For Immediate Release

First-ever Wildlife Crossing Design Competition winner is HNTB with Michael Van Valkenburgh Associates

Winning Design is Cost-Effective and Enables Humans and Wildlife to Better Coexist

Collisions between wildlife and vehicles have increased by 50 percent in the past 15 years and are a growing threat to both human safety and wildlife, costing Americans $8 billion and Canadians $251 million annually

January 23, 2011 (WASHINGTON, DC) – The ARC International Wildlife Crossing Infrastructure Design Competition www.arc-competition.com/welcome.php today announced that HNTB with Michael Van Valkenburgh Associates, Inc. (HNTB+MVVA) has won the first international wildlife crossing structure design competition. The winning design team won $40,000. ARC was designed to solve the problem of ensuring the safe mobility of humans and wildlife by allowing them to coexist through innovative engineering and architecture.

Robert Rock, Senior Associate for Michael Van Valkenburgh Associates, Inc. and Ted Zoli, Technical Director of Bridges for HNTB received their award at the National Academies’ Transportation Research Board’s 90th Annual Meeting held today in Washington.

HNTB+MVVA, a New York City design firm, was unanimously chosen by a jury of five leading experts in landscape architecture, engineering, transportation and ecology for their use of ordinary materials, such as concrete, in an extraordinary way. HNTB+MVVA’s design is cost-effective, modular, easy to construct, provides greater material control, and uses a unique built-in drainage system. Estimates suggest the crossing can be built for roughly half, on a cost per unit basis, of the current cost to build the structures that are in Banff National Park. Click here to view HNTB+MVVA’s winning design.

"The winning design combines complex ecology and engineering with practical intelligence by taking ordinary technology and recasting it in a new way,” said Nina-Marie Lister, the ARC competition advisor and professor at Ryerson University in Toronto. “Using a simple, modular approach to construction, the HNTB+MVVA design deploys familiar, everyday materials with elegance and cost-effectiveness. The jury chose this design because it is not only feasible, but because it has the capacity to transform what we think of as possible – a novel design solution to a growing problem that could serve as a model for the world.”

“What we really need now is the political, economic, and social leadership to bring this design to life,” said Charles Waldheim, chair of the ARC jury.

The HNTB+MVVA design includes a single span across the highway with no center pier as opposed to the Banff overpasses, which are comprised of two single spans with a median in the center. This single span is a unique feature that will provide a much safer experience for drivers.
by creating a more open space for drivers. There are also significant benefits to wildlife in the winning design as it is approximately four times wider than the structures in Banff. This provides an ideal setting to accommodate wildlife movement and a diversity of habitats on top of the bridge. One of the more promising design features from a constructability and engineering standpoint is that the winning design can be built without closing the highway in both directions.

The site of the design competition was West Vail Pass on I-70 in Colorado, about 90 miles west of Denver. Colorado’s I-70 corridor is considered to be significant barrier to wildlife movement because it is the only east-west interstate providing for the movement of people, goods, and services across the state and bisects a critical habitat linkage in the Southern Rocky Mountain region.

Juror and Alberta wildlife ecologist and research scientist Tony Clevenger says ARC is intended to inspire imitation worldwide. “Banff is the world leader in wildlife crossings but they’re in a static mould and the price of the structures keeps going up and up. The ideas brought forward in this competition are making us think about how to build these structures in new ways.”

Growing scientific research shows the importance of wildlife crossings and their effectiveness at reducing wildlife-vehicle collisions. In Banff National Park in Alberta, Canada, a continuous series of 22 underpasses and two overpasses has resulted in an 80 percent reduction in total wildlife fatalities because wildlife was allowed to roam free uninterrupted by human transportation. As a result, there have been approximately 240,000 crossings (and counting) of 11 species of large mammals, including wolf, grizzly bear, elk, lynx, mountain lion, and moose across these paths.

Parks Canada has expressed interested in meeting with all five finalists to help in the design of new wildlife crossings over key sections along the Trans-Canada Highway through the Canadian Rockies. The Newfoundland and Labrador government has recently been served with a class-action suit by victims in moose-vehicle collisions.

The jury was impressed by the caliber of all five of the finalist designs. Each finalist received $15,000 honourarium. The finalists were chosen to compete from 36 team submissions across nine countries, representing more than 100 firms worldwide. The jury was looking not only for sustainable, beautiful, compelling designs that met the needs of people and respected wildlife, but also those which utilized materials that make infrastructure more affordable in terms of capital cost, maintenance, and long term sustainability and, ultimately, make our roads safer.

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For Submissions of winner and the four finalists, see: www.arc-competition.com/finalists.php