

Home Landscape Design



A well-designed and functional home landscape can add to your family's joy and increase the value of your property. Modern landscapes are meant to be beautiful and useful. A well-planned landscape provides your family with recreation, privacy, and pleasure. Conscientious homeowners know that the landscape should also have a positive environmental impact. **Figures 1 and 2** depict the front and back yards of a Southern home. Throughout this publication, each step of landscape design is illustrated using this sample landscape. If you want to jump ahead, the completed landscape plan is **Figure 33**.

This publication is designed for avid gardeners and gives simple, basic approaches to creating a visually appealing, practical home landscape. If you are computer savvy, you may find it helpful to use a landscape design software program to help you through the process.

By following the step-by-step process of landscape design, you can beautify your property, add to its value and bring it to life with your own personality and style. The best landscapes reflect the uniqueness of the family and the region. Whether you want to do it yourself or leave it to a professional, this publication will help you understand the process that is involved in designing a landscape. Understanding the process will help you to ask the right questions when and if you consult a professional.



Figure 1. Front landscape. Drawing by Richard Martin III.



Figure 2. Back landscape. Drawing by Richard Martin III.

Professional Help

The idea of designing a home landscape can intimidate even serious gardeners. Wise people know their limitations. Consulting a professional when necessary can prevent costly mistakes. For this reason, don't let the cost of a designer keep you from asking one for help at any time during the design process.

Keep in mind that you can hire a professional to help you during a particular step without hiring one to do the entire design. For example, you might need help developing your base plan and site analysis, or you might ask for a consultation when you have the first draft of your landscape design to get a professional's opinion and input. Safety is always a consideration for constructed items, such as retaining walls, arbors, and steps. A licensed landscape architect can help you create a design to ensure these items are safe (see Working with a Landscape Architect at <http://msucare.com/lawn/landscape/resources/architect.html>). Landscape contractors can help you build and install your ideas (see Working with a Landscape Contractor at <http://msucare.com/lawn/landscape/resources/contractor.html>).

You should develop a relationship with the staff of your favorite garden center and involve them in your plan. They can certainly tell you about the plants they grow and sell.

Sources of Inspiration

Don't be afraid to scour landscape design books, the Internet, other residential landscapes, or other sources of information. Use them to spark your imagination and help you formulate design ideas that will work for your landscape. A list of regional books and references may be found at <http://msucare.com/lawn/landscape/resources/books.html>. Attend the garden and patio shows that occur in your area. You'll find everything you need, from professional services and building materials to plants and scores of adaptable ideas.

But, by far, the best source of landscaping ideas is your memories of gardens, landscapes, and natural places. You may want to recreate that corner herb garden that you remember so vividly from your grandmother's yard. Or it may be that secluded garden bench tucked away under a bower of sweetheart roses that holds nice memories for you. It could even be those wild muscadine grape vines you climbed as a child to reach the plump, juicy fruit—all these memories could be recreated and mixed with the desires of other family members to create a landscape that you and your family will treasure for years to come.

You may do most of your initial landscape planning in your head. But to capture those ideas most effectively, write down these observations, ideas, and expectations as they come to you. Use your digital camera to take pictures of plant combinations, landscapes, or gardens that are particularly appealing. You can even take digital pictures of magazine or book pages that show plants or landscape ideas you like. Then you could create a home landscape idea file on your computer for reference later when you start the actual design process.

Value of Landscaping

An ideal home landscape design should have value in four ways: aesthetically, economically, functionally, and environmentally.

Aesthetic

Aesthetic value can be achieved in many ways: by enhancing beautiful areas, creating new ones, or screening unattractive parts of the property. Using features in a landscape that impact all five senses can add to your pleasure and enjoyment of the landscape.

Economic

A well-designed landscape can increase the value of your home and property by as much as 15 percent. Landscaping can also reduce energy costs by buffering seasonal temperatures. Research indicates that heating or cooling bills could be reduced by as much as 30 percent by the proper placement of plants around the home. For example, proper placement of shade trees could provide cooling in summer, while evergreen trees could block cold winds in winter.

Function

Landscaping offers a special functional value, too. Well-placed trees, shrubs, turf, and construction features increase the amount of the property you use. A little shade in the right place, a little sun in another, a place for the kids to play, a private patio, pool, or deck—all these add to the enjoyment of being outside.

Landscaping helps you solve problems and cut down on maintenance. For example, groundcover used on a steep hill in the yard can help you avoid lawn maintenance headaches, and groundcover on a very steep slope may be essential to prevent erosion.

Environment

Environmental benefits of a good landscape design can provide climate control and many other energy-saving measures. For example, trees and shrubs can influence wind, water, light, noise, and temperature around the home landscape. Water can be conserved and used more efficiently. Plants can also provide erosion control and a habitat for wildlife. In addition, plants in the landscape help clean the air of dust and some pollutants. Proper plant selection and placement can deter fire and criminal activity.

Steps in Developing a Landscape Plan

All good ideas begin with a plan. Homeowners who begin installation without a developed plan may end up unhappy with the results. An unplanned home landscape built in separate steps sometimes does not coordinate well together when completed. Form a detailed overall plan before beginning installation. A good landscape design can provide a plan for phased installation, allowing a large or expensive landscape to be completed in stages as resources become available. A plan is a logical series of decisions that becomes the best overall idea.

There are seven basic steps to creating a landscape plan:

1. Develop a base plan
2. Conduct a site analysis
3. Assess family needs and desires
4. Locate use areas
5. Design outdoor use areas
6. Select and place plant symbols on plan
7. Establish priorities for implementation

Step 1. Develop base plan or plot plan

Purpose

Begin by developing a simple, scaled drawing of your existing landscape from a bird's-eye view. This map, or base plan, should accurately locate the property lines, house, drives, walks, fences, utility lines, existing trees, and other features that can affect your landscape development. There are many ways to measure and record the features of your landscape onto paper. Try one or more of the following techniques.

Identifying Your Property Lines

This step can be much easier if you obtain a map that shows the property lines and the house's location on the property. This may be a plat, a deed map, the architect's or builder's plans, or a topographical plan with contour lines showing the site's elevation or graduation. The map may include the fixed structures and hardscape—house, driveway, sidewalks, fences, walls, etc.

Depending on where you live, a plat may have been included in the papers you acquired when you purchased your home. If not, you may be able to obtain it from the city or county assessor's office. While you're there, you can request a copy of all local ordinances regarding easements, height restrictions, building codes, and any other regulations that could impact your landscaping project.

If you have difficulty verifying your property lines, you may need to call a registered land surveyor to locate and verify your property boundaries. You may use this survey plan as the basis for your scaled drawing.

Getting Started

Develop your base plan by using a piece of tracing paper to make a rough sketch of your property. If you have a large property, you may want to break the base plan into several drawings (front, side, or backyard areas of the landscape) or use large paper. Regardless, your sketch should show your property's general shape. Be sure to label the street and property lines. A directional arrow to indicate north is useful.

Gathering Equipment

Gather the equipment needed to take and record accurate measurements: 50- or 100-foot tape measure, pencils, erasers, and a large clipboard to hold your tracing paper. You may find that a measuring wheel works better for you than a tape measure. You will also need graph paper or a drawing scale to transfer your rough sketch into a scaled drawing. It is better to have a partner to help you take measurements using a tape

measure. If you don't have help, use a long screwdriver to go through the loop on the end of the tape and into the ground to hold it in place as you measure.

Taking Measurements

Now take the rough sketch of your property and begin to take measurements using the techniques described in the following sections. After all the measurements have been made, the rough sketch can be brought back indoors and a final base plan drawn to scale. For properties smaller than an acre, a scale of 1 inch = 10 feet (measure with an engineer's scale), or $\frac{1}{8}$ " = 1 foot (measure with an architect's scale) are appropriate drawing scales. For planting beds having a large variety of species, the architectural scale of $\frac{1}{4}$ " = 1 foot may be chosen. This larger scale can be a good choice when needing to show greater detail, such as in beds located adjacent to buildings or hardscape areas. Construction drawings for a building (also called floor plans) are frequently drawn in $\frac{1}{4}$ " scale, and these can be used as a base map for your planting plan. Use an architectural ruler or an engineer's scale to measure. These supplies are available at most drafting or art shops. See **Figure 3** for a sample base plan.

The base plan should show the following information:

- All property lines
- Bodies of water (streams, lakes, ponds, low areas)
- Buildings, including
 - floor plan with doors and windows
 - downspouts
 - outside water spigots
 - outside electrical outlets
 - decks and overhangs
 - air conditioner units
 - utility connections and meters
 - driplines
- All walls, fences, utility boxes and poles, fire hydrants, etc.
- Roads, drives, parking areas, walks and paths, patios, swimming pools
- On- and off-site utilities, above- and belowground, including electric, telephone, gas, water, sewer, septic tanks, and field drains. Notify Miss Utility (#811) to have underground utilities located.
- Existing vegetation, especially large trees
- Off-site elements including adjoining roads and drives, bodies of water, and structures
- Compass directions showing north, east, south, and west
- The scale size of the base plan

Identifying Property Lines

Find your property lines by using the plat, survey records, or other records. Measure each property line with a tape measure and record it on your rough sketch. If your property has side boundaries that are not parallel or if your home is not parallel to at least one boundary, you must make an additional

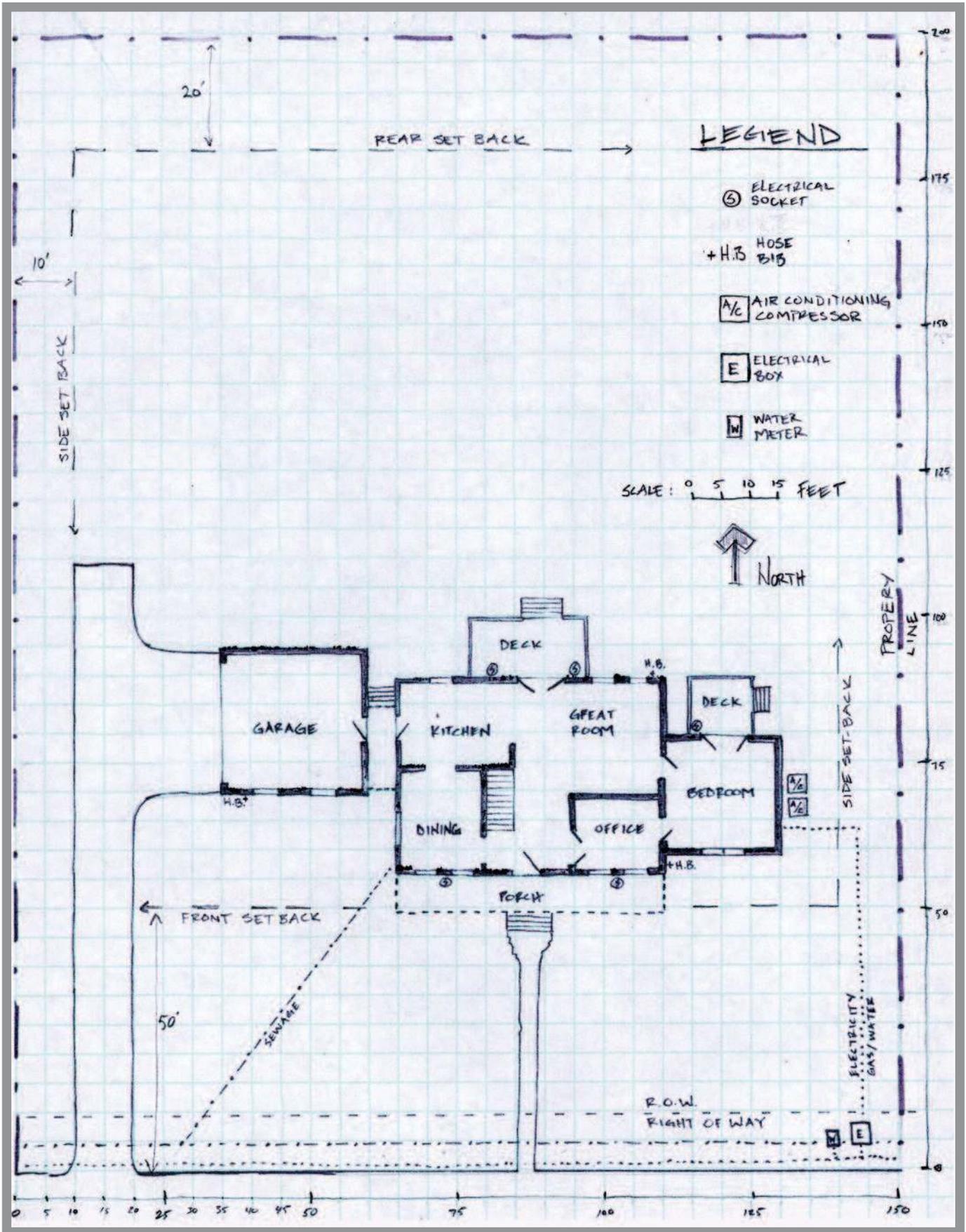


Figure 3. Base plan. Drawing by Richard Martin III.

measurement to draw the correct corner angles in your final drawing. Ask another person to help you by standing on the property line while you sight along the house wall toward them. Ask them to move to the left or to the right, as needed, to be in line with your sight line down the wall. Then measure the distance from your helper along the boundary line to the nearest corner. (Reference points D to H in Figure 4.)

In a similar manner, ask your helper to stand on the front property line. Align him or her on your sight line as you look down the side wall of the house toward him/her. Again, record the distance from your helper to each property line. (Reference points A to E and A to D in Figure 4.)

Locating House on Property

Accurately locate the front corner of the house by first measuring the distance from the street to the corner of the house (A to B as shown in Figure 4). Then measure the distance from the side property line to the front corner (B to F as shown in Figure 4). Locate a back corner of the house by measuring from the street to the back corner (A to C), and then measure from the back corner to the side property line (C to G).

You can record the measurements of each side of the house by using a set of blueprints of your home, by using the survey record, or by making measurements of each side. Be sure to indicate location of doors, width of windows, and height above ground level. Don't forget to measure heights from ground level of porches and decks. See Figure 5 for the method of measuring windows and doors.

Locating Outlying Landscape Features

You are now ready to locate the other features of the property. These features include above- and belowground utilities such as gas, water, electric, telephone, and sewer lines. Also included are TV cable, septic tank, field lines, utility meters, water faucets, roof overhangs, retaining walls, and fences. Don't forget to include existing trees and other plants you want to keep in the new landscape design. Depending on the quantity and locations of existing plants you plan to remove, you may also want to include them, especially if you will not be performing the removal yourself. If all of these features will not fit easily onto one base plan, you can create other plans to include features such as existing plant material and physical structures. See Figure 6.

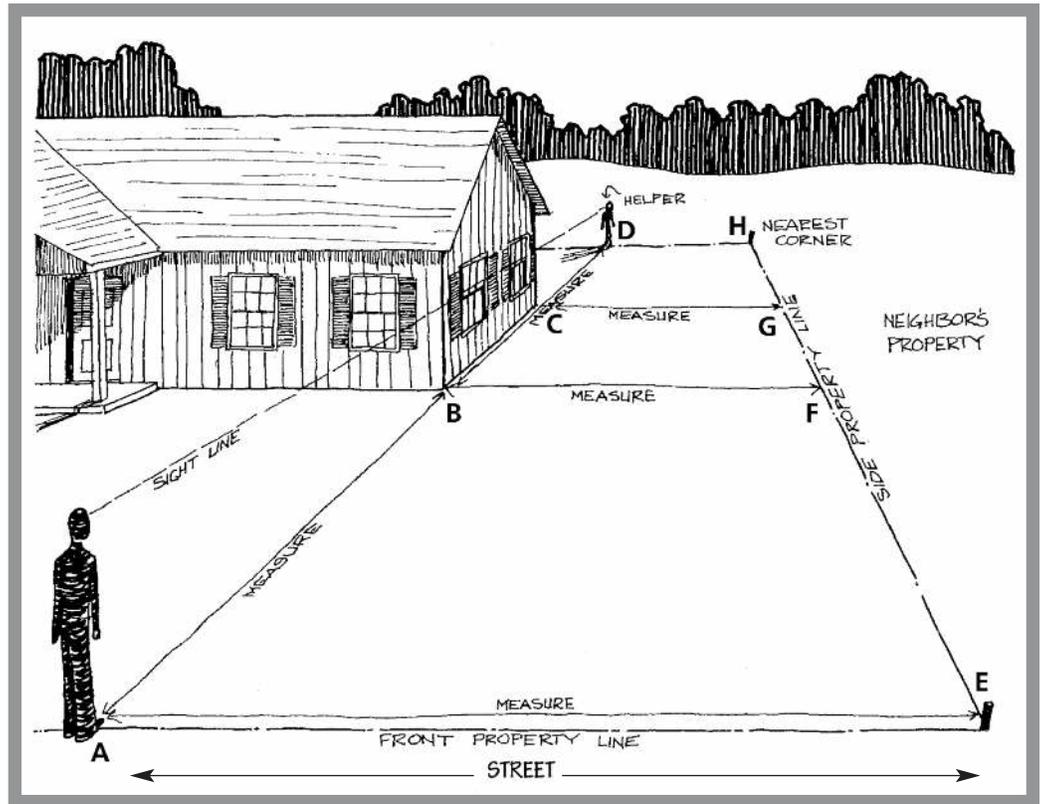


Figure 4. Measuring property lines.

MEASURING METHODS:

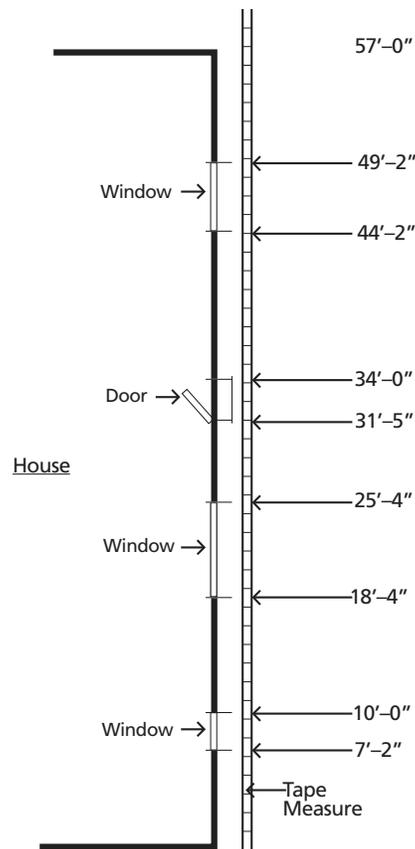


Figure 5. Baseline measuring: Used to locate doors and windows.

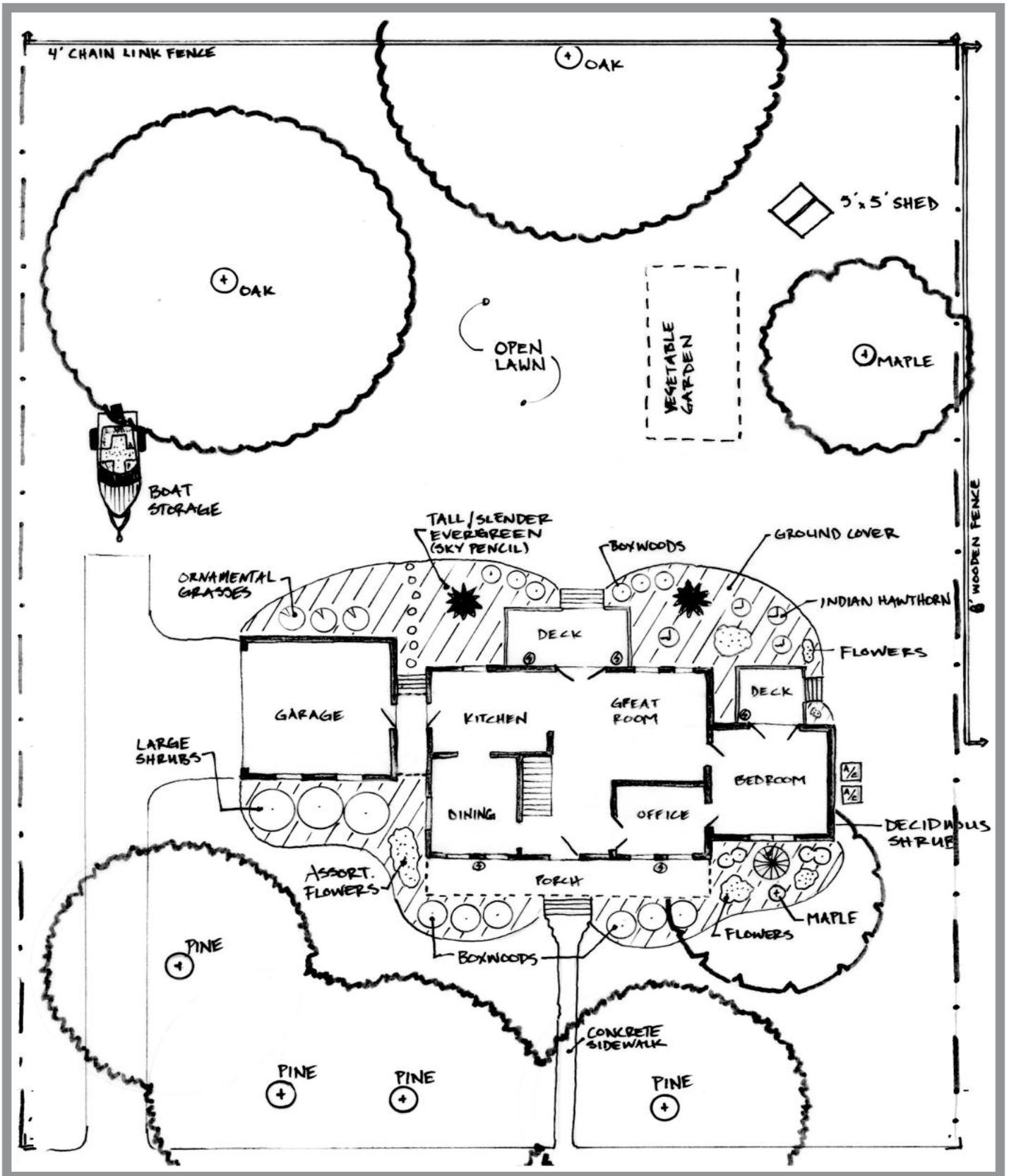


Figure 6. Inventory of existing plant material and physical structures. Drawing by Richard Martin III.

Natural features such as ditches, ravines, and steep slopes should be included. Also include neighboring buildings and existing vegetation, especially large trees, that will impact your landscape. You can locate these outlying features on your rough sketch by measuring in two directions from a known reference point, such as the house, street, or property line.

See **Figure 7** for a method of using the sight line of the house to locate an existing tree in the landscape. Trees or other feature points can also be located by a triangulation measurement (**Figure 8**). Measure the distance from two known points (A and B), marking on the base plan where these two distances meet along radii drawn by a compass.

1. Record the measurement from the house corner straight out to point A, which is aligned with the corner of the first tree.
2. Measure from point A to the center of the first tree, point B.
3. Measure straight out from point B to the point that aligns with the center of the second tree, point C.
4. Measure straight out from point C to the center of the second tree, point D.

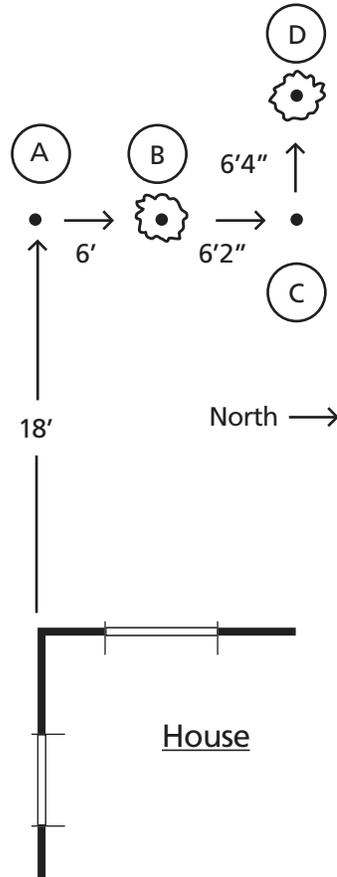


Figure 7. Measuring to outlying objects.

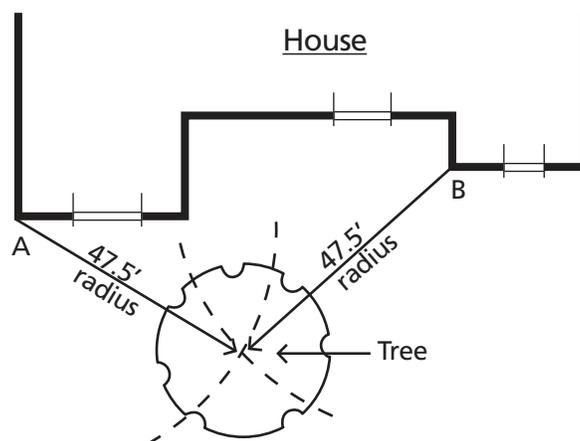


Figure 8. Triangulation measurement.

Measuring Curved Areas

You may have a curved bed, driveway, or other area. To measure the curve, you need a straight line from which to measure. If the area does not have a wall or fence backing it, create a line with string and stakes, a hose, or another measuring tape. Start at one end of the curved area. Lay out the tape

from the beginning point of the line to the outside edge of the curve to measure the distance. Repeat this process every 3 feet until you have measured the entire area. This will result in a series of dots on your base map that reflects the curving edge of the area. Connect the dots to determine the general shape of the area. See **Figure 9**.

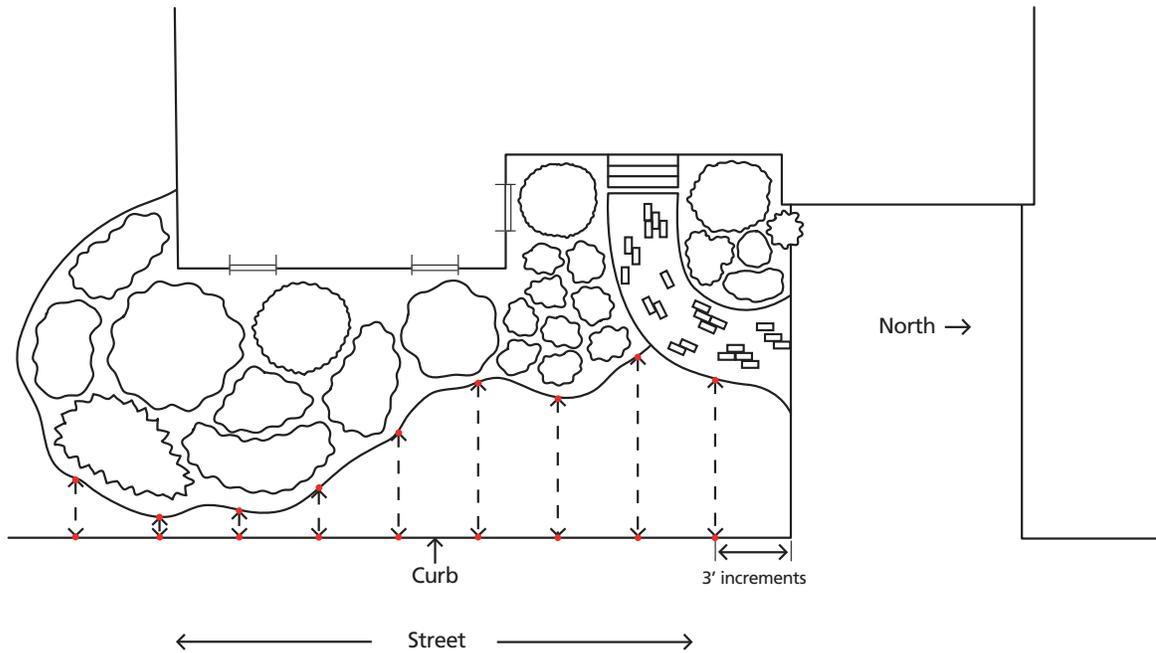


Figure 9. Measuring curved areas.

Measuring Angled Features

Be careful with angled surfaces that are created by bay windows, decks, patios, and other irregularly shaped protrusions. These can be tricky to measure. A simple technique to measure an angled feature is illustrated in **Figure 10**.

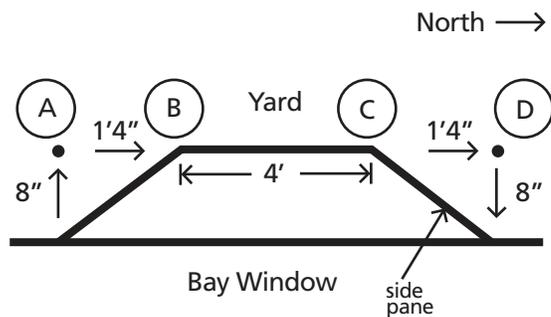
Transferring Measurements to Final Base Plan

The final base plan should be drawn on graph paper using the largest scale that will fit your property area. For example, a property area measuring 100 feet by 70 feet would easily fit on one 8 1/2 x 11 piece of 10 x 10 squares per inch graph paper if using a scale of 1 inch = 10 feet.

Graph paper is sold at bookstores and the office supply sections of large discount stores. Review your rough sketch and measurements of your property and landscape features. Start the final base plan by drawing a line across the bottom of the grid to represent the edge of the street or road in front of your house. If you have a corner lot, draw a second line to indicate the side street. Now, mark the compass directions on your base plan by indicating north with an arrow. Place east, south, and west in the appropriate area.

You should find out all of the restrictions, easements, and rights-of-way associated with your property. In most cities, the sidewalks are on city property, with the homeowner's property line beginning somewhere inside the sidewalk. You should avoid permanent plantings or construction in the easement areas, which are commonly used for widening streets and accommodating utilities.

After determining the distance of the easement, locate your front property line on your paper and draw it in lightly. Then,



1. Measure out from the house to points A and D to find out how far the window projects into the yard.
2. Measure from A to B, from D to C, and from C to B to find the width of the window.

Figure 10. Measuring angled features.

measure and draw in the side and back boundaries of your property. If your side boundaries are not parallel, you should draw the front boundary line and then use the sight line to draw the back boundary line. The side boundary line can then be located by using the measurements from reference points A to E and D to H as explained earlier in **Figure 4**. By establishing these four boundary lines, you have an accurate outline of your property.

Now, you can draw in your house by locating the corner that you measured for your rough sketch. It will be a certain distance from the street and a certain distance from the nearest property line. Count the squares on your graph paper and locate the corner of the house. Then draw in the measurements and shape of your home. Be sure to indicate doors, window heights and widths, and windowsill height from ground level.

Next, transfer all the other features from your rough sketch, including all features that will have an effect on your landscape design.

To draw in a curved feature on your final plan, transfer from your tracing paper the series of dot measurements along the curved edge of the area onto your scaled drawing. Then use a French curve to approximate the curved line. (French curves are available from office supply stores.) Rotate the French curve until some part of the inner or outer edge touches at least three points you have located. This curved line will accurately represent your feature.

When you have added all the features, you have a very accurate base plan of your property. Again, if it is not possible to accurately include all features on one base plan, you can create another base plan or inventory sheet that shows, for example, plant and physical structure inventory as shown in **Figure 6**. It might be helpful to create this plan on tracing paper so it could be placed over the base plan to create a complete “picture” of the property. See **Figure 3** for base plan. The completed base plan is your reference map while developing your landscape plan.

Before proceeding to Step 2, carefully review the following list and make any needed additions to your base plan.

Step 1 Checklist

1. Accurate property lines
2. Proper location of house, drives, walks, fences, patios, porches, decks, etc.
3. Location, kind, and condition of all trees and plants
4. Electrical poles, lines, exterior outlets, and meters
5. Gas, water, and sewer lines, including cleanout locations, and meters
6. Telephone and TV cables (above- or belowground)
7. Manholes in storm sewers and fire hydrants
8. Compass directions showing north, east, south, and west
9. Roof overhang, downspouts, water spigots, windows, and doors

10. Locations of steep slopes, drainage swales, and where site water is draining

11. Soil types and their characteristics

12. Existing building and neighborhood architectural styles

13. Locations of storage and functional use areas

Step 2. Conduct a site analysis

Purpose

Analyzing the site’s environmental conditions and taking inventory of other conditions of the site, including soil, is an important step. Accurate analysis of the site will help you understand existing conditions. You can then modify areas that need improvements and make the most of natural areas. Note wind, sun, and shade patterns, as well as water movement and terrain levels that impact where you locate play, cooking, garden, entertaining, pool, and other activity areas of the landscape.

Observing Over Time

For the most accurate site analysis, record observations of the site for a year before you start to change any of it. For example, if you purchased your home and property during the winter months, it would be a good idea to go through one growing season to determine the best areas for spring bulbs, perennials, or other plants.

A year of observing your landscape may sound excessive, but taking your time has an advantage. If you move too fast, you could destroy one of your landscape’s assets before you are even aware of it. Observing how the sun moves across your property during the year, where shade occurs, where water collects, which views are concealed or revealed by deciduous vegetation, and where privacy or lighting is needed is essential to creating an effective landscape.

Take time to determine where the favored pathways run. Where is the best spot to store gardening tools or equipment? It takes time to see the best views to enhance or the less attractive views to conceal. Remember to conduct part of your site analysis from inside your house, observing the views from windows and doors through the season. The view of your landscape as seen from inside your house is very important. Unattractive features should be hidden from view and attractive features emphasized.

Getting Started

Start the site analysis by taping your base map onto a rigid piece of cardboard or other material for stability. Take a clean sheet of tracing paper and place it over the base plan. Trace all existing features from the base plan—property lines, outline of the house, existing structures, paving, and plants. This duplicate will become your site analysis.

Recording the Landscape

Refer to **Figure 11** and the **Step 2 Checklist** to guide you through the site analysis items. The following paragraphs will help you accurately record features and patterns of sun, shade, wind, noise, soils, land form, surface drainage, and views. Put labels on the approximate location of each item or condition. Use arrows to indicate patterns of access, views, and slopes, labeling each one. Now take a look at what you have created. You should have an emerging picture of what your property looks like.

Look at the relationship between spaces. Is your parking space near the door you use most often? You may realize that you have incompatible zones of use side by side. Can you see and smell the dog pen while sitting on your patio? You may need to move or screen the pet area. What is the view from your family room picture window? Hopefully, it isn't the neighbor's woodpile or messy tool shed. Add notes, circles, and arrows as needed to show how existing zones of the house and yard work together or clash. The more detailed you make your site analysis, the better tool you will have when you go through the other steps in the design process.

Understanding Environmental Features or Patterns

Sun and Shade

The angle of the sun as it moves across the property in different seasons of the year is very important in determining how to plan for shaded and open areas. In Mississippi, the summer sun rises slightly to the northeast, is straight overhead at 12 noon, and sets slightly to the northwest. Look at your property and make notes on the summer sun's effects on your house. Indicate shady and open areas. See **Figures 11** and **12**.

Also consider the winter sun's effects. The winter sun rises in the southeast, remains low in the southern sky, and sets in the southwest. Use arrows to indicate how the winter sun affects your house. By knowing the sun's movements in summer and winter, you can decide where to locate summer shade and where to provide open areas to allow the winter sun to warm your home and outdoor living area.

Wind

Wind can be harsh and cruel during the winter but bring a cool breath of relief during the summer. In most areas of Mississippi, the winter winds are from the north and northwest. Summer winds are from the south and southwest. The three coastal counties of Mississippi enjoy a southerly Gulf breeze during most of the year. Look at your property and determine the orientation of the prevailing winds. This information will help you determine the natural placement of screens to protect you from harsh winds.

Noise

Everyone will not be fortunate enough to enjoy the quiet of country living. Homes in cities and suburbs can be constantly bombarded with noise from motor vehicles, activities of neighbors, and industry. Many noises can be buffered by

planting densely foliated trees and shrubs. Look at the property and determine if you and your family will have objectionable noises. Make these notes on your analysis sheet.

Soils and Land Form

Soils greatly affect the choices of trees, shrubs, and lawn grass. It is especially important to look at the soil around the house's foundation. Modern construction techniques usually turn up subsoil that is spread near the foundation. These subsoils are often tight clays lacking in structure or texture necessary for good plant growth. If you propose to use foundation plants, you must consider these soils.

You should take a soil test every 20 feet along the sides of the house and 2 feet out from the walls. Take the soil samples carefully and do not allow mortar mix or concrete chips to be included. These materials could ruin the test results and your plants. Make sure to remove those undesirable materials before soil preparation. For information on how to take and submit a soil sample, contact your local Extension office. The county Extension office can supply you with soil sample boxes and the instruction sheet. You can also view the Mississippi State University Extension Service online video "Taking a Soil Sample" here: <http://msucares.com/gardenvideos/>.

Surface Drainage

Next, you should determine the direction of surface water drainage. Use arrows to indicate how water runs off the property. Also indicate any areas where water runs onto your property from neighbors and vice versa. Take special note of any areas that are eroding, or washing away. In addition, indicate areas where water stands for long periods of time. It is best to perform these observations during multiple rain events of varying duration or intensity.

Views

Your site analysis should determine the desirability of views seen from all sides of your property as well as from inside the house. Indicate these on your analysis notes.

Review the checklist below before proceeding to Step 3.

Step 2 Checklist

1. Sun patterns and movements by season across the property
2. Hot areas, shady areas, and cool areas
3. Areas that need shade
4. Windy areas
5. Noise screens
6. Existing soil conditions, especially around home foundation
7. Soil test results
8. Poorly drained, wet, soggy, or low areas
9. Surface water drainage routes, including downspouts, drainage swales, and areas water drains
10. Areas where erosion is occurring
11. Slope of property, including banks, gullies, ditches, hills, knolls, etc.

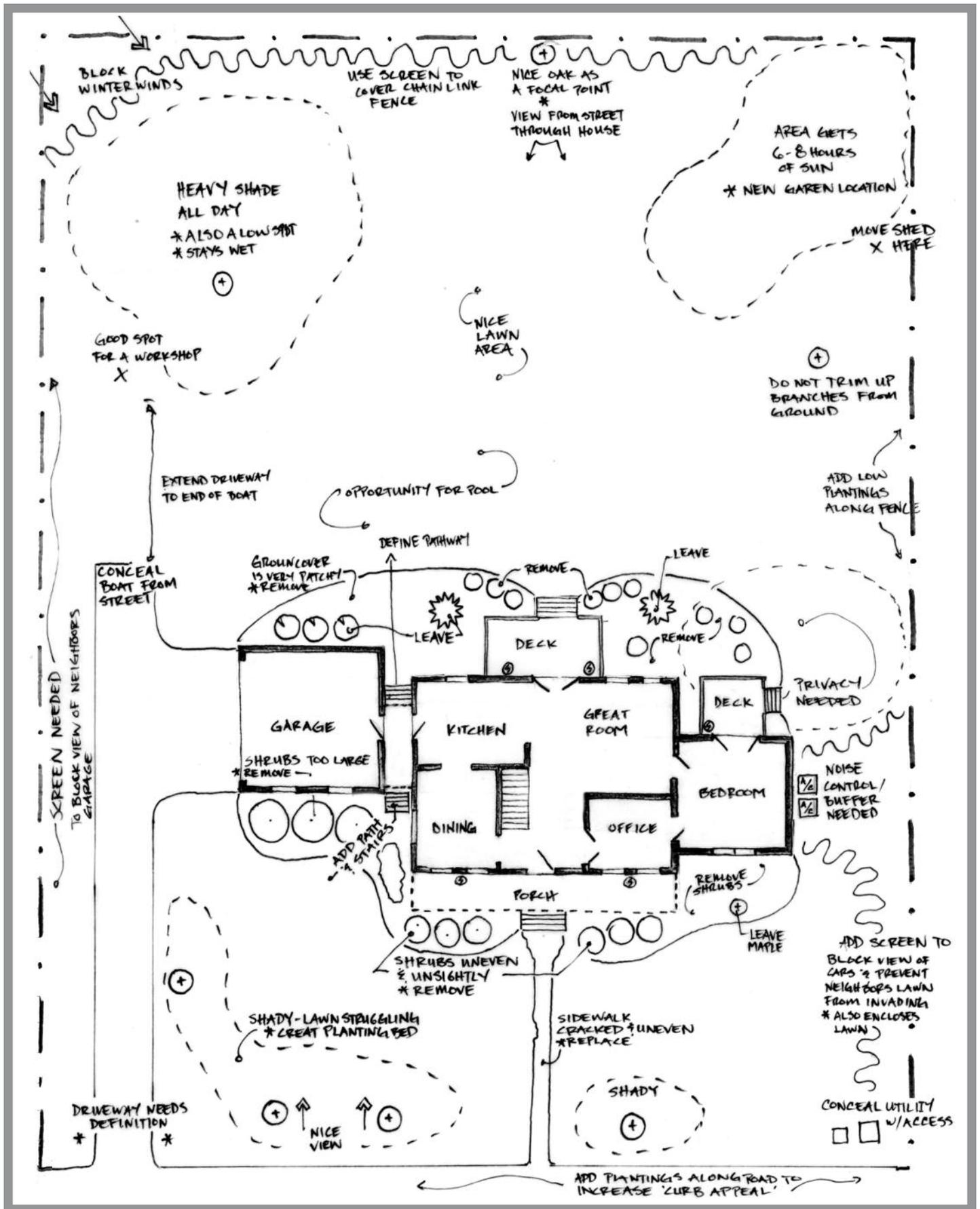


Figure 11. Site analysis. Drawing by Richard Martin III.

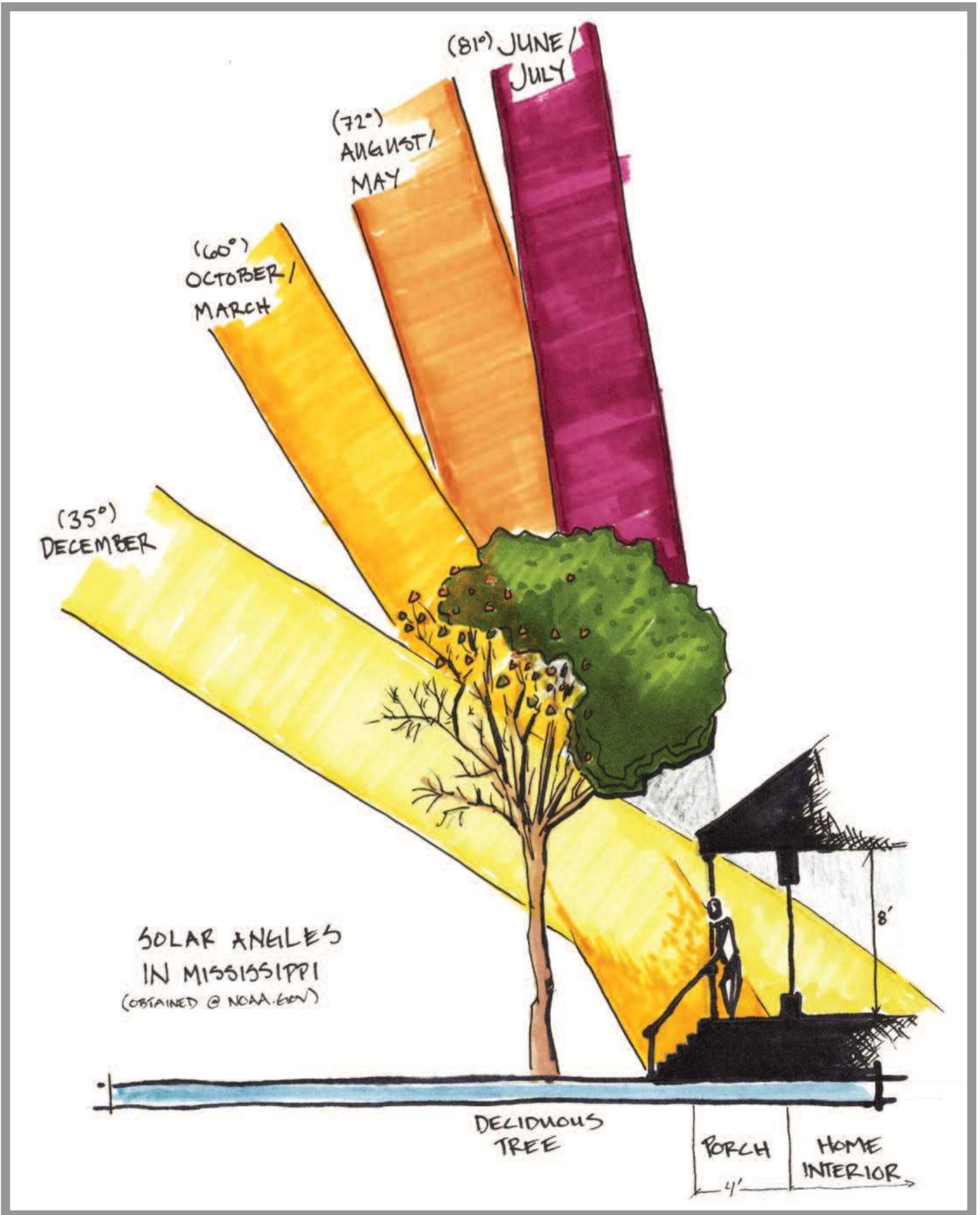


Figure 12. Solar angles in Mississippi. Drawing by Richard Martin III.

12. Condition of all trees and shrubs
13. Good views and poor views (both on and off property)
14. Items that need to be replaced or repaired, including fences, driveways, walls, walkways, patios, etc.
15. Health and condition of lawn
16. Valuable wildlife plants and areas
17. Invasive, exotic plants to be removed
18. Any other features that need to be improved

Step 3. List the family's wants and needs

Assessing your family's needs

With a complete base plan and a thorough understanding of the site, you are now ready to list your proposed use areas. Each family's needs vary with their outdoor activities. These are the types of areas you may consider when developing your landscape plan:

- Pet areas, such as open lawn and pens
- Cooking areas
- Sun bathing, lounging, or reading areas
- Entertaining areas
- Recreation areas
- Outdoor storage for equipment, firewood, vehicles, or boats
- Gardens, water features, pathways
- Attractions for birds, butterflies, and other wildlife

As you consider the areas you will include, be realistic. How much time are you willing to spend maintaining gardens and use areas? Be sure to budget how much you are willing to spend for various improvements.

Step 4. Locate the use areas

The outdoor areas of your property should tie into the areas and activities within your home. For example, outdoor cooking areas should be located near indoor kitchen or dining facilities. Service and storage areas should be located away from main use areas and views from the home. Patios and decks should connect directly into main entrances of the home.

Take another sheet of tracing paper and overlay onto the base plan. Draw zones where these different use areas could best occur and their approximate sizes. Try several different schemes until the best layout is evident.

Figure 13 shows an example of a general layout plan.

Step 5. Develop outdoor use areas

It is easier to develop each of the outdoor use areas separately and later combine them into the overall plan. Imagine yourself sitting within or using each area as you develop the design ideas. For example, to design a patio space, first decide on the elements that would make a successful seating area. You may include seats, tables, overhead shade structures, a sense of enclosure, views, water features, or other elements. Reviewing your home landscape idea file, looking at

garden magazines and books, and visiting other successful spaces may provide visual ideas to assist you. Remember to keep in mind the important principles from your site analysis so that your proposed use areas do not conflict with other elements, such as utility lines, water drainage, and other existing conditions.

To get an idea of the size of a space, use a garden hose to approximate the outline for the area. Move the garden hose to adjust the size of the space until it is the appropriate scale and form. It is best to select building material types and forms that will match and fit the character of the home and the surrounding area. After you have chosen the size that seems best in the landscape, transfer this general outline to the landscape plan at its proper scale.

Considerations for designing or creating outdoor living spaces

Just as a room in a house has walls, ceilings, and floors, so does a landscape space. As each room is designed for a specific function—kitchen for preparing food, living room for leisure, bedroom for sleeping—so are outdoor use areas. Outdoor spaces should accommodate their functions: eating, relaxing and talking, playing, or gardening. See **Figures 14, 15, and 16** for examples of these outdoor use areas.

Outdoor “ceilings” may be composed of constructed materials such as building overhangs, arbors, fabrics, or other materials. See **Figure 17**. They may even include the open sky or the branches of large canopy trees overhanging the space.

Many different floor materials may be used in an outdoor space, and detailed flooring materials such as pebbles or brick may provide a rich ground texture. There are many good paving materials that provide a wealth of colors and patterns. A solid pavement allows for permanent heavy use and provides direction for traffic (**Figure 18**). Turf and vegetated groundcovers are suitable for areas that are infrequently trodden, and may provide a strong contrast to nearby hardscape materials (**Figure 19**).

Fences or building sides can provide a sense of enclosure. “Walls” may be constructed of stone, brick, concrete, wood, or metal (**Figures 20 and 21**).

To hide adjacent views, these walls work best when more than 6 feet tall. Wood slat fences or open masonry block may provide a sense of enclosure yet still allow breezes into the area. Evergreen plants can be dense enough to allow for privacy while still allowing some air to pass through.

Just as a room in a house has hallways and doors, courtyards and other landscape spaces also have pathways and entry areas. These should be designed to make one feel that they are transitioning to or entering a special place. Gates are a wonderful way to separate different outdoor spaces (**Figures 20, 21, and 22**).

An entry may be framed into a courtyard space by using a pergola or trellis, creating an inviting entrance. These separate the patio space from the lawn or front entry.

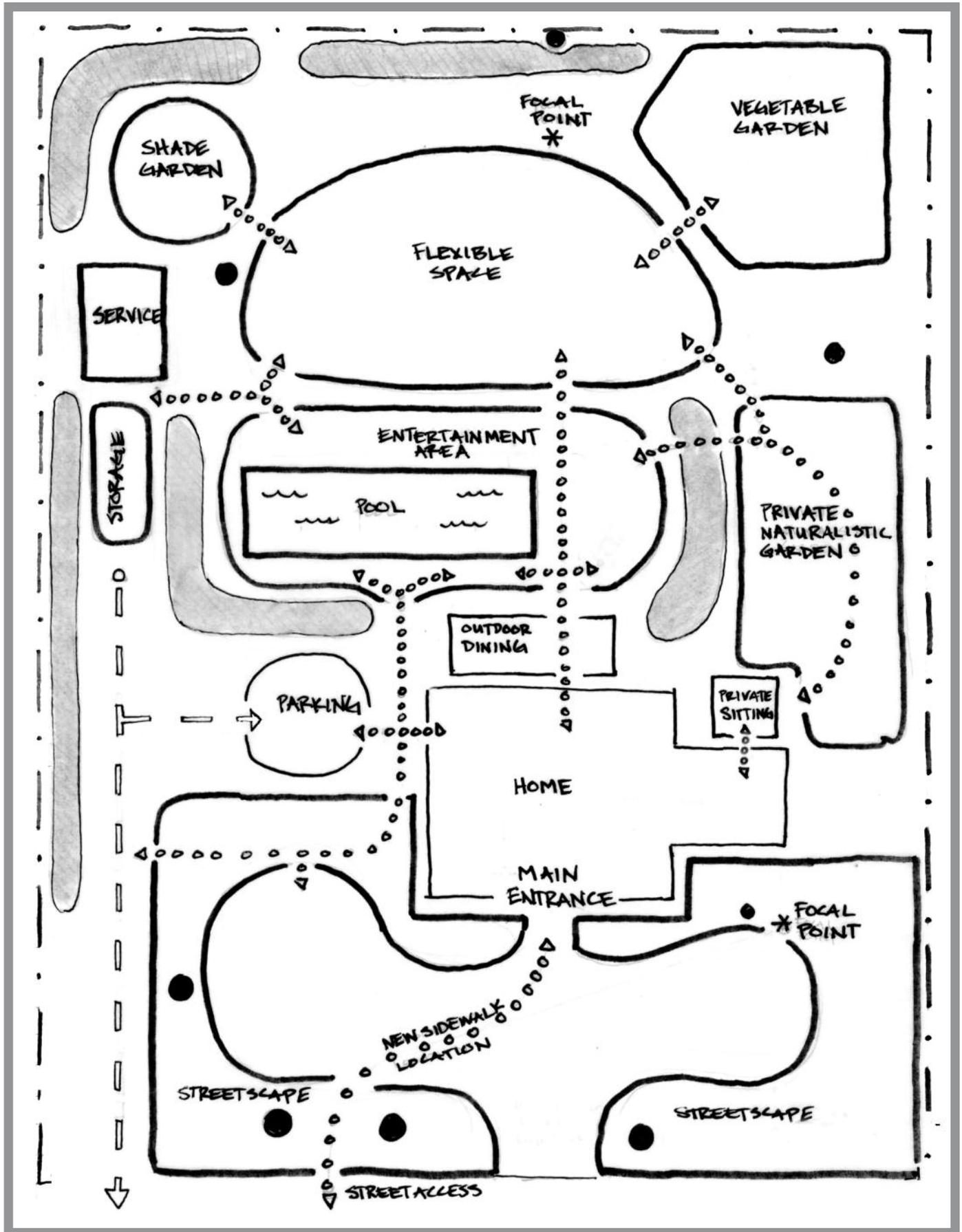


Figure 13. Locating use areas. Drawing by Richard Martin III.

Garden rooms are designed for the activities and functions that will take place there—such as sitting and relaxing. Make sure the areas are comfortable. For example, in a Southern climate it is especially important to provide shade from the hot sun (Figure 23).

For social spaces, include seats and tables, a place to serve food, and lighting for night functions. Organize seating in nooks or crannies away from the main walkways (Figure 24). This keeps seating out of the main traffic path and offers more privacy.

Small, personal spaces create opportunities to provide detailed features. Adding lush plants, urns and planters, and just the right bench in just the right spot can create a rich environment.

A key for creating personal spaces is to keep all things sized for the number of people that will typically use them. For example, a small wall ornament would get lost in a large garden, but a small area is the perfect place to put detailed features such as art objects and garden ornaments. Water is a wonderful element to add to gardens, whether it is a still, shallow pool with a few lilies or a feature with a spray head that provides more activity. Small courtyards and garden spaces are appropriate places for sculptures and features of interest. Any area for night gatherings is a great place to add fire for cooking, warmth, light, or character. Small spaces can also showcase strong plant textures (Figure 25).

Richly textured plants, such as palms and bamboos, do not take much room because they are tall and grow out of a nar-



Figure 14. This outdoor living space consists of two separate areas. The chairs, buffet table, and food cart in the foreground form a seating area. The dining table and chairs to the back create a dining area. These areas are defined and enclosed with a brick wall, shrubs, trees, and container plants. Photo by Lelia Kelly.



Figure 15. Providing convenient spaces for sitting throughout the garden makes the landscape more enjoyable and usable. The low hedge encloses the space and adds texture. Photo by Lelia Kelly.



Figure 16. Outdoor fireplaces make wonderful places to gather in the cooler times of the year. Seating and other accents, such as potted plants and sculpture, make this area attractive year-round. Photo by Lelia Kelly.

row bed area. This is also the perfect place for fragrant plants, such as roses, gardenias, and jasmine. The walls actually contain the aromas somewhat, so you can really appreciate the subtle scents of plants.

Here are a few use areas to consider:

Vehicular access and parking

Most likely your driveway and walk already exist, but they can be changed if there is a more functional and practical solution. Think about the arrival of your guests or yourself and how you would like to be welcomed to your home. Would you like to see flowers at your driveway entrance, to park in a shaded spot, to have enough pavement at the edges as you step from your car? Should there be a separation from the drive and parking to the entry walk of the home? These are all personal considerations that add to the quality of your life and guests' experience.

Walkways

Add walks where they are needed, including along the street or to connect from the street to your home. Before adding any permanent paving types, always check the location of property and setback lines. There are many different types of paving materials for walks and drives, and there is a wide variety of installation costs.

An important consideration is whether to use a permeable or impermeable paving material (Figure 26). Permeable means that rainwater can filter through or around the paving, and impermeable means that rainwater cannot filter through the paving material. Loose gravel, unmortared brick on

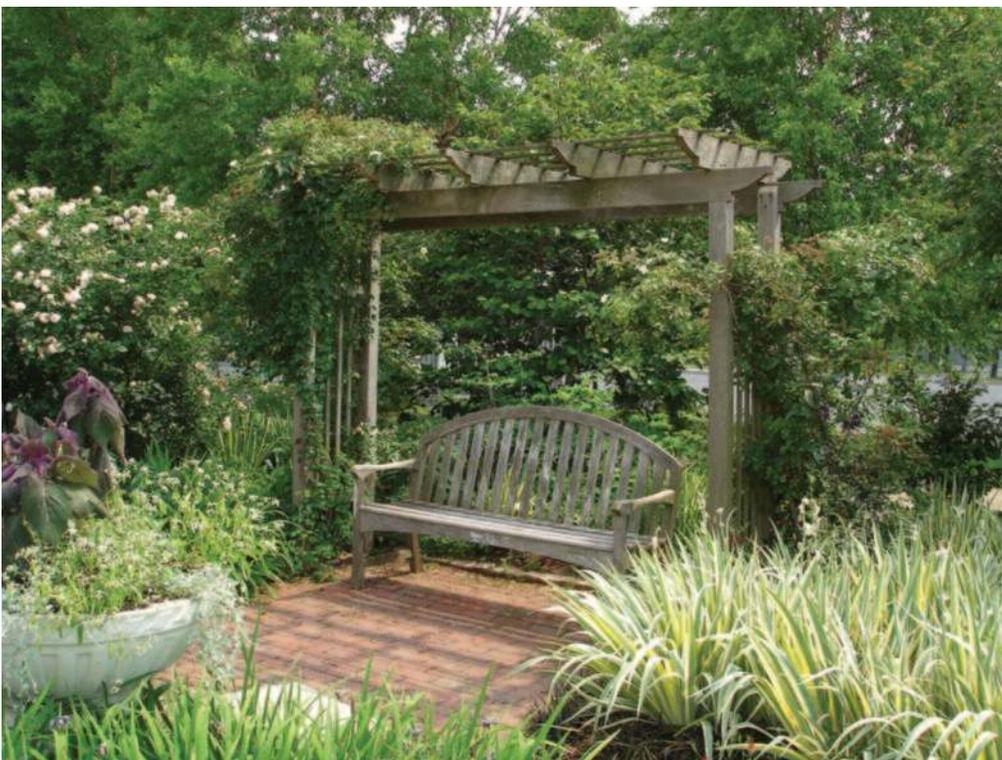


Figure 17. A swing covered with an arbor provides shade and a "ceiling" for this quiet corner of the garden. Photo by Lelia Kelly.

sand, or permeable concrete or asphalt are examples of permeable paving. Urban areas with expansive amounts of impermeable paving are experiencing severe water quality problems in local streams and are having concerns with dropping water aquifers. Because of these water problems, some communities are limiting the amount of impermeable paving allowed in site development.

The front walk should connect your front entrance to where your guests park or to the street. You may consider providing a walkway from the outdoor public area to the private area, so that guests will not have to go through your house or garage to get to the backyard party area. The walkway form should reflect the main type of form used throughout the design. For example, if you are using curved planting beds, the walkway may curve as well to provide an organized approach. Walks should be wide enough for comfortable use. A minimum of 4½ feet is typically wide enough for two people to walk side-by-side together. To add interest to a walkway, consider varying its width. Walks should always be designed for safety and comfort, and public walks must be accessible for disabled or elderly people. Consult with a professional for any walkways that require retaining walls, ramps, or steps.

Accenting the main entrance

For small front lots, the most important focal point from the street is the front door. The main public entry should be easily identifiable and attractive. Typically, all other ele-



Figure 18. If an outdoor “room” will receive heavy traffic, you may wish to consider installing a hard surface. A wide variety of paving materials is available, offering a wealth of colors and patterns. Photo and design by Pat Drackett. Landscape contractor: GroundScape Inc., Biloxi.



Figure 19. For infrequently trodden areas, consider grass or low groundcovers. When selecting turf, research the maintenance needs and durability of the varieties you consider. Photo and design by Pat Drackett.



Figure 20. This courtyard garden is enclosed with a high brick wall softened by lush vines. The door can either allow a view into another area of the garden or add mystery to what lies beyond. Photo by Lelia Kelly.

ments in the front yard should accent and highlight the front entry rather than compete for its attention. The front entry location on the home determines the visual balance of the front composition. Study the appearance of your house. Imagine the entrance as a pivot point for balancing. The house may appear heavier on one side. The “light” side may need more mass (larger plants, etc.) to balance the visual weight of the “heavy” side.

Putting it all together

The form of outdoor use areas should complement the architecture of the home and surrounding structures. For example, if the home has rectangular forms, then rectangular shaped patios, planting beds, fences, walls, and water features are appropriate. Clear and simple designs are always best, as combining various forms can be difficult to achieve successfully.

Label another sheet of tracing paper “preliminary plan.” Draw your ideal vision of each space to scale on this paper. Keep imagining and refining each space until it is fully resolved.

Step 6. Select and place plant symbols on plan

Section One: Selecting plants

Deciding which plants are to be used in your landscape plan may seem overwhelming in the beginning, particularly if you have limited experience with plants. Use your site analysis to help you select plants that fit the conditions of your property. For example, if the front beds are in full sun, choose plants suited to full sun. It is helpful to first make a list of the microclimates found



Figure 21. This beautiful wrought-iron gate serves as both an architectural feature and a security feature by limiting access to this backyard from a sidewalk along a city street. Passersby can still enjoy the view into the garden room beyond. Photo by Lelia Kelly.

in your yard, such as sunny and well-drained, shady and moist, etc. Then, research the plants you are interested in and learn about their site requirements. List each plant under its appropriate microclimate. Find out the following information about potential plants to figure out whether they can be used in your plan:

- Light requirements
- Soil moisture and pH requirements
- Mature size
- Rate of growth
- Maintenance requirements
- Susceptibility to pests and diseases
- USDA hardiness zone
- Heat tolerance

NOTE: The series of Extension publications titled *Selecting Landscape Plants* is a great resource to help you select plants to fit your landscape needs. These can be found at <http://msucare.com/> under the publications section.

Plant Palette

After you have determined the plants that are appropriate for your planting site, group the plants into categories, such as groundcovers; annuals and perennials; low, medium, and tall shrubs; accent plants; and specimen and canopy trees. This will be the “plant palette” that you will select from as you lay out your planting plan. It is helpful to include a photo of each plant and a symbol or note that depicts its light, moisture, and other preferences. After the plants have been divided into groups, you will be able to see what microclimate they prefer. This is a good way to experiment with various combinations of plants and to see how certain textures and flower colors will work with each other.

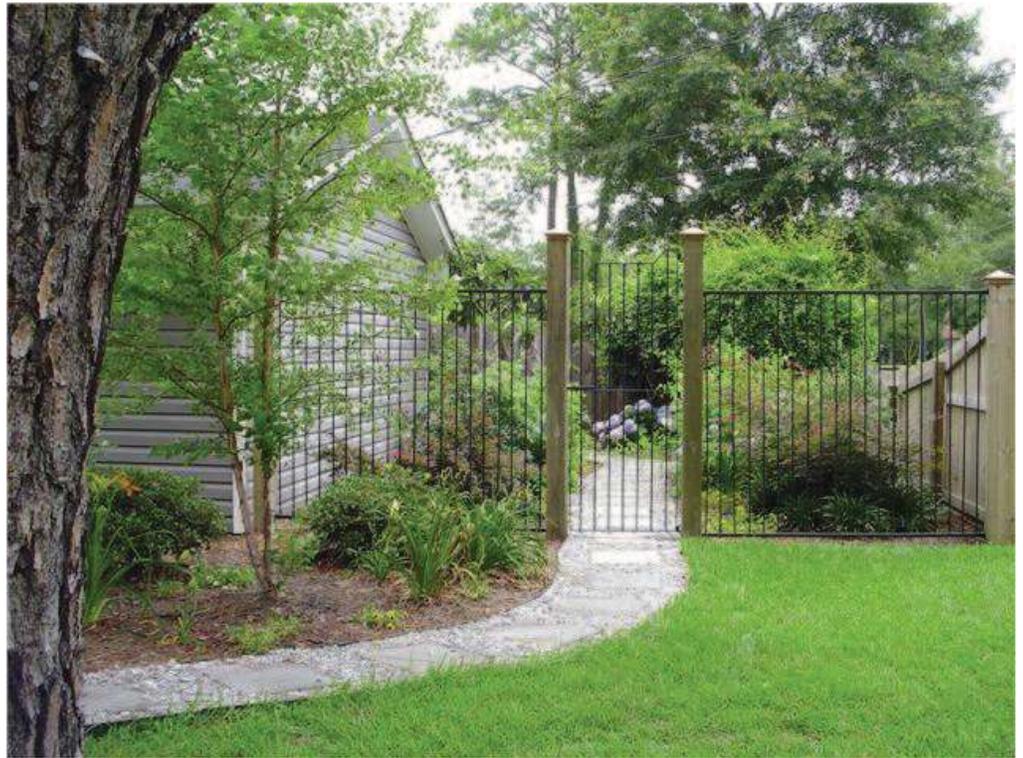


Figure 22. Gates can define the entry of your landscape or separate different spaces. This side yard has been transformed into an interesting garden room accented by a simple but elegant metal gate. Photo by Pat Drackett. Landscape contractor: GroundScape Inc., Biloxi.



Figure 23. This rustic bench is surrounded by cool green foliage and groundcovers and shaded by huge deciduous hackberry and oak trees. Adding to the cool atmosphere is the birdbath. Every Southern garden should offer a cool place to sit on hot summer days. Photo by Lelia Kelly.



Figure 24. A cozy, comfortable place to sit and visit away from the main walkways of the garden makes a nice addition to the landscape. Photo by Lelia Kelly.

Plant Uses

Consider the specific purpose you have in mind when choosing plants to include in your plant palette. If you need to screen an undesirable view, it may be best to select shrubs or trees that are evergreen. These are other examples of specific uses:

- Canopy trees for shade
- Specimen trees
- Foundation plantings
- Accent plants
- Hedges and screens

Ask yourself what function a plant will serve before you add it to your plan. Plants can serve more than one purpose. Trees and shrubs that screen your property line may also provide you with food, such as figs, blueberries, pears, or mayhaws for jelly. Plants can also act as shelter for wildlife or provide cut flowers or fragrance.

Landscape Themes

Landscape beds can be composed of a collection of plants with a specific theme, such as an herb garden, a wildflower garden, a rose bed, or a perennial bed. Those who enjoy flower arranging may wish to create a “cutting bed,” where perennials and annuals are grown solely for their blooms. If you like to observe birds, butterflies, and other wildlife, see MSU Extension Publication 2402 *Natural Resource Enterprises Wildlife and Recreation, Mississippi Recreational Gardens: Establishing a Backyard Wildlife Habitat*, which lists suitable plants and explains how to arrange them to attract wildlife to your yard. Theme gardens are often better suited for private areas of the yard, such as a back yard, rather than in a public area.



Figure 25. This shady understory garden contains a mixture of plants with strong, coarse textures such as fatsia, hosta, and shell ginger. Any of these plants can be used alone to draw the eye or in combination for a lush effect. Photo and design by Pat Drackett.



Figure 26. Permeable walks, such as this paver brick path installed on compacted base material, will allow rainwater to filter through or around the paved surface. These pathways can also make previously unreachable areas accessible to wheelchairs or strollers. Photo by Pat Drackett. Landscape contractor: GroundScape Inc., Biloxi.

Section Two: Consider before beginning your planting design

Foundation plantings

Resist crowding your residence with too many plants. Closely spaced plants may be attractive right after planting, but poor air circulation will lead to disease and pest problems. You want a long lifespan for your landscaping, not to have to replace it every few years! Know the mature sizes of plants to be used in your foundation plantings. The beds surrounding your residence are visually critical because they provide visitors with a first impression.

Place accent trees with broad crowns, such as crape myrtles, far enough away from buildings that the canopy has ample room to grow. Determine the mature width you can expect for a tree you would like to use, and divide that width in half. Measure this distance out from the building and mark it. This is the minimum distance for the center of the tree on your plan. You may need to go out a bit farther if you have deep eaves on your house.

Accent plants can be used on the corners and in front of blank walls of your residence. Do not overcrowd plants near your front entrance, as they will grow out of proportion and may require intensive maintenance. Color and texture can be used near your front door to lead the eye to your entrance. However, it is not necessary to use large areas of color and texture to have an impact. Even a small amount of color will draw attention to an area. Layer the shrubs in the planting

beds by their height, from highest to lowest. A border of low shrubs or groundcovers may be used along the bed edge, if desired.

Siding, eaves, and roof drip lines

Locate plants away from house siding, eaves, and drip lines. Siding can rot or mildew when crowded by plants. Never dig in or spread organic mulch over termite treatment bands. Dry soil under house eaves is a problem when there are no gutters. The force of water falling from the roof can be quite strong, damaging plants, splashing soil against the base of the house, and eroding the soil below. River rock or limestone gravel added below the drip line aids drainage and reduces water damage. Space plants to avoid downspouts connected to underground drainage pipe.

Screening air conditioning units

Dense evergreen hedges are not a wise choice to use for screening air conditioning units, as they can restrict access and air flow to the unit and require frequent pruning. Instead, use plants with an informal, open structure, located away from the unit. Consider screening units from only one side if they are visible from only one angle, such as a street view. Lattice screens are effective and can be one, two, or three-sided. Use vines on the lattice, a well-situated plant, or nothing at all.

Sun and shade exposure

Some homes have a contrast in sun exposure along the front of the residence, which presents a challenge if you want to provide landscape beds that “match” on both sides. A large tree may provide shade on one side, while full sun conditions exist on the other. If you want to have a unified, formal balance, use “chameleon” species that grow well in either sun or shade.

Formal or informal

Beds that are symmetrical or have angles are perceived as formal, while asymmetrical or curvilinear beds have an informal appearance. Even numbers of plants generally have a formal appearance, and odd numbers of plants tend to be informal. However, the same number of plants can appear either informal or formal, depending on their arrangement. See **Figure 27**.

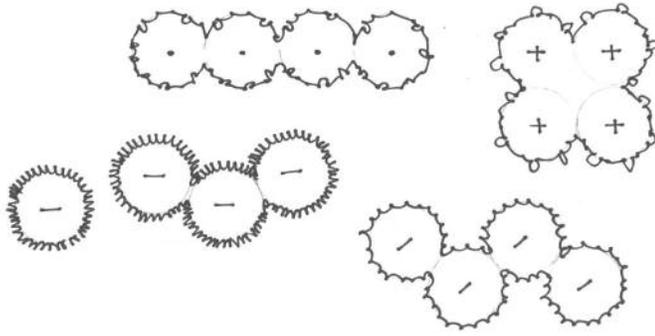


Figure 27. In general, even quantities of plants create a formal appearance, while odd numbers of plants produce an informal effect. However, the same number of plants can be arranged to provide either a formal (top row) or informal (bottom row) appearance. Image and planting symbols by Pat Drackett.

Outlining the planting beds

The geometry of some beds will be dictated by the shape of your residence and adjacent hard surfaces, such as walks, drive, retaining walls, etc., as well as by the style of your landscape theme. Formal plans composed of architectural shapes and straight lines will require more frequent maintenance to maintain than informal plans composed of naturalistic landscaping and curvilinear beds.

Clean bed lines give your property a fresh, finished appearance (Figure 28).

Bed edging, such as paver stone or brick, coordinated to your home or other paved surfaces, adds structure to your landscape. Leave enough room along the edge of beds for plants to grow to the width of the beds.

Planning for lawn maintenance

Design bed edges next to lawn areas with gentle, gradual curves that are easy for lawnmowers to navigate (Figure 29). Lawns should be accessible and wide enough to allow your mower to pass or turn.

Bed width

Wide planting beds are not easy to access. You can design a pathway that passes through the bed to provide an attractive and practical landscape feature. Garden ornaments, such as sculptures, environmental art, fountains, or birdbaths can be added along the path. Pathways can be paved brick, natural flagstones, or simply a linear gap in the plantings, allowing for ease of passage and maintenance.

Section Three: Locating the plants on the plan

1. Preparing to draw the planting plan

You can create your planting plan on a sheet of tracing paper that has been taped over the base map. Corrections are easier to make on tracing paper than on graph paper. Plant symbols can be drawn lightly in pencil. Once you complete your planting plan, darken the edges of plant groupings, major trees, and accent plants to give them more visual definition.

2. Drawing planting symbols

Symbols of plants can be drawn on your plan by using a circle template, which contains a variety of sizes of circles. These

templates can be found in the drafting section of most office supply stores. To determine the size of circle to use, for example, if your base map has been drawn at a scale of 1 inch = 10 feet (using an engineer's scale), and the mature size of your plant is about 5 feet, select a circle that measures half an inch ($\frac{1}{2}$, or .5 inch, according to the scale) in diameter.

Correspondingly, you would use a circle measuring $\frac{1}{5}$ of an inch ($\frac{2}{10}$, or .2 inch) for groundcover that measures 2 feet across. A small accent tree may measure 10 to 15 feet or more in width, depending on the species, so you would choose a corresponding symbol width to represent the mature tree. Keep in mind that the thickness of your pencil lead can affect the width of your drawn symbol. Therefore, while you are creating your planting plan, it is a good idea to check symbol widths from time to time on a scrap piece of paper.

Planting symbols can be simple circles, or you may choose to modify them to depict certain characteristics of the plants they represent (Figure 30).

Deciduous plants may be shown as having a branched appearance. Evergreens with needles can be drawn with sharp edges, while symbols for broadleaf evergreens may have rounded edges. Symbols for accent plants can be drawn to reflect their specific textures. You may wish to practice drawing planting symbols before you place them on your plan. Think about how you can depict each plant through a symbol that will be recognizable when you refer to the plan.

3. Spacing plants

The mature size of a plant is very important to consider when creating your plan. If plants mature at 5 feet wide, it is not advisable to locate them 3 feet apart (also called 3 feet "center to center" or "on center") just so they will look nice and full after planting! When locating several groupings of different plant species within a bed, avoid placing the masses of plants too close to each other. Instead, leave some room for a transition between plant species. Draw your planting symbol to represent each plant's mature size and resist placing them too closely. As you locate plant symbols, remember to leave enough space for maintenance and access to utilities, such as water spigots and utility meters.

4. Locating plants on the plan

Deciding the first plant to locate on your plan may seem like a challenge. You may feel like an artist pondering a blank canvas, wondering where to begin. However, think of the landscape plan as a series of logical steps, and locate the most important elements first. First, place on your plan the plants with the greatest impact or importance. These may be focal points, trees, or accent plants. You can think of them as the stars of your show, with all the other plants becoming their supporting cast.

Focal points

Focal points are plants with dramatic qualities that command attention and draw the eye, such as a specimen tree. They can also be landscape features, such as a bench or fountain. They can be informal or formal, depending on where

they are and their relationship to other elements. The effect of your focal point may be dictated by its relationship with surrounding trees, especially where there are many trees.

Because the eye is drawn to focal points, you will need to consider the views that surround it. For example, attention will be drawn to an unattractive view that is near or beyond the focal point. Consider the angles from which the focal point will be viewed. Will it be the first thing you see when approaching the house? Is it a main view from a window? Perhaps it will be a surprise feature when turning the corner of a pathway. A focal point can be an individual plant, or it can be part of a triangle, with the viewer on one corner, providing balance to other elements in the landscape. For example, a focal point may be located to provide balance for the mass of a large, mature tree that is a dominant element in the landscape.

Trees

When locating trees, consider the function they will serve. You may have a brand new lot with no trees at all and need canopy trees for shade. Or, if an undesirable view needs to be blocked, you may need to use trees that are evergreen, to provide screening in all seasons. Large trees, especially evergreen trees, will visually and physically dominate your residence if they are located too close to the structure, making it appear crowded and small. Choose trees that will not grow too large for your property or interfere with utilities. Trees located too close to your residence, especially evergreen trees, will dominate and



Figure 28. These before and after photos show the importance of having a clear definition between planting beds and turf areas. Note that beds do not need to be stuffed full of plants to have an impact. Rather, the clean beds and strong bedlines give this property a pleasant, finished appearance. Photo by Pat Drackett. Landscape contractor: GroundScape Inc., Biloxi.





Figure 29. The shape of planting beds is important. Create curved bed-lines with a mechanical edger or shovel, and develop smooth, gradual curves that will allow for easy mowing. You may wish to lay a garden hose on the ground to get an idea of the desired shape before cutting the final edge. Photo by Pat Drackett. Landscape contractor: GroundScape Inc., Biloxi.

make it appear crowded and small. Choose trees that will remain in proportion and scale to your house. When locating large trees, leave ample space for the sizeable root zone of those trees. Use care when planting under existing trees, as too much disturbance can cause root loss and harm or kill the tree.

Trees can contribute to your home's energy efficiency (Figure 31). Evergreen trees can be located to the north and west of your residence to block winter winds. Deciduous trees provide shade in summer and allow cooling summer breezes from the south. Because the summer sun travels in a southerly arc from the east to the west, its rays are more intense in these directions; therefore, shade trees should be planted to block these exposures. These shade trees will reduce energy demands by shading windows and walls during the hottest part of summer days. In the winter, when the leaves have fallen, deciduous trees allow the sun to warm your home.

Accent plants

Accent plants serve as secondary focal points, with one or more providing a strong color, form, or texture (Figure 32). A focal point or specimen tree is a dominant element in the landscape, while accent plants can be repeated in several places and provide unity to the landscape.

Filler plants

Once you have located your trees, focal points, and accent plants, and provided plants of various heights to frame them, fill in the areas around them. The placement of future plants will go more quickly after you have developed a portion of your landscape. Repeating certain combinations of shrubs and groundcovers in several areas within the design will unify the landscape.

5. Labeling the plants on the plan

If you have room on your plan, you may want to draw a line to each plant that indicates its common name, quantity, and the container size or height. This saves time spent searching for symbols in a plant key. You may also want to include the Latin name of the plant. However, there is not always space available to include all of this information. A shorthand method of using the quantity and first letter or two of the plant's common name (or Latin name) can be used where space is limited. For example, if the plant is an azalea, it could appear as "12 - A" or "12 - Az." The important part is that your method of labeling is clear to you or the people who will install the plants.

6. Creating a plant key

A plant key is a list of the symbols used in your design, along with the plants they represent. Both the Latin name and the common name for each plant may be listed, along with the size of each plant to be purchased. A total quantity for each plant used in the plan should also be included. You may pre-



Figure 30. Plan symbols may be modified to reflect texture or other plant characteristics. This allows the species to be quickly recognizable when you are reviewing your planting plan. Image and planting symbols by Pat Drackett.



Figure 31. Placing plants to maximize energy savings. Drawing by Richard Martin III.

fer to label each plant with a letter or letters that represents the plant name. However, it is important that your labeling system is clear to you or the people who will be installing the design, particularly if the plan is to be set aside for a period of time. See **Figure 33** for the complete landscape plan for the home and property depicted throughout this publication.

7. Copying your planting plan

Store your original plan in a safe location, and make copies of your plan for outdoor use. You can make a copy of your planting plan overlay and base map together on a copying machine because light will pass through tracing paper. Place a book or magazine on top of the plan and flatten it against the glass to provide weight while copying. Adjust the darkness setting on the copier so that the base map is clear on the copy. Adding color to a copy of the plan helps identify masses of plants, bloom colors, or a plant's prominence in the design.

Base maps for large properties can be created by taping two 8.5 x 11 sheets of graph paper together and printed on a copier that accommodates 11 x 17 sheets of paper. If your property will fit on an 8.5 x 11 sheet of paper and you would like space to write notes about your plan or add a plant key or plant list, then place your original plan in the center of the copier glass and copy onto an 11 x 17 sheet of paper.

Letter-sized sheets of tracing paper may also be taped together. Rolls of tracing paper can be purchased in various widths in the drafting section of office supply stores or

ordered from websites specializing in drafting equipment. You can choose not to use graph paper at all, but create the entire plan on a large piece of tracing paper if you are comfortable with using a scale.

Step 6 Checklist

Does your landscape plan include:

1. Trees that allow summer shade and winter sun?
2. Evergreen trees that provide protection from winter winds? (Locate these trees on the north and west sides of the residence.)
3. Dense evergreen trees or shrubs to screen undesirable views?
4. Tree placement that allows a clear view of the front entrance of your home?
5. Color or accent plants that provide interest and lead your eye to your front entrance?
6. Evergreen, low-maintenance shrubs as the basis of your foundation plantings?
7. Plants with an appropriate mature size for their locations in your landscape?
8. Seasonal interest with plants chosen for their blooms, bark, fruit, and foliage?
9. The right number of plants, appropriately spaced, to prevent overcrowding?



Figure 32. Use plants with a strong texture or color to draw the eye. Here, the coarse texture of holly fern stands out in a bed of liriopie. Repeating such accent plants in several locations of your landscape will provide unity to your design. Photo and design by Pat Drackett.



Figure 33. Complete landscape plan. Drawing by Richard Martin III.

Step 7. Establish priorities for implementation

After you have completed your use areas and planting areas to your satisfaction, it is wise to make a list of priorities to accomplish the plan. Decide on the areas that need to be developed first, and tackle them one at a time as your budget and time allow. Here are a few suggestions to help you accomplish your goals:

- Finish all land leveling and grade changes first.
- Correct all drainage problems before beginning installations.
- Complete all permanent hard surfaces, such as patios, walkways, driveways, and structures, first.
- Because trees take time to mature, consider planting them first.

The Low-Maintenance Landscape

With today's busy lifestyles, homeowners are seeking ways to reduce maintenance in the home landscape. The creation of a low-maintenance landscape requires proper planning and wise choices. This includes identifying areas that require a more manicured look and those that can be less heavily maintained. There are a number of landscape building materials, plant types, and design strategies that can reduce effort and expense. The best place to begin the low maintenance landscape is to develop a plan for your property.

Eight simple tips to create an easy-care yard:

Although there is no such thing as a no-maintenance landscape, here are a few suggestions to minimize excessive landscape care.

1. Reduce the total amount of unused lawn area.

Beautiful lawns are expensive and high-maintenance. In addition to the mowing, rolling, watering, fertilizing, liming, thatching, and pesticide, fungicide, and herbicide applying that are used to maintain a healthy lawn, lawn edging and raking can consume an extraordinary amount of time and expense. Maintaining proper play and open lawn space are important for many homeowners, yet reducing unused lawn portions can save time. Easy-to-care-for trees, shrubs, and groundcovers are excellent alternatives to excessive open lawn space. This may be achieved by applying herbicide to the unwanted existing lawn area, planting low-care woody plant species, and planting a thick groundcover or layer of mulch. The first few years may require extra weeding and care, but as the trees and shrubs establish themselves, an annual cleanup will be all that is required.

2. Use quality, long-lasting landscape materials.

As you select or replace structural features for your landscape, choose materials that do not require frequent replacement. Sidewalks, patios, decks, fences, steps, driveways, seating structures, trellises and gazebos, and furniture items should be durable. A concrete or brick patio will last 20 to 30 years, whereas a wooden deck or brick-on-sand patio may

need replacing every 5 to 8 years. Recycled plastic lumber has a much longer life span and reduced painting or staining needs than traditional treated wood for fences, decks, and steps. Bed edgings made of concrete, brick, or stone edging blocks will last much longer than landscape timbers or railroad ties. Also, mowing strips (concrete or brick pavers placed at the ground level) can be used for bed edges next to turf areas to reduce the need for edging treatments. Consider the initial cost, maintenance costs, long-term costs, and durability when selecting landscape materials.

3. Select perennial plants over annuals for landscape color.

To reduce replacement costs for annual plants (plants that last one season), consider using perennial plants (plants that come back every year). Depending upon your plant hardiness zone, impatiens, begonias, petunias, and marigolds may require replanting every year. Choose daylilies, stokes aster, lantana, black-eyed susan, coneflowers, evening primrose, or perennial phlox for long-lasting color.

4. Avoid problem or high-maintenance plants.

Hybrid tea roses, gardenias, and fruit trees are examples of high-maintenance plants. These require regular applications of pesticides, water, or fungicides in order to grow well in Mississippi. Select plants that are resistant to insect, disease, and fungal problems; tolerant of wet or dry periods and extreme temperatures; and adaptable to poor soil conditions.

5. Use geotextiles for weed control.

Geotextiles, commonly known as landscape or weed fabrics, can reduce weeds in sunny planting beds. Placing the fabric on the ground around existing shrubs and covering it with a thick layer of mulch will reduce the growth of many weed species. Pre-existing problem weeds should be controlled with an herbicide before covering. Geotextiles allow water and fertilizers through the cloth and allow plant roots to breathe. Do not use plastic sheeting, which is not permeable. Groundcovers may also be planted in open bed space to compete against weeds.

6. Put the right size plant in the right place.

Avoid constant pruning by selecting plants that will not exceed the desired height or width for their area. Problem places occur under windows, utility lines, roof eaves, view sheds, and near doorways. These problems can be avoided by asking the nursery owner to recommend plants that do not grow larger than the maximum height or width for the area required. Fast-growing plants require little or no pruning if they are located where they have room to grow to their mature size, such as in site perimeters or the rear of beds.

7. Place plants in masses, not individually.

Plant combinations are often more effective when planted in masses rather than as individuals. A dense shrub border in large island beds allows room for a mower around the outside edge, reducing the need for edging and weeding in scattered plantings.

8. Keep the landscape simple.

A complicated design with a wealth of landscape plants and garden areas often requires specialized care. Don't overdo focal points, accents, color, texture, or types of plants. Aim for balance. Landscaping should frame your home, not dominate it. A simple, effective design and palette of easy-to-manage plants can create a beautiful, carefree landscape.

The Sustainable Sites Initiative™

The Sustainable Sites Initiative (SITES™) is a new national effort to create voluntary guidelines and benchmarks that promote sustainable land design and construction practices. Jointly sponsored by the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center, and the

U.S. Botanic Garden, SITES™ provides a ranking system that awards points for comprehensive sustainable land practices for built projects. The program is complementary to LEED® (Leadership in Energy and Environmental Design) Green Building Rating System, and it is anticipated that the SITES™ criteria will be incorporated into future versions of LEED®.

SITES™ has nine areas of focus—hydrology, soils and vegetation, materials, monitoring, operations and maintenance, construction, pre-design assessment, site selection, and human health and well-being. For more information on Sustainable Sites and to see examples of how these can be incorporated into residential landscapes, visit their website at <http://www.sustainablesites.org/>.

Notes



By **Dr. Lelia Kelly**, Extension Professor, North Mississippi Research and Extension Center; **Robert Brzuszek**, Professor, Landscape Architecture; and **Patricia Drackett**, Director, The Crosby Arboretum, Coastal Research and Extension Center.

Portions of this publication were taken from an earlier MSU Extension publication, P479 *Planning the Home Landscape*, by James H. Perry.

We are an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.

Publication 2698

Extension Service of Mississippi State University, cooperating with U.S. Department of Agriculture. Published in furtherance of Acts of Congress, May 8 and June 30, 1914. GARY B. JACKSON, Director

(rep-1M-10-16)