

City of Punta Gorda



*Parks & Recreation
Master Plan
Design Standards*

Adopted: March 2010

Amended: July 2012

June 2013

November 2015

March 2016

July 2016

Section 1



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Section 2



Introduction

Introduction

On December 2, 2010, the City of Punta Gorda's City Council adopted the Parks and Recreational Master Plan. As part of the Plan, designed standards are required to establish a minimum set of technical specifications that address the unique character of the City. The design standards contained herein include crime prevention and safety design theories and emphasize features to be utilized in all new development, future renovations, additions, site development or other changes. They are dependent on site location, site conditions, functional requirements and the desired programming of the specific space, as well as the space's design intent. All design standards will be reviewed during the City's development review process and building permit application.



Section 3



Art

Art

Public Art adds uniqueness and vitality to a Parks System. Art serves as an expression of the aspirations and character of the community. Pieces of Public Art can also provide opportunities for interaction gathering spots, play and delight.

All Art installations within the parks system must be designed to meet the applicable sections of the Florida Building Code, best practices in Americans with Disabilities Act compliance, and in the use of environmentally sustainable and recycled materials.

■ Interactive Art



■ Murals



■ Art and Water



■ Sculpture Art as Playground



Section 4



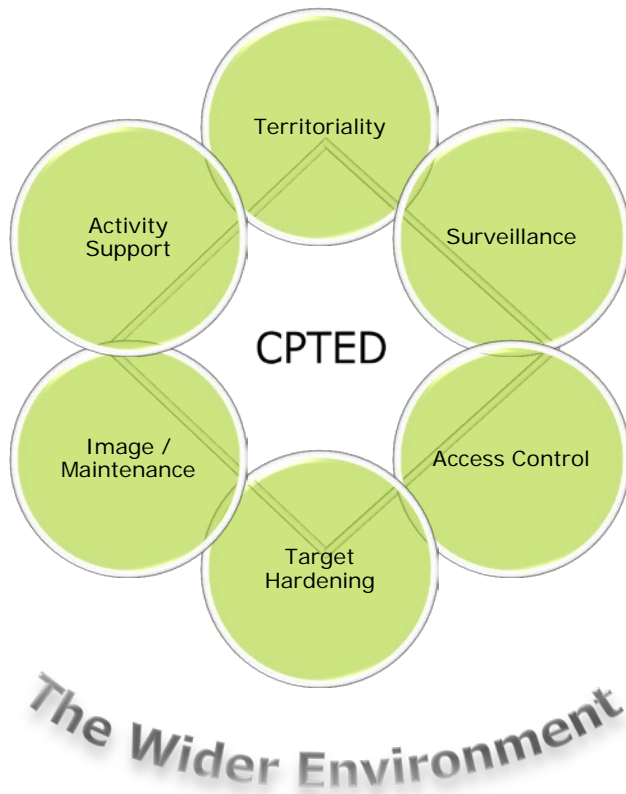
CPTED

CPTED

As part of the Design Standards, the City is incorporating the Crime Prevention Through Environmental Design (CPTED) theories which promote a climate of safety in a community right from the design start. The concept is strongly recommended by law enforcement officers, architects, city planners, landscape and interior designers, and resident volunteers. CPTED's goal is to prevent crime by designing a physical environment that positively influences human behavior. The theory is based on four principles: natural access control, natural surveillance, territoriality, and maintenance.



- Allows for clear sight lines
- Provide adequate lighting
- Minimize concealed and isolated routes
- Avoid entrapment
- Reduce isolation
- Promote land use mix
- Use of active generators
- Create a sense of ownership through maintenance and management
- Provide signs and information
- Improve overall design of the built environment



Benefits of CPTED

Community business & residents will have

- Opportunities to play meaningful roles in community crime prevention
- Improved sense of security and quality of life through reduced fear of crime
- Fewer crimes committed in neighborhoods, fewer victimizations of residents
- Increased interaction among residents and stronger neighborhood bonds
- New crime prevention and problem-solving skills and enhanced knowledge of city government agencies and other resources
- The specific strategy or combination of strategies will be dependent on the site condition, the functional requirements and the desired programming of the space, as well as the design intent

"CPTED is the proper design and effective use of the built environment which may lead to a reduction in the fear and incidence of crime, and an improvement of the quality of life."

- National Crime Prevention Institute

Section 5



Event Lawn & Turf Stabilization

Event Lawn & Turf Stabilization

Event Lawns and other high traffic turf areas require comprehensive design and management practices. Special grass species, irrigation, drainage, and stabilization techniques must be combined with best practices in pest control and fertilizer application in order to ensure consistent performance.

Design considerations include:


- Daily foot traffic expectations
- Expected number of events
- Type and frequency of vehicle traffic

All Turf Stabilization and Event Lawn features are to be designed on a project specific basis. The following specifications are to be utilized as a guide to typical products and applications.

Standard Irrigation:
Rain Bird Commercial Systems
System Design: project specific
Manufacturer: Rain Bird



Section 6



Hardscape Materials

Hardscape Materials

Hardscape materials are a range of concrete & concrete finishes, brick & pavers, and other choices for paths walkways and boardwalks which compliment the specific park type and create an attractive, vibrant, cohesive Park System. The hardscape material shall distinguish between drives, parking areas etc from pedestrian walkways, paths and plazas

Hardscape Materials include the following:

- Boardwalks & Trails
 - Brick Pavers
 - Concrete
 - Concrete Pavers
-

Hardscape Materials

Boardwalk & Trails

- Boardwalk
 - Wood and composite materials
 - Standard 10 to 12 feet wide



- Trails
 - ADA accessible
 - Asphalt



- Rough Trails
 - Crushed stone or similar



Note: All hardware used must be Stainless Steel

Hardscape Materials

Brick Pavers

Standard Brick Pavers: Brick 4X8

- Color: Antique
- Installation Pattern: Herringbone 45° with soldier course border, unless otherwise specified
- Product Line: 2 3/8, thickness
- Manufacturer: Brick America



Standard Drivable Brick Pavers:
Brick 4X8

- Color: 50% Heartland, 25% Savannah Brown, 25% Peachtree Avenue field mixed
- Installation Pattern: Herringbone 45° with soldier course border, unless otherwise specified
- Product Line: 2 5/8, thickness
- Manufacturer: Boral Bricks

Hardscape Materials

Historic Brick Street Pavers

Pedestrian – Light Traffic

- Size: 4 X 8 Brick
- Color: Harvest Blend
- ASTM C936
- Installation Pattern: Running Bond
- Product Line: Holland Stone Collection
- Manufacturer: Belgard,
- Supplier: Old Castle



Traffic

- Size: 4 X 8 Brick
- Color: Autumn
- ASTM C1272, Clay
- Installation Pattern: Running Bond
- Product Line: Rumbled series
- Manufacturer: Pine Hall Brick
- Supplier: Old Castle

Hardscape Materials

Concrete

- Concrete
 - Standard finish brushed uncolored
 - Standard 5 to 12 feet wide



- Optional Concrete Finishes
 - Shell aggregate (aka Tabby)



- Colorized Concrete
 - Site Specific Custom Color and Pattern Design
 - Compass Rose



- Rock Salt Finish with Special Expansion Joint Pattern

Hardscape Materials

Concrete Pavers

Standard Concrete Pavers: Brick 4X8

- Color: Harvest Blend, unless otherwise specified
- Installation Pattern: Herringbone 45° with soldier course border, unless otherwise specified
- Product Line: 2 3/8, thickness (3 1/8, thickness for drivable surfaces)
- Manufacturer: Tremron Group

Standard ADA Concrete Pavers: Brick 4X8 ADA

- Color: Charcoal or Red
- Installation Pattern: Parquet, unless otherwise specified
- Product Line: 2 3/8, thickness
- Manufacturer: Tremron Group



Optional Concrete Pavers to be utilized on a project specific approval basis only.

Optional Concrete Pavers: Mega Old Towne

- Color: Cappuccino, unless otherwise specified
- Installation Pattern: Herringbone
- Product Line: 2 3/8, thickness (3 1/8, thickness for drivable surfaces)
- Manufacturer: Tremron Group

Section 7



Park Structures

Park Structures

Structures are a vital part of any park system. They serve as shelter from the elements, activity areas, and community meeting points.

All structures within the parks system must be designed to meet the applicable sections of the Florida Building Code, best practices in Americans with Disabilities Act compliance, and in the use of environmentally sustainable and recycled materials.

Structures by type

- Park Shelter
- Gazebo
- Restroom

Design Considerations

- Location of Park
 - Type of Park
 - Area Available
 - Intended Use
 - Expected Average Number of Users
 - Area Architectural Context
 - Vandal Resistance
 - Crime Prevention Through Environmental Design
-

Park Structures

Park Shelter

Standard Event Shelter: Site Specific Design

- Size: project specific
- Roof Configuration: project specific
- Roof Decking: project specific
- Roofing Material: Standing Seam Metal, unless otherwise specified
- Roof Color: Galvalume, unless otherwise specified
- Structural Member Color: White, unless otherwise specified
- Mounting method: per manufacturer specification
- Custom Column Base: project specific
- Manufacturer: Icon Shelter Systems, unless otherwise specified



Note: All hardware must be Stainless Steel and "Rust Resistant"

Park Structures

Gazebo

Standard Gazebo: Octagon Shelter

- Size: project specific
- Roof Configuration: Two Tier w/Full Circle Ornament
- Roof Decking: 2X6 Tongue and Groove
- Roofing Material: Standing Seam Metal
- Roof Color: Galvalume, unless otherwise specified
- Structural Member Color: White, unless otherwise specified
- Mounting method: per manufacturer specification
- Custom Column Base: Split Face Concrete Block w/Cast Stone Cap
- Manufacturer: Site specific



Note: All hardware must be Stainless Steel and "Rust Resistant"

Park Structures

Restrooms

Standard Restroom: Site Specific Design

- Size: project specific
- Roof Configuration: project specific
- Roof Decking: project specific
- Roofing Material: Standing Seam Metal, unless otherwise specified
- Roof Color: Galvalume, unless otherwise specified
- Mounting method: per Florida Building Code
- Manufacturer: Site Specific



Note: All hardware must be Stainless Steel and "Rust Resistant"

Section 8



Plant Palette

Plant Palette

Plant selection is one of the most important decisions made when designing a park. The concept of planting the right plant, particularly the right tree in the right place is critical to creating a sustainable park system. Since most trees have the potential to outlive the people who plant them, the proper selection can have a significant influence on the success or failure of a park. The Plant Palette offers a variety of trees separated into large, medium, and small, palm trees, shrubs, groundcover, grasses and perennials species providing for a complete range of canopy and understory coverage options.

- Trees
 - Large
 - Medium
 - Small
 - Palms
 - Large
 - Medium
 - Small
 - Shrubs
 - Ground Cover
 - Grass Perennials
-

Plant Palette

Large Trees

- Bald Cypress
- Buttonwood
- Gumbo Limbo
- Laurel Oak
- Live Oak
- Longleaf Pine
- Paradise Tree
- Pond Cypress
- Red Bay
- Red Maple
- Royal Poinciana
- Sand Live Oak
- Southern Red Cedar
- Southern Slash Pine
- Sweet Bay Magnolia
- Water Oak
- West Indian Mahogany
- Wild Tamarind



Gumbo
Limbo



West Indian
Mahogany



Live Oak



Royal Poinciana

Plant Palette

Medium Trees

- Black Mangrove*
- Buckthorn
- Golden Shower
- Pigeonplum
- Pink trumpet tree
- Red Mangrove*
- Satinleaf
- Seagrape
- "Shady Lady" Black Olive
- Swamp Bay
- Weeping Fern Pine
- Wild Cinnamon
- Yellow trumpet tree

*Environmental Area



Buckthorn



"Shady Lady"
Black Olive



Yellow Trumpet
Tree

Plant Palette

Small Trees

- Autograph Tree
- Bottlebrush
- Buttonwood
- Crape Myrtle
- Desert Cassia
- Fiddlewood
- Florida Privet
- Frangipani
- Gallberry
- Geiger Tree
- Hopbush (Varnish Leaf)
- Jaboticaba
- Marlberry
- Peregrina
- Round Holly
- Simpson's Stopper
- Stoppers
- Swamp Dogwood
- Sweet Acacia
- White Geiger
- Yaupon Holly
- Yellow Tab



Autograph Tree



Geiger Tree



Buttonwood

Plant Pallet

Large Palm Trees

- Bismark Palm
- Buccaneer Palm
- Florida Royal Palm
- Majesty Palm



Bismark Palm



Majesty Palm



Florida Royal Palm

Plant Pallet

Medium Palm Trees

- Alexander Palm
- Carpentaria Palm
- Everglades Palm
- Foxtail Palm
- Sabal Palm
- Yellow Butterfly Palm



Sabal Palm



Foxtail Palm



Carpentaria Palm

Plant Pallet

Small Palm Trees

- Dwarf Palmetto
- European Fan Palm
- Formosa Palm
- Kentia Palm
- Large Lady Palm
- Macarthur Palm
- Pindo Palm
- Pygmy Date Palm
- Ruffled Fan Palm
- Saw palmetto
- Scrub Palmetto
- Slender Lady Palm
- Windmill Palm



Pygmy Date Palm



Pindo Palm



Ruffled Fan Palm

Plant Pallet

Shrubs

- Awabuki Viburnum
- Buttonwood
- Cardboard Plant
- Coontie
- Downy Jasmine
- Firebush
- Inkberry
- Pigeonplum
- Powderpuff
- Seagrape
- Silver Buttonwood
- Sweet Viburnum
- Walter's Viburnum
- Wax Myrtle
- Wild Coffee



Cardboard Plant



Seagrape



Viburnum



Firebush



Coontie

Plant Pallet

Ground Cover

- Algerian Ivy
- Asian Jasmine
- Cast Iron Plant
- Confederate Jasmine
- Dwarf Bougainvillea
- Dwarf Yaupon Holly
- Indian Hawthorn
- Mondo grass
- Parson's Juniper
- Perennial Peanut
- Railroad Vine
- Shore Juniper
- Society Garlic
- St. Bernard's Lily
- Tampa Vervain
- Weeping Lantana & Gold Lantana
- Wheeler's Dwarf Pittosporum



Asian
Jasmine



Perennial Peanut



Railroad Vine

Plant Pallet

Grass/Perennials

- Blue Daze
- Elliott's Lovegrass
- Fakahatchee Grass
- Florida Gama Grass
- Liriope "green giant"
- Liriope spicata
- Muhly Grass
- Pampas Grass
- Purple Lovegrass
- Sand Cordgrass



Purple
Lovegrass



Fakahatchee
Grass



Blue Daze



Muhly Grass

Section 9



Play & Fitness Equipment

Play & Fitness Equipment

Playgrounds are a vital part of any park system. They serve the children that play on them and the adults that take them there. Playgrounds and play areas as event nodes within any park adding activity and vitality to the public realm.

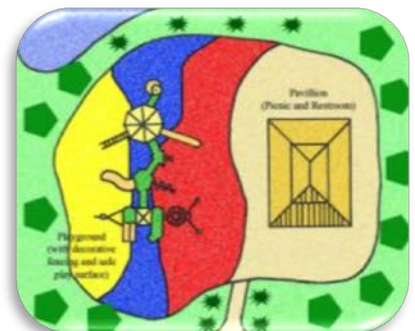
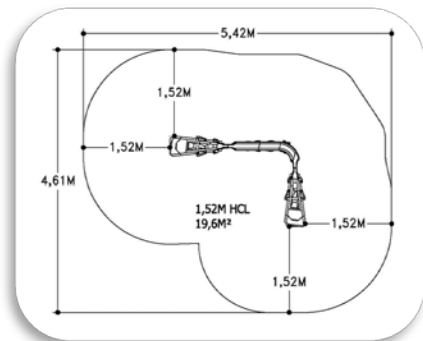
Playgrounds must be designed using ASTM International (formally American Society for Testing and Standards) standards for:

- Safety Performance Specification for Playground Equipment for Public Use
- Children's Playspaces and Equipment
- Impact Attenuation of Surface Systems Under and Around Playground Equipment

Best practices in Americans with Disabilities Act compliance, the use of environmentally sensitive and recycled materials, and age appropriate design standards.

Design Considerations

- Location of park
- Area available for play area
- User group age ranges
- Expected average number of users



Play Equipment to be utilized on a project specific approval basis only and must include age appropriate signage, systems and play surfaces

Fitness Equipment

Standard Fit Course: Mix and Match Components Project Specific

- Color: project specific
- Installation Pattern: per manufacturer specification
- Product Line: World Trail or similar
- Manufacturer: Site Specific



Standard Fit Course: Mix and Match Components Project Specific

- Color: project specific
- Installation Pattern: per manufacturer specification
- Product Line: LifeTrail or similar
- Manufacturer: Site Specific



Fitness Equipment to be utilized on a project specific approval basis and must include age appropriate signage, systems and surfaces

Section 10



Play Surfaces

Play Surface

Solid Surface

- Color: project specific
- Installation Pattern: per manufacturer specification
- Product Line: Project specifics
- Manufacturer: project specific

- Qualifications include:
 - Seamless
 - UV color stable
 - Stable, slip resistant, barefoot comfortable surface
 - Chemical (Chorine) / Salt-Water resistant
 - Durable low-maintenance surfacing
 - Minimum Warranty 3-5 year
 - Resist cracking and fading
 - Fire and chemical resistant
 - Bacteria, mildew and algae resistant
 - Allow for expansion and contraction
 - Fall zones to suit existing playground equipment
 - Meet or exceed all current federal CPSC, ASTM, IPEMA standards and ADA requirements (current standards)



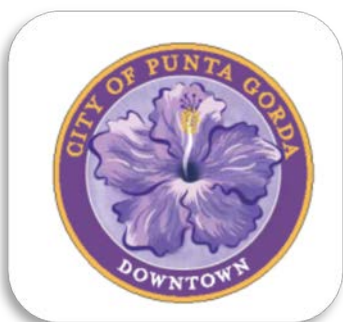
Section 11



Signage

Signage

This architectural feature should communicate effectively locations, directions, warning and information. These guidelines are intended to create a high quality and new urban type sign environment within the Park System. Designers should consider using specific identification for specific sections (i.e. Hibiscus Seal & Wayfinding) and incorporate clear informational fonts and content.



Signage

Monument

Standard Small Monument Sign:
City Custom / Park Identification

- Standard Surface: Brick
- Optional Surface: Cast Stone
- Optional Surface: Stucco painted
- Pier Cap: Cast Stone
- Manufacturer: site constructed



Signage

Wayfinding

All Wayfinding signage will have special requirements on FDOT controlled ROWs.

Standard Wayfinding: Hibiscus Logo Signage Series

- Color: as specified
- Mounting method: per manufacturer specification
- Manufacturer: Custom

Optional Waterfront Wayfinding: Compass Logo Signage Series

- Color: as specified
- Mounting method: per manufacturer specification
- Manufacturer: Custom



Signage

Informational

Standard "donation sign"

- Standard size: 10" x 2"
- Standard Color: Raised Silver; Recessed Black
- Hardware: Blind Mount
- Standard Wording: "A Gift From" or "A Gift to"



Need Park that Teach

Section 12



Site
Furniture

Site Furniture

Bicycle Rack

Standard Bicycle Rack:

The Lafayette

- Color: Black
- Mounting method: in-ground installation
- Product Line: Vintage Racks
- Manufacturer: CycleSafe



Optional Bicycle Rack: Saris 4-Bike Single Sided

- Color: Project Specific
- Mounting method: Surface
- Model: 2406 City Rack
- Manufacturer: Saris



Note: All bicycle Rack's must be "powder Coated". All hardware must be Stainless Steel and "Rust Resistant"

Site Furniture

Bicycle Rack

Optional Bicycle Rack:

Bike Shaped Bike Rack

- Model: BIKEBR-SF
- Color: Red or Blue
- Mounting method: in-ground installation
- Manufacturer: Belson Outdoors



Note: All bicycle Rack's must be "powder Coated". All hardware must be Stainless Steel and "Rust Resistant"

Site Furniture

Bollard

Standard Lighted Bollard: BOL/W42/14/BTL

- Color: Black
- Mounting method: Surface
- Product Line: Wadsworth Series
- Manufacturer: Holophane



Site Furniture

Drinking Fountain

Pet Friendly Drinking

Fountain: Model 2008SM

- Color: Textured Black
- Mounting method: per manufacturer specifications
- Manufacturer: Most Dependable Fountains
- Features include
 - One piece weld construction of NSI 380 Aluminum Alloy
 - 18 gauge electro-polished stainless steel bowl
 - Stainless Steel Bowl Strainer
 - Stainless steel anti-squirt head



Optional Fountain:

- Color: Onyx Black
- Mounting method: per manufacturer specifications
- Manufacturer: Most Dependable Fountains
- Features include
 - Heavy duty stainless steel pedestal with corrosion-resistant, brushed stainless-steel finish (standard).
 - Push-button filler valves.
 - Drinking fountains require a 1/2" supply line, and a waste line which measures a minimum of 1.25" in diameter
 - Activated by a side-mounted, self-closing button that can easily be turned on with your foot or optional wall mount plate



Site Furniture

Drinking Fountain

Bottle Filler Station

- Model 10155 SM
- Color: Black
- Mounting method: per manufacturer specifications
- Manufacturer: Most Dependable Fountains, INC.
- Features include
 - Pet Station
 - 10" Stainless steel surface carrier



Bottle Filler Station - ADA

- Model 10150 SM
- Color: Black
- Mounting method: per manufacturer specifications
- Manufacturer: Most Dependable Fountains, INC.
- Features include
 - Pet Station
 - 10" Stainless steel surface carrier



Site Furniture

Hand Rail

Standard Railing: Model K (Tear-drop)

- Color: White
- Mounting method: per manufacturer specification
Note: Standard installation is flush mount 2" posts. Any other mounting post size option is classified as an upgrade. 3" posts core drilled with concrete.
- Product Line: N/A
- Manufacturer: Swedge Lock Systems



Site Furniture

Receptacles

All Metal components in areas susceptible to salt spray, to be specified the hot-dipped galvanized pre-finish in addition to the VS Bronze power coat.

Standard Ash Receptacle:

Landmark Smokers' Outpost

- Color: Bronze
- Product Line: Smokers' Outpost
- Manufacturer: Ecolad Corporation



Standard Pet Waste Station:

JJB12B

- Color: ZW Green
- Mounting method: per manufacturer specifications
- Product Line: Sentry Pet Waste Station
- Manufacturer: ZEROWASTEusa.com
- Specifications include:
 - 7 ft U-Channel Post
 - Roll Bag dispenser
 - Waste can

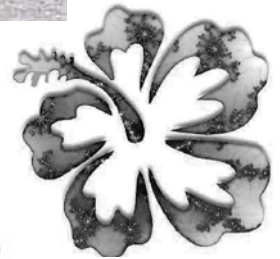


Site Furniture

Receptacles

Hibiscus Trash Receptacle:

- Lid: black removable fiberglass lid and a 32 gallon rigid plastic liner
- Lid (no ashtray)
- Color: TGIC Polyester Powder Coat, Color RAL 7032
- Fabrication: Aluminum
- Mounting method: per manufacturer specifications
- Manufacturer: D. M. Braun & Company PD-4310-MOD or approved equal



Optional Recycling Receptacle: TH-24

- Lid: Optional Rain Bonnet Lid (no ashtray)
- Color: VS Bronze, Cherry Slats
- Mounting method: per manufacturer specifications
- Product Line: Streetsite Series
- Manufacturer: Victor Stanley



Metal components in areas susceptible to salt spray, to be specified the hot-dipped galvanized pre-finish in addition power coat.

Site Furniture

Seating

Optional Bench:

CM-50 (6')

- Color: VS Bronze; Cherry Slats or site specific
- Mounting method: in-ground
- Product Line: GreenSites Series
- Size: 6 & 8 feet
- Manufacturer: Victor Stanley



Optional backless Bench:

CM-53 (6')

- Color: VS Bronze; Cherry Slats or site specific
- Mounting method: in-ground
- Product Line: GreenSites Series
- Size: 2, 4, 6, & 8 Feet
- Manufacturer: Victor Stanley



All Victor Stanley Metal components in areas susceptible to salt spray, to be specified the hot-dipped galvanized pre-finish in addition to the VS Bronze power coat.

Site Furniture

Seating

Hibiscus Bench:

- Color: TGIC Polyester Powder Coat, Color RAL 7032
- Fabrication: Aluminum
- Mounting method: surface
- Manufacturer: D. M. Braun & Company PD-4310-MOD or approved equal



Standard Seat Wall: Custom City of Punta Gorda Design

- Color: project specific
- Precast Wall Cap: WC2, Precast Designs, Inc
- Precast Pier Cap: PC4, Precast Designs, Inc
- Mounting method: per specifications
- Product Line: NA
- Manufacturer: site constructed



Site Furniture

Skate Deterrents

Standard Skate Deterrent:

AS Sealife Series

- Material: project specific
- Mounting method: per manufacturer specification
- Manufacturer: Skate Stoppers



Site Furniture

Tables/Picnic Tables

Standard Café Table: SPCT-24

- Standard Café Seat: FRS-19
- Color: VS Bronze
- Mounting method: in-ground
- Product Line: Steelsites Series
- Manufacturer: Victor Stanley



ADA accessible Table with Benches:
CM-56

- 8 ft. table w/ 6 ft. benches
- Color: VS Bronze; Cherry Slats
- Mounting method: in-ground
- Product Line: GreenSites Series
- Manufacturer: Victor Stanley



Site Furniture

Tables/Picnic Tables

Table: CM-4

- Table w/ 4-backless benches
- Color: VS Bronze
Cherry Slats
- Mounting method:
Surface Mount
- Options: 36" or 48"
square table top
Manufacturer: Victor
Stanley



Site Furniture

Tree Grates

Standard Compact Tree Grate:

4834 Camelia (48"X48")

- Material: Cast Iron
- Tree Opening: 16" or 18" (note: 18" for Foxtail Palm)
- Standard Option: Light Wells (2)
- Mounting method: per manufacturer specifications
- Product Line: Camelia
- Manufacturer: Ironsmith



Standard Large Tree Grate:

7278 Camelia (72"X72")

- Tree Opening: project specific
- Material: Cast Iron
- Standard Option: Light Wells (2)
- Mounting method: per manufacturer specifications
- Product Line: Camelia
- Manufacturer: Ironsmith



Standard Large Tree Grate: Paver-Grate

- Tree Opening: project specific
- Material: Cast Iron
- Standard Option: Light Wells (2)
- Mounting method: per manufacturer specifications
- Product Line: Camelia
- Manufacturer: Ironsmith

Site Furniture

Bicycle Fixit Station

Bicycle Fixit Station:

DERO Fixit

- Main body: 2" pipe, 6" x 2" 11g tube.
- Feet: 8" x .25" steel.
- Tool tethers: 3/16" stainless steel cable.
- Manual air pump.
- Hand tools:
 - Philips and flat head screwdrivers
 - 2.5, 3, 4, 5, 6, 8mm Allen wrenches
 - Torx wrench
 - Headset wrench
 - Pedal wrench
 - 8, 9, 10, 11mm box wrenches
 - Two tire levers

- hot-dipped galvanized finish
- The foot-mounted 6 wedge anchors or concrete spikes.
- Color:



Section 13

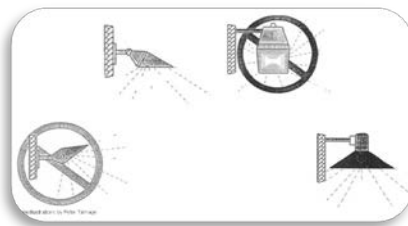


Site Lighting

Site Lighting

Site lighting is a key component of any public space intended for non-daylight use. In addition to aesthetics, energy conservation, safety, and preservation of natural light environment become significant factors in lighting selection. Therefore, all lighting selections should be based on a careful study of site conditions and surrounding land uses. For example urban environments may require more intense sources and dramatic lighting effects while a residential area may require fixtures that minimize light spillage onto private property. Additionally, proper lighting selection is highly technical and the following standards are to be used primarily for aesthetic guidance.

- Best Practices for light sensitive areas
 - Dark Sky Standards use in:
 - Residential areas
 - Environmentally sensitive areas



- Understanding optics
 - Light Patterns-Blub Types

	Type I	Type II	Type III	Type IV	Type V	Forward Throw
Light Distribution						
Recommended Application	Narrow walkways or bike paths.	Wider walkways, entrance walkways, bike paths and other long and narrow lighting applications.	Parkways, general parking areas, and other area lighting applications.	Wall mounting applications illuminating the perimeter of parking areas.	General parking and area lighting applications.	Recessed lighting applications for sharp, house-side cutoff and minimal spill light.
Recommended Placement	At or near center of pathways.	Near the side of the roadway.	Near the side of the street.	Near the side of the street.	At or near the center of a large area.	At the building perimeter.

Site Lighting

Decorative Street Light

Standard Commercial* Streetlight:

12' decorative pole with acorn luminaire

- Color: Black
- Mounting method: per manufacturer specifications
- Product Line: Wadsworth (pole), Granville (luminaire)
- Manufacturer: Holophane



Standard "Dark-Sky" Area** Streetlight:

As illustrated

- Color: Black
- Mounting method: per manufacturer specifications
- Product Line: 5851
- Manufacturer: Hadco



*For use in parks, parking lots, and streetscapes in the commercial and mixed-use areas primarily in the Community Redevelopment Area

**For use in parks, parking lots, and streetscapes in or adjacent to residential areas

Site Lighting

Lighted Bollard

Standard Lighted Bollard: BOL/W42/14/BTL

- Color: Black
- Mounting method: Surface
- Product Line: Wadsworth Series
- Manufacturer: Holophane



Section 14



Water Features

Water Features

Formal Fountains

Another important component of a well integrated and dynamic Park System is the addition of water features. Urban plazas, waterfront and neighborhood parks are symbols of the community and need to be carefully designed to accommodate a wide range of formal and informal activities. Fountains, water gardens and ponds can contribute to the life of the park and provide for a more meaningful park experience. These spaces can become a focal point for social interactions which can become the defining element of a City. Water can provide an engaging element that helps establish the character and quality of the space. Important objectives of the design include water conservation, maintainability, reduced chemical use, and the health, safety and welfare of the general public.

Standard Man Made Feature
Fountain: Fixed Base
Horizontal

- Motor Size: project specific
- Spray Pattern: project specific
- Standard Lighting: White, unless otherwise specified
- Mounting method: per manufacturer specifications
- Product Line: Fixed Fountain Series
- Manufacturer: Aqua Master



Water Features

Pond Aerators & Fountains

All water features are to be designed on a project specific basis.

Standard Small Pond Aeration

Fountain: Masters Series

- Motor Size: project specific
- Spray Pattern: project specific
- Standard Lighting: White, unless otherwise specified
- Anchoring method: per manufacturer specifications
- Product Line: Master Series
- Manufacturer: Aqua Master



Section 15



References

References

Aqua Master Fountains and Aerators	www.aquamasterfountains.com
Barco Products	www.barcoproducts.com
Blue from Wikipedia	www.wikipedia.org/wiki/blueway
CPTD Watch – Crime Prevention Through Environmental Design	www.cpted-watch.com
Cycle-Safe	www.cyclesafe.com/RenderTable.aspx
Dero Bike Rack	www.dero.com
Florida-Friendly Landscaping	www.floridayards.org
Foreverlawn	www.foreverlawn.com
Hadco	www.hadco.com/Hadco/Home.aspx
Haws Corporation	www.hawesco.com
Holophane	www.holophane.com
Hydraway	www.hydraway.net
Icon Shelter Systems	www.iconshelters.com
Ironsmith	www.ironsmith.cc
Jardinier	www.jardiercorp.com
Jerith Ornamental Fences of Distinction	www.jerith.com/patriotOrnamentalWire.htm
Lithonia	www.lithonia.com
Playworld Systems	www.playworldsystems.com
Skate Stoppers	www.skatestoppers.com
Surface America	www.surfaceamerica.com/index.php
Swedge Lock Fence and Railing	www.swedgelock.com
Victor Stanley	www.victorstanley.com



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