

PROJECT: Rehabilitate the Two Story Barn

LOCATION: Hubbell Trading Post National Historic Site, Ganado, Arizona

SIZE: 10,200 sf, **DATE:** 1997-1999

MATERIALS: Random rubble stone masonry with Ponderosa Pine second floor and roof vigas.

ROLE: Job captain- Historic Structure Report, Job captain- structural rehabilitation design.

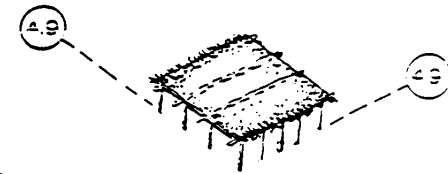
DESCRIPTION: Construction on the barn began in 1880s evolving from an open ramada structure with additions and enclosure continuing to 1915. This National Historic Landmark is 80' by 81' on the ground floor, the second story 60' by 62'. There are stock pens, stalls, storage rooms, and work areas on the first floor. The second story is a hay loft. Walls are of "rough rubble" set with adobe clay mortar. The roof structure consists of large ponderosa pine *vigas* with *latillas* ceilings over the *vigas* and then earth spread across the *latillas*. The Historic Structure Report effort updated and expanded historical research from the 1966 HSR. It also documented the earlier rehabilitation work completed on the barn in the 1970s and early 1980s.

This project focused on the rehabilitation design for a structural diaphragm at the second floor and replacement of deteriorated first floor columns. The rehabilitation construction was completed in 1999

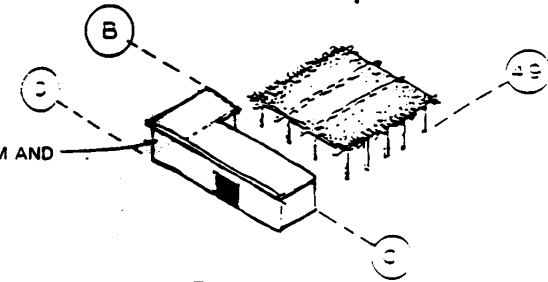


The Two Story Barn, February 1958

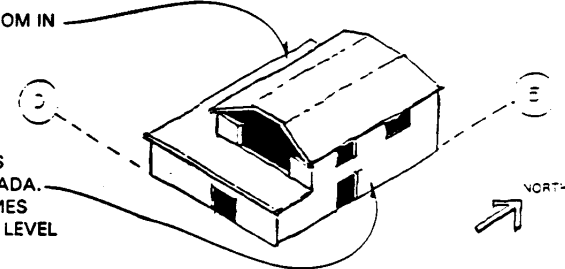
1878-MID 1880s. OPEN RAMADA ORIGINAL STRUCTURE?



MID 1880S. SOUTH STOREROOM AND BLACK SMITH SHOP ARE BUILT.

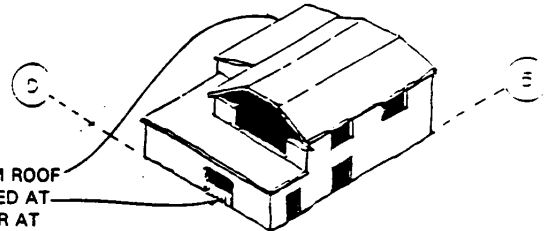


SINGLE STORY NORTH STOREROOM IN PLACE BY C. 1900.



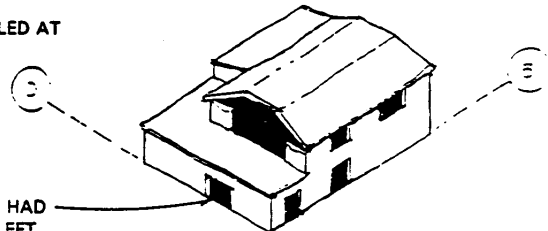
BY LATE 1890S (C.1897) STONES WALLS ENCLOSE ORIGINAL RAMADA. ORIGINAL RAMADA ROOF BECOMES LOFT FLOOR WITH NEW SECOND LEVEL ROOF ABOVE.

NORTH STOREROOM IN PLACE BY C. 1900.



BY C. 1915: NORTH STORE ROOM ROOF EXTENDED. EAST DOOR INSTALLED AT BLACKSMITH SHOP. SOUTH DOOR AT BLACKSMITH IS CLOSED OFF WITH STONE (OR BOARDS) AT LOWER PORTION AND WINDOWS INSTALLED AT UPPER PORTION.

1968-MID 1970S: INFILL @ BLACKSMITH SHOP SOUTH DOOR HAD BEEN REMOVED AND DOORWAY LEFT AS AN OPENING. BARN REACHES THE EXTERIOR APPEARANCE AS FOUND IN 1997.



Historic structure report sketch showing the barn's physical evolution.