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ABSTRACT

At present, the section of Buffalo in which the majority of the residents are white carries most of the burden of the K-8 schools with their extremely limited seventh and eight grade offerings. The sections of the community in which the majority of the residents are black now carry the heavy burdens of teacher shortage and teacher turnover that result in lower educational achievement. All the schools suffer from lack of even the most fundamental equipment such as books, dictionaries, globes, and maps. The Middle School Complexes can provide a solution that will cost substantially less than simply replacing the existing old buildings at their present locations. The Complex concept also opens up a new potential for a much higher quality of education available to all children on the basis of real equality and without segregation. Each Complex would belong to a larger community as a whole, responsive to and responsible to that total community. This study attempts to plan locations, attendance areas, and organizations for middle schools to make it feasible for the board of Education in Buffalo to eliminate racial imbalance, progressively, at least from the fifth grade on. Ways to meet this goal are described within the context of the severe plant obsolescence problem and the urgent need to provide ways of improving the quality of schooling at every grade level for every pupil. (Author)

PROJECT 1990

A Plan For Middle Schools

Part III

Buffalo, New York

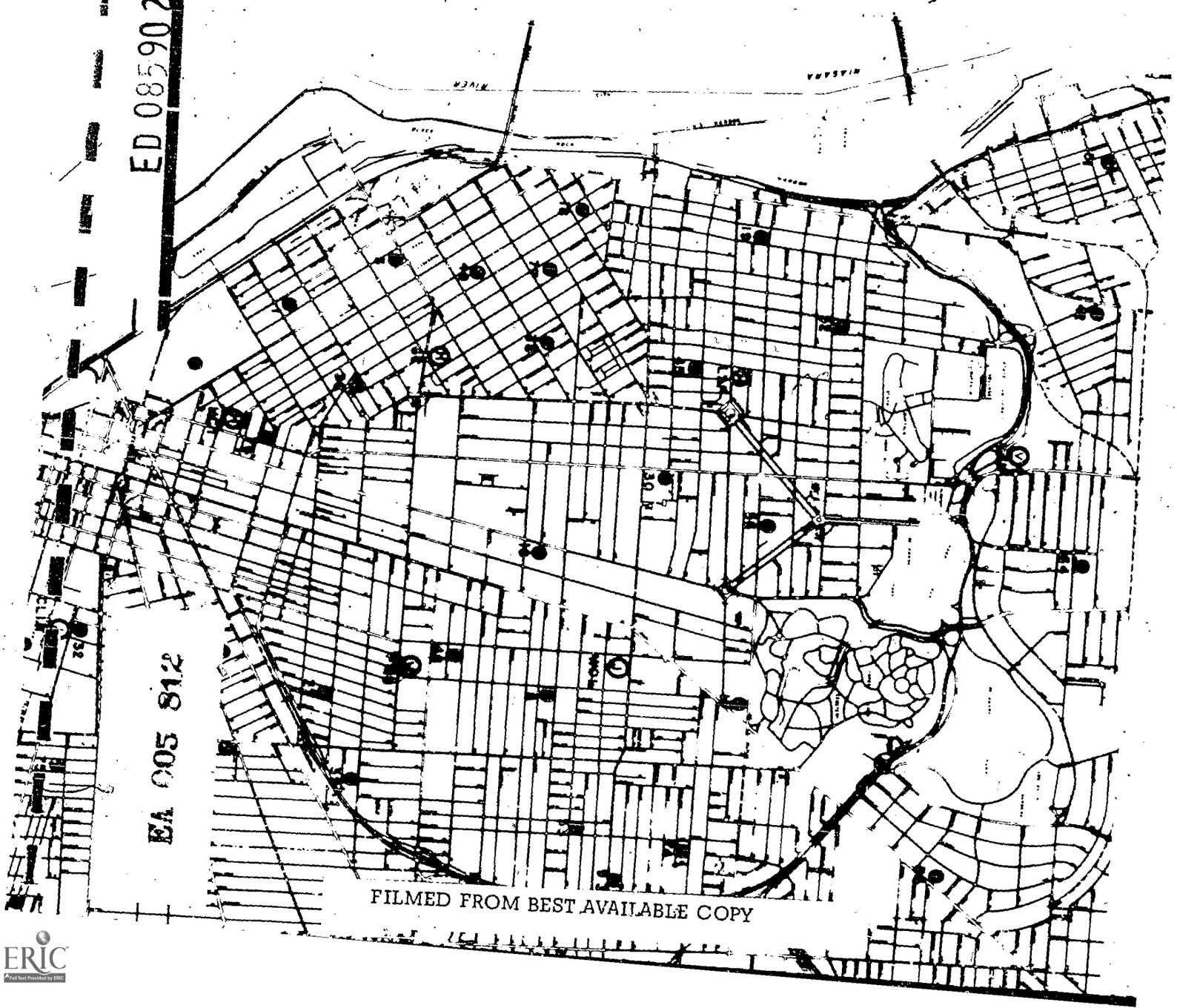
Component No. 4

By Max Wolff and Annie Stein

Final Report

Center for Urban Education

March 1970



CENTER FOR URBAN EDUCATION
105 Madison Avenue
New York, N.Y. 10016

A PLAN FOR MIDDLE SCHOOLS
BUFFALO, NEW YORK

A Study of Sites, Organization and Program

Max Wolff

and

Annie Stein

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March 1970

March 25, 1970

Mr. Eugene Johnson, President
Board of Education
Union Free School District No. 1
Town of Tonawanda
Kenmore, New York

Dear Mr. Johnson:

We are submitting herewith reports on Component #3 and #4 of Project 1990 in accordance with the contractual arrangements dated December 16, 1968.

This final report is a revision of previous reports submitted to Dr. Joseph Manch, the Superintendent of Schools of Buffalo. It reflects considerations and suggestions made for improving the report by members of the Superintendent's staff.

We are hopeful that the conclusions and recommendations of this report will be found most useful in improving educational facilities as well as educational programs in the public schools of Buffalo.

Because of the widespread interest in planning for middle schools, we respectfully suggest that this report should be made available to all to whom it might be useful.

We express our deep appreciation to all who cooperated in this undertaking.

Robert A. Dentler

Robert A. Dentler
Director

RAD:ml

C O N T E N T S

CONTENTS (Continued)

ACKNOWLEDGEMENTS

A study of this kind depends to a great extent on the cooperation of two groups of people--community residents who have the necessary data at their fingertips and are acquainted with the thinking and desires of the local residents, and researchers experienced in data analysis and planning for future development.

Dr. Robert Lamitie, Director of Project 1990, and Dr. Joseph Manch, Superintendent of Schools of the City of Buffalo, were available whenever they were needed to discuss the interpretation of data and the evaluation of ideas for planning. Their choices of project coordinators were excellent--Dr. Frank Ambrosie for Project 1990 and Mr. Lloyd Klute for the Office of the Superintendent of Schools. These men did much more than was originally expected of them. Dr. Ambrosie helped the researchers greatly toward an understanding of the city, and Mr. Klute enhanced their knowledge of the school system, its strengths as well as its weaknesses.

Dr. Frank Dressler, and Mr. Joseph Jones, Associate Superintendents, Mr. Donald S. Laing, Director of School Integration, and Mr. Jack L. Migliore of the Superintendent's staff as well as Mr. Frank Mesiah of the 1990 Project staff were very helpful and are deserving of our warm appreciation.

The study enlisted the help of Dr. Irving Kamil, Principal of I.S. 131, the Albert Einstein Middle School in the Bronx who devised an enriched curriculum for the middle school. His plans were submitted to the architechtural firm of Berman, Roberts and Scofidio so that they

could prepare the building designs for such a school. The cooperation of Dr. Kamil and the architects with this study was indeed indispensable.

Mrs. Catherine K. Almquist and Miss Mary Ellen Jenkins contributed most effectively as research assistants to the project.

Mrs. Kay Clanton, Senior Research Associate of our Center, helped us greatly with her intimate knowledge of Buffalo, originally her home-town.

Special thanks must also be expressed to the support staff at our Center, especially Miss Evelyn Wiener, Administrative Secretary and Miss Marcia Lilly, Secretary and to Mr. Dudley Thomas, Art Director at the Center.

While we have to share the credit for whatever was accomplished in this study with all who participated in our work, we must accept sole responsibility for the final version of this report.

It is our fervent hope that the report and its suggestions will help the Board of Education of the City of Buffalo to arrive at meaningful answers to the many problems of their school system.

CHAPTER I

A NEW MIDDLE SCHOOL PROGRAM

Considerations in Planning Middle Schools

Old buildings that must be replaced, racial segregation that must be corrected, teacher shortages and turnover, and most fundamental, the urgent need for improvement of educational programs for all groups in the population -- these are the problems that any plan for Buffalo's schools must address. In proposing a middle school program, this study seeks to make substantial contributions to all four of these basic needs.

The middle school years, critical as they are in the child's education, cannot be isolated from the primary education years or those years that follow. Although the task undertaken was to suggest a program of middle school construction, this study indicates as well how the new middle school program can change and improve educational opportunity in both primary and secondary schools.

The basic approach taken in this plan is to improve educational quality by providing a wealth of courses of study from which the individual child can draw. Given the freedom to choose, the help and guidance of experienced specialized staff, and a rich variety of resource materials suited to all kinds of learning styles, the child can develop in his own unique way -- learning about many things, learning how to get answers to his own questions, and discovering his own interests and aptitudes.

To achieve such an educational program within the normal limited school budget, enough children must be brought together to make it possible to form many different classes studying specialized subjects.

The school, too, must be large enough to be able to buy resource materials that are usually out of the financial reach of the small neighborhood school. Such materials include modern educational technology, fine libraries, athletic equipment and facilities, health facilities, and community services. If the school enrollment is large enough, the services of specialists on the teaching staff can be fully used.

Size is also critical in achieving racial balance in Buffalo, a city that has a rigid residential segregation pattern more severe than the typical Northern urban center. Bringing together children from several neighborhoods in a single middle school complex overrides such residential segregation.

Stability is another factor that calls for larger schools than Buffalo has traditionally built. In our mobile society, people move frequently although many of these moves are short distances within a city as old areas become less fashionable and new ones are developed. The small school forces children to transfer frequently as their parents move, disrupting the individual child's education and the schools' program. The larger school, drawing from a broader feeder area, is more impervious to these residence changes. The family may move but still stay in the same school zone.

Teacher turnover, too, is reduced. The new inexperienced teacher finds more help and guidance in the larger school where the experienced specialized staff has as part of its duties the training of new teachers. Team-teaching makes it possible for the new teacher to work closely with his more experienced colleagues. The profession becomes more challenging and more gratifying. Advancement in the larger setting is

more possible, and ambitious young people can look forward to interesting careers in the complex, rather than viewing teaching as a closed-door, deadend job.

In the light of these goals, the large school complex poses two problems: First, how to protect both the safety and the individuality of each child within the large complex and second, where to place the new schools to serve the city best.

To solve the first problem the "mini" school was developed within the "maxi" coat of the total complex; a school within a school -- small enough to create the intimacy and warmth of the small neighborhood school, yet part of the vigorous whole and within easy reach of all its programs and facilities.

Where to build such a complex raises important and sometimes competing issues. Several criteria were kept constantly in mind in choosing sites and feeder patterns for the six middle school complexes proposed in this plan. These criteria revolve about the issues of economy, racial balance and equality of treatment, minimum disturbance of the normal life of the child and the community, and the enrichment of the life of Buffalo and its citizens of all ages.

Criteria for Choosing Sites

1. Use existing school plants wherever possible.

This results both in economies in construction and in lessening of disruption to traditional school patterns.

2. Achieve racial balance in each complex close to the actual proportions of the races in the present primary grades (1-4) in the public schools.

These primary school children will be the pupils in the middle schools at the end of four years when some of the new schools will be opening their doors.

3. Avoid wide disparity in the racial composition of the six middle schools.

Stresses and strains result from such wide disparities. Schools tend to develop reputations for being "good schools" or "bad schools" where prejudice or custom stigmatizes schools by their composition or their location. When all the available schools provide equally good facilities and similar patterns of pupil enrollment such status considerations are minimized.

4. Equalize travel time for all children in the zone served.

This criterion is critically important in achieving the objective of full equality of treatment for all groups in the city. In the past, in Buffalo as in most other cities of the North, integration -- to the extent that it was accomplished -- placed a heavy burden on the black child. He was forced to travel long distances into the white community to desegregate the neighborhood schools attended by white children who needed only to walk to their nearby school. The schools in the black community continued to be totally segregated, or where they were closed, the black community was deprived of needed public space for recreation and other community purposes. An additional burden that this method of achieving desegregation placed on the black child was that of attending school in a strange neighborhood where he was often the uninvited guest. The white child had the more comfortable role of host.

To overcome these serious shortcomings of earlier plans for school desegregation, sites for the middle schools were sought that provide equal travel time for both black and white children. Not every one of the six complexes chosen meets this requirement fully, but over the city as a whole considerable equality of travel time was achieved. The sites chosen are as close to the centers of their attendance areas as possible so that many children both black and white can walk to school. Pupils who will ride the bus to school will come from all ends of the zone and from all the separate communities served by the school in roughly equal numbers.

5. Select sites of a public nature, not identified with any one ethnic group.

6. Seek proximity to public or private cultural, recreational, or educational facilities.

Criteria 5 and 6 are closely related and serve two ends. The first avoids the "host-guest" role for either the black or white child. Travel to a totally unfamiliar area that may be viewed as hostile, places a heavy psychological burden on the child and his parents. Public places, such as universities or the downtown civic area, that Buffalo citizens are accustomed to frequent and that do not have a specific ethnic association, make for more ready integration of the children and foster adult participation in the life of the school.

Such public places have another high value. They can provide an enriched curriculum. The school can and should involve nearby cultural, recreational, and educational facilities and their expert staffs directly in program.

7. Avoid relocation of families, businesses, or industry. In each of the six sites chosen open land, readily available, was sought. In only one case will even minor relocation be needed.

Metropolitan Educational Parks

The plan for Buffalo middle schools takes into consideration a seperate study of educational park development for the Nigara Frontier made as part of Project 1990. Three such Parks were recommended. These Educational Parks will draw children from the fifth grade through community college, providing a high level of educational quality and bringing together urban and suburban children. Attendace in the metropolitan Parks will be voluntary. It is expected that about 16 percent of the elgible Buffalo school children will elect to attend school in these Parks. If these Parks are not built, the plan for Buffalo needs only minor correction.

Wherever practical, the plan for the six Buffalo middle schools incorporates the educational policy of tieing the middle school administratively and educationally to a high school or to a primary school. The middle school complex itself embodies many of the high quality features of the Educational Park by providing centrally-shared facilities and staff serving a cluster of schools.

Finally, an underlying principle in the plan is to provide the child and his parents with options. A new school must serve for a minimum of 50 years. But in those years there will be many changes in educational policy and in community educational goals. Flexibility in construction and opportunities for free choice prevent the dead hand of the past from stilling the quick life of the present.

Metropolitan educational parks provide one such option. Magnet schools provide another. On the primary school level, this plan proposes that pupils continue to be provided with the option of transfers for integration through an expansion of the present busing program. For those parents who elect to keep their children close to home, the quality of these still-segregated schools is enhanced by the proposal for combining small schools into community-service, early childhood centers. These can be governed locally and will provide preschool, kindergarten and primary education through fourth grade, as well as serving local community social service, health, and education needs.

Throughout the plan, a pervasive concern is for the close involvement of the community both in decision-making and in the daily life of the schools. For example, the architect's plan for the new Fillmore School includes a parent pavillion with space for secretarial help and files for the use of community people, for the parents' association, for those who may be governing or volunteering for work in the school. Daytime adult education is provided for as well as the more traditional evening adult education and training programs. All the central facilities serving the pupils are open too, to the community and are designed to serve the community.

The plan opens a new road. How far the children of Buffalo will be able to travel on this new road rests with the people of Buffalo.

CHAPTER II

URGENT PROBLEMS OF THE BUFFALO PUBLIC SCHOOLS

Old Buildings and New Construction

"Educational facilities at all levels -- particularly at the high school level -- are over-age and obsolete and require extensive renovation" was the way the State Education Department characterized the schools of Buffalo in December 1967.[1] A study[2] released at that time found that of the 100 or so school buildings in Buffalo, fewer than 10 were built since 1950. Twenty buildings still in use date back to the 19th century.

"With a long history of limited maintenance, it is not surprising to find a great many details affecting operation which need correction either immediately or in the near future." These include deadend corridors, combustible tiles, inadequate lighting, coal furnaces (66 schools use coal, most of the furnaces are over 30 years old), no automatic controls.

"In summary, over 75 of the buildings are in need of some remodeling, renovation, or updating."

The State study, in making this evaluation of the Buffalo school plant, estimated a need for $89,555,000 for new construction and renovation of school buildings with an additional $19,000,000 needed for vital repairs.

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[1]Press statement, release by New York State Education Department.

[2]University of the State of New York, State Education Department: "Study of Buffalo Schools," December 1967, (hereafter cited as State Study).

A school building inventory prepared by Professor Austin D. Swanson for the Western New York School Study Council in 1969[3] found that 32 elementary schools or old wings of the schools should be replaced before 1975, another 29 by 1980. Seven high schools or their old wings also need replacement by 1975, with another five by 1980.[4]

Buffalo has been struggling to begin this massive renewal of its school plant, greatly hampered by limited construction funds. The very fact that so much of the school plant must be replaced gives Buffalo a unique opportunity to create something new and better. Cities with better and more modern plants are finding it hard to suggest and make the sweeping changes the public seeks, since they must continue to use existing schools.

The Buffalo Board of Education is committed to a program of middle school construction, although funds have not yet been appropriated. By building these middle schools for children from the fifth to eighth grades, great strides can be made in solving the obsolrete plant problem. This study has found that by constructing six middle schools of the size and in the location proposed by this plan, it will be immediately possible to close down 23 of the oldest elementary schools in the city. The financial savings are substantial. These 23 schools will not have to be replaced, and city resources will be increased through the return of many of these school buildings to the city for resale to the public.

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[3]Western New York School Study Council, State University of New York at Buffalo, Dr. Austin D. Swanson: "School Building Inventory for Erie and Iagara County." 1969

[4]This estimate was based on an anticipated 50-year life of a school with an additional 15 years following a major rehabilitation.

The investment in the new middle schools will bring maximum educational value for the education dollar spent. Buffalo will not just replace or renew the same school at the same site. It can make a quick advance into higher quality of educational opportunity for all of its children.

Old Fashioned Education and New Needs

In 1968, more than 64 percent of Buffalo's seventh and eighth graders still attended elementary schools where the program had not made substantive changes from 1951 to 1967. Twenty-eight of Buffalo's elementary schools still go through the eighth grade today with low enrollments.*

As long ago as 1951 a State survey[5] opposed the impoverished education for children in these grades that results from serving too few pupils. Their recommendation was that at least 300 pupils were needed in each school in the two grades to provide even the minimum state curriculum requirements. By 1967, the State felt this number was too small.

> ...70 percent of the K-8 schools have less than 200 pupils in grades 7 and 8. As a result of the small enrollment, the secondary programs in these schools suffers. Even a 300 pupil unit in the secondary school grades is now too small to provide strong, full-time specialists in each curriculum area.[6] By 1968, 91 percent of the K-8 schools had still not reached the minimum enrollment recommended by the State at mid-century. (See Table II.1).

The middle and junior high schools of Buffalo had an average of 750 pupils in these two grades in 1968 and gave a much better education, but less than 36 percent of Buffalo's seventh and eighth graders received this education.

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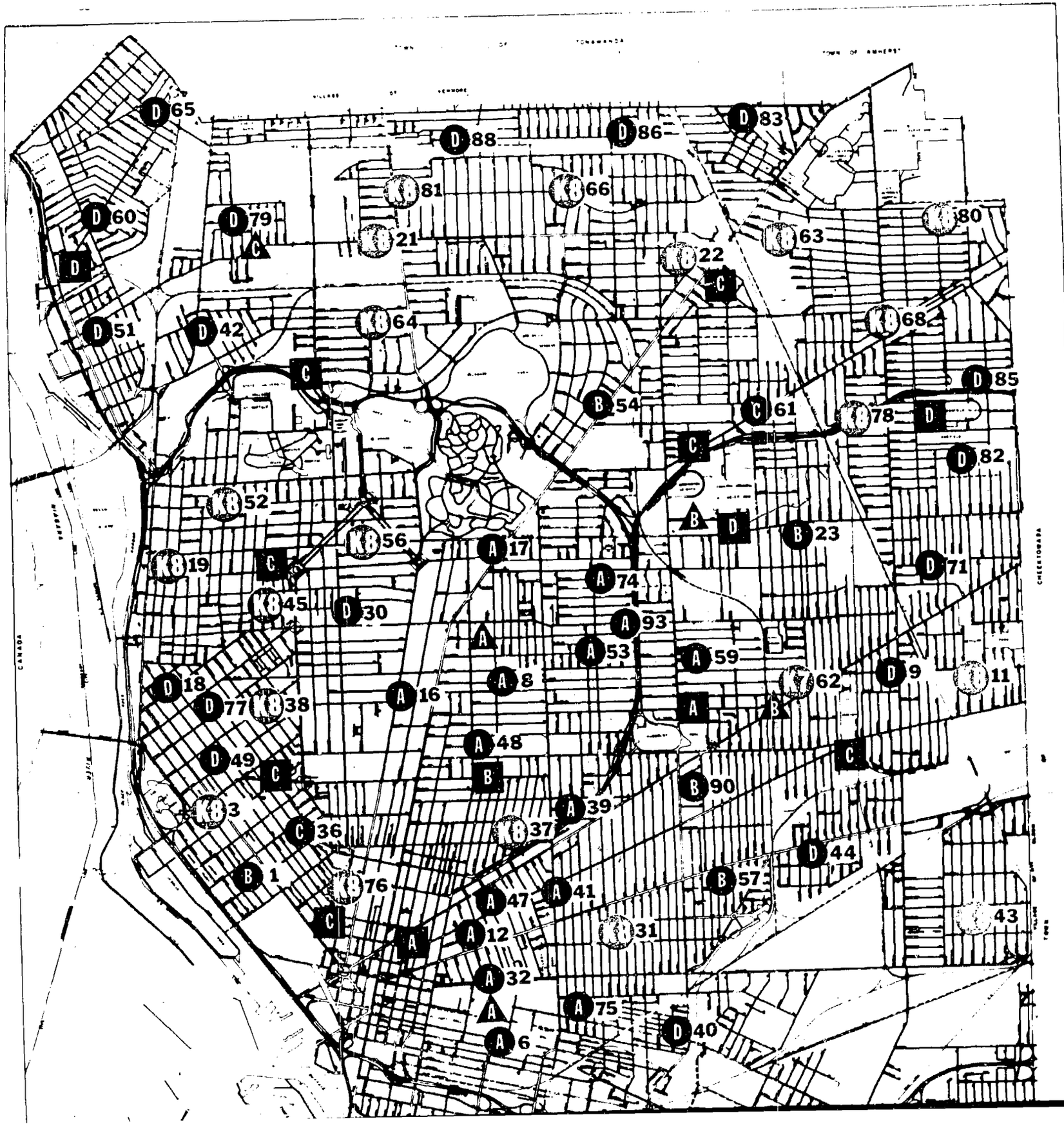
*Buffalo Public Schools' Organization Analysis as of October 3, 1969

[5]University of the State of New York, State Education Department: "Buffalo Public Schools in the Mid-Twentieth Century." 1951.

[6]State Study, 1967, p.17.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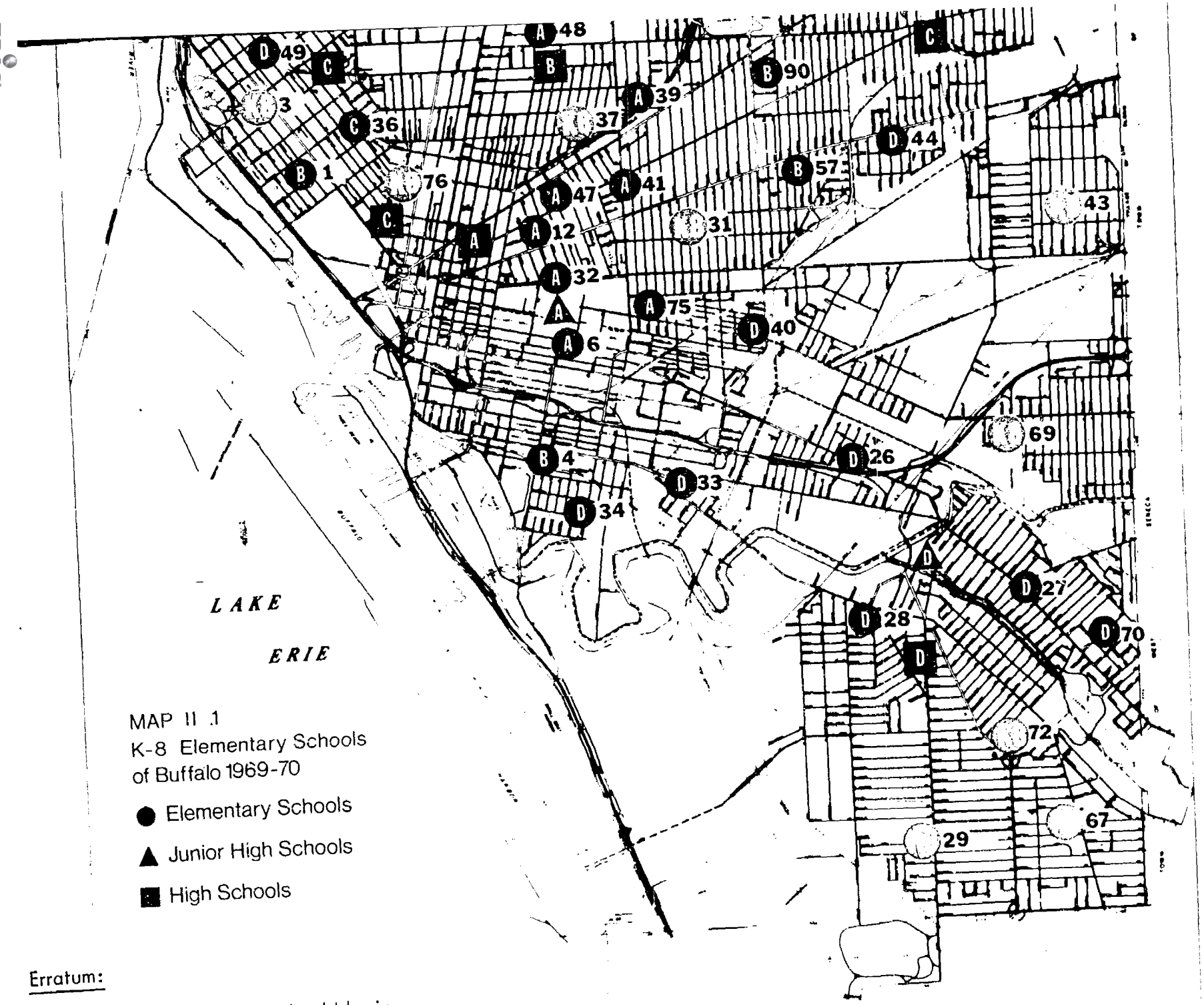

Erratum:

P.S. 1 is a K-8 school and should be in color

Note: P.S. 44, 77, 82 are K-8 schools with special 7-8 centers.

TABLE II-1

K-8 ELEMENTARY SCHOOLS OF BUFFALO AND ENROLLMENT IN GRADES 7 & 8, Oct. 1969

School	Enrollment* Grade 7	Grade 8	Total Grades 7 & 8
1	60	62	122
3	95	75	170
11	67	60	127
19	87	122	209
21	55	58	113
22	70	85	155
29	83	96	179
31	94	75	169
37	147	127	274
38	77	80	157
43	141	129	270
44	181	218	399
45	97	104	201
52	114	112	226
56	114	100	214
63	94	93	187
64	56	58	114
66	139	119	258
67	82	93	175
68	103	98	201
69	87	101	188
72	96	84	180
76	126	111	237
77	208	163	371
78	94	79	173
80	94	76	170
81	175	156	331
82	143	136	279

Totals

7th and 8th graders in K-8 Schools	5,849	55.3%
In Junior High Schools and Middle Schools	4,736	44.7%
Total 7th and 8th grade regular enrollment	10,585	100 %

Source: Buffalo Public Schools Organization Analysis, October 3, 1969

*Does not include any pupils in atypical 7th or 8th grade classes.

In 1969, librarian services were available in only 12 of the 28 K-8 schools, small amounts of special teacher services were available in home economics, industrial arts, swimming and foreign languages. Limited guidance help was found in about half of the schools, sustained mostly by federal funding of short-range programs.

In view of the fact that on leaving these K-8 schools pupils must choose between vocational and academic careers, their educational deprivation may never be remedied and their individual talents and potential never discovered.

Forty-five percent of the public high school boys go to the vocational schools where academic subjects are of only secondary interest. They have made the choice of vocational training without any exploration of the vast fields of knowledge that should be open to their young minds.

Perhaps a decade or two ago the loss to him would have been solely the restrictions placed on his personal intellectual development and the pleasure that would give him throughout his life. Today the loss is even greater -- both to him in his job opportunities and to society which needs more and more highly-skilled workers with broad knowledge in many fields. Entering the thermonuclear age, these youngsters can no longer get by with the kind of knowledge sufficient to the machine-industrial age we are just leaving. School Superintendent Joseph Manch set up a Committee to Study the Vocational Programs that reported:

> Many of the employment factors which characterized the period of the development of the vocational program in Buffalo do not exist today. The graduate of today faces an employment market which may require adaptability to several skills ....to succeed they will have to have more general knowledge in communication skills, mathematics, science and a cluster of trade-industrial skills.[7]

The Superintendent summed it up:

> Since students in Buffalo enter vocational schools at the age of 13 or 14, that is, after graduation from elementary school at the 8th grade level, there hasn't been much of an attempt or much opportunity to assess the desires or the aptitudes of these young people.[8]

The education program this study proposes for the middle complexes comes to grips with this question, recognizing the severe financial handicaps under which the Buffalo school system must operate. The complexes call for specialist teachers in a wealth of subjects, but keep the same pupil-teacher ratio that now obtains in the present Fillmore school. The difference lies in the number of children who are brought together and in the fact that the staff is shared and is fully used. The same money spent on teachers now can open a new intellectual world to these young teenagers and provide them with some knowledge of their own capacities before they decide their educational futures.

Throughout the Buffalo school system there is a lack of teaching and learning materials with many inequities between schools.

Scarce supplies can go further in a Complex and with more equality because they are shared in common facilities and are fully used.

The 1967 State study lists major needs of Buffalo schools thus:

> ....reference and supplementary books in all content areas. Other reference materials needed are children's magazines; pamphlets; encyclopedias; atlases; dictionaries; and filmstrips and recordings in social studies, science and health. The provision of these and other materials in content subjects would encourage teachers to develop ways of differentiating instruction....
>
> ....Appropriate maps and globes are needed in many classrooms. Science supplies and equipment are needed in each of the unit areas. Manipulative devices for the teaching of mathematics are especially needed in the primary grades.

In January, 1969, the Superintendent of Schools of Buffalo in his budget requests pleaded for more funds for equipping the schools, stating that deletions from earlier budgets had "created a backlog of critical needs."

Project Opportunity, which functions in several of the elementary schools, has involved teachers in the use of new audiovisual devices to strengthen the educational program. However, this has not yet been extended to the whole system.

Starting with this need, the middle school plan developed extensive library and audiovisual resource centers for use by teachers, students, and the community in each of the six complexes proposed. Duplication of such facilities in each of the present 28 K-8 schools is obviously out of the question. Centralized use by a larger number of children eases the financial cost and is one answer provided in the plan. In addition, the Federal funding programs (see Appendix) can help equip the new kinds of facilities such as community-service centers proposed in the plan.

The State Study in 1967 found that pupil achievement in Buffalo was markedly lower than in the State as a whole and that with twice as many secondary school pupils, the public schools won only half as many Regents scholarships as the Buffalo non-public schools; that fewer Buffalo children went on to further education than in any of the other Big Six cities of the State.

The State Study recognized that the financial plight of Buffalo impoverishes the schools. But beyond that, it suggests that "the Buffalo public secondary schools need to raise their own level of aspiration with respect to pupil abilities."

Setting higher sights is hard to do in the old setting. However, the necessity to build so many new schools creates the break in the old patterns that can transform the quality of education and raise the "level of aspiration" of adults and children alike.

Keeping a Good Staff

The State pinpointed the problems of teacher shortage and turnover as critical weaknesses in the Buffalo school system. Teacher shortage was most acute in the academic high schools with a pupil-teacher ratio of 23 to 1 instead of the maximum of 17 to 1 recommended by the State. (In 1969 this ratio was reduced to 19.8 to 1.) Next most serious shortages were in the seventh and eighth grades in the elementary schools where a 19.2 to 1 ratio prevailed. In 1967, the State recommended that 324 more staff members be hired in the academic high schools alone. Because of shortage of funds, it was not possible to increase staff.[9]

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[9]Data from Basic Educational Data Systems of the State Education Department, Ethnic Census, 1968-69.

Staff needs include assistant principals and other supervisory staff to assure effective teaching and to help new teachers. Guidance teachers number substantially below the State recommended standard. Minority-group teachers, both Negroes and Spanish-surnamed, are far fewer in the schools than should be expected: Only 10 percent of the teachers are Negroes. The need for more Negroes in supervisory positions has been recognized and additional black supervisors have been hired for the current school year. There are few regular Spanish-speaking teachers even though in some of the schools there are many children from Latin America.

Buffalo needs more psychologists, more attendance teachers, and more social workers, some of them to work full-time in several schools. Clerical and office help is needed throughout the system to relieve teachers of nonprofessional duties. Some teacher aides have been hired, but far too few to fill the gap. Turnover, which was acute in 1967-68, has been substantially reduced.

The State report comments:

> The fact that Buffalo is staffing more and more of its classrooms with raw recruits who are unproven or inadequately prepared is bound to have serious consequences.[10]

Buffalo's school staff, the State reports, is "overwhelmingly young, inexperienced and relatively unstable." Their need is for expert help. Such help today comes from central office supervision, which is considered too remote to provide the daily guidance needed at the local schools. Special needs of particular schools cannot be met adequately by the centrally-standardized, uniform education program. The state recommends a larger local administrative staff, greater flexibility in local programs, more resource materials to help the teacher, and training of teachers in the use of such aids.

This study's plan approaches the problem of attracting teachers and keeping them in the system somewhat differently. Many young, inexperienced teachers come to the schools, particularly those in the black communities, with a desire to succeed and to help the children achieve. Many of these same people are discouraged, not by the children but the conditions of their work. Even where there are enough supervisors, the young teachers do not receive all the help they need. The teacher is alone with the children and must sink or swim.

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[10] State Study, page 23.

Head Start opened a new experience to many teachers. Many of its programs, because they were so new and unstructured, shook up the traditional classroom atmosphere. Parents, aides, paraprofessionals came and went freely in the classroom. They not only helped the teacher with her nonprofessional chores, they created a warm and familiar atmosphere for the class. They helped the child who was depressed or overexuberant or neglected. In effect, they made the new teacher feel less alone and the children feel less alienated from school.

Another experience that has proven its worth is the cluster-teacher or team-teacher approach -- again sustaining the new teacher as well as focusing on the needs of the individual child, too often lost in the traditional classroom.

The middle school complex proposed in this study introduces both the wide use of parents, aides, and paraprofessionals throughout the complex and the team-teacher view of the individual child. It adds to these concepts the strengthening influence of the specialist teacher and the master teacher who are always on hand and who have as part of their duties the training of the inexperienced teacher, guiding him in his daily work and in his further study. Because of the larger size of the complex, local supervision becomes obligatory. It also becomes functionally related to the many varied aspects of the school's work -- the classroom, the group room, the teacher-parent-pupil conferences, the central facilities, the adult programs.

The young teacher is attracted to the school because of its newness, its great equipment, its flexible searching and testing of new ways of reaching and stimulating children. He is attracted, too, because there are many opportunities for advancement in the new setting -- to master teacher, specialist teacher, program coordinator, and so on.

Young people, today particularly, want to be engaged and creative in their work. This initial impetus can be sustained by the strength and support they will receive in meeting their problems from their more experienced faculty colleagues. They will be strengthened in their understanding of the children by the parents and community people who will be their co-workers.

Perhaps in this area too, the "overwhelmingly young, inexperienced" staff that is one of Buffalo's problems can be turned into one of its assets by investing their vigor and creative energy in a new educational venture, helped and guided by experienced "old hands."

Chapter III.

DE FACTO SCHOOL SEGREGATION IN BUFFALO

On February 15, 1965 the Buffalo Board of Education was ordered to desegregate its schools by the State Commissioner of Education.[11] At that time there were 15 elementary schools, two junior high schools and one senior high school that had a concentration of black students exceeding 90 percent of their total enrollment.

Five years later, in 1970, the same schools are still segregated with an even higher concentration of black students. In addition, there are two more elementary schools in this category and another high school that has reached an 85 percent concentration of black students. (Table III-1)*

Following the Commissioner's Order, Buffalo's major desegregation effort was the voluntary busing of black children from the inner-city schools to the peripheral white schools that had vacant seats. In all, about 2,500 children, out of a Negro school enrollment of over 26,000, availed themselves of the transfer program. This program did reduce the number of all white schools from 42 in 1966 to 23 at present.

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* Tables are presented at end of chapter.

[11] New York State Education Department: "In the matter of the Appeal of YERBY DIXON, et. al. from action of the Board of Education of the City School District of the City of Buffalo in regard to racial imbalance and related subjects. DECISION No. 7470."
The decision ordered the Board to submit an approved plan for "the progressive elimination of racial imbalance, including the steps to be taken in this direction beginning with the school year 1965-66."

There was no impact on segregation in the black schools.

At the junior high school level, Clinton and Woodlawn junior highs became 100 percent black during the five-year period and Genesee-Humboldt doubled its black enrollment to become 66 percent black in 1970.

East High School, which was 90 percent black at the time of the Commissioner's Order, is more than 98 percent segregated now. Nearly half of all the Negro academic high school students of Buffalo attended this one high school in 1968. As in the elementary schools, progress was made in achieving better racial balance in the high schools that had been nearly all-white five years ago. (Tables III-2 A and 2B).

The extreme degree of containment of the Black pupils in the segregated schools was lightened with the transfers into schools throughout the city. Eighty-one percent of the elementary school children attended segregated schools in 1966; by 1968 this had been reduced to 73 percent. Containment in the junior highs went down from 77 percent to 63 percent and from 60 percent to 46 percent in East High School.[12]

Dr. Ewald B. Nyquist, who was acting State Commissioner of Education on June 18, 1969, summed up the situation in his letter to the Buffalo Board of Education on that date thus:

> Despite the progress described in the (Buffalo Board) report, the conditions which promoted an appeal to the Commissioner of Education by the parents of Negro children still exist.

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[12] Board of Education, Buffalo, N.Y.: "Ethnic Census of the Buffalo Public Schools: 1968-69". April, 1969.

It would take 24 years to integrate the schools of Buffalo at the present rate of progress, even if the white-black proportions in the total school enrollment stay constant. However, they do not stay constant. In 1966, Negro children made up 35 percent of the elementary school enrollment (17,286 children). By the 1968 school year this proportion had risen to 37 percent of the public elementary school enrollment (17,364). The State Commissioner still retains jurisdiction in the Yerby Dixon appeal. The case is still open, the Order still in force. The construction of the middle schools proposed in this study will provide the substantial "progressive elimination of racial imbalance" required by the Order.

The base figure used in this study to define racial balance is 41 percent Negro. This is the proportion of black pupils in the first through fourth grades in the schools of Buffalo today. These are the children who will become the middle school enrollment in four years when some of the middle schools proposed have opened their doors. A major objective of this study has been to define the feeder patterns of the projected middle schools so as to achieve a balance in each school hovering close to this percentage.

The effect of the long period of uncertainty and hesitation in resolving the problem of de facto school segregation has been two-fold. The problem has become more severe and the good will of the black communities, both adult and student, has been eroded.

Buffalo is not alone in this predicament. In many cities of the North, school boards faced hesitant or hostile white majority opinion even when ordered by courts to desegregate their schools.

The black communities in the North, meeting defeat after defeat in their efforts to secure integration, have in many places given up hope of educational improvement through integration and are demanding, instead, the power to control and operate the schools in their communities.

Signs of a change of objective exist in Buffalo too. The magnet school at Woodlawn, the demand for the community-operated Academy in the Clinton area, the projected comprehensive program for the new high school to be built at Main and Delavon Streets, are all signs of the changing emphasis. Integration, however, retains its adherents, in both the black and white communities. The success of the transfer program for those children who elected to travel has encouraged many parents to continue to strive for its extension.

The moment is now to avert the dissension and strife that have erupted in cities throughout the North where fulfillment of the promises of equality in education was too long delayed. Opportunities for greatly enriched, integrated education from the fifth grade on and for thoroughgoing community involvement at all levels can reunite Buffalo around an invigorating program of school improvement.

The plan proposed in this report will establish high quality, integrated middle schools. No drastic changes in either total enrollment or in internal racial composition are expected.

School enrollment is expected to drop slowly until 1985. Then the offspring of the present large high school population will themselves be ready to enter school[14] and thereby increase the school population.

The forecast of future Grades 5-8 enrollment is:

1968	Estimated	
21,546	1970	21,692
	1975	20,934
	1980	18,894
	1985	19,389
	1990	23,966

There has been only a slow increase in the proportion of minority group to majority enrollment in the schools, averaging about 1.1 percent a year. The number of black children has been stable, the change in composition of the enrollment coming about through the movement of white families out of the Buffalo public schools. Even this movement can be expected to be checked somewhat with the opening of high quality middle schools. The drawing power of a superior educational system will tend to retain some and regain others who have left the Buffalo public school system to seek better schools for their children.

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[14]Board of Education, Buffalo, N.Y.: "Projected Estimates, Grades 5-8, 1970-1990."

The plan provides for full integration from the fifth grade up. At the pre-kindergarten and primary grades, the plan provides for community-service, community governed early childhood centers in the local communities that respond to the need expressed by the Academy movement. The option to transfer out, however, must be retained and expanded to provide for integrated education at the primary grades for those children whose parents desire it.

The Buffalo Board of Education, in November 1968, approved the construction of high quality, integrated, middle schools and recommended that 12 such schools be built in white areas at the perimeter of the city.

This study investigated the feasibility of constructing such schools at the sites suggested and recommends that the proposal be turned down for the following reasons:

1. Equality of travel time cannot be achieved at perimeter sites since the Negro children are concentrated in the center of the city and they would all have to be transported to schools that are within walking distance for the white children.

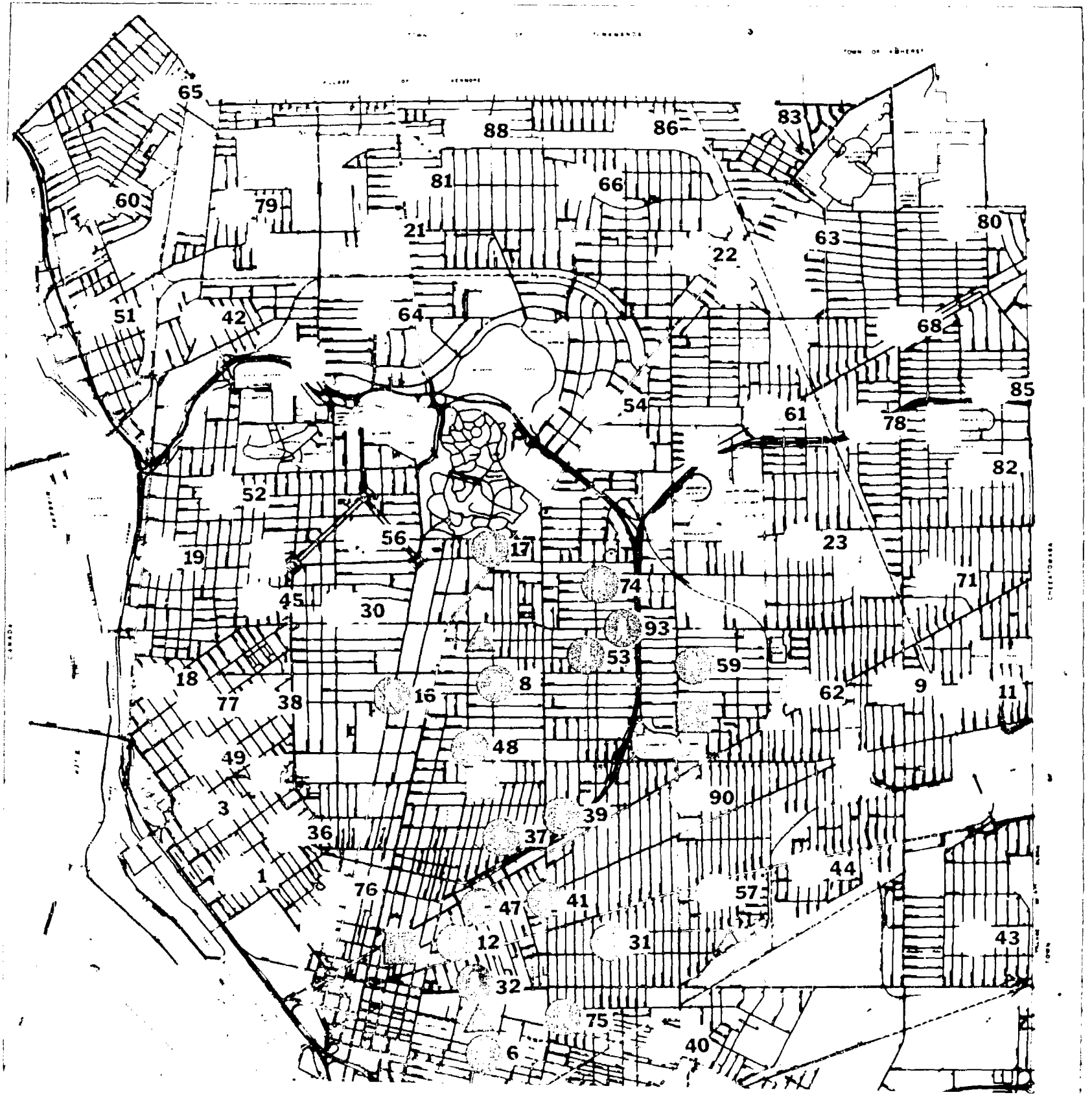
2. The expense of building 12 fully-equipped schools is wasteful of scarce resources. A smaller number of schools, using commonly-shared central facilities, will provide a higher quality of education for less money.

3. The psychological burden of leaving their community for distant, ethnically identified white areas is an undesirable inequity, for both the black pupils and their parents. Sites chosen should be general civic sites that

all Buffalo residents are accustomed to frequent and share.

4. It is extremely difficult to equalize racial balance at 12 sites without creating attendance zones that overlap or that cut the city into long narrow wedge-shaped lanes that will be difficult to sustain.

This study recommends that six middle schools be built, more centrally placed in their attendance zones. The resulting larger size of the schools has several substantial additional advantages. The problems raised by the size of the schools have been studied and proposals for overcoming these problems are discussed in the chapter that follows.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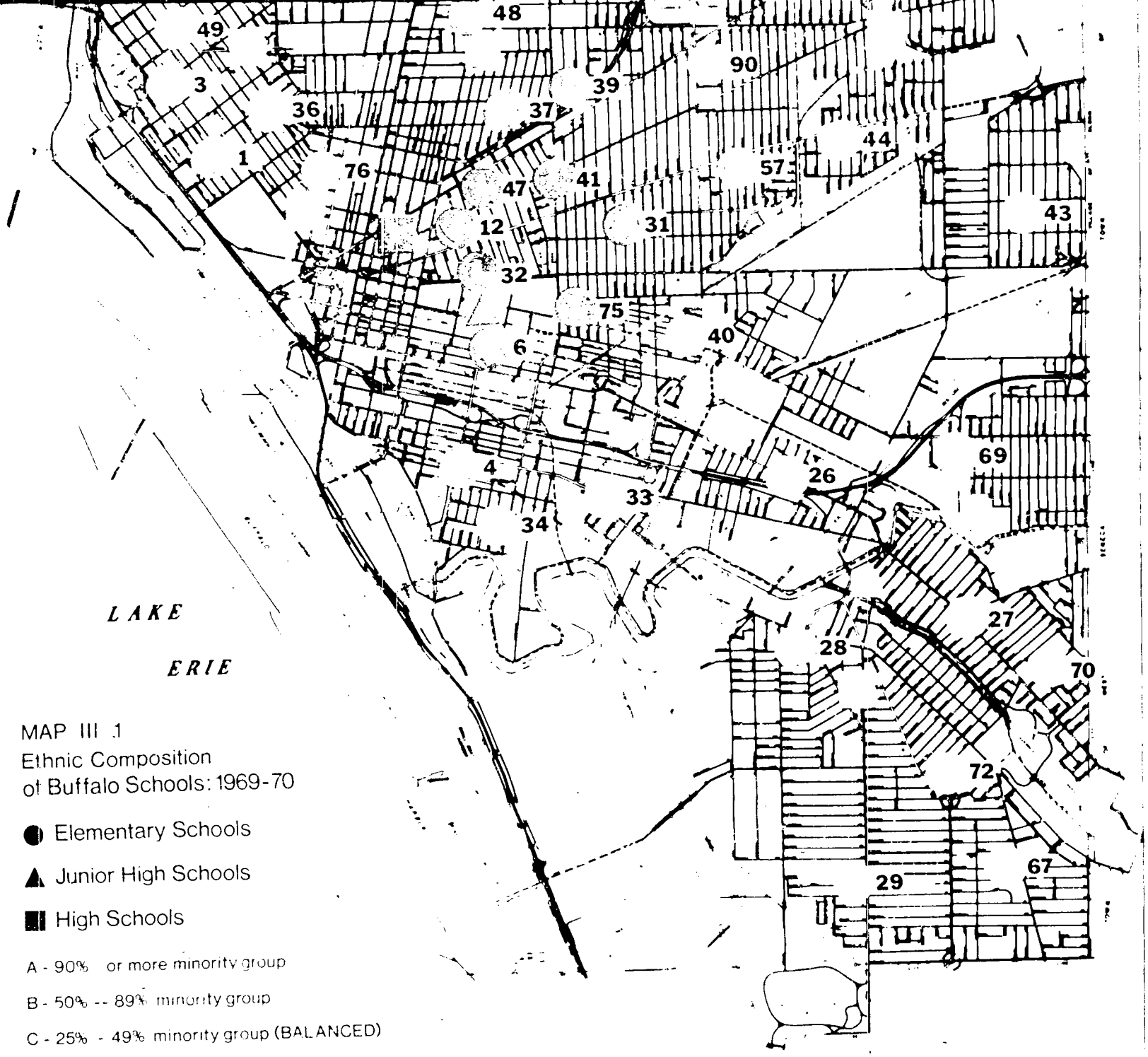


MAP III .1
Ethnic Composition
of Buffalo Schools: 1969-70

● Elementary Schools

▲ Junior High Schools

■ High Schools

A - 90% or more minority group

B - 50% -- 89% minority group

C - 25% - 49% minority group (BALANCED)

D - 24% and less minority group

Table III-1.

Percentage Distribution of Buffalo Elementary Schools by degree of segregation for the years 1961-1962, 1965-1966 and 1969-1970

Degree of minority group concentration[1]	1961-1962 No.	%	1965-1966 No.	%	1969-1970 No.	%
Deeply Segregated 90% or more	14	18.4%	15	19.7%	17	23.6%
Unbalanced minority group 50%-89%	2	2.6	5	6.6	8	11.1
Balanced 25-49%	4	5.3	5	6.6	4	5.6
Unbalanced white 10-24%	7	9.2	9	11.8	20	27.8
All-white 0-9%	49	64.5	42	55.3	23	31.9
All elementary schools	76	100.0%	76	100.0%	72	100.0%

Source: Computed from data compiled by Mary Ellen Warshauer and Robert A. Dentler, Center for Urban Education: "Public School Segregation and Related Population characteristics of Buffalo, N.Y." 1966. Data for 1969-1970 from Buffalo Public Schools.

1 "Minority Group" includes Negro, Spanish-surnamed, and American Indian as reported by The State Education Department annual ethnic census.

TABLE III-2A
BUFFALO SECONDARY SCHOOLS

PERCENT MINORITY GROUP ENROLLMENT 1965-66, 1969-70, BY SCHOOL, RANKED BY DEGREE OF SEGREGATION IN 1965-66: INCREASE OR DECREASE IN SEGREGATION.

School	Percent minority group 1965-66	Percent minority group 1969-70	Segregated More	Segregated Less
Segregated, black (90% or more min. gp.)				
Woodlawn J.H.S.	99%	100%	*	
Clinton J.H.S.	99	100	*	
East High School	91	99	*	
Unbalanced, black (50%-89%)				
Fosdick-Masten Voc. H.S.	75	87	*	
Balanced (25%-49%)				
Fillmore Middle School	43	56	*	
Genesee Humboldt J.H.S.	32	66	*	
Emerson Voc. H.S.	29	37	Balanced	
Bennett H.S.	27	38	Balanced	
West Hertel Middle School	-	28	-	
Unbalanced, white (10%-24%)				
Southside J.H.S.	-	24	*	
Burgard Voc. H.S.	23	43	*	
Lafayette H.S.	17	31	*	
McKinley H.S.	14	16	*	
Grover Cleveland	11	22	*	
Hutchinson-Central	10	13	*	
Segregated, white (0%-9%)				
Seneca Voc. H.S.	8	15	*	
South Park H.S.	7	15	*	
Kensington H.S.	2	15	*	
Riverside H.S.	1	7	*	

Source: As in Table III-1

[1]Minority group includes Negro, Spanish-Surnamed, and American Indian pupils as reported in the State Education Department annual ethnic census.

TABLE III 2 B
BUFFALO ELEMENTARY SCHOOLS

PERCENT MINORITY GROUP ENROLLMENT 1/ 1961-62, 1965-66, 1969-70, BY SCHOOL, RANKED BY DEGREE OF SEGREGATION IN 1961: INCREASE OR DECREASE IN SEGREGATION 1961-1965 and 1965-1969.

School	1961-62 Percent minority group	1965-66 Percent minority group	1965-66 Segregated MORE	1965-66 Segregated LESS	1969-70 Percent minority group	1969-70 Segregated MORE	1969-70 Segregated LESS
Segreg Blk 90% or more minority in 1961-62							
74	100%	100%		-2	100%		-2
93	100	100		-	100		-
47	99	99		-	99		-
6	99	98		-	100		-
75	99	99		-	100		-
8	99	100		-	100		-
32	99	99		-	99		-
12	98	98		-	100		-
41	98	98		-	100		-
53	98	99		-	99		-
17	98	100		-	99		-
31	93	98	*		99		-
48	93	97		-	99		-
37	92	99	*		99		-
Unbalanced black 50%-89% min. grp. '61-'62							
39	Rehab Center	98%	*		100%		-
15	84	closed			closed		
16	61	85	*		91	*	
Balanced 25%-49% min. grp. '61-'62							
4	47%	62%	*		82%	*	
54	39	56	*		52		-
24	28	39	balanced		Special school		
59	28	86	*		98	*	

table III - 2B continued

School segr. white in 1961-'62	1961-62 % all min group	1965-'66 % all min. gr	1965-'66 MORE segr	1965-'66 LESS segr	1969-'70 % all min. grs	1969-'70 MORE segr	1969-'70 LESS segr
72	1%	0%	--		1%	--	
77	1	2%	--		11		*
80	1	2	--		17		*
62	1	14		*	50	*	
9	0	1	--		12		*
19	0	3	--		11		*
21	0	2	--		14		*
22	0	0	--		13		*
23	0	15		*	58	*	*
25	0	0	--		closed		
27	0	0	--		0	--	
30	0	0	--		4	--	
45	0	0	--		3	--	
49	0	4	--		7	--	
52	0	1	--		6		*
57	0	41	balanced		55	*	
63	0	5		*	5	--	
64	0	5		*	30	balanced	
66	0	1	--		5	--	
67	0	0	--		3	--	
68	0	6		*	9	--	
69	0	2	--		9		*
70	0	1	--		1	--	
81	0	1	--		13		*
83	0	0	--		1	--	
86	0	1	--		4	--	
88	0	0	--		3	--	

Source: As in Table III-2.

[1] "Minority group" as defined in Table III-2.

[2] Dash indicates change of less than 5 percent.

[3] Predominance of Spanish-surnamed and American Indian, 1969.

table III - 2B continued

School	1961-62 % all min. group	1965-'66 % all min.gr.	MORE segr.	LESS segr	1969-70 % all min. gr.	MORE segr	LESS segr
Unbal. white 10%-24% minority in 1961-'62							
73	22%	55%	*		Special School		
13	19	32 Balanced			51%	*	
34	16	13		-	15		-
3 3	15	22		*	35 Balanced		
84	14	13		-	Special School		
40	11	12		-	21		*
85	11	9		-	15		*
Segr. white in 1961-'62 0% - 9% Min.							
76	9%	31% Balanced			51%	*	
79	9	7		-	13		*
82	9	7		-	21		*
28	8	9		-	9	-	
71	8	15		*	9	*	
33 3	6	7		-	18		*
36	6	10		-	39 Balanced		
18	5	6		-	12		*
65	4	0		-	8		*
11	3	2		-	5	-	
38	3	2		-	13		*
90	3	34 Balanced			73	*	
26	2	5		-	13		*
78	2	8		*	13		*
42	2	15		*	17	-	
29	1	2		-	4	-	
43	1	1		-	7		*
44	1	3		-	23		*

TABLE III-3

EFFECT OF BUSING PROGRAM ON ETHNIC COMPOSITION OF FORMERLY SEGREGATED WHITE[1] RECEIVING SCHOOLS

School	Percent minority group enrollment 1965	1969
#56	9%	20%
78	8	13
33	7	18
79	7	13
18	6	12
26	5	13
64	5	30
44	3	23
19	3	11
21	2	14
38	2	13
77	2	11
69	2	9
80	2	17
9	1	12
52	1	6
43	1	7
81	1	13
22	0	13
51	0	8
65	0	8

Source: Data from Buffalo Public Schools

[1]Schools with less than 10% minority group enrollment.

CHAPTER IV

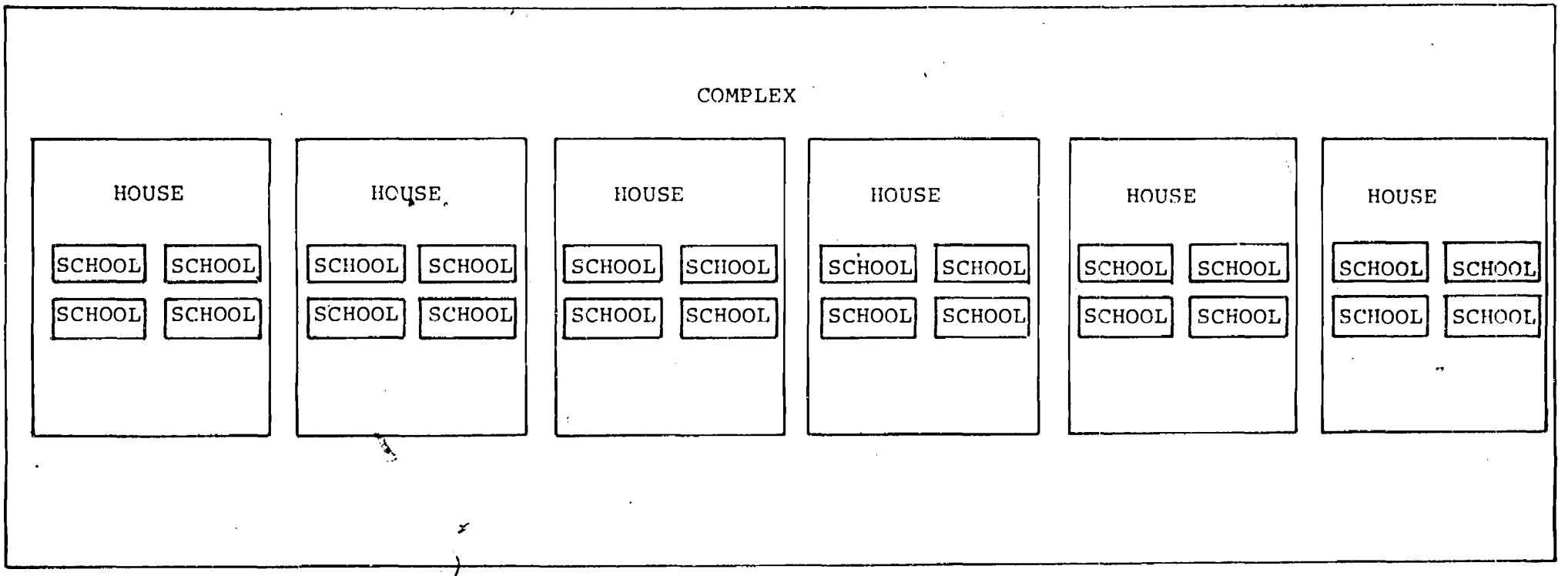
THE PLAN: A DESIGN FOR A MIDDLE SCHOOL COMPLEX EDUCATION PROGRAM FOR THE CITY OF BUFFALO

by Irving Kamil

Middle School education is an extension, in part, of the primary years, with certain important differences. The emphasis in the middle years of schooling should change from the development of basic skills to the use of these basic skills for the acquisition of knowledge, for the development of human and social relationships, and for the exploration of the broadest possible areas of learning. Thus, in the middle years of his schooling, the child should be exposed to many areas of human experience. During this exposure, for example, the child should explore, in some depth, the arts, the humanities, pre-vocational interests, and the fields of physical activities. Of course, skills development, which is characteristic of the primary years, will continue during Middle School education. The emphasis, however, should be on the use of these tool subjects.

It should be emphasized at the outset that this paper is planned as a working document, one that opens further the areas for discussion, and one that allows for many changes depending upon discussion that it might stimulate. The design of a curriculum for a school relies heavily upon value judgments. The final program that develops for the Middle Schools of Buffalo, N.Y. will depend upon the community's goals for education, sharing or modifying the value judgments made in this curriculum design.

BUFFALO MIDDLE SCHOOLS
BASIC ORGANIZATION

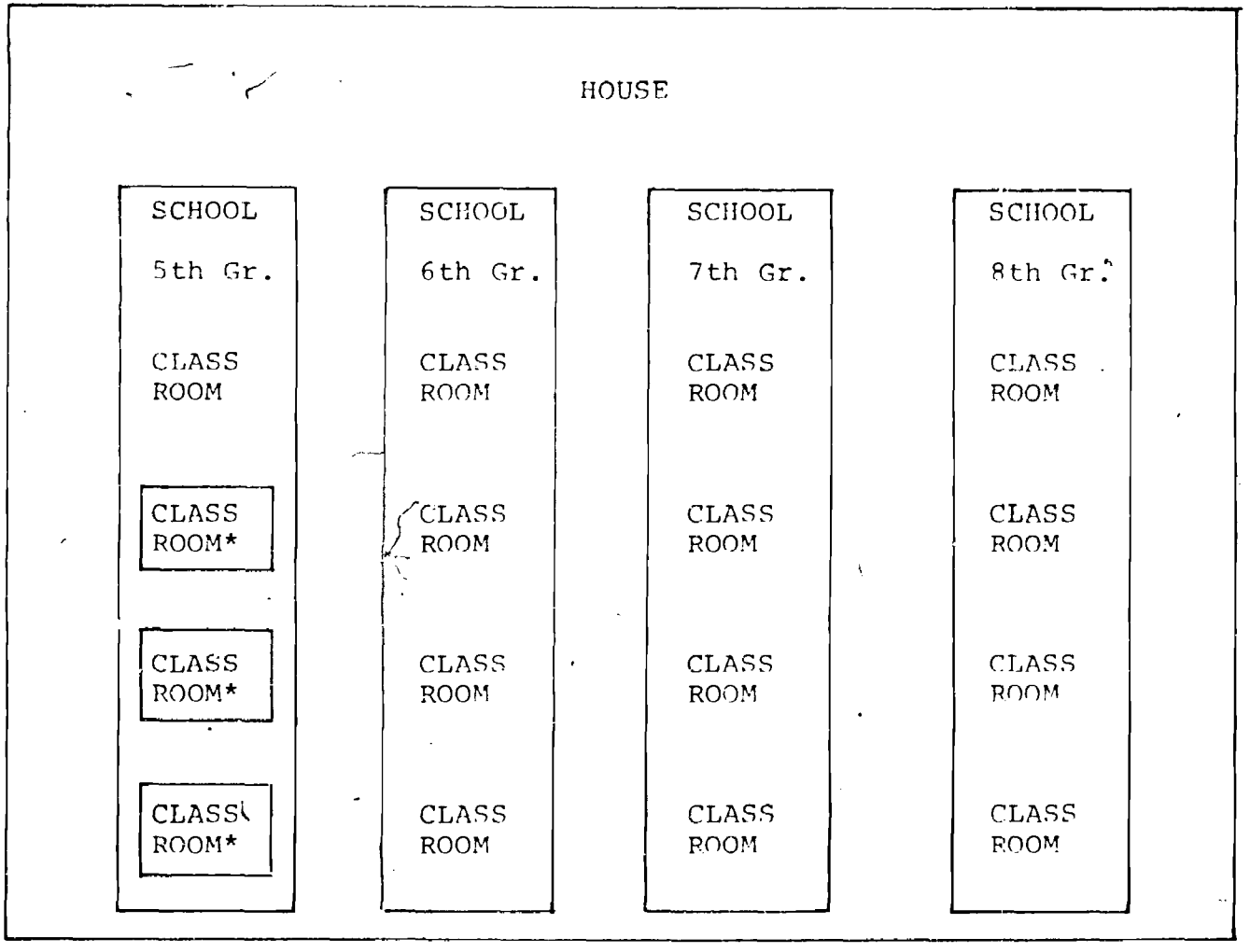


1 complex = 6 houses = 24 schools = 3600 pupils

1 house = 6 schools = 600 pupils

1 school = 150 pupils

Figure IV.1-p.39



* Self contained

Figure IV.2 -p. 40

of the individual child will center around the School, which contains 150 children, or within the House, which contains 600 children, rather than within the total Complex structure of 3,600 children.

It is projected that a given child in a given school will find the opportunity to establish relationships with teachers and pupils within his own School, within the entire House, and with those of other Houses of the Complex. Indeed, this will be inevitable if we take advantage of the full size of the Complex and offer the large choice of courses thus made possible. However, for purposes of focusing on the individual child, that individual child will remain in the same School he originally enters for the entire four years of his stay in the Middle School Complex. Thus he will become very well known to a particular group of faculty members and a particular group of his peers. He will not, however, be limited to establishing relationships only with the group in his own School or House.

One of the prime values inherent in the middle school structure is the existence of an integrated setting for middle school quality education. It should be apparent that the Complex lends itself to this integrating factor. How the children are grouped into Schools and Houses should be carefully considered so that maximum benefit of this integrated setting is allowed. I would recommend, and my experience has shown, that it is of great educational value that schools be heterogenously organized. The social relationships, which are so important in middle school education, are best set into operation with heterogenous grouping. Where homogeneous groups of youngsters must be brought together because of their common interests or talents, this can be done easily

within the structure outlined in this design. There are many factors involved in the quality education of youngsters today, and all of these factors must be taken into account in the organization of a school such as the one we are contemplating at present.

Program Design -- An Overview

In this curriculum design, every pupil for each of his four years in the middle school, must take work in each of six areas. These areas include the skills area, the concepts area, the area of exploratory vocational studies, the area of exploratory arts studies, the area of physical activities, and the area of self-learning activities. Within each of these large areas, I suggest numerous offerings on each of the four grade levels, so that the interests and talents of each child may be properly challenged and met. The only grade level on which there is a difference is the fifth grade. I suggest that half of the school day for each fifth-grade child be spent in a self-contained classroom. Coming from the primary school, in which he has had to relate to only one teacher and only one group of youngsters, the child deserves an opportunity for a transitional period during which he becomes accustomed to the change in structure that exists in the middle school. Before he moves into a totally departmentalized and, to a large extent, individualized program situation, he should spend his first year in a program that is only partially so. Thus, in the fifth grade, each child will spend half of his day in the departmentalized and individualized program which he will enter to a fuller extent in subsequent years. After this initial experience during which time he still has the security that comes from the self-contained classroom and the close relationship

with one teacher, he will be better able to move into the total program of the middle school.

During his first and, to an extent, his second year in the middle school, each child will have his course offerings largely prescribed for him. It is during the sixth grade, and to a much larger degree, during the seventh and eighth grades, that the child will find an opportunity to differentiate his areas of exploration, according to his talents, abilities, and interests. Thus, the offerings available in each of the six large categories will be less differentiated in the fifth and sixth grades than they become in the seventh and eighth grades. Concomitantly, it is partially in the sixth grade and much more so in the seventh and eighth grades, that the child will be able to mix with youngsters from other Schools and other Houses. In effect, the child entering the middle school stays close to his home School and moves out from it as he develops a sense of security and sense of awareness of all that is open to him in the entire Middle School Complex.

Program Design -- Details

1. Fifth Grade Program

In the fifth grade, the pupil will spend 50 percent of his time in a self-contained classroom within the School. In this self-contained class, he will study language arts, social sciences, mathematics, and science, with one teacher. The balance of his time will be spent in the large categories, mentioned above, as follows:

a. Skills subjects

Skills subjects to be offered in the fifth grade outside of the self-contained class are foreign language and typewriting.

BUFFALO MIDDLE SCHOOL
Percentage of time spent in categories of course offerings

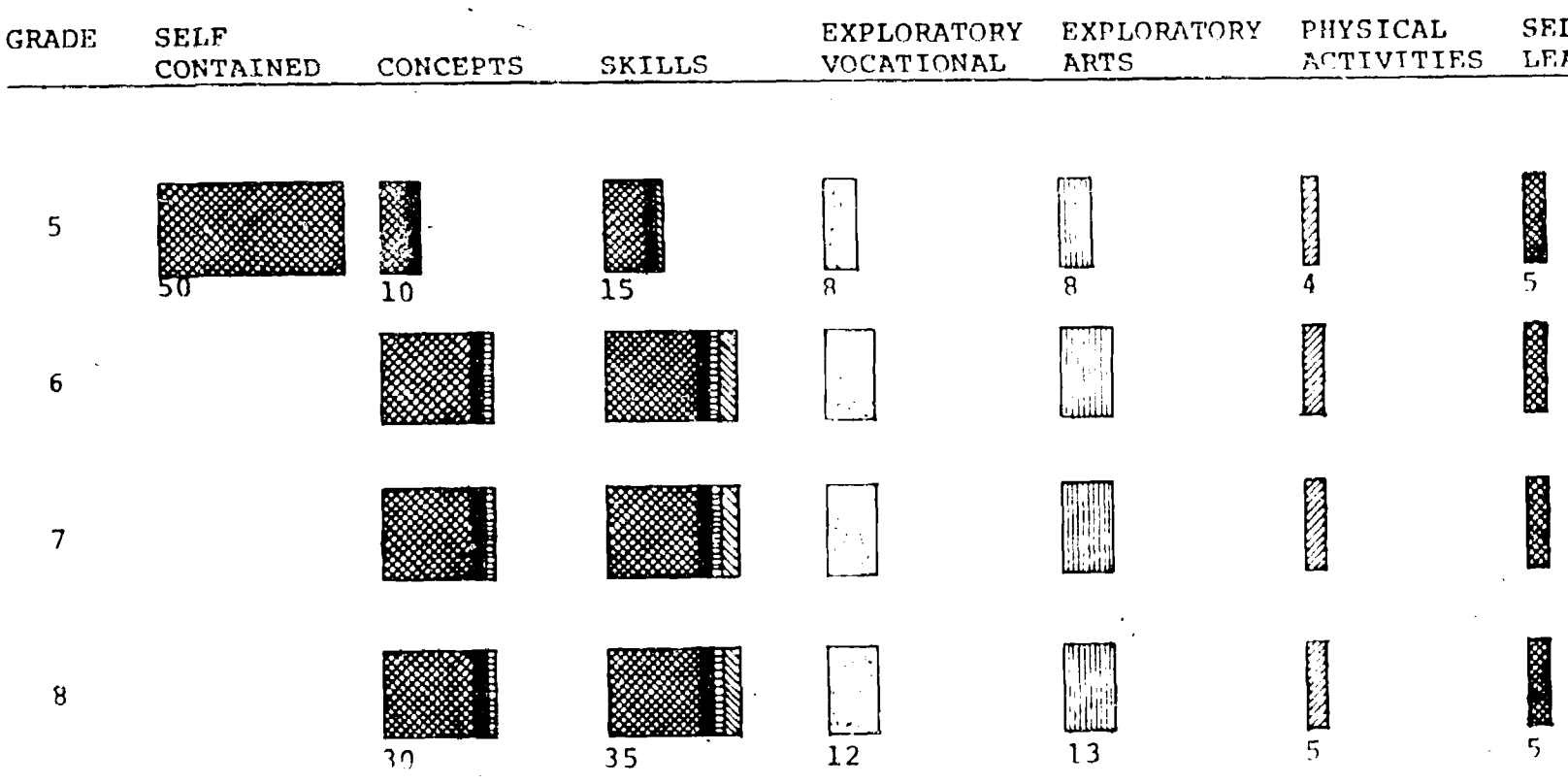


Figure IV,3 -p.44

Typewriting, which is valuable not only as a personal skill, but also because of its relationship to the various language art skills, should be taught in the fifth grade. It should be offered in all subsequent grades for maintenance of skill. Foreign languages are intrinsically valuable and open entirely new areas to the child for his exploration. It is in the study of foreign languages in the fifth grade, that some children will have their first opportunity to mix with children from other Schools, and even from other Houses. It is proposed that ten foreign languages be taught in the Middle School Complex. The foreign languages suggested are Spanish, French, Italian, Russian, Polish, American Indian languages (Senecan), Chinese, German, Latin and Swahili. It is suggested that some of these languages are popular enough so that they will be taught within the School or the House. Other foreign languages will have fewer pupils requesting them within any given House or School, and therefore classes will contain pupils from several Schools.

b. Concepts

A course in the Humanities, "A Study of Man," is to be taught to all pupils outside of the self-contained classroom. This course is visualized as a cross-disciplinary course, built around large concepts such as: "Man has a need to express himself," and "Man has a need for other human beings." Large concepts such as these contain elements of literature, art, music, and other disciplines.

c. Exploratory-Vocational

All children will have their first experience in industrial arts and home economics. In the industrial arts area, it is suggested that facilities be available in woodworking, metalwork, electricity and electronics, and plastics. It is also suggested that in home

economics facilities be available for experiences in cooking, sewing, home nursing and child-care, and interior decoration. It is planned that youngsters will cycle their experience in these areas. It is proposed that each child spend half a school year in one experience, and then change to another experience within the area of industrial arts and/or home economics. Whether boys and girls will have all of the experiences listed will depend upon the predilection of those involved. I suggest that certain experiences be made available to both boys and girls, and others be restricted to one or the other sex. Thus, cooking, for example, has been successfully taught to boys as well as to girls, but child-care and home nursing have not had such successful acceptance on the part of boys. In the course of his four years in the Middle School Complex, every pupil should have had an opportunity to have gained experience in at least four of the industrial arts and home economics areas.

d. Exploratory-Arts

Every pupil will have an experience in instrumental music and in the fundamentals of art. I suggest that each of these introductory courses be a half year in length. Thus, half of the children in the fifth grade might be taking instrumental music while the other half are having their art experience, and then the groups could switch at mid-year, so that in the course of the year all children will have had both experiences. The purpose of the instrumental music experience is not to make polished musicians of all children. Indeed, it is unlikely that most children will gain much facility with an instrument in one-half of one year unless they have had previous experience.

However, the appreciation that comes from having handled a musical instrument himself is one that the child should not miss. It is very valuable for him at the moment and for his future education.

e. Physical Activities

During his fifth year, and in all subsequent years in the middle school, the child should have an opportunity to engage in many organized physical activities. Indoor gymnasium space, swimming pools, and outdoor athletic facilities should be available so that each youngster can have a variety of experiences in this area.

f. Self-Learning Activities

All pupils should be oriented to the Middle School Complex. In addition, all pupils should have intensive work in study habits to enable them to gain the maximum from the opportunities afforded them in the Complex.

These activities are called Self-Learning Activities in the sense that the pupil has an opportunity to learn about himself, his talents and abilities, his interests and aspirations, so that he may begin to think about making future plans for himself in society. It is visualized that the Self-Learning Activities will be conducted by the staff members who are trained in the area of guidance. It has been suggested that facilities and personnel be available so that large-group and small-group sessions may be planned according to the needs of the group and the topic under discussion.

C. Sixth Grade Program

a. Skills

The skills offering in the sixth grade will include: Fundamental Skills -- Language Arts, Developmental Mathematics, Typewriting,

and Foreign Language. No differentiation is assumed in the Language Arts or in the Mathematics course given in the Sixth Grade. These are visualized as developmental courses growing out of the work in the fifth grade and continuing the skills development which had begun in the primary schools. Typewriting is to be given for maintenance of skill and for correlation with the Language Arts being studied. Foreign Language, except in exceptional cases, should be a continuation of the foreign language given in the fifth grade.

b. Concepts

The course offerings in the category of Concepts in the sixth grade are to be in American History, General Science, and Urban Living. The course in Urban Living is seen as one that will include concepts of consumer economics such as analysis of instalment buying costs, study of housing patterns in the city, an exploration of cultural and recreational opportunities which a city should offer its inhabitants, and discussion of the function of city government.

c. Exploratory - Vocational

Pupils will continue their exploratory activities in the areas of industrial arts and home economics.

d. Exploratory - Arts

All pupils will have the opportunity to study one area of the arts in depth. The offerings which are suggested in the field of Art are: Painting and Drawing, Ceramics and Sculpture, General Crafts, and Photography. The offerings which are proposed in the field of music are: Band Instruments, Orchestral Instruments, and the Chorus. In addition, a course in drama, entitled Acting and Directing, and membership in the

Dance Troupe, will be available to those interested. In addition to the one area which each pupil will select to study in depth, he will also select a generalized course in another area of the arts. The offerings available will be Music Appreciation, Art Appreciation, Drama Appreciation, and Appreciation of the Dance.

e. Physical Activities

All pupils will continue to take part in a variety of physical activities.

f. Self-Learning Activities

During the sixth grade, and in subsequent grades of the Middle School, Self-Learning Activities will center around Career Planning, Family Living, Concepts of Psychology, and Individual Activities. It is suggested that these four areas be cycled, so that each individual pupil spends about ten weeks of the school year concentrating his attention on one of the four areas in the sixth grade and in subsequent grades.

3. Seventh and Eighth Grades

a. Skills

In the seventh and eighth grades Foreign Language and Typewriting will be continued as heretofore. In the area of Language Arts, however, differentiation of offerings will take place. Each pupil may choose one of ten course offerings in Language Arts each year. These include: Journalism, Creative Prose Writing, Creative Poetry Writing, Developmental Reading, Public Speaking, Report and Expository Writing, Academic English, Rapid Reading, Playwriting, and Basic Linguistics. It is suggested that the possibility be considered of cycling these offerings for one half-year at a time, so that individual pupils may have the

opportunity to explore more than two of these areas. Similarly, in Mathematics, eight offerings will be available to pupils. These will include: Remedial Mathematics, Basic Mathematics, Algebra, Theory of Arithmetic, Business Mathematics, Geometry, Computer Mathematics, and Mathematical Games. It is visualized that selection would be made in conjunction with the guidance personnel and the parents, in all cases. In Mathematics, for example, it is expected that as many as 40 percent of the pupils would be better served by a continuation of Basic Mathematics in the seventh grade. Thus, those who are fully able to profit from advanced work in Mathematics during the seventh grade would be able to do so, while those who require another year of basic training in mathematics before taking advanced work will also be able to meet their needs.

b. Concepts

During the seventh grade, pupils will have a choice of five areas of the Social Sciences. These will include: Study of Ancient History, History of Latin America and the West Indies, Social History of the United States, the History of Asia and Africa, and the History of Europe. In the eighth grade, five other areas will be available for choice. These will include: A Study of the Problems of Democracy, A Study of Man in Society, A Study of Man through the Ages, A Study of Black History and Culture, and A Study of the Methods of History. In the area of Science,, it is expected that 70 percent of the pupils would be best served by additional work in General Science, while 30 percent will be able to take advanced work in science, namely, Earth Science, Biological Foundation, or Physical Foundation. In the eighth grade, about 30 percent of the pupils will probably be best served by a continuation of General Science, while

the remainder will be able to take the courses listed above, and in addition, courses in Astronomy and Space, Biology, Physical Science and Electronics. In the area of Humanities, ten offerings will be available in both the seventh and eighth grades, including: Studies of American Literature, Great British Writers, Readings of the Short Story, Readings of the Novel, Readings in World Literature, Poetry as Literature, Religions in Man's World, Planning our Cities, Governing our Cities, and Individual Guided Readings. The possibility of cycling these offerings so that pupils may be exposed to more than two of them should be considered.

c. Exploratory - Vocational

Experiences in Industrial Arts and Home Economics will continue during the seventh and eighth grades.

d. Exploratory - Art

During the seventh and eighth grades, a full scale of offerings in Music, Art, Drama, and the Dance will be available. These will include, in addition to courses already mentioned: Advanced Painting, Graphics, Creative Photography and Film-making, the Motion Picture as Art, a Theater Workshop.

e. Physical Activity

Experiences in all fields of Physical Activities will continue during the seventh and eighth grades.

f. Self-Learning Activities

Self-Learning Activities in the areas mentioned will continue during the seventh and eighth grades.

The educational program described is a practical one based on the same pupil-teacher ratio now in force in the Fillmore Middle School. The program is proposed as a basis for community discussion and decision. It suggests how much higher a quality of education can be provided without additional cost through the economies of size. This new potential for high quality education in Buffalo has been made possible by the urgent need to rebuild the schools and to end segregation. The citizens in the community, the parents of the children, and the children themselves will want to have a strong voice in debating and deciding the final program to be followed. It is hoped that this design will encourage such discussion and debate.

Implementing the Program

Personnel: Buffalo has a shortage of experienced well-trained teachers and administrators. It is to be expected that a program similar to this design will attract high caliber personnel because of the challenge it provides to any educator. Because of the depth to which the teacher will have to know his subject, it will encourage those less well-trained to continue their studies. In addition to administrators, master teachers, and teachers of all kinds, there will be a great need for paraprofessionals to serve many functions. This should be taken into account in planning for the Complex. Paraprofessionals should not only relieve teachers of non-teaching chores, but should also assist in the actual instruction of pupils.

Facilities: Some of the facilities should be in each of the separate Houses but many, for financial reasons, may best be built as central facilities. This includes such expensive facilities as the

library, the learning centers, special science facilities (planetariums and laboratories), closed circuit TV and audio-visual production centers, mathematics laboratories, gymnasiums, athletic and swimming facilities.

Administration: Because of the subschool form of the Complex a natural administrative ladder is apparent -- from School to House to Complex. This study recommends that parents and community be directly involved in the operations of the Complex at each level, and the architectural design accordingly provides space for group meetings at each of these levels. It is suggested that the entire Complex be governed by a Board representative of the communities served, the parents and the children. The administrative staff can be formed at each level by persons selected in consultation with the teachers and paraprofessionals serving at that level under a House Director. The six House Directors and the Master Teachers in charge of each of the central facilities, who comprise the next administrative level, appoint the committees needed to administer the special functions of the Complex, such as curriculum, guidance, etc.

The Complex offers the possibility of functional decentralization of the school system. The Supervisor or Principal of the Complex can be appointed by the governing body to achieve close rapport between the Complex and the communities served.

Community Service: All the facilities of the Complex should be open to the public throughout the week and the year. Programs operated by a community committee can make available to the communities regular education, day or evening, use of the library and resource center, manpower training in the shops, recreation in the athletic facilities,

creative work in the arts facilities and health care in the health facility. Meeting places and a place to do parent or community work are provided in the parent pavilion. In turn, the students in the social science programs can perform community service, maintain an information center, assist at the child care center that will tend the children of the adults working at or visiting the Complex. It is hoped that these ideas may suggest many other or different ways of utilizing the outstanding Complex facilities to promote the basic objective of community involvement and service.

COURSE OFFERINGS[a]
FILLMORE MIDDLE SCHOOL COMPLEX

Curriculum Area and Course	Grades 5	6	7	8
SKILLS				
Self-contained Lang.Arts, Math, Social Science, Science	*			
1. Language Arts				
Fundamental skills		*		
Journalism			*	*
Creative Writing-Prose			*	*
Creative Writing-Poetry			*	*
Developmental Reading			*	*
Public Speaking			*	*
Report and Exposition Writing				
Academic English			*	*
Rapid Reading			*	*
Playwriting			*	*
Basic Linguistics			*	*
2. Mathematics				
Developmental		*		
Remedial			*	*
Basic Math			*	*
Algebra			*	*
Arith. Theory			*	*
Business Math			*	*
Geometry			*	*
Computer Math			*	*
Mathematical Games			*	*
3. Typewriting	*	*	*	*
4. Foreign Language	*	*	*	*
Spanish	*	*	*	*
French	*	*	*	*
Italian	*	*	*	*
Polish	*	*	*	*
Russian	*	*	*	*
Am. Ind. Lang.	*	*	*	*
Chinese	*	*	*	*
German	*	*	*	*
Latin	*	*	*	*
Swahili	*	*	*	*

Curriculum Offering and Course	Grades 5	6	7	8
CONCEPTS				
1. History				
American History		*	*	*
Ancient History			*	*
History of Latin America and the West Indies			*	*
Social History of the U.S.			*	*
History of Asia and Africa			*	*
History of Europe			*	*
Problems of Democracy				*
Man in Society (Sociol.)				*
Man Through the Ages (Anthro.)				*
Black History and Culture				*
Methods of History				*
2. Science				
General Science		*	*	*
Earth Science			*	*
Biological Founda.			*	*
Physical Founda.			*	*
Astronomy and Space				*
Biology				*
Physical Science				*
Electronics				*
3. Humanities				
Study of Man	*	*	*	*
Amer. Literature			*	*
Great Brit.Writers			*	*
Reading the Short Story			*	*
Reading the Novel			*	*
Rdg.World Litera.			*	*
Poetry as Litera.			*	*
Religion in Man's World			*	*
Guided Reading			*	*
4. Urban Living				
Living in the City	*		*	*
Planning our Cities	*		*	*
Governing our Cities	*		*	*

Course Offerings (Continued)

Curriculum Area and Course	Grades 5	6	7	8
EXPLORATORY - VOC.				
1. Industrial Arts	*	*	*	*
Woodworking	*	*	*	*
Metalwork	*	*	*	*
Electricity	*	*	*	*
Printing	*	*	*	*
Plastics	*	*	*	*
2. Home Economics	*	*	*	*
Cooking	*	*	*	*
Sewing	*	*	*	*
Home Nursing and Child Care	*	*	*	*
Interior Decora.	*	*	*	*
Poise and Beauty Culture	*	*	*	*
EXPLORATORY - ARTS [b]				
1. Art				
Funda. of Art	*			
Painting and Drawing			*	*
Ceramics and Sculpture			*	*
General Crafts			*	*
Photography			*	*
Adv. Painting			*	*
Graphics			*	*
Creative Photog. and Film Making			*	*
Motion Pictures as Art			*	*
2. Music				
General Music			*	*
Band			*	*
Orchestral Instruments			*	*
Chorus			*	*
Music Appreciation			*	*
3. Drama				
Drama Apprec.			*	*
Acting and Directing			*	*
Theater Workshop			*	*
4. Dance				
Interpretive Dance			*	*
Appreciation of the Dance			*	*
Dance Troupe			*	*

Curriculum Area and Course	Grades 5	6	7	8
PHYSICAL ACTIVITIES	*	*	*	*
Indoor Gym	*	*	*	*
Outdoor	*	*	*	*
Swimming	*	*	*	*
SELF-LEARNING				
Orientation to Complex and Study Habits	*			
Career Plans		*	*	*
Family Living		*	*	*
Gen'l Psychology		*	*	*
Individual Activities		*	*	*

[a] Students in each grade are provided a choice of those courses checked for that grade. All grades must cover all six curriculum areas.

[b] Sixth-grade pupils have a choice of one in-depth and one appreciation course.

CHAPTER V

THE PLAN: NEW MIDDLE SCHOOL COMPLEXES FOR BUFFALO

Size and Character of the Middle School Complexes

This study recommends that all the fifth to eighth grade pupils of Buffalo attend six Middle School Complexes ranging in size from 3,000 to 3,600 students. One of the six, on a small site, will serve about 2,000 students.

These complexes will be organized into "houses" of about 600 children each. A House will contain four "schools," each with 150 children, one School for each of the four grades in the House. The entire complex will be under a single administration and governing board, with a unified educational program described in Chapter IV. This program is based on the concept of individual progress, and is designed so that each child may take full advantage of the many subjects taught in the Complex and in the associated high schools. It is designed also to provide maximum utilization of the talents of specialized staff. A guidance counsellor will be assigned to each School of 150 children to permit and encourage the closest individual attention to each child. Heterogeneous grouping in these Schools and Houses will be the rule, assuring equality of opportunity and full integration within each unit.

A Complex will serve as well the adults of the communities in its zone. It will be an all-week, all-year center providing education, recreation, training and service to its community.

There are about 21,700 children in the first to fourth grades in Buffalo's public schools at present. Of these 41 percent are black, two percent have Spanish surnames, and one percent are American Indians. These are the children who will be in the middle school years by 1974 when some of the proposed complexes will open their doors.

Not all these children will go to the Buffalo middle schools, however. Two Metropolitan Educational Parks will attract many children of middle school years from Buffalo, since the schools will have optional attendance. This study has used the estimate that 16 percent of Buffalo's eligible children will elect to go to these Metropolitan Parks. In planning for Buffalo's Middle School Complexes, this percentage of 16 has been deducted from the total expected enrollment in the Buffalo schools. If the Parks are not ready before the Middle School Complexes are built, these additional 3,400 children can be accommodated by adding one House to each of the six complexes.

Criteria Used to Select the Sites

The seven criteria used in this study, discussed more fully in Chapter I of this report, were:

1. Use existing school plants wherever possible.
2. Achieve racial balance in each Complex close to 41 percent black, the actual composition of the first through fourth grades now in Buffalo's schools.
3. Avoid wide disparity in the racial compositions of the six middle schools.
4. Equalize travel time for all children in the zone served.
5. Select sites of a public nature, not identified with any one ethnic group.
6. Seek proximity to public or private cultural, recreational, or educational facilities.
7. Avoid relocation of families, businesses or industry.

The sites chosen and the feeder pattern for each Complex are shown on Map V-I. The schools that will feed each of the six Complexes are given in Table V-I and its accompanying Detail Tables. Not all the sites fulfill the criteria equally well, but across the city good sites

were found. The most success was achieved in finding sites that required no relocation. The desired size of school and a satisfactory racial balance were achieved. Equality of travel time was achieved for the city as a whole, but not equally for each of the complexes. In almost every case an area was found that is of a civic nature and that offers challenging opportunities for combining the education in the school with a nearby educational, recreational, or civic institution.

Sites Proposed and Feeder Patterns

1. Fillmore Middle School Complex

This school for 3,400 children will use the existing Fillmore Junior High School, building additional facilities on the vacant adjoining land. Chapter VI describes in detail the architectural concepts suggested for this school. Not every complex need have the same buildings or central facilities. The design prepared is specific for the site chosen.

The ethnic composition of this Complex will be 60 percent white and 40 percent black. (Fillmore today is 55 percent black.) The schools that will feed the new Fillmore Complex are listed on Table V-1.1. Both Seneca and Burgard vocational high schools adjoin the enlarged Fillmore site. Possibilities should be explored for sharing some of their excellent programs and for making available to them some of the resources of the new Complex.

2. Triangle Middle School Complex (Table V-1.2)

This will be a new construction adjoining the new Eastside High School wherever it is finally scheduled to be built; for example at the Williams Street site, on a large tract of vacant land. The triangular shape of this site gives the Complex this name. Unified administratively and educationally with the new high school, this Complex could become

the high school and of the Middle School Complex should be planned together, giving this Complex high priorty, so that full advantage can be taken of the opportunity to provide high-cost central facilities such as a computer installation, a skating-rink, a fully equipped science building, and a stadium that can be used by both groups of pupils.

An additional factor in early construction of this facility is that it will permit the closing of Genessee-Humboldt as a junior high school and its conversion to an early childhood, community-service center described more fully further to this chapter.

The composition of this Complex will be about 47 percent black, with a total student body of 3,570 pupils, organized in six Houses.

3. Canal Middle School Complex (Table V-1.3)

The present Southside Junior High School will be converted to a middle school and combined with additional construction on available land north and south of the canal to serve about 3,440 pupils with a racial balance of 38 percent black. The construction of this Complex will permit the closing of Clinton Junior High School (now 99 percent Negro) and its conversion to a community-service, early childhood center. The site of this Complex is not as central as the others. However, the distances are not great from any end of the zone. The fact that an existing facility can be used is a strong recommendation.

4. Erie Middle School Complex (Table V-1.4)

This can be one of the most interesting of the six Complexes

because of its commanding location near the waterfront overlooking the lake and close to the civic center of Buffalo. This entire area is under construction, with a large housing development now being planned that will be served by a new K-4 school.

The complex is to be designed for about 3,200 children, but will enroll only 2,730 at first, leaving room for the children who will be moving into the new housing now planned. It will have an enrollment at the start of 38 percent black children. In addition, it will have nine percent Spanish-surnamed children and four percent of its students will be American Indians. This rich cultural mix can stimulate an especially interesting school program. Additionally, the school can take advantage of its official buildings and distinquished leaders to invigorate its social studies program. In return, the Complex will be a source of civic pride to the downtown area and visitors, shoppers, citizens with business at the City Hall should be encouraged to use its library, resource centers, art centers. The Complex can play an important part in the rejuvenation of Buffalo's center city.

5. Lafayette Middle School Complex (Table V-1.5)

This is the smallest of the Complexes, providing for about 1,760 children, 38 percent black. The site suggested is the present Lafayette High School, which was built in 1901 with an addition in 1921. It was partially reconstructed in 1958 and should be replaced by 1973. The

present high school population at Lafayette H.S. can be distributed to the new comprehensive school planned at Main and Devalan and the enlarged Grover Cleveland High School now in the Board of Education's capital plan.

Although the site is small, it was considered seriously because of the new construction close by of P.S. 45, permitting the combination of a primary school and a middle school on adjoining sites. Many possibilities for cooperation can be found; for example, the use of middle school pupils in the prekindergarten program that can be set up in P.S. 45. Similarly, since tutoring of young children by older children has been found to be a very sucessful way of improving the reading skills of the tutor even more than of the tutored, such a cooperative program can be made a regular part of the activities of children in both schools. Familiarity with the middle school will greatly help the younger children who can look forward to entering there at the fifth grade.

6. Woodlawn-McKinley-West Hertel Middle School Complex (table V-1.6)

The vacant land adjoining the new McKinley High School in close proximity to the State University College at Buffalo provides a uniquely excellent site for a Middle School Complex that is associated educationally and administratively with both of these outstanding schools. There are several important issues involved in a choice of site in this area that the community should consider. The existence of a new middle school on a site a short distance away to the north (West Hertel) and of the Woodlawn Junior High School, a new structure, 99 percent segregated black, not too distant to the southeast is further complicated by the fact that the black community has expressed a strong

desire that the new replacement for Fosdick Vocational High at Main and Devalan Streets be made a coeducational comprehensive high school of the first quality.

There are three possibile alternatives this study would like to suggest for community discussion:

First, that the new structure at the State University College site be combined with the nearby West Hertel School as one dual-campus complex, the major central facilities to be built at the new site, with shuttle buses providing ready transportation between the two sites. Woodlawn Junior High School would become a community-service, early childhood center including a program of elementary school education for adults during the day, a well-baby clinic, a health center for diagnostic and preventive medical care for the children and the community, a welfare office, dental clinic, etc. An after-school center for children of working parents, a community library-resource center, and perhaps a small farm-zoo for young children can be some of the elements the community might wish to see in such a facility. The fifth to eighth graders would attend the middle school at the State College-West Hertel Complex.

Second, that all three campuses be united into one Complex, i.e., West Hertel, the State College (McKinley High School) site and Woodlawn, despite the distances involved. One educationally interesting way to accomplish this has been proposed in several other cities. The fifth graders would stay in the school to which they are assigned. The sixth, seventh, and eighth graders would spend a third of each semester in one building, then travel with their whole group to the next, etc. The concept involved is to make each of the three centers a specialized

institute, e.g., Woodlawn might be a Language Arts institute specializing in that curriculum, including foreign languages and certain of the allied vocations such as printing (newspaper publication) and radio and electronics (for a radio or closed circuit TV station). The McKinley, State College site could well be the Science and Technology Institute to take advantage of the facilities at McKinley High School, and the West Hertel campus could become the Arts Institute for music, art, theatre, and the dance. Each of the Institutes would teach the basic skills and the basic skills teachers would move with their classes. The specialist teachers would remain in the Institutes that carry their subject, teaching different classes each third semester.

The College may find it a valuable addition to its teacher-training program to participate actively in developing this type of Complex and to staff the centers or institutes with some of their specialist college instructors or graduate students. The advantages are clear because the new complex would take the place of two small, segregated schools, without depriving either the black or the white community of local modern facilities.

A third alternative is to keep the three-campus complex with a single grade at each school site, under one administration and using the central Mc-Kinley-College site as a central facility serving all three. The fifth grade would be retained in each of the three campuses since they are not scheduled to have departmentalization.

There are shortcomings and advantages to each of these plans. The first plan, i.e., to convert Woodlawn to an early childhood, community-service center and send all the children to the two-campus complex ignores the fact that a new comprehensive high school will be constructed

near Woodlawn, making middle school education there potentially more significant. The other two plans require more transportation of children, though the distances are short. Essentially the decision will have to be made on the basis of the desire of the Woodlawn community. It should be their decision as to whether they wish to have their school become an early childhood center or to retain the older children in a Middle School Complex allied with the other campuses.

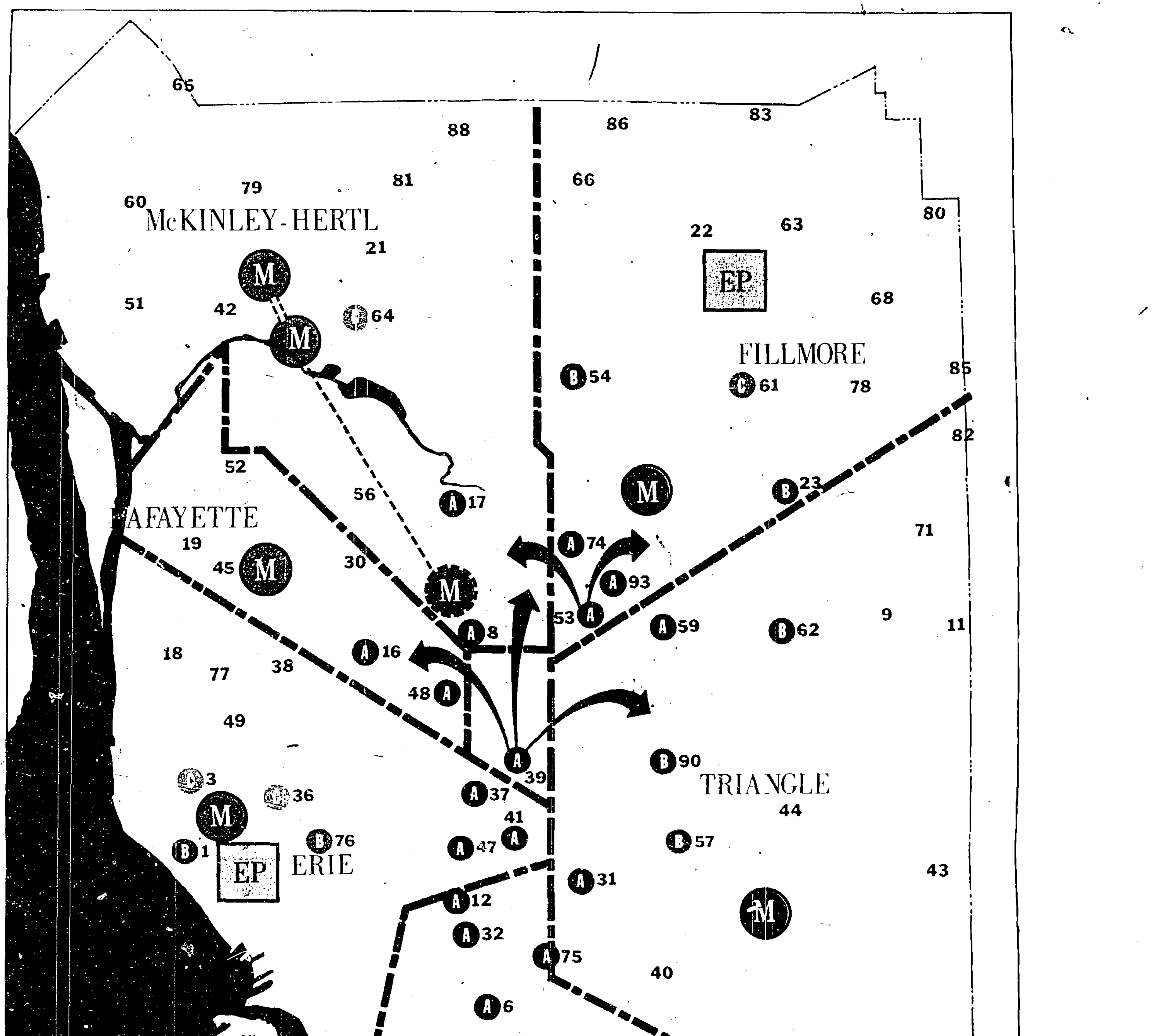
The zone indicated for this area would result in an enrollment of 3,400 children of whom 43 percent are black.

Effect of the Plan on Existing Middle and Junior High Schools

Three of the present six junior high or middle schools of Buffalo are retained as part of the proposed complexes. The Genesee-Humboldt and the Clinton Junior High Schools will be converted to community-service, early education centers. Woodlawn, too, in the first of the three alternatives discussed above, would become such a community center.

Genesee-Humboldt is directly across the street from old P.S. 62. It is recommended that this school be demolished and a pre-kindergarten, day care, and kindergarten center be constructed on its site as part of the Genesee-Humboldt center. The Genesee building itself would be converted to first to fourth grade, plus special early childhood facilities such as wading pools, a children's library of books, records, films and the like.

Clinton Junior High should be demolished at an early date and a similar center developed at the site. The new J.F. Kennedy community center that is nearby and the Academy program already in progress make this a logical next step. The community should participate actively in deciding the types of services that should be included in such a center in addition to the schooling facilities themselves.



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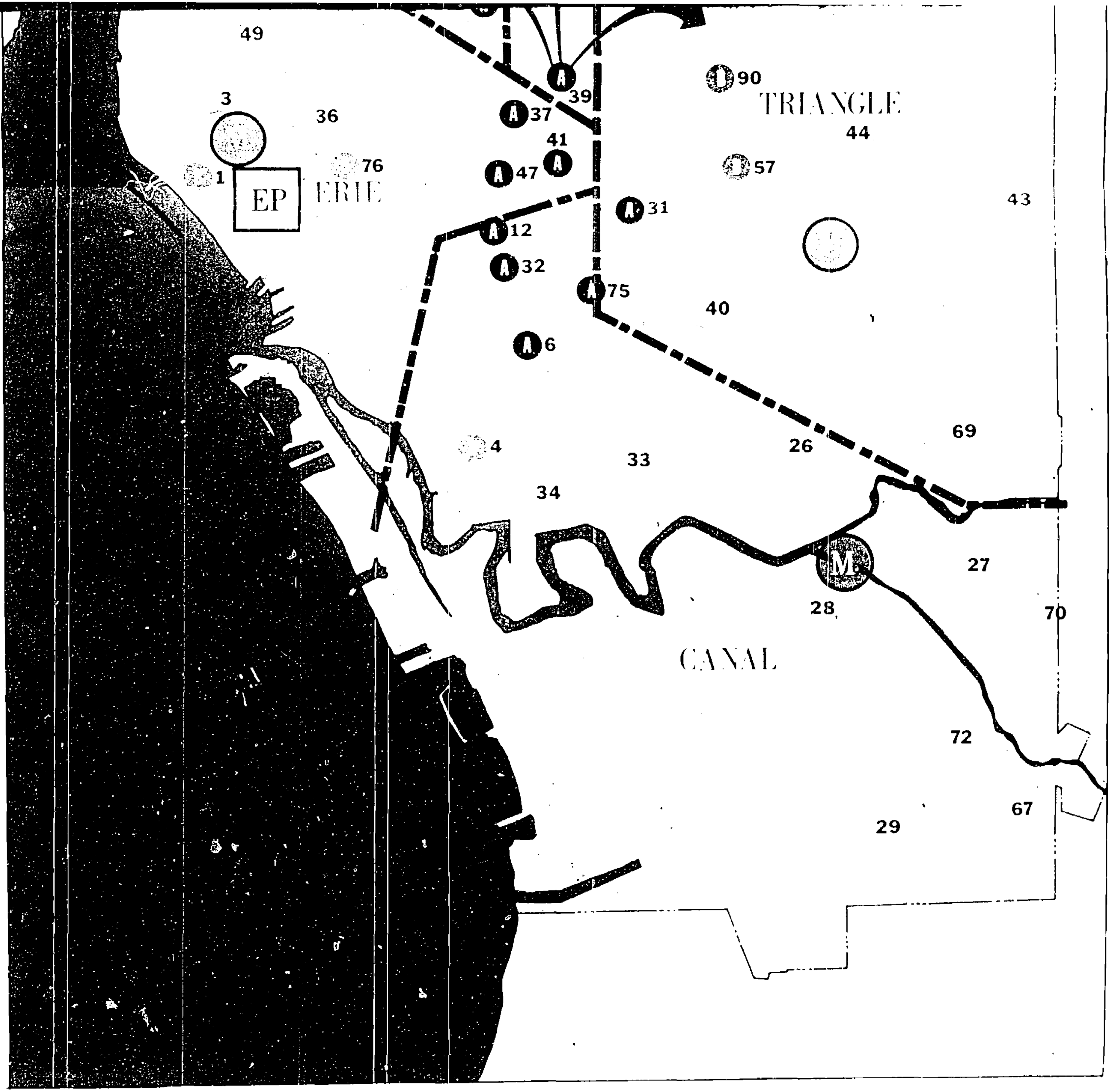

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TABLE V-1

SUMMARY

ENROLLMENTS, FEEDER PATTERNS[1], AND ETHNIC COMPOSITION OF MIDDLE SCHOOLS PROPOSED FOR BUFFALO, N.Y.

MIDDLE SCHOOL COMPLEX	Enrollment, grades 1-4, Oct. 1969				Percent of total			
	Total	Negro	S.S.A.	Am. In. [2]	Total	Negro	S.S.A.	Am.In.
1. FILLMORE	3,400	1,370	10	-	100%	40%	-	-
2. TRIANGLE	3,570	1,670	10	-	100	47	-	-
3. CANAL	3,440	1,300	100	-	100	38	3	-
4. ERIE	2,730	1,020	240	110	100	38	9	4
5. LAFAYETTE	1,760	670	-	10	100	38	-	1
6. HERTEL-McK. WOODLAWN	3,400	1,470	30	10	100	43	1	-
TOTALS	18,300	7,500	390	130	100%	41%	2%	1%

GRAND TOTAL

Total enrollment in Grades 1-4, October 1969	21,700
Expected to elect to go the Metropolitan Educational Parks (16% of total)	- 3,400
Enrollment in new Buffalo Middle School Complexes	18,300

1/ Detail Tables V-1 show the individual elementary schools that will feed to each Complex. All enrollment figures are rounded to nearest 10 from totals given on accompanying Detail Tables V-1.

2/ S.S.A. stands for Spanish-surnamed Americans. Am. In. stands for American Indians. These are the ethnic categories in the State Ethnic Census.

TABLE V-1.1

DETAIL: TO FILLMORE MIDDLE SCHOOL COMPLEX

ENROLLMENTS, FEEDER PATTERNS, AND ETHNIC COMPOSITION

Feeder school	Enrollment* Grades 1-4, Oct. 1969 Total	Negro	S.S.A.	Am. In.	
# 54 (½)	250	130	3	-	
74	450	440	-	-	
53 (½)	350	340	-	-	
93	150	150	-	-	
61	450	160	-	-	
23	500	270	5	-	
66	300	10	-	-	
36	150	10	-	-	
83	100	-	1	-	
63	250	10	-	-	
22	150	20			
80	200	10	-	-	
68	250	20	-	-	
78	300	30	-	-	
85	200	30	-	-	
TOTALS	4,050	1,630	9	0	
Less 16%	648	261	1	0	to go to M.E.P.
Net totals	3,402	1,369	8	0	
Percent of enrollment	100.0%	40.2%	0.2%	0.0%	

*Total figures are rounded to nearest 50; Negro, to the nearest 10.

COMMENT

This Complex uses the existing Fillmore Middle School building and enlarged it using adjoining vacant land. (See Architectural Plan, Chapter VI.). The enrollment is somewhat less than the space planned (3600) permitting growth.

TABLE V-1.2

DETAIL: TRIANGLE MIDDLE SCHOOL COMPLEX

ENROLLMENTS, FEEDER PATTERNS, AND ETHNIC COMPOSITION

Feeder school	Enrollment, *Grades 1-4, Oct. 1969			
	Total	Negro	S.S.A.	Am.In.
# 59	550	550	-	-
90	350	270	--	-
39 (1/3)	200	200	-	-
57	200	100	2	-
62	450	240	5	-
31	500	490	-	-
71	200	10	-	-
9	250	10	3	5
11	200	-	-	-
44	200	10	-	-
43	450	10	-	-
40	150	10	3	1
69	250	0	-	-
82	300	70	-	-
TOTALS	4,250	1,990	13	6
Less 16%	680	318	2	1
Net Totals	3,570	1,672	11	5
Percent of enrollment	100.0%	46.8%	0.3%	0.1%

*Total figures are rounded to nearest 50; Negro, to nearest 10.

COMMENT

This complex is proposed to adjoin the new Eastside High School scheduled for construction on the Williams Street site. It is called Triangle because of the shape of the large site it will occupy. It is recommended that the High School and the Middle School Complex be under a unified administration and educational program, serving as the core of a Buffalo City Educational Park and permitting continuous progress and enriched education from the 5th through the 12th grades. All facilities of the high school and of the middle school can be shared where appropriate, reducing costs and expanding educational opportunity.

TABLE V-1.3

DETAIL: CANAL MIDDLE SCHOOL COMPLEX
ENROLLMENTS, FEEDER PATTERNS, AND ETHNIC COMPOSITION

	Enrollment,* Grades 1-4, Oct. 1969			
Feeder School	Total	Negro	S.S.A.	Am. In.
#32	250	240	--	--
75	300	300	--	--
6	500	480	25	--
4	350	250	42	--
12	150	150	--	--
27	250	--	--	--
34	200	20	8	--
33	300	60	6	3
28	400	10	12	--
26	300	40	6	3
72	350	--	--	--
29	300	--	12	--
67	200	--	--	--
70	250	--	3	--
TOTALS	4,100	1,550	114	6
Less 16%	656	248	18	1
Net Totals	3,444	1,302	96	5
Percent of Enrollment	100.0%	37.8%	2.8%	0.1%

*Total figures are rounded to nearest 50; Negro, to nearest 10.

COMMENT

This Complex uses the existing Southside Junior High School building, expanding into adjoining land. The opening of this Complex will permit the closing of Clinton J.H.S. It is recommended that Clinton be converted to a community-service, early childhood center, pre-K to fourth grade, governed locally.

TABLE V-1.4

DETAIL: ERIE MIDDLE SCHOOL COMPLEX
ENROLLMENTS, FEEDER PATTERNS, AND ETHNIC COMPOSITION

Feeder School	Enrollment,* Grades 1-4, Oct. 1969			
	Total	Negro	S. S. A.	Am. In.
41	350	330	-	-
47	200	200	-	-
37	550	520	-	-
76	250	10	30	30
1	350	70	91	17
36	250	10	47	43
3	300	50	48	6
49	150	-	5	6
38	300	20	3	12
77	250	-	7	7
18	300	10	3	6
TOTALS	3,250	1,220	284	127
Less 16%	520	195	45	20
Net totals	2,730	1,025	239	107
Percent of enrollment	100.0%	37.5%	8.8%	3.9%

*Total figures are rounded to nearest 50; Negro, to nearest 10.

COMMENT

The site for this complex adjoins the new waterfront housing development area close to the downtown Civic Center. This area is ideally suited to a Complex because it is physically commanding and educationally can be related to city government studies. If the Metropolitan Educational Park planned for this area is built, Erie Complex will become a part of it.

The enrollment is deliberately lower than the others because about 500 more pupils will come from the new housing planned.

TABLE V-1.5

DETAIL: LAFAYETTE MIDDLE SCHOOL COMPLEX
ENROLLMENTS, FEEDER PATTERNS, AND ETHNIC COMPOSITION

Feeder School	Enrollment,* Grades 1-4, Oct. 1969			
	Total	Negro	S. S. A.	Am. In.
19	350	20	-	3
45	400	-	-	4
30	150	10	-	-
52	400	-	-	4
16	200	170	6	2
48	400	400	-	-
39 (1/3)	200	200	-	-
TOTALS	2,100	800	6	13
Less 16%	336	128	1	2
Net totals	1,764	672	5	11
Percent of enrollment	100.0%	38.1%	0.3%	0.6%

*Total figures are rounded to the nearest 50; Negro, to nearest 10.

COMMENT

The site selected for this Complex is the present Lafayette High School site. This high school is due to be replaced. The Complex is kept small because of the limited vacant land nearby on which to build. Educationally, this Complex can combine with P.S. 45, now under construction nearby. This will offer an opportunity to provide close relations between the two. Eg: The pre-kindergarten at P.S. 45 can be the field work for the home economics course at Lafayette Middle School Complex.

TABLE V-1.6

DETAIL: HERTEL-McKINLEY-WOODLAWN MIDDLE SCHOOL COMPLEX
ENROLLMENTS, FEEDER PATTERNS AND ETHNIC COMPOSITION

Feeder School	Enrollment,* Grades 1-4, Oct. 1969 Total	Negro	S. S. A.	Am. In.
65	250	10	3	-
88	100	-	2	-
81	200	-	-	-
60	450	-	5	-
79	300	30	9	3
21	150	10	-	-
51	250	-	3	3
42	150	-	11	1
56	250	50	3	-
53 ($\frac{1}{2}$)	350	340	-	-
54 ($\frac{1}{2}$)	250	130	3	-
64	200	30	-	-
17	350	350	-	-
8	600	600	-	-
39 (1/3)	200	200	-	-
TOTALS	4,050	1,750	39	7
Less 16%	648	280	6	1
Net totals	3,402	1,470	33	6
Percent of enrollment	100.0%	43.2%	1.0%	0.2%

*Total figures are rounded to the nearest 50; Negro, to the nearest 10.

COMMENT

A site close to the State University College and McKinley High School is suggested for the construction of special facilities to serve a Middle School Complex. Three alternative ways of organizing this Middle School are suggested in the text. Whichever of these three are chosen, the feeder pattern will be the one described in this Table. A new high school to be built at Main and Delavan and two existing intermediate schools (Woodlawn and West Hertel) create special problems and unique opportunities that should be decided by the communities involved.

Effect of the Plan on the High Schools

It is to be expected that the graduates of Buffalo's new middle schools will be better prepared and have higher aspirations for their continuing education than at present. More demands will be made on the high schools, both in curriculum and in facilities and equipment. Nor can continuous progress for the middle school children stop at the eighth grade. The work of the high schools must be closely meshed with the educational program that is developed for the middle schools.

One way to accomplish this with no loss of time is to have the high school personnel participating actively in the planning for both the educational program and the physical facilities of the middle schools.

In the choice of locations for the six Middle School Complexes, proximity to existing high schools was always an important factor. The possibility of future joint educational planning and the present need to plan for the construction of joint facilities were significant considerations in site selections.

We suggest that the Eastside High School be built larger than presently planned, to accommodate about 4,000 children so that it can receive all of the children who will be attending the Triangle Middle School Complex. The size of the new high school is critical, too, in providing for the elimination of the almost total segregation at East High School.

Since the site is very large it will be possible to provide facilities that both the high school and the middle school can share, such as a sports stadium, large playing fields, a computer installation to train the students as well as to do much of the programming, payroll and other business operations of both schools. A TV center and radio transmission studio can be considered for joint vocational training and to enliven the total educational program. Certain non-educational functions, too, can be shared such as a central kitchen where all food is prepared for quick delivery to the cafeterias in the several schools; a central health facility, well staffed and operated in conjunction with the city health department, both for emergency care and for preventive care, and record-keeping for all the children in the high school and middle school. Similarly, delivery of supplies and materials can be centralized for economy and efficiency.

The planning for both schools should be done simultaneously, both the architectural design and the actual construction, to effect maximum economies.

Lafayette High School: We recommend converting or reconstructing this plant to form the new Lafayette Middle School Complex. The pupils now attending Lafayette can be sent to the new comprehensive high school at W. Delavan and Main, and to Grover Cleveland High School, scheduled to be enlarged in the Board's long-range building program.

Seneca Vocational and Bargard Vocational High Schools are in the immediate vicinity of the proposed Fillmore Middle School Complex. Their excellent programs in electronics and aviation should be made accessible to those Fillmore middle school children who are especially interested in these fields. On the other hand, the health, library, arts and

resource centers at Fillmore can be made available to the vocational schools to enrich their academic programs, a goal the State Education Department urged upon the Buffalo school board. Close cooperation between the high schools and the Complex can be rewarding for both groups of pupils.

New McKinley High School adjoins the proposed McKinley-Hertel Middle School Complex. Whichever of the three alternatives suggested for this Complex are adopted, the science and technology concentration in this part of the dual-campus can readily be interwoven with the excellent program at McKinley High School. As in the case of Seneca and Burgard, the academic program at McKinley can be reinforced by the use of the strong library and resource center in the middle school. If construction plans permit, these centers can be located for equally convenient access to both groups of students and, of course, will contain materials appropriate to both age groups.

Hutchinson Technical High School: This excellent school is close to the site of the Erie Middle School Complex and close educational and administrative ties should be formed. Some common facilities -- a planetarium for the study of space, for example -- can serve both. Because of the "showcase" character of the Civic Center area this combination of middle and high school facilities can be a source of pride for all the citizens of Buffalo, and the entire community can share in the use of these facilities.

New Comprehensive High School at Main and Delavan: It is urged that this high school also be made larger than originally planned, to permit the absorption of many of the present Lafayette students, the former Fosdick students, and many of the graduates of the proposed McKinley-Hertel Middle School Complex. The great need for more high school seats emphasized in the State Education Department study can be met most economically and with higher educational potential by larger high schools, rather than by a proliferation of many small, modestly equipped schools.

Effect of the Plan on the Elementary Schools

Two dramatic effects on the elementary schools of the construction of Middle School Complexes are first, the elimination of all overcrowding and second, the opportunity created to close down 23 of the oldest buildings without ever having to rebuild them.

There are 22 elementary schools that are overutilized today: some are extremely overcrowded. The overcrowded K-8 schools will lose four of their nine grades; the K-6 schools will lose their fifth and sixth grades. The result is that many schools situated close together can be consolidated, yielding the oldest schools back to the city for other civic purposes or for sale to the public.

Table V-2 summarizes the suggestions this study makes for such consolidations. In addition to closing down 23 elementary schools, the Plan permits the closing of the old sections or old wings of five other elementary schools. Where needed, these old wings can be replaced by more playground space or community space. Some of them can be given back to the city for resale.

The gains, however, are not only financial. By converting all the elementary schools to primary schools (K-4), attention can be focused on

the needs of these very young children. The Head Start program has been so successful throughout the country that many cities are planning extended pre-kindergarten programs. Many are beginning to respond to the desire of working mothers for good day-care centers for their nursery-school-age children. The additional space created and the new educational emphasis on the early childhood years in these primary schools gives Buffalo the chance to initiate such programs readily. In most cities the greatest difficulty in launching such programs is the lack of space.

The Plan proposes another significant educational advance made possible by the middle school program. That is the development of five large community-service, early childhood centers. Three of these will be housed in converted junior high schools: Genesee-Humbolt (combined with P.S. 62), Clinton (combined with P.S. 6), and Woodlawn (under alternative Plan 1.) The other two would serve predominantly white communities at P.S. 69 and possibly at P.S. 82, now a special 7-8 center. Such a special center will no longer be needed since the Middle School Complex has ample facilities for all kinds of special education for the gifted, the retarded, and the handicapped.

These community-service centers are thought of as community-run facilities that can fill the health, social service, recreation, training, and cultural needs and desires of the local community. Parents can take courses during the day there, leaving their children at the nurseries. Early childhood facilities can include specially equipped playgrounds for the very young, wading pools, gardens the children can tend, possibly a farm-zoo to acquaint city children with the care of domestic animals.

Since in every case existing plant is used, the costs of conversion can be kept minimal. The equipment from the 23 schools that are closed

down can be transferred to these centers and new equipment added through federal and state funds for such pre-school programs. (See Appendix for federal programs related to early childhood.)

Integration below the fifth grade level is not achieved through the consolidations suggested except in four or five of the schools because they retain their local neighborhood character. For this reason this study recommends strongly that the transfer program in the early grades, initiated in 1968, be extended more widely for those parents who wish their children to have an integrated early education. The freeing of space in most of the schools makes such transfers practicable without having to construct the portables that were needed heretofore.

The specific suggestions for how the schools can be consolidated and the students at the 23 closed schools taken care of are given in Detail Tables V-2.1 through 6. The basis for selecting those to be closed was first, the age of the building and second, the ease with which the children could be assigned to other nearby schools without making the zones too large.

No doubt there will be instances where specific factors such as natural obstacles, etc., make the suggestions less satisfactory than alternative ones the Board of Education will devise. These are not finished recommendations since they are only supplementary to the task of this study, i.e., the formulation of a middle school plan. They were developed to test out the general practicability of such consolidations and to make sure that the middle school plan would not adversely affect any of the schools for the primary years.

Finally, this study urges that full advantage be taken of the enlarged opportunity to involve parents and community in the life of the

schools, particularly at early childhood period when the child himself and his parehts as well receive warm comfort from a close relationship between child, parent, and teacher. Paraprofessionals, parent aides and volunteers, older students helping in the day-care center after their own school is out, community people working on the community service programs, senior citizens reading to the children or tutoring, all contribute to the work of the teacher and the self-esteem of the child.

TABLE V-2 SUMMARY

EFFECT OF PLAN ON ELEMENTARY SCHOOLS BY MIDDLE SCHOOL ATTENDANCE AREA

	Closed	Wing closed	No change	New construction or conver.	To receive pupils	To send pupils	Send & receive
ALL AREAS No.of schools total 75	23	5	18	8	20	1	1
FILLMORE							
	PS 93		PS 74		PS 66	Part of	
	61		23		63	PS 53	
	22		86		80		
	68		83		78		
			85		part 54		
TRIANGLE							
	59	PS 43	90	PS 62 - Pre-K	44		
	57		31	82 - K4-Ctr	71		
	40		part 39	69 " "	11		
	9			Gen. Hum. to Early Ch.Ctr.			
CANAL							
	34		27	PS 6 with Clinton	4		
	70		33	Clinton to early	72		
	29		26	ch. ctr.	28		
	32				67		
	75				12		
ERIE	47	37	41		38		PS 49
	77		36		76		
	1				3		
					18		
LAFAYETTE							
	19						
	16		part 39	PS 48 new at	45		
	30			old Fosdick site			
	52						
old	48						
McKINLEY-HERTEL	21	79	65	* Woodlawn to comm.	81	Part 53	
	17	42	88	serv.early ch.ctr.	56		
		51	60				
			64				
			part 54				
			part 39				

* This is based on alternative 1 for Woodlawn. If either of the other two alternatives are adopted the effect on elementaries will be different.

TABLE V-2.1

DETAIL: FILLMORE ATTENDANCE AREA

EFFECT OF PLAN ON ELEMENTARY SCHOOLS IN FILLMORE ATTENDANCE AREA

	PRESENT					PROPOSED				
School	Age Yrs.	Organization	Enrolment, '68	%Minority group	%Utilized	Organization	Enrolment '68	%Minority group	%Utilized	COMM
part PS 54	3	K-6	576	52	n.a.	K-4	575	34	n.a.	Rec.fromPS61
74	43	K-6	899	99	117	K-4	580	99	76	-
part 53	40	K-6	629	99	n.a.	K-4	168	100	n.a.	Send/Woodlawn Early Ch.Cntr.
93	-			100			CLOSE			
61	64	K-5	636	23	98		CLOSE			
23	72	K-5	783	45	90	K-4	646	45	74	-
66	45	K-8	762	2	101	K-4	668	16	89	Rec.fr. 54,22
86	14	K-6	341	8	105	K-4	203	3	63	-
83	37	K-4	215	0	89	K-4	185	0	76	-
63	51	K-8	683	4	110	K-4	438	1	70	Rec.fr.PS22
22	62	K-8	434	3	107	K	CLOSE			
80	39	K-8	587	11	79	K-4	501	6	67	Rec.fr.PS68
68	46	K-8	736	8	105		CLOSE			
78	42	K-8	724	10	93	K-4	566	12	72	Rec.fr.PS61
85	15	K-5	310	10	109	K-4	283	9	99	

TABLE V-2.2

DETAIL: TRIANGLE ATTENDANCE AREA
EFFECT OF PLAN ON ELEMENTARY SCHOOLS IN TRIANGLE AREA

School	Age (Yrs)	PRESENT Org-aniz-ation	PRESENT Enrol-ment '68	PRESENT % Min-ority group	PRESENT % Util-ized	PROPOSED Org-aniz-ation	PROPOSED Enrol-ment '68	PROPOSED % Min-ority group	PROPOSED % Util-ized	COMMENT
P.S. 59	71	K-6	856	96	135		CLOSE			
90	8	K-6	665	63	99	K-4	434	62	64	-
62	62	K-7	885	39	123	PreK,K	241	71	34	CONVERT to PreK, K, as part of Genesee-H Early Ch. Center
57	54	K-6	321	50	92		CLOSE			
31	43	K-8	1079	99	96	K-4	649	99	57	-
44	61	K-8	890	11	86	K-4	686	21	67	Rec.from PS 57,40
Old 40	96	K-6	318	18	74		CLOSE			New 40 should be built to consolidate 57,31,44 into two schools
71	44	K-6	476	13	116	K-4	298	4	85	Rec. from PS 9
9	79	K-6	563	7	261		CLOSE			
11	46	K-8	542	3	87	K-4	543	1	87	Rec. from PS 9
82	38	K-8	793	16	129	K-4	349	16	57	Rebuild as Early Ch. Center
43	67	K-8	1035	2	91	K-4	513	2	45	CLOSE OLD WING
69	46	K-8	694	4	110	K-4	308	1	49	Rebuild as Early Ch. Center
Part 39	New	K-5	348	100	n.a.	K-4	302	100	n.a.	-
Genesee Humboldt	8	7-9				K-4	998	72	95	CONVERT with PS 62 to Comm.Service-Early Ch. Center. Rec. from 59 and 62

TABLE V-2.3

DETAIL: CANAL ATTENDANCE AREA
EFFECT OF PLAN ON ELEMENTARY SCHOOLS IN CANAL ATTENDANCE AREA

	PRESENT					PROPOSED				
School	Age (Yrs)	Org-aniz-ation	Enrol-ment '68	% Min-ority group	% Util-ized	Org-aniz-ation	Enrol-ment '68	% Min-ority group	% Util-ized	COMMENT
P.S. 34	105	K-6	287	13	89		CLOSE			
4	39	K-6	662	78	72	K-4	661	52	72	Receive from PS 34
70	46	K-6	418	1	111		CLOSE			
72	43	K-8	741	1	107	K-4	681	0	99	Receive from PS 70
29	62	K-8	812	3	131		CLOSE			
28	41	K-6	675	11	86	K-4	594	3	76	Receive from PS 29
67	38	K-8	599	1	80	K-4	583	0	78	Receive from PS 29
32	55	K-6	326	99	47		CLOSE			
75	43	K-6	638	100	84		CLOSE			
6	41	K-6	1019	100	76	PreK,K Only - COMBINE WITH CLINTON EARLY CH. CENTER				
27	5	K-6	422	1	130	K-4	292	0	90	-
33	39	K-6	507	19	89	K-4	360	20	64	-
26	15	K-6	465	17	108	K-4	345	13	80	-
12	10	K-6	336	99	78	K-4	345	99	80	Receive from PS 47 (Erie)
CLINTON THS		and PS 6				PreK K-4	1336	92	CONVERT TO EARLY CHILDHOOD CENTER, COMMUNITY SERVICE	

TABLE V-2.4

DETAIL: ERIE ATTENDANCE AREA
EFFECT OF THE PLAN ON THE ELEMENTARY SCHOOLS OF ERIE ATTENDANCE AREA

		PRESENT				PROPOSED			
School	Age (Yrs)	Organization	Enrolment '68	% Minority group	% Utilized	Organization	Enrolment '68	% Minority group	% Utilized	COMMENT
PS 47	79	K-6	436	99	115		CLOSE			
37	34	K-8	1229	99	81	K-4	902	100	59	Receive from PS 47
77	41	K-8	855	9	109		CLOSE			
38	12	K-8	680	8	99	K-4	584	8	85	Receive from PS 77
1	72	K-8	738	51	121		CLOSE			
76	43	K-8	736	51	89	K-4	563	51	68	Receive from PS 1
3	47	K-8	611	29	96	K-4	646	32	101	Receive from PS 1,3
49	8	K-4	203	5	n.a.	K-4	177	6	n.a.	Rec. from 77; send to 3
41	61	K-6	605	99	140	K-4	459	98	106	-
18	28	K-6	574	14	73	K-4	768	6	98	Rec. from PS 19
36	11	K-6	492	41	107	K-4	381	39	83	-

TABLE V-2.5

DETAIL: LAFAYETTE ATTENDANCE AREA
EFFECT OF THE PLAN ON THE ELEMENTARY SCHOOLS OF LAFAYETTE ATTENDANCE AREA

School	Age (Yrs)	PRESENT Organization	PRESENT Enrollment '68	PRESENT % Minority group	PRESENT % Utilized	PROPOSED Organization	PROPOSED Enrollment '68	PROPOSED % Minority group	PROPOSED % Utilized	COMMENT
PS 48	77	K-6	686	98	79	K-4	563	97	CLOSE OLD BLDG.	BUILD NEW ON FOSDICK SITE
16	69	K-6	366	90	114		CLOSE			
30	73	K-6	243	10	66		CLOSE			
52	74	K-8	928	0	88		CLOSE			
19	69	K-8	856	9	103		CLOSE			
[illegible]	80	K-8	900	3	75	K-4	1229	20	102	Under construction - to receive from 16,30,52,19
Part 39	83	K-5	209	99	n.a.	K-4	179	100	n.a.	Under construction. Note: This enrollment is 1/3 total: the other 2/3 go to different attendance areas.

TABLE V-2.6

DETAIL: McKINLEY-W.HERTEL ATTENDANCE AREA

EFFECT OF THE PLAN ON THE ELEMENTARY SCHOOLS OF McK-HERTEL ATTENDANCE AREA*

	School	Age-yrs.	Org-ani-ation	Enrol-ment, '68	% Min-ority group	% Util-ized	Org-aniz-ation	Enrol-ment, '68	% Min-ority group	% Util-ized	COMMENTS
PS	65	46	K-8	626	4	101	K-4	321	0	52	To be combined with PS 60 at a later date
	88	11	K-4	170	3	n.a.	K-4	170	2	n.a.	-
	31	40	K-8	872	3	115	K-4	504	3	66	Receive from PS 21
	60	71	K-8	1007	2	99	K-4	549	0	54	Combine with 65 -later date
	79	42	K-8	715	12	83	K-4	360	7	42	CLOSE OLD SECTION: Use playground and old section for Middle School expansion
	21	65	K-8	434	8	115		CLOSE			
	51	74	K-8	680	5	84	K-4	331	0	41	CLOSE OLD WING: INCREASE playground size
	42	53	K-8	509	9	45	K-4	191	3	17	CLOSE OLD SECTION
	56	59	K-8	639	16	95	K-4	505	8	75	Rec. from PS 52-Lafayette area
part	53	40	K-6	505	100	n.a.	K-4	Send this part of 53 to New Woodland Early Ch. Center			
part	54	3	K-6	162	52	n.a.	K-4	127	100	n.a.	This part stays at 54
	64	47	K-8	461	26	90	K-4	225	22	74	-
	17	30	K-6	704	99	90		CLOSE			
	8	49	K-6	1106	100	91	K-4	776	100	64	-
part	39	83	K-5	359	99	n.a.	K-4	303	100	n.a.	New Building under constr.
WOODLAWN J.H.S.		7-9		1481			K-4	1302	CONVERTED TO EARLY CH. CTR Rec. children from P.S. 53, 93 and 17		

*This plan considers only the first of three alternatives for Woodlawn J.H.S. given in the text. If either of the other two alternatives are decided upon, the effect on the elementaries will be different.

CHAPTER VI

FILLMORE MIDDLE SCHOOL COMPLEX: An Architectural Study

By Berman, Roberts & Scofidio, Architects

The architectural study took as its starting point the educational program developed by Irving Kamil in Chapter IV. Throughout the design of the Fillmore Complex both the philosophy of the educational program and the course offerings themselves were the guiding factors. Units of time were assigned to each activity listed in the program and these time units were then translated into units of space to determine the size of the areas required to fulfill the educational program.

The Fillmore district was selected for detailed study because it presents architectural problems that are fairly typical of the other sites chosen and because of the size of the enrollment expected in the new Complex. Further, the new Fillmore Complex uses the existing Fillmore building. Solutions found for how to convert the old building and tie it in with the total Complex will be applicable to the other two Complexes which also use older structures.

The Schematic Design

The new Middle School Complex is organized around three basic zones:

1. Classroom area
2. Social area
3. Shared facilities area

These three areas permit students to relate to different sizes and types of groups: small intimate groups in the classroom area, a large general group in the social area and a special-interest group in the shared facilities. The individual student on the average will spend most of his time within the classroom zone. Here he will work with the small group of

150 students who make up his individual School. This group in turn relates to the larger House group of 600 pupils. Within this House orbit, the individual pupil makes his new friends, schedules his program, and receives his administrative guidance and help.

An investigation of the various grouping possibilities indicated that there are economies as well as educational advantages to grouping the Houses in pairs. By doing this, still another group relationship can be achieved, this time consisting of the 1,200 pupils in the two Houses paired. However, this larger group would meet on the fringe of the social zone, where the classroom area opens out to the main avenues and streets of the Complex.

The social zone permits the intermingling of the whole student body. This zone is the public way, the streets, avenues and plazas leading to all parts of the Complex. Parents and community people will also have unlimited access to this zone on their way to the parents' rooms, the exhibit areas and all of the community service facilities.

The shared facilities zone, offers the individual student the opportunity to meet and work with other students who share his own special interests.

In putting together the schematic design for this Complex a conscious effort was made to develop a plan that would encourage these rich and diverse human relationships while maintaining the student's sense of individuality.

It was decided that shared facilities and community functions would be housed in the existing Fillmore buildings converted to their new use, leaving more freedom to design the classroom areas in an all new structure. Since so much of the students' time would be spent in this classroom area, it is especially important that flexible use of space and many variations

in scale be provided to encourage comfortable and imaginative arrangements for small groups, large groups, and individual study.

Classroom Areas

The general plan for the classroom area provides three separate structures, each of which will have two Houses in it on different floors. The three structures will be linked by covered bridges that will serve as passageways as well as exhibit areas. This bridge will also continue into another structure housing the central administration and guidance suite.

As shown in the drawings that follow at the close of this chapter, each of the classroom buildings will have, in addition to the two Houses, an intermediate, split level, nested between the two Houses. The administration and the common facilities shared by the two Houses will be lodged in this intermediate level. This intermediate level does not extend through the whole building so that at one end of the building there are only two floors; at the other end there are three floors. The extra height on the two-floor end of the building permits great flexibility in the use of balconies or elevations for small groups and large open spaces for other classroom purposes. The lower areas will have the self-contained classrooms and space for large projects. The upper areas provide flexible teaching space that can be subdivided in a variety of ways to suit changing program needs. The students themselves can change the shapes in this area. This opportunity to create their own environment, in effect to control their physical space, is important. It gives the pupils a feeling of pride in and identification with the environment they themselves have made.

At the lower ground floor level of the classroom zone are located lecture theaters with built-in audiovisual aids, group rooms adjoining

parents' rooms, dining and lounge areas. An exhibit block separates the classroom area from the social or public zone directly outside.

Social Areas

The social zone is made up of the avenues and streets which unite all the different parts of the Complex internally. These are walkways within the Complex that will not be open to vehicles. They will be landscaped and can provide opportunities for various outdoor displays, exhibits, and activities. They will not be just ways to go from one building to another but will create a campus atmosphere where people will meet to talk and stroll together.

Outside of the perimeter of the school leading to the regular city streets there will be entrances to the Complex at different points. Buses can drop off students and staff at these several points to avoid too much traffic at any one entrance.

Shared Facilities

The main entrance to the Complex will lead directly into the social zone and is located close to the main auditorium, a shared facility. Above the main entrance to the Complex is a mezzanine level containing the Community Information Center and, above that, the central administration and guidance suite. The capacious Parents' Pavilion sits on top of this block. The central shared facilities that will be used by community as well as by the pupils lie closest to this main entrance to permit easy access by the general public. Internal streets connect the various shared facilities to unify them and permit easy access.

The drawings at the close of this chapter depict the overall organizaion of the Complex and the internal organization of some of its important

units. The tables that follow the drawings describe the method used to convert the educational program into an estimate of the amount and types of spcaces that the architectural design had to provide.

Comparative Costs

Is it possible that such a myriad of different sizes of spaces, of specialized and of flexible areas and volumes can be financially practical in a city as restricted in its sources of school revenues as Buffalo? Educators, administrators and teachers are always cramped for suitable space. Their desire to experiment, to explore new ways of grouping children or of arranging materials, often is frustrated by the rigid four walls of the traditional classroom and the general dearth of space in conventional schools. Because of the size of the Complex and the economies that can be effected through optimum use of space, we have found that the cost per child of the generously endowed Complex is about 22 percent less than the per pupil cost of building the existing Fillmore Middle school.

The computation rests on this comparison:

(A module is the equivalent of one classroom unit in size)

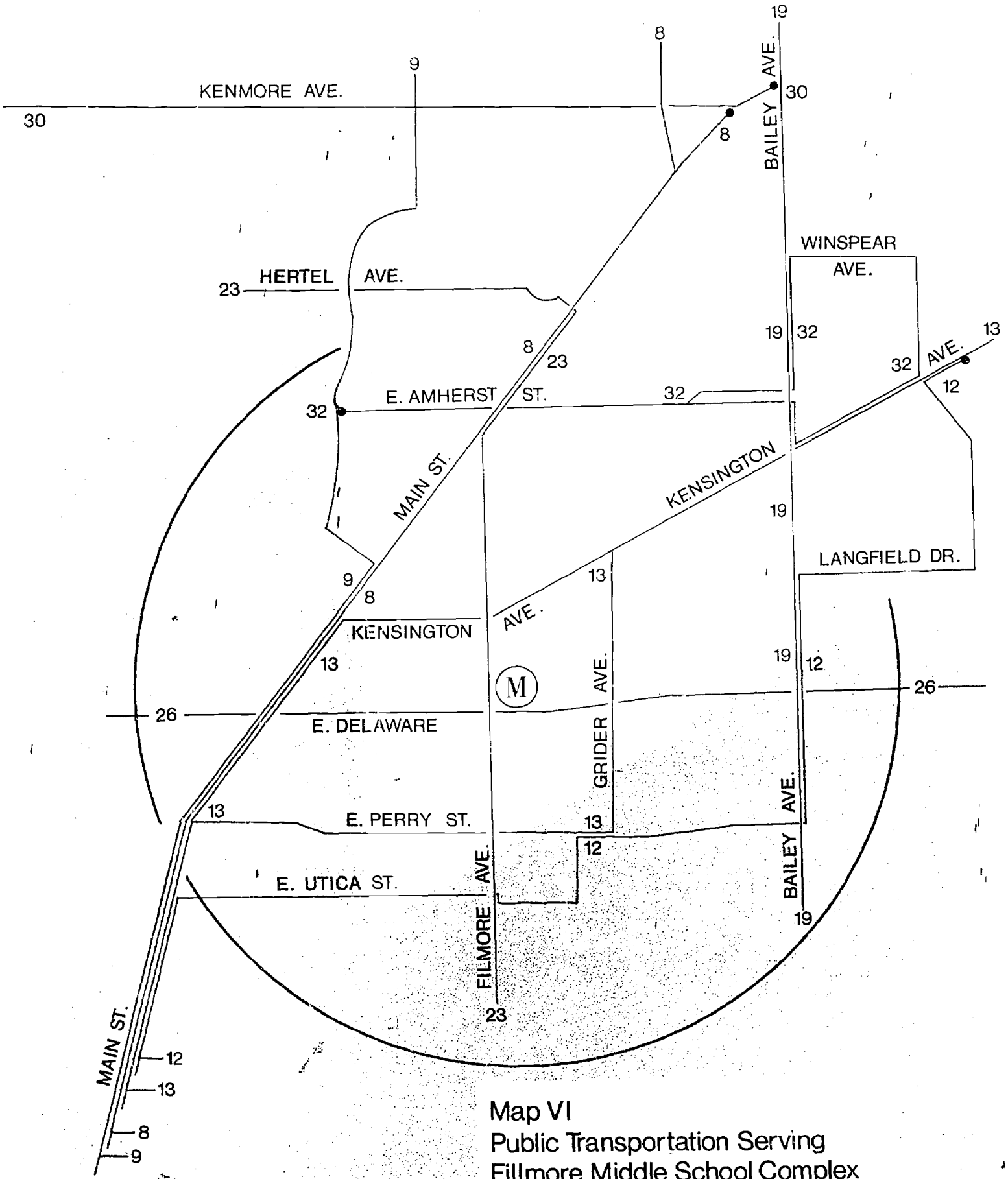
	No. of Modules	
	New Fillmore Complex 3,600 students	Existing Fillmore Middle School 870 students
Classrooms	88	24
Group rooms	5	None
Typing rooms	11	None
Science labs	9	7
Vocational space	26	7
Large auditorium	12	6
Small auditoriums	5	None
Stages	6	3
Gyms	21	8
Exercise gyms	4	None
Swimming	13	5
Instrument rooms	3	4
Vocal	2	None
TOTAL	205	64

This computation includes only the pupil spaces provided. If we compare the total space needed to include all the other new facilities provided for the community in the complex -- such as the ample parents' pavilion, the community information center, the parents' rooms, the health center, the nursery -- there is still a 14 to 15 percent saving in the per pupil cost of construction.

This comparison does not include the equipment installed in either the new or the existing Fillmore. However, the savings in construction provide a generous fund for use in obtaining good equipment appropriate to the possibilities opened up by the new structure.

Transportation

The accompanying map showing the Fillmore feeder district as projected in Chapter V shows the network of present bus lines that would serve the Complex. As is evident from the map, about 36 percent of the pupils who will attend the Complex live outside of the $1\frac{1}{2}$ mile radius beyond which the City of Buffalo provides free transportation. All the areas in the feeder zone are well provided with bus lines.



Map VI
Public Transportation Serving
Fillmore Middle School Complex

8 City Bus Routes

(M) Fillmore Middle School Complex

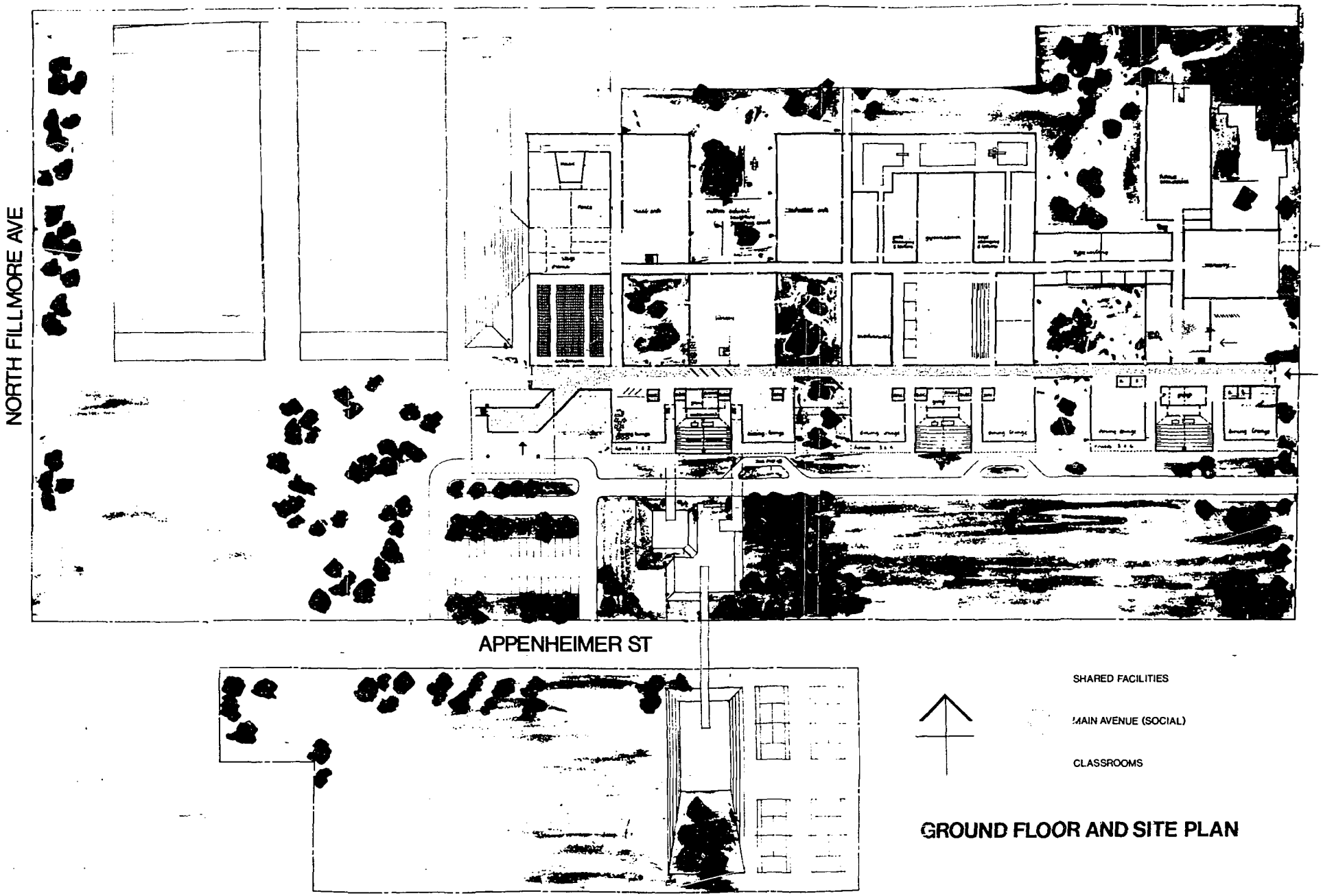
Complex Advantages

The rich diversity of school life in the Fillmore Middle School Complex is made possible by the size of its enrollment. Size alone, however, is not enough. Many schools in the country are substantially larger than the 3,600-pupil size proposed for Fillmore, yet they give little more to the child than a smaller school size.

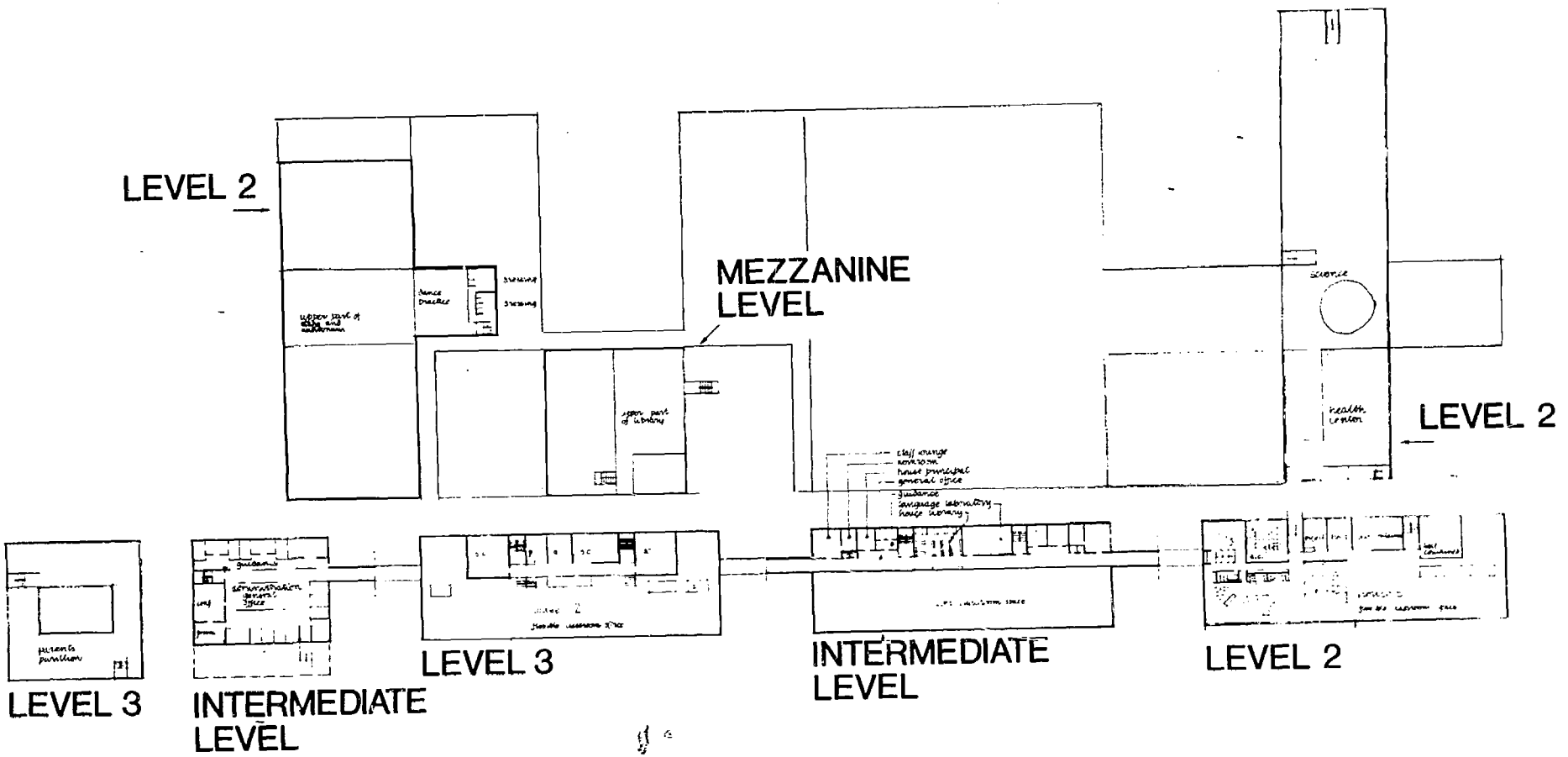
The essential difference lies in the concept of shared facilities and in the provision of space where almost any given activity can take place, where all kinds and sizes of groups can gather or to which they can retreat. Awareness of these opportunities at the planning stage is essential to the successful functioning of the completed facility.

If these possibilities are planned for at the start, the quality of education within a harmoniously functioning Complex can be immeasurably higher than is provided today.

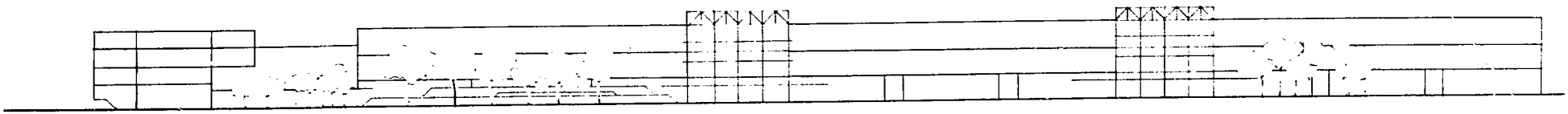
THE FOLLOWING DRAWINGS DO NOT REPRESENT A BUILDING DESIGN. THEY SHOW HOW AN EDUCATIONAL PROGRAM CAN BE TRANSLATED INTO SPACE.



GROUND FLOOR AND SITE PLAN

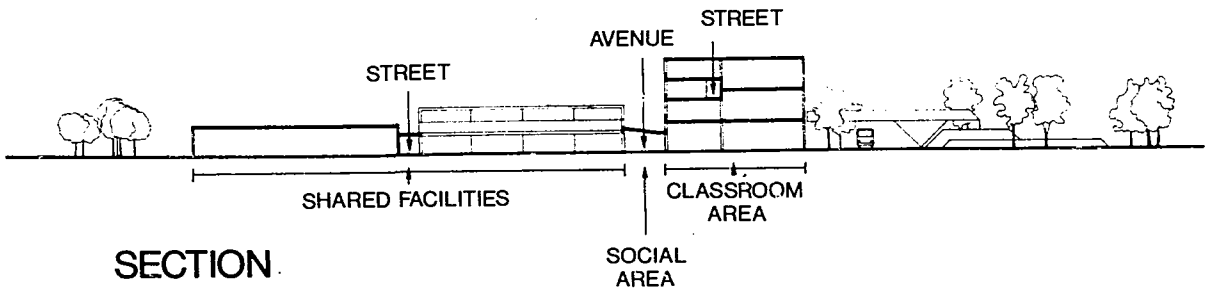


PLAN ABOVE GROUND FLOOR

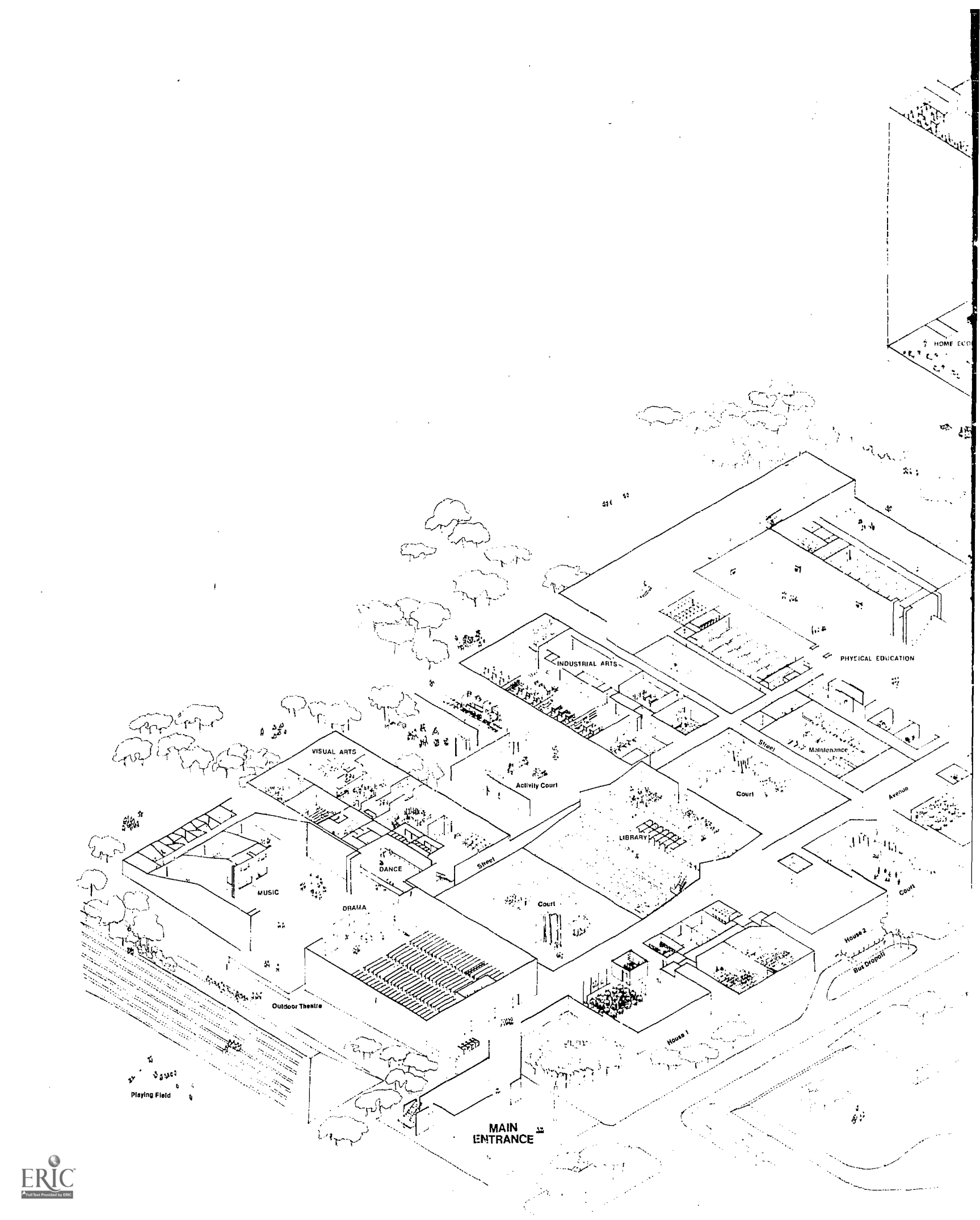


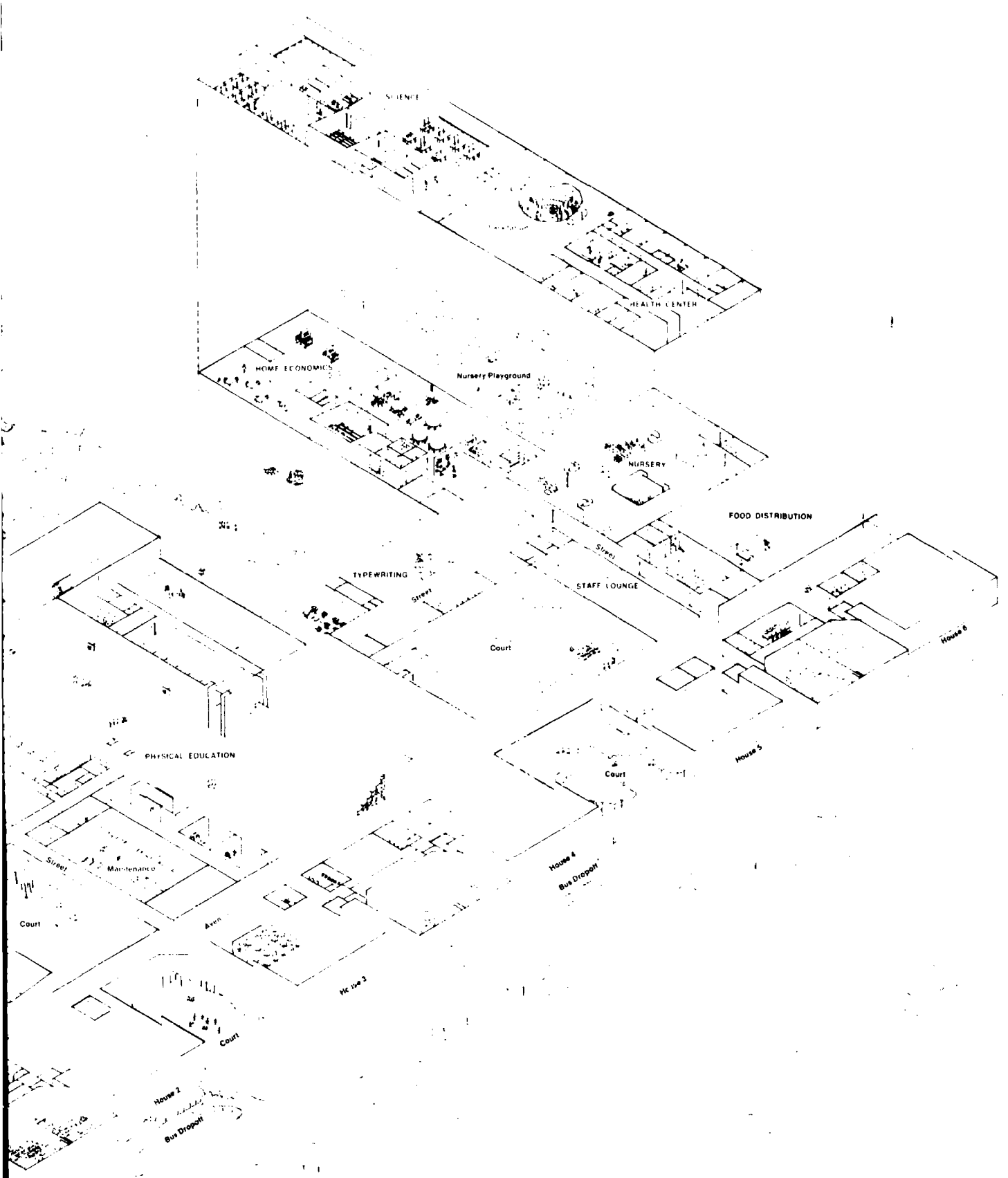
ELEVATION FROM APPENHEIMER STREET

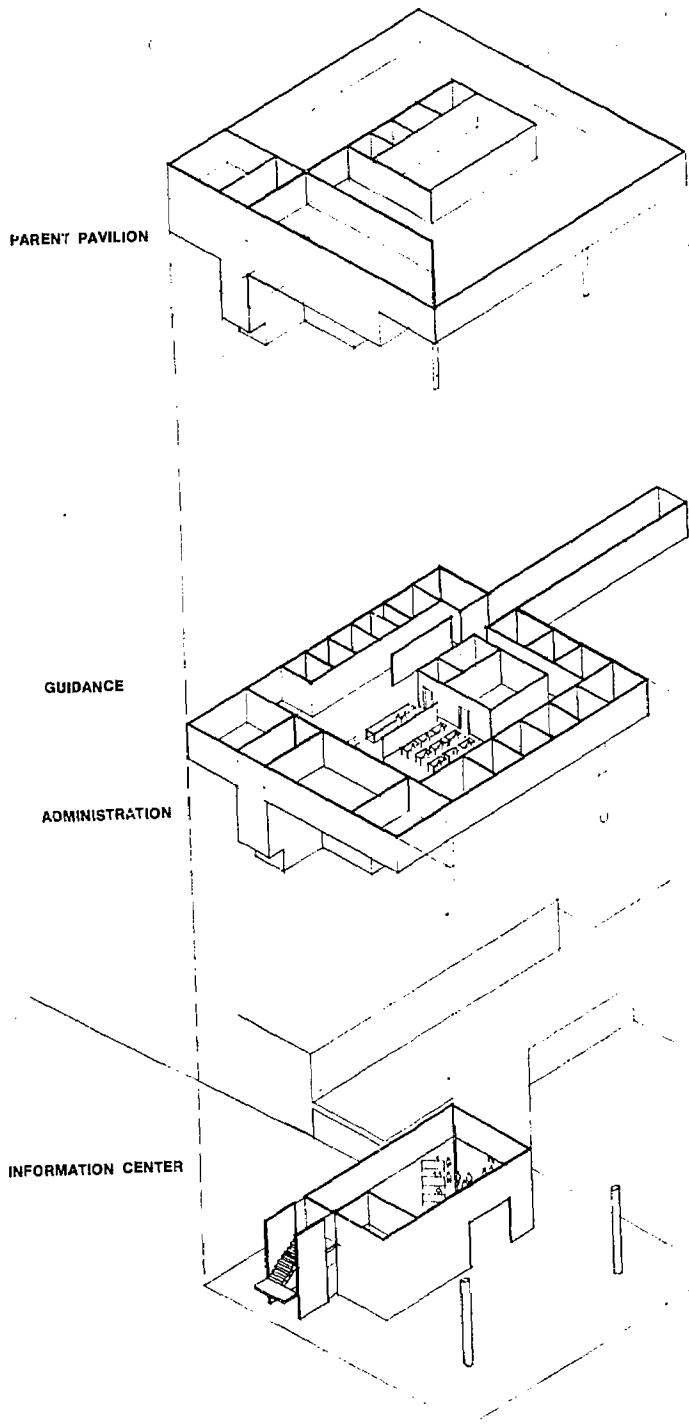
ELEVATION FROM NORTH FILLMORE AVENUE

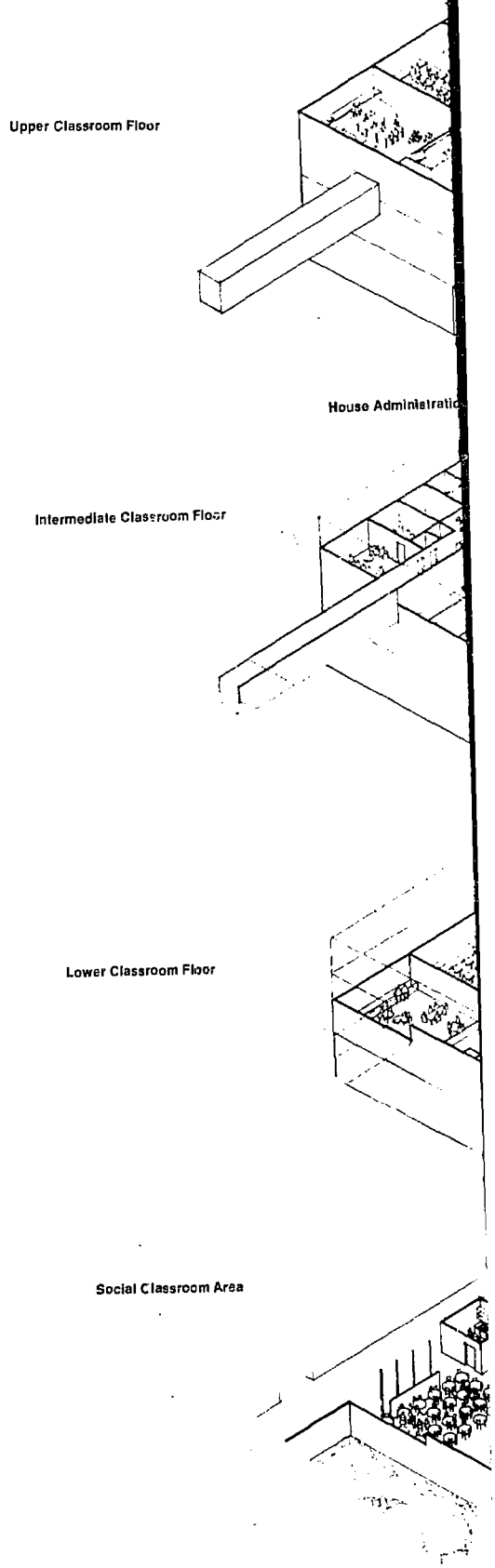


SECTION

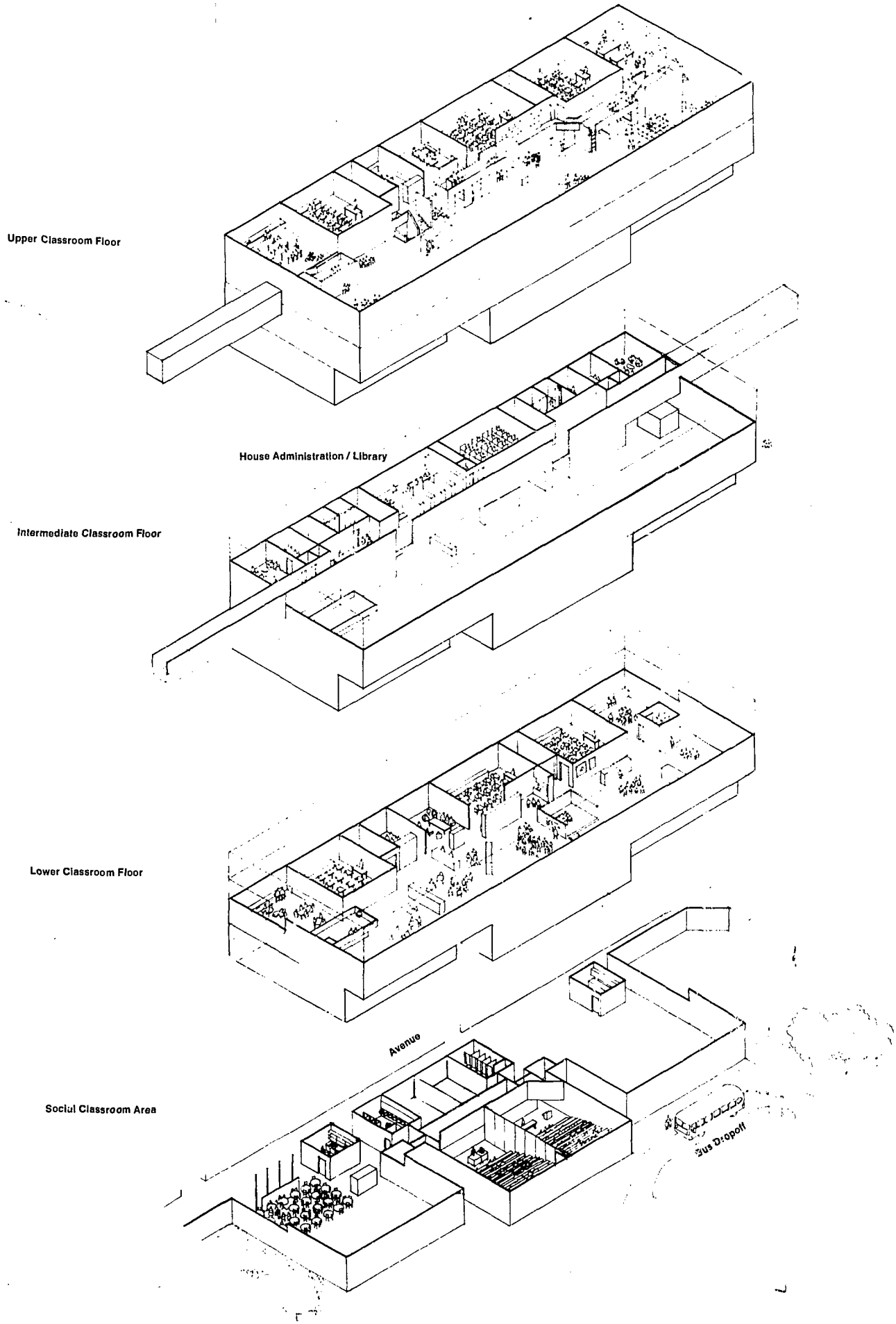

HOME ECO
INDUSTRIAL ARTS
PHYSICAL EDUCATION
VISUAL ARTS
Activity Court
Maintenance
Street
Court
Avenue
LIBRARY
DANCE
Street
MUSIC
DRAMA
Court
Court
House 2
Bus Dropoff
Outdoor Theatre
House 1
Playing Field
MAIN
ENTRANCE

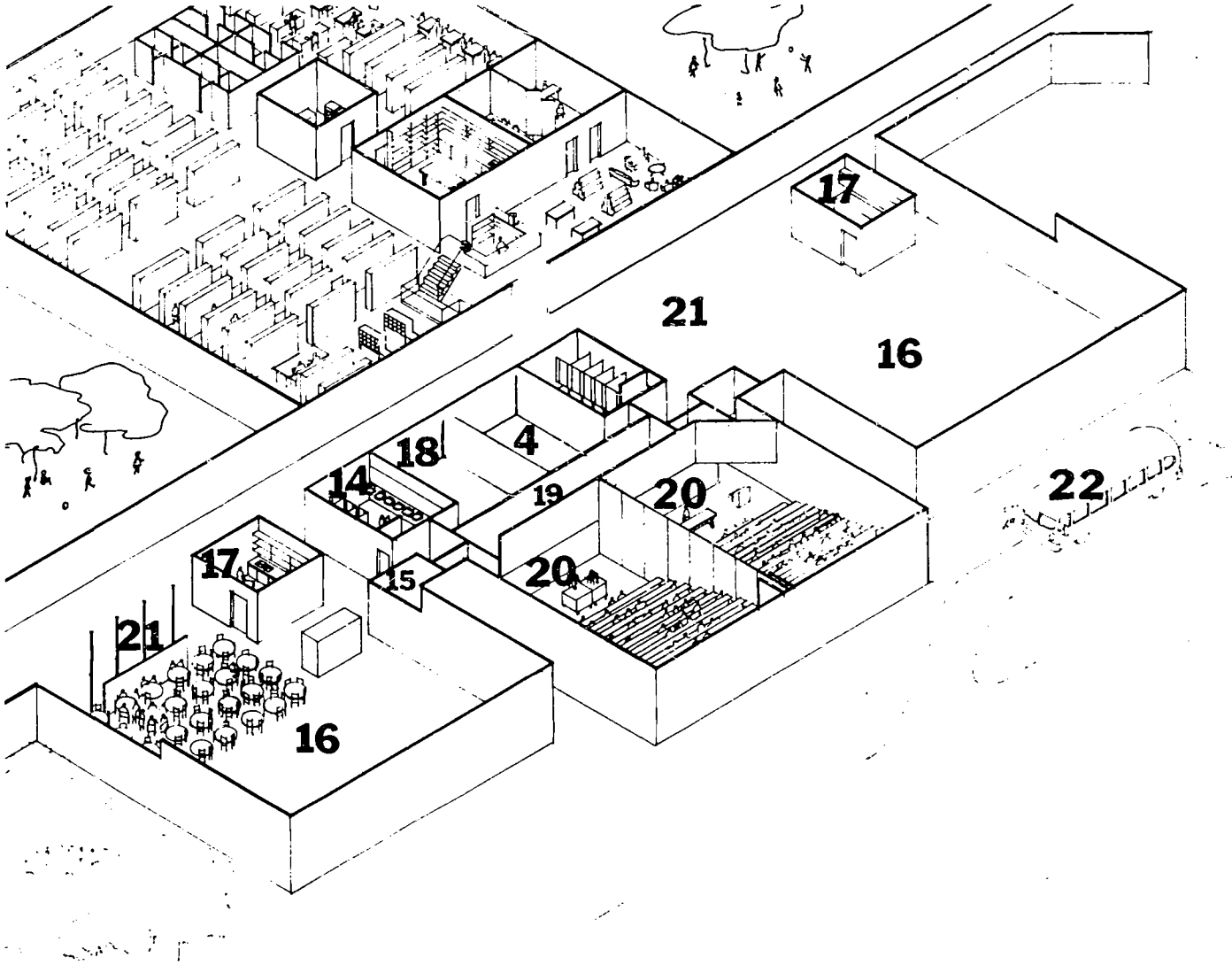

SCIENCE
HEALTH CENTER
HOME ECONOMICS
Nursery Playground
NURSERY
FOOD DISTRIBUTION
Street
STAFF LOUNGE
TYPEWRITING
Street
Court
House 6
House 5
PHYSICAL EDUCATION
Court
Street
Maintenance
House 4
Bus Dropoff
Court
Area
House 3
Court
House 2
Bus Dropoff


PARENT PAVILION
GUIDANCE
ADMINISTRATION
INFORMATION CENTER


Upper Classroom Floor
House Administratio
Intermediate Classroom Floor
Lower Classroom Floor
Social Classroom Area

Typical Classroom Area

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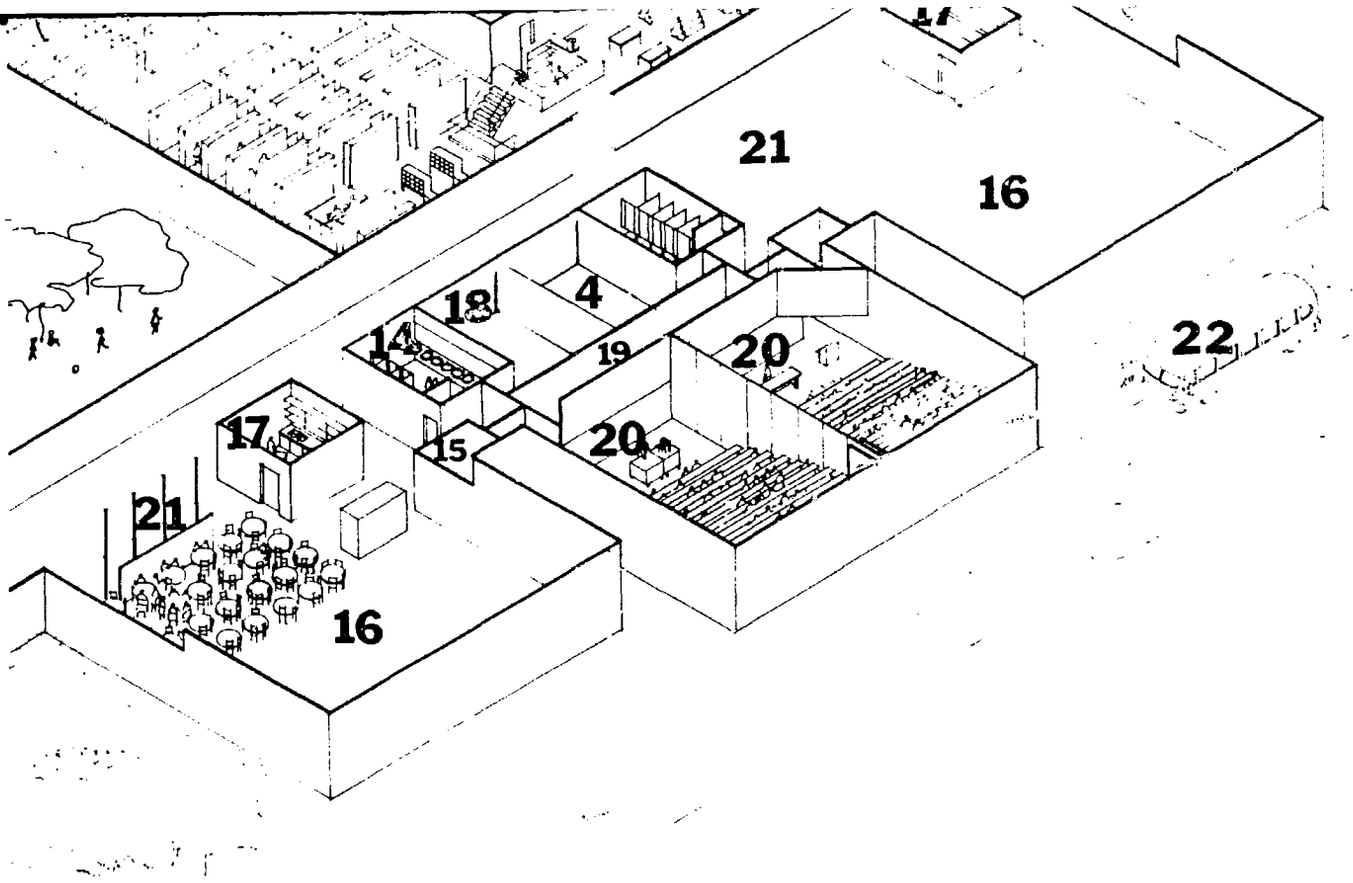
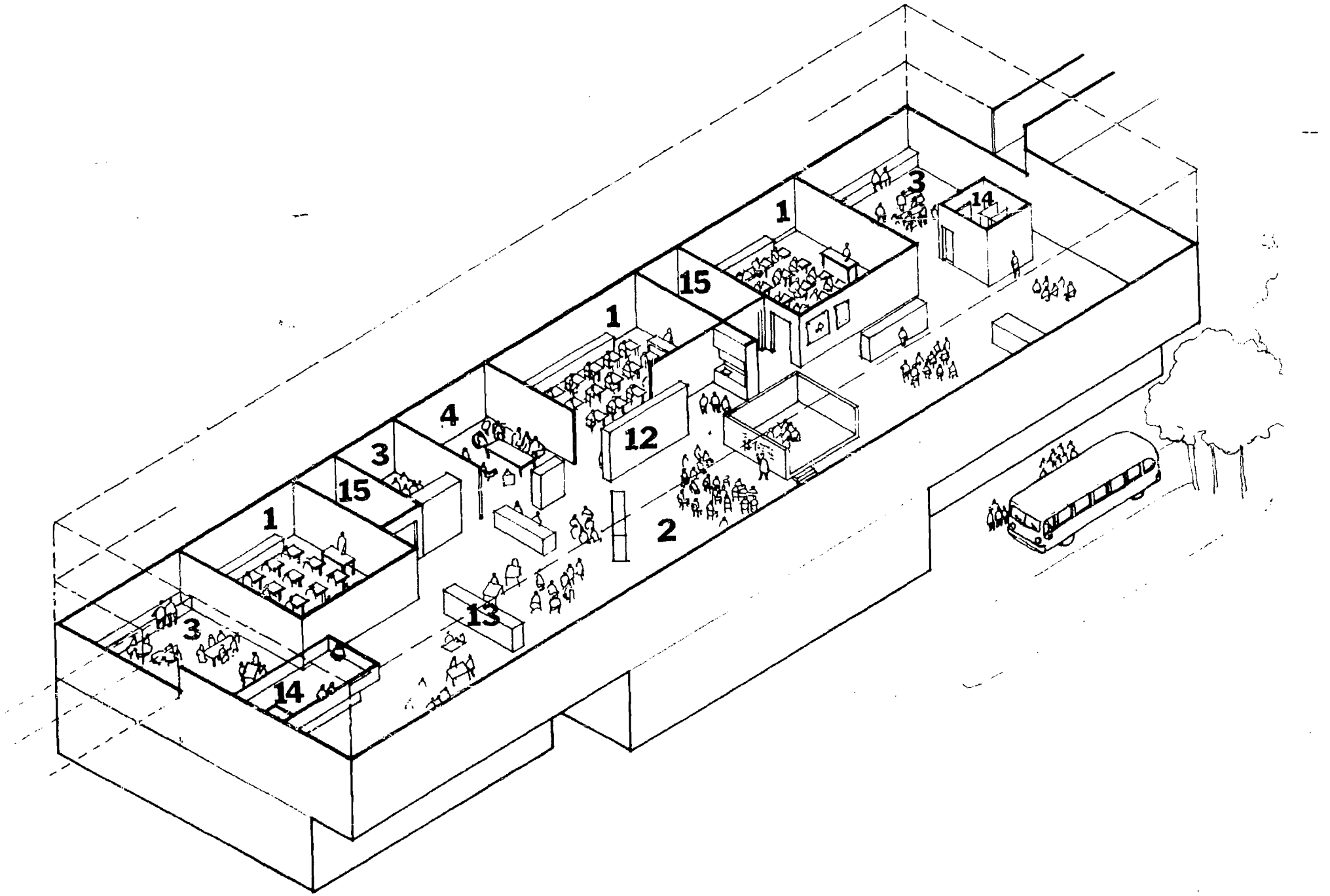


Fillmore Middle School Complex

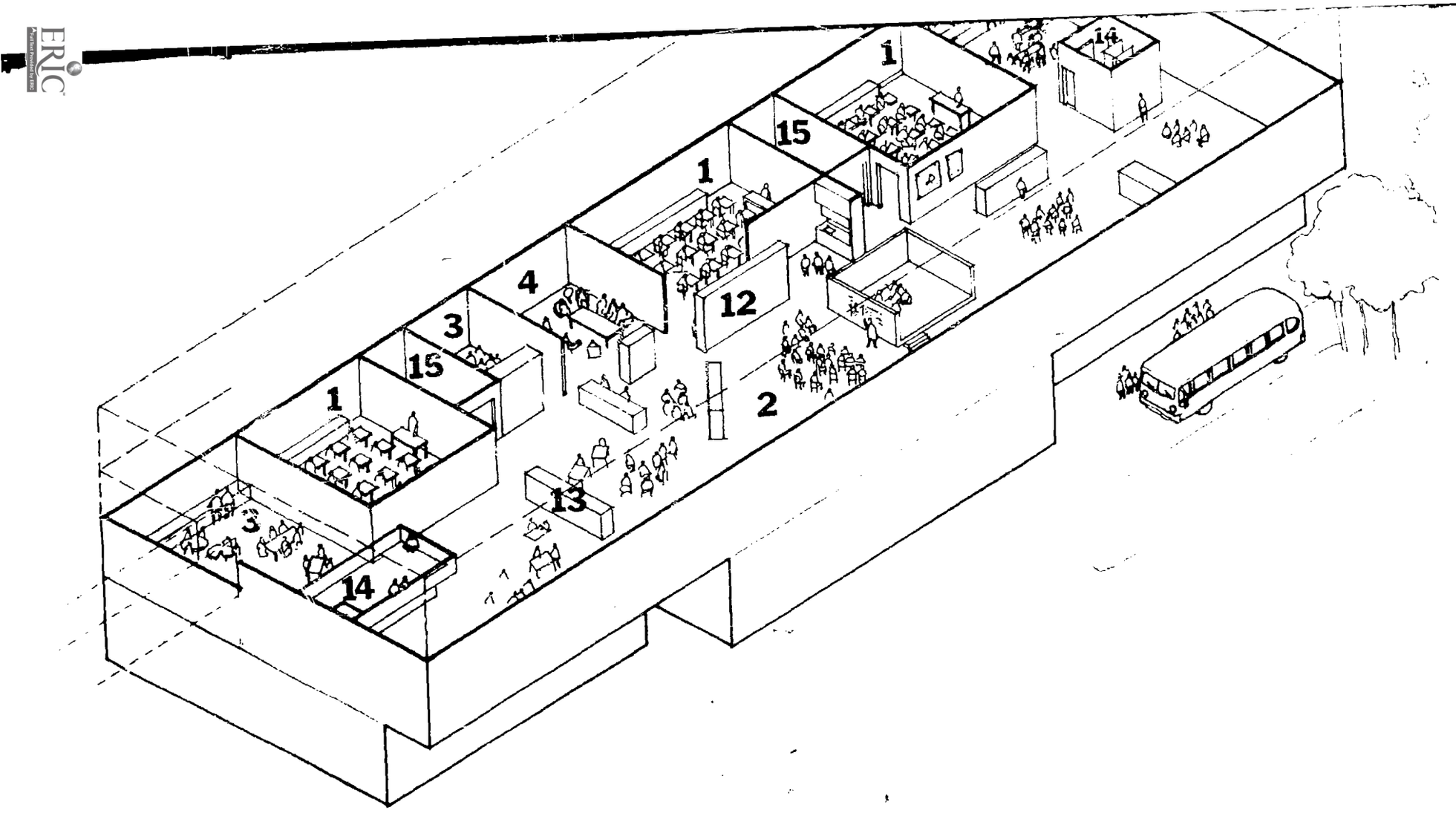
LEGEND

A CLASSROOM

1. Self Contained Classroom
2. Flexible Classroom Space
3. Project Area
4. Group Room
5. Language Laboratory
6. House Library/Resource Center
7. House Guidance Suite
8. House Director's Office
9. Teacher's Lounge (within House)
10. Teacher's Workroom (within House)
11. House Administration Office
12. Storage
13. Movable Storage Units
14. Toilets
15. Stair
16. Dining Lounge
17. Snack Bar and Servery
18. Parent's Room
19. Audio-Visual
20. Lecture Theatre
21. Exhibit Space
22. Bus Drop-off
23. Social/Public Area



Fillmore Middle School Complex



Fillmore Middle School Complex

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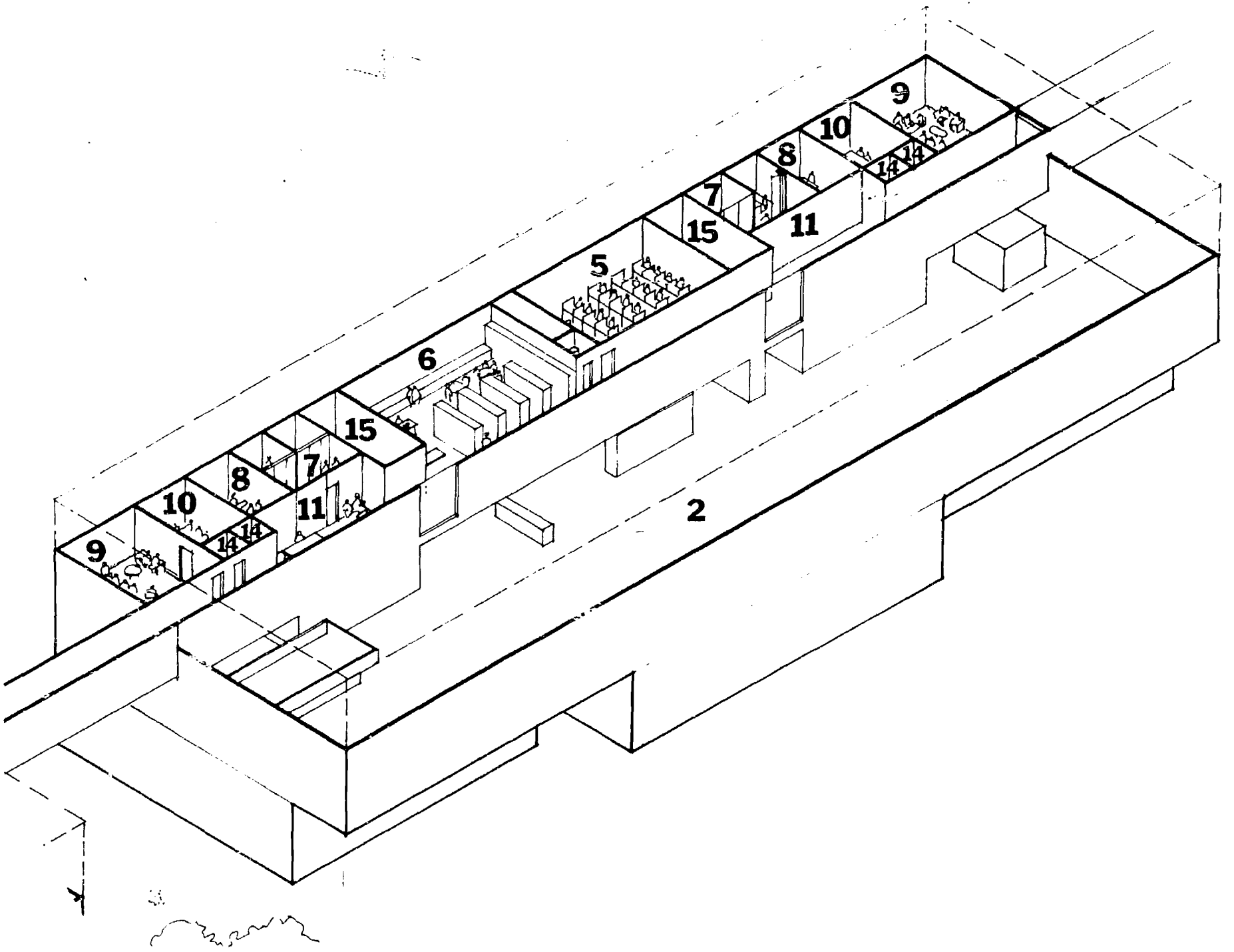
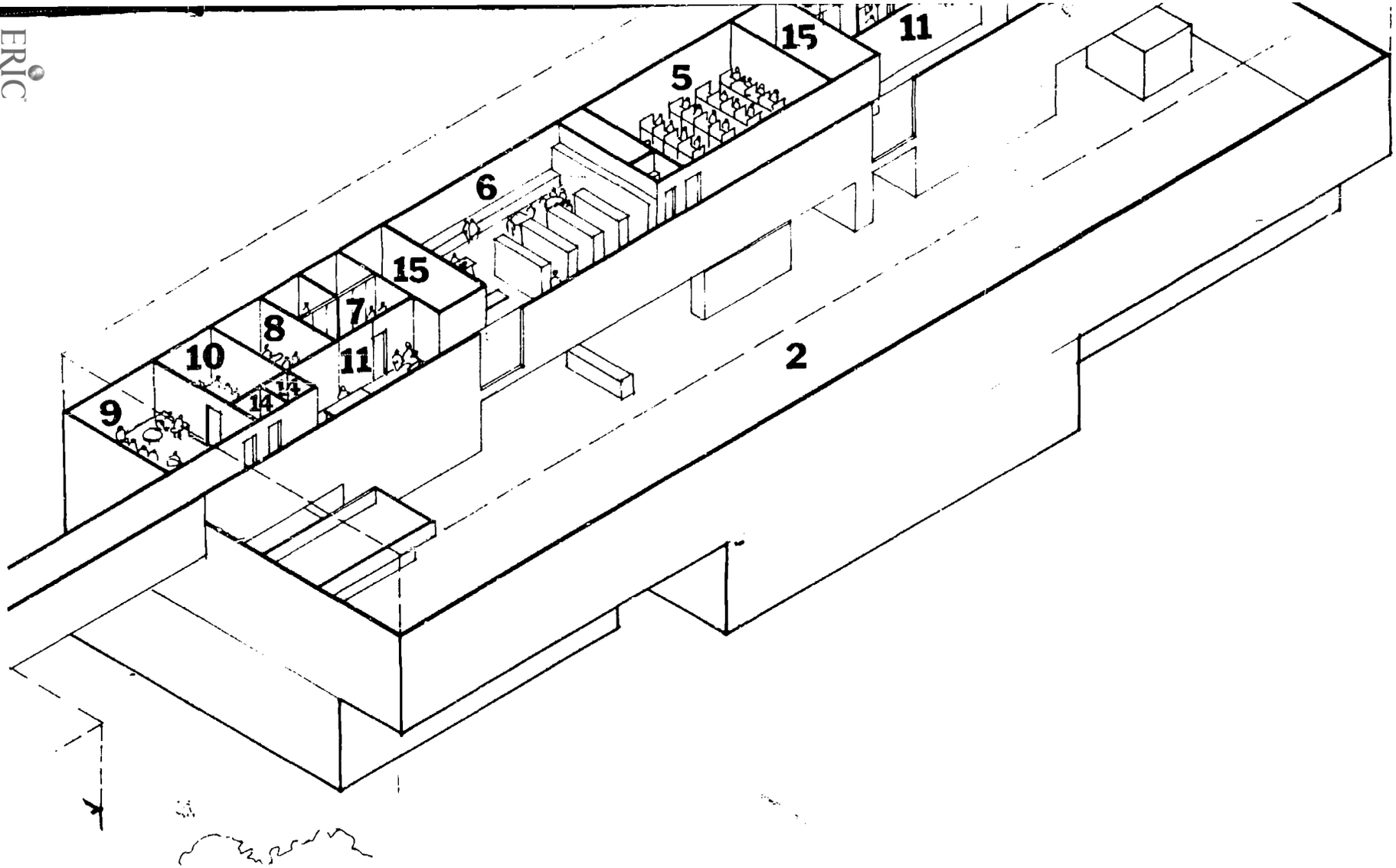
20. Lecture Theatre
21. Exhibit Space
22. Bus Drop-off
23. Social/Public Area



Fillmore Middle School Complex



Fillmore Middle School Complex

LEGEND

A CLASSROOM

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13. Movable Storage Units
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17. Snack Bar and Servery
18. Parent's Room
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21. Exhibit Space
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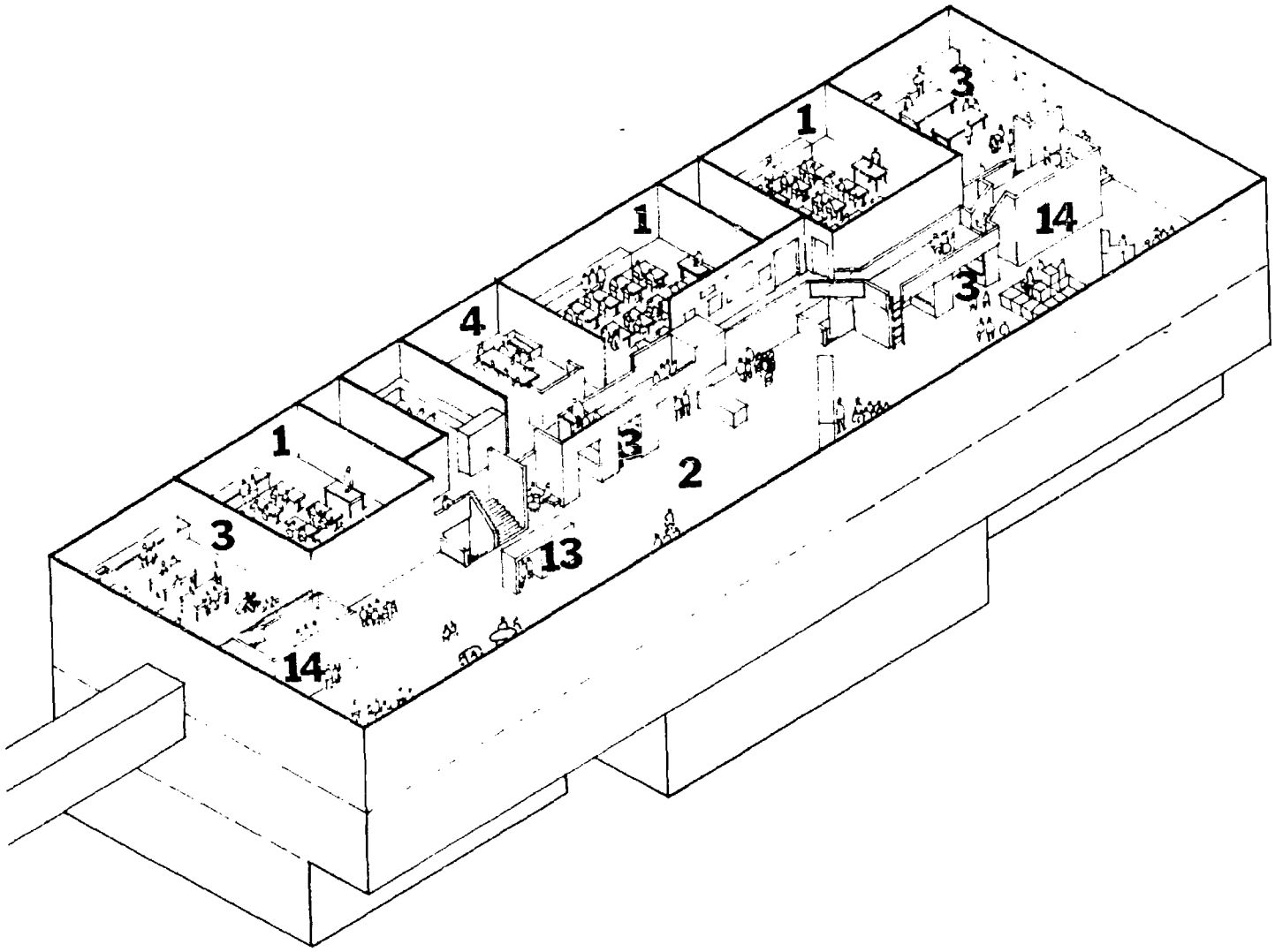
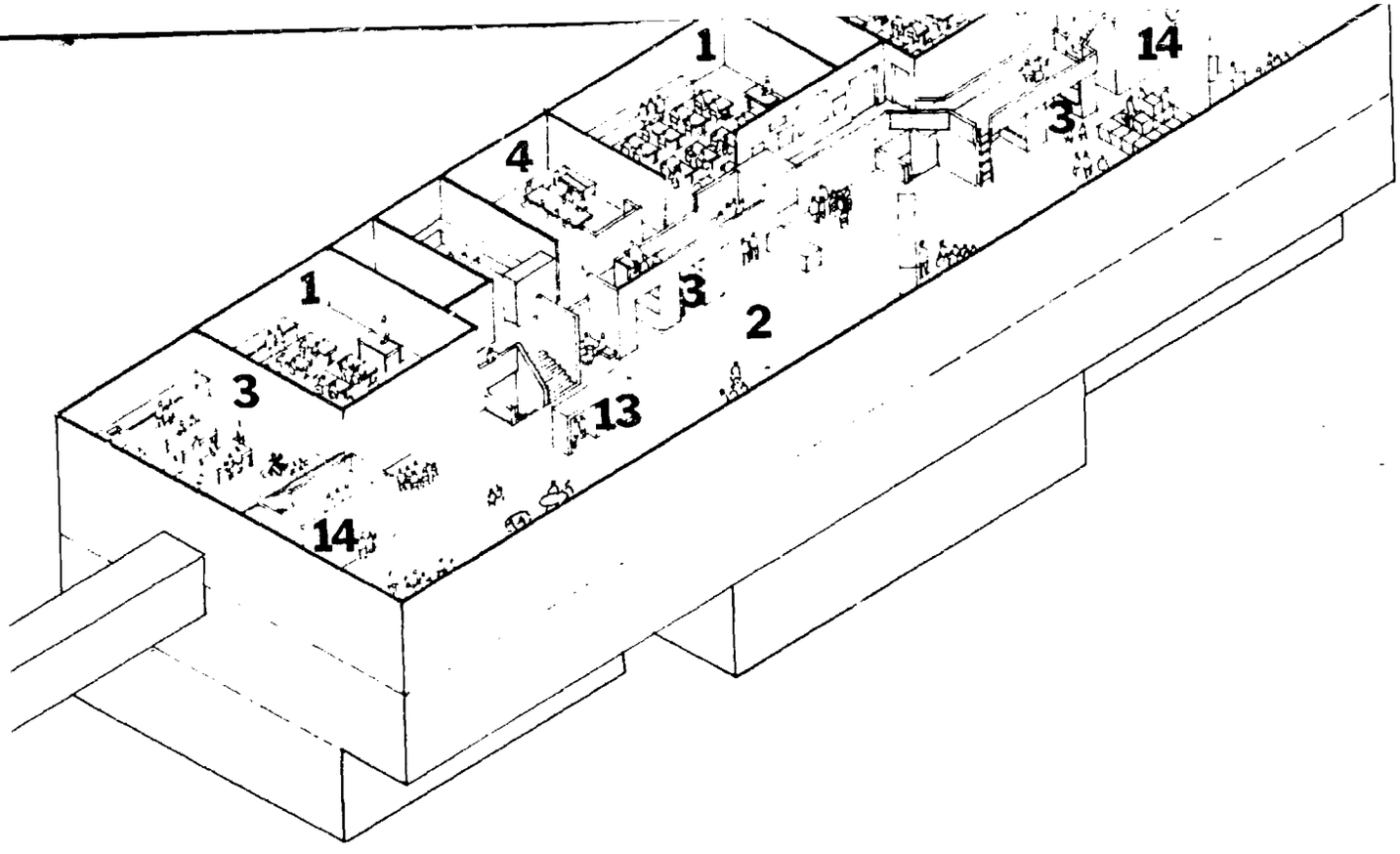


Fillmore Middle School Complex



Fillmore Middle School Complex

LEGEND

A CLASSROOM

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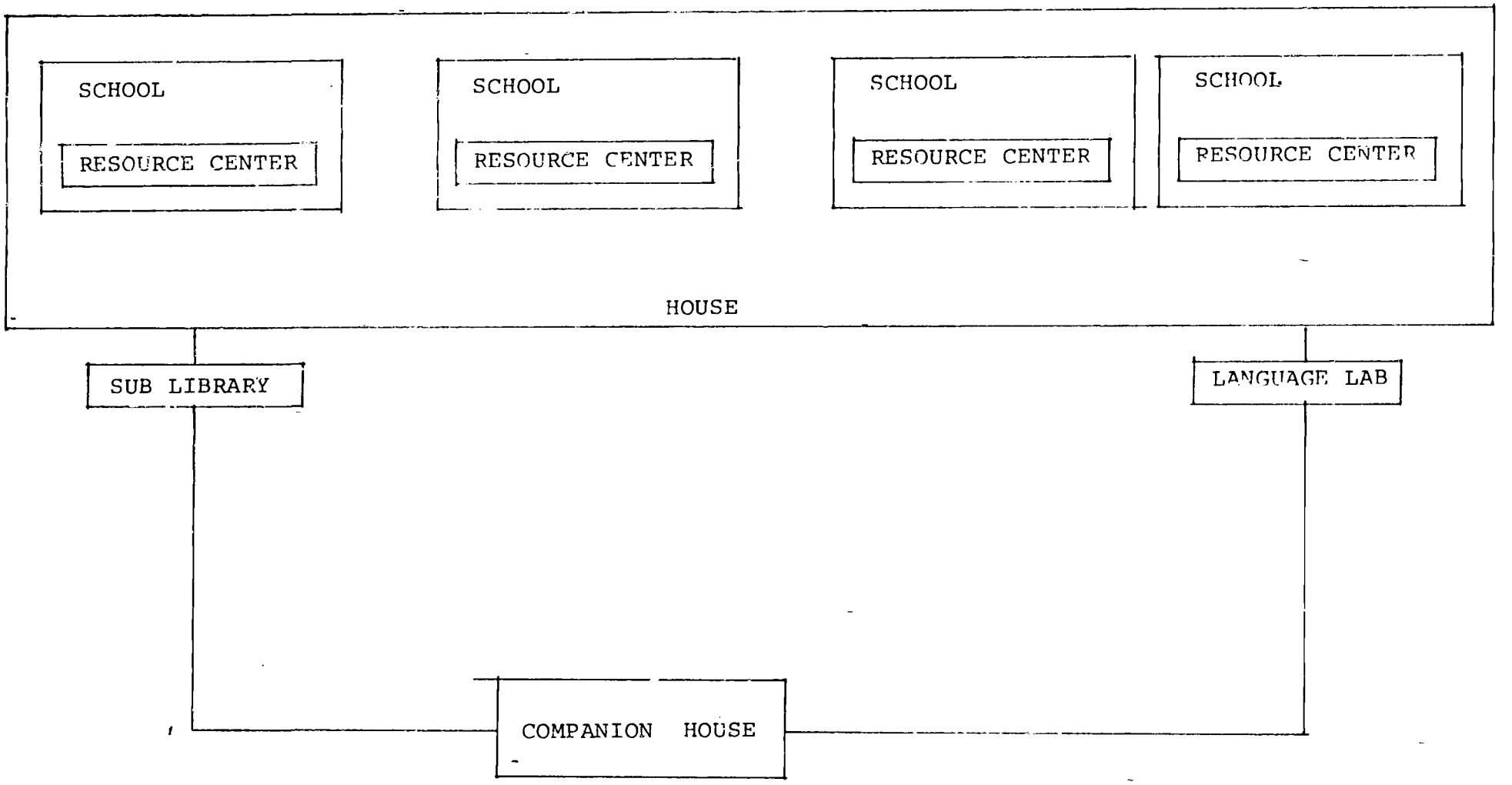
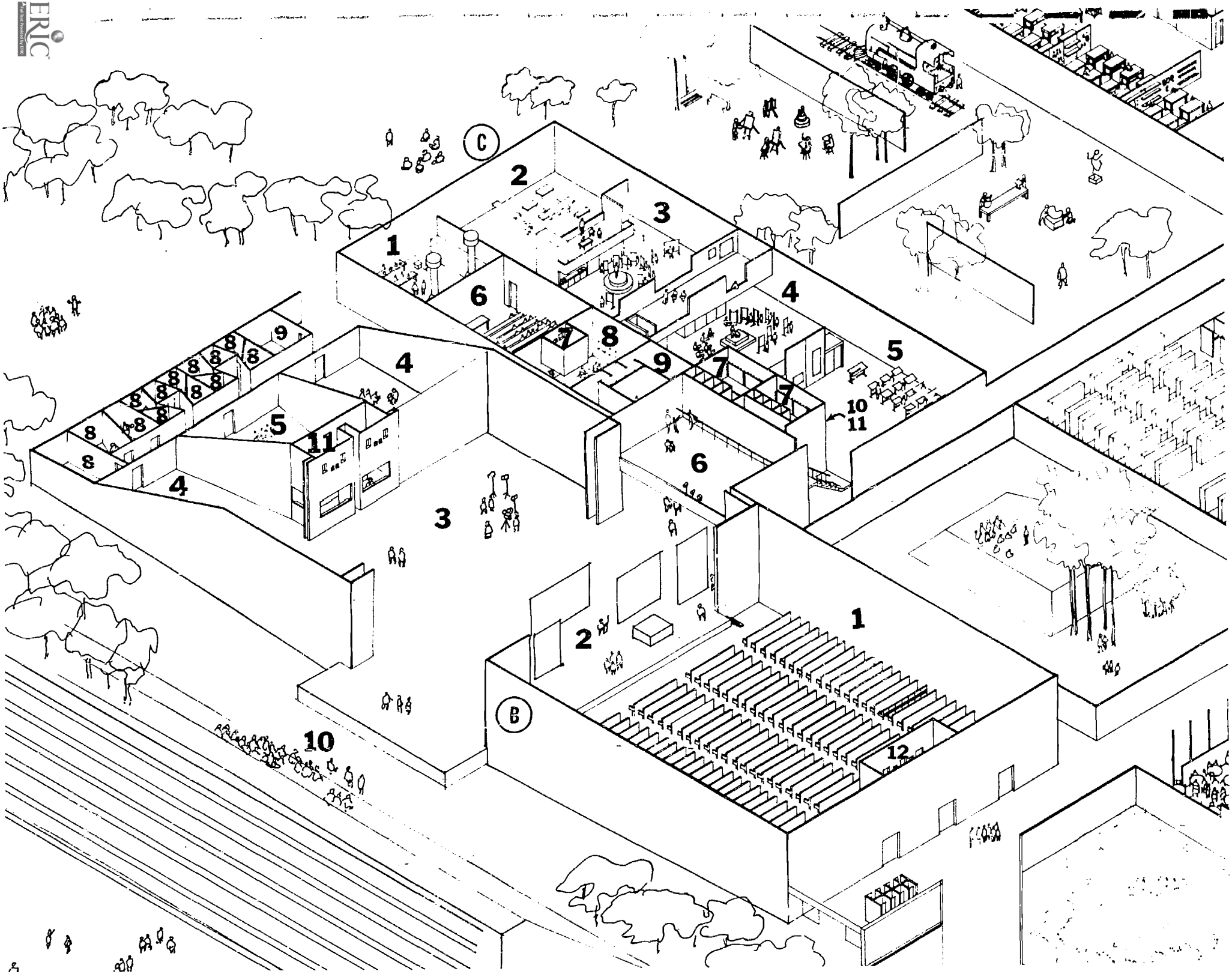
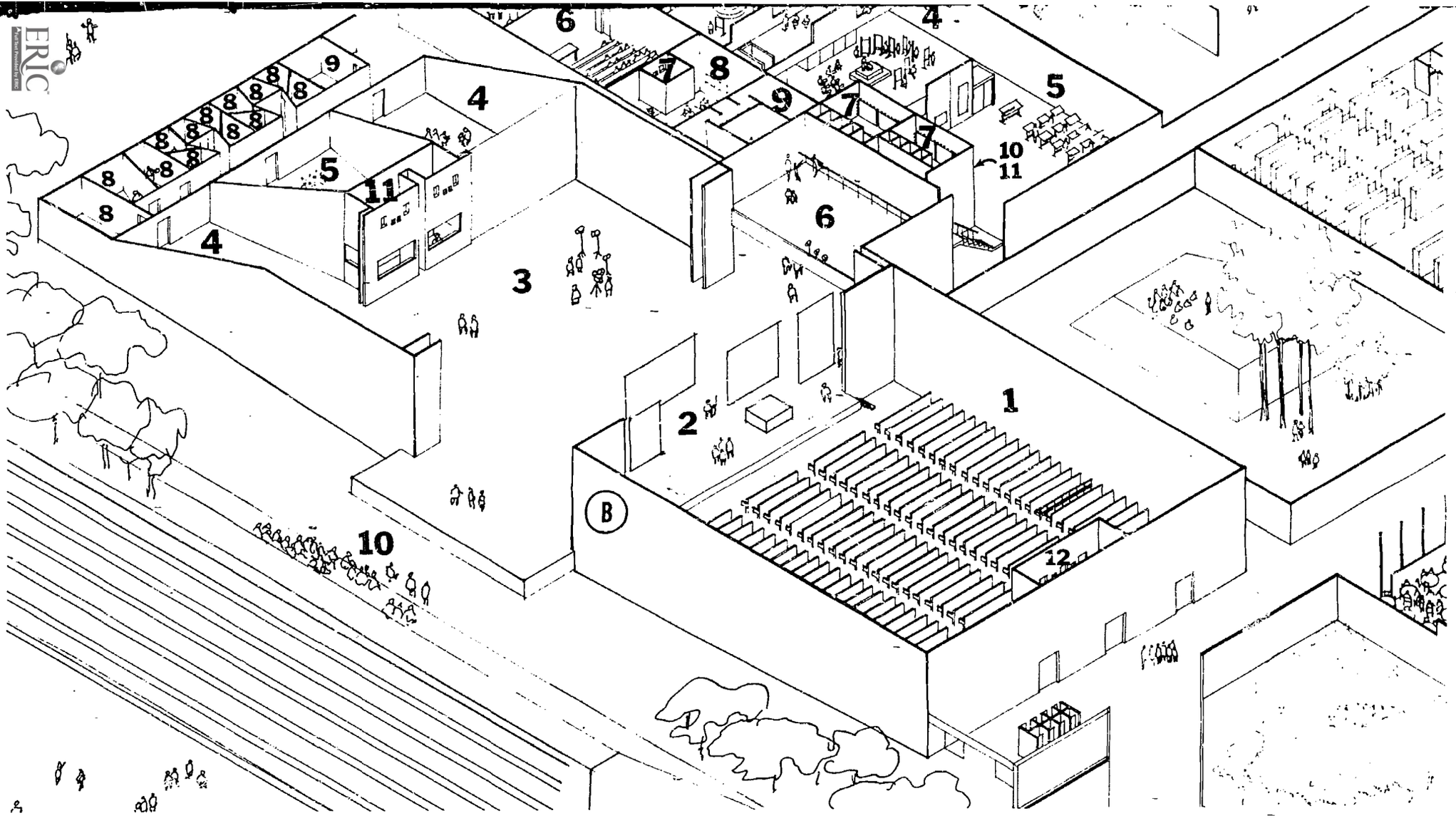
18. Parent's Room
19. Audio-Visual
20. Lecture Theatre
21. Exhibit Space
22. Bus Drop-off
23. Social/Public Area

BUFFALO MIDDLE SCHOOL





Fillmore Middle School Complex



Fillmore Middle School Complex

LEGEND

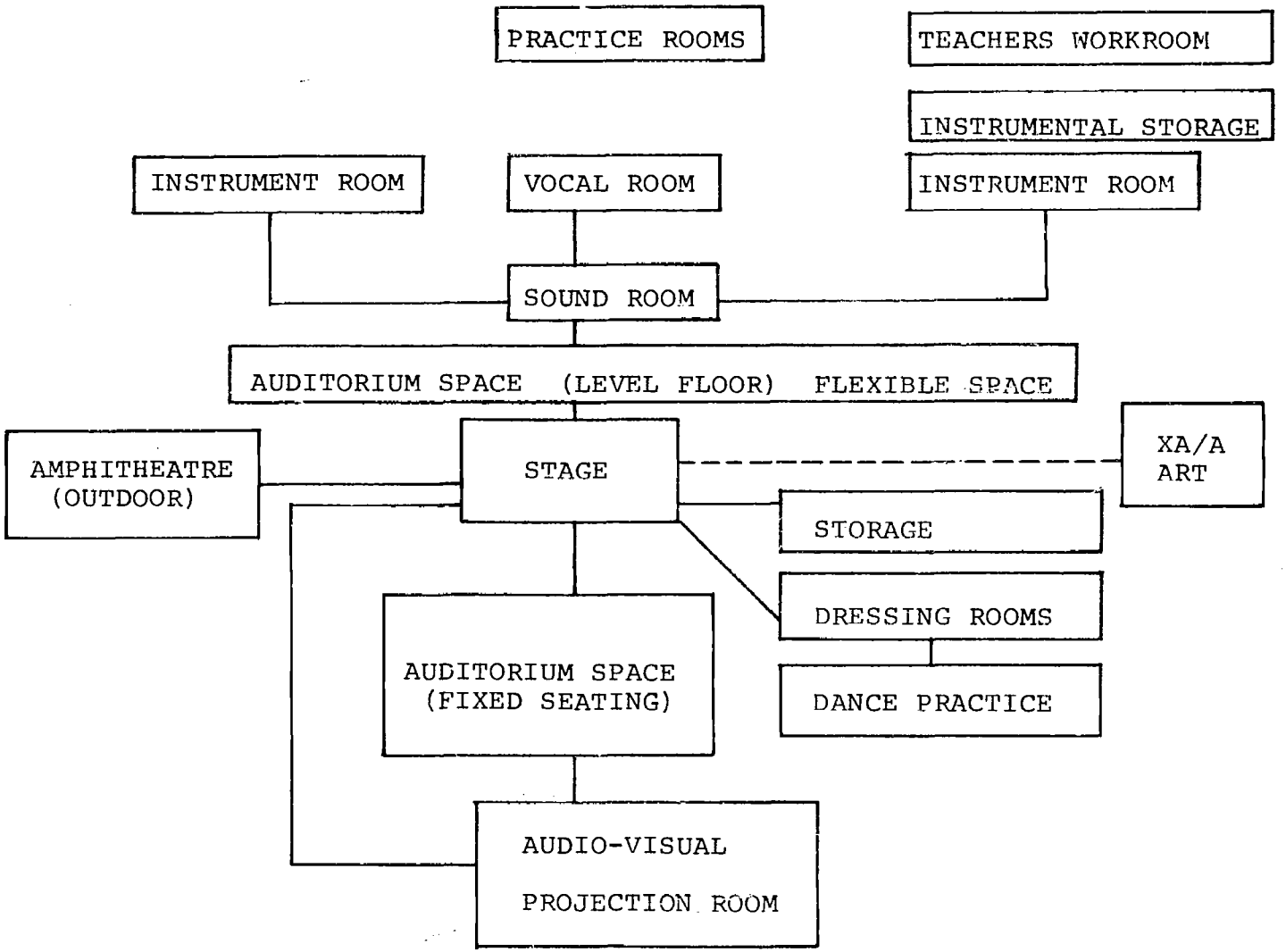
B MUSIC, DRAMA, AND DANCE

1. Main Auditorium
2. Stage
3. Flexible Auditorium Space (Drama, Music, Dance)
4. Group Practice Room (Music)
5. Choir Practice Room
6. Dance Practice Room
7. Green Room
8. Music Practice Room
9. Teacher's Workroom
10. Outdoor Stage & Amphitheatre
11. Audio-Visual
12. Projection Room

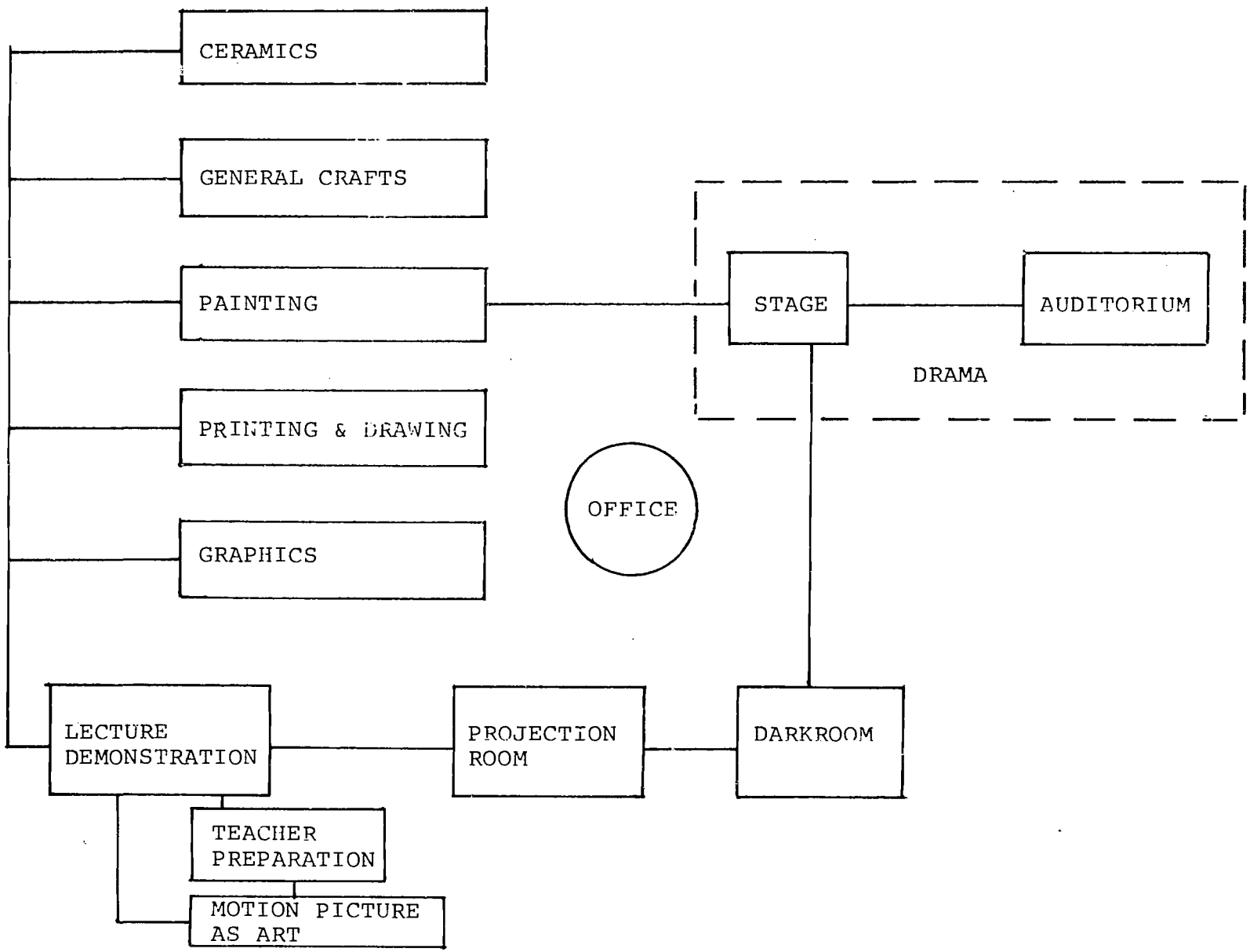
C VISUAL ARTS

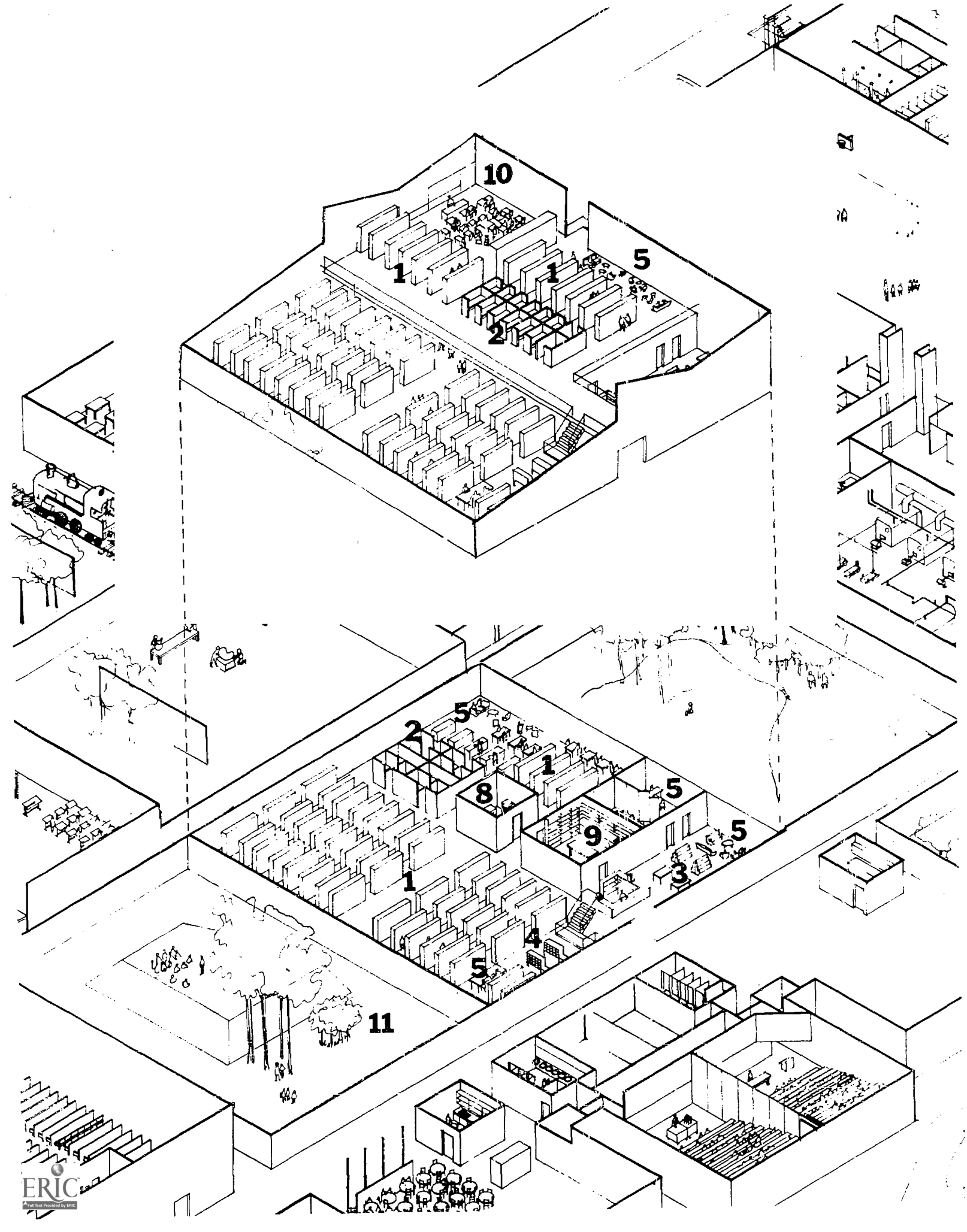
1. Ceramics
2. General Crafts
3. Printing and Drawing
4. Painting
5. Graphics
6. Lecture Theatre
7. Audio-Visual
8. Photography Studio
9. Dark Rooms
10. Storage
11. Teacher's Workroom

EXPLORATORY ARTS/MUSIC
EXPLORATORY ARTS/DRAMA
EXPLORATORY ARTS/DANCE



EXPLORATORY/ARTS

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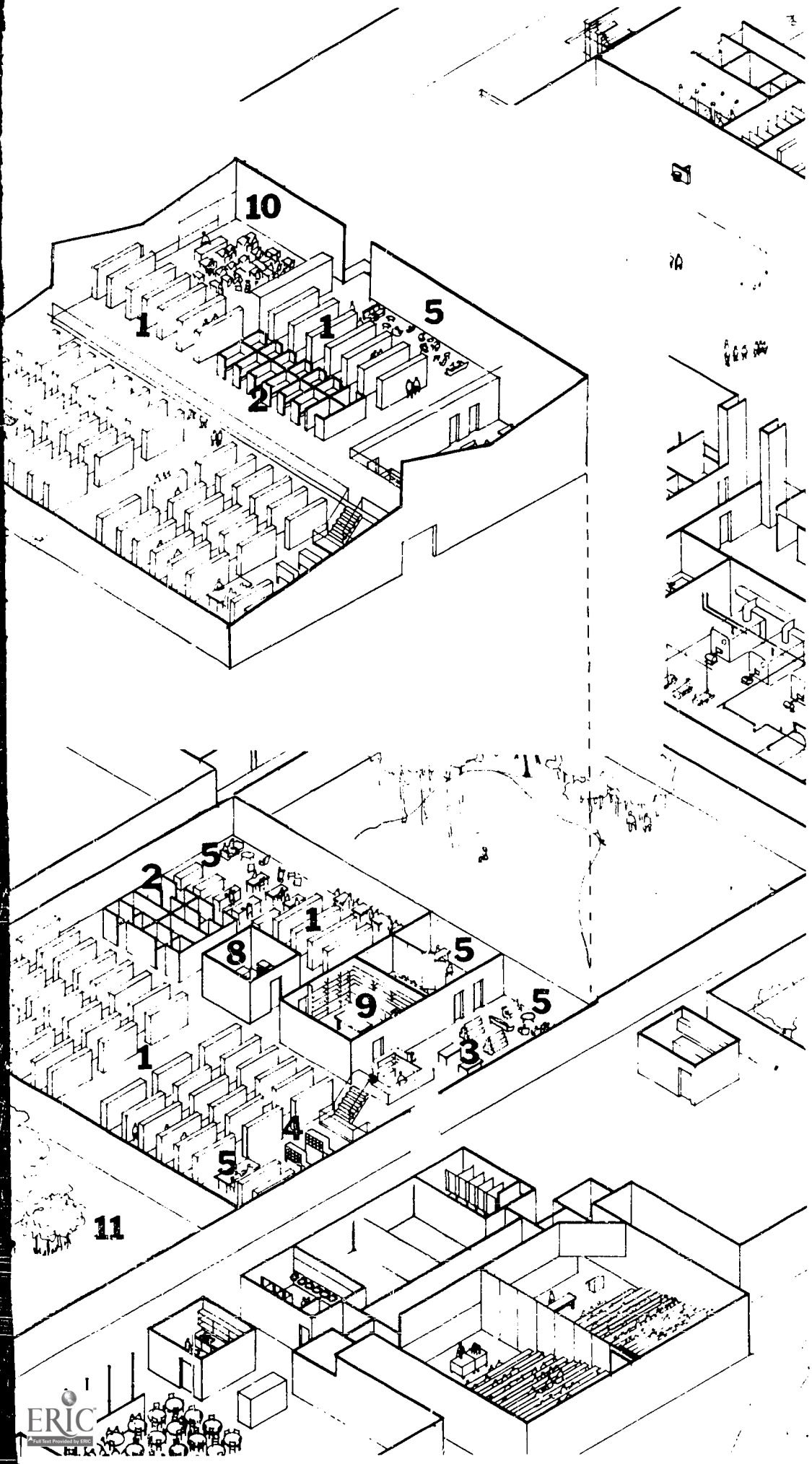


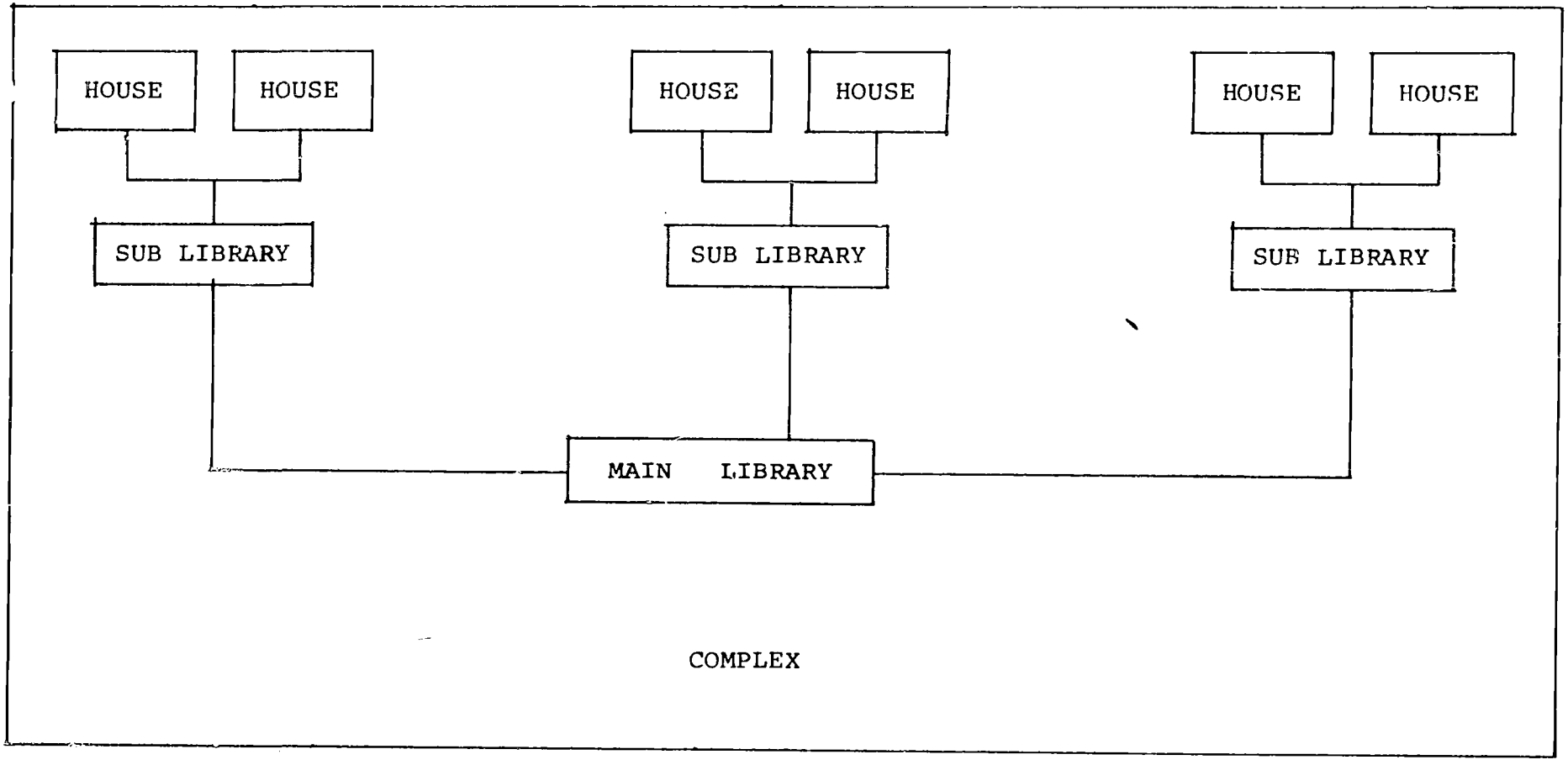
Fillmore Middle School Complex

LEGEND

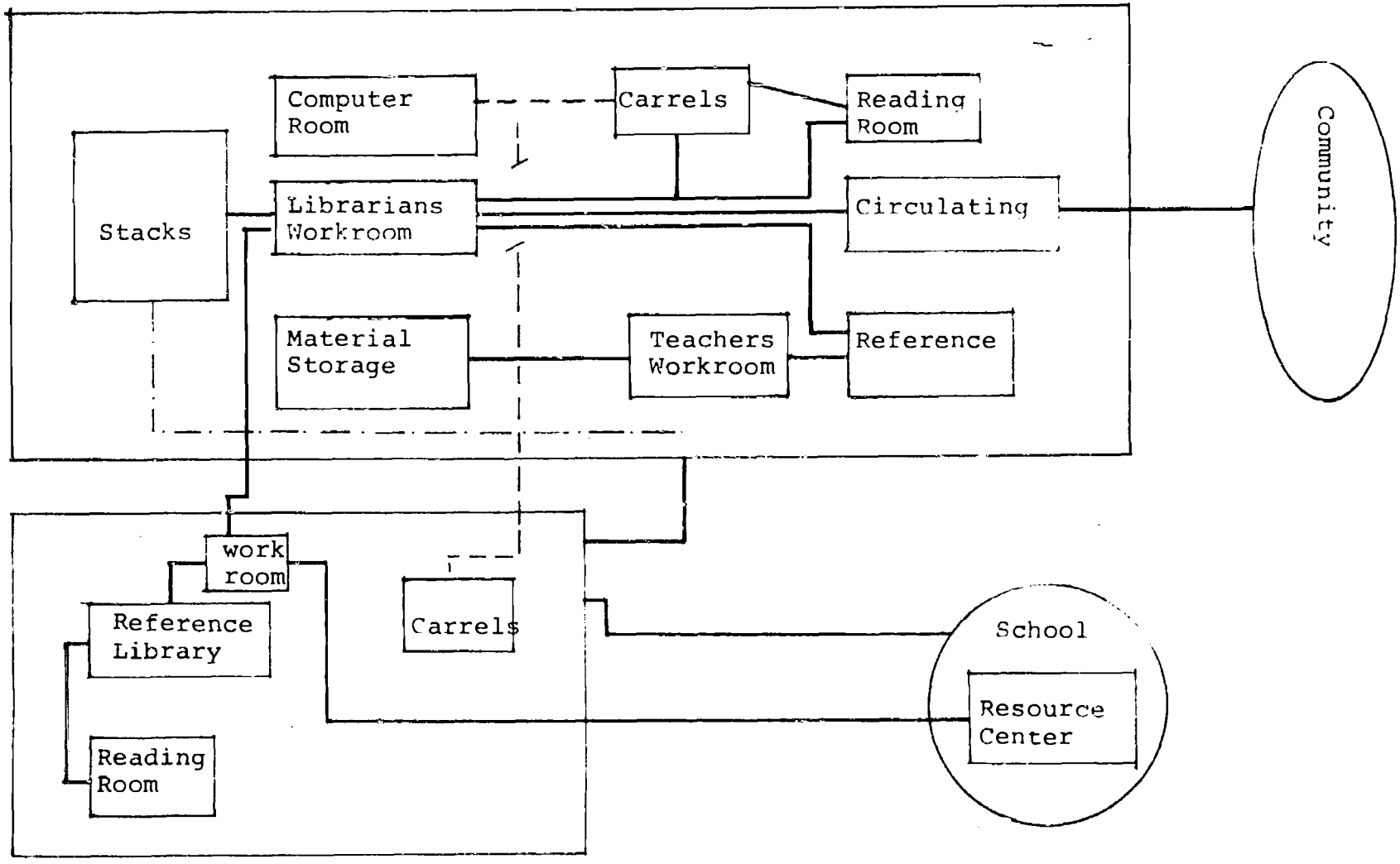
D LIBRARY

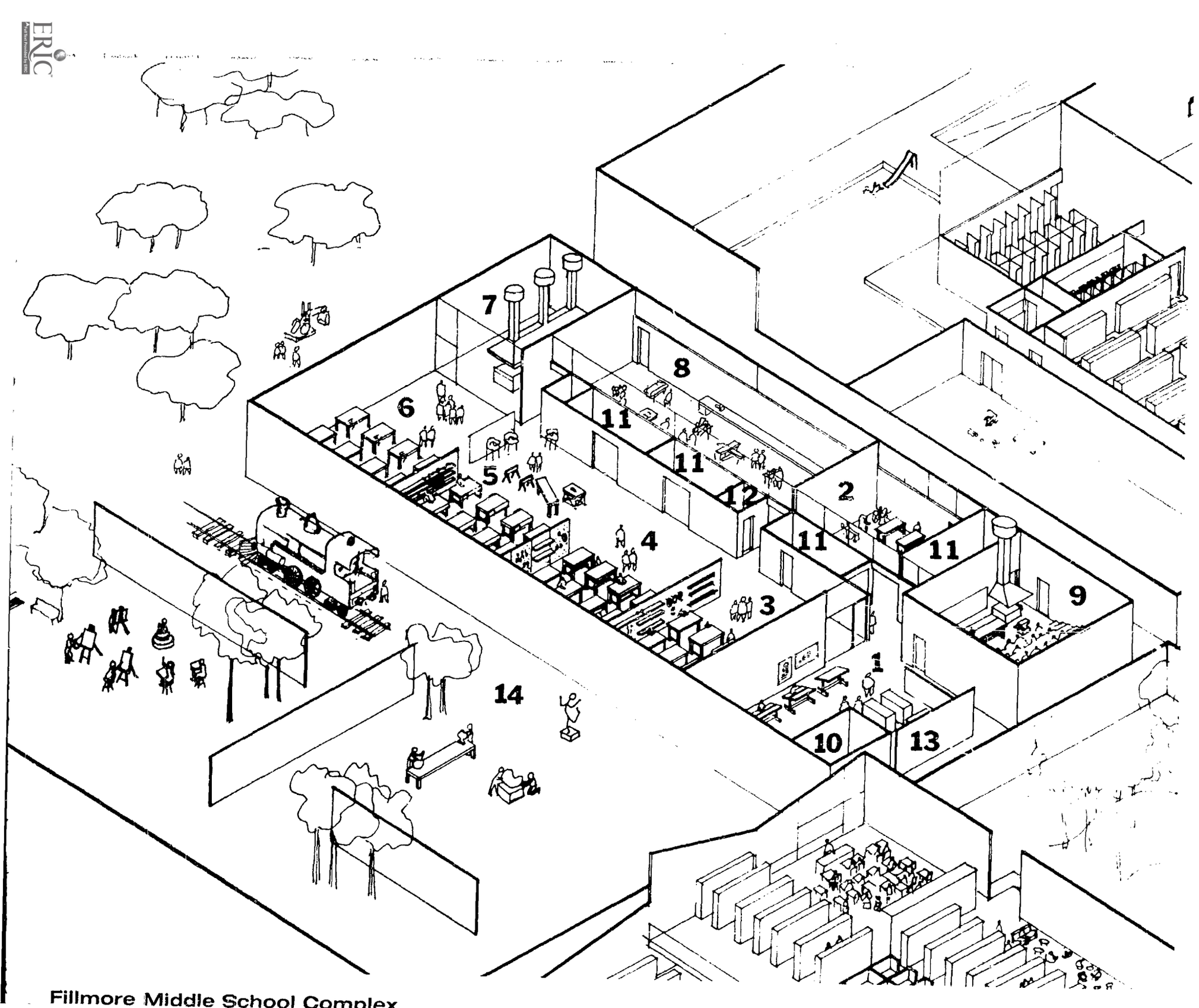
1. Book Stacks
2. Carrels
3. Periodicals
4. Catalogs
5. Reading Room
6. Librarian's Office
7. Conference and Group Room
8. Computer Room
9. Library Workroom
10. Instruction Area
11. Court

BUFFALO MIDDLE SCHOOL

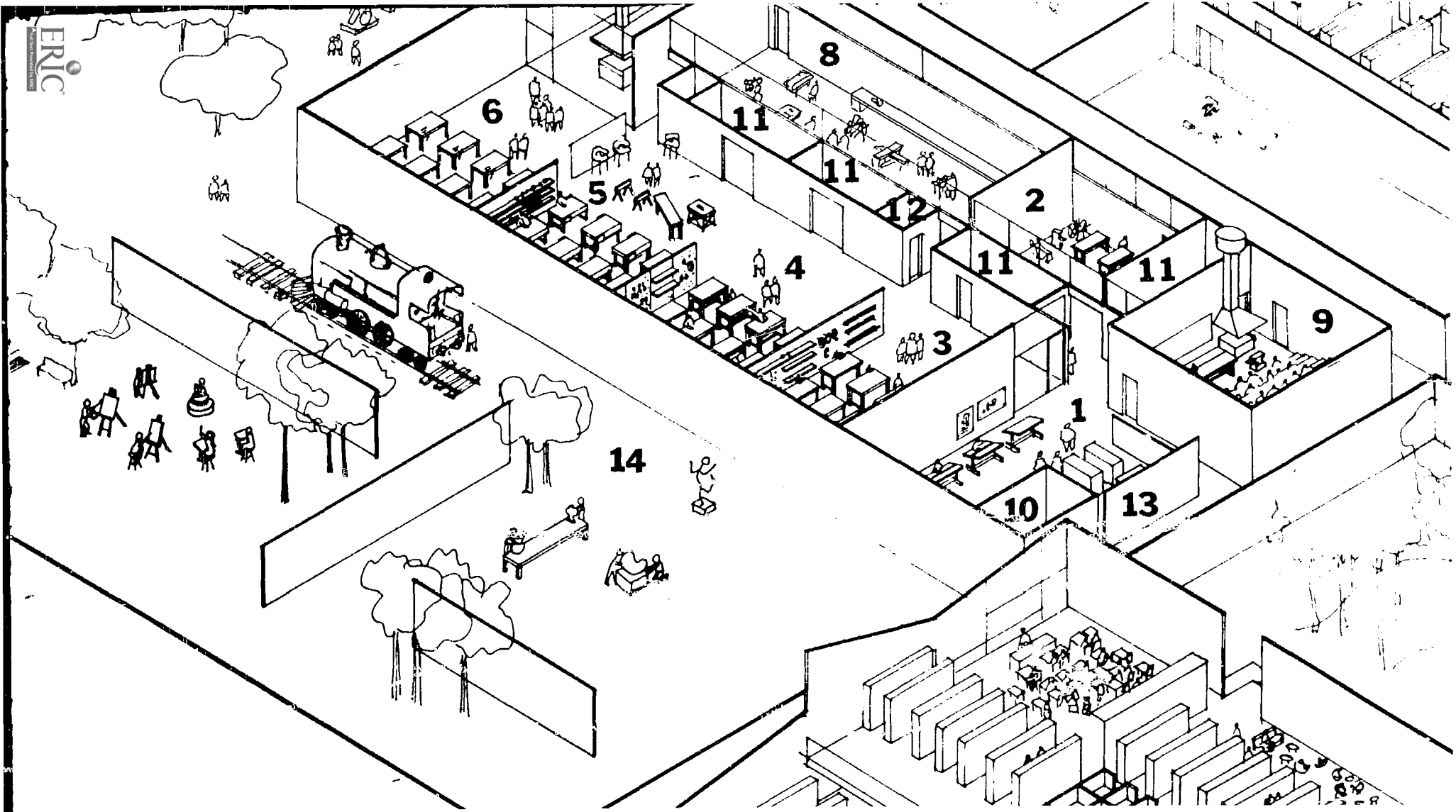


BUFFALO MIDDLE SCHOOLS - LIBRARY





Fillmore Middle School Complex



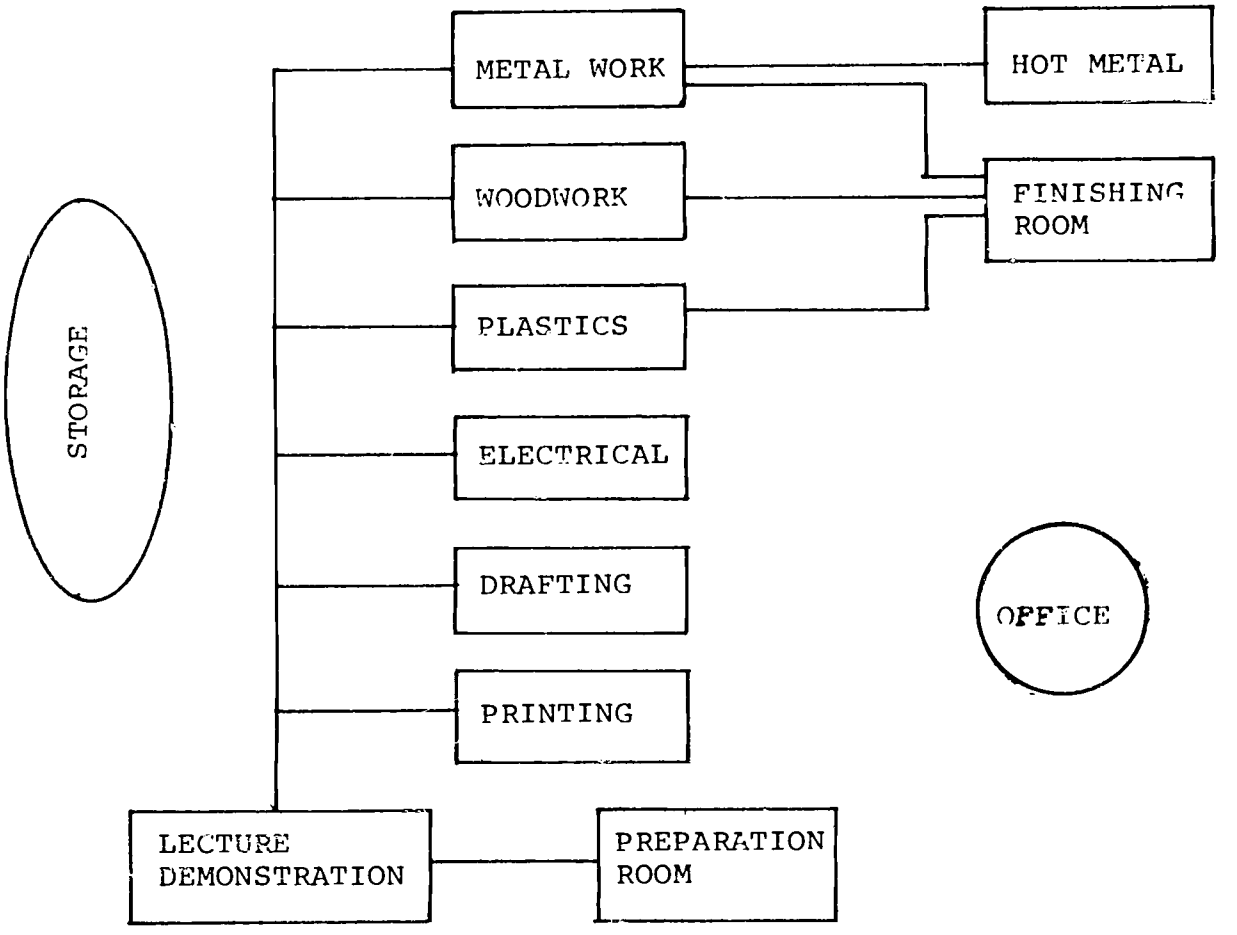
Fillmore Middle School Complex

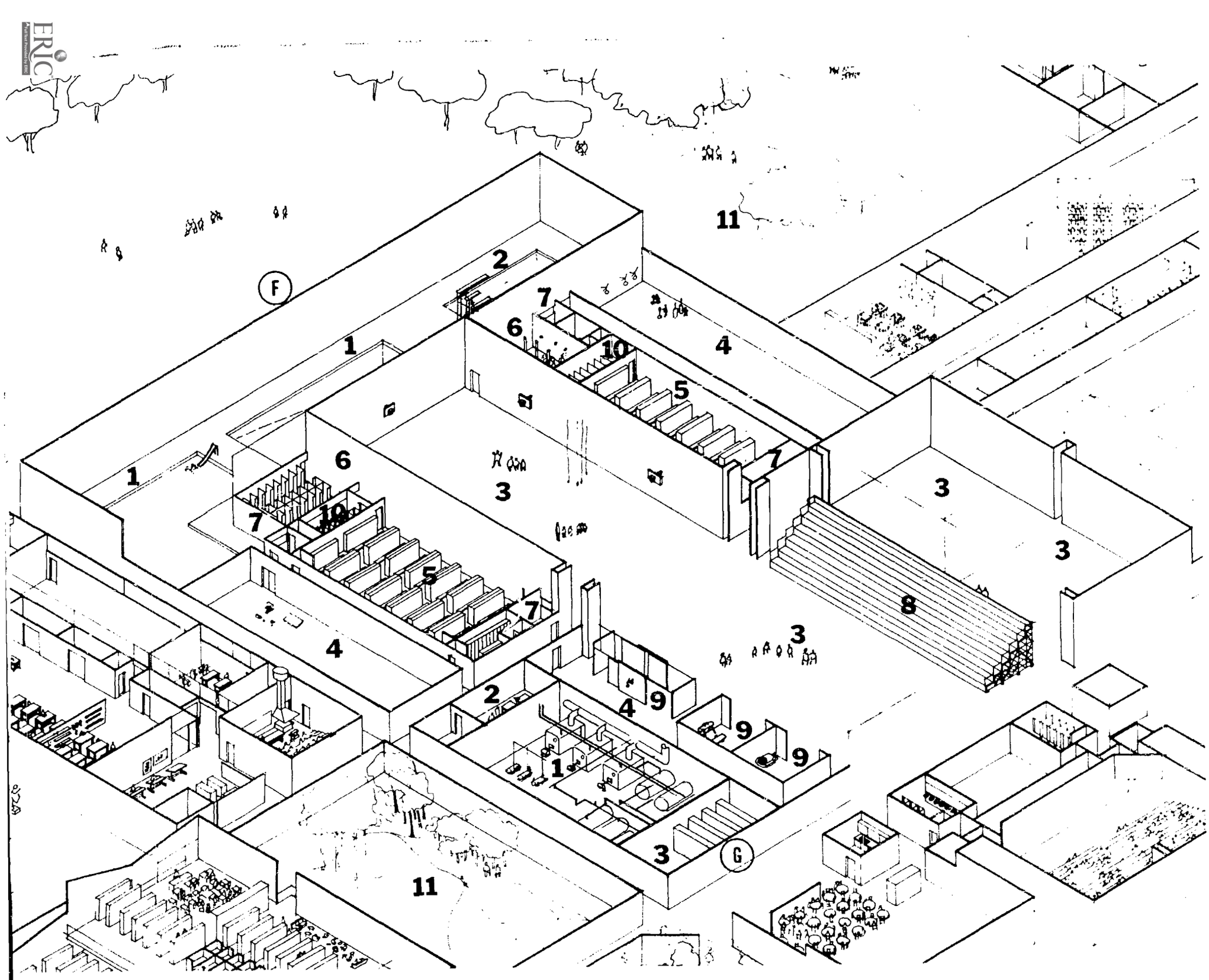
LEGEND

E INDUSTRIAL ARTS

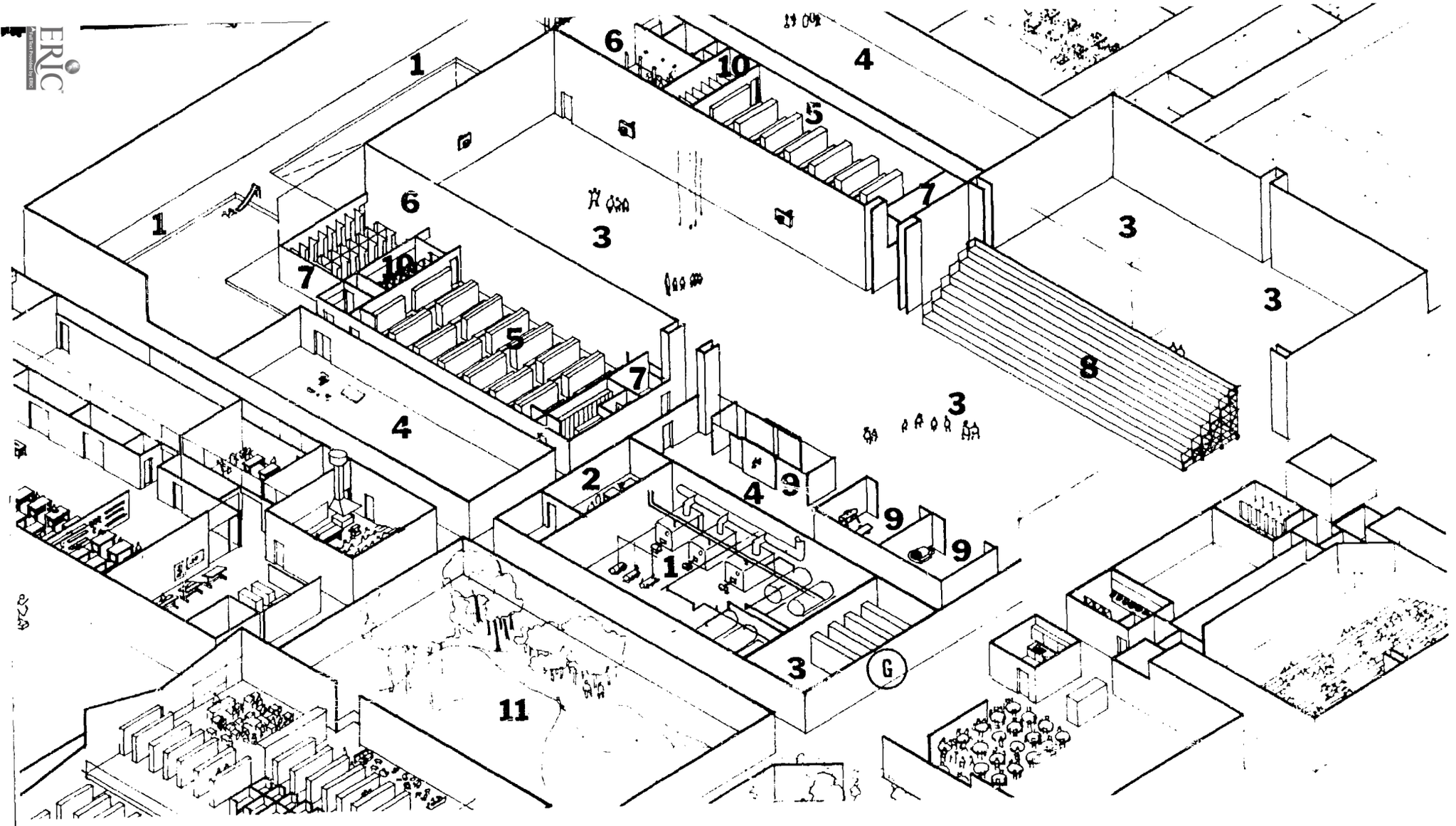
1. Drafting Room
2. Print Shop
3. Electrical Shop
4. Plastics Shop
5. Wood Work Shop
6. Metal Work Shop
7. Hot Metals
8. Finishing
9. Lecture-Demonstration
10. Teachers Preparation Room
11. Storage
12. Toilet
13. Exhibits
14. Activity Court

EXPLORATORY VOCATIONAL/INDUSTRIAL ARTS





Fillmore Middle School Complex



Fillmore Middle School Complex

LEGEND

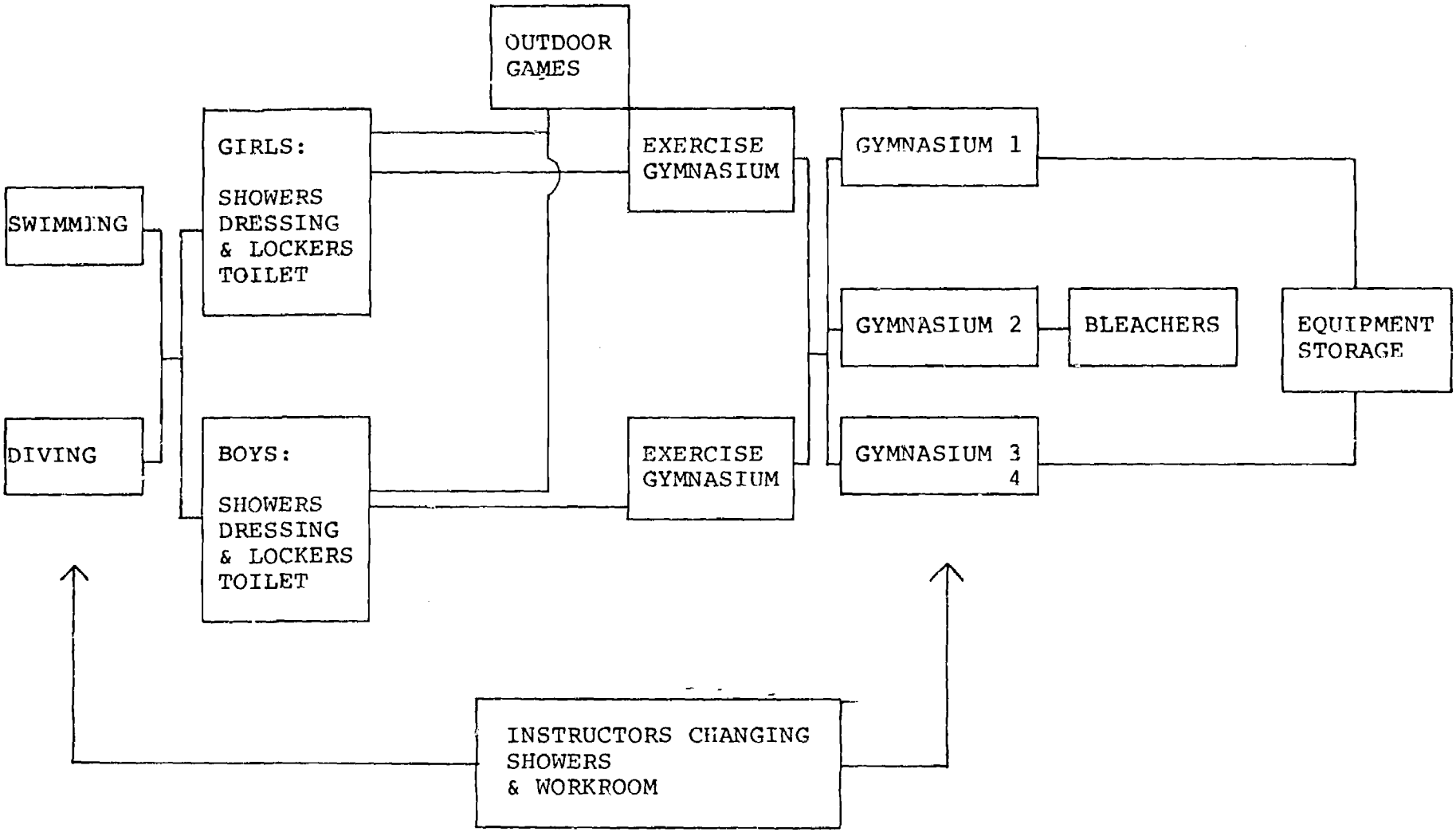
F PHYSICAL EDUCATION

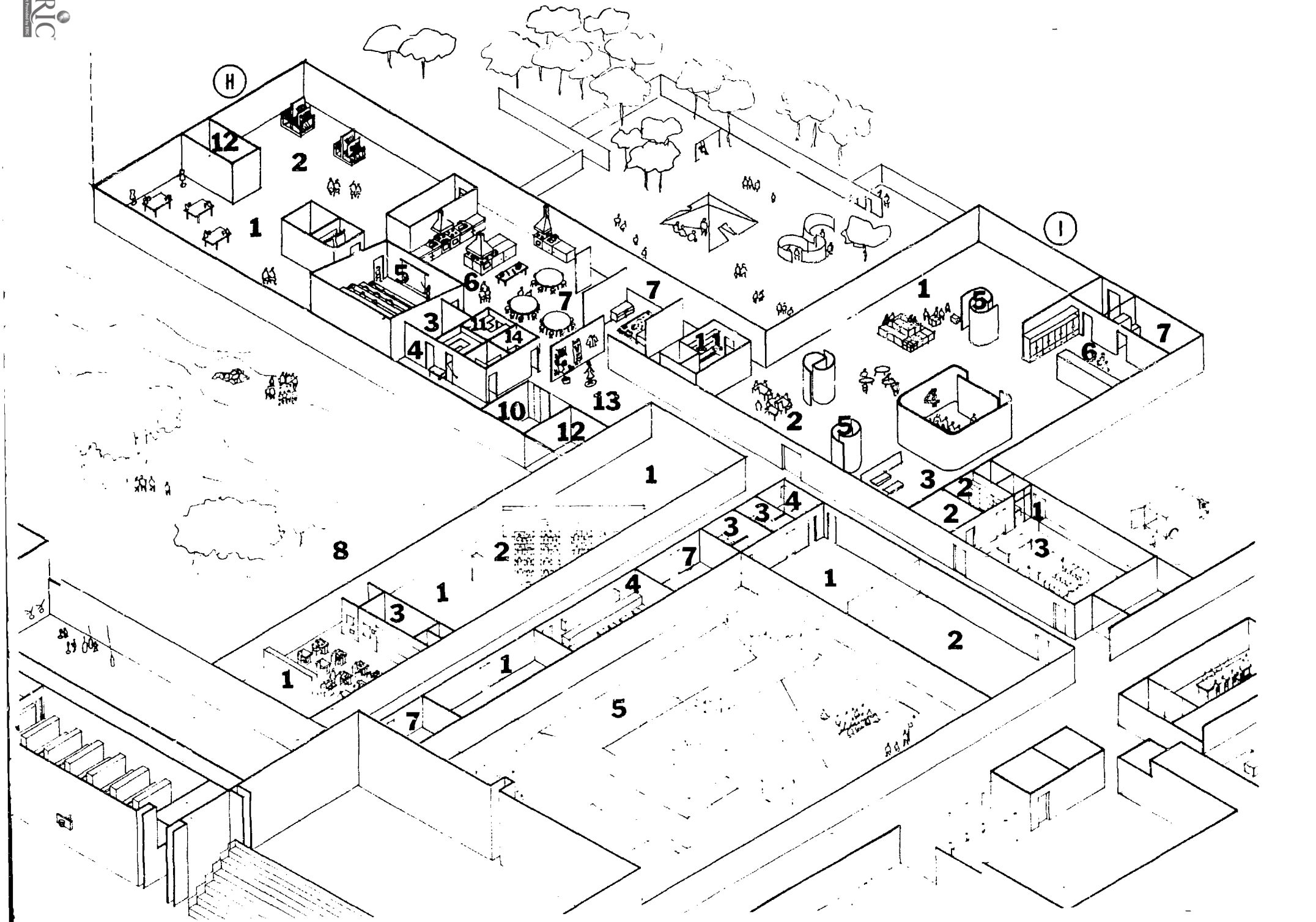
1. Swimming Pool
2. Diving Pool
3. Gymnasium
4. Exercise Gymnasium
5. Locker Room
6. Shower Room
7. Instructors Room
8. Bleachers
9. Storage
10. Toilet
11. Court

G MAINTENANCE AREA

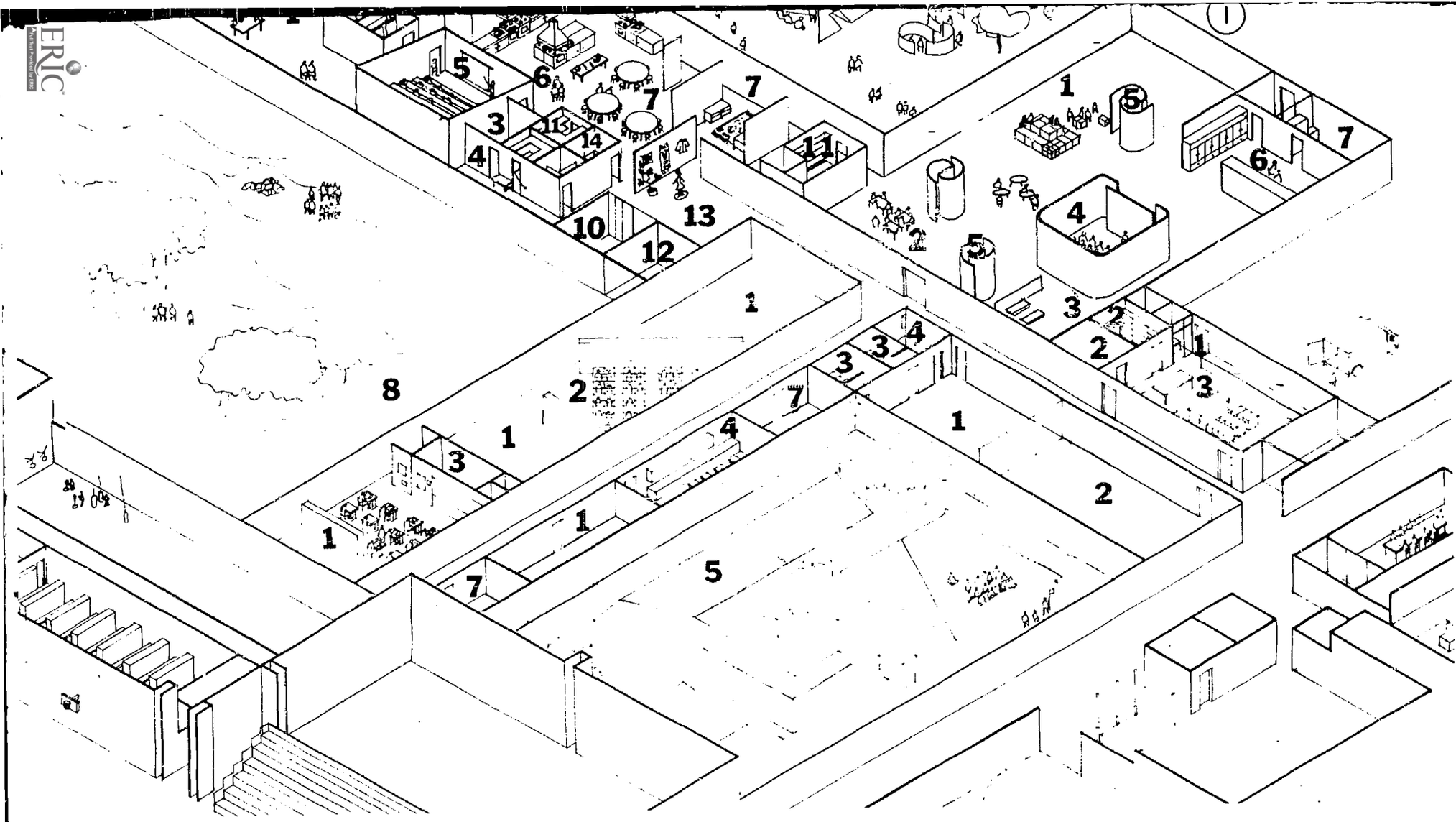
1. Boiler Room
2. Workshop
3. Storage

PHYSICAL ACTIVITIES





Fillmore Middle School Complex



Fillmore Middle School Complex

LEGEND

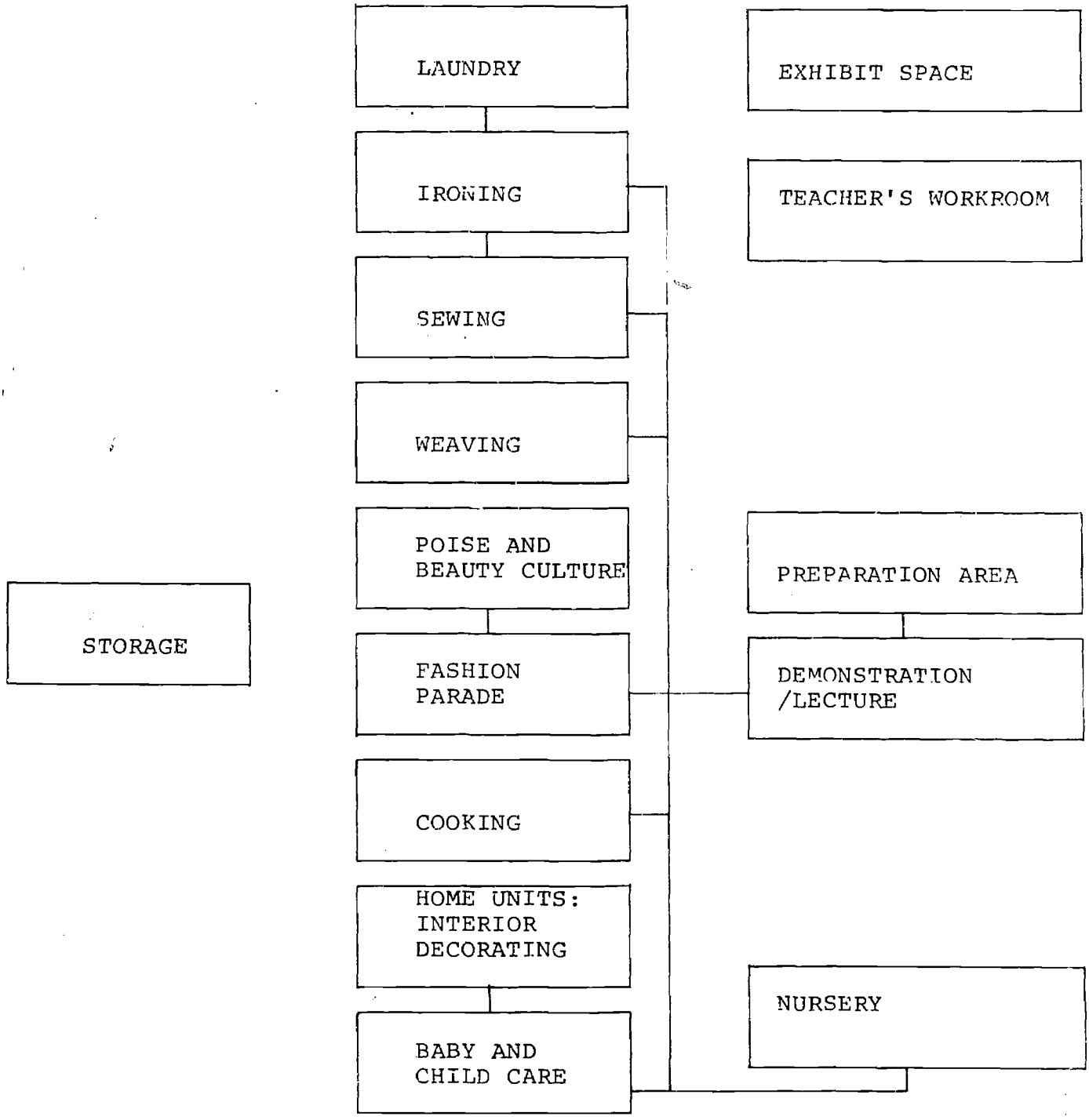
H HOME ECONOMICS

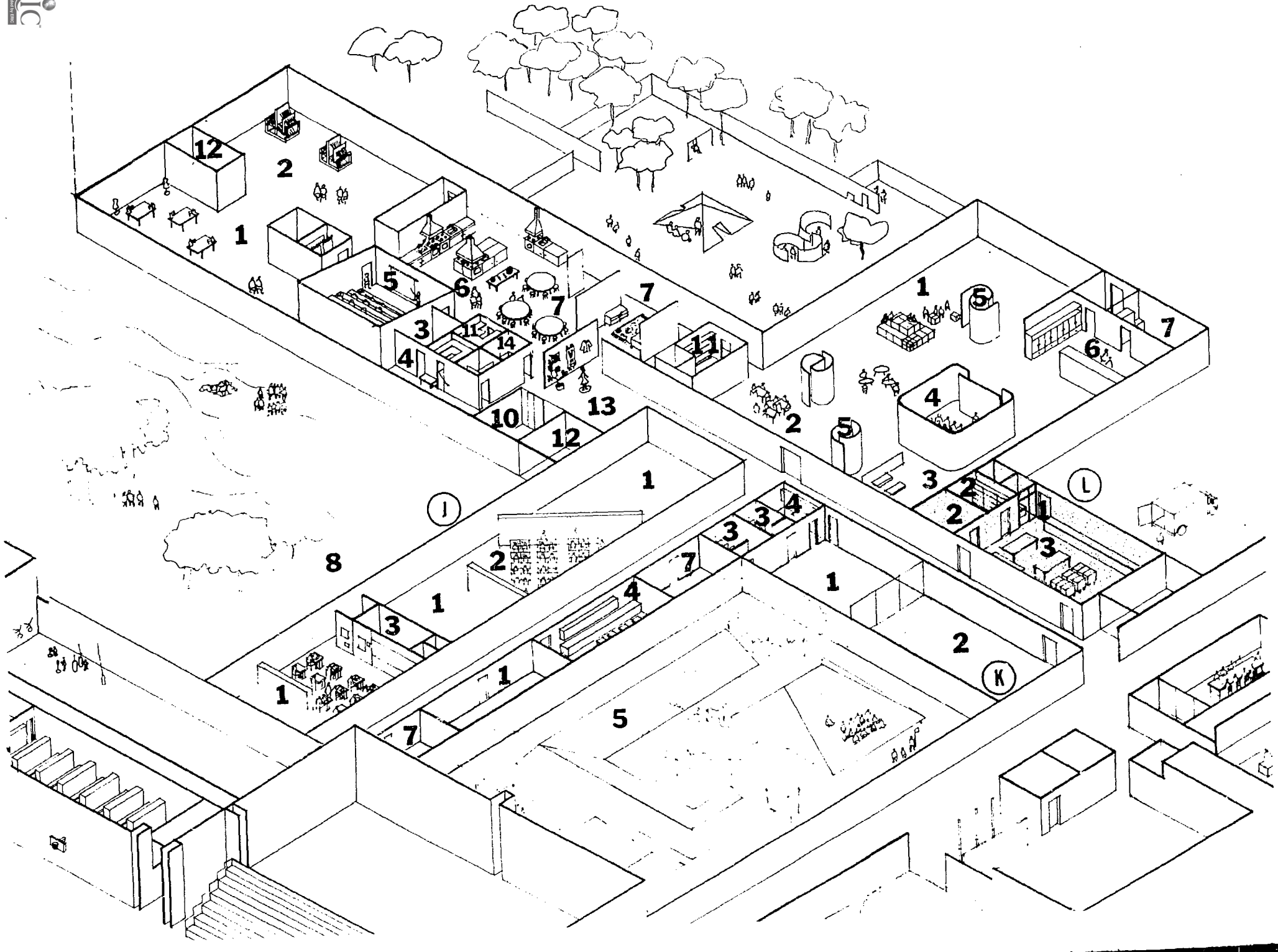
1. Sewing
2. Weaving
3. Laundry
4. Ironing
5. Fashion Parade
6. Cooking
7. Dining
8. Demonstration Domestic Units
9. Lecture-Demonstration
10. Teachers Workroom
11. Storage
12. Stairs
13. Exhibit
14. Toilet

I NURSERY

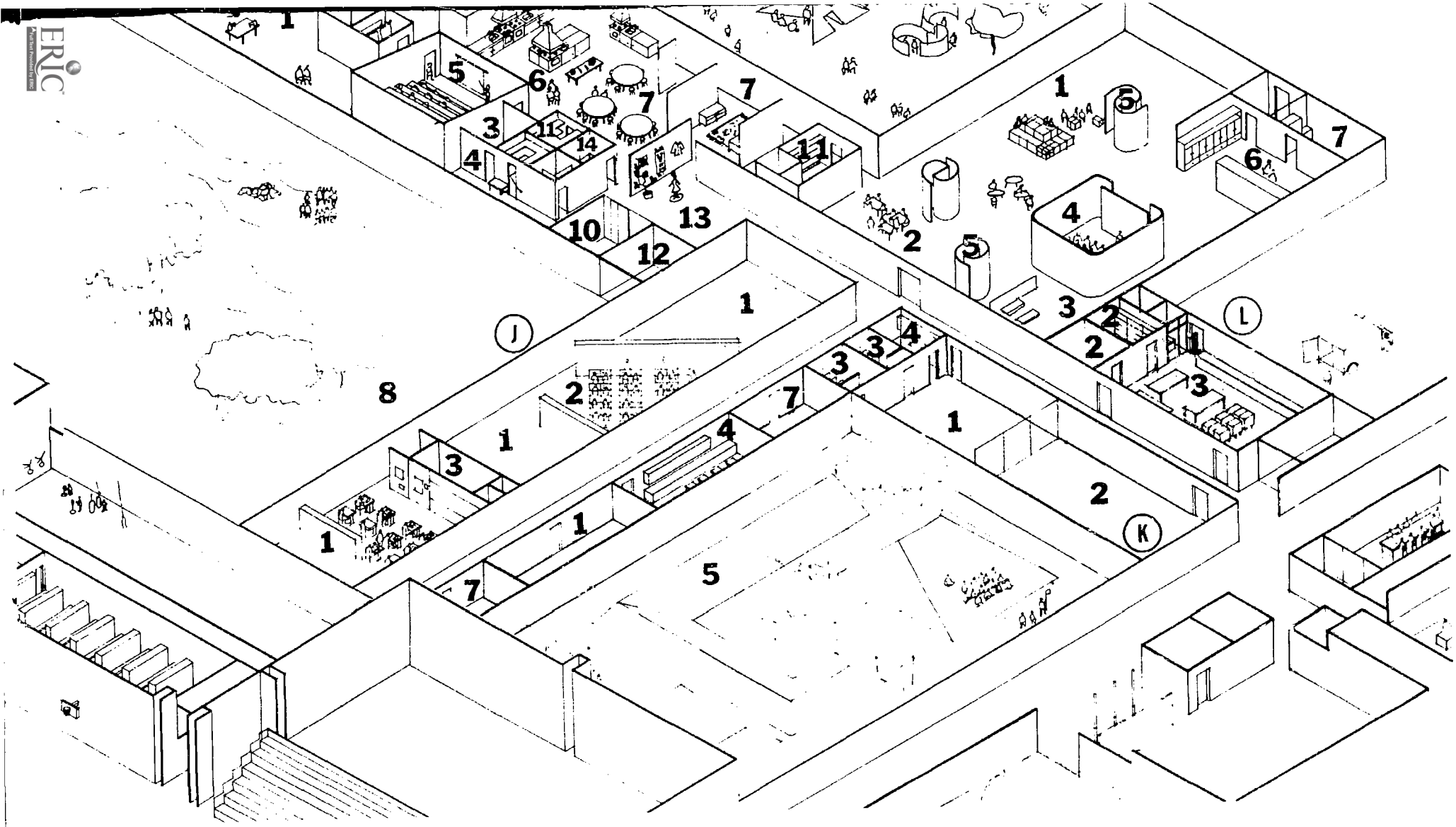
1. Playroom
2. Dining Room
3. Rest Area
4. Theatrette
5. Toilet
6. Parent Waiting
7. Teacher's Room
8. Playground

EXPLORATORY VOCATIONAL/HOME ECONOMICS





Fillmore Middle School Complex



Fillmore Middle School Complex

LEGEND

J- TYPEWRITING

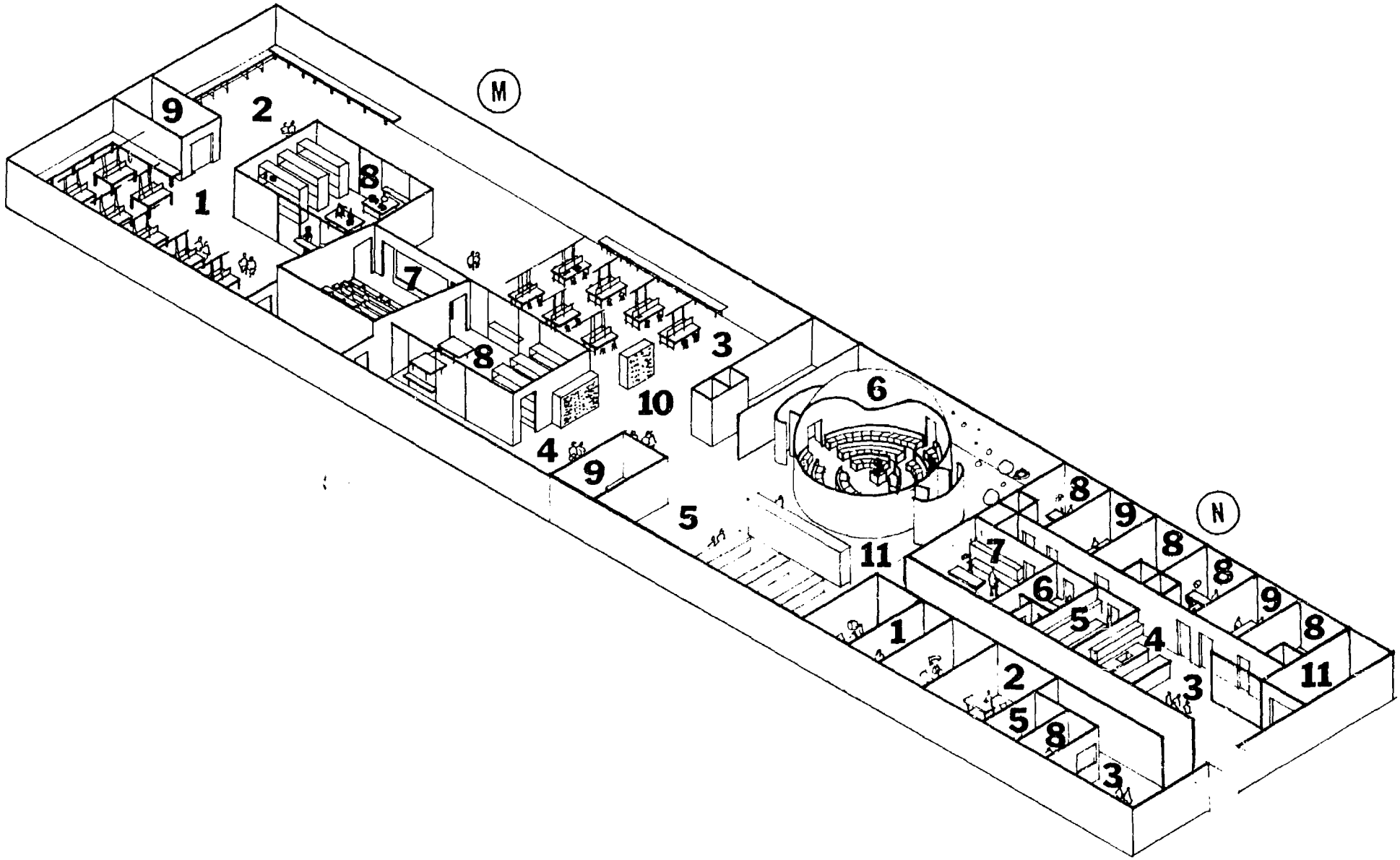
1. Classroom
2. Demonstration
3. Storage
4. Workroom
5. Toilet
6. Teachers Room
7. Mimeo Room
8. Court

K STAFF LOUNGE

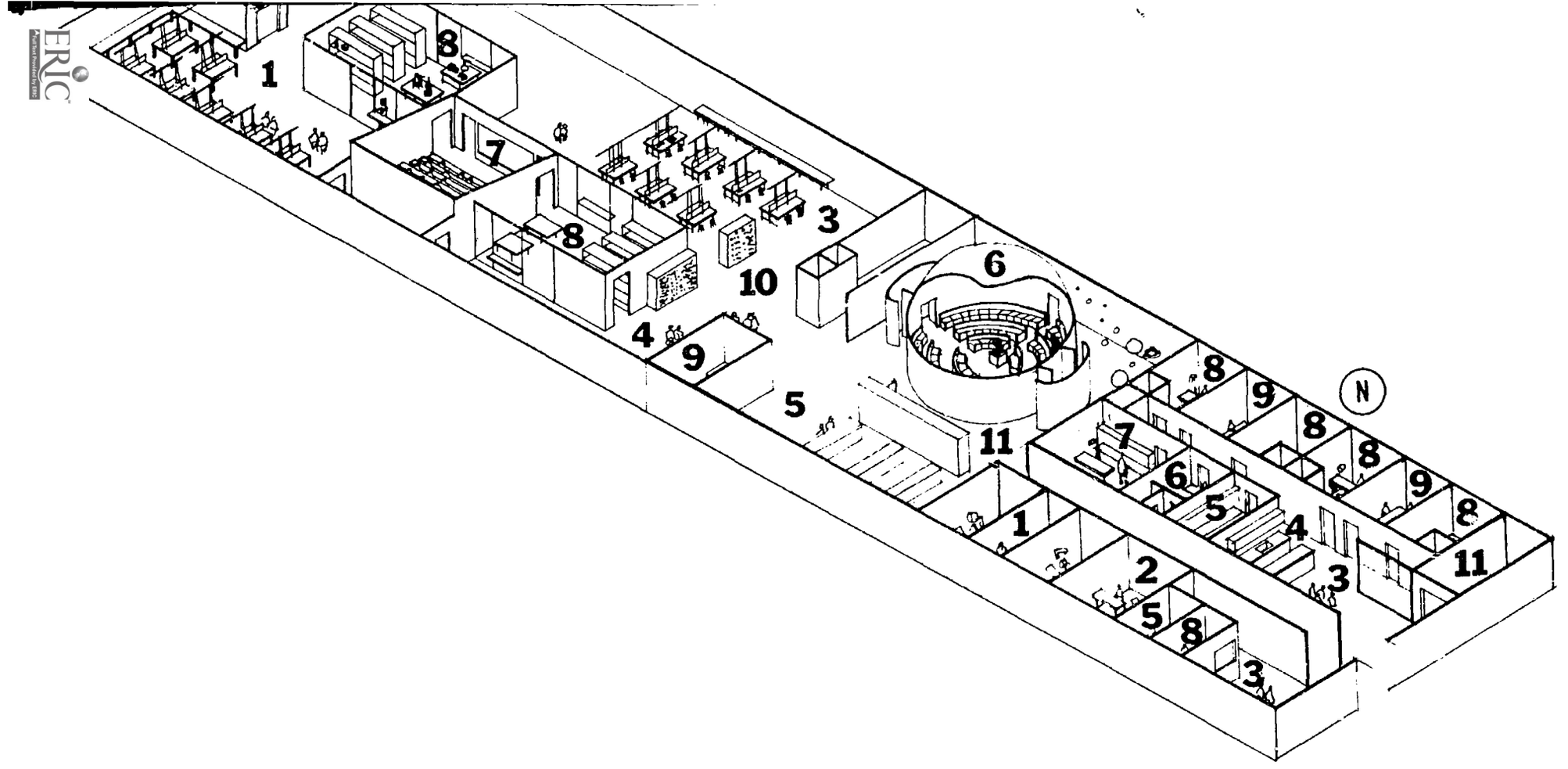
1. Dining
2. Lounge
3. Toilet
4. Snack Room
5. Court

L FOOD DISTRIBUTION

1. Receiving
2. Storage
3. Preparation



Fillmore Middle School Complex



Fillmore Middle School Complex

LEGEND

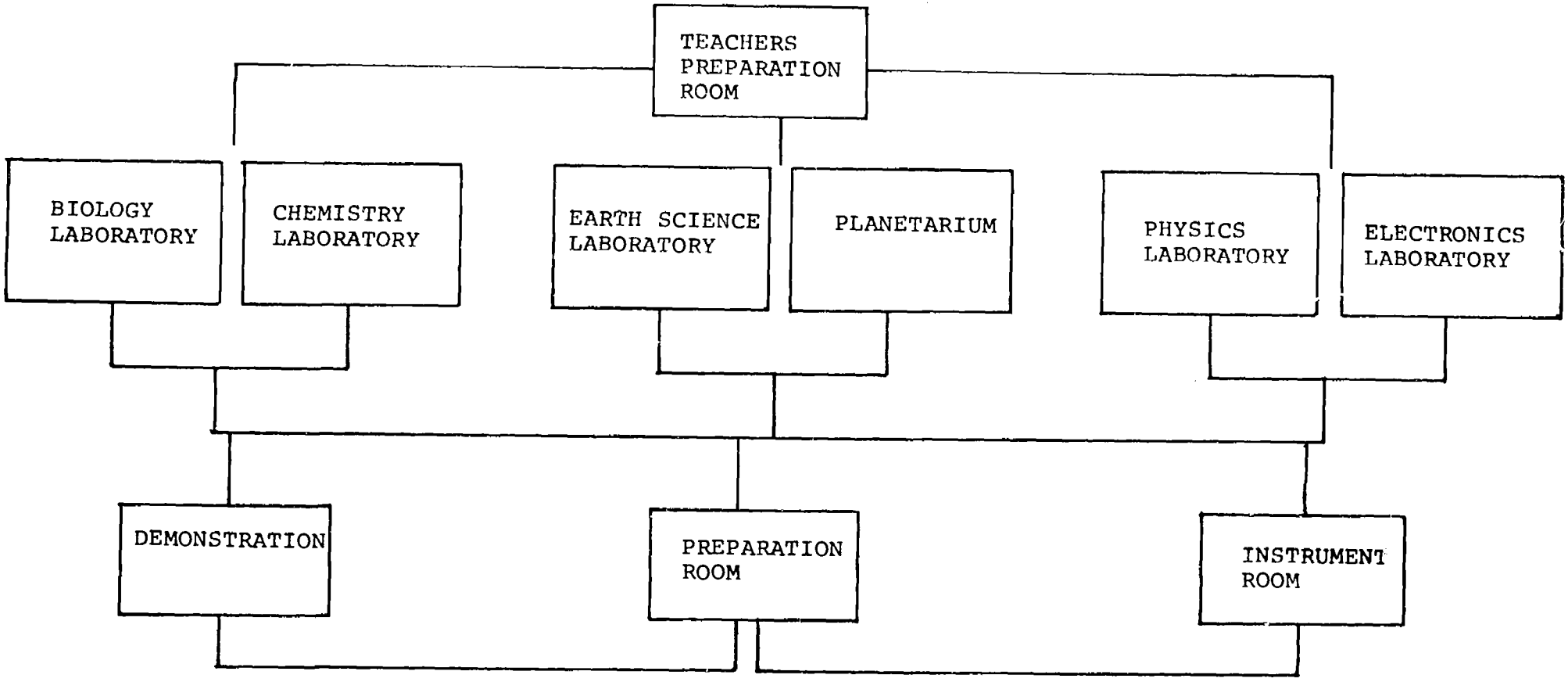
M SCIENCE

1. Chemistry Laboratory
2. Biology Laboratory
3. Physics Laboratory
4. Electronics Laboratory
5. Earth Science
6. Planetarium
7. Demonstration — Lecture
8. Preparation and Instrument and Glass Storage Room
9. Stairs
10. Toilet
11. Exhibit

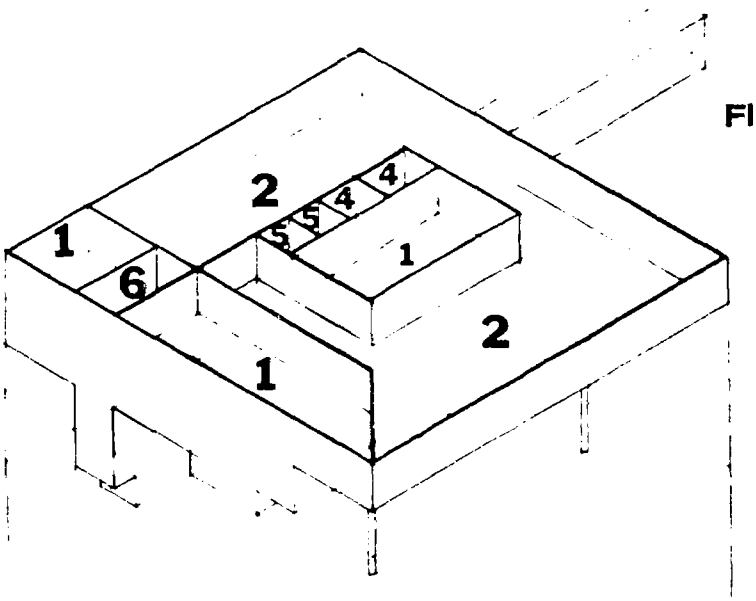
N HEALTH CENTER

1. Dental Suite
2. Well Baby Clinic
3. Waiting Room
4. Nurses Station
5. Utility Room
6. X-Ray Suite
7. Treatment Room
8. Examination Room
9. Doctors' Office
10. Toilet
11. Stairs

CONCEPTUAL/SCIENCE

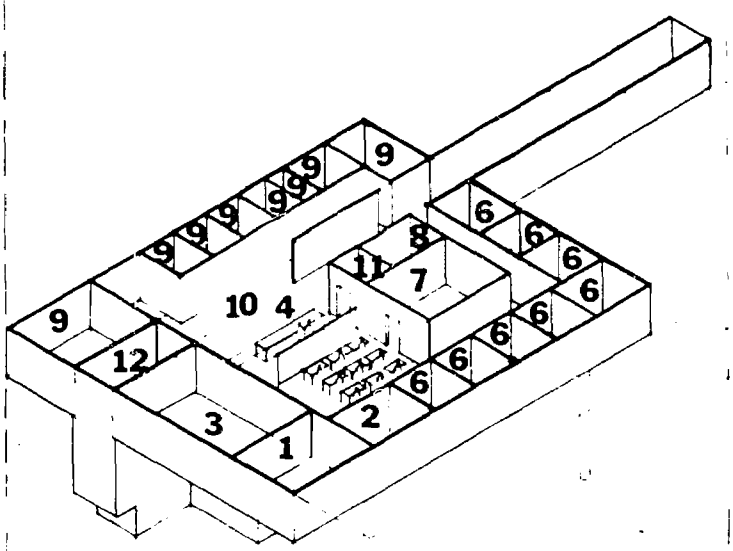


Fillmore Middle School Complex



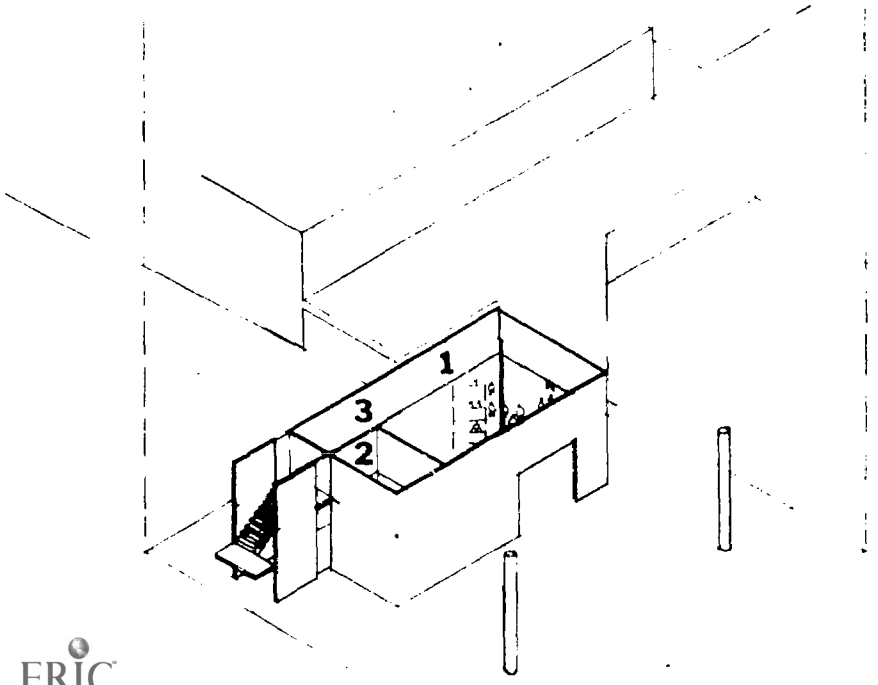
Q PARENT PAVILION

1. Meeting Room
2. Recreation Rooms
3. Activity Room
4. Office
5. Toilet
6. Stair



O ADMINISTRATION AND GUIDANCE

1. Complex Supervisor's Office
2. Assistant Supervisor's Office
3. Governing Board Room
4. Enquiries
5. General Office
6. Office
7. Record
8. Storage
9. Conference Room (Central Guidance Suite)
10. Working
11. Toilets
12. Stair



P INFORMATION CENTER

Display
Office
Consulting

BUFFALO MIDDLE SCHOOL PROGRAM ANALYSIS

Program Content	% of tot.	# of yrs.	# st. at one time	% hrs. / wk. of inst. time	% tot. hrs/wk. of inst. time	tot. hrs./ week	size of class	# of cls. / wk.	# of sp. req.	type of sp.	
Self Contained(La, Math,SS,Sci.)	100	1	900	50	12.5	11,250	25	450	18	CR	
Sub Total					12.5	11,250		450	18		
Fund.Skills Lang.Arts	100	1	900	10	2.5	2,250	25	90	3.6	CR	
Journalism	10	2	180	10	.5	450	25	18	.72	CR	
Creative Writing-Prose	10	2	180	10	.5	450	25	18	.72	CR	
Creative Writ.-Poetry	10	2	180	10	.5	450	25	18	.72	CR	
Developmental Reading	10	2	180	10	.5	450	15	30	1.2	G	
Public Speaking	10	2	180	10	.5	450	25	18	.72	CR	
Report. & Expos. Writing	10	2	180	10	.5	450	25	18	.72	CR	
Academic English	10	2	180	10	.5	450	25	18	.72	CR	
Rapid Reading	10	2	180	10	.5	450	25	18	.72	CR	
Playwriting	10	2	180	10	.5	450	25	18	.72	CR	
Basic Linguistics	10	2	180	10	.5	450	25	18	.72	CR	
Sub Totals					7.5	6,750		282	10.08	CR	
									1.2	G	

Table VI.1

Program Content	% of tot.	# of yrs.	# st. at one time	% hrs. / wk. of inst. time.	% tot. hrs. / wk. of inst. time	tot. hrs. /wk.	size of cls.	# of cls. /wk.	# of sp. req.	type of sp.
Developmental Mathematics	100	1	900	10	2.5	2,250	25	90	3.6	CR
Remedial Mathematics	15	2	270	10	.75	675	15	45	1.8	G
Basic Mathematics	40	1	360	10	1.0	900	25	36	1.4	CR
Algebra	15	2	270	10	.75	675	25	27	1.08	CR
Arith. Theory	15	2	270	10	.75	675	25	27	1.08	CR
Business Mathematics	15	2	270	10	.75	675	25	27	1.08	CR
Geometry	15	1	135	10	.37	337	25	13.5	.54	CR
Comp. Mathematics	15	1	135	10	.37	337	25	13.5	.54	CR
Mathematical Games	10	1	90	10	.25	225	25	9	.36	CR
Sub Totals					7.49	6,074		243	9.68	CR
						675		45	1.8	G
						6,749				
Typewriting	100	1	900	7	1.75	1,575	25	63	2.5	TR
	100	3	2700	5	3.75	3,375	25	135	5.4	TR
					5.5	4,950		198	7.9	TR

Table VI.2

SKILL/FOREIGN LANGUAGE

Program Content	% of tot.	# of yrs.	# st. at one time	# of inst. time / wk.	tot. inst. time / week	total hours /week	hrs./wk. → / size of cls. ←	80% Classroom			20% Language Lab			
							size of cls.	# of clss. / wk.	# of sp. req.	type of sp.	size of cls.	# of clss. / wk.	# of sp. req.	type of sp.
Spanish	16	4	576	10	1.6	1440	1152/25	46.1	1.84	CR	288/25	11.5	.46	L.L.
French	12	4	432	10	1.2	1080	864/25	35	1.40	CR	216/25	8.6	.34	L.L.
Italian	9	4	324	10	.9	810	648/25	26	1.04	CR	162/25	6.5	.26	L.L.
Russian	9	4	324	10	.9	810	648/25	26	1.04	CR	162/25	6.5	.26	L.L.
Polish	9	4	324	10	.9	810	648/25	26	1.04	CR	162/25	6.5	.26	L.L.
Senecca Indian	9	4	324	10	.9	810	648/25	26	1.04	CR	162/25	6.5	.26	L.L.
Chinese	9	4	324	10	.9	810	648/25	26	1.04	CR	162/25	6.5	.26	L.L.
German	9	4	324	10	.9	810	648/25	26	1.04	CR	162/25	6.5	.26	L.L.
Latin	9	4	324	10	.9	810	25	32.4	1.30	CR				
Swahili	9	4	324	10	.9	810	648/25	26	1.04	CR	162/25	6.5	.26	L.L.
Sub Total					10.0	9000		295.5	11.82	CR		65.6	2.62	
								296	12			66	3	

Table VI.3

CONCEPTUAL/SOCIAL SCIENCE

Program Content	% of tot.	# of yrs.	# st. at one time	% of inst. time / wk.	tot. % inst. time / week	total hours /week	size of cls.	# of clss. / wk.	# of sp. req.	type of sp.	size of cls.	# of clss. / wk.	# of sp. req.	type of sp.
American History	100	1	900	10	2.5	2250	25	90	3.6	CR				
Ancient History	20	1	180	10	.5	450	25	18	.72	CR				
U.S. in World Affairs	20	1	180	10	.5	450	25	18	.72	CR				
Social Hist. of the U.S.	20	1	180	10	.5	450	25	18	.72	CR				
Hist. of Asia and Africa	20	1	180	10	.5	450	25	18	.72	CR				
Hist. of Europe	20	1	180	10	.5	450	25	18	.72	CR				
							75% Classroom				25% Seminar Room(Assumed)			
Problems of Democracy	20	1	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Man in Society (Social)	20	1	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Man Through the Ages (Anthro)	20	1	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Black Hist. and Culture	20	1	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Methods of History	20	1	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
					7.5	6750		247.5	9.9	CR		37.5	1.5	G
									10				2	

Table VI.4

CONCEPTUAL SCIENCE

Program Content	% of tot.	# of yrs.	# st. at one time	% of inst. time / wk.	tot. % inst. time / week	total hours /week	Classroom 75% size of cls.	# of clss. / wk.	# of sp. req.	type of sp.	Laboratory 25% size of cls.	# of clss. / wk.	# of sp. req.	type of sp.
General Science	100	1	900	10	2.5	2250	25	90	3.6	CR				
	70	1	630	10	1.75	1575	1181.25 / 25	47.25	1.9	CR	393.25 / 25	15.75	.63	L
	30	1	270	10	.75	675	506.25 / 25	20.25	.8	CR	168.75 / 25	6.75	.27	L
Earth Science	10	2	180	10	.5	450	337.5 / 25	13.5	.54	CR	112.5 / 25	4.5	.18	L
Biological Foundations	10	2	180	10	.5	450	337.5 / 25	13.5	.54	CR	112.5 / 25	4.5	.18	L
Physical Foundations	10	2	180	10	.5	450	337.5 / 25	13.5	.54	CR	112.5 / 25	4.5	.18	L
Astronomy	10	1	90	10	.25	225	168.75 / 25	6.75	.27	CR	56.25 / 25	2.25	.09	L
Biology	10	1	90	10	.25	225	168.75 / 25	6.75	.27	CR	56.25 / 25	2.25	.09	L
Physical Science	10	1	90	10	.25	225	168.75 / 25	6.75	.27	CR	56.25 / 25	2.25	.09	L
Electronics	10	1	90	10	.25	225	168.75 / 25	6.75	.27	CR	56.25 / 25	2.25	.09	L
					7.5	6750		225	9	CR		45	1.8	L
													2	L

Table VI:5

CONCEPTUAL/HUMANITIES

Program Content	% of tot.	# of yrs.	# st. at one time	% of inst. time /week	tot. % inst. time /week	total hours/ week	size of cls.	# of clss. /week	# of sp. req.	type of sp.	size of cls.	# of clss/ wk.	# of sp. req.	type of sp.
Humanities Stud of Man	100	1	900	10	2.5	2250	25	90	3.6	CR				
							Classroom 75%				Seminar 25%			
Amer. Literature	10	2	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Great British Writers	10	2	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Reading The Short Story	10	2	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Reading theNovel	10	2	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Reading World Lit.	10	2	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Poetry as Lit.	10	2	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Religion in Man's World	10	2	180	10	.5	450	337.5/25	13.5	.54	CR	112.5/15	7.5	.3	G
Guided Reading	10	2	180	10	.5	450					25	18	.72	Reading RRRoom
					6.5	5850		184.5	7.14			52.5	2.1	
									8				3	G
													.72 1	RR

Table VI.6

CONCEPTUAL/URBAN LIVING

Program Content	% of tot.	# of yrs.	# st. at one time	% of inst. time / wk.	tot. % inst. time / week	total hours /week	size of class	# of clss. / wk.	# of sp. req.	type of sp.
Living in the City	100	1	900	10	2.5	2250	25	90	3.6	CR
Planning Our Cities	10	2	180	10	.5	450	25	18	.72	CR
Governing Our Cities	10	2	180	10	.5	450	25	18	.72	CR
Sub Total					3.5	3150		126	5.04	CR

Table VI.7

EXPLORATORY VOCATIONAL
/INDUSTRIAL ARTS

Program Content	% of tot.	# of yrs.	# st. at one time	% of inst. time / wk.	tot. % inst. time / week	total hours /week	size of class	# of clss. / wk.	# of sp. req.	type of sp.	
Ind. Arts Woodworking	10	2	180	8	.4	360	25	14.4	.58	S.	
				20	1.0	900		36	1.44		S. Total
	10	2	180	12	.6	540		21.6	.86		
Ind. Arts Metal Wk.	10	2	180	8	.4	360	25	14.4	.58	S.	
				20	1.0	900		36	1.44		S. Total
	10	2	180	12	.6	540		21.6	.86		
Ind. Arts Electricity	10	2	180	8	.4	360	25	14.4	.58	S.	
				20	1.0	900		36	1.44		S. Total
	10	2	180	12	.6	540		21.6	.86		
Ind. Arts Printing	10	2	180	8	.4	360	25	14.4	.58	S.	
				20	1.0	900		36	1.44		S. Total
	10	2	180	12	.6	540		21.6	.86		
Ind. Arts Plastics	10	2	180	8	.4	360	25	14.4	.58	S.	
				20	1.0	900		36	1.44		S. Total
	10	2	180	12	.6	540		21.6	.86		
Sub Total					5.0	4500		180	7.2	S.	
									8.	S.	

Table VI.8

EXPLORATORY VOCATIONAL
/HOME ECONOMICS

Program Content	# of tot.	# of yrs.	# st. at one time	% of inst. time / wk.	tot. % inst. time / week	total hours /week	size of class	# of clss. / wk.	# of sp. req.	type of sp.	
Home Ec. Cooking	10	2	180	8	.4	360	25	14.4	.58	S	
					1.0	900		36	1.44		S. Total
	10	2	180	12	.6	540		21.6	.86		
Home Ec. Sewing	10	2	180	8	.4	360	25	14.4	.58	S	
					1.0	900		36	1.44		S. Total
	10	2	180	12	.6	540	25	21.6	.86		
Home Ec. Child Care	10	2	180	8	.4	360	25	14.4	.58	S	
					1.0	900		36	1.44		S. Total
	10	2	180	12	.6	540		21.6	.86		
Home Ec. Inter. Dec.	10	2	180	8	.4	360	25	14.4	.58	S	
					1.0	900		36	1.44		S. Total
	10	2	180	12	.6	540		21.6	.86		
Home Ec. Poise & Beauty Culture	10	2	180	8	.4	360	25	14.4	.58	S	
					1.0	900		36	1.44		S. Total
	10	2	180	12	.6	540		21.6	.86		
Sub Total					5.0	4500		180	7.2	S	
									8	S	

Table VI.9

EXPLORATORY/ARTS

Program Content	% of tot.	# of yrs.	# st. at one time	% of inst. time / wk.	tot. % inst. time / week	total hours /week	size of class	# of clss. / wk.	# of sp. req.	type of sp.
Art	50	1	450	4	.5	450	25	18	.72	S
					1.08	972		39	1.56	s. Total
	33	1	300	7	.58	522		21	.84	
Printing & Drawing	10	1	90	10	.25	225	25	9	.36	S
					.41	369		14.8	.59	S. Total
	5	1	45	13	.16	144		5.8	.23	
Ceramics & Sculpture	10	1	90	10	.25	225	25	9	.36	S
					.41	369		14.8	.59	S. Total
	5	1	45	13	.16	144		5.8	.23	
General Crafts	10	1	90	10	.25	225	25	9	.36	S
				23	.41	369		14.8	.59	S. Total
	5	1	45	13	.16	144		5.8	.23	
Photography	10	1	90	10	.25	225	25	9	.36	S INCLUDE
				23	.41	369		14.8	.59	DARKROOM
	5	1	45	13	.16	144		5.8	.23	
Adv. Painting	10	1	90		.32	288	25	11.5	.46	S
					.55	495		19.8	.79	S. Total
	7	1	63	13	.23	207		8.3	.33	

(CONTINUED ON FOLLOWING PAGE)

EXPLORATORY ARTS
(CONTINUED FROM PRECEEDING PAGE)

Program Content	% of tot.	# of yrs.	# st. at one time	% of inst. time / wk.	tot. % inst. time / week	total hours /week	size of class	# of clss. / wk.	# of sp. req.	type of sp.	
Graphics	10	1	90	13	.32	288	25	11.5	.46	S	
				26	.58	522		20.9	.84		S. Total
	8	1	72	13	.26	234		9.4	.38		
Creative Photography	10	1	90	13	.32	288	25	11.5	.46	S	
				26	.55	495		19.9	.79		S. Total
	7	1	63	13	.23	207		8.3	.33		
Motion Pic. As Art	10	1	90	13	.32	288	25	11.5	.46	S	
				26	.48	432		17.3	.69		S. Total
	5	1	45	13	.16	144		5.8	.23		
Sub Total					4.47	4392		176	7.03	S	
									8	S	+ DARKROOM

Table VI.10 (cont'd)

EXPLORATORY ARTS/MUSIC

Program Content	% of tot.	# of yrs.	# st. at one time	% of inst. time / wk.	tot. % inst. time / week	total hours /week	size of class	# of clss. / wk.	# of sp. req.	type of sp.	
General Music	50	1	450	4	.5	450	25	18	.72	CR	
Band	15	1	135	10	.37	333	25	13.3	.53	IR	
	15	1	135	13	.48	432	25	17.3	.69	IR	
	10	1	90	13	.32	288	25	11.5	.46	IR	
Orchestra	10	1	90	10	.25	225	25	9	.36	IR	
	10	1	90	13	.32	288	25	11.5	.46	IR	
	7	1	63	13	.23	207	25	8.3	.33	IR	
Chorus	15	1	135	10	.37	333	25	13.3	.53	VR	
	15	1	135	13	.48	432	25	17.3	.69	VR	
	10	1	90	13	.32	288	25	11.5	.46	VR	
Music Appreciation	33	1	300	7	.57	513	25	20.5	.82	A	
	5	1	45	13	.16	144	25	5.8	.23	L	
					4.37	3933		157.3	6.28		
									7		

CR = CLASSROOM
IR = INSTRUMENT ROOM
VR = VOCAL ROOM

A = AUDITORIUM
L = LECTURE

Table VI.11

EXPLORATORY ARTS/DRAMA

Program Content	# of tot.	# of yrs.	# st. at one time	% of inst. time / wk.	tot. % inst. time /week	total hours /week	size of class	# of clss. / wk.	# of sp. req.	type of sp.	
Drama	50	1	450	4	.5	450	25	18	.72	CR	
Drama Appreciation	33	1	300	7	.57	513	25	20.5	.82	L.A	
Acting & Directing	10	1	90	10	.25	225	25	9	.36	A.S	
	5	1	45	13	.16	144	25	5.8	.23	A.S	
Theatre Workshop	10	1	90	13	.32	288	25	11.5	.46	A.S	
	8	1	72	13	.26	234	25	9.4	.38	A.S	
Sub Total					2.06	1854		74.2	2.97		

.72	CR
.41	L
.41	A
1.43	A.S

CR = CLASSROOM
A = AUDITORIUM
S = STAGE
L = LECTURE THEATRE

Table VI.12

EXPLORATORY ARTS/DANCE
PHYSICAL ACTIVITIES
SELF LEARNING ACTIVITIES

Program Content	% of tot.	# of yrs.	# st. at one time	% inst. / wk.	tot. % inst.time / week	total hours /week	size of cls.	# of clss. / wk.	# of sp. req.	type of sp.	
Interpretative Dance	50	1	450	4	.5	450	25	18	.72	S	Stage Facilities Required
Appreciation of the Dance	33	1	300	7	.57	513	25	20.5	.82	P	
Dance Group	10	1	90	13	.32	288	25	11.5	.46	S	
	8	1	72	13	.26	234	25	9.4	.38		
Sub Total					1.65	1,485		59.4	2.38		
Physical Activities	100	1	900	4	1.0	900	25	36	1.44		
	100	3	2700	5	3.7	3,330	25	133.2	5.3		
Sub Total					4.7	4,230	25	169.2	6.74		
Orientation + Study Habits	100	1	900	5	.12	108	25	4.3	.17		
Career Plans	25	3	2700	5	.94	846	25	33.8	1.35		
Family Living	25	3	2700	5	.94	846	25	33.8	1.35		
General Psychology	25	3	2700	5	.94	846	25	33.8	1.35		
Individual Activities	25	3	2700	5	.94	846	25	33.8	1.35		
Sub Total					3.88	3,492		139.5	5.57		

S = STAGE
P = PRACTICE

BUFFALO MIDDLE SCHOOLS

	School	House	Complex	# Pupils	1 Module /CR	.75 Module	1 Module	1.75 Module	1.75 Module	1.5 Module		
					CR	G	Lang. Lab.	Sci. Lab.	Shops	Type.	Phys. Act.	Stage Audit.
1 School	1	-	-	150	4							
# Units					4							
Area					2800							
1 House	4	1	-	600	16	1.5	.5					
# Units					16	1.125						
Area					11200	7.88						
1 Complex	24	6	1	3600	96	9	3	5	24	8	7	
# Units					96	6.75	3	8.75	42	12		
Area					67200	4725	2100	6125	29400	8400		

CR = CLASSROOM

G = GROUP

Summary Table VI.14

CHAPTER VII

PRIORITIES, TRANSPORTATION, AND COST CONSIDERATIONS

Priorities

It is suggested that the construction of the six Complexes proceed in three stages, with two Middle School Complexes to be built in each stage.

Stage 1: Triangle and Erie Middle School Complexes

Action should be initiated promptly on the Triangle Complex at the Williams Street site where Eastside High School is planned and the Erie Complex at the waterfront site now under development.

This choice is somewhat forced by circumstances. In the case of the Triangle Complex it is urgent that the middle school plans be integrated with the planning of the new Eastside High School on the same site if maximum advantage is to be taken of the cost savings in planning and construction and -- even more important -- if the sharing of facilities and continuous progress of the pupils' education from fifth to twelfth grade are to be achieved. Since the planning of Eastside High School is already begun, no time should be lost in proceeding with the planning of the Middle School Complex at the same site.

Another important reason for this step is that the construction of the Triangle Middle School Complex will permit early conversion of the Genesee-Humboldt Junior High to an integrated primary school complex, grades 1-4, allied with the conversion of P.S. 62 across the street into a preschool center including prekindergarten, Head Start, Day Care and kindergarten. The entire complex will be ungraded, carrying forward the successful ungraded program Buffalo has already tested.

As soon as the Triangle Middle School Complex is completed three present elementary schools can be abandoned, P.S. 59, 57, and 9. In addition, old P.S. 40 and the old wing of P.S. 43 can be surrendered to the city. The new P.S. 40, scheduled for early construction, should be planned as an early childhood (K-4) primary school right from the start since the later grades will enter the Middle School Complex as soon as it is built. The design for this first early childhood center can be a testing ground for the new type of primary school that will eventually be the typical elementary school of Buffalo when the full middle school program is completed.

The large tract of land now available may not be obtainable for long. Early action in fixing the site for the Triangle Middle School Complex will assure the unique opportunity Buffalo now has of building a high school and a middle school in a coordinated way on one site, looking forward to its establishment later as an Educational Park.

The Erie Middle School Complex is a high priority school for several reasons. The waterfront development will bring an estimated 500 middle-school-age children into the area. At present there is no adequate school for them. The school being planned for the waterfront housing will be a primary school using funding arranged by the State Urban Development Corporation (U.D.C.).

Joint planning with the U.D.C., which is concerned about middle school education for the children who will be living in their new project, and with the Urban Renewal program nearby can result in an early determination of a desirable site and the possibility of sharing the planning costs with these agencies.

The construction of the Erie Middle School Complex will permit the closing of P.S. 44, 77, and 1 and the old section of P.S. 37.

Stage 2: Canal Middle School Complex and McKinley-Hertel

Clinton and Woodlawn Junior High Schools are the two most segregated schools at this grade level. The construction of the two Middle School Complexes, Canal and McKinley-Hertel, will end the segregation at these schools. Clinton is long overdue for replacement, and this objective should have first priority in Stage 2 of middle school construction. The Plan calls for the conversion of Clinton and nearby P.S. 6 into a large community-service, early childhood center developing from the Academy program already begun there. A new Middle School Complex expanding the present Southside Junior High would receive the Clinton membership as well as the fifth and sixth grades of the other schools in Canal's attendance zone.

Three alternatives were offered in the Plan to remedy Woodlawn's present segregation. Each of these alternatives requires the construction of a middle school center adjoining the McKinley High School site. It is suggested that that land be secured now to assure that it will be available when the Board of Education and the community have resolved which of these alternatives is best.

Stage 3: Fillmore and Lafayette Middle School Complexes

The construction of the new high school at Main and Delavan must be completed before the Lafayette site will be available for reconstruction as a Middle School Complex since the present high school membership at Lafayette cannot be rehoused until the pressure of high school seat shortages is relieved. Similarly, the Fillmore area is not critically in need of early action because Fillmore is a fine building with an integrated middle school program, although the composition of the school with its limited attendance area is now in the unbalanced category.

It is important that the land adjoining Fillmore Middle School and that is now owned by the city and used for storing voting booths be secured soon to make sure that it will be available when the time for construction has come.

It is possible to obtain monies for planning from state and federal sources. This study recommends that advance planning money be sought for the entire program, certainly for Stages 1 and 2 immediately, so that an orderly and realistic long-range construction schedule can be worked out. The danger in construction is often that without an overall plan schools may be built one year that inhibit or even preclude good solutions to the problems of an adjoining area of the city. Such large expenditures of capital funds demand an overall city-wide plan that permits optimum use of scarce construction money as it becomes available.

We urge again that, however long the full program may have to take, options or actual purchase of the land that will be needed for all three stages should be arranged as early as possible.

Transportation

The Board of Education adopted a resolution for middle school development on January 31, 1968, that said in part:

> "Middle schools should be located in the peripheral areas of the city and districted so that two-thirds of their pupils live within the immediate vicinity. The other third of their enrollment would be children transported from the inner-city. By enrolling student bodies two-thirds white and one-third Negro, these schools would be racially balanced in that they would reflect the overall proportion of Negro pupils among our current membership."

Since the first to fourth grade enrollment today (the population of the projected middle schools four years from now) is about 21,700 pupils, this resolution calls for the transportation of about 7,225 children.

Nearly all these "inner-city" children would be black children, the white children attending school near enough to home to walk.

In estimating the amount of transportation that will be required to the six Middle School Complexes proposed in this study's Plan the customary 1½ mile radius was drawn around each school. The precise number of children who live outside of this radius in each feeder zone cannot be established without knowing the block-by-block count of children. However, assuming that they are evenly distributed across their elementary school zones we find that about 6,400 children out of the 21,700 or a little under 30 percent of the children will require transportation.

This estimate varies considerably from area to area thus:

Middle School Complex	Estimate Pupils living over 1½ m.
Fillmore	1,360
Triangle	1,590
Canal	1,460
Erie	780
Lafayette	200
W.Hertel-McK.	1,000
Total	6,390

This Plan, then, requires transportation for about 835 fewer children than the Board of Education's school proposal.

Not all of these children will have to be transported by school bus. The fifth and sixth graders, half of this number, will go by school bus. The older children can travel by public transportation. That would mean a total of about 3,200 children will go by school bus. Since the city is already transporting 2,600 children under the transfer plan, almost all of them in the middle school age group who would no longer need to transfer to obtain quality, integrated education, the additional burden on transportation costs will not be heavy.

Of much more importance is that the Board's proposal creates an inequity that may be unconstitutional as well as onerous. By placing the middle schools closer to the center of their feeding zones we reduce the number who must travel and avoid any discriminatory treatment of black children.

Cost Considerations

The school construction budget for 1969-70 requests $400,000 in planning money for this year and $18 million for each of the next three years, to a total expenditure of $54,400,000. This estimate is based on a $4,500,000 cost for each of 12 middle schools housing 1,200 children each, providing new plant for 14,400 children. This assures that the 7,000 children now in the middle and junior high schools will continue there. But both Woodlawn and Clinton are deeply segregated. Obsolete Clinton certainly should be abandoned very soon, and Woodlawn (as under Alternative 1 of this study's Plan) should be converted to other levels of education. If that is done, 2,000 more seats than the Board plans for will be needed. If the Metropolitan Educational Parks are built and 16 percent of the children of the city elect to go to them, the Board's planned construction will take care of all the middle-school age children and no additional seats will be needed. If not, we will need a total of 21,700 seats or an additional 1,800-2,000 seat school under the Board's plan. It will be a great advantage to Buffalo to have these Metropolitan Educational Parks developed not only for their high educational value and the degree of integration they provide but also because of the substantial financial savings that would result, even if Buffalo had to contribute some of its construction funds to these projects.

The per pupil cost under the Board's estimate of total cost would be $3,750. The architect estimates that the per pupil cost of constructing the six Middle School Complexes proposed in this study's Plan will be lower than this figure, based on the smaller square footage per child required in the larger school. Three of the complexes use existing middle or junior high school plants with a total enrollment of 3,900 children (Southside,W. Hertel, and Fillmore). In estimating costs, then, we deduct the 3,900 from the total enrollment in the Complexes (18,300) and arrive at the same number of children as are included in the Board's plan, i.e., 14,400. How much saving can be effected cannot be accurately estimated now without more precise engineering studies of the specific schools to be built. However, despite the superiority of the facilities provided in the Complex compared to the smaller middle school, the cost of the total construction program will not exceed the amount the Board is prepared to pay.

These economies are possible because of the use of shared facilities, particularly the high-cost structures such as auditoriums, gyms, cafeterias, libraries, etc. None of the facilities is fully utilized in the smaller buildings. By scheduling full use of these facilities in the Complex the duplication of high-cost structures is made unnecessary. Other savings are in the land costs--playing fields, swimming pools, parking space--and in actual construction costs. Two buildings at separate sites cannot effect the economies in construction that even the same two buildings constructed at the same time on the same site can.

Equipment costs have not been included because the decision has to be made as to just what equipment the Board and the communities would

wish to provide in the larger Complex and in the smaller schools. There is no doubt that the 12 smaller schools could not afford to have a computer each, but a Complex like the Triangle, which will serve both a middle school and the new high school, could afford one at a relatively low per pupil cost.

The question of cost is more fundamentally the problem of getting the most education for every education dollar spent. Even if the per pupil cost were not less in a 3,600 school, the value received for the dollar spent must be a major consideration. The Complex is not the more desirable simply because it is somewhat cheaper to build. It provides a superior education that will enrich both the children's lives and the whole community.

The other side of the picture is the cost of rebuilding the existing elementary schools that must be replaced if the middle schools are not built. At a minimum of $3 million (the Board's cost estimate for P.S. 40's replacement), replacing 23 old schools would cost the city $69 million--$15 million more than the total cost of all six Complexes. Instead of having to rebuild them, however, the Complexes permit their abandonment and their return to the city for resale to the public, thus providing additional funds for the schools.

Operating costs, as with equipment, are dependent on the choices the Board makes. The largest operating cost of a school, which is teacher's salaries, will not differ since the educational program proposed in this Plan is based on the existing Fillmore pupil/teacher ratio. However, many more aides, paraprofessionals, and specialist teachers will be wanted.

Additionally, maintenance costs for the equipment and programs possible in the Complex but not in the smaller schools will mean higher operating costs. In this area, the federal and state governments have many programs that few schools take advantage of because they are ill-equipped to provide these programs even if subsidized. The Appendix lists some 300 such offers of federal aid that singly may not be significant but that can be taken full advantage of in a larger Complex. The State Commissioner, too, has repeatedly informed the Buffalo Board of Education that he is prepared to assist with financial help in efforts made by the Board to remedy racial imbalance.

This report recognizes the severe money problems faced by the Buffalo school system, a chronic crisis of long standing. The Middle School Complex provides an economical way of substantially improving the education given Buffalo children. However, it will probably require financing at a higher level than now obtains. Buffalo must make the decision. The Superintendent has consistently pressed for those desperately needed funds without success. It is now up to the community to add its voice on behalf of the children.

CHAPTER VIII

CONCLUSION

This study has attempted to plan locations, attendance areas, and organizations for middle schools to make it feasible for the Board of Education in Buffalo to fulfill the Order of the Commission of Education of the State of New York that racial imbalance be progressively eliminated, at least from the fifth grade on.

In suggesting ways to meet this goal we have also tried to meet the severe plant obsolescence problem and the urgent need to provide ways of improving the quality of schooling at every grade level for every pupil.

All segments of the city have much to gain from these proposals. At present the section of the city in which the majority of the residents are white carries most of the burden of the K-8 schools with their extremely limited seventh and eighth grade offerings. The sections of the community in which the majority of the residents are black now carry the heavy burdens of teacher shortage and teacher turnover that result in lower educational achievement. All the schools suffer from lack of even the most fundamental equipment such as books, dictionaries, globes, and maps.

The Middle School Complexes can provide a solution that will cost substantially less than simply replacing the existing old buildings at their present locations. But beyond that--and more important than any financial considerations--is the fact that the proposed Middle School Complex opens up a new potential for a much higher quality of education. This higher quality of education will be available to all children on the basis of real equality and without segregation. Each Middle School

Complex will belong to a larger community as a whole, responsive to and responsible to that total community. There will be no hosts or guests. However different their outlook might be, the children will begin together the exploration of what mankind has learned.

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