Chapter VII

SCHOOLS AND PARKS

Parks and schools have an important influence upon both the appearance and organization of the city. They should be the center of social and recreational activity and the focal point of a well-organized and active community life. Parks break up the monotony of cities; they insure a more beautiful and more livable city. Large parks preserve natural areas of unusual beauty for the enjoyment of future generations. Experience has shown that play areas, properly placed, developed and supervised, are a most efficient means of combating juvenile delinquency. Development of parks and parkways will increase surrounding property value; the proper development of a park may even raise the character of an entire neighborhood.

People live where the urban environment is most attractive — where there are good school and park facilities. Thus, schools and parks should be located to bring about the best population pattern. The locations of schools and parks proposed in this report have been based on the proposed future distribution of population.

Many residential areas are lacking in ample school grounds and adequate park facilities, one reason for their blighted condition. Large school grounds and neighborhood parks will improve environment and aid in rehabilitation.

Almost 40 per cent of the area of the city is low and not suitable for residential development. Little of this will ever be absorbed in industry. Portions are adaptable for park purposes.

This chapter is divided into three parts, as follows:

1. An examination of the principles and standards for the development of an ideal school and park system.
2. An appraisal of existing facilities in light of these standards.
3. A proposed plan for a coordinated system to serve the future city, such plan to be based upon a gradual development of the present areas into a system that approaches as closely as possible to the ideal.

This chapter is primarily concerned with location and area of sites rather than with details of administration or development.

PRINCIPLES OF A COMPREHENSIVE RECREATIONAL SYSTEM

An adequate system of recreational facilities must be both extensive and diversified to serve the many requirements placed upon it. This section contains an analysis of the facilities that should be provided, a determination of which agency should be responsible for the development of each facility so that duplication will be entirely avoided, and an outline of modern standards regarding the location and area of the several units comprising the complete system. Plate Number 43 shows the classification of the total population into different groups having similar recreational requirements. A discussion of each group and the facilities that should be provided for them follows:

Classification of Population

Small Children

Small children, below school age, are closely attached to the home. Adequate home grounds and small play lots are their most logical recreational areas. The provision of fresh air and free space for protected play is primarily a parental obligation.

Children of Elementary School Age

Children of elementary school age are under the guidance and control of educational authorities a considerable portion of the time. Recreation is becoming an integral part of the school curriculum and a large playground is needed at each elementary school. Since the entire city should be served by these facilities for the school year, it is only logical that they also be used by the children during the summer months. The School Board should thus be primarily responsible for developing and maintaining the necessary recreational facilities for children of elementary school age.

Youths

The youths are more interested in active games and sports and require larger play areas than the elementary school children. The majority of the youths spend a large portion of their time in school
<table>
<thead>
<tr>
<th>CLASSIFICATION OF POPULATION</th>
<th>FACILITIES WHICH SHOULD BE AVAILABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SMALL CHILDREN</strong></td>
<td>HOME GROUNDS</td>
</tr>
<tr>
<td></td>
<td>INTERIOR BLOCK PLAYGROUNDS</td>
</tr>
<tr>
<td></td>
<td>NEARBY CHILDREN'S PLAYGROUNDS &amp;</td>
</tr>
<tr>
<td></td>
<td>KINDERGARTENS</td>
</tr>
<tr>
<td></td>
<td>DRIVES</td>
</tr>
<tr>
<td></td>
<td>PROMENADES } IN PARKS</td>
</tr>
<tr>
<td><strong>SCHOOL CHILDREN</strong></td>
<td>HOME GROUNDS</td>
</tr>
<tr>
<td></td>
<td>INTERIOR BLOCK PLAYGROUNDS</td>
</tr>
<tr>
<td></td>
<td>PLAY AREAS IN PARKS</td>
</tr>
<tr>
<td></td>
<td>SWIMMING POOLS</td>
</tr>
<tr>
<td></td>
<td>SKATING PONDS</td>
</tr>
<tr>
<td></td>
<td>COASTING HILLS</td>
</tr>
<tr>
<td></td>
<td>BOY &amp; GIRL SCOUT CAMPS</td>
</tr>
<tr>
<td></td>
<td>SCHOOL PLAYGROUNDS</td>
</tr>
<tr>
<td></td>
<td>PLAYFIELDS FOR ATHLETICS</td>
</tr>
<tr>
<td></td>
<td>COMMUNITY CENTERS</td>
</tr>
<tr>
<td></td>
<td>OUTLYING NATURALISTIC PARKS</td>
</tr>
<tr>
<td><strong>YOUTH</strong></td>
<td>PLAYFIELDS</td>
</tr>
<tr>
<td></td>
<td>SWIMMING POOLS</td>
</tr>
<tr>
<td></td>
<td>SKATING PONDS</td>
</tr>
<tr>
<td></td>
<td>COASTING HILLS</td>
</tr>
<tr>
<td></td>
<td>NEIGHBORHOOD PARKS</td>
</tr>
<tr>
<td></td>
<td>LARGE PARKS</td>
</tr>
<tr>
<td></td>
<td>COMMUNITY CENTERS</td>
</tr>
<tr>
<td></td>
<td>PLEASURE DRIVES</td>
</tr>
<tr>
<td><strong>ADULTS</strong></td>
<td></td>
</tr>
</tbody>
</table>

**RELATIONSHIP OF POPULATION GROUPS TO A SYSTEM OF RECREATION FACILITIES**

CITY PLAN & ZONING COMMISSION
PARK BOARD
DES MOINES - IOWA.

HARLAND BARTHOLOMEW & ASSOC.
CITY PLANNING CONSULTANTS
SAINT LOUIS - MISSOURI.
PROTECTED PLAY AREAS

COMMUNITY CENTERS

SUPERVISED SCHOOL PLAYGROUNDS

PLEASURE DRIVES

PLAYFIELDS

LARGE PARKS

SWIMMING POOLS

SKATING PONDS

OUTDOOR THEATRES

TENNIS COURTS

COASTING HILLS

SPECIAL FACILITIES

CITY PLAN & ZONING COMMISSION PARK BOARD DES MOINES - IOWA

TYPES OF RECREATION FACILITIES

HARLAND BARTHOLOMEW & ASSOC.
CITY PLANNING CONSULTANTS
SAINT - LOUIS - MISSOURI
and every junior and senior high school should have an adequate field for play and sports. These fields should also be available during the summer.

There will also be many youths who are not in school and playfield facilities must also be provided in the parks. Thus, both the School Board and the Park Board are responsible for the development of recreational facilities for the youths.

Adults

Adults are generally more interested in quiet, passive recreation than in organized and competitive sports. For them, there should be neighborhood parks, large outlying parks, pleasure drives, small ornamental areas, and community centers. The adult population that does enjoy tennis, baseball, and similar activities, can utilize the facilities of the playfields. The Park Board is primarily responsible for providing the recreational facilities for the adults.

There is, of course, intermingling of age uses in the different types of recreational areas. The above mentioned facilities will, however, meet the dominant recreational requirements of all persons within the city with a minimum amount of duplication.

**Standards of Location and Area**

Plate Number 44 shows the principles that should govern the location and development of the several units comprising a comprehensive recreational system.

**Elementary Schools**

Each elementary school should serve a homogeneous residential neighborhood approximately a mile square and should be as near as possible to the center of this district. The school site should comprise at least five acres and at least three acres should be available for unobstructed play space. Elementary schools should not be adjacent to railroads, in industrial and commercial districts, or on major streets.

**High Schools**

Junior high schools usually serve an area included within a one-mile radius of the school, while senior high pupils can travel a much longer distance. To provide for an adequate playfield, every senior high school site should comprise from twenty to twenty-five acres, and every junior high school from ten to fifteen acres. Certain neighborhood parks and large parks should also contain playfields. Factors that affect usefulness of playgrounds, such as major thoroughfares, do not interfere so much with the use of playfields, which attract older boys and girls.

**Community Centers**

Every neighborhood should have a building for indoor social and recreational activities. School buildings are logical neighborhood centers and should be designed and made available for such out-of-school uses. They need gymnasiums, auditoriums, libraries, and similar features.

**Neighborhood Parks**

Neighborhood parks are intimate community recreational areas whose value is chiefly dependent upon accessibility. McHenry and Good Park are examples of such areas. A neighborhood park should be within walking distance of every person in Des Moines—one-half mile is generally considered a fair radius of service.

Parks of this type must fit into the thickly built up interior of the city and therefore are limited in size. An area of at least twenty acres is desirable, however. They must be compact, thoroughly serviceable areas designed to offer the maximum recreational advantages to those who live around them. They should contain informal plantings and open spaces as well as facilities for active sports, such as tennis courts and baseball diamonds. The placement of such parks should be determined primarily by the boundaries of the district which it is to serve.

Elementary schools can often be advantageously located in connection with neighborhood parks. This provides an ideal neighborhood center.

**Large Parks**

The modern city should be encircled by a series of large outlying parks connected by a system of pleasure drives. Topography should be a predominant factor in their location and their general treatment should be natural and informal. They would embrace and preserve for the city dweller, all types of native landscapes around the city. Woods and hills, lakes, streams and valleys naturally sug-
gest themselves as public reservations. The parkways connecting these areas should be elongated parks, varying between 200 and 500 feet in width with a roadway near the center.

Small Ornamental Areas

Within the more intensively developed portions of the city, there should be small ornamental parks. These should be rather formally treated and well-maintained. They will do much to beautify the city and will provide areas for rest and passive recreation.

EXISTING SCHOOL AND PARK AREAS

The site of Des Moines favors the creation of superb parks and pleasure drives. The rolling topography and the two rivers afford many opportunities for park and recreational areas. The location and extent of areas that now provide recreational facilities are shown in Plate Number 45. This plan shows all park and school areas as well as certain other property available for recreation.

A significant portion of the city’s area is devoted to or available for recreational use. The areas are well distributed about the city. Both park and school sites increase in area as the outskirts of the city are approached, yet the older neighborhoods contain several small areas. In only two instances, out of the sixty schools, are a school and a park adjoining (Scott School and Grant School). Certain school sites are very park-like in character (Cassady and Callanan for example) while certain parks serve school needs (Chesterfield and Ash).

A large amount of river frontage is under public control. Rivers should be an attractive feature of any city. Des Moines can be justly proud of the river front developments even though much remains to be done. The present status of riverfront control is shown in the following table:

<table>
<thead>
<tr>
<th>River</th>
<th>Public Ownership</th>
<th>Private Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Miles of Frontage</td>
<td>Percent</td>
</tr>
<tr>
<td>Des Moines</td>
<td>6.57</td>
<td>33.5</td>
</tr>
<tr>
<td>Raccoon</td>
<td>11.51</td>
<td>75.2</td>
</tr>
<tr>
<td>Total</td>
<td>18.08</td>
<td>51.8</td>
</tr>
</tbody>
</table>

Of the thirty-five miles of frontage in the city, eighteen miles or 52 per cent is under public ownership. Much of this is due, of course, to the 1,500-acre water works park.

The following is a discussion of the facilities provided by the various governmental agencies:

The Park Board

Large parks make up the major portion of the present park system, seven out of every ten acres being devoted to this purpose. The number and area of neighborhood parks is commendable. Almost one acre out of every six is devoted to this type of park. The acreage of neighborhood parks has consistently increased since 1890.

The accepted standard of park area is one acre for each one hundred persons. Des Moines is now slightly below that standard, providing 0.815 acres for each 100 persons. Including Water Works Park and Walnut Woods State Park, there are eight large parks in the Des Moines area. All of these except Ewing Park, which was recently acquired, are well developed. The neighborhood parks are nine in number, varying in size from Drake Park of 4.5 acres to MacRae Park of 63 acres. There are nine river front parks and ten small parks. The city has but few boulevards or parkways.

The public and semi-public areas, the Airport, the Army Post, the Fair Grounds, the Veterans’ Hospital, the Capitol grounds, and the Drake University Campus, add much to the appearance and the character of the city. The Airport serves a great recreational need and probably attracts more people than any other single recreational area.

Impressive as are the existing facilities, Des Moines does not have a complete system of park facilities as outlined on the preceding pages. The river is not yet used as it could be for recreation. Neighborhood parks are badly needed in many sections of the city. There is not a parkway or boulevard worthy of the name within the city, yet the many wooded ravines are naturally adaptable for parkways.
The School Board

The School Board operates sixty schools, of which fifty are elementary and ten are high schools. Two of the elementary schools, Smouse and Cary, are special schools. There are six junior and four senior high schools.

The number of elementary schools is unusually high in proportion to the enrollment in Des Moines. Table Number 21 shows a comparison of elementary school enrollment in Des Moines with thirteen other cities. Des Moines has next to the lowest average enrollment per elementary school of any of these cities. Dallas, Texas, with an enrollment over twice that of Des Moines, has only six more elementary schools. It is much more economical to operate one large school than two small schools. There is obviously considerable economic waste in the Des Moines school plant, since there are too many schools. This is largely caused by the widely scattered population and the schools erected by the early districts.

The situation in regard to high schools is much better. Des Moines compares very favorably with the other cities in high school facilities.

Only five of the fifty elementary schools have a "standard" site of five acres. In area the various sites are as follows:

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Elementary Schools</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 acre</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>1 to 2 acres</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>2 to 3 acres</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>3 to 4 acres</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>4 to 5 acres</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>5 and over</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td><strong>50</strong></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

The larger sites are located in the outlying sections around the newer schools. The smaller sites are located in the older sections of the city where the need for play space is the greatest. Thirty-four of the fifty elementary schools adjoin an existing or proposed major street.

Of the six junior high schools only one has a site of the standard area—ten to fifteen acres. Three out of the four senior high schools have inadequate sites, less than fifteen acres.

There are certain outstanding school developments in Des Moines. The Roosevelt-Hubbell development and the Callanan-Smouse area are unusually attractive. The Casady School has an unusually fine site. On the other hand, most of the areas are bare and badly need landscaping. The schools should be attractive and inviting in appearance—an example for surrounding private developments.

The Playground Commission

The Playground Commission was created by ordinance in 1920. It is supported by both the City and the School Board. It owns no property, but supervises playgrounds on property owned by both supporting agencies.

Twenty-seven playgrounds were supervised during the summer of 1938 with a total attendance of 197,395. Fourteen of the playgrounds supervised in 1938 were on park property and thirteen on school property. The five best attended playgrounds were (in order of attendance) Union Park, Walker Park, Ash Field, Drake Park, and McHenry Park. Supervised playground locations are altered each year and can be adapted to fit local needs. Of the total number of children attending the playgrounds, 33.4 per cent walk less than one-quarter mile to reach the area, 36.7 per cent between one-quarter and one-half mile, and 29.8 per cent over one-half mile. One-half mile, therefore, seems a reasonable radius of service.

The Water Board

The 1500 acres of Water Board Property is an outstanding feature of Des Moines. The natural beauty of this area has been preserved and made available to the public by means of roads, trails, and picnic facilities. This large area, close in to the center of the city, answers a great recreational need, should be preserved in its present state and protected against any obnoxious encroachment.
### Table No. 21

COMPARISON OF SCHOOL FACILITIES AND SCHOOL ENROLLMENT IN FOURTEEN CITIES

<table>
<thead>
<tr>
<th>CITY</th>
<th>Elementary Enrollment</th>
<th>No. of Elementary Schools</th>
<th>Average Pupils per School</th>
<th>High School Enrollment</th>
<th>No. of High Schools</th>
<th>Average Pupils per School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richmond, Va.</td>
<td>42,754</td>
<td>36</td>
<td>1187</td>
<td>37,902</td>
<td>9</td>
<td>4211</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>19,000</td>
<td>30</td>
<td>633</td>
<td>12,000</td>
<td>11</td>
<td>1090</td>
</tr>
<tr>
<td>Dallas, Texas</td>
<td>34,574</td>
<td>58</td>
<td>596</td>
<td>16,863</td>
<td>9</td>
<td>1873</td>
</tr>
<tr>
<td>Sacramento, Cal.</td>
<td>10,225</td>
<td>18</td>
<td>568</td>
<td>5,741</td>
<td>6</td>
<td>956</td>
</tr>
<tr>
<td>Syracuse, N. Y.</td>
<td>22,372</td>
<td>42</td>
<td>532</td>
<td>11,522</td>
<td>15</td>
<td>768</td>
</tr>
<tr>
<td>Worcester, Mass.</td>
<td>28,241</td>
<td>54</td>
<td>522</td>
<td>6,301</td>
<td>6</td>
<td>1050</td>
</tr>
<tr>
<td>Wilmington, Del.</td>
<td>7,981</td>
<td>16</td>
<td>498</td>
<td>8,210</td>
<td>7</td>
<td>1172</td>
</tr>
<tr>
<td>Erie, Pa.</td>
<td>9,433</td>
<td>20</td>
<td>471</td>
<td>9,300</td>
<td>6</td>
<td>1550</td>
</tr>
<tr>
<td>San Diego, Cal.</td>
<td>14,937</td>
<td>36</td>
<td>414</td>
<td>14,842</td>
<td>13</td>
<td>1141</td>
</tr>
<tr>
<td>Little Rock, Ark.</td>
<td>8,044</td>
<td>22</td>
<td>365</td>
<td>7,060</td>
<td>5</td>
<td>1412</td>
</tr>
<tr>
<td>Topeka, Kansas</td>
<td>8,618</td>
<td>25</td>
<td>321</td>
<td>5,129</td>
<td>7</td>
<td>732</td>
</tr>
<tr>
<td>Wheeling, W. Va.</td>
<td>6,185</td>
<td>21</td>
<td>294</td>
<td>3,912</td>
<td>4</td>
<td>978</td>
</tr>
<tr>
<td>DES MOINES</td>
<td>14,707</td>
<td>50</td>
<td>294</td>
<td>13,079</td>
<td>10</td>
<td>1308</td>
</tr>
<tr>
<td>Lansing, Mich.</td>
<td>8,700</td>
<td>30</td>
<td>290</td>
<td>7,040</td>
<td>6</td>
<td>1173</td>
</tr>
</tbody>
</table>

NOTE: Cities listed in the order of the average enrollment per elementary school.

(Data obtained by a questionnaire sent to the various cities.)
EXISTING AND PROPOSED ELEMENTARY SCHOOLS

Existing Elementary Schools

Adequacy and Duplication of Service. The existing elementary school system is shown on Plate Number 46. This plate also shows the comparative enrollment and the adequacy and the duplication of service of each school as well as the 1930 distribution of population.

The one-half mile radius of service of these schools includes 16,900 acres or 48.14 per cent of the total city area. Within this served area is located 90.6 per cent of the existing population so that the majority of the pupils are fairly well served by elementary schools.

Except for the extreme west, east, and south portions of the city, the schools are located in an irregular, haphazard manner. There is an unusual amount of duplicated service. Of all the areas within one-half mile of an elementary school, 25.67 per cent is served by two or more schools; 6 per cent of the area served is within one-half mile of three schools, and 1 per cent is within one-half mile of four schools. The plate shows that the majority of the duplicated area is found in the older central portions of the city. Duplication means waste for the taxpayer. Elimination of this condition should be undertaken in the near future.

Comparative enrollment of the various schools is also shown on Plate Number 46. In general, a comparatively large enrollment prevails where the area of service is not duplicated. There are large enrollments at Willard, Brooks, and Phillips on the east side, at Park Avenue on the south side, and at Crocker on the west side. Enrollment is small in areas of heavy duplication. Grant, Elmwood, Given, and Kirkwood all have small enrollments. The eight schools in areas around the State Capitol also have small enrollments. Two elementary schools are in conjunction with junior high schools (West and Callanan) and have very small enrollments. Barton School in the extreme southwest portion of the city has an enrollment of only twenty-five pupils.

Enrollment Trends and Age of Buildings. Fast trends in enrollment at each school and the period in which the building was constructed are shown in Plate Number 47. Enrollment is shown for the years 1915, 1920, 1925, 1930, 1935, and 1938. The age of building symbols are placed on the site of the school.

In the city as a whole, elementary enrollment has gradually decreased since 1926. It has been estimated that this enrollment will gradually increase again and that the city will ultimately have an elementary school enrollment of around 22,000 pupils.

While there was a considerable increase in enrollment at most schools up to 1925, few schools have maintained their enrollment since then. The steady enrollment maintained at Crocker School is due to the abandonment of surrounding schools and the consequent enlargement of the area served. In the same general section of the city, the Sabin School has lost heavily while the Nash enrollment is maintaining a steady level. The many small schools in the area around the State Capitol are generally maintaining their enrollment, indicating a stable neighborhood. The large losses at Washington School are due to the large parochial school in the neighborhood.

Only four schools increased in enrollment between 1935 and 1938. These are Nash School, Howe School, Hanawalt School and Meredith School. Even certain schools in rapidly growing neighborhoods have experienced small losses in enrollment since 1938. Riley, Rice, Perkins, Monroe, Park Avenue, and Phillips are examples of this trend.

Certain neighborhoods, which were developed several years ago, were occupied by persons of similar ages. Their children were sent to school in great numbers at about the same time. That large group of children has now passed through the schools and the enrollment is rapidly dropping. Examples of this condition are Hubbell School, Greenwood School, Oak Park School, and Saylor School. Enrollment at these schools can be expected to increase again as the age of the neighboring population again changes.

Of the 46 schools shown on this plan, parts or all of 16 buildings were erected before 1900. Twenty-eight schools have been built or have had remodeling or additions since 1920.

It is difficult to anticipate enrollment so accurately that the school building is neither too large nor too small. Some of the schools contain empty rooms; others have makeshift frame additions. This has been caused not only by irregular and spasmodic city development, but by instability within developed areas. An economical and efficient school building program is dependent upon a more reasonable and intelligent method of city growth. Blighted neighborhoods must be rehabilitated, existing development of good character protected, and new neighborhoods developed according to a preconceived plan before the school system can be properly developed according to a logical program. School buildings represent a large investment of public funds and much of the existing development will have to be utilized in the proposed plans.
Proposed Elementary School System

The proposed system of elementary schools is shown on Plate Number 48. This plan also shows the probable future distribution of population. Half-mile circles around the school sites indicate that practically all of this future population will be served by the proposed system of elementary schools. In the few locations where a walk of more than one-half mile is necessary, it would be uneconomical to provide an additional elementary school. Existing sites were used wherever possible, partly accounting for the slightly uneven distribution of sites in certain sections of the city.

This proposed system involves the use of but 36 elementary schools. The plan proposes the erection of 7 new schools, the retention of 10 sites in their present area, the enlargement of 19 present sites, and the abandonment of 13 elementary schools. These proposals are in scale with future needs and can be gradually developed over a period of 25 years. They are generally in accord with the plan of 1922.

The recommendations are briefly summarized as follows:

Existing Schools of Adequate Area to be Retained

**Adams School.** This school is well located to serve the northeast portion of the city. Considerable urban growth is expected within its area of service. The site of 4.14 acres is ample.

**Greenwood School.** Areas north and south of Grand Avenue and east of Greenwood Park are served by this school. It is fairly well located. The enrollment will always be small and the site need never be enlarged.

**Howe School.** Its location on a major street (Indianola Road) is the only defect in this school. The site is large, 5 acres, and it is well located to serve the population south of Pioneer Road and east of South Union Street.

**Hubbell School.** This is an attractive school with ample play areas, well located to serve the relatively dense population in the western portion of the city.

**Perkins School.** The strategic location of this school is readily apparent. It is built on a 15-acre site on which a junior high school was once contemplated. If this junior high never materializes, the five acres west of Forty-fourth Street could be sold, leaving an unusually fine playground of 10 acres.

**Phillips School.** This school is well placed to serve a well populated area in the eastern portion of the city. The site is adequate in area—4.68 acres—and the building was enlarged in 1925.

**Rice School.** The Beaverdale area is well served by this school. The site is ample in area.

**Scott School.** This school is needed for the population that will always reside in the Chesterfield area. The site is small, 1.78 acres, but with the adjoining small park an adequate amount of play space is available.

**Wallace School.** This school is well located in relation to the city as a whole but badly placed in regard to immediate surroundings. It is located on a railroad and further expansion of the small site, 2.04 acres, is difficult.

**Windsor School.** Windsor School serves the area west of Glendale Cemetery and Waveland Park. The site is ample, 4.14 acres. Acquisition of the vacant land between the school and Cummins Drive would afford a fine park development.

School Sites to be Enlarged

The importance of enlarging many of the existing sites cannot be overestimated. The majority of these schools are located in older areas where there is a paucity of recreational area. In many instances the area proposed to be acquired is completely developed with buildings and will be expensive to acquire. The return, however, will more than justify the investment. Money obtained from sale of sites to be abandoned can be used in this acquisition. The vacation of minor streets will facilitate these enlargements in many instances. In no case will a proposed vacation seriously interfere with traffic circulation.

**Bird School.** This is an old school, erected in 1887, that has always had a large enrollment. The site is fairly well located to serve a well built up area. The small area of 1.57 acres can be doubled by acquiring land to the east as shown.

**Brooks School.** This location will always serve an intensively developed neighborhood. The site of 3.24 acres should be enlarged by acquiring the remainder of the block to the west and by vacating one block of East Twenty-first Street that now separates the two areas.
Casady School. This is one of the most attractive school sites within the city with its wooded area and turf playground. Presence of underground mines in the area is a menace to the building. It would be unfortunate if the school had to be relocated.

Cattell School. This school serves a large enrollment in the Highland Park area. The small site of 1.96 acres should be enlarged by acquiring the remainder of the block to the north.

Crocker School. This school is well located to serve the area south of University Avenue and east of Keosauqua Way. The site should be enlarged by acquiring the remainder of the block to the north.

Elmwood School. Located in an intensively developed section of the city and on University Avenue, a complete new site for this school would be the ideal solution. However, the present site fits into the general scheme very well and a new site in the immediate vicinity would cost more than the enlargement of the present site. Acquisition of the remainder of the block to the east is recommended.

Jefferson School. Considerable population will undoubtedly be eventually located in the area served by this school. The site of 2.69 acres should be enlarged to the north as shown.

Logan School. The present site of 1.15 acres should be enlarged by acquiring the remainder of the half block to the north and the half block to the east and vacating one block of East Sixteenth Street to enable this school to better serve the area north of University and between East Fourteenth Street and the railroads.

Longfellow School. This school should be enlarged by acquiring the remainder of the block. The property to be acquired is very old and run down. The proposed enlargement will do much to improve the neighborhood.

Lucas School. The site of this school (1.37 acres) should be enlarged by acquiring the remainder of the block. The site is well located to serve the developed neighborhood between the State Capitol and the railroads and south of University Avenue.

Monroe School. This school is well located to serve a rapidly growing area. The present site of 3.69 acres should be enlarged by acquiring property to the south as shown.

Nash School. This school is on the same site as Irving Junior High. Buildings cover most of the school site which should be enlarged by acquiring property to the east as shown and vacating one block of Fifteenth Street.

Oak Park School. This school will always have a large enrollment. The site of 2.60 acres should be enlarged by acquiring the remainder of the block to the south.

Park Avenue School. It is unfortunate that this school is located at the intersection of two major streets. It serves an area that should develop even more intensively in the future, and the school now has a large enrollment. More play space will be needed and acquisition to the east is recommended.

Sabin School. This school has one of the most cramped sites in the city. It serves a well developed area in the north central part of the city. The site of only 1.73 acres should be enlarged by acquiring the remainder of the half block on both sides of Fifth Street and vacating one block of the street.

Saylor School. This school is on the same site as the Harding Junior High. The remainder of the block to the east should be acquired and one block of Cornell Street vacated.

Stowe School. This school serves an area that should experience considerable growth in the future. The site should be extended south to Dubuque Street.

Willard School. This school has the largest enrollment of any elementary school. Its location on two major streets and a railroad is unfortunate. If any disaster should demolish the building in the future, the development should be moved northward. The site of 4.26 acres should be enlarged by acquisition of the remainder of the block.

McKinley School. The small site of this school should be doubled by acquiring land in the block to the west and vacating one block of S. E. Fifth Street.

Proposed New Elementary Schools

In the Northwest. Three new schools are proposed in northwest Des Moines to serve this rapidly growing area. Riley School and Rice School can never serve this portion of the city, and Riley School should eventually be abandoned and be replaced by a school on the southeast corner of Merle Hay Road and Hickman Avenue and one on the site now owned by the school board fronting on Douglas Avenue.
A new school will also be needed to serve the area north of the Veterans Hospital. A site for this school is recommended on the northwest corner of Beaver and Madison. This site is now vacant and should be acquired before development takes place.

**Northeast.** A new school will eventually be needed in the northeast part of the city. A site on the corner of Hull Avenue and East Twenty-fourth Street is proposed.

**Southeast.** Both Curtis and Benton Schools have small enrollments and cramped sites. This area would be better and more economically served by a new school located north of the new neighborhood park on Railroad Avenue. This block is now owned by the Park Board. One block of Railroad Avenue could be closed and a fine neighborhood center result.

**West.** Hanawalt School has a site difficult to use because of its rough topography. This school is not as far north as it should be to serve the population south of Waveland Park and west of Greenwood Park. A new school should be developed north of Grand Avenue and between Fifty-sixth Street and Country Club Boulevard as shown.

**South.** One new school is proposed in south Des Moines. The present site of Washington School is small and almost unusable due to the rough terrain. The building is old. A new school is proposed on the more level ground to the east of South Union Street and between Kirkwood and Gray. This school could then front upon the proposed Crawford Creek Parkway.

**Schools to be Abandoned**

**Riley School.** This school is not well located to serve the future population that will be in this area. It should eventually be replaced by two new schools proposed for this section of the city.

**Frisbie School.** The population report proposes eventual elimination of population surrounding this school. The school and the small residential area around it should be a part of West Des Moines. Frisbie School is small and very expensive and should be abandoned.

**Kirkwood, Given and Grant Schools.** These schools are all old and on small sites. Their radius of service is duplicated by Bird, Elmwood, Nash, Casady, and Monroe.

**Callanan and West.** There is but little population around the Callanan School that is not within one-half mile of an elementary school. It should be abandoned as an elementary school.

The old West High School Building serves areas better served by other elementary schools and need no longer be used for that purpose.

**Clarkston School.** This is an old school on a small site. Its radius of service is duplicated by Oak Park and Saylor. It is located on a major street and much of its radius of service includes areas that will never be developed for residence purposes. The site of this school and the site at East Eighth and Madison should be retained until the Highland Park area is completely developed. Any abandonment of Saylor due to overcrowding at Harding Junior High would necessitate use of these sites.

**Douglas and Meredith.** These schools are located in an area that should never develop with residences because of difficulty of provision of sewer facilities. It would be more economical to serve the scattered population of this area by bus than to maintain these two schools.

**Emerson and Webster.** These schools are on small sites and are old. They duplicate other nearby schools.

**Cary School.** This should be abandoned as a special school due to the condition of the building and perhaps located in one of the schools proposed to be abandoned.

**Benton and Curtis.** These schools should be abandoned and replaced with a new school as before mentioned.

**Washington and Hanawalt.** These schools should be abandoned and replaced with new schools as before mentioned.

**Barton.** It would be more economical to transport the Barton pupils by bus rather than to maintain a school for only 25 pupils.

**EXISTING AND PROPOSED JUNIOR AND SENIOR HIGH SCHOOLS**

The junior high schools of the city should be within one mile walking distance of the majority of the city's population. Each junior high school should have a site of 10 to 15 acres. Senior high school pupils can travel a longer distance. Each senior high school should have a site of 20 to 25 acres and be located close to a bus or street car line.
Existing Junior High Schools

The existing junior high school system is shown on Plate Number 49. This plate shows the area of service, enrollment trends, and age of buildings of these schools. The 1930 population is also shown.

Much of the city is not properly served by junior high schools. The rapidly growing northwest portion of the city has no junior high school. The east and south portions of the city are inadequately served. At the same time there is an inordinate amount of duplicated service. The area served by West Junior High is almost entirely duplicated by Callanan and Washington Irving. There is a large amount of duplication between Callanan and Roosevelt. On the whole the junior high school system is badly related to the development of the city.

Of the eight schools, only four have an approximation of an adequate site; namely, Roosevelt, Callanan, Amos Hiatt, and Wilson. The sites of the other four—Lincoln, West, Irving, and Harding—are cramped and inadequate.

Seven of the eight schools were erected since 1920. The buildings are modern and attractive in appearance.

Two of the junior highs are combination junior and senior high schools—Lincoln and Roosevelt. Four of them are combination elementary and junior high schools—Callanan, West, Irving, and Harding.

The enrollment at these schools dropped slightly between 1935 and 1938. As was the case with the elementary schools, the enrollment is larger at those schools whose radius of service is not duplicated. Studies of junior high school enrollment reveal that the present enrollment of 6800 would increase to a maximum of 10,000 in 1975.

Existing Senior High Schools

Four senior high schools are needed to serve the four sections of the city—the west, from Kewanee Way and Harding Road to the west city limits; the north, from Kewanee Way to East Fourteenth Street to the north city limits; the east, from East Fourteenth Street to the east city limits; and the south, from the rivers to the south city limits.

Roosevelt High School, serving the west part of the city, is an outstanding educational development.

North High School was built in 1895 with remodelings and additions in 1914, 1915, and 1930. The site is very small and cramped for a senior high school (2.5 acres). The enrollment has increased from 601 in 1915 to 1838 in 1938.

East High School was erected in 1912 at a cost of $463,366, including land. The site is small, 4.22 acres, and the pupils are forced to use Ash Field, over a mile away, for their athletic field. The school is too near the central portion of the city to properly serve the eastern section. The enrollment at this school has increased from 1062 in 1915 to 2118 in 1938.

Lincoln High School is badly located to serve the south portion of the city, being on the edge, rather than in the center of the development. The building was erected in 1923 at a cost of $859,249, including land. The site is small, 7.06 acres. The athletic field, a block to the west, is on rough terrain and unsatisfactory both from the standpoint of usability and appearance. The enrollment at Lincoln has increased from 258 in 1925 to 854 in 1938.

Proposed Junior and Senior High Schools

The proposed junior and senior high schools to serve the future enrollment are shown on Plate Number 50.

Proposed Junior High Schools

An ultimate system of ten junior high schools is proposed to serve the future city.

West Part of the City. To serve the western portion of the city, it is proposed to retain Callanan and Irving as junior high schools. The site of Callanan is adequate, and Washington Irving is well located to serve the north central portion of the city. The site of the latter school is small and should be enlarged by acquiring the remainder of the block in which the school is located and the entire block to the east. One block of Fifteenth Street could then be vacated and a fine play area result.

Increasing enrollment in Roosevelt High School will soon necessitate other arrangements to serve this section of the city with junior high facilities. It is proposed that Roosevelt be abandoned as a junior high and that a new junior high be developed in conjunction with the new location of Hanawalt elementary school north of Grand and east of Fifty-ninth Street. This site is better located than Roosevelt for junior high purposes, as it eliminates the duplication of service between Roosevelt and Callanan.

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One of the most pressing school needs at present is a junior high school for the northwest portion of the city. Such a school is proposed north of Hickman Avenue and between Forty-eighth and Forty-ninth Streets as shown. This location is very convenient to the existing and probable future development of this area.

The area served by West Junior High is also served by Callanan and Irving. It is recommended that this school be abandoned as a junior high school.

**North Part of the City.** Harding Junior High is well located to serve the north part of the city. The site should be enlarged by acquiring the remainder of the block to the west and the two blocks to the south as shown. Two blocks of Cornell Avenue and Ovid Avenue can then be vacated and a badly needed playfield result.

**East Part of the City.** The two junior high schools, Amos Hiatt and Woodrow Wilson, will not be adequate to serve the population in the east part of the city.

Amos Hiatt is well located to serve the western portion of this area. The site should be enlarged by acquiring the remainder of the block in which the building is located and the remainder of the block to the north. Without hindering traffic circulation, one block of Garfield Avenue could be vacated and the two areas combined into a fine playfield.

It is impracticable to serve the area between the Rock Island Railroad and the east city limits with one junior high school. Abandonment of Woodrow Wilson as a junior high school and the eventual development of two new junior high schools is recommended. One of these new schools would be located on the northwest corner of Hull Avenue and East Twenty-ninth Street. This area is now vacant and a fine 15 acre site could be easily obtained. To serve the southern portion of this area a new junior high school is proposed on the two blocks bounded by Grand Avenue and Walnut Street and by East Twenty-eighth Street and East Twenty-ninth Street. This would give a site of approximately 10 acres. Much of this area is now built up, but a better site cannot be found in the immediate vicinity. The area between University and Dean and the Rock Island Railroad and the State Fair Grounds is badly in need of recreational area that would be afforded by this development.

**South Part of the City.** To serve the south portion of the city a new junior high school is proposed in conjunction with the present Howe elementary school. The site should be enlarged as shown. Lincoln High School will eventually be too small to accommodate both junior and senior high school pupils in this area. Plans have already been prepared, however, for another wing on this building. This addition and the above mentioned junior high will be adequate to serve the southern part of the city.

As can be seen, this proposed system of junior high schools will place such facilities within a mile of almost all the expected future population and will result in a minimum amount of duplication.

**Proposed Senior High Schools**

Roosevelt High School is well located to serve the western portion of the city, except for its bad relation to transit facilities. Transportation to and from Roosevelt High is a difficult problem.

A new school will be needed to replace North High School to serve the area between Harding Road and Keosauqua Way and East Fourteenth Street and North of the central business district. The present site of North High is cramped and much of the building is archaic. It is recommended that this school be located on the area between Sheridan Avenue and Holcomb Avenue, and between Second Avenue and Sixth Avenue.

This area, comprising 25 acres, is now almost entirely vacant. It is low and a considerable portion would have to be filled, especially around the building. The immediate surroundings, industrial in character, are not attractive but could be screened out to a great extent through proper planting. The high school could be developed as a continuation of the Birdland play area development, immediately to the south. The presence of these play facilities and the short distance from this site to the present North High Athletic field would make possible an unusually fine development. This site would also be on two good transit lines, Sixth Avenue and Second Avenue. The small expense of acquiring this site should offset any difficulties in its development.

East High School is not well located to provide high school facilities in the eastern portion of the city. The site is very small and should eventually be abandoned. The present Woodrow Wilson Junior High should eventually be developed as the senior high for this portion of the city. The present site of 9.52 acres should be enlarged to include all territory between University and Garfield and East Twenty-third Street and East Twenty-fifth Street. This proposed change from a junior high to a senior high would, of course, necessitate a considerable addition to the present building.

Lincoln High School will have to be retained as the school to serve the south part of the city even though its location is not as central as it should be. A playfield should be developed for this school by acquisition of the entire block to the west. The terrain of this block is rough, but by doing considerable grading, adequate level play space could be developed.
EXISTING AND PROPOSED NEIGHBORHOOD PARKS

Existing Neighborhood Parks

Des Moines is unusually fortunate in possessing nine neighborhood parks, seven of which are completely developed and all of which are well located to fit into and become an integral part of a future system of neighborhood parks. In addition, two school grounds, Callanan and Roosevelt, have neighborhood park characteristics of both area and development. The extensive use made of the present neighborhood parks indicates the necessity of providing more similar areas throughout the city.

Proposed Neighborhood Parks

Many of the present developed sections of Des Moines need neighborhood parks and new sites should also be acquired in certain areas that will eventually be urbanized.

Plate Number 51 shows the proposed system of neighborhood parks. This plan also shows the probable distribution of the future population and it is evident that the majority of persons will be within one-half mile of a neighborhood park.

A system of thirty-two neighborhood parks is proposed. Three of these would be portions of large parks. Two would be existing school grounds. Seven would be existing neighborhood parks with their present boundaries, while six would be enlargements of existing parks. Fifteen new parks are proposed. Eighteen of the thirty-two parks would adjoin schools or be developed in connection with school grounds. A detailed discussion of these recommendations follows:

West Part of the City

Around Crocker School. The Crocker School grounds should be enlarged to include the remainder of the block. The one-half block to the west should be acquired and one block of Seventh Street vacated to create a neighborhood park for this built up section of the city.

Enlargement of Bates Park. The built up neighborhood north of University and east of Eleventh Street is badly in need of park facilities. Bates Park should be extended westward to the alley between Fifth and Sixth Avenue as shown. One block of Clark Street could be vacated and this park area connected with the proposed extension of the grounds of Sabin School. This would afford an ideal neighborhood center for this area. The property to be acquired is completely built up.

Enlargement of Chamberlain Playground. A neighborhood park to serve the area between Keosauqua Way and Woodland Cemetery could be developed by acquiring property between Chamberlain Playground and West High Field as shown. This park could be developed in connection with Bird School.

Good Park. This park is well located to be a part of the neighborhood park system.

Drake Park. Grant School, adjacent to Drake Park, is proposed to be abandoned. The acquisition of the remainder of the property on the east side of Twenty-third Street between Cottage Grove and Drake Park Avenue and the vacation of one block of Twenty-third Street will double the area of this park and provide needed play space within the neighborhood.

Proposed Casady School Park. The neighborhood around Casady School now has no park facilities. A block and a half between Sixteenth Street and Eighteenth Street should be acquired as shown. A large proportion of this area is now vacant.

Witmer Park. This park is well located to serve the area between Twenty-seventh Street and Forty-first Street and between University and Hickman.

Phillpott and Ashby. These parks are well located to serve the area north of Hickman Road and between Forty-sixth Street and the River.

Proposed Northwest Parks. Two neighborhood parks are proposed to serve the northwest part of the city. Both of these would be in connection with proposed new elementary schools. One would be located adjoining the vacant school property at Douglas and Fifty-second Street. Half the block between Euclid and Ovid should be acquired as shown. There is but little development in this area at the present time. The other park would adjoin the proposed connection of Merle Hay Road and Fifty-sixth Street as shown. This area is vacant at the present time.

Proposed Perkins School Park. There is a relatively large area more than one-half mile from the two proposed parks or Witmer or Ashby Park. A fine neighborhood park could be developed to serve this area by acquiring the wooded ravine between the Perkins School grounds and Forty-first Street. This ravine and the ten-acre school grounds would make an excellent neighborhood park. The ravine should be left in its present natural condition.
Callanan and Roosevelt. These two school grounds are well located and developed to serve the neighborhood park needs of the west central portion of the city.

Windsor School Extension. Acquisition of the vacant property between Windsor School and Cummins Drive would make possible the development of a fine neighborhood park for the area west of Waveland Park.

Greenwood Park. Neighborhood park facilities now developed in Greenwood Park will serve the area south of Grand Avenue. Better access from the west and east is needed, however. Residents are now forced to go to Grand Avenue to enter the park.

The Highland Park Area

McHenry Park. The western portion of the Highland Park area is well served by McHenry Park, which is an outstanding neighborhood park development.

Union Park. Neighborhood park facilities in the northeast part of Union Park serves the southeast portion of this area.

Proposed Harding School Park. A large part of the Highland Park area is more than one-half mile from a neighborhood park. Play space is badly needed for this intensively developed residential area. The proposed extension of the Harding School site as shown would provide this needed space and be well located to serve the area that is now without such facilities. A considerable portion of these blocks is now vacant.

East Part of the City

Proposed Longfellow School Park. The neighborhood around Longfellow School now has inadequate park facilities and the neighborhood is depreciating in character and value. A neighborhood park around this school is proposed as shown. One block of Walker Street and one block of East Seventh Street would be vacated. This area is now built up with residences, many of which are in advanced stages of depreciation. Their removal would be a distinct benefit to the surrounding area.

Proposed Amos Hiatt Park. The proposed extension of the grounds of Amos Hiatt Junior High School would make a good neighborhood park development for the surrounding area.

Proposed Extension of Ash Field. Acquisition of property between Ash Field and the alley between Claypool and Walker would create a neighborhood park for an area now heavily populated.

Proposed Phillips School Park. Acquisition of property between the Phillips School grounds and Hubbell and Easton Boulevards would create a convenient park for surrounding neighborhoods.

Proposed Adams School Park. The School Board owns a five-acre tract a short distance to the west of Adams School. Acquisition of the property between these two areas would create an ample neighborhood park to serve the extreme northeast portion of the city.

Grand View Park. A large area in this part of the city is well served by neighborhood park facilities in the southern portions of Grand View Park.

Proposed Park West of Fair Grounds. The proposed new junior high school site west of the fair grounds should also be developed as a neighborhood park to serve the surrounding residences.

Thomas Tract. This area will afford needed play space for the residences between Raccoon Street and the Des Moines River.

South Part of the City

Mac Rae Park. This is well located to serve the western portion of this area.

Pioneer Park. This park should be extended as shown.

Proposed Broad Street Park. A new neighborhood park is proposed south of Broad Street and between Union and S. E. Fifth Street. This area is now well wooded, contains little development, and could be developed into a fine neighborhood park.

Black Diamond. There is a considerable area not served by Mac Rae Park, Pioneer Park, or the above proposed park. The Black Diamond is well located to serve this area and should be extended as shown.

Proposed Jefferson School Park. To serve an area that will ultimately be well developed, a neighborhood park is proposed north and west of the Jefferson School. Much of this area is now owned by the Water Board.
PROPOSED SYSTEM OF PARKS AND PARKWAYS

Plate Number 52 shows the existing and proposed park and parkway system. Existing and proposed neighborhood parks are also shown, as are parkways, proposed municipal forest, streamside development and streamside control areas.

Large Parks

Des Moines now has many attractive and well developed large parks. The large attendance at areas such as Birdland Park, Union Park, and Greenwood Park is indicative of their value and popularity. The areas that are developed with golf courses are well used as is evidenced by the attendance of 46,315 at the two courses in 1937.

The existing large parks are well distributed about the city and provide excellent service for the population. They represent varied topographical features such as river fronts, rugged areas, and woodlands, and are also developed with many varied facilities. The existing large park system is generally adequate for the future population, and only two new large parks are proposed. The majority of future park acquisitions and improvements should be confined to neighborhood parks.

The Gray's Lake area should eventually be a large park. The sand and gravel now being extracted from this lake will some day be exhausted and the area will be useless for commercial or industrial purposes. This large lake, with good water and sand beaches, close in to the center of the city, will make an ideal large park development.

Riverview Park, now a commercial amusement park, should be eventually obtained by the city. The lagoons in this park will make possible a fine development. This area is also very convenient to developed portions of the city. Existing commercial development should, of course, be eliminated if the city develops the area as a park.

Proposed Municipal Forest and Streamside Areas

Theory and Practice of Municipal Forest Development. At the present time there are no municipal forests in Iowa. Many American towns, however, have discovered that community forests pay as they grow.

The development of a town or community forest offers a means of putting both idle men and idle acres to work at an undertaking which will be self-liquidating and in which the original cost of development is relatively insignificant. In addition, there are opportunities for community recreation, protection of watersheds, protection of wild life, and wild flowers, and production of such forest crops as nuts and berries, all of which can yield small but helpful returns to the community.

Long range planning and careful thought are necessary but, over a period of years, forest lands can provide protection to municipal watersheds, grow timber which may be sold or used in fabricating products, and provide extensive recreation areas for all classes as well as public hunting and fishing grounds.

Possibilities in Des Moines. There are many opportunities for development of successful community forests in the Des Moines area. A considerable portion of the city's area is low, wooded, and adaptable for no other purpose.

There is always a nominal market for timber products in an urban area similar to Des Moines. In addition, the various governmental agencies use a considerable amount of timber which could be supplied from the municipal forests.

These forests could also have considerable recreational development without conflicting with the forestry. Roads and trails, picnic areas, etc., would make them very attractive to the city dweller desiring to spend his leisure time in the out-of-doors. Of maximum importance is the fact that the forests would insure a logical use of the area and prevent inappropriate private developments.

Proposed Forest Areas

The proposed forest areas are shown on Plate Number 52. Most of these areas are on low ground close in to the center of the city. Woods now cover the majority of the areas. In detail the areas are as follows:

Ewing Park. For the next several decades this park should be developed primarily as a forest. Much of it is now wooded with birch, elm, crab and oak. It is excellently adapted for forest purposes and should be the first one developed.

Case's Lake Area. This area is well wooded with lowland timber and would be very adaptable for growing cottonwood. Areas on both sides of the Des Moines river should be acquired, giving full control of the river banks.
Franklin Beach Extension. Low property to the west of Franklin Beach would make an excellent forest area. Acquisition to Illinois Street is proposed. Certain neighborhood recreational areas might well be located in this area.

Crocker Woods Area. Considerable acquisition is recommended on both sides of the Des Moines river in the “Crocker Woods” area. This land is well wooded. A saw mill is now operating in it. Acquisition as a forest would also eliminate deplorable housing conditions in the area.

Walnut Creek Area. There is low, well wooded property on both sides of Walnut Creek between the Water Works property and Grand Avenue. Development as a forest would aid in protecting the city water supply.

Area West of Sixty-third Street. A beautiful hardwood forest lies just west of the west city limits. It should eventually be acquired by the city as a municipal forest.

Proposed Parkways

In addition to drives within the large parks and forests, certain parkways, which are really elongated parks with a roadway in the center, are proposed. These are shown in Plate Number 52, and in general follow ravines and water-courses and connect the various park areas.

The objective of parkway development is to secure pleasure drives within the city and to encourage appropriate development of the surrounding area. They should be desirable to walk or drive through and, preferably, should be continuous and diversified.

The parkway recommendations are briefly as follows: (This does not include roadways within existing or proposed large parks or forests.)

Witmer Parkway. Property development in the northwest part of the city would be greatly encouraged by this parkway. It is possible to develop this drive from University Avenue to Hickman without crossing an intersecting street at grade. Certain connections to surrounding streets could be made at intervals. This parkway would connect the proposed Crocker Woods forest with Witmer Park. One branch would connect with Maquoketa Drive and the proposed Perkins School Park as shown.

Urbandale-Cummins-Mahaska Parkway. The street car line on Urbandale Avenue will eventually be abandoned. This street will then make a fine boulevard and parkway from the proposed Crocker Woods forest, past Phillip Park and to Fifty-sixth Street. One branch could follow the ravine north of Phillip Park and connect the latter area with Ashby Park as shown. Fifty-sixth Street should be followed to the proposed neighborhood park northwest of the cemetery. South of that area the parkway should follow a well defined ravine to Cummins Drive. From Cummins Drive the Mahaska Parkway right-of-way could be used with extensions to Grand Avenue. South of Grand Avenue the roadway could continue through the proposed forest and the water works property and terminate at Ashworth and Greenwood Parks.

Four Mile Creek Parkway. This parkway should be developed along Four Mile Creek as shown. The Park Board has already acquired part of the right-of-way for this development. This parkway should be developed with a roadway on the west side only. The east side of the stream should be developed with picnic facilities and reached by pedestrian bridges. By following this procedure, unwarrented development will not be encouraged to the east of Four Mile Creek.

Proposed South Parkways. Just east of South Union Street in the south portion of the city is a well defined ravine (Crawford Creek). The development of this part of the city has been negligible because the platting ignored topography. A parkway should be developed in this ravine from Park Avenue south to Indianola Road and eventually to East Fourteenth Street as shown. Part of this parkway would go through the proposed neighborhood park between Broad Street and Park Avenue. At the present time there is not a single building in the path of this improvement. The proposed right-of-way is wooded and attractive. The grades are good and the development of this parkway would offer the easiest access to this part of the city. The channel could remain open and be paralleled by two roadways. A right-of-way of between 100 and 200 feet would be needed. Platting of lots on this parkway would aid in the development of this section of the city.

A parkway should also eventually be developed along the stream to the east of Pioneer Park. This drive would extend from Hartford Avenue to Park Avenue.

Fleur Drive. This street is the only highway entrance to Des Moines that has not been spoiled by cheap and unsightly commercial enterprises. It should be protected and developed as a parkway.

Streamside Control

Rights-of-way or easements varying between 100 and 200 feet in width should be obtained along certain other streams in the outlying portions of the urban area. These should not be developed with
roadways for many years in order not to encourage further scattering of the population, but they could be retained in their native condition and improved with walks. They are essential to protect the streams by preventing encroachments of private development and thus enable the channel to carry the storm drainage. Much of the right-of-way can be obtained through subdivision control.

The major streams that should be controlled include portions of Walnut Creek to the west of the city limits, Yader Creek from the proposed forest to the airport, the stream that goes westwardly from the airport to the water works grounds, and the Raccoon River to Walnut Woods State Park. The latter area should, however, be developed with a road as soon as it is acquired.

The frontage on Dean's Lake should be protected by easements or acquisition along the shore line. Located in an industrial district, this lake will offer little or no recreational possibilities. It is, however, the outlet for an important storm sewer and the shore line should be protected.

Other Public and Semi-Public Areas

Certain other public and semi-public areas have been made a part of this plan. The Water Works park will always be an integral part of any park system in Des Moines. The grounds should be extended to the Rock Island Railroad on the north and the Chicago Great Western Railroad on the south. The small parcel between Ashworth Park and the railroad should also be acquired. The airport is also a part of the plan for a complete park system and should be developed with this in mind.

Riverfront Development

The city now controls a large amount of property along the river banks. The value of public ownership is evident from the existing development and should be extended in the future so that all the river front within the city will either be publicly owned or under some form of public control. The proposed park system will insure much of this ownership. Control over the remainder could be assured by passage of legislation.

Wherever possible, roadways should parallel the river. This has already been accomplished in Birdland Park and in portions of the Water Works park. A roadway is under construction from Sixth Avenue to Euclid on the north bank of the Des Moines River and from Riverside Park to Court Avenue on the west bank of this river. Roadways along the banks should also be developed in the existing and proposed park and forest developments. When possible, these should be developed in a continuous manner.
APPENDIX

APPENDIX "A"

MINIMUM STANDARDS HOUSING ORDINANCE

AN ORDINANCE PROVIDING MINIMUM REQUIREMENTS FOR THE ISSUANCE OF PERMITS TO ERECT DWELLINGS AND TO PROVIDE HEALTH, SANITARY, AND OTHER REGULATIONS THEREOF—and REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT THEREWITH.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DES MOINES, IOWA:

Section 1. The provisions of this ordinance shall be held to be the minimum requirements for the protection of the health, welfare, and safety of the community and shall be in addition to the provisions of the building regulations and other ordinances of the City of Des Moines.

Section 2. The term "dwelling" as used in this ordinance shall apply to any house or building or portion thereof which is occupied in whole or in part as the home or residence of one or more human beings, either permanently or transiently.

Section 3. The provisions of this ordinance shall apply to new dwellings to be erected, to dwellings to be altered, to buildings not dwellings to be converted into dwellings, and to dwellings moved from one lot to another.

Section 4. No dwelling shall hereafter be erected unless there is accessible city water and a public sewer, or a private sewer connected directly with a public sewer. Provided, however, that an Imhoff tank or similar mechanical means of sewage disposal may be used where public sewer mains are not accessible.

Section 5. All dwellings shall provide for water closets installed in rooms or compartments separated from other portions of the dwelling by partitions extending from floor to ceiling, with entrance provided by a solid door. Except as provided in Section 4, all water closets in dwellings shall be connected with public sewers and public water mains.

Section 6. All dwellings shall provide a kitchen sink, with running water properly installed and connected to a grease trap, which kitchen sink shall be placed in a room separated from other portions of the dwelling by partitions extending from the floor to the ceiling.

Section 7. The provisions of Section 4, Section 5, and Section 6 of this ordinance shall not apply to farm dwellings located on farms of ten (10) acres or more, provided that there be no more than one such dwelling for each ten (10) acres of farm land.

Section 8. For the exterior wall surfacing of dwellings, the use of tar paper, corrugated iron, unfinished slab siding, or materials of equivalent character is prohibited.

Section 9. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 10. This ordinance shall be in force and effect after its passage, approval, and publication as provided by law.