Lanscape development for a home on a few acres can be approached differently than for a small lot. The house on a small city lot has little space for plantings in the front or back yard. A suburban house site has more room for plantings, even hobby gardening such as roses, flowers, vegetables, and fruit, or even sports such as tennis.

But the opportunities to develop a landscape for a large lot or small acreage are almost unlimited. With planning, it’s possible to find the space for most outdoor activities, such as gardening hobbies and small farming ventures.

The house and other buildings on the property can be visibly enhanced with plants. The landscape around the home should provide pleasure and convenience to the family but still be easy to maintain. With good planning, the landscape should be useful, add value to the property, and provide beauty for the family and community to enjoy.

Although it’s possible for an owner to develop a landscape plan, you would be best advised to consult with a landscape architect or landscape designer to prepare a master plan. You could hire a consultant for a preliminary study and, combined with reading and self-study, complete the plan yourself.

A great deal of garden literature deals with landscape design of small properties. Many people have accumulated a library of information and through experience and observation know what they want in the landscape and garden.

Each residential planting plan can be unique. No two houses, sites, or families are exactly alike. It follows that no single landscape plan will fit all properties or answer the requirements of all families.
A landscape design needs to be developed for the architectural style and lines of the house. The building materials, colors, and entryways can offer clues and suggest landscape ideas for plants and structures. But most important, the planting should be designed for the people who will live there and use the land.

The landscape design process is a procedure used to develop a landscape plan that will be both useful and beautiful. First, information must be gathered and recorded on the conditions of the site and the needs of the people who will use the land. This information serves as the basis for development of a landscape program.

The extent to which a landscape program is developed will depend on the owner's or the family members' attitudes towards gardening and the outdoor environment. A desire for comfortable and beautiful surroundings can influence the amount of time and expense devoted to grounds maintenance.

A limited budget should not prevent you from developing a landscape plan. Most of the preparation, planting, and construction can be completed by the homeowner and the family.

Larger projects or extensive plantings can be phased and budgeted over a period of years. This is why a landscape plan is an essential first step. It permits all parts of the total landscape to be fitted together at later times like parts to a puzzle. When carefully planned, the finished landscape will be a complete and pleasing picture, rather than a jumble of plants and accessories unrelated to each other.

Site Analysis

First step in landscape planning is the orderly and logical recording of conditions and facts on the buildings and land area. The most useful landscape design will depend on how well the landowner or consultant can overcome or modify site restrictions, or enhance and protect the property's good points.

An analysis of the site should include a list of the existing conditions, natural or manmade, that have immediate or potential effects on the property. These can include anything that is heard, seen, smelled, or felt.

Size and shape of the land, direction of the sun, winds, and views all present restrictions and/or opportunities to landscape a small acreage. The land and buildings each express some characteristics, beauty, advantages, and limitations. The owner or designer of the landscape needs to get the feel for the land to understand what the site has to offer, suggest, or express.
Success or failure in producing a functional landscape plan often depends on how well the designer understands the site's characteristics. Each site, no matter how small, offers some unique opportunities.

Organization of the land and outdoor spaces is critical so that all the use requirements of the owner can be met. The landscape should look good 12 months of the year, not only in spring and summer. Buildings, plants, and structures can be planned to strengthen each other. No amount of planting can overcome the lack of good organization.

Natural forces of sunlight, rainfall, winds, frosts, and temperature cannot be eliminated. However, they can be modified by the landscape design. Broad categories that must be considered are: climate, topography, land, soil, vegetation, house, utilities, and community. In the site analysis, these conditions should be located, described, and evaluated. A value judgment is needed on each condition. Is the condition useful? Is it good or bad?

Climate and weather affect outdoor activities more than any other factors. Plants or structures can be used to create shade, trap heat, redirect or slow wind movement. Minimum temperatures determine the kind of plants that can be grown. Temperatures also determine the range of outdoor work, gardening, and recreation activities. Landscape design is influenced by the effects of rainfall, frost-free periods, and wind direction.

The changing direction of the sun from winter to summer creates a whole different set of sun and shade patterns on the land and buildings. Knowing where there is sun or shade at different hours and seasons helps solve problems for plants, gardens, and outdoor activity areas.

Road noise, traffic, glare, and street lights affect the landscape. The pattern of street and auto headlights on the windows and outdoor areas impose a set of restrictions or benefits that may be modified with plants or structures.

Topography must be considered, too. Is the site sloping, or rolling? Will the planned activities work on the existing grade? Perhaps the activity should be changed. An alternative would be to modify the site by grading if the hobby or activity has a high priority.

Esthetically, sloping or rolling land is more dynamic and has more advantages for the design of the house and landscape. A level site has neutral and minor landscape interests. So more interests can be planned with fewer restrictions. On a flat site, bold colors and exotic materials are possible. Level areas have
less protection from the wind so more climate control elements such as trees (windbreaks) or structures may be needed.

Drainage and grading are closely related problems. If a plant-growing activity is planned, drainage or grading may be needed. Even with only a few acres, a landowner should be concerned not to allow "brown water" to run off the property. Help on drainage or grading problems can be obtained from an engineer, landscape architect, the U.S. Soil Conservation Service, the Cooperative Extension Service, or a landscape contractor.

Soils information is needed for the site analysis to determine what plants (shrubs, flowers, vegetables, fruit) will grow best on the land or if changes must be made. A soil test can be obtained through the county Cooperative Extension Service. Results of the test will indicate the soils' lime requirement, fertility status, and if corrective or maintenance fertilizers are needed.

Many counties have a detailed soil survey made by the U.S. Soil Conservation Service. This gives more detailed data on the soil texture, structure, plant nutrient, and drainage characteristics. Knowing this helps you forecast the potential for growth, development, and success of a landscape planting, horticultural venture, or hobby.

Native plants on the property enable you to "read" the landscape and they provide clues to the local environment and soil conditions. Trees, such as red maple and sour gum, and shrubs, such as arrowwood viburnum or red-stemmed dogwood, can indicate wet or poorly-drained soils.

Identify and evaluate why the existing plants are growing on the site. Are they worthwhile? Do they add to the landscape? If they are removed, will this adversely affect or improve the area? Some native plants may be an asset, some a liability.

The House Plan

The house exerts a strong influence on landscape design. The house plan will affect the relation of the house to the outdoor areas and gardens. Rarely are the house and garden designed together.

A door from the kitchen or dining room is the logical place for outdoor cooking and eating. A door from the living room to an outdoor patio is a logical place to sit or entertain. A door from a bedroom could lead to a private garden.

Assess the views from inside the house looking out and
from outside looking in. Should they be screened, hidden, or used? To be able to look into a neighbor's attractive landscape is like owning the land without the taxation.

Consider the impact of movement of people and vehicles about the place. Dimensions for outdoor use areas—such as walks, steps, patios, and furniture—are larger than inside. Walks should be wide enough for two people side by side, at least four feet wide.

The house tends to dominate on a residential property and be less dominant on an acreage. Most houses are geometric and the land around them can be developed with the same geometric or formal pattern.

The formal plan is still the easiest and safest for a landscape—especially for smaller areas. On larger properties, the informal free-form design works best. The formal design can transition out from the house to the large informal space.

The value of trained landscape designers is their ability to integrate the site and program in a functionally good and esthetically pleasing way. Owners often are not able to express why they like what they see—but will admit they find it attractive and enjoyable.

Utilities (water, sewers, electricity, telephone) need to be identified on the landscape plan. The location of meters, height of wires, sewer clean-outs, and tile lines all influence the placement of plants and gardens. So do walks, driveways and property easements.

In site analysis, circulation deals with people and vehicles on the property. Landscaping can enhance what people will feel, see, or experience as they walk or drive on the site. Are there enough lights for entering at night? Are the entrances visible?

One criterion used to evaluate a community is the appearance of its homes and grounds. Zoning and building regulations will control the type of building and homes to be constructed and neighborhoods that will be created. They can protect or restrict the building of a swimming pool, privacy fences, or boundary line plantings.

Zoning regulations, however, should not be considered a hard and fast contract between local government and property owners. Regulations and conditions have to change with the times and can be tested by the appeal process.

Nothing to Hide

One of the most inappropriate landscape approaches in use (or misuse) today is the foundation planting. This technique has
been based on a virtually abandoned house form. Unfortunately, the use of plans in this manner in residential landscape design has not changed with the alterations in architectural design.

Today's houses are built with little visible foundation. Standard construction brings the facing material of wood, brick, or stone close to the ground. There is generally nothing to hide—yet the hiding process continues.

Many rules and recommendations have been written on foundation plantings. But the authors believe it would be better to forget the foundation planting concept and to consider the entire property—house and site—as one living environment.

**Plan for People.** Any success for a useful landscape plan is more assured when the project is well thought out and not forced onto the site. A key to planning the landscape for the people who will use it is to thoroughly understand their goals—what they need, what they want, and what they can afford.

Family characteristics (number, ages, sex, interests) will reflect the type of landscape desired. Children's play areas and outdoor cooking, eating, and entertainment areas could be important. The hobbies and garden ventures for fun or profit need to be provided in the best locations.

Special interests, attitudes on beautiful surroundings, outdoor activities, and maintenance will suggest the size and extent

![Typical planting in front of a 1900 period house, planned to overcome the architectural styles of that era and hide the foundation.](image1)

![Typical foundation planting of a modern house but no longer needed to hide the foundation.](image2)
of gardens and plantings. What will be the needs for storage, parking, roadways, service areas, animals, or pets?

Few people can afford to complete a landscape all at once. Financing can finish the job sooner. The extra cost to borrow money can often be justified by the immediate use and enjoyment plus the property's added value.

On the other hand, once you begin developing the landscape plan you may be forced to change your dreams by the realities of a budget and the available space.

In the landscape design process, your next step is putting together a program based on the information gathered on the site and your goals.

This information can be both written and in graphic form recorded on a plot plan of the property. Three parts of a program that designers find helpful are:

- A plot plan to record the facts of the site
- A site or environmental analysis plan to record the physical and environmental facts on the site
- A functional diagram to show how the land will be used

The plot plan is drawn to scale (usually 4, 8, 10, or 20 feet to the inch). The plot plan should show all existing features—such as the house, drives, walks, trees, boundary lines—as they appear on the lot as if seen looking down from an airplane. Suggested further reading at the end of this chapter can provide more detailed information on developing a plan.

The next step is to place tracing paper over the plot plan. Information gathered in the site analysis can be recorded on this paper overlay. All the physical elements, good and bad, that affect the site can be noted.

Examples of elements to be listed are the shadow patterns of the winter and summer sun, good and bad views, direc-
tion of slopes, drainage areas, winds, and existing vegetation. These items all add to potentials of the site or identify something that needs to be modified. Possible solutions can be noted on the plan. All this information is useful and helps identify the areas or elements to change, eliminate, or retain.

Last step in developing the program is to figure and note the interrelationship of the outdoor use areas in terms of rough size, abstract form, and sizes by drawing bubble or
functional diagrams. Functional diagrams are drawn on another sheet of tracing paper placed over the previous drawing. These diagrams help visualize the connection of the outdoor use areas to the interior rooms of the house.

Functional diagrams show areas of separation between activity and use areas. They help you evaluate an outdoor use area and compare it to the house, circulation links, or identify new problems. Functional diagrams help you double check whether or not the use or activity area fits your needs or desires. They help in evaluating the impact of the use area on the soil, vegetation, neighbors, or community.

Elements and activities of the functional diagram should be organized to give the optimum relationship to each other. For example, the outdoor eating and cooking area (patio) should be in an area for easy transfer of food and dishes from the kitchen. Storage facilities for patio furniture, garden tools, or play equipment need to be related to the appropriate outdoor use area.

Sometimes a compromise must be made on whether to modify the site to the landscape program or to adapt the program to fit the site conditions. By developing the best possible functional diagram, you can decide if it is worth giving up these relationships on the site or to modify the site to achieve the optimum relationship. For example, a slope might be graded to provide a terrace or a patio relocated to preserve a tree providing shade for a kitchen window.

Outdoor Rooms

With completion of the most acceptable functional diagram, the outdoor "rooms" are located on the site. These areas may need to be divided, separated, screened, or connected with plants or structures. Grades could be changed. Existing plants may not be in the right location for an activity or area. The functional diagram is the germination of an idea or concept for the start of a landscape plan.

The analysis phase provides two major clues for developing the final landscape plan. First, it indicates the best places for specific needs. Second, it suggests the best form or shape for the site. For example, in the analysis the best place for a garden is determined and the form it should take to fit more perfectly with the house, roadway, or equipment storage.

The next step to the design process is development of a preliminary plan to locate the plants and structures used in the design. These are the elements which create in an abstract way the outdoor rooms.
Indicate all plants and structures in terms of their width, height, length, and functional purpose. For example, shade could be provided by either a tree, an awning, or an arbor. A privacy screen could be either a hedge, wall, or fence. In this phase, the approximate sizes are shown in an abstract fashion for the structures, paved surfaces, locations for plants, areas to be shaded, and changes of grade.

This form of preliminary plan gives a picture of the proposed design, not detailed enough to work from, but detailed enough to test the program. Examples and pictures from books and magazines can supplement the design. In this stage, the
plan can be reviewed, evaluated, and tested to determine if it will work.

**The Blueprint.** The final design is the master plan. This plan is the "blueprint" showing to scale the exact location for all structures, pavements, and plants, plus their names and/or building material. At this point the arrangement and form of the plants and structures are determined.

Understanding the principles of landscape design and plant composition will help you complete the landscape plan. More in-depth information on this phase can be found in the further reading at the end of the chapter.

Effective landscape design is not as simple as it may sound. Certain environmental and space design problems must be solved by considering the functional spectrum of plants and applying the design principles of simplicity, balance, scale, sequence and focalization.

The time to begin a maintenance program for the yard is when the landscape is first designed. With careful thought, maintenance does not have to be drudgery. Many ambitious landscape designs can make unnecessary work for the owner if planned for maximum effect rather than the minimum maintenance desired by most people today.

As the landscaped area begins to develop, change, and mature, so does the family. Their requirements must be anticipated in a landscape design that should be flexible enough to adapt to your family's changing needs.

**Further Reading:**


