

# NORTHERN

# Gardener

CREATING & CARING FOR YOUR ENVIRONMENT

## Landscape Lighting

### Why Landscape Lighting?

In daylight hours a well-designed landscape is full of color, texture and form. But as night falls, the gnarly trees turn to shadows looming over the grass. The flower beds and pathways are lost in the darkness.

Properly designed and installed outdoor lighting can bring back this lost beauty. It illuminates the best features of your landscape, while leaving dark those areas you wish to conceal in the shadows.

Not only have you created an aesthetically pleasing environment,



### CARING FOR YOUR ENVIRONMENT

- ✓ Protect your personal property by installing a landscape lighting system. A well-planned lighting system not only increases evening landscape beauty, but also increases home safety and security.

but you have also added safety and security to your home.

### Lighting Techniques

All fixtures produce light. It is proper bulb selection along with the design and placement of the fixtures that create the unique moods and effects in an exceptional landscape lighting design. A variety of lighting concepts make up the overall design. The basic concepts are:

#### Pathway Lighting

Pathlights are designed to add general illumination for pathways, patio, steps and garden areas. They add drama and safety to your landscape. The wide variety of fixtures allows the home owner to express his/her style preference.

#### Moonlighting

With the use of mature trees, one can add illumination from above to different areas of the landscape. By placing accent fixtures high in the trees, you can add either general illumination or pinpoint

lighting to accent features in the landscape.

#### Uplighting

Illumination from below. This concept brings life to the dramatic features within the landscape. The focal points are generally trees, shrubs, statues, fountains and unique structures.

#### Wall Washing

Also referred to as "grazing," this concept uses a flood-light fixture to cast light across surfaces. It accentuates shadows and textures to add drama on boulder stone and architectural walls.

A good designer will use a combination of these concepts to create a style and mood of his/her own. The limits are only the home owner's creativity and imagination.

### QUALITY OF PRODUCTS

Products used by professional installers are designed by companies with years of experience and craftsmanship. Fixtures are developed with creative intent, function and light intensity in mind.

Professional grade light fixtures are generally constructed of durable materials including:

- Aluminum
- Bronze
- Copper
- Stainless Steel

for long life expectancy. Fixtures come in many different finishes such as: black, deep bronze, Verde green and natural metal finishes.

## Installation

### 1. Developing a lighting plan.

Start by viewing places that have outdoor lighting for ideas; visit lighting showrooms, outdoor lighting studios or contact a landscape lighting professional. An outdoor lighting showroom will give you the opportunity to choose the design and style of fixtures and to understand the many capabilities of those products.

### 2. Decide “low” or “high” voltage fixtures.

Both low and high voltage fixtures have their advantages.

**High voltage** or regular house current operates at 120 volts. The advantages are being able to travel longer distance from the power source and the option to use higher wattage lamps. The disadvantages are: danger of electrocution, higher cost in installation labor and more unsightly appearance (due to conduit and boxes).

**Low voltage** (12-volt) also has its advantages. It is easily installed, consumes less electricity than 120-volt, has a clean, attractive look and permits little chance of electrocution. The disadvantages of low voltage are high wire cost for long distance and the cost of transformers.

Most landscape (outdoor) lighting manufacturers have chosen to design the majority of their fixtures using 12-volt lamps because of their compact size and large

array of wattage and beam spreads.

### 3. Determine wire size.

When using low voltage fixtures you must calculate voltage drop to determine the wire size. Voltage will decrease as you increase wire length, increase wattage or both. There is a formula to calculate voltage drop. Your lighting supplier can assist in calculating wire size.

### 4. Bury the wire.

After establishing the route, bury the wire a minimum of 6 inches deep by slicing the ground and inserting the wire.

### 5. Mounting the fixtures.

Fixtures are mounted on either a 6” metal or 17” PVC stake. The 6” stake is pushed into the ground and wire connections are made outside

the stake. For a more professional installation, 17” stake is “dug in” packed and leveled in a hole. Wire connections are made inside the stake. All connections should be made with direct burial wire connectors.

### 6. Transformer.

The transformer converts regular house current (120-volt) to low voltage (12-volt). Transformers commonly come with built-in timers and/or photocells for automatic control of the lights. Most are plugged into a standard outlet.

For more information on lighting and installation, contact an outdoor lighting showroom of a landscape lighting professional or a landscape designer or contractor.

