PLANNING THE HOME LANDSCAPE
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A well-designed landscape is a pleasure to the family, enhances a community and adds to the property’s resale value. Landscape design involves much more than placing trees, shrubs and other plants on the property. It is an art which deals with conscious arrangement or organization of outdoor space for human satisfaction and enjoyment. Some of its major goals include:

- Organizing and developing the site for maximum use and pleasure.
- Creating a visual relationship between the house and the site.
- Reducing landscape maintenance to a practical level.

Americans spend tremendous amounts of money “landscaping” their businesses, homes, streets, parks, schools, etc. Much of this money is wasted, however, because of little or no planning. People cannot understand how to landscape until they know why they landscape. There are several reasons why people “landscape”: some think it improves the appearance of their place; others like to grow plants; still others just want their place to look pretty. Too often these landscapes dominate rather than serve. Masses of plants or other materials in the landscape may take up a large portion of the space and leave little room for people.

Then how does the designer arrange space so that people will find it useful, beautiful, meaningful and functional? His methods include:

- Observing and analyzing the habits of the people who will be using the space, including their needs, desires and how much space each of their activities requires.
- Studying past methods.
- Surveying available materials to solve design requirements.
- Analyzing the environment of the site including the view in and around the site. The ecology of the site should be carefully analyzed since it is an important design determinant.

Not all landscaping improves the appearance of a building. The work of an insensitive designer can subdue a building, conceal important features or contradict the architect’s intent. Good landscape design can significantly improve the building’s appearance by adding warmth, liveability and personality. It can also relate a building to its site and environment and give it the desired degree of dominance.

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Growth and change separate landscape designs from other arts. Most works of art such as architecture, sculpture and painting look their best when new. Landscape designs, however, are at their worst when new and improve with age. A well-designed landscape will seldom look the same any two months of the year.

The temptation to begin planting immediately is almost overwhelming. Whether you are landscaping a newly-built home or redesigning an existing landscape, the results will be much more satisfying if you plan first. Ideally you should consult a professional landscape architect on planning, but you can produce good results if you follow these steps.

**BASE PLAN**

Draw a base plan to scale. For most properties a scale of 1/8” = 1’ is workable; for small properties or a particular area of a larger development 1/4” = 1’ may be better. Graph paper with lines indicating a particular scale may also be helpful. Include all major features on your drawing such as existing walks, terraces, outbuildings, trees, shrubs, drives, property lines, easements, utilities, etc. After preparing the base plan, place tracing paper or tissue paper over the original plan to sketch possible ideas and solutions to your landscape needs and problems.

**SUGGESTED SYMBOLS**

-_Property Line_
- City Easement
- Sewer Line
- Electric Line
- Water Line
+ Telephone Pole
+ Water Spigot
□ Gas Meter
□ Water Meter
□ Fire Hydrant
□ Air Conditioning Unit

- Existing Tree
- Existing Shrub
- Steep Slope
- Window
- Door
- Sliding Glass Door
- House
- Roof Line Overhang
STEP ONE: MEASURE EACH PROPERTY LINE AND RECORD MEASUREMENT ON A ROUGH SKETCH. IF A PLOT PLAN OF THE LOT IS AVAILABLE, USE DIMENSIONS SHOWN ON IT.

STEP TWO: TO MAKE SURE HOUSE IS PARALLEL WITH PROPERTY, OR IF PROPERTY LINES ARE NOT PARALLEL, SITE A LINE (REFERENCE LINE) ALONG ONE SIDE OF HOUSE TO LOCATE REFERENCE POINTS "A" AND "B".

STEP THREE: ACCURATELY LOCATE ONE CORNER OF THE HOUSE BY MEASURING THE DISTANCE FROM BACK EDGE OF CURB, OR EDGE OF STREET, TO NEAREST PROPERTY LINE. FROM THIS CORNER OF THE HOUSE, MEASURE EACH SIDE OF THE HOUSE.

STEP FOUR: BEGIN CONSTRUCTING A CAREFULLY DRAWN PLOT PLAN BY SELECTING A SCALE TO WORK WITH (1/8"=1", 1/4"=1") OR BY SELECTING GRAPH PAPER. BEGIN BY DRAWING CURB LINE AS A DOUBLE LINE OR STREET EDGE AS A SINGLE LINE. CONSTRUCT PROPERTY LINES IN THE SAME MANNER THEY WERE MEASURED. ALSO, INDICATE COMPASS DIRECTIONS.
STEP FIVE - NOTE FIRST OF ALL THE CITY EASEMENT, WHICH IS LEGALLY CITY PROPERTY. THE CITY MAY REMOVE ANY PLANTING OR CONSTRUCTION WITHIN THIS AREA FOR STREET WIDENING, SEWER WORK, ETC. EXACT LOCATION VARIES ACCORDING TO CITY ORDI-

STEP SIX - LOCATE OTHER EXISTING FEATURES ON A ROUGH SKETCH BY USING THE SAME METHOD USED FOR LOZATING THE CORNER OF THE HOUSE. BY MEASURING FROM KNOWN REFERENCE POINTS, SUCH AS STREET, PROPERTY LINE, HOUSE, IN TWO DIRECTIONS, THE FOLLOWING PERMANENT FEATURES CAN BE LOCATED:
A. WINDOWS, DOORS, CHIMNEYS, INCLUDING HEIGHT OFF GROUND
B. ALL ABOVE AND BELOW GROUND UTILITIES
C. UTILITY METERS, ELECTRICAL OUTLETS, WATER SPIGOTS
D. NATURAL OR PROMINENT FEATURES - RETAINING WALLS, RAINT IES, ROCK OUTCROPPINGS
E. EXISTING TREES AND SHRUBS
F. NEIGHBORS BUILDINGS AND LANDSCAPE FEATURES NEAR THE PROPERTY LINE
G. ROOF OVERHANG ON HOUSE
ALL OF THESE FEATURES SHOULD BE MEASURED AND NOTED ON THE ROUGH SKETCH BEFORE DRAWING ON FINAL PLAN.

STEP SEVEN - TRANSFER INFORMATION PLOTTED ON THE ROUGH SKETCH TO THE FINAL PLOT PLAN. THE PLOT PLAN IS READY TO BE USED AS THE BASE FOR A HOME LANDSCAPE DESIGN.
Always indicate compass directions in relation to the house by drawing an arrow (N→) pointing north. You may also want to show the direction of the rising sun. In winter, the sun rises a little south of east and sets a little south of west. In summer, the sun rises somewhat north of east and sets somewhat north of west.

**SEASONAL SUN ANGLES WHICH WILL AFFECT THE DESIGN OF THE LANDSCAPE**

![Seasonal Sun Angles Diagram]

List your needs. Observe and consult each family member and consider them in your plans. These needs may include a driveway and turnaround space, off-street parking, play space for children, an outdoor living area, a vegetable garden, privacy from certain areas, windbreaks, etc. There are usually several ways of satisfying every need, and you must decide on the most appropriate one for you. The most satisfying landscapes are both practical and beautiful.
Study your site. The piece of land you live on is generally referred to as the site. Ideally, the selection of the site, placement, and design of the house and the landscape development should all be done at the same time. Selecting a site without having some idea of the type of house and landscape development you want would be difficult.

Go back to the base plan you prepared in step one. Look closely at the problems and opportunities of your particular site. Tape a piece of tracing paper over the plot plan and prepare a rough sketch:

- Indicate major views from the inside looking out as well as the view on the site itself. Determine whether they are good or bad (for example: a direct view of the neighbor's trash or an open field of wildflowers).

- Show exposure to summer breezes as well as winter winds. Also, indicate where you need shade.

- Indicate drainage patterns and slope of the land. Also, note any problems such as areas where water stands or needs to be redirected.

- **EXISTING SITE CONDITIONS**

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  - **NOTE ON SOIL TYPE**
  - Soil is mainly clay with some sand in it. Fair to poor drainage. Check with County Extension Office to have soil tested.
■ Note the soil type and approximate depth, and have your soil tested. (For further information on soil testing procedures, contact your county Extension office.)

■ Remove your tracing paper rough sketch and record this information as neatly as possible on your base plan.

Diagram and place space needs. Again, tape tracing paper over your plot plan and go back to your list of needs from step two. Place needs and activities where they can serve best and provide enough space for each need. (For example: an outdoor living area should be of sufficient size for the use it will receive.) Rather than decide upon the shape of a lawn, terrace or parking area at the beginning, let these forms develop from and reflect the needs listed in the beginning.

The following areas are frequently found in the home landscape. Develop each according to your family's needs and priorities.
**Work or Service Area.** The work or service area can be convenient, orderly and attractive. Lawnmowers, wheelbarrows, tools, insecticides and fertilizers all need to be stored in a dry convenient location. If tool and equipment space is not already provided, plan for one. Since many service areas are most convenient when adjacent to the garage or carport, consider adding your storage area to an existing wall.

Garbage storage and clotheslines should be near the kitchen and laundry rooms. Allow at least four feet around the clotheslines to keep clothes from rubbing against fences, plants and walls. If only used occasionally, retractable or folding clotheslines may be the most practical.

Service areas can also contain a compost pile or space for cutting flowers and vegetables.

Consider screening the service area from view with either structures or plants to make it an attractive as well as functional part of the landscape.

**Children’s Play Area.** Locate the play area where someone inside the house can easily see it. A sand pile and swing sets are popular as well as paved areas for riding toys, play houses and tree houses. Keep the designs simple and easy to maintain and consider how the area might be used after the children are grown.
Recreation or Active Sports Area. Features such as a swimming pool, shuffleboard and tennis courts require considerable space and investment. A tennis court is normally 120 x 60 feet and a badminton court is 22 x 44 feet; swimming pools vary in size.

If some of these facilities are on your list of needs but not practical for immediate installation, you may consider leaving open turf areas that can be used for badminton, other games and play.
Outdoor Living and Entertaining Areas. Terraces and patios are an integral part of many Texas homes and should be located, if possible, where they will receive summer breezes and afternoon shade. If sun is a problem, add trees or overhead shading structures.

Outdoor living areas are usually adjacent to living areas of the house where they can easily be served and seen from inside. With the cost of interior floor space at an all-time high, outdoor living areas can economically add entertaining and living space. Even when not in use, well-planned, attractive decks and terraces adjacent to the house give a feeling of added space to interior rooms. Attractive, long-lasting outdoor furniture and accessories (such as water features, sculpture and container plants) can be useful and enrich outdoor living areas.

Some families have several outdoor living areas. Small terraces adjacent to bedrooms, bath areas and dining rooms are becoming more popular. A terrace may be placed away from the home to take advantage of a striking view, good breezes or the shade of an unusually beautiful tree.
Public and Entrance Areas. A large front yard is often a questionable use of land and resources. The parklike expanses found in some of our older subdivisions are pleasant but of little practical value. If your lot is small and building codes allow, consider developing the entrance area as a courtyard providing more use area for the family. If street parking is a problem use part of this area for off-street parking. Parking and enclosed front courts can be both attractive and functional.

Provide shade where it will most benefit your home's energy conservation. Keep plantings simple with shrub masses, groundcovers and flowering trees used to serve real purposes.

Build walks and drives well and have them as direct and convenient as possible. Walks should be a minimum of 3½ feet and preferably 4 feet wide. Provide a larger paved area at the entrance, if possible, since people tend to congregate there.

A few container plants, small flowering trees or specimen shrubs help to make the home's entrance a focal point. Other features which focalize the entrance include architectural accessories such as attractive light fixtures, street numbers and front doors.
Referring back to the diagram of space needs, begin finalizing the plan by refining the spaces into definite shapes. Now you are ready to choose materials. Try to choose materials that satisfy as many of your needs as possible. Sometimes non-living materials such as fences are a better choice than living materials such as a hedge. Both materials should provide privacy, but the hedge may require considerable time to grow where the fence provides immediate privacy. Also, if space is limited a fence may be the best solution. Maintenance is also frequently a concern. Usually non-living materials (brick, wood, etc.) require less maintenance than living materials which may require watering, trimming, etc.
One of the major objectives of good landscaping is to create a visual relationship between the house and the site. If your house is already constructed, you can still do a fine job of relating it to the site. Some of the ways this relationship between house and site may be achieved are:

- Use plants that are found growing naturally on or near the site.
- Repeat architectural lines of the house in the landscape — either with plants or construction such as walls, fences, etc.
- Use building materials that blend well in the natural environment or may be found there (for example: a wood shingle roof for a home on a wooded site or stone retaining walls in an area where the stone is found naturally).

Landscape design cannot be reduced to a series of rules. It may, however, be helpful for the homeowner to keep the following design concepts in mind as the design develops.

- Group plants for emphasis. Group the same plants rather than alternating shrubs or using many individual plants spotted about the property to provide a sense of unity and order.
- Plant trees for shade. Trees of appropriate mature size should be used so that they will be neither too large nor too small for the house. Deciduous trees can usually planted closer to the home than evergreens.

- Compliment the structure. Do not separate the house from its site by a ring of plants or foundation planting. Plants should compliment the lines of the structure, not set it apart from the site.
Provide privacy. Instead of planting all the way around the property lines of your site, place screen plantings where they will provide privacy to exposed traffic and neighborhood activity. Use screening materials only where necessary.
- Soften walks and drives. Walks and drives in most cases serve only as aids in circulating people. When they are lined with hedges, border grass or other materials, they may become too prominent. Use enough materials to soften large areas of paving but allow the lawn grass to meet the pavements in most areas.

- Allow space for ultimate growth. Space shrubs in relation to buildings to allow for natural growth. Generally, no shrub should be placed closer than three feet from the building unless it is a groundcover or a plant which uses the wall for support. Do not be fooled by small plants in the nursery. Know the mature size of all plants you are using and space them accordingly. Plants should compliment, not cover a house. Select plants that require less maintenance.
Screen service areas. Service areas should require small amounts of the site. Clothes lines, garbage containers, tool storage, etc. should be placed in a convenient area and screened from the living and viewing areas of the landscape.
Use native plants. They frequently withstand weather extremes and are usually more resistant to insects and diseases. Native plants can also be important relating a structure to its site.

Native Plants. Native plants are rightfully gaining a prominent place in the landscape. Although we have seen an increase in planting and preserving native plant species, we are still a long way from maximizing their potential. Often the native plants are more resistant to drought, insects and disease. If species are selected that are native to the immediate vicinity of the home, there is an additional bonus of visually relating the new landscape to the natural environment.

Unusual challenges for landscaping with native plants can be found in some of our more densely populated areas. Subdivisions around Austin and San Antonio, for instance, are often located in hilly areas to take advantage of views. The ecology of these sites is very delicate with a thin soil layer over rock supporting a few small trees such as Texas persimmon (Diospyros texana), live oak (Quercus virginiana), agar (Mahonia trifoliolata) and sumac (Rhus lanceolata).
If the property owner has a stereotyped concept that landscaping should consist of planting various broadleafed evergreen trees and flowering shrubs, he may clear the site of all the "brush." Then, after spending considerable time and money trying to provide topsoil, irrigate adequately and reduced soil pH as well as deal with insect and disease problems, the property owner wonders why maintaining the landscape is such a big and expensive job.

With some careful thinning, pruning, transplanting and a few well-placed groundcover areas, the property owners could have an attractive and functional landscape. Builders, developers and homeowners need to evaluate natural growth on the site before destroying it.

Diverse temperatures, topography, soil and rainfall in Texas give every part of the state its own unique character. We can develop more functional and attractive home landscapes by utilizing native plants.

**Plant Grouping.** Plants are basically used as specimens, in lines, in groups or in masses. Each method creates a different effect. Most landscapes will use all four types of groupings.

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**PLANT GROUPINGS**

- **SPECIMENT**
- **LINE**
- **GROUP**
- **MASS**
• Specimen or accent: Using plants as specimens is a good way to emphasize a character shrub or an unusually beautiful tree. If used sparingly, accent plants create interest and contrast. Too many specimens, however, result in visual chaos. Flowering trees such as crape myrtles, dogwood and cherries are often used for accent. Using a specimen plant or small tree near the entrance can help focalize on that area. Container plant specimens are another good possibility for accent if plants and containers are scaled to the area.

• Line: Lines of trees, shrubs and other plants can effectively carry the home's architectural lines into the landscape. Straight or curved lines of tree plantings can shade parking or play areas or serve as a windbreak. Select hardy, well-adapted plants to form a line since the visual effect can be spoiled if one or a few of the plants are damaged. Also be sure that the same soil, drainage and sun conditions occur along the length of the row since any or all of these factors can significantly affect the plant.
- Group: Grouping is a relatively natural way to use plants. Place several trees, shrubs, etc. fairly close together for a more massive effect. Since plants are often grouped naturally, this is a good method to relate your landscape to the natural environment. Also group container plants for emphasis.
• Mass: The mass is really just an extension of the group. In mass plantings, individual plants tend to lose identity. Mass plantings are especially useful in relating large buildings to the site since these plantings can be large enough to be in good scale.
Use landscape construction. Although most people evaluate the success of a landscape development in terms of the selection and condition of the plant materials, most really well-designed landscapes contain a good balance of construction and plant materials.

Carefully designed and executed paved surfaces, fences, walls, overhead structures and edging materials are not only attractive but also reduce routine maintenance. If possible, when selecting building materials for the landscape, repeat materials and colors already used on the home. Weathered wood, natural stains, concrete and earth tones in brick will usually blend with existing construction materials and relate to the natural environment.

The following drawings contain construction ideas for typical home landscape use.
OVERHEAD STRUCTURE

- 2" x 6" ledger lag-bolted to house studs
- Toehail rafters to beams
- 4" x 6" rafter, 24" - 36" o.c.
- 4" x 4" post
- 4" concrete slab
- 12" x 12" x 24" concrete footing
- Steel post anchor with lag screws
- 2" x 2" with 1 1/2" spacing
- 4" x 8" beam

Metal connector
ON-SITE PARKING

IMPORTANT POINTS:

1. Riser + Tread = 2.1 inches
2. Riser height must not exceed 7 inches.
3. Tread to riser relationship must be consistent over entire length of stairway.
4. No fewer than two steps to avoid an invisible one-step hazard.
5. No more than twenty steps in a group without putting in a landing or rest area.

OUTDOOR STEP DESIGN
EARTH MOLDING...

creates a pleasant view by blocking noise and unsightly views, and it helps facilitate drainage on the site.

DRAINS

French Drain

Catch Basin

Downspout Drain

Wet Spot

French Drain

Storm Drain

Outlet to Storm Drain

Outlet to Storm Drain

18" Diam. Cast Iron Grate on Ledger

Concrete Catch Basin

Fiber, Plastic or Clay Pipe, 4" Diam

"8" Per 1' Slope

Catch Basin

French Drain

Top Soil

Perforated Pipe on Top Half Wrapped with Felt Tar Paper

Compact Gravel

Curb Outlet

Drill or Break Curb

Finish Grade
Landscape accessories are details which may have no functional purpose, such as surfacing or enclosure, but do have definite visual effects. Accessories also help express individual tastes and preferences. Major accessories, however, should not be afterthoughts; they should be planned as the design evolves. Accessories add character and dimension to a garden, but poorly selected and placed accessories may spoil an otherwise well-designed landscape.

Many landscape accessories are available. Much of what is available, however, has little or no aesthetic value. To determine whether or not to use an accessory in the garden, ask yourself these questions: (1) Does it have practical use? (2) Is it beautiful itself? (3) Does it fit or relate to the overall landscape design? Probably the most important of these three questions is the last one.
Garden furniture offers a real opportunity to add utility, color and beauty to the landscape. Comfortable and attractive items are now available in a wide variety of maintenance outdoor furniture. Today's designs are infinitely more comfortable than yesterday's traditional cast iron bench. Outdoor furniture must be large enough to be practical and must be in scale with its surroundings. Built-in furniture has the added value of being permanently in place and enhancing the overall design. Occasionally the surface of a retaining wall or raised planter can serve as a seating area. The living terrace is the most usual place for outdoor furniture.

Beware of temptations to use objects from the past as landscape accessories. Sometimes this can be done effectively but more often these objects are of little or no functional use and are very difficult to relate to the overall development.

An interesting piece of driftwood, tree roots or limbs, boulders or rocks provide interesting substitutes for good sculpture. These items are easily blended with the design and may be readily available.

Birdbaths are often used in home landscapes. To be useful they should be shallow, not exceeding 1½ inches in depth, and contain fresh water. Bird houses and feeders should also be selected on the criteria discussed earlier.

Other accessories, such as stained glass, relief sculpture, outdoor chandeliers and plant containers are finding their way into the well-designed landscape. A stained glass window, partially enclosed in an outdoor area, or a burning outdoor chandelier may be added for interest, illumination and possible insect-repelling qualities. Hanging or conventional container plants can add a great deal of interest. With the current trend to return to natural materials and handmade workmanship there is an almost limitless variety of accessories available for our use. The temptation to "overdo" has never been greater. Like other fine things, garden accessories should be used with considerable restraint.

Outdoor lighting can add a great deal to the attractiveness and usefulness of the landscape. Specialists often recommend two separate lighting systems: one for functional and safety purposes and another designed to be beautiful and interesting. Dimmers, low voltage units and other special lighting equipment have become popular and add versatility to outdoor lighting. When placing outdoor lighting for beauty only the effects of lighting should be seen; the source or fixtures are usually hidden in the ground or in tree branches.

Good landscaping is a major investment in time and money. Many people feel that they obtain double enjoyment by including well-designed outdoor lighting to increase the hours of pleasure from their outdoor environment.
Educational programs conducted by the Texas Agricultural Extension Service serve people of all ages regardless of socio-economic level, race, color, sex, religion or national origin.


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