

## Bike Ranch Program for Sustainability

As the most energy efficient form of transportation, cycling is at the forefront of sustainability, and our commitment to sustainability begins at the most elemental level of promoting human powered transportation. A primary objective of the Bike Ranch is to be a leader in sustainable design, development, and operations. We are striving for Platinum Leed certification. LEED stands for "Leadership in Energy and Environmental Design" and is regulated by the United States Green Building Council. The certification process encompasses everything from design, materials, construction methods and practices, hotel operations, core services, and supply chain transparency. There are currently only five Platinum LEED certified hotels in the US, and none in Arizona.

### Site Plan

The primary goal is to preserve natural habitat to the greatest extent possible and to minimize our impact on the natural environment.

- Implement site strategies that minimize grading.
- Site buildings to leave undisturbed important trees, vegetation and habitat.
- Leave major washes undisturbed.
- Create no-disturb areas of pristine desert.
- Create dedicated wildlife corridors.
- Cluster buildings to leave maximum amount of undisturbed natural open space.
- Reduce parking to minimum allowable by code.

### Construction

Minimize negative impact on the natural environment through choice of materials and high quality construction that will endure far into the future.

- Implement site access plan that reduces site disruption.
- Maintain natural topography of the site.
- Check for animals: Use observers in front of earth moving equipment and to check trenches before back fill.
- Minimize dust creation.
- Implement non-polluting construction practice; require recycling on site.
- Implement a sustainable purchasing policy for construction material: Use products that are wherever possible naturally sourced, regionally produced, contain recycled content or are recyclable, and are non-toxic.
- Use natural building materials: adobe, natural plasters, salvaged and certified sustainable woods.
- Use healthy, natural fiber insulation.
- Use alternative, permeable surfaces for driveways and parking and/or have higher reflective surfaces that minimize heat island effect.

## Building Design

The primary goal is to design a project with a high degree of aesthetics along with energy and water efficiency.

- Use passive solar strategies as much as possible.
- Design a net-zero energy project using roof top solar collectors, solar parking canopy, and solar pergolas.
- Use Multi Variable Refrigerant Volume (VRV) split HVAC system that utilizes energy recovery units and VRV heat pumps to maximize the building's energy performance.
- Collect AC condensate.
- Use low level LED exterior lighting in accordance with Dark Skies Ordinance limits, with automated dimmers and shutoffs.
- Use natural gas fueled on-demand water heaters.
- Water harvest and containment from all buildings.
- Incorporate artisanal products that are locally and regionally produced.

## Landscape Design

The primary goal is to create a healthy, natural habitat for native plant species and animals.

- Remove invasive foreign plant species: Rhus Lancea, Tamarisk
- Use indigenous plant species that require little water and no fertilizer, and employ permaculture strategies to maximize the effect of rainwater and surface water.
- Design decorative landscaping close to buildings that emphasizes drought tolerant plants.
- Emphasize plant species that are food sources for wildlife.
- Employ cisterns for roof top water collection and AC condensate collection.
- Harvest grey water from laundry, bath, sinks and showers for landscape irrigation.
- Propagate native plant species.
- Create an organic herb and vegetable garden.

## Interior Design

Create a healthy, comfortable and responsive indoor environment.

- Implement a sustainable purchasing policy for fixtures, furnishings, and equipment. Purchase products that are wherever possible naturally sourced, regionally produced, contain recycled content, or are recyclable.
- Design to maximize access to fresh air and natural light.
- Use natural breathable plasters with integral color.
- Use natural woods, fabrics, and upholstery with an emphasis on salvaged, recycled and recyclable materials.
- Use organic bedding and naturally made soaps and care products.
- Use low or no VOC paints and coatings.
- Use LED lighting.

- Employ an automated smart system in rooms with occupancy sensors for lights and HVAC
- Use high efficiency plumbing fixtures: low flush or dual-flush toilets, reduced flow showerheads and faucets, Stand@ or no-water urinals.
- Use dashboards to monitor energy usage.
- Capture energy from spinning cycles.

The goal is to create a proactive, earth friendly environment for the enjoyment and participation of guests, staff and visitors of the Bike Ranch.

- Implement a sustainable purchasing policy for all supplies. Purchase products that are wherever possible produced sustainably produced, contain recycled content, and are recyclable. Use only natural and green cleaning products.
- Use sustainable, organic food products that promote locally/regionally grown and on-site grown foods.
- Promote and facilitate a cycling to work program for staff.
- Use all electric vans for guest transport.
- Have electric charging stations for the public.
- Promote cycling to the public.
- Implement a safe cycling program in co-ordination with other stakeholders.
- Implement comprehensive recycling program to minimize waste stream.
- Be a meaningful participant and leader in the local and wider Earth progressive movement.
- Incentivize staff participation and leadership in environmental projects.
- Integrate and partner with Saguaro Park to further its environmental objectives.