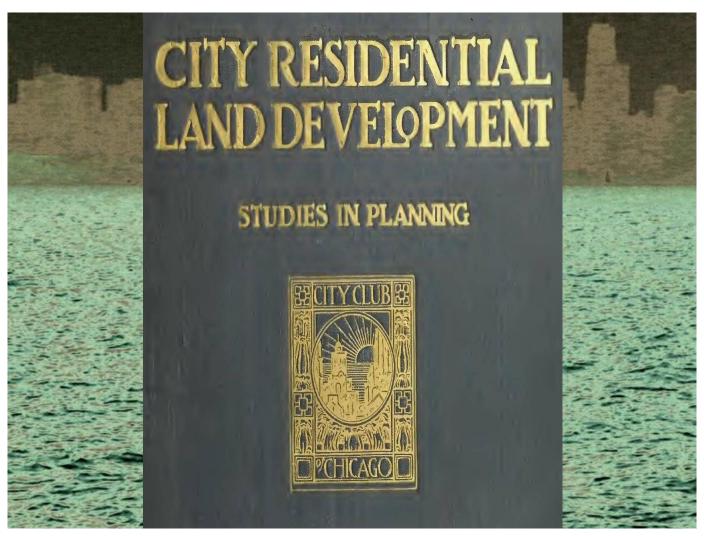


Background: Chicago skyline from Planetarium promontory.



Yeomans, Alfred Beaver (editor). City Residential Land Development: Studies in Planning. Competitive Plans for Subdividing a Typical Quarter Section of Land in the Outskirts of Chicago. Chicago: University of Chicago Press, for City Club of Chicago (1916).

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PUBLICATIONS OF THE CITY CLUB OF CHICAGO

CITY RESIDENTIAL LAND DEVELOPMENT

STUDIES IN PLANNING

COMPETITIVE PLANS FOR SUBDIVIDING A TYPICAL QUARTER SECTION OF LAND IN THE OUTSKIRTS OF CHICAGO

EDITED BY
ALFRED B. YEOMANS
LANDSCAPE ARCHITECT



THE UNIVERSITY OF CHICAGO PRESS CHICAGO, ILLINOIS



PREFACE

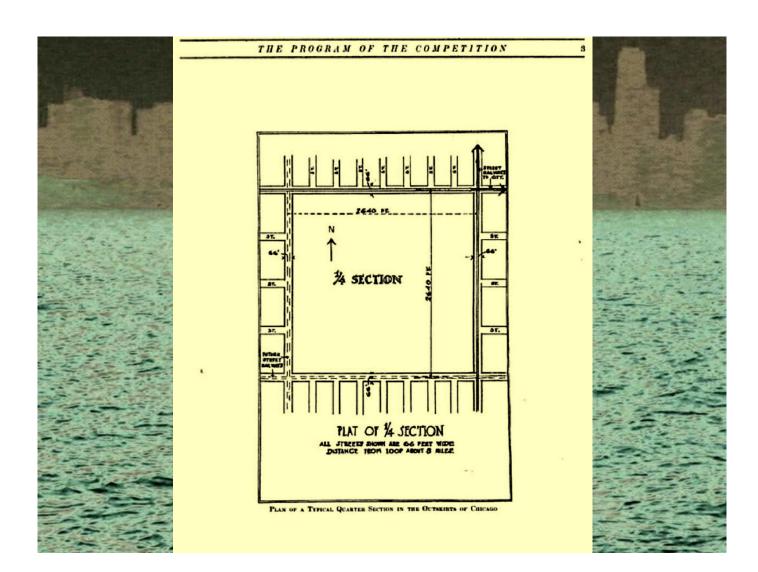
THE environs of our large cities constitute one of the most promising fields for the work of the city planner. Within the built-up portion of the city changes in the street plan and the creation of open spaces are enormously expensive and difficult. On the other hand, every large city includes within its limits large areas of unimproved or only partially improved land where the city planner, real estate operator, and others may work practically unhampered by the ideas or lack of ideas of their predecessors.

There is increasing evidence of a tendency in this country to take advantage of these opportunities to intelligently direct and control the growth of cities. The purely mechanical extension of existing street systems is giving way to scientific methods of land development based on a careful study of the probable economic, social, and esthetic needs of the prospective inhabitants.

The present volume, consisting mainly of plans submitted in a competition held by the City Chub of Chicago in 1913, is issued in the hope that it may help to stimulate interest in the more intelligent planning of the outlying portions of large cities.

THE EDITOR.







I. THE PROGRAM OF THE COMPETITION

PROGRAM OF A COMPETITION

with Cash Prizes
for the procuring of a
Scheme of Development
for a Quarter-Section of Land
within the Limits of the
City of Chicago, Illinois

The Problem

The City Club of Chicago is preparing to hold a Housing Exhibition to open at the club building March 7, 1913. As a stimulating and constructive feature of that exhibition it is desired to have displayed plans showing the possibilities, according to the best practice of the present day, for laying out and improving, for residence purposes, areas in Chicago now unoccupied. The City Club has, therefore, asked the Illinois Chapter of the American Institute of Architects to draw up a program, addressed particularly to building and landscape architects, engineers and sociologists, for a competition for plans for laying out, as a residence district, a typical area in the outskirts of the city. The Chapter has drawn up such a program, and Mr. Alfred L. Baker, President of the City Club, has offered \$600 for prizes for such plans. The program is as follows:

Program

A tentative city plan has been proposed for Greater Chicago. It deals especially with the broad structural features of the city framework and contemplates a long period of time for its execution. Meanwhile the unoccupied land in the outskirts of the city is being rapidly built up with homes without that intelligent direction which is necessary for the good of the city and its population. Recreation centers and parks are not being located until population has made them absolutely necessary, and then at large cost for the requisite land. Nor are the essentials for good housing and for neighborhood institutions being recognized.

The object of this competition is to extend information and awaken increased interest concerning the matter of laying out, for residential purposes, unbuilt areas in the City of Chicago in an improved manner, showing the essentials of good housing in its broadest sense, the best methods of subdivision of residential land, the best disposition of space for parks and recreation centers, the most practical width and arrangement of roads, the most convenient location of stores and of public or semi-public grounds and build-







CITY RESIDENTIAL LAND DEVELOPMENT

ings, the most desirable provisions for house yards and gardens and the proper density of population to be provided for.

It is also hoped that some of the plans proposed in this competition may actually be adopted as the basis for developing some of the vacant quartersections in the outskirts of the city.

For good reasons it has been determined that the area for the laying out of which plans are to be submitted in this competition shall be, not a precisely located, but an imaginary or an assumed site, as follows:

The site comprises a quarter-section of land assumed to be located on the level prairie about 8 miles distant from the business district of the City of Chicago. The tract is without trees or buildings and is not subdivided. The surrounding property is subdivided in the prevailing gridiron fashion as indicated by plat on opposite page. It is assumed that within a mile of the site are to be found numerous scattered instances and several groups of ordinary frame and brick houses such as prevail on the southwest, the west and the northwest outlying sections. Many of the larger industrial plants that are located or are being located west and southwest of the city are distant from ½ mile to 4 miles from the site. Many of these plants can be reached from the site on foot or by car lines, with or without transfer, within twenty minutes.

The site is served by street car lines on two sides, and there is a possibility of street car lines on the other two sides.

The site as shown on the plat is assumed to lie in the southwest quadrant of the city, and is served by street car lines on the east side and the north side. A passenger from the site may, by starting north on one of these lines or east on the other, reach the loop district, by transfer if necessary, in about 45 minutes.

Any competitor may, if he chooses, assume the site to lie in the northwest quadrant, in which case he would modify the plat by showing the two existing street car lines as on the south and east instead of the north and east sides of the site; and a passenger would then reach the loop district from the site in like time by starting south on one of these lines or east on the other and transferring, if necessary.

Each competitor will submit two drawings: First a plan, drawn to a scale of 80 feet to the inch, showing the streets as proposed to be laid out in respect to direction, width, grass plots, fore-gardens or plantation of trees along them; the size and arrangement of lots; the location of dwellings upon them; the proper provision of gardens; the provision of public open spaces other than streets; the designation of spaces for the business, recreational, educational, religious, administrative and other social requirements of the prospective inhabitants, and any other features belonging to a proper development of the site as a residential quarter according to the best practicable standards for the location.

Second-Each competitor will submit a bird's-eye perspective of the



7



CITY RESIDENTIAL LAND DEVELOPMENT

area, or some portion of it, in its proposed developed condition, which shall not exceed 20 inches by 36 inches inside the border lines, or an equivalent

Both drawings are to be rendered in pen and ink, or pen and ink with monotone wash. They are to be made suitable for half-tone reproduction.

Plans are not to provide for a population greater than 1,280 families for the quarter-section.

Competitors will assume that all present city ordinances affecting building within the fire limits will prevail in this quarter-section.

Each competitor will submit with the drawings a typewritten statement giving the following data concerning his plans, namely:

- (1) The number and sizes, in street frontage and superficial area in square feet, of lots for dwellings.

 (2) The number of families to be accommodated.

 (3) The number of feet of public sewers proposed.

 - (3) (4) The number of square yards of street pavement proposed.
 - The number of square yards of sidewalk proposed.
 - Percentage of total site in streets.
 - Percentage of total site in other public spaces.

Each competitor is also invited to explain and discuss, as fully as he may choose, the general purposes, policies or features represented in his solution of the problem. Any person or group of persons may submit drawings and statement in

is Open

Prizes

to be Exhibited

Density of

Competitor

this competition.

Three prizes will be awarded, the first of \$300, the second of \$200 and the third of \$100, for the best, second best and third best sets of plans submitted, and honorable mentions will be made as shall be determined by the

Judgment is to be rendered by a jury of five chosen by a joint committee of the City Club and the Illinois Chapter of the American Institute of Architects.

The drawings are to be delivered to the office of the City Club, 315 Plymouth Court, Chicago, at or before noon of March 3, 1913, addressed to "Housing Competition, City Club, Chicago."

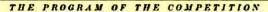
To each set of drawings there must be attached a plain opaque sealed envelope containing a card bearing the name of the author or authors.

The award will be announced on or before March 10, 1913.

It is intended that the drawings submitted shall be shown in the Housing Exhibition mentioned.

Persons or groups of persons desiring to enter the competition will please send notice as early as may be to the address below. A meeting, to which persons sending such notice will be invited, will be held about January 4, to talk over the competition and any questions which may arise respecting it among those intending to participate.







As a convenience and aid to those who shall take part in this study, the City Club will endeavor to have, on or about December 26, for sale to entrants, at prices indicated, plus postage and duties where necessary, a limited number of sets of the following books and pamphlets, describing the progress of the garden city and garden suburb movement, especially in Great Britain and Germany, namely:

- "Nothing Gained by Overcrowding," by Raymond Unwin. Published by Garden Cities and Town Planning Association, London, 1912. 6c.
 2. "Forest Hills Gardens." Published by the Russell Sage Foundation, New York
- "Housing and Town Improvement." Published by the Housing and Town Planning Association of Ireland, Dublin, 1912. 25c.
 4. "The Bournville Village Trust." Published by the Bournville (England) Village
- Trust, 1911.
- "Typical Plans of the Bournville Village Trust." Published by the Bournville
- Village Trust, 1911. 25c.
 6. "Garden Suburbs, Villages and Homes." Published by the Co-partnership Publishers, Ltd., London, 1912. 12c.
 7. "The Pioneer Co-partnership Suburb." Published by the Co-partnership Pub-
- lishers, Ltd., 1912. 6c.
- 8. "Co-partnership in Housing." Published by the Co-partnership Publishers, Ltd.,
- "Garden Suburbs, Town Planning and Modern Architecture." Published by T. Fisher Unwin, London, 1910. 25c.

 10. "The Garden City—Port Sunlight," by M. Georges Benoît-Levy. Translated
- from the French, 1904.
- "The Buildings Erected at Port Sunlight and Thornton Hough." Published by Lever Bros., Ltd., Port Sunlight, Liverpool, 1905.

 12. "The Cheap Cottage and the Small House," by J. Gordon Allen. Published by
- Garden City Press, Ltd., Letchworth, England, 1912. 36c.

 13. "Die Deutsche Gartenstadt-Bewegung." Published by the German Garden City
- Society, Berlin-Schlachtensee, 1911. 40c.
 14. "Die Deutsche Gartenstadt Muenchen-Perlach," by Berlepsch-Valendas and
- Hansen, 1910.
- 15. "Bodenpolitik und Gemeindhene wonnungstatende."
 lepsch-Valendas. Published by E. Reinhardt, Munich, 1911. Price, 50c.

 16. "Can the Present-Day Evils of the Living Conditions in Great Cities Be RemDablished in German by Carl Heymanns, Berlin, 1912.

Inquiries

Inquiries for further information should be addressed in writing to " Housing Competition," City Club, 315 Plymouth Court, Chicago. The answers will be in writing and will be forwarded, with the questions, to all known competitors December 21, 1912.

GEORGE E. HOOKER, Civic Secretary.





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In addition to those whose plans appear in the book, the following submitted plans in the compet Booth, A., Calumet High School, Chicago Mayo, Charles, 23 W. Kintie St., Chicago Dorr, John L., 7180 Lander Ave., Chicago Norton, Edger W., 489 Slater Bilde, Westweter,	Man.



II. THE REPORT OF THE JURY

NOTE: The following grathenen constituted the jury: Messrs, John C. Kranedy, Housing Expert; John W. Alvord, Engineer, Jens-Jonen, Landscape Architect: George W. Maher and A. W. Woltenskorf, Architecta, Mr. Edward H. Bouton, Director of the Rohad Park Company, Bullimore, extel as consultant—The Eddaw.

BEFORE discussing the merits of the various plans submitted in this competition we wish to state briefly the method followed in arriving at our conclusions. We observed at the outset that the 39 sets of plans could be arranged according to type in about five different groups. First, there were those based upon the so-called gridiron pattern; second, a group not following any fixed design, but rather heterogeneous in their make-up; third, a number which were very systematically organized, with frequent repetitions of a characteristic unit or block; fourth, plans of the beaux arts type, presenting fine vistas, boulevards, spacious parks, and sites for imposing buildings; fifth, a class of plans showing unity and system in composition, yet not falling in class three with the repeated unit, or class four with its rather magnificent scale of development.

Having arranged the plans in groups for purposes of comparison, we began a process of elimination on the basis of the following considerations:

- (a) The economy and practicability of the plan for a quarter-section in northwest or southwest Chicago.
- (b) The provision for health and sanitation.
- (c) Beauty, including general composition, architecture, originality.
- (d) Comfort and convenience of residents.
- (c) Provision for social activities, including education, recreation, business, etc.

Each plan was given individual consideration by all the members of the jury and none was eliminated without unanimous agreement. When the jury had studied all the plans and decided tentatively upon the prize-winners, the merits of the plans were discussed with Mr. Edward H. Bouton, Director of the Roland Park Company, Baltimore, who had been invited to serve as consulting member of the jury. In the selection of the prize-winners the judgment of Mr. Bouton coincided with that of the jury.

A few plans were rejected at the outset because they did not comply with the essential conditions of the competition.

Without attempting to discuss the merits and defects of each plan individually, excepting the prize winners, we may summarize the principal reasons for eliminating those which were not awarded prizes as follows:

- (a) Several were not adapted to such a district as the one to be provided for according to the terms of the competition. The most common defect in these plans was an over-elaborate system of parks, boulevards, or public buildings which could not be maintained by working people with only moderate means.
- (b) Aside from the matter of expense some plans were deemed inappropriate for such a district because they were on a too monumental scale. The width of the streets and the arrangement and type of buildings were better suited to a whole city than to a quarter-section.
- (c) Some plans went to the opposite extreme. They showed little originality, and made inadequate provision for parks and playgrounds, public buildings and social centers.

- (d) While few plans were rejected because of any single defect, yet those which provided for the business of the district in the central part away from both car lines were considered unsatisfactory to that extent.
- (e) Plans which provided for large athletic fields next to residences, libraries, or other buildings where quietness would be desirable, were considered defective in that respect.
- (f) There was a wide difference in the merits of the street systems of the various plans, and this factor was always considered important. The jury was not committed to any particular scheme of streets, curved or straight, but favored those plans which provided for easy access to all parts of the district, while at the same time insuring a reasonable degree of privacy, and freedom from through traffic. We also recognized the merits of those plans which in the arrangement of streets broke up the long interminable views now so characteristic of Chicago, and guarded against the clouds of street dust which are likely to sweep through straight unbroken thoroughfares.
- (g) The jury considered plans that generally arranged the houses in closed courts, or in a sort of cul-de-sac as defective from the standpoint of ventilation.

Of course it goes without saying that most if not all of the plans submitted had meritorious features. In some respects plans which were not awarded prizes were superior to those which were premiated. On the other hand, none of the plans, including the premiated plans, were considered ideal in every respect. Our problem was not to find a perfect plan, but simply to select the three which on the whole seemed to offer the most satisfactory solution of the problem.

We considered the plan awarded the first prize to be well adapted to the Northwest side of the city. It provides for 1,280 families, 152 of which were to be housed in flats, the rest in single dwellings. Provision is made for considerable variety in the type of dwellings, both attached and detached. Some might think at the outset that the 434 twenty-foot lots are too narrow, especially in view of the fact that 25 feet is now practically the minimum in Chicago, and that thirty and thirty-three foot lots are very common. It must not be forgotten, however, that two or more families are generally housed on each of these lots, so that the amount of land allowed on the minimum size lots per family is really considerably more than the amount occupied per family at present. By the use of attached houses the objection to building on such small lots is obviated.

The plan shows marked originality in many respects. The arrangement of the streets is in our opinion excellent, providing for easy access, and at the same time enhancing the beauty of the entire section. As stated before, while the jury is not committed to the endorsement of any special street arrangement, we cannot agree with those who maintain that curved streets must always be considered as undesirable on a level prairie site. We have already given the reasons for our views on this matter.

One of the best features of the plan is the provision for park, playground, or garden spaces in the interior of most of the residence blocks. Thus the expenses for parking are reduced to a minimum, since there are no extra costs for paving, etc. Moreover, these private parks — private in the sense that they are restricted in their use to the families living in the surrounding residences — afford safe playgrounds for the children and encourage a neighborly spirit among the families in the block.

CITY RESIDENTIAL LAND DEVELOPMENT

The plan shows striking architectural composition which gives unity to the whole design. There may be a difference of opinion as to the probable success of a market piazza, but we believe the experiment would be well worth trying.

The plan which was awarded the second prize provides for 1,275 families, 1,156 in single dwellings and 119 in flats. In this plan, as in the one just discussed, provision is made for considerable variety in the types of houses. Space is reserved in the rear of each lot for parks, playgrounds, or gardens. One of the distinguishing features of the plan is the diagonal street. It is questionable whether this would become the main thoroughfare for which it is designed, unless the street were continued in the same direction beyond the confines of the quarter-section. On the whole, the jury considered the plan one of the best balanced in all respects that was submitted, and one that is well adapted to the conditions prevailing in either the Northwest or Southwest sections of the city.

The plan receiving the third prize was selected because, of all those having a central social center, this seemed to be worked out most successfully. The street system was also well arranged. Adequate provision is made for parks, and the dwellings, while mostly of the attached type, are so designed and arranged as to assure plenty of light and air to each family.

III. THE COMPETITIVE PLANS WITH DISCUSSIONS BY THE DESIGNERS

Arranged in alphabetical order with the exception of the premiated plans

COMPETITIVE PLAN BY WILHELM BERNHARD* AWARDED FIRST PRIZE

GRADUALLY but slowly we have come to realize that town-planning, like any other civic advancement, is not only a civic necessity but also a thoroughly rational and practical business proposition. Wherever town-planning has been properly handled, it has developed a healthy and sound community life, has proved to be profitable, and has shown in dollars and cents that it has fostered the growth of commercial and industrial prosperity.

The advantages of such planning are becoming recognized, and to-day there is practically not one residential or housing enterprise of noted importance undertaken without first bringing its proposed development under one comprehensive plan unifying and co-ordinating the whole. The results obtained from this foresight have more than justified the comparatively small expense connected with the preparing of necessary plans.

We all know that town-planning means more than a mere beautification of existing conditions, or such improvements as the creation of parks and community centers. Town-planning involves a proper and orderly co-ordination of all of the features of a city's present and future development.

Successful planning will always find for each problem its own individual solution, best suited to the particular needs of the case. The resources which nature offers us will be individually utilized, the topography of the land closely followed, and every feature forced to serve to the utmost advantage.

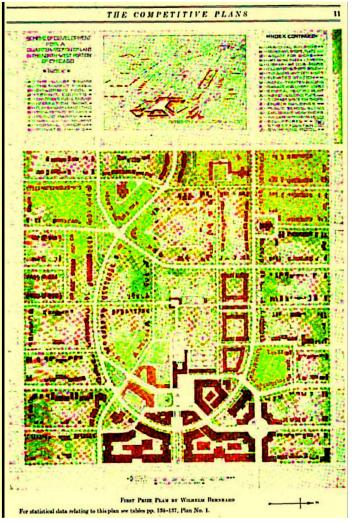
The accompanying plan for laying out a quarter-section of land was conceived for a particular site presenting conditions actually existing in the outskirts of Chicago. It is by no means to be regarded as a typical model to be multiplied indefinitely.

The introduction of one typical solution with the idea of repeating it indefinitely means the same old monotony, that deadly monotony which has resulted from obstinute adherence to the gridiron plan and has begun to wear on the nerves of every community genuinely interested in its own welfare. Moreover, the method of repeating a single unit cannot be practically applied within a complicated organism such as an already partly developed city, not even under such physical conditions as obtain in the prairie regions and in most parts of Chicago and its adjacent territory.

Briefly stated the endeavor in this layout has been:

- To create a community center as an architectural emphasis and as a center for business and civic life.
- To separate distinctly the business streets and squares from the residential part of the community.
- To eliminate as much as possible from the developed tract the through-running traffic from Chicago proper.
- To emphasize the domestic character in the business as well as in the residential districts of the community.

"Note: Competitors submitted only a plan and hird's-eye view in the competition. An opportunity to supplement these with additional drawings or photographs for publication was later extended to each contributor.—This Entron.





5. To give to the architecture an individual character as an outer expression of the inner life of the community.

The plan provides for an organically worked out community center, an idea which only some ten years ago was considered a beautiful but impracticable dream, but is to-day known to be in many instances a practical necessity. The idea in itself is comparatively new but has proved a success in

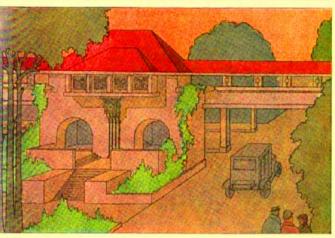
many rapidly growing and prosperous communities in this country. The center of the community will be the village square, surrounded by buildings for civic, public, and business life. A 34-foot wide archway will serve as a main, architecturally accentuated entrance to the square. On the east side is a group of municipal buildings. on the north side buildings for mercantile purposes with an open areade, and on the west



side a clubhouse and library facing the main park and recreation places. The south part of the square will contain an open garden, with a monument in the center. Close to the square and with easy connections to it will be the market piazza, as a center for food supplies. In the near neighborhood will be located two blocks entirely devoted to shop purposes, with apartments above, a lodge-hall, a fire-station. theater, garage, and livery stable, two schoolhouses and churches. Thus the community center serves as mart or exchange for the suburb's civic and business life, a distinct separation between residential and business parts is made, and and the domestic character which ought to be

one of the most notable characteristics of an up-to-date development for residential purposes is obtained.

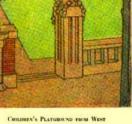
Another essential in maintaining a true domestic character is the avoidance of unnecessary traffic. The monotonously endless business thoroughfares running in straight lines from Chicago proper out through its suburbs, with their never-ceasing noise of street cars and heavy wagons, and their temptation to automobiles for speeding, are making impossible the quiet, clean, healthy environment the name suburb suggests. The value of straight thoroughfares on which the suburban passenger traffic must be located is obvious. Those thoroughfares should be planned tangential to residential subdivisions, running between them and serving as feeders to them, and should not go through the



ELEVATED STATION



CHURCH AT TERMINUS OF RESIDENTIAL STREET



heart of the resident centers. Residential streets, however, within the subdivision should be planned informally. They will add to the attractiveness of the whole district, and at the same time discourage through-traffic.

Thus, in giving a curved line to the chief streets of the layout, the purpose has been to discourage their use as through streets, and, from an esthetic viewpoint, to avoid the monotony of straight street lines so predominating in this country. The two main thoroughfares will have a width of 60 feet, slightly curving when approaching the community center, with ample set-back of buildings. Streets less important for traffic will be 40 feet wide and less. The additional space thus given to the lots will decrease the public cost for pavement repairs and will increase the size of the lots, permitting ample space for front gardens as well as back yards. The sidewalks will all have a width of 5 feet, except in

front of stores, where they have been given an additional 5 feet. On the street side of sidewalks there will be throughout the entire layout a grass covered space 6 feet wide for trees and shrubbery.

The grouping of houses in larger and smaller units, of which some are set back, some brought forward, will avoid the monotony which the street with a straight line of single houses offers, and at the same time will decrease the building

Wherever possible there has been provision made for a private park in every block. This space will serve not only as ample space for raising vegetables but also as an ideal playground for small children.

The lots facing the boundary streets, located near the surface car lines, are supposed to be occupied by citizens of

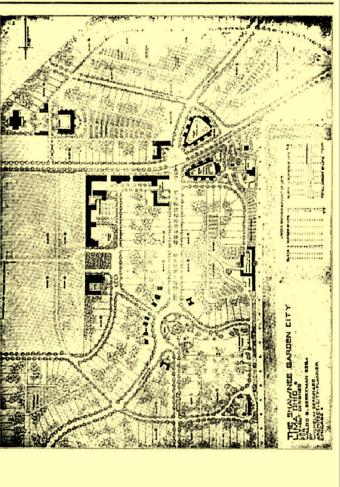
moderate means. The lots on the inside of the tract facing the public park will have a street frontage of from 40 feet up to 80 feet and will naturally be selected by people in more favorable circumstances. The idea of providing lots suitable for citizens of different means has been adopted in most of the modern real estate developments and garden cities, both abroad and in this country, and it has proved very profitable.

The organically developed suburb, strongly marked by an architecture of its own, able to impress its individuality on the district, will awaken in its citizens the love for beautiful surroundings, and will express definitely through its individuality the individual life of its citizens.

The plan of a suburban development near Lima, Ohio, shown on the opposite page and now being carried out may be interesting as a realization in fact of the idea advocated by the author.

The tract is located two miles southwest from the heart of the city of Lima at the highest altitude around the city. It embraces some five hundred acres of beautiful, gently rolling land with ravines for natural drainage and valleys which provide exceptional natural opportunities for an ideal residential community. It is being developed by private capital with the ultimate aim to produce, amid attractive surroundings, homes not to exceed \$4,000 each in cost.







COMPETITIVE PLAN BY ARTHUR C. COMEY

AWARDED SECOND PRIZE

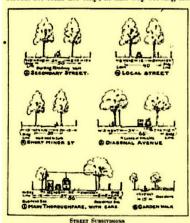
THE stated limitation of 1,280 families for the quarter-section controls the type of development almost without regard to the price of the land. At this density but few apartments are necessary or desirable, these being located at the corners of the property on the car lines, together with most of the stores. Nor need solid rows of dwellings be built. Detached houses throughout would be feasible but there would be wasteful extra expense and a sacrifice of privacy due to the close proximity of windows in adjacent dwellings. The double or semi-detached house is therefore the normal type, with fairly frequent single houses and also groups of three or four.

The normal lot approximates 35 x 100 feet, but a considerable range is provided to suit varying needs. Important features in several blocks are the allotment gardens, where near-by residents may rent a plot whenever they feel able to carry it along, but need not be burdened with the permanent responsibility of the extra land. With the low density required (eight families per acre) such means of eking out the family income becomes especially beneficial. Should, however, the demand for these allotments be slight, the land will be almost equally valuable as local playground space.

The principal playground is located with the school, which, with most of the other community buildings, such as branch library, fire department, recreation center, a hall,

and churches, are grouped about a small park or common.

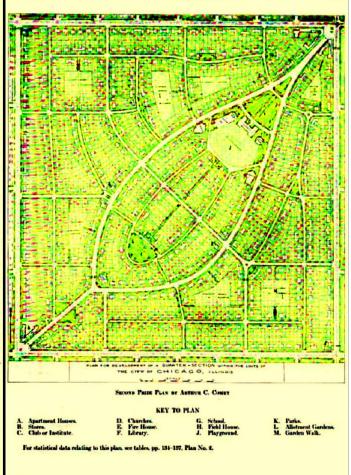
The street system is designed to provide access by broad avenues, with intermediate streets for local use only, in this way serving the traffic more economically and far more



district. Nor under present American conditions should there be deep interior courts, impasses, and similar features, as these are hard to light and police and are apt to require extra piping. though economizing in street surface. A considerable variety in site planning is provided, however, with several small parked areas on which the houses face. Furthermore, the building lines, shown on the plan by broken lines, permit interesting compositions, with narrow fore-gardens along all streets. The establishing of an interior as well as exterior building line is an important provision to insure permanent light and

air through the middle of each block.

attractively than by the gridiron system. It is not believed, however, that an extremely irregular or circuitous street system should be adopted in this



Most of the street frontage runs north and south to secure sunlight in all the rooms, but the valuable frontage along the main thoroughfares is preserved intact. Trees (not shown on the plan for clearness) are included in a parking strip on all streets. On the short, thirty-foot streets they are adjacent to the property with the sidewalks next to the pavement so as to give adequate space between the rows of trees and to economize on street works, but the building lines are kept the same distance apart as on the forty-foot streets.

The subdivisions proposed for the various streets are shown on the accompanying diagram. Boundary thoroughfares are shown widened to 86 feet, ten feet being taken from the property in the quarter-section, thus providing 76 feet for the present.

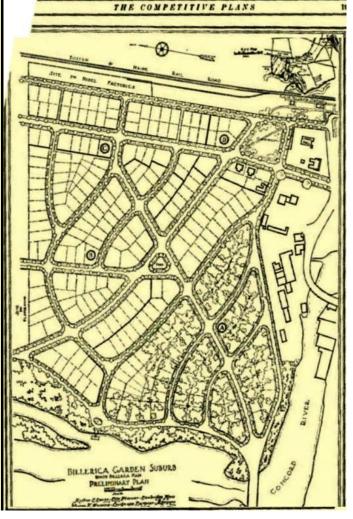
The garden walks are to be constructed with open wire fences and will form attractive by-passes into the gardens. With the proper inspiration and guidance the back yards should develop fully as attractively as the street frontage.

The type of improvement proposed by this plan will provide the essential physical features of a Garden Suburb adapted to American conditions and ideals. If wise methods of financing and disposal are adopted and effective community interests are fostered, its permanent success will be insured.

A suburban development actually under way at North Billerica, Mass., a plan of which appears on the opposite page, would indicate that the Garden Suburb idea is perfectly possible of realization under American economic and social conditions. The plan represents a model community of 56 acres for the workmen of the Boston & Maine R. R. repair shops, twenty-one miles from Boston and favorably located adjoining the North Billerica station and the present village center, with its school and other public buildings.

Acting under the recommendations of the Massachusetts Homestead Commission the Billerica Garden Suburb, Inc., was incorporated in June to develop the estate. The Company's dividends are limited to five per cent cumulative, and each resident must be a shareholder. This is the first time in the United States that the five essentials of the English garden suburb — site planning, limited numbers of homes per acre, wholesale operations, limited dividend, and participation by the residents — have been combined to meet the needs of the workman earning \$12 to \$20 per week.

The plan shows the type of development along advanced garden suburb lines, with an average of five families per gross acre. Sites for community buildings, playgrounds, and allotments are provided, and the arrangement of roads and houses is carefully determined to secure the maximum practical and aesthetic values. The very attractive river front is dedicated to the town's park system, and a large grove of pines in the southwest section has been preserved to a great degree by the careful location of street and lot lines. In one section (A) houses are being sold outright; another portion (B) will be turned over to a Co-partnership Society for Development by that method; in a third section (C) houses for rent will be built; and in the fourth (D) the Company will erect special buildings for shops, improved boarding houses, lodgings, etc.



SCHOOL DEVELOPMENT

COMPETITIVE PLAN BY ALBERT LILIENBERG AND MRS. INGRID LILIENBERG

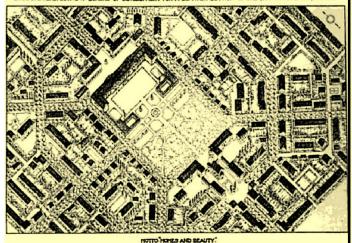
AWARDED THIRD PRIZE

A TOWN planning scheme is one of the most important things we can leave to posterity. On the quality thereof depends to a great extent if the generation to come will grow up to be healthy and strong citizens, and if they will be comfortable in their town; it decides if the town will continue to engender the discouraging feelings that it does now, or if it will help to raise the character and the sense of beauty of its inhabitants.

This quarter-section of land the competitor has tried by the simplest of means to make a site for real homes. The streets have not been made too long, and at the end of them one's eyes will always meet a pleasant view. Streets without any green and streets with grass, trees and fore-gardens alternate with one other. Here and there open spaces are left for small parks and playgrounds. To the schools have been given sunny and free locations, and other public buildings have been placed on the most monumental sites of the section. The directions and dimensions given to the streets have not been fixed with regard to through traffic, but are designed for local use and to provide access to the street car lines.

Both for economical reasons and for esthetic effect the by-streets have been made as narrow as possible while proper distances between the houses have been secured by means of fore-gardens.

BRED EYE FER PECTIVE OF SCHEDE OF DEVELOPMENT FOR A CLIARTER-SECTION OF THE CITY OF CHEAGO, ELIPSIS



PETTO, POPER AND MANUT.

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KRY TO PLAN

A. Folkhamer, poper for C. School, Hamilal or other E. Chark.

F. Tends Capita.

COMPETITIVE PLAN BY H. A. ANDERSON AND VICTOR REECER

THE accompanying scheme is submitted as a city layout which will fit in any portion of the present gridiron scheme occupied by the congested portions of Chicago. It satisfies the conditions imposed by the existing street system. These conditions are that the streets connect with the stubs of the adjoining property, that the blocks be easily numbered, and that reasonably direct transit across the section be possible. It is so arranged that should it be desirable the scheme could be repeated. The streets are made wide with the idea of obtaining a picturesque effect, and no decided curves which would impede the circulation are used. The present population of such a section of Chicago is about 1,500 families, and we have accommodated 1,034 families, or one family to one lot, practically condemning the building of flats and apartments except at the four corners of the section.

The houses represent quite a departure from general building practice in this country, but lend themselves most admirably to a scheme of this kind. Instead of placing individual houses upon each lot, we have combined the houses into groups of two, three, and up to eight in number, renting the portion occupying each lot to one family.

The recreation and public areas have been combined and located in one section, convenient to all parts and so designed as to form a pleasing composition for the benefit of all living within the quarter-section. In one section of the park we have provided an athletic field and a gymnasium for the proper recreation of the people and the healthy development of sport.



BRO'S-EYE VIEW, LOOKING SOCTHWEST

The refuse is taken care of by a system of alleys, shown upon the plan, which are of the minimum width of 16 feet required by the ordinances of the City of Chicago. Where the block is large enough to permit of extra space in the center, this is to become city property and is to be used as a recreation ground by the tenants occupying the adjoining lots.



PLAN BY H. A. ANDERSON AND VICTOR REECER, CHICAGO, ILL.

KEY TO PLAN

- A. Club House.
 B. Assembly Hall.
 C. Gymnasum.
- E. Police and Fire Stati F. Schools.
- G. Hospitals.
 H. Churches.
 J. Stores and Business Buildi
 N. Band Stand.
- O. Tennis Court.
 P. Athletic Field.
 Q. Playground.

For statistical data relating to this plan, see tables, pp. 134-137, Plan No. 14.

COMPETITIVE PLAN BY LOUIS H. BOYNTON

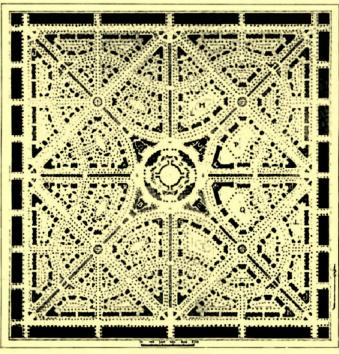
In planning a development for a quarter-section in a city like Chicago the first consideration is to adopt an arrangement of streets which will provide a system of circulation that may be readily combined with the existing "gridiron plan," and which, indefinitely repeated, will provide a new system of circulation avoiding the bad features of the old. Convenience of circulation is, of course, the prime requisite of any good city plan. Apart from artistic considerations the worst feature of the gridiron plan is the difficulty of going from one place to another in a diagonal direction. Moreover, as a result of a scientific study of the problem, Mr. William Atkinson has demonstrated that the ideal exposure for houses is provided in streets that run northeast and southwest or northwest and southeast, or in other words in streets that run at an angle of 45° to the north and south line. Consequently a diagonal system of streets has been introduced which, together with the curved road shown on the plan, provides an ideal frontage for the houses.

As shown on the plan for repetition (page 26), this would introduce two major systems of circulation; i. e., northeast and northwest, and north—south and east—west, the former being the more important. Of course if the plan were repeated the streets bounding the quarter-sections should be widened and parked, providing a location for street car lines in the center of the parking. Secondary circulation is provided by intermediate streets entering the property on the sides and by a winding road which encircles the whole tract.



BIRD's-ETE VIEW OF PART OF THE QUARTER-SECTION

The east and west halves of the property, as shown on the plan, are subdivided on slightly different principles so as to show two of the many possible variations of the scheme. The east half follows the practice in the English Co-partnership Suburbs,



PLAN BY LOUIS H. BOYNTON

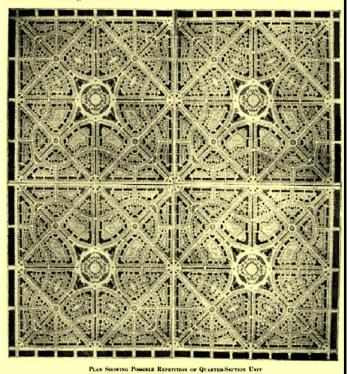
KEY TO PLAN

- A. Administration Buildia, and Dispensary. B. Assembly Hall.
- E. School. I.
 F. Children's Clubs. J.
 G. Office Building. K.
 H. Inn. L.
 - Stores and Flats.
 C. Garage.
 Allotment Gardens.
 - P. Athletic Field.
 Q. Tennis Courts.
 R. Police and Fire Stat

For statistical data relating to this plan, see tables, pp. 134-137, Plan No. 13

such as the Hampstead Garden Suburb, with ample space in the center of the blocks for allotment gardens and semi-public playgrounds, while the west half is divided for the usual real estate development where the lots are sold to individual owners. It is a well established principle that in order to provide comfortable dwellings at a

It is a well established principle that in order to provide comfortable dwellings at a low rental or at a low selling price it is necessary to reduce the size of the individual holdings to a small area and to build houses in series or attached groups. Consequently there are about 350 houses which would be attached on either side and the greater part of the rest of the houses are semi-attached either by being built in groups of two or by being built on the ends of the longer blocks.

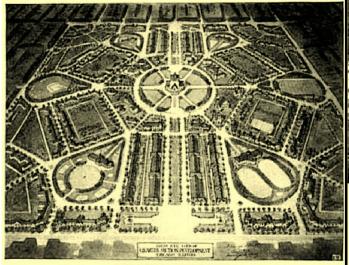


As to the width of the streets: the parked avenues are 80 feet wide from lot line to lot line with two 18-foot roads and a 24-foot parkway. The streets on the inscribed square are 60 feet wide with a 28-foot roadway. The winding roads are 40 feet wide with a 16-foot roadway with occasional turn-outs. The widths of the sidewalks have been computed on the basis of five feet for the more important streets and four feet for the narrower roads. In almost every case the width between building lines is 130 feet.

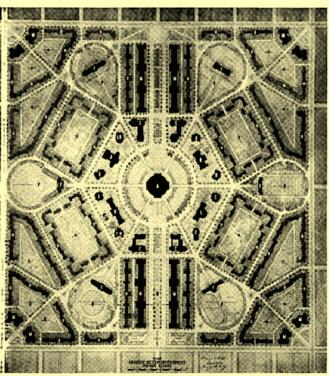
COMPETITIVE PLAN BY BRAZER & ROBB

FURST we must recall that the program stated that the site was on a level prairie without trees, buildings, or subdivisions but the site was on a level prairie without trees, buildings, or subdivisions, but that "the surrounding property is subdivided in the prevailing gridiron fashion as indicated by the plat." These conditions controlled our solution of the problem. Knowing that any such subdivision before it could be executed must be officially approved from a practical standpoint as to its arrangement of streets, all of the surrounding streets are carried either directly or indirectly into and through the property, thereby not seriously impeding the through traffic of fire engines, ambulances, etc., which city regulations usually require. The main business arteries are very direct, so as to attract the majority of the through traffic, and it will be noticed that the residential streets are more or less curved and reduced in width so as to make them unattractive for direct traffic communication. This arrangement allows the continuation of surrounding street names through the property, simplifying the house numbering system, etc.

In order to esthetically harmonize this development with the surrounding gridiron plan so as not to make the adopted garden suburb treatment so pronounced as to deteri-



BIRD'S EYE VIEW OF THE QUARTER-SECTION



PLAN BY BRAZER & ROBB

For statistical data relating to this plan, see tables, pp. 154-157, Plan No. 18.

orate surrounding property, we have kept the transition from the surrounding gridiron into this property gradual and harmonious. For this reason also we adopted a geometrical, formal pattern with only a sufficient amount of curved streets to give interest and variety, but there is great variety of direction and also of short length streets. The property is thus subdivided into building lots having right angles attractive from the real estate man's point of view. Through communication is provided on the diagonals, which have been purposely curved.

By keeping the width of the paving of residential streets as narrow as possible, the first cost of the development is reduced as well as the cost of maintenance. Such streets would also probably retain their residential character indefinitely, as trade follows wide, direct streets. All of the residences are served by rear alleys, thereby removing all service from the streets. These alleys would not be sheet paved and all sewer, water, telephone pipes, etc., would be laid therein, so that in case of necessary excavation for repairs they could be cheaply and readily broken into and patched without spoiling the more expensive paving of the main streets.

It will be noticed that, as we have assumed this property to lie in the northwest quadrant, practically all of the residential streets run more or less north and south, thereby insuring in both morning and afternoon the maximum amount of sunlight to each dwelling. The residences have been kept in the more retired and quiet locations, although easily accessible to the public and semi-public life of the development, as well as to the surrounding trolley lines, which undoubtedly would in the future traverse all the wide bordering streets. Additional trolley lines may be chartered on both the north and south, and east and west axes as well, without taking the clatter and danger directly through the residential streets.

The residences have all been arranged on the English garden principle; that is, in the center of each block a large garden space is reserved which could be allotted, as the residents of that block might decide, either for gardens or for playgrounds which could be used for tennis, bowling greens, or for play space for very young children where they may be watched by their mothers from the dwelling windows. If this development were managed by a wise corporation, these garden spaces could be kept entirely open as such, until the full development of the property as shown on the plan had been reached. If this land then became so valuable that the garden spaces must be occupied, upon vote of the residents or the corporation a street could be cut directly through this garden property, giving residence lots equal in area to those facing the street surrounding the block. This would, of course, be done only in a case of emergency, but it would be much preferable to have these garden spaces occupied by residences than to use any of the residential portion of the property for mercantile purposes on account of the increased value of the land, as is unfortunately the usual practice. These garden spaces contribute to the beauty of the scheme and are most desirable for the sake of sufficient light and air, as well as for fresh vegetables or playground space.

All dwellings on residential streets either face directly upon a park, public ground, or playground, or else such space is located at the end of a short block. Such an arrangement should prove most attractive in giving open and well-landscaped vistas from each residence. As seen in the perspective view, the residences are designed in an attractive

suburban style and arranged in groups more or less connected in proportion to their value, the cheaper ones being all connected in order to save great expense of finished side walls and the economic loss of heat. By projecting some of the houses and retiring others, architectural variety and attractive front and rear yards are obtained, each with its own flower garden. The cheaper and connected dwellings for the workingman have been placed where they would be most accessible to the surrounding trolley lines, as this class of the population rather enjoys the bustle of a busy street. Their children can, however, safely play in the gardens at the rear. The most expensive dwellings are placed nearer to the social and public buildings and have been designed with a fewer number of dwellings to the group, giving a higher class aspect and one which would harmonize better with the public buildings placed in parked areas. A few stores (twelve), with flats above for the storekeepers, have been placed at each corner of the property near the cross trolley lines, where such stores usually locate. One hundred and twelve are located on the main axis running directly through the property.

For convenience and esthetic reasons, all of the buildings of a public or semi-public character have been placed in the center of the property.

The social aspect of this development has been considered secondary only to the general arrangement of streets. A large social center building, containing rooms for various public meetings and entertainments, is placed directly in the center of the property and equally accessible to all the residents. Six playgrounds have been arranged, equally distributed throughout the development, and subdivided to encourage their use by children of different ages and sexes.

The sites for public buildings include six churches, boys' and girls' elementary school and high school, library, theater, opera house, lodge building, Y. M. C. A. building, civic building for police and fire apparatus, hotel with garage, etc. Most of these buildings have been placed so as to close a vista from an approaching street, and the field-houses for the playgrounds are also similarly located.

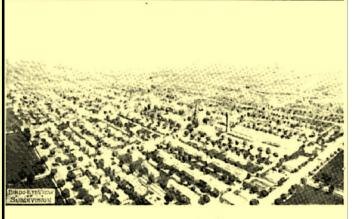
COMPETITIVE PLAN BY G. C. CONE

WITH the larger aspects of city planning we consider that we are not concerned in this investigation. The tract to betreated is not destined to have a community consciousness apart from that belonging to the city as a whole. We therefore believe that town anatomy, involving the study of a complete organic unit, is not our subject. Rather we regard the study as one of detail, immensely important, forming a part indeed of the larger subject, but not town planning as such. The factors involved are so largely social that our best help comes from a study of the habits of Chicago people. True, both precept and practice along housing and town-planning lines are farther advanced in England and Germany than with us, but the investigations and study upon which these are based are first-hand with them and introspective. Ours must be this, too. We must be mindful lest we suit our housing and general home arrangements to their needs rather than to those of our own people.

The plan herewith submitted retains in large measure the rectangular method of subdivision, and can claim most of the well-known advantages of that method; i. e., favorably shaped lots, economy of space otherwise lost in bad street and alley intersections, and simplicity in the matter of street names, and in the numbering of houses. Moreover, and this is most important, it partakes with the rectangular method of the advantage of harmonizing with the structure of the city as thus far laid out. The prevailing street scheme of Chicago has become so universal and far spread that it has in a way come to be authoritative. It has in its favor the real advantages that it is orderly, readily understood, and capable of being extended indefinitely without confusion. We have retained therefore the general lines of the gridiron system but have modified it to suit our needs. A skeleton map of the design showing the main roads drawn to the scale of the city map, and laid down upon any of the numerous half-mile squares so characteristic of the city plat, will show that a harmonious relationship has been preserved even though some streets have been devoted to new uses. Our endeavor has been to design a quarter section, which, if repeated over and over again, would rather simplify than confuse the city plan. The city's fabric should be not so much a network as an organic structure with streets of graduated importance and special use. In our residence streets, as hereafter described. and in the broadened through thoroughfares, we have attempted to organize rather than to destroy the gridiron system.

Of course we have a community center. The recreative and educational features there shown are indispensable in any populous quarter-section of the city. The tendency of trade to congregate about prominent street intersections, especially those where street car lines cross, is so strong that we can not control it if we would. It is expected that, as time goes on, business will more and more surround the tract, facing out upon the present and proposed street car lines as provided in the outer tier of lots seen on the map.

Back of the outer tier of lots to the east and west is a 45-foot public strip of land (Q) intended to segregate the barns, garages, and outhouses of the tract as nearly as may be. This strip would be under city ownership, or private ownership with city rules governing it, and the owner of each abutting lot would have the right to build under lease such outbuilding as he might require, or, if he waived this right, the land might be leased to another



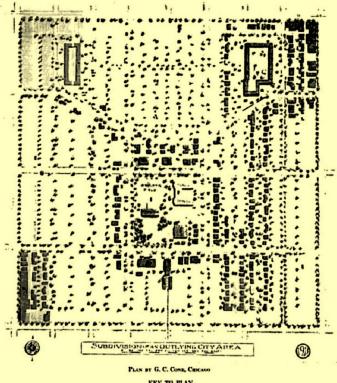
family for a similar purpose. Such reservations might, at the option of the lessees, be devoted to playgrounds or gardens. This provision of space for outbuildings back of the prospective business blocks, and serving also some 100 of the residence lots of the tract, it is believed will tend to cause prospective barn-owners to buy here, and will thus tend to segregate the outbuilding nuisance, and to keep residence lots free.

Involved with the question of barn room is that of lot length, which introduces one of the essential features of our plan—the short, wide lot. Having observed the habits of families rather than the traditions of real estate subdivision, we are led to believe that for many, if not most households, a deep rear lot is not as desirable as more room in front, and that, in many cases, it is really undesirable. Ideally used, it is all that tradition paints it, but the little garden, the croquet lawn, the grape arbor, and the happy privacy investing it all, form a charming picture of what does not exist in the city back yard. So primitive and wholesome a thing as the impulse to garden, which all men feel for a little time in the spring, no matter what their occupation or where they live, finds only abortive expression in the average back yard. City soil and city atmosphere are against it. Moreover, the Chicago man is not a gardener by instinct or tradition. His impulses are not pastoral, they are urban. The result is inevitable — the average garden on the average back lot is not successful.

Again, arguing counter to theory but in accordance with experience and observation, we do not believe that back yards in the city make the best playgrounds. The proximity of the back yard to the alley, its tendency to be in disorder and dirty, and its very removedness from the pleasures of the street where people come and go and things happen, makes it alike undesirable to mothers and children. Meanness and wrongdoing flourish in back yards. The mother feels safe about the child "out in front." The respectability

of the surroundings comes to her aid mightily, and except for the actual physical dange of the traffic street, the child needs less watching in the front yard than in the back.

This brings us to the consideration of two types of residence streets as exemplified



KEY TO PLAN N. Large Resi

For statistical data relating to this plan, see tables, pp. 134-137, Plan No. 9.

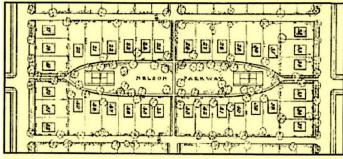
on the plan, one in which the pavement is omitted entirely (P), its place being taken by a public greensward or playground, and a second (D), or modification of the first in which narrow semi-private drives skirt the grass area on either side. The essential thing in the design of the first type is the grass space between the fronts of the houses, usually occupied by the street. At either side of this lawn strip runs the usual sidewalk, but the street proper or pavement is altogether lacking. The reasoning which leads to this comparative innovation is very simple. Each house is reached by a paved alley as described later. This takes care of all merchandise wagons, as it would in any case. The houses on this street are not on the whole those that will have many carriages call at their doors, and, in the event that it is desired to reach a vehicle, a walk of half a block in any case will reach a public way. For emergency purposes, such as ambulance or fire department calls, the alley is always at hand. In short, the need for a drive to our very door, unless we use a vehicle as a matter of common habit, is more traditional than real. For those who own or use vehicles daily we have other provision as has been explained. For those who prefer safe play space for their children, ample setting of parklike area for their houses, and quiet freedom from dust and noise, this type of street is offered. The sidewalk and the greensward with its trees, like the ordinary street, are public spaces publicly created and maintained. The expense should be considerably less to the abutting property than that of the usual street.

With this form of street, the lots fronting on it would be short at both ends, so to speak; that is, the back yard, for reasons heretofore explained, we believe in making only deep enough to afford a small clothes lawn, say, 20 feet from front to back. The front yard, moreover, because of the ornamental lawn and play space provided in front in place of pavement, does not need to exceed, say, 20 feet in depth. If the house is 30 feet from front to back, the lot must then needs be 70 feet in depth over all. We gain much in light and appearance for the premises by taking the ground gained from the far back end of the ordinary lot and making both the lot and the house wider to the front. Especially is this true where street improvements are inexpensive as here contemplated. We have in such a street arrangement the fashionable "place" of some of our cities adapted to the needs of cottagers. People like to make a brave showing in the matter of their domicile. A house wide to the street, and with room on either side, not only is saved from too close contact with neighbors, but looks its value. The usual deep lot behind is not missed, and the 40 or 50 foot park space in front gives the house an added distinction. The comparatively small area of yard for the householder to take care of is a feature which would tempt many families from flats and tenements, especially in view of the fact that it is proposed to heat all the buildings of the tract by central heat as described elsewhere.

A second modification of the above "street" contemplates a narrow drive on one side, and only a walk on the other. There are besides these streets, one ordinary street with a narrow single drive and any extra space gained added to the length of the lots. This is for the benefit of those who do wish to garden or otherwise use the usual deep lot. Then there is in the north portion of the plat, a cross street without parkways, and with only one 5-foot walk on one side; in all, but 23 feet. This is a local accommodation short cut in the midst of an otherwise long block and a recognition of our right to have such an irregular thing if it suits our convenience, even with the gridiron plan. At (H), on the plan, is provision for those who really desire the advantages of cottage "apartments" with liberal common grounds surrounding the two-story buildings. Double houses are here and there introduced to break the monotony of single fronts and to retain a certain flexibility of design.

Two further features which inspection alone of the plan will not disclose are the provision of paved alleys, practically all lots being thus served, and the central heating plant, which in this enterprise should be peculiarly successful, saving much expense both in construction and in service later, and making for cleanliness and for economy of the householder's time.

The subjoined sketch from a recent design by O. C. Simonds & Co., shows an application in actual practice of the fundamental innovation suggested in the foregoing article. The Beloit Model Homes Co., of Beloit, Wis., is using this type of street in the construction of a portion of their new subdivision near the Fairbanks Morse Co. plant in that city. The area usually occupied by the street will be grassed over and somewhat depressed in grade with a view to flooding in winter if desired. The traffic which comes to the homes is largely alley traffic and is taken care of by eighteen-foot paved alleys back of the houses. Sidewalks approach the front as with the usual street, but at either end of the block the opening is narrowed to avoid using valuable frontage on the bordering streets and to give a suggestion of park-like seclusion to the enclosed area. The houses, by following somewhat the lines of the curving sidewalks, gain outlook over the enclosed park, and each in itself presents a more individual appearance. The plan has been accepted and recorded and thus constitutes an interesting experiment in actual subdivision work.



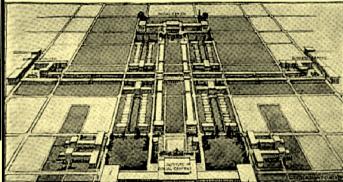
PLAN BY WILLIAM DRUMMOND

DEVELOPED FROM A SKETCH SUBMITTED IN COMPETITION

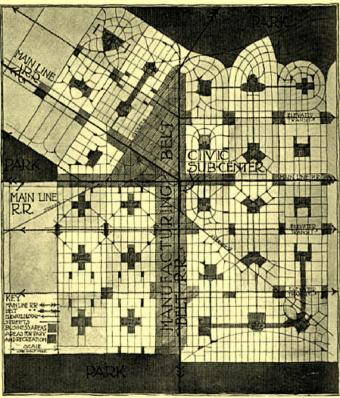
CAN the suburban extensions to the great city of to-day be made to bring about the realization of a more ideal residential neighborhood than we now have? This is really the most important of civic questions, since its successful working out means so much in its every bearing on city life.

We are troubled with the indiscriminate spread of industrial activities which seem to advance upon perfectly helpless and old established communities. We suffer from an undesirable springing up of apartment buildings here and there in neighborhood developments which violate every sense of the appropriate and the harmonious. We suffer from the fact that street, harbor, and rail transportation facilities are so inefficiently disposed in our city that the broadest benefits to be derived from these fundamental requirements of city life are not possible of realization to many of the less favored parts of the city.

The Germans and the English have produced examples of garden cities or garden suburbs which embody many very progressive measures, each example differing somewhat in its plan and operation from the others. They have found that it does not pay to overpopulate; that rents, health, beauty of environment and economy of improvements all suffer therefrom. They have indisputably proven that it does pay to carefully plan the whole neighborhood development through the employment of the most skillful architects. They have put into operation in some degree many of the measures that have since been proposed for public consideration in this country and have thus triumphantly proven the correctness of many contentions heretofore held as theory. But in this country, our laws and our land-holding system seem not to lend themselves to such desirable ends. In fact, they are antagonistic.



Bun's Eye View or Two Assorsing Units
Showing in the "Nucleus" a portion of the area developed with a formal arrangement of certain buildings and grounds, the docks adjoining being for individual residence.



A CITY AREA DEVELOPED ON THE "NEIGHBORHOOD UNIT" PLAN (Using the Quarter-section as the Approximate Unit Area)

Here, at the main line railway junction are important features, a main line passenger station, a freight depot, storage buildings a municipal market, postal and civic deportmental offices, etc., forming a civic subscenter. A left line connects a series of such civic subscenter, and cruming into and out from the city over street, about 3/5 to I miles apart are the elevated lines, while "reas town street car lines occur every half mile. This method, creating boundary lines out of certain streets having transit facilities, results in marking of the unit surgithed-nod areas ("thee kered" in tind). Each mult have equipped offers specially conversals these results of the local workman as well as for those who by joine can work elevativer. The large paths, separating the great array of the city offer ample opportunity for recreational diversion for all, close to the home environment. The belt, offering the best of adapting facilities, would trend to limit industrial areas.

From the start it would seem almost hopeless to strive for a working test of anything like a comprehensive land development scheme unless a definite policy was to be adopted which contemplated a consummation of local community ownership and control instead of individual ownership. This policy is a proven fundamental as seen in the development of the English garden city, where the co-partnership plan has been a great success.

While we are securing funds for an initial quarter-section development scheme and while we are working for a law which will enable communities to guarantee the bonds of local companies or otherwise provide the funds which must be forthcoming to systematically support the work, we should also be endeavoring to find out what general type of plan can be relied upon to cope most successfully with the situation in hand. What shall be done with the apartment house (always the most economical habitation), the low cost single dwelling (always in the greatest demand, but seldom to be had in attractive shape), the vacant lot, the alley, the back yard, and the business street? The individual dwelling will take care of itself if these usually menacing factors are handled in the working out of the problem in an artistic and at the same time a practical manner.

Chicago is to-day consciously seeking the widest possible spread of social, recreational, educational, and industrial opportunities. Working to this end, the parks, playgrounds, and social settlements have taken a long lead ahead of those in other cities. So, in working out schemes for suburban development that may hasten a better day, it should be remembered that most to be desired is such constructive planning as will lead to wide improvement throughout the older parts of the city where arrested development and abnormal development prevails. If present-day faults are corrected or can be corrected in the new venture, then the measures employed cannot but be of profound influence in the reformation of the older parts. On the other hand, if half-way or superficial measures only are to be tried, no general improvement need be looked for.

In contrast to the simplicity, the directness, the power for good, inherent in a possible well-organized community plan, we see in the origination and execution of civic projects to-day the most astonishing discord and complexity, and therefore the most indirect and untraceable influences at work in the sinister machinations of exploiters. Where order should exist we have chaos.

THE NEIGHBORHOOD UNIT PLAN:

Order is the keynote of our plan. It provides that the whole city be divided into areas approximately such as the quarter-section. Each of these areas is regarded as a unit in the social and political structure of the city.

A quarter-section may prove to be too large or too small, but the unit is intended to comprise an area which will permanently exist as a neighborhood or primary social circle. Each unit has its intellectual, recreational, and civic requirements featured in the institute which is located approximately at its center and its local business requirements featured at its corners. In a series of units there would then be an alternate disposition of centers of activity which would remove as far as possible the operation of one function from that of the other.

As to building development, our plan provides that the apartment building and the low cost single dwelling, together with the institute and business centers, be employed in the formation of such an architectural arrangement as might be called a nucleus or frame in the articulation of the plan. This would provide in a definite manner for the best development of those areas which on account of many uncertainties usually remain unused for building, or are built on for expediency without regard for the best interests of the neighborhood. The remaining areas in the unit are then well fitted to the uses o those able to build and keep up the better class of residences, being here retired from noise and traffic and so appointed as to remain permanently desirable as home sites.

The building of the "nucleus" offers an interesting and more or less complete initial stage of development. It answers the question, What shall we do first? It can be composed at first of either apartments or single dwellings, or both, for a choice is open and progressive stages of development can thus easily be arranged, the temporarily vacant land being available for agricultural uses until outside pressure exerts its influence in bringing about a more and more complete development of the unit.

Instead of retaining the illogical ward system, each of the great arms of the city, existing on the great railroad radii, is considered as being a borough or general division, reaching from the center to the furthest suburban limits. In Chicago there would be six or seven boroughs. The plan on p. 38 illustrates roughly a more or less ideal development for such an area as might be located in Chicago with its center at Western Avenue where the St. Paul and North Western railways cross and run parallel into the central district. The drawing is intended to illustrate in plan the characteristics of such a subcenter of the city as is indicated at this point in our proposal for the rearrangement of the railway and harbor facilities of Chicago. This proposal is published in the City Club's booklet, The Railreay Terminal Problem of Chicago.

Chicago, having no changes of level, enjoys no elevated public viewpoints, as many cities do. Her greatest charm to the eye must reside in long sweeping distances every- or what kind of dwellings the economy of a future day will favor, but it would seem that where evident in the passing view. This suggests the use of broad and interesting vistas so disposed as to emphasize the freedom of movement and the breadth of space which are is to be expected for purposes of discussion, on the one hand, or on the other, the co-operachief characteristics of the great western prairie on which the city lies.

Long usage proves that a system of squares or rectangles develops a more economic local street system than is otherwise possible, but the right-angled street and alley plan i chiefly objectionable because of the impossibility of variety in aspect, since all streets alike disappear into uninteresting distance, and since rigid adherence to such a plan makes impossible the desirable feeling for individuality in one's environment. So it would seen





COURT VIEW



THE CITY BLOCK:

that some local streets should be emphasized, being broad and stately, others minimized in importance, being modestly retired, and a number broken where possible so as to close the vista and create preferential sites for churches or quasipublic buildings.

Our plan places the business centers at the extreme corners of the unit and thus imposes the greatest amount of traffic on the boundary streets and relieves the interior streets of business traffic and consequent noise and danger. The interior roadways can, therefore, be much narrower than present municipal requirements demand.

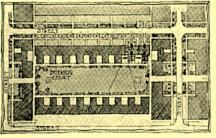
The usual city block is of an economical shape and size, for while it is a minimum area sistent with the necessary requirements of light, air, and domestic separation, still it can be made very attractive if carefully laid out so as to develop its advantages to the utmost. This can be done in the building of either multiple or single dwellings. Individual yards placed in pairs, between pairs of dwellings, the latter either separated or attached, illow the block interior to become a garden or lawn for the common use. This idea s illustrated in the various rough sketches which appear on pp. 40 and 41, and also in the bird's-eye views. The arrangement provides for either double or single street entrances or driveways and garages, and develops for each house a maximum prospect and exposure to sunlight. This scheme may appear to some to favor a too intensive space use, but it must be remembered that it still remains to be demonstrated just what the maximum number of families for one block should be. This has a bearing on the limitation of the unit neighborhood population, but many external influences would modify any tendency

to approach it as an average for the whole unit. We cannot foretell what size of block

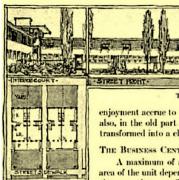
the city block should not be so large as to make cumbersome the gathering together which tion of the residents in the use of possible common dining-

rooms, children's play space, allotment of garden space, etc. Alleys, usually an unnecessary and unsightly adjunct causing the waste of much valuable area, should be done away with when the awakened neighborhood spirit commends the beauty of orderliness. It will then be seen that, by cooperative agreement and studied care in the use of premises,

wider opportunities for use and



THE ORDINARY CITY BLOCK, EVEN WITH ATTACHED DWELLINGS FOR FIFTT OR SIXTY FAMILIES, CAN HAVE A BEAUTIFUL INTERIOR GARDEN COURT



THE SMALL ATTACHED DWELLING enjoyment accrue to the individual than in the old way. Then, also, in the old part of the city the usual block interior will be transformed into a cleared-out garden green.

A maximum of actual use by the inhabitants of the total area of the unit depends on a minimum of use by business. At the same time an efficient use by business means a limitation

of competition for local trade and less loss due to duplication. Therefore we set apart the areas contiguous to the intersecting boundary streets for business purposes. A chief factor in this disposition is that these streets would probably have car lines, and inasmuch as the transit lines must soon be made available for local freight duty these would then be peculiarly economical for business use.

Open squares could be expanded from the intersecting business streets and by employing arched-over buildings, car patron shelters, and center features, a much more interesting situation would be realized than is seen to-day on our long-drawn-out business streets where so many stores, not serving good use, offend the eye mile after mile. Business does not need to string out on long lines, but has advantages in being concentrated.

The main business street should be transformed into a residence street made extra wide and of the more formal type, parked at the center and at either side. The latter provides for domestic privacy, the former a less noisy and dusty railway bed than we now have, which, later, can be paved to provide for such increased traffic as might develop along certain streets.

THE INSTITUTE OR SOCIAL CENTER:

In order that the neighborhood may institute and maintain its social and political organization, it must be equipped with the necessary buildings. The institute, which may



STREET VIEW-A GROUP OF STREET DWELLING

be one building or a group of buildings, is designed to answer this purpose; and since local convenience is of first importance, it is placed approximately at the center of each unit. It is intended to house here the schoolrooms, workshops, and usual elementary educational equipment, with also a large assembly hall as well as a number of smaller halls for rotated use by classes, clubs, and societies, for reading, music, drama, dancing, and lectures. Provided also with large natatoria, gymnasia, gardens, and athletic fields, wide and varied popular recreation would be available. The object of the institute is to bring about healthful and vigorous participation in all those activities which could be systematically pursued through the employment of expert instructors, as well as to encourage voluntary religious, educational, recreational, and political activities.

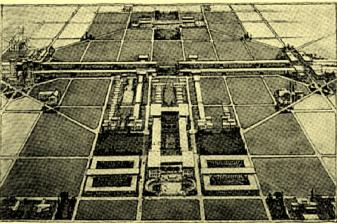
In each unit the open local forum would vent the expression of the best thought and make that thought effective. The whole body would contribute to open, known actions.

The citizen is to-day removed from an effective voice in the political expression of the

city, because he now uses no consistent and orderly method of local expression. The very mass of the city makes it a prey to spoilsmen. The real intelligence of the community is inoperative and frequent "reform" movements to improve conditions are baffled. The organization of the entire city into working units would bring about systematic activity and a broad civic unity of purpose.

ARCHITECTURAL ASPECT:

Should a more or less extensive change occur in the social order, there will probably develop a new popular esthetic viewpoint.



It is pertinent to ask, How ought we to live? What sort of character should our physical surroundings exhibit? Have we not outgrown and become tired of present usage as expressed in the houses and the street pictures everywhere so uninteresting and so much alike?

Should we not seek the broadest diversity in aspect consistent with harmony and beauty in street pictures? This aspect can only be arrived at by allowing the architect full freedom in the disposition of the component parts of the street picture.

To impose universal arbitrary restrictions as to lot lines, alleys, long straight streets height of buildings, etc., brings it about that no matter how many kinds and styles of building are introduced the resulting street picture is just what we have now - the for a fuller communal life by providing places for the exercise of neighborhood activities. inartistic effect is unescapable.

In the new unit neighborhood the architect's work will be thoroughly accredited, will prove itself indispensable to the creation of living accommodations for all which will be both better and more economical than those to be had at present where each man is his own boss. Many new projects will require the services of able men and will throw responsibility on each in his own neighborhood, for the individual architect should be employed on a unit project.







ABOVE: THE BROOKFIELD KINDERGARTEN SCHOOL BELOW: THE AUTHOR'S HOME-RIVER FOREST



Above: The River Forest Woman's Club Below: The Maywood M. E. Cherch

COMPETITIVE PLAN BY H. J. FIXMER

THIS design is a radical and original modification of the gridiron type of subdivision.

It purports to be an engineering rather than an architectural solution of the using problem.

The design proper seeks to give the dweller his own individual plot of ground, which ecomes part of a harmonious communal development of the fore-garden, and to provide

It is sought to make the design practical rather than esthetic. The average skilled worker desires an individual home, with open spaces for flowers, garden, and recreation.

The layout of a tract should fulfill certain practical conditions; viz., economy, conenience, utility, sanitation, beauty, social needs, and traffic.

Straight streets give quickest access to all points, eliminate danger at curves, and are sy to maintain. Stores and apartments are located on the car lines or exterior streets; the school, park, and social center near the center of population. The "community" lots can be sold at a moderate price and will always be used for home purposes.

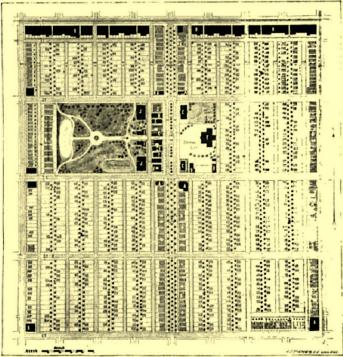
This plan is superior to any other plan in its sanitary possibilities. There is room, cause of the wide lots and open spaces, for plenty of air, sunlight, and vegetation. There re no unpaved, disease-breeding places. There is no vehicle traffic in front of the homes, with its attendant dirt, dust, and danger. All sewage, gas, and other conduits run from the rear of the houses; and all garbage and material are handled from the street in the rear of the houses.

For the worker of small means there are few plans realizing the measure of simple eauty which this plan does. The interior blocks, it will be observed, are "community" Instead of facing the dwellings on a public street, the street is placed at the rear of the lots, absorbing the customary alley with its various functions, and yet preserving ts use as a public street or vehicle traffic way.

The houses, not nearer than sixty feet apart, front on a continuous garden tract. Along the center of this tract runs a brick or cement walk, not more than ten feet wide. This walk is bordered and shaded by magnificent trees, around which spreads a velvety lawn interspersed with shrubbery and flowers, each resident co-operating in a general effort to make the homes blend into and become a part of the general garden.

Along the east and west streets a brick or stucco wall is built, with a neat column entrance where the middle walk intersects. This entrance would be surmounted by a flowering vase and light globe, while the wall in time would be covered by climbing vines. The foot traffic is thus separated from the vehicle traffic, and the charm of quietness, cleanliness, and exclusiveness without loss of democratic character, is simply and ecoomically achieved.

The nature and layout of the community units promote sociability and neighboriness, since each home enjoys the fore-garden with its common use, care, and ornamentation. In addition, an ample park, a social center with its characteristic meeting places,



PLAN BY H. J. FIXMER

KEY TO PLAN

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STATISTICAL DATA

ervice stores, and an attractive boulevard promenade are provided. The various public places to be provided for are shown on the plan.

The east and west streets provide for the through traffic. The north and south streets provide for local traffic and such through traffic as would need to use them. wide boulevard is provided for pleasure traffic. One of the important features of this plan is the separation of foot and vehicle traffic and the design of streets and roadways to accommodate the proper amount and kind of traffic.

A community developed along the plan here proposed is virtually independent of xterior attractions. As a whole, it is an independent unit and can expand harmoniously, since each "community" unit is adapted to any topographical condition and admits of indefinite repetition.

The worker and his family can rest and play in peace and safety in front of their home, having use of a private garden sixty feet wide by six hundred feet long. It is but a short walk to the car, the school, the churches, park or other neighborhood activity. With such surroundings, conveniences, and attractions, real home life can be fostered and realized and children brought up as American children should be brought up - physically, morally, spiritually, socially, and intellectually healthy. A home once established here is permanent, for the property cannot be used satisfactorily for any other purpose.

This plan, while not an ultimate or ideal solution of the urban housing problem, sugests a step toward that end, a step that is simple and easy to realize.

COMPETITIVE PLAN BY EDMUND GROVER

In this design the author has endeavored to offer a practical combination of the rectangular, the diagonal, and the concentric methods of street planning upon a basis of symmetry and simplicity.

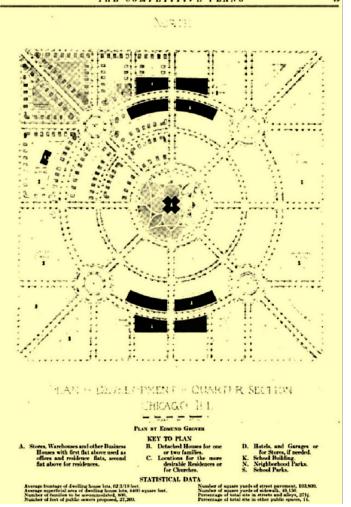
The design presents a large percentage of park, parkway, and street area, the cost of construction for which would be, of course, somewhat larger than that of the usual gridiron plan without open spaces, and the advantages, perhaps, from an economic point of view, not so apparent nor so immediately to be realized; but since the deliberate purpose of the plan is to offset the tendency to congestion, to provide variety in the place of monotony, to aid in the uplift of a community through its environment, and to set the stage for a more satisfactory social performance, the utmost economy in these areas for public enjoyment has not been attempted. The hope would be to create a country-like oasis in the tiresome city desert, a sort of residence park suitable for people who were neither very rich nor very poor, and attractive to people of good taste who could afford to build for themselves houses costing, say, from \$3,000.00 to \$10,000.00, and who would prefer to have a little land for gardens and lawns—in fact, a semi-rural community of well-to-do, intelligent, and self-respecting people.

The central feature is a large single structure, or a group of semi-detached buildings, to be used as a recreation center with provision for a large water basin, gymnasia, music courts, courts for handball and other games, and surrounded by a formal park of about six acres. This, in turn, is surrounded by a "ringstrasse" of eighty feet in width. Directly north and south of the center are two districts where stores and offices would be segregated. These business districts would be served by another eighty-foot "ringstrasse" upon which is shown a circuit of street railway. The intersections of this latter ring and the two principal streets running diagonally through the quarter-section afford suitable sites for statuary or fountains. The four marginal blocks lying east and west from the center consist of one tier of house lots enclosing parks of six acres or more. In these, schools could be located as shown, or, perhaps better, the high school and trade school would be combined and two or three grade-school sites be afforded. Eight other smaller neighborhood parks are provided for.

Essential to this plan is a satisfactory result in street tree-planting, and the importance is here emphasized of having planting spaces of ample width, extra fine specimens of trees set far enough apart and large supplies of tree nourishment.

After all, a good deal of the desired result depends on how the plan is lived up to, on the social conditions, and on the opportunity to secure the proper architectural treatment. Such treatment would require a long and special study by competent architects, and the social conditions involve many difficult problems.

Is not the attempt to maintain opportunities for a high percentage of income on the value of fifteen hundred dollars per acre inconsistent with the very purpose of this study? And is it not the proper and legitimate function of the city to help to rescue some of its poor exploited people from the toils, and awaken in them an ambition for a life of more leisure and more opportunity for self-development? And, finally, who shall say that it would not pay?



COMPETITIVE PLAN BY W. B. HARTIGAN

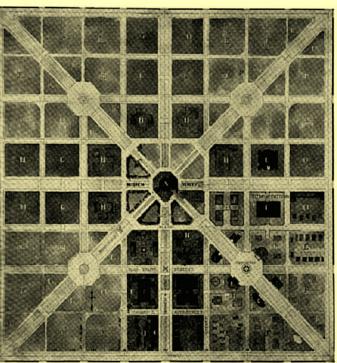
THE section was treated primarily as a residence proposition. All features were subordinated to the wants of the family doubline in the section was treated primarily as a residence proposition. subordinated to the wants of the family dwelling within its confines. It was supposed that a ratio of one block for business to five of residence was a good proportion, but the scheme is sufficiently elastic to permit more dwellings. All living within the section can find transportation, business, and social opportunities close to their doors. Children and women can find recreation parks or buildings close at hand and reach them without danger of being killed by reckless auto or vehicle drivers. The author feels that the sunken street idea may be somewhat ahead of the times and its cost might not be justified, but at the rate population is increasing the time will come when human lives will be considered more important than the cost of such construction; therefore why not make a start now?

Under prevailing building methods an enormous loss is occasioned by individual cost of party walls, extra foundations and division walls, separate pipe lines, etc., etc. It is very evident that considerable saving of time, material, and labor is effected by gathering individual business enterprises under one roof.

The loss of building area taken for boulevards, streets depressed, etc., would be offset by increase in height of buildings towards the center. For instance, building A can be devoted to offices and can be made 125 to 150 feet. Flat buildings are a paying investment and as now constructed satisfy a large proportion of the American people. These buildings can be carried to a height of 90 or 100 feet. Business buildings can be built to a height of 50 or 60 feet.



BIRD'S-EYE VIEW OF THE QUARTER-SECTION



PLAN BY W. B. HARTIGAN

KEY TO PLAN Large letters indicate whole blocks; small letters, single buildings.

emi-public.

COMPETITIVE PLAN BY HERBERT E. HUDSON

N the vicinity of Chicago there are broad expanses of prairie lands. A large portion, geographically situated to meet the requirements of this competition, is now awaiting the hand of the subdivider. A community builded upon this prairie should express in its composition something of the prairie upon which it has been founded and in which it gets its setting. The prairie, with its rolling grandeur, has only been brought into touch with mankind as the hand of civilized man has reached forth and taken from its soil something of use to him.

As man and his existence have broadened beneath the influences of civilization, so has the prairie grown beneath the cultivation of man. It is not therefore, such a great step from the waving fields of grass, growing at will upon the prairies, to the waving fields of grain growing in ordered lines at the will of man. In no place can we find a truer interpretation of the prairie in all its spleador than in the crop harvested upon its surface. This represents the condensed expression of its resources, the product of its latent possibilities. Even as the grouped dwellings and habitations of mankind represent the accumulated ideas of "harvested civilization," so does the sheaf of wheat represent its native prairie.

A garnered sheaf of wheat, set upon an expanding prairie, with a rising sun pouring down light and sunshine, its renewing forces, has been chosen as the ideal of this theme.

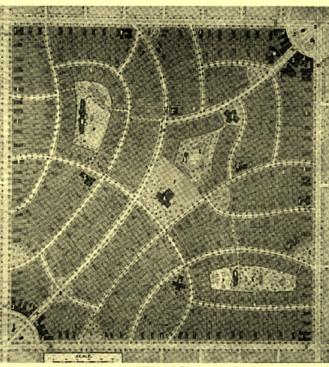
A residential community is arranged with the home as its center. From this point of view we look out over our section. The strength of the community is in its homes and as the strength of the sheaf is in its base, let us place the base of the sheaf in the lower southwest corner and the home districts of our section will fall into place. The radiating streets will then form the shape of our sheaf. Just as the lines of transportation and trave are the pulling forces of civilization, so are the rays of the sun typified in the streets radiating from the northeast corner. The crest of the sheaf is its fruited tips, and in our plan at the typified crest, we find the crystallized expression of civilization, civic control, and protection - the municipal building, etc.

In the solar park at the northeast we will place shelter houses, comfort stations, and some large grass-covered mounds topped with monuments which shall be typical of the prairie. This central, solar park shall be reflected in numerous smaller sun-kissed parks scattered throughout the tract, each typical, in its touch of color, of the tips of the sheaf.

The binding force of our civilization is to be found in its schools and neighborhood associations, and so at the binding point of the sheaf we find the location of the school with its libraries, athletic stadium, neighborhood center, etc.

The design provides access to the lines of transportation without allowing heavy traffic within the district. A study of the layout will show that the secondary lines of travel on the quarter mile streets have been somewhat preserved.

The line of travel running northeast and southwest is given a width of 66 feet. With a 32-foot roadway this leaves about 10 feet for the planting of trees. Other streets in the scheme have been given widths of 50 feet. These will have 22-foot roadways leaving 14 feet for tree and sidewalk space.



PLAN BY HERBERT E. HUB

- e, Fire. Lodge Halls.
 - M. Y

STATISTICAL DATA

COMPETITIVE PLAN BY ROBERT KINGERY

NDER the conditions of the competition, the quarter-section to be improved lies eight miles southwest of the central business district, forty minutes from the down-town offices. The daily occupations of the men will be largely in the city proper, and direct routes through the plot provide convenient access to the surface cars which run only on the boundary streets. The surface of the tract being level, any arrangement of streets is physically possible. The soil is light and the cost of the small amount of grading required by the plan would therefore be inconsiderable.

The general direction of the streets is determined by the bulk of the traffic which would be toward the city. By the diagonal system an appreciable distance is saved the business man, the delivery man — in fact, every one. From the direction of the city toward the little park there is a broad formal "mall" 100 feet wide, with a 24-foot enter parkway, a 20-foot streetway on either side, 12 feet being given to each parking, and 6 feet to each sidewalk. Facing this and the similar "mall" at the further end of the tract are larger lots for the more pretentious residences.

Space is reserved for a park near the center of the plot, and its irregular shape adds to its attractiveness. To the northeast is the breathing space, with open meadow, flowering trees and shrubs, and a small lake. The lake is shallow at the cast end for wading, and deep at the other end for swimming, the two parts being divided by ropes for safety. The material excavated from the lake site would be used to build the viaduct which divides the park from the playground. The viaduct, an elevated street, is really a building for dressing-rooms, lockers, showers, and similar comforts, separate parts being set aside for men and women. The playground is equipped with a quarter-mile cinder running-track, baseball diamonds, and outdoor gymnasium apparatus.

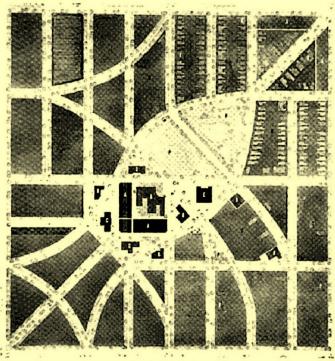
The streets are 80 feet wide in the residence districts, giving a 20-foot traffic space, 24 feet of parking area on either side and 6-foot sidewalks. The parking area is public property, affords the effect of a well-kept front to each house, and gives the children a roomy playground on the home side of the street. No alleys serve the residence. Modern civilization is taking a step in advance in getting away from these unsightly thoroughfares, and is finding that delivery from the front by a service walk is as convenient as delivery by alley.

Public and semi-public buildings such as theater, school, library, Y. M. C. A., churches, etc., are centrally located.

Space is reserved for shops and stores near the center of the plot and at the corner nearest the city are reserved two business blocks for trade. As more area is needed for shops and stores the expansion should be restricted by ordinance to the border streets.

A strict housing policy has not been adopted. The apartment house is distinctly a growth of the American city and is peculiarly adapted to conditions in Chicago. It is good in idea and may be delightfully good in construction. The citizen of to-day is coming to live out-of-doors. The home is a place to come back to—not a place to stay cooped up in away from fresh air. For this reason the streets and park spaces are in a special degree a part of the housing scheme. Houses and apartments may be built sub-

ject to only the building-line restriction, 20 feet from the street line. Most of the building lots are 38 by 125 feet, and allow plenty of space for back-yard gardening and clothes drying. Since there are no alleys, all lot lines might be disregarded, and the residents of a block might combine in making the interior of the block one large park or playground.



PLAN BY ROBERT KINGERY

KEY TO PLAN

A. Stores and Shops. B. Churches. C. Y. W. C. A. and Y. M. C. A. D. Schools and Library. E. Municipal Buildings.
C. Building Lots.
P. Parks.

For statistical data relating to this plan, see tables, pp. 134-137, Plan No. 6.

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COMPETITIVE PLAN BY EDGAR H. LAWRENCE W. B. GRIPFIN, ADVISORY

VITH the level land and other conditions so characteristic of the central western portion of the United States we can, in a typical community scheme, deal very generally with the structural elements of development.

The method of this project follows a primary distinction between suitable site requirements for individual or specialized occupancy, and those of social or general communication, in which twofold aspect the multifarious factors are analyzed before formulating into a synthetic design.

SYNOPSIS

1. OCCUPATION	1.226 Two-Family Units
1.1 INDUSTRIAL FUNCTIONS	1 . 227 Family Units
1.11 As PART OF CHICAGO	t. COMMUNICATION
1.111 Focal Industries	4.1 EXTERNAL TRAFFIC
1.11t Local Industries	1.11 Boundary Highways
1.11t01 Location	1.4 INTERNAL TRAFFIC
1.1120d Area	t. 20 General
1.11203 Unit Allotracuts	1.201 Nomenclature
1.11t1 Transfer Station	2 202 Equipment
1.11t3 Street Assemblage Units	1.2022 Pedestrian Pavements
1.1184 Retail Vending Units	2.2025 Parkings
1.1145 Trades Units	1 2026 Trees and Shrubbery
1.1146 Bulk Storage and Supply Units	* 2.2025 Illumination
1.12 As INTEGRAL INDOSTRIAL GROUP (ALTERNATIVE)	2.2026 Conduits
1.121 Manufacturing Site Plant	2.21 Distribution
1.4 DOMESTIC FUNCTIONS	2.211 Segregation
1.21 As PART OF CRICAGO	2.212 Congregation
1.42 As INTEGRAL DOMESTIC GROUP	t.elel Private
1.221 The Community Unit	1.2122 Neighborhood
1. ret Educational Units	1 2123 School
1.223 Association Units	2.2125 Associations
1.224 Dormitory Units	1.2125 Community
1 993 Neighburhand Units	

OCCUPATION.—The location at about eight miles southwest of the loop and an exclusively street
car accessibility must, according to general tendency in similar portions of Chicago, imply for
this site adaptation to a predominantly residential function. Since the site is flat and the problem
an economic one, irregular curves and acute intersections may be entirely avoided.

1.1 INDUSTRIAL FUNCTIONS

1.11 As PART OF CHICAGO.

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- 1.111 For Lincoln, Chicago is pre-eminently an industrial organism whose focal functions are connected in a gridiron system of main streets and avenues at half-mile intervals with occasional radial highways, all equipped with steam railroad, surface tram, or overhead rapid transit systems.
- 1.112 LOCAL INDUSTRIES.
- 1.1101 LOCATION.— Local industrial functions are found generally distributed along these circulating avenues, and therefore on this typical tract will eventually be found along the greater part of the perimeter.
- 1.11202 Aug...—By comparison on the basis of population the frontage of the perimeter is proved excessive for local industries so that only about five-eighths of that frontage is allotted to business.
- 1.11203 Unit Allothert.— These lots are all rectangular with alley shipping frontages as well as street store frontage free from alley crossings, and of 100 feet depth.

- .1121 TRANSPER STATION.— Since the points of greatest traffic will be the most accessible and valuable sites, the most general local industries will naturally start at the existent transfer corner in a special areade court structure that will be dignified and important as a keynote. Built full to the street line, with three areaded sheltered approaches and a fountained courtyard, there is accorded a window frontage of 1480 lineal feet for the small popular stores. A two story office tower corner feature may effect a befitting terminal for each long-internal avenue, while a roof garden café can have an attractive outlook toward the central community group.
- 1.1122 PUBLIC SERVICE UNITS.—These should have subordinate preference as terminal gateway features to the shorter avenues, and include postal, police, and fire stations, ward office, water, gas, and electric offices, bank and rental offices.
- 1.1123 STREET ASSEMBLAGE UNITS.— Corner allotment must for safety be given to popular amusement establishments.
- 1.1124 Retail. Vexdiso Units.— Following in order of importance contiguous to the most valuable corners are the retail stores, wherein vending alone is carried on, comprising display and sales spaces for groceries, drugs, confections, cigars, liquors, dry goods, furniture, and furnishings.
- 1.1125 TRADES UNITS.— A different class of industries naturally to be set next, and of less continuous demand, are the trade shops, permissible only in single-story structures on account of light requirements, fire risk, and noise. These are the bakeries, restaurants, barber shops, milli-
- nery shops, laundries, paint, plumbing, and carpenter shops, photograph studios, and garage.

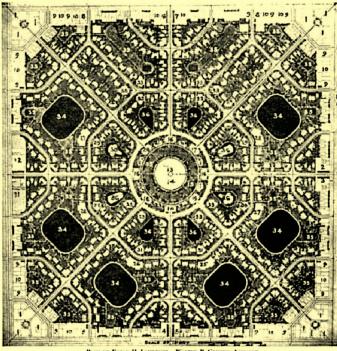
 1.1126 BULK STORAGE AND SUPPLY UNITS.—On the least valuable circulation avenue are placed the larger industrial units of wood-yard, fuel and building material supply depots, and possibly a community heating plant.
- 1.12 As AN INTEGRAL INDUSTRIAL GROUP.
 - MANUFACTURING SITE PLANT.— To suggest the adaptability of a quarter-section development in connection with its own manufacturing industry, assume the triangular quadrant of 40 acres lying along a steam railway frontage on the west side of the tract. The accessibility of switch tracks is evident, and with buildings disposed along the community frontage, the railway operations would be faced off.



BIRD'S EYE VIEW OF QUARTER-SECTION

- DOMESTIC FUNCTIONS.
- 21 As Part or Chicago.—Considered thus it seems advisable to develop independent communities within the limit of local acquaintanceship, apart from the external disturbing influences.
- As INTEGRAL DOMESTIC GROUP.— As the internal attractions will have to compete with those of the external city, they must be so organized as to raise the popular standards and minimize the evil influences found among a multitude of time-killing pursuits.

 1 THE COMMUNITY UNIT.— In the center of the tract, its most accessible point, is provided a
- THE COMMUNITY UNIT.—In the center of the tract, its most accessible point, is provided a community group, consisting of the common with music pavilion set in a reflecting basin with bordering aquatic gardens, tree-shaded promenade, and public gardens setting off refectory, assembly buildings, library, and amphitheater, and a colonnade connecting four eight-room public schools eventually necessary.



PLAN BY EDGAR H. LAWRENCE. WALTER B. GRIPPIN, ADVI

KEY TO PLAN

58

- NDUSTRIAL FUNCTIONS.
 Transfer Station.
 1. Store Areade Structure.
 Public Service Units.
 2. Post Office.
 3. Police and Fire Station.
 4. Ward Office.
 3. Gas, Water, and Electric Office.
 5. Gas, Water, and Electric Office.

- Gas, Bank. Rental Office. Assemblage Units.
- Street Assemblage Units.
 8. Theaters.
 Retail Vending Units.
 1. Store Areade Structure.
 9. Retail Stores.
 Trade Units.
 10. Trade Shops.
- For statistical data relating to this plan see tables pp. 134-137, Plan No. 7.
- KEY TO PLAN
 Bulk Streage.

 11. Post and Building Supply Depot.
 14. Community Heating Plant.

 Community Units.

 Educational Units.
 13. Music Pavilion.
 14. Water Basin.
 15. Public Gardens.
 16. Schools.
 17. Awembly.
 18. Library.
 18. Library.
 18. Education.
 18. Schools.
 19. Kinderguarden.
 18. Religious Building.
 18. Kindergarden.
 18. Refectory.
 18. Refectory.
 18. Training School.
- mits.

 N. V. V. C. A.

 Y. W. C. A.

 Y. Hallard Hall.

 J. Linion Headqua

 J. Logic Hall.

 J. Café.

 J. Café.

 J. Café.

 J. Pay Fields.

 J. Play Fields.

 J. Play Courts.

 Ve Family Units.

 Ve Family Units.

 No Units.

 See Houses.

EDUCATIONAL UNITS.—The four schoolhouses are placed at one community center for economy of administration, within range of a quarter-mile of separate continuous children's playgrounds radially disposed. Schoolrooms are preferably set with the cardinal points of the 999 compass.

SOCIATION UNITS.— On the octagonal circuitway are eighteen street terminal sites suitable for important structures for local social groups such as union headquarters, lodges, turner societies, social clubs, residential inns, billiard halls, and religious associations, all placed contiguous to playfields or garden frontage. Church edifices in appropriate group-ing can command quiet internal vistas.

DORMITORY UNITS.— Closely allied to, and often combined with, the associations are th .224

neutronv Units.— Closely allied to, and often combined with the associations are the various residential organizations and other home provisions for independent individual residents. icomonuous Units.—The outdoor neighborhood features are here substituted for the street areas of the built-up city or the isolated playgrounds of the slum districts. The advantages of parental oversight by reason of contiguity to the home are thus secured. Variety is afforded by garden accommodation to some, modest play courts to others, children's playgrounds with apparatus or water facilities, and to many, ample fields for each sport in season, including football, baseball, basket-ball, lacrosse, handball, tennis, croquet, cricket, and banked running-track to be flooded for winter skating rink.

Two-Family Units.—The two-family house has become established in our developing Chicago residence districts to such an extent that we are not warranted in ignoring it. The proportion of these units is entirely flexible in this scheme, in which about 18% has been .226 introduced. These are placed on lots of most accessibility to transportation line and on street corners, utilizing the lots with smallest back yards.

.227 HET UNITS.— It is to be hoped that the individual house and grounds will long be the dominant features of our cities.

An allotment of 30 feet will allow a house of two good rooms in width, with entrances at the center of one side, leaving street and garden frontage free for outlook, and when staggered, a vista from the two sides also. Verandas are thus free in the rear where house staggered, it was most the work and a second and the fronts are maximum distances apart and free from intrusion. These lots are 100 feet deep, with additional backset of 15 feet belonging to the city, but planted and maintained as an individual holding, and securing a spacing of 60 feet between building lines.

Gardening is not a universal avocation here as in England, so that less private vard recreation space is to be provided. Hedges and irregular shrubbery constitute the better means of separating and beautifying the neighborhood lawns in one harmonious parklike ensemble.

For sunlight in all rooms each day an arrangement of houses with the diagonal points of the compass is most important in our climate; seventy per cent are here so placed.

Inside the house, the concentration of entrances and stairways utilizes the space least

useful for occupancy. Here a back alley approach becomes unnecessary and rear outbuildings functionless.

COMMUNICATION.— This phase considers the means of connecting the specialized sites with the general facilities for transportation, being tributary to the existing surrounding system, yet discriminating as to the kinds and quantity of service desired.

EXTERNAL TRAFFIC.

BOUNDARY HIGHWAYS .- The prevailing boundary highways of 66 feet width are here main-2.11 tained, also the continuity of the abutting streets, to avoid confusion. It is inevitable that there will be some distinction in importance between the existing street car lines, determining the most valuable part of the tract, in which the development will begin, and from which it can progress normally without intervening vacant spaces, as is apparent from the geometric plan.

INTERNAL TRAFFIC.

- GENERAL -- A minimum width of 60 feet is here fixed between frontages on communication ways serving as access to buildings, giving a suitable backset from actual public ways, whose widths are determined by their transit needs as inferred from their length, character of occupancy, and tributary feeders.
- NOMENCLATURE. A simple system of nomenclature is important, and is possible here 2.201
- VEHICLE PAYEMENTS.—These are to be considered of ample width at 25 feet in the more important ways, and at 18 feet in the lesser ways, being sufficient for a vehicle to pass one backed against the edge. 2.2021
- PEDESTRIAN PAVEMENTS .- Sidewalk pavements are 4 feet for purely residential routes allowing 5.5055 promenade two abreast. In the primary routes 6 feet width is conceded. The pathways of the playgrounds are 4 feet wide, a minimum amongst shrubbery.
- A parking of but 2 feet width will permit planting of evergreen maintenance, and can be omitted entirely at road intersections where additional vehicle
- 2.2024 TREES AND SHRUBBERY. - Residential ways are both natural and dignified, being short, straight avenues lined with different species of trees and massed shrubbery, all confined to the abut-
- ting allotments.

 ILLUMINATION.— Illumination of narrow ways can be sufficiently diffused from relatively low 2 . 2025
- standards, possible of execution as ornamental concrete lanterns.

 CONDUITS.—A public service conduit in each trafficway is here contemplated, to be built of concrete in the trench excavated for sewer, furnished with stubs and manholes, and equipped 2.2026 with all public service mains.
- The functions of internal lines are to reach the homes quickly and to meet the 2.21 needs of distribution and collection to and from these homes. Study of this project show it to be continuous for such service, without being attractive to thoroughfare usage.
- SEMBLATION.—It is important to arrange internal lines to seelude the domestic community from industrial circulation. No streets are therefore allowed to pass through without diversion 2.211
- NOREMATION.— This function is for periodic domestic social amenities, in contradistinction to the streets of a general city which are for concentrating and circulating traffic in large numbers and drawing trade. Filtered through the segregating system, cut off from through traffic, this function is only periodically operative, as for the children at certain times of the day and for the adults at evening.
- PRIVATE CONGREGATION .- This reassembling of the individuals first takes place within the 2.2121 buildings in the family and club and inn groups.
- NEIGHBORHOOD CONGERGATION.—The garden fronted park, play fields, play courts, and gym nasium courts of various sorts are supplemented by an informal winding scheme of path with irregular shrub and tree plantations, forming a circulating pedestrian parkway suitable
- for children and for infants go-carts.

 SCHOOL CONGREGATION.— The advantageous location of the schools at the internal ends 2.2123 the bisecting centerways makes the shortest possible distances between home and school which are thus not more than two blocks apart.
- 2.2124 OCCIATIONS CONGREGATION.—In general these features are cross linked for interfellowship by the octagonal circuitway with two objectives terminating a vista at each turn.
- COMMUNITY CONGREGATION.— The location of this function in the geometric center is estab-lished for reasons of accessibility, isolation from external influences, and to emphasize it 2.2125 importance to the city as the unified social expression of a 6400 community.

The central functions are joined together by a protected passageway as a promenade fo students and visitors, overlooking the public gardens setting off the pool with its central feature of an open pagoda designed as a music pavilion.

COMPETITIVE PLAN BY MARCIA MEAD

THE site for this scheme of development chosen in the northwest quadrant of the city is designed with reference to a diagonal axis through the intersection of the main street car lines running to the loop district in the heart of the city.

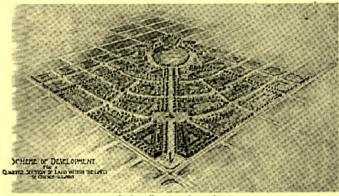
The aim of this scheme is to house a number of people of somewhat varied circumtances in such a way as to promote a unity of general interest.

The nucleus of the design is a large central plaza around which are grouped the schools, fire-engine houses, and other semi-public buildings, and from which the streets radiate in different directions.

The social building containing amusement hall, library, clubrooms, gymnasium, swimming pool, shower baths, etc., is located at one end of the plaza overlooking the field for athletic sports or outdoor entertainments.

Behind the social building will be found the playgrounds, which are provided with swings, teeters, wading pool, sand piles, various apparatus for gymnasium work, and ample space for games. In addition to this, each group of houses has its common play space, thus providing for an abundance of outdoor life and recreation.

The intervening spaces about the main plaza between the public buildings are occupied by two or three story tenements, thus furnishing residence for groups of people not desiring single houses and lots. The stores are grouped in the northwest section on either side of the playgrounds, shielding the residence sections from the noise of the games. Assuming that many of the larger industrial plants are located in the outlying districts in this direction, the people occupying the site are thus afforded opportunity to purchase supplies on the way to and from their work.



KEY TO PLAN

- For statistical data relating to this plan see tables pp. 134-137, Plan No. 19
- P. Parks.
 R. Play Space or Gardens.
 S. Athletic Field or Plaza.

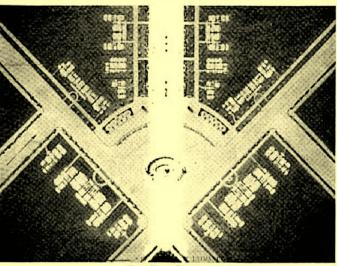
The streets are carefully planned so as to secure pleasing vistas in every direction and their width is determined by their relative use and importance. Lines of traffic are kept as narrow as practicable, varying rather the width of the grass plots where a more open effect is desired.

Leading up to the plaza and terminated by a statue and exedra is the promenade flanked by trees and parks on either side. The vista is interrupted by an open square surrounded by trees, forming an admirable setting for a sculptural group or fountain.

The entrance to the community is at the junction of the ear lines and is emphasized by an open space with attractive pavilions on either side. (See detail plan of the entrance to the development.) Other pavilions are designed at the terminations of the other two important streets.

To further secure the unity of the design, the axes of some of the streets connecting with the outside area are placed to one side, breaking the vista by a group of trees while not seriously interfering with the traffic.

To accommodate people of different circumstances, the northern and western portions are divided into small lots and groups of houses, while the southeastern portion is divided into larger lots where single houses may be built. This arrangement accommodates different classes of people and at the same time forms minor social groups of common interest.

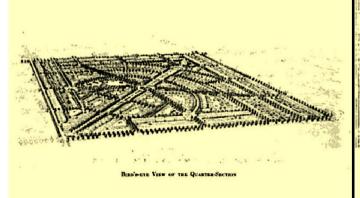


COMPETITIVE PLAN BY MORELL & NICHOLS

Our endeavor has been to plan a section where not only workmen living near the manufacturing district could find sanitary modern housing conditions among attractive surroundings, but also where the more prosperous would feel inclined to build their homes. The entire scheme was studied out more or less in conformity with the new civic plans for Chicago, and the main feature of the plan was determined on the general principles governing this civic plan.

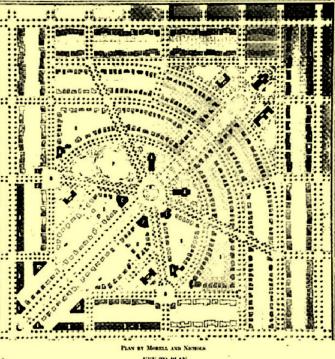
The plan aims to arrange the streets in such a way as will afford free traffic circulation throughout the development and feasible connections with the surrounding established streets. Attention has been directed towards such an arrangement of streets as would lead traffic to the important foci, would avoid the monotony of the gridiron system, and would provide variety in the setting of the public and private buildings. The width of the streets varies in the scheme in accordance with the importance of certain streets to the traffic. The cost of construction and maintenance of streets would not be much less than if the development was a regular gridiron system, largely on account of the cost of the wide main parkway. However, such an imposing parkway with double roadway and a center parking space would be a strong attraction to the subdivision and well worth its cost.

The less expensive workmen's houses and the business and amusement houses, together with the apartments, were located along streets having or to have street car traffic. The attached type of building for this class would be most desirable from both economic and esthetic points of view. Towards the central point larger building sites are shown on which detached homes could be built. In addition to generous building sites, space was



also provided for attractive, cheerful surroundings, for small garden tracts, open play courts, and free breathing spots and playgrounds other than the public streets. The public building sites are located at the most conspicuous points, where the buildings would receive sufficient space for the needed setting and where their attractive architectural features would add general interest to the section.

In providing sites for the public buildings the educational, recreational, religious, social, and administrative needs of the community were considered and ample provision was made for them.



	KEY TO PLAN			
Church.	E.	Library.	1.	Fire St.
School.		Administrative.	J.	Police !
Social Hall or Club.		Market.	K.	Hotel.
Store.		Hospital.		Apartn
For statistical data relating	to this	plan see tables pp.	134-137, Plan	No. 15.

N. Public Square.
O. Play Court.
P. Park.

COMPETITIVE PLAN BY ROBERT A. POPE

HE great cost of city development to-day is due to the excessive amount of land in streets, and the resultant large charge which their improvement and maintenance permanently involves. This has been brought about by the engineers, who have accepted the established precedent of the small uniform city block and city lot as essential to the best interests of the city. Further, they have assumed that all streets should be

through streets and traffic streets, whether the area affected is residential or not.

In submitting this design, the convenience of the engineer has been taken into account only as a minor consideration, a procedure quite contrary to the one in vogue among the

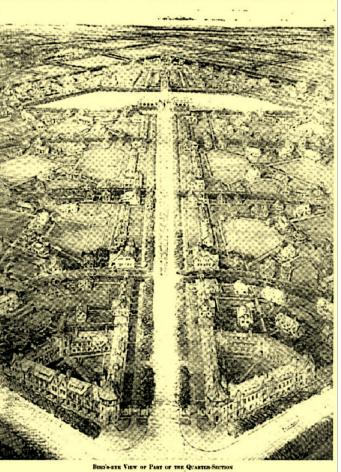
only as a minor consideration, a procedure quite contain, so that it is street layout departments of our large cities.

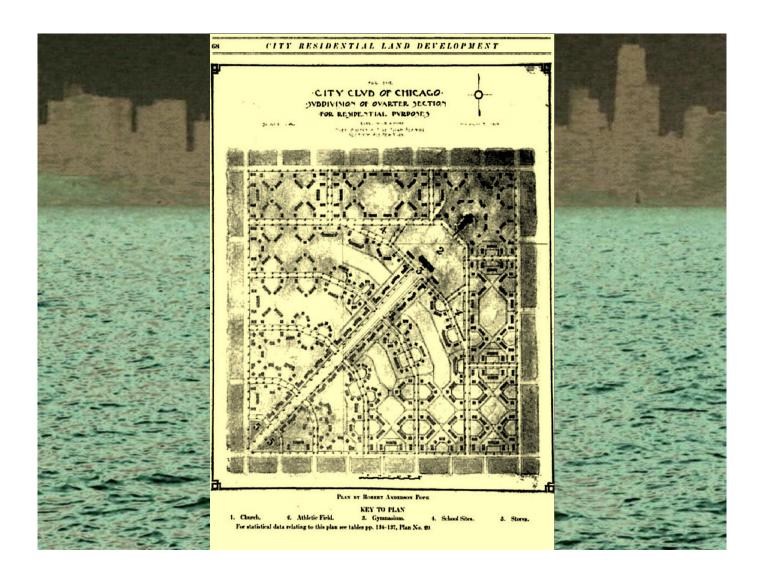
The design submitted has a street area of 91,904 square yards which, when compared with the abutting Chicago plan for the same area, shows a percentage of 19 per cent in its favor. Translated into cost of development this means a saving of \$6,017.72 over the typical Chicago plan.

This minimizing of street area has been accomplished by assuming as true two unpre-cedented hypotheses: first, the streets within the quarter-section should not have to accommodate more than a small percentage above the traffic loads of its own community, instead of having all residential streets through thoroughfares, as is largely done in Chicago



A GROUP OF HOUSES AT FOREST HILLS, MASSACHUSETTS A suburb of Boston planned by the author, showing the houses facing an open park on a principle Chicago quarter-section plan.





and most of our large cities; second, better homes can be had without too much actual street frontage if service can be provided in the rears of houses, with walks from the main highway in front.

These two hypotheses make possible the saving of \$6,017.17 over the present type of plan, besides making an additional saving in the amount of lineal feet of road in development. A much larger saving could be made were it not for the excessive unit cost at which the service road has been figured. This economy of land makes possible an extraordinary amount of park and playground space. In regard to limiting the traffic, we have brought the thoroughfares of this quarter-section into some relation with the adjoining roads, but purposely have linked them up as little as seemed desirable, in order to prevent through vehicular traffic. The pedestrian traffic, however, especially to the ear lines, has been greatly facilitated by the use of walks across the blocks, and through the parks and playgrounds, accomplishing at the same time an economy in land, road, and development cost.

. A minor economy resulting from these hypotheses is found in the reduced number of street trees necessary to purchase and maintain.

Vehicular as well as pedestrian access to the car lines has been made as direct as possible. The breaks in the thoroughfares leading up to the car lines are made to give a little more picturesque impression by emphasizing the importance of the central promenade, along which, on Sundays and holidays, most of the people in the community would find it attractive to walk.



REAR VIEW OF A GROUP OF HOUSES AT FOREST HILLS, MASSACHUSETE





70



TOTH TLOOP-PLANTYPE'A'

*)ECOND-TLOOP-PLAN-

The longest walk to the car line would be about ten minutes. The average walk would be nearer four minutes.

City dwellers cannot hope for escape from the monotony of the typical city plan, unless it be provided for them in the residential area in which they live. Because of this, it is all the more imperative that the residential districts which we are to add to our cities be freed from this monotony by their development in a picturesque manner. It is partly, then, for this reason that we have used the groups of houses around parks. We have varied these groups as to the types of houses, and the shapes and sizes of playgrounds. The park and playground border planting would diversify these groups still further.

The design of the boulevard leading up to the gymnasium and playfield furnishes another departure from the usual city plan.

This will be stately rather than picturesque, and will therefore result in another psychological impression in the minds of the dwellers in this community. The great playfield gives an effect of expanse and of freedom not to be found within the ordinary city development scheme. The tower of the gymnasium is on the axis of five different streets.

In the matter of the social life of the community, it is contended that it is quite as feasible to predetermine the social life of the community by means of a scientific design as it is to determine the direction which pedestrian and vehicular traffic will take when streets and walks are laid down in given places.

The ideal number of families in a group varies with the type of population to be served, and the location of the population. We believe, however, that it can be scientifically determined what is the best number of families to embrace in one group for a given type of land. We have assumed in our design that from six to ten family units form a desirable group.

We believe the gathering of these families around open parks, and abutting on adjoining playgrounds, will be material factors in establishing that mutual aid which Prince Kropotkin says is one of the greatest uplifting influences in urban life. The relation of the houses in surrounding the playgrounds, which in turn are to be well hedged in, makes it possible for the housewife, working in the kitchen, to observe the small child at its play, a relief and in many cases an immeasurable economy in the nervous energy of the mother.

The location of a church, two large schoolhouses, and a great gymnasium in one group and in a well-defined center, adjacent to the large public park or parade ground, tends to bind the community as a whole together with these numerous types of social activities. Such buildings will furnish places for lectures, for the drama, and for gymnastics, drilling and indoor games, while the great playfields will provide for football, baseball, hockey, drilling, track athletics, and public gatherings. The location for the school houses has been chosen adjoining the playfield, so as to give the maximum use and advantage of this open space to the children before, during, and after school hours.

The minimum amount of land needed for household uses and for front gardens has been assigned to each house. The reason for this is that the burden of maintenance or purchase, either outright, by lease, or through the co-partnership plan, must be reduced to a minimum, and therefore we have given to most of the houses only enough ground for the service arrangements, clothes drying, etc., in the rear, and for a small garden, such as is found in England, in



Type 'D

71 72

the front. This will provide as much land as the prospective tenant will have either ability or inclination to maintain.

MOST-FLOOD-PLAT

The park and playground area must be maintained by the community so as to be kept uniform. This can be done at a relatively small cost in view of the large amount of land to be taken care of at the same time under one organization.

From within, the houses have been so arranged as to secure broad and long outlooks over park and playgrounds, and it can be said of this plan that every family has a park in front of its house, and a playground in the rear. (See illustrations, pp. 66 and 69). The outlooks from the houses are nearly all through views, because the houses have been arranged so that they look by, rather than into each other. These through views are very long, far longer than they ever are or could be in the typical city layout.

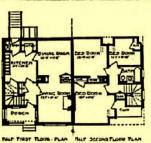
A point might be made that the playgrounds would harbor noise and mischief, but this is simply a matter of limiting the use of them to children of a certain age, at certain hours, and preferably under tutelage. They are primarily intended for the smaller children. The older boys could play their games in the large park under observation of a

welfare worker or the police. We have arbitrarily assumed a one-family house unit to be 25×26 feet, which makes possible any one of the accompanying types, A, B, or C.

In each instance the family house unit dimensions are 25 x 26. In each case the dining-room, living-room, hall, and kitchen are provided on the first floor, with bath and three or four bedrooms upstairs. Any long party wall houses are so oriented as to have no north bedrooms.

Whereas these houses cost from \$2,200 to \$3,000, they are semi-fireproof, and could probably be reduced in cost to from \$1,700 to \$2,600. Here again, however, the actual house unit that would be best for the purposes of this community can only be actually determined by a housing survey of some similar, but built-up, area. This survey should give us an idea of the average amounts available for rentals, and we must then design our houses and our land development so that the charges for rent, or sales, shall not exthe amount of money available for renting or purchase purposes among this class of population.





COMPETITIVE PLAN BY CHARLES H. RAMSDELL

THE accompanying plan makes possible a reduction in street length of the gridiron system of 4100 feet, or about 19 per cent. This means a radical reduction of all street utilities, the pavements, the sidewalks, the street tree-planting, the length of sewer, gas, and water mains. There would be possible a radical change of character of these utilities. There are more short streets and side streets in this plan than on the gridiron platting. This would reduce pavement widths, size and depths of sewers, water and gas mains. There would be a reduction of sidewalk area because of the parked areas.

At the same time only two abutting streets are blocked by the new plat. Otherwise, every street co-ordinates with those of the adjoining plats. This means a decided economy of distance in turning the necessary corners and jogs of streets where one would meet an offset of line. An added saving of distance would be found in the diagonal direction of the streets as shown on this plan. One could diagonally cross the entire tract as well as cross it directly north and south, east and west.

The separation of the different classes of houses, stores, semi-public and public buildings, would make possible the complete and solid building of the whole tract without the disagreeable feature of undesirable neighboring property.

It is intended that the social activities of the suburb would be cared for in the Social Center building on the Common. This building would hold all public meetings and be headquarters for clubs, gymnasium classes, etc. On the other end of the common would be placed the largest school — of imposing size and character — to terminate the most attractive street vistas to it. The church locations would be for sale subject to restriction as to use, but the common ought to be held for all the residents of the suburb. Three classes of playgrounds are provided, one for school children, one for classes out of school hours and during the vacations, and lastly, a field playground for the larger sports — baseball, football, field games, etc.

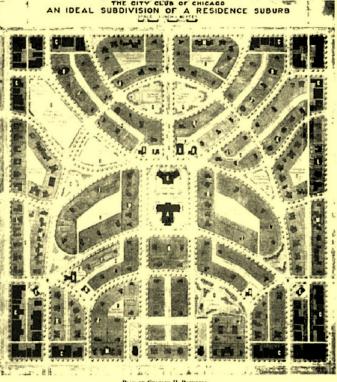
Small neighborhood parks would prove valuable breathing spots and quiet recreation grounds for the residents. They would be city park squares rather than parks of the naturalesque type. The popular love of flowers and gardens could be provided for in some of the small parks shown.

The street system as laid out is intended to provide its own interesting vistas and attractive views. The curvilinear system is adopted to give the attractive winding roadways. Certain streets are straight and wide enough to give imposing perspective views while others are of considerable length to provide interesting circuit drives.

The homes of similar character would be grouped; the larger set well back from the street, the smaller nearer the street. The demand for small lots would be met by a combination of 25-foot group houses and lots, but single houses have each a 50-foot lot at least.

Interesting treatment along the alleys would be possible by locating gardens along their length. Then, too, consistent street treatment in the way of planting of trees and shrubbery, hedges, or walls would be most attractive along the winding streets.

As a whole, this plan was worked up not as a solution for the problem of housing the dense populations of Europe or the East, but rather for the more open suburb of the West, where land is not sold by the square foot.



PLAN BY CHARLES II. RAMSDELL

KEY TO PLAN

A. Civic Center Building. B. Churches.

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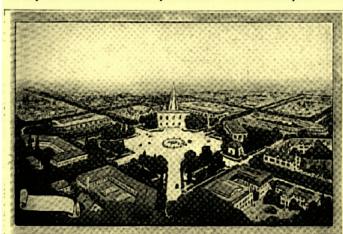
- G. Stores and Office Buildin
 H. Large Residences.
 ols. I. Medium Sired Homes.
- K. Two-Family Houses. L. Apartment Buildings. M. Twenty-five-foot Group Houses. N. Building Lots.
 - P. School Playgrounds.
 Q. Parks and City Squares.
 R. Allotment Gardens.
 S. Gardens along Alley Lines

For statistical data relating to this plan see tables pp. 134-137, Plan No. 16.

COMPETITIVE PLAN BY RIDDLE AND RIDDLE

THE plans for the development of Chicago prepared during the years 1906–1908 under the direction of the Commercial Club, generally known as the Burnham plans, propose the extension of existing diagonal streets into areas now unimproved. It is the intersection of two such diagonals in the future southwest section of the city that the authors of this memoir and the accompanying drawings have made the object of their study. They have been guided in this choice by the belief that the Burnham plans are epoch making, and that new steps in the working out of the city streets should be governed by the general lines laid down in this great work. The design they present is, then, an attempt to modify in the most direct and practical manner the present gridiron-like arrangement of our streets so as to be acceptable to prevailing ideas and yet give a grateful relief from the interminable vistas and monotonous repetitions of rectangular plans.

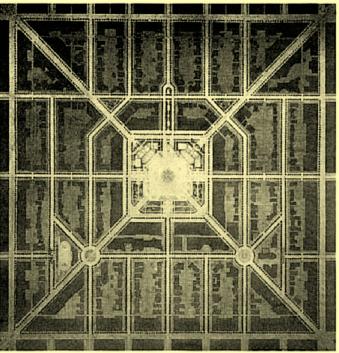
The governing motive of this study, as will be seen from an inspection of the drawings, is the local civic center, subordinate to, but recalling the great municipal center established in the Burnham plan. The position for such a center would be at the intersection of the great diagonal arteries of traffic which would bring the life necessary to create commercial vigor and an animated meeting place for trade, public meetings, and fetes of various kinds. Around this center have been placed, therefore, the shops, markets, and office buildings necessary for the service of a community of the kind. Back of these shops are courts



BIRD'S-EYE VIEW OF THE CIVIC CENTER

which delivery wagons would use to avoid the obstruction to circulation caused by the use of the sidewalks as loading platforms.

In the square closing the vistas of the diagonals which play so important a part in this plan are placed, on one side, the municipal building with the offices for the aldermen, fire and police stations on the first floor and with assembly and reading rooms on the sec-



PLAN BY RIDDLE AND RIDDLE, CHICAGO

The buildings enclosing the central square are shops, markets, and offices. Other business buildings are located on the diagonals.

For statistical data relating to this plan see tables pp. 134-137, Plan No. 4.

ond; on the other side, the schoolhouse to be used on the broadest educational lines. Between these buildings is placed a monumental column. A fountain is in the center of the square, and the whole composition is closed in by a parkway 100 feet wide.

The plan follows, as has been said, the rectangular arrangement of streets prevailing in Chicago. In addition to the diagonals the authors have carried through the plan a north and a south street intersecting in the square. All other streets they have interrupted, not only for the additional charm thus obtained, but also to prevent the encroachment of traffic and business on avenues devoted to homes.

COMPETITIVE PLAN BY WILLIAM H. SCHUCHARDT

THE author of the accompanying design chose the so-called spider web scheme as the best adapted to the conditions set by the program. In the center of the tract are located the public or semi-public buildings which should be easily accessible from all parts. Facing smaller squares (four in number) and somewhat removed from the noise of street car lines or the lines of greatest traffic, are placed the churches, Y. M. C. A., and Y. W. C. A. buildings, or other clubs and local theaters, and, at the corners of the tract, where more people will gather per hour than at other points, are placed the store buildings for tradesmen. At these corners are also suggested transfer and comfort stations which will not only be of practical value but will also mark the entrance to the diagonal streets.

The relation of the main thoroughfares to the principal buildings is such that long interminable vistas are avoided. Each building serves as an architectural accent at the end of a long vista and yet at no cost of convenience.

In the southwestern portion is placed the park, extending from the center to within a short distance of the future street car crossing. A bandstand at one end and a possible swimming pool at the other will help to make this a popular meeting place. The school playgrounds might also be used by the general public after school hours. Close to the park and near the center are branch police and fire stations and also comfort stations.

The residences are all faced on the narrow curved streets so that their owners may enjoy the charm of apparently meandering ways and also be removed from lines of general traffic. Alleys are shown on the plan as about 10 feet wide. In the opinion of the author



BIRD'S-ETE VIEW OF THE QUARTER-SECTION



a width of sixteen feet, as required by law, is needlessly extravagant. (The arguments for the narrow alley are not necessary here.)

Exact similarity of lot sizes in any scheme but the gridiron is, of course, impossible. The author of this design assumes that the area under consideration will be occupied by wage earners or other people of comparatively small income and has therefore accepted the customary standard size of 25 x 150 feet for the majority of lots. There are cheaper lots which are about 25 x 100 feet and a large number in the southwestern section which are only 17 x 100 feet and are intended for standardized cottages to be built in groups, each house being 17 x 24 feet. In block "A" in the southwestern section the author has shown an arrangement of such cottages with their gardens, suggested by schemes he has seen in Europe during a recent investigation of housing on the Continent and in England. All other blocks are, however, laid out with greater regard for American precedent, excepting that, in the grouping and placing of houses, European model villages serve as guides.

The author has recently drawn plans for the above-mentioned standard cottages which may be grouped in an infinite variety of ways (as indicated in the bird's-eye view) and has found that such cottages having six rooms, cellar, and bath can be built in fairly fire-proof units for about \$1,375.00 each, under a large contract. The contractors have given assurance that where several hundred such houses may be built at one time, the variety of grouping would not increase the cost. The possibility of beneficent beauty and architectural value in such groups of cottages as against the deadly monotony of the now prevalent military camp arrangement needs only suggestion. The author desists from the desire to here emphasize the need, in this country, of making much out of little, as is universally done in Europe.

In addition to the 1,172 lots reserved solely for residence purposes, there are at the corners of the quarter-sections about 75 properties for business purposes. The second and third floors of these business buildings may be devoted to flats accommodating perhaps 150 or 200 families. As some families will require more than one lot the entire area may be assumed to provide homes for 1,150 to 1,200 families.

COMPETITIVE PLAN BY ALBERT STURR

STUDY of site-planning has led to the conclusion that practical and artistic considerations are interdependent and must be worked out together. In the solution herewith offered the motive has been to demonstrate that a slight modification of the gridiron system, which on level land has many practical advantages, will render possible the introduction of many of those features of civic art which are desirable in a residence district.

The southeast corner of the site, which is nearest to the city, where street railways intersect and where transportation and business activities will inevitably be most highly concentrated, is designated as a business center and main entrance. A diagonal boulevard leads to a park and to a plaza upon which are located various institutions forming a social center. Churches face small plazas in the midst of more strictly residential sections. Several court groups provide for those who prefer a more secluded environment and freedom for the frolics of young children. Street views are given a variety of interest by parks and open spaces with their embellishments, by the court vistas, and by interrelations in sizes, designs, and positions of houses.

in sizes, designs, and positions of houses.

A grouping of city homes in orderly relation to one another and to social and business centers, together with ample provision for outdoor recreation, will suggest and encourage mutual dependence and co-operation, the lack of which is so evident in the appearance of our cities.

Extension through the site of streets leading to it will co-ordinate the section with surrounding territory, promote neighborliness, discourage exclusiveness, and preserve the value of public institutions.

The fraternal and Y. M. C. A. buildings are available for entertainments, clubs, etc.; both have direct connection with the athletic field. The school auditorium will serve as a general meeting hall, rendering a separate building for this purpose unnecessary.



PLAN OF ALERT STORE

REPLAN OF ALERT STORE

KEY TO PLAN

A. Allbeit Field. P. Fire Station. P. Park Shelter. C. Church. K. Kindergatter. P. Park Shelter. C. Park Shelter. C. Church. K. Kindergatter. P. Park Shelter. C. Park She

The park shelter with its minor accommodations may serve the convenience of the residents in general. A pond for wading, boat-sailing, and skating by the children is located in the park near the social center.

Upon examining a comparison of the practical features of the accompanying plan and statements of quantities and costs, with those of the gridiron system, we will find that by the plan herewith submitted:

First. The amount of original capital investment may be reduced.

Second. The cost, per lot, of development to the point where building operations may properly begin is slightly greater. This is a result of liberal reservation of land for park, playground, and athletic field. The saving to the home-builder, however, by means of co-operative management such as is necessary for realization of a development of this kind, and the proximity of facilities for recreations, not to mention a multitude of other benefits, more than compensate for this.

Third. The cost to the general city government for maintenance will not be greater. The reduction of length of streets and area of street paving enables corresponding reductions in the cost of lighting, cleaning, and repairing same. Elimination of rear alleys increases cost of garbage collection, but considerably relieves police duties.

Fourth. General traffic and fire apparatus may move through the section with as much directness and rapidity as is necessary in a residence section.

COMPETITIVE PLAN BY A. C. TENNEY, M. D.

THIS scheme of development is based upon a study of the physical environment and necessities of mankind in latitude 42° to 43° north (or south). Longitude has no special bearing in our scheme.

The supply of direct sunshine to every "living" room, ample air space and circulation, stability in construction, and a design which will facilitate co-operative endeavor are the leading thoughts.

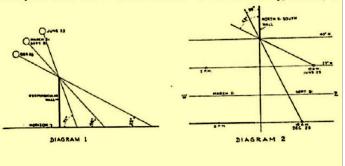
A minimum of two hours' direct sunshine entering every living or sleeping room is secured. The scientific basis for the plan lies in a knowledge of the earth's inclination on its axis and the resulting distribution of sunlight at various seasons.

Between 42° and 43° north (Chicago's latitude) we find that on June 23d (the longest day of the year) the sun approaches the zenith so that its rays strike the earth at an angle of 71° with the horizontal at noon. In consequence, when the days are longest (March 21st to September 21st) and direct sunlight the least essential, the sun's rays strike the earth so nearly perpendicular that only where buildings are most congested and very tall is the earth, or are those upon it, denied the direct sunlight.

During the cold winter days, the earth's inclination on its axis causes the sun's rays to approach the earth from a point south of the equator. The angle of approach on the shortest day, December 43d, is 45° with the horizontal at noon, and all objects placed in the path of the sun's rays cast shadows approximately three-tenths (3/10) greater than their height.

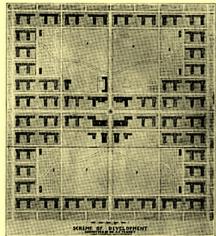
It is during this season of the year, when the days are shortest, when the stimulating effect of the sun's light and heat is most needed, that the improper lighting of buildings and homes is most evident. This short-day period from September 21st to March 21st (with the shortest on December 23d) must be given special attention in any scientific plan for natural lighting.

This scheme, therefore, leads directly to the details of construction and relative position of the individual buildings, and from that to the larger plan which is a deduction or consequence rather than a "scheme beautiful." It becomes necessary, therefore, to



disregard the usual method of subdividing into lots, of placing streets and alleys, and of constructing the apartments themselves.

In the present plan the buildings are but three stories high (41' 6") and on December 23d would cast a shadow fifty-nine feet and four inches. It is assumed that they may be



PLAN BY A. C. TENNEY, M. D.

KEY TO PLAN

- A. School buildings (containing 9¢ rooms, providing up. ft. of floor space to each child).

 B. Church buildings (certing espacity of 600 each).

 C. Children's playprounds with day surveries.

 D. Civic center building containing: lat floor—Doing room of hitchen and small day nursery, women a rooms, committee rooms, auditorium seating postal station drug store, doctors offices, and a room emergency "hospital," and accommodate Library, men's smoking and billiard

- G. 1.
- sents. at buildings with first story on street side given tores and commercial rooms of all varieties. O.

STATISTICAL DATA

- ber of square yards of sidewalk proposed is 43,6%1, extage of total site in open streets is but 13,5%, extage of total site in other public spaces is 14,9%,

increased to or replaced by five-story structures (62' 6" high), in which case this shadow on December 23d, ninety feet long, would fall at the foundation line of any other buildings north. Thus future tenants are guaranteed against any violation of their rights to direct sunlight unless apartments are constructed more than five stories high, which is not

The attached diagram No. 1 on p. 84 is illustrative.

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To obtain a maximum east, south, and west frontage, a modified "court" plan of construction is adopted. In the plans submitted the total east, south, and west exposure in each apartment building is approximately 700 feet with but approximately 240 feet north frontage.

The laws governing the sun's distribution of light are used as the basis for determining the proportions of the courts between the wings extending north and south. By consulting diagram No. 2 it is readily seen that the shadows cast east and west by a straight north and south wall vary from 29° to 63° at various times during the year.

Averaging nature's extremes gives us 46°, and 45° may be accepted as a practical working basis. This is exactly the angle by which an equilateral quadrangle is bisected through its corners. This establishes the principal in practice that the space east and west, between the southwardly extending buildings, must be as great as the length of these buildings. It may be more but should never be less. Space forbids statement of details, but this plan insures a minimum of two hours of direct sunlight to any and every room facing east, south, or west, on the shortest day of the year, and adequate shade in the hottest season.

THE COMPETITIVE PLANS

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COMPETITIVE PLAN BY CHARLES A. TIRRELL

SINCE the existing car lines meet at the northeast corner of the property and this location is nearest to the city, the nucleus of the business center would be placed at this point, and allowed to spread, as occasion demands, west and south along the street car lines, thereby making business development as elastic as possible. It should be made imperative that no business be allowed off these boundary streets except as shown on the plan at the northeast corner of the property.

The boundary streets should be widened to 120 feet for a 660-foot block both south and west, for present business needs, and all buildings along the boundary streets kept back to the limit of a 120-foot street.

The buildings in the business center would be of brick, of good design, and not more than two stories in height. Provisions are made here for banks, theaters, post office, police and fire station, and an administration building, besides the stores and shops, offices for doctors, dentists, lawyers, etc.

Small stores and shops (delicatessen) that are needed for the immediate wants of the tenants should be allowed on the boundary streets whenever the demand is sufficient to warrant patronage.

Within the business center is proposed a market center where all vegetables, fruits, etc., may be sold, thereby keeping them from the front sidewalks where they are usually found to be a nuisance.

The market building should be of pleasing design to present a good façade from the axial streets leading to the square.

To meet the social requirements of the inhabitants it is suggested that a park be centrally located where all may be accommodated with athletic sports and other forms of recreation. At the north end of this park the school buildings have been grouped and, in connection, ample space for children's playgrounds provided.

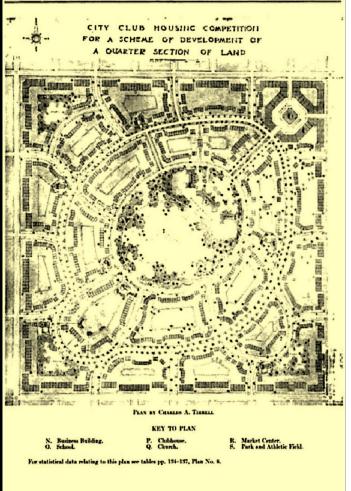
In these school buildings there would be located reading-rooms, library, lecture halls, etc. Such an arrangement should tend to bring the children and adults into closer social relations and necessarily greatly benefit the community.

Spaces for three other small public parks or recreation grounds have been provided for, places where mothers and small children may go and not be annoyed by athletic games and noisy children.

Provision has been made for six churches, well spaced and so located that they give picturesqueness to the immediate surroundings and greatly enhance the street picture.

A wide street or boulevard has been carried completely around the property connecting with all the entrance streets, and extending to the park by a parked roadway on the northeast axis of the school group. This street and all entrance streets are 66 feet wide with a 24-foot pavement; all other streets are 44 feet with an 18-foot pavement. Since all through traffic should be discouraged by the street arrangement, the above widths for streets are ample for a scheme of this type.

The planting of trees along the streets, boulevard, and parkways should not be too



CITY RESIDENTIAL LAND DEVELOPMENT

stiff, but rather irregular, scattered and in groups at good vantage points, to strengthen street vistas and give settings to the buildings.

It is suggested that apartments should be placed along the boundary streets occupying spaces above the shops, and in all building spaces along boundary streets up to such time that the space is needed for business purposes. Apartments may also be located on either side of the parked drive leading to the school group.

Houses may be detached, semi-detached, and in groups, and should be of plain, honest construction with due regard to local materials and other local conditions.

The control of the design for houses and groups should never be relaxed.

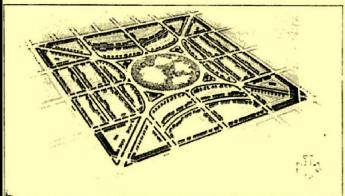
No houses should be placed nearer than 20 feet to the front or rear lot lines and ample spaces should be provided for allotment gardens, recreation grounds, tennis courts, children's playgrounds, etc., in the interior spaces of the building blocks.

COMPETITIVE PLAN BY PHELPS WYMAN

HILE the accompanying plan is designed as a unit, the land represented is regarded as only a small part of a larger entity. It does not try to create a complete town but to construct only a residential section of a much larger city. Places for the labor, trade, and amusement of adults are mostly elsewhere except as they should belong to every residential locality. There is, however, in this plan complete provision for children, both in the way of school and play, and there are local gathering places for their elders such as churches, clubs, political meetings, and provision for neighborhood business in stores and offices.

Street articulation with the rest of the city is furnished by diagonal arteries which lead also to all neighborhood gathering places except stores and offices, which are near the street car lines. The rest of the streets are regular enough to furnish good building lots, irregular enough to be interesting, direct enough to be convenient to all residences facing them, and indirect enough to prevent them from becoming general city thoroughfares.

The inhabitants are considered largely as working people. Facing the park are larger lots and separate houses for professional and business men, while on the minor streets the lots have ample light and room; but to economize space and to make a more attractive appearance the houses are grouped into larger units — not, however, by creating apartments. Lots are not made unduly deep that rear tenements and unnecessary sheds may be discouraged; but provision for gardens is made in separate interior areas where space may be had or not, according to the will of the adjacent residents.



BIRD'S-EYE VIEW OF THE QUARTER-SECTION

KEY TO PLAN

For statistical data relating to this plan see tables pp. 134-137, Plan No. 10.

CITY RESIDENTIAL LAND DEVELOPMENT

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Because of the intrusion of diagonal streets the street area shown is no more or less than with the better type of rectangular subdivisions; nevertheless, because the bulk of the traffic is thrown upon the diagonal streets, the other pavements can be narrower, and first cost and maintenance be reduced. The chief claim to economy, however, is in the gain in time and convenience to the inhabitants.

Along with greater convenience, though secondary to it, is the esthetic appearance of the subdivision. A straight street is indicative of grandeur; but to receive its proper effect, its buildings must be of like character. The majority of streets in this quarter-section are sufficiently curved to give a quiet effect and continually changing views as one passes along them. Those streets which are straight, and they are introduced because of the preference of some for straight residential streets, have their views always stopped by objects at their termini. In city planning there is no monotony like long, continuous, straight streets which have no apparent end.

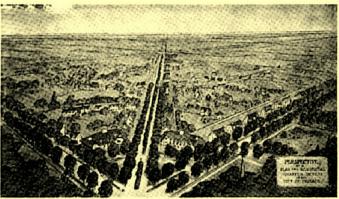
COMPETITIVE PLAN BY ALFRED B. YEOMANS

N the accompanying plan the section is considered as an intregal part of the whole city. Any adequate street plan for the city as a whole must provide for diagonal arteries radiating from the central district. One of these diagonals is assumed to pass through the quarter-section under consideration. This diagonal naturally becomes the main business street of the section, and the stores and offices are therefore located on it. A direct north and south and an east and west street across the section provide additional means of direct communication between adjoining sections.

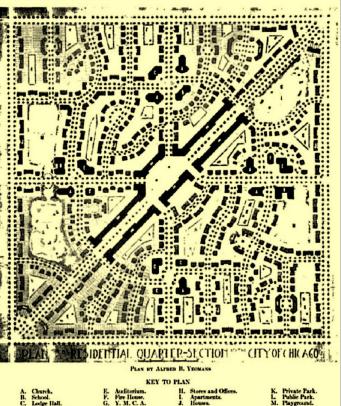
The writer does not believe that any purely rectangular system of streets, irrespective of their architectural embellishment or of the effective grouping of buildings along them, can be made as satisfactory esthetically as a system containing at least some diagonal or curving streets. While the main traffic streets are straight and unobstructed, purely residence streets are therefore made irregular or curving, freedom from traffic and more variety in street pictures being thus secured.

Four groups of buildings serving the common social needs of the community are provided. It is believed that by keeping the social group small and by providing adequate facilities for its activities close at hand, it may develop a greater degree of coherence and hence greater effectiveness as a factor in the life of the whole city.

Two parks of 4.5 acres and 3.8 acres respectively are provided and two playgrounds of 2.7 and 2.3 acres. The latter are directly connected with a school building so that they may serve both as school and public playgrounds, the school building being utilized as a fieldhouse and social center out of school hours.



Except for a few apartment buildings only single family dwellings are provided. Dwellings are set not less than 15 feet back from the street line and 10 feet from side lines. At intervals a group is set farther back so as to avoid a monotonous row of façades and to provide opportunity for interesting front garden treatment. Houses in blocks have a passage between each pair giving access from the street to the rear yard, the necessity of alleys being thus obviated.



ta relating to this plan see tables pp. 134-137, Plan No. 17.

School. Lodge Hall. Public Libra

IV. NON-COMPETITIVE PLAN

PRANK LAOTD WRIGHT

PLAN BY FRANK LLOYD WRIGHT

"Fool! The Ideal is within thyself. Thy condition is but the stuff thou shalt use to shape that same Ideal out of."—Carlyle.

ACCEPTING the characteristic aggregation of business buildings, flats, apartments, and formal and informal dwellings for well-to-do and poor natural now to every semi-urban section about Chicago, this design introduces only minor modifications in harmony with the nature of this aggregation.

The proposed site locates the given tract upon the prairie within eight miles of the city's center, and so makes it an integral feature of Chicago. The established gridiron of Chicago's streets therefore has been held as the basis of this subdivision. The desired improvements have been effected by occasional widening or narrowing of streets, shifts in the relation of walks to curbs, the provision of an outer border or parkway planted with shrubbery to withdraw the residences somewhat from the noisy, dusty city streets (shelters in which to await cars are features of this parkway at street crossings), the arrangement of a small decorative park system planned to diversify the section in the simplest and most generally effective manner possible, and, finally, the creation of a new system of resubdivision of the already established blocks of the gridiron.

Grouped within the small park system are recreation features such as groves, open playgrounds, tennis courts, pools, music pavilion, athletic field, and sheltered walks. The groups are so planned that adults and young people are attracted to the less quiet portion of the park near the public buildings, the children and more quietly inclined adults to the small park in the opposite direction.

The inevitable drift of the population toward the business center of the city is recognized in the grouping of the business buildings, more formal dwellings, and apartment buildings, large and small, on the streets next to the railway going to the city's center. A branch bank, post office, temple of worship and secular clubhouses, branch library and exhibition galleries, cinematograph and branch of civic theater are also grouped with the business buildings; but all these are grouped as features of the small park system. To the rear of the theater and also located on the street railway to town is the central heating plant and garbage reduction plant with smokestacks made into sightly towers. Here also there is a public garage and near the center of this side of the block a public produce market is designed in the form of a large open court, the court paved and screened from the park by a simple pergola.

These various buildings are all utilized as "background" buildings and so are continuously banked against the noisy city thoroughfare, and the upper stories are carried overhead across intervening streets to give further protection from dust and noise, and to provide, in a picturesque way, economically roofed space for the combination business and dwelling establishments that cling naturally to the main arteries of traffic.

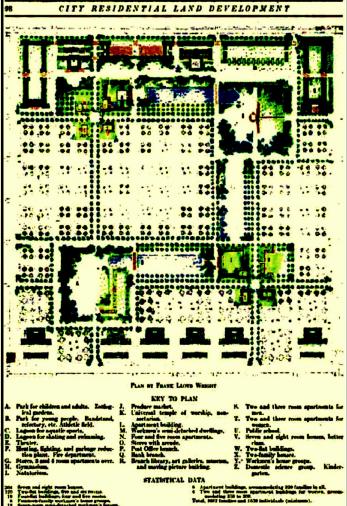
By thus drawing to one side all the buildings of this nature into the location they would naturally prefer, the greater mass of the subdivision is left quiet and clean for residence purposes. No attempt is made to change the nature of these things as they naturally come. The commercial buildings, however, are arranged with a system of interior No attempt is made to change the nature of these things as they natcourts which care for all the necessities that are unsightly. Space is thus provided, quietly

and in order, adapted to all commercial requirements, with great economy of expenditure necessary for exterior effect, and without the exposure of unsightly conditions. The market has been treated as a desirable picturesque feature of the whole arrangement. The bank and post office are located where they will be passed morning and evening to and from the city as are the various shops. There is but one temple for worship, but there are sectarian clubrooms opening on courts at the sides and rear and in connection with it.

The library has top-lighted galleries for loan collections and a cinematograph hall. With this library are grouped separately a boys' club, branch of Y. M. C. A., and apartments for men. The school buildings, kindergarten, teachers' departments, and Y. W. C. A. building are grouped on the opposite side of the quarter-section on the axis of the children's recreation grounds. A shallow boating and swimming pool and a zoological loan col-lection from, say, Lincoln Park are features of the park system on this side. All building groups on this side. All bullianing groups have internal green courts for privacy as well as their relation to public playground, greens-ward, and shrubbery. The space between this park portion of the quarter-section and the outside city street to the south is devoted to an inexpensive type of detached dwelling, with



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closed interior courts. Facing the outside city street are modest, grouped cottages for working men and women.

The division of the small park systems into two groups draws the children going and coming from school, kindergarten, and playground in the direction opposite to the business quarter.

The remainder, the larger proportion of the quarter-section, has been left intact as a residence park, developed according to the principle of the "quadruple block plan." This remaining area has been kept as large and unbroken as possible, as it is from the sale of this property that the profit would come that would make the park system possible.

In this real body of the subdivision an entirely new arrangement of the resubdivision of property is shown, dispensing with alleys, and wherein the simple expedient of an established building line protects every individual householder from every other one and insures maximum community benefits for all.

At the same time it is possible to put as many houses in all necessary variety upon the ground (several schemes of arrangement are shown), and still maintain these benefits, as is possible now under the wasteful, absurd, and demoralizing practice which universally obtains, wherein the unsightly conditions of city life are all exposed to the street, and either a dirty alley is open to the sides of the blocks or useless rear courts are left with all outhouses abutting upon them, rendering the prospect of the entire neighborhood unsightly to every one and making impossible any real privacy for any one. Under the present system of subdivision, all attempts at beautifying the premises may prove futilities, as any man turned loose upon his own lot may render himself obnoxious to his neighbors.

The "quadruple block plan" will prove immune from the possibilities of such abuse. Each householder is automatically protected from every other householder. He is the only individual upon the entire side of his block. His utilities are grouped to the rear with his neighbors' utilities, and his yard, front or rear, is privately his own. His windows all look upon open vistas and upon no one's unsightly necessities. His building is in unconscious but necessary grouping with three of his neighbors', looking out upon harmonious groups of other neighbors, no two of which would present to him the same elevation even were they all cast in one mould. A succession of buildings of any given length by this arrangement presents the aspect of well-grouped buildings in a park, of greater picturesque variety than is possible where façade follows façade.

Architectural features of the various buildings in the general public group recognize and emphasize in an interesting way the street vistas, and nowhere is symmetry obvious or monotonous. The aim has been to make all vistas equally picturesque and attractive and the whole quietly harmonious.

The virtue of this plan lies in the principle of subdivision underlying its features—
the practical, economic, and artistic creation of an intelligent system of subdivision, insuring greater privacy together with all the advantages of co-operation realized in central
heating, shorter sewers, well-ordered recreation areas, the abolition of all alleys, fewer and
shorter cement walks and driveways, and airiness of arrangement in general with attractive
open vistas everywhere. Always there is the maximum of buildings upon a given ground
area, dignity and privacy for all.



EXPLANATION OF ALTERNATIVE BLOCK ARRANGEMENTS

- A. Quadruple re-subdivision of city block by means of single cross street and parteres into four sub-blocks. Four houses grouped at center of each sub-block about an interior court enclosed by low walls—16 of the enclosure available to each of the four houses.
 - of the four houses.

 One entrance to one house only on each side of each sub-block. No alleys—houses revolving in plan so that living-rooms and verandas face outward and kitchens inward to courts. A single plan used thus is always presented at a different angle in harmonious groups of four.
- B. Same. Single cross street—no parterres. Houses grouping across the streets increasing interior court gardens and giving direct access from street to all houses without parterres.

 C. Same. Each of the four houses moved to exterior angles of

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C. Same. Each of the four houses moved to exterior angles of the four iclo of the sub-block—grouping uniformly in four equally distant from each other both ways, garages at center. Each group connected by low walls about eight feet back from public walls. Major area of each lot suited for private use as a garden, to destroy the control of the control of the garden, and the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the suited of the control of the control of the control of the control of the suited of the control of the cont

There is an idea in this plan of subdivision which I believe to be valuable to the city and immediately available wherever several blocks remain without substantial improvement, because it may be put into practice without concession to the cupidity of the average real estate man, since he gets as many lots to sell under this system as he does in the one now in use. Moreover, the quadruple arrangement insures to the purchaser greater freedom and privacy with no decrease of any privileges he now enjoys. It is as valuable for low cost cottages as for luxurious dwellings.

Artistically this principle is susceptible of infinite variety of treatment without sacrificing the economic advantages which the householder gains through commercial repetition and to which he is entitled. The individual unit may vary harmoniously and effectively with its neighbors, without showing as under present conditions veritable monotony in the attempt to be different.

In skilled hands these various treatments could rise to great beauty, but, even if neglected, the nature of the plan would discipline the average impulse of the ordinary builder in a manner to insure more harmonious results.

Other rhythms in grouping than those suggested here are easily imagined, so that all the charm of variety found in the Gothic colleges of Oxford could easily find its way into the various workings of the underlying scheme.

Much has been written, said, and done recently in relation to civic planning all over the world. For the most part, what has happened with us in this connection is what has happened to us in individual building: we are obsessed by the old world thing in the old world way with the result that, in this grim workshop, our finer possibilities are usually



handed over to fashion and sham. Confusing art with manners and aristocracy, we ape the academic Gaston or steal from "My Lord" his admirable traditions when our own problems need, not fashioning from without, but development from within.

FRANK LLOYD WRIGHT.