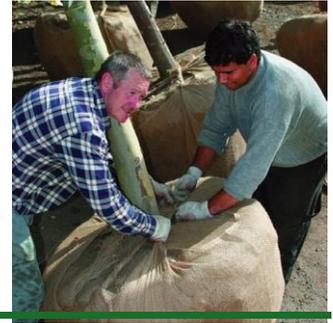


# Chapter 25.

## Landscape Contracting



**A** definition of landscape contracting is “a profession that involves the art and technology of landscape and garden project planning, construction and landscape management, and maintenance and gardening; for garden aesthetics, human enjoyment and safety, and ecosystem-plant community sustainability”. This includes the labor and materials needed to create the landscape improvement, as well as the maintenance required to keep the property, whether small or large, looking its best.

The **landscape contractor** is a business person who installs the work of a landscape architect or other design professional. Many landscape contractors create, sell and install their own designs. Each project needs to be done within the fiscal guidelines of the bid, estimate, or budget. The scope of the work may include large tract development (site work), highway landscaping, park and recreation development, or intimate spaces for residential, commercial, or industrial landscapes. The variety of work may include changing the topography of the land by grading; improving the soil and installing lawns, gardens, trees, shrubs, and groundcovers; relocating trees; building walks, patios, and decks. The diversity of work is accomplished using a wide variety of techniques, operating specialized equipment, and obtaining various types of materials needed to perform the job.

After the landscape is installed, the landscape contractor might maintain the plantings through the guarantee period or provide continuing maintenance service under contractual arrangement

To remain competitive, the landscape contractor must be competent, knowledgeable, accurate in record keeping, successful in bidding, and efficient in business management. In summary, a landscape contractor must be a business person, a designer (or at least understand design concepts), a construction person, a horticulturist, and a manager. All landscape contractors must also obtain and keep current, certain licenses with the State of Maryland, such as a Plant Dealer License, a MD Home Improvement License and, depending upon the level of maintenance

work, a Pesticide Applicator License and a Professional Fertilizer Applicator Certificate. (See the MD Laws and Regulations chapter at the end of this manual).

### Interiorscaping

Until the mid to late 60’s, emphasis was on outdoor landscapes. However, since psychologists discovered that plants have a beneficial impact on human health and well-being, there has been increased use of plants for interior landscapes. There is as much emphasis now on the interiorscaping of atriums in hotels, corporate office buildings, and public areas in shopping malls, as there is in landscaping the surrounding outdoor spaces. Many landscape contractors are now specializing in the increasingly in-demand service of building plant-covered walls inside of office buildings. These “living walls” require irrigation systems, water capturing systems and lighting systems to keep the plants thriving. (More information about living walls can be found in the New Technologies and Emerging Practices chapter of this manual.)

### Landscape Management

Landscape management involves the care and maintenance of landscapes that are either private, commercial or institutional properties. Landscape managers use their knowledge of plants and the natural environment to provide long term care and development of each type of property. The business of landscape management requires technical, scientific, horticultural and basic management skills. You must be able to provide your clients with services that properly care for their investments such as their trees and shrubs, flower beds, lawns, irrigation and lighting systems, walkways, and road surfaces.

The landscape management industry has many new entrepreneurs. This segment of the ornamental horticulture industry is attractive as a start-up opportunity to many people because it requires a minimal capital investment to establish a business and potentially creates a rapid positive cash flow, if managed correctly. The

**A landscape contractor must be competent, knowledgeable, accurate in record keeping, successful in bidding and efficient in business management.**

landscape management business is often used as a stepping stone to establish a landscape contracting company.

Clients will hire you if you are a skilled professional that can advise them on the long term care and development of their property. You must be able to perform the **agreed upon services** on time and with skill. You must be dependable, trustworthy, cost conscious, and keep current with new technology and equipment. You must also understand the financial and legal obligations required to run this type of business enterprise.

### **Company Image**

Your company's image is valuable and critical to your success. First impressions begin when you pull into the client's driveway. Be punctual. Your vehicle should have the name of your company clearly displayed. The exterior should be clean and the interior should not be piled high with soda cans and fast food wrappers. Beat up, dirty old vehicles do not reflect professionalism.

You will usually be on private property and you should always remember that it is someone's home. You and your staff should be mindful of your surroundings and your customer's expectations at all times. Always assume the client is watching you and model your behavior accordingly. Even if your client is not on site, a neighbor might be watching and report to your client that loud offensive language was heard, that cell phones were in constant use, music was blaring from radios, etc. Remember that more and more people have security cameras hidden around their property. Act professionally at all times. By having a well trained staff that looks and acts professional, you will be able to expand your business through positive referrals.

Creating and maintaining a "safety conscious" work environment is also a critical management concern. Emphasize safety at all times. Safety is the manager's responsibility and needs to always be an important part of daily routines. From planning, training, implementing, analyzing, correcting and improving, then back to planning, safety is always ongoing.

An important part of safety on a property is having **clearly marked utility lines**. Underground utilities are a hidden danger that you or your employee can't see when digging holes for new plants. Always call Miss Utility at 811, a week before doing any work on a property that involves digging of any kind. The utility company will mark the location of all underground lines. Overhead wires may be obvious but employees may forget that they can be electrocuted when using a pole pruner on trees growing near power lines.



### **Licensing and Insurance**

All landscape management companies need to obtain and keep current certain licenses with the State of Maryland. Such licenses might include a Plant Dealer License, a MD. Home Improvement License and, depending upon the level of maintenance provided, a Pesticide Applicator License and a Professional Fertilizer Applicator Certificate. Obtain the proper insurances needed to protect you, your employees and your clients. (See the MD. Laws and Regulations chapter at the end of this manual).

### **Maintenance Tasks**

Every client's landscape is unique. Most landscapes have micro and macro environments within the overall landscape property which will require specific maintenance and care. The landscape management professional must be capable of carrying out the following tasks:

#### **Turf Management**

Listed below are common proper turf management practices that will help maintain a healthy turf, reduce insect and disease problems, and improve the appearance of the lawn.

- A soil sample should be taken every three years to determine the pH and nutrient levels of the turf areas. The analysis provided can be used to establish an appropriate fertilizer and liming program. Only apply fertilizer based on the recommendation of the soil test results! You must be a Certified Professional Fertilizer Applicator in the State of Maryland to apply fertilizers to lawns.
- Mow at the correct height. The type of grass being cut will determine the proper cutting height. Blades need to be sharp. Do not cut off more than 1/3 of the total length of the grass blade when mowing.
- Edging or string trimming should be neat and consistent. Hard surfaces should be swept or blown clean. Wear safety glasses, long pants and boots, to prevent injuries from flying debris. Property, such as glass windows, can be also be damaged by flying debris.
- Clippings normally should be left on the lawn. If they are heavy, however, double cut the lawn or remove them. When left on the lawn, they help return the nutrients back into the soil.
- Pre- and postemergent herbicides may be needed to control problem weeds. Never allow weeds to go to seed or you will be dealing with weed problems for years to come.

- Insect and disease control should be accomplished using proper IPM practices.
- Core aeration will help with compaction, drainage and nutrient exchange. Overseeding with improved varieties of seed will encourage a stronger lawn. Seed during fall and spring seeding windows
- Leaf removal or leaf mowing/mulching should be performed in the fall. The frequency will depend on each site.
- Always make sure the site is clean when you leave.

### Using Groundcovers to Reduce Maintenance Costs

There are many areas in a landscape where groundcovers can replace turf: on steep slopes, under trees, in areas of heavy shade, in areas not frequently used, where large surface tree roots are a problem or when clients simply wish to reduce the size of the lawn. Most groundcovers are relatively easy to maintain. Although they may be more costly to install and establish than turf, this additional cost will be recovered by reduced maintenance, long term.

### Trees, Shrubs and Groundcovers

Listed below are some routine landscape maintenance practices that should be performed. The frequency is determined by each specific site.

- Selective pruning. This includes the removal of dead wood, heading, stem renewal, and thinning. Pruning is done for corrective or cosmetic purposes. Make sure that you know the proper pruning techniques and timing for the specific plant species in the landscape.
- Shearing of formal hedges and topiaries must be done with sharp shears. Always make certain the plant tops are narrower than the bases.
- A soil sample taken every three years will help determine the fertilizer program that best suits that site.
- Weed control. Several methods may be needed, based on the site. Weeds can be controlled with pre-emergents, postemergents, control barriers, hand pulling and hoeing.

Use proper IPM practices to control insect, mites and diseases. Subscribe to the weekly Pest Report issued by the University of Maryland. <http://extension.umd.edu/ipm>.

Leaf removal should be performed in the fall. The frequency will depend on each site.

- Watering during dry times and especially through the summer and fall will keep plants healthy. Always water slowly so that the water soaks into the ground. Frequent light waterings are not effective. Most trees and shrubs require 1" of water per week throughout the summer to thrive. Install rain gauges at every

site so that you know how much rain the site has received.

- Some evergreens may need winter protection. This can be done with a temporary barrier set up, wrapping them in burlap or as a sprayed on anti-desiccant.

### Mulch and Mulching Practices

Mulching of trees and shrubs in the landscape should be done on an as needed basis. Do not over mulch. Do not create mounds or "volcanos" of mulch around the base of trees and other plantings.

Before mulching around a tree always check its root collar, the flared area at the base of the tree, where the trunk meets the soil. **Root**

**collar excavation**, the removal of excess soil and mulch around the root collar, may sometimes be necessary. This can be done by carefully pulling back excess mulch from the root collar and removing the mulch. Root collar excavation can also be accomplished by using an air spade, a special tool powdered by an air compressor.

Common types of mulch include shredded and/or composted leaves, shredded pine or hardwood bark, pine needles, pine fines, LeafGro™ or composted manure. Hardwood bark mulch (pH 7.0-8.0) may be used for newly installed plants but should be applied to a depth of only **two inches**, so it will remain drier and therefore will not decompose quickly. For annual (or as needed) mulching of established beds, pine bark mulch is recommended, as it resists breaking down, and does not release manganese into the soil. Excessive manganese in the soil will interfere with plants' uptake of iron. Raw or fresh wood chips may be used on paths or trails but should not be used as mulch around plants because their decomposition uses up nitrogen from the soil, depriving plants of that nutrient.

Purchase mulch from a reputable or known source, to be sure of the quality of material. Some mulches, particularly those that are dyed red, black, or other colors, contain shredded material from old wooden pallets, discarded furniture, demolished buildings or lumber scraps. These are not appropriate quality to use with plants because they are not composted and may contain toxins, nails and other debris. All mulches should be free of weed seeds.

**Do not create mounds or "volcanos" of mulch around the base of trees and other plantings.**

## TO CALCULATE THE AMOUNT OF MULCH OR TOPSOIL NEEDED:

(for filling an undesirable depression or creating a raised bed)

The volume of mulch or topsoil you need is measured in cubic yards (CY). To find the amount of material you need in cubic yards, calculate the planting area in square feet, multiply by the depth you wish to have, and divide by 27... this will give you the cubic yards of mulch or topsoil you will need.

$$\frac{(\text{Planting Area in Sq.Ft.}) \times (\text{Depth in ft.})}{27} = \# \text{ CY}$$

If not using bulk mulch or topsoil, then determine the appropriate number of bags needed by taking your amount in cubic yards (CY) and obtaining nine bags of mulch for each CY (assuming each bag holds 3 cu.ft.), or 13.5 bags if each bag holds 2 cubic feet:

**1 CY = 9 bags, if each bag holds 3 cu ft.**

**1 CY = 13.5 bags, if each bag holds 2 cu ft.**

If you have access to the internet, go to:

**[www.landscapecalculator.com](http://www.landscapecalculator.com)**

for an easy-to-use mulch calculator. Enter the area in square feet and the depth of mulch in inches and it will calculate the amount of mulch you need.

### Annuals and Herbaceous Perennials

Annuals and perennials require periodic maintenance. Listed below are some common practices.

- Mulch on an as needed basis. **Be sure not to over mulch.**
- A soil sample taken every three years will help determine the fertilizer program that best suits that site. Annuals will require monthly liquid fertilization.
- Dead-heading of some plants will improve their appearance and will help them to flower longer.
- Weed control is normally done by pre- and postemergents, hand pulling, or hoeing.
- Spring bulbs should not be cut back after they flower. The nutrients produced in the foliage are needed to manufacture food for the bulb.
- Summer flowering bulbs need to be dug up in the late fall and stored in a cool place during the winter.
- Leaf removal should be performed in the fall. The frequency will depend on each site.
- Perennials should be cut back in late fall or in early spring before the new growth starts.
- Perennials should be divided when they become overcrowded or if they decline in health.

### Interiorscapes

Interior plants often require different horticultural practices. Work on interiorscape plants should be done when it won't interfere with clients, customers and staff.

- Make certain each plant is properly watered. Mop up water spills.
- Remove yellowing foliage and spent flowers.
- Trim the foliage of plants that exhibit marginal tip necrosis.
- Maintain a regular fertilizing schedule.
- Replace plants that are no longer attractive
- Inspect for insect and disease problems. If needed use pesticides that are labeled safe for indoor use.
- Always pick up trash that people discard into planters and pots. Pick up all clippings.

### Other Services That Can be Offered to Customers

- Plant replacement
- Monthly deer repellent spray program
- Service and repair of irrigation and outdoor lighting systems
- Erosion control
- Planting and maintaining containers of flowering annuals
- Vegetable garden planting, maintenance and cleanup
- Hard surface weed control – patios, driveways, sidewalks
- Seasonal flower plantings in beds: spring pansies, summer annuals, fall pansies
- Gutter cleaning
- Power washing
- Snow removal
- Holiday lighting
- Water garden and pond maintenance

### Water Gardening

Interest in water gardening for both home and commercial landscapes has been steadily increasing, making the construction and maintenance of these features an ever larger segment of the nursery and landscape market. The following information will give you a very brief introduction to water gardening and aquatic plants. The mechanics of constructing a pond, installing operating pumps and filters etc. are not covered here but many resources for more information are listed at the end of this chapter.

### Essentials for Successful Water Gardening

**Sun:** The more sun, the better, for most aquatic plants. Five to six hours of mid-day sun are necessary. Water lilies and lotus are the most well-known and popular aquatic plants and some varieties can tolerate shade.