HEALING BY THE SEA: AN EMPIRICAL STUDY INTO BIOPHILIC DESIGN

TYPICAL VILLA CONSTRUCTION

- PALM THATCH ROOF COVERS
- WOOD DECKING
- 2 X 4 WOOD BEAM SUPPORTS
- 2 X 10 FLOOR JOISTS
- JOIST HANGERS
- TREE COLUMNS
- CONCRETE FOOTINGS
- WATER, ELECTRICAL, AND WASTE PASSIVE SYSTEMS
- OPERABLE CLEARSTORIES AND RETRACTABLE FRONT/BACK DOORS ENHANCE NATURAL VENTILATION BY HARNESSING LOCAL TRADE WINDS
- EXTERIOR WOOD LOUVERS PROVIDE SUN SHADE AND PRIVACY
- ROOF THATCHING ADDS INSULATION TO HELP COOLING
- POOL AND SEA PROVIDE EVAPORATIVE COOLING

RESORT MASTER PLAN

- LOBBY
- FRONT DESK
- ORGANIC STORE - LOCAL MARKET
- ADMINISTRATION BUILDING
- PUBLIC RESTROOMS
- ACTIVITY OFFICE
- RESTAURANT
- LAUNDRY FACILITIES
- LANDSCAPE AND MAINTENANCE
- FACILITY MAINTENANCE AND SUPPORT
- TENNIS COURTS
- GATED VILLA ACCESS
- POOL(S)
- JACUZZI SPA
- MEDITATION AND SPA
- BOAT DOCK
- COURTYARD
- RESORT PARKING
- PRIVATE BEACH
- CARIBBEAN SEA

PASSIVE SYSTEMS

- VERTICAL CAVITIES AND VENTS
- INTEGRATED COLLECTION AND RECYCLING SYSTEMS
- NATURAL VENTILATION
- LOW IMPACT MATERIALS
- PRECAST CONCRETE AND LOW-IMPACT WOOD
- NATURAL LIGHTING/MMO
- PASSIVE SOLAR WASTE AND PRIVACY
Biomimicry (from bios, meaning life, and mimesis, meaning to imitate) is a design discipline that seeks sustainable solutions by emulating nature’s time-tested patterns and strategies. The core idea is that nature, imaginative by necessity, has already solved many of the problems we are grappling with: energy, food production, climate control, non-toxic chemistry, transportation, packaging, and a whole lot more (Benyus, 2012).

The focus of this project lies in the relationship between the built structure and the natural world. In more detail, how biophilic design can effect those who use it and the environment in which it is located. Biophilic design is defined as “the deliberate attempt to translate an understanding of the inherent human affinity to affiliate with natural systems and processes - known as biophilia - into the design of the built environment” (Kellert, Heerwagen, & Mador, 2008).