Landscape design is the conscious arrangement of outdoor space for human enjoyment and satisfaction. A well-designed home landscape is aesthetically pleasing and functional. It offers pleasure to the family, enhances the neighborhood, and adds to the property’s resale value. With a little forethought and planning, you can organize your home site for maximum use and pleasure, and create a visual relationship between the house, its site, and the neighborhood.

The planning process, possibly the most important aspect of residential landscaping, is often neglected. We frequently see the evidence: a few scattered shade trees, overgrown foundation shrubs, a narrow concrete walk, and a fenced-in backyard. The resulting landscape rarely looks good, can be fairly expensive, and may not serve family needs. Good planning can save you time, effort, and money and can lead to a much more satisfying environment.

When you begin planning the landscape of your home grounds, think about the entire space and the overall effect you want to achieve. Don’t limit your ideas to trees, shrubs, and grass. Consider a patio, deck, mailbox, screening wall, outdoor lighting, a new walk, or a parking area as possible landscape features.

There are six basic steps to creating your landscape. If you follow them, the finished product will be a personal landscape that reflects your family’s wants and needs and allows for growth and change in the future.

**Step One - Develop a Plot Plan**

The first step in landscape design is to draw a plot plan of the site showing the boundaries and physical features that will affect your design. The plan should include property lines and angles; show the placement of the house on the property; and indicate the location of driveways, utilities, easements, and any other limitations.

**Figure 1.** Plot plan showing property lines and location of house inside the boundaries.

When all of your information has been gathered and marked on a rough sketch, transfer it to a final plot plan drawn accurately to scale (Fig. 1). A suitable scale is 1 inch per 10 feet. Suggested symbols are shown in Figure 2. Be sure to indicate compass directions on your plan. Locate one corner of the house by measuring the distance from the nearest property line and from the back edge of the curb. Measure the distance from each corner on the side of the house to get the correct orientation. Use a 50- or 100-foot flexible steel tape to make accurate measurements of the property. If a plat is available, use it to obtain more accurate dimensions.

**Figure 2.** Suggested symbols for plan drawings.
Next, locate any existing features on the property and the house using the same method as shown in Figure 1.

Be sure to include the following:

- Windows, doors, and other openings, including height off the ground
- Aboveground and underground utility lines
- Existing trees and shrubs
- Utility meters, drain pipes, water spigots, outlets, and septic tank
- Features on or near the property line

Anything else prominent on the site.

Mark these features on the plot plan as shown in Figure 3.

Step Two - Conduct a Site Analysis

Take the time now to study the site and analyze its environmental features. Tape a sheet of tracing paper over the plot plan. You will use this sheet for your site analysis. An example is shown in Figure 4.
Sun and Shade

The way the sun affects your house and site at different seasons will greatly influence the overall design. By knowing the direction of the sun at different times of the year, you can determine where trees will be needed to provide shade in the summer and where you will need open areas to allow the winter sun's rays to heat the house and outdoor living areas (Fig. 5).

Wind

Knowing the direction of prevailing winter winds can help you decide where to locate a windbreak, which can be important if you live in the mountains. You should also take care not to block off any summer breezes from outdoor living spaces.

Sights and Sounds

Figure 4. An analysis of site conditions. Check with your county Extension agent about soil type.

Figure 5. Take winter and summer sun direction into account in analyzing your site.
Walk around your property and note what you see in various directions. When you are standing on the front step, do you have a pleasant view? What do you see from the deck in the back yard? Also, take note of any objectionable noises that occur often. Note the good and bad views and the sources of noise on the site analysis. Also think about the views looking in.

Soils

Many families are confronted with the difficult task of landscaping in “urban soils,” which may include mortar, bricks, sheetrock, plywood, plastic, and other leftovers. The soil in many parts of Arkansas is tight clay, which needs both physical and chemical amendments before trees and shrubs can be planted. Have soil tests made and note the soil type and topsoil depth on your site analysis. (County Extension offices can provide information on free soil testing.) Also note any poorly drained areas that may need underground drainage. Does water stand in low areas after a rain? Do these areas remain wet for several days?

Step Three - Assess Family Needs

Identifying your personal needs and wants will help you design a landscape that is aesthetically pleasing, enjoyable, and functional for your family. Listed in the “Checklist of Landscape Needs” are examples of the kinds of landscape needs that you and your family might consider.

Checklist of Landscape Needs

Access to the house
- Walks – width, drainage, appearance, and lighting
- Driveways – type of surface and amount of turnaround space
- Parking – for family, guests, a camper, a boat, or bicycles

Family Activities
- Outdoor entertaining – cooking, seating, and patio access
- Children’s play area
- Sports, recreation
- Extra parking for boat or recreational vehicle

Maintenance
- Do you do your own yard work?
- Storage for garden equipment
- Specific gardening interests (for example, growing vegetables, roses, herbs, fruit trees, or bulbs)
- Don’t forget space for:
  - Garbage cans
  - Clothesline
  - Dog pens
  - Firewood storage

Step Four - Locate Use Areas

Refer to the list of family needs and decide where to locate the areas for various uses. Try to provide enough space for each activity. Following this step divides the site into several separate areas, each serving a specific purpose but all combined into the overall design.

Figure 6. Plan showing location of the various public, private, and utility areas.
Public, private (family), and service (utility) areas can usually be defined in residential landscapes. Try to develop each one according to your family's needs and priorities. Record these areas as shown in Figure 6, using another sheet of tracing paper taped over the plot plan.

Step Five — Develop Use Areas

Public and Entrance Areas

The area most often seen by passers-by and guests is referred to as the public area. It usually includes the front yard, drive, walks, and main entrance to the home.

One of the first questions is where your guests enter the house. If they come in through the garage and utility room rather than the front entrance, concentrate on redirecting them to the front door. This can be accomplished with several landscape features.

First, consider the width of the front walk. A minimum of 4-1/2 feet is comfortable for two people walking together (Fig. 7). The front entrance can be enhanced by a walkway with an interesting surface texture such as brick, slate, or aggregate concrete. Outdoor lighting is very effective for directing pedestrian traffic after dark.

Try to add a focal point to the entrance area. You might use an interesting tree underplanted with a ground cover or a planter with a specimen shrub. A popular trend in landscaping is low, indirect lighting.

Foundation plantings are often the first feature homeowners think of when landscaping is mentioned. Many home foundations are overplanted. Choosing and placing foundation plants is one of the most important landscape concerns.

Foundation plants are always in the public eye. They greet visitors, add dimension to the area, and when properly chosen, accentuate the architectural lines of the house. Foundation plantings are often installed according to the old formula, “big ones on the end and little ones in the middle.” This approach is not completely wrong, but there are other design criteria to consider as well.

The old formula funnels attention to the entrance. Often, however, the result is shrubs that quickly become overgrown (Fig. 8).

This landscaping theory assumed that the house must be surrounded by plants to conceal its unsightly foundation. More recent architecture usually does not need this screening.

When planning the foundation areas, consider the size, color, texture, and number of plants needed to direct visitors to the entrance and accentuate the architectural lines of the house. Quality plants are most important. Instead of overplanting with small shrubs (of the size sold in 1-gallon containers) to give an effect of instant maturity, use fewer plants of specimen size and character. A few well-placed specimen plants are much more impressive than a row of small ones. Choose a location to enhance the individual character of a plant so that as it matures it will get better without major maintenance.
In modern landscape designs a small ornamental tree is frequently located as close as 5 or 6 feet from the foundation. Good choices are dogwood, redbud, Japanese maple, crape myrtle, star magnolia, and sourwood. Treeform evergreen shrubs are also useful, such as burford holly, ligustrum, or cherry laurel. Incorporate masses of ground covers or mulched areas to create interesting lines. Remember that quality, not quantity, enhances the landscape.

**Family Activity Areas**

When designing areas to be used by the family, refer to the needs identified in step three. What are your family's landscape needs and wants? You can use landscape design to create private areas with attractive views from your patio or terrace. With our pleasant North Carolina climate we can enjoy outdoor activities most of the year. The outdoor living areas should be easily accessible to living and kitchen areas of the home. Decks, patios, and terraces should be considered an integral part of the residential landscape.

Various construction materials are available to the homeowner for these projects. The use of pressure-treated wood for decks and screening walls is very popular in modern landscaping. Brick and aggregate concrete make excellent terraces and patios. Hot tubs, container plants, raised beds, water features, and sculptures can all be combined to enhance an outdoor living area.

The recreation and sports area is naturally a part of the family activity area. Some families enjoy sports such as tennis or swimming that require special planning. If you may someday add a tennis court or swimming pool to your site, be sure to leave enough space.

The needs of small children for landscape space should also be considered. Plan for sandboxes, swing sets, playhouses, and toys to be located in the family activity area. Consider their removal when the children grow up.

**Utility or Service Area**

Every residential landscape requires an area where gardening equipment, garbage cans, firewood, bicycles, and other items can be stored. Often these items end up at one side of the garage, behind the back porch, or under the deck. When designing your landscape, set aside a certain amount of space for these necessities. Try to provide space for an outside utility building that is easily accessible.

Remember to keep the back of your site accessible to vehicles. Some day you may need to have a tree removed or a concrete patio installed.

Space for gardening activities, such as a greenhouse or beds for vegetables and cut flowers, should be provided for this area. Also, locate any compost pile here. If unsightly utility areas are visible from your house or patio, a screening wall or hedge may be needed. Do not forget to screen off unsightly areas from the neighbors, also.

**Checklist for Steps Four and Five**

**Public or entrance area**

- Is your entrance adequately accented?
- Is your house number easily seen?
- Do your guests enter where you want them to?
- Does the walkway attract attention?
- Are exterior lights required?
- Is the house "overplanted" with shrubs?
- Have you considered using small trees and ground covers?
- Do foundation plants vary in texture, form, size, and color?

**Family activity areas**

- Do you need a patio, deck, or terrace?
- Are there outdoor cooking facilities?
- Are hedges or screening walls needed to provide privacy?
- Do you need a children's play area?
- What about accessibility?

**Utility area**

- Is this area easily accessible?
- Will it accommodate all the equipment to be stored?
- Is screening needed?
- Is the garden area, if any, located where it will receive maximum sunlight and have good drainage?

**Step Six - Design, Construct, and Plant**

Landscaping guided by a series of "rules" does not take the needs of individual families and sites into account. Do not let your design be limited by such so-called rules as "always plant shrubs in groups of three or five," and "never plant annuals in the public area." Good design rarely results from following rigid rules.

**Design Concepts**

This publication does not provide any rules or recipes for landscape design. Instead it offers some design concepts to be drawn upon selectively to meet individual landscape needs. In designing a landscape, consider the site inventory and analysis, the style of architecture, and the family's personal landscape requirements. The objective is to create good visual relationships between the features on the site and the site itself. Creating spaces is important in accomplishing this objective. The finished design should reflect the priorities set by your family to satisfy its aesthetic values and functional requirements.

From among the modern landscape trends explained in this section, select those that will enhance your site. Landscape design includes both plants and construction materials.

**Emphasize by Group Planting**
Rhododendrons, azaleas, and dogwoods can be mass planted in informal beds (Fig. 9). Try to locate the plants so that a natural scene is created as they mature. Plant the shrubs or trees together in one large bed and mulch well. Consider adding bulbs for seasonal color.

Provide Privacy

If the site analysis reflected a need to screen unsightly views, provide a noise barrier, or create privacy, plant evergreen shrubs or build a screening fence. If room and time allow, a natural evergreen hedge may be the answer. Many trees and shrubs that make good screens grow very well in North Carolina. For immediate privacy and low maintenance, you might choose to build a fence. The space required for various types of screening barriers is shown in Figure 10.

Specimen Plants

In selecting plants consider quality, not quantity. The plants used should be of specimen quality. Locate plants where they will create focal points and draw attention to a special area.

Energy Conservation Through Landscaping

Locate deciduous trees where you will benefit from summer shade and winter sun. Use a windbreak if necessary. Combining these landscape ideas with proper insulation and conservation habits can significantly decrease energy consumption.

Construction Materials: Wood, Brick, and Railroad Ties

For many people, the term residential landscaping immediately brings to mind dogwoods, azaleas, and Kentucky 31 fescue. In other words, they think of landscaping and planting as synonymous. But you can broaden your idea of landscaping to include screening walls, patios, outdoor lighting, walks, and decks. Landscape architects incorporate many of these items as important landscape features.

Figure 9. Flowering shrubs and trees can be grouped to create a natural scene.

Figure 10. Space needed for four types of 6-ft visual barriers.
Wood construction offers the homeowner a readily available and relatively simple way to create functional, pleasing outdoor garden features. Selecting the proper kind of wood is important because the finished product must withstand all kinds of weather and insect attacks. The wood must also be strong and resist wear, splintering, and warping.

Use either the heartwood of a decay-resistant species or lumber that has been treated with a preservative for outdoor construction in North Carolina. The naturally decay-resistant woods are redwood, cypress, and western red cedar. Various outdoor grades of these woods are available, although all are quite expensive. Treated lumber is more economical and is satisfactory for most projects. Pressure-treated wood is the best choice. This lumber must meet certain standards for various uses and is marked accordingly. Several yellow pine species native to the South are often used for treated lumber.

Waterborne salts are the best wood preservatives. Wood treated with these salts can be painted or stained; it is odorless and nonleaching. To eliminate any confusion, ask for “salt pressure-treated lumber.” It is also a good idea to help select the various sizes and lengths. Try to find lumber that is not warped or splintered and that has the fewest knots.

If you are designing a deck or patio for outdoor entertaining, imagine all your guests in the allotted space. Outdoor furniture is usually heavier and larger than that used indoors, and people are accustomed to more elbow room outside. Stake off the space you plan to use and see if it “feels” the right size.

Brick is one of the easiest construction materials to use and is readily available. Building a walk, terrace, or patio can be a weekend project. Laying brick on sand (with or without mortar) is an acceptable landscape practice.

Railroad ties offer many possibilities for landscaping. They make very attractive retaining walls, planters, or borders. Use care to square off rough ends and turn down ragged edges.

The Edible Landscape

The term "edible landscape" is a familiar term used in landscaping for several years now. An edible landscape challenges the home gardener to incorporate fruit- and vegetable-producing plants into the overall design. It is not necessary to substitute these plants for all ornamentals in the landscape. The idea is to progress from the typical backyard garden and develop a plan that uses edible plants to solve functional landscape problems (Fig. 11).

For example, try planting fruit trees. No matter how small the space, there is some variety of apple, pear, cherry, peach, or plum that can be planted. Dwarf varieties generally reach a height of 6 to 10 feet and should bear fruit within three to four years. Semi-dwarf varieties grow to approximately 15 to 20 feet.

Instead of planting junipers, krones, or cotoneasters, think about planting strawberries as a ground cover. An area with well-drained soil that receives at least 6 to 7 hours of direct sunlight will produce lush green foliage, spring blossoms, and early summer fruit. Be certain to choose a variety adapted to your area, and plant disease- and insect-free plants. Set individual plants 12 to 18 inches apart in the spring, allowing runners to develop and mow over the entire bed. Clean cultivation is essential. Strawberries are perennials, but their beds need to be renovated every three to four years.

Blueberry bushes are a good substitute for a ligustrum or buxus hedge. In northern Arkansas, it’s recommended to plant varieties of the “high-bush” type and in southern Arkansas you can either plant varieties from either two types “rabbiteye” or “southern high-bush”. Acid soils (with a pH of 4.5 to 5.5) usually promote best growth. This could be problematic where a great deal of brick and mortar were used in construction. Modify soils by adding plenty of organic matter and by mulching with 4 to 6 inches of decayed sawdust. Two or more varieties should be planted to ensure proper pollination. Plant the bushes in full sun about 4-1/2 to 5 feet apart.

Extension offices in every county offer publications on vegetable gardening and on the culture and care of fruit trees, blueberries, strawberries, and figs.

Preparing the Final Plan

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**Figure 11. An "edible" landscape.**
When you have finished the planning steps and considered the various design concepts, you are ready to begin designing your landscape. Your planting plan and plant list should show the location of all plants and give appropriate information. This final plan will also show any changes to be made in the walks or drive and any additions such as a deck or patio (Fig. 12). The symbols shown in Figure 13 can be used in drawing your plan.

After completing your plan, you will probably be eager to begin work on the landscape. You may want to implement the design over a period of years. Decide which part of the landscape is most important. By establishing priorities, the landscape can be implemented in stages. Always try to finish one project before starting the next. Remember that “design is opinion.” What pleases you and your family is the only criterion for a “good” design.