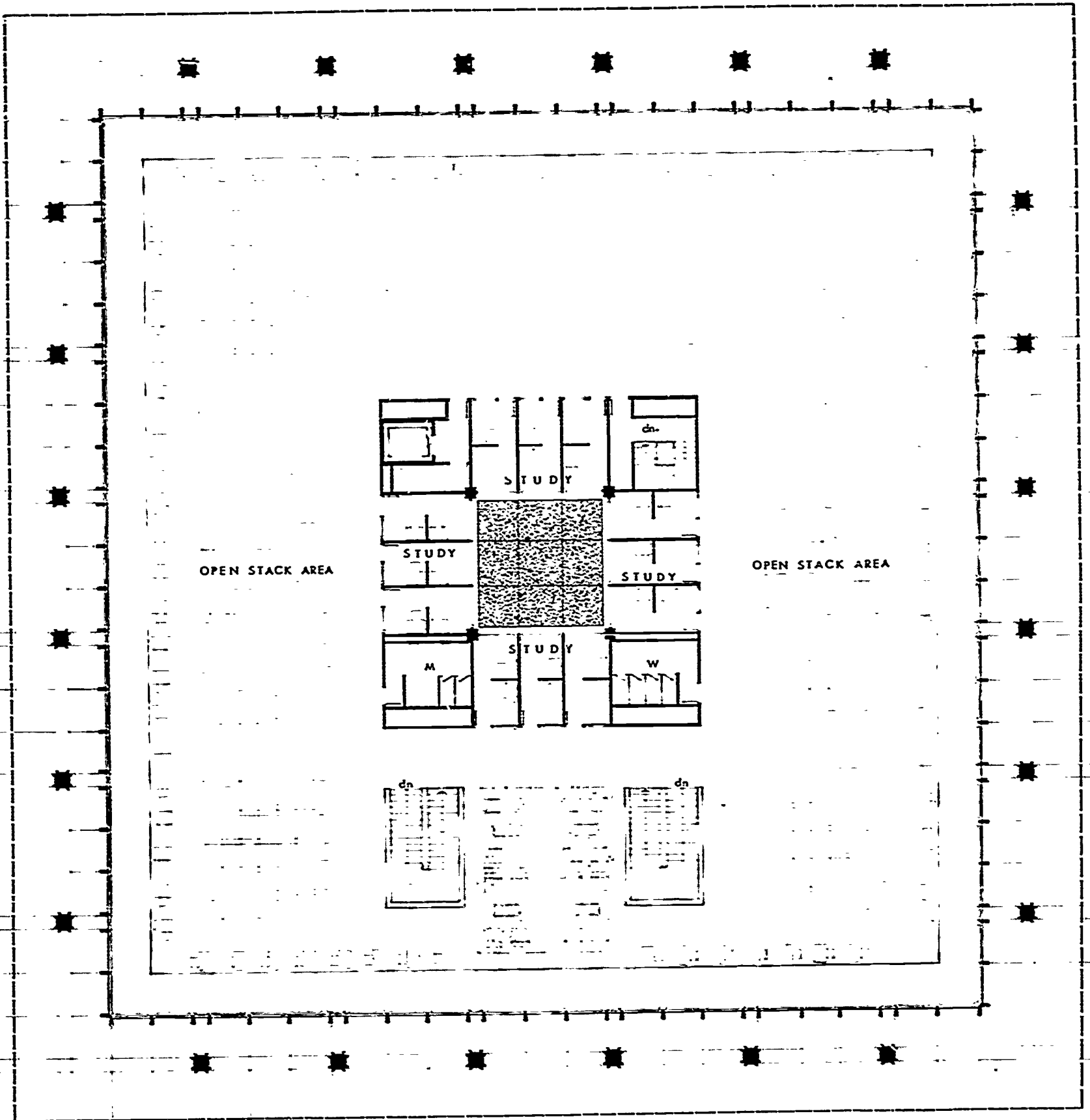
The seating on the main floor totals 254 and includes 73 single tables, 27 larger tables, and 31 lounge chairs. The open bookstack is 9700 linear feet—capacity 57,000 volumes. The special features on the floor include:

- Four lounge areas
- Open display of several hundred current periodicals
- Card catalog
- Bibliographies
- Indexes and abstracts
- Information desk.

The loan desk is compact, and at slack times one individual can control the two upper floors. The lower floor underneath the main floor operates independently of the two upper floors, and contains no open areas. Around the light well on the main floor are the librarian's offices, the workrooms, and the technical services areas.

The interior of the library, as a space, is a visual experience with white as the only background color for the wall surfaces. Color was introduced in the building interior in the lounge areas through carpet selection and furniture groupings. The large lounge area opposite the light well in the lower level received a rich Irish carpet called Avocado, which contrasts well with the white terrazzo surface of the light well. The main floor of the building has carpets of Stone Gray for lounge areas on the west, Charcoal in the formal lounge beside the light well, and Harvest Gold for the lounge area on the east. The upper-floor lounge carpet is a large area of Harvest Gold. The furniture groupings for each of the lounge areas are covered with Naugahyde, a synthetic material, in colors of mustard, black, and tangerine, and are coordinated with the carpet selections.

The extensive collections of library furniture and components are coordinated to meet the functional needs of a modern library. These furnishings are basically walnut-laminated surfaces with black metal supports. The interior woodwork and wood detailing are of walnut finish, and the metal door frames are in black. The floor surfaces are white terrazzo in the entry stairways and light well, with



Second-floor plan, C. Y. Thompson Library, University of Nebraska



Individual seating, C. Y. Thompson Library, University of Nebraska

white Vinyl tile as the principal floor covering. The lighting system is an uninterrupted white luminous ceiling.

The finishing touches of the interior include a white flame-resistant drapery fabric which is so sheer as to permit both light and privacy to the studies and the seminars. We also plan to add architectural pottery with appropriate plantings in the light well and several other places. Then we will decorate the entire building internally with selections from our renowned collection of works of modern art at the University of Nebraska.

The lower floor features a lounge, opening into the light well; a combined area dedicated to the Hall of Agricultural Achievement, which is an official statewide group advisory to the College of Agriculture; and, surrounding the light well, five seminars. Across the hall to the west are two typing rooms and a microfacsimile center. These several facilities seat 132 individuals. The 188 seats on the upper floor, the 256 on the main floor, and the 132 on the lower floor add up to 576, which we hope to increase by another 78, to 654, for the building.

On the lower floor are two large bookstack rooms, one on the north and one on the south. These rooms are 36 feet wide and 103 feet long, with a 2 1/2-foot aisle extending along the interior wall. The stack ranges fill the room; they are 45 inches apart from center to center. In each of the two rooms there are 11,000 linear feet of shelving with a combined capacity of 134,000 volumes. With the capacities of 57,000 volumes on the main floor and 73,000 on the upper floor, the building is now equipped to house 264,000 volumes. The lower floor has the same dimensions as the main floor, except that certain extensions have been added on the east side for the delivery and loading area and for mechanical-equipment supplies and storage.

The acquisition and catalog departments for the several libraries on the two Lincoln campuses are located in the University Library on the City Campus, downtown. In the East Campus Library, however, are located the following technical service functions:

- All the procedures of bibliographic identification which precede acquisition and cataloging
- All library exchanges correspondence and records for East Campus material
- All East Campus serial records and receipts
- Certain special projects, such as remarking back sets of volumes for selective reclassification from Dewey to Library of Congress.

The technical service area is located on the main floor, in the offices around the light well. It is adjacent to the bibliography and reference center and to the card catalog, and affords easy access to the central serial file and to the shelf list. There is good vertical transportation for incoming and outgoing materials—an elevator in the light well group—and

convenient access between the receiving, shipping, and work space on the lower floor and the technical service space.

Data processing equipment and operations will be easily installed when these are developed as an extension from the University Library. Xerox copying is provided in the lower floor; present and potential office areas provide adequate space for growth.

Finally, let us consider the exterior of the building—from my point of view. The basic material covering all structural elements is a precast concrete using white cement and an exposed quartz aggregate. The nonstructural walls are either gray glass or a small, black, ceramic tile produced in Japan. The podium of the building is covered with a red brick which recalls the material used in many of the older structures on the campus. The surface of the podium is essentially a paved surface broken by small planting areas and furnished with benches and flowerpots along the balustrade. This paved surface is an extension of the building 24 1/2 feet in all four directions. The building module is expressed by brick grid lines separating concrete squares of paving.

Externally, this building is impressive. Its lines are strongly vertical and horizontal and quickly attract attention in the surrounding college campus display of trees and flowers and grass. The building is white inside and outside; the interior is bathed in a soft, white light. At night the exterior is floodlighted. The total aspect is both imposing and inviting.

LAWRENCE ENERSEN

The following simple requirements for the C. Y. Thompson Library were set forth by the owners:

- An open shelf system with a capacity of 100,000 volumes
- An additional capacity of 150,000 volumes in semistorage
- Space for 500 readers
- All areas with the greatest possible freedom from structural members
- Operation by a minimum staff.

The architects, too, had set down some requirements as follows: A building exhibiting a clear statement of its purpose; disciplined and significant as a symbol of academic life.

In the planning process of this building we enjoyed an unusual working relationship with the administration, the librarian, and his staff. We met at stated intervals, discussing freely the problems connected with the library, and only after long discussions were any lines drawn on paper. These lines, the first ones, were drawn freehand at large scale, so that they were easily changed and adjusted.

If a library is to serve as a symbol of academic life, then its position on the campus seemed to us to be of initial importance. During the development of

a master plan for the campus, the site was selected as one which provided a position of prominence, and one which anticipated the shift of the academic center of gravity to the east.

The original buildings on the campus had been organized around a mall running north and south. Until the construction of the library the mall continued to be the heart of the campus, even though numerous buildings to the east had set up minor tensions to the north-south axis. It remained for the library successfully to tend the visual pattern to the east, permitting a whole new constellation of buildings.

In our preliminary research of open shelf libraries it became apparent that many presented a pattern of disarray. The buildings were often plausible in terms of function, but they did not appear orderly in an outward expression nor in the sequence of the interior spaces. It seemed to us that if any building should speak of order, it would be a library whose sole purpose is to create order out of written confusion. We deliberately sought, therefore, a form and composition which would express a high degree of discipline and yet permit a logical unfolding of function as one investigated the interior.

The exterior expression which we sought was one that would be persuasive as to intent, and one that would announce in simple terms the importance and the nature of what was happening within its spaces. Because of the prominent position on the campus, we also felt that the building should have a degree of transparency, because it "plugged" a space from the west to the east.

To architects the exterior should also tell the manner in which the building was constructed. An architect who notices that there is no column at the corner and also that the columns do not touch the roof, or at least the column casings, immediately knows that the building is a steel structure, and we feel that this expression of material is important. The library site slopes from the front to the back so that the building picks up almost a story in height as you go from the front of the building to the rear.

This slope is taken up by means of a podium on which the building sits. The lower floor, or ground floor, contains the mechanical-equipment spaces within this podium; it also contains facilities for the semistorage which was mentioned in the program and many other features. The first floor, to which the public is readily admitted, is the second level.

The structure of the building is really in two parts: the columns penetrate through the main floor and hold the upper floor in the manner in which a tray would rest on your fingers. This is the structure which supports the books and does the work of the library.

A second structure keeps out the elements. The columns outside the building support a roof which spans across, providing nothing but the roof function. The "tray," the second floor, does not touch the outside walls, so that there is a two-story space sur-

rounding the entire first and second floors. There is an obvious advantage to this method of construction when you realize that on the second-floor level there are no columns whatsoever to interfere with any position of furniture or of shelving that the library might elect to place there in the future. There is complete freedom; there is, you might say, no module to contend with, because even the lighting is a continuous, luminous ceiling, and there is never the problem of trying to get proper relationship to a light fixture.

I mentioned that we wanted the building to have some degree of transparency because of its position on the campus. This was achieved we think, or hope, by having glass in the upper portion of the wall and a dark tile in the lower sections, so that the space between the columns is relatively dark and has the appearance of transparency, although actually only the upper portion admits any natural light.

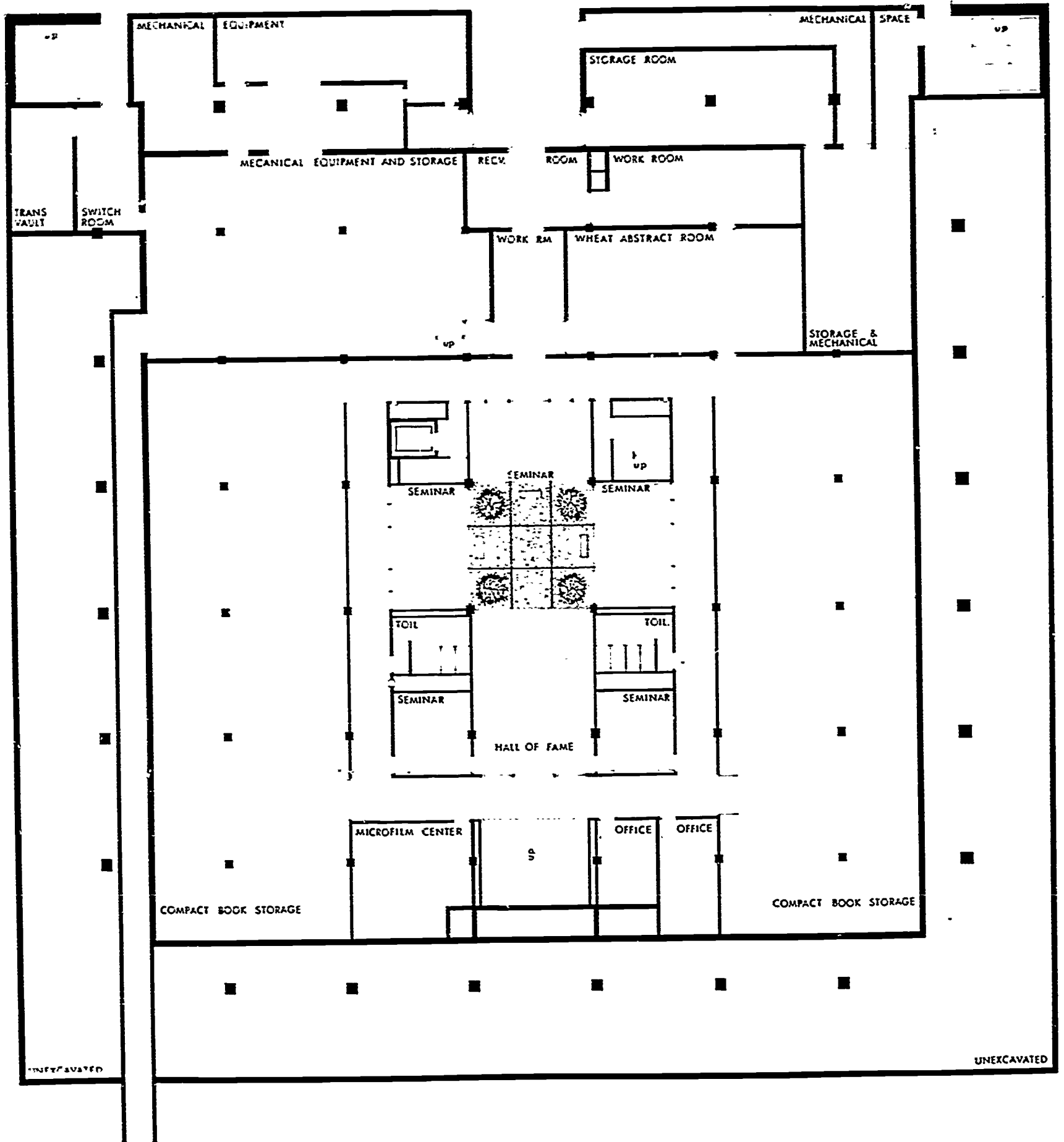
We think that every building should not only solve the practical requirements which are set forth, but also become a visual experience as one approaches, enters the building, and senses the unfolding of the inner spaces. This is particularly difficult in an open shelf library where, once inside the building, you are constantly confronted with 7-foot shelving.

I should also say that when we were first working on this project, we considered the space around the periphery as being sort of an ambulatory, because students who are reading books frequently have to get up and ambulate around to adjust themselves to the long period of study. Whether or not the space will develop in that manner, or whether it may ultimately be needed for desks, I do not know, but I still think it is valid to have a certain space within the library for walking and moving about.

Entering the front door, you have a choice: you can go to the main level, or you can go down to the lower floor, via a stairway which terminates in the courtyard. I think it only fair to say that in the initial planning of this building there was some thought that administrative offices would be put in the lower level. As it developed, this arrangement was not used, but nevertheless the planning was such, and that is one reason why the building sits up above the ground, making possible this lower level which could have been used for administrative offices.

The entire top floor is surrounded by a gray glass window. Naturally we were concerned about glare and about sun pattern on the floor. In our budget we had an allowance for shades or draperies or whatever might prove to be necessary to offset them. This expenditure was deferred, however, until we had used the building for a year to see whether it was really necessary. That money has since been released, because we have decided that we do not need further shading. This is due to three factors:

1. The glass is a gray glass which does not look gray from the inside, and that cuts down some of the glare but certainly not all of it



Basement plan, C. Y. Thompson Library, University of Nebraska



2. There is a wide overhang which gives a positive shadow for much of the year and
3. The high level of illumination inside the building makes the glare, if there is any, unnoticeable. As you know, glare results from a great contrast in lighting, and since we have almost a hundred foot-candles inside, even a small sun pattern on the floor would not be distracting in that high degree of illumination.

You have quite a surprise when you enter the building because the main floor is enclosed. There are some slit windows, but the feeling is one of enclosure—the space is introverted. But when you climb the stairs, the whole vista expands and you can see out to the campus all around you.

H. DEAN STALLINGS

Recently, I read an article which said that a good small library should have the following features available to be seen when you come in the front door, namely:

- Catalog
- Circulation desk
- Reserve book room
- Current periodicals
- Reference collection
- Stairs and elevator.

These are all to be seen in this building with the exception of the elevator, and the planners purposely did not want to make this a public elevator.

There is good coloring in the drapes, the walls, the lounge furniture, and the rugs. When I was in the building, I saw white, olive, gray, charcoal, mustard, black, tangerine, and gold.

In the stack areas whole rows of shelves have been replaced by lockers. In other places shelving has been replaced by coat racks so that you can hang your coat back in the stacks. The planners have also come closer to solving the usual overshoe problem than any library I have ever seen. At the bottom of each coat rack there is a little metal drip pan about the same size as the bottom shelf in a stack unit, and the students put their overshoes there.

Some special periodical shelving permits the display of the current copy with the back numbers right underneath. A lot of glass has been used in the building, but you have heard by now that it has been used most judiciously. I ordinarily would not recommend an open, hanging staircase for a public building, but this staircase is really a work of art. In the front entry there are two places to return books.

The library has a public address system. Parking is limited, but there is plenty of space where the School of Dentistry will be built. The circulation desk I thought was too small, but the traffic pattern is good—you go out by the side of the circulation desk

and you come in in a wider lane. Missing from the plan is a smoking room. I do not know whether Nebraska has state laws against smoking or not, but no provision has been made for smoking in the building.

I thought the janitor's closets were small compared to the size of the building. There is no staff room, and I'm sure that was not an oversight, either. And the elevator is nearly lost.

The technical processing rooms are rather small, but most of this work, of course, is done on the main campus.

All told, this is a very fine library. As the critic, I should like to be the first to congratulate the architect, the librarian, and also the State of Nebraska for their excellent facility.

DISCUSSION

Question: Do you have any trouble with the heat rising from the main floor to the top floor in view of three things: (1) the open space all around, (2) the open stairway, and (3) the open well? I should think the top floor would become very hot in the winter.

MR. LUNDY: We had a very severe winter, and this problem did not seem to be present. I was in the building many, many times.

Question: What provision has been made for people who cannot climb the stairways?

Answer: This building has an inside elevator, and we will gladly give a key to any handicapped person to carry with him.

Question: How do these handicapped people get into the building?

Answer: They enter through the delivery entrance on the east side which is at ground level.

Question: What material is used in the carpeting?

Answer: The material is Acrolan. So far we have had nothing but good experience with it. It wears very well and apparently performs better than wool.

Question: Do you have reserve shelving?

Answer: Most of our reserve assignments are on open shelves, in regular classification sequence, both in this library and also in the big one downtown. In the East Campus Library we have a few books on reserve just behind the information desk on the main floor. But only a handful! We have been operating for a long time on the theory that 80-90 percent of commonly requested reserves should be out in the open shelf collections with enough copies to take care of the readers.

This is the practice we follow. We accept the fact that there are always dozens, or hundreds, of volumes on two-hour assignment. Our librarians determine what goes on reserve after a full conversation with faculty members. We never take a reserve list at face value.

Question: I would be interested in hearing about the lighting system.

Answer: The open bookstack and reading areas on the two upper floors are lighted by louvered ceiling lighting systems. There is a continuous luminous plastic louver over the entire area, with continuous rows of fluorescent lighting fixtures on 30-inch centers, about 20 inches above the plastic ceiling. The plastic ceiling louvers consist of hollow cylinders about 1 inch in diameter and about 3/4-inch thick. Curved plastic shields are hung under the fluorescent tubes to shield them from view and to diffuse the light evenly over the ceiling. We have 120 footcandles in the reading areas, and about 70 footcandles in the stack areas. The offices, seminars, and study rooms are lighted with recessed, round, incandescent lighting fixtures,

and in these areas the lighting level is about 70 footcandles. I might add that the distance in the clear from the floor to the ceiling on the main floor is 9 feet, 8 inches; on the upper floor, 9 feet; and on the lower floor, 8 feet.

Question: How do you clean all that plastic hanging over those lights?

Answer: The fact is, they do not get very dirty in Nebraska where we have no coal soot. Our heat is supplied by natural gas.

Question: Why were you not able to enter directly on grade? Why do you have to go up three steps to get to the esplanade, and then three more to get into the building?

Answer: Administrative offices were considered for the lower space, and in order to have any natural light in these areas, we raised the first floor. Unfortunately, the decision reversing this plan was not made until after the building was built. Therefore we have this split-level effect.

PRESENTATION OF PLANS

Librarian: *H. W. Apel*

Critic: *Clyde Haselden*

*Librarian, Lafayette College,
Easton, Pennsylvania*

MARSHALL UNIVERSITY LIBRARY

Huntington, West Virginia

H. W. APEL

Marshall University is a state university located in Huntington, West Virginia, a city of about 85,000 at the extreme western part of the state. It was founded as Marshall Academy in 1837 and became state-supported with the creation of a normal school in 1867; teacher training has always been an important part of the program. Through the years an "academic program" led to the establishment of baccalaureate programs in the 1920's, graduate work in the 1940's, and a name change from "Marshall College" to "Marshall University" in 1961 reflecting the changed character of the institution. Marshall is located in the fast-growing Ohio River Valley and is near the Kanawha Valley, which is one of the centers of chemical industry of the world.

Marshall University is a regional university essentially undergraduate in character with primary emphasis on the teaching function. In recent years there has also been a small but growing research program at the master's level, in honors work, and at the faculty level. The instructional program is carried out through three undergraduate schools—

the College of Arts and Sciences, the Teachers College, and the College of Applied Science—with master's degree level work in the Graduate School which draws from the faculties of the undergraduate colleges for its instruction. In the fall of 1963, total enrollment was 4748 and in fall, 1964, it was 5246; during 1964/65 there were 623 graduates receiving baccalaureate degrees, 228 receiving master's degrees, and 37 receiving two-year associate degrees.

Marshall's 1964 on-campus enrollment of 5246 included 4665 undergraduate and 409 graduate students. Enrollment in two two-year branch colleges at Logan and Williamson, each about 75 miles distant from the main campus, totaled 431. Extension class enrollment was about 350. One long-range enrollment estimate indicates the on-campus enrollment will be at least 7600 by 1970; another 1970 estimate indicates an enrollment of 8385.

What will Marshall be in the future? We are quite certain that gross enrollment will be not less than 7500 to 8000 by 1970. The major part of this increased enrollment will be undergraduates and will bring greatly increased demands for library service to students at the lower-division level. It is equally clear that our graduate work will increase. Master's level work is being offered in an increased number of departments: a six-year program is being offered in one department and another department has proposed a Ph.D. program, with several others expected to follow.

Undoubtedly the demands placed on Marshall's graduate program will hasten as industrial development of this rich Ohio Valley proceeds and as business and industry in southern and western West Virginia bring in more personnel who will wish to pursue further academic work and secure advanced degrees. This increased graduate work, along with more specialized faculty interests, brings with it increased demands for augmenting the collections with much more, and more specialized, material.

STATISTICAL DATA

Architect: Dean & Dean, Architects,
Huntington, West Virginia

Type of library: University

Population to be served: 7,600

Area: 74,652 square feet

Book capacity: 362,500 volumes

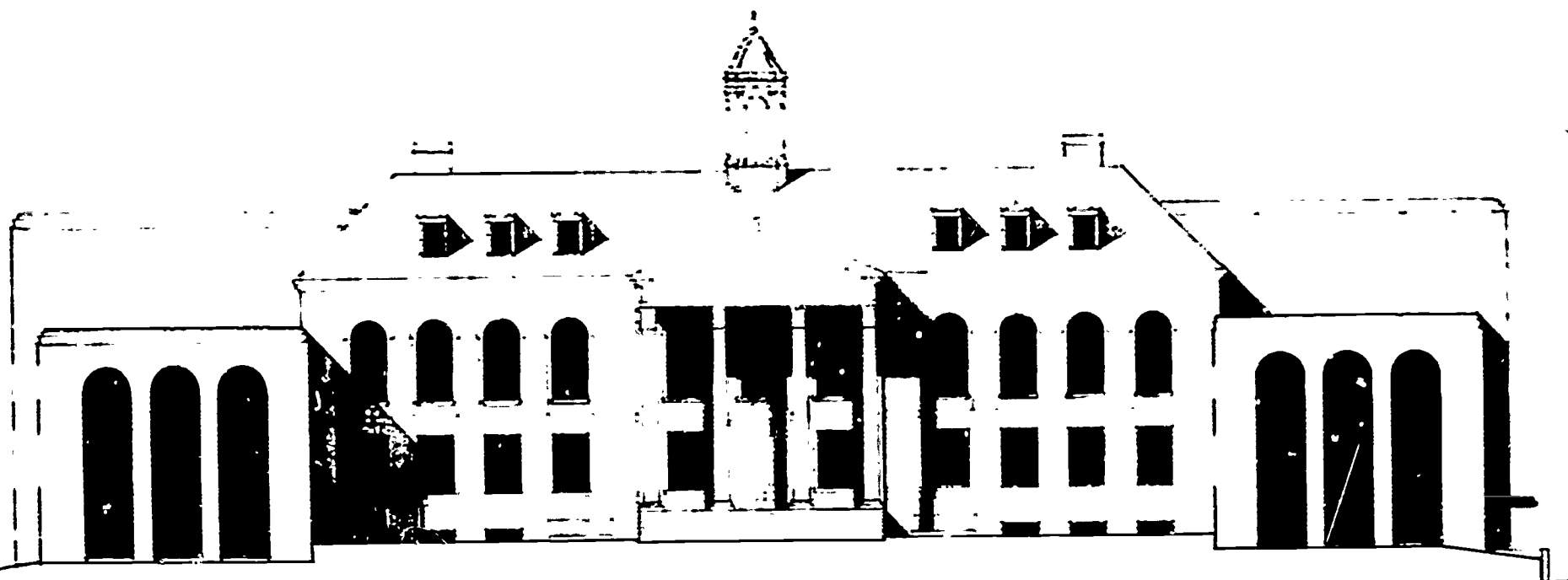
Seating capacity: 850

Cost: \$1,900,000

Building: \$1,500,000 (estimated)

Equipment: \$400,000 (estimated)

Cost per square foot: Remodeled area, \$12
(estimated construction cost)
New area, \$20 (estimated
construction cost)



North elevation, Library Addition, Marshall University

What are the implications of this future pattern of enrollment and instruction for the University Library? Simply stated, they are threefold: (1) improved service to undergraduates and other students whose needs are similar, i.e., those students enrolled in large classes, often with multiple sections, and whose book needs are essentially similar; (2) expanded facilities for individualized study and research at the graduate and upper-division undergraduate level; and (3) provision of an adequate amount of an appropriate type of space for an enlarged program of faculty research and study. These three areas were developed in detail in our program proposal.

Before proceeding to our proposal, a word about our existing library is in order. The present University Library is organized along traditional lines. A circulation department handles loans from the general collection for home use as well as loans of reserve books. A reference department has responsibility for all reference work, for occasional formal instruction in the use of the library, and for use and maintenance of the reference collection, the West Virginia collection, the U.S. Government documents collection, and the periodicals collection. A cataloging department handles all cataloging and preparation operations and does bibliographical searching for acquisition work. The librarian serves as administrative head of the University Library and directs all acquisition work.

The library building, built 1929-31 as a combination building with classrooms on the first and ground floors, serves well a traditional type of organization for an essentially undergraduate institution. It is an imposing building of Georgian design and has become a campus landmark. It has the typical monumental reading room not uncommon thirty-five years ago with the inevitable high ceilings and long tables, each of which seats a dozen or more students. There is a small closed stackroom with very little space for administrative functions and preparation operations. For a small college with most teaching of the

lecture-textbook variety—with a few assigned collateral readings and perhaps a “library problem” or two—the building probably was quite adequate when it was built.

Now, however, thirty-five years later, enrollment has increased from about 1300 to more than 5000, and a growing graduate program and an increasingly research-orientated faculty are making demands of quite a different nature than the building was ever designed for. The collections have increased from about 25,000 volumes in 1929 to about 140,000 volumes now. Seating is available for only 300.

Structurally the building is in excellent condition. It was well designed, well built, and has been well maintained. On several occasions minor alterations have been made to permit library operations to expand into areas not devoted to library uses previously. For instance, in 1958 the library occupied all the classroom space on the first floor, and in 1963 the attic was finished and air-conditioned to provide an excellent stack area with a capacity of some 40,000 volumes.

As we reviewed the needs of our undergraduates and other students who attend large classes, the needs of our graduate students, and those of our faculty, we came to the conclusion that we really needed separate facilities for the two basic types of users. We felt that we had not just one building expansion problem, that of merely providing more space for more books and more spaces for more users, but a dual problem, which seemed to lead us unerringly to separate facilities for the special use of the two types of users.

So we proposed a separate facility primarily, but not exclusively, for the use of undergraduates. Quarters and collections would be designed especially for lower-division students and others enrolled in introductory courses and other large classes. This would be a facility for mass-use for students whose patterns of book needs are quite similar rather than highly individual. Here would be found an open shelf collection of books and other library material which should

supply at least 75-80 percent of the library needs of all but the most advanced students.

We have named this facility the "Collegiate Library." It was felt that this name was preferable to one which would indicate that use of the facility was limited to undergraduates only or would imply that undergraduates would be limited solely to use of this portion of the overall University Library. As finally planned, the Collegiate Library will seat slightly more than 400 with shelving for more than 50,000 volumes.

Along with this newer mass-use facility, we propose greatly to expand in the general collections our holdings of material which is of particular use in individual research in all academic areas. The general collections would include many titles also held in the Collegiate Library as well as all titles not appropriate to the Collegiate Library collections. The bulk of the collection will probably consist of more specialized material and material having research potential. We propose to provide for the use of these collections ample space specifically designed for individual work by graduate and advanced undergraduate students and faculty members.

The General Library would be for the use of all students, faculty members, and other approved users in our University community. Stack permits would continue to be issued to students and others who could profitably use the closed shelves. The enlarged closed stack areas would be equipped with ample individual study space for permit holders in carrels, cubicles, oasis areas, and the like, to allow their full and complete use. The main circulation desk would utilize student assistant pages to secure books for general users from the stacks.

Once our basic program concept was devised, we began to work with the architects. We have a local firm, Dean & Dean, Architects, who have just completed plans for a 3.5 million classroom and office building for us and who are quite familiar with Marshall. Although they have never designed a library building before, they seemed to grasp the basics of library planning quickly and are very responsive to our requirements.

At one time we all assumed that expansion of the library would be to the south, into the campus. This would have permitted a square building which we felt would have had the inherent administrative advantages of a compact unit. A quick estimate, however, indicated to us that such a structure would project too far into the campus to the detriment of our master land-use plan. Consequently we abandoned our preconceived notion of where the addition should go and let the program guide the architects as to location.

We did not actually prepare a program statement, which is a finished document. We did prepare a rather lengthy statement in which we reviewed the institution, the library as a part of the institution, and our philosophy of librarianship as embodied in our new plan for service in a dual-purpose facility.

We also prepared a number of working papers on various aspects of library operation to serve as bases of discussion with the architects.

We gave the architects only three stipulations which were "musts": (1) the control and bibliographical area *must* be in a central location (we told them, somewhat with tongue in cheek, that "the card catalog is used by almost everybody almost all of the time and *must* be close to everywhere!"); (2) we must provide for a sizable addition to the existing multi-tier stackroom; and (3) the exterior *must* be so designed as to be aesthetically appropriate and in keeping with the appearance of the existing building.

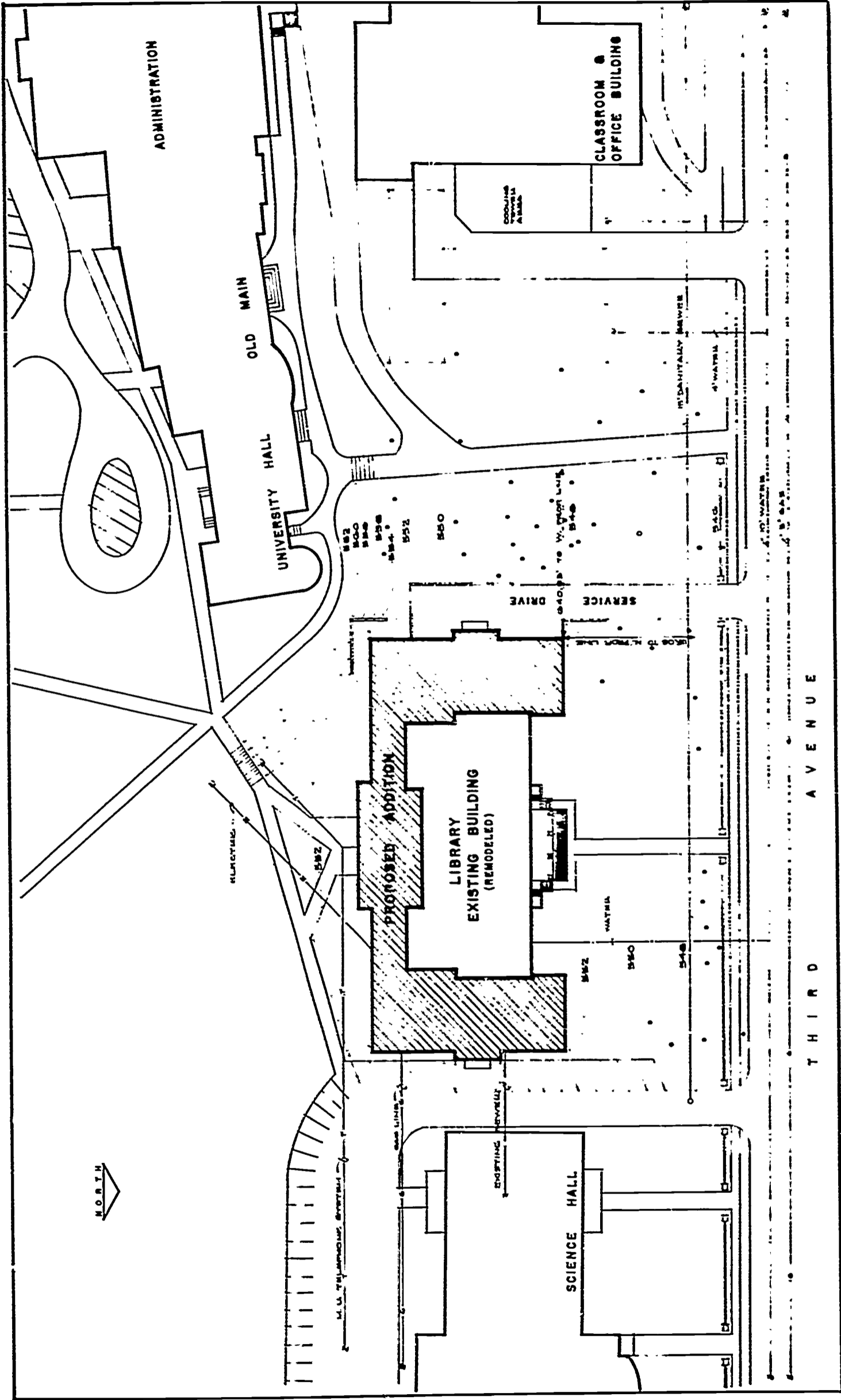
We originally planned a building for our estimated 1970 enrollment. Finding that the cost of this would be far in excess of our available funds, we made an attempt to design for today's enrollment (using American Library Association standards of seating and shelf capacity) and found we were still above our limit money-wise. Finally, we agreed to allow the architects to design a building which could be constructed within our budget, starting with the dollar and working with the program to provide as much space as they could with the funds available.

The preliminary plans call for extending to the south, into the campus, only about 20 feet and then literally "wrapping around" the existing building with an extension on both the east and the west sides which projects only 20 feet. As designed, there will be 93,566 *gross* square feet; in "assignable area for academic purposes," there is a total of 74,652 "assignable" square feet. There are 850 reader stations and a book capacity of 362,500. Virtually all the interior of the existing building will be razed and remodeled so that we will, in effect, have almost all entirely new space. Wherever possible, new construction will be free of interior walls to allow maximum future flexibility. The entire building will be electrically heated using electric resistance coils with chilled-water cooling (central system).

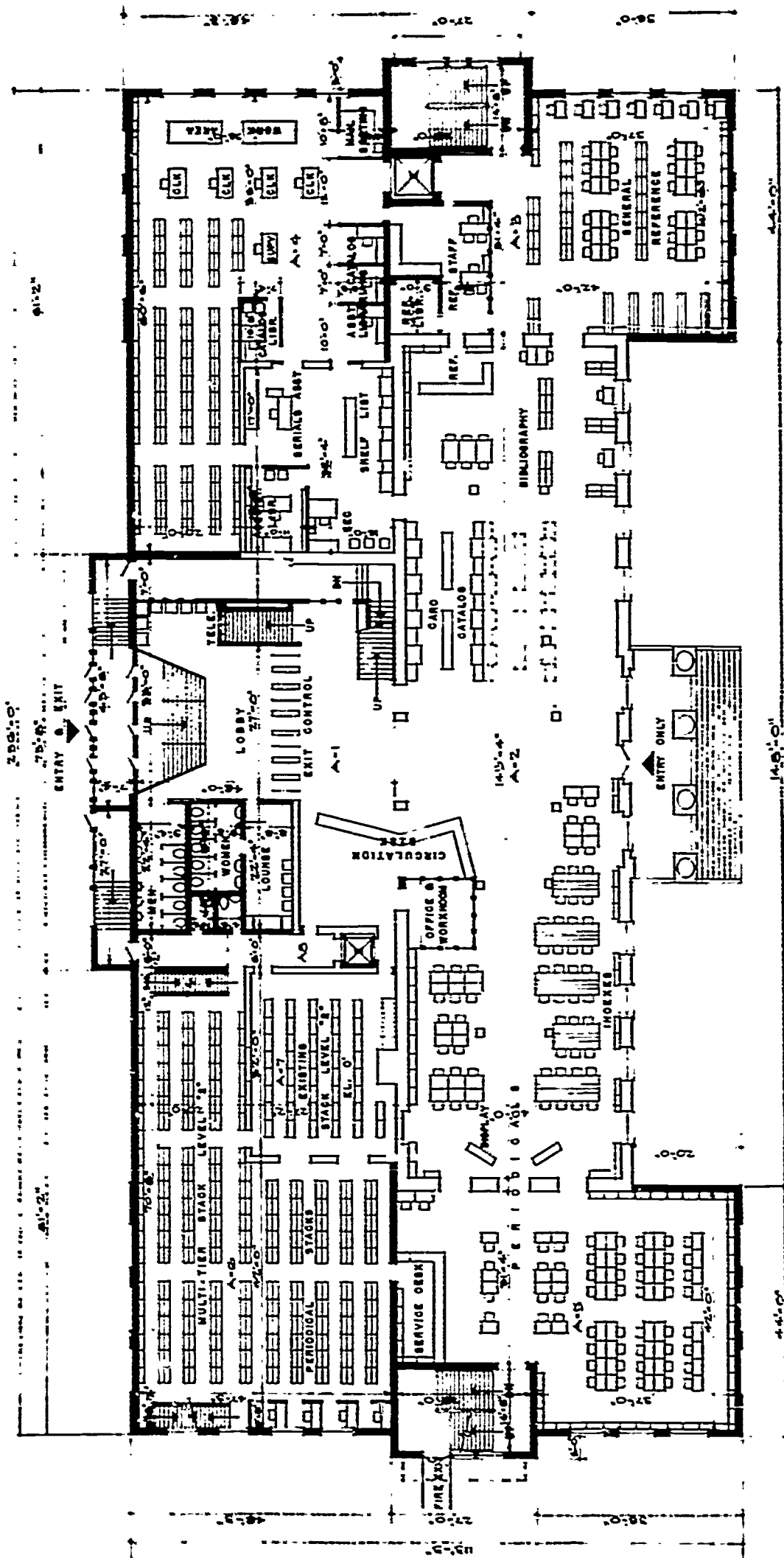
First Floor

I should mention, first, that the front entrance (from the street) is not the main entrance. The south door, on the campus side, is actually the main entrance since almost all of the library users come from classroom buildings. The north door will be preserved as an entry only as a convenience to the few who will wish to use it.

Entrance from the campus is through a vestibule up ten steps to the lobby and thence through turnstiles into the control area. To the left are stairs to the second and third floors and to the right the circulation desk. Directly ahead is the bibliography area with the main public card catalog, periodical indexes, and — as one approaches the general reference area past the card catalog — national, trade, and other bibliographies. Technical processes (order, serials, and cataloging) offices are adjacent, in the southwest



Site plan, Library Addition, Marshall University



First-floor plan, Library Addition, Marshall University

LEGEND:
 EXISTING
 NEW
 NONASSIGNABLE
 ASSIGNABLE

corner of this floor. At the east end of the first floor is a periodical reading room with latest issues of most titles on display and a service desk to handle requests for back issues from the stacks. All periodicals are shelved by entry, with bound and unbound kept together in order of date of issue. The matter of having all back issues in closed stacks will be given further study to determine the problems inherent in splitting a collection, but we will at least look into it.

On the first floor we have virtually all central services needed by the ordinary user of the General Library. The card catalog and main circulation desk are here, as are the periodical indexes and access to the periodical collection as well as the bibliographical and general reference collections. Immediately adjacent to the card catalog are the Library of Congress Printed Catalog and similar works with the shelf list nearby. The most frequently used library functions are concentrated here with only the library administrative offices, reserve collection, and the Collegiate Library on other floors.

It is planned that stack permit holders will enter the stack at the general circulation desk on the first floor. In all probability all books available for home use will be checked out here, although we may find that we will want to permit loan books from the Collegiate Library to be signed out at the second-floor reserve desk. We will attempt to arrange the turnstiles so that at least one of them can be operated from the circulation desk at all but the busiest times.

Second Floor

The Collegiate Library occupies virtually all the second floor with about 18,000 square feet of area, 400 seats, and shelving to hold 53,000 volumes. Most seating will be at individual study tables—the exact type to be determined. We showed 8 carrels in the preliminary plans; these would probably be enclosed so as to permit typing and so forth. We expect to investigate the potential for us for application of some of the newer electronic devices and will possibly find it appropriate to make some provision for later addition of these newer techniques.

Closed reserve will be operated in conjunction with the Collegiate Library, since a reserve system is a device to facilitate mass-use of a few books in a short time and the Collegiate Library is our facility for mass-use. We may need to include in the Collegiate Library collections second copies of some of the more recent of the most heavily used periodicals.

Floor 2A

The major portion of this floor will be new space (some 6500 square feet), secured by building a new floor in the upper part of the present reading room. The architects feel that there is ample room for this intermediate floor since there is more than 23 feet

between the floor levels of the present second and third floors. We, of course, are delighted since this is relatively inexpensive new space and, while we do lose a rather impressive reading room, we also eliminate some of the problems which are inherent in the use of a monumental high-ceilinged reading room.

Floor 2A will have special collections, the West Virginia collection, and our now virtually nonexistent but, we somewhat fear, soon-to-be-burgeoning University archives. About 2250 square feet will be devoted to study space for stack permit users, with 55 carrels adjacent to the present stack level 6.

A group study room to seat 28 is provided on this floor (outside of the special collections area). This is in a somewhat secluded area for which no other prime use could be found. We will need to have some sort of supervision, of course, possibly by audio monitor at times the special collection area is not manned.

Third Floor

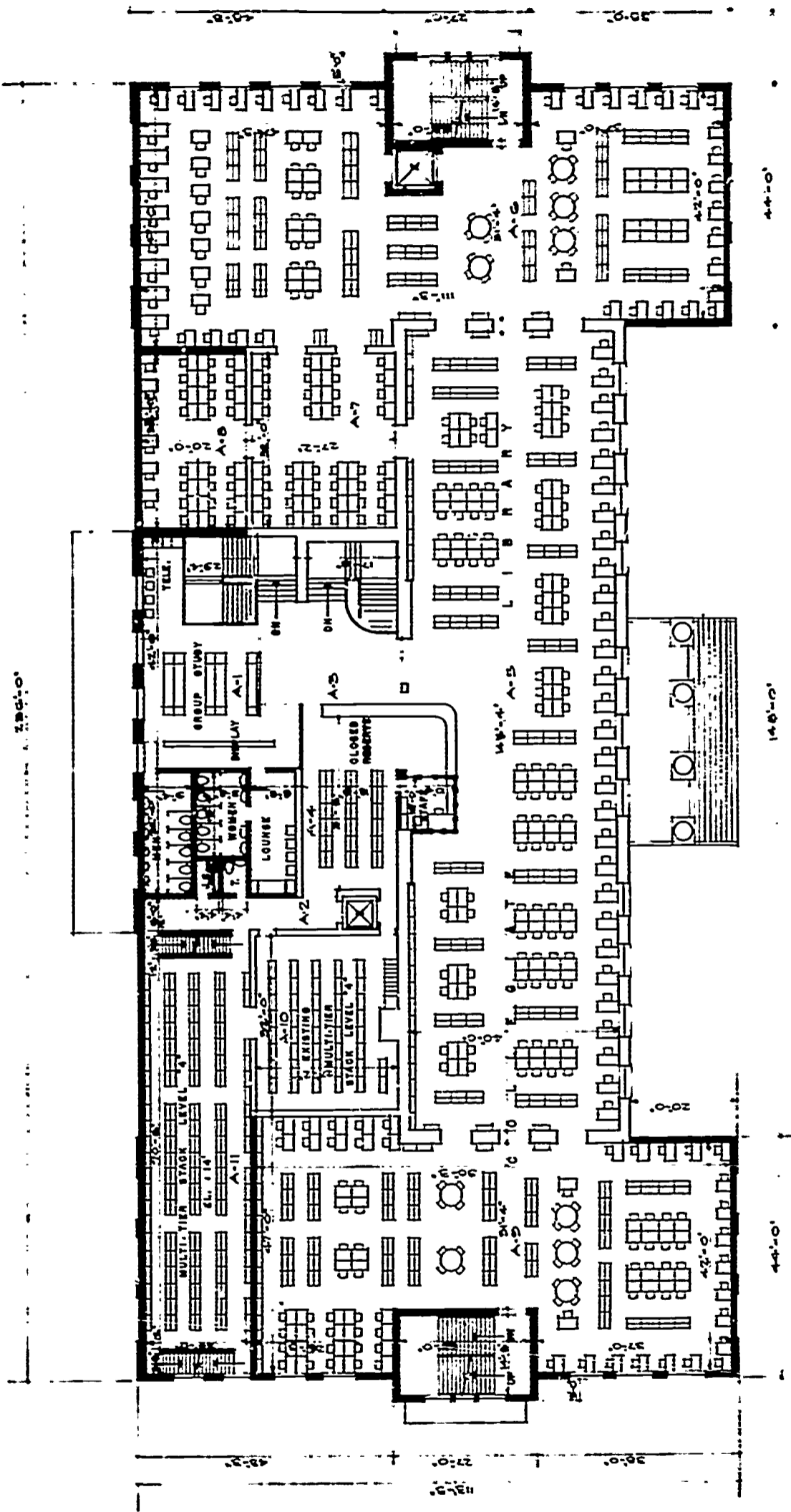
The existing third floor will remain about as it is now with the exception of some changes in the heating system. This was a dirty attic until about two years ago when the area was completely remodeled, insulated, finished, air-conditioned, and newly lighted. Accessibility has been a problem in the past because of the only one narrow stairway. Staff access will now be easier by the elevator at the west end to which general reference and technical processes will have direct access on the first floor. The U.S. Government documents collection and certain other lesser-used material is now kept here, and we plan to continue such use.

Ground Floor

We had hoped to have the librarian's office and allied offices on the main floor near the center of things. However, other functions took precedence and these library administrative offices were placed on the ground floor. It is felt that this arrangement will actually prove to be advantageous. While there is certainly merit in the librarian's office being accessible to all, from a practical point of view the privacy which comes from relative isolation will be of real value. People can be made to feel welcome in other ways. Another good feature is having the shipping and receiving room adjacent to the offices and to the photographic services area, and just one floor from technical processes via elevator.

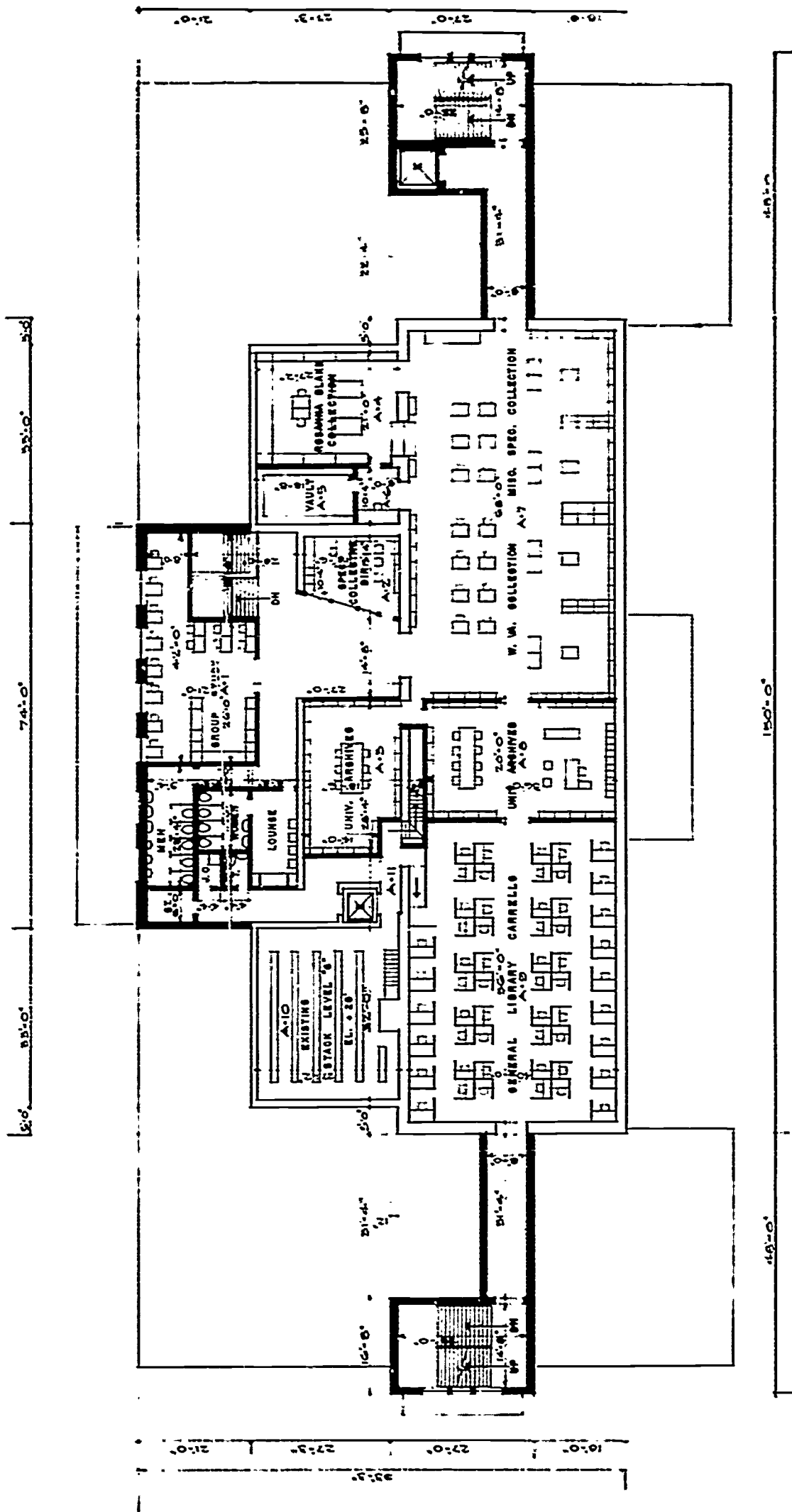
Library photographic services will include the customary photostat, microfilming, and allied services. If it is felt needful at some future time to have the University Library provide audio-visual service to the campus, the space here should be adequate.

The two areas in the north center shown as reading rooms can be used for after-hours reading rooms if desirable. Or they might at some future time be



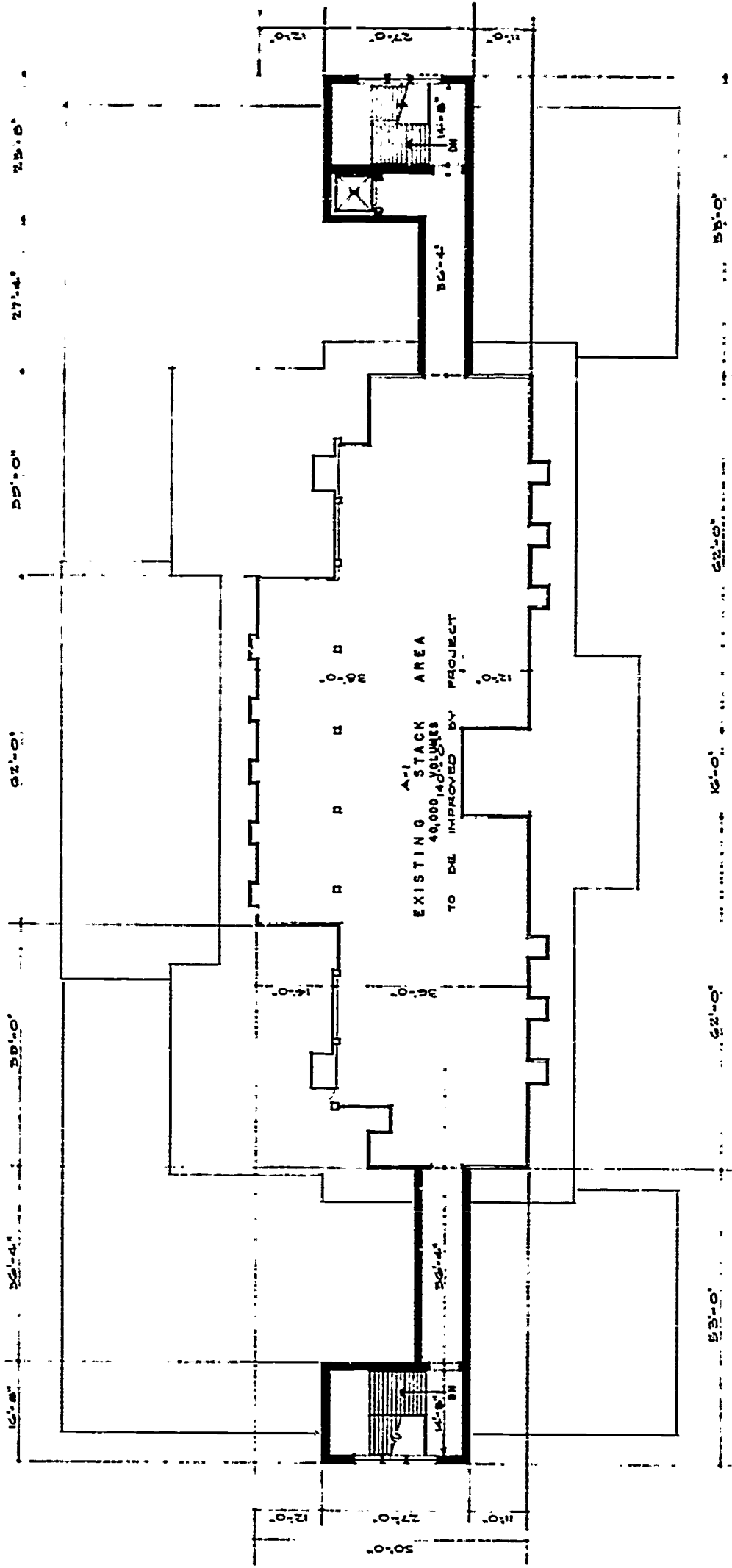
Second-floor plan, Library Addition, Marshall University

- LEGEND:
- EXISTING
 - NEW
 - NONASSIGNABLE
 - ASSIGNABLE



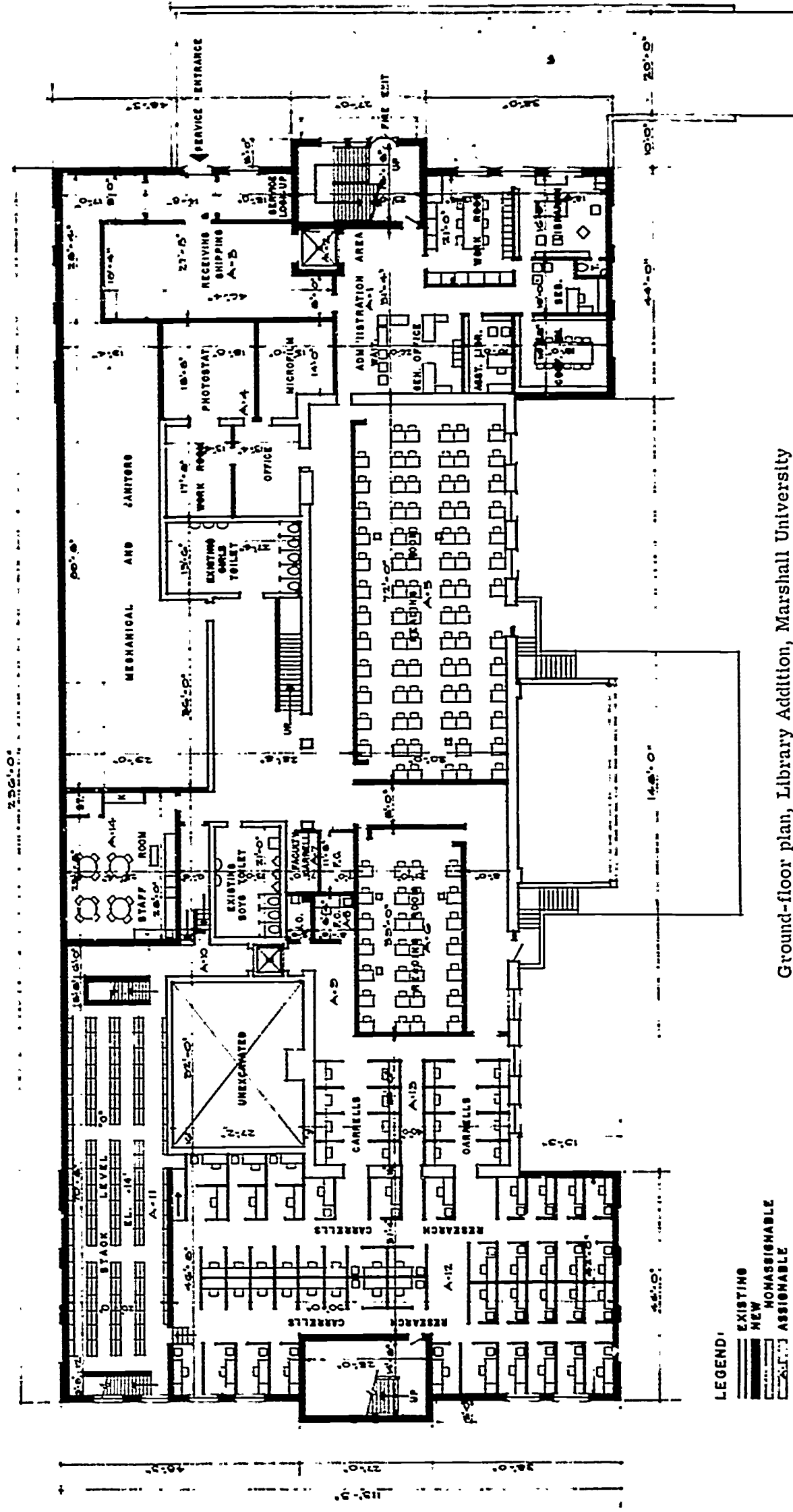
Floor 2A plan, Library Addition, Marshall University.

- LEGEND:
- EXISTING
 - NEW
 - NONASSIGNABLE
 - ASSIGNABLE



Third-floor plan, Library Addition, Marshall University

- LEGEND:
- EXISTING
 - NEW
 - NONASSIGNABLE
 - ASSIGNABLE



Ground-floor plan, Library Addition, Marshall University

LEGEND:
 [Solid line] EXISTING
 [Dashed line] NEW
 [Dotted line] NONASSIGNABLE
 [Dash-dot line] ASSIGNABLE

used for library science instruction. The larger room will in all probability be used as a general purpose room for meetings, although it will not formally be designated as a lecture room. The staff lounge is close enough to allow use of the area for receptions and the like.

CLYDE HASELDEN

While I am sure the experience helps, it certainly is not necessary to have planned an addition to a library to understand and appreciate the efforts of Mr. Apel and his architects. A mere examination of the proposal and the layout will give you some idea of the challenging aspects of such an addition.

Mr. Apel in his working papers for the administration and architects initially requested seating for 1900 readers—or 25 percent of an estimated enrollment of 7600 students in 1970—in an enlarged library building with a life expectancy of twenty to twenty-five years. He also proposed “an expansion in new construction and remodeling to afford a maximum of flexibility in use,” stating that this “implies a modular library design in which most of the floor space can be used to support freestanding, single-tier book-stacks or tables, chairs, and other furniture or to subdivide into rooms.”

Naturally, as always, it has been necessary to reduce these demands in terms of funds available and what administrators are fond of calling “the realistic approach.” Nevertheless, the fact remains that any major addition to the building must be considered in terms of the cost, the projected enrollment, and the life span of usefulness of the enlarged structure. The basic issue is whether a major addition to a traditional library of Georgian Revival design at an estimated cost of \$1,500,000, not including furniture and most equipment, will provide the best possible expansion of library services at Marshall University for present and projected enrollments.

A review of these plans will indicate that in most respects this is an expansion of a traditional, fixed-function library with load-bearing walls and supporting columns in certain areas interfering with the most efficient allocation of space. Except for the Collegiate Library on the second floor and bibliography and reference, a majority of the stacks are segregated in a multi-tier, closed stack arrangement in the southeast corner of the building. There certainly has been little success in bringing the reader and the books closer together. There is not such interspacing of reading and shelf space since most of the seating is at a considerable distance from the closed stacks. Although 122 seats are scheduled for the stacks, only 4 such seats actually appear in the layout. Certainly there should be sufficient closed stacks in the library, but most of the shelving should be open stacks easily accessible to reading areas, with tight controls at the entrance.

Site and Orientation

The present site of the building near the classrooms apparently is as good as any, although I am aware that some librarians think the library should be closer to the dormitories because of evening study. The orientation of the building with the long axis running east and west is good since the north side is the best area for reading. Still, there may be some discomfort from the sun for readers on the south and east sides, and even more so for those on the west side of the building.

Seating—General

It is difficult to determine the exact space allowed for seating and furniture arrangement in these plans because of the lack of a scale of measurement—i.e., 1/8 inch or 1/4 inch = 1 foot. The planners of this layout are to be commended for providing so many individual seats, though I have the impression that in their efforts to get in as many seats as possible, the layout is highly regimented and formalized. Would it be helpful to provide some 4 foot by 6 foot tables and more informal chairs, not couches, to break up the areas? (Of course, informal seats could take up more space than carrels or tables.) While the few round tables included look nice on the drawings and are useful for seminars or discussion groups, they are not satisfactory for study or reading.

First Floor

Entrance. I am concerned with the two entrances to the building. The traffic confusion and control will be a major problem. Perhaps you can close off completely the entrance to the north. You will have better security, and people will not be using the library merely as a short-cut across the campus. There are no check points indicated at the exit control on the south; there is also the question of controlling “entry only” on the north side of the first floor. A book-return slot should be provided probably at the south entrance.

The rest rooms at the south entrance on the first floor take up valuable space which could be better used for administration or some other library function. Actually, except for staff, is it essential to have rest rooms on this floor? The two service elevators near circulation and technical processes are well located. The supporting columns in the original structure on this floor, and on the floor below, interfere with the best possible arrangement of functions.

Card catalog. While the card catalog is not visible from the lobby or near the circulation desk, it is well located for technical processes and reference. Traffic from the south entrance to bibliography and reference will have to go through the catalog area or around it at the north end of the building. This may

not be too serious if enough space is provided for the flow of traffic.

Bibliography area. The bibliography area appears rather tight for the rapid accumulation of over-size trade bibliographies and printed catalogs such as the *National Union Catalog* and the British Museum and G. K. Hall publications. Usually for these over-size volumes only five or six shelves of standard 7-foot, 6-inch shelving can be used.

Reference area. The reference area is well located in relation to the card catalog and bibliography, but it is not too accessible for the public, and some reference librarians may consider it too far from the general stacks. Shelving capacity in this area is more generous than in bibliography, but if it is ever necessary to expand, there actually is no place to go. Patrons using the study table in front of the reference counter may be disturbed by conversations at this point. Also there may be some disturbance to readers seated in general reference where the carrels are divided by ranges.

Periodical indexes. It is difficult to determine the necessary space for these indexes. Naturally it will depend on how many your library has and plans to acquire. Since indexes also accumulate very fast, you should have double-tier periodical racks for the tables as well as some additional freestanding shelving. The indexes are some distance from the reference department.

Current periodicals. If you plan to display a maximum of 1500 current periodicals, sufficient space can be provided by laying the periodicals flat on 3-foot shelves, each 12 inches wide and 4 1/4 inches apart. Here, again, you will have to be careful of your space. If you plan to display only the latest issue, you can average 3 periodicals to a 3-foot shelf. But to shelve the current volume of all your periodicals, you may not average 3 to a 3-foot shelf. With the 37 single-face sections of shelving in the northeast corner of the building consisting of 15 shelves, 4 1/4 inches high and 12 inches deep on 7-foot, 6-inch standard shelving, you should shelve flat approximately 1665 periodicals. However, the 37 single-face shelves along the wall will not be uniformly 7 feet, 6 inches high because of the windows. Thus additional shelving will have to be arranged. Also a place will have to be found for current newspapers. If you are convinced it is necessary to check out periodicals from the stacks, would it not be better to do this from the circulation desk and avoid the additional expense of staffing another service desk?

Technical processes. There seems to be ample space for technical processes if I am correct in assuming you plan 13 staff members for this area. Cataloging and acquisitions could be reversed to place the latter nearer the books, as they are delivered from receiving, and the catalogers nearer the public catalog. Shelving in this area seems too far removed from the staff. Space also should be available here

for supplies, a wardrobe and sink unit, and such tools for acquisition as the *Cumulative Book Index*, *Publisher's Trade List Annual*, and *Books in Print*.

Ground Floor

Administration area. Would it not be better for the librarian or assistant librarian to be located on the first floor accessible to the public? This administration area appears unusually large because of the space allotted for the general office and workroom.

Receiving and shipping. Space is sufficient in this area and well lined up with the nearby elevator and technical processes directly above. If mending, binding preparation, and storage are located here, some shelving and a sink unit should be installed.

Microfilm-Photostat. If microfilm is only for the production of film, space should be provided somewhere for microfilm reading machines and the storage of film.

Reading areas. The two reading rooms on the ground floor are too cut up and boxed off. Perhaps they are intended as classrooms. The entire layout on this floor appears confusing for anyone using the carrels.

I question the purpose of the two exits on the north side of the building in the center, one of which opens into reading room A-5. Perhaps this arrangement is for the use of rooms A-5 and A-6 as study halls when the rest of the building is closed. Often such an arrangement is planned in a new building or addition and then not used, as the administration will acquiesce quickly to the demands of students that the entire library remain open for later hours.

Second Floor—Collegiate Library

The Collegiate Library concept of a separate reading area and book collection no doubt has merit, but there are many disadvantages to this plan. It is an expensive project which calls for much duplication of the collection, the preparation of a separate card catalog, and additional staff for recataloging and supervision of the library once it has been assembled. Separation of the collection will be confusing for the patron. Undergraduates in most colleges, doing their research and other assignments, are now demanding full use of the library's resources with as few barriers as possible.

The stacks in the Collegiate Library have a capacity of 48,000 volumes—less than the amount requested. Additional shelving will reduce the seating, which is already below that indicated initially in the program. Patrons seated at the tables will certainly be disturbed by traffic between classes and the search for books between the stack ranges. Actually, in this arrangement of alternating seating and a single range, thus spreading out the stacks, there may be some difficulty in locating the books.

Floor 2A

The question of control of this area immediately arises. You might want to arrange all your special collections in one area accessible only to staff and provide an adjacent reading area for the use of this material. The group study in 2A-1 will be disturbing for those using the carrels in this area.

I am curious about the possible relationship between the 2A-9 carrels and the University archives and also the access to these carrels. Since you already are tight for space, you should consider moving the archives out of the building. Special collections will be the responsibility of the reference librarian, who will be some distance from this area.

Third Floor

The Marshall University Library is a depository for U.S. Government publications which are to be shelved on the third floor. The reference librarian will be responsible for these publications. Thus this location makes them inaccessible for staff and patron. Mr. Apel reports that plans are still under consideration for the location of such facilities as smoking, typing, and map-atlas areas.

Conclusion

Finally, we return to the question of enlargement

versus a new building. While some improvement over the present structure has been achieved, on the whole the addition does not provide the best possible arrangement and adequate space for expanding enrollment, book collection, and staff.

The multi-tier stacks are isolated from reading areas which in some instances are still divided into rooms. The seating capacity of 850 readers is far below the 1900 seats requested earlier in the program notes. The staff will be handicapped in their efforts to give the best possible service. The disruption of service and damage to books must also be considered while the building is being remodeled and enlarged. The enlargement of this building will destroy a beautiful exterior and still fail to provide adequate library facilities. At best, the enlargement of this building will take care of Marshall University's library needs for a short time. Then, once again, it will be necessary to seek funds for another addition or a new building.

I am sure you have already carefully studied and investigated the possibility that the present building might be used more efficiently for purposes other than a library—or as someone else has so much better said it, "Can the present library be remodeled more effectively and economically for other purposes than library purposes?" Undoubtedly the cost of a new building will be the major issue. Of course, it will cost more initially, but it actually will be more economical in the long run and also more useful.



Rear view, Bemidji State College Library

Wirtz - Reynolds & Associates, Inc.

PRESENTATION OF PLANS

Librarian: *Donald C. Dickinson*

Architect: *R. F. Whiteman*

Critic: *Le Moyne W. Anderson*
Director of Libraries, Colorado State University,
Fort Collins, Colorado

BEMIDJI STATE COLLEGE LIBRARY

Bemidji, Minnesota

DONALD C. DICKINSON

Bemidji State College is located in a town of 10,000 in northern Minnesota, a region of severe winters and pleasant summers. Bemidji has the only institution of higher education within a radius of one hundred miles. In general, this is an economically depressed area. The college, founded in 1921, is the youngest of the five state colleges in Minnesota. It is governed by the State College Board and financed through the state legislature.

In the fall of 1964, some 2,600 students were enrolled, and 3,000 are expected in 1965. Most of the students come from the immediate vicinity of the college—from small towns and small high schools. The college has experienced a very rapid growth, tripling in size between 1958 and 1964. Recently, a large number of students have come to college at the upper-class level, transferring from area junior colleges. In the fall of 1965 we will employ 180 faculty members. The college has always been devoted primarily to teacher training but is now starting to build a liberal arts program. All students are required to take a two-year general education curriculum. A graduate degree in education has been offered since 1954.

The present two-story library, built in 1948 with

seating for 270 and shelving for 50,000 volumes, has been adequate until recently. The library subscribes to 550 journals, holds microforms and phonorecords, and is a partial government depository. The 1964-65 book budget of \$26,000 will be considerably improved by a budget of \$70,000 for 1965-66. The staff consists of 5 professionals and 2 civil service clerks.

The 1963 legislature appropriated \$937,000 for a new college library. Immediately, a faculty building committee was selected, and for the last two years it has worked with the consulting and project architects and library staff at all stages of planning.

The site for the library is on the central part of the campus, midway between housing units and classrooms, with a superb view of Lake Bemidji. Originally programmed as a three-story building, the library was to seat 750 students and house 110,000 volumes. Now, with a grant of \$464,000 from the federal government, the building will be four stories, seat 1100 students, and contain 175,000 volumes. A fifth floor is planned for the future.

All the main service features of the building are located on the second floor in close relationship to one another. A central stairway provides access to the two floors of seating and shelving above. Entrance to the building has been complicated by the sloping site and a desire to "hook-up" with the campus tunnel system. The main entrance was finally located on the second floor with an additional entrance-exit to be open at peak hours on the third floor. Windows have been used sparingly except on the east which looks out to the lake. The building is planned on a system of 24 x 27 bays.

The plan of the building calls for all areas to contain an integrated system of shelving and seating so that students and books are thrown together. The only exception to this is in the small, closed study rooms on each floor. Double carrels and faculty studies are located around the perimeter of each floor. With the addition of the fourth floor, the basement area will be given over to audio-visual services and to storage

STATISTICAL DATA

Architect: Jyring and Whiteman
Hibbing, Minnesota

Type of library: Liberal arts college

Population to be served: 2,418

Area: 48,914 square feet

Book capacity: 175,000 volumes

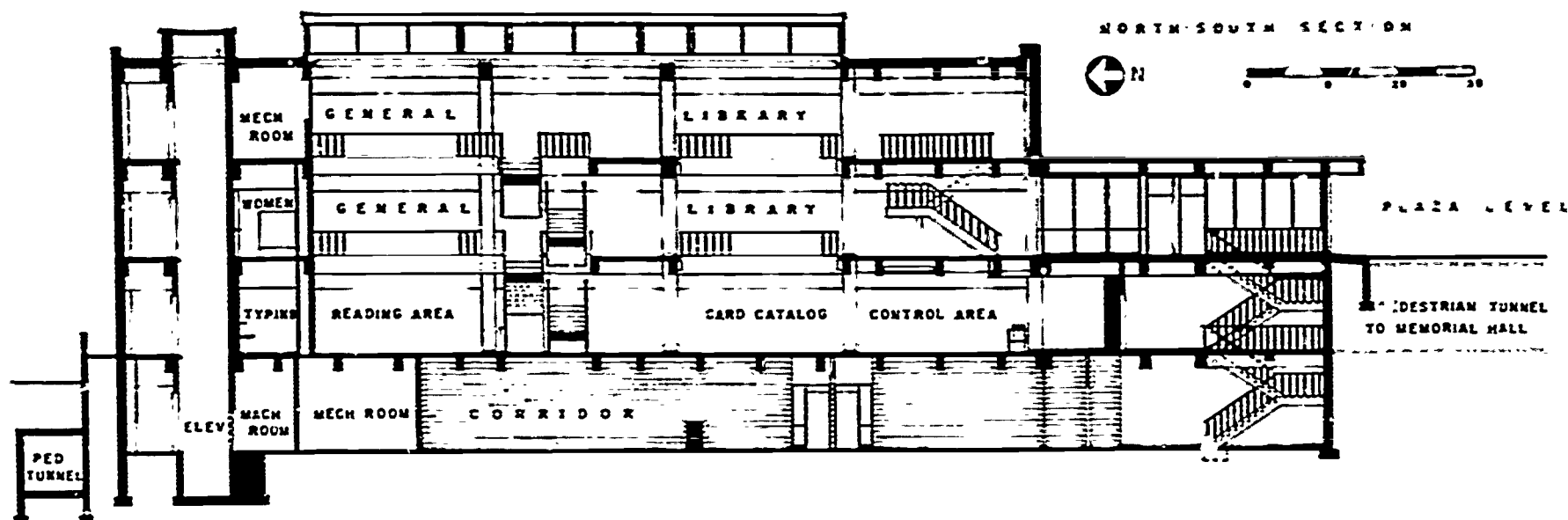
Seating capacity: 1100

Cost: \$833,000

Building: \$778,000

Equipment: \$55,000

Cost per square foot: \$15.90 (construction cost)



Elevation, Bemidji State College Library

shelving. It is planned that the curriculum library will be located on the third floor, and a special collections room on the fourth floor.

We intend to furnish the library with comfortable, informal seating areas on every floor. All reading space will contain a heavy amount of individual seating. Carpeting and paneling should help with both noise control and general comfort, while the building will be air-cooled with a deep-well water system. It is hoped the building will be an efficient and pleasing answer to the library needs of Bemidji State College.

R. F. WHITEMAN

The library is the fourth academic building that we have designed for the college. The campus does have a beautiful setting along the shores of Lake Bemidji. Five months of the year the weather is delightful; for two months it is intermediate; and the five months of winter are almost unbearable with temperatures down to 50° below zero.

The dormitory complex is north and the academic complex south, with the library in the center of the complex but located so that the students coming from the dormitory area do have to pass the library area to get to the academic section.

The present library is south and is connected to the present administration building. The campus is being expanded both north and south.

All college buildings and dormitories are connected with pedestrian tunnels. In the wintertime the students are seldom seen. The access to the library building, therefore, is primarily through the tunnel system. The location of the library astride the tunnel system makes it necessary for students to pass through the library in traveling between the dormitories and the student center academic area. Actually, they do not go through the controlled part of the library. Therefore, no student can avoid at least passing contact with the library.

To get into the library itself from the tunnel

level, you go upstairs on the south. On the first level we have periodical storage and mechanical rooms, the elevator, and three temporary classrooms into which the library will expand as it needs the space.

The main entrance is on the south and will lead into the main foyer of the library. Here the charging desk is located with the card catalog immediately adjacent to the entrance. The current periodical reading area, an informal reading area, and the reference area are located here.

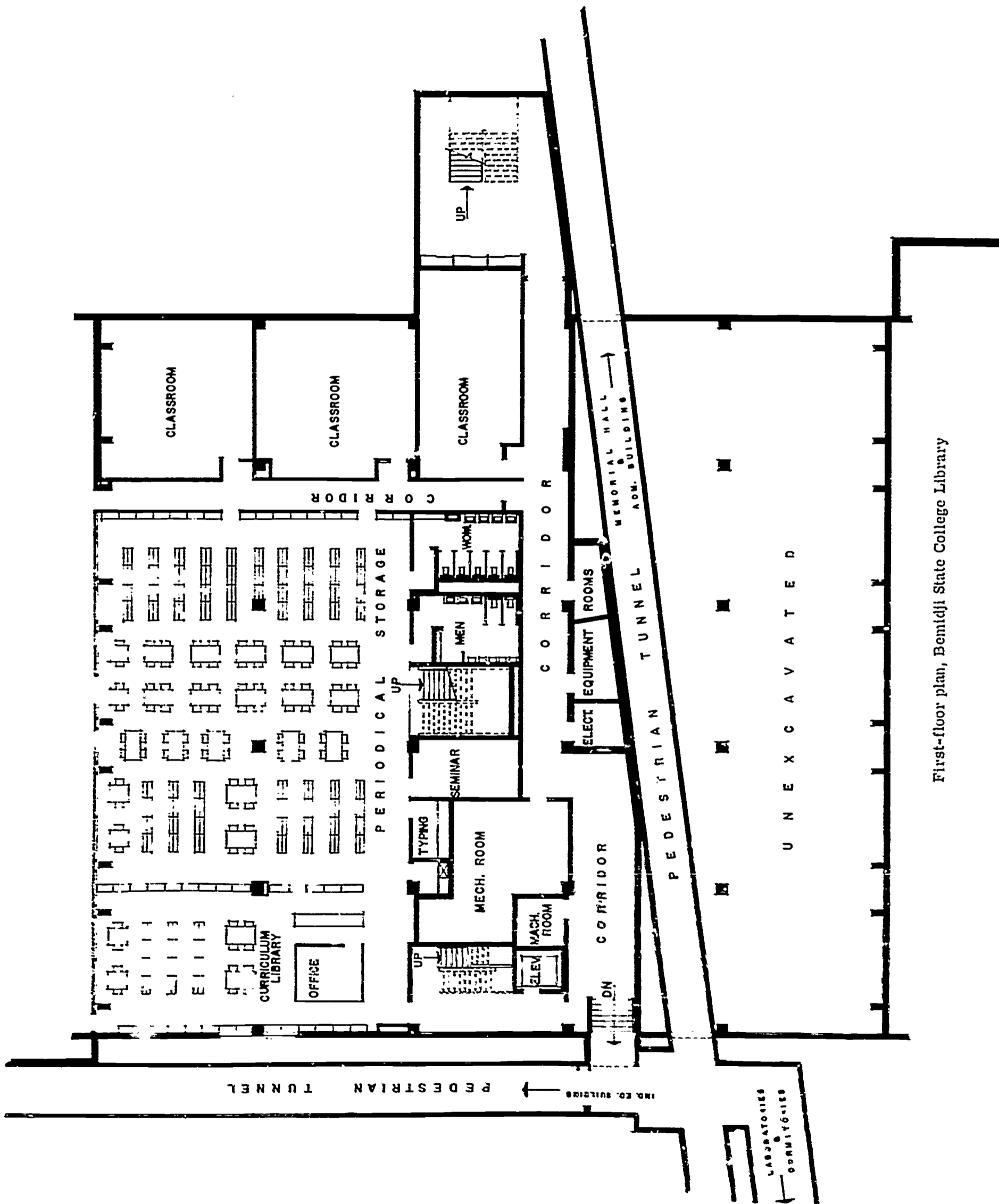
The technical processing department is located on the main floor along with the librarian's office and the reception area, which again is close to the control center. Materials are received at the north entrance, travel through a corridor, and on into the library receiving area.

On the lake side, there are doors from the main reading room to the balcony. On all floors the stacks are interspersed with seating. The stacks are located in the center of the bays.

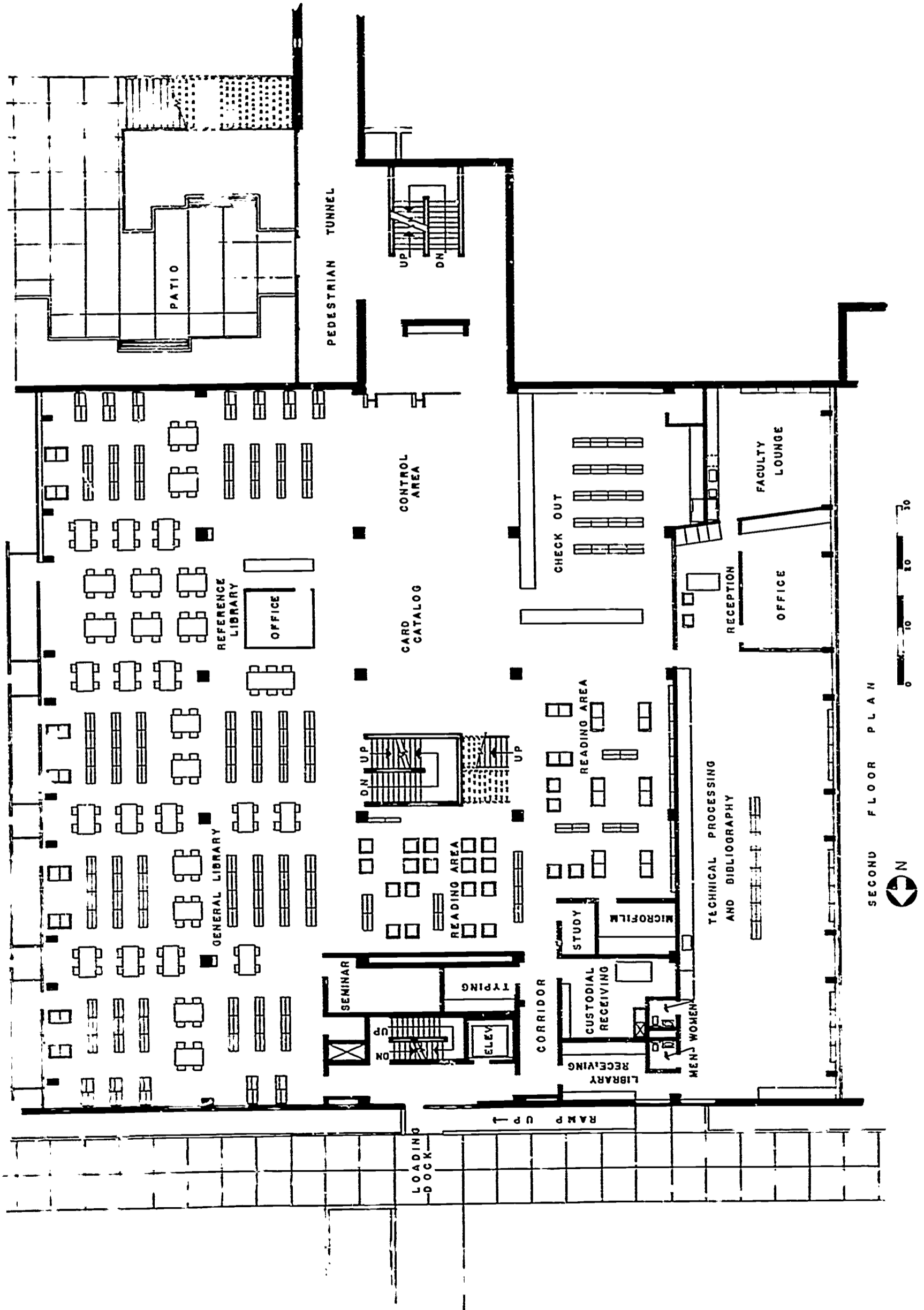
On the outside walls of the third and fourth floors are located the faculty studies and double carrels. From the tables on the east you will be able to see the lake. The fourth floor will be very similar to the third floor.

The design of a library building presents a challenging opportunity to the architect. I feel that the building must have an inviting atmosphere and environment to ensure that it will receive full use. The essential warehouse characteristics of the building type should be counterbalanced if possible, and the use of scattered stacks and seating can be developed to prevent the division of the building into immense stack areas and outsized reading rooms.

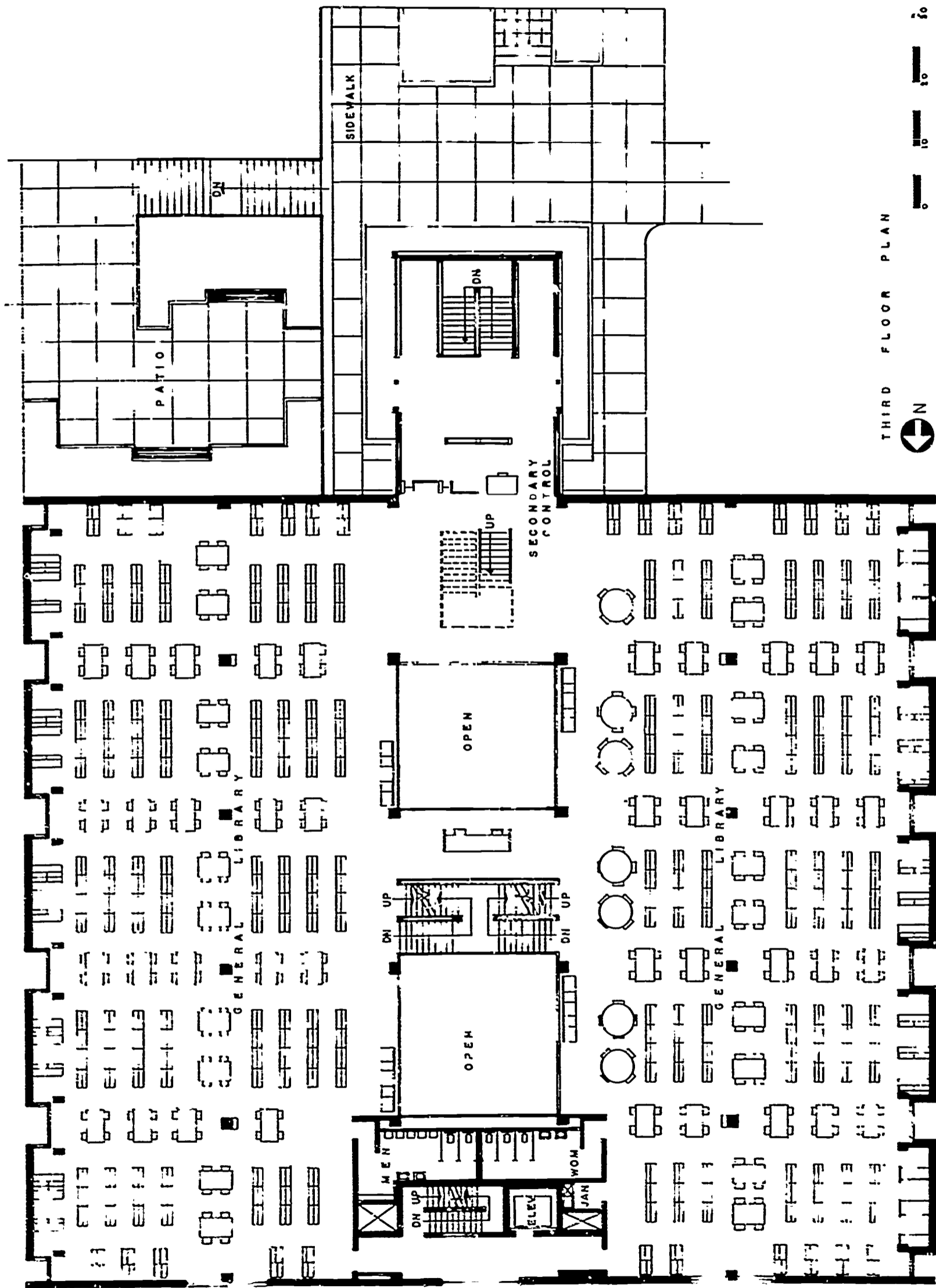
The building construction in northern Minnesota is necessarily of the highest quality because of the weather extremes. The library has a structural frame of reinforced concrete, with insulated exterior brick walls and glare-reducing insulated glass. The building interior is relatively simple. This is the first state college building to be fully air-conditioned. It was a



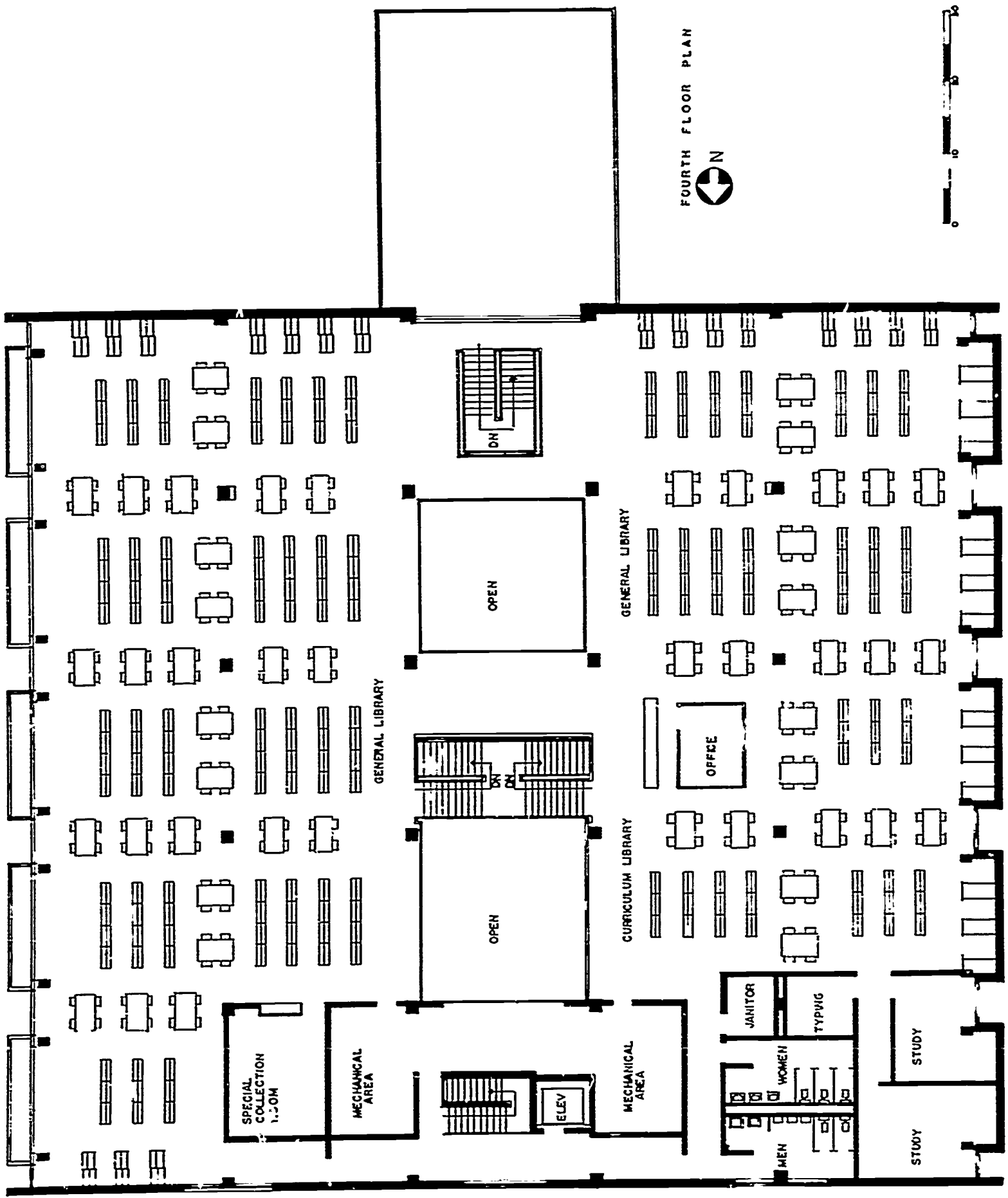
First-floor plan, Bemidji State College Library



Second-floor plan, Bemidji State College Library



Third-floor plan, Bemidji State College Library



Fourth-floor plan, Bemidji State College Library

tough selling job in an area that is proud of its cool summers.

LE MOYNE W. ANDERSON

I subscribe to the opinion that a full view of the female form—*à la naturel*—has much less appeal to the healthy male than a view in which a woman is artfully revealed and concealed. I do not embrace the same aesthetic mystique when viewing academic library buildings, however. From the exterior to the interior, I want to see books—books with the overwhelming and immediate impact they provide! I do not want to be tantalized by a strip-tease act when I visit a library. I want to know where the books are as soon as possible and preferably by seeing them as I approach the building from afar.

The Bemidji State College Library does not meet my basic criterion for building excellence. It is conceivable that a person may have to walk 100 feet within this edifice before encountering the physical entity which librarians are dedicated to assemble. I look with incredulity upon the construction of a college library building which forces upon the patron such devious routes to the product offered. The building is under construction, however, so further discussion of the elements of design is academic. We have before us, I judge, a *fait accompli*.

What is there to criticize? Anyone who has done only a modicum of library building consulting is sensitive to the admonishments of one's mentor who says that we are not to be "critical of what might seem to be unusual solutions until you fully understand what the real problem was."¹ On the other hand, we are also told *not* to be "overly impressed by campus planners. They are rather new at the game and they certainly are not infallible."²

I face the same dilemma in criticizing these plans. Not understanding fully, I am sure, the problems of the Bemidji State College staff, I shall plunge ahead, nonetheless, knowing that no matter what the problems are, the solutions presented in these plans are offered by fallible mortals. My comments hereafter will be made within the context of an imaginary self-guided tour of this library structure.

Approaching the building at the south, I can enter through a kiosk at the third-floor level. If I understand the plans correctly, I must go down at least one flight before gaining access to the building proper. On the other hand, if I enter from the pedestrian tunnel to the north on the first floor, I must walk nearly 200 feet through a corridor and up one flight of stairs before entering the library. I could also come into the building at the second level from another tunnel, which I have already decided is my favorite entrance.

It is my favorite, you understand, because at this point I immediately see books, I see reading areas, I see librarians, and I see all the other paraphernalia associated with an academic library.

Once I go through the turnstiles on the second floor south, my first question for a reference librarian could readily be posed because this information point is easily spotted—although I would wonder why the information counter, or desk, is not facing west rather than south. If I were referred by an assistant to a reference book, I would have ready access to the material. It is close at hand, and the collection is small enough to make retrieval simple.

If I needed to use the card catalog, I could easily find it for it occupies a position of prominence. If I searched for a title by call number in the general library, however, I might have some difficulty wending my way in and out of the stacks and reading areas while trying to find a book within this checkerboard arrangement. I would most certainly note mentally that at a future date, in order to use a peripherally located carrel at mid-point on the east wall, I would have to traverse 75 feet from entrance to the reader's station and probably disturb patrons on both sides of me all the way, no matter how circuitous I deliberately made my route.

On the other hand, I could choose a reading area closer to the entrance, which appears to be more convenient. I would be very near a main stairwell, however, and the noise of the traffic would prompt me to move shortly.

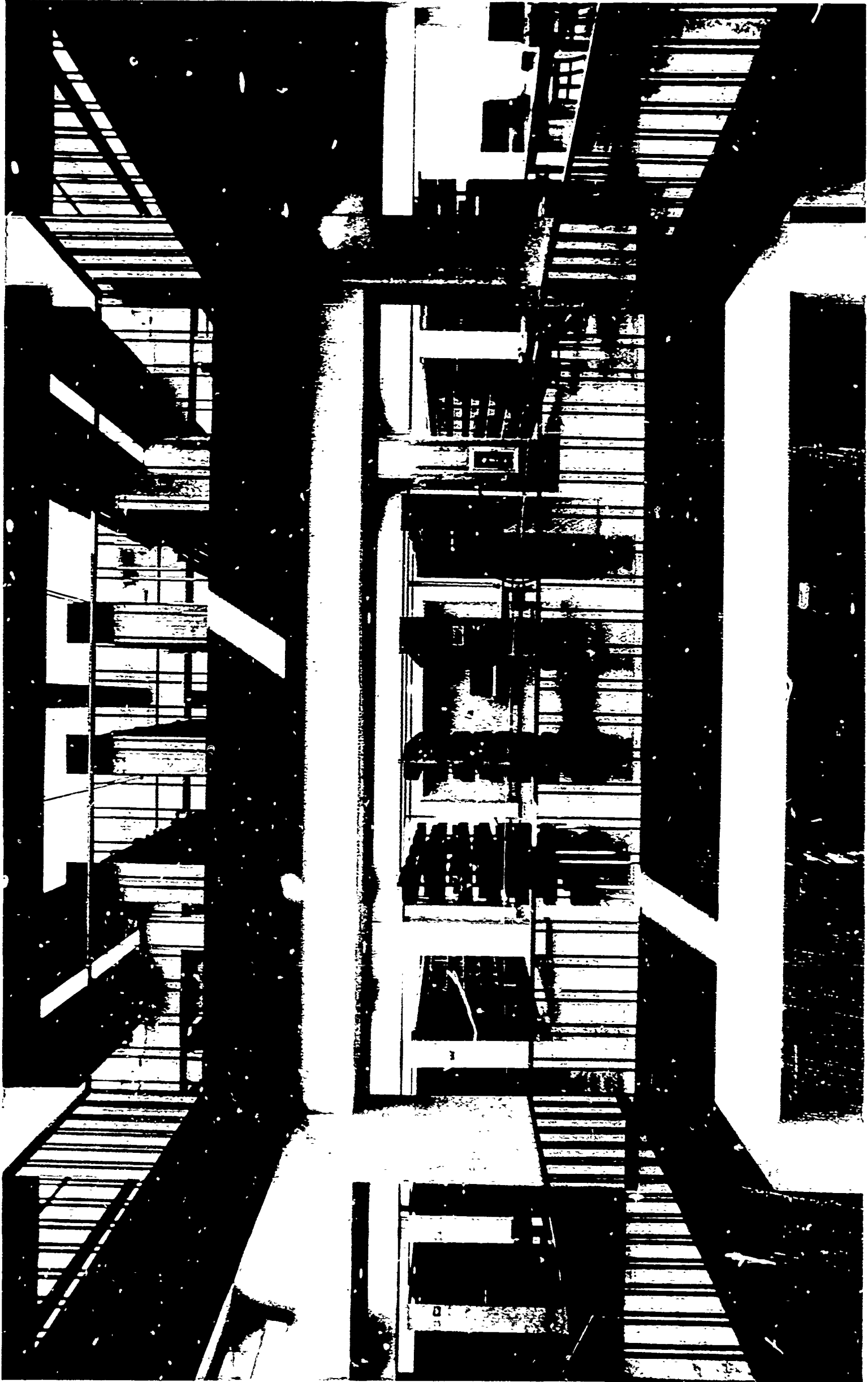
If literature investigations referred me to a microfilm citation, I would contact a staff member who would show me, in turn, how to use the reading machine, but only after traveling some 75 feet, depending upon which staff member provided the assistance—circulation or reference. If I use the reserve books, or if I wanted to borrow a title, the loan desk is easily located and satisfactorily and unobtrusively situated off to the side of the main entrance. I may be vexed at times, however, if the monitor check point creates a traffic jam and interferes with my effort to negotiate a loan. If I used the seminar room on this level, along with several other persons, I would enter and leave the room, occasionally chatting perhaps and consequently disturbing the patrons studying in contiguous areas.

If I wanted to see the librarian, I could easily find his office. As a faculty member, however, I would feel a bit conspicuous in having to cross the reception room to get to the lounge. As a library staff member, particularly the librarian's secretary, I would wonder why a corridor along the south wall from the control area directly to the lounge was not planned, thereby avoiding this devious route to a cup of coffee. Indeed, I might ask why the lounge could not have been located in another part of the building, consequently freeing the space for library staff offices at some future date.

As a patron, if I went to the third or fourth floors, I would have the same confrontation with the checkerboard arrangement that I experienced on the second

¹American Library Association, Library Administration Division, *Planning Library Buildings for Service* (Chicago: A.L.A., 1964), p.12.

²*Ibid.*



Stack areas, Bemidji State College Library

Watson Reynolds & Associates, Inc.

level. This realization would leave me at the mercy of a directory system, which would have to be definite and precise. It would be helpful, too, as a patron to have like facilities repeated on each floor in identical positions, consequently simplifying the orientation. The rest rooms, for example, on the fourth floor, third floor, and first floor are all in different locations, and they are not available at all on the main floor.

On the first floor, I would be satisfied with the classrooms which are located off a corridor and apart from the stack and reading area. I would assume that the south doors from the periodicals storage area have crash hardware or some control mechanism; otherwise, what would prevent me from appropriating the volumes for home use without bothering to complete a record at the loan desk—if, in fact, the volume does circulate?

The curriculum library on the first floor seems well situated, although, again, I would wonder what controls are envisaged for the north stairwell as well as the elevator. This floor appears, by the way, to envelop the utilities within a core more satisfactorily than the other levels do and with a less-clobbered result.

Now, if you please, I shall drop the mantle of the reader. I plan to effect an abrupt transition from patron to library staff member and/or a book in order to consider the technical processes areas for particular attention, as suggested by the Institute Committee. Inasmuch as I did not have detailed information on the proposed layout of this important service, I can speak only generally. It is a fact that more than fifty steps are necessary to add a book to the collection of this library. The decisions of selection having been made, the verification process, including consultation of the card catalog and the bibliographies, can be accomplished readily within the areas specified. The distances between the tools are not great. I assume that the acquisitions and serials sections are to be located in the north part of the confine, adjacent to the receiving and shipping area. It would seem that a continuous flow of materials can be realized, for the books arrive on the north dock and are unpacked in the receiving room, moving along into the processing area. The furniture and equipment could be easily and effectively arranged. I would hope that consideration has been given to the electrical requirements, particularly convenience outlets and overhead lighting, as well as to the plumbing, which does seem to be indicated on the plan.

The thought occurs to me that a great deal of traffic may develop through the exit and entrance from the reception area into the technical processing room. This may be especially noticeable as faculty members and other campus patrons visit the librar-

ian's office. Another entrance on the east wall of the processing room may be worth considering.

The cataloging and classification apparently are to be done by library staff members at open desks. It may be worthwhile to utilize some type of baffle or barrier around each librarian's desk, about 5 foot high, thereby creating a semblance of privacy.

I would say that the space seems to be adequate for handling the marking and book preparation operation, judging from the volume of activity projected and delineated in the written program. The space for the bindery preparation, however, is unclear to me. Again, I assume it is in this area. The flow from the technical services to the circulation department is good and can be continuous. Once the new materials are turned over to the circulation department and have been sorted, it means that, except for the shelving of the titles on the second floor, the book trucks must be pushed to the north elevators for vertical distribution throughout the building. This is not the most convenient arrangement inasmuch as there are more than 100 feet to cross from the loan desk. In any event, to complete the travels of the book itself, it is now on the shelf and ready for the reader to find.

My conclusions then are nine in number, to wit:

1. The site is good, permitting ready access from the principal campus buildings within reasonable distances
2. The structure is aesthetically pleasing, utilizing a beautiful setting to great advantage
3. The flow of patron traffic into the building, with the multiple points of access, is unnecessarily complex
4. The location of the major points of service—reference and circulation—is centralized and satisfactory
5. The interspersing of chairs and books, à la the checkerboard, will have more disadvantages than advantages
6. The arrangement of utilities and like facilities varies widely from floor to floor and will present a continual orientation problem
7. The special facilities, such as microfilm and seminars, are limited, scattered, and not close enough to staff service points
8. The administrative and technical services rooms are well located near the entrances, the bibliographical tools, and the receiving areas
9. The Bemidji State College Library, as planned, can be a livable and workable building for reader and staff member alike. If the point of no return has not been reached, some revisions in the plan could make the building more functional, particularly for the patron.

PRESENTATION OF PLANS

Associate Director of Libraries: *Robert Muller*

Architect: *John C. Haro*

Critic: *Stephen McCarthy*

*Director, Cornell University Libraries,
Ithaca, New York*

UNIVERSITY OF MICHIGAN CENTRAL CAMPUS LIBRARY Ann Arbor, Michigan

ROBERT MULLER

At the University of Michigan we have a Central Campus library, called the General Library, which is still in fairly presentable and good shape. It looks imposing. It is in the center of a mall. The idea of simply scrapping it would be unthinkable. Hence we were, more or less, forced into the position where we had to add to that existing building, rather than to think in terms of an entirely new structure, even though we were perfectly aware that the existing structure was neither flexible nor an ideal kind of library building.

Briefly, the history of the building goes back to 1898. The original stack dates back that far. In the early 1920's an addition was built around this old structure, because the idea of demolishing it could not be seriously entertained. The existing building is, therefore, by this time close to forty-five years old in its major newer portions. A few years ago two additional stack floors were added at a cost of about \$1 million.

What we did was to write a program for what we needed in a building addition. In writing this program we put down everything that we wanted to put into the

addition, with priorities, precise space designations, and so on. Then we added up all the space requirements and translated them into a cost figure of \$35 per square foot. That unit cost included everything: project cost, architects' fee, and the like. When we added up all the figures, they came to something in excess of \$11 million.

At that point we were told that, in view of what the University had already spent for libraries over the past decade, plus the many other projects that were clamoring for high priority, such as a new School of Architecture and Design Building, a new Dentistry Building, a new Education Building, etc., etc., we could not even get a library addition on the state appropriation building priority list. After all, the University of Michigan had been most generous as far as its library development was concerned during the past decade. We built a new Medical Library, which, incidentally, has already outgrown its size by this time; we built a building that has attracted a great deal of attention, the Undergraduate Library, at a cost of about \$3.5 million; we built a storage library; and, of course, we built numerous branch libraries, such as one for music and one for physics-astronomy. Several others are now on the drawing boards, including one for dentistry and one for mathematics. The administration decided that the maximum for which money could be raised, minus what the federal government could contribute (which was expected to be one third, and turned out to be one third), would be around \$4.5 million. What we had to do next was to pick out of the program statement all the items of secondary priority and leave in only what we considered to be the highest priority.

What were these high priority items? They were, essentially, that we needed more carrel space and more book space. Unless I am misinformed, the University of Michigan probably has the largest graduate enrollment, exclusive of New York University, of any

STATISTICAL DATA

Architect: Albert Kahn, Associated Architects & Engineers, Inc., Detroit, Michigan

Type of library: Graduate library for the social sciences and the humanities

Population to be served: 4000

Area: 83,565 square feet

Book capacity: 655,500 volumes

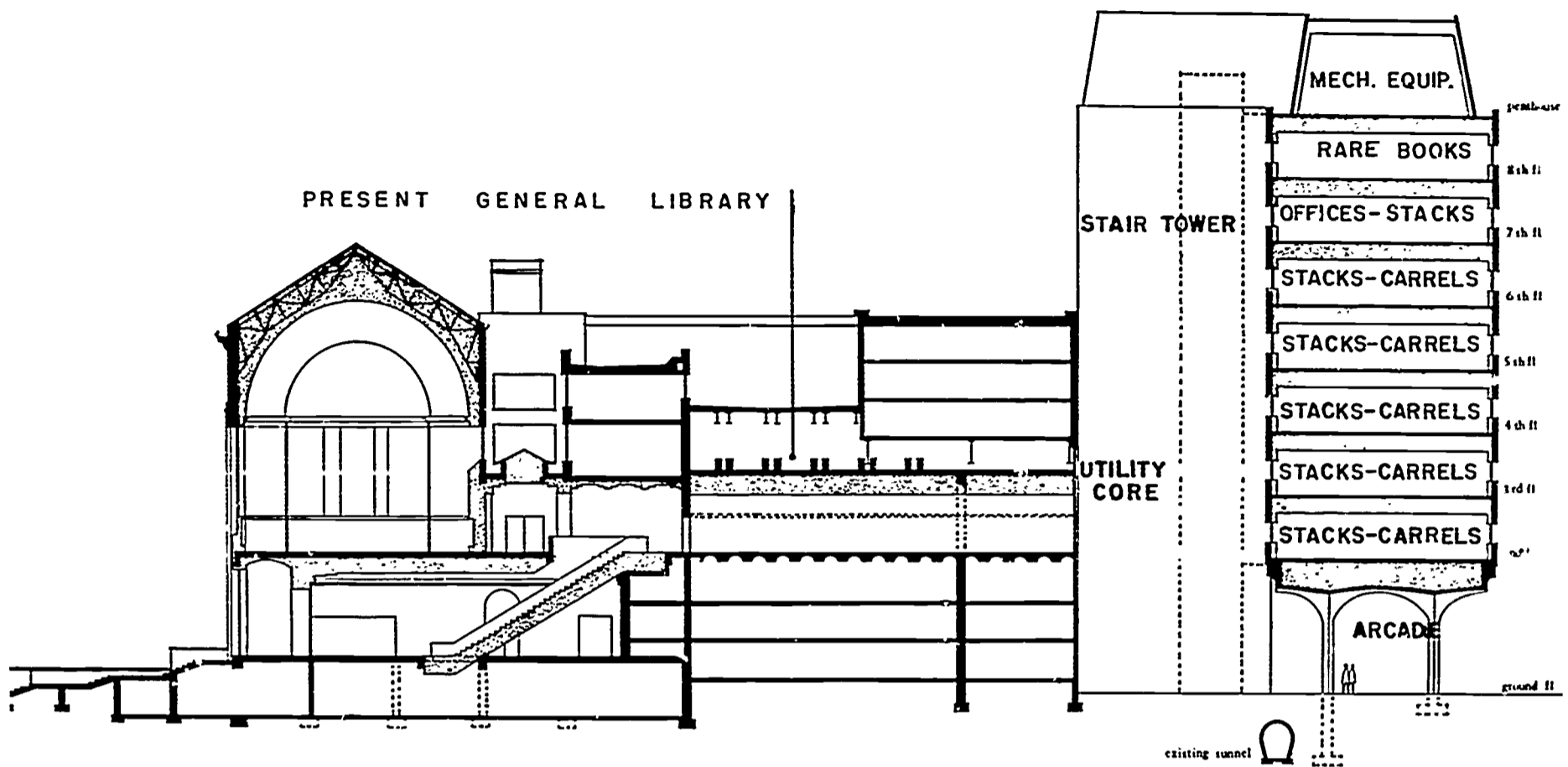
Seating capacity: 536

Cost: \$4,375,000

Building: \$3,796,500

Equipment: \$578,500

Cost per square foot: \$35.57 (construction cost)



Cross section, University of Michigan, Central Campus Library Addition

university in the country; yet we have only 275 carrels for graduate students. We have to assign 2 or 3 graduate students to one carrel, which is far from ideal; we desperately needed more carrel space. Secondly, we needed more book space; we had already moved more than 300,000 volumes from the main building and placed them in a storage building on the North Campus about two miles away. Those were the two highest priorities. In addition, we hoped that, if this new section had to be built, the main building could be rehabilitated, and the administration has indicated that the state might be willing to spend \$2.5 million on the rehabilitation of the main building. So we are talking here of a total project of about \$7 million.

In the proposed rehabilitation of the main building, certain reading room areas which had been originally designed for stacks would be converted into stacks, and this dislocation made it necessary to transpose several functions into the planned addition; among them an area for maps and an area for rare books. There were other reasons for moving rare books into this addition; however, the rare book relocation is considered to be a temporary location because we hope that some day we will be able to do what Indiana University has done and what Yale and Harvard have done, and build a separate Rare Books Library. Our rare book collection is distinguished, with more than 50,000 rare books plus special collections.

The program, then, consisted of the following: (1) we wanted just about to triple the carrel capacity

by adding more than 500 carrels; (2) we wanted to increase the capacity for books by as much as possible and found that we could achieve that objective by providing shelves for 650,000 volumes if we counted only seven shelves; if we added an eighth shelf, we could then further increase the capacity by about 100,000 volumes. We are considering here an added capacity of 750,000 maximally. In addition to this, the new addition will also house the administrative suite of the library, which will serve the director and his associates; (3) we had to transpose the map area; and (4) we had to transpose the rare books.

I should mention that this building will serve primarily the graduate students in the social sciences and the humanities. It will not serve the pure and applied sciences to any great extent. The present building serves a graduate student body of 2700. We are planning the total complex for a graduate body of about 4000 by the year 1965. For this projected student body of 4000, we will have 809 carrels, including existing carrels, or about 2 for every 10 graduate students by 1975, as compared to about 1 for every 10 at present. As to stack space for collection growth, the new addition will provide about 125,000 lineal feet of shelving, of which 31,250 feet (25 percent) should remain free as shelf space for shifting, and about 25,250 feet will be occupied by overflow from the existing building, leaving a residue of 68,500 feet available for expansion as of July, 1965. If we assume a maximum growth rate of 7000 feet per year, the new addition will be filled by 1975, or eight years after

completion (7000 feet is required for about 70,000 volumes).

Perhaps we will not grow at quite so rapid a rate, perhaps only at the rate of 2,000 volumes a year, in which case the addition will last six years longer, or a total of nearly fourteen years. On the other hand, as soon as the building is built and empty shelves are visible all over, many faculty members will say, "Well, now, I've been suffering all these years because you put all those books in storage. Bring them back." I predict that within a short while some of the books that are currently in storage will have to be brought back into the building, and I wouldn't be surprised that within five years, or maybe even less, the building will already have proved to be too small. However, it is designated as the first unit, and Mr. Haro will indicate where we will put the second unit.

JOHN C. HARO

The design of this particular facility was based on two major objectives. The first was to expand and perhaps eventually replace the existing obsolescent structure dating back to 1898 in its oldest portion. The second was to design the building in such a way that it could be adapted to varying uses as the nature of library service changed. For a long time, both buildings will have to be used together to serve study and research in the social sciences and the humanities at the graduate level; consequently, a scheme should be developed which is sufficiently flexible to allow for the possibility of using any area of the building interchangeably for book storage, readers, carrels, or staff work space. The necessary proximity to the General Library was a prime factor in the determination of the project site. Further, the Central Campus planning concept envisages a development of a library complex extending from the present library past the Undergraduate Library east to the Physics-Astronomy Building. It was desirable to maintain an uninterrupted flow of student pedestrian traffic along and through the complex. That the structure would not impinge on part of the President's residence area was also a very important factor in the design of the building. Immediately to the south of the General Library is a tunnel housing the existing loop system of heating and utility maintenance. The campus engineering service recommended that this system be left intact because of the cost of relocation and extreme inconvenience of possible interrupted service. So you can see that what we have here is a very constricted site and a very limited approach to the planning of a new facility.

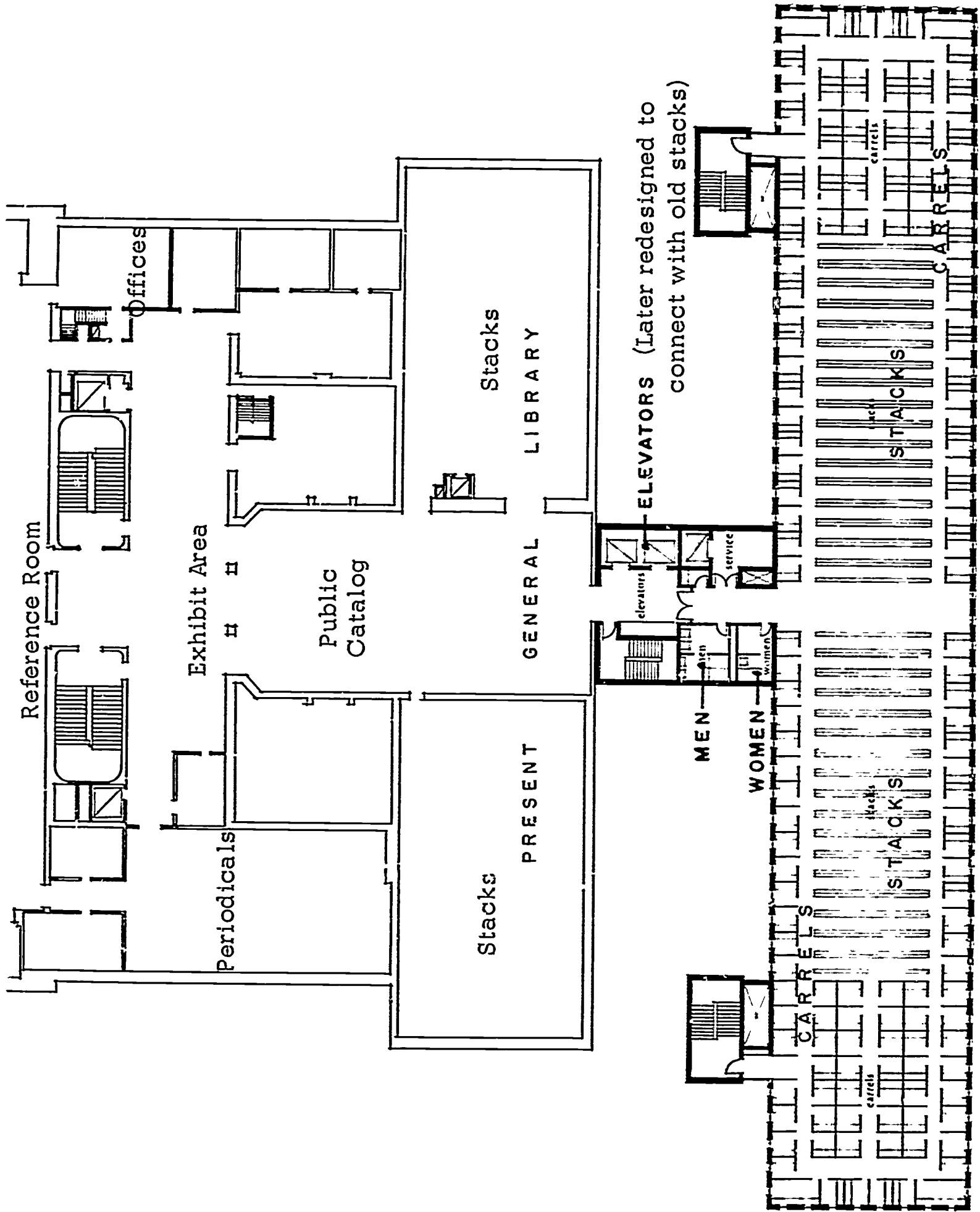
The original University occupies a square; the buildings on the main mall are the Natural Science Building, the existing Angell Hall, and the existing library building. The library building is the one to which we are adding the new structure to the south. The Clements Library is directly south of that, and although it has no direct relationship to the library

facility, the proximity is still one of the major considerations in future development. The present Undergraduate Library, which was completed about seven years ago, is to the east; again, the relationship of this Undergraduate Library building to the General Library is a major consideration in the location of this new building. The site planners—Johnson, Johnson and Roy, of Ann Arbor—have been involved in an extensive study of the future development of the University; the expansion of library facilities is indicated in an easterly direction, with additional buildings to connect the library to the Physics-Astronomy Building, forming a linkage of library facilities through the central part of the campus and also relating it to the Undergraduate Library.

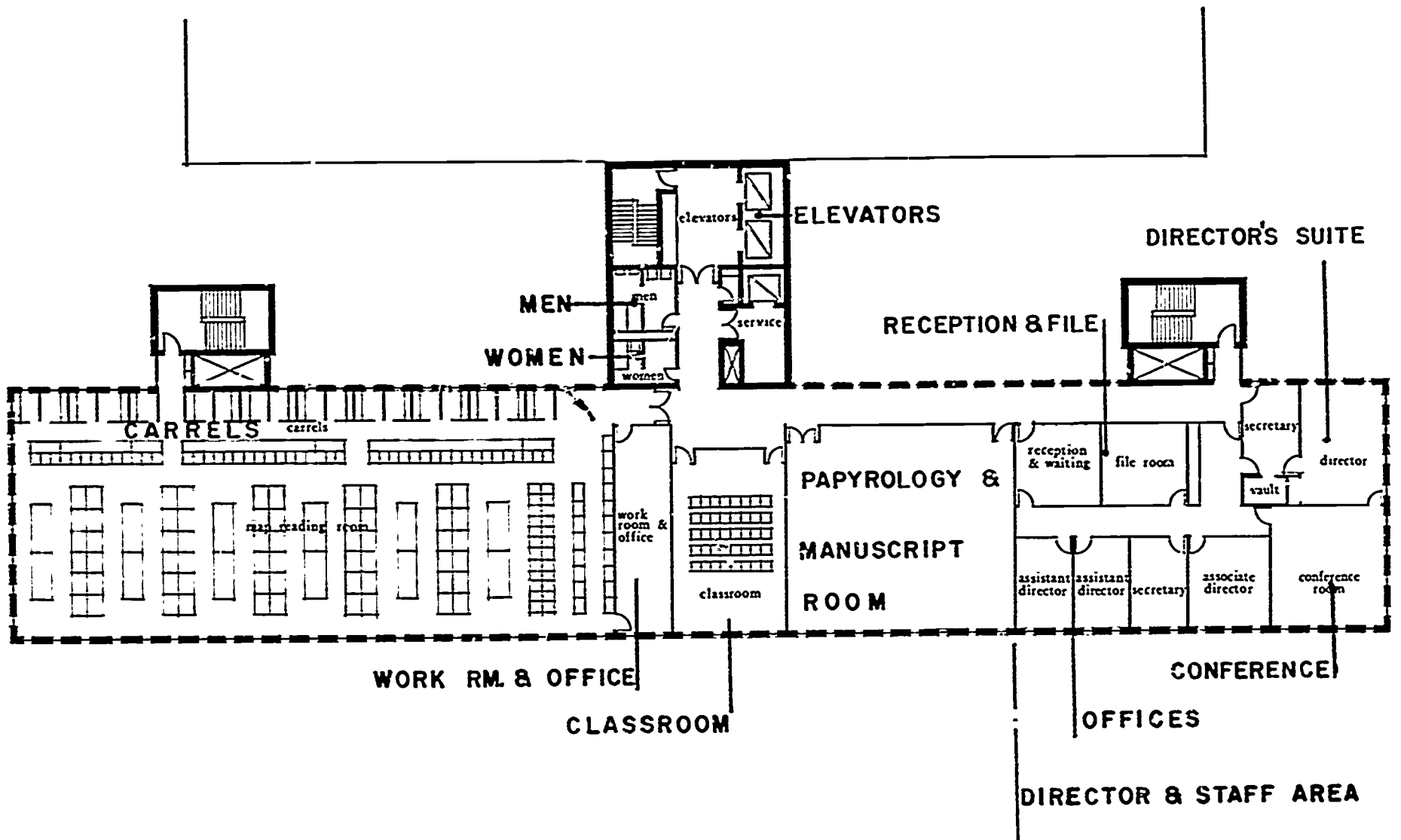
As we studied this problem, we were faced with an existing traffic flow across the campus in an east-west direction, which was fairly well established. The President's residence here was a quite inviolate piece of property; any rerouting of traffic through this area would present quite a problem. The space was limited around the entire facility; consequently, a low building was not a possibility at all. Obviously, putting a building in this location presented a considerable problem. The President's residence property is south, and the Clements Library is east of it. The Undergraduate Library is east of Clements. The existing stack area of the General Library is on the south side, and, for the most part, the stack portion of the General Library was considered to be in satisfactory condition, with the exception of the original wing which dates back to about 1898. We thought that we would demolish a portion of that existing wing and add to the General Library through the top, making a connection from the General Library to the new building.

With a very limited site for the new building and the need for maintaining the flow of pedestrian traffic through the site, the building was set up on stilts, so that an arcade could be carried through the building. This is a covered arcade with no enclosure except for the entrance to the library building itself. On the top of the arcade a large plaza is proposed; thus a common space is developed between the new library and Undergraduate Library and the Clements Library. In the future it may be a possibility that a connection between all these could be developed; certainly between the existing library and the Undergraduate Library, if the use of the library indicates that this is necessary. We are proposing a renovation of the existing library where an entrance is still maintained at its original position facing on the north mall of the Central Campus. The students enter here; an escalator will be provided where the front staircase is now located, and the fifth level of the stack area will be converted to a card catalog area and a connection to the new addition through the utility core.

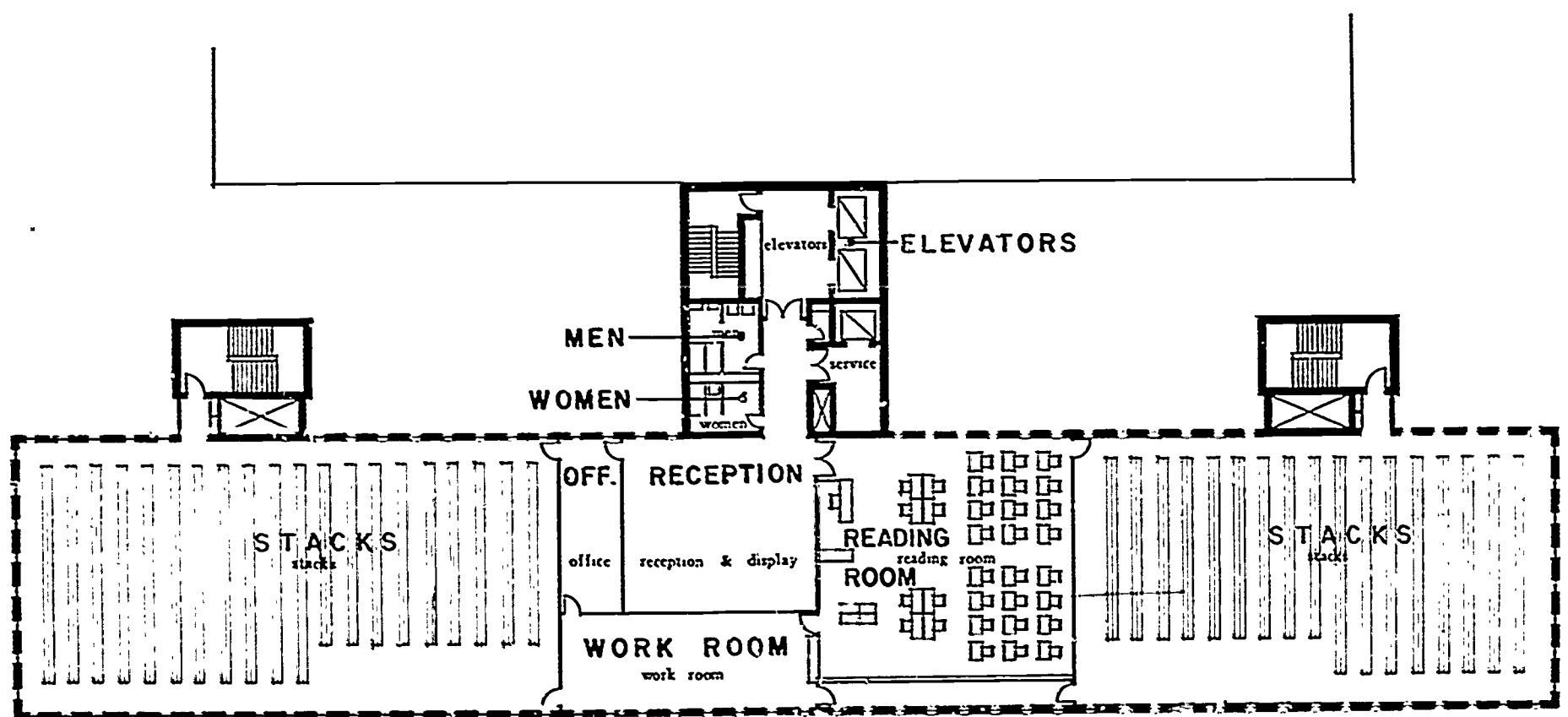
The existing utility tunnel is, for all practical purposes, inviolate (the cost of moving the utilities or disturbing them in any way would have made the construction of this building far more expensive than



Second-floor plan, University of Michigan, Central Campus Library Addition



Seventh-floor plan, University of Michigan, Central Campus Library Addition (latest plan interchanged seventh and eighth floors)



Eighth-floor plan (rare books), University of Michigan, Central Campus Library Addition (latest plan interchanged seventh and eighth floors)

it is at the present time). Consequently, our footings for the building were all located south of it and the arcade, the columns for the arcade were pinched in to miss the existing tunnel. The arcade is a completely open space. The entrance to the building is at this point. The first floor of the new library is contiguous with the second level of the present General Library. The second, third, fourth, fifth, sixth, and seventh floors are stacks, with rare books on the top floor. The mechanical equipment is located at the base of the connecting tower, with a utilities tunnel running through at the south, providing connections for the utilities for the new building. To that extent, and only to that extent, is the present utility tunnel disturbed. The foundations for the new building will miss that portion of the building completely.

The second floor is a typical floor, a floor which is repeated in its basic concept through the sixth floor. The building dimensions are 49 feet by 254 feet. There are no columns in this building; consequently, there is no module as is normally thought of. The reason for doing this was that we would then have complete flexibility in the arrangement of stacks and carrels, or whatever room arrangement might be anticipated in the future. There is a clear span of 49 feet, and the sections through the north and south will accommodate carrels on the outside with an inner core of stacks. The amount of carrels may vary from floor to floor, depending on the need; at the present time, the stacks will be located in the central portion with carrels along the periphery. Stairs are provided at either end of the building with mechanical shafts adjacent to them. The toilet facilities are in the main core section, with the elevators nearby. The present General Library will have an escalator; the card catalog will be placed in the connection between the buildings on the second floor, which is contiguous with the fifth level of the old stack building that is to be demolished.

The seventh floor differs a little from the floor below, but here, again, there are possibilities for various kinds of facilities within the basic framework of the building. Again, there are no columns to obstruct the planning, so that we have quite a bit of flexibility in arranging the plans as we see fit. On the seventh floor are located carrels (on the north side), a classroom, a workroom, and offices, placed directly across from the elevator; likewise, the papyrology and manuscript room adjacent to the director's and the staff offices. The eighth floor is devoted to rare books, with stacks on either end and reading room, workroom, offices, and reception in the center; the elevator service, stairs, and toilets are in the core. We could convert this top floor completely to stacks if it were required in the future. The penthouse areas are devoted entirely to mechanical equipment and the cooling tower. The elevator shaft and stairs end at the top floor; the cooling tower is open, as is usually the case, at the top.

As to windows, the present intent is to provide

narrow horizontal bands of sash around the building. The building faces south; consequently, with the concern for a minimum amount of light penetrating the building, it was our feeling that by keeping this window area quite small, we could have a minimum amount of penetration into the building and still provide the carrels with a view outside. Those people who occupy the carrels for a long period of time will have an opportunity to look out and not feel penned in. The window itself is small; it will be about 2 1/2 to 3 feet from the floor and will extend only to approximately 5 1/2 to 6 feet above the floor, so that the primary view is possible only when a person is sitting. The windows do not provide a view to people who are standing, since the carrels are generally around the periphery of the building, and we are cutting off the light as much as possible to the interior.

DISCUSSION

Question: What protection would a person have when the sun was directly adjacent to him as he occupied the carrel?

MR. HARO: The carrel, of course, is a rather small and constricted space. If we were to use a long, narrow window, this would permit a greater amount of sun penetration from the high portion of the window to enter the building and the carrel. We are reducing the height of the window to about 2 1/2 to 3 feet, and the top of the window will actually be at about eye level when a person is standing up. Thus the amount of sunlight will be much more easily controlled than if there were a tall window and a large expanse of Venetian blinds was needed for protection. A certain amount of overhang is provided in the projection of the structure beyond the glass line.

Question: Will there be any appreciable difference in your cost if you build columns?

MR. HARO: There certainly would be. It would be less costly to build a building with a center row of columns. However, this would impair the flexibility to a great extent, and we find that the additional cost is well warranted by having a clear span, where there are no restrictions imposed by the columns in terms of spacing of carrels or stacks. The stacks can be placed at any interval that would suit. The lighting is arranged in a direction perpendicular to the stack so that, regardless of the spacing of the stacks, there is always good lighting for the stack area.

Question: Why not use a cantilevered design?

MR. HARO: This, in fact, is what we have done on the first floor. The building is cantilevered on the first floor to the north, in order to miss the utility tunnels.

Question. Could you not have move' the addition closer to the existing building?

MR. HARO: We could; at the same time we wanted to leave open space, so that we could have as many of the carrels opening up onto an open space as we possibly could. And a building contiguous to the existing structure proved to be quite expensive.

STEPHEN McCARTHY

As Mr. Muller has said, the programmed needs for the University of Michigan Central Campus Library building have been very severely reduced, because of space limitations adjacent to the existing building and because of fund limitations. This is certainly regrettable, but apparently it must be accepted.

I would point out what Mr. Muller mentioned but perhaps has not been stressed enough. The rather major renovation of the existing building which will be required to make the new structure function satisfactorily as a part of the central building will cost \$2.5 million. That is to be added to the approximately \$4.5 million cost of the structure which has been presented, so that we are actually considering a \$7 million construction project.

The relationship of the existing building and of the new building to other library buildings and to some other campus buildings has been indicated. There is no question that the architects were given an extremely difficult assignment—to provide a suitable addition to the existing buildings in this very narrow and constricted site. I certainly commend them for it.

I think the building presents some interesting features and also some serious difficulties. The floors are roughly 45 feet by 270 feet, and this space is column-free, which certainly is an advantage.

One thing I am unable to tell is, what is expected to be the principal entrance to this building? Is it from underneath the colonnade, or is it from the old building? There are two entrances, and I do not know what the traffic pattern is expected to be. Some kind of control at the lower exit under the colonnade is needed. The building as presented does not have a focal point, and it seems to me that this is desirable. Maybe this is provided for in the existing building.

I am concerned at the distance of the stacks from the circulation desk. I cannot help but be concerned about the paging of books, unless the library is to be entirely self-service. I do not know whether any mechanical facilities are contemplated for the movement of books back and forth other than book trucks and elevators.

I see no evidence of any kind of service desk in this building until you reach the seventh floor. That may be all right, but it is somewhat unusual. Perhaps this comment stems from my thinking of this building as more separate than it is really intended to be. And it may be that the articulation of the circulation

desk, reference services, bibliography, and so on will work better through the existing building.

The site obviously gave the architect this long and narrow building as the only solution. But it is clear that if you have a long and relatively narrow building, you have long aisles and corridors. You have them in the stack floors. There are carrels on the perimeter, then 4-foot aisles, and then 27 feet of stacks. As a result, there are 8 feet of aisle for 27 feet of stack, and this is, I believe, a rather high proportion.

I would suggest that the floors are not in the proper location vertically. In my judgment, to make the first three floors stack and carrel floors; have two floors unfinished; and then put the library administration, maps, papyrology, and the rare book department on the top floor is to plan the building upside down. The rare book department should be on the second floor; maps and papyrology and administration should be on the third floor; and from there on up you should have stacks and carrels.

The reason given for the present arrangement is that there will be heavier traffic to the stacks and carrels than there will be to the rare book department. I would agree with that, and I would say that it reinforces my argument. The rare book department and its exhibit area ought to be down where faculty, students, alumni, donors, and so on will see it. It will be a better rare book department in my judgment if that is done. So my suggestion would be, I repeat, that the architect consider relocating the rare book department on the second floor; put maps, papyrology, and library administration on the third floor; and then stacks and carrels from there up.

To concentrate on the rare book area, I would like to get rid of that long, narrow corridor which really serves no purpose except to permit one staff member to get from his desk to the desk of another staff member, and I do not think that is necessary. I believe that the exhibit area could be reworked, perhaps its shape changed a little, and that the reading room could be made somewhat longer and narrower. Then the area to the south could be developed over whatever space is required as a staff work area for rare books, and this could constitute the aisle. You have to have an aisle in the work area, anyway.

I would also suggest that the present seventh floor, which as you realize I have now made the third floor, could be restudied and the corridor space somehow reduced. I do not quite know how. In the administration area I did a little measuring, and in order to get to the administration area there is one corridor which is 7 feet wide, and another which is 5 feet wide. Thus, 12 feet of the 45 feet available is used for corridor. I think this layout can be replanned.

I would also suggest that perhaps the library administration area might like to change spaces with papyrology. I think that the Director of Libraries ought to be a little more accessible than papyrology.

I wondered a little, in view of the need for space,

about the classroom for the rare book department. It seemed to me that the number of hours per week that that room was being used for classes in rare books probably was not very large. But I could be wrong. In any case I would suggest that you might consider whether there are not dual uses for this room, since it is adjacent to the map area. Some kind of combination use might be a possibility.

It seems to me that if my suggestions were followed—if the rare book department were located on the second floor, with an appropriate information and reception desk in the exhibit area, and a qualified and accoutered person seated there—this arrangement would give the building a focal point.

There are some relatively small matters I could mention. I saw no provision for smoking in the building. This is a mistake. I thought the size of the rare book study desks were too small. There seems to be no provision for coats and brief cases in relationship to the rare book department. Maybe this is not a problem, but most libraries do not want people to carry brief cases into rare book departments. It may be that some provision is expected to be made available in the exhibit room.

I have assumed that the stairs at each end would be available for movement from one floor to another on the upper floors. I do not know whether there will then be a control problem on the ground floor, but I raise that as a question.

I am sure the colonnade will be very attractive but it is expensive and there is not one square foot that is worth anything to the library. It does not help Mr. Haro to tell him that, but that's the fact and the planners might as well face it.

I think we have had an interesting juxtaposition in our discussion of two major universities, Michigan and Minnesota, both of whom have library buildings built at about the same time on much the same plan, which are now seriously inadequate because of the vast increase in enrollment and in size of collections.

Minnesota is moving to a new campus, with really two central libraries, and I believe the West Bank Library is to be the key library of the future. The Walter Library will serve a very important purpose, as Mr. Cerny said, for 20,000 students. Minnesota's solution is to go to a new plot of ground, construct new classroom and office buildings, and create a duplicate second complex, at an estimated cost of, shall we say, \$10 million.

The solution proposed for Michigan—and I know there are numerous factors here of which I am unaware and all of which have to be taken into account by the authorities at Michigan—is for it to embark on a \$7 million program, which does not, it seems to me, open the way for the future. This may be the only thing that can be done, but there is this very serious consideration—\$7 million is a lot of money! As you heard Mr. Muller say, this building is supposed to last for ten years, but he is not sure it will last for more than five.

And so Michigan will not be solving its central library problem by this project. It may be the only project that is viable in the University at the present time; it may be that the situation is so desperate that despite all the things that can be said against it or in favor of some other plan there is no other solution that is possible now. This is a hard decision to make, and I am certainly glad that I do not have to make it.

DISCUSSION

Question: Mr. McCarthy mentioned the lack of any focal point. I judge that this building is going to be stack and reader space, as an adjunct to the original building. Is this correct?

Answer: Yes, that is correct; we have simply added carrels and stack space. The focal point, as in any library, would be the card catalog, and it would be located in the main entrance to this building. Some concern has been expressed about the narrowness of the plan, but if one keeps in mind that the 10 feet leading to this one floor is only for this one floor, and the elevators then lead to the other floors, this will not be so serious. Actually the distance of the main corridor will be quite wide, about 40-50 feet, and will be flanked on both sides by card catalogs and consulting tables.

CHAIRMAN: Mr. McCarthy said that the building is upside down, in his opinion. I wonder if there is comment on that statement?

MR. HARO: Basically, as architects, we have looked to the University for what it considered to be the most important relationships, but I do believe that the proximity of the stacks to the card catalog is of primary importance in that light.

MR. MULLER: We were more concerned about the students than about ourselves. We felt that it was important to narrow the distances as much as possible between the catalog and the bibliographic center, and the stacks and carrels. It is for this reason that the administrative suite went high up.

A more recent change has been made that was not incorporated in the plans which would actually interchange the location of the administrative suite and the rare books for a different reason. The rare books would be below the administrative suite, and the administrative suite would be on the top floor, because we anticipate a possible growth of the rare book area, which could then extend downward. There would be no room for expansion for the department if it were on the top floor.

One of the criticisms was that the rare book area on the eighth floor would not receive quite enough attention. We were planning to have exhibit cases for rare books in the main hallways leading to the building on the sides where the catalog is currently located.

These cases would be away from the actual rare book stacks, so that the rare book room as such would be used primarily by those who wished to consult rare books, rather than for the purpose of providing exhibits for rare books.

CHAIRMAN: Another criticism had to do with the colonnade.

MR. HARO: The arcade is an expensive architectural element. Yet I think that when we are dealing with a constricted campus where traffic patterns have to be maintained, steps have to be taken to provide for this kind of traffic. When ground space is at a premium, then the introduction of more building space on the ground tends to disrupt the traffic patterns to an even greater degree, forcing traffic to channel in and around corners of buildings. I think that this would be really quite a disaster if this were to happen. Under the circumstances the arcade seemed to us to be a valid solution, because the traffic along this particular part of the campus is exceedingly heavy, and to choke it off would have been a very serious mistake.

MR. MULLER: I think one point Steve McCarthy correctly raised was the question of mechanical facilities. We do not really know what the future holds, whether

a building of this sort will have to provide paging or not. At the present time we manage all right. Students and faculty help themselves to books; books they cannot find are then searched and paged. By paged, I mean, are collected and then picked up later. We would hope that we can continue this pattern. However, the latest meeting with the architects has resulted in provision in the floor structure for future installation of mechanical facilities which would allow for the installation of a book conveyer, both vertical and horizontal.

Another question related to smoking, and since this part of the building will be air-conditioned, and, incidentally, the rehabilitation of the old building also will include air conditioning, it is conceivable that smoking will be allowed. At the present time no smoking is allowed in the General Library building, whereas smoking is allowed throughout the Undergraduate Library. I do not know how these matters are determined. I am not the director of the library, and I myself do not smoke; maybe if I were the director, I would say "no smoking." We have found that smoking has done a great deal of damage to the various parts of the Undergraduate Library, particularly to the ceiling structure where the ventilation ducts go through. In a building which contains research materials and rare books, one has to be careful, and I think this is a good point to bring out for further study.

IV. School Library Sessions

MODERATOR *Richard L. Darling*

PANEL MEMBERS *Mrs. Beatrice Katz*
Arthur Parkllan
Arthur Katser
Leo Dworkin
Donald Friedrichs
Lyn Graziani

TEAM-PLANNING THE SCHOOL LIBRARY A Panel Discussion

MRS. KATZ: This discussion will center upon four points: (1) why a team, (2) who should be on the team, (3) what are the roles within the team, and (4) procedures on forming a team. Dr. Parkllan will speak first. He was formerly coordinator of a committee of 200 citizens and professionals to organize a large development around a high school in a redevelopment area that would focus on the school as the center of the community.

MR. PARKLLAN: Mrs. Katz mentioned 200 people. The number was actually 181. When you get that many people working together, or even if it's a smaller number, say, 18, 19, or 20, the important thing is involving the community in discussing what they want. In most major areas, in constructing facilities of one kind or another, it seems to me this is one of the basic syntheses.

Let's take the subject of a library. You hope the public will use this library. If they don't, somebody is going to look pretty funny. The same applies to our schools. We are no longer in a position where we can open school at nine and close at two, or open at eight and close at one, as they used to do in some areas.

Libraries, thank heaven, have had a much different kind of experience. I am sure most all of you

Richard L. Darling, Supervisor of Library Services,
Educational Services Center, Montgomery County Public
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Mrs. Beatrice Katz, Director of Library Services, Oak
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Arthur Parkllan, Member, Board of Education, Oak Park
Public Schools, Oak Park, Michigan

Arthur Katser, Audio-Visual Coordinator, Clinton Junior
High, Oak Park, Michigan

Leo Dworkin, Chairman, Art Department, Oak Park High
School, Oak Park, Michigan

Donald Friedrichs, Principal, Bentley High School, Livonia,
Michigan

Lyn Graziani, Eberle-Smith Associates, Detroit, Michigan

have faced this actuality of a poor man's university in the library. It's a place where large numbers of people have to be served, and how they are served must be built into the library.

It seems to me the first thing we should do is ask people what they want of the library. When we create an environment whereby the people who use the facility can do only certain kinds of activities, then we are limiting them. They might never actually realize that there are things they want to do, activities they want to participate in, in that library unless they are asked.

It is the same in the school. In Oak Park, the basic criterion we started with was that the school would be built around the library and not around the gymnasium. This was different from what happened in many suburban high schools. The gym and swimming pool were put in first, and the rest of the school was built around them. We have already outgrown the senior high school, and one of the key jobs the planning groups are going to have to consider is how to expand.

In this connection, in the Ford Foundation Planning Grant one of our major jobs was to look around at the possibilities of expanding the library and not just the school library, either, but the public library as well, with the school working in cooperation. Incidentally, they are not called libraries anymore; they are called resource facilities. Basically they are the place where the learning materials are kept, and one of the finest learning materials is still a book.

A community will support an activity that it has had a hand in creating to a far greater degree than one which has been planned for it by alleged experts in a society as quickly changing as ours.

MR. KATSER: Even though some of the citizens may participate in the team, I think one of the most important things to remember is that those citizens who do

take part have the opportunity to take back the ideas they have heard to the rest of the community. When community laymen help in the preparation of library planning, then the entire community takes a greater interest in this planning, and this is one of the major successes of having a team. It is not simply the involvement of a few members, but rather the indirect involvement of the entire community, that will assure the success of such a program.

MR. DWORKIN: I think the library is an exciting place where, although it is a quiet place, much is happening to stimulate the intellectual growth of children. Consequently, I think one of the reasons for involving the community in the planning of it is the creation of new ideas. Not only do we need the assistance and support of others, but when you work on a team you find the other members add a new dimension to your thinking. Each person, when he makes the effort, has so much more to offer than is obtainable in any other way.

MRS. KATZ: We might add that when working with a team, you can get some outside opinions and hone out some of these mistakes before they are formalized. It is difficult, when you are personally involved in a program, to see objectively and be critical of your own work, especially if you are the only person, or one of a few persons working. You cannot see the possible mistakes as readily as an outsider.

We worked with Mr. Katser and Mr. Dworkin. Mr. Katser, I think, is an unusually creative teacher, especially in the area of the classroom, and Mr. Dworkin, in turn, has forced the library, so to speak, to include areas that are not part of the basic collection. We have a number of art books that you do not often find included in libraries because Mr. Dworkin has inspired us to include them.

MR. PARKLLAN: We recognize the idea of feedback and community understanding, but there is a predisposition on the part of people, especially boards of education, to be somewhat fearful of involving people who have been critical of the schools. If I have learned one thing, it is that you must include the local critics of the school, because if you do not, your plan, however good, may be cut out by them. You have to include these people if you look upon the library as an educational activity. Frankly, we were pressed many, many times because of them to re-examine our own thinking. In some cases we found it had been fuzzy and in others, we were way off base. Whenever you consider involving a community group, you must remember to get good across-the-board representation.

MR. DWORKIN: A provision we neglected totally, perhaps, is to have consultants on the team. A library is for the students, and we should discover how they feel about libraries and how they think

libraries may be improved. I cast a vote for including students on a consultant basis to help improve the services and suggest materials and features that need to be included in our libraries that are not there now.

MRS. KATZ: When involving students, we should be sure to include the dropout and the graduate as well. The library is visited by many people, and sometimes we neglect the potential of the dropout. Maybe the library has not helped him but could have.

MR. KATSER: In order to maintain complete communication, we have to search out those who are deeply interested in school planning and also those who do not have much interest. We have to go out and look for associations that are interested in community growth and invite these people to participate impartially in the school planning program. We have to see that all groups are aware of what is going into the library, whether these people have a positive or negative attitude to what is being done at the time.

MR. PARKLLAN: Have we mentioned the architect on the team? I would like to add that in planning for schools, you can do no greater disservice to an architect than to be vague about what you want. The more specific you are about what you want to do in your library or school, the more effectively he can do his job. Let me give you an example. This project, incidentally, was not a library but a school.

A school was built in a suburb of Detroit. The kindergarten was built with huge I-beams. This was fine, except for one thing. What do kindergarten kids do? They run around. What do they run into? Those same I-beams!

This is a fine example of lack of communication between the architect and the people for whom he is building. It is not his fault, either, because he had not been told what was needed and had been allowed to go ahead on his own and simply use his best engineering and mechanical abilities. Right from the start you must inform your architect. Only in that way can he understand what is needed. If you present him with a written report, be sure it is clear. The architect should have assistance, too, from the specialists in the universities who are conversant with new activities in the area of their specialties. For instance, if we were building a library open to the general public, I would certainly want to know something about what is happening in or around public libraries right now, and I would want my architect to know about it, too.

MR. KATSER: I think from the beginning you have to include the instructional specialists. The new ideas coming into education all the time have increased the use of audio-visual materials, and these certainly should be part of the plans for a library. All these specialists must work together from the beginning, including the architect.

MR. DWORKIN: I would like to talk about the nature of involvement. One thing I would warn against in any group is taking a very strong position too early. One of the purposes of having a team is to share and stimulate ideas. We should look at the situation in terms of our local educational needs, and then we can look at what other people have done and perhaps use what they have done as a guide. The people involved in this process have to come from the professional staff, primarily because the library becomes the intellectual hub of the whole school.

MR. KATSER: We must also have classroom teachers involved. The entire school must be represented including the administration. There must be a fair number of administrators included.

MRS. KATZ: We must not neglect the administrators. We cannot exclude them from building planning because you can hardly make any plans at all unless you have them involved.

At a certain point in planning, particularly where the community is present, we ought not to limit the thinking to what is practical or possible. This comes soon enough in terms of what the administrator is thinking. We should consider what would be ideal in materials, what we would like to do in terms of curriculum.

Our school is limited because there is not the facility for large groups and for movement back and forth from a smaller room to a larger one. The library is the only facility that lends itself to different kinds of meetings such as conferences and other group functions.

MR. PARKLLAN: I should like to bring up a point of disagreement concerning traveling to inspect other facilities. I approve of junkets. I have seen the good they have done. Some groups can accomplish more by having an opportunity to explore facilities this way than by any other. For example, we had laid out all the specifications for a high school. We thought we knew what we wanted, a little bit of this and a little bit of that, and we read about the things other people wanted. The plan turned out to be the greatest hodgepodge you have ever seen in your life.

Coming back on the plane with a group from one of these trips, I moved from chair to chair asking questions, and we were comparing other facilities with ours and considering them in relationship to our needs. I found the members had all made a discovery. They all agreed that nobody else was going to solve our problems for us. We found that our problems were just a bit different and that you cannot transfer one plan in total from one city to another.

MRS. KATZ: We should all try to profit from other people's mistakes. One of the difficulties in school libraries as compared to public libraries is that you are not in a position to look at them critically. Per-

haps if we visited with an eye for learning we would have less of the repeating of mistakes.

MR. DWORKIN: I agree with Dr. Parkllan. The point he made is that it's a matter of timing. At the very beginning you must have the attention of the people focusing on what they want to do. Sometimes when we look at what the other person does, we do not have the slightest notion then what it is that we need or want.

MRS. KATZ: Maybe you could elaborate on what the roles of the teams are. Who should be doing the inviting, for instance.

MR. KATSER: Any time you plan any group visitation, you must take a number of lay people with you. You have to show them what other communities are doing so that they, in turn, can show others. If nothing else, you have to show them that your plans cannot be exactly like some other school district's. You have to show them your own problems in your own community. Teachers certainly must go along on some of these trips so that they can see what some of the plans are and include some of their own.

MRS. KATZ: What you identify as the role of a member of the team might prevent him from thinking in terms of himself and not really bring out what his own aspirations are. We are trying to get the individual citizen to determine what our individual needs are. We have to emphasize to the community member his role in terms of himself and his children—what he wants. Is it something that the community has tried to get? He is entitled to his own aspirations and his own goals for his children, whether or not they are practical.

MR. DWORKIN: One of the functions of a trip is to select wisely a place to visit. You might very well raise the aspirations of a community. If you see a well-functioning facility, this may raise the aspirations of the community and the staff.

MRS. KATZ: You cannot start with that hope though. You must first get from the individual his ideas, what he wants. You must start as you do with a child—where he is at the moment.

MR. PARKLLAN: I do not think there is any question that the toughest job a committee is going to have is getting the rest of the community to realize their aspirations. The community needs prodding, pushing, help, and support. Otherwise, you won't be successful. Their wants are extremely difficult to put into words. For instance, we had a whole census study for the people in my group because I asked them, "What does your community want for this high school?" and they didn't know what I was talking about. I asked them, "What do your neighbors like?" They couldn't

answer. They didn't know. They didn't know their neighbors really.

MRS. KATZ: I think we have fairly well spelled out our goals. We have spent most of our time describing this nebulous thing—what we think the committee should do. As far as the rest of the team is concerned, their jobs are spelled out for them.

We are trying to focus on the fact that the school is the center of the community. Let us go on to the idea of sequence of procedures. One of the most important things to be considered is when these steps should take place. The first thing you must do is form the team. Also, you have to start with the examination of the school districts. I would like your opinions on who should take part.

The group represented here today would be a good steering committee: the library, the personnel, the board member who represents the community. It would make a good steering committee to which you could add in planning a larger team.

It is most important to keep the team a workable size. Probably a good number would be not over twelve people. You can choose a teacher representative or two and call in various people from various departments to serve as consultants.

MR. PARKLLAN: There is another point Mrs. Katz reminded me of. It is relative to this business of representation—that is, feedback. If you do not have feedback of what the committee is doing back into the community, the committee takes on all the aspects of a star chamber and this is not good. Some groups have the idea that the representation on a committee such as this must be overbalanced in favor of the community of lay individuals. In other words, those people who have a vested interest in the outcome as professionals could, if necessary, be regularly outvoted. For example, the teams should have an uneven number like 11, 13, or 15. However, you have to count on a couple of people being absent. The odd person is always from the community.

MR. FRIEDRICH: I should like to present some of the ideas of a building principal on what to do before the contractor arrives. Sometimes building principals are known to be not exactly "team" members. They get into the driver's seat and ride herd until you wonder whether they are on a team or not. I would like to approach this topic from this standpoint.

Planning involves people both inside and outside the school. Whether it is a formal or an informal team, both must be involved, must feel part of the planning, and must know that their library is going to meet their needs.

The principal's primary responsibility is getting the job done to the satisfaction of all concerned, and this takes at least three key factors: (1) good communication, (2) reasonable expectations, and (3) much luck.

What to do before the contractor arrives? Get people involved!!

The mechanics of team planning can be handled in a dozen different ways, each of which may be effective for a particular situation. The real difference is in the people involved and how they feel about the job of building a new library. Let us take a look at the people involved, ask a few questions of them, and, I hope, include a few ideas.

What about the students? What are they expecting from a new library? When it is built, will they take pride in it and find it satisfactory to work in? When you plan your library, keep your student council informed. Show them the plans and sketches and try putting a sketch of the new library in the yearbook. Get ideas in the school newspaper. Start projects, perhaps, for the purpose of special pieces of furniture with money raised by the students. There is nothing like students feeling, when they first walk in the library, that this is a contribution they had a part in making.

Ask for student suggestions for new books, magazines, films, and records. Planning a new library has to grow out of planning it together.

What about the classroom teacher? Does he look upon the new instructional materials center as a place that belongs to the librarian just as his own classroom or shop or laboratory belongs to him? All too often this is the case.

So we might try a few of these ideas. Select a cross section of classroom teachers, both old-timers and new teachers for you want to get ideas from both groups. Put them to work with the librarian in planning a new facility to meet with specific objectives for the next five years. You can go around and around and still come back to where you are now. If you have specific objectives and want to accomplish them within the next five or ten years, you can get agreement on them and go from there.

Part of this planning with classroom teachers involves their own personal physical comfort when they move in the direction of the library or instructional materials center. I suggest you definitely plan to construct a lounge adjacent to, or part of, the new library as another place for teachers to work in, either alone or in small groups. As similar ideas come forth, be sure to include them.

Plan for a clerk to be available at all times to handle teacher requests, making certain he is conveniently located.

Our new library at Bentley is planned so that a teacher may have coffee or coke and a smoke in the lounge. He may then take ten steps across the hall and order all his audio-visual equipment; or, take two steps in the opposite direction and schedule the library for a class visit. A few more steps and he is sitting in the periodicals section reading a current newspaper or a magazine that is not available in the lounge. He can go five more steps into the area where he can actually develop audio-visual material

for use in the classroom. These conveniences make this a functional library and a practical one for the people who want to use it.

In relationship to teachers, we studied the manner in which outstanding teachers are making use of our library and we moved the library further in the direction of the effective use they are making of it. A few social studies teachers, for example, were making effective use of current periodicals. They had immediate access not only to current periodicals but to all back issues as well.

We experimented with new uses of the old library to determine whether or not new arrangements would facilitate use of the library. For example, we took an old glassed-in conference room, dismantled it, and constructed a larger conference room, separate from the main reading room, and this experiment led to our happiest decision. It began to be used in different ways. It began to be used as a room to which teachers could come both for reference and for preparation for the reading room.

So, with the experience of this separate reference area behind us, we decided to plan a separate library classroom immediately adjacent to and partially visible from the reading room. Classroom teachers have been extravagant in their praise of this facility. I can only say that it actually evolved from the experimental use of the old library with the convenience and effectiveness of teacher use of the library in mind.

What about the department chairmen? Is each given an opportunity to state his own ideas? What about the librarians themselves? Have they had the opportunity to sit down and reach fundamental agreements on basic issues? All too often libraries are being planned without sufficient participation of the librarians themselves.

More and more, I find that team planning is a fine element as far as the community is concerned. However, all too often the librarian's ideas are not effectively used. Give the librarian some broad limitations in which to work, such as the total square footage available and the general space of the building. Make certain he includes space for teacher-student-principal-architect ideas as well as his own. Give him a deadline. This helps to hammer out agreements. The important thing is to reach decisions. Make certain to work closely with experts on all uses of audio-visual and data processing equipment.

What about the problem of a library consultant? He should have been in the act years ago and probably has been. Make certain you dig out the old North Central evaluations and reports on earlier visits to know what was said about your library the last time.

If possible, give your consultant the whole story of the personalities involved and the key decisions to be made. Use him to work with the team effectively, to bring personalities together, and to get key decisions made promptly. If he cannot be added to the regular team, make certain he puts his ideas in

writing and sends them back to you. Sometimes you receive what seems to be your own ideas coming back to you through the mail in the form of a recommendation, and you can get that extra one thousand square feet you have been working for.

What about the school library supervisor? A good school principal would have been working with the supervisor for a long time. Ask the supervisor to help build a concept of need for effective library service with the superintendent and the board of education.

Work closely with your supervisor to establish specific goals for books and materials, services, additional clerical help, modern equipment, and professional specialists in the library and/or audio-visual services. Invite your supervisor to help you on problems of existing personnel and the planning process. Listen carefully to the supervisor's ideas on library quality but insist that he, in turn, listens carefully to yours. Make your final decision on the best idea, not on the basis of administrative prerogative or professional jealousy.

What about the superintendent and the board of education? What does a principal do in library planning with his bosses? One thing I have tried to do is make certain these people who are very, very busy people in the community and in their office work actually get into the library at least once a year. We all have our ways of doing this. I would like to suggest one way. Ask them to come to the library to have their pictures taken to be placed in the school annual. Make sure when they get there that they see the limitations as well as the rosy side of the library. We cannot progress if we say everything is just fine. The way we get help is by pointing out the limitations as we go along. Provide them with reports on library use and recommendations for expansion of services long before the money becomes available for new facilities to replace those old overcrowded, poorly equipped library areas that we have in too many of our schools.

Make certain you know the financial and community relations problems faced by your superintendent and board of education and how a new library in your school must fit into these problems. Since unlimited money is not available, ask for specific square-footage allocations with which to plan, then go to work! Be aware of the good suggestions of economy-minded members of the board, but speak out where quality of library service is affected.

We finally get to the architect. Since architects have problems with clients who cannot agree among themselves, be sure consensus is achieved in your case and that you adhere to your requests of the architect. It will make it much easier for him to stay on his job and get it completed on time. Every time you get one good idea, the next day brings another one, and it is difficult to know whether to replace the latest idea or to change the instructions to the architect.

Make sure you read the architect's reports of his conferences with you. The record is not always accurate. Sometimes there is misunderstanding between the professional people and the architect. Copies of the minutes of these meetings are available from the architect, and he is happy to have any corrections that would direct his work more accurately.

Check over very carefully every new set of drawings to make certain nothing was overlooked, and *I mean nothing!* There are electrical outlets and many other areas of the library that need to be double-checked. Those final drawings go to the contractor, and they show the way the building is going to be when you are through with it. Make a final survey of the working drawings to make sure of the changes and to verify, for instance, that the fire marshal or the department of public instruction have not made changes without your knowing it.

Make certain the entire facility is planned for each piece of specialized equipment. The architect will be happy to provide you with a library furniture company he has confidence in. Make sure the company does not cram too much furniture into too small a space just to sell furniture.

The specific organization of the planning committee and the study sessions involving students, teachers, librarians, the principal, the consultant, the library supervisor, the superintendent or his representative, and the members of the board of education will depend upon the specific circumstances of each community. In any case, all are directly or indirectly members of the planning team, the success of which is largely in the hands of the building principal.

MR. GRAZIANI: The architect has been called the form giver of the building. However, it is amazing to me how each building definitely reflects the experiences that have gone on before the building takes shape. The meetings with the clients, the discussions, the ideas, and the communication between the people involved are all reflected in the building.

The architect must do research and keep up with new methods. Educators are reading so much about community planning and things change so quickly that the architect must keep up with all the new ideas. We even create hypothetical cities with a school as a center and study it for community use and so on. By this means, we have been able to consider different aspects of the problem and try, if possible, to find physical solutions.

Other factors, too, must be considered, such as new educational concepts, small group instruction, and the individual student—also, the ramifications of the way the student spends his time here. And the staff, how does it affect the library of today and tomorrow? The instructional aids and audio-visual equipment of all kinds must be planned for.

In these new concepts, what sizes of space will be needed—a small group conference to the left and

a small group conference to the right? These can be portable. What about the staff preparation area to prepare tape and so on for talks for class programs? What about conference groups—every kind of group—this problem? How do audio-visual equipment and group participation affect the library and its uses? The student cart we have heard so much about—will it be for one or two, will it be portable, or will it become part of the library facility? Should there be small discussion areas with transmitters? The architect has a responsibility toward the student and his ideas and all the ramifications of them especially as they pertain to the library.

The architect comes to the client to design a building. He knows each client has his own needs and problems and that he has his own new ideas. These ideas are accepted in many instances. This is the important part, the beginning: the communication of ideas; the interplay of concept, of curriculum and program. The concept can be translated by the architect. He can give help by understanding what the client wishes to do. We believe the library is an integral part of the whole educational process, and this concept is translated into the whole program. The program, to the architect, is the functional beginning of the rooms in the building. These rooms can be drawn to scale so that the functions can become a part of them.

The material you give to the architect should include the number of books expected in the library and the amount of audio-visual equipment anticipated now and in the future; the types of audio-visual equipment; the teaching machines and tape recorders—all these things have to be stored, programmed for, and provided for within the facility.

Also, what type of reference system will you have? What reference desk will you have in your new library? Conference tables—how many and what size and what equipment for each? Teacher-student work areas, teacher preparation areas—how many of these and, again, what equipment is needed and what is the function and activity that go on in each one of these spaces? Precisely what is the room used for and what will be the dimensions of the space? Will the room be long? Will it be large?

The total library space for the reading room—how is it distributed? How is the room divided? Are the stacks in the room or around the room? What is your philosophy on where they should be? Translate this to the architect. The student carrel—what type should it be? There are many on the market, and it is up to the group to determine what type and how many.

Displays—what type of display media are needed? Do you want just graphic cases that are movable or permanent displays mounted on the floor? What type of displays are good for your specific library purposes?

How many tables will you have? How many chairs will be needed? The established figure is 10 percent of the school population, but this is rarely

reached. It is usually only 5 percent. Where do you fit into this 5 or 10 percent?

The architect can pull all these data together and start to think about how he can create a building that will serve you functionally and yet be decorative. Then the architect takes his main talent—the ability of the architect to create a library and give it character.

The student is the most important part of the library. Will he want to come in, and will he want to use it and enjoy being there? We would like to create a different atmosphere, perhaps with the library overlooking a landscape, thereby creating a feeling of peace and tranquillity. Thus the library has other uses and aspects to it.

The creation of activity space is to make people curious and want to go there. Many, many people it is true, would not even go in the door, and, they stay away.

The sequence of expansion as you approach the building is important. How much expansion can you see from your car as you approach and then as you come closer and note the material used and the shape

and form and planning? The grass and trees and sculpture of the building wall work together to create an environment. The use of the right materials, the focal points, and the views beyond, all make our life more worth living.

We spend a great deal of time in buildings; why not make them pleasant to be in? The architect can be sculptural in feeling and make use of symbolism which is also very important.

An interior can be much more exciting with the creative use of materials. Sequence of materials can be employed extensively in making the building more enchanting and more stimulating for the purposes it has to serve.

Here we have everything in one space: the books, stacks, a lounge area, reading space, a desk in the foreground. All these aspects are important and must be organized if they are to function properly. If all have been carefully planned by committees, then the library should function well and be a delight to the staff and a credit to the planning committee and the architect who created it.

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REMODELING TO PROVIDE QUARTERS FOR A PROCESSING CENTER

The topic I have been assigned is "Remodeling To Provide Quarters for a Processing Center." If there is anything I may leave out in discussing the building of a processing center, you will have to put it down to misconception of the topic.

What is the background for the central processing of library and instructional materials? This is a familiar topic for discussion with librarians who are in general agreement regarding the logic of this procedure.

To review briefly, in any school district or system with more than two schools, it is generally conceded that central processing techniques and advantages should be investigated. Where the ordering of materials has been centralized, a natural next step seems to be the delivery of these materials to one location in the school system.

Centralized cataloging can eliminate duplication of technical processes in the individual school libraries with the exception of minor chores. Cataloging of materials at the processing center saves the time of the individual librarians and gives them more time for teacher and student. When you talk to librarians, this is always their complaint. They have to spend too much time cataloging and processing. In our new processing, it seems to me it is more important than ever to have as much time as possible to devote to the needs of teachers and students. The books and materials would find their way more quickly into the hands of teachers and students.

More efficient utilization of clerical personnel is possible. Here, again, if you utilize the clerical personnel to do processing chores, then the experienced librarian will have more time to explore the delightful task of helping teachers and students. The typing of catalog cards for books, films, and filmstrips relieves individual librarians of another clerical routine.

A step beyond central cataloging is the technical processing of books, that is: lettering, lacquering, pasting, preparing pockets, and typing book cards. All of these are considered a part of processing and

may be done in the central processing center. Frequently the last two chores are done in the central library processing center and then, again, they may be delegated to willing students.

Let us say that the board of education and the administration staff of a school system or a school district have reached a decision that central processing of instructional materials would be more economical and timesaving. This, of course, has been and is subject to perhaps too much discussion, and the librarian or supervisor should be ready to explain the requirements for space and equipment. It would be a remarkable bit of timing if, at the time you decided to go into central cataloging and processing, you were going to have a new building and move into new quarters. However, I am sure that for many of us the decision to have central processing comes not at the time a new building is being planned, but rather at a time when all the buildings in the school system are completely filled with people and students and there is no space for the additional facility we have to plan for.

I am also sure that if the school district has decided on this move, the librarian has anticipated and acquiesced in the administrative decision. With the counsel of the superintendent of schools and the staff members in charge of buildings, she has already searched for the space to meet the needs of the processing center.

In current discussions about instructional materials expansion librarians frequently assume that space for the handling of the printed materials does not need to be quite so large now. They give as an explanation that when so many librarians choose to have printed cataloging cards purchased along with the books, they do not need a central processing center or as much space as previously needed. Sometimes the librarian chooses to buy books from a firm or agency that catalogs and processes the books as a part of the purchase price. Whichever is the new procedure, this does have a bearing on the special requirements. However, we should not be so willing

to eliminate this space or part of this space for printed materials because there may be a change in the point of view. Maybe the librarian tries out some of these new commercial processes, maybe she tries out regional processing, and after that she decides she must return to the old setup where she can have the cataloging done in the old school systems.

A recent discussion I had during the week with one of our supervisors is responsible for these remarks. At that time she told me she was not entirely pleased with the regional setup of cataloging, preparing the printed card, and so forth. She is going to have to go to the board of education and say she has changed her mind and must go back to the old setup. You must take this possibility into consideration.

If all instructional materials, including printed materials, are to be processed, more provision for space must be given to three-dimensional materials such as globes, skeletons, weather kits, specimens, to name a few. Each of these takes as much space as a pile of twenty books. If these materials must be stored before processing, that space will have to be reckoned with continually. Then when you distribute three-dimensional materials, they do not go into a convenient package so that you have to consider storing them until you are ready to distribute them.

This paper presents a philosophy for remodeling and not necessarily a blueprint. It is based on the idea that if necessity arises, we should find the space and go on the best we can until more space appears. The librarian has a degree of judgment as to how adaptable certain spaces may be; as to how furniture and equipment may be arranged to accomplish most efficient processing. However, each librarian is faced with the necessity of moving into processing centers and must meet those problems with the solutions based on her special requirements.

In considering the remodeling for a processing center, the librarian works with the superintendent of schools, the architect, and the district engineer (term used in this discussion to designate whoever fills the role of adviser regarding buildings). Close communication among these three is essential, as was indicated this morning, and it is upon the cooperation of these three—the superintendent, the district engineer, and the architect—that the librarian must depend. The librarian's delineation of the needs and the space necessary is translated into workable designs and blueprints. It is not the responsibility of the librarian to determine that a particular wall is load-bearing, but it is the responsibility of the school architect or the district engineer to indicate to the librarian that her plan of combining several rooms is impossible because heating conduits are in the wall and cannot be removed. Therefore, the wall cannot be removed.

What considerations must we as librarians and supervisors have in mind when we hunt for space? These are factors which we must consider and give to the architect so that he may translate them into the actual design. In brief, they are as follows:

1. Number of people to be accommodated
2. Types of furniture: desk, typing table, cabinets for storing materials, shelving for books waiting to be processed, steel files, and book trucks
3. Location of space—one of the most important requirements is that it should be near an outside door for deliveries
4. Utilities—the availability of the plumbing, electrical outlets, and communication system, such as telephone and public address system
5. Machines—you have to consider the space you require for machines you are going to use: a large photo-copying machine, a machine for pasting, the essential typewriter, and the like
6. Floor covering—the type of floor covering you want, especially when remodeling. Some floors will not submit to carpeting. One school said, "Don't call it carpeting, call it insulated floor covering." It takes a special type of floor for that, too
7. Acoustical tile—you are going to have to use this to keep the noise down to a proper level.

In remodeling, the project becomes an individual instance and compromises are necessary, particularly in the systems in which I am a participant. The librarian has to decide what requirements she cannot do without. It is not necessary to decide what you have to have, but rather what you cannot do without.

The first remodeling project I am going to mention is an example just to show you that a librarian has to get into it. From this point of view, I must say that I am not a librarian who has had to fight the administration. I feel that I have been very fortunate in this matter. All the school superintendents I have had and all the engineers I have worked with have been more than cooperative, and it is so because we all knew we had a goal in mind and if we worked hard we would achieve that goal.

The first remodeling project in which I was involved was in Alton, Illinois, a number of years ago. We were searching for a space for central processing. There were twenty-three schools, which for some of you is not a large number, but we did have to find space for the remodeling. After looking at all the buildings in the district, we found space in the oldest school building in the district. It was a basement area 40 feet by 26 feet, which extended under half of the school building. Remodeling involved digging out the basement to be sure it was deep enough and would be the proper height. It involved pouring a cement or concrete floor and painting the walls and the exposed heating pipes in the ceiling. The pipes were somewhat of a hazard to the taller members of the library staff at the beginning. The space was large enough to accommodate four librarians and one secretary. There was a work counter 32 feet long and 3 feet in width, extending practically the entire length of the room. Under it was open shelving. It was counter height so that we could have two shelves underneath. The open shelving provided space for the books as

they were unpacked. They remained on this open shelf until they moved out to the centralized library and bookmobile systems.

The remainder of the room consisted of shelving for more than 20,000 books which constituted the collection for the bookmobiles. Deficiencies included the painted floor, and we tried to help this by partially covering it with a rug.

Water was never installed here because this space was intended to be a temporary place, but we did manage for a number of years. The lighting, with incandescent fixtures, has been adequate and attractive; colorful drapes have been hung at the windows. For a number of years an efficient processing operation has gone forward here. This example serves to illustrate that unlikely services used willingly by a capable staff will contribute to an efficient organization.

As I looked for space for a district processing center in District 68, these requirements assumed top priority: In case we were going to have three staff members in the processing center, we would have to have, of course, appropriate office furniture and equipment for processing. We would have to have shelving for the permanent collection of library tools and new books waiting to be processed, and cabinets and tables with formica tops. It was at this place that I departed from my former idea of having a stationary counter. Here we are using book trucks to move along from one work station to another. Even though the space is a rectangle, the same supply line really works and, as the materials come in, they move along until they get to the opposite side of the room.

It was necessary to facilitate the removal of books. We were fortunate because we had found a spot which was close to the central district warehouse. The other things I looked for in this setup were, of course, accessible plumbing facilities, suitable electric outlets, an exhaust fan for eliminating lacquer fumes, and so on.

We first found a room adjoining one of the elementary libraries. The building was four years old. The only difficulty was that it was on the second floor and had no outside door except one into the library. It was intended to be a fan room for the boiler next door. For this reason, all packages would have had to be carried through the library.

Next we came upon a room on the ground level of our oldest building. Formerly it had been used by the custodians as a lounge. If a librarian is willing to use a space for remodeling, sometimes the space is not available. However, if you take over space from another department, you have to consider the other department. In this instance, we found another space for the custodians and they think it is better than the former one.

Now, what influenced us in the selection of these facilities? The commandeered space is 23 feet by 26 feet. It has been set up in an assembly-line manner, despite the rectangle shape. Work stations (cabinets with formica tops) are arranged in the order of the

customary routines of acquisition, cataloging, typing of cards, lettering, and lacquering. The materials move on work trucks along the work stations. These have proved more flexible than shelving. The pasting of pockets and typing of book cards are done in the individual libraries.

The location of this room is next door to the warehouse for supplies for the school district. The boxes coming into the district processing center can use the same loading and unloading facilities as the warehouse. Communication between the instructional materials department, the district supply clerk, and the truck driver for the district is a very important factor. How quickly can they communicate with one another? Also, we can send materials out twice a day, which is the schedule for regular deliveries to the district.

Librarians have often maintained that a library is a function and not a place, and so it is in centralized processing. I do not want you to think that we would expect this small room to handle all materials. We decided that three-dimensional material should not be processed in the district processing center; the center would be devoted to audio-visual material, film, and filmstrips. I did not regard this as any breakdown in the centralization of our processing facilities. By the logistics of movement, the usual bulky materials—such as planetariums, rock and mineral kits, and torsos, which are part of the science program—are sent directly to the district science materials center. There they are cataloged.

This year's addition to our staff is a media librarian. Part of the task of the media librarian is to work with teachers and students in the merchandising of these materials. In this way, he will expedite our services a little.

Even though we have just moved into these new remodeled facilities, this particular location is regarded as only temporary because the new building is part of our planning in District 68, in which we will have new administrative offices and services. Telephone and public address systems have been installed and a teacher's preparation area with a facility for closed-circuit television. All of those eventually will be in one wing, but we do not know when we will get that one wing. We could not wait for it; we had to do something. I was determined to have the centralization of processing.

Then a further conjecture entered our thinking. District 68, in keeping with the practice in other school districts and institutions of higher learning, has purchased some property adjoining our junior high school. In the process we have acquired a house, and since it is in excellent condition, it has possibilities for office space and all the administrative staff. In reviewing the possibilities for use with the superintendent of schools and the district engineer, these facts emerged.

The main floor of the house has sunroom, living room, and dining room all thrown together as one room, with a bedroom adjoining. This, we decided,

would be converted into two offices, and there is an excellent attic which we decided would be suitable for storage. The basement has possibilities for central processing.

We thought some renovations could be made in the basement. The ceiling could be dropped 2 feet and could have acoustical tile added to assure noise reduction. The walls could be painted. I was told you can cover 2000 square feet of surface with one gallon of paint. The lighting could be brought up to 100 candle power with overhead incandescent fixtures. Since the basement was below ground level, we thought asphalt tile would be better than carpeting. The school superintendent has said that from here on, carpeting is less expensive and easier to maintain.

Here, again, this house would be a temporary expedient until the new building is finished. The reason we are not going to do anything too elaborate is that when you remodel, it should not cost more than a new building. Since the expense per cubic foot should not be more than we would spend for the new building, we cannot be too extravagant.

Finally, in addition to other uses which might emerge from the remodeling, a teachers' preparation room is being considered. It seems to me that it would be a convenience which could provide facilities for printed material and for construction of models, dioramas, charts, posters, and transparencies.

I think the teacher preparation area has possibilities as one of the additional services which could be housed in the district processing center. There is this rationale for such a move: Jack Tanzman, writing in *School Management*, suggests that not every teacher has the ability or the time to make or construct these teaching aids. He suggests the inadvis-

ability of spending so much time in somewhat mechanical operations. He further proposes that a clerical staff member could carry out the wishes as designed by the teacher. It would be much more economical, and I am sure it would reduce teacher frustration, if this work could be turned over to a staff. This is certainly no criticism of the teachers nor is it suggesting that they lack the dexterity to handle the aids. It merely indicates the versatility of the uses we may find for a processing center.

In conclusion, I may say that remodeling to provide efficient quarters for central processing permits the librarian to convey to her colleagues the kinds of activities which she thinks should be a part of the central processing center. It also suggests new uses for the processing center, but, more important, it permits the librarian to take a long look at the activities she has been doing as a part of central processing.

Perhaps we have been preoccupied for too long with some trivia which could be eliminated. After a look at current trends in library management as well as in the contributions to be made, it seems to me that the librarian has gone a long way in explaining herself and her program to her colleagues. Too much preoccupation with technical processing has given the professional librarian a difficult part to play at times, and our colleagues, I am sure, would prefer to have us give them much more professional services.

We are more interested in having teachers and students use the materials, whether printed or non-printed—that is our goal. The schools think we can do more and that our purpose is important. Technical processing and cataloging should be a means to an end and not necessarily the end of all we hope for in librarianship.

Cora Paul Bomar

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Raleigh, North Carolina*

OPPORTUNITIES AND CHALLENGES INHERENT IN UNUSUAL SHAPES FOR SCHOOL LIBRARIES

I have always contended that a good school library program can exist in any school facility where there is a resourceful, qualified, creative librarian supported by a concerned faculty and a willing board of education. And I further contend that it almost invariably follows that, where good library service is initiated, adequate facilities will be forthcoming *if* long-range building objectives have been developed and immediate steps have been identified based on intelligent knowledge and interpretation of building needs.

Likewise, I have always maintained that it is the space and not the shape that makes it possible to develop a full complement of library service. The arrangement of space influences function; therefore, space relationships are important. The accompanying diagram illustrates the importance of space relationships. I agree, however, that the architectural character—the form and design, location and arrangement of space, imaginative use of color, materials, and lighting—can influence the type of library service and program developed in a particular space, but this cannot happen in nonexisting space.

And so I can approach my subject, "Opportunities and Challenges Inherent in Unusual Shapes for School Libraries," since I, too, am convinced that the organization of space is influenced by shape. I do, however, emphasize that I agree with Marvin R. A. Johnson that "Space is the major ingredient of architecture—three-dimensional space, as it is seen and experienced from a single position." He goes on to say, "Materials and structural system which support the building and its parts—the masonry, the metal, the glass, the wood, the plastics—all these and others are the means to the end of creating, defining, limiting, and organizing space. The architect must also think about and plan the environmental factors related to space: the thermal, sonic, visual, heating, ventilation, air conditioning, acoustics, illumination and vision." Mr. Johnson continues, "The architect has a responsibility to aesthetics so that the buildings he designs may enhance

the places where they sit and so that they may affect the spirit and emotions of man."¹

I go a step further than did Mr. Johnson and say that the unusual shapes of school libraries that sometimes frustrate the professional school librarian may be the best possible organization of space intended to free the imaginative minds of librarians and library users.

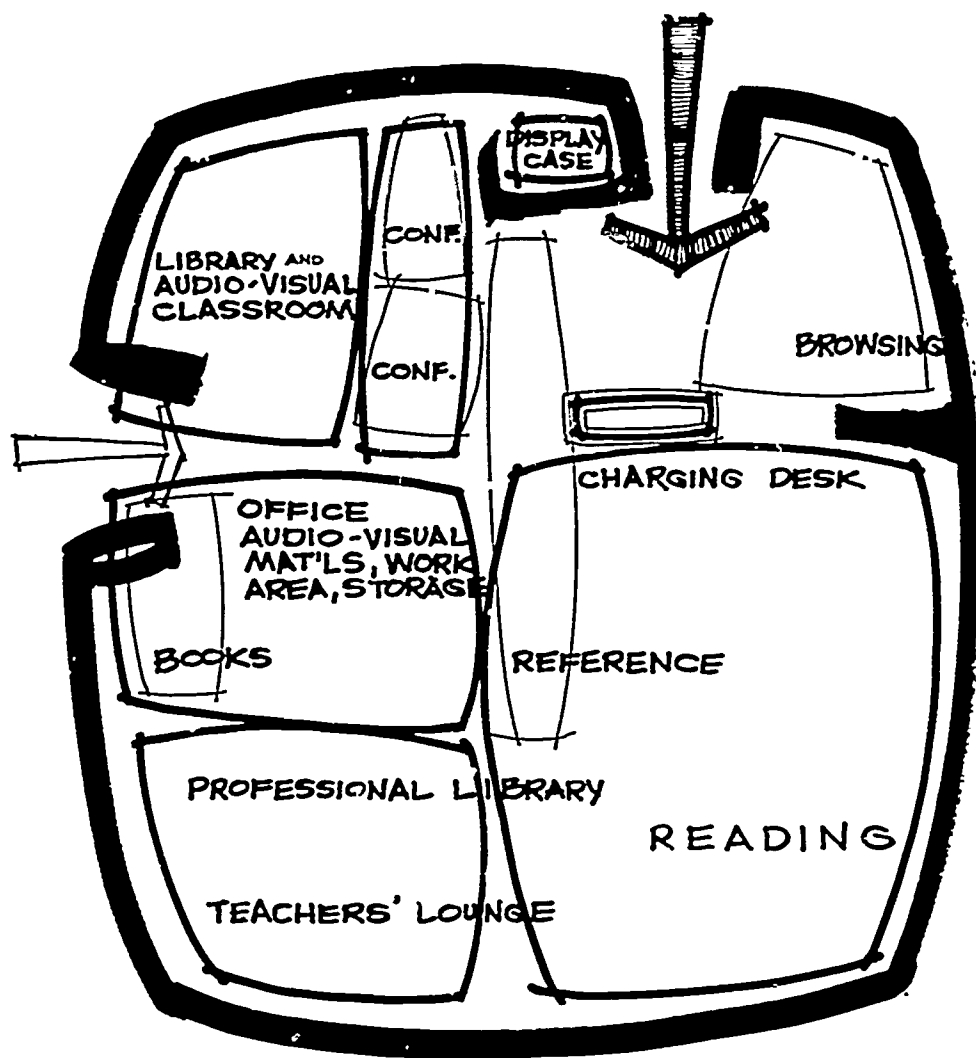
Increasing emphasis is placed on school libraries by educators; by state, regional, and national standards; and more recently by the federal government through the Elementary and Secondary Education Act of 1965, Public Law 89-10. No longer is the school library considered a luxury or an adjunct if space and budget permit. The school administrator no longer asks, "Can we afford to have a library?" Rather he says, "And how large should our library be?"

Planning and designing school libraries has become an important phase of the total school-building process and involves many areas of specialized knowledge. Basic to planning facilities to house the school library is an acceptance of the fact that the school library is at all times a part of the larger whole, the school, even though it must be considered within its own entity. As a part of the larger whole it must be meshed with other entities and must not overwhelm or absorb all other major areas of the school facility.

The architect has many factors to coordinate in planning the school. Other areas in the school must be considered along with the library, and many times the library cannot have all that is included in the educational specifications. Compromise, budgetary adjustments, school-community values all emerge as the planning process attempts to design facilities for the desired library program.

The librarian's ability to interpret library program

¹Marvin R. A. Johnson, "What Goes Next to 'What,'" *North Carolina Libraries*, 20:77-79 (Spring, 1962).



What goes next to what ...
The school library—a relationship diagram

needs to educators, boards of education, and the architect can greatly influence the architectural character of the library space. Whether librarians have the vision, the flexibility, or the public relations to do the job should be one of the major concerns of the library practitioner and of the library educator. Vision and flexibility are based on knowledge of what is, what should be, and what will be, and willingness to accept and adjust to change. Public relations are dependent on attitudes, personality, and ability to communicate ideas based on knowledge and understanding.

To build the best library Dick Darling asserts that, "Today's educators and architects must plan new schools and school libraries to accommodate a virtual revolution in education." I agree with Dr. Darling and state further that my experience has been that architects do read—in fact they read, study, explore, and ponder more than any professional group I know. Educators try to keep up, but usually there is a long time lag between the discovery of a new idea and the actual implementation of it. The architect is usually the one who grasps the idea and translates it into form and shape, hopefully attempting to read the future in the crystal ball.

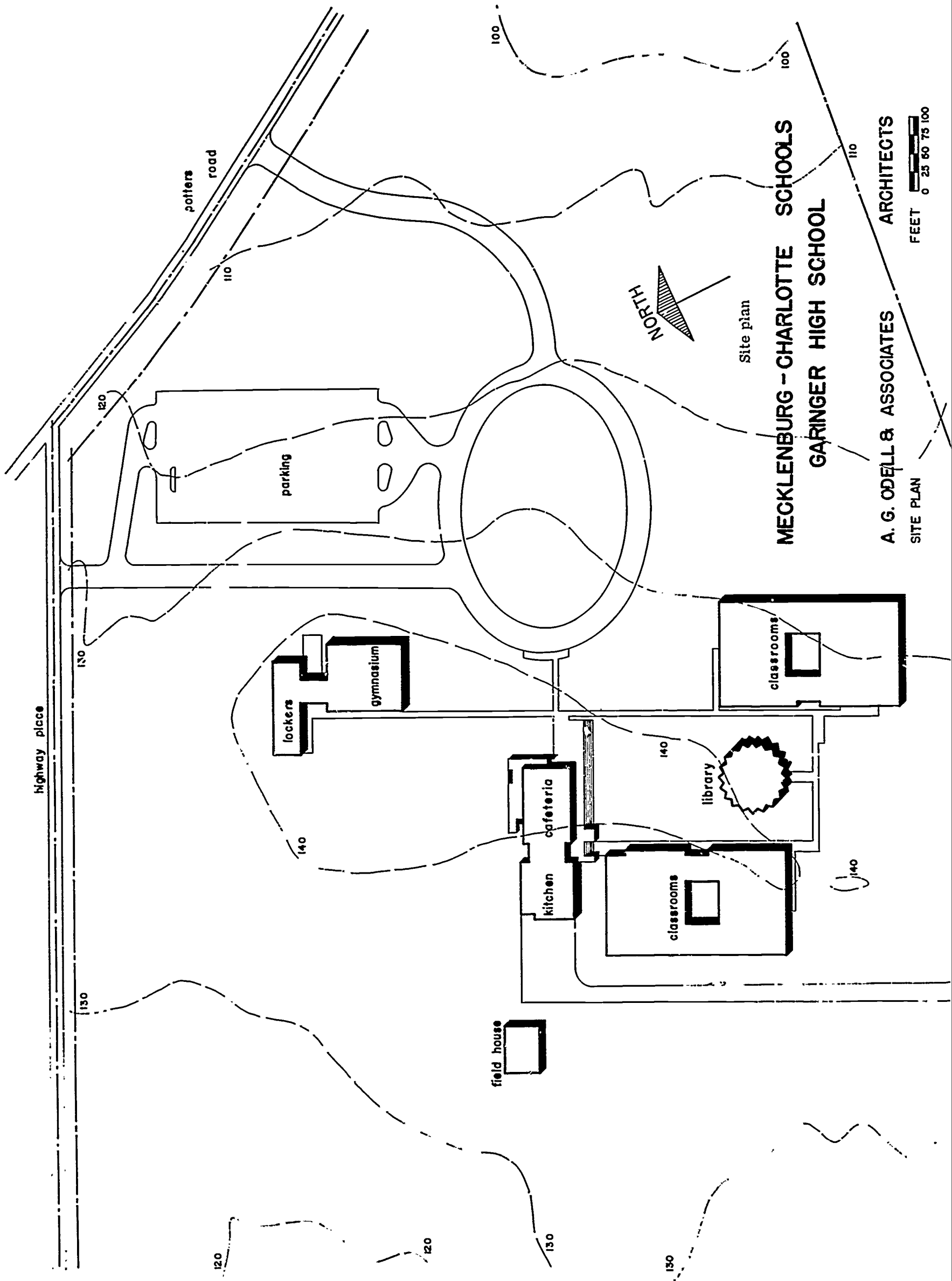
Educators are forced into keeping in tune with educational movements and changes. The architect examines with relish these movements and changes. Architects are aware and often times knowledgeable of greater expectations of the American public and of advancing technology. They hear much about the

dominant emphasis on academic excellence, significant emphasis on efficiency and economy of administration, and special programs for the educationally deprived. Architects sense a growing concern for individualization of instruction and an awareness of the need for the student to assume greater responsibility for his own education. They bring this understanding, be it right or wrong, to the planning phase and supposedly design buildings to accommodate today's school and to be ready to meet the needs of tomorrow. When school libraries are planned and constructed with problematic features, it may be that the librarian could not cope with the architect's attempt to translate into his design the message he deduced from examining the new educational movements described in the literature and talked about by the educational planners of the day.

Educators and architects are intrigued by the following:

L-shaped library
hexagon library
round library
skylighted domes
open space concept
windowless rooms
individual study areas
carrels everywhere
electronic islands
wood/steel and plastic
in color

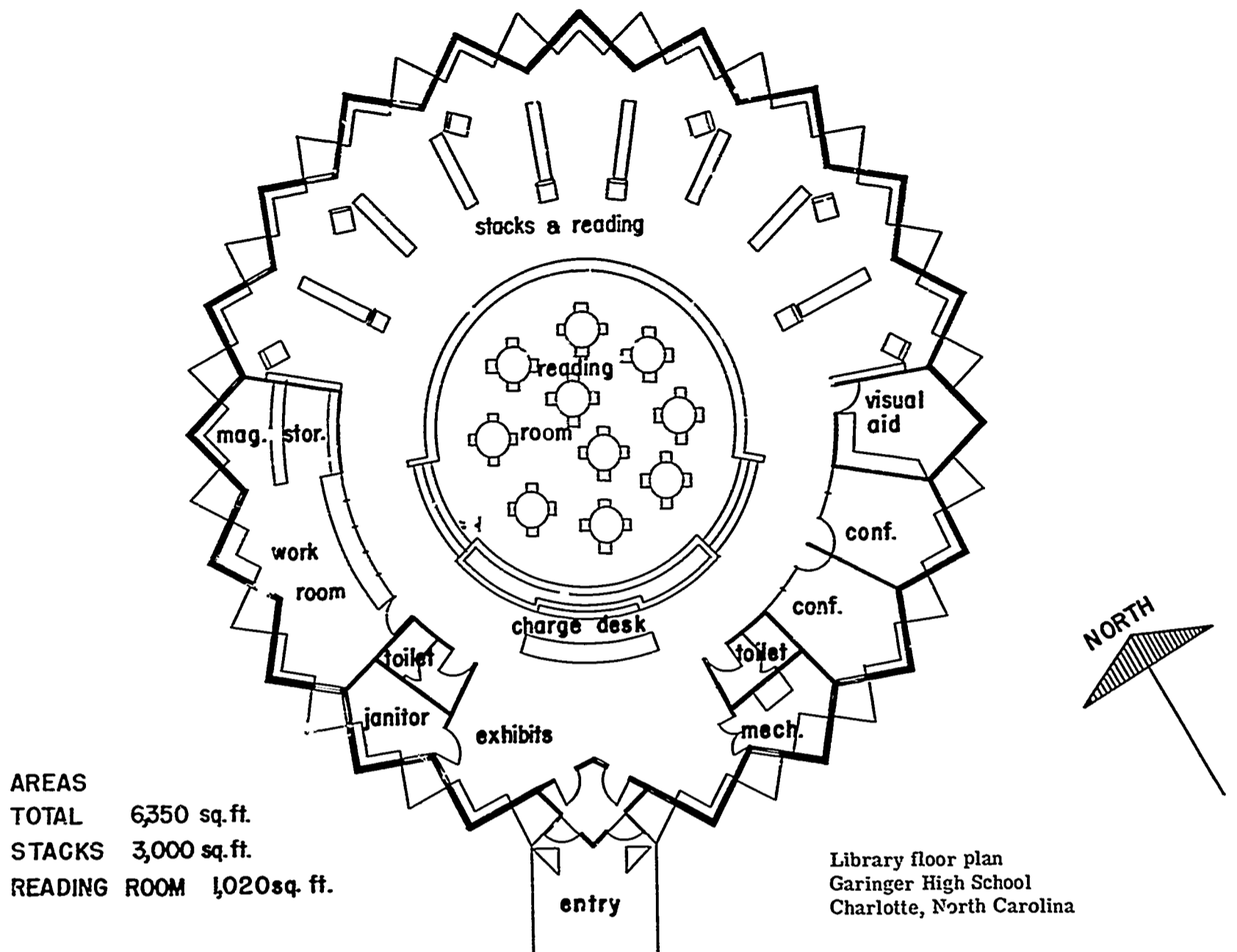
triangle library
split-level library
tri-level library
two-level library
pyramided roof bays
all glass walls
radial shelf arrangement
stack shelving
commons area or mall
quiet areas and noise
zones.



**MECKLENBURG - CHARLOTTE SCHOOLS
GARINGER HIGH SCHOOL**

**A. G. ODELL & ASSOCIATES
ARCHITECTS**

SITE PLAN
FEET 0 25 50 75 100



AREAS
TOTAL 6,350 sq. ft.
STACKS 3,000 sq. ft.
READING ROOM 1,020 sq. ft.

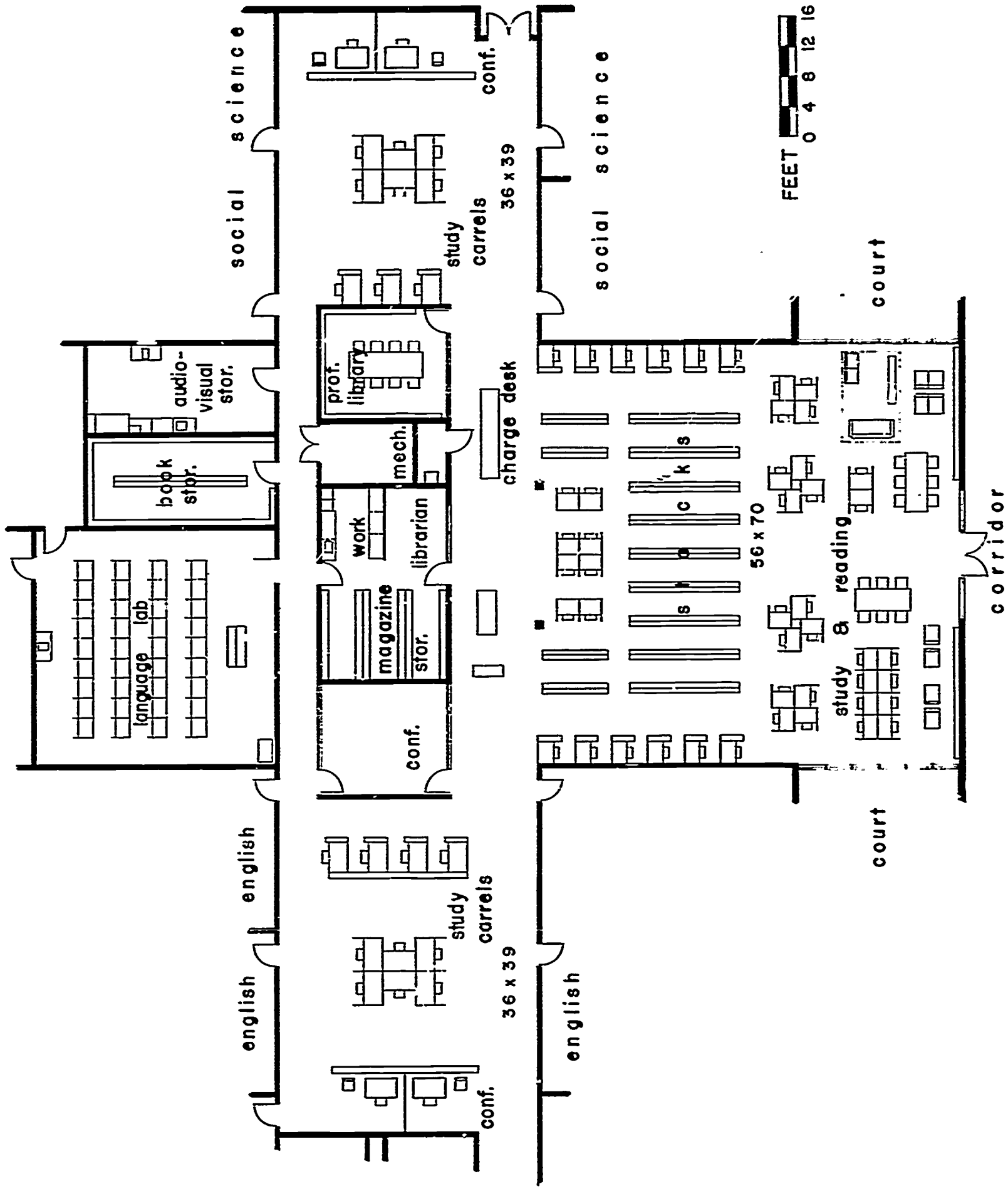
School librarians also are intrigued with these same possibilities. Along with this interest some school librarians have a feeling of fear and uncertainty—fear that the library will become strange and offbeat, and that some other group may be getting ready to take over. These school librarians are the ones Ralph Ellsworth, Hobart D. Wagener, Elenora Alexander, Donald G. Emery, Mary Virginia Gaver, Jesse Shera, and others chastise.

Educators, including school librarians, boards of education, and architects, all have one common purpose when school buildings are being planned and constructed, and that common purpose is to erect a school facility with architectural character appropriate to its function in the educational process of that individual school. Ralph Ellsworth expresses it this way, "A building has architectural character when it is completely appropriate to its function; when it reveals a tasteful and interesting use of line, mass, proportion, and material; when it is full of happy space surprises, when it makes the viewer's heart 'leap for joy.'" Ellsworth goes on to say, "Occasionally a building, like a person, may have a fine character, but may still be hard to live with in small ways."

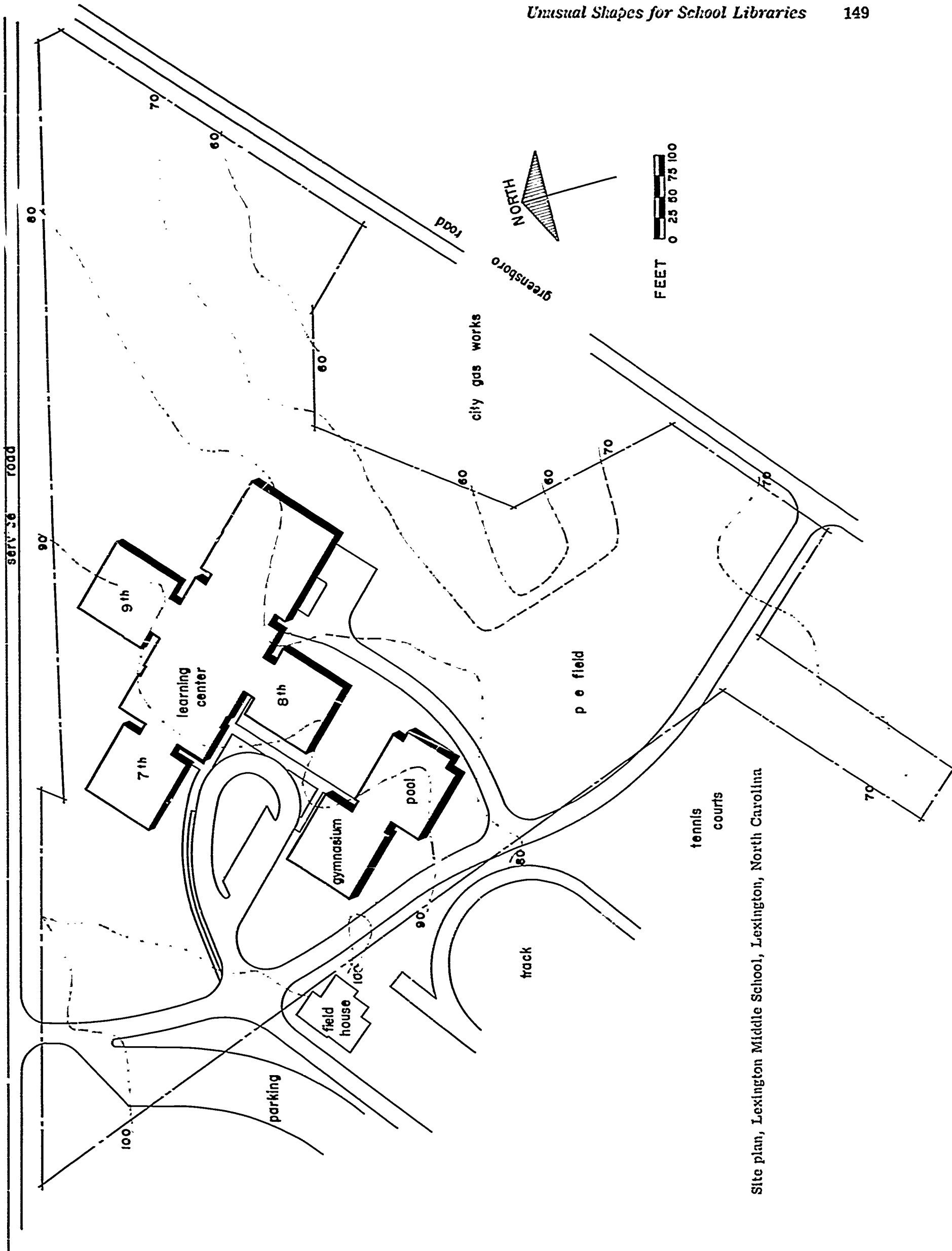
And it is at this point that I face my topic head

on, "Opportunities and Challenges Inherent in Unusual Shapes for School Libraries." The building has been planned, constructed, and is now occupied. The librarian is here also and on the job, or about to go into this school library which has an unusual shape or unique spatial arrangements. Usually this library and this librarian may be categorized in one of or a combination of three categories:

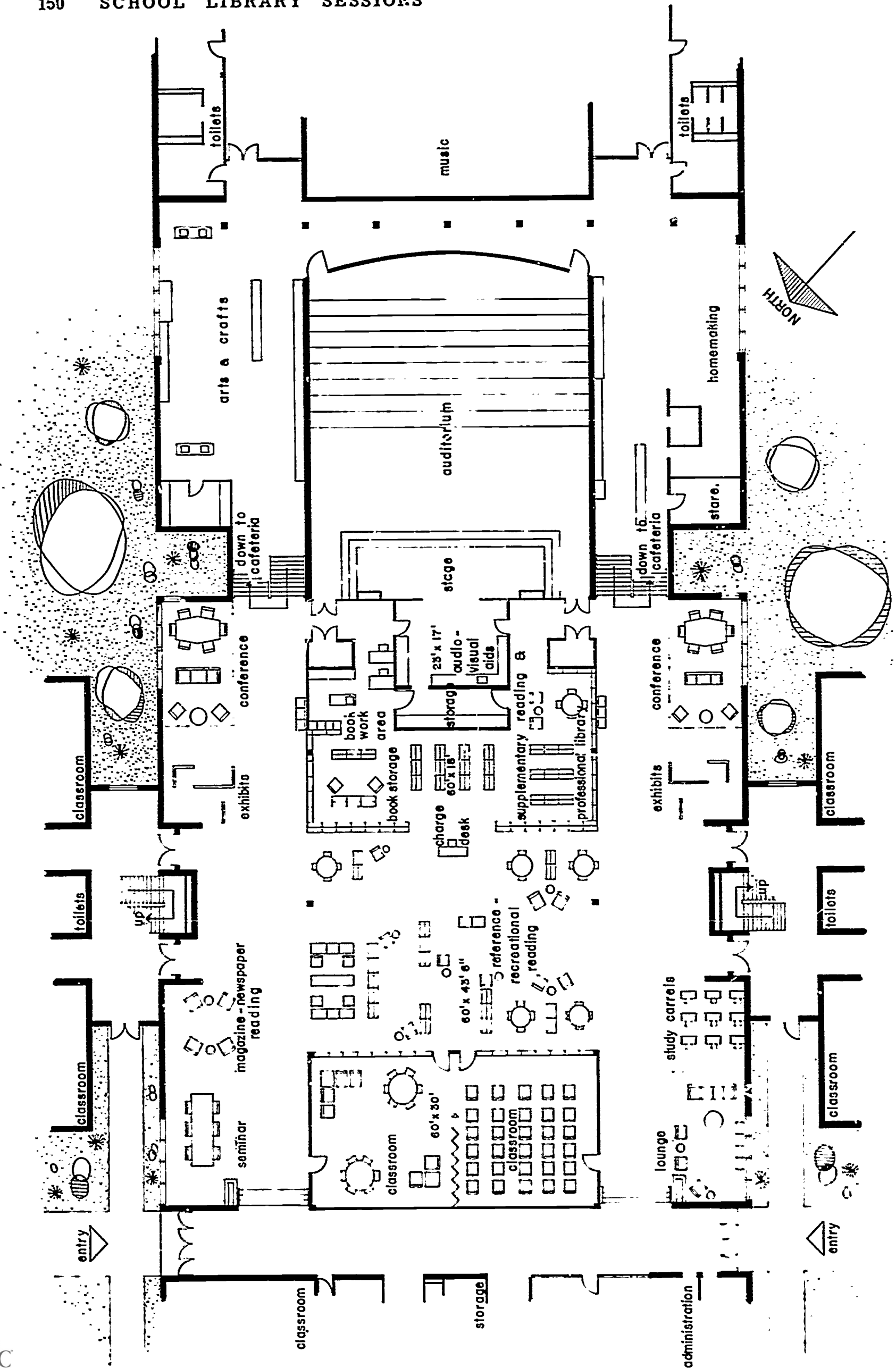
1. A library designed to be the focal point on the school campus but lacking two vital characteristics: flexibility and expandability. The qualified library staff is eager to effect comprehensive library service
2. A library designed to accommodate new patterns of administrative organization for instruction, and new learning materials. The librarian is the traditional book librarian who has been accustomed to sit behind the circulation desk in the library room and monitor the use of the books and periodicals
3. A library designed to accommodate the concepts emerging through the development of comprehensive educational specifications. Faculty, including librarian, is eager to develop a school curriculum supported by comprehensive educational media services.



Library floor plan, Northern Nash High School, Nash County Schools, North Carolina



Site plan, Lexington Middle School, Lexington, North Carolina



TOTAL LIBRARY AREA
120' x 120' = 14,400 sq. ft.

Library floor plan, Lexington Middle School, Lexington, North Carolina

And now let us look at an example of each of these three types:

1. A round library building, as at Garinger High School, Charlotte, North Carolina, designed to be the epitome of the creative architects' attempt to grasp the ideas of the educational movements and translate them into the architectural design. Somewhere along the way the librarian did not communicate the functional details necessary to provide for flexibility and expandability.

The library is beautiful with its colorful carousel roof and sunken reading area. The radial arrangement of books offers opportunity for placement of individual study carrels that can function as electronic islands. The sunken reading area can become a center of interest, virtually a happy space surprise. These are but some of the opportunities the library staff is exploring as a result of the unusual shape of the library.

Low expectation of the function of the library as a comprehensive educational media center, or absence of the opportunity for the librarian to communicate with the architect, results in the library's being too small to accommodate the material collections and the type of service needed in this school. The Garinger High School library was designed to accommodate 1000-plus students, yet the 1964-65 enrollment totaled 2400-plus students.

The challenge is to find ways of expanding this round library building so that it can accommodate library service the school needs and wants today, and be adaptable to changes emerging tomorrow.

2. The next library, the consolidated Northern Nash High School, Nash County Schools, North Carolina, grades 9-12, will easily accommodate an enrollment of 1200-1500 students, although the anticipated maximum enrollment is 1000 students. This library was planned under the direct guidance of the superintendent in tune with the times, and designed by an architect who "got the message." The library flows out to, and around, the classrooms with no one knowing where it begins or ends. The space is arranged to exploit the teachable moment for the individual, the small group, or the large group. It can support new teaching methods and accommodate newer educational media. It is an example away from the large reading room to satellite, independent study areas shared with the subject departments. Opportunities for developing creative library service are many.

The librarian has been a book librarian used to the rectangular room with bookshelves on the walls and rows of rectangular tables filling the room except for the large charging desk occupying the center of the room. The challenge is to interpret library program to staff, and to deploy staff in such a way to take optimum advantage of the facilities.

3. The Lexington Middle School, Lexington, North Carolina, grades 7-9, is being built to accommodate a maximum enrollment of 900-1000 students. This library is designed in harmony with the educational specifications cooperatively developed by the superintendent and staff and the board of education under the guidance of the educational consultant and design consultant of a state education school-planning division. The development of the educational specifications involved study, reading, visiting other schools, and thinking about the purposes of schools, what takes place in all types of school facilities, and what kind of library services would be needed to support the school being planned. The more the planners studied and talked, the greater their expectations became, and, before long, educational specifications were emerging that projected a new and different approach to teaching and learning.

The library is the school and the school is the library in a manner of speaking, for the library is literally the crossroads of the school. The library is larger than the gymnasium and can easily house more than 40,000 volumes. The school is designed to accommodate a curriculum utilizing flexible grouping, team teaching, independent study, small-large group activity, and a full complement of educational media services.

Here the opportunities are legion. The challenge is to design a curriculum that will implement the program set forth in the educational specifications. What new relationships will be established between teacher and librarian? What new staff members may be required? In short, what measures need to be taken to make maximum use of the facilities in improving the educational services to students in this new school? Constant in-service study, organization of the school and the school day, acquisition and organization of all educational media, deployment of staff, and evaluation of practices with open-mindedness and willingness to change are needed.

By now you probably have suspected that I am most enthusiastic about the future of school libraries as reflected in the revolutionary shapes and space arrangements emerging in new school construction. You are also aware of my belief in utilizing existing space by making the most of it, by creating a spot of beauty, a point of emphasis, or a new and different functionary activity.

To summarize, I have tried to emphasize these two main points:

1. The school administrator and the architect desire to plan and build the best library:

They base these plans on their interpretation of the school today and its anticipated needs of tomorrow.

They depend upon the school librarian to interpret the school library.

The school librarian must know what the educational profile is *now* and what it will be.

2. After the school is built, the school librarian utilizes its features to develop the best library service:

He projects library service in positive assumptions.

His great expectations are never sacrificed

although compromise may be expedient as of the moment.

He enlarges his vision and realizes that the unusual shape of his library or the other strange new features of the facility may make it the best library after all.

In conclusion, I emphasize that the vision and expectation of the school librarian determine, in part, the extent the school library facility meets the needs of the school. Flexibility, changeability, modifiability, and adaptability apply to the librarian as well as to the library facility.

Margaret H. Grazier
Librarian, Wylie E. Groves High School
Birmingham, Michigan

LIBRARY IN THE ROUND

My appraisal of the round library has been four and one-half years in the making—the four and one-half years I have spent as a librarian in a new handsome circular library.

Many of the advantages of roundness are readily apparent in the Wylie E. Groves High School Library in Birmingham, Michigan. The combination of the unusual shape and a dramatic vaulted ceiling immediately impresses the student when he enters for the first time. The library is attractive and inviting. The enclosed circle lends an air of relaxation and informality. Bookstacks, placed at right angles to built-in wall shelving, form alcoves around the perimeter of the library. Students are proud of the library's looks. They use it as a background setting for countless pictures for the paper and yearbook; it is high on the list of places they show off to visitors. Placed strategically at an intersection of major corridors which serve the academic classrooms at one end of the sprawling one-story high school, the Groves Library is difficult to ignore in its dominant position, and few students do. Throughout the day they walk around the library in the routine of going to classes.

Some of the disadvantages of the round library are readily apparent to the experienced librarian at first glance. *Space is wasted.* Library stacks, furniture, and equipment are rectangular or block in dimension, and they cannot be fitted into a round container without waste of space. *Space is also lost.* In making a circle, the corners of the square are eliminated and the library is that much smaller. The informality and relaxed atmosphere of the round room are conducive to an equally relaxed behavior by students. Supervision has to be more constant than either students or librarians desire. Such supervision is costly in terms of librarians' time and services needed but not given. The openness of the library, which gives a feeling of spaciousness, makes difficult at the same time the separation of study

areas for concentrated individual work from areas for browsing and casual reading. A major handicap of the round library is the inability to screen off the noise and activity at the circulation desk. The constant procession during each hour of small groups of students and an occasional teacher from the classroom into the library and to the circulation desk is desirable if the library aims, as we do, to be useful to the school. Each transaction at the desk, however, is noisily obvious, yet there is no place within the circle to which the circulation desk can be moved which will eliminate the disturbance.

A basic problem of the round library is the difficulty of enlarging it. The Groves High School Library has been in operation for five and one-half years and has now completely outgrown its shelving space for books and back issues of magazines, and its seating space for students. The architect who plans the expansion of the library will have a serious problem in attempting to add needed space and yet retain the beauty of the original room.

Some of the serious physical difficulties of library operation in the Groves Library occur not because the library is a circle but because the circle is not large enough. The library does not include space for such essential functions as audio-visual service and storage, a library classroom, and a faculty study. The space designed for the combined workroom and magazine storage room and for bookstacks was much too small. We at Groves estimate that our library needs three times its current space to meet the present demands for service and materials which students and faculty would like to make. Had the circular library been made three times larger originally, space could have been allotted for the functions and storage which we now need but lack. Whether these special areas could have been so placed within the circle to provide easy access to them, afford the privacy needed, and yet retain the aesthetic appeal of the present room is questionable to me.

The past decade has seen a tremendous growth in the demands by students and faculty for library materials. To catch up and keep up with demands, school library collections will have to grow. As more schools reach the minimum of ten books per student recommended by the standards of the American Association of School Librarians and note the still unanswered requests from classes for material, the recommendation by Ralph Ellsworth for a basic collection of 30,000-50,000 volumes will seem increasingly sensible. Similarly, as more schools experiment with flexible scheduling, large and small group instruction, team teaching, and independent study, formulas for the proportion of students to be accommodated in the library will be revised upward sharply.

If school libraries are to grow, they will have to expand. A round library in the school, when viewed from the standpoint of its probable future, seems an unfortunate choice, indeed.

Were I given my preference, I should vote for a library in which attractiveness and eye appeal derive from the texture, form, and color of wall and ceiling materials, from furniture, draperies, and carpeting rather than from the perfect sphere. I should vote for the library which would become the hub of the school because it had sufficient space for students and for materials rather than because of its roundness. I should vote for the library which could expand easily and systematically. Artists and philosophers have revered the circle as the perfect figure. What they revere, librarians abjure.

James L. Lanman
Curriculum Materials Coordinator, Valley Winds School
Riverview Gardens School District
St. Louis, Missouri

THE PERCEPTION CORE, VALLEY WINDS ELEMENTARY SCHOOL

Valley Winds School in the Riverview Gardens School District in St. Louis was built in an area where the population increase required a new elementary school. Only children who live in that area attend the school. It provides an educational program for these 541 children from the time they enter kindergarten until they enter the seventh grade.

Plans for the school began in 1962 when the Educational Facilities Laboratory of the Ford Foundation provided three grants totaling \$23,000. A select group of teachers and administrators from the district worked with Dr. Nolan Estes, the superintendent, and various specialists in drawing up the educational specifications for the school. Some of the specialists who worked with the Riverview staff at various times were: Dr. Robert Anderson, Harvard University; Dr. Harris Taylor, Claremont Graduate School of Education, Claremont, California; Mr. James H. Miller, Children's Theater Consultant, Shreveport, Louisiana; Miss Louise Anthony, Director of Library Services, Alton, Illinois; Mr. T. G. Morrissey, Electronic Engineer, Denver, Colorado; Dr. William Alexander, Peabody College for Teachers, Nashville, Tennessee; Mr. Faber Birren, Consultant on Interior Design, New York; and Mr. Jack Tanzman, Director of Audio-Visual Communications, Plainview-Bethpage Public Schools, New York.

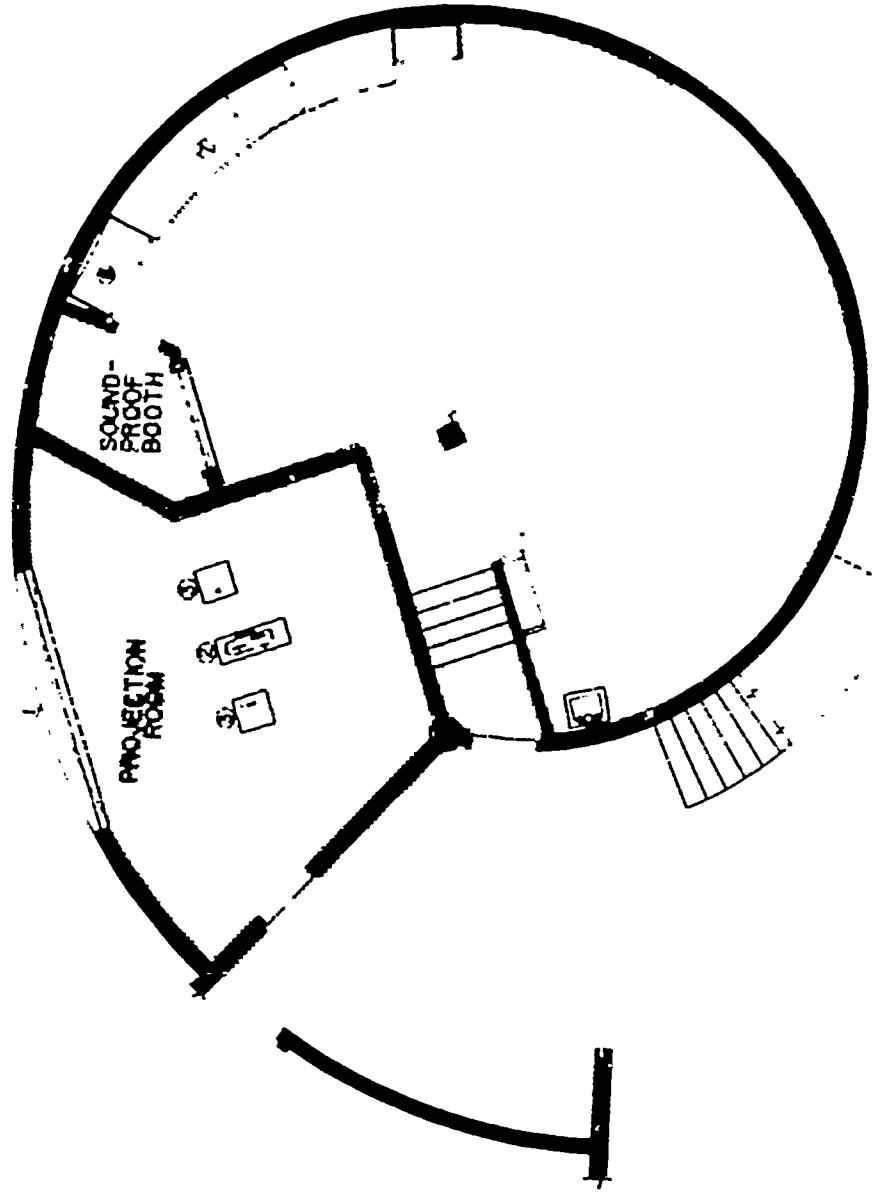
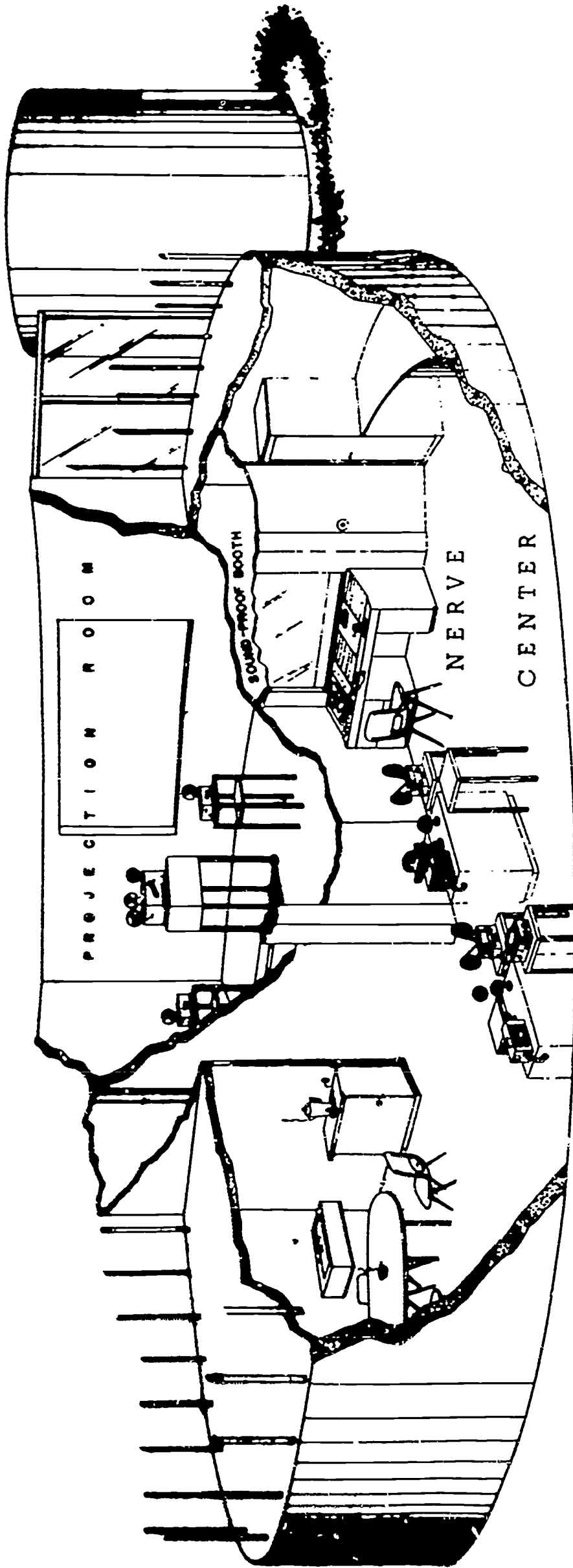
After the educational specifications were drawn up, they were submitted to the architects, and several major decisions were made which influenced the design of the building. It was decided that the curriculum be spiral, built around the acquiring of basic skills, the organizing of centers of content, the development of concepts, and the acquiring of individual study and behavioral habits which would develop the pupil into a fully functioning individual.

It was further decided that the organization would be nongraded and nonclass-structured. The only unit for grouping for instruction would be the individual pupil. This meant that instructional materials, equip-

ment, and space had to afford maximum flexibility. With the achievement of such flexibility a staff could, by prudently altering the organization of the school when needed, provide optimum continuity, sequence, and integration in the educational program of each pupil. In order to facilitate further this flexibility it was decided that team teaching and full-time and part-time resource persons should be utilized.

In the light of these decisions, the building was designed so that a learning resource center became the heart of the building and the educational program. A gymnasium, cafeteria, or all-purpose room was purposely planned out of the building in order to make more space available for the center. In lieu of the cafeteria there is a satellite kitchen to which hot food, prepared at another school, is brought and made ready to serve. Food is served to children in trays which they take to their instructional areas. The term "instructional areas," as used in this paper, refers to the seven areas in which the children have their individual desks or receive instruction from the various individual teachers, teams of teachers, or resource persons. Three of these areas are one room, one is a suite with the equivalent floor space of three classrooms, and one is a suite with the equivalent floor space of nine classrooms. A covered, but exposed, play shelter provides space for physical education. This shelter utilizes infrared heaters which heat the objects in the area but not the air.

The conchiform structure which is Valley Winds School has at the beginning of the spiral a central complex made up of three areas. One part of the complex is a circular room, half a level below the basic floor level of the building, which is appropriately called the "Nerve Center." In the Nerve Center new books are processed, books are repaired, teacher-designed materials are produced, tapes for audio presentation are made, overhead transparencies are developed and produced, and all instructional materials are evaluated, ordered, and distributed. The



Nerve Center, Valley Winds School, St. Louis, Missouri

audio-visual equipment, such as individual filmstrip viewers, tape recorders, record players, 16mm movie projector, 35mm filmstrip and slide projector, reading accelerators, television receivers, radios, and overhead projectors, are serviced here.

If the educational objectives of the school are to be achieved, there will be need for an ever increasing amount of instructional materials, programmed learning sequences, and facts and information of all kinds. Retrieval processes will have to be developed using always the latest and most effective media possible within the financial reach of the district. In recognition of this the planners of Valley Winds School provided for the installation at a future date of a tape system by which room equivalents in the instructional areas are to be connected with the Nerve Center. Each instructional area has five outlets recessed in the floor, which are connected directly with the Nerve Center. There are also a number of these outlets in the Perception Core. On the inner wall of each room equivalent in the instructional areas, in the administrative suite, the curriculum center, the children's theater, and the Perception Core, there is a nerve panel which is connected with the outlets and the Nerve Center. When the tape system is installed, a teacher or pupil may dial or phone the Nerve Center and request any tape in the tape library or instruction previously recorded by a teacher to be relayed to one of the outlets mentioned above. Using headsets with volume controls 1-16 pupils will be able to receive the material on tape. At a later date, when video cameras and video recording equipment have been installed in the Nerve Center, the same process that can be done with audio materials will be done with visual materials. The building is piped for closed-circuit television.

Directly above the Nerve Center, half a level above the basic floor of the building, is the second part of the central complex. It is the curriculum center. This center houses the pupil records, professional library, samples of curriculum materials including pupil texts, other instructional materials, and a small individual storage area where teachers may leave the materials with which they are currently working. It is a teacher planning area and also provides a pleasant place for formal and informal professional meetings, and a place where teachers may eat their lunch. A counter-high panel wall separates this mezzanine from the Perception Core.

The third part of the central complex is the projection room, which is on the basic floor level of the building. This room houses a 16mm motion-picture projector, a 35mm slide projector, and a 35mm filmstrip projector. All these projectors throw their images, which are viewed from the children's theater, on a translucent plastic screen. Once set up, these machines are remotely controlled from the children's theater. The 6-foot-by-12-foot screen can accommodate images projected simultaneously from all three machines.

As the spiral wall moves outward from this central complex, it next encircles the Perception Core, which utilizes 10 percent of the 43,246 square feet of the building. It is designed to be an integral part of the instructional areas of the building. Pupils in 65 percent of the instructional areas do not have to pass through halls (there are none in the building) to go from one to another complex of the plant, or pass through other areas to go to the Perception Core. They merely step through a door and there they are.

The Perception Core is a library, a materials center, a reading instruction center, a study center, a programmed materials center, or whatever is needed to provide learning experiences for individual boys and girls who have become intensely caught up in the excitement and adventure of learning. As presently equipped, the Perception Core will seat 120 pupils and will house 7000 books. However, with additional equipment arranged differently, it could accommodate many more pupils and books. The book carts and cabinets, with the exception of the card index and vertical file cabinets, are on wheels and can be moved easily at any time by two adults. The tables are either round or trapezoid in shape; they have formica tops and adjustable legs. The books are shelved in counter-height book carts which have white formica tops. They are arranged in sections to facilitate individual study and reading. In actual practice, sections are not numbered nor are any sections permanently established. In fact, changes were made three times during the 1964-65 school year.

In Section I, the reference books, science books, applied science books, and biographies are located. It includes three sink units where individual pupils may engage in individual science projects. Two models of the human torso and a skeleton are in this section and are in constant use. Other science models, such as the eyes, the ear, a leaf, the earthworm, a flower, a frog, can be checked out by pupils to be used either in this section or in their instructional area. A pupil, after consultation with the science resource teacher and/or his academic adviser (that is, the teacher administratively responsible for him and for his total educational program), may elect to work individually on an experiment, with a microscope or with other science equipment. After deciding to do so, he fills out a form stating what he wants to achieve, what he needs to do it, and where he will do it. He brings this to the charging station, receives the equipment, and carries it in a tray to Section I of the Perception Core, or his instructional area. When he has completed his work, he returns it to the charging station and turns it in.

In Section II, the beginning-to-read and easy-to-read books are shelved, and tables are provided to accommodate 40 children. Teachers working with first-, second-, and third-year pupils may bring up to that number of children from the group for which their team is responsible. Here they carry out a major portion of the individualized reading program. This

section is used exclusively for that purpose and is in constant use throughout the school day. Older children may use this section, but a number of books on the same level are shelved in the appropriate section in other parts of the Perception Core. Thus, the older children do not have to feel that they are checking out books that are beneath them. The younger children have free access to any section of the Perception Core.

Section III contains the fiction books, magazines, card catalog, charging station, and vertical files. The materials in this section are used with a greater degree of frequency than those in other parts of the Perception Core. It is centrally located and because all furniture is counter height, the library clerk has eye contact with every section of the Perception Core from the charging station. All nonexpendable instructional materials are checked out from this station. This includes maps, globes, audio-visual equipment, tapes, individual filmstrip viewers, books, vertical file material, reading accelerator models, programmed materials, filmstrips, overhead transparencies, and materials for the teachers from the curriculum center. Expendable materials are stored in readily accessible areas where teachers may go at any time and get what they need.

Located behind the charging station is a battery of filing cabinets which contain independent activity sheets. Some of these are devoted to the development of a single concept, some to the development of a series of related concepts which culminate in a generalization, some to the development of a skill, and some are for pleasure, requiring pupils to use the knowledge and skills they possess. Academic advisers or resource teachers direct children to these activity sheets, or a child may request that he be allowed to work with them. In either case the pupil checks out the sheet and follows the direction given on it. If it requires answering questions, successful completion of a puzzle, or the stating of factual information or generalization, the pupil obtains an answer sheet at the charging station and checks his own work. The independent activity sheet and answer sheets are then returned to be refilled. The independent activities are developed by the teachers working with the curriculum materials coordinator and the personnel in the Nerve Center. At the present time the number of activities is limited because the staff started with nothing at the beginning of the year. Each year there should be an ever increasing number of these produced. Some publishers are beginning to develop this type of material. As the commercial products become available, they will be added, if they fit the curriculum needs of the school.

The card index has three divisions. One is the standard catalog of books using the Dewey Decimal System. The second is the vertical file which lists alphabetically all maps, globes, charts, overhead transparencies, and folders in the vertical file. The third contains every other item of nonexpendable

instructional supplies such as paper, crayons, paint, and the like which are kept in continuous supply. On each side of the card index is a table with three individual filmstrip viewers. Pupils may check filmstrips out from the charging station and view them at these tables, or they may check out a viewer or projector and view the filmstrip alone or with a small group in their instructional area. Tapes are checked out in the same manner as filmstrips. They may be used individually in the Perception Core, or individually or with small groups in the instructional areas.

The remainder of the books in the Perception Core are shelved according to the Dewey Decimal System, starting with the 000 to 100 classification in the narrow portion and working around to the charging station.

At the beginning of the year pupils must obtain a temporary pass to enter the Perception Core. These passes are signed by a teacher and are for a specific purpose. When the pupil demonstrates to the satisfaction of the team of teachers to whom he is responsible his ability to be an independent and responsible person, he is recommended by them for a permanent pass. This pass is the plastic charge plate used in the charging machine. Any member of the staff may require the pupil to surrender the pass, but if his team of teachers recommend reissuance within the hour, it is automatically reissued.

A permanent pass gives the pupil the privilege of using the Perception Core at any time he has need and has not scheduled some other activity. He need not obtain permission from his teachers to do so. At the close of the 1964-65 school year approximately 80 percent of the fourth-, fifth-, and sixth-year students had permanent passes. Approximately 30 percent of the primary-aged children had them. On only six occasions were pupils required to return their passes, and in only one case was the pass not reissued.

Pupils may have two books checked out at a time. Books are checked out for a week. Reference books and a single volume of an encyclopedia may be checked out overnight. Tapes, filmstrips, vertical file materials, instructional materials, and audio-visual equipment are checked out by pupils for use on the day checked out and must be returned before leaving school.

Every effort has been made to create in the Perception Core a quiet, informal environment in which a pupil with a specific purpose may work. The purpose may be to find a book he can read for pleasure, to browse through the magazines, to check out the card index for books and materials on a specific topic, to use the reading accelerator, to study the maps or globes or use one of the science models, to study a filmstrip or listen to a tape, or to gather data for a report. Whatever the purpose, the Perception Core should provide him with the materials and equipment he needs and the space he needs to accomplish it.

As a consequence of this mode of operation, the library clerk has to be familiar not only with books

but with all the other sources of information available. All of these must be easily accessible and easily checked out. The library clerk issues each day approximately 200 books. In addition, she also checks out other items about a hundred times each day. There is no overdue charge on books or other materials. Children have free access to the books, models, globes, maps, tapes, and filmstrips. No materials were lost during the 1964-65 school year, and only 9 books were lost, 6 of these retained by a family who moved away without notifying the school. Although repair of books was done as needed without any record being kept, approximately 20 books were repaired during the year. None had to be sent to a bindery at the end of the year.

The Perception Core is separated from the children's theater area by a glass wall. The theater itself is unique. It was designed for the children. A large, open space is surrounded by three simple acting areas, each of which may be used for simultaneous production, and two of which may be joined by a bridge that crosses the interior stream aquarium, extending into the theater a short distance. With the "open stage" concept, drama presentations are staged utilizing portable flats designed and built by the students. Creative thought is stimulated in this flexible space and student interest is expanded by the acting tower, including an enclosed spiral stairway leading up to a balcony which looks out over the theater.

One of the walls in the theater is a rear-view screen facility on which movies or scenes may be projected. The area can also be used for large group instruction or as an auditorium facility. The center of the theater is depressed two steps below the basic floor level of the building, and this area, all of which is carpeted, can be used as a seating area for pupils without bringing chairs from the classrooms. The children simply sit on the carpet. For other audiences, the spaces can be filled with chairs from the adjacent instructional area with a minimum of effort. However, in actual practice this is rarely done.

As the building spirals outward, the administrative suite is wedged between the children's theater and the instructional areas. The instructional areas start at the administrative suite, encircle the entire inner core described up to this point, and end opposite the administrative suite.

At Valley Winds, a learning resource center concept is being developed. The center includes the Nerve Center, curriculum center, projection room, Perception Core, children's theater, and art center which is a basement area the same size as the administrative suite and located directly beneath it. This resource center is administered by a curriculum materials coordinator working under the supervision of the principal. The coordinator is responsible for the utilization of all expendable and nonexpendable instructional supplies. He has a staff of three people. A library clerk, who operates the Perception Core, makes sure all books and instructional materials are checked in and out and are placed in their proper places when not in use. She also trains pupils and schedules them for work in the Perception Core. At all times she has at least three pupil assistants on duty.

An audio-visual technician prepares overhead transparencies and trains pupils to use audio-visual equipment. One of the goals of the school is to train every pupil to use every piece of audio-visual equipment. This technician also consolidates the teachers' orders of films, filmstrips, and tapes from the cooperating school district of the St. Louis suburban area's library and handles the scheduling of these when they arrive. Last year this meant an average of 50 films and filmstrips and 15 tapes per week. It also meant facilitating the use of 8 tape recorders, 16 overhead projectors, 7 record players, 3 16mm projectors, 3 35mm filmstrip projectors, and 12 individual viewers. A production clerk processes all incoming library materials, repairs books, and duplicates all material designed or requested by teachers. In addition, she requests material for and maintains the vertical file.

Although problems have continually cropped up, the building, the staff, and the curriculum organization have provided in the past and are continuing to provide the flexibility to allow the attainment of the educational goals which have been established for Valley Winds School. The staff and the professional people in the district, recognizing that much needs to be done, firmly believe that here is one fruitful approach to providing an educational program adequate for today and capable of meeting the demands of the future.

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PLANNING A NEW INSTRUCTIONAL MATERIALS CENTER IN A SCHOOL

In the development of my assigned topic, "Planning a New Instructional Materials Center in a School," there have been numerous long pauses. Also, there have been numerous questions flash to mind which started out, "How do you...?" I could say that throughout my remarks I plan to use exclusively the term "instructional materials center." However, this is not the case. My topic could just as easily be titled, "Planning a New *Library* in a School," and to me it would have the same meaning. I hold to the thesis which is presented in the introduction of *The School Library: Facilities for Independent Study in the Secondary School*. This recent Educational Facilities Laboratories report takes note of "age-old confusion in the relationship between the carrier and content...."¹ The report further states: "It is undoubtedly true that certain carriers may prove to have specialized usefulness not shared by other carriers, but there is enough evidence to suggest that since all carriers can serve individual as well as group use, it would be wise for schools to consider them all as legitimate library materials."²

It has been my experience to plan a school library, an instructional materials center, for tomorrow. When tomorrow arrives and the facility becomes operational, sometimes certain well-planned features are questioned. We generally find the tomorrow which was envisioned is not tomorrow in reality. Unfortunately, tomorrow too often turns out to be just that—different than planned. Perhaps our salvation is to have a superintendent who keeps in mind the second part of the phrase from Alexander Pope's *Essay on Criticism*, "To err is human...." Yet, we have no choice in our planning of school

library facilities. We cannot, we must not, plan in terms of yesterday or today. We have no other choice than to plan for tomorrow if we are effectively to implement our basic responsibility—improve the educational program for each student.

Two words quickly draw attention to changes in our educational programs. There is nothing magic or mystic veiled in these words, but one has already revolutionized our communications, whereas the other may yield a communications upheaval of even greater magnitude. I call your attention to the word "Gutenberg"—the process which developed literally transformed the world of the printed word. Secondly, I call your attention to the word "Gemini"—a word symbolic of a chain of technological events which, when translated to the field of communications, could well transform the full spectrum of audio and visual technology. To put this point of view in a more down-to-earth context, a library planned according to yesterday or today is just as obsolete as a German V-2 rocket.

In taking this approach I do not in any way imply that we have been wrong in our library facilities planning. Gemini, I feel sure, was made possible by apparently fruitless endeavor and frustration—sometimes called experience! We, too, have traveled far in our library planning experience and have made much progress, but let us not become satisfied or complacent, for tomorrow *will not be today!* With a pinch of tradition and a pound of progress, library planning will continue to be an exciting experience!

To make a milk shake we need milk, chocolate, and ice cream—plus a blender. To blend technology, materials, and instruction, we need a library. For proper blending, school libraries must be planned:

1. To support the full range of the instructional program for each student at every grade level
2. To be used by the student *and* professional staff
3. To accommodate all forms of print and nonprint materials.

¹Ralph E. Ellsworth and Hobart D. Wagener, *The School Library: Facilities for Independent Study in the Secondary School* (New York: Educational Facilities Laboratories, 1963), p.16.

²*Ibid.*

My three basic purposes for planning the library as a facility encompass the nine general objectives of the library program in the school set forth in *Standards for School Library Programs*, published by the American Library Association.³ The nine objectives are summarized in these words: "The objectives quite rightly focus upon the most important function of the library in the school—the work with teachers and students; and they are based on the assumption that this work can be carried on successfully only when certain conditions prevail—the services of qualified personnel in sufficient number, an abundance of well-selected printed and audio-visual materials, and arrangements that make materials easily accessible within the school."⁴

Basically, insofar as comprehensiveness of service and program support are concerned, the elementary library facility and the secondary library facility have much in common. Differences are generally due to type of service and program and to the extensiveness of the total facility as reflected by

³American Library Association, American Association of School Librarians, *Standards for School Library Programs* (Chicago: A.L.A., 1960), p.8

⁴*Ibid.*, p.9.

enrollment. For example, space needs and arrangement of space for individualized activity are found more frequently in the secondary school than in the elementary. Further, sophistication of supporting equipment and furniture is directly related to the service and program levels of the student enrollment.

Libraries come in many shapes; for that matter, so do librarians. In the school system in which I am employed, we have a round school in which there is a pie-shaped library. Another building may still include the traditional long, rectangular library, while a more modern building will include a library with space more effectively located and efficiently arranged.

During the past several years as all of our libraries have broadened programs and enriched services, library facilities, too, have undergone transition—a transition from traditionally planned libraries to libraries planned not only to permit more comprehensive service but also to allow for what we hope is a degree of flexibility for changes which inevitably are ahead.

I enjoy recalling Augustine Birrell's phrase of 1874, "Libraries are not made; they grow." Each of us, as we go about our work, trust that our libraries, planned for educational growth, help make each child a little better for the experience as he departs each day.

Mary Ann Swanson
Librarian, Evanston Township High School
Evanston, Illinois

REMODELING AN EXISTING LIBRARY TO PROVIDE QUARTERS FOR A MATERIALS CENTER

Evanston Township High School is a comprehensive high school serving a community located immediately to the north of the city of Chicago. Although it has graduated more than seventy-five classes, the present building was built in 1924. Included in the first construction at the present site was the library. It was a room of about 2736 square feet which had a balcony on the three interior walls. In addition, a small workroom was located at one end, and a similar room for class groups was at the other. As the collection and school population grew, this Gothic structure was apparently becoming too small for the program which librarians, teachers, and administrators felt the school needed.

In September, 1952, after many meetings with the superintendent and an architect a report was prepared by the head librarian. The report outlined plans for a new library to be built in one of the court areas. It described reading rooms, magazine room, conference rooms, textbook storage areas, and audio-visual rooms.

In the spring of 1953 the board of education decided to ask the community for a bond issue of \$1,950,000 to include a new library (not to be located in a court, but as an expansion of its original area), a swimming pool, and an auditorium. In April, 1953, the voters turned down the request. However, in October of 1954 the proposal was approved.

In January, 1955, department chairmen or representatives met and were presented with a list of services which they should consider for the new library. These possibilities were just suggestions which they were to take to their department meetings for discussion. The reports of these meetings listed those materials and spaces which members of the departments felt were essential to their teaching.

Every department expressed an interest in having the usual printed materials; some wanted paperbacks; a number of recommendations suggested a sample textbook collection as well as professional

books and magazines. Several departments wanted listening areas but "not cubicles." One department's report stated, "The library should not have magazines on microfilm, college handbooks, or private desks for individual research."

While this planning was going on for the expansion of the physical facilities, the library was being changed from the conventional printed collection to a materials center. First, in the 1953-54 school year, the library was asked by the audio-visual committee to take over the filmstrip collection. It had been housed in boxes in the bookroom—the room where supplementary texts were housed, which was not always open to teachers. When this collection was transferred, it was examined for its condition and usefulness. Out-of-date and worn-out filmstrips were discarded. The filmstrips which were useful were classified and cataloged, and dittoed copies of the classified list were given to each teacher.

The next collection to be acquired by the library was the phonograph record collection: a few poetry albums, some Mercury Theatre Shakespeare, and a few recordings of musical compositions. These were classified and a list prepared for each teacher, but until recently they were not cataloged. Currently we are working on this project, and soon we shall be able to say that the entire collection of long-playing records has been cataloged.

The library in which the faculty assembled for coffee that hot September morning after completion of the remodeling included the following areas: The main reading room was the original library with balcony, the same size as before construction—38 feet by 72 feet. Opening at the north end of that room a new wing housed another reading room, 33 feet by 65 feet. A classroom which was part of the original structure became part of the suite by the cutting of a door into the new reading room. The former room for group use was divided into two spaces: (1) the college and career room, and (2) the conference

room. At the south end of the main reading room another wing was built. Here were located the back files of periodicals, the office workroom equipped with everything from desks to plastic adhesive, the storage room packed full of supplies, and the listening room opening into the main reading room. The old office became primarily a film-previewing and audio-visual storage area with part of it becoming a corridor from the professional library to the high school library.

The filmstrip cabinets were housed in the library office, and the recordings placed in the listening room. An old custom-built piece of shelving was refinished to serve as the shelving for the recordings collection. After this was outgrown, double-faced metal record shelves replaced the temporary shelves.

The professional library was formerly a classroom to the south of the library office. It had become part of the compound before construction. The remodeling brought it closer by means of a door cut into the inner corridor so that it was more accessible to library staff as well as to teachers.

The library provided, for use with the materials, filmstrip projectors, record players, and tape recorders on a "cash and carry" basis. No advance request was necessary as long as a desired piece of equipment was available. In 1959 the motion-picture rental program was added, and an additional secretary was added to the staff.

This is only a step in the change from library to materials center. In January, 1965, the voters of Evanston approved an \$8 million bond issue for Evanston Township High School. A record was set, perhaps, in that this was a 5 to 1 victory.

The materials center had been outgrown. The shelving space for 30,000 books is more than crowded with 49,000 volumes. The magazine storage area no longer is large enough to house the back issues of 198 periodicals. Another 60-drawer unit of card catalog has been added. Students are turned away daily because the seating capacity is not only inadequate, because of the growing school population, but the cur-

ricular changes bring more students to fulfill assignments. A survey by the educational consultants of Engelhardt, Engelhardt, and Leggett made recommendations that there was a need for a change in library facilities as well as in other facilities.

As the result of the report, now known as the "Leggett Report," the board of education accepted a recommendation that the high school, in planning for 6000 students in the 1970's, reorganize the school around the present hall arrangements into four semi-independent schools on one campus. This proposal included a system of resource centers—one for each school.

Current plans are by no means final. Frequent meetings involving members of the various departments and the building steering committee along with consultants have produced many revisions. Plans include the provision of 15,000 volumes of a basic collection—not for basic students, but basic to any quality high school curriculum. Space will be provided for individual study space—probably 50 percent of the 120-135 seats will be individual places. About one third of these will be equipped for use as viewing stations for TV and sound film lessons, viewing stations for 8mm loop projection, and listening stations for recorded lessons. Some areas will be acoustically treated so that calculators may be used and language pronunciations practiced. Surrounding these centers, each of which will be 5000 square feet, will be the library audio-visual workroom, teachers' workroom, and departmental offices for teachers.

The central library will remain as the location of centralized processing and the main resource center for the four separate resource centers. Here will be kept the back issues of periodicals beyond two or three years, here will be the books for the specialized project, here will be materials available for the teacher to request be placed on temporary loan in one of the four resource centers. As electronic developments permit, slow-scan television, facsimile reproduction, and perhaps someday a regional information retrieval center will become available to the high school students through this central library.

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Baltimore, Maryland

REMODELING A KNAPP SCHOOL LIBRARIES PROJECT DEMONSTRATION CENTER—The Mount Royal Elementary School, Baltimore, Maryland

As a part of the application for consideration as a demonstration center for the Knapp School Libraries Project, it was required that a plan for any needed remodeling be submitted, with sufficient specifics spelled out so that a reasonable estimate of the required money could be included in the proposed budget. In fulfillment of this enjoiner, Baltimore submitted a plan which represented minor remodeling, with one exception.

Structural Changes and Shelving

The floor plan of the original library indicated a reading room with floor space equivalent to one and one-half classrooms. The combination conference room-workroom had floor space equivalent to one half a classroom.

The adjacent classroom was annexed to the library. The taking over of this room gave 35 feet more of floor space. This added room was fondly referred to as "Mildred's room" for a long time in honor of the long-suffering teacher who was being displaced. She good-naturedly tolerated numerous surveying incursions by the various specialists and technicians who were involved in the hammer-and-saw part of the operation.

This additional room provides a total of 102 feet in length and 28 feet in width, or 2856 square feet in the entire library area. Discounting the space used for conference and work area, there are approximately 2408 square feet. With 60 patrons in the library at one time, the equivalent of two classes, this allows 40 square feet per person, well above the suggested national standard.

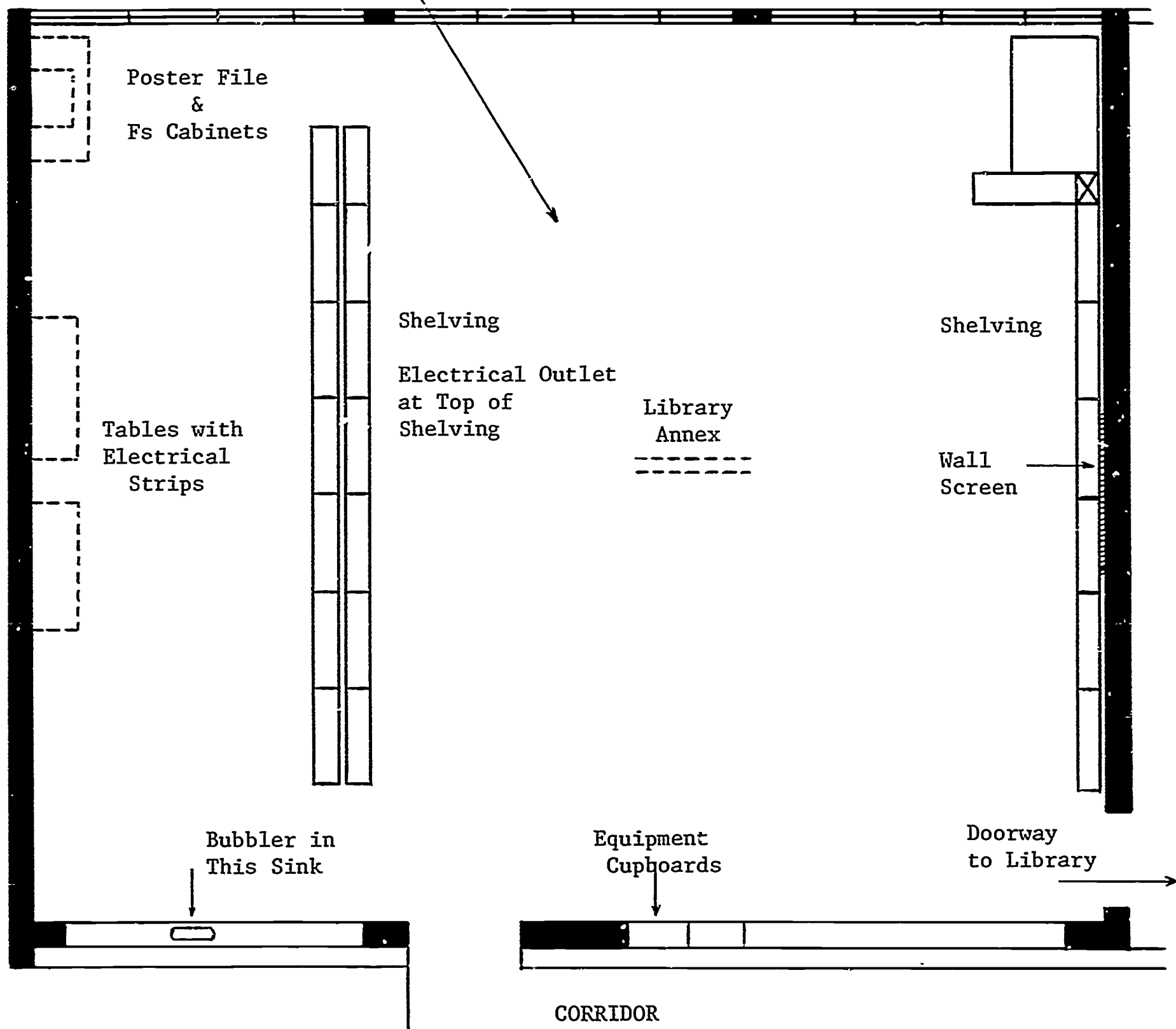
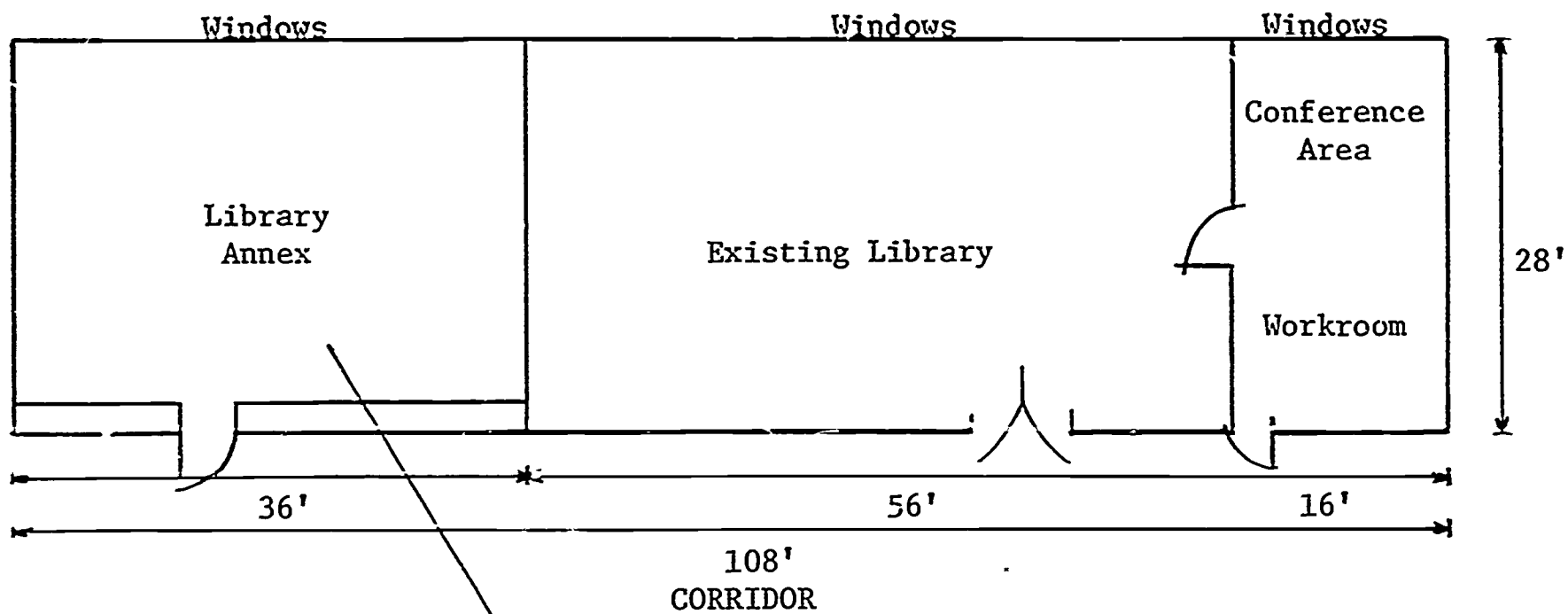
This is how the added space was utilized: A doorway was cut through one wall to connect the annexed room with the library. Additional shelving was placed in such a manner as to create two areas in the annex. Some of this shelving is 12 inches deep, with the lower half partitioned to accommodate recordings.

The preference of the librarian was taken into consideration in not having doors, either sliding or hinged, which would then technically categorize this equipment as cabinets. The equipment was made by our State Use Industries, and the understanding is that if we decide we want the doors in the future, they can be added on the premises at a nominal figure. Backed up to this shelving are units of standard book shelving, 6 feet high by 3 feet wide, with adjustable shelves, of course.

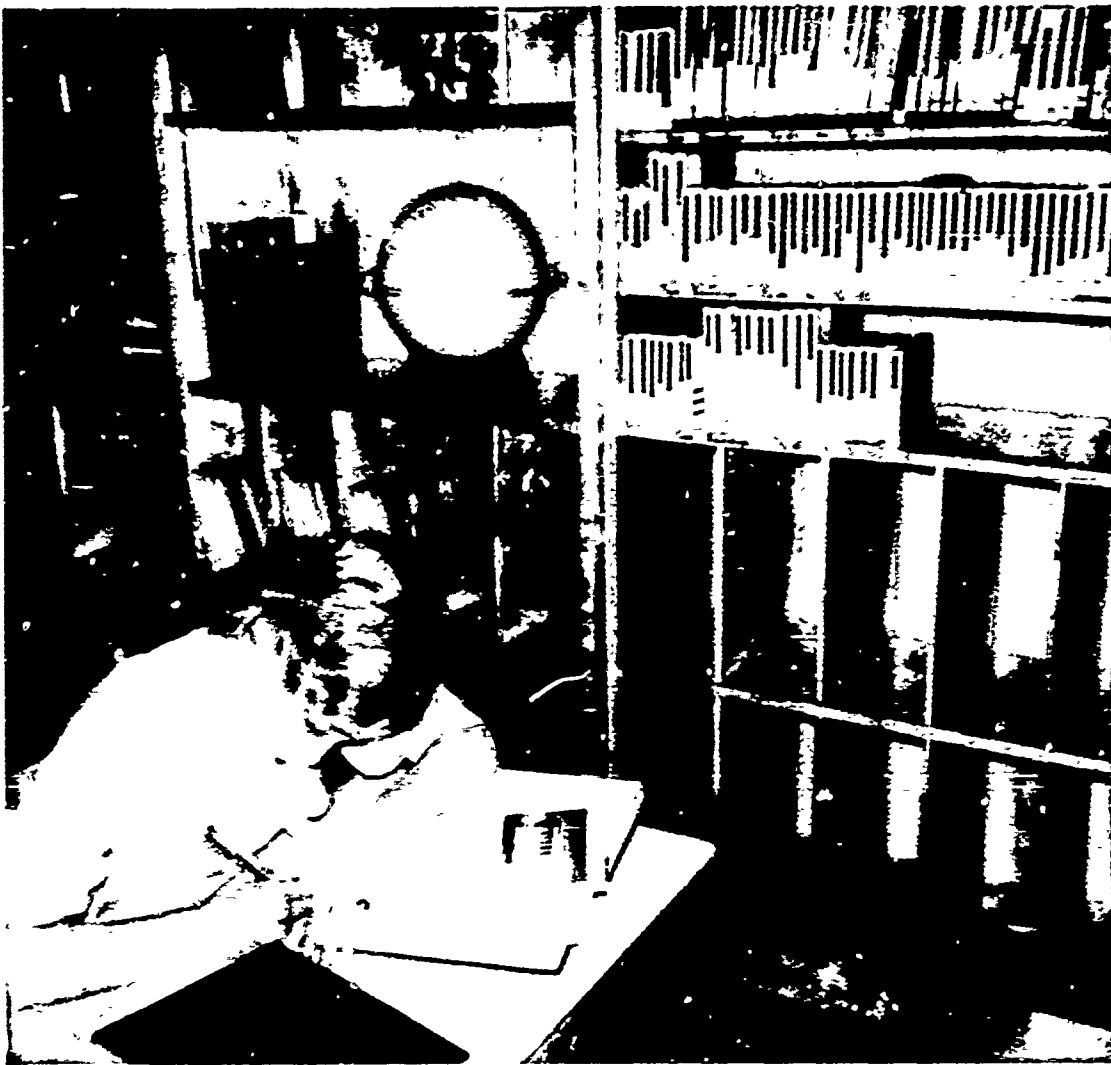
On one wall additional shelving is placed. The counter-height shelving in the center of this wall is under the space which will accommodate a wall screen. The existing blackboard of the original classroom has been retained in this space and can be used for some teaching activities.

The library of this school is located on the second floor, above and to the right of an outside entrance. In order to carry on a summer program and evening hours, measures had to be taken to secure the rest of the building. Gates are to be installed, therefore. Some gates were already there, to shut off parts of the building when the very fine community recreation program was in action. The existing gates made it necessary to provide only three more, at a stairway and at two places in the hall. Access will still be possible to the lavatories. Drinking water will be provided library patrons by a bubbler to be installed in the sink in the library annex.

Minor electrical work has included the installation of some additional outlets, a center-of-the-room outlet in the annex for hooking up projection equipment to be focused on the wall screen, and electrical strips on some tables. The outlet for the center of the room is attached to the top of a piece of shelving and receives current from a strip run along the air-conditioning duct. It is hoped that the use of portable table-top screens, which will be constructed in our department shops, will make it possible to convert the wired tables into individual study areas at will.



Plan for remodeling, the Knapp School Libraries Project—Mount Royal Elementary School, Baltimore, Maryland



Some of the shelving in the annex is 12 inches deep to accommodate recordings

The screens will be stored in a cupboard when not in use. This project is still in the planning stage.

Each classroom in this building has a cupboard, and of course the room annexed to the library had one. For better accommodation of audio-visual equipment, adjustable shelves and locks were added. Alas, there still is not enough storage space. Fortunately, there is a locked space across the hall which we can use, although not exclusively.

Equipment

Draperies have been installed in the entire library suite. They are of fiber glass. Those in the library proper are opaque; their purpose is to cut glare. Those in the annex are of the same material, but with a vinyl coating to shut out light. Even with the use of lenticular screens, there are times when there is an advantage in being able to reduce light.

A rug has established a browsing and storytelling nook in the easy-book section. Its size was limited so that it would not extend beyond the shelving and cause stumbling. Some problems of corner curling have occurred, however, which can offer the same hazard. Currently our custodians are following through on suggestions from our "rug" man in the business office. I fear they are not too happy about the rug. We are planning to make them more so by buying a vacuum cleaner for its care.

The younger children sit on the rug for story hour. The overflow use colorful cushions. The rug is also a favorite after-school spot for informal browsing.

The addition of a small three-unit charging desk has made helping with the circulation more of a status symbol than ever among the library aides. This piece of equipment replaced a single pedestal desk which is now being used as the office desk for the second librarian. None of the charging desk chairs listed by any catalog gave the height-adjustment range which our librarians felt would be comfortable for the new desk. The alert eyes of one of them spotted a likely chair in a science-equipment catalog. It was a good match, adjusts to the desired height, and seems to be working out well.

Poster and filmstrip cabinets were purchased for the annex room. The base with legs was chosen by the librarians for the poster file, in preference to the flush base that catches dust which cannot be reached easily with cleaning equipment. The smaller of two available poster cabinets was chosen because the larger seemed unnecessary and unwieldy. Since then a number of outsize travel posters have been acquired. We are planning, therefore, to use *this* file elsewhere and acquire the larger one.

The librarians preferred cabinets with slotted drawers to the drawers with circular holes for holding filmstrip cans. This type provides a place for labeling each filmstrip.



For better accommodation of audio-visual equipment, adjustable shelves and locks were added to the cupboards in the annex

The original library had two vertical files. A jumbo file was added to accommodate oversize material, particularly some oversize picture sets. The plethora of valuable ephemeral material collected by our librarians and our alert fieldworker has made it necessary to order two additional legal-size files to accommodate the rest of our vertical file resources.

Air Conditioning

An unexpected variable entered into the original plan which certainly bears out Robert Burns's well-worn phrase about schemes, mice, and men. The "a-gley" was definitely in our favor, however, as you shall see.

By chance, an observation of this proposed center took place on a very cold, *very* sunny afternoon in February. Now this library has a western exposure and many windows and, although outside the weather was freezing, inside the temperature was indeed high. This thermal paradox evoked the suggestion that we seriously consider air conditioning, which we did.

This facility was gained at the sacrifice of shelving in the library and in the annex, also. The overhead ducts traverse the ceiling for the entire length of the library suite. At first we were overwhelmed by the unlovely proportions of this monster and talked furtively and frantically about what could be devised to hide it or screen it. Our engineers unimaginatively

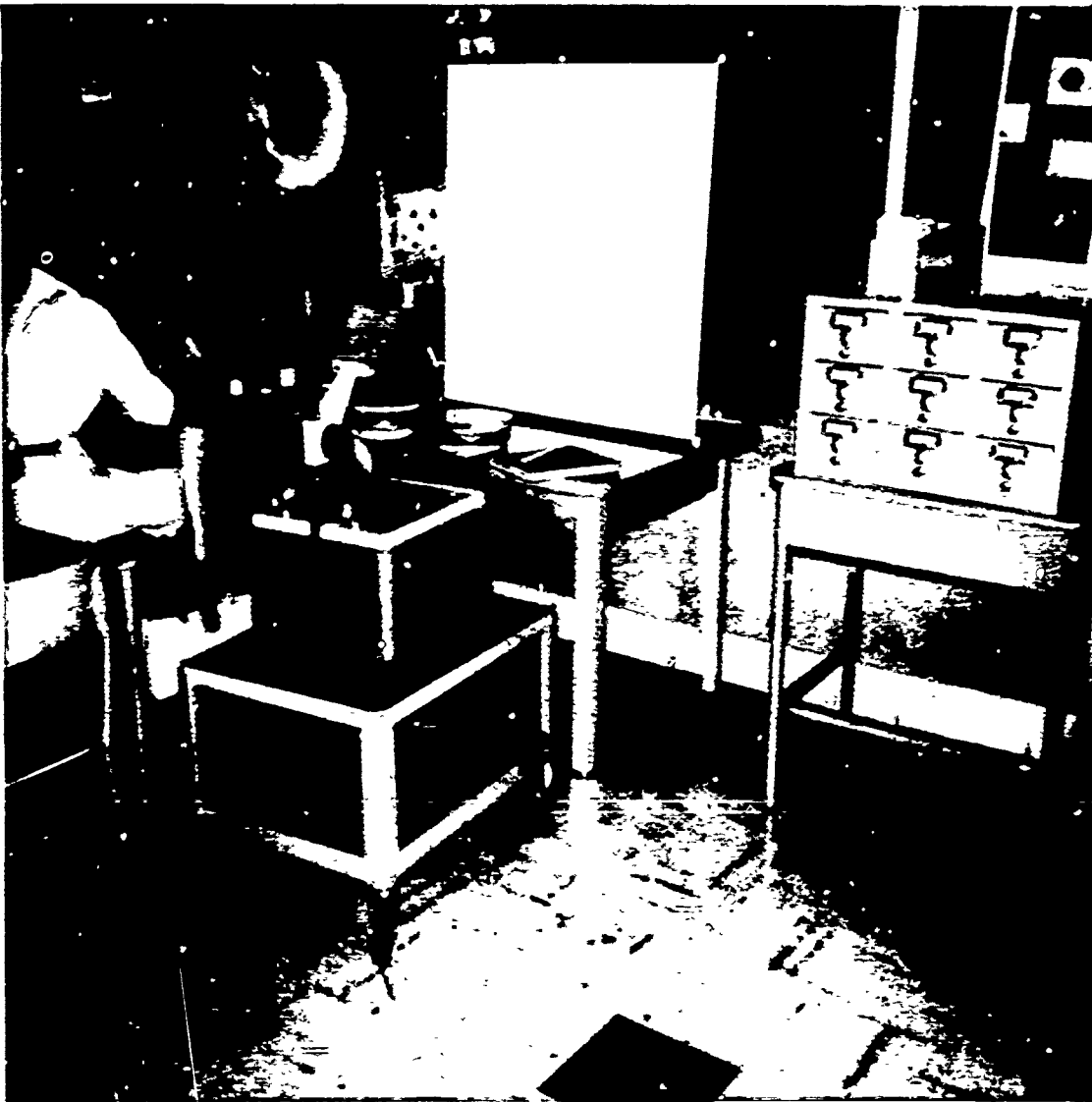
reminded us that access to it, for changing of filters and servicing, must be available at all times. Further, they quoted city codes of minimum distances to be maintained beyond the unit, and so on, and so on, all very technical and confusing.

While this was going on, we were becoming more and more used to the equipment, and now we have decided that it really does not need to be hidden after all. Shelving has been arranged around part of it, in an attempt to recapture some lost wall space. An individual study area has been developed on one side of it. I shall warn you, however, that it is noisy. We have been assured that further adjustments may temper this. Right now we are toying with the idea of wall-to-wall carpeting in the annex, which may have some subduing effect on the cacophony. Sad to say, every silver lining does have its cloud!

Audio-Visual Equipment

Preparational equipment added includes a Thermofax copier for reproducing printed material and making transparencies for the overhead projector. On a visit to a nearby county school, the librarians noted a dry-mount press and felt that it would be a welcome addition to the library at Mount Royal. It is used for mounting pictures and clippings.

Both librarians felt that a label maker would be generally useful. The ease with which the one ordered



Equipment wagons are very handy for transporting heavy and fragile equipment

operates is a great improvement upon one demonstrated several years ago which almost made blisters on thumbs.

A Wilson movie mover is on long-term loan to the Knapp center from the instructional materials center of the Baltimore City public schools. The film is threaded at the end and projects directly on the screen, which is housed on the top of the cart. This is but one of the many courtesies and cooperative acts from our supervisor of instructional materials who has been a source of wisdom and guidance in the selection of brands and types of equipment.

Equipment wagons are very handy for transporting heavy and fragile equipment. The school has three floors, but it does have an elevator. Once the equipment is loaded, therefore, it can be taken any place in the building with a minimum of effort. This is a great help to the custodial staff. As cooperative as they try to be, they do have other duties, and the use of audio-visual equipment by teachers and pupils has increased greatly since the beginning of the project.

The library has attempted to purchase all types of aural and visual reproduction equipment which would be generally useful in the elementary school program, and in quantities to meet the demand realistically. These include:

1. Filmstrip projectors: standard, small group, and individual
2. Filmstrip previewers for individual use of filmstrips
3. Tape recorders
4. Phonographs
5. Listening posts
6. Overhead projectors
7. Screens, in several sizes—lenticular for optimum daylight visibility, whenever available.

Future remodeling and equipment, on order or in the consideration stage, are:

1. Study carrels
2. Wall-to-wall-carpeting
3. A vacuum cleaner
4. The change of the circuit of our ceiling lights to permit individual lighting of the two large areas in the annex.

Summary

The expansion and improvement of the library quarters and the addition of substantial amounts of useful equipment have improved the library program tremendously, even during the make-ready year. The impact is noticeable throughout the school. We are confident that the results of this three-year demonstration library program will be so evident and so significant that they will prove what the Knapp Project hopes to show—that a good school library program *does* make a difference!

*V. American Library Trustee
Association Workshop*

MORNING SESSION

Charles E. Reid

President, American Library Trustee Association

OPENING REMARKS

It gives me great pleasure to bring you greetings on behalf of the American Library Trustee Association. For the past few days many of us have joined together to discuss planning for and evaluation of our physical facilities in which we provide library service to the public.

The greatest value of this workshop will be that, in assessing our physical facilities, we must examine our library services and planning for the future of our building; we must plan for the expanding and ever changing concepts of library services and for the library of tomorrow; and we must recognize the need for increased financial aid on all levels. In evaluating the services to the public we must come to the realization that only through larger units of service can we hope to meet the needs for depth which are required in library service today.

I wish to repeat what I said in my message to the members of the American Library Trustee Association. It is our responsibility to the taxpayers of our community to see that monies spent for library services are spent efficiently and effectively.

We can best accomplish this by pooling our resources of knowledge so that the buildings of today and tomorrow will not become obsolete within a few years. We must not waste our money on inefficient and inadequate physical plants which cancerously eat into our annual budgets and inhibit efficient staff operation.

Planning cannot wait. We cannot leave the evaluation of our library and our services and the planning of our future services to chance.

It seems to me only fitting that as we approach

the Fourth of July, the day on which our nation celebrates its freedom from the bonds of oppression, we spend these preceding days in contemplation of our responsibilities as trustees and librarians—to provide the library facilities so that the mind of man may remain free through free access to all resources of the world.

The American Library Association and Library Administration Division are providing the tools by which you can properly build library services. The utilization of these tools is entirely up to you.

As president of the American Library Trustee Association, one of the pleasures of holding this office is to work with the Workshop Committee. Those of us who are officers always feel this is the ideal committee. It helps to mold the imaginative and creative program which has made ALTA such a fine division of ALA.

This year has been no exception. We have been blessed by two chairmen, or cochairmen, who have done an outstanding job together with their committee, and at this time it gives me a great deal of pleasure to introduce Ray Williams, one of the cochairmen, the Director of the McIntire Public Library of Charlottesville, Virginia.

MR. WILLIAMS: It is a pleasure for me to introduce a fellow Jerseyite, a trustee of Metuchen Public Library, known to all trustees and librarians alike, Dr. Lowell Martin, Vice-President and Editorial Director of Grolier Publications of New York and, most important, a friend of libraries on every level.

Lowell A. Martin
Vice-President and Editorial Director, Grolier Publications
New York City

INTRODUCTION

This is a workshop, a workshop on libraries and library buildings today. I notice that the library building meetings the last few days have been called a "conference," and this meeting is called a "workshop." I infer from this that librarians confer and trustees work. Actually the term does apply to the meeting today because if I had tried to summarize in one sentence what this session is going to seek to do, I would put it this way: we are going to plan a library building, or maybe the right way to say it is that *you* are going to plan a library building.

The program will move through a series of steps to the point where by the afternoon session we will have designed a specific building for an individual community. Here are the steps through which we are going to move in the meeting this morning and this afternoon. Perhaps you could think of the morning meeting in three steps. Remember, our objective is to understand the building planning process and to apply this understanding in the planning of a specific building.

Our first step is not to take a sheet of paper and start to draw lines on it. No, we are going to stand back just a little, as I think you have to, even if you are concerned with a building right down the street in your community. We are going to stand back as our first step and ask a leading librarian, James E. Bryan, who is also a library building expert to remind us of what library service is today and how building needs grow out of this broad view.

Still by way of preparation and as the second step in the program this morning, we are going to call on three trustees who in different ways have had recent library building experience. Then, as the third step, we are going to ask you if you will participate with the committee and with the members of the program to help us set down the functions, the program, and the criteria which should apply in any library building. That is this morning's program.

We would urge on you that you concentrate on the

planning activity throughout the day including the luncheon period. We do not have a formal program at lunch—there is not to be another speaker at that time—but you will be at tables where it is possible for the full group to talk together. There will be a committee member at each of the tables and we hope that the discussion can go on informally at that time.

When the group reassembles in the afternoon, there will be three steps that we will go through then also. Mr. Williams will describe a community to which we will seek to apply the criteria and programs that have been developed in the morning. He will have with him Mr. Odell, an eminent architect, who was president of the American Institute of Architects last year.

Mr. Williams, Mr. Odell, and you will start putting this building plan together, and as a third step you will actually end up with a preliminary sketch. It is a dry run on planning a library building and ought to be, therefore, of real value to every trustee here who is contemplating a library building program. But I think the session should also be of value to trustees who already have a building, because this is a fine way to review the situation.

Now, just a few words of caution on a structured meeting of this kind. I heard someone this morning say, "I understand we are going to design an instant library." Maybe that is a good phrase because I suspect our library will be just about as good and as bad as instant coffee. What we are doing is an artificial exercise, as we should remember for a couple of reasons:

One very definite reason I would remind you of is that the program does not fully involve participation of the librarian, and certainly when a library building is being planned one would be working with the trustees, librarians, architects, and the community in a larger way. Furthermore, we are going to be pushing together in a matter of a few hours a process that must go on over many months and in some

cases an even longer time—the designing of an actual library building.

We have an added responsibility to try to pull all these steps together and make them effective. We are going to attempt, along the way, to set down a record of what is going on. There will be notes prepared on Mr. Bryan's comments, summarizing the gist of his remarks. As the trustees of the panel speak, Hoyt Galvin is going to record the major points that they make. We are hoping to make it unnecessary for you to use your memory. The points brought up this morning will be recorded so that we can refer to them in the afternoon.

Most of you know Hoyt Galvin, who is the Director of the Charlotte, North Carolina, Public Library. He told me a few minutes ago that a count of the num-

ber of his building consulting jobs would probably be close to fifty. Hoyt Galvin is the incoming president of the Library Administration Division of the American Library Association.

We will start with the presentation by James E. Bryan, who is the Director of the Newark, New Jersey, Public Library. Mr. Bryan is one of the foremost library building authorities in the country, and a colleague of mine in New Jersey. I have worked with him a great deal and know the quality of this man. Incidentally, he happened to be the president of the American Library Association a year ago. Ned Bryan will start us from the broader viewpoint of current library needs as they also apply to buildings. He will move us up to the beginning of the planning process for this building's program.

James E. Bryan
Librarian, Newark Public Library
Newark, New Jersey

WHAT MUST LIBRARIES DO TO MEET EMERGING NEEDS?

I would like to take Lowell's comment "librarians confer and trustees work" a little further and have it sound this way: librarians confer, trustees work, and trustees work librarians. It seems to me to be a little better suited to this morning.

The library board is the policy-making body, and in some of our states—New Jersey, for example, where I am from—the board is actually assigned the overall library administration by the state statutes. For this reason it is responsible for the planning and construction of library buildings. This is one of the most important things that a board can and will do in the advancement of the educational goals of its own community. It is often one of the most important contributions that an individual trustee will make in his incumbency on the board.

I feel that the way you have undertaken this program today will be very useful and certainly will put library building further ahead in due course. Each community is different; its problems are different; and these problems will be satisfied in different ways. In my opinion there is no standard community, no standard set of library problems, no standard solution to them, and no standard library building. On the other hand, this fact of community difference is not in any case to be construed as an excuse not to provide adequately for this important library facility. Trustees and librarians working together on building programs and problems make sense. The trustees' knowledge of the community, the local site and building conditions, the ways of the trades, labor practices, building methods and materials, various legal aspects of site acquisition, contracts with architects, the building process, and building contracts is very important to the library director and to the architect.

The work of our library board in Newark is greatly advanced by people such as Tom Daly, our president this year, who is chief engineer for the *Newark News* (which, by the way, is rebuilding its major plant in Newark while still operating the

presses every day), and Gus Kelly, who is chairman of our building and grounds committee and chairman and treasurer of our library board. Gus is chief counsel for the Newark Housing Authority and has directed the preparation of more sites and building contracts than anybody else in the city of Newark in all probability. Tom and Gus are both here today. They are both interested in the trustee programs, and I am very pleased to have their support in the building programs that we undertake.

I think librarians need to acknowledge the help that has been given by trustees to the work of the library and of the staff, not just in building matters or in legal matters, but in the human aspects of running organizations in our community.

In this first part of our program, which will start our discussions, it would be my hope to proceed about as follows: (1) to relate some of the changes in the fabric of our society which affect library service and hence library buildings; (2) to indicate what the changes in library service may be, and to suggest how you will discover them in your own communities; (3) to assess briefly what effect these changes may have on library building; and (4) to outline the procedures by which a new building may be conceived and planned, programs of public and official acceptance undertaken, approvals received, bids advertised, contracts let, construction completed, and library operations move in and begin.

First, as to these various social, educational, and cultural changes in American life which affect our public libraries. I would like to say that libraries do not operate in a vacuum since books, which are the tools of learning, reflect quickly and responsively changes in our society. What affects life affects knowledge and so affects libraries. Conversely, what affects knowledge affects life and affects libraries, and I hope libraries affect knowledge and affect life also.

Many of the following points you realize, but I will try to go over them quickly: population increase,

population distribution, transitive increase in the life span.

Charlie Reid, in a talk recently, mentioned the fact that there are now 20,000 Americans who are more than 100 years old. This is, to me, a startling fact, and it serves to call attention to the change of population and the various groupings in our total population. There is increase in the age group over 65, and increase in the school age group. All of these affect libraries. There is increase in recorded knowledge. Do you know that in the last five years the number of books published in the United States—new titles and new editions—has increased from 20,000 to 26,000. There are now 80,000 journals published in the world.

Bill Dix, of Princeton, in a recent talk indicated another fact which is very surprising to me as indicating the growth of knowledge. He reported that 90 percent of the world's scientists who have ever lived or published are now living and publishing. This is really the blossoming time of recorded knowledge and probably of all of our history to date. The educational picture is rapidly changing. For example, there are many more high school graduates. The number of high school graduates entering college has jumped amazingly, and the expectation is for a continued rise in college enrollment and in the number of 16- to 22-year-olds in the college group.

The number of graduate students has also increased. At Princeton last year the number of college graduates going on to graduate school was 70 percent of the total graduating class. The years of schooling completed by adults likewise continues to increase. Our population on the whole has not only completed more years of schooling, but it is more literate than it has ever been before.

The quality of education is improving, with many high school graduates skipping the beginning courses in colleges in such fields as the sciences, languages, and mathematics. Our young people not only *can* do better than was thought possible a few years ago, they *are actually doing better*.

The college curriculum continues to expand, and our graduate of twenty years ago scarcely recognizes the course offerings of our major colleges and universities. They have expanded to such a degree. The educational establishment, that is, formal education as an institution, has expanded more rapidly than the libraries which support it with books and other materials.

It has been said that in some fields of engineering complete retraining is now needed every ten years. When I attended college, it was considered that, after you had your college education, you were educated for life. This is no longer so. There is now more leisure time for cultural and educational pursuits. Some of you may have heard me tell this story, but I repeat it here because I think it does help us with a sense of proportion about the use of leisure time in libraries.

A few months ago I was discussing with some people in our city—business people, one of whom was a merchandiser—the problem of the four-day week, and most of the people at the lunch table were quite obviously incensed that the four-day week was a possibility. People should work more than four days a week was their feeling. The merchandiser did not say anything. Finally, on being pressed, he said, "Well, we are not opposed to the four-day week." One of the people there asked him why and he replied, "It is very simple; it just gives people one more day to spend money."

When a good segment of our society thinks of one more day of leisure time as one more day to spend money, certainly educators, such as librarians, and people who support the educational process, such as library trustees, must bear in mind also that one more day of leisure, brought about by an improved technology, also can raise the educational and cultural sights of the people in our communities. This is one of our responsibilities.

Business and industry must compete on the basis of an increasingly complex technology, and many markets are highly competitive. Know-how is a must to survive. A man's judgment in business must be based on facts if his business is to compete and advance.

For many years it was said that a strong arm and a strong back were sufficient equipment in the country for minimum survival. Today literacy is the tool for minimum survival. In a time of such rapid change in our economy, due to improved technological processes and automation, our economy cannot stand an increase in unemployment due to functional illiteracy. Hence the massive attack on poverty and its roots, especially lack of education and inability to read at levels that are necessary for employment. Programs to prevent poverty now extend from the third and fourth years of life in children to the education for adults.

The development of mass media of communication and a population on wheels have tended to break down much of the provincialism which formerly existed in certain geographical areas. People may live in rural, suburban, and urban areas but what they think about, what they are concerned about, how they earn their livelihood have become quite universal in nature.

The idea that "the hicks are in the sticks" is pretty much a myth now due to television, radio, and the mass media publications. In short, the old argument that people are not so advanced or well educated or informed because they live in the country can no longer stand up.

At one time, in our country, political boundaries reflected the social-economic culture and the public safety and common defense factors which were important to people residing in these areas. This is decreasingly so. In our major urban areas the lack of relationship between political boundaries and the educational and cultural needs of the people is rapidly

raising difficulties about the tax base necessary for the educational and social programs, including those of the public library.

Lest we forget, may I remind you that our public libraries have now been active in many areas for fifty or sixty years (Newark library, for example, celebrated its 75th anniversary last year) and have themselves done much to raise the sights of people and to increase their desire for educational and cultural advancement. Sometimes we are so concerned about public library weaknesses and insufficiency, and of course there are weaknesses and insufficiencies, that we do not give the public library as an institution the credit due it. Our predecessors as trustees and librarians have fostered the most effective, informal instrument of education yet known to man. Much of the pressure on our libraries, library staff, and library building is our own doing. We have developed a good program, and it is used more than we expected it to be.

The last of the social phenomena that I would like to speak about is that our young people today—despite the reports of the inadequacy of the younger generation and their general contrariness to the established order—are working harder, are studying harder, are more inquisitive about knowledge, and show more interest to learn and use libraries than those of past generations. I certainly question anyone who feels that the younger generation is not up to or not as interested in working as hard as my generation was.

I am sure that you are as familiar with these changes and many others as I am. Let us say that they are numerous, they are important, and they affect libraries as a part of the educational process.

What are the implications of some of these changes for library buildings? First, let us think about reader seats. More people today are using libraries and a differing proportion in the age groups is using libraries than was true twenty years ago. The need for libraries to work with the great unreached group, the great uneducated group, the great deprived group, is a problem before our present public libraries. Many libraries reach 25 percent, 30 percent, or 35 percent of their populations. What about the rest? What about the functional illiterates? Are they a responsibility and will this affect our library buildings?

The starting enrichment programs as part of the drive against poverty are for children of three to four years of age. In some cities kindergarten programs are now being considered for four-year-olds. Many libraries, including Newark Public Library, have had programs for preschool children for a number of years. Our library has had, and this includes branches, programs for preschool children for the last fifteen years.

The Newark board of education's "Operation Head Start," which is a summer program to assist deprived children in underprivileged circumstances to catch up immediately, has called on our public library for

thousands of books for this program—a demand which we are having very real difficulty in meeting. The growing retired or so-called "Golden Age" group with their increasing years of schooling and interest in and time for reading and pursuit of cultural projects, their desire and interest in working as groups, all of these demands affect the number of reader seats in libraries. All spell out one fact very plainly—that public libraries will be used more and will need more reader seats (and probably in somewhat different proportions) than we have calculated up until now.

A word about the book capacities. The explosion of knowledge, the increased years of schooling completed, and the need to provide reading materials for persons who have graduated from the advanced curricula of colleges and universities will require that libraries, even for the smaller population served, will need more books. If the public library is the people's university and if its responsibility is continuing education after people have completed a formal course, then certainly with the explosion of knowledge and the increase in the number of books published, we will need room for more books than our libraries now permit.

In the last few years, particularly in the student age group, we are noticing a marked increase in the use of periodicals. They provide a very useful and up-to-date form of information. In one day our library has had as many as 2000 requests for back issues of periodicals. This requires a staff of eight people full time. We have found that we are using a basic list of 100 different periodicals with back issues to 1850. This is the result of the educational program. What this demand does is make librarians reconsider how they are going to handle periodicals.

Not only is there demand for current issues but also for back issues: bound, unbound, and on microfilm. The proportion of material on microfilm against the proportion of material bound or unbound in terms of back issues is becoming critical when you remember that while the saving on microfilm is 50 to 1 in space only one person can use it, while 50 can use the originals. This may be a slight exaggeration, but there comes a time when ten or twelve microfilm machines in a library are not sufficient, and you may wish some of the materials which you now have on microfilm were in bound copies.

We are going to need a reevaluation of children's programs, particularly in the work with preschool children. These children are using books in public school programs. It is true they are picture books, they are easy readers, but they help to communicate ideas and they are useful in the preschool programs. To encourage parents to read to children is all important. We may well see some changes in our library building because of this program. Alternately, we are now finding that many children are using adult books because they are interested in the subjects discussed in books which were formerly used primarily for adults.

When I started in library work, we had fairly clear ideas when we bought books that they were for children, for high school students, for college students or for the general adult public. Today you do not know who is going to read or use the books which you buy, and some of the very bright elementary school and high school students who have advanced knowledge of science are using books which our Ph.D. students formerly used. There is more flow from the children's department to the adult department in our libraries.

There is an increase in the use of other types of materials in our libraries: films, filmstrips, music, recordings, and tapes. We need a place to preview them, a place to listen to them. Language and literature recordings are a very good way to learn foreign languages, and they illustrate a demand which is on the increase in our public libraries.

The role of the library as the so-called adult education center of the community, with its increasing tendency toward adult education and group programs, also will have an effect on our buildings. Use of more work techniques, films, film forums, exhibits which bring in the best from the outside, use of existing space in our libraries to let our own people show what they have been doing, all these are activities which libraries can encourage for the educational and cultural advancement of individuals.

The reading, discussion, and participation technique requires meeting rooms, and they should be available in our libraries. There is increasing need for special services such as photocopying, which not only saves our books but saves much time for the borrowers. Last month our library sold, at 10 cents per copy, more than 22,000 pages of photocopy. If someone said ten years ago that this facility was not an important part of the public library, the facts certainly dispute the statement now.

In some communities, particularly cities, where there are large numbers of culturally deprived children and adults, some special services, such as tutorial programs, study areas, and availability of the library as a study hall at night, help deprived people and are important in a library building. In crowded areas there is a need for retreats, especially in our cities, for a person to be by himself to think, to cogitate, to read. This implies more individual study facilities in our public library, more places where a person can go to be by himself.

The development of informal and formal systems of libraries, the development of contract arrangements, federations, the sharing of collections, the sharing of operation, the possibility of centralized acquisitions in our larger areas, all need be considered in our building. These changes in use patterns (especially on the part of children and young adults), the difference in the intellectual and social ages of children, all affect the openness of the library and the flowing of people back and forth.

A word should be said also about the economics

of libraries. The more material that can be added to collections, displayed on open shelves, and made available without a proportionate increase in cost of daily operation, the better the educational opportunity is in a community. In other words, if a library can have on its shelves 50,000 volumes which—by means of a better building arrangement—it can supervise with the same staff that was wont to handle 25,000 volumes similarly shelved, the educational opportunity is much enlarged and is enlarged beyond the increase in cost of the books alone.

The biggest expense in library operations is in salaries. In many libraries the cost of staffing runs from 75 percent to 80 percent of the budget. If you can expose more books at no more cost in staff, the educational opportunity is enhanced. The cost of operation must be borne in mind because the library competes with other community agencies for the tax dollar. An efficient arrangement will pay for itself over and over again. A layout that requires one additional professional and clerical helper can cost \$100,000 over a period of ten years.

A new development in the thought about libraries is the tendency toward a minimum library. We are working on this in New Jersey. We now think of a minimum library (and there should be none smaller than this) as one with 25,000 volumes—8000 children's books, 17,000 adult books—regardless of the size of the community to be served. If a community cannot afford a library as good or as large as this, then it should throw in its lot and become part of a library system or work out contract arrangements to provide this size of operation.

With the educational demand on libraries there are also changes in library support. The local tax base has in many communities been supplemented with state and federal aids. The funds have been used to improve staff and collections and assist with building programs. As an example, Library Services and Construction Act building funds of approximately \$1 million are available in New Jersey for the first year of the program. This will permit about twenty building starts this year which amount to well over \$10 million in value. Here, indeed, is seed money used for the best purpose. We will probably have more new library starts in New Jersey in this year than we have had in the last five to eight years in our state.

These buildings also will be better than many previously built buildings, since they must meet criteria which the state has required in the distribution of the funds. As our discussions this morning proceed, many more factors affecting public library building will be brought out. These mentioned here are just intended to start our thinking.

It is really exciting when a community is ready to plan for a library or when its first library has outgrown its educational britches, so to speak, and the community needs a new library facility. The experience of building a library building can be troublesome and fearsome; it can also be exceedingly rewarding. It is

not a simple operation. It involves many steps, many people, many agencies. The process involves money, aesthetics, the whims, desires, prejudices, and interests of many people; and somewhere and sometime, we hope, the very real needs of library service.

If one approaches the matter with a little flexibility—with the understanding that this is a community enterprise and with the philosophy that there is more than “one way to skin a cat”—the librarian, the board, and the community will all get their money’s worth and a good library, too. A library is not built academically or in a vacuum. It is built by people using the community process, with its strengths and its weaknesses, in the full gaze of public officials and, of course, in the full gaze of the taxpayers. It is a cooperative endeavor and not a one-man operation.

The library building and the library adequacies are areas, then, in which the library trustees should take a strong and forward-looking leadership role. They should be looking ahead to the fact that educational and cultural change is bringing requirements for bigger buildings with larger collections and a more comprehensive list of services than we have known before.

The steps of a public library building project vary in some instances, but I have tried to put them together in groups:

STAGE I. PRELIMINARY PLANNING

- Program
- Engaging architect, and consultant (if needed)
- Site selection and acquisition
- Standards
- Preliminary drawings and budget estimates

STAGE II. COMMUNITY ACCEPTANCE

- Design approval—planning board, and others
- Approval by elected officials
- Budget acceptance
- Bond issue referendum and/or community approval
- Other local and state approvals

STAGE III. PREPARATION OF FINAL PLANS

- Final plans and drawings
- Adjustment of furniture and equipment layouts to final plans
- Specifications
- General conditions

STAGE IV. BIDDING AND CONTRACTS

- Advertisement for bids
- Receipt of bids
- Award of contracts
- Notice to proceed

STAGE V. CONSTRUCTION AND OCCUPANCY

- Shop drawings
- Extras
- Punch list
- Furniture and equipment
- Moving in

These five stages are not mutually exclusive and

thus tend to merge one into the other. But I thought I would group them for you in this way so that you could see the whole flow of a program from the idea to the finished building.

Roughly, they include the program and the process for engaging the architect and the consultant if a consultant is needed. The problems of site selection and acquisition (and sometimes there is difficulty over this; in other cases the site is known in advance and is not a problem). Preliminary plans and specifications, preliminary budget estimates, the various procedures in gaining community acceptance, the development of working drawings and specifications which indicate what the terms are for doing the work. The advertisement for bids, the award of contract, the problems of extras, the notice to proceed. After the building contracts have been awarded, the work on the furniture and equipment and furnishings. Finally, the punch list, which is one of the big problems you have in a building in getting all of the items required by the specifications complete to the satisfaction of the architect. And then—occupancy!

All these separate steps, and I will not speak any more of these now, gradually flow together, and as you move from one step to the next, you will find that you are more conversant with a building program, more knowledgeable as to what your problems and responsibilities are.

I would like to spend the balance of my time on the program or the program stage. The program is a fairly concise statement of what is wanted, expected, or hoped for in the library building, and it may be in various forms. It may be a written statement, it may be a table of data, and it may be only in your minds and in the mind of your librarian. A written statement is best because it gives you an opportunity to examine, reexamine, weigh, and assess.

Who prepares the program? The librarian and staff help and may start it. The board of trustees certainly is concerned with the statement as to what the building is going to do and what is going to be in it. In some cases a board will engage a consultant to draw up a building program. In other cases the program is completed before the architect is engaged. I suggest to boards that the architect become a part of the program team and help to form the program. The town officials usually are interested in the program and what the building will do. Sometimes the program is a combination of the contributions of all of these.

I recall one case that I know about in a particular community where the board and the library consultant (the board being interested in getting a new building) were brought together by the mayor, and the mayor announced that he was going to help to make funds available for a new library. In five minutes or so, the conversation went like this:

“Now, you know in this community the library has got to be in the park. We have always known this, that the library is going to be in the park,

and this is where it is going to be. We also know that it should be back in the trees where it will make a nice picture for people who come by, and they can see the library back there in the trees.

"We all know a library is a colonial or Georgian building. This is what our community expects in a library, and because we are very tax conscious and the people are economy-minded in this community, we all know it will be a basement and two-story building because this is the most economical building to build.

"I have ready for you \$250,000 to build this building."

This was all fine except that it was pointed out to the mayor that the \$250,000 would provide only the number of square feet which would barely hold what the existing library held and would allow no room for future expansion. But that was all the money there was, and that was what the choice was.

In a case like that, you really have not much need for a building program. It is decided almost before you start. I would like to report that the building was built that way. The mayor regretted that no more funds were available, but he said that within five to eight years he would make additional funds possible. He has done this, an addition has been put on that building, and it is now adequate to hold the collection. I point this example out as one of the methods by which a building gets built.

What preparation is desirable to make a program? First, a community study. What is your community like? Are you sure you know what it is like? Have you any idea what the trend will be for the next twenty years? What do you know about the people of your community, their number, which age groups are growing most rapidly? What people are moving out? What people are moving in? What do you know about the average years of school completed in your community, the size of the family, the percentage of high school students attending college? What business and industry do you have? Do you feel that your library has a responsibility to help train people generally or specifically for local business and industry?

What are the educational and cultural programs in your community? What are the curricula of your schools? Do you have junior colleges? Do you have colleges? Does your community have special library responsibilities? Is the library a cultural center for your area? Is there a museum or art gallery or will the library assume some of these responsibilities? Will you have a union catalog for your geographical area for the holdings of all libraries in your area? What special library collections will you have? Will your library be an area library? What do you know about the census data for your community, per family income?

Towns really *are* different. For example, I know of two places about the same size, but one has families with 3.5 members per family, another has 4 members

per family. This implies a greater number of children and a larger children's room. I know of two communities the same size, but in one 90 percent of the high school graduates go to college and in the other 30 percent go to college. Does this have any relationship to the collections at the library, to the number of people who will use it, to what part of the collections will go to practical technology and what part to more academic subjects?

What are the educational trends and how is the explosion of knowledge affecting your community? The study should lead to some definite ideas of what your community is like now and what it will be like twenty years from now. What are the educational and information problems you will have? What will be the community needs for library service? This is the time to look at other libraries and make lists. Librarians and trustees will ask their colleagues what they like and what they do not like about their buildings. They will ask what they would do over again and what they wished they had not done at all. Then they will write these points down. They will look at other buildings, other operations, not only library operations, to see how they work. They will see how shops, supermarkets, factories, and offices handle their problems, their traffic loads, and the people who use them.

Bear in mind that the library performs the same operations as many businesses do but in different proportions. We must get books in, process them, and place them attractively on shelves so that they will be read. We must arrange our libraries so that our customers, the people who use them, can find what they want in a logical arrangement. You will write these points down.

There will be talks to staff members on how various library operations are performed and how the operations can be worked into a flow of work, and you will write these points down. You will notice how your own operations vary from those of other libraries. Just as an example, in one library that I know of, every staff member has both public duty and work-room duty on one-hour shifts. In speaking to that librarian I mentioned how unusual this was, and she said, "Well, we have no staff problem. The staff likes it and we have no turnover. How is your turnover?" And I admitted our turnover was more than we like it to be.

In another library that I know of, every professional staff member catalogs books. This is a fine program. This is one way for professional staff members to learn the insides of books. But this procedure, of course, means a different arrangement in the cataloging area. Program planning is a good occasion to examine operations, to find better ways to do them. As you make up your mind and discuss ways to do them, you will write these points down.

The board will discuss with the staff the effect of the projected operations on the budget. This is the time to determine, it is the time to discuss with the architect, these various operations. It is the time to

review standards which may apply, not only the state standards if you are applying for a federal grant but the interim standards for small public libraries, the Wheeler and Githens standard, and any other standards which may apply.

I suggest to you that standards are for the so-called "average" community. You must know in what ways your community is not average, and there may be many reasons why your library should exceed a given standard.

You sort out and record all of these ideas that you like, and they can make your program. You can make your program in another way, also. You can make a list of services to be given, the functions which each service will perform, and descriptions of the various areas of operation. Such a statement might include how many of everything: how many reader seats, how many informal index tables, how many vertical files, how many map cases, how many atlas cases, and so on. It should examine briefly the matter of relationships. I would like to discuss this matter now to give you some idea of what I mean by relationship.

For example, every public service area should be supported by some book storage office and work area. Often the supporting functions can be grouped so that two or more public reading room areas can be served by a single book storage office or work area.

The flow of work itself will often clarify the relationship involved. In processing new materials, for instance, it is well to have on one level a loading dock, a receiving area, and space for unpacking and processing, including cataloging, classification, and preparation. The more that all these steps can be put on one level and the more that materials can be moved on wheels, the smoother the work will flow.

You must consider problems of flexibility. Flexibility implies provision for one or more uses for the same area at different times during the library development over a period of years. If you bear in mind that the average public library today is fifty years old, you will realize you are really building for some time. I hope that none of our buildings being built now will have to last to meet the requirements of the next fifty years. But new buildings do not come as frequently as we would hope.

Flexibility is most desirable. It can be achieved by providing a small number of large areas instead of a large number of small areas. Or by separating different services in large areas; by using movable book shelving, easily moved partitions, or folding doors if the openings are not too large; by keeping bearing walls to a minimum; by combining related functions. There are many other ways to effect flexibility.

Ease of supervision is also important. Libraries have certain slow periods in the morning and on other occasions; peak loads usually occur from 3:00 P.M. to 6:00 P.M. and on Saturday morning. Schedules are

managed where possible to provide greater time saving at both clerical and professional desks to meet peak loads.

A flexible, well-conceived layout of public services will require less staff at slack periods. The saving of such an arrangement over a period of years can be substantial and warrants careful thought in the planning stage. One of the last steps in the program is the preparation of a description of each area and a list of furniture and equipment.

We might now consider briefly some site criteria:

- Attracts and serves greatest number of people
- Is where people go, not necessarily where they live
- Has a good pedestrian and vehicle count
- Has a street-level entrance
- Permits "see in"
- Has adequate parking
- Is where *all* persons in the community feel free to go
- Is where people go for other purposes, such as to bank, to shop, and so on
- Is not off the beaten path, so women and children feel free to use the library in the evening
- Has close proximity to schools—important for children
- Is available to business and industry
- Is large enough to contain adequate building, proper landscaping, and *future additions*
- Is where building will stand out and be noticed
- In brief, is located to fit the activity patterns of people in the community.

In the matter of site each community has its own problems. In many of the newer communities there are not necessarily natural community centers where a library might fit, but suffice it to say that the community will get the greatest value of the money expended for a library building and the greatest return when the library is in a location where it gets great use, the maximum use for the tax funds expended.

To sum up briefly, since there is nobility and dignity in the public library idea, there is thus a nobility and dignity in the public library structure, a friendly, inviting, practical kind of nobility which will encourage use and make people feel at home. I might sum it up this way: The building is for use by people, by everyone in the community. It must be friendly, it must be inviting, it must be attractive, it must be approachable, it must be available and convenient. It must fit into patterns of community activity. It must not be apart from the general flow of the community.

The structure is intended to function and accommodate itself to the activity of people. Reference users, browsers, information seekers, children, literally everyone in the community needs to use the library at some time, and good library services, well planned, are used far beyond general expectation.

Finally, the library building is not a monument to the ideals of freedom of inquiry, of the right to read, study, and understand for one's self, or of continuing education through life, but it is a building for

use by people so that these ideals, so important to our society, will continue and flourish.

MR. MARTIN: Ned, this was truly a substantial and important statement. Ned and I had an agreement that at a certain time I would pass him a note saying his time was up, but I did not do so at the appointed time. I thought we were getting too much out of his discussion.

One quick comment on Ned's excellent presentation. I was most pleased that he stressed the need to give attention to emerging and coming demands upon libraries. I say this with some feeling because recently I had occasion to visit some fine new library buildings, and I have an uneasy feeling that we librarians sometimes slip into the weakness that all of us have experienced in relation to highway planning. You know the wrong way to plan a highway—you make a scientific study of how many cars will go by this place, how many people are going from here to there, scientific as all get out, and then the highway is built. It is a new superhighway, and the first time you get

on it, you are in the worst traffic jam you have ever known. The planners were not looking at the emerging trends which Ned stressed so well.

We have three trustees present who will take part in this portion of our program: Mr. Richard Ruddell, of Dearborn, Michigan; Dr. Harvey Merker, of Detroit; and Mr. Sidney Zwiren, of Southfield, Michigan.

We are turning to these three men because each of them has had a special type of library building experience. Dr. Merker was the chairman of the building committee of Detroit during the period, or at least part of the period, when their large recent building was completed. Mr. Ruddell is chairman of the building committee in Dearborn, and Dearborn is actively planning for an important new building. Mr. Zwiren, who is president of the library commission in Southfield, is going to tell us about his experience in completing a building which has been open now for just under a year.

We are going to start our session with Dr. Harvey Merker, the president of the Detroit Public Library Commission.

Harvey Merker
Trustee, Detroit Public Library
Detroit, Michigan

PANEL DISCUSSION

Sam Levenson in a speech a while ago said, "When I was a little boy, I did everything my father told me to do. Now I am a man, and I do everything my little boy tells me to do." In continuing, Sam said, "What I would like to know is when am I going to be able to do what I want to do?"

Ladies and gentlemen, I am very happy to have a part in this wonderful gathering that you are having here in Detroit at this time. The Detroit Public Library and the city are honored to have you here at the 100th anniversary of our Detroit Public Library. You may be interested in knowing when you leave this building that at this northeast corner, on a little triangular piece of ground, we started the Detroit Public Library in 1865 in one room of the state capitol of Michigan, which also served as the high school.

In 1877 our first library building was dedicated. Our library had its start under our Detroit board of education, and for sixteen years the committee of that board of education sponsored and ran the library. Finally the members came to the conclusion there was too much business in the library for the board of education to sponsor along with its own educational responsibilities. They recommended that a commission be formed; proper laws were passed and a commission was formed. But the board of education retained the power to appoint the library commissioners.

So the commissioners are not appointed by the city or the common council but by the Detroit board of education. The president of the board of education serves as an ex officio member with our six commissioners.

Our commission is divided into a series of committees, and I will run through them hurriedly. Mr. Bryan gave you a wonderful résumé of all the activities involved in a library and in the building program. We here in Detroit divide our commission into (1) an administration committee which handles personnel appointments and promotions, (2) a book committee

which takes care of gifts from Friends of the Library, individual memorials, and so forth, (3) a finance committee which takes care of our accounts under a business director and also takes care of city, county, state, and federal funds that come to us, and bond issues, and (4) a building committee which takes care of construction, equipment, and general building affairs. I will go into that committee's work a little more in detail in a minute.

Then, of course, we have our director who watches general expenses and cooperational work with suburban libraries. We find here in Detroit with our college situation that many of the pupils and students have need for a library such as ours, and if you were in our library on a Saturday or Sunday, you would readily find out how our reference branch has a tremendous demand from suburban communities. At the present time we are working with these communities in cooperational work making the library card common to their communities as well as to the Detroit Public Library. Of course, the director is always interested in new business and in many of the items that have been mentioned here this morning, and the commission in discussing library policies.

It was mentioned earlier that we have just built an addition to our main library. We have more than doubled our space, and I wish to assure Mr. Bryan that we have taken care of the future in planning the addition. We are looking forward to welcoming you all tomorrow evening at the library.

We have 28 branches in the city of Detroit. We supply books for 29 hospitals and convalescent homes. We also take care of our municipal reference library. When it comes to sites for a new branch, we always consult the Planning Commission of the city of Detroit. The members make a thorough study, and we are practically always in agreement with them on a site. We have that help from the Planning Commission. We go into the question of the need for a new library, we have discussions, and we give the matter much

study and thought. We are particularly interested in the functional value of the library.

The point was brought out earlier that, if a library is properly constructed, the books can be handled in a much more efficient manner without too much extra help. Our team for considering a new library consists of the members of the Library Commission, and we have been very fortunate to have one of our finest contractors in the city of Detroit as a member of the commission. I can tell you that that fact has saved us in this last building hundreds of thousands of dollars.

Naturally, our librarian and associate librarian are very close to construction and to the functional values. Both are consultants in the building of other libraries in the United States. We are very fortunate in having special abilities like that on our own board.

We always engage an architect. We consult the city engineer, and we have to convince the city fathers that we need the library because we have to appeal to them for a portion of our funds. Our Library Commission is a municipal corporation in its own right. I do not know whether there is another setup such as the one we have here in Detroit. The issuance of bonds within certain limits is our right; this involves 1/4 percent of the assessed property valuation.

Finally, the Library Commission has the power to enter into contracts, supervise construction through a clerk of the works or a project engineer, and, of course, is responsible for the maintenance. I wish to assure you that many or all of the suggestions that Mr. Bryan has given we attempt to follow to the letter in order to get the most efficiency and the best results for the city of Detroit and our suburbs.

MR. MARTIN: I was interested how Dr. Merker, early in his comments, brought in the relations between Detroit, the Detroit Public Library, and the communities round about. I think this is a point that Ned did not stress quite as much as I might have been tempted to stress it. The day of self-contained libraries is past, if there ever was such a day, and this is another one of the important factors in building planning.

Let us turn now to an individual who has worked with a building that was recently built—Mr. Sidney Zwiren, who is president of the Southfield Library Commission. I am sure it will be clear from his remarks that the library functions within the Wayne County program.

Sidney Zwiren
Trustee, Southfield Public Library
Southfield, Michigan

I have been asked to address my remarks to planning for a small community library and to attempt to relate how we operate at Southfield Public Library under a contractual obligation with a larger unit of government, namely, Wayne County.

In listening to some of the talks in the last few days, I discover that although we here in Michigan are talking about county libraries, apparently in New Jersey and California you are starting to talk about regional reference centers. I presume some of you must be thinking about how you would function as regional reference centers: the problems, the advantages, how they would affect the building and staff, and so on. So in the minutes allotted to me I will try to cover these points.

After hearing so many speakers tell us how to do things and thinking about our experience at Southfield the last two years, I realized that perhaps some of the problems of our trustees are a little different from yours. I will tell you, therefore, about some of the mistakes we have made, and maybe they will give you some insight into the type of problems to look for.

To help you realize our problems, let us go back a few years so that you understand our community. Six years ago we had no library, no building, no books. Two years ago—and I will bring you up to two years ago after six years ago—entering into a contract with Wayne County, we had a building that was the first school building in the city of Southfield, 180 years old. We had 2500 square feet. We had about 15,000 volumes, one third of which were borrowed. We had our Wayne County contract, a population of 35,000, and a total operating budget for that library of about \$40,000. Our support is based upon three tenths of a mill of assessed valuation in our city. At that time, two years ago mind you, three tenths of a mill represented \$36,000; the other \$4,000 came from other funds.

Here we are two years later in a building of 18,000 square feet. We now have a collection of

25,000 volumes. We still have our Wayne County project. We have a population of 50,000 today and a projected population of about 120,000 in ten years, perhaps seven to eight years. We now have an operating budget of \$150,000. The reason I bring out these statistics is that this is what has happened to us—we were overwhelmed.

When I was appointed to the board four years ago, the first responsibility assigned to me was to watch the water level in the furnace so that it did not explode. After about three months when it was seen that I could accept responsibility, I was assigned to make sure the automatic door operator on the front door functioned properly and the door would close. These were the kinds of problems we had, and I suspect the kinds of problems many of you have right now with the kinds of buildings you are in.

The point I am trying to make is not to get overwhelmed when you are faced with a building program. Do not lose sight of what you are trying to accomplish, and do not let people do things to you that should not be done. This happened to us.

Here are some of the things that happened: We went into a building where the space seemed wonderful—19,000 square feet. What more could we ask for? We knew in terms of how we should grow that this space would house the collection. But we did not have the vaguest idea of the kind of programming we wanted in that building. We should have thought about this three or four years earlier. The lack of a long-range plan has hurt us in this building. We were given a building with three floors but no mobility between these floors: no elevator, no booklift. Here we are in this building ten months, and we are going to start to knock out walls next year or start to add stairwells. Don't let this happen to you! If you are given three floors, make sure you have access to those three floors.

The architect's original intent was that the children's library would be upstairs. Our concern has

been, since architecturally the building demanded a well overlooking the lobby with a 3-foot rail, how many children would fall over that rail each day. So this has presented a problem in the building. The closed stairwells limit us just to moving upstairs and taking advantage of that space because, in addition to the closed stairwells, there are outside access doors in those stairwells. For us really to get upstairs it means that we are going to have to build an open stairway. This is after only ten months in the building! Do not let this kind of error happen to you.

Another fault that we find with this building is the lack of flexibility. We probably share a great deal of the responsibility for this lack because here, again, we were concerned only with the collection—how many books did we need and so forth. We did not recognize the other services that we should and could provide, because two years ago we had no way of imagining that this amount of money would be available to us.

One thing we did that I first thought was a mistake, but that has worked out very well was not to provide for a book drop in the new building. This was done at the suggestion of our librarian. Being easy to get along with, I said, "Glenn, I will go along with you, but let's plan where we are going to put the drop after we receive all of the complaints. You recognize that without it books must be returned during the open hours of the library." In ten months we have had exactly one complaint.

We attempted to get complete control from our circulation desk, and this has helped us considerably. We did come up with certain areas that still lack control, but they have not presented any major problems. However, I think the staff working the desk would have a little more assurance if they had complete control of all the corners of the library.

Let us get on to our relationship with Wayne County: how we have operated and how the operation has had a direct effect on this building and some of our planning. As I understand, Wayne County has seven different types of relationships with community libraries. We were the first city library outside of Wayne County as such (we are in Oakland County) to establish contractual services with Wayne.

Being so new, we took advantage of a program which they had and which at the moment seems to be satisfactory for the near future. What this means is that Wayne County does all of our book processing for us. They provide us with all of our stationery, our library cards, anything we need in the way of providing library service.

Our contractual services also include all of our personnel, who are actually Wayne County employees. They are hired by Wayne but are still under the direct supervision of our board. There are advantages and disadvantages to this arrangement, and I will try to cover some of them.

As you can see, we are almost entirely dependent upon Wayne County for library service. The effect

that the relationship with Wayne has had on our building is this:

We do not have a traditional workroom, as you know it, because we are not doing any of our technical processing. We have a room we call a workroom, but in all practicality it serves as a receiving area where we pile the books until we get them on the shelves. A minimum of administrative space is needed because most of the administrative function is being performed by Wayne. I would presume that if we did not enjoy the growth we have, we would still have no need for administrative space, but our problem is growing.

Do not let yourself get into this situation. We are building an office and are providing secretarial assistance for our librarian this year because, as we grew, we found that our librarian's job had become more of an administrative job than we had anticipated. Also, if you are in a small community, do not lose sight of the fact that, as you grow, some of the work for which you have been relying upon the system, you are going to be forced to do for yourselves.

Being a part of a system minimizes our storage requirements. But we still need storage space. We are fortunate in having a very active Friends group in our community that, incidentally, raises about \$3000 a year. We store the books for their book sales. They have an art show each year, sometimes twice a year, and we store all of the paraphernalia required to show and display the arts. So you should have a storage space whether you are part of a system or not.

In terms of aspects other than building, Lowell Martin said I might want to touch on some of these as they related to a community system. If you are a young, growing, and struggling library and you cannot provide consultants on your own staff in every area, being part of a system provides an invaluable service. As an example, we have a representative from the Wayne County system attend our board meeting each month. We hold a joint meeting for the Friends board and the library board at the Wayne County building so that we can discuss mutual problems and enable our people to understand the services available from the system. The important thing is that consultant service is available.

When we need craftsmen, painters, carpenters, you name it, we can draw upon the county facilities. Likewise, if you are in a small community and—I hate to use the words—"operate on a limited budget," being a part of a system makes available to you many items you otherwise cannot have in your own collection.

These are the advantages that come about when you are part of a system. But for those of you that do go into a system, I want to throw out one word of caution. Do not lose your own identity. Even though you are part of a system and geographically all the other libraries nearby are within that same system, you may find there are peculiarities to your community that mean you occasionally have to work on your own. Keep in sight the needs of your own community and relate them to the system approach and the kind

of programs the system wants to do. Do not lose your identity; it is a very easy thing to do.

It helps to have a vision of the kind of facilities you are going to provide in the long range so that, as your building is planned, you can readily make the services available. For instance, we never anticipated two years ago that we would start a recordings collection this year. We have no place to put a record player or let anybody listen to it. We do not have one in the building, but we are going to start our collection this year. I wish this had been planned two years ago.

Ned mentioned a microfilm collection. Ned, your statement on periodicals is also very true in our library. Right now we store them in what was called the workroom. It is confusion. We are initiating a program this year of putting our periodicals on microfilm. We expect to buy a couple of microfilm readers. We are presently investigating a microfilm reader-printer because of the problem of getting the maximum use out of this type of equipment. We installed a Vicomatic copying machine six months ago, and it has quite a bit of use. People are duplicating pages of books and taking them home with them rather than working at the library. We have a nominal charge for use of the machine.

We are starting an art print collection this year. We have found that, in the services we have been asked to render for our community, people like to come in and borrow art originals (if we have them) or prints. They let them hang in their homes for a period of several weeks and keep changing them as their fancy dictates.

Some of the other facilities we wish we had planned space for or knew where to fit into the building are adult discussion groups, student discussion groups, and story hours, and I wish we had emphasized more the space requirements for our reference collection.

We had anticipated that our circulation and library use would increase, but we did not anticipate that the kinds of users would change and the materials they would want from the library would change. About two years ago the state library asked us to make a survey of our building, and we did this on the old building. It was broken down by age category, occupation, students, and so forth, and whether the users were coming in for reference material or popular reading. We used this information to do what little planning we did do for this building. That information today is no more valid than it might be if you were trying to use it for your library.

We have had a drastic change in going into a new building. So we are now making up our own questionnaires. We are conducting our own survey, probably the latter part of September when we get into full swing again. Then we can tailor our program this

year a little more to the needs of the people that are using the library today.

I would like to make two other comments before I close. As I said, we knew we made mistakes in our planning, and in listening to several of the speakers the last few days I found out that we made more mistakes than we even knew. The reason I want to bring the point up again is that some of these "mistakes," as they have turned out, were not really mistakes. One of the speakers yesterday, it was Mr. Chitwood or Mr. Rohlf, made some very specific comments with regard to locating a library in a civic center. It so happens this is exactly where our library is located. We may be in the wrong place, but our circulation has increased about 30 to 35 percent in comparison to any given month of last year, and I told you what is happening to our operating funds. Our collection has increased, as I said, from about 15,000 two years ago to 25,000 this year, and, as a matter of interest, we are going to buy 8000 new books this year. So this location has not worked out too badly for us.

Perhaps a word of explanation should be given. We do not have a downtown area as you know it. This plan is peculiar to our community. We cannot locate in the downtown area if we wanted to because we do not have one. We have a big shopping center in the southeast corner of our city—Northland. This would be our downtown area. The point is, and I think Ned said it better than I can, that every situation is different.

One other thing he said, "Do not use gifts for a building fund unless you know where your operating funds are going to be." When we moved into this building with a \$40,000 budget, the city estimated our rental at \$35,000. We told the city administrator, "You do one of two things. You either get us money to operate this building or you give us \$10—a \$5 lock for the front door and a \$5 lock for the back door."

The city found the money. Now let me tell you what happened since we moved into this building. I suppose it will happen to each of you. I have never seen so much interest in library service stimulated in a city as has happened in ours in the last year.

I can attribute it only to the fact that we are in the new building. I am sure there are many other factors, but one must be because we are in the new building. I will say we are unusual, but I wish I knew why.

Our city council created a library commission of council members two months ago. We have three commission members now on the library committee. Then a most unheard-of thing occurred. The city council reinstated \$7500 to a budget that the city administrator recommended be cut. I can attribute this only to the fact that we moved into this building, and I think we have created a new image for library service for our community.

Richard Ruddell
Trustee, Dearborn Public Library
Dearborn, Michigan

The comment on our modern highway system, that the world's finest engineers are hired to design the highways and nature's lay idiot to tell you how to get on and off, makes me think that, in a manner of speaking, trustees write the signs for their library systems. Whether we get people on or off the system properly, I think, is up to the trustees and not so much up to the librarian.

Too often as trustees we are bemused by the expertise of librarians, and this is perhaps justifiable. They know their job, and all too frequently we do not know ours, and in a vacuum other people make the decisions we should make for ourselves.

As trustees I think we can lend continuity to the library system that so often a librarian cannot do. In Dearborn, for a number of reasons, we have had three or four librarians in the past six or seven years, all of them excellent librarians, highly competent, but lacking the continuity that the trustees can give to such a system. We can serve an interpretive function, interpreting the system to the public and the public to the system.

We can give it added skills and, for that matter, added hands and feet in helping the librarian do his job. Generally, we can forward the program of the library system.

I would like to go into some detail as to what our building program is for Dearborn, but I am afraid time will not permit it. I do know this. Whatever formula you may employ, whether it is Joe Wheeler's or anyone else's as to the size of the library, chances are that when you move in, it is too small or does not have an elevator.

We started our plans for this library, a community of about 110,000, thinking that 85,000 feet would be great. This would give us everything we wanted for the next twenty years. We are up to 112,000 feet and still going. We are only a few weeks from making our final decision. I wish the convention had been a few weeks later so that I could have shown you some

plans. In interpreting the needs of the community of Dearborn to the library, we tried to draw on some of our own experiences.

We felt, for example, that it is entirely the place of a library to have art works, whether they are in book form or framed art; to have play scripts; to have musical scores for the community orchestras; to have films for local film groups; and so on. I think we probably will have the largest feature-film collection of any library in the country. I think our audio-visual budget is the third largest in the country of any public library.

If we have these materials, then it seemed to us that our library building should in some way structurally reflect this. So one of the first things that we have started to plan is a multipurpose room which has grown to become a fully equipped, fully regulated theater. This will have an auditorium that can adjust to the size of the audience.

The stage will also be adjustable in size—for a small string ensemble, a 100-piece orchestra, a single speaker, or light opera. The acoustics likewise will adjust in keeping with the nature of the presentation. We are contemplating long-distance facsimile transmission so that we can tie in with larger libraries whose resources we would like to draw on and so that smaller libraries can tie into us. Also that large industrial users such as Ford Motor Company, which has its home office in Dearborn, can use our facilities or we can use theirs, or possibly go over their transmission lines to their plant facilities, which number some ninety in the country.

We have contemplated and are seriously planning closed-circuit television to eliminate the need for policing certain areas of the library. These may seem minor details, but they are not so minor. These are details of the construction of the building that I had not planned to get into.

More what I wanted to touch on is the fact that these are roles, I believe, of the board of trustees or

commissioners. It is in this area that the librarian, the library consultant, and, of course, the trustee may serve as consultants for the theater and interior decorations, for the art work we may employ, and so on. All of these are experts, but no one is more of an expert in his own community than the trustee is or should be.

AUDIENCE DISCUSSION

MR. MARTIN: I think I failed to mention the different backgrounds of these individuals. The variety of backgrounds that we as trustees bring to the library field is important. Dr. Merker is an engineer. Mr. Zwiren is responsible for a sales program. Mr. Ruddell is head of the information service of a major automobile company that is identified with Dearborn. I think it is gratifying that individuals of these very different backgrounds seek to take hold of this library building question.

Now we want to start the discussion. I suppose this is a rather large group for a discussion, but I think we can work it out.

Let us start with a discussion of the functions and activities of libraries that are significant as you move toward the planning and construction of a library building. Who has the first comment or suggestion on this theme?

MR. STEVENS: George Stevens, Asheville, North Carolina, president-elect of the state association. That title does not bestow any knowledge on me, but I would like to suggest that two very valuable sources in working out your program are two elements in your community who do send many people to the library. One of them is your public education system. Certainly your school superintendents ought to take part along with the local government officials. The other is the alert modern industrialists, which you certainly have here in Detroit and which I am happy to say we have in our own community. Those people just drive their employees to learn more. Let us get them in the building program.

MR. COHEN: George Cohen, Appalachia, Ohio. I want to comment on one matter. How do we plan for the declining population, the group where we lose all the young people and retain all the more or less elderly and illiterate? We have to provide library services for this segment of our society, too.

MR. MARTIN: I am going to turn that right back to you. We are not experts up here. You have asked us a good question, now give us what you think is the answer.

MR. COHEN: We have had not one single application for library service aid to Appalachia. Nobody is doing any planning for it. The library covers a very

large area with very irregular topography. It is hard to serve large units. We have had, for the last two or three decades, a decline in population. It is almost an impossible group for which to provide the modern library service we have been talking about here the last two days.

MR. MARTIN: We heard a comment earlier about a community that was a few thousand people and now is 50,000 people. Can someone else help with the question of the declining area, the area losing its population? There are others besides this one referred to by Mr. Cohen.

MRS. CARSON: I am from New York State and a trustee of a five-county library system. I would say that developing library system service is one very good answer to this need, judging from our experience in New York State, where there are 22 library systems for the entire state, and in the particular system of which I am a trustee, where there are five counties. Some of these areas are also losing population, not at a rapid rate but at a small rate. Many members of our libraries were pretty pathetic groups when they joined the system and began to get system service.

The less you have, the more you need a system is what I am trying to say. If you have very little local support, then, of course, you will get better results and have more services if you belong to either a county system or a system of several counties. The sparsely populated areas are the ones that are really getting a tremendous boon out of system service in New York.

A TRUSTEE: I am from the other end of the country—New Mexico. We do not have systems because we are so big geographically, so small in population, and so poor in funds. But we are using the state library through the funds that come from state services and from federal services. That is a way to expand when you have 39 libraries, some of whom have as little as 17 cents per capita for support.

MR. MARTIN: I was interested in Mrs. Carson's bringing in the fact of library systems. I am picking up a point she made and hope it will be of value for these declining population areas.

A study is going on in New York State, at the moment, of these library systems, and particular attention, or as much attention as elsewhere, is being paid to those parts of the state where populations are either stable or declining. It is so easy, you know, to get excited about the growing places and we need to, but there are these other sections also to consider. Let me touch briefly on one hopeful item.

In the system program in New York State, one of the finest things that has happened is the increasing number of telegrams and telephone calls from relatively remote libraries into centers of one kind or

another in order to get better library service. Just telegrams and telephone calls, nothing fancier than that, but this simple communication is most useful.

A TRUSTEE: I am from California, and my answer to George is a little personal. Would you like us to put up a barrier and say "Ohioans, go home?"

MR. STEVENS: Isn't that a peculiar thing we say, "West Virginians, go home," "Kentuckians, go home." We should not do that. The gentleman behind me is from Detroit, and he says all the Ohioans are coming to Detroit. I think we have to provide library service for the individuals who are in our service area at any particular time. If we are going to develop a program, we have to consider who the individuals are that are going to be in our area in the future and to orient this finding to our building. What type of building do we need to provide service for the people passing through our community?

A TRUSTEE: For older people, for the Golden Age group.

MR. MARTIN: This comes back to one of Ned Bryan's basic points of the program designed for the community. I cannot resist a comment on the California population. I have been spending a little time out there. You get off the airplane in California, and immediately you are told it is the most populous state in the country. Two minutes later you are told all the problems of their population. I do not believe there are nearly so many people as are supposed to be in California. It's just that they all get on the freeway at once, and it seems that way.

MR. CLEMENS: I have another suggestion, although it may not solve Mr. Cohen's problem. I am Mark Clemens from East Meadow, Long Island, New York area trustee. It seems to me that many areas in the country are going downward. Some of the local people have taken the initiative and formed groups to redevelop the area and attract new industry to help and possibly reverse the decline. My question is, how many trustees are asking their librarians, who are college-trained individuals, to participate in this program: to help write the reports, to help dig out the facts, to help redevelop the area? The library should be at the forefront of any committee to help redevelop the area, level off the population, help make the area more attractive, and possibly move it up again.

MR. MARTIN: Of course, that community as well as any other needs sources of information. It needs to utilize the sources of information in building itself up, and that is what you are suggesting.

MR. ELLIS: Phil Ellis, East Meadow, New York. I think our two-county area is likely to be the Appalachia of the next decade. In Michigan there seems to

be a great deal of interchange between industrial and public library collections. There is considerable talking to each other. I know that our situation in industrial Long Island is much different from the one in Michigan, because in Long Island we have a great many small competitive companies, whereas Michigan has a small number of very large and not so competitive companies. I think if we could have established working arrangements so that all our libraries including industrial libraries could have talked to each other, exchanged information, and consolidated expenses, we might not be going downhill so rapidly in our library program right now. How do you do it in Michigan? Can you suggest how we can do it on Long Island?

MR. MARTIN: Is there a trustee from Michigan, from this area in particular of Michigan, who has some acquaintance with the interuse and interexchange of materials among public, industrial, and other libraries? Mr. Ruddell, do you happen to have a contact with such an exchange?

MR. RUDDELL: I was interested when Mr. Ellis spoke of it because I never heard of one.

MR. MARTIN: I believe I am right that Mr. Ruddell has worked both with library and with other forms of information sources so that he would have had some contact with interexchange.

MR. RUDDELL: I am sorry I misinterpreted your first question. Yes, I am trying to effect an interchange of materials at the library in Dearborn. I feel that any functional library built today, especially in the middle range of size, has an obligation to smaller libraries in its area to dispense information to them. This includes libraries of industry or church or labor or whatever. I think the smaller libraries have an equal obligation to obtain information from larger libraries and sources of information. That is why I have chosen to speak of exchange as an information community system.

MR. MARTIN: I would like to call on the panel members at this time.

MR. ZWIREN: With regard to interrelationships between libraries, we are part of the Wayne County system, but one thing I did not mention was that at the present time we are negotiating with smaller communities to provide library service for them.

This has been done before in Michigan. As a matter of fact, when we negotiated with a smaller community of 4000 population and they asked us on what basis we would provide the service, we simply used the contract Baldwin Public Library in Birmingham, Michigan, had with two other communities and said, "This is what we would do." The exchange has worked out well here in Michigan, and although we had not done it before, we have seen it work. We are

sure we can make it work for a smaller community right next to ours.

MR. MARTIN: Interrelations among the same types of libraries is a program that is growing rapidly. I believe the speaker a few moments ago was especially interested in relations across the types of libraries. I will give him one-half minute to clarify or add to his statement.

MR. ELLIS: As far as I know, industrial collections are held as if they were competitive stock in a company. There is no exchange between the industrial collections because of the competitive nature. Also, as far as I know, industry has no access to the public libraries in the county and no plans for it.

MRS. JEFFREY: I am in the Detroit system. What I would like very quickly to say is, of course, this is the Detroit Public Library and one of the large institutions of the country. There is a tremendous use by industry, business, and public relations firms of the Detroit Public Library. This is one of the great surprises I had when I first came here. For example, the GM Tech Center, located in another county, regularly brings a truck. Ford Motor and other corporations also bring their trucks. The use by public advertisers, industry, tradespeople, and so forth is extraordinary. What we have learned—and I believe there will be a study out fairly soon that will give evidence to this statement—is that a library is very important for the economic growth and welfare of the community. We would hope, of course, that this use is also very important for the development of the in-service or services between libraries. Small libraries can thus have the reference materials that the big libraries such as Detroit have. Such use supports the general—whether we call it regional or metropolitan—concept of library development.

MR. MARTIN: I think it is interesting that our discussion has returned naturally to this point several times. It is somewhere near the center of the problem, is it not? If you think you have a library standing alone in a community of say 35,000 people, which I believe is what we are going to discuss this afternoon, how many books does that community need? What books will it need in the next ten years? What actual requests will it have from people? And the answer is, "Millions of books." I mean this. Potentially, people may ask for almost anything. So unless we have some concept of how that library is going to relate to other sources, the right size of building would be one that would hold a million books.

One thing follows from another, and the only way to plan realistically is to think in terms of these relations among the same types of libraries as well as among the cross types of libraries.

MR. BLOSS: Kenneth Bloss, Baldwin, Michigan. We

are a community of 850 population, and we have much the trouble that Brother Cohen has with our young population leaving town because there is no industry. My comment here, and Mrs. Jeffrey was good enough to give me a little start on this, is that we are obliged to make our little library so good that our percentage of library users according to our population will be increased tenfold or perhaps a hundredfold. This will make of our library a cultural center that may bring some of those young people back to town.

MRS. PHILLIPS: Ruth Phillips, director of New Rochelle Public Library, which is one of the central libraries of the Westchester Library System in New York State. Twenty-five years ago the libraries there banded together before there were systems to form a union catalog. This catalog consists not only of the holdings of the public libraries but of the college libraries, the special libraries, and many of the industrial libraries. Therefore, we now service many calls from the *Reader's Digest* and many other industries. We can locate the books and tell the patrons where they may be found, and through the system they are sent to the public library in the respective area. We find this is a great service; it is one of the means of providing books throughout the system without having to house them in one central spot.

MR. MARTIN: Our discussion is really just starting. I am going to recognize only one more person on this question because of our schedule, but do not feel that you are cut off, please, because we are going to stay right on through the period here. The next person—this is arbitrary on my part—the next person will have to be a trustee.

MR. MAREW: Gordon Marew, chairman of the board of trustees for the Guam Library out there in the middle of the Pacific ocean. We have a unique situation that I want to mention here. If any of you have a similar one, I would appreciate information on it.

We have a public library, College of Guam Library, and public school libraries. We also have United States Navy and Air Force bases on Guam. They are our only industry. We have nothing else.

We are now considering taking over and contracting our services to the military and hope that we can work with the college and public school system also. So, if any of you have information on relationships between military and small local communities I would appreciate hearing from you.

MR. MARTIN: Mr. Karpel, is your comment on this particular point? Unfortunately, because of schedule, I have to end the discussion. Is your comment predicated on the question raised?

MR. KARPEL: It relates to the previous one. Referring back to the comment on East Meadow, I believe there was a governor's conference in Albany a week

ago in which industrial, public, and college libraries participated on cross competition, maintenance, and so on. I think the trustees as a group should be thinking about library services as a total integrated function for elementary school, high school, college research at whatever level, and the public, too, of course. Trustees should think of where the library gets the books for the readers and how it provides the service. The service may not necessarily be in our own library, so that we should be thinking of where we are to obtain materials for our readers, whether it be by telephone, delivery service, or whatever means.

In our own specific area (to relate back to the comment from Guam) there is an eight-county survey going on involving industry, college, and public elementary and high school libraries, including, for example, West Point and Vassar College. All these libraries are talking together about how they can best use their resources to serve the people of the community. I think more and more trustees will have to start thinking about the other kinds of libraries in their community and how their resources can be utilized to serve the public.

MR. MARTIN: I think we have just opened the questions rather than necessarily been able as yet to answer them, but fortunately the afternoon is before us. I am going to ask Mr. Williams for a final word.

MR. WILLIAMS: You have had a number of very general topics that you have been thinking about, such as philosophy and approach, and that is fine. Now we have to translate these into something specific. When we do, we will have a building. Believe you me, this is a difficult trick to try, but we are going to have one. One of the lists we had was the list of various areas that had to be provided in the building. There are many, many things that you will need in that building.

This noon, while you are eating lunch, remember that you are supposed to be thinking about these various points. After lunch, we will do a quick summary of what you have gotten out of the morning discussion, and we will go on and start to put this all together. When we are talking this afternoon, we will have to do it rapidly; we will have to have short comments. We will object and add to and sit down, and we will go ahead. The session will go fast, fast, fast. Otherwise, no building, and our whole object is a building.

AFTERNOON SESSION

Raymond E. Williams
Director, McIntire Public Library
Charlottesville, Virginia

OPENING REMARKS

This afternoon's session can be either weird or wonderful, and the result will depend on you. As I said this morning before we adjourned, let us make our responses short and to the point, add what we can, and do not be afraid that whatever we suggest might sound too silly to bring up. It certainly won't be because you people that are here as trustees at this Institute are among the sharp ones in your community. You may not think so sometimes when you get to talking with some of the other trustees, but you are. Not only that, but the reason that you are here is because you are the vocal ones, the interested ones, the ones who are intensely involved in your libraries, and you made the sacrifice of time and effort to be here.

You made the effort of coming to a conference where you can find out more about your responsibilities. We have a roomful of almost 300 active trustees and some librarians. Every one of you has some problem that you have to deal with when you go back to your library. I know you have the talent, I know you have the ability, and I know you have the dedication. Later, I know that you will come through with your comments about the library.

For this afternoon's session—just as this morning we had Mr. Bryan, who is past president of the ALA and whom we librarians selected as one of the best among us to be our president—we have one whom the architects last year selected as president of the American Institute of Architects, Mr. Arthur Gould Odell, Jr. Every once in a while Mr. Odell will add to the discussion. Remember, he is our architect, and we thus have no less than the president of AIA to help us. So we must have a good building when we get done.

Mr. Odell has been a member of the National

Commission on Highway Beautification, and has many times been involved in both national and state matters that concern architects. He is a very talented person, and as you hear him talk and see him work today, I am sure you will discover the intensity that he brings to his job of being an architect. The evidence is there. Hoyt Galvin again is going to help interpret statistics and so on.

What are we going to do? We are going to take the criteria we developed this morning, and we are going to work out the functions and then the form of a library building. We shall have to limit our problem because, for one thing, we have 10-inch-by-10-inch transparencies to work with, and you cannot draw a million-dollar library on a 10-inch-by-10-inch transparency and get any clarity. Our size of town will thus be limited. This limitation will work against us in some ways because we are to have all of the facilities we think a library ought to furnish, and we will have to compress the library, pull it down, fit it in somehow into a place where only 35,000 people live. We are assuming the town will grow to 35,000 in about ten or fifteen years, the normal time. Mr. Odell will tell more later about the building site. We picked, not by chance, a downtown corner in the city. It is about a block from the main banking and department store area. There is ample parking provided next to it, municipal parking, so that the parking is taken care of, and it is at the intersection of two equally important streets.

There is the framework. There are two equally important streets. Mr. Odell will tell a little more about the site, then we will start talking about what we are going to put into the building.

Arthur Gould Odell, Jr.
A. G. Odell, Jr. & Associates
Charlotte, North Carolina

PRESENTATION

Before talking about the site, I would like to make a few remarks about the practice of architecture. I am sure you librarians know the practice of architecture has changed considerably over the years. I mean over the decades, over the centuries. It used to be that an architect had an individual as a client—he might be a king, he might be a duke, he might be just a simple robber baron—but it is not that way anymore. A client now is invariably a committee, whether it is a board of trustees, a building committee, or a board of directors. This does not always work out for the best, not because we do not welcome all the brains we can get in trying to arrive at any architectural solution, but merely because a plethora of people so frequently adds to or creates considerable confusion and delay.

I hope that all of you trustees, when you get into a building program, will do everything you can to persuade your city fathers or board of trustees, whoever controls your purse strings, to appoint a board of not more than five persons including your librarian—preferably three. You have got to make decisions. People look at an architect and want him to hurry up, hurry up, the money is here, we want the building yesterday. The truth of the matter is the average architect spends more time waiting for group decisions than he does in producing the work.

This particular building that we have before us today is an assumption, and I would like to sketch the hypothetical site for us. We have to make certain assumptions to start off. This morning I saw the chart on the wall. You might say this situation is an ideal one, one that everyone should have. It is what we all want. When you go to a town of 35,000 people, they all say, "All we want is to have the library right on the square of the city, everything on one floor."

As you all know, you very seldom get that. This is due to financial limitations or to the dictates of the city fathers or county commissioners. Frequently you wind up taking what they think they can best give you.

We are going to assume a site where you cannot put everything on one floor. We will draw here a typical city block. Let us assume that this property is divided this way—say we have a department store here. That makes a good neighborhood for a library because a department store and a library have a great deal in common!

Let us say we have a retail store here, and a parking lot here. The city fathers and the library board could not buy this; they did not have enough money. But since there is nothing on it, they feel that in the future, when they do need it, they can then get more money and condemn a portion of it. In the meantime they consider the parking lot will be an asset for the library as a service to the patrons of the library.

We wind up with a piece of property on the corner, about 112 feet square. These are main streets and, as Mr. Galvin said, since they are heavily traveled streets, basically the location is a good one. The site is probably not as big as you would like it to be—it seldom is in any architectural endeavor—but, nevertheless, you feel it will appeal to many people and it will pick up much impulse interest since it is right in the heart of this community.

The next consideration is, what are we going to have in this library? How do we want to make it work?

I believe you had certain criteria spelled out to you this morning concerning the various elements. Before we get into the size, use, and adaptability of the elements, let us talk for a minute about the relationship of all the various functions of this library.

Let us say for the moment that we are going to enter the library here. We have to have a door somewhere. Do not think of it in terms of site; think of it in terms of function. We have a library here; now where do we go? You have a flow of people coming in. This flow of people starts in this direction.

Where do they go? A library offers—any I know offer—"additional auxiliary functions for a community." This means meeting rooms or auditorium or whatnot.

in proportion to the size of the city. So when the people start flowing in here, right away you want to take care of the flow. The flow will be divided; a certain number will go into the library and some will come in here to a board meeting or community meeting of some kind. As soon as that traffic flow gets to the door, it splits, and some go down here to the meeting rooms or auditorium.

When they leave the meeting room, you do not want to turn them out again into the street. You want to interest them in the function of the library even if they are coming in for a certain meeting. When they leave, you want to try to get them back into the main flow of the traffic of library users. The main stream is the group going actually in to use the library.

Now here comes this main stream, and where do the people go? Can we assume that a good portion of them are going into the general stack area? It all depends, of course, how the library is operated. If you think this is a false assumption, I would like you to speak up and say so. Off this general stack area you have these other elements. We call them reading elements; they can be rooms, alcoves, furniture clusters—it all depends upon the size of the facility. I think this generality can apply to almost any library.

AUDIENCE DISCUSSION

MR. WILLIAMS: Mr. Odell, when you are talking about the general stack area, you consider this the place where books are open for public use, do you not? The term "stack" oftentimes denotes partial storage.

MR. ODELL: I am thinking of open stacks.

MR. WILLIAMS: You are thinking of areas where there are books and readers and intermingled functions?

MR. ODELL: Yes. In a large library you would have all sorts of divisions of large areas, but in a community of 35,000 people I think the areas would virtually all be open stacks. There would, of course, be storage but this is a general open area.

MR. GALVIN: Commonly we speak of shelving for the open areas and stacks for the storage areas. However, this is not a universal practice

MR. ODELL: Now we assume this area is where the majority goes. This may be in partial answer to your question, Mr. Williams. The reference room, in turn, could embrace certain closed stack areas, and you will have another group of people in there for a specialized purpose. They are not going to the general open stack area; they are looking for something highly specialized. Thus you have another group coming off down here. They are going down here to

what we may call reference or specialties as distinguished from the general open stack or book area.

In this area you invariably have to have a conference room attached, whether it is an intimate closed reading room of some kind or a meeting or research room. We will call it "conference room." That conference room ought to work both ways. It ought to be arranged in such a way that when people down here in the reference area are not using it, then the people from the general stack area can use it. But it should be isolated within the reference area.

We have said nothing as yet about service or about processing. Let us say we have processing and that means a back door or service door. The processing will serve both reference and the general stack area.

There is also the matter of control. Let us assume everybody leaves this general stack area this way. Before they leave, they have to go through some type of control. We are not trying to locate it area-wise; we are trying to locate it graphically. Of course, control works both ways. It has to work in relationship to general supervision of the general stack area. Likewise, it ought to be related to the general entrance area.

It seems to me these are the general components of a library of this size, expressed in a diagrammatic form of their relationships. If anyone feels otherwise, if he thinks this general view should be amended or there is something wrong with it, I would welcome an expression of his opinion.

MR. WILLIAMS: We now have a general idea of the basic functions of the library. We come back to the discussion we had this morning. We are ready to start thinking about the different functions we want our library to fulfill and to incorporate them in this general pattern—the things we talked about this morning. One way might be to list some of the functions that we want to have in our building, and Mr. Odell will then indicate where these would be.

MR. GALVIN: Under "library demand" it says "more seats." This was one of Ned Bryan's comments—that in libraries today we find we need more seats, more books, more special services. At the same he referred to cooperation among libraries.

MR. ODELL: I think you can say this, Hoyt, that there are not enough seats here and not enough books as far as growing space is concerned. That is true in just about any project an architect works on. The building is never big enough; there is not enough money; there is not enough growing space.

Last night I attended one of the conferences here on school libraries. We did a library once which was based on an ultimate school capacity of about 1600 persons. The library was a team effort of architects, administrators, librarians, and about as many consultants as a dog has fleas. We finally arrived at the

decision that this was as big as that library should ever get. The library was criticized last night for not having enough space to grow in.

After looking over the collections of some of the libraries, college and otherwise, it seems to me that one of the great administrative problems confronting all libraries is the matter of discards. For example, Duke University has 500 volumes of Brazilian law written in Portuguese. They all add to the total count. I am not arbitrarily picking out Duke; I can pick out any library, and it probably would have the same problem.

In a community of 35,000 people you have that problem of always figuring what will have to be doubled in ten or twenty years, and you have to think ahead in that regard. It is a rough problem. There are some structures that are very difficult to add onto. But I do not think a library is as difficult as, say, a theater or a cafeteria. That is almost like doubling the size of an egg; it is pretty hard to do.

This hypothetical community we picked out looks to the future probably as much as any one could. A part of the parking lot behind the library presumably would not be very expensive to take over in the future.

MR. GALVIN: I think this might be a good time to mention, Mr. Odell, that when you build a building, it costs \$1 to \$1.50 to build the space in it for one book. The formula is 15 books per square foot. If you can build a building at \$15 a square foot, you are doing very well. That is \$1 a book to store that book, to put the building there in the first place.

MR. ODELL: Hoyt's own library was designed by us. Although the stacks are in the basement, we designed the building so that in that portion of it a couple more floors could be added. A branch library system is like branch banking. It is not so essential as it used to be for everything to be expandable because of the possible branches. I do not know whether Hoyt will ever see that addition.

A TRUSTEE: I wonder if we could have some discussion on the matter of noise within the library. Replacement ultimately will involve how noisy or how busy these areas are.

MR. ODELL: I think that with a library for an assumed population of 35,000 the only thing you can do is put in the best acoustical treatment you can, such as carpets or other acoustical features. In a large library in a big city you can departmentalize and isolate many of the functions, but that is hard to do acoustically in a small library of this size. Reading alcoves, areas, or sections would presumably have some degree of privacy. Likewise, the reference area is in another circle of its own which would indicate it, too, would have a certain separation from the general traffic flow.

MR. WILLIAMS: Before we go on, we should state that in a library for 35,000 people all of your materials form your reference collection. Some of it is in, some out being circulated, and others, such as ready reference materials, are there because they are used every day, but the function is closer than shown on the diagram. One encompasses the other. It is almost as though the reference function were concentric or an interior tangential circle within the general reading area rather than a separate one.

MR. ODELL: There is another element we do not show here, and it frequently occurs. A book collection is donated by the local D.A.R., or a local historical collection is given you, and you have to put it in a separate place somewhere. A small community always has a problem like that.

MR. WILLIAMS: Now, shall we run down through some of the points that were suggested this morning? How does our building take care of such things as interlibrary cooperation? Start from there. A person comes in your door who wishes to contact someone about the materials available in the library. They are limited.

What happens next to his interlibrary request? Some other library has to assist him with its collection, and you have to get a message to someone. We would assume that the person coming in would have used the reference facilities or the reference librarian that were there. Not finding the material he wanted, he would then get either a slip or a form that could be sent to some other library. That slip has to go out through the mail.

What about the relationship then? Would you have your communications with other libraries for getting material not in your building by mail? Where is the mail communication with other facilities?

MR. ODELL: Possibly a bookmobile or that sort of carrier?

MR. WILLIAMS: Or sending off a message to someone?

MR. ODELL: I think these are all basically processing

MR. WILLIAMS: Then our arrow needs to go both ways

MR. ODELL: Yes.

MR. WILLIAMS: Your arrow between reference and processing is a two-way direction.

MR. ODELL: That is true of anything of a special nature which is going out.

MR. WILLIAMS: We also would need to add to processing a facility to take care of our basic mailing or

the mailroom sort of function. We would want to put that in.

MR. ODELL: I think so. Your processing and delivery, receiving and mail, and bookmobile service in a library of this size (bear in mind a community of 35,000) would probably all be the same. The functions may have a partition between them, but basically they would all be in the same general area. I agree with you that all will come and go through there.

MR. WILLIAMS: All right, the mailroom is over there. That will take care of written matter that goes back and forth for communication. Now, when the material comes in (we are again using your outside arrows as you have them), the mail has to go back through. The records sent or asked for must be picked up and then go back to the reference area, do they not? The person asking the question must be able to leave his question at one place and pick up his answer at the same place. He cannot go chasing all around.

What else did we put in this morning? What about the hospital and institutional service that was mentioned?

MR. ODELL: I think in a town of this size such service probably would not exist; it would be part of general services.

A TRUSTEE: But it does exist.

MR. ODELL: I should not say exist. I mean, occur as a separate entity or separate department. Because of your objection I want to hear more about the service.

MR. WILLIAMS: Who has a service of that sort that they think ought to be provided here, and where do they think this ought to come on our diagram?

A TRUSTEE: I will make a suggestion. There would be a demand for such service, and I think it would go back through your processing function. But then it would go from processing to general stack area because I do not think very many sick people read law books. You will use lighter material or craft material for people who are ill. So you will have to have two lines of communication now between your processing area and your general stack area.

MR. WILLIAMS: From what area would the material come that we would use in our hospital service?

A TRUSTEE: From the general stack.

MR. ODELL: Then it goes right out to your bookmobile and is distributed around to the hospitals. Here it is loaded on dollies and run through the corridors. That is the way most of the libraries operate.

MR. WILLIAMS: You have to get the material from this library to that hospital.

MR. ODELL: Yes, by bookmobile I assume. Then we have one bookmobile in this community.

MR. WILLIAMS: We also have our special collection coming off our general stack or book room area. We will need another symbol on the diagram. This time we have a bookmobile coming out of there. It is apt to be connected not so much through the processing as it is through the general book section.

A TRUSTEE: I would be less confused if we were to translate some of Hoyt's information into this 35,000-community library. We get to thinking in general terms, and the first thing you know we are in a library that might cost up to \$100,000. If we could find out how much money will be available, how many books we will have to have, and what sort of reference collection, maybe you can do the plan a little differently.

MR. ODELL: Such data would be helpful. That is the unfortunate part about planning—you depend on other people who do not know what they are talking about to set the budget. You trustees are the real professionals, and in a town of 35,000 people you ought to say what you want to have, the basic minimum needs. You should not wait for the county commissioner to chop your budget in half and say that is all you can get. Unfortunately, this is the way the world goes around and this is the way most of us live. But we are trying to deal with a hypothetical situation, and I won't say money is no object. We will not have a big research library, but with a town of 35,000 what should the library have in order to serve the average community of that size properly and effectively?

The hypothetical lot we are considering is about 115 feet square. You start off by planning a building of a couple of floors on that site. You do not start building two and a half floors or two and a third. You see what you can get into this plan on this area, and then you can say that is not enough or that is too much, this is too extravagant, or that half is the way to do it. When you decide on *this* budget and *this* size, then most of these problems solve themselves, and you find that mailing records and bookmobiles all of a sudden fit into the space. This would not be the case in a big library.

MR. WILLIAMS: That is true. We have to compress in many ways.

MR. ODELL: I will try to sketch some sort of approach on this building. Each one of these squares represents about 8 feet. Let us say the building line of the department store is over here and this is the property line.

This is the parking lot back here. Each of the

4

squares is 8 feet. Your sidewalk is out here, whatever width it may be. We propose to start out on this architectural basis. We have to consider the column spacing, because, after all, we know we are going to have columns in this building. We cannot afford to have clear open space. If we have to stress the whole building, it will be very expensive, far beyond the budget of any library whether it is in the small city or the big one.

So we come in here, and we set these bays or spaces of about 27 feet. I suggest that size because in 27 feet square you can get modules of either 4 feet 6 inches or 3 feet for stacks, for lighting fixtures, and so on. There is an economy there. When architects set these bases, they usually start out doing just as I have suggested here, although frequently first ideas have to be changed. But you have to make an assumption to start with, so we will put these columns here.

I think department stores recognize, and libraries, too, that it is frequently desirable, if you are on a corner, to have a corner entrance so long as that corner is made attractive and inviting. Let us say for the sake of argument that we come in here. We are going to have this much cut out of the building on the first floor for a corner entrance. Now we will put the entrance doors here. This is your main entrance.

At the second floor let us plan to cover the whole entrance. A covered entrance has certain advantages; it will keep the wind and weather from blowing in these busy entrance doors. In cool weather you would probably have a vestibule here and a number of glass vestibule double doors. Out here you might have a bench, something to make this area inviting, almost like a porch.

Now, if you come in, the first thing you want to see are the card catalogs. Suppose we put the card catalogs opposite the door. This is a very busy street corner. I think ever since the Enoch Pratt Library was built, everyone has recognized the desirability of having certain displays easily seen by the public, whether they are exhibits run in conjunction with the library, new acquisitions, or whatnot.

If this front was glass, you could have a few books and a browsing area right where you come in. We know that the bulk of the library will be in this next area; that is the biggest space you have. One of the first things you should think of is, what about the children? Should you isolate them upstairs? That means a separate control for them. It seems to me it would be better to put the children down here in front. I assume you will have control here somewhere. That control can keep an eye on the children down there; if you have them separate upstairs, you will need a separate staff function.

Now, let us say the balance of this area will be adult reading. You might have any number of open stacks along here. If you have a control by the door and your card catalogs here, then obviously your

service area ought to be here. We know we will have at least one bookmobile and maybe two. We certainly want a dock to accommodate at least one of them, which will probably be locked up at night. The other may be at a school or some other place in the community. We will plan to keep one on the site, and whether you keep it there or not you have to have a place to service one. Let us say the service entrance is here. Of course, you have to have a loading dock beside it; virtually all of them open on the right-hand side.

From this dock you have to get into the building. Let us take this area here and do it processing or service or mailing records, whatever you want to call it. Receiving will be in this area.

You must consider the matter of rest rooms in the library. In a library of this size, with its staff, patrolling of two floors, and so on, certainly it would be more desirable to have the toilets downstairs than upstairs. Let us say we are going to have two rest rooms here, the doors of which will open to the adult reading room and near control.

Then, of course, you have to have an elevator or booklift, whichever it may be, so that would be in here, and maybe this would be janitorial space. Here is the stairway, and you will have storage along here. That is your first-floor plan, but it does not provide a very inviting way to get up to the second floor.

You might consider doing this—suppose you had stairs near the card catalog. If you could afford the space, particularly if you had a basement stack area, you could say, "Let's try to make something monumental out of this whole front part which is seen from the street. Let's give it dignity and prestige for a public building and let it go two stories high." If you do that, then you could have the second floor just over this area here, and that would make an open two-story lobby facing the main street. The entranceway at the corner could likewise be two stories.

I would like to take you next to the second floor, if I may. What I had in mind, with the basic facilities down there on the first floor, was to have on the second floor the auditorium-meeting room, local history room, directors board room (which you must staff), the staff lounge, and some ancillary facilities.

MR. WILLIAMS: I think it would be good for you to add them to the diagram.

MR. ODELL: Do you want to criticize the first floor before I complete the second floor?

MR. WILLIAMS: We will talk about the building first as a function as a whole, and then start to fit the facilities we want in the building to see where they come.

MR. ODELL: We get up here on the second floor and we will consider the part of the second floor which I have indicated. This is open end two stories high. This particular area is the only one in which you have

a second floor. It is almost like a mezzanine, you might say.

As we come up the stairs from below, there is a two-story portion, this, of course, is your corner entrance. You could have a gallery up here open end. Paintings or pictures placed here could be seen below. You could have a very small auditorium or large conference room here. I think it is a misnomer to call it an auditorium, but have a formal type of room with movable chairs and a platform. Let us say you have another meeting room here, maybe a couple of staff rooms here, and a staff lounge.

Here is the elevator or looklift coming up from below. Here is the stairway which we show below. Perhaps you could have a couple of monitor-controlled toilets back here. Here is a janitor closet and here a corridor. Off that you could have a kitchenette and another meeting room. You could have the local history room here, and the director's office and the board room here. I think the comment was made by someone a little while ago that the kitchenette ought to be near the lounge.

A TRUSTEE: I think you have included too many meeting rooms.

MR. ODELL: This is a problem we always have discussion about, whether the public or anyone else ever has enough meeting rooms. They are like closets in a domestic residence. Maybe there are too many, but the library serves these auxiliary activities of the community, and the more you have going on in a library, the higher its incidence of use. Maybe there are too many meeting rooms; this is just one concept. You could design this building to have another floor, but that is never a very economical thing to do. It is better to add onto the side or back of a building than it is to go on top of it.

I think this would be a start on planning a facility for a town of this size. Maybe there are certain basic features that are entirely wrong. The purpose of this meeting is to discuss the plan.

MR. WILLIAMS: How many square feet have we, Mr. Odell?

MR. ODELL: You have about 22,000 feet, less this area which we carved out to try to make a more attractive entrance.

MR. WILLIAMS: Our cost for that building then, not at Detroit prices but at other level prices, would be—

MR. ODELL: It would be difficult to quote a nationwide preliminary budget—maybe \$21 per square foot. That does not include furnishings; it covers the construction contract figures. It would include, of course, land, architect fees, furnishings, and all movable fixtures.

MR. WILLIAMS: We are headed up to \$450,000.

MR. ODELL: I think we will probably be talking about \$500,000 before we are done with this. What we are talking about is a library of half a million dollars for a town of 35,000. Metropolitan areas such as Detroit or New York might well add 25-30 percent to that. But if you are in a less-populous section with open shop areas, I do not think the figure I gave you is unreasonable. We could build that in North Carolina.

MR. WILLIAMS: When we talked about our basic requirements for this building we indicated—what was it, two or three or four books per person? Suppose we had three books per person, approximately 100,000 books. Have we room for that number on our lower-floor plan there?

MR. ODELL: I think we were talking about having 68,000 or 69,000 books.

A TRUSTEE: That is not enough.

MR. ODELL: That number would not include additional stack area to any extent. You may add on, in the future, in the back or in the basement of the present building plan. This is just the beginning building plan. Do you want to comment on that, Hoyt?

MR. GALVIN: Not right now.

MR. WILLIAMS: We are dealing then with a total of under 70,000 books.

A TRUSTEE: Are we allowed to ask questions? I have a question as to whether we have enough space for readers and books in this square footage. I think that we need more spaces for readers and books and should cut down on some of the other facilities.

MR. ODELL: More space and more books. I started off by saying you never have enough of either one to satisfy a client, and I say it again. You have a town of 35,000. Most of the towns I know of, even in the relatively poor state of North Carolina, have several branch libraries in addition to the main one, even in a town of 35,000.

I think when you start off on a building like this, you have to make certain assumptions. I am perfectly willing to admit that any assumption we made was not big enough and did not allow for enough books.

MR. WILLIAMS: Would the main collection as you have it there along the alcove, together with the children's area, hold 67,000 books approximately?

MR. ODELL: There is about 60 feet by 70 feet in the rectangular area in the upper left-hand corner. That does not mean those open stacks are all you necessarily

have. The sketch is purely diagrammatic, but this is the area, plus the children's area, plus the area in front which is for new books and browsing.

Upstairs you would probably have some book volume, maybe not much, but you would have certain specialized collections in one or two of the rooms up there. As far as additional book space goes, it has to be in the basement or it has to be space you add onto in the rear in the future.

MR. WILLIAMS: What about your reader space? What had you figured there?

MR. ODELL: We started off our thinking in rough terms. Of course, some of these spaces meld together as open spaces and are not defined by a partition, but there are about 200 square feet at the entrance for displays; 200 square feet for the lending desk, workroom, and card catalog; 500 feet for magazines and book reading; about 2000 feet in the children's area and a portion of that (500 feet or so) might be considered for young adults; for a ready reference desk, maybe 100 feet; for a reference-desk workroom, 200 feet; for open shelving for adult books (you have 50,000) say 3000 square feet or so. Adult reader seating may be 80 seats, about 2000 square feet.

MR. WILLIAMS: About 80 seats for adults?

MR. ODELL: Yes, it all adds up there.

MR. WILLIAMS: 80 for adults and what for children?

MR. ODELL: For children we have about 2000 square feet in the lower left-hand corner.

MR. WILLIAMS: The number of seats?

MR. ODELL: I would say 30.

MR. WILLIAMS: So you are seating approximately 110; this is a rough figure with the informal and formal seating combined. That gives us about 3 seats per thousand, which is well within the range of what is reasonably considered proper for a building. So we do have reader space. But we still, as we said, are probably short on books.

There are a number of ways that we can change that part of the plan a little; each community, as we talked about it, had a different problem. We can put in a little more book space in various places.

Now, let me ask Mr. Odell a question. Supposing your committee unanimously felt, "We really have to have more open shelving. We need to have close to 100,000 books here. This is our considered judgment." In what way would you handle that decision in the general structure?

MR. ODELL: I think probably what we should do is

move the children out. You would have to staff them separately upstairs, probably, and then take the ancillary facilities upstairs and put them in the basement.

MR. WILLIAMS: How do you like that, Committee?

A TRUSTEE: Could the open staircase come out and the two floors be extended?

MR. ODELL: You can build a two- or three-story warehouse, and that is the most efficient structure in the world, no windows, a perfect library in plan if that is what you want.

A TRUSTEE: Why don't we want it?

MR. ODELL: Maybe you do.

A TRUSTEE: You are hinting that we don't.

MR. ODELL: I do not want it; maybe you do. I do not want a library to look like a warehouse. I want it to have attractive amenities and to be a pleasure for people to be in it. I want the people in it to look out and see trees and sunlight. I do not want to be in a warehouse, but maybe you do. As the librarian you will make that decision. An architect cannot make a building any better than the client will let him. And the client is the man that makes the final decision. If a warehouse is what you want, you will find an architect that will give it to you.

MR. WILLIAMS: I agree with you. You must have, as Ned Bryan was saying this morning, this matter of dignity of the building. I think you are right. Another question: You had what ceiling heights? You would generally figure on 10 feet, 6 inches, something like that?

MR. ODELL: Yes. I would not have any more than that, particularly if you had the two-story open space in the front, as a number of libraries do. This might be somewhat of a prosaic or hackneyed solution to have this front part facing the street two stories high with a mezzanine treatment. But even if the library were in a big city and other floors were stacked on top of the second story, that is one way, one aesthetic approach, to give the library some character and dignity and make it somewhat imposing as compared to a two-story retail store.

MR. WILLIAMS: Suppose we were to retain this part and, since we are looking for space for stacking, use this as a two-story stack, that is, bring the ceiling on up to 15 feet or 16 feet and put in two levels here. Is that what you are proposing?

MR. ODELL: No, I meant putting more stacks on the same level and moving the children out. Then that is all general room. If you put in two or three stacks,

you have about a 15-foot ceiling there. Although this is all right from the utilitarian point of view, if you have a college library with carrels at the end and so on, I think it would be a rather noisy, confined sort of arrangement for general circulation by the public.

MR. WILLIAMS: You know we are doing the impossible in trying to talk over a building in the space of an hour. This is not fair to an architect or to the committee that is helping. We assume that in some way we can work out a reasonable connection between these various parts: the amount of material, the 100,000 books, the space for the children, and so on.

What we have here is a basic diagram that will be a starting point for discussion. I think we want to move over now to the other facilities that we want this building to provide. We can arrange these spaces. Let us not worry ourselves much more about that. Somehow we can get the book space we need and the reader space. What else do we want our building to do?

A TRUSTEE: Provide sufficient work space for the staff, please; you never do.

MR. ODELL: You cannot get everything on one floor. We purposely endeavored to make this planning difficult because that is what all of us are usually confronted with, whether as clients or architects. There is no question that we much prefer to have a staff room and all the staff facilities on the ground floor near control and processing. But when you have to split facilities into two floors, then decisions have to be made as to what goes up and what stays down.

MR. WILLIAMS: Let us consider the first diagram again and take up the question about workroom space. What is the size of our staff now?

A TRUSTEE: 14.

MR. ODELL: 14 people? How many communities run a library in a town of 35,000 with a 14-man staff? In a good rich part of the country, maybe, but there are not too many.

MR. WILLIAMS: Normally we would expect a workroom space for half of that staff at a time; is that what you mean?

A TRUSTEE: You have to have at least 5 persons in there at one time.

MR. WILLIAMS: How much space do 5 people take in workroom space? These are the kinds of questions that trustees should be asking. 500 square feet? Have we got 500 square feet? I thought it added up to more than that.

MR. ODELL: It seems to me that librarians ought to establish that figure themselves. Of course, I realize

there are a number of mitigating factors in any given community, but a definite rule of thumb as to how many staff members per capita in the community should be established.

MR. WILLIAMS: We do.

MR. ODELL: And hold a hard, firm, and persuasive line with your trustees or with your city fathers, because a staff is much more important than the building itself.

MR. WILLIAMS: Our rule of thumb for the number of staff per capita is 1 for every 2500. That works out to the 14 people. Of those, as we are talking about the amount of space you need in the building, you would have some working on the floor with a 68-hour or 60-hour work week on the building. You would have 5 or 6 that would be involved in the workroom process at any one time. So we need about 500 - 600 square feet. You would consider, wouldn't you, that 100 square feet for a work-station area would be about right?

MR. GALVIN: 150 feet may not be too liberal.

MR. ODELL: It could be a little more.

A TRUSTEE: I think you need space for more than 5. For instance, if you have a staff as large as mentioned, although they would not all be in the workroom at the same time, they would need a work area for things they are doing when not there. Planning the space to 150 feet per work station probably would take care of it.

MR. ODELL: For book processing the diagram shows only 800 square feet. The extension office is about 200 feet.

A TRUSTEE: Where are you going to house your bookmobile collection?

MR. ODELL: We have the bookmobile space here, also a loading platform. Usually this would be an interior, heated, or air-conditioned space. A number of libraries operate with bookshelves all along the loading platform. They are not permanent, just a matter of temporary storage for getting materials in and out.

The elevator, of course, is reasonably close to this area. Some of you may have stacks in the basement or stacks on a future third floor. When you start extending the building that way, the whole service core of this particular plan will change or be modified.

A TRUSTEE: What are you listing the basement for?

MR. WILLIAMS: There is no basement at this point.

A TRUSTEE: Where do you get the extra space?

MR. ODELL: There would be a basement or a third floor. There is a nucleus for extra space. Remember, one-half million dollars is all you are going to put into this building.

MR. WILLIAMS: As soon as you put a basement under there, your basement will cost some \$10 or \$12 per square foot.

MR. ODELL: You add another \$150,000 at least, even if it is an unfinished space.

A TRUSTEE: What space is available for heat and air conditioning?

MR. ODELL: We put that in a penthouse on the roof in this scheme. I do not mean to be facetious. We have done the same in twenty-story office buildings and in department stores. One of the large department stores in North Carolina has all the air conditioning on the roof.

MR. WILLIAMS: That is an interesting point and something for you to remember in your buildings. I recall when we were talking with the fire marshal in Minneapolis about our heat and air conditioning. We had a heavy slab roof under the penthouse that housed the boilers and air conditioning, and the fire marshal immediately started to throw up his hands. He pulled them down in a hurry when he realized that explosions go up. I wonder if now most of the buildings in Minnesota are required to have their boilers up on the roof because the plan has been found to be so good. The danger was up, not down below where the people were. It is an interesting arrangement.

A TRUSTEE: I would like to ask about the auditorium area. First, how high should the ceiling be in an auditorium? Second, could you give us some idea in breakdown in space as to how much square footage might be required for stage and staging area and, then, how much square foot per person to seat people?

MR. ODELL: As I said earlier, it is probably a misnomer to call this an auditorium. We are seating only 100 people in there. You would have only a little platform in it. To answer your second question, you probably ought to allow 6 1/2 - 7 square feet per person.

A TRUSTEE: Not counting the stage?

MR. ODELL: That is right.

MR. GALVIN: I tend to go a little higher than that. The whole room, stage and all, should allow 9 or 10 square feet per person. This would loosen up the space.

MR. ODELL: The room would be crowded, Hoyt, if

you are going to include the platform area when you say 10 square feet per person. But if you are talking about an auditorium that has a stage and some extra features and you go to 12 square feet, the actual seating area is between 6 - 7 square feet. In the room we are talking about here for 100 people, you have 1000 square feet including the stage. Hoyt and I are really saying the same thing.

A TRUSTEE: You answered the question I asked. Thank you. But what about the ceiling height?

MR. ODELL: That depends on the floor area, really.

A TRUSTEE: I think that in a library for a community of this size—a library two stories high—the auditorium should be thrown out and the space used for book storage.

A TRUSTEE: No, no.

A TRUSTEE: You have other meeting places in a town of 35,000.

MR. ODELL: We have the suggestion that the amount of meeting space both for larger facilities and for smaller ones be cut down in order to provide for the book material. I think that is something no one can decide other than the librarians themselves.

MR. WILLIAMS: And their boards.

MR. ODELL: Yes, after careful consideration of their communities and the library use.

A TRUSTEE: What about the showing of films?

MR. WILLIAMS: What about your film programs? What about the educational work that the library must carry on with various groups? We talked this morning about the special groups, special teaching, and so on that would have to be done. Where does that take place?

A TRUSTEE: You wouldn't do it in the auditorium.

A TRUSTEE: I am sorry to interrupt, but I think we could leave the matter of the auditorium. I think we need an auditorium, and in a city of this size we could eliminate all the meeting rooms except the board room. That could serve as a meeting room. The lounge, in the way that it is drawn, looks very large for a staff of this size. It could be cut down some. We could bring the processing department up on the second floor. It is good to have it downstairs, but not essential when you have an elevator. That would open up more space on the first floor for the reading of books and also more for the extension department, bookmobile books, and storage.

MR. ODELL: That is true. You can do that.

MR. WILLIAMS: Then you get more area for books and readers down there.

A TRUSTEE: I think that a large proportion of the square footage of the building is in some of these facilities that might be desirable, but in a community of 35,000 I doubt if you need that many.

MR. ODELL: You must decide whether you want a booklift or an elevator. If you put processing upstairs, it should be an elevator.

A TRUSTEE: I would like to suggest that we conserve space on the second floor and eliminate the board room. How often does the board meet? I think the director's office is large enough, with the director's table at one end of it, to serve as the board room, and it would conserve considerable space.

MR. WILLIAMS: And also provide a place to lay out plans while they are being considered.

MR. ODELL: It is interesting that you say that. We just finished a building in Hagerstown, Maryland, in which your suggestion was followed precisely. The director's office is fairly large and there is a good-sized table in it. That is where the board meets to have conferences.

MR. WILLIAMS: So we can make room for processing by taking out that little room, the board room, and cutting down the size of the lounge. Processing will then be up on the second floor.

A TRUSTEE: Could not a committee of trustees consider whether the processing might be done in a larger library rather than in this library for 35,000 people? That would save 800 square feet.

MR. ODELL: Such a move would relegate this library to a branch in that respect. Of course, that sort of arrangement could take place, but not in a sparsely populated part of the country. We have considered that in these criteria. But in a large metropolitan city this library would revert to branch status, and processing would be done in a large library, as you say.

A TRUSTEE: I know the size of the library is established, but what about the relationship of the library and the parking lot? Could this be arranged in another way, such as by elongating the property of the library and having the parking lot almost surround the library building, at least on three sides? This is a downtown area, and there may be one-way streets. If the parking lot could allow for an extra entranceway, people could enter the library from the parking lot as well as from the street. You have a meeting room on the second floor; you could have an entranceway exclusively for the meeting room.

MR. WILLIAMS: As we said this morning, there are a number of ways to arrange these facilities, all the elements we are talking about, and that is why it was important that Mr. Odell approached the problem as he did. The functions are there, and thinking about the relationship between them is necessary before you get down to the actual plan.

You spoke of this library as being a kind of branch facility. We know that no library of a city of 35,000 can be on its own entirely. What were the figures about the present amount of book production? We are now running about 24,000 to 25,000 titles a year.

How many hundreds of periodicals are published? There is a tremendous amount of materials that you need. I was talking to the persons at my table this noon and heard comments like this:

"My daughter needed to know how much food an aardvark ate in a day for a report in the seventh grade."

Another one said, "My daughter had to make a report in the eighth grade on musical instruments in China. It had to include pictures and descriptions."

You run out of self-sufficiency almost immediately on requests like these. So what we need to do with this building is to provide for its being part of a larger whole—a larger system or a larger amount of materials. We have to tap other resources for these needs.

We have the possibility, then, of reducing our processing area, and relying on someone else to do the processing or buying it commercially. Somehow, you can reduce the area for processing your material within your own building. That may be the relief you need.

A TRUSTEE: The second-floor meeting room bothers me. There is no elevator available, and we must consider the aging population and the service we are to give the people of that group.

MR. ODELL: What we would assume in this plan—and do not misunderstand me, I am not trying to defend it; this is no criterion—is that if there were an elevator on this side of the stairs, it would basically be a service elevator on which a book cart would fit. You would probably have it keyed, if necessary, and a disabled person would be allowed to take it up. But you would not let the children in the neighborhood come in and ride up and down. I think the most significant alternative suggested, Mr. Chairman, is this idea of moving the processing upstairs. Any number of libraries do have elevator service with the processing upstairs or downstairs.

Take Mr. Galvin's library in Charlotte, North Carolina. He has a considerable amount of processing upstairs and an elevator. The library in Hagerstown, Maryland, is three stories in the back because of a sloping terrain. There is a service entrance on the lower floor which basically is a basement except that it is ground level in the rear. The processing there is, you might say, in the basement.

I think we all agree, whether it is a library or

your own business or your own industry. that everybody likes all facilities to be on one floor. That is the ultimate goal in almost any building done today that serves a utilitarian purpose. Unfortunately, that goal is very seldom realized.

A TRUSTEE: If you reduce the size of the workroom by having your processing done elsewhere, do not reduce it too much unless you know that you are going to be a real branch. We are not a part of a system, but we do have our processing done elsewhere. The jobber gives a large discount but is very slow. It is very nice to have the large discount, but your patrons want some books fast. So we order those books ourselves and process them ourselves in order to get them to the people when they want them.

On the bulk of the books there is not that much of a hurry, and we are happy to have the large discount. So, do not eliminate your processing room or reduce it too much unless you know that everything is going to be done elsewhere.

A TRUSTEE: The cost of this building, one story and a half on the second floor, has been stated as a half-million dollars. Someone mentioned that it would cost about \$100,000 or \$150,000 to put a basement under it. Why don't we go down and have a full basement under the entire building for processing, staff rooms, and meeting rooms? Put a full first floor on it and forget about this half second floor. Not only will you get the additional space, but you will save your community a little money.

I do not know how many communities of the 35,000 size can afford to put a half-million dollars into a library building. I come from a city twice that size, a little more than twice that size, and we are having trouble getting a \$150,000 bond issue passed to put an addition on our building.

It would seem to me, being a trustee, that the financial end is just as important as the use of the building, if you would go down for a full basement in the entire area, which you said could be put in for about \$100,000 or \$150,000 and then cut the half second floor off, you will get a lot more space for your money.

MR. ODELL: I think that is quite true. There are two points, though, that I might mention. First, it is cheaper to add another floor on top than it is to put in the basement. Secondly, you have processing done, and everything that goes down has to go back up again. Basements are not cheap in fireproof buildings. You may run into waterproofing problems and so forth.

Actually you can build on grade level cheaper than you can build a basement. When you go up a floor, you have your floor, that is, the ceiling of the structure below you. It would be cheaper to go up than to put a whole basement underneath.

A TRUSTEE: How much more would it cost if you needed to expand? Could you put a floor over the half of the second floor and expand that way?

MR. ODELL: Yes, that could be done if your design to begin with had that in mind.

A TRUSTEE: Would it be costly?

MR. ODELL: I would say no, relatively speaking.

A TRUSTEE: Mr. Odell, would you care to comment on what it would take to extend the second floor out over the parking area if more room were needed?

MR. ODELL: It would probably cost you about 50 percent more than if you built on the ground itself, or 35 percent more.

A TRUSTEE: Has it been established that we have access to that parking lot? I understood that it belonged to someone else and could not be purchased.

MR. WILLIAMS: It is a municipal parking lot.

A TRUSTEE: Would we have authority to build there?

MR. ODELL: My first statement was, and this is an assumption, that the board did not have enough money to acquire that parking lot then, either to buy it from the city or condemn it and take it from private enterprise. But that does not preclude the library from stepping in at some future time, when it has a little more capital, and picking it up. It is one of the first things the library should do when it can afford it.

A TRUSTEE: Why not make the city donate it to you?

MR. ODELL: Great idea.

A TRUSTEE: Then you would not have to worry about the second floor.

A TRUSTEE: I would like to ask another question about costs. Suppose you made a larger auditorium, turned it full length of that hall, and then used dividing folding doors between—would that be satisfactory?

MR. ODELL: If you want to spend about \$30 per square foot for folding partitions, you can do that; otherwise, it does not work since the area is not soundproof. Partitions are an expensive item. You have to put some money into them to have them really do the job.

A TRUSTEE: We have a hotel that uses them. We have meetings in each part, and they work very well.

MR. ODELL: You probably have a very fine partition. It can be done.

MR. WILLIAMS: The suggestion was made to have a folding partition between parts of a larger room. As Mr. Odell says, you would have to have a very good one; the fabric type of divider is of limited use.

A TRUSTEE: Are we not assuming, as was mentioned yesterday, that the building will be entirely flexible as well as the services? These partitions then are not necessarily fixed. They can be changed from time to time.

MR. ODELL: That is true, and I think it might be of some interest to you if I said a few words about so-called movable partitions. Movable partitions, if they really do the job, are very expensive. You have to move them about a half dozen times before they begin to pay for themselves. You can put up any number of dry walls (adequately soundproofed partitions), and tear them down, throw them away, and build another in another place three or four times for the price of what you pay for a good grade of movable partitions.

MR. WILLIAMS: Bear in mind Mr. Odell is not referring to folding doors; he is talking about movable partitions.

A TRUSTEE: I would like to address a question to Mr. Odell. Let us say we have adequate volumes and an adequate construction budget, but we have a real problem with the budget for the staff. This is the case in my part of the country. I would like to hear more about the use of multi-tiers in the public library, assuming in this case that the multi-tier would give us storage for the volumes and visible control from the circulation area. In other words, I want to know what the disadvantages of the multi-tier system are.

MR. ODELL: If you are addressing that question to me, sir, I would say the librarians have a better answer for you than I do. They have to live with that sort of contraption, and that is what it would be—a contraption. We have used them in a number of libraries in what you call closed or limited-access stack areas. But if it is an open stack area and you turn the public, including children and teenagers, in there, multi-tiers are not so satisfactory. They are made on very tight modules, and get only about a 7-foot-3-inch ceiling. I think the problem is an operational one more than an architectural one.

MR. GALVIN: Stacks of that nature are suitable for storage purposes. But in the type of library we are talking about here, there will be a limited amount of storage space. Most of our shelves should be relatively open to the public. I do not believe a multistack area is very practical for the major portion of this building. It severely reduces the flexibility of the library. I saw a building up in Westchester County, New York, recently that had this sort of stack set right in the middle of the building. It has been a very expensive building to operate over the years and is to be given up. It is not too bad a building except for the multi-tier stack right in the middle. Such a stack is not practical for this size of a library, in my opinion.

MR. WILLIAMS: When you talk about a multi-tier, the two-level stack or three-level—

MR. GALVIN: Two, three, four, or five—it does not make any difference; they ride on one another.

MR. WILLIAMS: When you are talking about two tiers being open to the room, there is some difference between that and a closed stack that goes up.

MR. GALVIN: We think of that more as a mezzanine, do we not?

MR. WILLIAMS: Yes. Was that the kind of multi-tier you were talking about, or a three- or four-level?

A TRUSTEE: Two levels.

MR. WILLIAMS: As more of a mezzanine, open to circulation and with open rail, that can be supervised from the circulation area.

MR. GALVIN: That is an entirely different problem. Some people favor it very much. As you know, Joe Wheeler is a sort of dean of public library consultants. Many people call him "Mezzanine Joe"—and he protests the Italian—because he goes in for lots of "mezzanines" in public libraries.

A TRUSTEE: I am concerned about the stairway blocking the control of the children's room. The stairway should be in, but I do not see how the desk can control the children behind the stairway.

MR. ODELL: It would be a very open stair proposition with no risers in it. In other words, it would not be a closed stairwell. If you had the place teeming with children on some given afternoon, you would probably have to delegate one of your staff to go over there anyway.

A TRUSTEE: Can you see through the stairs?

MR. ODELL: When I said that they would have no risers, the open stairs would, of course, increase the visibility.

A TRUSTEE: I would like to comment a little on the mezzanine. If, for example, you would have 60,000 volumes in this building to go in open stacks, you are talking about approximately 400 sections of bookstacks. Now, 400 sections of bookstacks on one level is a very large stack; it almost approaches a maze. I think in a collection this size, with a bookstack for approximately 60,000, a mezzanine may be twice as easy—depending on the solution to this particular problem—as having the stacks all on one level. I think those present will understand from the discussion that this is a problem to which there is neither local nor national agreement as to the solution.

MR. WILLIAMS: There is a solution that is sometimes used where you go down a half level and up a half level. But then you have a real problem about getting materials back on the shelves. There is the possibility, however, of going down a ramp or stairs and up a ramp or stairs.

MR. ODELL: That is frequently done in suburban libraries, particularly where there are changes in grade. We assumed the level site here. Since we can scoop into the ground for that space going up and down, we can have a more compressed stack and have it on two levels, properly divided in the middle where your eye level would be.

MR. WILLIAMS: Any other questions about what this building should do for you?

A TRUSTEE: Is there any reason why the children's room is confined to the first floor? Would it be possible to put that upstairs and put the director's office and some of these other facilities and processing here?

MR. ODELL: That was mentioned earlier, and I certainly think the children could be upstairs. Except for times when the children's room is having concentrated use, the control desk could keep an eye on them without having a special staff member assigned to them. I suppose it is a pet idea of mine, but I think it is delightful to pass by the library and see the little children in their miniature chairs poring over books. That is one of the greatest advertisements a library can have. But, there is no reason why the children's room could not move upstairs.

A TRUSTEE: Don't you have trouble with the children upstairs?

MR. ODELL: If you have them near the front door and near the toilets and controls, you won't have them running through the place.

MR. WILLIAMS: I might mention another point, too. You put windows across the front of the library so that people can see in. Yet in the evening, when the lights are really going to show someone inside, your children's room will be much less occupied than the adult section. So whom do you see at night, and what are your windows for? You do not see the children because not very many of them are there in proportion. You will be busy with the student and adult groups toward the back, and passersby should be able to see them. Maybe they can see through the library that far. There is that point to consider.

MR. GALVIN: Using the old rule of thumb which all of us are scared of—about one-half square foot per capita for this 35,000-square-foot building—I have space allocation for about 18,000 square feet. At \$20 or \$21 per square foot, the total is less than the half-million dollars we were talking about. If you use

\$2.50 or \$3 per square foot for furnishings, you will still be coming in for \$22 or perhaps \$23 a square foot for this furnished and equipped building.

Finally, Ray, I want to make this comment. I work on a considerable number of plans and units and look at them by the hour. At first you decide that there is no solution for a problem, but you keep looking at it and you go back to it a second day. All of a sudden an answer will jump out at you. It often reminds me of playing chess. Those of you that enjoy chess know that at any one time on a chessboard there are literally thousands of moves. Trying to see that one move is the difficult thing. Keep worrying over a library plan. Give your architect plenty of time; it won't cost any more to give him a little more time, a little extra think time. He will think about the problem driving to work and driving home, and that is just when a revolutionary idea may come that will bring out the solution.

Ray introduced this program by saying it was an impossible assignment to design a library in one afternoon like this. We have just begun to plow into the problem. But if you keep working at it long enough, and give your planning team and your architect enough time, you can find the solution.

MR. ODELL: I think that is a fine simile about a chess game, except that in chess the players take all the time they want. Architects never have had that time. It is really not laughable. The quicker the architect turns out a job, the more money he gets because he sells his time and the time of his associates. But all too often, whether it is a library project or a public school, the planners sit around for ten years talking about getting the money to build a library or school. Finally, they pass a bond issue, and then they want the plans the day before yesterday.

Of course, where you can get the most from your architects, your consultant, your librarians, and your whole staff, is in the preliminary phase that we are talking about right now. This is where the time should go. Any architectural firm can work out the drawings in the prescribed time limit once the preliminaries have been approved. When you are building a library, you are building one that will probably stand there for fifty years. So don't worry about the next eight months. That is frequently a tragic mistake.

A TRUSTEE: Ray, I think we might have a compromise on this plan that we are making. You have the lot cost and budget, and it is a fortunate one. I subscribe to Mr. Bryan's aesthetic values for the building, but it occurs to me we could put in a third floor. This would give us service areas we could use. By cutting down the aesthetic values, we could have more service areas, which we need.

MR. ODELL: One time I was working on a project for one of the largest manufacturers in the country, R. J. Reynolds Tobacco Company. They engaged us to advise them on improving their physical image in

a certain city. I think the controller and the chief engineer were sitting there at the executive committee meeting. I said, "Wait a minute. All we are doing here is just trying to make things look nice. You don't get any dividends out of beauty. That is all you are buying." The chairman of the board, I am glad to report, said, "Yes, that is what we are talking about. It is not bad to spend money on beauty. Think how much you spend on your wife."

That is a decision we all have to make.

MR. WILLIAMS: I would like to have us go over the different suggestions about the building. As we are talking about the various points, I think it would be good for us to think, "Yes, it is possible to do this. We can work this around. We can get a building that can house these functions." I would like to have us take about a fifteen-minute session for just dreaming of the various facilities that we want in the building, the services we would expect. This is the time when we look for the wild ones.

I will start the discussion. Your dreams for what could happen in this building are what the architect needs to be hearing about. I will start with a few, and I want you to add others you would like to see fulfilled in this building somehow. We don't know how, but somehow. For instance, suppose this library connected with others into a central charging system, so that this building along with others, maybe fifty or sixty miles away from here, were using magnetic charging. The books would be charged out electronically with only a supervisor charging by a machine, and would be discharged electronically. All would be recorded fifty miles away; all overdues would be handled there. What are your needs for workroom space for circulation? It can go, most of it, except for the book repair work. All you need are wires going from this building.

I will give you another one. Suppose you are in constant teletype, telephone, and telegraph communication with a larger library for materials you want. Suppose you get four-day-a-week service from that library on delivery. Your collection may not be as large as you want it at first, but you have large collections available. Now suppose that larger library was close enough so that a telegraph or direct wire could be used. You could send your messages, and the materials would start to be delivered to you immediately as you wrote. Suppose we found—how else am I going to dream—that we could have people come to this library as a central place to select materials? In this building we would want to have some place where all the people in our industrial libraries, school libraries, and maybe our local junior colleges could come to go over book selection materials. This would become the center. This is the place where you would have the thousands of new titles a year available.

The books have to be here so that librarians can look them over, pick out the ones they want for their library, and also order. This is a service for the community you might want.

What services do you want your building to perform for you? What kinds of problems are you giving to your architects? Let us have your ideas.

A TRUSTEE: How about having a high-fidelity module outfit in the auditorium and stage area, with jack outputs so that you could line up six or eight people in the front rows of the auditorium to jack into the musical collection and listen to it by earphones?

MR. WILLIAMS: Where would you have your collection?

A TRUSTEE: It would have to be in the room adjoining.

MR. WILLIAMS: Someone would be operating your room there?

MR. ODELL: If the auditorium were large enough, you would have a small space for projection equipment. That could be enlarged, with a little additional cost, to take care of the equipment you are talking about.

MR. WILLIAMS: These facilities can be incorporated. We are trying to get the ideas out.

A TRUSTEE: I do not think we could dispense with our photocopy and laminating equipment. I also feel that one of the boss "leaders" we have are our large recordings collections. We have to have listening rooms for the collections.

MR. WILLIAMS: Do you have to have listening rooms? Without them you may reduce your demands, and maybe that is what you want. Who else wants what? We are spending almost a half-million dollars; we ought to get all the dreams we want.

A TRUSTEE: Coin-operated typewriters.

MR. ODELL: Soft-drink machines.

A TRUSTEE: A library of a new college erected in Grand Rapids, Michigan, has carrels for its listening machines.

MR. WILLIAMS: With channels to listen to? Very good. What else?

A TRUSTEE: Our community has a number of handicapped people because of the university that is located there. Many of them stay in our community. We feel we should have some provision for wheelchairs.

MR. WILLIAMS: Yes, a way of getting people who are disadvantaged into the library. Of course, we have sidewalk entrances, and that is a start. But you need other equipment.

A TRUSTEE: You should have wide-enough corridors.

MR. WILLIAMS: Very good. I had the unfortunate experience of seeing a boy brought to our library the other day who was on a flat stretcher. He had to be carried down seven steps in one place, three steps in another, and up two in another. I know what you mean. But, anyway, the boy saw the books.

A TRUSTEE: How about a microfilm reading and duplicating room?

MR. WILLIAMS: Think of a way of doing this within the building and also of some way of getting this material to your patrons easily and quickly—instant service for an instant building. What else?

A TRUSTEE: A vision section for blind or partially sighted.

MR. WILLIAMS: A place for those who are completely blind to hear the talking voice.

A TRUSTEE: This is a wild one. How about having some way that you could draw on a television kinescope collection by wire so that you could rent out to borrowers a program to run through their own television set—a kinescope on any program they might want to see?

MR. WILLIAMS: That is a wonderful dream. Kinescopes these days are becoming quite common. We are getting used to the fact that we can watch a football game or baseball game with the live action, and in just a moment stop the action and come back to a part on the kinescope that has been played. There is no reason why you could not have a storage of the scopes to be sent out. Who else?

MR. ODELL: Have you seen these new golf machines? You play a course in the country by television and hit the ball right into the screen.

MR. WILLIAMS: We all had a TV driving course recently, but I have not seen those. What else? What other facilities would make this library of yours a cultural center you would be proud to have? What can you draw on? How do you get materials from other libraries? You have not exhausted the possibilities. Speak up.

A TRUSTEE: This morning someone mentioned a collection of fine art prints. I know of libraries that are lending prints. We could do the same.

MR. WILLIAMS: So we need storage space or exhibit space for pictures that are available. We do not need to have all these materials physically in the library, but we ought to have an idea about how to get them.

MR. ODELL: I think that is a very important point. Communities of this size as a rule have a library long before they have any kind of art museum. The

library usually has to function in that regard if there is to be any museum activity at all.

If the library is a branch or part of a larger community and the community has an art museum, the museum usually is only too glad to let the library have temporarily, on a free-of-charge basis, anything it wants to hang or display. When there is no museum, I think it is a very essential part of any library's work in a small community to serve as one. That is one reason why I indicated this area on the second floor, on the balcony, as a spot for exhibits.

A TRUSTEE: One of the most unusual functions that I know of in a library, which has been working for quite a few years in Grosse Pointe, in this neighborhood, is the loan of tools of all kinds. The library has do-it-yourself tools and lawnmowers and so on. The service is really working.

MR. WILLIAMS: *He* had the courage to say it. What do you have? Films are too pedestrian; we have gone far beyond them. Everyone knows the library has to have films.

A TRUSTEE: I would like to report an idea to save on the bookmobile, which we tried in our area in Long Island. We carry materials to another area of the county, and save a lot of money, by using the school buses that are driving the children back and forth to school. The buses do not have anything to do between hours but sit there. We signed up the buses to transport children and adults to the library, two and three times a day and back, for \$5000 a year. We were able to transport children on a regular run and also adults. We hope in the future we will continue to do so.

MR. WILLIAMS: There is a good idea.

TRUSTEE: This is an idea somebody else developed, and we sold it to our community. I do not know of any other library doing the same right now. I think it is a fine idea, because the buses are not doing anything at the time. It is good to see 100 children get off the bus, go into the library, and two hours later come out with armfuls of books.

MR. WILLIAMS: In order to do something like that you have to let people know both by schedule and by general advertising. You have to produce lists, schedules, and announcements.

TRUSTEE: We use our own newsletter for public relations for mailing out the lists to the school district. We also have a mention in the school newsletter five or six times a year. In the beginning we put a notice in the paper and in periodicals in the area.

MR. ODELL: I would like to ask this gentleman a question about the service he just described. I was interested to hear you say you get the children out of

school and take them to the library. I know of a couple of communities that tried to take the children to the museum. They ran into irresistible resistance from the educators, who said, "We cannot interrupt our schedule; such a visit does not fit into the curriculum." It reminds me of the dietitian in the multipurpose school cafeteria. Once the dietitian gets in there, the doors are locked except for eating purposes. How did you work your plan out with your school people? How did you get the sympathy or the desire to get the children out of school and send them to the library?

TRUSTEE: The adults go during school hours, and the children during the other shift's school hours. The school has split sessions: from 9:00 to 12:00 in the morning one group of children goes to school, and from 12:00 to 3:00 in the afternoon another group goes to school. The ones that come in the morning to the library come at 10:00 o'clock. We drop them off and a couple hours later take them back. In the afternoon another group will come.

MR. ODELL: The system works best in communities where you have double sessions.

A TRUSTEE: Or in the summertime.

A TRUSTEE: It also works very well when you have library sessions after school hours from 4:00 o'clock until 6:00 o'clock. You can get two or three runs in, depending on the size of your system, of course.

A TRUSTEE: We have a foundation that provides visual aids for our school, such as industrial and vocational models. They would be an excellent acquisition for other libraries. However, the models present a serious storage problem, as they are large. But they are used and they are very welcome in this area.

MR. WILLIAMS: That would mean another consideration in our program planning. Our elevator would have to be a little larger than one that would take a book truck or an occasional infirm person. It would have to be big enough to take a good-sized exhibit up and down to the meeting rooms.

A TRUSTEE: We were told this morning about the desirability of space for people to be alone—individual reading facilities. I do not quite know what the speaker had in mind, but I would think a space more private than a carrel.

MR. WILLIAMS: A very good point to be considered in many of our libraries. One of our ancient and honored authors once wrote quite a fine piece about a place to hide and a place to cry. In our older homes there is a place to be alone. Sometimes one needs to be alone with books. We have to arrange our libraries for that possibility too. Everyone does not want to be at the circus all the time. Let us go on with our dreams.

A TRUSTEE: If we are going to dream, how about a dream for additional help? I would like someone to help on these collections and displays. I would like full-time public relations help so the people in the community will know about all these wonderful services we are offering and take advantage of them. We need someone to educate the community to use the library to the fullest extent possible.

MR. WILLIAMS: I think you have all done well. I know that oftentimes this afternoon the front table has dominated the discussion. I hope that we have done what a workshop is supposed to do.

In this morning's session we talked about general principles and we had the fine exposition by Ned Bryan. This was followed by the opinions of three panelists who gave their particular reactions to their libraries and their problems. At lunchtime we had conversation sometimes on personal problems and sometimes on library matters. This was followed by a workshop where we were grasping for ideas and working toward solutions. We were trying to think through a problem, each in his own way, and a means by which to do it.

We cannot arrive at any final solutions or an answer that is valid for everyone. The principal reason for this day's sessions was the stimulation of thinking, and we hope we have done just that. We hope this workshop has been worthwhile for each of you. The informal discussions of today, it seems to me, supplement and complement the more formal talks given yesterday and the night before.

Now a final word about libraries. You remember the things that we talked about today. We planned a library that we recognized as our own or as one that we would like. We added to it the dreams that we wanted, the additional personnel, the additional services. We talked about other facilities that could be included, of certain costs that would appear in the library budget. Let me remind you that our library service, good or bad as it may be, is one of the most wonderful developments on the educational scene in the world. The public library is a unique contribution to life in our country and in others. We have set certain standards, but when you seriously dream about what your library can do, no matter what the size of your community, you cannot be sure whether the library will cost \$2 or \$3 a year to run per person, or \$10 or \$20 a year. We have had a comparatively short time for developing our present level of educational system. We have no idea what our real potential might be.

Unless you talk about your library buildings, unless you talk about your services, unless you dream and think and expand and move into the new forms of communication that are available to you, you fail. But if you keep doing these things, you will achieve something that mankind probably has never known before—the freedom of man to inquire and learn freely by himself.