MODULAR CROSSING SYSTEM

Innovative Design Solutions for Wildlife Crossing Infrastructure Vail, Colorado

Main Points

- Kit of Parts
- Modular and Efficient Construction System
- Material as a Response to an Ecological System
- Specialized Contractors Working with Wood
- Freeform Timber Structure
- Wide Crossing
- Substrate, Vegetation, Topography
- Adaptive Management
MCS MODULAR CROSSING SYSTEM
INNOVATIVE DESIGN SOLUTIONS FOR WILDLIFE CROSSING INFRASTRUCTURE VAIL, COLORADO

7 STEP PROJECT
- Tracing the Animal Paths
- Locating the Bridge
- Transporting the Modular System
- Installing without Disruption
- Placing the Landscape
- Creating New Bridges
- Monitoring & Adaptive Management Strategies
- Data Collection
- Electronic Display
- Implement the Data
- Optimize Crossing System
- Education of Public

VIEWING PLATFORM FOR BIKE RIDERS
MCS MODULAR CROSSING SYSTEM

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FORM FINDING PROCESS

This wildlife crossing utilizes the surrounding landscape in order to create a new shape inspired by nature. The design uses a flow both system of layering wood planes to create an easily malleable shape. The main design intent of the crossings is a structure derived from the abstraction of the topographical layers in the landscape above. The smooth organic curves of the topography in the natural environment of the crossing's surface are reconstituted below in the rigid stratification of the structural layers in the built environment for vehicular traffic. The expression of this malleable topography marks as if it had been carved from a single block of wood, optimizing the material to its maximum, before reaching its final shape. The result is a design that incorporates a flexible system that is able to respond to the dynamic requirements of the ecosystem it serves to protect while creating boundaries that visually and spatially isolate it from the analogous artificial human domain below.