

# Archaeology, Business, and the Public

■ JUDY L. BRUNSON

**T**he Salt River Project (SRP), a public power utility based in Phoenix, Arizona, made an important discovery when its employees uncovered a village constructed by the Hohokam people sometime between 350 and 700 A.D. A team of archaeologists uncovered more than artifacts: They also unearthed a thirst for knowledge among several thousand local residents.

This discovery occurred through the enactment of a cultural resource policy that has helped shape the company's commitment to preserving archaeological and historical resources. SRP and a growing number of utility companies are concerned about preserving cultural resources for environmental reasons and because the remains represent previous human societies from which many present-day groups trace their ancestry.

Federal and Arizona state laws and regulations are designed to protect cultural resources. Yet, SRP's concern for cultural resources goes beyond the requirements through the company's approach to archaeological and historical sites.

SRP developed a cultural resource policy in the 1970s. This policy requires that we complete cultural resource clearances on our own land before construction begins. In addition, when our construction will

impact a known site on private land where no legal requirements will protect it, SRP gets permission from the landowner to complete any necessary archaeological excavation. Construction projects scheduled at a developer's request and located within a high sensitivity area for cultural resources also concern SRP. The utility notifies the developer of the potential for archaeological features and requests approval to complete the necessary collections or excavations to recover the important data.

Fifteen to 20 years ago, many companies perceived archaeology as a problem that could delay construction. To a large degree, this perception still exists. Yet, at SRP, archaeological investigations hold up proj-

**At the Salt River Project, archaeological investigations hold up projects less than 1% of the time.**

ects probably less than 1% of the time. When investigations do delay construction, problems stem from scheduling an inadequate amount of time for the archaeological work. Through proper planning, archaeological studies usually can be performed in a timely and beneficial manner.

When surveys are required to comply with federal or state regulations, project managers must budget the time that will be required not only to do the study but also

to process the reports through the proper channels. Preplanning and recognition of the resources are important elements of any project.

In the past, many companies have experienced the headaches of constructing around archaeologists' excavating sites along high-power transmission line rights of way. Costs for delays and extra movement of crews and equipment around these areas are quite high. Through better planning and communication, many of the problems and the high cost overruns could have been avoided.

Companies learned an expensive but beneficial lesson. In siting transmission lines now, engineers often change tower locations to avoid archaeological sites. This is possible because archaeologists perform cultural surveys early in the planning process for engineers planning tower locations. In addition, archaeologists now undertake and complete their studies prior to construction. Archaeologists can help engineers to design access roads so that by the time construction begins, no archaeological problems exist.

While cultural resources are important, utility company budgets generally are not set up for preservation. For both these reasons and because of SRP's concern about preserving the past, archaeological surveys increasingly are becoming an important factor in the preplanning phase of purchasing land and scheduling construction projects.

In addition to incorporating cultural resources within the preplanning phase, management is realizing that subsurface cultural resources sometimes will be found where there is no surface evidence.

Again, communication is a key factor in preventing a possible problem. Construction crews may be tempted to ignore subsurface archaeological discovery situations. Although they often perceive archaeological finds as interesting, construction personnel may view the situation as a nuisance and probably cause for a job to be delayed. While company policies may be strict as to reporting and stopping avoidance requirements, it would be unrealistic to argue that all archaeological discoveries are reported. To avoid losing information, archaeologists and construction crews need to reach a compromise without damaging the integrity of the resource.

When utilities undertake land-disturbing activities, the trenches often can boost the identification of archaeological remains. A

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variety of information can be revealed through trenching activities. For example, historic and prehistoric canal systems, habitation structures, storage sites, and a variety of other features and artifacts can quickly be recorded and mapped, without stopping construction work for a long period. If no additional land disturbance will be created from the trench where the

**Historic and prehistoric canal systems, habitation structures, storage sites, and other features and artifacts can be quickly revealed by trenching.**

feature is located, there rarely will be a need for further excavation. Valuable information about the cultural resource can be derived without major setbacks in the construction schedule.

As a result of our cultural resource policy, SRP recently sponsored a major excavation at a planned electric substation site. We had acquired the property at an earlier date when an archaeologist had not been on staff. SRP contracted with Tempe-based Archaeological Consulting Services (ACS) to complete an archaeological survey of the property as part of the preconstruction requirements. The firm reported that artifacts were scattered across the property. Test trenches revealed that many subsurface features were intact. The archaeologists' research showed that the substation site was part of a large, prehistoric Hohokam village called La Ciudad do Los Hornos, which is Spanish for "City of Ovens."

SRP contracted with ACS to perform a full-scale excavation. The substation construction date eventually was delayed 3 weeks to accommodate the anticipated amount of archaeological work. Since several construction changes that were unrelated to the excavation also would have delayed the construction start date for the same period of time, the change did not create a problem for any group involved.

Fortunately, the archaeological survey had been completed with lead time for the actual excavation. If the site had been discovered during construction, the job probably would have been postponed due to the

site's significance. Preplanning helped save construction time. Nevertheless, the archaeologists knew they would have to work quickly.

Shortly after completing the archaeological survey, the archaeologists began the excavation of the Hohokam village. "Hohokam" describes groups of people who lived in the Arizona desert from approximately 300 A.D. to 1450 A. D. They are best known for their complex canal systems that extended more than 700 hundred miles in the Salt River Valley, which is home to the present-day Phoenix metropolitan area.

SRP recognizes that archaeological excavations can help answer questions about the Hohokam's lifestyle, their origins, and reasons for leaving. For example, excavations have revealed that the Hohokam lived in pithouses. The floor of the home was dug 1 to 2 feet below the ground. The walls were made both from a series of wood pole supports placed around the edge of the structure and from internal supports.

The roof was made with a series of roof beams across the top. Smaller wood branches, twigs, and other plant materials were woven throughout the support poles, and a thick cap of earth and caliche was placed over the exterior of the structure. Caliche is a natural calcium carbonate present in the soil. When mixed with water

and then allowed to dry in the sun, it forms a plaster that is almost as hard as concrete. Mixed with the earth, it helped insulate the Hohokam's home, both inside and out.

When SRP's excavation was completed 2 months later, ACS had uncovered 36 houses, numerous pits, and one communal oven (horno). The archaeological team found ceramic vessels and both ceremonial and everyday items still present on the house floors. The professionals also found carbonized remains of corn, beans, and reeds. The team discovered that most of the floors had been plastered so that the architectural features of the lower base of the house, including the floor and various pole support stains, easily could be seen.

SRP continually strives to help Arizonans learn about their culture. Because of the easy visibility of the archaeological features and since SRP wanted the public to share in the excitement of the find, we offered public tours at the site on two consecutive Saturdays. Archaeologists—both professional and volunteer—worked during the tours so the public could see the scientific techniques used to extract information and artifacts.

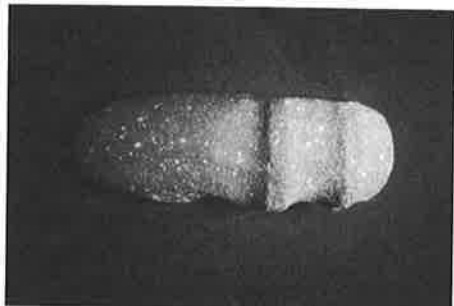
By taking the tours of the site, the public was better able to understand the importance of archaeological work and appreciate the Hohokam culture. Visitors received brochures containing facts on the Los Hor-



*The Hohokam village site offered SRP a chance to educate the public on archaeology and enhance its image.*



*This Hohokam red-on-buff jar was found virtually intact at the SRP substation site.*



*Archaeologists were excited upon discovery of this rare argillite ax.*



*Judy Brunson of SRP taught children and adults alike about archaeology.*

nos site and the Hohokam people who called the site "home."

Response to SRP's tour invitation was overwhelming! When the first Saturday arrived, archaeologists expected 100 to 250 people. Instead, more than 700 people arrived. On the second Saturday more than 2,000 people attended the tours.

Tours also were given throughout the 2 weeks to school groups of all ages, several local Native American groups, museum organizations, civic groups, and SRP personnel. SRP had gotten the word out about the discovery through a news release, media follow-up, and a flyer. No paid advertising was necessary.

Archaeologists currently are completing an in-depth analysis of the artifacts and information gathered during the excavation. Archaeologists who worked at the site and other archaeologists who have excavated portions of the site that date to a later period will cooperate to prepare a final report after analysis is completed. The report will be released in the summer of 1989. An exhibit will be open at the SRP History Center during Arizona's Archaeology Week, March 12-18, 1989. Some of the artifacts already are on display at the Center.

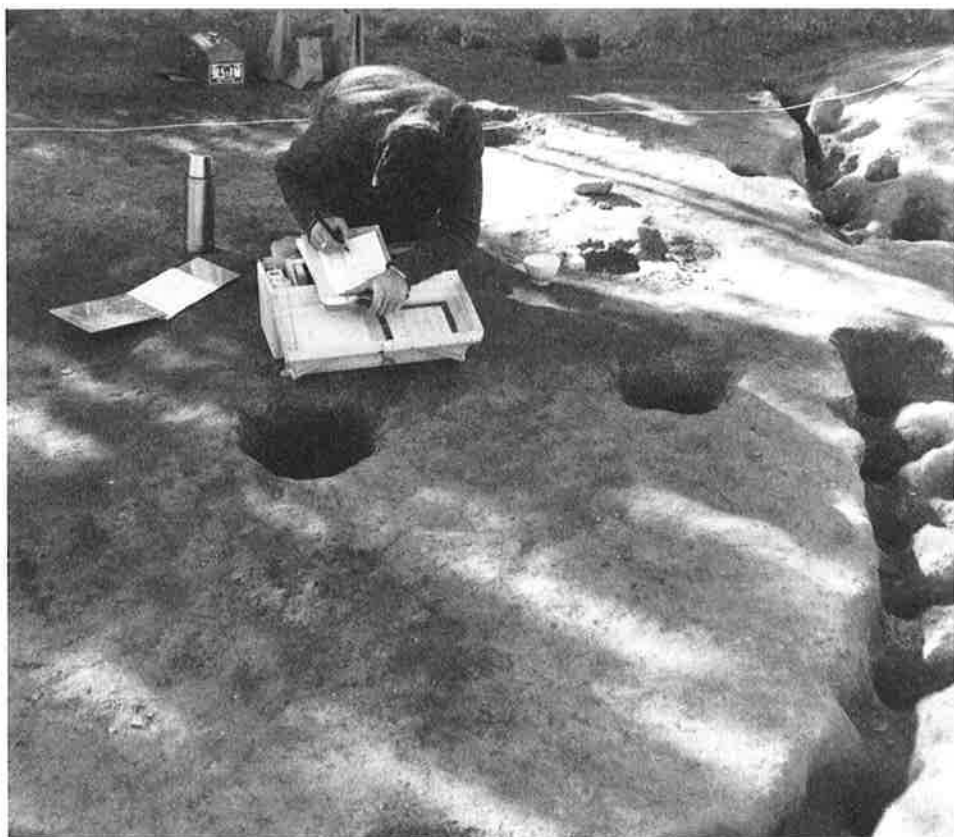
**Early integration of archaeological and construction planning can save irreplaceable information from the past from being forever lost.**

SRP management considers the excavation costs well spent. Irreplaceable data were recovered indicating that the analysis should provide important new information toward reconstructing the early Hohokam lifestyle. The tours have enhanced the public's positive attitude toward SRP. Feedback from the public shows an increased awareness of the importance of archaeological work. The public also learned more about how the Hohokam lived 1,000 years ago in the area known today as Tempe.

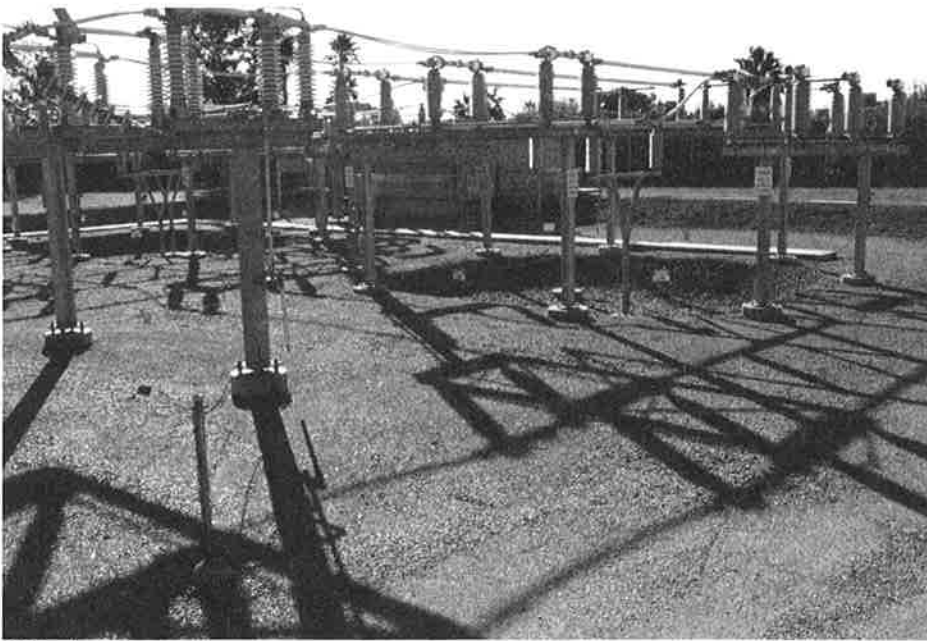
Archaeological excavations are completed to retrieve important information that otherwise would be lost during con-



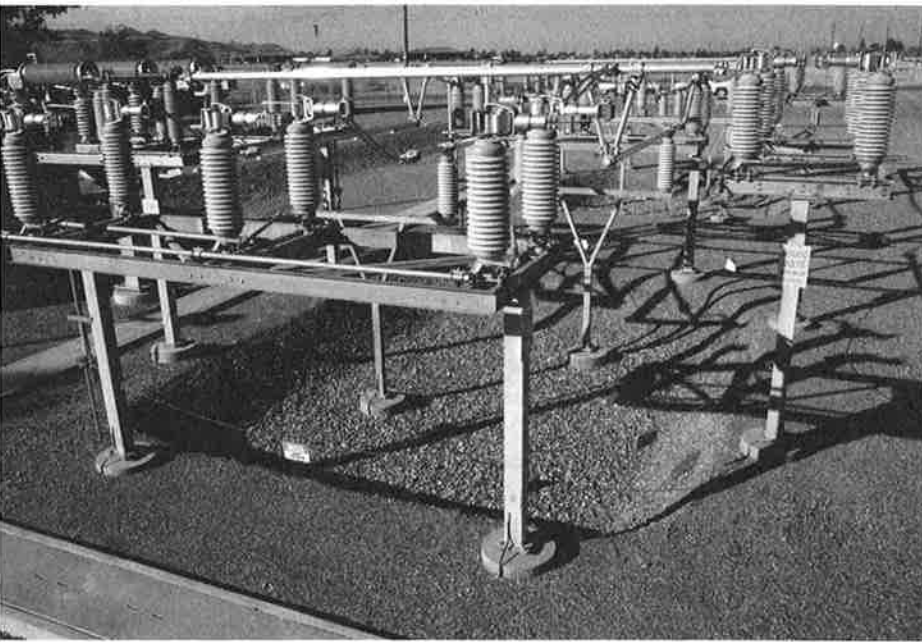
*Judy Brunson conducts a tour of the Hohokam village uncovered before construction began at the Lassen Substation site.*



*An archaeologist records data at the site of a Hohokam village in Tempe, Arizona. SRP hired Archaeological Consulting Services to perform the excavation.*



SRP's Lassen Substation today, after the archaeological excavation uncovered reams of information.



SRP's Lassen Substation today occupies the Hohokam village site.

struction activities. The irreplaceable resources are a concern both to companies and the general public. Early planning and incorporation of these concerns into construction plans offsets any potential loss and recovers important information that can be used to better understand how people lived in the past. The past can be recovered as long as companies participate and plan for cultural resource clearances. The results benefit everyone. (IRWA)

*All photographs are courtesy of the Salt River Project.*



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