

Sustainable Lake Worth Beach
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Lake Worth Beach will be a completely sustainable city by 2050

In order to attain this goal Lake Worth Beach commits to utilizing sustainable energy utilities only, using EKOTECTURE framework

Four demonstration projects will commence in Lake Worth Beach by 2023 to educate how to build sustainably, live comfortably and safely during Climate Change and beyond. Sustainable Lake Worth Beach will draw tourists from the world over, creating a basis for a new thriving sustainable economy in our city.

Broad concepts presented here to be explained in greater detail in future

All human beings need...

- A healthy, harmonious life; in equilibrium with other human beings and the natural world.
- A variety of clean foods, water and air, and a safe, comfortable shelter.

EKOTECTURE helps to meet basic human needs through its integrated utility infrastructure

EKOTECTURE structures are designed to resist the destructive forces of nature, Including:

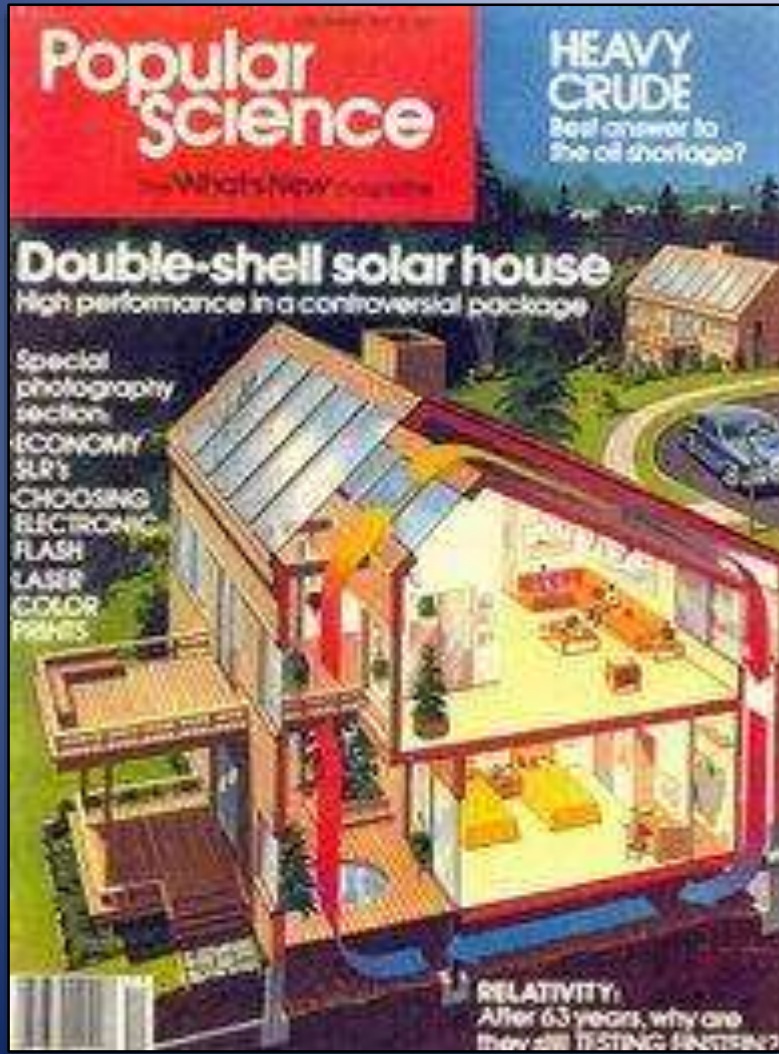
- Hurricanes
- Tidal surges
- Tornadoes
- Floods
- Fires
- Earthquakes
- Civil Unrest

... And they float



EKOTECTURE

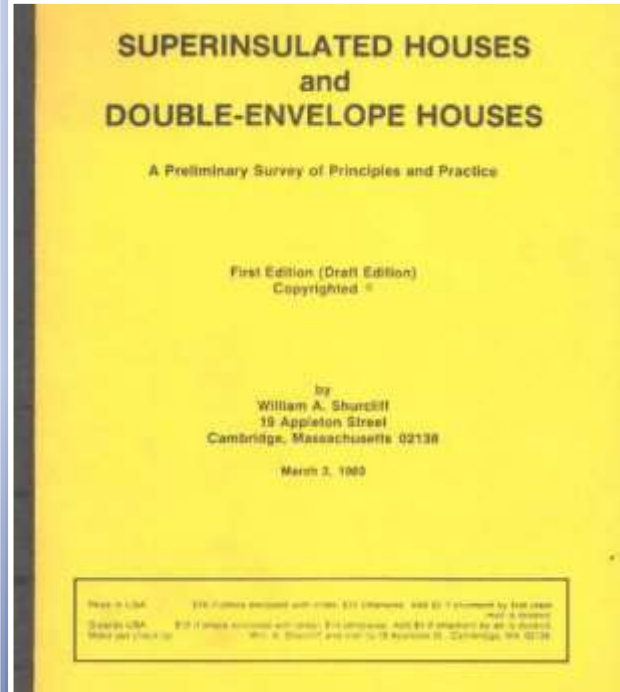
Lee Porter Butler's innovative environmentally sustainable architectural designs, validated through the years, by enthusiastic clients.



The design can be adapted to any architectural style, and will be used to preserve/recreate and enhance the 20th Century South Florida Beach Vernacular Architecture that characterizes our city, enabling sustainable development for a mixed-use project, from affordable housing to multi-million-dollar, state-of-the art cottages. Permaculture gardens supply organic food for residents, restaurants, and for sale.

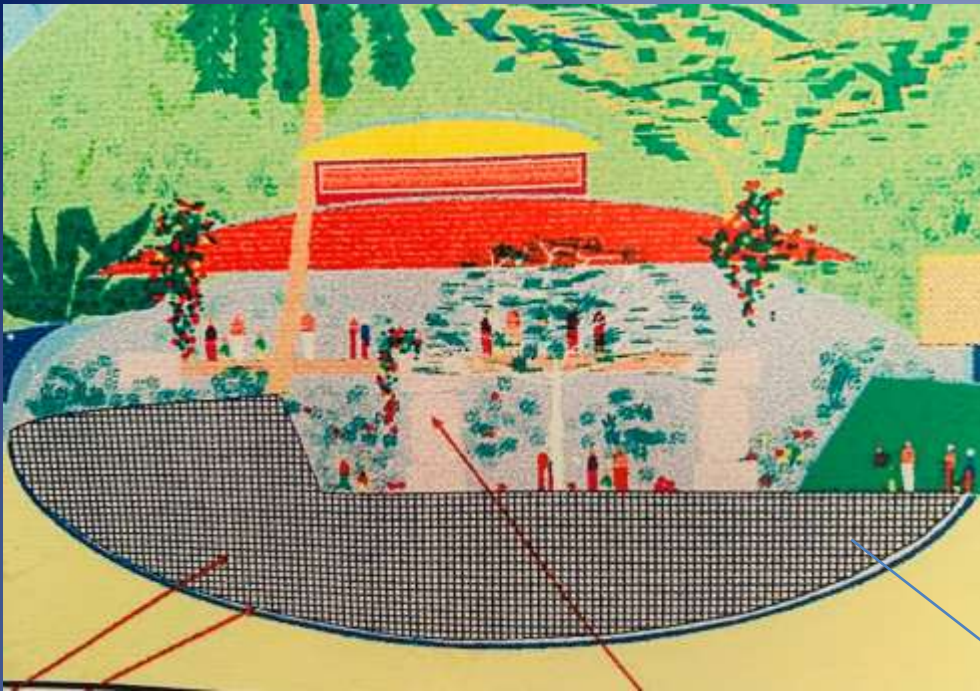
EKOTECTURE lends itself well to Indoor-outdoor southern Florida lifestyle. Building-integrated energy systems generate ample energy to sell to our utility at less cost than conventional energy sources, contributing to a circular, sustainable economy.

Lee's design innovation case-studied by Brookhaven National Laboratory - United States Department of Energy, discovered to be the most energy efficient house they had ever studied. Harvard academic, William A. Shurcliff produced an approval study on the principles and practice of Lee's Double Envelope (Geo-thermal Envelope) homes.





PROJECT 1 : South L and M Street Development



20,000 sq. feet: Commercial & retail services
 30,000 sq. feet: 52 units residential efficiency apartment
 5 Residential cottages /\$1,000,000 up each
 15,000 sq. ft. rooftop aerponics commercial greenhouses
 A Health, Environmental, Educational Center
 Employment balance living spaces
 Meeting place for x culture communication
 Solar electrical generator w/storage system
 Grey water & rain water purified for pure mineral rich drinking
 Waste turned into fertilizer for gardens
 Passive optical systems provide sunlight in all interior spaces
 Solar hot water system
 Filtered oxygenated air provided for all interior spaces

The Creative Communications Center

In the center of our city provides healing for the Community with a floating foundation and is Completely self-sustainable.

Project 1. South L & M Street

The South L&M Street project will house the anchor for all community sustainable development, future projects that the City of Lake Worth Beach proposes, where open-sourced discussions address all the needs of our community in the Creative Communications Center for the City(CCC)

This mixed income development will include off grid, based on the principles of EKOTECTURE, *Essential Architecture*, including affordable housing apartments and multimillion dollar state of the art cottages: sustainable replicas of the former dwellings in that neighborhood, in styles of 20th Century South Florida Beach Vernacular Architecture. Underground/water parking in the “hull of the vessel”, (see slide 7). The pedestrian neighborhood with permaculture garden will be serviced by neighbors to supply local restaurants. Neighbors will gain credits in The Citizens Time Bank. Ekotecture has relationships with U of Miami, U of Fl. , and locally with Capscare to offer Sustainable Development curriculum. The South L & M Street’s community pool will be open to neighborhood residents via sold passes. Permaculture, aquaponics, hydroponics supply sustenance needs to be met in our neighborhood in this demonstration community, model for the world.

We will be a model for future sustainable development from which cities globally can gain inspiration and knowledge.

Project 2: The Gulfstream



[This Photo](#)

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In keeping with the modest 20th Century south Florida beach town persona we will retrofit and renovate the existing hotel, keeping original sizes of many rooms with the latest ergonomic, self sustainable designs. We will convert top floors into high-end larger suites. The second building will highlight the most innovative sustainable technological advances: EKOTECTURE's underground "hull" houses the new sustainable utility and smart systems for the entire project: lights, gas, water, waste management. The new building will be tiered and terraced for views to the Intercoastal from most guest suites.

The rooftop garden on both buildings grows food for the restaurant and community, as does the greenhouse atrium. The new building will have parking underground/water in the hull.

Browse shops, art galleries, and dine in restaurants. The second building's swimming pools, hot tubs, game rooms, and facilities for live/workspaces. Kayak, paddleboard, canoe, sailboat, rentals available at Bryant Park for guests and for Lake Worthians at reduced rates



Swim with the dolphins in our oceanside lagoons designed for interaction with our cetacean friends.



The Oceanfront Eko-Park, Pool, Eko-Lazy River & Dolphin Lagoon.

The new pool, at the old pool (why dig another hole? We made the shape more inviting.) is perfect for competitions, classes, pool parties, with added novel water park features, like walls of water, fountains and mineral pools (great for the senior population). The 1st 100% eko-friendly, wind turbine, solar, gravity geo-thermal operated Lazy River will encompass Oceanfront Eko-Park – from the Casino to Benny's circumferences both current parking lots. An electric trolley, monorail/or gondola services Oceanfront Eko-Park, Pool, Lazy River from the Tri-rail with stops downtown, at Bryant Park and east side of intracoastal. Additional ferry service from Snook Island Dock and Bryant Park for dolphin watching provides alternate access to ocean side. NO CARS at our beach! A vehicle access road behind the Casino building with service ports of access to each of the eatery establishments all the way to Benny's, allows for emergency vehicles. Parking remains on the north side, especially for handicap.



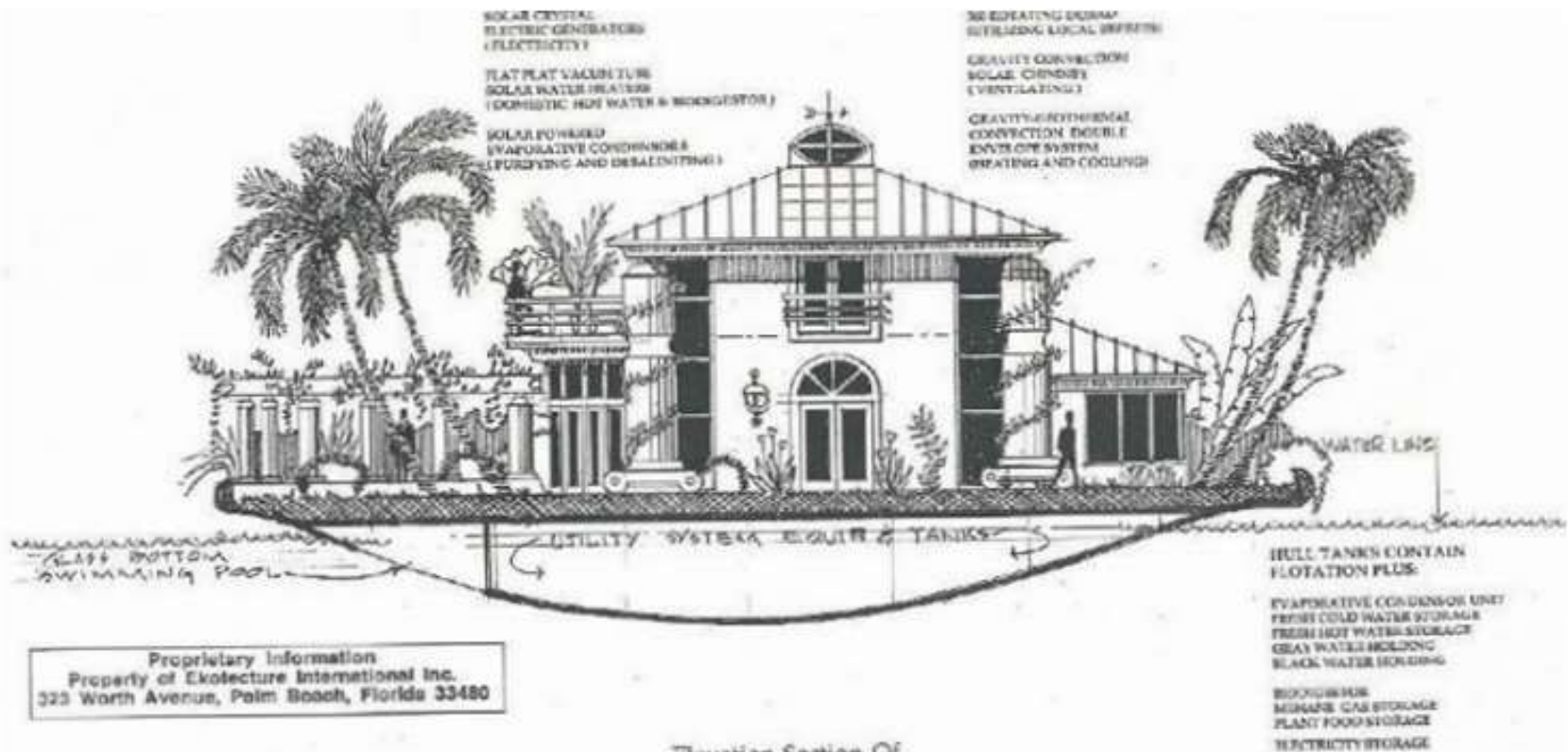
Project 4 : The Golf Course Residential Community

Utilizing EKOTECTURE we will build a small community of completely off grid, floating homes (at Hole 1 and where Hole 1 touches Hole 7) where the golf course floods, and golfing may soon not be possible. (Most of the golf course will remain.) These multi million dollar homes protect lives of inhabitants in flood or hurricanes, using EKOTECTURE sustainable principles. The state of the art smart, ekological homes will have shared amenities of floating gardens, swimming pool, tennis courts.

The EKOTECHTURE Ark

The Ark is a floating home, anchored on land with below water utility infrastructure, which provides lights, gas, water, waste management, and food production in the greenhouse. Hull enables structure to withstand ocean water surges and storms: a boon to any coastal community – built with environmentally friendly materials and systems.

Natural Environmental Architecture



Proprietary Information
Property of Ekotecture International Inc.
323 Worth Avenue, Palm Beach, Florida 33480

Elevation-Section Of
Floating Island Home • Model One
Ekotecture International Inc. PATENTED 1995

EKOTECTURE partnerships for efficiency

For decades, Alliance BioConversions Company (ABCC) has been an ally to EKOTECTURE. Their treasure trove of proven, open source, biological, mechanical systems, materials, and products which provide sustainable solutions for many utilities in the EKOTECTURE homes including hydroponics, aquaponics, aeroponics, and water reclamation to provide greater yields with 90% less water and land. Building and garden integrated bird and bat safe helix wind turbines run on ceramic ball bearings, rather than gas motors to generate energy in the same manner for utilities as solar. EKOTECTURE embraces the latest technological advances.



New, sleek windmills convert circular motion into mechanical work, utilizes and maximizes wind energy from 5 -180 MPH winds

EKOTECTURE has relationships with Florida colleges and universities with whom we can partner on this project.



Framework: EKOTECTURE

Biospheres are organically conceived structures, buildings, vessels, arks, and mobile living environments, manufactured according to the following database: (characteristics and principles) i.e., "Sustainable Construction Structures".

- 1) Integrates the architectural functions with the utility (water, gas, electricity and sanitary) utility infrastructural functions.
- 2) Utilizes solar, gravity, geo-thermal and other universal scientific principles and energies to "power" the systems (photovoltaics, solar water heaters, evaporative condenser purifiers, bio-digestors, solar chimneys, evaporative cooling tubes and others).
- 3) Eliminates destructive friction and combustion resulting in maintenance expenses
- 4) Produces "0"(zero) pollution, taking nothing from the earth, air, water, putting "0"(nothing) back into the earth, air, or water in its operation.
- 5) Utilizes the geometry of organic spiraling dodecahedral stacking crystalline structures to form super strength elements within the core of the building modules.
- 6) Utilizes indigenous Cementous materials and recycled plastics to produce inexpensive, lightweight enough to float, fireproof, molded structural modules and tanks which resist mold, mildew, fungus, virus, bacterial growth.
- 7) Utilizes compartmented flotation tanks in its "floating foundation platform" which is structurally integrated with the hidden superstructure above, enabling the structure to resist seismic horizontal earthquake shear forces, hurricane wind forces, floods, tidal surges and tornadoes while retaining its ability to provide utilities and keep water out. Designed for 250 mph winds.
- 8) Utilizes its organic wastes to produce organic fertilizer and methane gas.
- 9) Maintains comfortable interior temperatures year-round, in any climate
- 10) Controls winter and summer sun, rain, and breezes to maintain interior comfort.
- 11) Utilizes an "interior garden (greenhouse space)" to grow foliage and flowers, which negatively ionize the air, remove all particle pollutants, odors, toxic "off gassing", and to increase the oxygen content, introduce floral fragrances, eliminating "sick building syndrome".
- 12) Utilizes low voltage direct electric current moving through "electrically activated (doped) portions of the structural wall elements, eliminating electrical wiring and the associated fire potential and shock hazard.
- 13) Utilizes rainwater and the latest radionics water treatment technologies and mineral salts to produce a nutritionally superior, fresh, natural spring quality domestic water supply.
- 14) Utilizes the gray water from laboratories, showers, laundry, and parking lot runoff to fertilize and water the landscape.
- 15) Links the fertilizer resource being generated with ancillary hydroponic aqua culture and aeroponic horticultural facilities to provide fresh fruits, vegetables, fish, shrimp and flowers for local markets.

www.TheDolphinDream.com

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