Texas Ranch

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abstract
This thesis project came about from an interest in the idea of establishing a relationship between the built form and the landscape that it inhabits - a ranch in central Texas. I began with a program of a house, stable, horse riding arena, ranch hand living, and various service buildings. I decided to organize these buildings along a linear spine down a gradual hillside on the property. The limestone block spine walls begin at a wind pump tower which provides well water for horses to drink and bathe in. A clear structural hierarchy exists in the relationships between the stacking of the walls and making a framework of wood and steel. Details were resolved with special consideration for the materials and their natural qualities and properties. The project brings to light some of the vernacular practices of the region.

acknowledgements
To all friends, studio-mates, faculty, and especially family, I wouldn’t be where I’m at today without you.

thank you
house in the fall
The materials in this architecture have an inherent natural beauty: the warm color and beautiful grain patterns of wood, the rugged texture of limestone, and the manner in which sunlight catches, hardens, and imparts depth and color to the natural objects and the design in the landscape. These are given a place to shine and become a part of the landscape that I love.
660-acre site located in Leon County near Centerville, TX on the fringe of the western edge of the Piney Woods. Materials are harvested from the land, the forest, and the oil fields.
The massive limestone-walled "spine" is a service pathway connecting the ranch buildings. The path takes one from lofty vantage points atop the hill down to the pasture level between towering walls. Underfoot, well water is carried from the windpump tower down to a horse trough and wading pool.
As one approaches the site from the south, they are shielded in their journey by extensive foliage. The large pasture expands before you as you cross a narrow stream. The stone walls create a sense of place in the vast field as one turns west to follow the trail uphill to the windpump and house.
The windpump is the point of origin for the stone walls. Powered by the prevailing breeze, ground water is pumped up to begin its journey down the walls to the trough and wading pool. Cast-in-place board-formed reinforced concrete spires support the steel cage which houses a water reservoir.
The property owners' house is meant as a weekend retreat, a summer home for two immediate families. Through its evolution, consideration for service and served space, views, varying levels of privacy, rootedness, and materials remained at the forefront.
The structural steel members in the kitchen create a frame work for counters and cabinets. Solid stone walls necessitate exposed plumbing fixtures in the bathrooms.
Crucial moments in architecture where two or more materials come together. Where glass meets stone, it is intervened with steel (right). Steel brackets with bolted connections join wood rafters to the steel beam (opposite).
Central to the steel ceiling is a channel glass skylight. It acts as a gutter which carries well water from the windpump to the horse trough and wading pool. From within the walls overhead, occupants are reminded of the necessity of water to settling the region.
process sketches

Sketching details helps central on solving some of the critical moments where materials join together. The channel glass expands to be framed by steel sheets (above). Two more layers of frosted glass conceal the connections. Concrete treads continue the passage of water (below). The treads rest on bent steel sheets which tie into the coursing of the limestone walls.
After its journey downhill from the windpump, well water turns the corner through a trough in the floor of a concrete platform. The gutter empties into the horse trough adjacent to the stable. From the trough, the water flows into the wading pool.
The horse stable plan is constructed of a series of monolithic concrete pylons which support and house the wood frame of the walls and roof. Each 12’x15’ stall can be fitted with horse chambers or storage, creating an adaptable framework for varying needs. The central stone walled shed houses saddles and serves as a break room/kitchen for the ranch hands.
A typical site section through a shed and workshop shows the relationship of the buildings to the stone walls in the hillside.
Past the ranch hand living quarters, the limestone walls support a simple horse shelter in the middle of the pasture. At their terminus, the blocks open to form a seating ring around a central fire pit in the center of the wide open pasture.
credit

All drawings, images, photographs, and text by Mark Richardson.