

## Attachment A

### **SHORELINE DEVELOPMENT REVIEW MANUAL**

#### Section A. Design Guidelines for Shoreline Setback Area

1. Said shoreline setback shall be landscaped and designed; to provide shade and comfortable pedestrian use and shoreline walkways; to frame views and vistas of water and other shoreline areas; to screen less aesthetic uses and to provide a variety of visual experiences for the users of the shoreline setback area, as well as users and viewers from the street, from the water, and from within the development at both ground elevation and high elevation. The transition from land to water shall be softened by the use of materials such as riprap, wood structures and appropriate species of plants. Plant materials shall be selected or preserved on site on the basis of salt tolerance and longevity, wildlife and environmental values, hardiness, insect and disease resistance, wind tolerance, drought resistance, low maintenance requirement and compatibility with existing natural areas or features. Plant materials should preferably be native, chosen for attractiveness of form, color and texture.
2. Water dependent uses such as approaches to piers or docks shall be permitted within said shoreline setback.
3. Water related uses are designed to encourage public use and enjoyment of the water's edge such as restaurants, outdoor cafes and boat rental facilities and/or shoreline walkways shall be permitted within said setback area. Where a shoreline walkway is provided then a covenant with provisions for maintenance of said facilities in perpetuity shall be required.
4. Ground-level parking, trash dumpsters, grease traps, trash transfer stations or facilities, loading docks, storage areas and court games with shall enclosures shall be prohibited in the shoreline setback area.
5. Trees shall be a minimum height of 10 feet overall immediately after planting and shall have a minimum trunk caliper of 2½ inches. Tree canopy shall have a minimum of 50% shade over all pedestrian and use areas within five years. Shrubs shall be of sufficient size to assure survival and spaced closely enough to provide 100% of ground coverage within one year of planting.

6. All environmentally sensitive areas shall be protected. Natural ecosystems shall be preserved to the maximum extent possible. Existing natural features (rock outcroppings, topographic undulations, etc.) shall be preserved, utilized and enhanced.
7. Climatic comfort shall be provided by amelioration and utilization of existing and potential microclimatic conditions, including seasonal aspects of summer heat and humidity, and winter cold spells and wind protection.
8. Sun position and intensity shall be considered as a prime controlling factor in human comfort, in plant selection and location, in furniture placement, and visibility. Shading from architectural elements shall likewise be considered. Deciduous trees should preferably be used in areas where winter use is to be encouraged.

#### Section B. Design Guidelines and Minimum Standards for the Shoreline Walkway

1. The shoreline walkway shall generally consist of the following subareas:
  - a. Edge – The interface between the land and the water.
  - b. Safety Buffer – A landscaped area between the shoreline walkway and the water's edge.
  - c. Pedestrian Walkway – a minimum six foot wide shoreline pedestrian promenade or walkway/surface.
  - d. Passive Space – A place for amenities such as benches, landscaping, shade structures, drinking fountains, trash receptacles and signage generally landside of the pedestrian walkway.

Note: Subareas, a, b and d, may vary in width within the shoreline setback in order to allow the pedestrian walkway to meander and/or change axis. Subareas shall be designed according to the guidelines and criteria included below.

2. Transitional Security Strip – Landside of the shoreline walkway area may be provided to separate the public shoreline walkway from the private space. This strip shall be in harmony with and not interrupt the

continuity of the public shoreline walkway area.

3. Design Guidelines for the Public Shoreline Walkway and the Transitional Security Strip

1) Edge Subarea

- 1) Riprap should be placed along any new or existing bulkhead seawall or shoreline where shoreline walkway is constructed. When installed riprap shall be placed in accordance with the provisions of Chapter 24 of the Code of Metropolitan Dade County, Florida.
- 2) The top of the seawall/bulkhead shall be a minimum of 6” and a maximum of 8” higher than the pedestrian walkway surface. The landside edge of the seawall/bulkhead shall be beveled at a 45 degree angle.

b. Safety Buffer Subarea-

- 1) The safety buffer subarea shall be designed, primarily with plant materials to keep persons a safe distance from the water's edge. Where appropriate, a change in elevation may be used to define this subarea.
- 2) Where landscaping, rough paving, changes in elevation, or other means of defining the subarea are impossible; or if the pedestrian walkway is located at the water's edge, then a barrier at the water's edge shall be installed. When used, such a barrier shall be as visually transparent as possible, such as a simple railing

c. Pedestrian Walkway Subarea

- 1) The pedestrian walkway subarea or promenade shall be at least 6 feet wide. Provided that the minimum width is met, the width may vary and the alignments of the pedestrian walkway may meander within the shoreline setback area.
- 2) Where public pedestrian walkways are already designed or built on adjacent properties or where there are adjacent public rights-of-way, the pedestrian walkway

shall be designed and built to align with these adjacent features.

- 3) Some passive areas shall be allowed on the water side of the walkway within the safety buffer subarea so that people can sit near the water's edge. It shall, however, be limited to 25% of the length of the property so that the pedestrian view is maintained.
- 4) The pedestrian walkway shall be designed in accordance with the standards for accessibility for the physically disabled and/or handicapped provided in Section 515 of the South Florida Building Code.
- 5) Obstructions to movement (trees, bollards, lighting, etc.) within the pedestrian walkway shall not be allowed to reduce the clear width of the walkway to less than 6 feet at any point.
- 6) The pedestrian walkway surface shall possess stability and firmness, be relatively smooth in texture, and have a non-slip surface. Materials such as concrete, wood, tile or brick on concrete should be used as a surface for the pedestrian walkway. The use of expansion and contraction joints no wider than  $\frac{3}{4}$  of an inch in width and filled with a substance impervious to water should be encouraged. Where walkway design calls for wood decking, wood, such as pressure treated pine or cedar may be used if elevated above the ground surface and provided with a 6" high curb along each side. In such instances the wood planks should be placed no more than  $\frac{1}{8}$  of an inch apart.
- 7) The walkway surface shall be sloped toward an acceptable storm drainage disposal system constructed in conformance with Section 4611 of the South Florida Building Code and Chapter 24 of the Code of Metropolitan Dade County, Florida.

d. Passive Subarea

- 1) The major subarea for sitting, landscaping and shading shall generally be located along the inland side of the pedestrian walkway. Lengths of the passive zone may be elevated above the level of the walkway shoreline to

improve overall appearance, to satisfy the needs of landscaping materials or to make it easier to see shoreline vistas.

- 2) Appropriate additional furniture such as historic or environmental markers, overhead canopies or shelters, drinking fountains, and trash receptacles shall not be confined to the passive subarea and shall not infringe on any visual corridor designed in accordance with the provisions herein below. All furniture shall be permanently installed, preferably by direct burial in concrete.
- 3) Benches shall be provided at a minimum of 2½ foot sections of bench per 100 feet of linear shoreline. All benches shall have backrests and shall be placed to provide direct views of the water. A space of 6 feet shall be provided between the front of a bench and the nearest obstacle. A paved space 36” wide between ends of benches, or at the end of one bench shall be provided to allow room for wheelchairs.
- 4) Trash receptacles shall be provided within the passive zone.
- 5) Where drinking fountains are provided, they shall be placed on hard surface areas in order to be accessible to wheelchair dependent people. Stepping blocks shall be located so as not to interfere with access to the fountain either by ambulant or wheelchair dependent people.

e. Transitional Security Strip

- 1) Security to limit public access to private property may be provided by fences, grade changes or retaining walls. When a security strip is provided, all fences and walls shall be landscaped to reduce their visual impact on the shoreline walkway area and shall provide minimal visual obstructions.
- 2) For landside adjacent developments that serve the public (i.e. restaurants, shops, hotels, entertainment) wide, visible and easy pedestrian access to the shoreline walkway shall be provided. Landscaping and security

barriers shall not visually or physically block the shoreline walkway from such adjacent landside uses.

#### 4. Shoreline Walkway Landscape, Lighting and Signage Guidelines

##### a. Landscaping Guidelines

A. All of the criteria included in Section A. 5-8 hereinabove shall also apply to the shoreline walkway area.

B. In addition, trees shall be planted in the shoreline walkway area to provide a minimum percentage of 40% of shade canopy. This may be accomplished using individual trees or groupings of trees.

##### b. Lighting Guidelines

1) Sufficient walkway lighting shall be provided using a combination of low fixtures at the water's edge in the safety buffer subarea and peripheral lighting within the passive subarea and transitional security strip in order to illuminate the immediate surroundings, and provide security.

2) Overhead lighting shall be confined to the passive subarea and transitional security strip and posts and standards shall be placed so that they do not present hazards to pedestrians. The lighting shall consist of down lighting with lamps positioned not over 14 feet high, 175 Watt MV, 50 feet on center minimum. These overhead lighting fixtures shall be placed so that light patterns overlap at a height of 7'0" to provide views of oncoming persons along the shoreline walkway with a minimum intensity of ¼ foot candles over all use areas. Mercury vapor, metal halide lamps, or similar "white" light luminaries shall be positioned so that light patterns overlap to avoid areas of deep shadow.

3) Lighting at the water's edge shall be low level fixtures no higher than 30" high with down illumination not extending beyond the bulkhead, seawall, or riprap. These fixtures shall be approximately 20 feet on center.

4) At hazardous locations, such as changes in grade,

supplemental lower level lighting or additional overhead units shall be used.

- 5) Once minimum lighting standards for the shoreline walkway are met, up-lighting and colored lighting may be used for signs, landscaping and accenting within the passive subareas and transitional area.
- 6) Lighting fixtures shall be designed to complement both the adjacent upland development and walkways, as well as in-water amenities and shall be designed to comply with the provisions of the Shoreline Design Manual following adoption of said manual.

c. Signage Guidelines

- 1) All major public shoreline access points, including parks, walkways, roadways, designated midblock walks and public plazas, shall be marked with standard "Public Shorewalk" signs.
- 2) Signage shall be used to identify publicly oriented private development, such as cafes or shops, that are accessible from the public shoreline walkway. Such signs shall preferentially be placed in the passive subarea or transitional security strip.
- 3) Uniformly designed historic informational or environmental markers or plaques may be placed in the passive subarea or on public piers or overlook areas which such are provided.
- 4) Signage visible from the water shall identify access points and adjacent public activities such as cafes or shops, for boaters where public dockage is provided.

Section C. Design Considerations for Fishing Piers

Where fishing piers are deemed appropriate, fishing pier design shall address the following:

1. The guidelines included in Section B hereinabove shall also apply to fishing pier design.
2. The pier surface shall be either concrete or close-fitting wood such as pressure treated pine or cedar. Where wood is used,

the planks shall be no more than 1/8 of an inch apart.

3. Fishing piers should be wide enough to accommodate benches, fish cleaning stations and lighting, and should permit anglers to move along the railing and also allow visitors to walk along the pier.
4. Railings should be designed to accommodate anglers and their equipment, including rod holders and bait cutter boards, as well as to provide a safe waterfront area for adults, children and the handicapped.
5. Wherever feasible, riprap and shallow artificial reef materials such as concrete culverts should be included in pier design.
6. Ladders should be provided to permit access into and from the water