

LOST DOG WASH TRAILHEAD

C I T Y O F S C O T T S D A L E



INTRODUCTION

The Lost Dog Wash Trailhead has been developed in a manner that minimizes the environmental impact of the access area on the native desert site. Architectural elements are designed to be environmentally responsive while blending into the natural desert habitat of the McDowell Sonoran Preserve. The Lost Dog Wash Trailhead includes the following green building design elements:

SITE DESIGN

- The entry drive, parking and structures are designed to fit between the natural drainage flow patterns of the site. Retaining the pattern of native arroyos and swales throughout the site minimizes the necessary grading disturbances and allows for the maximum amount of native vegetation to be retained in place.
- The project included the salvage and replanting of all salvageable native trees and cacti that fell within the site disturbance limits. Native desert cobble and dead fall were also salvaged at the beginning of construction to use as top dressing to blend the disturbed areas back into the native Preserve landscape.
- Parking areas and driveways are developed with stabilized decomposed granite paving which acts to retain the natural desert character while minimizing the increase in drainage run off from the parking area.
- Utilize energy efficient low level LED lighting bollards in the parking area to minimize light pollution. Bollard lighting is timer controlled to turn completely off several hours after the Preserve closes.

WATER EFFICIENCY

- The trailhead utilizes composting systems for the restrooms that minimizes water consumption and eliminates the need for a sewer connection. The composting system is calculated to save approximately 200,000 gallons of water annually over a conventional system.
- Graywater from the trailhead sinks and drinking fountains is stored in a 4,000 gallon underground cistern to utilize for landscape irrigation.
- Rainwater harvesting is used to collect all roof rainwater run off from the trailhead. The rainwater is stored in the underground cistern for use in landscape irrigation.
- Graywater and Rainwater Harvesting are estimated to save approximately 75,000 gallons of water per year in landscape irrigation.

ENERGY

- Solar power is provided to the trailhead facilities by a 2,000 watt solar electric array. The solar array consists of a 16 high efficiency multicrystal photovoltaic modules. The trailhead is developed completely off the electrical grid.
- Trailhead improvements use energy efficient LED lighting throughout to minimize energy needs.

MATERIALS & RESOURCES

- The rammed earth walls of the structures utilize earth material that was salvaged during the construction of the foundations. The rammed earth walls help the structures to blend seamlessly into the landscape.
- Metal roof panels, wall panels and steel beams have a natural rust finish and include a high percentage of recycled content.
- All of the structures are very low scale and incorporate materials that will blend well with the natural desert environment.