

**CITY OF MARCO ISLAND**

**ORDINANCE 02-22**

AN ORDINANCE TO ESTABLISH NEW LANDSCAPING AND BUFFERING REQUIREMENTS TO SUPERCEDE, SUPPLEMENT AND/OR REPLACE LANDSCAPE AND BUFFERING PROVISIONS OF THE COLLIER COUNTY LAND DEVELOPMENT CODE (ORDINANCE 91-102, AS AMENDED) AND CURRENTLY APPLICABLE TO DEVELOPMENT ON MARCO ISLAND; ESTABLISHING TITLE AND CITATION; ESTABLISHING PURPOSE AND INTENT; PROVIDING FOR LANDSCAPE AND IRRIGATION PLAN PROCEDURES; PROVIDING FOR PRUNING AND MAINTENANCE; PROVIDING FOR PLANT MATERIAL AND INSTALLATION STANDARDS; PROVIDING FOR EXISTING PLANT MATERIALS; PROVIDING FOR TREE PRESERVATION CREDITS; PROVIDING FOR SIGHT DISTANCE TRIANGLES, SIGNAGE AND BERMS; PROVIDING FOR MINIMUM LANDSCAPING REQUIRED FOR VEHICULAR USE AREAS; PROVIDING FOR MINIMUM LANDSCAPING REQUIREMENTS; PROVIDING FOR MINIMUM LANDSCAPE BUFFERING AND SCREENING BETWEEN USES; PROVIDING FOR THE MARCO ISLAND STREETScape PLAN; PROVIDING FOR CUL-DE-SAC BEAUTIFICATION; PROVIDING FOR INCORPORATION, CONFLICT AND SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Article VIII of the State Constitution and Chapter 166 of the Florida Statutes provide that municipalities shall have the governmental, corporate, and proprietary powers to enable them to conduct municipal government, perform municipal functions, and render municipal services, and may exercise any power for municipal purposes, except when expressly prohibited by law; and

WHEREAS, state law requires municipalities to adopt Land Development Regulations within one year of Comprehensive Plan adoption; and

WHEREAS, the Marco Island Planning Board, as the Local Planning Agency, has conducted all required public hearings related to this ordinance, and has forwarded this ordinance to City Council with a recommendation of approval.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MARCO ISLAND, FLORIDA:

**SECTION ONE: TITLE AND CITATION**

This ordinance shall be known and may be cited as the "City of Marco Island Landscape Code."

## SECTION TWO: INTENT AND PURPOSE

The purpose and intent of the landscape code is to:

- A. Promote the health, safety, and welfare of residents of the City of Marco Island by establishing minimum uniform standards for the installation and maintenance of landscaping;
- B. Improve the aesthetic appearance of commercial, and residential developments through the requirement of minimum landscaping in ways that harmonize the natural and built environment; promote preservation and planting of native plants and plant communities;
- C. Improve environmental quality by reducing and reversing air, noise, heat, and chemical pollution through the preservation of canopy trees and the creation of shade and microclimate;
- D. Reduce heat gain in or on buildings or paved areas through the filtering capacity of trees and vegetation; and
- E. Promote water conservation by encouraging the use of native and drought-tolerant vegetation and properly zoned irrigation system through xeriscape.

## SECTION THREE: LANDSCAPING AND IRRIGATION PLAN PROCEDURES

- A. *Landscape plan required.* Prior to the issuance of any subdivision plat or site development plan, an applicant whose development is covered by the requirements of this code shall submit a complete landscape plan to the Community Development Director or his designee. This includes commercial, institutional, and multi-family developments. The landscape plan shall be prepared by and bear the seal of a registered landscape architect.

Prior to the issuance of a certificate of occupancy for a single-family residence the owner or owner's representative shall prepare and submit a copy of the final "as-built" survey that accurately depicts the approximate location of code required landscaping materials on the property, including the common name of tree species installed, and the height at the time of planting. This landscape plan will be used in conjunction with the final inspection of the single-family residence, and kept as part of the permanent file.

- 1. Except in the case of a single-family residence, as described above, the landscape plan shall be drawn to a suitable scale, include dimensions, north arrow, date, title, project owner's name and address, delineate the existing and proposed parking, vehicular use areas, buildings, access

points, and roadways, show all utility lines or easements, and show the location of existing and proposed planting areas and vegetation communities and designate them by species name. The code-required landscaping shall be highlighted or indicated on the plan to differentiate from the applicant's provided landscaping that is in addition to that required by this code. Design creativity is encouraged so long as it meets the intent of this code. The plan shall show the location of permanent vegetation protection devices, such as barricades, curbing, and tree wells. The plan shall also include a chart indicating graphic plant symbol, botanical and common name, quantity, height, spread, spacing, native status, drought tolerance rating (as defined by "Xeriscape Plan Guide II" latest edition, as published by South Florida Water Management District, West Palm Beach, FL) and type of industry practices and standards. In addition, a tabulation of the code required landscaping indicating the calculations necessary to insure compliance with this code should also appear. A certificate of occupancy permit shall not be issued until approval of the landscaping plan and installation of plants are inspected by the City.

- B. *Irrigation plan required.* All new single family residences, multi-family, commercial and institutional developments shall be irrigated by the use of an automatic irrigation system with controller set to apply water in a manner consistent with this code. Irrigation plans for multi-family, commercial and institutional developments shall be prepared by persons qualified to prepare irrigation plans, such as an irrigation designer or landscape architect. Moisture detection devices shall be installed with all automatic sprinkler systems to override the sprinkler activation mechanism during periods of increased rainfall. Where existing irrigation systems are modified requiring the acquisition of a permit, automatic activation systems and overriding moisture detection devices shall be installed in compliance with this code.

Required irrigation installed at single-family residences does not require the submittal of an irrigation plan. The system must be installed by a licensed professional prior to the issuance of a certificate of occupancy. As part of the final inspections for the residence, the irrigation system will be inspected to insure the inclusion of the following system elements: control valve; vacuum breaker; timer (clock); and rain sensor.

1. The irrigation plan shall be drawn at the same scale as the landscape plan to: show existing vegetation to remain; delineate existing and proposed buildings and other site improvements, parking spaces, aisles, and driveways; indicate main valve, and pump locations, pipe sizes and specifications; show controller locations and specifications; show backflow preventer and rain-sensing devices and include a sprinkler-zoning plan indication type, specifications, spacing, and coverage. If drip irrigation or soaker hoses are proposed, their layout shall be shown.

2. Reference the City of Marco Island Public Right-of-Way Ordinance for irrigation system requirements within the public right-of-way. (Reserved)
- C. *Existing plant communities.* Existing plant communities and ecosystems shall be maintained in a natural state and shall not be required to be irrigated. Native plant areas that are supplements to an existing plant community or newly installed by the applicant shall be irrigated on a temporary basis only during the period of establishment from a temporary irrigation system, water truck, or by hand watering with a hose.
- D. *Cultivated landscapes.* Cultivated landscape areas (sod, shrubs, and trees) shall be provided with an automatic irrigation system to improve the survivability of the required landscaping. Sprinkler heads irrigating lawns or other high water demand areas shall be zoned separately from those irrigating trees, shrubbery, ground cover, flowers, or other reduced water requirement areas. Automatically controlled irrigation systems shall be operated by an irrigation controller that is capable of watering "high water" requirement areas at different frequencies and duration than "low water requirement areas". Landscaping shall only be watered on an as-needed bases.
- E. *Irrigation systems.* Irrigation systems shall be designed for the zoning of high and low water use areas. Plans shall include in schedule form, the irrigation system's total gallons per minute (GPM) for each zone, recommended zone running times in minutes, hours and showing days per week, and estimated zone precipitation rate in inches per hour. The irrigation system shall be generally designed to apply one inch of water per week during two operations per week. The system coverage shall be designed for 100 percent coverage unless specified by the designer. The system shall be generally designed for the 100% head to head coverage as generally recommended by the irrigation sprinkler manufacturers for matched precipitation. These requirements may be adjusted for retention areas. The irrigation system shall be designed and installed in accordance with the Florida Irrigation Society's, Standards and Specifications for Turf and Landscape Irrigation Systems (as amended). Irrigation systems utilizing well water shall be designed and maintained in a manner which eliminates staining of the building, walks, walls, and other site improvements. All systems shall be designed to minimize the application of water onto sidewalks, driveways, streets, and other impervious areas. Irrigation systems, other than drip or soaker hose systems shall be operated between the hours of midnight and 8:00 a.m. South Florida Water Management District (SFWMD), City of Marco Island, or other utility company water use restrictions shall supersede these requirements. There are no operational requirements for irrigation systems utilizing effluent/reused water sources.

- C. *Removal of damaged or nuisance trees.* Ongoing maintenance to prohibit the establishment of prohibited exotic species is required. Any plant materials of whatsoever type or kind required by these regulations shall be replaced within 30 days of their demise and/or removal. Code Enforcement will inspect areas affected by this code and issue citations for violations.

## **SECTION FIVE: PLANT MATERIAL AND INSTALLATION STANDARDS.**

- A. *Quality.* Plant materials used to meet the requirements of this section shall meet the standards for Florida No. 1 or better, as set out in Grades and Standards for Nursery Plants”, part I and part II, Department of Agriculture, State of Florida (as amended). Root ball sizes on all transplanted plant materials shall also meet state standards.
1. At least 50 percent of the trees and 50 percent of the shrubs used to fulfill these requirements shall be native or naturalized Southern Floridian species, as determined by accepted valid scientific reference. The “Recommended Trees and Shrubs for the City of Marco Island List” is available for reference at City Hall.
  2. In addition, for all sites, at least 50 percent of the trees and shrubs used to fulfill these requirements shall be drought-tolerant species as listed in the “Xeriscape Plant Guide and Native Trees for South Florida” (IFAS). Reference to be used in the native determination may include, but not be limited to:  

Long, R.W., and O. Lakela, 1976. A Flora of Tropical Florida.  
Small, J.K., 1933. A Manual of the Southeastern Flora.  
Wunderlin, R.P., 1982. Guide to the Vascular Plants of Central Florida.
  3. Where xeric plants are to be utilized, use the South Florida Water Management District Xeriscape Plant Guide (as amended) as a reference.
- B. *Trees and palms.* All required new individual trees shall be species having an average mature spread or crown of greater than 20 feet and having trunk(s), which can be maintained in a clean condition with over ten feet of clear wood. Trees adjacent to walkways, bike paths and rights-of-way shall be maintained in a clean condition with over ten feet of clear wood. Trees having an average mature spread or crown less than 20 feet may be substituted by grouping the same so as to create the equivalent of a 20-foot crown spread. For code-required trees, at least 50% of the trees shall be canopy type trees and 50% may be palms. The minimum size of the trees at the time of installation shall be as follows:

*Single-Family Single Story Structures*

**Canopy Trees:**

(50%) 10', 4' spread, 1.75" caliper (at 12" above the ground).

(50%) 8', 3' spread, 1.50" caliper (at 12" above the ground).

*All Other Single Story Structures (multifamily, commercial, and institutional)*

**Canopy Trees:**

(50%) 12'-14' on average height, 6' spread, 3" caliper, 6'-7' clear trunk, 65 gallon minimum. Container or ball and burlaped (B&B).

**Palms:**

(50%) 12' clear trunk height minimum with 15' minimum mature clear trunk height.

*All Multiple Story Structures (single family, multifamily, commercial, and institutional)*

**Canopy Trees:**

(25%) 12'-14' on average height, 6' spread, 3" caliper, 7' clear trunk, 65-gallon minimum. Container or ball and burlaped (B&B).

(25%) 16'-18' on average height, 7' spread, 4" caliper, 7' clear trunk, 100 gallon minimum. Container or ball and burlaped (B&B).

**Palms:**

(25%) 12' clear trunk height minimum with 15' minimum mature clear trunk height.

(25%) 15' clear trunk height minimum with 18' minimum mature clear trunk height.

A grouping of three palm trees will be equivalent to one canopy tree. Exceptions will be made for *Roystonea* spp. (Florida Royal Palm) and *Phoenix* spp. (Canary Island Date Palm not including *Roebelenii*) which shall count one palm tree for one canopy tree. Also, exceptions will be made for *Cocos* spp. (Coconut Palm) and *Arecastrum* spp. (Queen Palm) which shall count two palm trees for one canopy tree. In side and rear yard locations, palms can only be substituted for 50 percent of the canopy tree requirement. Front yards may have 75 percent palms, and are encouraged within commercial zoning districts.

- C. *Tree species mix.* When trees are required to be planted to meet the requirements of this Code, a mix of species shall be provided. The number of species to be planted shall vary according to the overall number of trees

required to be planted. The minimum numbers of species to be planted are indicated below.

#### REQUIRED SPECIES MIX

Required Number of Trees	Minimum Number of Species
2-10	2
11-20	3
21-30	4
31+	5

D. *Screening/Buffering.* Where screening is required (refer to Table 2) it shall be accomplished by the use of or combination of hedges, shrubs, ground covers, berming, and decorative fences or walls in combination with shrubs, vines and ground covers covering 50% or more of the fence or wall. The screening/buffering shall be designed to create within 12 months a 100 percent opaque visual screen/buffer, to be maintained in perpetuity, except for visibility requirements at vehicular access points, street intersections, and pedestrian access points.

1. *Minimum shrub sizes for opaque hedges at time of installation.* Ten (10) gallon container, 48" height, 36" spread minimum, with the 48-inch height measured from the top of the root ball to the extent of the upper most foliage planted 4' on center.
2. *Minimum shrub sizes at time of installation adjacent to right-of-way and vehicular use areas.* Three (3) gallon container minimum planted 36 inches on center with a minimum height of 24 inches and spread consistent to the species of plant, but meeting a Florida No. 1 or better nursery grown grade. The 24-inch height is measured from the top of the root ball to the extent of the upper most foliage.

E. *Ground Cover's.* Prior to the issuance of a certificate of occupancy for any single family residence, multi-family, commercial, or institutional development, ground coverings, as described below, shall be installed.

1. *Lawn Grass.* All lawn areas shall be sodded and/or planted with turf species normally grown as permanent lawns within the Southwest Florida area. Solid sod shall be used in swales or other areas subject to erosion. The use of drought tolerant species is encouraged. In no event shall the use of or combination of organic or non-organic ground coverage areas exceed the pervious area percentages specified in items 3 or 4 below.

Reference the City of Marco Island public right-of-way ordinance for requirements within the public right-of-way.

- F. *Installation.* Prior to the issuance of any certificate of occupancy permit for a use required to provide landscaping and irrigation in accordance with this section, all required landscaping and irrigation shall be installed and in place as set out in this code. All plant materials must be installed in accordance with accepted landscape practices in the area and meet the plant material standards contained in this code. Plant materials shall be installed in soil conditions that are conducive to the proper growth and the plant material.

#### **SECTION FOUR: PRUNING AND MAINTENANCE.**

- A. *Pruning.* Vegetation required by this code shall be pruned to promote healthy, uniform, natural growth of the vegetation and shall be in accordance with "Standard Practices for Trees, Shrubs and Other Woody Plant Maintenance" ANSI A300 or latest edition of the National Arborist Association. Trees shall not be severely pruned in order to permanently maintain growth at a reduced height or spread. Owners found in violation of this provision must remove the severely pruned trees and replace with trees equal to the number and height of the trees removed. A plant's growth habit shall be considered in advance to avoid conflicts.
- B. *Maintenance.* The owner shall be responsible for the continued maintenance and upkeep of all required landscaping so as to present a healthy plant in a condition representative of the species. Tree and palm staking shall be removed between six and twelve months after installation. All landscapes shall be kept free of refuse, debris, disease, pests, and weeds and shall be fertilized and irrigated to maintain plants in a healthy condition. Special maintenance requirements necessary to preserve the design professional's intent shall be noted on the planting plan. Any plant materials of any kind are required by these regulations to be replaced within 30 days of their demise and/or removal. Code Enforcement will inspect areas affected by this code and issue citations for violations. If the required corrective action is not taken within the time allowed, the City may use any available means of enforcement to secure compliance. These shall include, but not be limited to the following:
1. Prosecution before City of Marco Island Code Enforcement Board;
  2. Withholding of any permit, construction plan approval, certificate of occupancy, or inspection by the City;
  3. Placing a lien on the property, to include all administrative, legal, material and installation costs.

2. *Xeriscape*: Landscape areas utilizing xeriscape designs shall comply with the principals of Xeriscape TM as recognized in the publication "Waterwise – Florida Landscapes" from Florida's Water Management Districts. Landscape designs utilizing the Xeriscape TM principals with reduced lawn areas, and a combination of drought tolerant plantings and mulched areas with properly zoned irrigation systems are encouraged for water conservation purposes. Xeriscape schemes shall comply with the following seven principals of Xeriscape TM landscaping: a. plan and design; b. obtain a soil analysis; c. choose proper plants; d. use turf wisely; e. irrigate efficiently; f. use mulches; and g. perform proper maintenance. In no event shall the use of or combination of organic or non-organic ground coverage areas exceed the pervious area percentages as specified in items 3 or 4 below.
3. *Organic Ground Covers*: Ground covers such as organic mulch including bark chips, pine needles, eucalyptus, Austrian pine, and recycled matter from yard cuttings, shall not be permitted on more than 30 percent of the pervious area of the property, unless it is used in combination with a landscape design utilizing all the Xeriscape TM principals. In combination with a Xeriscape type landscape design the organic coverage area may be increased to 50 percent of the pervious area of the property provided all the mulch utilized on-site is organic ground cover. The 30 percent or 50 percent coverage areas shall not be contiguous in solid coverage of one area, but broken up with curvilinear lawn grass or landscape planting areas. A two-inch minimum layer after watering-in of organic mulch shall be placed and maintained around all newly installed trees, shrubs, and ground cover plantings. Each tree shall have a ring of mulch no less than 24 inches beyond its trunk in all directions.
4. *Non-Organic Ground Covers*: Ground covers such as, stone, gravel, or other non-organic material shall not be permitted on more than 20 percent of the pervious area of the property, unless it is used in combination with a landscape design utilizing all the Xeriscape TM principals. In combination with a Xeriscape type landscape design the non-organic coverage area may be increased to 50 percent of the pervious area of the property provided all the stone utilized on-site is a decorative smooth surfaced stone. Crushed rock, gravel, and SRD rock is prohibited on lawns utilizing 20 percent or more non-organic ground cover. The 20 percent or 50 percent coverage areas shall not be contiguous in solid coverage of one area, but broken up with curvilinear lawn grass or landscape

planting areas. If non-organic ground cover is installed, it must be installed in a manner that presents a finished appearance.

F. *Prohibited Species*. The following plant species shall not be planted:

1. Enterolobium cyclocarpum (Ear tree).
2. Melia azedarach (Chinaberry tree).
3. Bischofia javanica (Bishopwood).
4. Scaevola frutescens (Australian inkberry).
5. Dalbergia sissoo (Indian rosewood).
6. Sapium sebiferum (Chinese tallow tree).
7. Ardisia elliptica (Shoe button ardisia).

This list shall be subject to revision as exotic plant species are determined to be noxious, invasive, cause environmental degradation to native habitats, or to be detrimental to human health, safety, or the public welfare.

G. *Prohibited exotic species*. In addition to the prohibitions outlined in section 2.4.4.11, the following species or seeds thereof shall not be grown, offered for sale, or transported inter-city or intra-city.

1. Melaleuca spp. (Punk tree).
2. Schinus terebinthifolius (Brazilian pepper)
3. Any member of the family Casuarinaceae (Australian pine).
4. Rhodomyrtus tomentosus (Down rosemyrtle).
5. Dioscorea bulbifera (Air potato).
6. Colubrina asiatica (Lather leaf).
7. Lygodium spp. (Climbing fern).
8. Syzygium cumini (Java plum).
9. Mimosa pigra (Catclaw mimosa).
10. Acacia auriculiformis (Ear leaf acacia).
11. Albizia lebbeck (Women's tongue).
12. Ficus microcarpa (Laurel fig).

## **SECTION SIX: EXISTING PLANT MATERIAL.**

A. All new and or redevelopment shall retain existing native and mature vegetation to the maximum extent possible. Existing native vegetation shall be retained unless storm water management design, necessary grade changes, required infrastructure or approved construction footprints necessitate its removal. The need to remove existing vegetation shall be demonstrated by the applicant as part of the building permit or site development plan review process. Areas of retained vegetation shall be preserved in their entirety with all trees, under story, and ground covers left intact and undisturbed provided that prohibited exotic plant materials as defined herein are to be removed.

- B. During construction, all reasonable steps necessary to prevent the destruction or damaging of existing vegetation shall be taken. No excess soil, additional fill, equipment, liquids, or construction debris shall be placed within the drip line of any vegetation that is required to be preserved, or that will be credited towards the required landscaping.
- C. Protective barriers shall be installed and maintained beyond the drip line of all retained vegetation unless site improvements prohibit installation of barriers beyond the drip line, and shall remain in place for the duration of the construction process phase. The location of the protective barriers shall be determined by a landscape architect or design professional.

**SECTION SEVEN: TREE PRESERVATION CREDITS.**

Existing native trees may be credited towards meeting the minimum tree planting requirements according to the formula in Table 1. Fractional measurements shall be attributed to the next lowest category.

**TABLE 1. CALCULATION OF TREE PRESERVATION CREDITS**

<i>Existing Crown Spread of Preserved Trees</i>	<i>or</i>	<i>Diameter of Tree at 4.5 Feet Above Natural Grade</i>	=	<i>Number of Tree Credits</i>
50 feet or greater	or	26 inches or greater	=	3
40 to 49 feet	or	20 to 25 inches	=	2
30 to 39 feet	or	13 to 9 inches	=	2
20 to 29 feet	or	8 to 12 inches	=	1
10 to 19 feet	or	2 to 7 inches	=	1
Less than 10 feet	or	1 ½ to 2 inches	=	1*

\*Credited against equivalent required tree only.

**SECTION EIGHT: SITE DISTANCE TRIANGLES, SIGNAGE AND BERMS.**

- A. *Safe sight distance triangles at intersections and access points.* Where an access way intersects a right-of-way or when a property abuts the intersection of two or more rights-of-way, a minimum safe sight distance triangular area shall be established. Within this area, vegetation shall be planted and maintained in a way that provides unobstructed visibility at a level between 18 inches and ten feet above the adjacent access. (See Figure 1).

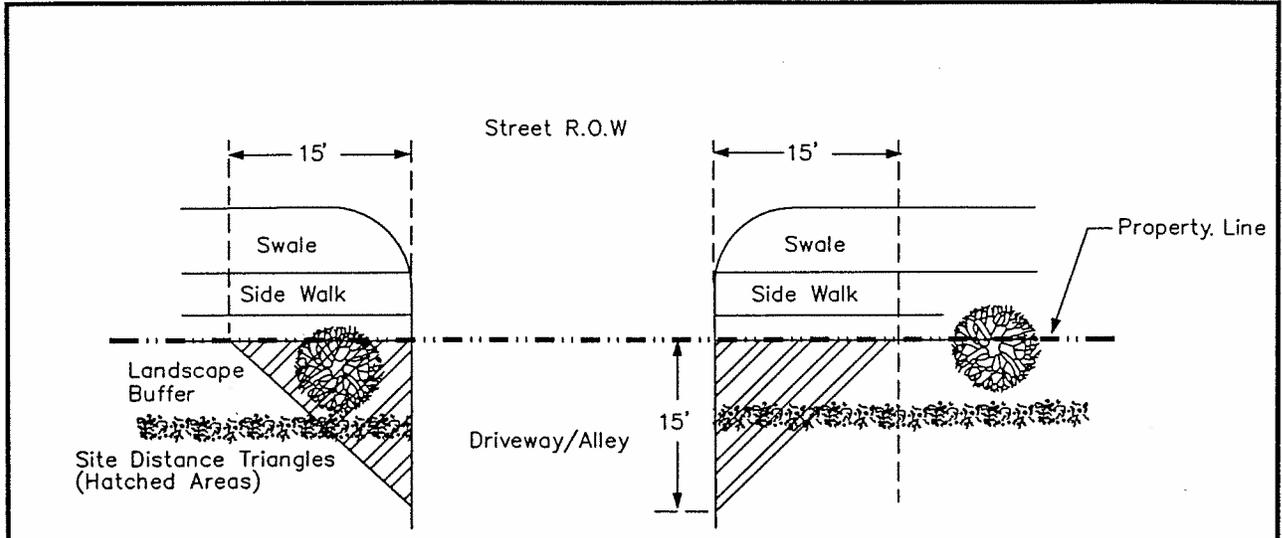
Where an access way enters a right-of-way, two safe distance triangles shall be created diagonally across from each other on both sides of the access way. Two sides of the triangle shall extend fifteen feet each way

from the point of intersection from the edge of pavement and the right-of-way line. The third side of the triangle shall be a line connecting the ends of the other two sides.

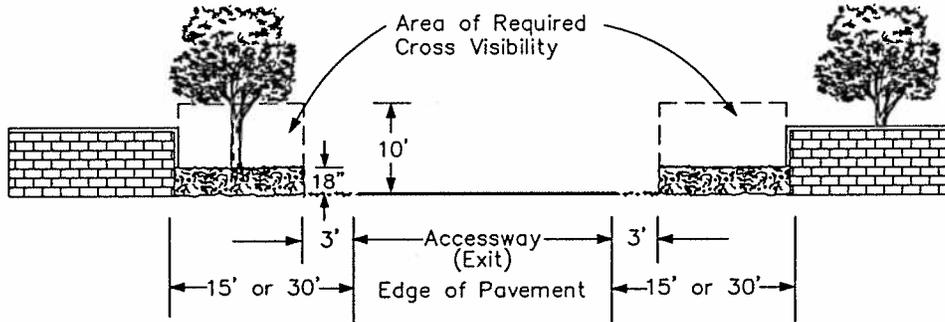
Where a property abuts the intersection of two rights-of-way, a safe distance triangle shall be created. Two sides of the triangle shall extend 30 feet along the abutting right-of-way lines, measured from the point of intersection. The third side of the triangle shall be a line connecting the ends of the other two sides.

- B. *Signage located within/adjacent to landscape buffer area.* All trees and shrubs located within a landscape buffer shall be located so as not to block view of signage. Where specimen trees exist, the signage setback location may be administratively reduced per the Land Development Code. Code required plantings should progress in height away from the street. Signs may be permitted within the restricted area of the landscape buffer to a minimum setback of one half the buffer width along with an overall reduction of the sign size requirements as described by 50 percent.

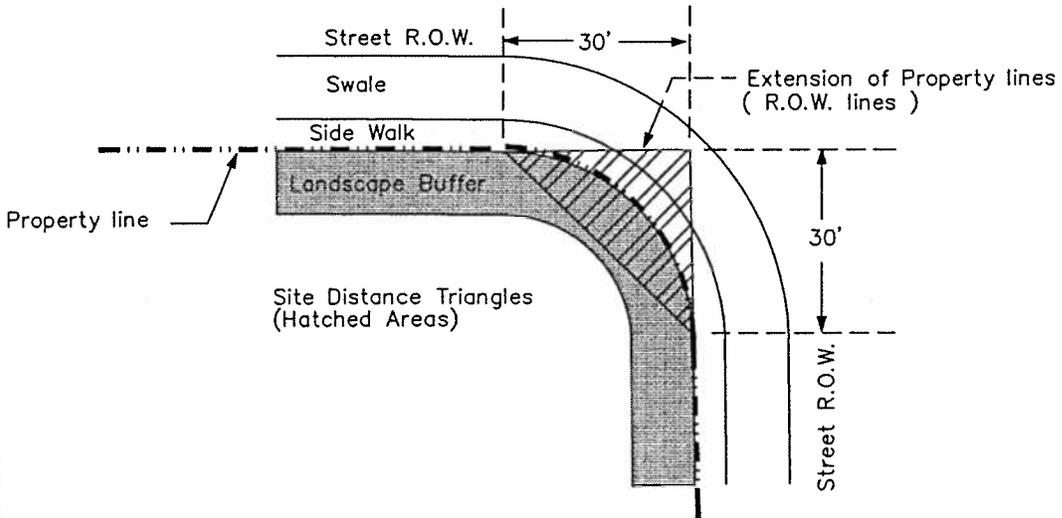
FIGURE 1: SIGHT DISTANCE TRIANGLES



Example 1: Typical Driveway/Alley Intersection with Street R.O.W.



Typical Section for Examples 1 and 2



Example 2: Typical Street Corner Intersection

- C. *Landscape berms.* All perimeter landscape berms over two feet in height shall meet or exceed the minimum standards as set forth herein. All grassed berms shall have side slopes no greater than four to one. Berms planted with ground cover and landscaping shall have side slopes no greater than three to one. Existing native vegetation shall be incorporated into the berms with all slopes fully stabilized and landscaped with trees, shrubs, and ground cover. Landscape berms shall not be placed within easements without written approval from all entities claiming an interest under said easement.

## **SECTION NINE: MINIMUM LANDSCAPING REQUIRED FOR VEHICULAR USE AREAS.**

- A. *Applicability.* The provisions of this section shall apply to all new and re-development of off-street parking or other vehicular use areas. Existing landscaping which does not comply with the provisions of this code shall be brought into conformity to the maximum extent possible when: the vehicular use area is altered or expanded except for restriping of lots/drives, the building square footage is changed, or the structure or a unit within the structure has been vacant for a period of 30 days or more and a request for an occupational license to resume business is made. These provisions shall apply to all developments with the exception of single-family, two-family, and mobile home dwelling units, on individually platted lots. Any appeal from an administrative determination relating to these regulations shall be to the board of zoning appeals or equivalent.
- B. *Landscaping required in interior of vehicular use areas for multi-family, institutional, and commercial developments.* At least ten percent of the amount of vehicular use area on-site shall be devoted to interior landscaping areas. The width of all curbing shall be excluded from the required landscaped areas. All interior landscaped areas not dedicated to trees or to preservation of existing vegetation shall be landscaped with grass, ground cover, shrubs or other landscape treatment. One tree shall be provided for every 250 square feet of required interior landscaped area. Interior landscaped areas shall be a minimum of five feet in width and 150 square feet in area. The amount of required interior landscape area provided shall be shown on landscape plans.
- C. All rows of parking spaces shall contain no more than ten parking spaces uninterrupted by a required landscaped island, which shall measure inside the curb not less than eight feet in width and at least eight feet in length and at least 100 square feet in area. At least one tree shall be planted in each island. These islands shall not be used as retention areas or as swales. Landscape islands for compact car parking areas shall be at least seven feet in width and at least 100 square feet in area. These tree requirements shall be met with existing native trees whenever such trees are located

within the parking areas and may be feasibly incorporated into the landscaping. Where existing specimen trees are retained in landscape islands, the amount of parking spaces in that row may be increased to 15. A parking stall shall be no farther than 50 feet from a tree, measured to the tree trunk. Interior landscaping areas shall serve to divide and break up the expanse of paving at strategic points and to provide adequate shading of the paved area. Perimeter landscaping shall not be credited toward interior landscaping.

- D. Interior landscaping areas shall be provided within the interior of all vehicular use areas. Landscaped areas, wall structures and walks shall require protection from vehicular encroachment through appropriate wheel stops, curbs or other structures.
- E. *Vehicular overhang of landscape areas.* The front of a vehicle may overhang any landscaped area a maximum of two feet, provided the landscaped area is protected by motor vehicle wheel stops or curbing. Two feet of such landscaped area or walkway may be part of the required depth of each abutting parking spaces. Walkways shall be a minimum of six feet in width if a vehicle is to overhang the walkway. The landscaping of the two-foot area of vehicular overhang shall be accomplished with ground covers only that reach height of 12 inches or less and shall not be a woody type plant.

## **SECTION TEN: MINIMUM LANDSCAPING REQUIREMENTS.**

- A. Landscaping for all new development, including single-family, two-family, mobile home, multi-family, commercial, and institutional uses shall include as a minimum, the number of trees set forth below. Areas dedicated as preserves and conservation areas shall not be counted to meet the requirements of this section. When calculating minimum tree requirements, a fractional unit of 0.50 or greater shall require an additional tree.
  - 1. *Single family, two family, and mobile home developments.* One canopy tree per 2,500 square feet of lot area, or two canopy trees per lot, whichever is greater, with the maximum number required: 15 trees per lot. One or more canopy trees, palms, or grouping of palms meeting the code requirements shall be located within ten feet of the front property line.
  - 2. *Multi-family developments.* One canopy tree per 2,000 square feet of pervious site area excluding preserves. This is in addition to other landscaping requirements.

3. *Commercial and institutional developments.* One canopy tree per 3,000 square feet of pervious site area excluding preserves. This is in addition to other landscaping requirements.
4. *Building perimeter plantings.* All commercial, institutional, and multi-family developments inclusive of accessory uses shall provide building perimeter plantings in the amount of 100 square feet per 1,000 square feet of proposed building ground level floor area, except within the Elkcam Circle Zoning Overlay. These planting areas shall be located adjacent to the building and shall consist of landscape areas, raised planters, or planter boxes that are a minimum of five feet wide. Seating courtyards, eating areas and plazas may be incorporated within them. Additional design criteria is provided in the Architectural and Site Design Regulations Ordinance.

#### **SECTION ELEVEN: MINIMUM LANDSCAPE BUFFERING AND SCREENING BETWEEN USES**

- A. *Applicability.* The buffering and screening shown in Table 1 shall be required under this section and shall apply to all new and redevelopment of commercial, institutional, and multi-family development. Existing landscaping which does not comply with the provisions of this section shall be brought into conformity to the maximum extent possible when the vehicular use area is altered or expanded except for restriping of lots/drives, the building square footage is changed, or the structure or a unit within the structure has been vacant for a period of 30 consecutive days or more and a request for an occupational license to resume business is made.
- B. The buffering and screening provisions of this code will be applicable at the time of planned unit development (PUD), subdivision plat (PSP), or site development plan (SDP) review, with the installation of the buffering and screening required pursuant to Table 2. Where a more intensive land use is developed contiguous to a property within a similar zoning district, the Community Development Director or designee may require buffering and screening the same as for the higher intensity uses.
- C. Landscape buffering and screening standards shall conform to the minimum buffering and screening standards of the zoning district it most closely resembles. The Community Development Director or designee may approve alternative landscape buffering and screening standards when such alternative standards have been determined by use of professional acceptable standards to be equivalent to or in excess of the intent of this code.
- D. *Standards.* Trees and shrubs shall be installed at the height specified in this code, unless otherwise noted.

E. Water management systems, which shall include retention and detention areas, swales, and subsurface installations, shall be permitted within a required buffer provided they are consistent with accepted engineering and landscaping practice and the following criteria:

1. Water management systems shall not exceed 50 percent of the square footage of any required side, rear, or front yard landscape buffer.
2. Water management systems shall not exceed 70% of the required buffer width. A minimum five-foot wide 10:1 level planting area shall be maintained where trees and hedges are required.
3. Exceptions to these standards may be granted on a case-by-case basis, evaluated on the following criteria:
  - i. Water management systems, in the form of dry retention, may utilize an area greater than 50 percent of the buffer when existing native vegetation is retained at natural grade.
  - ii. For lots of record 10,000 square feet or less in size, water management areas may utilize an area greater than 50 percent of the required side and rear yard buffers. A level planting area of at least three feet in width shall be provided in these buffers.

F. Vehicular use, or any other impervious areas shall not occupy any part of a required Alternative A, B, or C type buffer except as written below:

1. Driveways and sidewalks that are constructed perpendicular to the required buffer and provide direct access to the property;
2. Parallel meandering sidewalks occupy the buffer and its width is increased by the equivalent sidewalk width.

G. *Types of buffers.* Within a required buffer area, the following alternative shall be used based on the matrix in Table 2.

*Alternative A:* Ten-foot-wide landscape buffer with trees spaced no more than 30 feet on center.

*Alternative B:* Fifteen-foot-wide, opaque within one year, landscape buffer maintained at six feet in height, which may include a wall, fence, hedge, berm or combination thereof, including trees spaced no more than 25 feet on center. When planting a hedge, it shall be a minimum of ten gallon plants, 48 inches in height, three feet in spread and spaced a minimum four feet on center at planting.

*Alternative C:* A landscape buffer shall be required adjacent to any road right-of-way external to the development project. Said landscape buffer shall be consistent with the provisions of the City of Marco Island Master Plan, which is incorporated by reference herein. The minimum width of the perimeter landscape buffer shall vary according to the ultimate width of the abutting right-of-way. Where the ultimate width of the right-of-way is zero to 99 feet, the corresponding landscape buffer shall measure at least ten feet in width. Where the ultimate width of the right-of-way is 100 or more feet, the corresponding landscape buffer shall measure at least 15 feet in width. Developments within the Town Center Mixed Use District shall provide a perimeter buffer of at least 20 feet in width, regardless of the width of the right-of-way. The exception to this landscape buffer requirement is property located within the Elkcarn Circle Overlay as provided for in the Land Development Code. The Town Center Mixed Use District right-of-way buffer requirements shall not be applicable to roadways internal to the development or along alleys, however, these areas shall provide the applicable landscape buffer per this code.

Trees shall be provided in an amount equivalent of one tree per 30 feet of buffer length abutting the right-of-way. Trees shall be spaced so to provide for an unimpeded proper and mature growth of the trees being used. Trees with less than a 20 foot crown spread shall not be used within this buffer unless under overhead utilities or are trees above the number required of this code. Applicants whose properties require installation of Type "C" buffers within 500 feet of a major arterial or collector roadway intersection shall install required canopy trees at 16-18 feet heights with 7 foot minimum canopy spread, 4 inch diameter caliper and 7 foot clear trunks or palms with 15 feet clear trunks within the Type "C" buffer areas.

A double hedge row of at least 24 inches in height at the time of planting and attaining a minimum of three feet height within one year shall be required in the landscape buffer where vehicular areas and parking spaces are adjacent to the road right-of-way.

The remaining area of the landscape buffer shall consist of existing native vegetation, grass, ground cover, or other landscape treatment. Every effort shall be made to retain and incorporate the existing native vegetation in these areas.

Type "C" buffers shall be permitted to utilize the adjacent right-of-way roadway shoulder for landscape and retention area purposes and based upon the following conditions:

1. A meandering sidewalk is provided crossing back and forth over the property or right-of-way line.

2. Retention areas recreated so to be shallow dry type retention areas and not continuous in line or length. Retention areas must also be interconnected with piped drainage systems and connected into the site's overall system or outfall area.
3. Include along each right-of-way one pedestrian entrance/rest area containing decorative paving, one bench, one bike rack and one trash receptacle. The one per right-of-way requirement can be reduced to one if the pedestrian entry/rest area is located at the corner of the property at a roadway intersection and enlarged in areas containing two each of the above listed site furnishings. Parking requirements may be reduced by one space per pedestrian entry/rest area.
4. The plan and layout is approved by the City of Marco Island's Public Works Director and the Community Development Director or designee.

**TABLE 2 TABLE OF BUFFER REQUIREMENTS BY LAND USE CLASSIFICATIONS**

Subject Property's District/Use	<i>Adjacent Properties District</i>							
	1	2	3	4	5	6	7	8
1.) Residential (RSF) single-family	-	B	B	B	B	*	C	-
2.) Residential RMF-6, RMF-12, RMF-16) multifamily	B	A	A	B	B	*	C	-
3.) Residential Tourist (RT)	B	A	A	A	B	*	C	-
4.) Commercial (C-1, C-1/T, C-2, C-3, C-4, C-5)	B	B	B	A	B	*	C	B
5.) Public Use (P), community facility (CF), Golf Course Clubhouse, Amenity Center	B	B	B	B	A	*	C	A
6.) Planned unit development (PUD)	*	*	*	*	*	*	C	*
7.) Vehicular rights-of-way	C	C	C	C	C	C	-	-
8.) Golf course	-	-	-	-	-	-	-	-

The letter listed under "Adjacent Properties District" shall be the landscape buffer and screening alternative required. The "-" symbol shall represent that no buffer is required. The PUD district buffer, due to a variety of differing land uses, is indicated by the "\*" symbol, and shall be based on the landscape buffer and screening of the district or use with the most similar types, densities and intensities of use. Where a conflict exists between the buffering requirements and the yard requirements of this code, the yard requirements of the subject-zoning district shall apply.

Buffer areas located between commercial out parcels within a shopping center may be shared and a minimum of 10' wide. This does not apply to right-of-way buffers.

## **SECTION TWELVE: MARCO ISLAND STREETSCAPE PLAN**

*Marco Island Streetscape Plan. (Reserved)*

## **SECTION THIRTEEN: CUL-SE-SAC BEAUTIFICATION**

*Cul-de-Sac Beautification:* Permission for any cul-de-sac improvements by residents must be submitted to the City of Marco Island Public Works Department for approval. Submissions must include a drawing showing all improvements along with an agreement to provide maintenance for the improvements.

## **SECTION FOURTEEN: INCORPORATION, CONFLICT AND SEVERABILITY**

- A. It is the intention of the City Council and it is hereby ordained that the provisions of this Ordinance shall become and be made part of the Code of Ordinances of the City of Marco Island, Florida, and that the sections of this Ordinance may be renumbered or relettered and that the word "ordinance" may be changed to "section", "article" or other appropriate word.
- B. All sections or parts of sections of the Code of Laws and Ordinances of Collier County, Florida, all Collier County ordinances or parts of ordinances, and all Collier County resolutions or parts of resolutions made applicable by the City Charter in conflict herewith are hereby repealed to the extent of such conflict.
- C. If any word, phrase, clause, subsection or section of this Ordinance is for any reason held unconstitutional or invalid by any court of competent jurisdiction, the invalidity thereof shall not affect the validity of any remaining portions of this Ordinance.

**SECTION FIFTEEN: EFFECTIVE DATE**

This Ordinance shall take effect immediately upon adoption by the Marco Island City Council.

Passed in open and regular session through roll call vote by the City Council of the City of Marco Island, Florida this 15th day of July, 2002.

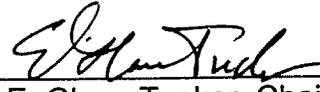
Attest:

CITY OF MARCO ISLAND, FLORIDA



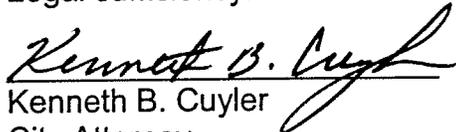
A. William Moss  
City Manager/City Clerk

By:



E. Glenn Tucker, Chairman

Approved as to form and  
Legal sufficiency:



Kenneth B. Cuyler  
City Attorney