



## Designing Aztec Ruins

### Planned Design

The ancestral Pueblos, not the Aztecs, built the elaborate stone structure you're visiting today and occupied it for approximately two centuries, between 1100 and 1300 AD. Within miles of Aztec's West Ruin are scores of other structures, indicating an extensive, planned community. Clearly, construction of this magnitude required well organized teams of workers and substantial forethought. Despite such deliberate design, the use of the building probably changed over time. As you tour the site, consider the ways in which it was planned, renovated, and repaired much like modern cities.

### What is a Great House?



Aztec's West Ruin is regarded architecturally as a "Great House." With approximately 400 rooms and 30 kivas, West Ruin is the largest known Great House outside of Chaco Canyon. Chaco Great Houses are large, typically multi-storied stone buildings on a formal plan, with core-and-veneer walls, large rooms, plazas, and usually one or more Great Kivas. Unlike small houses, they show evidence of community-wide activities. The structure was used as a gathering place, ceremonial center, trade center, work area, and storage. Most archeologists agree that this building was probably not originally intended for habitation; most people lived in small, one-story dwellings nearby. However, evidence suggests that people may have lived in some rooms of the Great House in later years.

### Phases of Construction

Construction of Aztec's West Ruin was episodic and rapid. In fact, the majority of Aztec West was completed in only 30 years! (For comparison, Pueblo Bonito in Chaco Canyon took almost 300 years to build.) The first walls built in the West Ruin were those of Kiva L (stop #15) around 1100 AD. This preliminary construction, outlined in dashed blue, is referred to as Stage 1.

Ten years later, approximately 1110 AD, the largest period of construction began at Aztec West. During this episode, referred to as Stage 2 and outlined in red on the map, multi-story rooms in the north and east wings were constructed. Archeologists estimate that about half of the entire Great House was built within this decade.

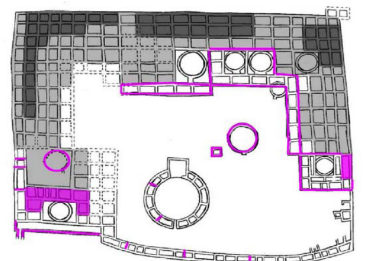
The last episode of major new construction began around 1120 AD. During this episode, referred to as Stage 3 and outlined in green on the map, multi-story construction of rooms in the west wing took place. These three stages, which occurred within a span of 30 years, account for the majority of the construction at Aztec West.

Two phases of renovation to this Great House occurred after the initial, rapid construction. During the McElmo renovation phase in the late 1100s, outlined in pink, inhabitants demolished rooms in the eastern north wing and far southwestern end of the site and inserted numerous large, blocked-in first story kivas. Additionally, a line of new plaza-facing rooms were added.

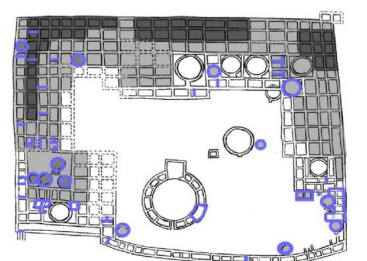
During the Mesa Verde renovation phase in the mid 1200s, outlined in blue, inhabitants subdivided rooms, added sunken kivas to second-story rooms, and constructed new roofs. It was during this time that a change in the use of the building may have occurred. The building may have been more heavily used for habitation, and room use included storage, tombs, and latrines.



- Stage 1 (1100 - 1109)
- Stage 2 (1110 - 1120)
- Stage 3 (1120 - 1130)



- Renovation phase 1 (late 1100s)



- Renovation phase 2 (mid 1200s)

## Astronomical Alignments

Many researchers are particularly interested in the way ancestral Pueblos incorporated the movement of the sun and the moon into their architecture. No one can prove that the alignments we observe today were intentional, but the fact that they are found in major sites all over the region suggests that solar and lunar alignments were a signature feature for ancestral Pueblo builders.

The long, straight back wall of Aztec West marks both the summer and winter solstices. From the west corner of the wall, you can watch the summer solstice sun rise directly up the east corner. From the east corner, you can watch the winter solstice sun set down the west corner.

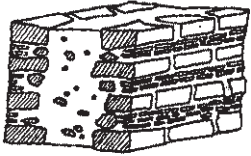
The ancient people may have designed these alignments to keep a precise agricultural calendar, marking the best times for planting and harvesting crops. The alignments probably tracked a ceremonial calendar as well. Modern Pueblos still relate the sun, moon, and stars to their religious lives. Some still have traditions for choosing and training sunwatchers, people who are responsible for reading the seasons from the movement of the sun.



(Above) Archeologist Rich Friedman documenting the 2006 winter solstice sunset. (Left) Photograph of 2012 summer solstice sunrise by archeologist Gary Brown.



## Distinctive Characteristics



Core-and-Veneer Masonry



(Above left) Mesa Verde masonry

(Above right) Chaco masonry

Archeologists often use tree ring dating to figure out when walls were constructed, but masonry styles also indicate approximate construction period. There are two distinct masonry styles at Aztec West: Chaco masonry and Mesa Verde masonry. Chaco masonry developed in Chaco Canyon during the 9th, 10th, and 11th centuries. It is characterized by organized, meticulous rock layering, chinking, and core-and-veneer masonry, which uses a central core of mud and stones sandwiched by outer facings of stones in mud mortar.

Mesa Verde masonry, named for its prominence in the Mesa Verde cliff dwellings, is a style characterized by larger, rounder stones with less emphasis on layering and chinking. The picture on the left was taken at Stop #14 and shows both masonry styles. The Chaco-style wall was constructed in the initial stages of construction in the early 1100s while the Mesa Verde-style wall was constructed during the first reconstruction phase in the late 1100s.

Contrary to previous thinking, archeologists do not necessarily attribute each phase to population migration. This structure was inhabited continuously, and construction styles evolved over time. Our current society is no different; we often see houses built in different time periods neighboring each other on the same street.

Decorative and perhaps symbolic elements like the green layer in the wall at stop #3 are commonly found here. While the purpose of the green layer remains unknown, many speculate that masons may be mimicking the local stratigraphy. Locally, the green siltstone is from an impermeable formation that the water table sits atop, possibly accenting the importance of the water table in a symbolic way.

T-shaped doors are common features and usually face the plaza in ancestral Pueblo Great Houses. Their purpose has also been widely speculated, ranging from a functional explanation (more elbow room when carrying pots through doors) to symbolic (directing one's attention towards the earth, a sacred place for the ancestral Pueblos.)



Band of green stone in west wall



T-shaped doorway

## Symbolic Layout

The site locations of Great Houses across the Four Corners region, the orientation of the buildings, and the complex formal geometries of Great Houses suggest that the ancestral Pueblo builders and architects were incredibly skilled planners and designers. North Mesa, the first Great House constructed in this area, sits on the mesa above East and West Ruins. An ancient road runs directly north and bisects the East and West Ruin here at Aztec (see diagram on right).

The buildings and features at Aztec Ruins were much more than a collection of storage, living, and ceremonial spaces. Taken together, they were a large-scale representation of ancestral Pueblo worldview. The symmetrical layout speaks to a grand sense of order and balance on the landscape. The architecture of Aztec Ruins not only impresses modern visitors with its massive size and fine workmanship, but inspires them to ponder the goals and lifeways of its ancient builders.

