LANDSCAPING
INTRODUCTION

The most successful projects use landscaping to heighten the qualities of the site, accentuate the building, and enhance the site’s identity and its human scale. The design guidelines encourage the use of a wide variety of plant material to add visual interest to the landscape throughout the year.

The physical characteristics of each site and each plant should be carefully evaluated when making the final selection to ensure that plantings will survive and thrive in the selected location.

As Raymond continues to grow, there will be increased emphasis on the quality of the landscape between the buildings and Route 302. With buildings sited closer to the highway, the town is looking for a much more village feel to the public landscape.

Landscape Goals

• Reinforce the identity of the Raymond commercial district through the use of plant materials that will provide visual interest throughout the year.

• Supplement the landscaping that has been installed as part of the Route 302 walkway.

• Enhance the aesthetic appeal and scale of commercial development through the use of colorful plant materials with interesting forms and massing.

• Help create attractive areas safely separated from the road where pedestrians feel comfortable.

• Maintain existing trees that separate commercial uses, buffer lakes and streams, and create a natural appearance to the corridor.

• Manage invasive species using ecologically sound practices.

• Assist in wayfinding by emphasizing entrances to buildings and major circulation patterns.

• Increase the attractiveness and comfort of parking lots by reducing their scale, providing shade, and adding seasonal interest, using sound environmental practices.

• Provide screening for less attractive parts of a site or separating incompatible land uses.

• Utilize landscape maintenance techniques with the least adverse environmental impact.

With proper planning, trees, shrubs, and other plantings can provide shade, emphasize entrances, screen undesirable views, and add color and interest throughout the year.
OBJECTIVES

The landscape plan should develop an environment that complements the architecture, reinforces circulation paths, highlights entrances, provides shade, adds seasonal interest, and is designed and maintained using sound environmental practices. The commercial district should be unified by a rich variety of street trees, flowering shrubs, and masses of color.

DESIGN GUIDELINES

Preparation. As part of the Site Plan application or building permit application process, a landscape plan should be prepared by a landscape architect or other qualified professional familiar with local growing conditions. The plan should be accompanied by a narrative that describes the design intent, plantings and other landscape features, maintenance requirements, tree protection, and other relevant features of the plan.

Coordination with Utilities and Site Features. The planting plan should illustrate how plantings will be integrated with underground and overhead utilities, site lighting, signage, and other site features that may influence the selection or location of plants. The plan should be designed to avoid conflicts (both at the time of planting and in the future) between plantings and other site elements.

Irrigation. The use of low-maintenance, drought tolerant species is strongly encouraged throughout the corridor. Where needed, underground irrigation is encouraged in front setbacks, public spaces, and other highly visible areas. Irrigation should be coordinated with other elements of the site plan so it does not cause overflow or flooding in walkways, sidewalks, parking lots, or similar pedestrian areas.

Planting Design. Planting design should stress simplicity in form and limit the number of species used. Plants should be massed to soften edges, corners, and paved areas and to integrate the building into the landscape.

Variety. The use of a variety of plant materials that exhibit seasonal color and interesting texture is strongly encouraged to create a distinctive, yet low maintenance environment. Planting plans should strike a balance between monoculture (the use of a single species) and too much variety. See Raymond Plant Materials List at the end of this section for recommendations.

Boulevard Effect. Large spreading deciduous trees should be planted in appropriate locations along Raymond’s roads to define the edge of the travelway, provide shade for pedestrians, clean the air, and add scale to the commercial corridor. This requirement should not be imposed in a way that impacts the visibility of either signage or merchandise.

Safety. Selection of plant materials should consider public health and safety. Avoid plants with poisonous fruits, large thorns, or invasive growth patterns. The ultimate form and height of plant materials should be considered so they will not create unsafe conditions or block sight lines for pedestrians, bicyclists, or motorists as they mature.

Invasive Plant Species. Plant species that are considered invasive or potentially invasive in Maine should not be used in the landscape. The Landscape Plan should indicate how existing invasive species will be dealt with, using best management practices. The following species are among those considered invasive and should not be used:

Shrubs
- Berberis thunbergii Japanese Barberry
- Elaeagnus angustifolia Russian Olive
- Elaeagnus umbellata Autumn Olive
- Euonymus alatus Winged Euonymus
- Ligustrum sp. Privet
- Lonicera japonica Japanese Honeysuckle
- Lonicera morrowii Bush Honeysuckle
- Lonicera tatarica Tatarian Honeysuckle
- Rhamnus cathartica Common Buckthorn
- Rhamnus frangula Glossy Buckthorn
- Rosa multiflora Multiflora Rose

Trees
- Acer ginnala Amur Maple
- Acre platenoides Norway Maple

Vines and Perennials
- Celastrus orbilulata Oriental Bittersweet
- Fallopia japonica Japanese Knotweed
- Lythrum salicaria Purple Loosstrife
- Phragmites australis Common Reed
**LANDSCAPE PRINCIPLES**

**Rocks.** Large rocks should be used as landscape elements very sparingly and only as accents in mass plantings. When used, ornamental rocks should be partially buried.

**Buffers & Screening.** Plant materials and other landscape elements may be used to create suitable buffers between residential and commercial properties. The design of buffers should consider the appearance from both commercial and residential viewpoints. Evergreen plantings are particularly effective for year-round buffering.

**Minimum Plant Sizes.** Unless otherwise required by site conditions, plant materials shall meet the following size standards:

- **Canopy Trees** 2 1/2” caliper
- **Flowering Trees** 2” caliper
- **Evergreen Trees** 5-7’ height
- **Deciduous Shrubs** 24” height
- **Evergreen Shrubs** 18” ht./spread
- **Perennials** 2 year clumps
- **Ornamental Grasses** 2 year clumps
- **Ground Covers** 3” pots

The use of bare root plant material should be avoided.

**Simplicity.** Planting design shall stress simplicity in form and limit the number of species. Shrubs, perennials, annuals, ornamental grasses, etc. used along the roadways should be planted in masses or ‘drifts’ that emphasize colors and textures, rather than used as single specimens.

**Ground Cover.** Extensive areas of bark mulch shall not be used as a substitute for live ground cover. Where mulch is used, it shall consist of dark, decomposed shredded bark, with pieces less than 1” in any one dimension.

**Resources.** Additional information:


LANDSCAPE PRINCIPLES

A simple planting plan that features drifts of perennials and ornamental grasses to accentuate a small medical building.

By preserving this specimen tree, the owner maintained visual interest, provided shade, and retained site character.

A pedestrian use area has been effectively separated from the adjacent roadway by a backdrop of flowering shrubs, perennials, and trees.

Ornamental trees can be an effective way to give scale to the street. Trees should be pruned to a minimum of 8' above the walk.

An informal grouping of trees, shrubs, groundcovers, and trees emphasize the front entrance of this office building.

Upright forms of tree species were selected for this tight location next to a building wall.
OBJECTIVES

Mature trees along Raymond’s commercial district are an important element of community character. They provide significant year-round visual interest, wildlife habitat, and comfort to pedestrians. Where practical, existing mature and specimen trees should be preserved during development.

DESIGN GUIDELINES

Planning for Tree Protection. Every effort should be made to preserve existing or unique trees or other plant material. Transplanting and reusing trees and other plant materials are strongly encouraged. The landscape plan should illustrate where individual trees or masses of significant vegetation will be preserved and what measures will be taken to protect the trunk and root system during construction. The Planning Board or Code Enforcement Officer (CEO) may require a survey and photographs of existing trees to be preserved.

Construction. As a general rule, no construction activity should be allowed within the drip line (outer edge of the tree canopy) during construction. This includes grading, compaction, utility installation, stockpiling of construction materials, or movement of vehicles.

Temporary Measures. Barricades (snow fencing or similar materials) should be installed prior to construction to prevent compaction of tree roots and damage to bark. The radius of the protection fencing in feet should be at least the diameter of the tree in inches (i.e., a 12-inch diameter tree should have a fence with a radius of 12 feet).

Professional Assistance. In the case of unusually significant trees, the Planning Board may require a report from a Maine licensed arborist that describes the procedures that will be used to protect the tree during and following construction.

Tree Walls / Wells. Where grading is required near trees to be preserved, properly designed tree wells or retaining walls may be used to ensure the long-term health of the tree. Such structural systems should be designed by a landscape architect or other qualified professional.

Grade Changes. Many tree roots are at or near the surface. Grading within the drip line in excess of a few inches should be avoided since it may cause irreparable damage to the root system and cause the tree to die.

Replacements. Where trees noted to be saved are damaged or lost during construction, the Planning Board or CEO may engage the services of a licensed arborist to determine the value of the trees and to develop a mechanism for their replacement.
OBJECTIVES

Landscaping is necessary in parking lots to improve the visual appearance, reduce the scale of paved areas, define edges, provide shade, and add seasonal interest. Trees, shrubs, and ornamentals should be planted in large groups, or drifts, appropriate to the scale of the space. It is more important to define the edges of the parking lot than to plant trees and shrubs within the lot.

DESIGN GUIDELINES

Landscaping in Parking Lots. Parking lots with 10 or more spaces should have at least one tree per eight spaces, planted in or within five feet of the edge of the lot. At least 10% of the interior area of any parking lot with 25 or more spaces should be landscaped with a living ground cover other than grass. Larger or more intense parking lots should have more intense landscape treatments.

Plant Material Variety. All parking lot landscaping should be able to tolerate dry growing conditions. The use of a variety of groundcovers, perennials, flowering shrubs and ornamental grasses is encouraged in parking areas. See Plant Materials List at the end of this chapter.

Undesirable Plant Materials. Trees that may damage automobiles (dripping sap, messy fruit, or hard seeds such as acorns) should not be used in or around parking lots.

Location of Trees. Trees in parking lots should be planted in informal groups, straight rows, or irregular groupings as space permits, or they may be concentrated in certain areas. Trees should be planted a minimum of five feet from the end of parking lot islands.

Safety. Where trees abut pedestrian walkways or places where people will be walking in parking lots, their lower branches should be pruned to at least eight feet above the paved surface to avoid becoming an obstacle. Shrubs used in parking lot islands should not exceed three feet in height to avoid blocking visibility.

Snow Storage. Landscape materials surrounding parking lots and in islands should be able to tolerate large quantities of snow stored during winter months. Delicate plant material should not be used in areas where they are likely to be buried under snow.
Parking lot islands provide an opportunity to use a variety of plant species to break up the mass of pavement and introduce interesting textures.

Parking lot islands should be large enough for trees to achieve full maturity and to prevent damage from car doors and snowplows.

This island of hardy black-eyed susans adds texture and a spot of color to the parking lot.
OBJECTIVES

Trees should be used at building entrances, in parking lots, and amidst open space. They should be allowed to achieve full maturity and display their natural form. In particular, planting plans should include large shade trees within or near the right of way to create a more unified, pedestrian-friendly streetscape.

DESIGN GUIDELINES

Suitability. Trees should be resistant to insect infestation, drought, disease, roadside salt, and auto emissions. All plant material should be suitable to Raymond’s growing conditions. A list of possible varieties of street trees is included at the end of this chapter.

Coordination. Trees should be carefully selected and located to complement building elevations without blocking storefronts, signs, or lighting. Trees should be planted in locations where their root development and branching patterns will not interfere with underground or overhead utilities, streets, and sidewalks.

Plantings near Roadways. Trees near public or private roads should be planted a minimum of 5’ (where possible) from the edge of the paved or gravel shoulder. Trees along numbered routes should meet the setback requirements of MDOT. Prior to planting, property owners should consult with MDOT officials as to the location of the right of way. Landscaping planted at intersections should preserve an adequate sight triangle as determined by a traffic engineer. Trees should not be planted in the strip between the roadway and the pathway paralleling Route 302.

Pedestrian Movement. The lower branches of trees planted near pathways and sidewalks should be at least eight feet above the surrounding grade and five feet from the edge of the pavement to minimize interference with pedestrian movement throughout the year.
OBJECTIVES

A wide variety of shrubs and ornamental plantings should be used throughout Raymond to add seasonal color, provide visual interest, help define spaces, screen undesirable elements, and emphasize circulation routes.

DESIGN GUIDELINES

Variety in Plantings. The use of flowering shrubs, evergreen shrubs, perennials, annuals, vines, ornamental grasses, and other plant material is highly recommended, in addition to street trees, evergreen trees, and ornamental trees. A listing of plantings that may be suitable for the corridor is provided at the end of this chapter.

Selection. The selection of plantings should consider ultimate height and spread, maintenance, pest and disease tolerance, and their nuisance potential (e.g., leaf litter, thorns, and insect attraction).

Foundation & Wall Plantings. Planting beds are recommended along exposed building edges, foundations and uninterrupted walls. Plantings should provide either a formal pattern or a naturalistic blend of heights, colors, and textures for visual relief. In general, plantings should not be installed within 18” of the face of the wall.

Accent Plantings. The installation of special planting beds is encouraged to complement the plantings along the pedestrian path and add year-round visual interest. These could include daylily beds, butterfly gardens, bog gardens, fragrant gardens, shade gardens, yellow foliage gardens, early blooming gardens, texture gardens, etc.

Mass Plantings. Shrubs and perennials should generally be planted in large masses or ‘drifts,’ rather than as individual specimens, to provide a pleasing effect for both motorists and pedestrians.

Safety. Plant material should be selected with due consideration to public health and safety. Avoid plants with poisonous or messy fruits or leaves, large thorns, or overly aggressive growth patterns. Large shrubs which could provide hiding places along pathways or block the view of moving vehicles should be avoided.

SHRUBS & ORNAMENTAL PLANTINGS

Ornamental grasses can provide a simple, cost-effective, low-maintenance way to add texture throughout the year.

Trees, evergreens, shrubs, and perennials should be able to withstand severe growing conditions and weather. This informal grouping provides an attractive accent for a highly visible corner.

Masses of daylilies make a bright, colorful statement in front of this bank. Additional drifts of similar plantings in the commercial area would create a memorable effect.
OBJECTIVES

Planting plans should anticipate a 3-8 year growing cycle to achieve maturity for shrubs, and 15-20 years for trees. Proper maintenance should be assured so the site continues to improve as the landscaping achieves maturity. The Site Plan should be designed and plantings selected with due consideration for maintenance requirements.

DESIGN GUIDELINES

Selection. The use of plant materials and landscape elements that require a low degree of maintenance is strongly encouraged. All plants should be resistant to insect infestation, drought, disease, roadside salt, and auto emissions, and hardy to Maine winters.

Low Maintenance Materials. The use of plant materials and landscape elements that require a low degree of maintenance is strongly encouraged. Planting characteristics to be considered include: drought resistance (except where irrigated), tolerance to auto emissions, disease and insect resistance, lack of thorns that could trap debris, and relatively small leaves for ease of fall cleanups.

Approach. The use of integrated pest management, organic lawn care, and other environmentally sustainable practices is strongly encouraged.

SITE MAINTENANCE

This full-grown euonymous blocks the view of motorists leaving this service station. A smaller shrubs, requiring less maintenance, would have been more appropriate.

This round rock mulch may be an effective ground cover, but it can present a safety hazard when loose rocks end up in the walkway.

Natural forms are preferable to overpruned plants. Plant material should be selected with consideration for ultimate size to avoid unnecessary pruning.
OBJECTIVES

Plant Materials List has been developed to encourage property owners to look at many options in both form and species. The list should be considered a starting point in selecting plants. These recommended plants have been derived from a number of sources to inspire a greater landscape variety in . The final selection of materials should consider the specific growing requirements and characteristics of each plant and the conditions present within the site.

STREET TREES

Aesculus hippocastanum  Baumanii Horsechestnut
Acer campestre  Hedge Maple
Acer ginnala  Amur Maple
Acer x. freemanii  Armstrong Maple
Acer x. freemanii  Autumn Blaze Maple
Acer rubrum  Red Maple
Acer saccharum  Sugar Maple
Acer tataricum  Tartarian Maple
Acer triforum  Three-flower Maple
Amelanchier  Shadbrow
Betula nigra  River Birch
Carpinus betula fastig.  Upright Hornbeam
Carpinus caroliniana  American Hornbeam
Cercidiphyllum japon.  Katsura Tree
Cladrastis lutea  Yellowwood
Corylus colurna  Turkish Filbert
Crataegus crugallli  Cockspur Hawthorn
Ginko biloba  Maidenhair Tree (m)
Gleditsia triacanthos  Thornless Honey Locust
Gymnocladus dinicus  Kentucky Coffee Tree
Liriodendron tulipifera  Tulip Poplar tree
Magnolia acuminata  Cucumber tree
Prunus accolade  Accolade Cherry
Prunus maackii  Amur Chokecherry
Pyrus calleryana  Cleveland Pear
Quercus alba  White Oak
Quercus bicolor  Swamp White Oak
Quercus cocinea  Scarlet Oak
Quercus imbricaria  Shingle Oak
Quercus palustris  Pin Oak
Quercus robur  Upright English Oak
Quercus rubra  Red Oak
Quercus shumardii  Shumard Oak
Sophora japonica  Regent Scholartree
Tilia cordata  Littleleaf Linden
Ulmus parvifolia  Lacebark Elm
Ulmus americana  Princeton American Elm; Frontier Elm
Zelkova serrata  Greenvase Zelkova

ORNAMENTAL TREES

Acer campestre  Hedge Maple
Acer ginnala  Amur Maple
Aesculus carnea  Red Horsechestnut
Amelanchier canadensis  Serviceberry
Carpinus betulus  European Hornbeam
Carpinus carolineanum  American Hornbeam
Celtis occidentalis  Hackberry
Cornus kousa  Kousa Dogwood
Cornus mas  Cornealiancherry
Dogwood
Cotinus obovatus  American Smoketree
Crataegus crus-galli  Cockspur Hawthorne
inermis ‘cruzam
Crataegus viridis  Winter King Hawthorn
Halesia carolina  Carolina Silverbell
Maackia  Loebner Magnolia
Magnolia stellata  Star Magnolia
Malus species  Crabapple
Nyssa sylvatica  Tupelo
Ostrya virginiana  Ironwood
Phellodendron arboreum  Amur Corktree
Prunus sargentii  Sargent Cherry
Prunus subhirtell  ‘Autumnalis’
Pyrus calleryana  Bradford Pear
Sorbus alnifolia  Korean MountainAsh
Syringa reticulata  Tree Lilac ‘Ivory Silk’
EVERGREEN TREES

Abies concolor    White Fir
Abies fraseri    Fraser Fir
Picea abies     Norway Spruce
Picea glauca    White Spruce
Picea omorika    Serbian Spruce
Picea pungens    Colorado Spruce
Pinus resinosa    Red/Norway Pine
Pinus strobus    Eastern White Pine
Thuja occidentalis   American Arborvitae
Tsuga canadensis    Canadian Hemlock
Tsuga caroliniana    Carolina Hemlock

FLOWERING & ORNAMENTAL SHRUBS

Aesculus parviflora   Bottlebrush Buckeye
Aronia arbutifolia    Red Chokeberry
Berberis thunbergii   Barberry ‘Crimson Pygmy’
Cotinus coggygria    Common Smoketree
Cotoneaster adpressa   Creeping cotoneaster
Cotoneaster divaricatus   Spreading cotoneaster
Cotoneaster horizontalis   Rockspray Cotoneaster
Deutzia gracilis   Slender Deutzia
Enkianthus campanulat.    Redveined Enkianthus
Eunymus alatus comp.   Dwarf Burning Bush
Forsythia ‘Sunrise’   Sunrise Forsythia
Hydrangea paniculata   Panicle Hydrangea
Ilex verticillata    Winterberry
Myrica pensylvanica    Bayberry
Potentilla fruticosa   Bush Cinquefoil
Prunus maritima    Beach Plum
Rhododendron species    Rhododendron species
Rosa rugosa    Beach Rose
Viburnum prunifolium   Blackhaw Viburnum
Viburnum sargentii   Sargent Viburnum
Viburnum trilobum    Amer. Cranberrybush
Xanthorrhiza simplicissima    Yellowroot

PERENNIALS

Achillea millefolium    Yarrow
Aster x frikartii    New England Aster
Astilbe varieites    Astilbe
Coreopsis verticillata    Moonbeam Coreopsis
Echinacea purpurea    Purple coneflower
Hemerocallis species    Daylilies
Liatris spicata    Gayfeather
Malva alcea ‘Fastigiata’    Hollyhock Mallow
Perovskia atriplicifolia    Russian Sage
Rudbeckia ‘Goldsturm’    Black-Eyed Susan
Sedum telephium    Autumn Joy Sedum

ORNAMENTAL GRASSES

Deschampsia caespitosa    Tufted Hair Grass
Festuca ovina ‘glauc’    Purple Silver Grass
Miscanthus sinensis