

2018 MASTER PLAN FINAL REPORT

AUGUST 2018







THE ENVIRONMENTAL LEARNING CENTER: THE NEW NATURE CENTER

The ELC envisions a world where all individuals of all walks of life and in all places – urban, suburban, rural – living nearby our Indian River Lagoon or far away – are healthy, happy, scientifically literate, informed citizens, deeply connected with their local environment.

This is the role of nature centers reinvented: to bring new life to their natural resource assets in order to address current and projected future societal needs and serve as community gathering spaces to connect environmental conservation and natural history education with the physical and psychological well-being of the human species. Adults and children are unable to act as stewards on behalf of the environment if they are not well themselves. And nature contact is what brings wellness and what brings needed knowledge.

ELC's goal – through participatory, immersive, naturebased experiences accessible to all – is to deepen the human connection with and understanding of other species on our precious planet, so that all humanity can live in harmony with the rest of our natural world.

This is the ELC Master Plan. This is ELC's vision for our shared future.



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ACKNOWLEDGMENTS

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The Environmental Learning Center (ELC) is a not-for-profit 501(c)3, led by the ELC Board of Directors. The ELC Foundation is a separate not-for-profit 501(c)3 with sole support function to the ELC, stewarding its endowment; it is led by the ELC Foundation Board of Directors and guided by its Investment Committee.

The ELC is located at 255 Live Oak Drive, Vero Beach, FL, 32963.

ELC's mission is to educate, inspire and empower all people tobeactivestewardsoftheenvironmentandtheirownwell-being.

OVERVIEW

The Environmental Learning Center (ELC) is located on the Indian River Lagoon at the north end of Vero Beach on Wabasso Island, approximately one mile from public beach access to the Atlantic Ocean. The Lagoon is considered the most diverse estuary in North America, and the ELC proudly stewards 64-acres of land surrounded on three sides by its waters. Approximately twelve acres of the ELC's land is classified as upland and can support development; the remaining area is largely protected mangrove forest.

Terra Design Studios led the ELC Master Planning Team, which included:

- Terra Design Studios, LLC
 Cindy Tyler, PLA and Rob Thompson Landscape
 Architects
- PNF Architecture & Design and Babienko Architects
 Pamela Fernandez and Jeff Babienko, Architects
- David Cox Consulting
 David Cox, Ph.D. Environmental Consultant
- Knight, McGuire and Associates, Inc. David Knight, PE - Civil Engineer
- EMD Consulting Group Rick Daley, Strategic Planner

Concurrently, the ELC formed a Master Planning Committee comprising ELC Board members and key staff to provide input to the Planning Team throughout the entire planning process. In addition to leading regular Committee review sessions, the Planning Team conducted multiple interviews with a variety of focus groups, including community leaders, site users, ELC volunteers, and current and potential donors.

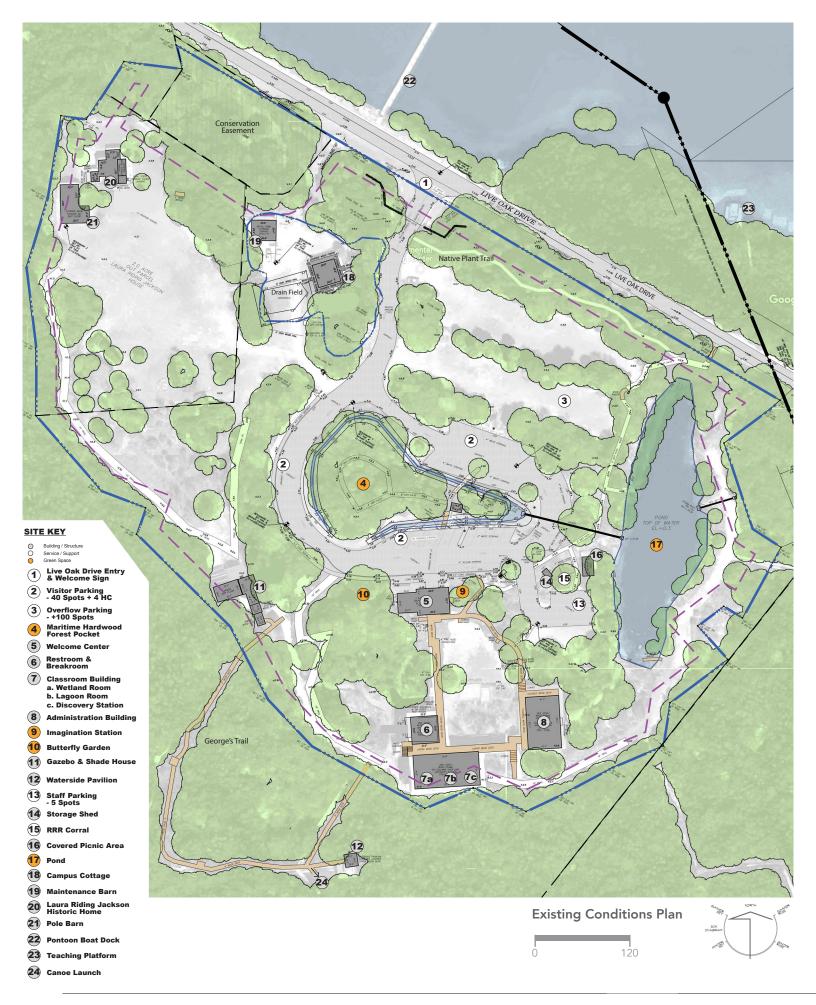
The resulting Master Plan represents the blended vision of key stakeholders and the expertise of the Planning Team and has earned the approval of both the full ELC Board of Directors and full ELC Foundation Board of Directors. The Master Plan provides a roadmap for developing the campus in phases over the next five to ten years.

MASTER PLAN SUMMARY

The visitors' experience is of highest importance. The ELC's Master Plan offers multiple layers of authentic and distinctive experiences in order to:

- Bring people who otherwise do not choose to spend their discretionary leisure time at ELC, such as multi-generational audiences, families, people with limited physical abilities, etc.
- Make a day at the ELC even better for those who already do choose to come.
- Increase the ELC's ability to earn income through stronger membership and paid admission, gift shop sales and café revenue, pontoon tours and guided canoe trips, and perhaps most importantly, multiple tiered opportunities for rental fees.

By following the Master Plan roadmap, the ELC will have the tools needed to transform into an essential asset of the community, strengthen their fiscal position, and ultimately become even more effective in educating, inspiring, and empowering all people to be active stewards of the environment and their own well-being.



THE ELC'S 30-YEAR JOURNEY

The ELC's founding visionaries were members of the local Audubon Society who saw value in the rich bounty of life along the Indian River Lagoon. They believed that educating people was the key to protecting this irreplaceable national resource, which led to the formal creation of ELC in 1988. Founders solicited Indian River County for the use of part of Wabasso Island and sealed the deal with a \$1/year, 99-year lease agreement.

BUILDINGS

Since 1988, the ELC has constructed four main buildings:

- Welcome Center, including ticketing, interpretive media and gift shop;
- Classroom Building, including the Discovery Station, an interactive museum with hands-on exhibits, touch tank and aquariums;
- · Restroom and Breakroom Building; and
- Administration Building.

In 2008, lighting struck and completely destroyed the Classroom Building and Restroom and Breakroom Building. Within two years, the ELC opened new facilities that were designed and constructed to a higher green standard, receiving 4-Star Green Globes certification.

BOARDWALKS, TRAILS, OUTDOOR LEARNING STATIONS AND BOATING FACILITIES

During the past 30 years, ELC incrementally built:

- One-and-a-half miles of boardwalk and trails through the mangrove forest and upland habitat;
- A screened outdoor classroom called Waterside Pavilion;
- A raised platform for Lagoon viewing, called George's Perch;
- A Lagoon-edge wildlife viewing platform along the southern edge of ELC's property called George's Blind;
- A large gazebo adjacent to a plant nursery called the Gazebo and Shade House;
- A multi-purpose picnic and teaching pavilion called Mardie's Hut;
- A motorized platform that lowers participants kneedeep into the Lagoon to drag a seine net;
- A freshwater stormwater management pond that doubles as an outdoor laboratory;
- A pontoon boat dock on the Lagoon north of Live Oak Drive; and
- Canoe storage facilities and dock along the southern edge of ELC's property, including a quarter-mile canoe trail in the mangroves.

EDUCATIONAL PROGRAMMING AND COMMUNITY OUTREACH

ELC recently expanded its mission to include human well-being in addition to environmental conservation, and has continued to add programs for both children and adults since its inception. The ELC offers more than 450 programs annually to the general public and serves over 30,000 children and adults, on- and off-site, through school excursions, camps, mentoring and internship programs, lecture series, adult education, professional development, family festivals, corporate and family parties and gatherings, and numerous other partnerships and programs.















MASTER PLANNING GOALS

At a high level and during early stages of the master planning process, ELC's Two-Year Roadmap Plan offered an evaluation tool for programming, which the Planning Team embraced as equally relevant for guiding capital improvements in the Master Plan. The Roadmap requires "yes" answers to at least two of these three questions in order to proceed with the initiative:

- Does it support our mission?
- Will it serve our intended audience(s) in a better way?
- Will it generate revenue?

Additionally, the Master Planning Committee directed the Planning Team to prepare a Master Plan that would accomplish the following goals:

- Promote increased visitation by new and repeat guests.
- Increase physical accessibility for handicapped and elderly guests.
- Increase facility rental opportunities and special events.
- Increase cross-disciplinary and societal partnership programs.
- Provide on-site refreshments.
- Provide overnight housing.
- Provide space for changing exhibits.
- Provide research opportunities for ecological and social scientists.
- Provide enhanced wayfinding.

During the master planning process, a few of the originally-stated goals were altered as the Planning Team evaluated the highest and best use for limited acres of developable land and staff time. As such, over-night housing for occasional program participant use was re-envisioned to be a mobile structure in the form of a tent and/or camper, rather than a permanent fixture on site.

The original list of goals was strengthened and lengthened during strategic visioning workshops led by EMD Consulting Group. (The full Strategic Vision document can be found in *Appendix A*.) During these sessions, it was deemed that the Master Plan should respect and even amplify the most distinguishing features that give the ELC a strategic and competitive advantage over like-minded cultural institutions in the region, such as botanical gardens, parks, and preserves. These advantages will help transform the ELC's perception from "nice to have" to "a critical part of the community", and they include:

- An exceptional location on the Indian River Lagoon and near Atlantic Ocean access;
- A site with numerous opportunities for additional features and programs;
- An unwavering commitment to environmental education, science, and human and environmental health; and
- Authentic and diverse nature experiences for all ages.

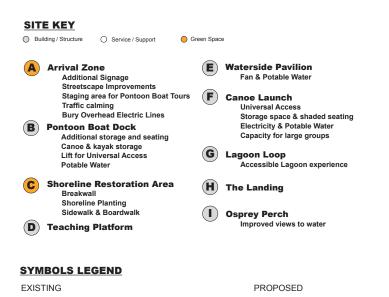
Lastly, the Master Planning Committee and Planning Team adopted the following goals as critical factors of success:

- Focus on a differentiation strategy from other regional, like-minded cultural institutions. Build distinctiveness in every step.
- Provide exceptional guest experiences.
- Define and incorporate iconic features.
- Support authentic experiences.
- Demand high quality design.
- Focus on increasing ALL revenue streams.
- Develop diverse experiences that will appeal to a multi-generational audience.
- Protect ELC's essence as a haven for respite that creates a sense of well-being in all visitors.





View of the Pontoon Boat Dock and Proposed Interpretive Center from Causeway Bridge



Bodies of water

Mosquito ditches

from Wetland and

Conservation Areas

Overhead Electric Line (To be buried)

Lease and Easement lines
25' Development Fasement

IRS-16-341.dwg 03/13/2017 ±12.7 acres

Sanitary Sewer line (Force Main)

Upland Boundary per Indian River Survey

Property line

Water line

A VISITOR'S PERSPECTIVE A WALK THROUGH THE MASTER PLAN

The narrative that follows describes the visitors' journey as they move through components of the Master Plan, as if all the pieces and parts are in place. In fact, master plans are built over time; in *Appendix C* you can find phasing strategies for the Master Plan's first phase of implementation.

Happy visitors, and lots of them, are essential to the success of any cultural institution. The ELC's master planning process held their visitor experiences in the highest regard and strove to both attract those who do not presently visit and protect and enhance the experiences of those who are frequent guests. The Master Plan focuses on the visitors' journey, beginning with their drive to the ELC, continuing with their experiences of parking their car, finding their way to the entrance to the Interpretive Center and then strolling through an inspirational collection of immersive southeastern Florida habitats and native plant and animal displays.

Boardwalk

Viewsheds

Tabled Crosswalk

Wayfinding Signage

Out and Back Boardwalk Experience



SITE KEY FFE = Finished Floor Elevation Building / Structure Green Space O Service / Support Critter Corner (FFE 6.8) **Maritime Hammock Auto Court Butterflies & More!** The Ascent Administration & Classrooms Buildings Interpretive Center (FFE 11.0) (FFE 12.5 & 12.8) **Lagoon Terrace Sunset Deck Water-wise Cascades Live Oak Stroll Canopy Walk** Hidden 'Island' **FUN Zone Native Plant Gallery** Western Boardwalk **Education & Event** Pavilion (FFE 8.0) **Eastern Boardwalk** The Oval The Pond **Teaching Shadehouse Osprey Perch Trail**

DIY Lagoon Stewardship

Vegetation (species unknown)

Vegetation (Cabbage Palm)

Building

Boardwalk

Walkway

Buildina

Walkway

Live Oak (Approx. Location)

Maintenance Route

Maintenance Route

Shared Visitor &

Bodies of Water

Cover / Pavilion Boardwalk

Tabled Crosswalk

SYMBOLS LEGEND

EXISTING

PROPOSED

Stewardship Centers

-x--- Fence 4' Ht

Fence 6' Ht

Canopy Tree

Shrub

Screening

Salt Marsh

Swale

Restroom

Service

Specimen Plant

Display Planting

Natural Planting Bed

Turf or Grass Pave

Important Viewshed

Solar Shade Panels

(FFE 8.5)

PROPOSED

Volunteer Training & Grounds

THE ENLARGED DEVELOPMENT ZONE A CLOSER LOOK

The Enlarged Development Zone zooms in to focus upon the developable upland habitat at the ELC. The approach to campus and its edges are an important part of the Master Plan, and the boardwalk that loops through the mangroves and leads to open water of the Indian River Lagoon especially set the ELC apart from other interpretive nature destinations in the region. However, it is the core of campus that offers the greatest opportunities for improvement and enhancement. Here, we will highlight a parking lot with a story to tell, a visionary Interpretive Center that welcomes us and teaches us, places for nature play, animal interactions, and making memories.

The Master Plan also takes into account staff needs with the same level of attention that was paid to the visitor experience. Everything from parking to service routes to upgraded facilities aims to enhance the efficiency with which the ELC's staff and their support structures operate.



View of the Interpretive Center from Live Oak Drive

THE APPROACH WAYFINDING ALONG THE WATER'S EDGE

The ELC visitors' experience begins even before they set foot on campus – it starts with their journey there. Visitors find clear way-finding signage on major routes to the ELC. They even catch a view of the ELC's Pontoon Boat Dock and the iconic Interpretive Center from the Causeway Bridge, which helps to orient them. If traveling from the east along Wabasso Beach Road (Route 510), visitors spot a prominent sign identifying the upcoming right-hand turn onto Wabasso Island Lane; drifts of tended beds of native plants reinforce this way-finding moment. The planting display continues on the bridge embankment on the left, leading visitors' eyes to a secondary way-finding sign on Live Oak Drive.

After turning onto Live Oak Drive, visitors drive through an impressive mangrove forest on both sides of the roadway; a low fence offers visual cues that the land on both sides belongs to the ELC. They begin to decompress and relax a bit, knowing that they are on the right track.

A tabled crosswalk, where the roadway surface gently rises to meet the elevation of the path, marks the pedestrian crossing to the Pontoon Boat Dock on the left. The newly-restored Lagoon edge offers clear views to the water, and "oyster condos" form a breakwater to help prevent wave erosion. Visitors spot a few guests in wheelchairs using the new pontoon lift so that they may access the boat with ease.

On the right, visitors see the two-story Interpretive Center, including a green roof and built to the highest level of green standards feasible for the organization. The Lagoon Terrace's bold and beautiful Florida-Friendly LandscapingTM, and the third ELC way-finding and entrance sign, all work in concert to cue visitors to turn right into the Maritime Hammock Auto Court.

MARITIME HAMMOCK AUTO COURT (J)

The Maritime Hammock is one of the special ecological habitats of the ELC campus which is less often encountered by visitors to Florida. Featuring live oaks, cabbage palms and red bay - plants critical to migrating songbirds and protected gopher tortoises and Eastern indigo snakes, it is a living exhibit offering the first personal introduction to the ELC's vision for environmental stewardship.

The parking lot layout honors existing openings in the maritime hammock, and pervious pavement maintains hydrology patterns. Rainwater is directed towards the Grass Pave spaces or to outer infiltration and water cleansing depressions. LED, dark sky compliant light fixtures allow evening use by ELC visitors. And daytime visitors find ample opportunities to park in the shade, either beneath the power-generating photovoltaic-panel shade arbors or the canopy of mature oaks that have been carefully protected, as they head to a clearly-defined walkway that leads to another tabled crosswalk and safe pedestrian crossing zone.

Entering campus, it is clear to the visitors they are arriving at a space dedicated to leadership fostering a healthy connection between people and the environment.

THE ASCENT (K)

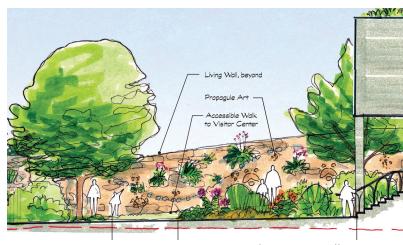
The first floor of the Interpretive Center sits eleven feet above sea level and is built approximately six feet above the entry drive. A gently ascending curving path guides visitors to the Center's entry point. The theme of Florida-Friendly Landscaping™ (as guided by the University of Florida) surrounds the Center and embraces the path to the north. Flowers are in full bloom beneath two of the largest live oaks on campus. A tall "Living Wall" borders the path to the south. Exhibits hung from and embedded into the Living Wall change often and include features like "What's in Bloom Today". The Wall is made of local materials, outfitted with plant pockets and treasure nooks for all kinds of interactive and fresh ideas.



Photovoltaic -Panel Shade Arbors



Visitors walk along the curved Living Wall



Facing the Living Wall



THE PUBLIC REALM THE INTERPRETIVE CENTER & LANDSCAPES

INTERPRETIVE CENTER (L)

The indigenous maritime hammock, from roots to canopy, inspires the Interpretive Center's design.

Walkways that enter and exit the Center, the "roots", are organic and curving; the building's broad canopy shades the visitor while drawing them in to experience the vast array of exterior and interior spaces within its canopy. The Center supports lectures, exhibits, conservation, education and wellness programs, handson activities, special events, and the arts.

The architecture supports the "Building as Teacher" concept, utilizing advanced green building strategies while simultaneously employing passive sustainable techniques from historical Florida vernacular. Water feature walls, sunken gardens, natural energy sources and many other aspects of the Interpretive Center are artistically featured for visitors to enjoy experientially, while learning about their important functions and receiving information and inspiration of green building elements they can incorporate in their own homes. Informational exhibits throughout highlight the green features of the building and how it operates, serving as a visitor destination in its own right.





"Building as Teacher" Green Systems



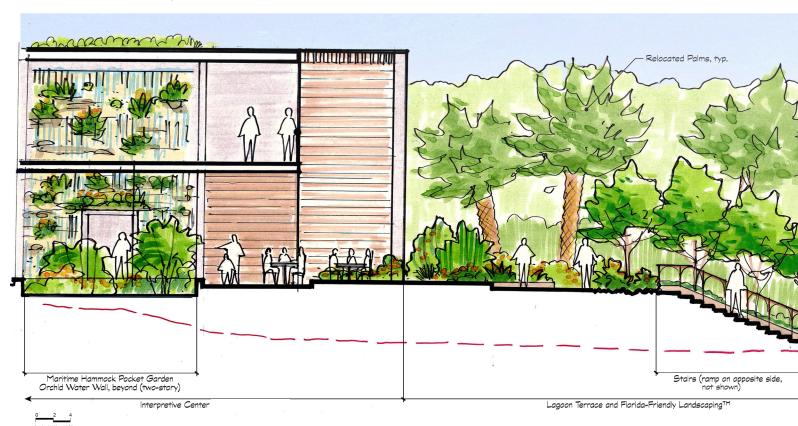
THE LAGOON TERRACE (M)

A greeter welcomes the tour bus group at the special group entrance, while the casual visitors are drawn by a dramatic vista of the Lagoon, enticing them to visit the Lagoon Terrace. Here, they are rewarded with summer breezes and an inviting spot to sit and take in the view of the water.

The Terrace wraps around a beautifully designed sunken garden, called the Maritime Hammock Pocket Garden, that showcases the complexity of plant and animal life in the maritime hammock (a special Florida ecosystem), from the saw palmettos on the hammock floor to the orchid-laden canopy of mature palms and oaks. This strong and unifying element visually links all three floors of the Interpretive Center through a vertical open space, allowing the visitor to experience it at each level and thematically introducing the importance of the conservation of the maritime hammock to ELC guests. The Pocket Garden also offers filtered daylight for lower floors while providing passive cooling for the Interpretive Center by drawing warm air up through the branches.

Another treat awaits visitors on the Lagoon Terrace. An Orchid Water Wall, a two-story water feature built of stone and indigenous oyster shells, flanks the entrance to the restrooms and features an active water cascade interspersed with maidenhair ferns, orchids, and other bromeliads that can be found in the region. The wall material harkens back to the Native Indians that once inhabited this land and cultivated oysters, creating ritual mounds that could reach up to 40-feet in height. Using an eco-friendly strategy, rainwater is collected from the roof and provides water for this feature. In fact, the stair access behind the wall shows the amount of water captured from the roof - yet another teaching tool. The tranquil sound of water dripping down the wall and its floral display gives visitors a reason to dwell in the Lagoon Terrace.

Among other things, the Terrace is the outdoor support for the Café, an open and inviting refreshments venue.





Top: Envisioned ELC Orchid Water Wall Bottom: Orchid Water Wall Inspiration





Lagoon Terrace Section

Visitors relax with coffee, refresh with an ice cold drink or grab a snack or lunch while visiting the Café. The Café's sliding glassed walls capture 180-degree views of the Lagoon and the Courtyard while connecting the Lagoon Terrace to open-air seating. Surrounding the seating, planted containers of aromatic medicinal herbs surround groupings of movable tables and chairs - promoting the healing power of naturebased remedies and concepts of self-sufficiency by serving as examples of what visitors can plant at their own homes. Pond apples and other southeastern Florida edible shrubs and trees flank the Florida-Friendly Landscaping™ plant collection. Visitors are intrigued by some of the unusual species and planted arrangements and make notes to experiment at home with these new ideas.

The Lagoon Terrace doubles as a means for visitors to access the Pontoon Boat Dock across Live Oak Drive. Since the Lagoon Terrace is in the public realm, anyone can spend some time here and wander to the Dock for a closer view of the Lagoon or a ticketed pontoon boat tour.

There are two ways to descend to the tabled crosswalk at Live Oak Drive – a set of steps and a barrier-free curving ramp. Both are paved with an all-weather material and increase the visitor's interface with the Terrace's plants and the menagerie of pollinators and other animals attracted to them.

GIFT SHOP AND TICKETING

Once visitors have explored the Lagoon Terrace and Café, they are at last ready to purchase a ticket and enter the "paid" experience awaiting them at the ELC. In the Gift Shop, visitors enjoy views of the Pocket Garden as they browse merchandise, watch videos related to ELC features, investigate the "Critter of the Week" corner, and learn from greeters what's cool to see as they purchase their tickets or present their membership cards. The Gift Shop offers an enticing glimpse into the Mangrove Room beyond, encouraging potential visitors to explore further.

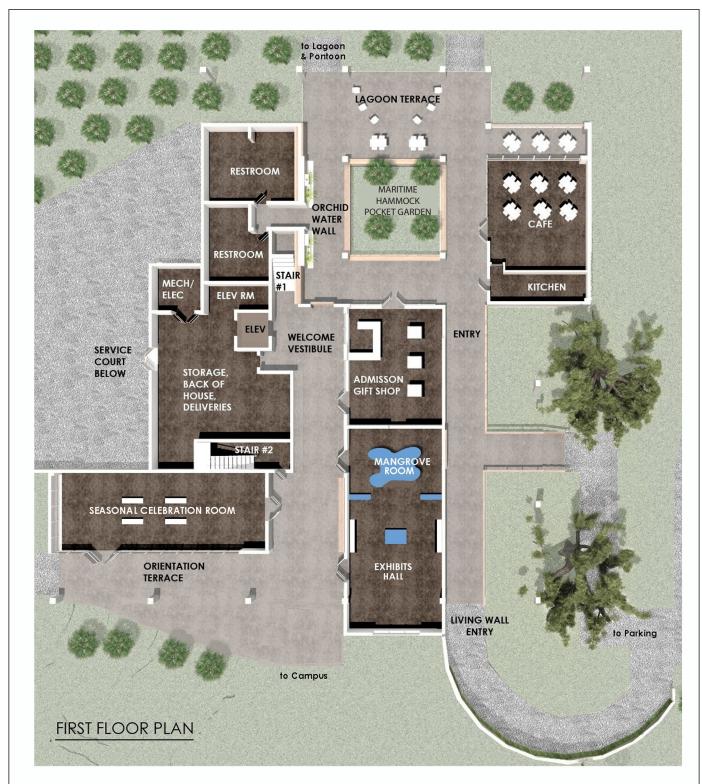
BEYOND THE GATE THE PAID EXPERIENCE

INTERPRETIVE CENTER: FIRST FLOOR

Visitors have now entered the "paid experience zone." The first stop is the Mangrove Room, which introduces visitors to the complex mangrove forest system, a predominant feature of the ELC's landscape. A centrally-located Shallow Waters Tank features a close-up look at mangroves and their inhabitants, including oyster condos and crabs. Related animal exhibits surround the tank on the perimeter walls.

Visitors move on to the **Exhibit Hall**, which features freshwater, brackish, and saltwater aquariums, representing the region's diverse spaces; handson interactive exhibits; video documentaries; and exhibits of rotating collections of various species, such as turtle shells, seashells, and critter skeletons.

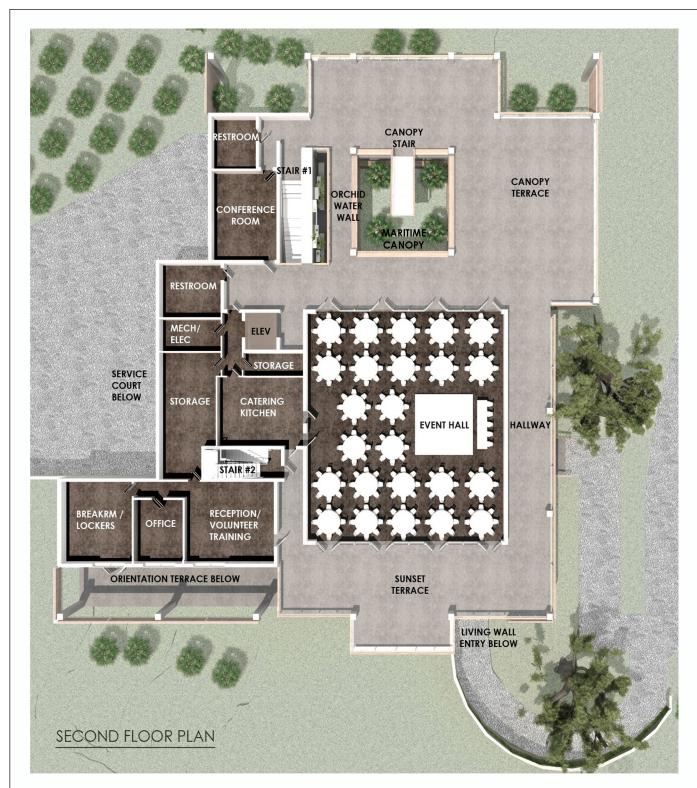
Next, visitors enter the Seasonal Celebration Room, a glass walled space overlooking the Orientation Terrace that offers opportunities for traveling art and nature exhibits, lectures, classes, and local exhibits such as nature photography and paintings. Private rentals can use the Seasonal Celebration Room in combination with the Orientation Terrace and Exhibit Hall for an expanded experience.



INTERPRETIVE CENTER

ENVIRONMENTAL LEARNING CENTER FINAL MASTER PLAN PHASE 31 JANUARY 2018

PNF. ARCHITECTURE + DESIGN babienko architects



INTERPRETIVE CENTER

ENVIRONMENTAL LEARNING CENTER FINAL MASTER PLAN PHASE 31 JANUARY 2018

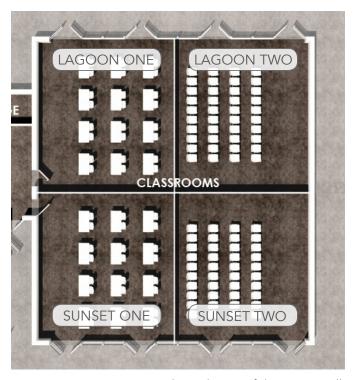
PNF. ARCHITECTURE + DESIGN babienko architects

INTERPRETIVE CENTER: SECOND FLOOR

If they are visiting the ELC for a special event or class, visitors take the elevator or stairs to the **Canopy Terrace**, a shaded exterior terrace overlooking the Lagoon that continues to offer coastal breezes and treetop views of the Lagoon and Canopy Courtyard. The Terrace supports many uses, as an outdoor classroom, resting spot, or an outdoor space for event cocktails and dining with access to the catering kitchen.

The second floor of the Interpretive Center also supports an **Event Hall** that provides a multi-functional space for events, corporate retreats, and community meetings. Whole or split into four spaces, the **Event Hall** offers many opportunities to take in the views of the Lagoon and the ELC campus while providing flexibility through division into two large or four smaller multipurpose gathering spaces: **Lagoon One** and **Two and Sunset One and Two**. The Event Hall welcomes larger premiere lectures, wellness and arts programs and classes for 200 guests at a time. An adjacent catering kitchen, elevator and storage facilities support the Event Hall or its transformation into smaller educational or event spaces.

Adjacent to the Conference Room, a **Sunset Terrace** awaits to provide shaded and airy views of the ELC's amazing sunsets. It overlooks key features such as the Nature Plant Gallery, The Oval, and the FUN (Families Unplugged in Nature) Zone. Exterior dining and cocktails are offered to guests via the catering kitchen.



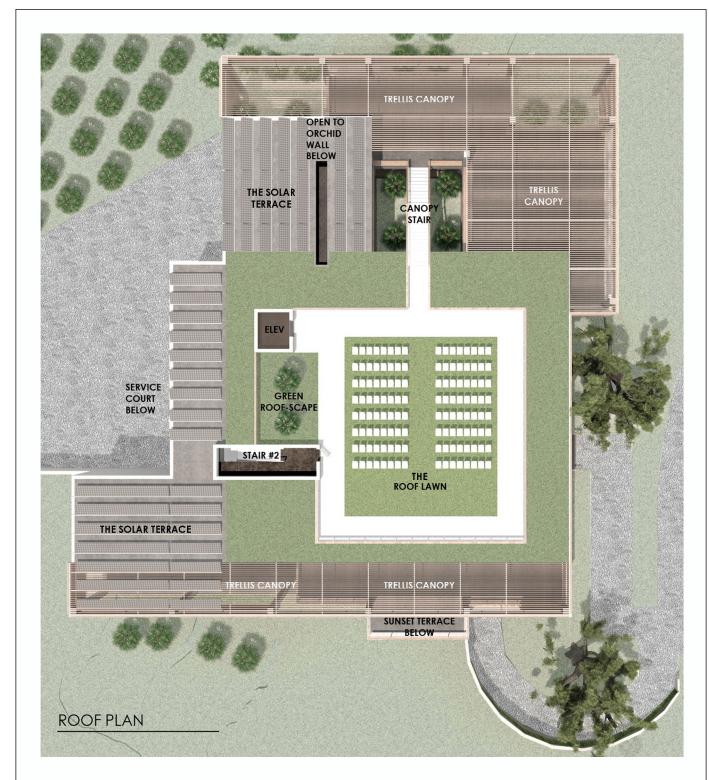
Enlarged View of the Event Hall, split into four classroom spaces



Utilizing classroom space at the ELC



Sunset over Vero Beach



INTERPRETIVE CENTER

ENVIRONMENTAL LEARNING CENTER FINAL MASTER PLAN PHASE 31 JANUARY 2018

PNF. ARCHITECTURE
+ DESIGN
babienko architects

INTERPRETIVE CENTER: THE ROOF

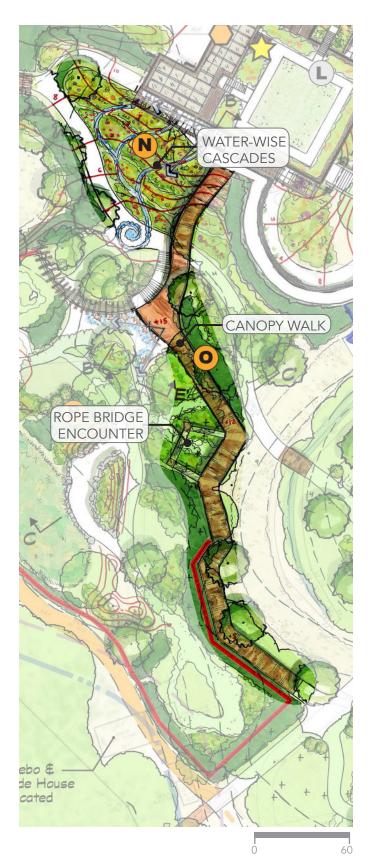
On the rooftop, visitors enjoy the fenced **Roof Lawn**, which provides spectacular panoramic views of the water surrounding Wabasso Island. The program possibilities are endless, from lawn games to birding and painting classes to nighttime astronomy classes and overnight camping experiences. Beneficial coastal breezes can cool up to 150 seated diners here, as well as those gathered for spontaneous lawn games and other activities. The Interpretive Center is the only location in Indian River County offering 360-degree views overlooking the Lagoon, bridges, the mainland and the barrier islands, making it a destination in itself.

A grid of photovoltaic solar panels on the roof defines the **Solar Terrace**, an exhibit in support of the "Building as Teacher" philosophy. Real-time viewable control panels provide information on energy production and building consumption.

The **Teaching Roof Garden** exhibits native-to-Florida flora that can be grown on rooftops - again, part of the "Building as Teacher" concept.



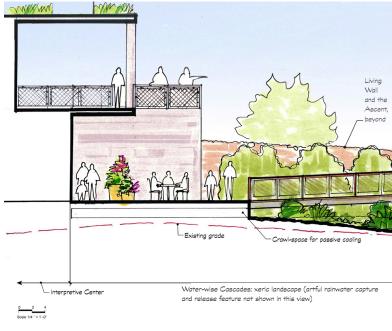
The Roof Lawn



WATER-WISE CASCADES (N)

Visitors in large groups, such as school field trips or tour buses, receive their welcome and orientation instructions from an ELC staff or docent on the Orientation Terrace. Casual visitors also gather here to map out their ELC journey. The view from this vantage point is quite inviting, offering a panoramic perspective of the Native Plant Gallery, FUN Zone, Canopy Walk, and the Water-wise Cascades themselves.

The Water-wise Cascades capture rainwater from the Interpretive Center roof and channel it into circuitous runnels surrounded by drought-tolerant plants to a grated spiral runnel and inlet at the entrance to the FUN Zone, serving as a tangible example that sustainability and conservation can be beautiful. When there is no rain, the artful organic lines of the runnels and drifts of xeric plants carry the day. But when a brief summer thunderstorm pops up, visitors delight in the activation of the waterways and celebrate the rain. The introduction of water-wise plant species and revealing the journey of a raindrop in an artful way to regional visitors work in tandem to inspire a change in the way homeowners plant and tend to their landscapes.







CANOPY WALK (O)

There are many choices for the casual visitors as they take in the view from the Water-wise Cascades. Many first-time guests will likely choose the Canopy Walk to experience the ELC's live oaks, cabbage palms and gumbo limbos from the treetops, amidst the branches. This is an experience that is unparalleled in the region, giving visitors the opportunity to see the region's unique ecology from our animal neighbors' point of view; it is also an iconic, dramatic way to begin to explore the ELC. The Canopy Walk continues to gently rise from the elevation of the Water-wise Cascades terrace until it is approximately twelve feet above the entrance to the FUN Zone. Many visitors with young children decide to descend the stairs at the overlook and explore the FUN Zone first, saving the Rope Bridge Encounter up ahead for later.

<< Pictured Top to Bottom: Custom, Curved Runnels Rope Bridge Encounter Inspiration



Water-Wise Cascades and Canopy Walk Section



FAMILIES UNPLUGGED IN NATURE - FUN ZONE (P)

The FUN Zone aims to reconnect children and their caregivers to nature - to feel more comfortable with taking their own adventures and learning about nearby nature through joy-filled, participatory, and open-ended free play with natural materials inspired by native plants and animals.

Although the ELC stewards several Floridian ecosystems - mangrove forests, salt marsh and maritime hammocks, it is the marsh and upland habitat that are the focus of the FUN Zone's features. The main path in the FUN Zone is paved with an all-weather material both for easy use by strollers, wheelchairs and walkers and to mitigate clean up after a storm event.

The visitors' first stop is the **Welcome Terrace**, a gathering spot that offers shade seating beneath a curving vine-clad arbor, Florida-Friendly Landscaping[™] and native plantings and exhibits, and an interactive water feature and photo opportunity. The mosaic-embedded spiral runnel of the Water-wise Cascade is located at the threshold. They enter the FUN Zone gateway between tall coquina walls and immediately know that this is a place to run, play, and explore.

Directly ahead is **Cabbage Palm Patch**, a place for showcasing new ideas and new educational messages. The ELC staff continually changes the theme so that a visit to the Patch is fresh. This year's theme is Pirates of Treasure Coast, and visitors run to climb upon the miniature pirate ship and search for treasure in the sand mounds. A docent invites them to see some of the artifacts on her discovery cart while other visitors orient themselves by viewing the FUN Zone map.



Upland Habitat



Shade Arbor Seating



Beware the Pirates of Treasure Coast!

To the right, visitors catch a glimpse of other families enjoying the nature play stations in **Gumbo Limbo Circle**. True to its name, log tunnels, stump jumps, balance beam mazes, and web climbers are sprinkled beneath the shade of a large circle of gumbos. The low hanging branches and forked trunks invite adventurous children to climb a few feet above ground and taunt those below from their red-barked perch. Other children are gathering materials from the nearby bin and working together to build the best fort ever!

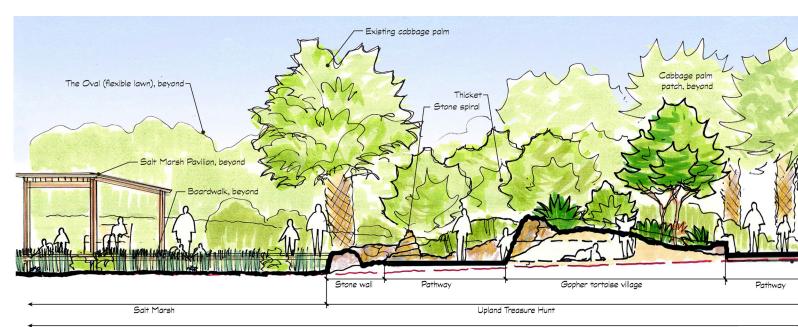
Visitors continue to the right and come upon a path leading to a boardwalk that hovers over a restored **Salt Marsh**. The Salt Marsh is a fast-disappearing part of the southeastern Florida landscape, and when the ELC discovered its remnants, they eagerly brought it back to good health. Families run over the floating boardwalk that is surrounded by salt grass to reach the shade of the **Marsh Pavilion**. Here, they find interactive exhibits, welcome seating, and on occasion, an ELC docent to lead a planned activity.



Web Climb Adventures



A Salt Marsh Boardwalk



FUN Zone

Returning to the main path the way they came, or if physically able and adventurous, visitors hop from rock to rock through the Salt Marsh to land at **My Studio**Outside. This zone is dedicated to adding an "A"

(Art), to STEM learning initiatives (Science, Technology, Engineering and Math). Benefiting from its adjacency and shared use of the multi-purpose Education and Event Pavilion to the north, My Studio Outside offers led activities that focus upon earth art, nature crafts, and creative problem solving. ELC staff invites visitors to join in today's activity – raked sand art. Other families have opted to paint on nearby easels or create sidewalk chalk masterpieces.

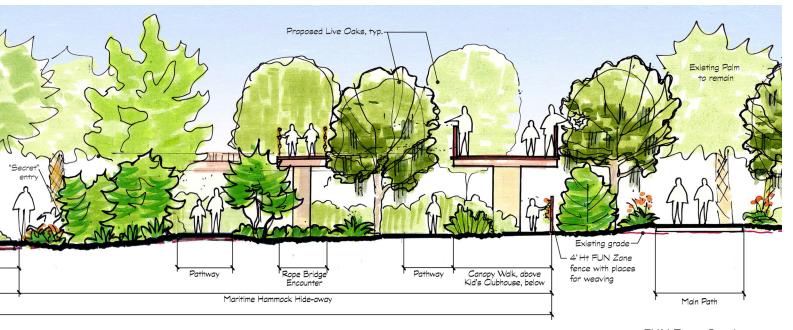
The **Education and Event Pavilion (CC)** provides shade, cooling overhead fans, comfort facilities, handwashing stations and storage for staff to effectively lead group activities. When the Pavilion and Oval in the Native Plant Gallery are in use, FUN Zone visitors can still use the restrooms.



A Weave Frame and Easels



Education and Event Pavilion Shade Seating



FUN Zone Section

Upon entering the FUN Zone from the Welcome Terrace, most visitors are drawn to **Fig Fog**, a strangler fig-themed interactive misting exhibit with a story to tell. The Florida strangler fig is the only native strangler species found in southeastern Florida, and its artistically-themed concrete roots, twisted "strangling" trunk, and aerial roots are the stars of the show. Mist emits from the "canopy" and the radiating roots, making Fig Fog one of the favorite spots in the FUN Zone.

Everyone loves cooling water, and the opportunities for imaginative play are endless in Fig Fog. However, the inspiration for this area of the FUN Zone is multitiered and, quite frankly, amazing. Through interpretive panels, interactive exhibits and discovery cart props, visitors come to realize the story of the unique life cycle of the Florida strangler fig, which includes its complete dependency on only one species of wasp for pollination.

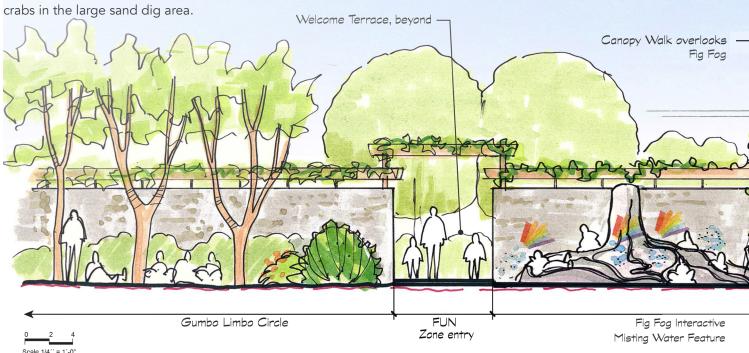
Cooled off and happy, children and their caregivers head to **Upland Treasure Hunt**, where they role play as gopher tortoises and indigo snakes, crawling through re-created burrows and tunnels. Encouraged by land crab sculptures, they eagerly excavate for imaginary



Fig Fog Inspiration



Blue Crab Dig

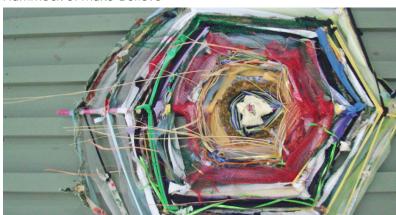


Visitors next enter the welcome and mysterious shade of a stand of oaks and companion trees to find the **Hammock of Make-Believe**, the FUN Zone's area of drama play and imagination. Here, families meet the magical creatures of the forest, delight in the discovery of miniature fairy houses on display and life-sized play houses to enter and explore. Drums, marimbas and other music makers invite a spontaneous jam session. A small puppet stage and seating area is located at the southernmost corner of the Hammock of Make-Believe for kid-generated performances.

As they exit the FUN Zone, one more destination remains unexplored – the **Maritime Hammock Hide-away**. Families wend their way through an existing thicket of saw palmettos, oaks, and palms to a secret hideaway beneath the Canopy Walk. This is the perfect spot for a Kid's Only Clubhouse. Children find a large chalkboard wall to leave messages for the next round of visitors, a gallery wall to hang the art of the day, and movable tables and chairs to just hang out.



Hammock of Make-Believe



Gallery Wall



Fig Fog Section



THE WESTERN BOARDWALK (Q), CANOE LAUNCH (F), AND WATERSIDE PAVILION (E)

Those who did not visit the FUN Zone first continue to gently descend on the Canopy Walk to a major crossroads with choices to visit the Western Boardwalk or Live Oak Stroll to Critter Corner. FUN Zoners arrive at the same threshold by using the main path at grade. This threshold, along with the entire main pathway system, is paved in an all-weather material, such as concrete or lightened asphalt.

Cloaked in mangroves, the ELC is uniquely situated on and surrounded by the Indian River Lagoon. First time visitors will be eager to explore both. They enter the mysterious and deeply shaded **Western Boardwalk** that sits only a few feet above the dark and lazy waters of the Lagoon. Quite a collection of crabs lives here, and visitors are amazed at how quickly they scamper about. Spiders, too, enjoy the mangrove forests, and the dappled sunlight catches their web masterpieces as they sparkle in the branches. Walking for about a quarter-mile, enjoying interpretive panels and moments along the way, visitors emerge from the heavy air of the forest to the sunlight and breezes offered on the Canoe Launch.

The Canoe Launch provides visitors with their first view of the quieter side of the Lagoon. They arrive just in time to watch ELC volunteers load a group of adventure-seekers into canoes for a guided tour of the Lagoon's open water and mangrove trails. Visitors can return through the mangroves to the upland parts of campus or continue their water-side journey on the Lagoon Loop. The former choice takes them past the Waterside Pavilion, an elevated screened-in pavilion that welcomes the casual visitor when not in use for led programs and field trips. Visitors enter and enjoy the interpretive material offered here as well as the cooling effects of the overhead fans.









THE LAGOON LOOP (G)

The Lagoon Loop is a quarter-mile, clear-bottomed walkway elevated a few feet over the normal water elevation of the Indian River Lagoon. Here, visitors learn that, even though the Lagoon is tidal, it is the wind that truly influences the fluctuation of its waters. The clear bottom allows visitors to catch a glimpse of aquatic life beneath their feet, but most importantly, it enables precious light to reach the protected sea grass sprouting from the Lagoon floor. In certain seasons, visitors can spot manatees and dolphins, but they always find a wide variety of fish and birds.

No place in the region offers such a dramatic interface with the Lagoon. While visitors come to this part of campus for its raw beauty and piqued adventure, they come away with a wealth of newfound knowledge about the lagoon systems. Subsequently, ELC educators and docents have come to depend on the Lagoon Loop for multi-generational tours and classes. It is the only place on campus that a person who cannot physically canoe and does not wish to purchase a pontoon tour ticket can interface with the Lagoon in a meaningful way.

EASTERN BOARDWALK (R) AND THE LANDING (H)

The Lagoon Loop guides visitors to The Landing, formerly known as George's Blind, and the Eastern Boardwalk. They continue a quarter mile along the shaded Boardwalk before emerging into the sunlight and the eastern features of ELC's campus.

<< Pictured Top to Bottom The Eastern Boardwalk The Lagoon Edge Brown Pelican over Indian River Lagoon American Manatee



THE POND AND POND LOOP TRAIL (S)

Back on the upland, visitors are presented with options. The Beach, Cable Ferry, and Water Testing Dock lie directly ahead. On The Beach, families wade and search for critters in the shallow pond waters and hop onto a kid-powered raft that navigates from shore to shore, called the Cable Ferry. In the center of the Pond, children are guided to a Water Testing Dock. Nearby Mardie's Hut offers shaded seating, overhead fans, protection from inclement weather and space for school field trip activities.

The **Pond Loop Trail** provides a quieter choice for those who wish to enjoy the dramatically framed views of the water while sitting in the shade. Many cherish this part of campus as a place of respite and replenishment.

OSPREY PERCH TRAIL (T)

A short spur trail springs from the Pond Loop Trail, inviting visitors to again enter the mangrove forest. Spoil piles, remnants of long-past mosquito ditch dredging activities, have created an anomaly in the region – pockets of upland habitat sprinkled amongst the mangroves that foster such surprises as prickly pear, Florida privet, and fig. It is uncommon to find places in the mangroves that visitors can explore their "walking" roots up close and at ground level.

Visitors return again to an elevated boardwalk to approach a 30-foot platform called **Osprey Perch**, formerly known as George's Perch, where visitors are rewarded with a panoramic view over the mangrove canopy to the Lagoon beyond. In season, they also discover an active osprey nest to the right and enjoy the constant activity and calls from the adult birds.



DIY LAGOON STEWARDSHIP CENTER (U)

Because of its location, mission and long-standing commitment, the ELC is uniquely positioned to grow the next generations of stewards of the Lagoon. Most components of the Master Plan aim to hook visitors, and once here, offer them a plethora of led and self-led memorable experiences. But the scale and breadth of many features of the Master Plan cannot easily be replicated by one person or one family. In contrast, the DIY Center offers "you-can-do-this-at-home" active and passive ideas to inspire regional visitors to strengthen their water-stewardship actions, one household at a time.

Casual visitors gain new ideas each time they visit the DIY Center, yet it is also suitable for led programming. Visitors learn principles of alternatives to traditional water-intensive turf grasses; how to collect and clean rainwater in an artful way; small-scale gardening in raised beds or containers; how to take advantage of vertical gardening opportunities such as living walls and espaliered fruit trees; and much more! A shade sail structure welcomes small groups to gather and view the exhibits found here.



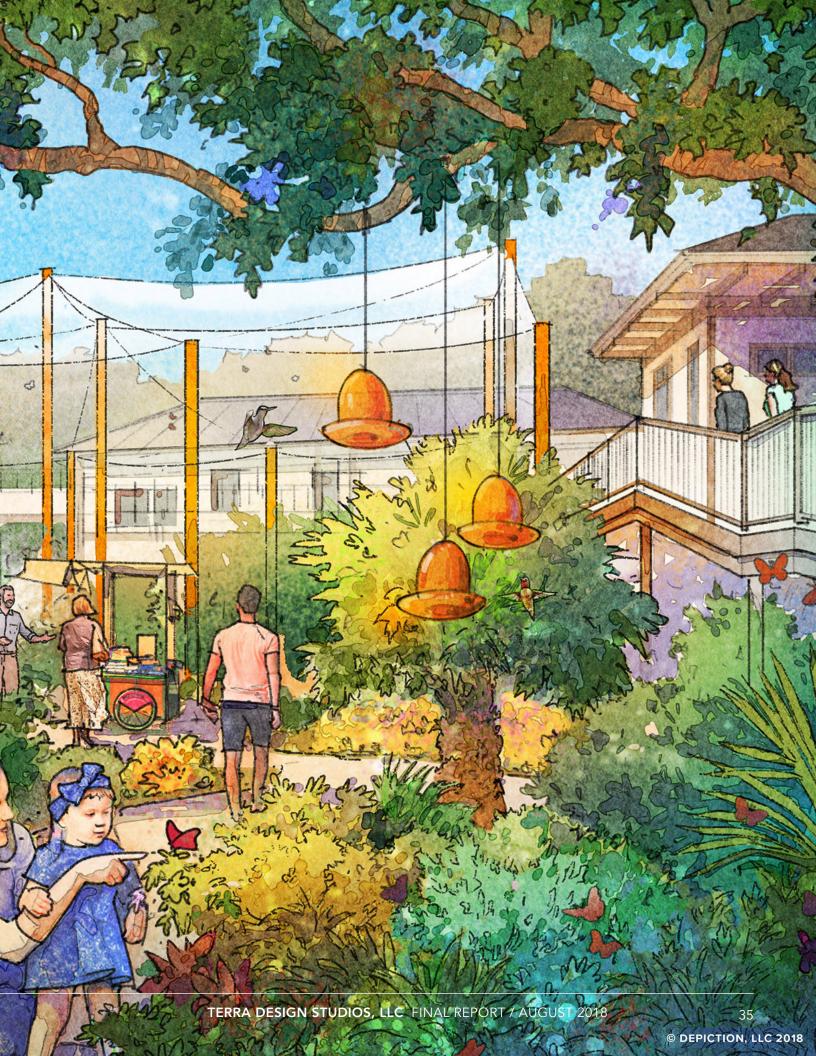
A Green Anole, one of Florida's native lizards

CRITTER CORNER (V)

From the comfort of the shade sail, visitors gain peek through the shared wall into Critter Corner, a collection of small mammals and other native animals. They eagerly enter this display area of lit cages and interactive exhibits. On scheduled days, ELC staff empower visitors to meet the animals and interact with them on a personal level. What better way to connect people to nature than through a face-to-face meeting with a native green anole or ringneck snake?

A larger, renovated Touch Tank Encounter, one of the best-loved components of the Discovery Station in the Classroom Building, now lives in the main room of the repurposed existing Welcome Center as part of Critter Corner. Here, visitors gather cherished magical memories of how sea urchins, starfish, and hermit crabs feel in their hands. A docent creatively weaves stories about these animals and their reliance on healthy plant life and clean lagoon water. Small reptiles, amphibians and insects are displayed in the room adjacent to the Touch Tank. A demonstration European honeybee hive also lives at Critter Corner; the access point is safely positioned high above visitors' heads and away from the flow of traffic. Visitors complete their time at Critter Corner with newfound knowledge and respect for the Lagoon's web of life.









A Vero Beach sunset over the Administration Center

ADMINISTRATION BUILDING AND CLASSROOMS BUILDING (X) AND SUNSET DECK (Y)

Butterflies and More! (W) is surrounded by an elevated boardwalk that provides access to many existing buildings: the Administration Building, the Classrooms Building, and the Restroom and Breakroom Building. The bank of restrooms here are open to all guests at any time, but most of the classrooms and event spaces are reserved for use by children during led programming, field trips, summer camp activities, and even overnight chaperoned stays.

An important exception to the planned use for this existing portion of the ELC's campus is the new life granted to the former home of the Discovery Station, renamed the **Hammock Room**. Here, the possibilities are endless and the final use will evolve. The Hammock Room could be outfitted as an intimate rental venue or lecture space, or research lab space for interns, or for additional ELC offices.

Visitors also benefit from a visit to one of the ELC's best-kept secrets – the Sunset Deck overlooking the mangrove forest to the west. Partially enclosed, this premiere rental destination allows guests to enjoy southeastern Florida's magnificent sunsets. Unscreened sections permit unhindered views and photographs of the brilliant western sky.



Home of Live Oak Stroll

LIVE OAK STROLL (Z)

One of the most beautiful spots on the ELC campus is the pocket of mature live oaks to the west of Critter Corner. Here, visitors leave the sensory stimulation of the brightly colored pollinator garden to decompress once more in the shade and quiet hush of the Live Oak Stroll. Visitors search the canopy for the delicate blooms of Florida butterfly orchids and scan the ground for the subtle color of the tooth-petal false rein orchid, both native to the region. Newly-planted upland trees and understory species expand the plant palette and biodiversity for generations to come. A tent platform or two stand at the ready for overnight camping or shaded outdoor classrooms.

HIDDEN ISLAND (AA)

The main path leads guests through one of the last teaching moments along their journey – Hidden Island. Imperceivable to most, shallow storm water depressions define the Island, and it is only during a rain event that it reveals itself. The mature maritime hammock vegetation offers visitors another area of cool respite, shade seating, and peacefulness. Some of the ELC's resident gopher tortoises choose the Island as their home, so a lucky visitor may come upon this elusive native at any given time.

Enlarged Plan for BB, CC, and DD >> corresponds with the following page





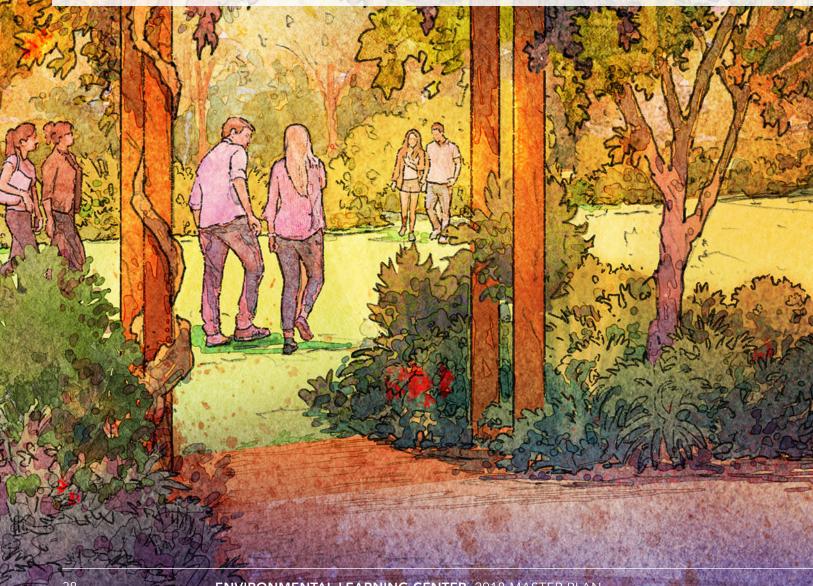


The final stop on the visitors' journey is the Native Plant Gallery. The ELC is strongly committed to increasing awareness about the beauty of native plants and their resilience against southeastern Florida's weather extremes, pests, and disease. The Native Plant Gallery showcases a variety of natives as if they are exhibits at a fine art museum – sometimes on pedestals, sometimes at ground level lining the "halls" of the museum, sometimes dripping from the "ceiling". Visitors enter the Gallery through the Hummingbird Pergola, a colonnade capped by a curving arbor cloaked in native flowering vines and pollinator favorites. They are delighted to immerse themselves into this highly-tended garden and explore spotlight species on pedestals.

The Gallery includes a Teaching Shadehouse (EE), which is a place for ELC staff and volunteers to teach the propagation of native plants to all audiences. However, it is specifically designed as a horticultural therapy classroom for special audiences. The Shadehouse shares restrooms, volunteer support spaces and outdoor storage with the adjacent Volunteer Training Center.

THE EDUCATION AND EVENT PAVILION (CC) AND THE OVAL (DD)

Visitors continue to The Oval, a large turf area ringed by native plants. Here, they come upon a family enjoying a spontaneous game of giant Jenga while garden-lovers stroll the outer edges to explore

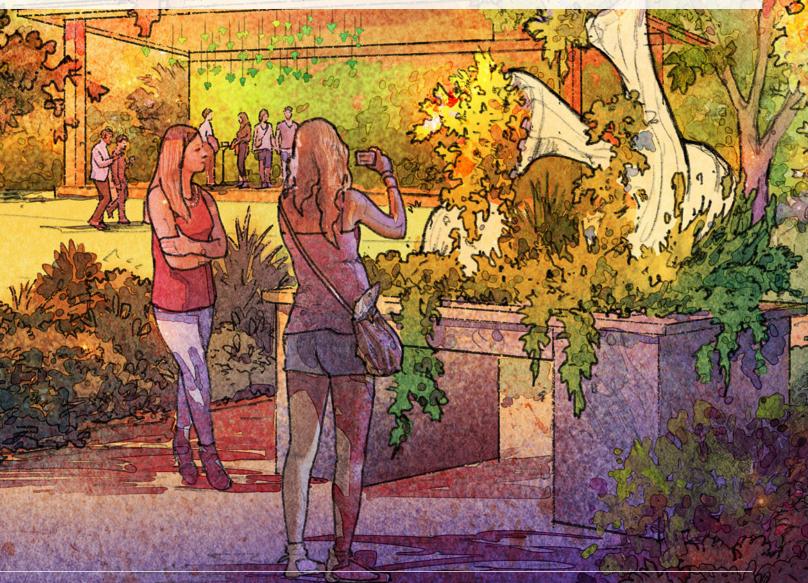


native canopy and ornamental trees and understory perennials on display there. All can rest a moment or two in the cool shade of the **Education and Event Pavilion** or stay longer and participate in a program or planned activity led by the ELC staff. At times, The Oval and Pavilion may be in use for a special private occasion or an ELC-sponsored event, but access to the displays in the Native Plant Gallery will remain open to the casual visitor.

When rented, The Oval can support many types of events, ranging from tented dining to open-air lawn seating for concerts. As mentioned earlier, the Pavilion is well equipped to support educational programming

in conjunction with the FUN Zone, but the catering prep space also allows it to be equally effective in hosting formal events.

Visitors have made lasting memories during their time at the ELC. With new ideas in their heads and inspiration in their hearts, they return to the Interpretive Center to visit the restrooms, relax with a cool refreshment at the Café or Lagoon Terrace, and of course, purchase a reminder of their fun-filled day at ELC in the Gift Shop! They are eager to tell their friends and family about their discoveries of the day and to return soon.



BEHIND THE SCENES

PARKING, BACK-OF-HOUSE, MAINTENANCE, AND MORE

Parking, staff and volunteer offices, maintenance routes, back-of-house functions, emergency vehicle access, etc. are all essential master plan components for cultural institutions, and the ELC's Master Plan is no exception. These components are summarized below. Detailed capacities and sizes for building and selective site components are described in **Appendix B**.

VISITOR PARKING - 193 SPACES

- 70 spaces in Maritime Hammock Auto Court, a mix of hard paved and Grass Pave spaces
- 33 spaces in Maritime Hammock Auto Court under photovoltaic-panel shade structures
- 90 grass overflow parking along the Grass Pave Circle, Wabasso Island Lane and Live Oak Drive

STAFF AND VOLUNTEER PARKING - 17 SPACES

- 10 spaces in Maritime Hammock Auto Court, beneath photovoltaic-panel shade structures
- 7 spaces at the Maintenance Center

LARGE EVENT PARKING - 200+ SPACES

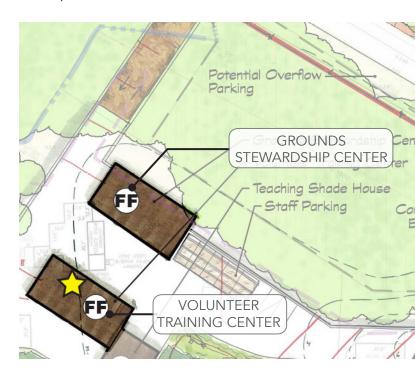
 For events once or twice a year - off-site spaces employing valet or shuttle services

STAFF AND VOLUNTEER OFFICES

- 2 offices (Event Coordinator and Volunteer Coordinator) and small conference room at Interpretive Center
- 1 office (Grounds and Operations Director),
 4-5 work stations for Grounds and Horticulture crew, volunteer lockers and shared work station,
 break room, shower and restrooms at Volunteer Training Center
- Remainder (Administration and Education) at the Administration Building – room to expand into existing Discovery Station room as needed.

INTERNAL MAINTENANCE ROUTE

A primary maintenance vehicle route circles the ELC campus. The western portion is solely used by staff; the eastern portion of the loop is shared with ELC visitors.



BACK OF HOUSE

New Volunteer Training and Grounds Stewardship Centers (FF) are located in the northwest corner of the ELC campus proper. They accommodate staff and volunteer facilities described previously as well as vehicle storage, workshop and additional indoor storage; trash, recycling and composting bins; outdoor storage; fuel tank on a trailer; and service corridor to the Interpretive Center.

EMERGENCY VEHICLE ACCESS

Hidden Island Loop, a twenty-foot wide access route for emergency vehicles to service Critter Corner, the Administration Building, Education Building and Restroom and Breakroom Building is paved with Grass Pave. It is assumed that on occasion, eight feet of this lane can be used to parallel park cars when overflow parking is needed. Emergency vehicle access to the Interpretive Center is accomplished via Live Oak Drive and the ELC's entry drive. Emergency vehicles access the Volunteer Training Center and Grounds Stewardship Center by crossing the two-lane bridge through the mangrove wetland.

THE NEAR AND DISTANT FUTURE PHASING STRATEGIES

As pointed out earlier, master plans are not typically built all at once – components are implemented over time. ELC's Planning Team and Planning Committee have collaboratively developed phasing strategies for implementation of the first phase of the Master Plan. The first phase represents a big step and significant financial investment for the ELC – funds will need to be raised and designs will need to be prepared and constructed, which collectively will take years.

In the meantime, it is important that ELC's visitors see consistent and steady progress, without lulls, and the Action Items to Undertake During the Capital Campaign, found in *Appendix D*, offers a way to accomplish that objective. *Appendix C* outlines the Master Plan's first phase; and *Appendix E* describes an action item list for when the ELC seeks jurisdictional agency reviews and approval. These appendices are found in *Appendices 1* of 2.

How often are master plans revised? This is a common question. The ELC Master Plan defines its path for the ensuing five to ten years – it is a roadmap infused with an intended amount of flexibility. It is important to realize that the Master Plan will evolve as the ELC will undoubtedly also evolve, whether through change in leadership, Board composition, economic and physical climate, and/or the need to address unforeseen yet relevant social issues. When these changes begin to raise questions about the Master Plan's effectiveness as a guiding document, it is time to re-evaluate and revise the Master Plan. This is normal and healthy part of the continuing evolution of any cultural institution.

However, one of the reasons the ELC's Master Plan may be evaluated sooner than twenty years is the unknown impact of climate change on the campus. It is important to note that the Planning Team and Planning Committee made a decision in the master planning process to exceed code-enforced minimum finished floor elevations (FFE) for buildings. In 2017, when the Master Plan was authorized, minimum FFE's on the ELC campus were set by code at 7.5 feet above sea level. The Master Plan adopts a minimum FFE of 8.0 feet. Iconic buildings of significant investment and use, such as the Interpretive Center, plan for a floor elevation three-and-a-half feet above code minimums, or FFE 11.0 feet. Conversely, the FFE for unconditioned spaces of the Education and Event Pavilion is set at 8.0 feet. The Enlarged Development Zone of the Master Plan, found on Pages 8 and 9 of this document, defines floor elevations for each building.

The Master Plan responds to other potential climate change impacts by:

- Evaluating site grading to allow high water levels during storm events to drain more quickly;
- Paving the main path with a durable material so clean up after a storm event is less costly;
- Encouraging the development of an evacuation plan for people and animals;
- Locating most costly equipment well above minimum floor elevations, such as aquarium filters and pumps;
- Minimizing areas of high-maintenance plant displays in low areas of campus; and
- Continuing a commitment to the use of native plants that are more resilient in storm events or periods of drought.

