

RIVERWALK PARK DESIGN CRITERIA: FEBRUARY, 2019

GOALS OF THE RIVERWALK

- Create a safe, pedestrian friendly recreational trail that connects people and places along the St. John's River.
- Provide public access to the riverfront.
- Unite the Northbank and Southbank Riverwalks through common, subtle complementary design features that develop, emphasize and enhance existing infrastructure rather than requiring additional, extensive infrastructure investment.
- Allow the Northbank and Southbank Riverwalks to retain their own identity for wayfinding purposes. The Northbank connects the sports district, restaurants, shops, offices, businesses and the Downtown, Brooklyn and Riverside neighborhoods. Earthy brown and red colors, straight lines, angular and square patterns dominate the design style of the Northbank. The Southbank Riverwalk provides connection among many medical facilities, restaurants, shops, offices, businesses and the San Marco neighborhood. Bright colors and curvilinear lines enhance a nautical themed design style that defines the Southbank.
- Create lasting, memorable experiences throughout the Riverwalk with hubs, nodes and nodettes that provide immersive and interactive landscapes describing unique features of Jacksonville and the St. John's River.
- Create a vibrant, interactive waterfront experience that improves access to parks, hotels, museums, restaurants and shops.
- Provide connection across the St. John's River through increased pedestrian bridge access, water taxi, and enhanced sight lines.
- Provide critical pedestrian and biking safety downtown. Pedestrians and cyclist can travel safely on the Riverwalk from downtown Jacksonville to the Riverside neighborhood, for example, without intersections, traffic signals and automobiles.
- Create a timeless Riverwalk framework establishing connectivity with the understanding that styles, product availability and development will change.
- Increase hospitable features of our Riverwalk including shade, seating, access to food, water and sanitation facilities.
- Create a resilient Riverwalk that can withstand hurricane, high wind and flood conditions.
- Connect Jacksonville's increasingly diverse and vibrant cultural, economic and recreational hubs.
- Serve as a part of the larger multi-use and greenway trail plans for Jacksonville therefore connecting more people and more neighborhoods to the St. John's River.

INFRASTRUCTURE STANDARDS

The City of Jacksonville is bisected by the St. John's River, and the Riverwalk is adjacent to the river. The Riverwalk varies in its spatial relationship to the river: it is partly built over the water, atop a bulkhead or separated from the waterfront with a reinforced rip-rap bank. Because the St. John's River is tidal and prone to storm surges the stream banks, waterfront parks and walkways have been flooded and stressed. After each storm, washed out walkways, landscaping, infrastructure and fountains are rebuilt. Compromised bulkheads are reinforced.

In order to create a buffer for river flooding, reduce infrastructure damage and reduce resulting recovery and maintenance cost, create more pedestrian friendly landscapes, future Riverwalk developments shall be set back from the water's edge to allow for a natural, planted reinforced shoreline where appropriate based on wave impact, tidal conditions, velocity, soil composition, etc. Planted reinforced shorelines shall be reviewed and approved on a case by case basis by the City Engineer. This should be done in areas where there aren't existing bulkheads or planned shoreline changes in a development agreement. A living shoreline or hybrid stream edge treatment will allow floodwater to slowly recede over rocks and planted landscape to preserve Riverwalk infrastructure and create a naturally shaded, visually appealing walkway. In locations where a living shoreline will not provide superior upland protection for the Riverwalk, a bulkhead will be required. A hybrid living shoreline should be created in conjunction with bulkheads in areas with no boat dockage and under the review of the City Engineer.

The path width shall conform to current FDOT standards for a shared use path; however FDOT minimum turning radius and grading standards will not be used for the Riverwalk, as the Riverwalk is anticipated to be a more urban, specialized use path. The current FDOT standard of minimum 15' wide with a minimum vertical clearance of 12' high shall be maintained throughout the length of the walkway except in short intervals where width is constrained and in no event shall any constrained location be narrower than 12' in width. Trees, shade structures, lighting, signage and furnishings shall all be placed outside the 15' minimum Riverwalk width or if within the Riverwalk out of necessity due to constraints such as over water location, then shall not reduce the effective width to less than 12' with minimum vertical clearance. The Riverwalk path design shall provide for use by pedestrians and bicyclists of various abilities and be designed for many users entering and exiting the walkway at various, irregular intervals. All path design requirements shall comply with ADA standards. Every effort will be made to provide ADA compliancy as the first design option. For example, ramps will create the primary entrance and exit points along the Riverwalk. Ramps will be fully integrated into the first design option and will not be merely a secondary design feature.

LIGHTING

Appropriate lighting is crucial to creating a unique and safe visitor experience. Lighting design will reinforce and define activity areas and provide interest at night. Lighting will facilitate safe and convenient circulation for pedestrians and bicyclists. Overspill of light and light pollution will be avoided. Minimizing the visual impacts of lighting in related or adjacent parking areas is critical to maintaining the Riverwalk atmosphere and experience.

The Riverwalk shall have an average ambient light level of between one (1) and three (3) footcandles with a minimum of half (0.5) and a maximum of six (6) footcandles at any point as measured on the ground plane. Accent lighting or recreational lighting may exceed these standards by a multiple of 2.5.

The position of the lamp in a pedestrian way light should not exceed 16' from the ground plane. Lighting shall focus on lighting the pathways and pedestrians. Light fixtures shall be installed on the side opposite of the river whenever possible to ensure ease of maintenance and reduced flooding risk. Light fixtures shall have tops to enhance the nighttime sky and prevent glare into adjacent properties. The color of light has also been shown to help people accurately identify colors at night and be more conducive to human health and wildlife. Warm colors, with color temperatures of no more than 3000 Kelvins should be used instead of cool blue light. LED lights with these standards shall be used to increase electrical efficiency. Accent or up lights of

fountains, art, structures and plant material are encouraged to increase visual interest on specimen trees or sculptural design elements. Accent or up lights need to be used in conjunction with the overall lighting plan so the effectiveness of the specialized lighting is pronounced.

SERVICE AREAS

Service areas, constructed stormwater infrastructure, electrical and mechanical equipment shall be visually unobtrusive and should be integrated with the site and adjacent buildings. Landscape screening shall be used as feasible; however use of landscape screening shall be incorporated into the area without creating dead spaces around infrastructure. Light lockers or housing that encloses transformers or back flow valves shall be decorative in nature.

SIGNAGE

Signage shall be provided to assist wayfinding to the Riverwalk, parking and along the Riverwalk. A signage package, outlining color choices, dimensions and materials is located in Appendix A. All signage shall incorporate the Jacksonville Riverwalk logo. Directional signage is located along the roadway, one block away from public access points, and outside of Jacksonville Skyway Monorail Stations. Directional signs direct people to the Riverwalk from sidewalks and streets. Parking is noted on directional signs if parking is adjacent or across the street from a directional sign.

Signage along the Riverwalk includes directory/directional signs and directional signs. The directory/directional signs are located at public access points. The directory map signs are designed to be electronic in the future, however, until such time, the map shall be updated if any of the key locations as outlined in the legend change or as the Riverwalk expands. Directional signage above the directory sign identify features along the Riverwalk or easily accessible from the Riverwalk. Points of interest outside the Riverwalk are listed with the number of blocks from the Riverwalk. Points of interest that are not directly accessible are not listed on directional signage. Directional signs are placed at public access points where a directory sign is clearly visible. River taxi signs are also noted along the Riverwalk.

All signage and locations shall be approved by the Parks Director. No commemorative markers or storyboards shall be located on the Riverwalk without the express approval of the Parks Director and shall conform to or compliment the color palette and materials adopted in Appendix A. Sign locations shall be field verified to minimize interference with other signs, utilities and trees. Signs shall be mounted as described in Appendix A. No sign shall reduce the effective width of the Riverwalk to less than 12 feet.



Logo

HARDSCAPE

Segments of the Northbank and Southbank Riverwalks were constructed at different times and with varying materials. Each installation offers interesting experiences and designs. It is



important to keep key design elements of all segments as they increase the length and diversity of the public space. Planting patterns and key hardscape elements will tie the Riverwalks together, while they remain distinctly different.

New, sculptural benches shall be placed at nodes/hubs and nodettes along the Riverwalks.

The benches shall provide contrasting colors to the greens or blues of the Riverwalk, and be in the orange to red hues. (Pantone 1585C, 1797C, 5455U or equivalent). The design shall be approved by the Parks Director. The benches styles shall be placed on both sides of the Riverwalk in an effort to tie the design styles together and create a more playful design aesthetic.



Examples of potential, acceptable artistic benches.
(Jeppe Hein "Bench of Expectations & Landscape Forms "Escofet Flor")

NORTHBANK RIVERWALK

The Northbank connects the sports district, restaurants, shops, offices, businesses and the Downtown, Brooklyn and Riverside neighborhoods. Earthy brown and red colors, straight lines, angular and square patterns dominate the paving design of the Northbank. The walkway changes from pavers to concrete at various locations, but all of the internal paving design includes some square design of paver accents in the brown color family. The fencing is primarily black or galvanized metal in straight lines with accents of squares with an "X" through them. This design style should be maintained, however the material and detail design choices shall be flexible. All designs shall be submitted to the Parks Director for written approval prior to submission to the Building Department.

Many of the pavers that are used throughout the current Northbank Riverwalk are no longer available and the design has been costly to maintain. New walkways should be constructed of concrete with pavers being used as accents in rectilinear patterns. These accents should occur where the two paths meet or where turns occur. Pavers shall be installed per tolerances and specifications outlined in the Interlocking Concrete Pavement Institute guidelines. Concrete portions of the walkway shall be reinforced concrete and be a minimum of 5" thick. Concrete shall comply with existing City of Jacksonville concrete specifications. Concrete shall have a salt finish. Any colored concrete shall be colored throughout the concrete.

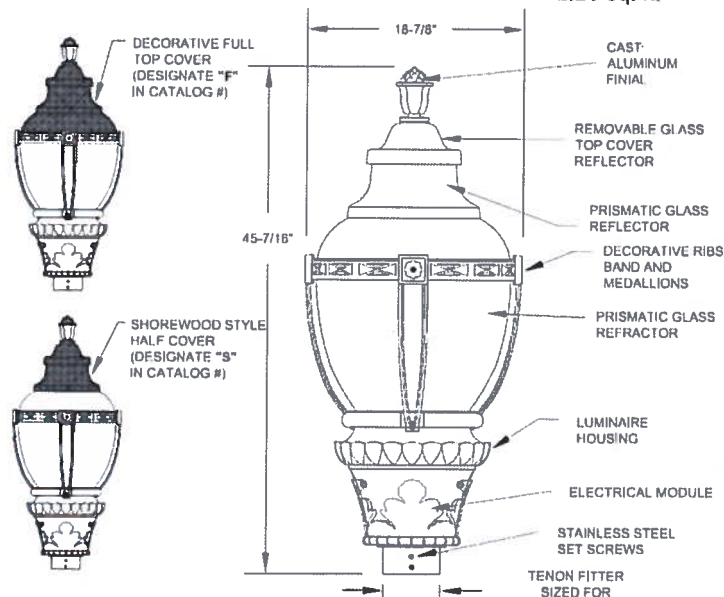
Railings that are used along Northbank Riverwalk shall be either powder coated black or hot dipped galvanized steel. Railing shall be upright and accent patterns shall be rectilinear in nature. Railings shall be as unobtrusive as possible so the waterfront is more dominant than the railing. Railings should only be used in areas where it is necessary according to safety code.



Examples of potential, acceptable Northbank Riverwalk railing.

Light standards shall be historic in character and powder coated black. Current lights should be matched in quality and style. Existing lights are similar to the State Street, Acorn Style Luminaire with full decorative cover. The primary lighting along Northbank Riverwalk will be from light standards. Bollard path lights may compliment the light standards, with style complimenting the light standards.

STATE STREET LUMINAIRE
 ACORN STYLE WITH FINIAL, BAND, MEDALLIONS
 AND DECORATIVE RIBS
 MAXIMUM WEIGHT - 80 lbs.
 MAXIMUM EFFECTIVE PROJECTED AREA - 2.26 sq. ft.



Examples of acceptable Northbank Riverwalk lighting.

Benches along Northbank Riverwalk shall be historic in character and all steel. Existing wood benches will be phased out. Acceptable benches shall be black or green FMS-324 bench from Victor Stanley. Where appropriate, the backless bench model could be used or approved equal. Trash cans shall also be all steel and open from the top. Acceptable trashcans shall be the ES-42 Victor Stanley or Lexington 36 gallon with rain bonnet lid, or approved equal. Bike racks shall be black or green Victor Stanley BRHS-101 or approved equal. Drinking fountains shall be Canterbury Designs, New York Fountain or approved equal. All site furnishings shall be attached with stainless steel, tamper proof hardware.



Examples of acceptable Northbank Riverwalk site furnishings.

SOUTHBANK RIVERWALK

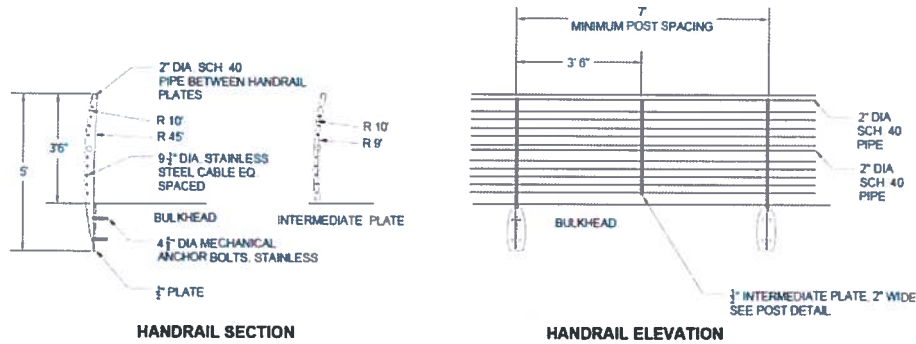
The Southbank Riverwalk provides connection among many medical facilities, restaurants, shops, offices, businesses and the San Marco neighborhood. Bright colors and curvilinear lines enhance a nautical themed design style that defines the Southbank. The current Southbank Riverwalk is constructed over the water. As the Southbank Riverwalk is built out, the walkway design should shift to areas on land, and concrete should be used with paver details. Alternative shade sails should be used that allow for more head room. This design style should be maintained, however the material and detail design choices shall be flexible. All designs shall be submitted to the Parks Director for written approval prior to submission to the Building Department.

Many of the pavers that are used throughout the current Southbank Riverwalk are faded, custom colors and have been costly to maintain. New walkways should be constructed of concrete with pavers being used as accents in curvilinear patterns similar to the existing radii. These accents should occur on a regular basis along the walkway to add interest. Bands of a two tan pavers (Pantone 467C), in an offset stacked bond configuration, shall be used to differentiate between color changes. Pavers shall be installed per tolerances and specifications outlined in the Interlocking Concrete Pavement Institute guidelines. Concrete portions of the walkway shall be reinforced concrete and be a minimum of 5” thick. Concrete shall have a salt finish. Any colored concrete shall be colored throughout the concrete. Concrete and paver color palette shall consist of the following (or equivalent):

Pantone 174C	Pantone 7452C	Pantone 7416C
Pantone 1797C	Pantone 7499C	Pantone 3294C

Railings that are used along Southbank Riverwalk shall contain steel wire with galvanized posts and

a thicker top railing. If more walkways are built over the water, the railing shall be arced into the walkway to match the area between Friendship Fountain and Duval County School Board. Railings on walkways not over the water shall be upright. Railings shall be as unobtrusive as possible so the waterfront is more dominant than the railing. Railings should only be used in areas where it is necessary according to safety code.



Example of acceptable Southbank Riverwalk railing mounted to a bulkhead.



Existing Southbank Riverwalk railing and materials.

Light standards for general path lighting shall be a similar style to the existing Southbank Riverwalk lights. These are the Architectural Area Lighting, Universe Collection, medium or pedestrian scale. The fixtures are illuminated solid rings, straight hoods, black with a flat glass lens. The pole is a 12' pole with fluted decorative base and a SLA 17 arm.

Benches and trashcans can be sourced from DuMor and the steel black trash can is model 84-32-DM and the bench is the DuMor Steel Bench 95 in a 10' length. The drinking fountain is Murdock #M43-2-PF. Acceptable alternatives can be approved by the Parks Director. All site furnishings shall be attached with stainless steel, tamper proof hardware. Direct connections of the hardware

into brick should be avoided.



Examples of acceptable Southbank Riverwalk site furnishings.

LANDSCAPE

GENERAL

Landscape design, installation, and maintenance shall comply with RPDC and with Part 12, Chapter 656, City of Jacksonville Ordinance Code, Tree Preservation and Landscape Standards; should there be a conflict between Chapter 656, Landscape Design Standards and RPDC, the more stringent requirement shall prevail. Proposed landscape design by the Property Owner within the easement may be considered in satisfying applicable portions of the requirements of the Landscape Ordinance; existing landscape within the easement may be considered with new development work using Chapter 656 "Credit for existing trees and understory." Screening of parking lots and drives shall be in compliance with Chapter 656, Landscape Design Standards.

QUALITY CONTROL

Landscape Work shall be installed based on approved landscape documents prepared by a State of Florida registered Landscape Architect. Approval shall be completed in the 10 set review process and concurrence with City of Jacksonville, Parks Recreation and Community Services, Office of Director. Installation of landscaping shall be in accordance with Chapter 656 "Landscape Design Standards." See Chapter 656, "Invasive Species" for prohibited material. Site inspections shall be conducted by a landscape architect during the installation and at completion. Maintenance inspections for all formal landscape areas shall be completed by a landscape architect on a monthly basis. A maintenance report with accompanying photographs and map shall be generated to ensure issues are addressed properly.

PLANTING ZONES

Planting designs shall be established by planting zones. The areas closest to the river will have a less manicured appearance and will be able to withstand tidal changes and flooding. Areas closer to the Riverwalk shall be more formal in design and node planting design shall be highly designed and maintained. Plants appropriate for each area are outlined in the planting lists, Appendix B.

FLOATING WETLAND MATS (SOUTHBANK, 2016)

Floating wetland mats shall be installed in small water areas that are located between the bulkhead and the Southbank Riverwalk. The mats are constructed of framework that supports

planting media to grow grasses/rushes and will offer changing floristic interest. The mats will need to be replanted yearly as the plant material will become too large for the mat structure.

RIVERSHORE (SLOPED AREAS ADJACENT TO THE RIVER)

Rivershore areas are areas with slopes adjacent to the river. These areas often contain rip-rap and have slopes that near 4:1. The purpose of planting in these areas is to create floristic diversity and stabilize the banks. No areas along the Riverwalk shall have slopes that exceed 4:1.

RIVERWALK

The main Riverwalk walkway shall have consistent plantings that are formal in nature and tie into the adjacent plantings. In order to do this, key or thread plants shall be used. These plants will be used to provide 60% of the plant materials along the walkway. These plants are noted in the plant list.

ADJACENT TO CORPORATE CAMPUS

These are existing areas adjacent to corporate campuses. The companies have tied the Riverwalk planting and maintenance into their corporate landscapes. There shall be no change in these planting designs for the areas that are already maintained.

POPS/ACCENTS

These areas will incorporate more formal planting designs and may include planters and hanging baskets. Use of native plants is encouraged in these areas. These will provide smaller pops of color or interest, but not be as large as the nodes in scale.

NODES/HUBS

Node shall be designed in accordance with the theme of the node and only required to plant 20% of the plants in the planting list. Use of native plants is encouraged in these areas. The node design shall incorporate the key/thread planting material to maintain consistency along the Riverwalk.

DESIGN PRINCIPLES

DESIGN FRAMEWORK

In formal planting areas, mass plantings should be used to increase the readability of the landscape. Textures should be considered when pairing plants. Plants that are seasonally dormant should be paired with plants that offer interest during the dormant season.

In areas of natural plantings, foreground plantings shall create a formal edge. The foreground plantings shall be limited in species and size/height. These plants are noted in the plant list.

Under plantings in shady areas should focus on varying colors of green and texture. Plantings in sunny areas shall also utilize texture changes, however blooming plants that continue throughout the seasons are strongly encouraged.

Planting areas shall be lined with small fencing to protect plantings and further reinforce planting zones. This fencing should be 2-3' tall, sized according to the associated planting and location along the Riverwalk. The intent of the fencing is to create another visual cue to visitors that the plantings



Example of fencing in a planting zone.

are not be walked through.

Walls and hedges utilized to screen visibility of unsightly areas such as service yards require a six (6) foot wide (minimum) landscaped bed of smaller shrubs and groundcovers. However, the berm or hedge may not to be constructed where it interferes with vision or safety.

All areas of the Riverwalk landscaping shall be designed in accordance with Crime Prevention through Environmental Design Guidelines (CPTED).

STORMWATER TREATMENT

Wherever feasible, best management practices shall be incorporated in the Riverwalk. No hardscape structures shall be used to directly channel flow into the river; all stormwater shall sheet flow through formally planted filter strips into the landscape. Planting shall be integrated with water quality treatment areas and selected based on their

ability to tolerate standing water time after storm events.

Where above ground stormwater management facilities are required, such facilities shall contain multi-purpose amenities. For example, a bioswale could be used to screen other infrastructure or a dry retention basin can be used for active recreation.

EROSION CONTROL

Along the waterfront, where bulkheads are not present a minimum of a 3:1 slope shall be maintained. Any areas that contain rip-rap, the rip rap shall be a consistent size, no smaller than 1-1.5ft. and weighing between 150-500 pounds, unless a hydrologist deems smaller material is able to maintain the slope. Rip rap shall meet all St. John's River Water Management District standards and the outermost layer shall be comprised of gray granite or similar material that provides a uniform appearance. The sloped and rip rap slopes shall be planted with soil, as feasible so root systems are able to help maintain the slope. Appropriate plant materials are identified in the planting list. Grasses, perennial and forbes (native perennial) species shall be planted no more than 2' OC.

SHADE

Shade trees shall be used to ensure a canopied Riverwalk. Seventy percent of the Riverwalk shall be shaded either by trees or shade structures. Shade shall be measured by the canopy size as outlined in the Jacksonville Tree Commission's Approved Tree Planting List ("Tree Planting List"), or by the shadow cast by a shade sail at noon. Shade trees or large trees as identified by the Tree Planting List shall be used in areas with areas large enough for planting. The planting area requirements for a large tree shall be a minimum of 15' x 15; however, if less space is available a structural soil, custom support system, or suspended pavements shall be used to accommodate the root system. Only small and medium trees as identified by the Tree Planting List shall be specified in planters. Planting of groundcovers should be considered under trees as feasible. Shade structures shall be placed in areas that cannot support tree plantings. Shade structures shall be designed for easy removal if fabric is used and affordable replacement. Shades shall be at a height to minimize vandalism and conform to the minimum vertical clearance height of 12'. All shade structures shall be approved by Parks

Director.

IRRIGATION

All irrigation shall be designed to be consistent with water efficient landscaping design standards in accordance with Chapter 656; informal/natural theme to include areas of re-established native plant communities with temporary irrigation system.

If feasible, irrigation systems shall use reclaimed water.

Temporary irrigation systems shall be abandoned after plantings are established in Rivershore Planting Zones. Irrigation systems in nodes, nodettes and Riverwalk shall be maintained in fully functional condition at all time. If planters or baskets are used, they shall be watered with a water truck.

Equipment and design shall be as vandal resistant as possible.

PLANT LIST

For the purpose of continuity and compatibility, the attached plant list is provided. Continuity from development to development is gained along the riverfront where RPDC has provided for certain requirements such as plant materials; design compatibility is gained by repetition in detailing and design elements, such as landscape features and textures.