

PRINCIPLES OF LAND SUBDIVISION THAT

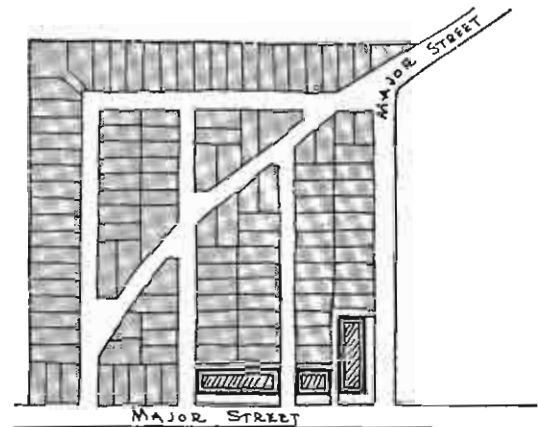
DISCOURAGE HEAVY THROUGH TRAFFIC

Minor streets should be so arranged as to make fast through travel impossible. Rapidly moving traffic on local residential streets results in an undue number of accidents and also unnecessarily increases the cost of pavement construction and maintenance.

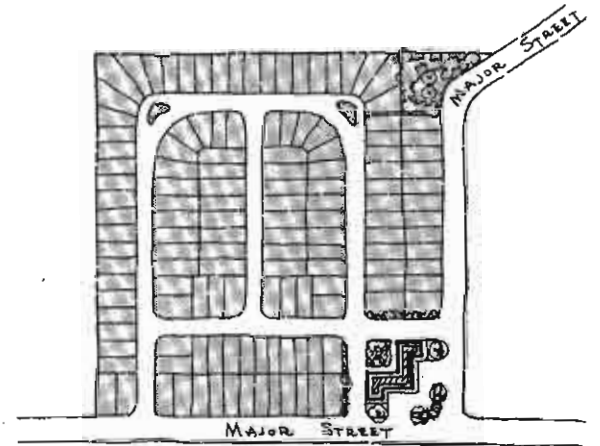
The mixture of local and through traffic on a residential street creates a condition which tends toward a doubtful policy as to land use and neighborhood growth. Where lots have unlimited and direct access to a heavy traffic street there is a constant threat that the restrictive covenants and zoning ordinance may be broken down by pressure to convert detached dwelling lots into income properties.

The upper illustration at the right shows poor street planning that results in unfavorable conditions.

BAD



GOOD



PLAN FOR EXTENSION OF MAJOR STREETS

In the development of a large subdivision, the relationship of the tract to the master city plan of a community, if such exists, should be ascertained. It is obvious that proposed major streets, transportation, recreation, and public utilities should be considered in planning a new segment of the city.

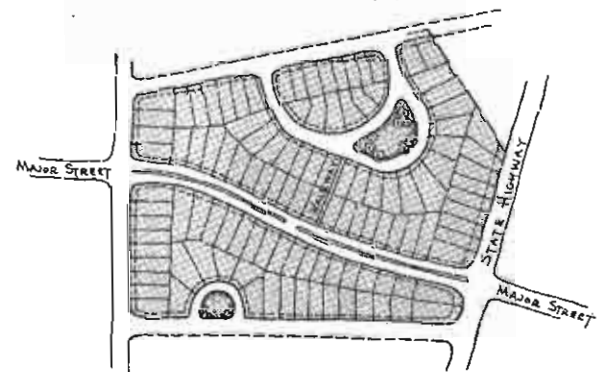
Where no official plans exist, however, provisions should be made for projecting major streets through the subdivision that now end at the boundary of the tract.

When major traffic streets are not planned as part of the subdivision, lots may be sold and houses built in the path of a future trafficway. Either the development of a through street is blocked or opening of the street later is an unnecessary expense.

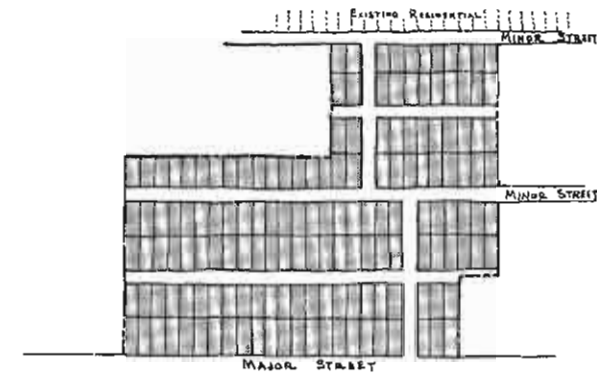
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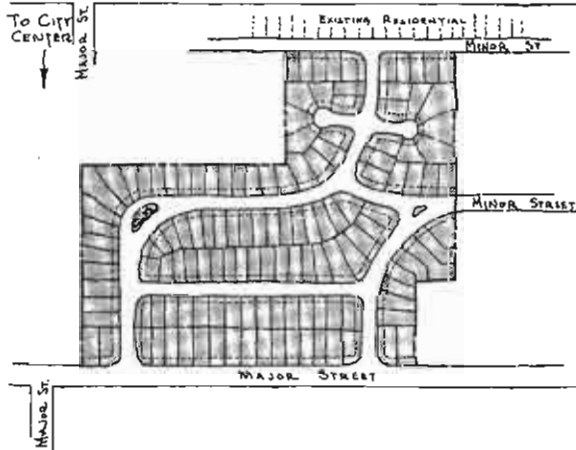
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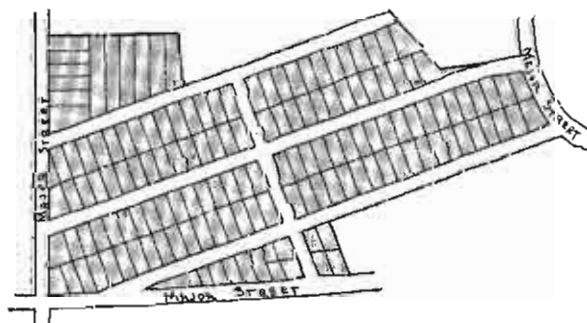
MAKE NEIGHBORHOODS MORE DESIRABLE



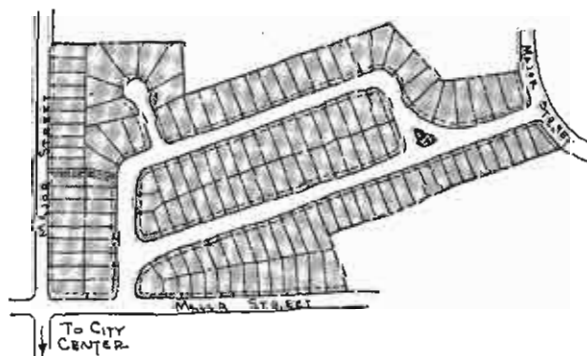
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TRAFFIC SHOULD FLOW TOWARD THOROUGHFARES

When traffic does not flow toward main thoroughfares, it causes an unnecessary use of local streets in order to reach the main traffic ways. This excessive use of residential streets causes an added expense of pavement construction and maintenance. Local streets that carry unnecessary traffic form definite hazards to pedestrians and children.

The street design of a subdivision should be carefully planned to provide for all traffic demands and at the same time create a street arrangement that will make an attractive neighborhood. This will generally produce fewer streets than one which cuts up the land into numerous rectangles without consideration of proper traffic routing. A monotonous street system of this type is generally extravagant, producing more streets than are needed.

MINOR STREETS SHOULD ENTER MAJOR STREETS AT RIGHT ANGLES

Streets should intersect each other as nearly at right angles as is practicable, and the number of streets converging upon a single point should be kept at a minimum. All minor streets approaching a major thoroughfare at acute angles should be turned so that for a distance of about 100 feet they will be at right angles to the major street.

When minor streets join a thoroughfare at raking angles, visibility is greatly impaired for both motorists and pedestrians. Drivers are also tempted to turn in and out of such streets without greatly reducing their speed.

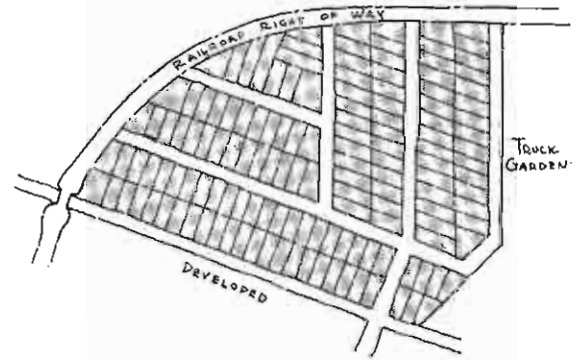
The sketch plans at the left illustrate how hazardous traffic intersections can be improved by correct platting to obtain streets crossing at right angles.

AVOID PLANNING OF DEAD-END STREETS

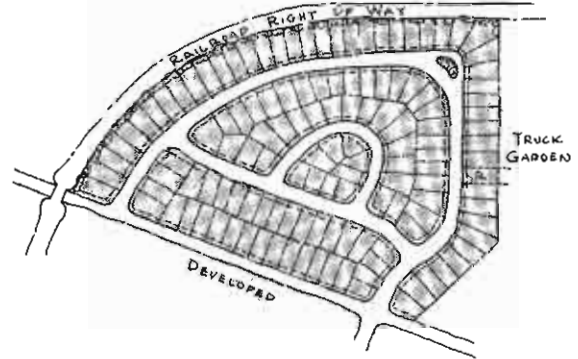
The practice has been, in the past, to place dead-end streets against railroad rights-of-way, open country, or some other permanent or temporary barrier. This should be avoided. The remote possibility, in many cases, of dead-end streets connecting with future streets in an adjoining tract has resulted in blighted property in that particular locality.

When there is a possibility of the street going on through, at some future time, the lot at the end of the street may be reserved for a given time and not sold or built on. If it develops that the street connection will not be necessary, the lot can become a building site and complete the design of the neighborhood. When conditions make it impractical to avoid a dead-end street it should be terminated by a turn-around. This circle should have a diameter of at least 60 feet and be at least the depth of one lot from the boundary line of the tract.

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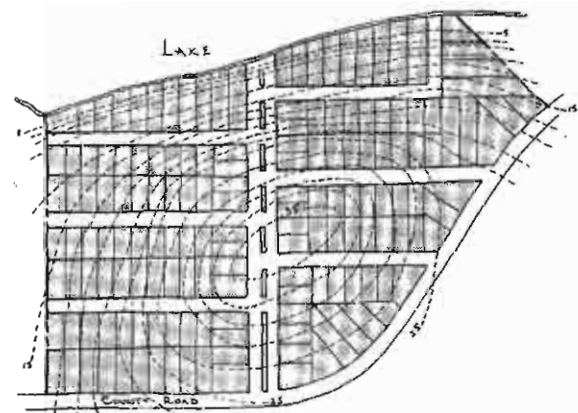
STREETS SHOULD FIT CONTOURS OF IRREGULAR LAND

When ground levels of a tract vary considerably, streets should be laid out to conform to natural conditions. Observations as to high and low ground are often adequate to determine the location of streets. If the land is rough, a topographical map should be made to obtain a complete representation of ground conditions.

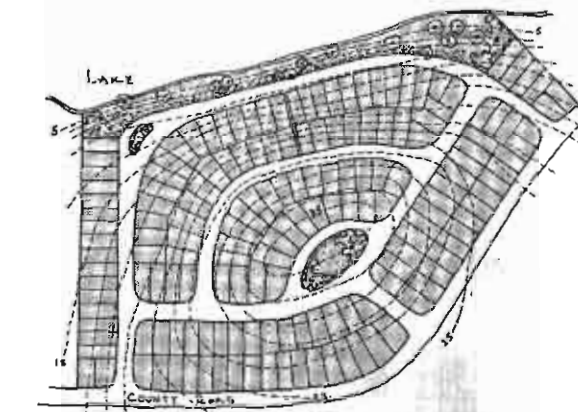
Streets laid out to fit the contours of the land will avoid excessive grades and reduce construction cost. A subdivision plan based upon the topography of the site not only makes possible a better designed development, but also makes the installation of utilities more economical.

In locating streets, consideration should be given to the size and shape of lots and blocks in order to obtain the best use of the land.

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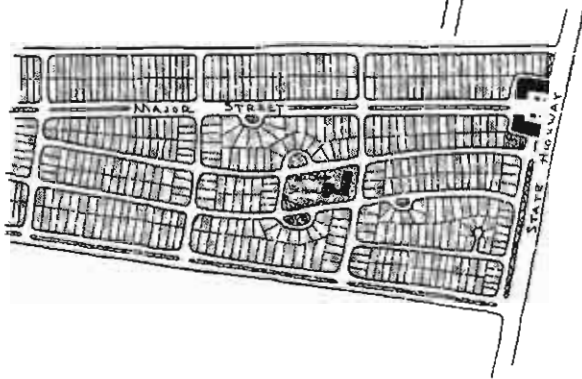




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SHORT BLOCKS ARE NOT ECONOMICAL

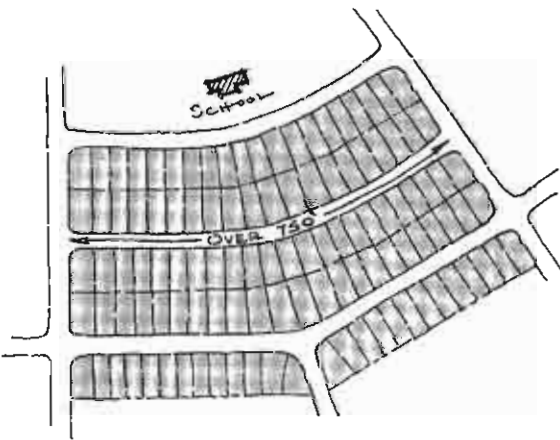
These sketches contrast two types of local street design—one, an example of the rigid gridiron pattern, the other planned to meet the requirements of local access and circulation.



GOOD

Short blocks increase initial construction costs because of the large number of cross streets, and also increase traffic hazards and travel time through such districts. In the lower plan, better shaped lots are secured and those facing the State highway are protected by a park strip. This plan also provides a local shopping center and a school site.

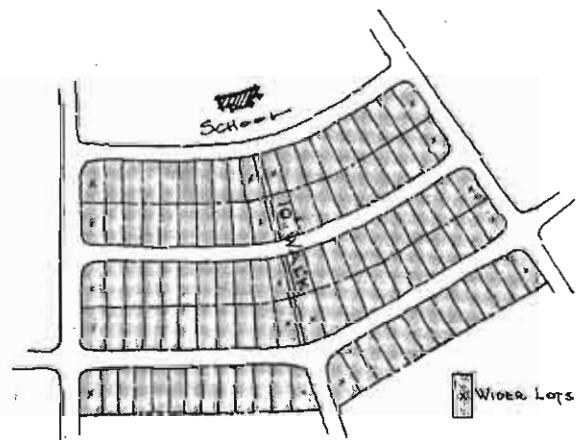
The platting of suburban residential blocks up to 1,300 feet in length by two lot-depths wide, bounded by streets that are adjusted to topographic and traffic requirements is recommended as being most economical.



BAD

LONG BLOCKS REQUIRE CROSSWALKS NEAR CENTER

The use of crosswalks through long blocks to afford more direct access to nearby community facilities is desirable because of the appeal and convenience that is lent to otherwise remotely situated residential lots. Such pedestrian ways near the middle of all blocks exceeding 1,000 feet in length is recommended.



GOOD

When a nearby shopping center, school, or park is so located that a large number of residents of a neighborhood are forced into circuitous routes in order that they may reach their destination, it is often desirable to provide crosswalks in shorter blocks—those over 750 feet in length. This often brings the playgrounds or grocery store as much as a quarter of a mile nearer in walking distance to the doorsteps of many homes.

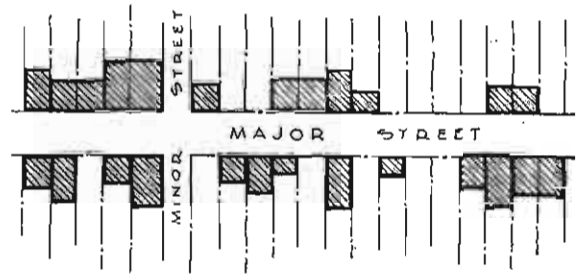
PLAN COMMERCIAL SITES WHERE NEEDED

Local shopping centers are definite assets to a community. They should be located within convenient and safe walking distance for the residents and designed to afford adequate off-street delivery and parking facilities.

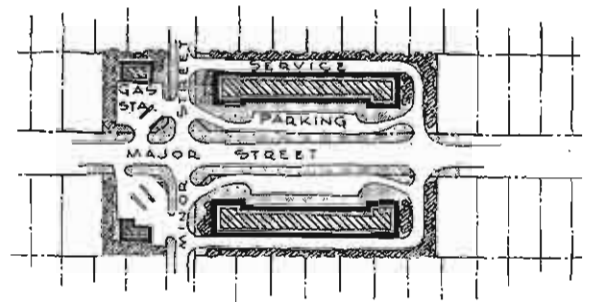
Commercial structures should be concentrated at suitable centers adjoining a major thoroughfare and be accessible by way of local connecting residential streets. They should be designed together as a group and not as a series of unrelated separate stores.

No rule-of-thumb method for ascertaining the amount of land needed for commercial use in a community has proven satisfactory. Such factors as estimated per capita sales and the volume of business per store unit, must be analyzed in determining the kind and number of stores that the neighborhood can profitably sustain.

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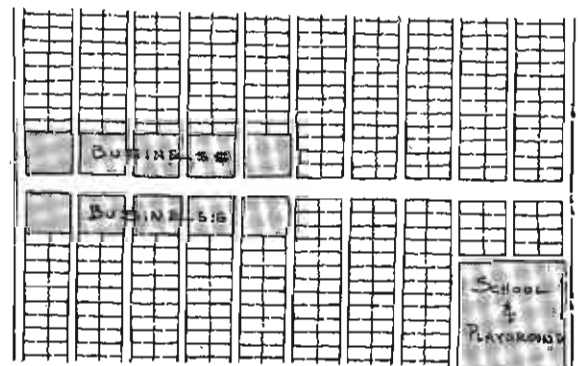


PROVIDE SCHOOL AND CHURCH SITES

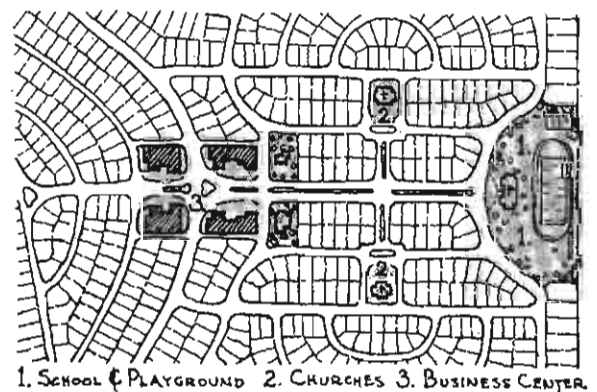
If a subdivision is large enough to warrant the consideration of all community requirements, locations should be provided for schools and churches. These sites should be centrally located for the convenience of all property owners and citizens in the vicinity. Adequate space should be provided for the parking of automobiles, without interfering with private parking needs of those living near the school and church.

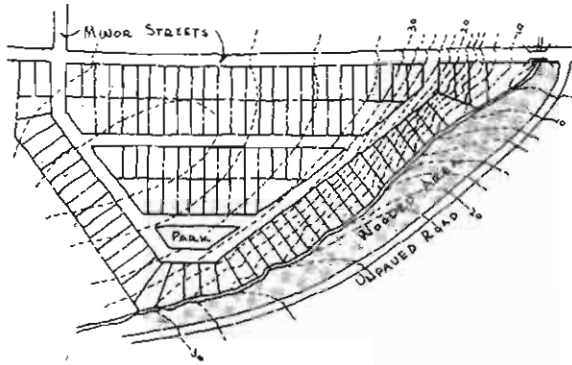
These buildings produce a favorable impression as to the stability of a community and, therefore, should form one of the early demonstrations of neighborhood growth. The selection of convenient sites for such facilities as schools, churches, and local shopping centers will go far in increasing a subdivision's salability.

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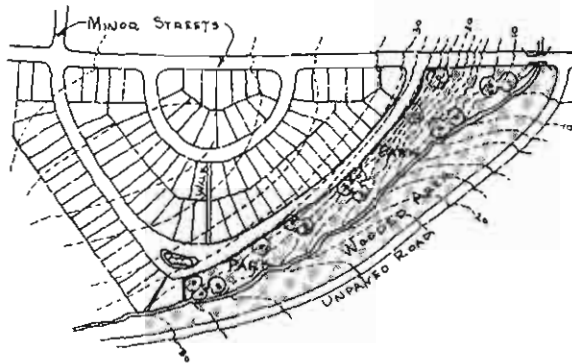




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PARKS ARE A DEFINITE COMMUNITY ASSET

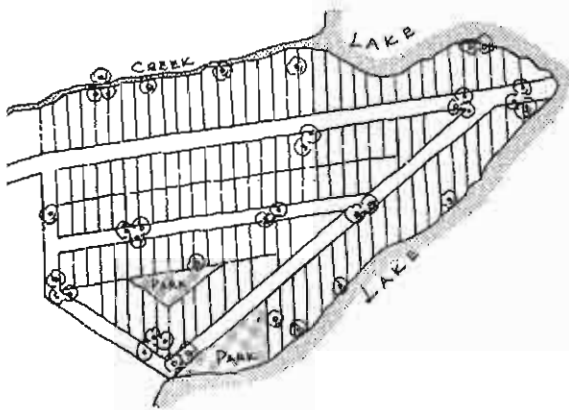
Rough wooded areas that are difficult to develop into economical dwelling sites are often well adapted for recreational use. Enhanced adjoining property values may exceed the cost of developing and dedicating such public open spaces. A well-located park also may offset the sales resistance of remotely situated lots and render the entire tract more marketable.



GOOD

Parks are a definite asset to a community. They are a proper place for children and adults to enjoy the out-of-doors with safety. They reserve, for all time, natural features that all property owners in the vicinity can enjoy. They are as important to neighborhood development as any other general feature.

The improvement and maintenance of park areas should be handled in the same manner as street improvements and maintenance.

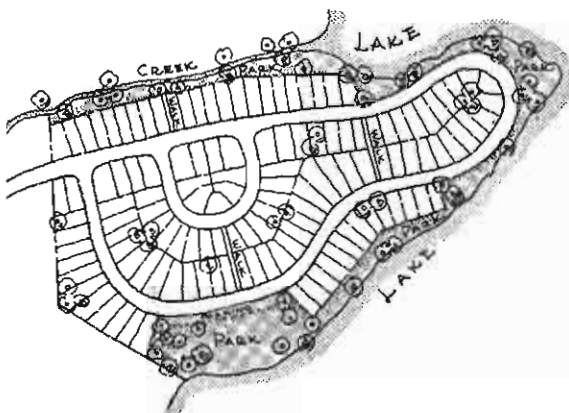


BAD

PRESERVE NATURAL FEATURES OF SITE FOR IMPROVED APPEARANCE

It is recommended that whenever possible all natural features of a neighborhood should be preserved to add to the beauty of the tract.

In many cases valuable tree growth has been cut down and knolls have been removed in order to fill in lower ground. Frequently this is an unnecessary expense and only results in the ruination of what might be a more valuable residential property.



GOOD

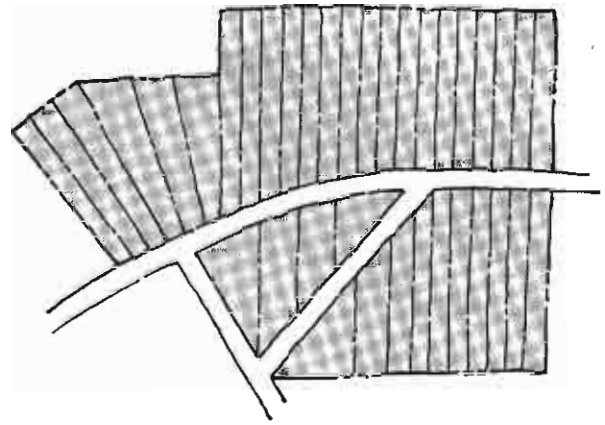
A more desirable neighborhood can be created when roads are located to fit the existing lay of the ground and placed in such a manner as to preserve, as far as possible, the native tree growth. The curving of streets to fit contours of the land and the saving of valuable trees add to the beauty of a development and reduce construction cost.

DEEP LOTS ARE WASTEFUL

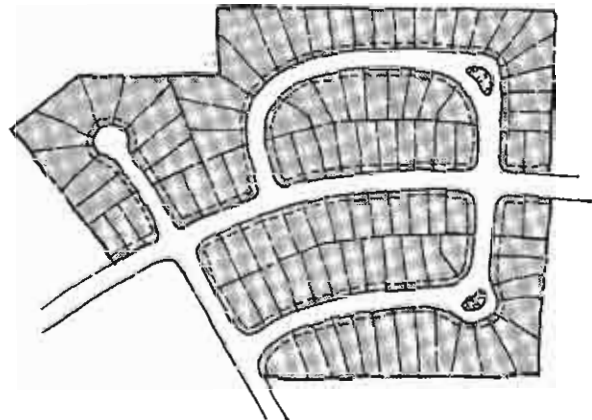
Great depth in a residential lot generally does not increase its salability by virtue of its large area. This type of platting materially decreases the number of lots in a subdivision. Residential lots over 150 feet in depth are usually undesirable unless they are one-quarter of an acre or more in size. Replacement of barns by garages has made deep lots unnecessary.

If consistent with economical land subdivision, residential lots of 50 or 60 feet in width should not greatly exceed 130 feet in depth. Lots of from 100 to 120 feet in depth will usually be found satisfactory for single-family dwellings. Lot sizes should be arrived at only after a careful study of local conditions and by an analysis of the relationship between front foot utility and street construction costs and the value of undeveloped land.

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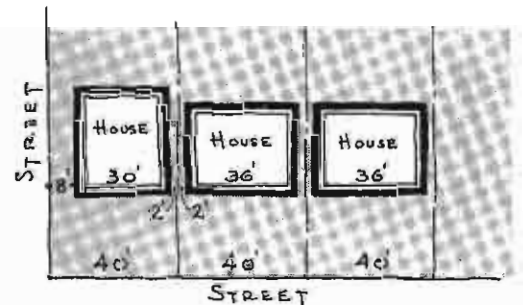
PLAN LOTS OF ADEQUATE WIDTH

The well-being of a neighborhood and the economic soundness of a project rest largely on the manner in which the land is divided into lots.

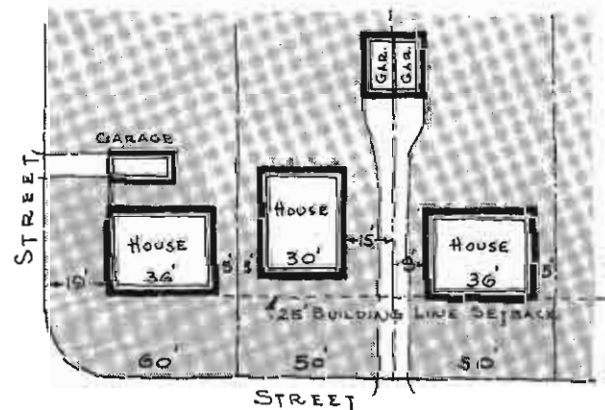
The width of these units should not be reduced beyond a minimum consistent with building coverage, and light and air requirements. Each developer should consider the question of lot width from the point of view of local regulations, the character and topography of the site, the type of dwellings contemplated, and the ratio of raw (unimproved) land costs to the linear front-foot costs of local public utility improvements.

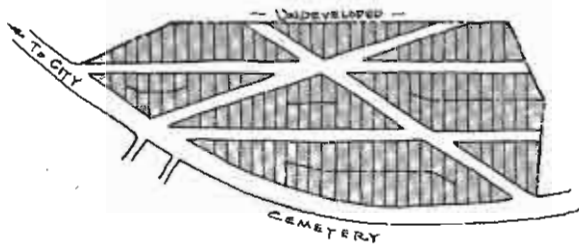
Practical building sites require lots at least 50 feet wide to provide adequate side yards for light, air, driveways, and to avoid crowding.

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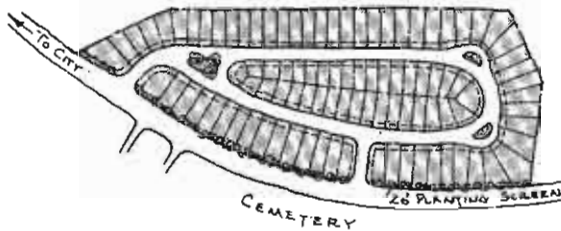


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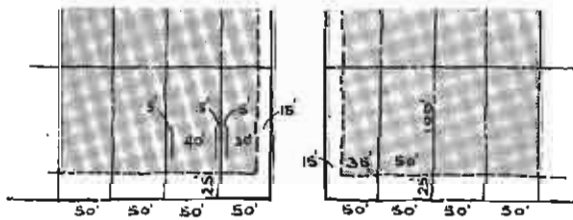
AVOID SHARP-ANGLED LOTS

Lots that have sharp-pointed corners are wasteful of land because the resulting wedge-shaped areas have little or no utility. Such lots also constitute poor building sites.

Sharp-angled lots can be avoided by planning streets to intersect at right angles and by making side lot lines perpendicular or radial to street lines.

In the sketches at the left are contrasted an extravagant—though not unusual—type of subdivision plan and a suggested revised design which has 40 percent less street area, better sized and shaped lots, and eliminates hazardous traffic intersections.

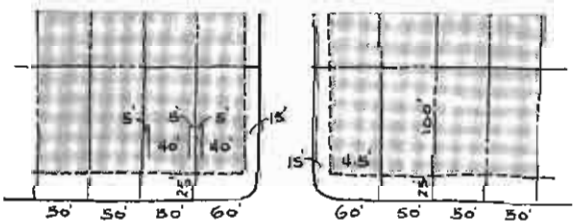
Attention also is directed to the manner in which deep lots are backed against the highway bounding one side of the tract, thus permitting all houses to face into the subdivision.



BAD

USABLE AREA

Corner Lot—35' x 100' = 3,500 sq. ft.: Building Frontage 30'
Interior Lot—50' x 100' = 5,000 sq. ft.: Building Frontage 40'



GOOD

USABLE AREA

Corner Lot—45' x 100' = 4,500 sq. ft.: Building Frontage 40'
Interior Lot—50' x 100' = 5,000 sq. ft.: Building Frontage 40'

PLAN WIDER CORNER LOTS

Every residential lot within a neighborhood should be sufficiently spacious to provide free area on all sides of the space to be covered by a dwelling. Because of the special requirements imposed upon corner lots by reason of necessary setbacks from two streets, it is recommended that corner lots be given extra width at least to the extent of the additional side yard demanded by the side street setback requirement. In the case of a normal corner lot with a side yard requirement of 5 feet and a side street building line setback of 15 feet, the width should be 10 feet wider than interior lots.

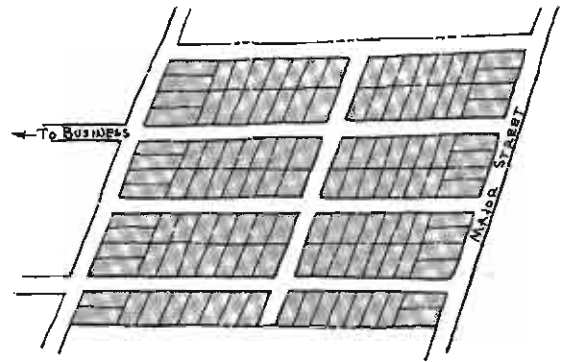
Regulations establishing minimum building line setbacks on the front, sides, and rear of dwellings must be considered by the subdivider at the time lot lines are established.

MAKE LOT LINES PERPENDICULAR TO STREET

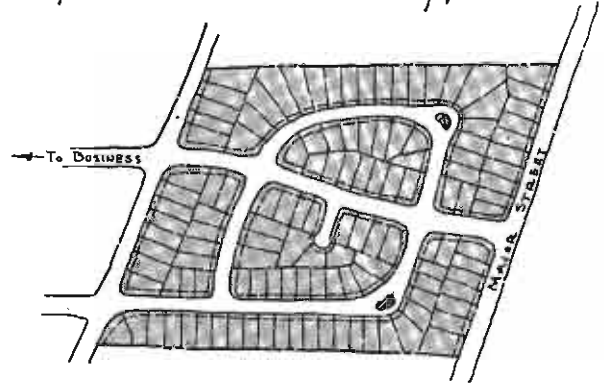
In order that maximum use be obtained from all lots, it is suggested that the lot lines be kept perpendicular or radial to street lines. When this is not done, there is a tendency to build houses on lots so that the sides of the houses are parallel with the side lot lines. This creates an unattractive sawtooth arrangement and many times causes the front of one house to face into the side or rear of a neighboring house.

If a maximum use is to be made of every square foot of the lot area, it is important that the lot be well shaped. If lines are not kept perpendicular to the street, sharp-angled corners will result. These are difficult to utilize and gives the area an undesirable appearance.

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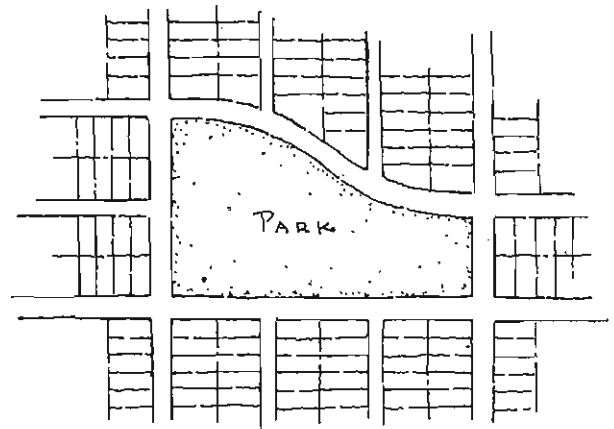
PLAN LOTS TO FACE DESIRABLE VIEWS

In laying out a subdivision the planner should take advantage of any natural or created beauty spot. Whenever possible lots should be so faced that houses will look out over the park rather than face on side streets.

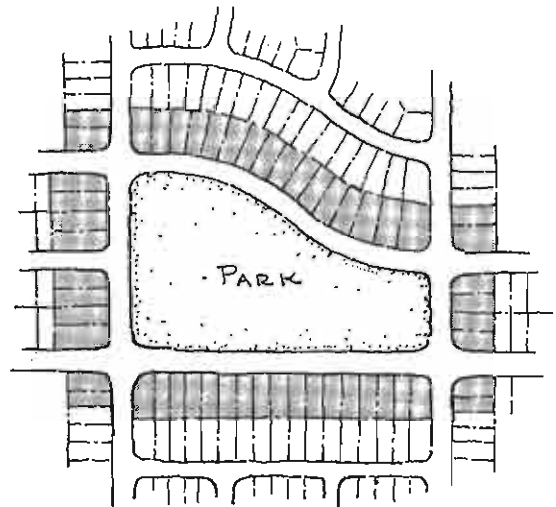
Developers should give consideration to the arrangement of lots so that the proposed dwellings will not overlook neighboring rear yards, face undeveloped and unrestricted property, nor be exposed to the adverse effects of heavily traveled streets and adjacent nonconforming land uses.

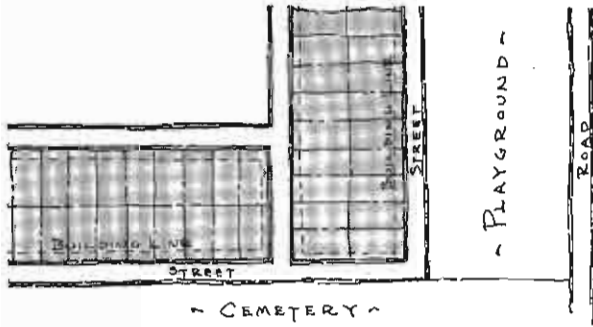
Each lot within a new subdivision should not only constitute a good house site, but also be so planned as to size, shape, and orientation that it takes full advantage of such desirable natural features as views, the slope of the land, sunlight, prevailing winds, shade trees, and adjoining public spaces.

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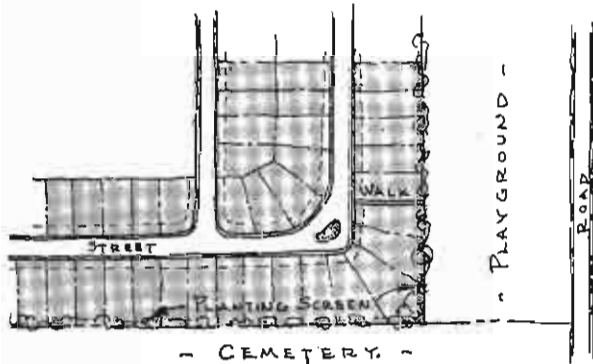


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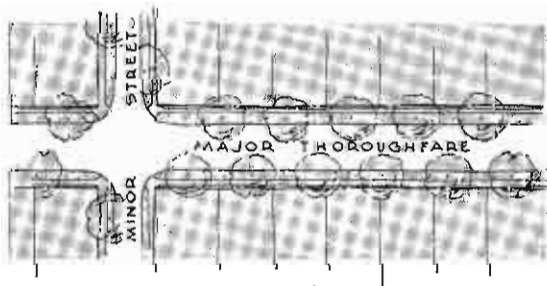


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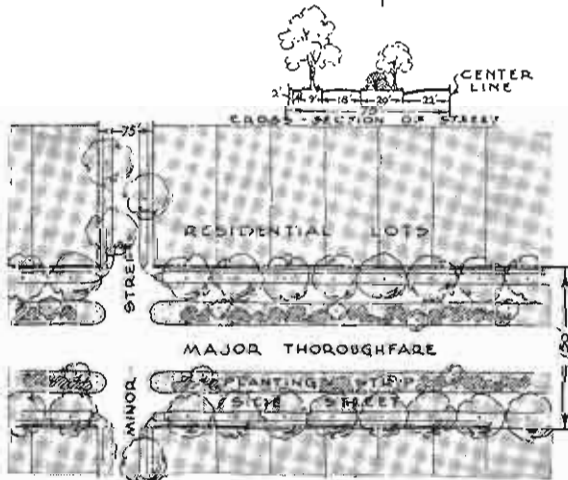
PROTECT LOTS AGAINST ADJACENT NONCONFORMING USES

Residential lots should be arranged so that they will not be seriously affected by a nonconforming use of adjoining property. Objectionable properties can be blocked off by screen planting, or the lots backed against the nonconforming land so that houses built on them front away from the objectionable use. It is suggested that where possible the subdivision boundary line be along the rear of a lot rather than the center of a street.

The appearance and value of a building site is improved when it faces a similar site across the street. Correct location of lots, well-drawn restrictive covenants and zoning ordinances are a protection against the blighting influence of adjoining nonconforming property uses.



BAD



GOOD

PROTECT RESIDENTIAL LOTS AGAINST MAJOR STREET TRAFFIC

When residential lots are located on a major thoroughfare, it is suggested that the through traffic be separated from local service by a planting strip about 20 feet wide.

An 18-foot local service roadway should be located inside of this planting protecting the residences against the noise and dust of traffic, and lessening the street dangers to children. Increase in the desirability of the lots will offset the cost of added street width and the planting of trees and shrubs will add to its attractiveness.

In the past it has been the custom of developers of subdivisions to set aside all property on main thoroughfares for business or apartments because of the belief that a major highway was not a suitable place for a private dwelling. The result has been spotted developments, with many vacant lots.