



# Southern Ridges

SINGAPORE

**With 4.9 million people sharing** 710 square kilometers (274 sq mi)—most of it heavily urbanized—Singapore is one of the most densely populated countries in the world. The Singapore government faces a challenge in maintaining high quality of life and offering suitable recreational opportunities in this increasingly dense environment. At Southern Ridges—a nine-kilometer (5.6-mi) chain of open spaces connecting three existing hill parks—the Urban Redevelopment Authority (URA) of Singapore has managed to create a contiguous nature preserve in an environment with limited open space.

Southern Ridges connects three existing parks—Mount Faber Park, Telok Blangah Hill Park, and Kent Ridge Park—which had been separated by major arterial roads and dense vegetation. Each park was notable on its own, but they were not easily accessible. The design concept, therefore, was to link these open spaces with a series of pedestrian bridges and walkways, creating one large natural preserve. Given the fragile environment, the URA made unobtrusive and ecologically sensitive design a priority when it selected architects through an international design competition in 2003.



## JURY STATEMENT

The Southern Ridges is a nine-kilometer chain of open spaces that connects the rolling hills of three existing parks. The project, visited by a half million people since its opening, creates a rare contiguous recreational space in densely populated Singapore.

## DEVELOPMENT TEAM

### Owner

Ministry of National Development  
Singapore  
[www.mnd.gov.sg](http://www.mnd.gov.sg)

### Developer/Master Planner

Urban Redevelopment Authority  
Singapore  
[www.ura.gov.sg](http://www.ura.gov.sg)

### Design Architects

**(Henderson Waves)**  
RSP Architects Planners &  
Engineers (Pte) Ltd.  
Singapore  
[www.rsp.com.sg](http://www.rsp.com.sg)

IJP Corporation Architects  
London, United Kingdom  
[www.ijpcorporation.com](http://www.ijpcorporation.com)

### Design Architect (Alexandra Arch

and Forest Walk)  
LOOK Architects  
Singapore  
[www.lookarchitects.com](http://www.lookarchitects.com)

### Design Architect (HortPark)

MKPL Architects Pte Ltd.  
Singapore  
[www.mkpl.sg](http://www.mkpl.sg)



The three most popular elements of the park system are the bridges—Henderson Waves and Alexandra Arch—and the elevated pathway, the Forest Walk. Located 36 meters (118 ft) above Henderson Road, the torqued Henderson Waves bridge spans 274 meters (899 ft) connecting two hill parks. The bridge’s wavelike form—designed by local firm RSP Architects Planners & Engineers and London-based IJP Corporation Architects—was based on the mathematical concept of periodicity, which is the same equation that governs the oscillation of ocean or sound waves. The bridge’s largest wave, 57 meters long (187 ft) and six meters high (20 ft) at its crest, is centered above the main road. The bridge’s walkway is made of yellow balau timber, which softens the bridge’s appearance. Seating and alcoves for visitors are located along the walkway.

Forest Walk, designed by locally based LOOK Architects, is an elevated walkway that guides park users up the steep, forested terrain of Telok Blangah Hill. The 1.3-kilometer (0.8-mi) walkway traverses the terrain in a switchback fashion, offering views of the forest, city, and coastline below. The walkways are constructed from a thin mesh of structural steel, permitting sunlight to penetrate to the forest floor and preventing the retention of rainwater. The strength of the material also allowed the designers to use of less of it, reducing the overall impact, both visual and actual, on the sensitive environment.

The Alexandra Arch draws its inspiration from the form of a folded leaf. It serves as the “gateway to nature,” leading visitors into the Forest Walk. The asymmetric bridge has a tilted arch, rising six meters (20 ft) above Alexandra Road and spanning 80 meters (262 ft). The ribbed arch is illuminated at night using color-changing LED lights, with a programmed display meant to simulate dusk in the tropics.

The Alexandra Arch allows visitors to walk from Telok Blagah Hill Park to the 23 hectares (57 ac) of lawns and gardens at the horticulture park (HortPark). The park’s Visitor Centre, designed by local firm MKPL Architects, is a U-shaped complex, with 255 square meters (2,749 sf) of office space and 178 square meters (1,911 sf) of retail area surrounding a courtyard of athletic fields and gardens.

Since its opening in May 2008, Southern Ridges has been visited by more than a half-million people, averaging 6,000 visitors on the weekends and 35,000 each month. The project is another link in URA’s plans to connect the hill parks to the waterfront along the southern coastline of Singapore. When that project is completed in 2012, URA will have created a comprehensive recreational loop, allowing visitors to experience each of Singapore’s distinct ecological zones, from dense forests to mangrove trails to beaches.



PHOTOGRAPHS BY URBAN REDEVELOPMENT AUTHORITY OF SINGAPORE (ALL IMAGES)



**PROJECT DATA**

**Web Site**  
[www.ura.gov.sg/sr\\_bridges](http://www.ura.gov.sg/sr_bridges)

**Site Area**  
10 hectares (24.7 ac)

**Land Uses**  
park, open space

**Start/Completion Dates**  
November 2002–May 2008