

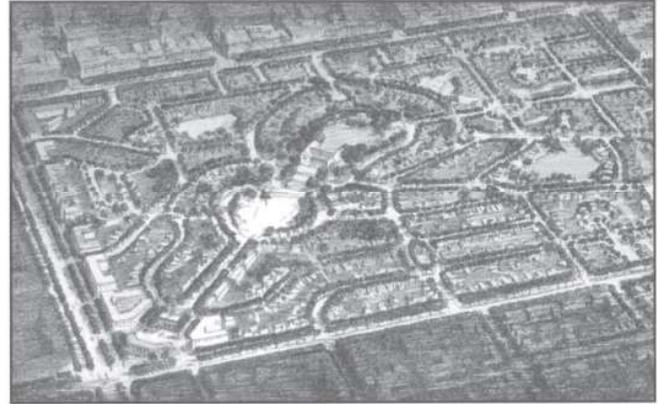
Clarence Arthur Perry

Summary

Traditional community, as opposed to the abstract and alienated social relations characteristic of modern urban industrial society, was a preoccupation of sociologists and social critics of the 19th and early 20th centuries. Chicago-trained sociologist Clarence Arthur Perry (1872–1944) became one of the principal theorists of and advocates for the traditional neighborhood as a basis for the planning of new towns and urban areas and for the redevelopment of blighted slums. His advocacy of the “neighborhood unit” as a principle element of planning was based not only on his academic interests, but also on his direct experience as sociologist-in-residence for the Russell Sage Foundation’s model garden suburb of Forest Hill Gardens in New York, designed by Frederick Law Olmsted, Jr. and Grosvenor Atterbury (begun in 1909). His observations of that project led directly to the treatise on “Neighborhood and Community Planning” published as Volume VII of the 1929 *Regional Plan of New York*, and excerpted here.

Key words

community plan, housing, neighborhood



The neighborhood unit. 160 acre tract for 6000 people with pedestrian ways for dwellings, school, and shops with no transecting highways. Drawing: Chester B.Price, *House and Garden*, 1925

The neighborhood unit

What is known as a neighborhood and what is now commonly defined as a region have at least one characteristic in common—they possess a certain unity that is quite independent of political boundaries. The area with which the Regional Plan of New York is concerned, for instance, has no political unity, although it is possessed of other unifying characteristics of a social, economic and physical nature. Within this area there are definite political entities, such as villages, counties and cities, forming suitable divisions for sub-regional planning, and within those units there are definite local or neighborhood communities which are entirely without governmental limits and sometimes overlap into two or more municipal areas. Thus, in the planning of any large metropolitan area, we find that three kinds of communities are involved:

- The regional community, which embraces many municipal communities and is therefore a family of communities;
- The village, county or city community;
- The neighborhood community.

Only the second of these groups has any political framework, although all three have an influence upon political life and development. While the neighborhood community has no political structure, frequently it has greater unity and coherence than found in the village or city and therefore is of fundamental importance to society.

I THE NEIGHBORHOOD UNIT

The title “neighborhood unit” is a term of reference given, for purposes of the study described in this article, to the scheme of arrangement for a family-life community. Investigations have shown that residential communities, when they meet the universal needs of family life, have similar parts performing similar functions. In the neighborhood-unit system, those parts have been put together as an organic whole. The scheme is put forward as the framework of a model community and not as a detailed plan. Its actual realization as an individual real-estate development requires the embodiment and garniture which can be given to it only by the planner, the architect, and the builder.

The underlying principle of the scheme is that an urban neighborhood should be regarded both as a unit of a larger whole and as a distinct entity in itself. For government, fire and police protection and many other services, it depends upon the municipality. Its residents for the most part find their occupations outside of the neighborhood. To invest in bonds, attend the opera or visit the museum, perhaps even to buy a piano, they have to resort to the “downtown” district. But there are certain other facilities, functions or aspects that are strictly local and peculiar to a well-arranged residential community. They may be classified under four headings. Other neighborhood institutions and services are sometimes found, but these are practically universal:

Source: “Neighborhood and Community Planning” *Regional Survey—Volume VII New York City: Regional Plan of New York and its Environs*, 1929.

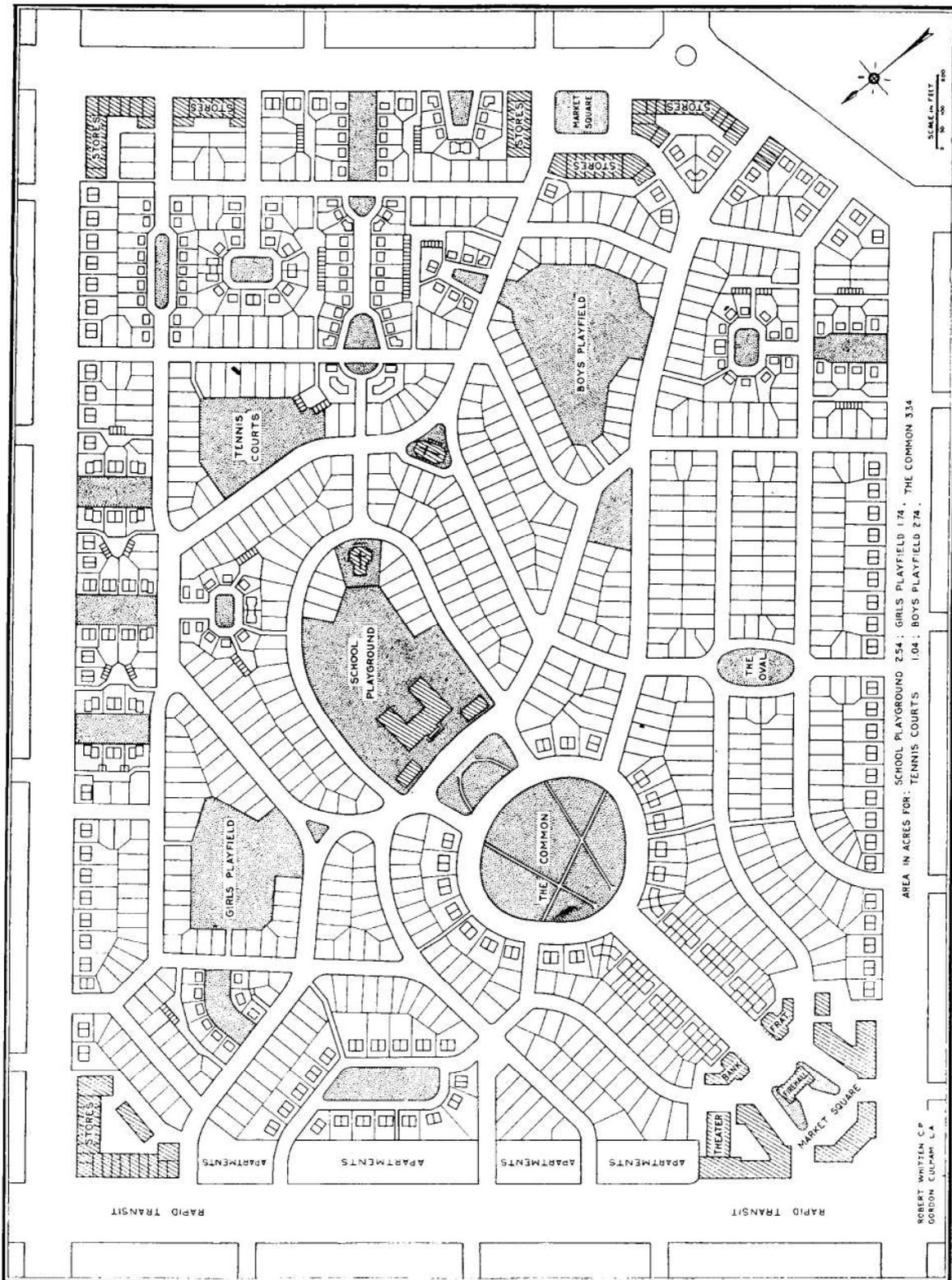


Fig. 1 Plan prepared in connection with research into "The Economics of Land Subdivision." It represents an attempt to apply the above principles in a layout suitable for a development of modest homes in the suburbs.

- Elementary school
- Small parks and playgrounds
- Local shops
- Residential environment

Parents have a general interest in the public school system of the city, but they feel a particular concern regarding the school attended by their children. Similarly, they have a special interest in the playgrounds where their own and their neighbors' children spend so many formative hours. In regard to small stores, the main concern of householders is that they be accessible but not next to their own doors. They should also be concentrated and provide for varied requirements.

Under the term "residential environment" is included the quality of architecture, the layout of streets, the planting along curbs and in yards, the arrangement and setback of buildings, and the relation of shops. Filling stations and other commercial institutions to dwelling places—all the elements which go into the environment of a home and constitute its external atmosphere. The "character" of the district in which people lives tells something about them.

It is with the neighborhood itself, and not its relation to the city at large, that this study is concerned. If it is to be treated as an organic entity, it logically follows that the first step in the conversion of unimproved acreage for residential purposes will be its division into unit areas, each one of which is suitable for a single neighborhood community. The next step consists in the planning of each unit so that adequate provision is made for the efficient operation of the four main neighborhood functions. The attainment of this major objective—as well as the securing of safety to pedestrians and the laying of the structural foundation for quality in environment—depends, according to our studies, upon the observance of the following requirements:

Neighborhood-unit principles

Size. A residential unit development should provide housing for that population for which one elementary school is ordinarily required, its actual area depending upon population density.

Boundaries. The unit should be bounded on all sides by arterial streets, sufficiently wide to facilitate its bypassing by all through traffic.

Open spaces. A system of small parks and recreations spaces should be provided, planned to meet the needs of the particular neighborhood.

Institution sites. Sites for the school and other institutions having service spheres coinciding with the limits of the unit should be suitably grouped about a central point, or common area.

Local shops. One or more shopping districts, adequate for the population to be served, should be laid out in the circumference of the unit, preferably at traffic junctions and adjacent to similar districts of adjoining neighborhoods.

Low-Cost Suburban Development Area Relations of the Plan

Complete unit	160 acres	100 percent
Dwelling-house lots	86.5	54.0
Apartment-house lots	3.4	2.1
Business blocks	6.5	4.1
Market squares	1.2	0.8
School and church sites	1.6	1.0
Parks and playgrounds	13.8	8.6
Greens and circles	3.2	2.0
Streets	43.8	27.4

Internal street system. The unit should be provided with a special street system, each highway being proportioned to its probable traffic load, and the street net as a whole being designed to facilitate circulation within the unit and to discourage its use by through traffic.

To offer a clear picture of each of these principles, the figures illustrate plans and diagrams in which the principles have been applied.

2 LOW-COST SUBURBAN DEVELOPMENT

Character of district. The plan shown in Fig. 1 is based upon an actual tract of land in the outskirts of the Borough of Queens. The section is as yet entirely open and exhibits a gently rolling terrain, partly wooded. So far, the only roads are of the country type, but they are destined some day to be main thoroughfares. There are no business or industrial establishments in the vicinity.

Population and housing. The lot subdivision provides 822 singlefamily houses, 236 double houses, 36 row houses and 147 apartment suites, accommodations for a total of 1,241 families. At the rate of 4.93 persons per family, this would mean a population of 6,125 and a school enrollment of 1,021 pupils. For the whole tract the average density would be 7.75 families per gross acre.

Open spaces. The parks, playgrounds, small greens and circles in the tract total 17 acres, or 10.6 percent of the total area. If there is included also the 1.2 acres of market squares, the total acreage of open space is 18.2 acres. The largest of these spaces is the common of 3.3 acres. This serves both as a park and as a setting or approach to the school building. Back of the school is the main playground for the small children, of 2.54 acres, and near it is the girls' playfield of 1.74 acres. On the opposite side of the schoolyard, a little farther away, is the boys' playground of 2.7 acres. Space for tennis courts is located conveniently in another section of the district. At various other points are to be found parked ovals or small greens which give attractiveness to vistas and afford pleasing bits of landscaping for the surrounding homes.

Community center. The pivotal feature of the layout is the common, with the group of buildings that face upon it. These consist of the schoolhouse and two lateral structures facing a small central plaza. One of these buildings might be devoted to a public library and the other to any suitable neighborhood purpose. Sites are provided for

4 ■ The neighborhood unit

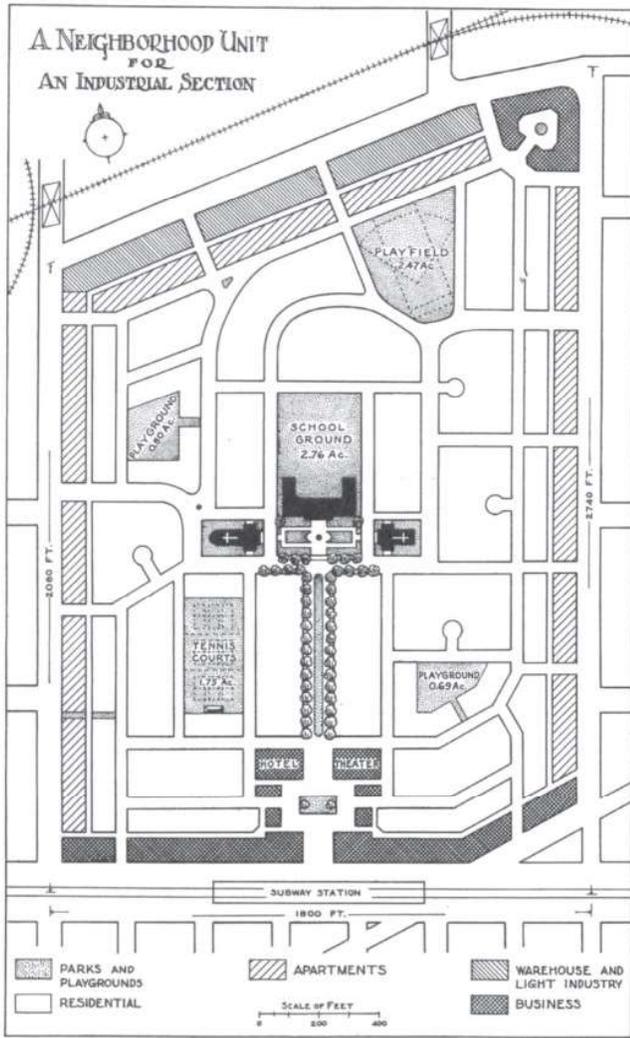


Fig. 2 Diagram suggesting the type of plan that might be devised for a more central area in the neighborhood of industry and business.

two churches, one adjoining the school playground and the other at a prominent street intersection. The school and its supporting buildings constitute a terminal vista for a parked main highway coming up from the market square. In both design and landscape treatment the common and the central buildings constitute an interesting and significant neighborhood community center.

Shopping district. Small shopping districts are located at each of the four corners of the development. The streets furnishing access to the stores are widened to provide for parking, and at the two more important points there are small market squares, which afford additional parking space and more opportunity for unloading space in the rear of the stores. The total area devoted to business blocks and market plazas amounts to 7.7 acres. The average business frontage per family provided by the plan is about 2.3 feet.

Street system. In carrying out the unit principle, the boundary streets have been made sufficiently wide to serve as main traffic arteries. One of the bounding streets is 160 feet wide, and the other three have widths of 120 feet. Each of these arterial highways is provided with a central roadway for through traffic and two service roadways for local traffic separated by planting strips. One-half of the area of the boundary streets is contributed by the development. This amounts to 15.3 acres, or 9.5 percent of the total area, which is a much larger contribution to general traffic facilities than is ordinarily made by the commercial subdivision, but not greater than that which is required by present-day traffic needs. The interior streets are generally 40 or 50 feet in width and are adequate for the amount of traffic that will be developed in a neighborhood of this single-family density. By the careful design of blocks, the area devoted to streets is rather lower than is usually found in a standard grid-iron subdivision. If the bounding streets were not over 50 feet wide, the percent of the total street area would be reduced from the 27.4 percent to about 22 percent. It will be observed that most of the streets opening on the boundary thoroughfares are not opposite similar openings in the adjacent developments. There are no streets that run clear through the development without being interrupted.

3 NEIGHBORHOOD UNIT FOR AN INDUSTRIAL SECTOR

Fig. 2 is a sketch of the kind of layout, which might be devised for a district in the vicinity of factories and railways. Many cities possess somewhat central areas of this character, which have not been preempted by business or industry but which are unsuitable for high-cost housing and too valuable for a low-cost development entirely of single-family dwellings.

Economically, the only alternative use for such a section is industrial. If it were built up with factories, however, the non-residential area thereabouts would be increased and the daily travel distance of many workers would be lengthened. One of the main objectives of good city planning is therefore attained when it is made available for homes.

Along the northern boundary of the tract illustrated lie extensive railroad yards, while its southern side borders one of the city's main arteries, affording both an elevated railway and wide roadbeds for surface traffic. An elevated station is located at a point opposite the center of the southern limit, making that spot the main portal of the development.

A Neighborhood Unit for an Industrial Section
Distribution of Area

Complete unit	101.4 acres	100 percent
Residences—houses	37.8	37.3
Residences—apartments	8.4	8.3
Parks and play spaces	10.8	10.6
Business	5.2	5.1
Warehouses	3.2	3.2
Streets	36.0	35.5

Functional dispositions. The above features dictated the employment of a tree-like design for the street system. Its trunk rests upon the elevated station, passes through the main business district, and terminates at the community center. Branches, covering all sections of the unit, facilitate easy access to the school, to the main street stem, and to the business district.

Along the northern border, structures suitable for light industry, garages, or warehouses have been designated. These are to serve as a buffer both for the noises and the sights of the railway yards. Next to them, separated only by a narrow service street, is a row of apartments, whose main outlooks will all be directed toward the interior of the unit and its parked open spaces.

The apartments are assigned to sites at the sides of the unit that they may serve as conspicuous visible boundaries and enable the widest possible utilization of the attractive vistas which should be provided by the interior features—the ecclesiastical architecture around the civic center and the park-like open spaces.

Housing density. Fig. 2 is intended to suggest mainly an arrangement of the various elements of a neighborhood and is not offered as a finished plan. The street layout is based upon a housing scheme providing for 2,000 families, of which 68 percent are allotted to houses, some semi-detached and some in rows; and 32 percent to apartments averaging 800 square feet of ground area per suite. On the basis of 4.5 persons in houses and 4.2 in suites, the total population would be around 8,800 people, and there would be some 1,400 children of elementary school age, a fine enrollment for a regulation city school. The average net ground area per family amounts to 1,003.7 square feet. If the parks and play areas are included, this figure becomes 1,216 square feet.

Recreation spaces. These consist of a large schoolyard and two playgrounds suitable for the younger children, grounds accommodating nine tennis courts, and a playfield adapted either for baseball or soccer football. In distributing these spaces regard was had both to convenience and to their usefulness as open spaces and vistas for the adjacent homes. All should have planting around the edges, and most of them could be seeded, thus avoiding the barren aspect so common to city playgrounds.

Community center. The educational, religious and civic life of the community is provided for by a group of structures, centrally located and disposed so as to furnish an attractive vista for the trunk street and a pivotal point for the whole layout. A capacious school is flanked by two churches, and all face upon a small square, which might be embellished with a monument, fountain, or other ornamental feature. The auditorium, gymnasium, and library of the school, as well as certain other rooms, could be used for civic, cultural and recreational activities of the neighborhood. With such an equipment and an environment possessing so much of interest and service to all the residents, a vigorous local consciousness would be bound to arise and find expression in all sorts of agreeable and useful face-to-face associations.

Shopping districts. The most important business area is, of course, around the main portal and along the southern arterial highway. For greater convenience and increased exposures a small market square has been introduced. Here would be the natural place for a motion picture theater, a hotel, and such services as a branch post office and a fire-engine

house. Another and smaller shopping district has been placed at the northeast corner to serve the needs of the homes in that section.

Economic aspects. While this development is adapted to families of moderate means, comprehensive planning makes possible an intensive and profitable use of the land without the usual loss of a comfortable and attractive living environment. The back and side yards may be smaller, but pleasing outlooks and play spaces are still provided. They belong to all the families in common and the unit scheme preserves them for the exclusive use of the residents.

While this is primarily a housing scheme, it saves and utilizes for its own purposes that large unearned increment, in business and industrial value, which rises naturally out of the mere aggregation of so many people. The community creates that value and while it may apparently be absorbed by the management, nevertheless, some of it goes to the individual householder through the improved home and environment which a corporation, having that value in prospect, is able to offer.

The percentage of area devoted to streets (35.5) is higher than is usually required in a neighborhood unit scheme. In this case the proportion is boosted by the generous parking space provided in the market square and by the adjoining 200-foot boulevard, one-half of whose areas is included in this calculation. Ordinarily the unit scheme makes possible a saving in street area that is almost, if not quite, equal to the land devoted to open spaces.

The school and church sites need not be dedicated. They may simply be reserved and so marked in the advertising matter with full confidence that local community needs and sentiment will bring about their ultimate purchase by the proper bodies. If either or both of the church sites should not be taken, their very location will ensure their eventual appropriation for some public, or semi-public, use.

4 APARTMENT-HOUSE UNITS

Population. On the basis of five-story and basement buildings and allowing 1,320 square feet per suite, this plan would accommodate 2,381 families (Fig. 3). Counting 4.2 persons per family, the total population would number 10,000 individuals, of whom about 1,600 would probably be of elementary school age, a number which could be nicely accommodated in a modern elementary school.

Environment. The general locality is that section where downtown business establishments and residences begin to merge. One side of the unit faces on the principal street of the city and this would be devoted to general business concerns. A theater and a business block, penetrated by an arcade, would serve both the residents of the unit and the general public.

Street system. Wide streets bound the unit, while its interior system is broken up into shorter highways that give easy circulation within the unit but do not run uninterruptedly through it. In general they converge upon the community center. Their widths are varied to fit probably traffic loads and parking needs.

Open spaces. The land devoted to parks and playgrounds averages over one acre per 1,000 persons. If the space in apartment yards is also counted, this average amounts to 3.17 acres per 1,000 persons.

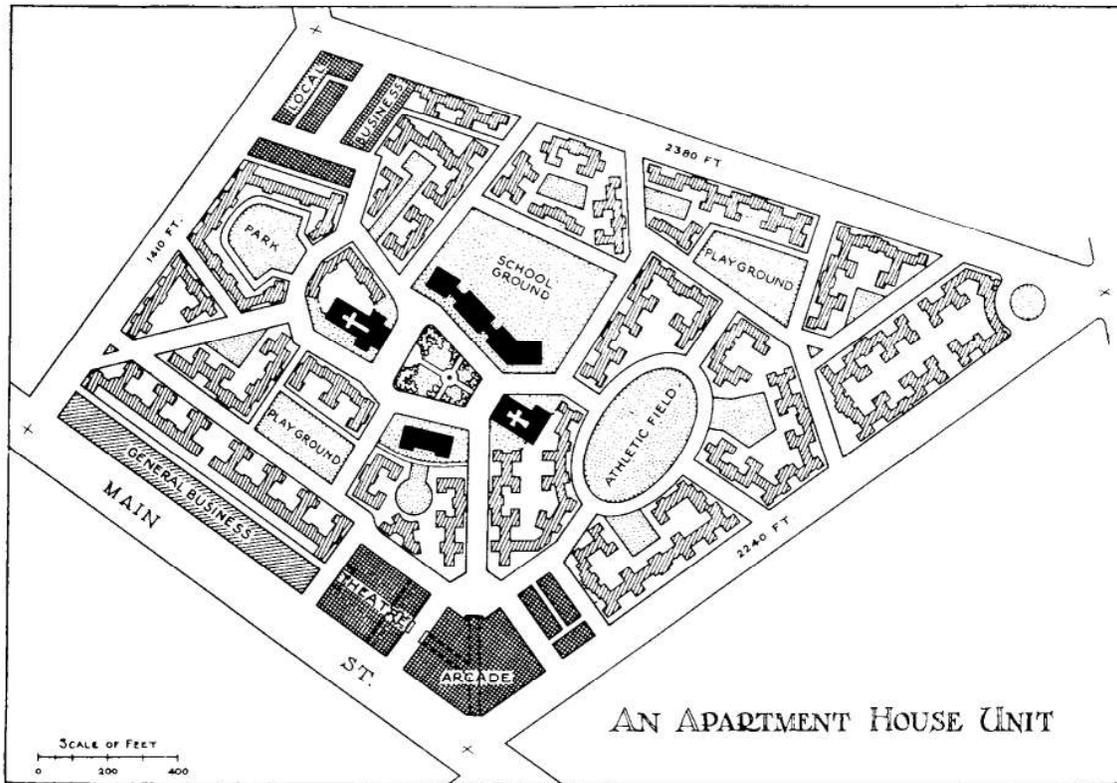


Fig. 3 Diagram of an apartment-house district such as might be laid out on the edge of a subsidiary business district and in a region in which the housing is a mixture of the single and multiple family types.

Apartment House Unit

Distribution of Area

Total area of unit	75.7 acres	100 percent
Apartment buildings.....	12.0	15.9
Apartment yards.....	21.3	28.0
Parks and playgrounds.....	10.4	13.8
Streets.....	25.3	33.4
Local business.....	4.9	6.5
General business.....	1.8	2.4

Area of Open Spaces

Kind	Acres
School grounds.....	3.27
Athletic field.....	1.85
Common.....	.81
Park.....	.61
Playground.....	1.03
Playground.....	.81
Circle.....	.18
Small greens.....	1.86
Total.....	10.42

For 1,600 children the space in the schoolyard provides an average of 89 square feet per pupil, which is a fair allowance considering that all the pupils will seldom be in the yard at the same time. The athletic field is large enough for baseball in the spring and summer, and football in the fall. By flooding it with a hose in the winter time it can be made available for skating.

On the smaller playground it will be possible, if desired, to mark off six tennis courts. The bottle-neck park is partly enclosed by a group of apartments, but it is also accessible to the residents in general.

The recreation spaces should be seeded and have planting around the edges, thus adding attractiveness to the vistas from the surrounding apartments.

Community center. Around a small common are grouped a school, two churches, and a public building. The last might be a branch public library, a museum, a "little theater," or a fraternal building. In any case it should be devoted to a local community use.

The common may exhibit some kind of formal treatment in which a monument and perhaps a bandstand may be elements of the design.

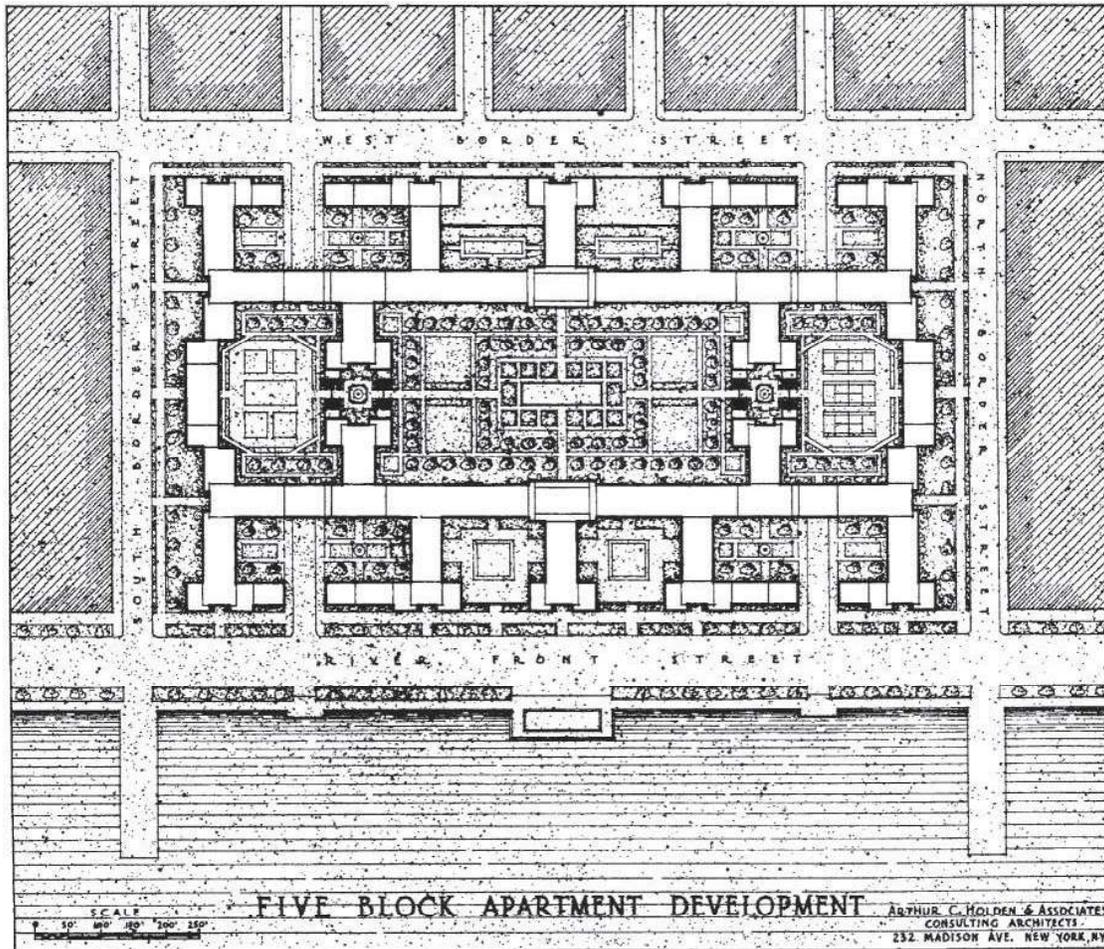


Fig. 4 Plan illustrating a five-block apartment unit suitable for a rebuilding operation in a central section that had suffered deterioration.

The situation is one that calls for embellishment, by means of both architecture and landscaping, and such a treatment would contribute greatly to local pride and the attractiveness of the development.

The ground plan of the school indicates a type in which the auditorium, the gymnasium and the classrooms are in separate buildings, connected by corridors. This arrangement greatly facilitates the use of the school plan by the public in general and permits, at the same time, an efficient utilization of the buildings for instruction purposes.

Apartment pattern. The layout of the apartment structures follows quite closely a design by Mr. Andrew J. Thomas employed for a group of "garden apartments" constructed for Mr. John D. Rockefeller, Jr., in New York City. The suites are of four, five, six and seven rooms and, in the case of the large ones, two bathrooms. Light comes in three sides of a room as a rule and, in some cases, from four sides. All rooms enjoy cross-ventilation.

In the Rockefeller plan every apartment looks out upon a central garden, which is ornamented with a Japanese rookery and a footbridge over running water. The walks are to be lined with shrubbery and the general effect will be park-like and refreshing.

Similar treatments could be given to the various interior spaces of the unit layout. Here, however, due to the short and irregular streets and the odd positions of the buildings, the charm of a given court would be greatly extended because, in many cases, it would constitute a part of the view of not merely one, but several, apartments.

5 FIVE-BLOCK APARTMENT-HOUSE UNIT

Locality. The plan shown above (Fig. 4) is put forward as a suggestion of the type of treatment which might be given to central residential areas of high land values destined for rebuilding because of deterioration or the sweep of a real estate movement. The blocks chosen for the ground site are 200 feet wide and 670 feet long, a length that is found in several sections in Manhattan. In this plan, which borders a river, two streets are closed and two are carried through the development as covered roadways under terraced central courts.

Ground Plan. The dimensions of the plot between the boundary streets are 650 feet by 1,200 feet, and the total area is approximately 16 acres. The building lines are set back from the streets 30 feet on the

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northern and southern boundaries. Both of the end streets, which were originally 60 feet, have been widened to 80 feet, the two 20-foot extra strips being taken out of the area of the development. The western boundary has been enlarged from 80 to 100 feet. The area given to street widening and to building set-back amounts to 89,800 square feet, or 11,800 square feet more than the area of the two streets which were appropriated.

It will be observed that the plan of the buildings encloses 53 percent of the total area devoted to open space in the form of central courts. The main central court is about the size of Gramercy Park, Manhattan, with its surrounding streets. Since this area would receive an unusual amount of sunlight, it would be susceptible to the finest sort of landscape and formal garden treatment.

Both of the end courts are on a level 20 feet higher than the central space and cover the two streets that are carried through the development. Underneath these courts are the service areas for the buildings. At one end of the central space there is room for tennis courts and, at the other, a children's playground of nearly one acre. By reason of the large open spaces and the arrangement of the buildings, the plan achieves an unusual standard as to light in that there is no habitable room that has an exposure to sunlight of less than 45 degrees. The width of all the structures is 50 feet, so that apartments of two-room depth are possible throughout the building, while the western central rib, being 130 feet from a 100-foot street, will never have its light unduly shut off by buildings on the adjacent blocks.

Accommodations. The capacity of the buildings is about 1,000 families, with suites ranging from three to fourteen rooms in size, the majority of them suitable for family occupancy. In addition there would be room for a hotel for transients, an elementary school, an

Five-Block Apartment House Unit

Five blocks and four cross streets . . .	19.07 acres
Two cross streets taken	78,000 sq. ft.
Given to boundary streets	50,800 " "
Area of set-backs	39,000 " "
Land developed	16.4 acres
Covered by buildings	6.5 "
Coverage	40.0 per cent
Three central courts	5.3 acres

auditorium, a gymnasium, a swimming pool, handball courts, locker rooms and other athletic facilities. The first floors of certain buildings on one or more sides of the unit could be devoted to shops. The auditorium could be suitable for motion pictures, lectures, little theater performances, public meetings, and possible for public worship. Dances could be easily held in the gymnasium. In the basement there might be squash courts.

Height. The buildings range in height from two and three stories on the boundary streets to ten stories in the abutting ribs, fifteen stories in the main central ribs, and thirty-three stories in the two towers. Many of the roofs could be given a garden-like treatment and thus contribute to the array of delightful prospects which are offered by the scheme.

This plan, though much more compact than the three others, nevertheless observes all of the unit principles. Neither the community center nor the shopping districts are conspicuous, but they are present. Children can play, attend school, and visit stores without crossing traffic ways. ■