

Prior to the initiation of the project, it will likely be necessary to abandon the Pima County property and right-of-way (streets, roads, and drainages) even if the plat is not abandoned. Pima County Board of Supervisors Policy C3.17 requires that county property containing cultural resources will not be sold or otherwise conveyed to a third party unless resource protection and preservation are made a condition of the sale and the property is conveyed subject to restrictive covenants enforceable by the County. Should impacts to cultural resources be unavoidable, the third party will be responsible for the costs of mitigation.

Much of the project area (75.1 acres) was surveyed in 2002 by Desert Archaeology, Inc. (DAI) (Brack 2002). Although that project is over 10 years old, WestLand's review of the resulting report found that it meets the current standards for a cultural resources inventory. Archaeological testing was subsequently conducted by SWCA, Inc. (SWCA), at the two archaeological sites identified by DAI (Tucker 2005). During the current project, WestLand conducted a full-coverage field survey of the remaining 15.3 acres of the property (the survey area) and field-checked the two sites previously recorded by DAI and tested by SWCA (AZ AA:16:330 and 462 [both ASM]) as well as field-checked one site (AZ CC:16:24[ASM]) previously recorded by EcoPlan Associates, Inc. (Brack 2002; Fahrni and Tucker 2006; Tucker 2005). The combined results of WestLand's examination of the survey area and previous work in the project area are presented here. The cultural resources inventory was conducted in conformance with the regulations governing cultural resources inventories within the state of Arizona, including the Arizona Antiquities Act (A.R.S. §41-841, *et seq.*), the Arizona State Historic Preservation Act (A.R.S. §41 861, *et seq.*), and Executive Order 2006-14. This report complies with the Arizona Antiquities Act reporting standards and the Arizona State Historic Preservation Office (SHPO) guidelines that were revised in January 2016.

The cultural resources inventory was conducted on November 7, 2016, by WestLand archaeologists Anna King and Stephanie Brown. The project was conducted under the direction of Fred Huntington, who served as project manager, and Mark Chenault, who served as project principal investigator. The cultural resources inventory and assessment resulted in the re-evaluation of three previously recorded archaeological sites and the recording of two newly discovered isolated occurrences of cultural material.

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## ARCHAEOLOGICAL RESEARCH AND RECORDS SEARCH

Prior to fieldwork, WestLand performed an archaeological records check and literature search of the site record files available through the Arizona State Museum (ASM) online cultural resources database (AZSITE). Information on previously recorded sites and survey projects within the project area and a surrounding 1.6-km (1.0-mile) buffer was used to provide baseline information on the cultural resources in the project area.

According to AZSITE records, 41 cultural resources inventories have been conducted within the 1.6-km (1.0-mile) buffer surrounding the project area, four of which intersect the project area (**Table A.1 and Figure A.1** [Appendix A]). These projects are largely related to residential development and utility and roadway improvements.

AZSITE documents 12 previously recorded archaeological sites within the 1.6-km (1.0-mile) buffer surrounding the project area, three of which intersect the project area (**Table A.2 and Figure A.1** [Appendix A]). The previously recorded sites in the vicinity are attributable to the prehistoric and historical eras, and are associated with Archaic, Hohokam, Native American, and Euroamerican cultural groups. The sites in the project area consist of a prehistoric lithic procurement and processing site, a historical road, and a historical natural gas pipeline. Sites within the buffer include a large-scale Hohokam habitation, several petroglyph sites, several artifact scatters, and a historical habitation site.

### HISTORICAL MAP REVIEW

Historical maps such as General Land Office (GLO) plats, U.S. Geological Survey (USGS) topographic quadrangles, and Mineral Survey plats can be extremely helpful in tracing the historical development of a particular area and in the field-identification of historical sites. As part of the current project, WestLand reviewed the historical maps listed below prior to performing the field survey. Images of these maps are provided in **Appendix C**.

- GLO plat for Township 15 South, Range 13 East, officially filed in 1871
- 1943 San Xavier Mission USGS 15' quadrangle
- 1957 San Xavier Mission USGS 15' quadrangle

The earliest map of the project area, a GLO plat from 1871, shows the initial development of the road networks in the vicinity of the project area. One road—labeled “From Tucson to Altar” on the plat—passes through the center of the project area. The 1943 and 1957 editions of the San Xavier Mission USGS 15' quadrangle show a similar road crossing the project area. On the latter map, this road is called “Sikes Road.” Also shown on the 1957 San Xavier Mission USGS 15' quadrangle is a “Pipeline” through the project area. A dirt road that closely follows the alignment of the early road was recorded by DAI as AZ AA:16:462(ASM) and the pipeline was recorded in this area as part of AZ CC:16:24(ASM) by EcoPlan Associates (Fahrni and Tucker 2006). Both are discussed in the **Site Descriptions** section below.

## **SURVEY EXPECTATIONS**

Based on the known cultural resources located within and surrounding the project area, there was the potential for identifying archaeological sites and isolated occurrences related to Archaic through Formative period habitation, resource procurement, and special-use or ritual activities in the survey area. The area is known to contain numerous volcanic hills, rich sources of lithic materials that were exploited prehistorically. Several petroglyph sites have also been identified in the area. The western portion of the survey area contains a small rocky hilltop that may have been used prehistorically for lithic materials or as a place suitable for rock art. WestLand's review of historical maps and previous archaeological studies indicates that two historical linear features—a road and a natural gas pipeline, both recorded as archaeological sites—are present in the project area. No other features are shown within the project or survey area on historical maps, and the surrounding area is shown as very sparsely developed until after 1957. Nonetheless, WestLand anticipated the potential to identify isolated historical residences, ranching infrastructure, and refuse dumps related to Euroamerican occupation of the project and survey areas during the late nineteenth and early twentieth centuries. However, no prehistoric or historical sites had been identified in the survey area during surveys in the 1980s and 1990s, and this fact tempered WestLand's expectations.

## PHYSIOGRAPHIC CONTEXT

The project area is located within the Basin and Range physiographic province at the western margin of the Tucson Basin. Specifically, it is located along the southern extent of the Tucson Mountains approximately 3 miles north of Black Mountain and 1 mile south of Beehive Peak, surrounded by a rolling landscape of slope and finger ridges emanating from various small volcanic peaks. A small volcanic hill is located at the western edge of the project area and comprises much of the western survey area. Another larger volcanic peak is located immediately southwest of the project area, and portions of AZ AA:16:330(ASM) are located on the toe of this peak's northeastern slope. Generally, the project area slopes downward from west to east, with elevations ranging from 2,610 to 2,540 feet above mean sea level (amsl). A small unnamed drainage cuts across the northern portion of the project area, flowing westward to meet the West Branch of the Santa Cruz River, which is located approximately 1.85 miles east of the project area.

The surficial geology of the project area is composed mainly of Early Tertiary to Late Cretaceous Volcanic Rocks (50–82 Ma [million years]) consisting of “rhyolite to andesite and closely associated sedimentary and near-surface intrusive rocks; commonly dark gray to dark greenish gray or greenish brown” (Arizona Geological Survey 2016). According to the Arizona Geological Survey, in the vicinity of the project area this unit can include thick welded ash-flow tuffs. This geologic unit forms much of the northern and western portions of the project area, and the entirety of the survey area. The southwestern portion of the project area contains Middle Miocene to Oligocene Volcanic Rocks (11–38 Ma), including “lava, tuff, fine-grained intrusive rock, and diverse pyroclastic rocks” such as “basalt, andesite, dacite, and rhyolite” (Arizona Geological Survey 2016). The surficial geology in the remainder of the project area is composed of Quaternary surficial deposits representing poorly sorted slope deposits from the nearby peaks. In this area, bedrock is generally near the surface or fully exposed, particularly on the volcanic hills and associated slopes. In the lower areas, some sediment accumulation has formed. Where present, these sediments are sandy with a thick cover of gravels and small cobbles.

The vegetation in the project area is typical of the Arizona Upland subdivision of the Sonoran Desertscrub biotic community (Brown 1994). Dominant native species include scrub mesquite (*Prosopis* sp.), creosote bush (*Larrea tridentata*), saguaro (*Carnegiea gigantea*), cholla (*Cylindropuntia* sp.), and prickly pear (*Opuntia* spp.). Various shrubs, seasonal grasses, and forbs are also present.

The project area is surrounded on three sides by residential developments, and while the project area itself retains much of its native character, it has been impacted by its proximity to these residences. A web of recreational two-track roads and dirt-bike or ATV tracks crisscrosses the project area, as does an access road for the historical natural gas pipeline. Modern trash is found throughout the project area.

## CULTURE HISTORY

The brief overview of human prehistory presented here covers the region known as the Tucson Basin, an area where the flows of several drainage systems and rivers converge and one that is bounded by four major sky island mountain ranges: the Santa Catalina, Rincon, Tucson, and Santa Rita ranges. A summary of the various culture histories relevant to this area is presented in [Figure 3](#).

Arizona is a geographically diverse landscape from the high desert Colorado Plateau in the northeast, across the rugged central mountainous zone, to the southern and western lowland desert Basin and Range territories. Archaeological evidence indicates that people have adapted to and inhabited this diverse landscape for more than 12,000 years. Over the tenure of human history, the environment has changed radically from the cooler and moister conditions of the late Pleistocene epoch to the warmer and drier conditions of today. As the environment changed, and as human populations increased over time, a variety of human cultures developed. Although these cultures did not arise and develop in isolation from cultures in other regions, it is evident that cultures in different geographic regions followed unique trajectories. Humans have responded in a variety of ways to the biological, geological, hydrological, geographical, and physiographical diversity of Arizona. The long tenure of human prehistory and history in Arizona is divided here into five major periods representing shifts in the human cultural adaptation: Paleoindian (11,500–8500 B.C.), Archaic (8500 B.C.–A.D. 1), Formative (A.D. 1–1450), Protohistoric (A.D. 1450–1691), and Historic (A.D. 1691–1963). These five main periods are often subdivided into briefer phases to represent cultural trends and developments specific to the various regions across Arizona.

The earliest evidence of people inhabiting Arizona is attributed to the Paleoindian period. Paleoindians are perceived as migratory, nomadic “big game” hunters who roamed North America at the end of the Pleistocene epoch. Using spears tipped with characteristically large fluted lanceolate projectile points, they hunted the now extinct megafauna of the terminal Pleistocene, particularly mammoth (*Mammuthus* spp.) and ancient bison (*Bison antiquus*) (Faught and Freeman 1998; Reid and Whittlesey 1997:30–37). The extinction of the large mammals and the warming and drying conditions of the Holocene epoch ushered in the Archaic period. Human populations responded to changes in the environment and resources by diversifying subsistence strategies, including hunting a wide range of animal resources and gathering a broad spectrum of wild plants (Mabry 1998; Mabry and Faught 1998). The Archaic period was punctuated by the hot and dry conditions of the middle Holocene “Altithermal” (Mabry 1998:30), leading to a virtual withdrawal from the lowlands and a reduced occupation of the highlands (Mabry 1998:65). Between about 3300 and 600 B.C., as temperatures cooled and rainfall increased, the number of Archaic period sites increased (Mabry 1998:29, 73).

	Cultural Stages		Hohokam		Dragoon		Middle San Pedro Valley	San Simon		Papaguería	Trincheras			
			Period	Tucson Basin <sup>1</sup>	Phoenix Basin <sup>2</sup>	Tuthill <sup>3</sup>	Vanderpot and Altschul <sup>4</sup>	Altschul <sup>5</sup>	Sayles <sup>6</sup>	Vanderpot and Altschul <sup>4</sup>	Haury <sup>7</sup>	Bowen <sup>8</sup>	McGuire and Villalpando <sup>9</sup>	
1700	HISTORIC													
1600														PROTO-HISTORIC
1500												Santa Teresa		
1400	LATE		Postclassic	Tucson	Polvorón	Tucson	Tucson	Babocomari			Sells	Phase IV	El Realto	
1300					Civano			Huachuca						
1200			Classic	Tanque Verde	Soho	Undefined	Tanque Verde	Tanque Verde				Topawa	Phase III	
1100						Tanque Verde								
1000	MIDDLE	Sedentary	Rincon	Sacaton		Tres Alamos	Tres Alamos	Encinas	Encinas	Vamori	Phase II	Altar		
900													Colonial	
800		Cañada del Oro	Gila Butte	Cascabel				Cerro	Galiuro					
700	Pioneer	Snaketown	Snaketown											
600				Tortolita	Vahki									
500	Early Ceramic	Agua Caliente	Red Mountain											
400														
300														
200														
100														
A.D.														
B.C.														
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The next significant step in the cultural development of Arizona was the introduction and development of agriculture. Current dating evidence places maize securely in the Southwest by 2100 B.C. (Merrill et al. 2009), but the transition to an agriculture-based subsistence adaptation developed later, around 1700–900 B.C. (Mabry 1998:73). The introduction of maize and the development of agriculture set the foundation for the cultural developments that followed. As a general statement, the ensuing Formative period is characterized by increases in population and the differentiation of these populations into the regionally distinctive cultural groups that we identify as the primary archaeological cultures of late prehistory, notably Ancestral Pueblo (Anasazi), Mogollon, Hohokam, Trincheras, and Casas Grandes. Prehistory in southern Arizona ends with the collapse of the late Formative period cultures and an apparent depopulation of the region. The subsequent Protohistoric period is poorly understood. Central and southern Arizona were sparsely occupied at first Spanish contact.

Early Spanish accounts of southern Arizona and its people provide the framework for what we know about the Protohistoric period. Spanish missionaries identified the peoples they encountered along the upper Santa Cruz and San Pedro Rivers as the Sobaipuri (Doelle and Wallace 1984, 1990; Gilpin and Phillips 1998:32; Masse 1981). The Sobaipuri apparently had occupied the territory since the end of prehistory and are hypothesized to have been the descendants of the prehistoric archaeological cultures in the region. The Athabaskan-speaking Apache occupied the vast mountainous regions below the Mogollon Rim in central and southeastern Arizona north and east of the Sobaipuri (Gilpin and Phillips 1998:68–70; Whittlesey 2003:243). The Apache probably entered the American Southwest late in prehistory and expanded their territory south across eastern Arizona. This expansion eventually brought them into direct conflict with the Sobaipuri and, later, European settlers who were also expanding and colonizing southern Arizona. The Historic period commences with the arrival of Jesuit missionary Eusebio Kino and the establishment of Spanish missions and presidios in the Santa Cruz and San Pedro River Valleys in 1691. The Historic period can be characterized by increasing Euroamerican colonization, settlement, expansion, industrialization, and conflict (Spicer 1962). The Historic period is conventionally subdivided into Spanish, Mexican, and American periods reflecting shifts in governmental authority.

### **NATIVE AMERICAN OCCUPATION OF THE TUCSON BASIN**

The oldest evidence of human occupation in the Tucson Basin and the surrounding areas is attributed to the Clovis complex. This complex is identified by a distinctive lanceolate spear point with a concave base, longitudinal fluting, and lateral and marginal grinding (Slaughter 1992:72). Much of the evidence for a Clovis presence in southern Arizona comes from isolated occurrences of Clovis points (either whole or in fragments). For example, such points have been recovered in Saguaro National Park East and Willow Springs in the Tucson Basin; in the Avra Valley area west of the Tucson Basin; and along Big Wash near Oracle Junction (Agenbroad 1967; Ayres 1970; Faught and Freeman 1998:44; Huckell 1982; Neily 1985:10; North et al. 2005; Seymour et al. 1997:1–8). The



Folsom complex succeeded the Clovis complex. Folsom, like Clovis, is identified by a distinctive style of projectile point. No Folsom points have been identified in southern Arizona (Faught and Freeman 1998:45). Plainview is a third Paleoindian tradition or tool complex that has been identified on the Colorado Plateau and in the southern Basin and Range province (although not, to date, elsewhere in Arizona). The Plainview tradition is attributed to the late Pleistocene or early Holocene period. Plainview points consist of several subtypes, including Meserve, Milnesand, and Belen points. All these points resemble Clovis points in their basic configuration, but they are unfluted (Faught and Freeman 1998:47). A few fragmentary projectile points resembling the Plainview type have been found on the eastern Santa Catalina bajada and in the interior of the Tortolita Mountains (Huckell 1984; Wallace and Holmlund 1986). Later Paleoindian complexes have not been identified anywhere in southern Arizona (Faught and Freeman 1998).

The Archaic period was characterized by the collecting of a broad spectrum of wild plant and animal resources for subsistence. The large Pleistocene animals hunted in the Paleoindian period had become extinct by the beginning of the Archaic period, although it has been suggested that the two subsistence strategies overlapped temporally and possibly spatially (Faught and Freeman 1998:50). The hunting of megafauna may have been an opportunistic component of what was otherwise a subsistence strategy resembling that typified by the term *Archaic*. Nevertheless, a rough temporal marker of 8500 to 8000 B.C. has been chosen as the starting point of the Archaic period, as it was around this time that a ground stone tool industry consisting (initially) of one-handed manos and slab metates became common across the Southwest (Huckell 1996:306, 327). This has been accepted as evidence that many plant resources (seeds in particular) were not exploited by people using Paleoindian subsistence strategies and that the beginning of the Archaic marks a broadening of the resource base. Geographically, the period of time designated by archaeologists as the Archaic is subdivided into several regions spanning the Southwest as a whole. In the southern Basin and Range region of the Southwest, the broad cultural manifestation termed the *Archaic* is known as the Cochise culture. Temporally, the Cochise culture is subdivided into three broad divisions: Early, Middle, and Late. The Early Archaic period (circa 8500 to 6000 B.C.) of the Cochise culture is known as the Sulphur Springs phase. There has been a general lack of diagnostic projectile points recovered from Early Archaic sites in southern Arizona that can be directly correlated in time with the Sulphur Springs phase, and sites dating to this era are not always recognizable without direct methods of dating, such as radiocarbon (Huckell 1996:329). The Middle Archaic period (circa 6000 to 1200 B.C.) of the Cochise culture—known as the Chiricahua phase—is typified by the addition of shallow basin metates, mortars and pestles, various bifacial tools, and distinctive side-notched projectile points (Chiricahua points) to the overall tool assemblage (Freeman 1999; Huckell 1996:342; Mabry 1998). Generally, the Middle Archaic period was a time during which regional variations in the material culture across the Southwest became less pronounced. It is during the Middle Archaic period that evidence of permanent or semi-permanent domestic architecture appears, although bands of people probably remained highly mobile. The first Mesoamerican cultigens (including maize) also arrived in the Southwest during this period, perhaps as early as 2000 B.C. (Huckell 1996:343; Mabry 2005:114–115).



The Late Archaic period (circa 1200 B.C. to A.D. 1) appears to have been a time of increasing adaptation to agriculture as the primary subsistence strategy. The prevalence of maize agriculture has led some researchers to refer to this period as the Early Agricultural period (Huckell 1996). The earliest direct dating of maize from various parts of the Southwest suggests an essentially contemporaneous adoption of this cultigen about 4,000 years ago (Mabry 2005). Hunting-and-gathering practices remained a vital subsistence strategy throughout the Late Archaic/Early Agricultural period though, as proven by macrobotanical, zooarchaeological, and human osteological data (Diehl 2005:182). In the south, the Cochise culture entered its penultimate cultural stage, the San Pedro phase (1500 to 800 B.C.), which was named for the type-site first investigated by Sayles on the San Pedro River (Sayles and Antevs 1941). Recent investigations at the site of Las Capas on the Santa Cruz River floodplain have provided a wealth of information about San Pedro phase agricultural technologies, architecture, artifact and feature types, and mortuary patterns (Desert Archaeology 2009; Mabry 2008). Apart from its distinctive corner- and side-notched projectile points, the San Pedro phase is typified by (1) small oval pithouses, often with large interior bell-shaped storage pits and similar extramural pits (both of which reflect the importance of storage in a subsistence economy that includes the growing of crops); (2) flexed inhumations; (3) refinements in ground stone technology; and (4), in the Santa Cruz River Valley, canal-irrigated farming. Also notable during the Late Archaic period was a ceramic tradition of figurines, beads, and miniature vessels (Heidke 2005; Stinson 2005). Although the miniature vessels are argued to be incipient pottery (Heidke 2005), these objects have decorative qualities reminiscent of baskets and are similar to ceramic effigies found in Early Formative period contexts at other sites (Haury 1976). Late Archaic incipient pottery may be part of the ceramic effigy tradition. Until relatively recently, the San Pedro phase was considered to be the final stage of the Cochise culture. Archaeological work in Tucson and other areas, however, has led to the definition of an additional phase, the Cienega phase, for the final pre-ceramic stage of the Cochise culture in southern Arizona (Gregory 2001:253; Huckell 1996:345). The Cienega phase, in contrast to the earlier San Pedro phase, is characterized by round, rather than oval, pithouses; distinctive projectile points with deep diagonal corner-notching (Cienega points); and a more diverse ground stone artifact assemblage (Huckell 1996:345; Stevens and Sliva 2002:300). The dates proposed for this phase are circa 800 B.C. to A.D. 150 (Gregory 2001).

The Formative period is differentiated from the Archaic period by the addition of pottery to the material culture repertoire. The Formative period in the Tucson Basin is typically considered synchronous with the tenure of the Hohokam culture. This may or may not be the case (see Deaver and Ciolek-Torrello 1995; DiPeso 1956). The Hohokam culture is segmented into a sequence of four cultural periods. From oldest to youngest, these are the Pioneer, Colonial, Sedentary, and Classic periods (Gladwin 1965; Haury 1976, 1978). In their original formulation, these periods represent the thesis that the Hohokam culture derives from Mesoamerican immigrants who “pioneered” a new way of life in the Gila and Salt River Valleys of Arizona. After a few centuries of development, the descendants of the original immigrants “colonized” most of the uninhabited adjoining river valleys of central and southern Arizona using their sophisticated technological,

social, political, and religious systems. Once in place, the Hohokam colonists became “sedentary” agriculturalists. A few centuries later, the Hohokam culture reached its zenith, or “classic” cultural development. The alternative to the Hohokam cultural sequence is a tripartite division of the Formative period into three smaller periods referred to simply as Early, Middle, and Late. The three Formative periods also correspond generally to the Hohokam cultural sequence (Gladwin et al. 1937; Haury 1978). The Early Formative period encompasses the Pioneer period through the end of the Sweetwater phase. The Middle Formative period begins with the Snaketown phase of the Pioneer period and covers the Colonial and Sedentary periods. The Late Formative period corresponds to the Classic period. The slight mismatch in the two sequences is a result of looking at Hohokam prehistory from the so-called Hohokam peripheries: the Papaguería, the Tucson Basin, the upper and lower Santa Cruz River Valleys, the Gila Bend region, the San Pedro River Valley, the Safford Basin, southeastern Arizona, and the Tonto Basin.

The Early Formative period represents the time before the appearance of a distinctive Hohokam cultural tradition. In the Tucson Basin, the Early Formative period appears to have developed out of the matrix of the Late Archaic Cochise culture. Archaeological investigations in the Tucson area in particular (for example, at the Houghton Road site and other sites along the Santa Cruz River) have, over the past several years, yielded a large amount of data supporting this idea (Reid and Whittlesey 1997). The basic pattern is the appearance of plain brownware pottery, circular or bean-shaped structures, and a loose circular settlement arrangement with a centralized specialized or communal structure. Flexed inhumation is the preferred mortuary practice. This initial Formative development is followed by another that is differentiated by the appearance of red-slipped pottery, a shift in architectural style from circular to rectangular houses, and changes in the settlement structures. This second Formative development is followed by a third, marked by the appearance of line-decorated pottery, additional shifts in architectural style, and other changes in settlement structures. The Early Formative period encompasses two cultural phases in the Tucson Basin: the Agua Caliente (A.D. 150 to 550) and the Tortolita (A.D. 550 to 650). During the Agua Caliente phase, brown plainware ceramics in the form of “seed jars” and bowls were developed. The succeeding Tortolita phase represents the local expression of the redware horizon (Deaver and Ciolek-Torrello 1995). An interesting note about the Tortolita phase in the Tucson Basin is the absence of zoomorphic representations in shell and stone (Vokes 2003). These representations figure prominently in later Hohokam iconography.

The Middle Formative period is marked by the appearance of a robust and regionally influential Hohokam cultural pattern. It is evident that this cultural pattern is not indigenous to the Tucson Basin, but has its birthplace to the north on the middle Gila River. The Middle Formative period corresponds—approximately—to what archaeologists have called the late Pioneer, Colonial, and Sedentary periods of the Hohokam sequence. During the Colonial period, beginning around A.D. 800, the material culture of the Tucson Basin and Phoenix Basin Hohokam diverged, especially the ceramic artifacts: the Tucson-area Hohokam produced red-on-brown ceramics and

the Phoenix-area Hohokam produced buffwares. Populations throughout the Hohokam world apparently increased during the Colonial period, in part because irrigation technology had improved, facilitating the reliable cultivation of maize, beans, squash, and cotton (Reid and Whittlesey 1997). The practice of inhumation was replaced by cremation burial (Wilcox and Sternberg 1983), but both inhumation and cremation were practiced in the middle and upper Santa Cruz River Basins. In the Tucson Basin, large primary village sites with ballcourts and associated clusters of smaller sites became the predominant settlement pattern. The Hohokam Sedentary period (A.D. 950 to 1150) was distinguished by an overall increase in the number of settlements (many in previously uninhabited locations and environmental niches) as well as the relocation of some primary villages. In the Tucson Basin chronology, this period has been divided into the Early, Middle, and Late Rincon subphases (Wallace and Craig 1988) based primarily on changes in ceramic decoration. Pronounced changes in settlement location occurred, perhaps related to environmental factors and perhaps also in response to social upheavals. During the Early Rincon subphase, the previously strong connections between the Tucson and Gila Basins began to wane. This is seen in the diminishing quantities of imported Gila Basin pottery and an apparent concomitant increase in the amount of local pottery produced. The local pottery during the Early Rincon subphase is distinguished by a degeneration in the execution of the line work and a bolder, simplified decorative style. The beginning of the Middle Rincon subphase is marked by the mass abandonment of existing settlements and the founding of new settlements. More importantly, the ballcourts in the Tucson Basin were abandoned. This suggests a broad-scale rejection of a key aspect of Hohokam social organization. Correlating with these broad-scale shifts in settlement and population is the appearance of a distinctive pottery style and technological innovations in the indigenous pottery industry that resulted in a variety of bichromatic and polychromatic decorative expressions. These technological innovations were unmatched in the Gila Basin and are found nowhere else in the southern and central parts of Arizona. At the end of the Middle Rincon subphase, maybe after three or four generations, there was another upheaval in the Tucson Basin; again, existing settlements were abandoned and new settlements founded. The Late Rincon subphase is conventionally considered the last phase of the Sedentary period; however, many of the Late Formative period settlements were founded during this subphase. For this reason, the Late Rincon is considered the initial stage of the Late Formative period.

The Late Formative period is marked by significant shifts in population and settlement and by changes in architecture and the material culture seemingly related to a chain of events that spawned cultural and social reorganization across the deserts of central and southern Arizona: the migration of peoples from the Colorado Plateau region into these desert regions and the construction and spreading influence of the site of Paquimé in northern Chihuahua. The mass abandonment of the Middle Rincon subphase settlements across the Tucson Basin seems to have occurred sometime between A.D. 1100 and 1150. Associated with this shift in settlements is another shift in ceramic decorative styles and technologies. Rincon Polychrome (a distinctive artifact of the Middle Rincon subphase) ceased production, whereas polychrome pottery

emphasizing balanced and opposing red and black elements continued to be made in limited numbers. This particular color scheme is similar to the polychrome traditions in northern Chihuahua and to the local polychrome traditions in southeastern and south-central Arizona. Archaeologists divide the Late Formative period (also known as the Classic period) in the Tucson Basin into two phases: the Tanque Verde (A.D. 1150 to 1300) and the Tucson (A.D. 1300 to 1450). Architecture during this time changed from pithouses to rectangular multi-room surface structures with adobe walls, sometimes reinforced with posts or stones. Houses were often enclosed in rectangular adobe-walled compounds (Fish et al. 1992; Hayden 1957). At the larger villages, a new form of public architecture appeared: the earthen platform mound. Settlements became fewer but larger, possibly in response to increased conflict and the need to find protection in numbers for the purposes of mutual defense and safety (Doelle and Wallace 1991). In the Late Rincon subphase, the design styles on red-on-brown pottery became simpler and more rectilinear. This simplified style reached its apex during the Tanque Verde phase in the pottery type Tanque Verde Red-on-brown. The Tanque Verde style bears affinity to contemporary styles to the east and northeast. It is an extremely rigid style with limited variation. In the Tucson phase, Salado polychrome pottery became the primary decorated ware (Reid and Whittlesey 1997). In addition, the long-established practice of cremation burial was replaced by inhumation burial.

The Late Formative period ends sometime around A.D. 1450 with the disappearance of the Late Formative period cultures and the abandonment of the major Formative period settlements in the Tucson Basin and the rest of southern Arizona. Various competing theories have arisen to explain this cultural change. With regard to the Hohokam culture area to the north along the Salt and Gila Rivers, soil salinization as a result of intensive irrigation with alkaline water, water-borne diseases spread through canal systems, overpopulation leading to resource depletion, social and political reconfiguration, raiding and warfare, internal strife, climatic change in the form of floods or droughts—or some combination of these—have all been proposed (e.g., Abbott 2003; Ackerly 1982; Andrews and Bostwick 1997). With regard to the other areas of southern Arizona that were not dependent on a similar level of social organization or extensive networks of irrigation canals, other factors may have been at work. These factors remain as theories and are largely speculative. Little hard evidence is available to reveal what happened at the end of the Formative period. What is clear is that when the Spanish first entered the southwestern United States less than a century later, the large Late Formative period settlements across southern Arizona were long abandoned and the history of these prehistoric cultures had already passed into the folklore of the native peoples that the Spanish encountered.

Between the Hohokam collapse (circa A.D. 1450) and the arrival of the Spanish, there appear to have been significant changes in the Native American cultures in the region. Very little is known about the period before 1691, prior to the arrival of Father Kino in the Santa Cruz River Valley (Wilson 1999:12–13). The Spanish identified the people living along the Santa Cruz and San Pedro Rivers as the Sobaipuri (Doelle and Wallace 1990; Masse 1981). Differences between the material culture and lifeways of the Piman peoples and the Hohokam have led some researchers

to question whether the Hohokam were the ancestors of the O'odham or if the latter moved into the region after the Hohokam decline (Seymour 2007; Teague 1993). For instance, Sobaipuri sites tend to be subtle when compared to the more extensive Classic period Hohokam sites, containing less substantial architecture and sparser artifact assemblages with little ground stone. A lack of painted pottery, storage features, and extensive irrigation features has also been noted at these sites (Doelle 1984; Masse 1981; c.f. Seymour 2007). This is generally taken as evidence that Sobaipuri groups existed at lower population densities and were more mobile than previous Hohokam populations.

## **EUROAMERICAN OCCUPATION OF THE TUCSON BASIN**

The Historic period begins in 1691 with the establishment of the mission system in the Santa Cruz River Valley following the arrival of Jesuit missionary Eusebio Kino. Kino made his first forays into the area in 1691 (to Tumacácori) and 1692 (to San Xavier del Bac) (Bolton 1984; Wilson 1999:12–13). After a poorly documented visit to the Casa Grande area in 1694, Kino made a second *entrada* to the Tucson area in 1697 accompanied by Captain Juan Mateo Manje and some 20 soldiers and native guides (Bolton 1984; Wilson 1999:24). Manje kept well-written journals of his travels through southern Arizona and of his interactions with the native peoples (Manje 1954). Kino established thriving missions and *visitas* along the Santa Cruz River and Altar River Valleys. These include the famous village of Bac—named San Javier del Bac by Kino—as well as Busanic and Tutatamba in the Altar River Valley.

Following the death of Padre Kino in 1711, much of the mission system in the Pimería Alta fell into disrepair for the next 50 years (Bolton 1984). However, in 1757 Father Bernard Middendorf, a Jesuit, arrived in the Tucson area and re-established a Spanish presence. By the early 1770s, a mission church—San Agustín—had been built by the newly arrived Franciscans at the base of Sentinel Peak near the Sobaipuri village *sTjulsbon* (Dobyns 1964, 1976). In 1776, the Presidio of Tucson was established by an Irishman, Hugo O'Connor, along the eastern bank of the Santa Cruz River opposite the newly constructed church (Dobyns 1964). Defensive and residential structures were built in what is now downtown Tucson, and soldiers from the presidio at Tubac were moved north to Tucson to defend it against Apache raiding, which had become a serious problem in the region (Dobyns 1964). Spanish colonists and Native American farmers were attracted to the area by the farmland and water provided by the river and by the relative safety offered by the presidio (Dobyns 1976; Officer 1987). Mexico gained independence from Spain in 1821, and Mexican settlers continued to arrive and farm the Tucson Basin. The San Agustín Mission appears to have been abandoned by 1831 (Elson and Doelle 1987). However, the inhabitants of the region continued to use the Tucson Presidio for protection (Officer 1987).

The Treaty of Guadalupe-Hidalgo, signed in 1848 following the conclusion of the Mexican-American War, ceded that portion of (what is now) Arizona lying north of the Gila River to the

United States. In 1853, the Gadsden Purchase expanded Arizona from the Gila River south to the present-day Mexican border. Although the lands included in the Gadsden Purchase had been used for ranching in the past, Arizona's ranges were now open for ranching activities on a large scale. The increase in population in California since 1849 had resulted in a significant beef market, and Arizona became a thoroughfare for cattle driven from Texas to California. The U.S. Army arrived in Tucson in 1856 and founded the original Fort Lowell southeast of the old Spanish Presidio in 1866. As with the presidio, Fort Lowell's main purpose was to protect settlers from ongoing Apache raiding. In 1858, the Butterfield Overland Mail Company was formed, providing stagecoach transportation across the region (Stein 1993:95). The Southern Pacific Railroad arrived in 1880 (Myrick 1975), bringing with it a flood of Anglo-American settlers. The defeat of the Apache in 1886 with the surrender of Geronimo brought boom times to the region. Mining and cattle ranching were the main industries of growth (Sonnichsen 1987). In recent times, tourism, the health industry, the University of Arizona, and Davis-Monthan Air Force Base have fueled the growth of Tucson and the surrounding areas (Sonnichsen 1987).



## **SURVEY METHODS**

WestLand's survey methods were influenced by the nature of the expected archaeological resources and the character of the landscape. A pedestrian archaeological survey was conducted within the survey area using standard field survey procedures. Crew members aligned abreast at 20-m intervals walked parallel transects back and forth across the survey area until the entire survey area had been examined for archaeological resources. The project area was not systematically surveyed due to its having been recently surveyed by DAI. Within the previously recorded site areas, WestLand archaeologists walked non-systematic transects across portions of the sites in order to assess their surface expression and current condition. The archaeologists purposefully targeted the previously recorded features and artifact concentrations for relocation. Topographic maps, surveying compasses, global positioning system (GPS) units, and pin flags were used to ensure complete coverage.

The initial expectation was that much of the evidence of human use of the area would reside in archaeological artifacts, features, and sites and that these would probably be attributable to Formative and Protohistoric period Native American and Historic period Euroamerican land-use patterns. The field methods focused on collecting basic information about individual artifacts, features, and sites, including their age, cultural affiliation, and presumed function. Basic metric data were also recorded.

In addition, the survey methods were influenced by the expectation that sites are often masked or obscured by ongoing modern land use. A review of historical maps was performed prior to the field survey to help identify Historic period features that might still exist as archaeological sites. These potential finds were then "ground-proofed" by the archaeological survey team. Field observations were recorded on standardized forms and later entered into WestLand's Archaeological Information Management System for analysis.

### **ARIZONA STATE MUSEUM SITE CRITERIA**

Evidence of past human activities exists on the landscape in objects, sites, districts, buildings, and structures. The archaeological survey anticipated finding three categories of archaeological resources: (1) artifacts, (2) artifact scatters, and (3) features. The first two categories consist of portable objects left behind on the landscape by various activities. The third is made up of non-portable purposeful constructions, excavations, and deposits.

The ASM provides guidelines that identify what is minimally considered an archaeological site. Upon initial discovery of an archaeological artifact, artifact scatter, or feature, the archaeological survey team converged on that find to determine whether other associated archaeological materials were present. Once fully defined, the ASM guidelines (1995) were applied to determine whether that archaeological find should be designated and recorded as an archaeological site. According to the ASM, a site is any:



1. Physical remains of past human activity that are at least 50 years old.

Additionally, sites should consist of at least one of the following:

2. 30+ artifacts of a single class (i.e., 30 sherds, 30 lithics, 30 tin cans) within an area 15 m (50 ft) in diameter, except when all pieces appear to originate from a single source (i.e., one ceramic pot, one core, one glass bottle).
3. 20+ artifacts which include at least 2 classes of artifact types (i.e., sherds, ground stone, nails, glass) within an area 15 m (50 ft) in diameter.
4. One or more archaeological features in temporal association with any number of artifacts.
5. Two or more temporally associated archaeological features without artifacts.

Resources satisfying these minimum criteria were designated as archaeological sites and recorded as specified in the ASM site recording manual (ASM 1993). Archaeological resources that did not meet these criteria were designated as non-site isolated occurrences.

Site recording generates the following records: written descriptions, photographs, and electronic data collection with a Trimble Geoexplorer. A primary site datum (PSD) marked with an aluminum tag is placed at each site. UTM coordinates are electronically recorded for each PSD with sub-meter accuracy and initialized to the NAD83 CONUS datum. Site boundaries are established by the distribution of artifacts and features. Within each archaeological site, the locations of any features or diagnostic tools are mapped. For each newly discovered site, an ASM site number is obtained from the Arizona State Museum Site Files Office (University of Arizona, Tucson) and an ASM site card is completed and returned to the ASM for entry into their site files records and database (AZSITE).

## **ISOLATED OCCURRENCES**

This category includes all archaeological resources that are not identified as archaeological sites. The location of each isolated occurrence is recorded with a hand-held GPS unit. To the extent possible, each isolate is categorized into a conventional typological category and attributed to an archaeological culture and chronological period.

Isolated occurrences can be individual artifacts, artifact scatters, or features. By definition, these are considered archaeological when they are more than 50 years old. Many artifacts of glass, metal, and synthetic material lack clear diagnostic characteristics to indicate their age. Because these are abundant around modern settlements and in areas frequently visited for hunting, camping, and other forms of recreation, it is impractical to map and record all glass, metal, and

synthetic materials. These industrial-age artifacts are identified as archaeological resources only when clear diagnostic evidence establishes that they are over 50 years old. If these artifacts are related to the defined themes of Euroamerican land use, then items that can be linked specifically to these activities are mapped and documented at the discretion of the field director in consultation with the principal investigator. Similarly, many individual man-made features are present on the landscape whose ages are uncertain. Some commonly encountered examples are cairns, rock clusters, small rock rings, mining features, ranching features, trails, and roads. Even though the age of these features may be ambiguous, they are related to the theme of Euroamerican land use and are mapped and recorded. Some of these may be diverse groups of artifacts and features that meet all the ASM criteria for an archaeological site except for the determination of age. These are identified as isolated occurrences because their age is unknown.

## **SURVEY FINDINGS**

No new sites were identified during the field survey of the survey area. Two isolated occurrences of cultural material were recorded. WestLand re-assessed the three previously recorded sites located within the broader project area. This re-assessment and a description of the two isolated occurrences are presented below.

## SITE DESCRIPTIONS

### AZ AA:16:330(ASM)

**OTHER SITE NUMBER:** n/a

**WESTLAND FIELD SITE NUMBER:** WRI 7

**CULTURAL AFFILIATION:** Archaic, Hohokam

**AGE:** Archaic (8500 B.C.–A.D. 1); Middle to Late Formative (A.D. 1000–1450)

**TYPE:** Feature and artifact scatter: resource site

**DIMENSIONS:** 530 × 200 m (77,300 square meters)

**ELEVATION:** 2,590 feet amsl

**NATIONAL REGISTER OF HISTORIC PLACES ELIGIBILITY RECOMMENDATION:** Determined eligible (d) by the Arizona SHPO in 2005

**SITE DESCRIPTION:** AZ AA:16:330(ASM) is an extensive prehistoric artifact scatter with rock features that is interpreted as a lithic resource procurement and processing site. Here, locally available “Buff’s Chert” was exploited and used in prehistoric lithic tool production. Ceramic and ground stone artifacts are also present. The site is located on the northeastern slope and toe of a large volcanic hill and the adjoining alluvial flats. The vegetation in the site area is moderately dense and consists mainly of mesquite, creosote, acacia, saguaro, and cholla—particularly in the western portion of the site on the volcanic hill slope. Sediments on the slope are rocky and shallow with areas of exposed bedrock. On the adjoining flats, sediments are sandy with dense gravels and cobbles (Photo 2; Figure 4).



**Photo 2. Overview of AZ AA:16:330(ASM), facing southwest**

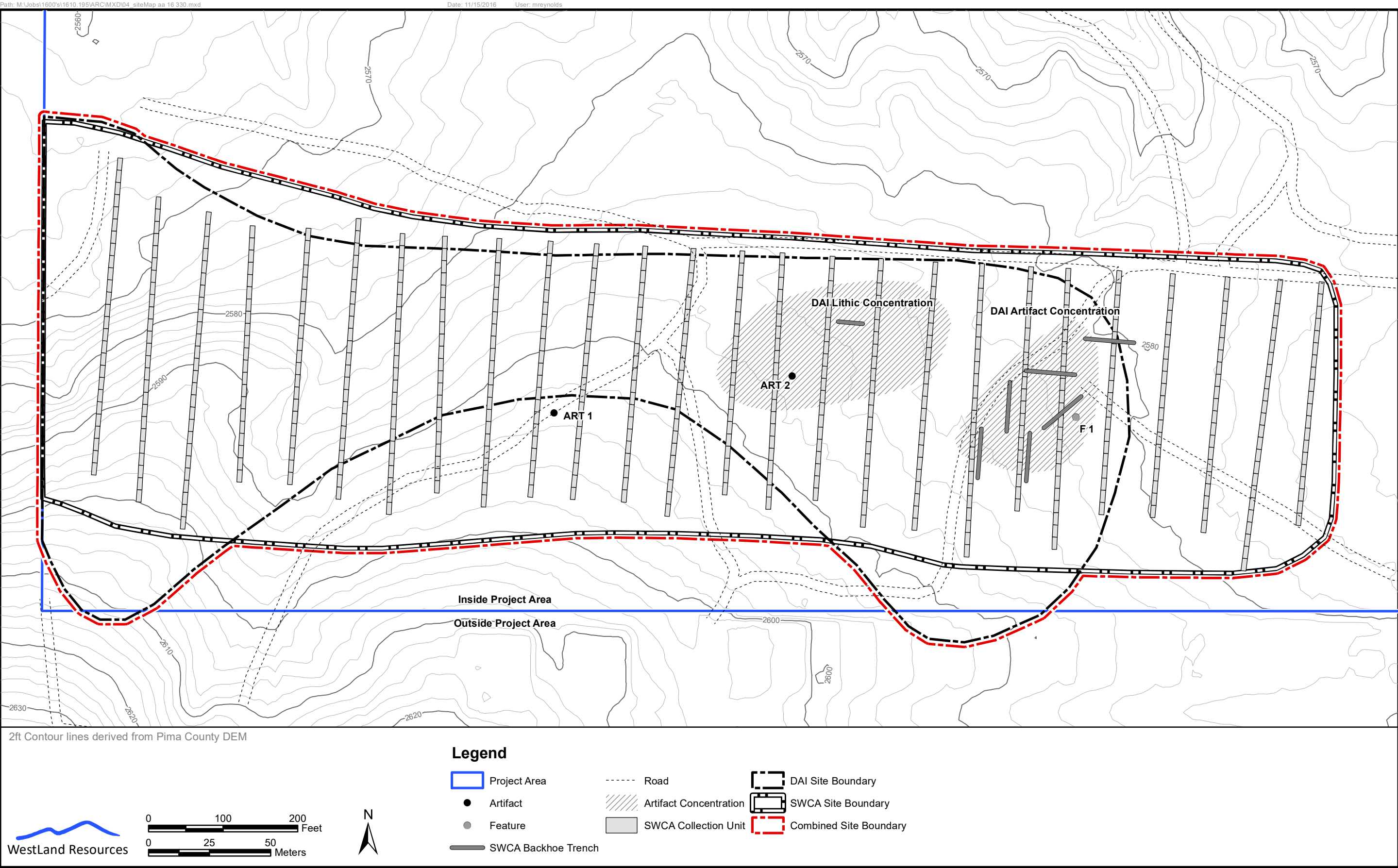


Figure 4. AZ AA:16:330(ASM)



WestLand's field-check at AZ AA:16:330 (ASM) revealed a moderately dense artifact scatter consisting mainly of dark gray-brown "Buff's Chert" lithic debitage fragments, along with debitage composed of pink, cream, black-and-white banded, and white-colored chert, rhyolite, silicified mudstone, and other materials. One gray-speckled rhyolite projectile point fragment was identified and point-located as ART 1 (**Photo 3**). A light scatter of mainly plain-ware ceramics was noted across the site area, and one decorated sherd was identified and point-located as ART 2 (**Photo 4**). This sherd is either Rincon or Tanque Verde Red-on-brown type, indicating a Middle to Late Formative period occupation at the site. WestLand identified one possible feature at AZ AA:16:330 (ASM), Feature 1, a loose alignment of cobbles partially embedded in the ground surface. This feature may correspond to features previously identified within the site (see below). A light scatter of historical artifacts was found within the site area amidst more recent trash. Among the historical items are soda bottles and tableware that were manufactured during the 1940s through the 1960s.



**Photo 3. ART 1, a projectile point fragment**



**Photo 4. ART 2, a Rincon or Tanque Verde variety Red-on-brown sherd**

Overall, the site is in fair condition. Several dirt roads and ATV tracks cross the site, and the El Paso Natural Gas pipeline was installed historically along the site's northern edge. Modern and historical trash is scattered throughout. Previous archaeological testing activities were the source of additional disturbance (see below), particularly in the east-central site area where indications of mechanical ground disturbance were noted.

**PREVIOUS ARCHAEOLOGICAL WORK:** The site was initially identified during the Presidio Gardens survey conducted by the ASM (Billings 1989). The original recorders described it as a small (20-m-diameter) sherd and lithic scatter along with two depressions and a rock cairn (Billings 1989). DAI re-assessed the site during their Belnor Vista Survey in 2002 and greatly expanded the site area to include a dense lithic concentration, a ceramic and lithic concentration (see **Figure 4**), and a diffuse scatter of ceramic and lithic artifacts. DAI did not relocate the features

described by the original recorders, but they did locate a small rock concentration of unknown function and temporal association (Brack 2002). This feature was identified in the approximate location of Feature 1 identified by WestLand during the current survey (see Figure 4).

Subsequently in 2002, SWCA conducted an archaeological testing program at the site that consisted of systematic surface artifact collection; the point-location and collection of diagnostic artifacts; the excavation of two rock features; and the excavation of seven backhoe trenches to determine the presence of subsurface features (Tucker 2005:6–9). SWCA's surface artifact collection was conducted using 2-m-wide transects spaced 20 m apart oriented north-south across the site area from which all visible artifacts were collected, for a total of more than 12,000 individual artifacts. Forty-six diagnostic artifacts were point-located and collected from across the site area consisting of 27 decorated ceramic sherds, 13 flaked stone tools, 3 projectile points, 1 ground stone fragment, and 2 shards of historical bottle glass. SWCA found that artifacts were spatially concentrated in the central and eastern portions of the site (see Tucker 2005:6; Figure 3), mirroring DAI's findings during their survey.

SWCA conducted exploratory excavations on two rock features identified at the site. SWCA's Feature 1 consisted of 18 partially embedded cobbles arranged in a loose alignment. A 1-by-1-m unit was excavated in one 10-cm level. Sediments around the feature consisted of loose silt and decomposed rhyolite bedrock. No artifacts were identified below the ground surface, although additional unmodified cobbles were found there. SWCA interpreted this as a natural non-cultural feature. Feature 2 consisted of 19 partially embedded cobbles arranged in a loose curved alignment. A 1-by-2-m unit was established around the feature, which was excavated in a single 10-cm level. The sediments here were similar to the other feature and consisted of loose silt and decomposed rhyolite bedrock. No staining or charcoal was noted in the sediments. One subsurface artifact, a metate fragment, was identified during the excavation of the unit. Due to the absence of staining, the lack of additional artifacts, and no other indications of cultural activity, SWCA interpreted the feature as a natural accumulation of cobbles that had been partially buried by aeolian and alluvial sediments. The presence of the ground stone near the feature was seen as purely coincidental (Tucker 2005:6–9). SWCA's Feature 2 appears to correspond to Feature 1 recorded during the current survey and previously by DAI. SWCA's Feature 1 was not relocated.

In order to determine the presence of subsurface features, SWCA excavated seven 20-m-long backhoe trenches during their testing efforts. The trenches were placed in the east-central portion of the site within the highest concentration of artifacts. The trenches were excavated to depths of between 55 and 80 cm below the ground surface before hardpan caliche or bedrock was encountered. No features or artifacts were identified in any of the trenches (Tucker 2005:6–8).

**INTERPRETATION:** AZ AA:16:330(ASM) is interpreted as a lithic procurement and processing site that may have also seen short-term or seasonal habitation. The presence of ceramic sherds—



which, according to SWCA’s artifact analysis, include both jar and bowl forms, along with one worked sherd (Smith 2005:10–12)—and a few ground stone implements indicates that additional activities such as food preparation and consumption may have occurred at the site, although only for a short duration. Temporally diagnostic ceramics identified by WestLand and the previous recorders are indicative of a Middle to Late Formative period Hohokam occupation; however, it is also likely that the site’s lithic resources were used earlier in prehistory by Archaic groups. This is supported by the Archaic period projectile point types identified and collected during archaeological testing at the site (Hesse 2005:12–25).

**ARIZONA/NATIONAL REGISTER OF HISTORIC PLACES ELIGIBILITY EVALUATION:** AZ AA:16:330(ASM) was determined eligible for inclusion in the A/NRHP under Criterion (d) by the Arizona SHPO in 2005 following recommendations by DAI and SWCA. SWCA’s testing program examined the role of AZ AA:16:330(ASM) as a Buff’s Chert procurement and processing locale, although their trenching methods identified no subsurface features and their excavation of two possible rock alignments indicated that these features were natural. Surface collection at the site sampled approximately 10 percent of the site’s artifact assemblage. SWCA recommended that their work at AZ AA:16:330(ASM) was sufficient to exhaust the site’s research potential (Tucker 2005:30).

## AZ AA:16:462(ASM)

**OTHER SITE NUMBER:** n/a

**WESTLAND FIELD SITE NUMBER:** WRI 7

**CULTURAL AFFILIATION:** Euroamerican

**AGE:** Historic, ca. 1943–present

**TYPE:** Linear site: road

**DIMENSIONS:** Portion within project area:  $642 \times 4$  m (2,568 square meters)  
Total site area:  $846 \times 4$  m (3,384 square meters)

**ELEVATION:** 2,550 feet amsl

**NATIONAL REGISTER OF HISTORIC PLACES ELIGIBILITY RECOMMENDATION:** Determined ineligible by the Arizona SHPO in 2005

**SITE DESCRIPTION:** AZ AA:16:462(ASM) is a historical unimproved two-track dirt road that is oriented southwest to northeast across the project area ([Photo 5](#); see [Figure B.1](#) [Appendix B]). The road measures up to 4 m wide and is incised 20 to 50 cm into the ground surface. It transects the low hills of the rolling landscape and is surrounded by vegetation consistent with the Arizona Upland subdivision of the Sonoran Desertscrub biotic community (Brown 1994). Species include creosote, mesquite, cholla, low shrubs, and grasses. The road is truncated by residential developments at both its western and eastern ends.



**Photo 5. Overview of AZ AA:16:462(ASM), facing east**

**PREVIOUS ARCHAEOLOGICAL WORK:** AZ AA:16:462(ASM) was initially recorded during DAI's 2002 survey of the Belnor Vista project area (Brack 2002:22–23). DAI noted that the road roughly approximated a route labeled “From Tucson to Altar” on the 1871 GLO plat. They also noted that the road was incised into the ground surface—unlike the other roads in the project area—and that this was not due to water erosion, suggesting long-term use, perhaps since 1871. (The correlation between these two roads could not be made with any degree of certainty, however [Brack 2002:22].) DAI noted a scatter of 1930s–1960s trash along the roadway and in the surrounding area. They therefore concluded that while the road might possibly represent a late nineteenth century route, it certainly pre-dated 1950.

Subsequently, in 2002, SWCA conducted archaeological testing on the road segment (Tucker 2005:25). The testing program consisted of re-surveying the road to identify additional road-associated artifacts and features as well as preparing a detailed historic context for the road (see Steely 2005:25–30).

**INTERPRETATION:** AZ AA:16:462(ASM) is a historical road segment, some iteration of which appears on an 1871 GLO plat of the area. SWCA postulated that a route between the Santa Cruz River Valley and the Altar Valley in Arizona was probably used during the Spanish and Mexican periods, although many alternative paths likely existed. There is no clear evidence that AZ AA:16:462(ASM) specifically was in use during that period. By 1850, a route from the Altar Valley to the Santa Cruz River was in use by Pedro Aguirre of the Buenos Aires Ranch. While the route used by Aguirre is shown on the 1871 GLO plat, the scale and precision of that map make correlation with the current expression of AZ AA:16:462(ASM) difficult. It is likely, however, that a route that followed the Santa Cruz River Valley north from Arivaca would have had a more reliable water source and thus would have been preferred to the more northerly and remote route of the Tucson to Altar road. In 1892, what is now Arizona State Route 86, or the Ajo-Tucson Highway, was designated the official route from Tucson to Sasabe and areas to the west, and from that time onward the Tucson to Altar Road likely fell into disuse (Tucker 2005:30). Routes through the project area that better match the road segment recorded as AZ AA:16:462(ASM) are shown on both the 1943 and 1957 editions of the San Xavier Mission USGS 15' quadrangle. On both quadrangle maps, this route is keyed as an unimproved dirt road. The 1957 map labels the road “Sikes Road” and shows it extending to a series of cattle tanks southwest of the project area, suggesting that it was used by local ranchers later in its history.

**ARIZONA/NATIONAL REGISTER OF HISTORIC PLACES ELIGIBILITY EVALUATION:** AZ AA:16:462(ASM) was determined ineligible for inclusion in the A/NRHP by the Arizona SHPO in 2005 following recommendations made by SWCA as a result of their archaeological testing and archival research. SWCA stated that the site lacked integrity of location, setting, workmanship, design, and materials (Tucker 2005:30).



## AZ CC:16:24(ASM) – El Paso Natural Gas Pipeline I 100

**OTHER SITE NUMBER:** n/a

**WESTLAND FIELD SITE NUMBER:** WRI 8

**CULTURAL AFFILIATION:** Euroamerican

**AGE:** Historic (A.D. 1947–present)

**TYPE:** Utility: natural gas pipeline

**DIMENSIONS:** Portion within survey area: 615 × 23 m (11,776 square meters)  
Total site length is ~1,125 km from Eunice, New Mexico, to Blythe, California.

**ELEVATION:** 2,580 feet amsl

**NATIONAL/ARIZONA REGISTER OF HISTORIC PLACES ELIGIBILITY RECOMMENDATION:** While natural gas pipelines have been ruled exempt from National Historic Preservation Act Section 106 review (ACHP 2002), the Arizona SHPO determined AZ CC:16:24(ASM) eligible under Criterion (d) as recently as 2012.

**SITE DESCRIPTION:** AZ CC:16:24(ASM) designates the El Paso Natural Gas Corporation's (EPNG's) Mainline 1100, part of the EPNG California system. This line, which extends west from Eunice, New Mexico, to the Colorado River at Blythe, California, was constructed after World War II to meet California's growing energy needs (Steely and Newsome 2008:E-32). Originally a 20-inch-diameter pipeline, this in-use line is currently 26 inches and services much of Tucson's natural gas needs. On the ground surface, the pipeline is marked by a 6-m-wide graded-and-drained dirt access road with warning paddles and signs interspersed along its length. (Photo 6; see Figure B.1 [Appendix B]).



**Photo 6. Overview of AZ CC:16:24(ASM), facing east**

The pipeline intersects the southern portion of the project area. Its path through the project area and vicinity is relatively flat as it avoids the major volcanic hills of this portion of the Tucson Mountains. The vegetation in the area is characteristic of the Arizona Upland subdivision of the Sonoran Desertscrub biotic community (Brown 1994). Dominant vegetation includes mesquite, creosote, cholla, various shrubs, and seasonal grasses.

**PREVIOUS ARCHAEOLOGICAL WORK:** Through time, AZ CC:16:24(ASM) has been recorded by a number of archaeological projects, the most pertinent to the survey area being a survey along Valencia Road by EcoPlan Associates (Fahrni and Tucker 2006). Recently, SWCA prepared a historic context and compiled an NRHP Multiple Property Documentation Form for EPNG's mainline pipelines across the southwestern United States (Steely and Newsome 2008). These projects and the historic context describe EPNG Pipeline 1100 as an in-use natural gas pipeline with surface features, including the access and maintenance road along the alignment (ASM site card; Steely and Newsome 2008). WestLand found the segment of the gas pipeline that intersects the project area to be as described by its previous recorders. The line is in use and has been upgraded over time.

**INTERPRETATION:** AZ CC:16:24(ASM) is EPNG Mainline 1100, part of the utility's California System that extends from Eunice, New Mexico, to Blythe, California. The line was constructed in 1947 to meet California's increasing energy demands after World War II (Steely and Newsome 2008:E-32). The construction of the alignment set records for its speed, taking just under a year to complete the 700-mile pipeline (Steely and Newsome 2008:E-33). The efficiency of this construction was due, in part, to EPNG's "two decades of pipeline construction experience and a recent wartime culture of big projects completed quickly" as well as to new technologies developed for the project (Steely and Newsome 2008:E-33). These new technologies included innovative pipe-welding and pipe-bending methods and the use of "ripper machines" capable of laying between 15,000 and 16,000 feet of pipeline per day (Steely and Newsome 2008:E-32–E-33). These technologies remain in use to this day.

**ARIZONA/NATIONAL REGISTER OF HISTORIC PLACES ELIGIBILITY EVALUATION:** While natural gas pipelines have been ruled exempt from National Historic Preservation Act Section 106 review (ACHP 2002), the Arizona SHPO determined AZ CC:16:24(ASM) eligible for inclusion in the A/NRHP under Criterion (d) as recently as 2012 (ASM site card).

The proposed project will avoid disturbance to this natural gas pipeline.

## ISOLATED FINDS

Two isolated occurrences were identified during WestLand's fieldwork in the survey area. Both represent historical artifact disposal.

**IO 1** is an all-steel cone-top beer can. This item is near complete, with the exception of some dents and bullet holes. This type of can was manufactured between 1935 and 1955 (Maxwell 1993) (**Photo 7**).



**Photo 7. IO 1, a cone-top beer can**

**IO 2** is a scatter of aqua bottle glass. Approximately five fragments representing two different bottles were identified in a 10-m-diameter area. The scatter includes one plain aqua body shard and two red and white applied-color-label body shards. One of these reads “ONE PINT” and the other “RETURN FOR DEPOSIT / DR PEPPE[...].” Two bottle base fragments are also present. One of these is un-stippled and contains no makers’ marks; the other is stippled and has the maker’s mark “[stylized G over upside-down stylized G],” indicating manufacture by the Glass Container Corp. between 1967 and 1987 (Lockhart et al. 2015).



## RESEARCH SYNTHESIS

WestLand's field survey and site-check resulted in the re-assessment of three previously known cultural resource sites and the identification of two historical isolated occurrences. The surface expression of the sites and their current condition met WestLand's prior expectations based on the known archaeological work that has been conducted in the project area.

One site, AZ AA:16:330(ASM), represents prehistoric Native American lithic procurement and production activities, particularly the exploitation of the locally available Buff's Chert. The temporally diagnostic artifacts point to several periods of occupation at the site, including during the Archaic period (8500 B.C.–A.D. 1) (Hesse 2005:24) and the Middle to Late Formative period (A.D. 1000–1450).

Two sites and both isolated occurrences represent Historic period Euroamerican activities in the project area. One site, AZ AA:16:462(ASM), is a road that was in use as early as 1943 and possibly established by 1871 or earlier. AZ CC:16:24(ASM) is a 1947 El Paso Natural Gas pipeline. The two isolated occurrences—a beer can and the remains of two soda bottles—represent intermittent waste disposal possibly related to recreation in the project area.



## MANAGEMENT SUMMARY

Tucson Electric Power retained WestLand to conduct a cultural resources inventory of a parcel of land in advance of the proposed construction of a solar power generating facility. The project is called the “15 MW Project,” named for the planned first phase, which will generate 15 megawatts of power. The property consists of 90.4 acres (the project area) located southwest of Tucson in unincorporated Pima County near the intersection of Valencia Road and Camino de la Tierra. Survey of the project area (75.1 acres) was conducted over 10 years ago, in 2002, but still meets the current standards for a cultural resources inventory. During the current project, WestLand conducted a full-coverage field survey of the remaining 15.3 acres of the property (the survey area), and field-checked the three previously recorded sites in the project area.

WestLand’s cultural resources inventory of the survey area and re-assessment of the project area resulted in the evaluation of three previously recorded archaeological sites and the identification of two newly recorded isolated occurrences of cultural material. Recommendations are provided as follows:

- AZ AA:16:330(ASM) was determined eligible for inclusion in the Arizona and National Registers of Historic Places under Criterion (d) by the Arizona State Historic Preservation Office in 2005. In 2002, the site underwent archaeological testing conducted by SWCA during which sufficient data were collected to mitigate the adverse effects of planned development on the site (Tucker 2005). WestLand recommends that this previous work is sufficient to have mitigated any adverse impacts to the site by the proposed TEP 15 MW project and that no further treatment is recommended.
- AZ BB:13:462(ASM) has been determined ineligible for inclusion in the A/NRHP by the Arizona SHPO.
- AZ CC:16:24(ASM), an El Paso Natural Gas pipeline, is exempt from National Historic Preservation Act Section 106 review following a 2002 ruling by the Advisory Council on Historic Preservation. However, the Arizona SHPO determined the site eligible for inclusion in the A/NRHP as recently as 2012. For this project, WestLand defers to the Arizona SHPO determination; however, the proposed project will avoid disturbance to this natural gas pipeline and no further work is recommended for it.
- The two isolated occurrences are recommended ineligible for inclusion in the A/NRHP.

WestLand also provides the general recommendation that all ground-disturbing activities have the potential to unearth archaeological sites and human remains, and that all such discoveries should be treated in accordance with Arizona Revised Statute §41-844 if found on Pima County land and with Arizona Revised Statute §41-865 if found on private land.

## REFERENCES

Abbott, David R. (ed.)

2003 *Centuries of Decline during the Hohokam Classic Period at Pueblo Grande*. University of Arizona Press, Tucson.

Ackerly, Neal W.

1982 Irrigation, Water Allocation Strategies, and the Hohokam Collapse. *Kiva* 47:91–106.

Advisory Council on Historic Preservation (ACHP)

2002 Exemption Regarding Historic Preservation Review Process for Projects Involving Historic Natural Gas Pipelines. *Federal Register* 67(66):1–2.

Agenbroad, Larry D.

1967 The Distribution of Fluted Points in Arizona. *The Kiva* 32:113–120.

Altschul, Jeffrey H.

1994 *From North to South: Shifting Sociopolitical Alliances during the Formative Period in the San Pedro Valley*. Paper presented at the Spring meeting of the Arizona Archaeological Council, April 8 and 9, Tucson.

Andrews, John P., and Todd W. Bostwick

1997 *Desert Farmers at the River's Edge: The Hohokam and Pueblo Grande*. Pueblo Grande Museum and Archaeological Park, Phoenix.

Arizona Geological Survey

2016 *Geologic Map of Arizona*. Available at: <http://data.azgs.az.gov/geologic-map-of-arizona/>. Accessed November 14, 2016.

Arizona State Museum (ASM)

1993 *Archaeological Site Recording Manual, Version 1.1*. Arizona State Museum, University of Arizona, Tucson.

1995 *Revised Site Definition Policy*. Arizona State Museum, University of Arizona, Tucson.

Ayres, James E.

1970 Two Clovis Fluted Points from Southern Arizona. *The Kiva* 35:121–124.

Billings, J. R. “Buff”

1989 *Site Card for AZ AA:16:330(ASM)*. On file. Arizona State Museum, University of Arizona, Tucson.

Bolton, H. E.

- 1984 *Rim of Christendom: A Biography of Eusebio Francisco Kino, Pacific Coast Pioneer*. University of Arizona Press, Tucson. Originally published by the Macmillan Company in 1936.

Bowen, Thomas

- 1972 *A Survey and Re-evaluation of the Trincheras Culture, Sonora, Mexico*. Manuscript on file. Arizona State Museum Library Archives AT-95-85. University of Arizona, Tucson.

Brack, Michael L.

- 2002 *A Cultural Resources Assessment of the Belnor Vista Development, Valencia Road and Camino de la Tierra, Pima County, Arizona*. Project Report No. 02-156. Desert Archaeology, Inc., Tucson.

Brown, David E. (ed.)

- 1994 *Biotic Communities of the American Southwest*. University of Arizona Press, Tucson.

Dean, Jeffrey S.

- 1991 Thoughts on Hohokam Chronology. In *Exploring the Hohokam. Prehistoric Desert Peoples of the American Southwest*, edited by G. J. Gumerman, pp. 61–149. Amerind Foundation New World Studies Series No. 1. University of New Mexico Press, Albuquerque.

Deaver, William L., and Richard Ciolek-Torrello

- 1995 Early Formative Period Chronology for the Tucson Basin. *The Kiva* 60(4):481–530.

Desert Archaeology

- 2009 *Completion of Compliance-related Archaeological Fieldwork at the Site of Las Capas (AZ AA:12:111 [ASM]) and Related Canals (AZ AA:12:753 [ASM]) on the Grounds of the Ina Road Regional Wastewater Reclamation Facility, Pima County, Arizona*. Desert Archaeology, Inc., Tucson.

Diehl, Michael W. (ed.)

- 2005 *Subsistence and Resource Use Strategies of Early Agricultural Communities in Southern Arizona*. Anthropological Papers No. 34. Center for Desert Archaeology, Tucson.

DiPeso, Charles C.

- 1956 *The Upper Pima of San Cayetano del Tumacacori: An Archaeohistorical Reconstruction of the O'otam of Pimería Alta*. Publication No. 7. Amerind Foundation, Dragoon.

Dobyns, Henry F.

- 1964 *Lance Ho! The Containment of the Western Apaches by the Royal Spanish Garrison at Tucson*. Editorial Estudios Andinos, Lima, Peru.

- 1976 *Spanish Colonial Tucson: A Demographic History*. University of Arizona Press, Tucson.

Doelle, William H.

- 1984 The Tucson Basin during the Historic Period. *The Kiva* 49:195–211.

Doelle, William H., and Henry D. Wallace

1984 The Tucson Basin during the Protohistoric Period. *Kiva* 49(3–4):195–211.

1990 The Transition to History in Pimería Alta. In *Perspectives on Southwestern Prehistory*, edited by P. E. Minnis and C. L. Redman, pp. 239–257. Westview Press, Boulder.

1991 The Changing Role of the Tucson Basin in the Hohokam Regional System. In *Exploring the Hohokam: Prehistoric Desert People of the American Southwest*, edited by G. J. Gumerman, pp. 279–246. University of New Mexico Press, Albuquerque.

Elson, Mark D., and William H. Doelle

1987 *Archaeological Assessment of the Mission Road Extension: Testing at AZ BB:13:6(ASM)*. Technical Report No. 87-6. Institute for American Research, Tucson.

Fahrni, Grant, and David B. Tucker

2006 *Supplemental Cultural Resources Survey of Selected Parcels in Support of Proposed Road Improvements along West Valencia Road, Pima County, Arizona*. Cultural Resources Survey Report No. 06-921. EcoPlan Associates, Inc., Tucson.

Faught, Michael K., and Andrea K. L. Freeman

1998 Paleoindian Complexes of the Terminal Wisconsin and Early Holocene. In *Paleoindian and Archaic Sites in Arizona*, edited by Jonathan B. Mabry. Technical Report 97-7. Center for Desert Archaeology, Tucson.

Fish, Suzanne K., Paul R. Fish, and John H. Madsen

1992 *The Marana Community in the Hohokam World*. Anthropological Papers of the University of Arizona No. 56. University of Arizona Press, Tucson.

Freeman, Andrea

1999 Status of the Middle Archaic in Southern Arizona. In *Excavation in the Santa Cruz River Floodplain: The Middle Archaic Component at Los Pozos*. Anthropological Papers No. 20. Center for Desert Archaeology, Tucson.

Gilpin, Dennis, and David A. Phillips, Jr.

1998 *The Prehistoric to Historic Transition Period in Arizona, circa A.D. 1519 to 1692*. Archaeological Report No. 97-4. SWCA, Flagstaff.

Gladwin, Harold S.

1965 *Excavations at Snaketown: Material Culture*. University of Arizona Press, Tucson.

Gladwin, Harold S., Emil W. Haury, E. B. Sayles, and Nora Gladwin

1937 *Excavations at Snaketown: Material Culture*. Medallion Papers No. 25. Gila Pueblo, Globe.

Gregory, David A.

2001 *Excavations in the Santa Cruz River Floodplain: The Early Agricultural Period Component at Los Pozos*. Anthropological Papers No. 21. Center for Desert Archaeology, Tucson.

Haury, Emil W.

1975 *The Stratigraphy and Archaeology of Ventana Cave* (second printing). University of Arizona Press, Tucson.

1976 *The Hohokam: Desert Farmers and Craftsmen*. University of Arizona Press, Tucson.

1978 Concluding Thoughts. In *The Hodges Ruin: A Hohokam Community in the Tucson Basin*, by Isabel T. Kelly, pp. 126–128. Anthropological Papers No. 30. University of Arizona Press, Tucson.

Hayden, Julian D.

1957 *Excavations, 1940, at University Indian Ruin*. Southwestern Monuments Association Technical Series Vol. 5. Gila Pueblo, Globe.

Heidke, James M.

2005 Early Agricultural Period Pottery from Las Capas and Los Pozos. In *Material Cultures and Lifestyles of Early Agricultural Communities in Southern Arizona*, edited by R. Jane Sliva, pp. 171–206. Anthropological Papers No. 35. Center for Desert Archaeology, Tucson.

Henderson, T. Kathleen

2002 Chronology. In *The Grewe Archaeological Research Project, Volume 1: Project Background and Feature Descriptions*, edited by Douglas B. Craig, pp. 163–208. Anthropological Papers No. 99-1. Northland Research, Inc., Flagstaff and Tempe.

Hesse, India S.

2005 Lithic Analysis. In *Archaeological Investigations in the Belnor Vista Development, Southwest of Tucson, Pima County, Arizona*. Prepared by David B. Tucker, pp. 12–25. Cultural Resources Report No. 05-93. SWCA, Inc., Tucson.

Huckell, Bruce B.

1982 *The Distribution of Fluted Points in Arizona: A Review and an Update*. Arizona State Museum Archaeological Series No. 145. University of Arizona, Tucson.

1984 The Paleo-Indian and Archaic Occupation of the Tucson Basin: An Overview. *The Kiva* 49(3–4):133–145.

1996 The Archaic Prehistory of the North American Southwest. *Journal of World Prehistory* 10(3):305–372.

Lockhart, Bill, Bill Lindsey, Carol Serr, Pete Schultz, and Bear Schreiver

2015 *Manufacturers Marks and Other Logos on Glass Containers*. Compiled by the Bottle Research Group, Society for Historical Archaeology. Electronic document. Available from <https://sha.org/bottle/pdffiles/GLogoTable.pdf>. Accessed on November 17, 2016.



Mabry, Jonathan B.

1998 *Paleoindian and Archaic Sites in Arizona*. Technical Report 97-7. Center for Desert Archaeology, Tucson.

2005 Diversity in Early Southwestern Farming and Optimization Models of Transition to Agriculture. In *Subsistence and Resource Use Strategies of Early Agricultural Communities in Southern Arizona*, edited by Michael W. Diehl. Anthropological Papers No. 34. Center for Desert Archaeology, Tucson.

2008 *Las Capas: Early Irrigation and Sedentism in a Southwestern Floodplain*. Anthropological Papers No. 28. Center for Desert Archaeology, Tucson.

Mabry, Jonathan B., and Michael K. Faught

1998 Archaic Complexes of the Early Holocene. In *Paleoindian and Archaic Sites in Arizona*, edited by Jonathan B. Mabry. Technical Report 97-7. Center for Desert Archaeology, Tucson.

Manje, Juan Mateo

1954 *Unknown Arizona and Sonora 1693–1721. From the Francisco Fernandez del Castillo Version of Luz de Tierra Incognita*. Translated by Harry J. Karns and Associates. Arizona Silhouettes, Tucson.

Masse, W. Bruce

1981 A Reappraisal of the Protohistoric Sobaipuri Indians of Southeastern Arizona. In *The Protohistoric Period in the North American Southwest, A.D. 1450–1700*, edited by David R. Wilcox and W. Bruce Masse, pp. 28–56. Anthropological Research Papers No. 24. Arizona State University, Tempe.

Maxwell, D. B. S.

1993 Beer Cans: A Guide for the Archaeologist. *Historical Archaeology* 27(1):95–113.

McGuire, Randall H., and María Elisa Villalpando C.

1993 *An Archaeological Survey of the Altar Valley, Sonora, Mexico*. Archaeological Series No. 184. Arizona State Museum, University of Arizona, Tucson.

Merrill, William L., Robert J. Hard, Jonathan Mabry, Gayle T. Fritz, Karen R. Adams, John R. Roney, and A. C. MacWilliams

2009 The Diffusion of Maize to the Southwestern United States and its Impact. *Proceedings of the National Academy of Sciences of the United States of America* 106(50):21019–21026.

Myrick, David P.

1975 *Railroads of Arizona, Volume I: The Southern Lines*. Howell North Books, Berkeley.

Neily, Robert B.

1985 *The Snowflake-Redonda Project: An Intensive Archaeological Survey in the Upper Little Colorado River Area of East-Central Arizona*. Cultural Resource Management Division, Arizona State Museum, University of Arizona, Tucson.

North, Chris D., Michael S. Foster, John M. Lindly, and Douglas R. Mitchell

2005 Newly Discovered Clovis Point from the Phoenix Basin and an Update on Arizona Clovis Point Attributes. *The Kiva* 70(3):293–307.

Officer, James

1987 *Hispanic Arizona*. University of Arizona Press, Tucson.

Reid, Jefferson, and Stephanie Whittlesey

1997 *The Archaeology of Ancient Arizona*. University of Arizona Press, Tucson.

Sayles, E. B.

1945 *The San Simon Branch, Excavations at Cave Creek in the San Simon Valley: Volume 1. Material Culture*. Medallion Papers No. 34. Gila Pueblo, Globe.

1983 *The Cochise Cultural Sequence in Southeastern Arizona*. Anthropological Papers of the University of Arizona No. 42. University of Arizona Press, Tucson.

Sayles, E. B., and Ernst Antevs

1941 *The Cochise Culture*. Lancaster Press, Inc., Lancaster.

Seymour, Deni J.

2007 An Archaeological Perspective on the Hohokam-Pima Continuum. *Bulletin of Old Pueblo Archaeology Center No. 51*. Old Pueblo Archaeology, Tucson.

Seymour, Gregory R., Richard V. N. Ahlstrom, and David P. Doak

1997 *The Sanchez Copper Project. Volume 1: Archaeological Investigations in the Safford Valley, Graham County, Arizona*. Archaeological Report No. 94-82. SWCA Inc., Tucson.

Slaughter, Mark C.

1992 Flaked Stone in Arizona. In *Making and Using Stone Artifacts: A Context for Evaluating Lithic Sites in Arizona*, by Mark C. Slaughter, Lee Fratt, Kirk Anderson, and Richard V. N. Ahlstrom, pp. 2.1–2.12. Prepared by SWCA, Tucson. Distributed by the Arizona State Historic Preservation Office, Phoenix.

Smith, Alexa M.

2005 Ceramic Analysis. In *Archaeological Investigations in the Belnor Vista Development, Southwest of Tucson, Pima County, Arizona*, prepared by David B. Tucker, pp. 10–12. Cultural Resources Report No. 05-93. SWCA, Inc., Tucson.

Sonnichsen, C. L.

1987 *Tucson: The Life and Times of an American City*. University of Oklahoma Press, Norman.

Spicer, Edward H.

1962 *Cycles of Conquest: The Impact of Spain, Mexico, and the United States on the Indians of the Southwest, 1533–1960*. University of Arizona Press, Tucson.

Steely, James W.

- 2005 Historic Context for the Altar Road between Tucson, Arizona, and Altar, Sonora. In *Archaeological Investigations in the Belnor Vista Development, Southwest of Tucson, Pima County, Arizona*, prepared by David B. Tucker, pp. 25–30. Cultural Resources Report No. 05-93. SWCA, Inc., Tucson.

Steely, James W., and Dan K. Newsome

- 2008 *Machine in the Garden: El Paso Natural Gas Company's Mainline Pipelines through the Desert Southwest*. Compiled as the Fully Developed Historic Context "Pipeline Operations of the El Paso Natural Gas in New Mexico, Texas, and Arizona, 1928–1956." SWCA Environmental Consultants, Tucson.

Stein, Pat H.

- 1993 Historical Resources of the Northern Tucson Basin. In *The Northern Tucson Basin Survey: Research Directions and Background Studies*, edited by John H. Madsen, Paul R. Fish, and Suzanne K. Fish, pp. 85–122. Archaeological Series 182. Arizona State Museum, Tucson.

Stevens, Michelle N., and R. Jane Sliva

- 2002 Empire Points: An Addition to the San Pedro Phase Lithic Assemblage. *Kiva* 67(3):297–326.

Stinson, Susan L.

- 2005 Early Agricultural Period Pottery from Las Capas and Los Pozos. In *Material Cultures and Lifeways of Early Agricultural Communities in Southern Arizona*, edited by R. Jane Sliva, pp. 207–216. Anthropological Papers No. 35. Center for Desert Archaeology, Tucson.

Teague, Lynn S.

- 1993 Prehistory and the Traditions of the O'odham and Hopi. *Kiva* 58(4):435–454.

Tucker, David B.

- 2005 *Archaeological Investigations in the Belnor Vista Development, Southwest of Tucson, Pima County, Arizona*. Cultural Resources Report No. 05-93. SWCA, Inc., Tucson.

Tuthill, Carr

- 1947 *The Tres Alamos Site on the San Pedro River, Southeastern Arizona*. The Amerind Foundation No. 4. Amerind Foundation, Dagoon.

Vanderpot, Rein, and Jeffrey H. Altschul

- 2007 The Mescal Wash Site: A Persistent Place in Southeastern Arizona. In *Hinterlands and Regional Dynamics in the Ancient Southwest*, edited by Alan P. Sullivan and James M. Bayman, pp. 50–108. University of Arizona Press, Tucson.

Vokes, Arthur W.

- 2003 Personal Ornaments from AZ BB:13:74(ASM). In *Excavations at AZ BB:13:74(ASM): An Examination of Three Middle Rincon Phase Locs*, edited by M. W. Lindeman, pp. 77–80. Technical Report No. 2000-01. Desert Archaeology, Inc., Tucson.

Wallace, Henry D.

- 2004 Update to the Middle Gila Buff Ware Ceramic Sequence. In *Hohokam Farming on the Salt River Floodplain: Refining Models and Analytical Methods*, edited by T. Kathleen Henderson, pp. 59–141. Anthropological Papers No. 43. Center for Desert Archaeology, Tucson.
- 2012 Site Chronology. In *Life in the Valley of Gold: Archaeological Excavations at Honey Bee Village, a Prehistoric Hohokam Ballcourt Village, Part 1*, edited by Henry D. Wallace, pp. 109–122. Archaeology Southwest, Tucson.

Wallace, Henry D., and Douglas B. Craig

- 1988 A Reconsideration of the Tucson Basin Hohokam Chronology. In *Recent Research on Tucson Basin Prehistory: Proceedings of the Second Tucson Basin Conference*, edited by William H. Doelle and Paul R. Fish, pp. 9–29. Anthropological Papers No. 10. Institute for American Research, Tucson.

Wallace, Henry D., and James P. Holmlund

- 1986 *Petroglyphs of the Picacho Mountains, South Central Arizona*. Anthropological Papers 6. Institute for American Research, Tucson.

Whittlesey, Stephanie M.

- 2003 *Rivers of Rock: Stories from a Stone-dry Land: Central Arizona Project Archaeology*. SRI Press, Tucson.

Wilcox, David R., and Charles Sternberg

- 1983 *Hohokam Ballcourts and Their Interpretation*. Archaeological Series No. 160. Arizona State Museum, University of Arizona, Tucson.

Wilson, John P.

- 1999 *Peoples of the Middle Gila: A Documentary History of the Pimas and Maricopas, 1500s–1945*. Researched and written for the Gila River Indian Community, Sacaton, Arizona, 1998 (revised 1999). Report No. 77. Las Cruces.

# **APPENDIX A**

## **ARCHAEOLOGICAL RECORDS SEARCH**

Table A.1. Previous archaeological surveys within the project area and vicinity

Table A.2. Known archaeological sites within the project area and vicinity

Figure A.1. Previously recorded archaeological sites and projects within 1.6 km (1 mile) of the project area

Class I References

**The following information is considered sensitive; may be protected under federal, state, and local laws; and may be removed from the report.**



**Table A.1. Previous archaeological surveys within the project area and vicinity**

Agency Project No.	Project Name	Reference
1980-139.ASM 1	Mission Ridge Survey – U.S. Homes	Bentley and Brew (1980)
1981-10.ASM 2	Belnor Vista	Urban (1981)
1995-148.ASM 3	Avra Valley – Valencia Road Survey	Swartz (1995)
2003-41.ASM 4	Belnor Vista Assessment	Brack (2002)
BLM-16-07 5	R&PP Application A-7878	Not recorded
BLM-16-13 6	ROW for Kevin Wahl	Not recorded
1974-3.ASM 7	El Paso Natural Gas: San Xavier Survey	Creel (1981)
1980-108.ASM 8	Tierra Ridge, Valencia Road and Sorrel Lane	Urban (1980a)
1980-109.ASM 9	Salida del Sol II, Westover and Vereda de los Arboles	Urban (1980b)
1980-117.ASM 10	Mason Terrace	Urban (1980c)
1980-135.ASM 11	Pima County Department of Transportation and Flood Control District Valencia Road Survey	Brew (1980)
1980-148.ASM 12	Mission West Unit No. I, SW Corner of Los Reales and Cardinal	Urban (1980d)
1980-157.ASM 13	Cooper Ridge, Camino de la Tierra and Valencia	Urban (1980e)
1988-181.ASM 14	Cultural Resources of a West Valencia Property	Niles-Hensler (1988)
1991-109.ASM 15	Cultural Resources Inventory for 11 CAP Pressure Regulating Valve Station Sites in Tucson and Pima County	Slawson (1990)
1994-112.ASM 16	Hohokam Middle School	Sullivan (1994)
1994-128.ASM 17	Mission View Assembly of God	Jones (1994)
1996-147.ASM 18	Pasqua Yaqui Tribe	Terzis (1996)
1996-285.ASM 19	Bilby-Camino de la Tierra Main Replacement Project	Sliva (1996)
1998-141.ASM 20	Drexel/Mission Main Survey	Vint (1998a)
1998-142.ASM 21	Sorrel/Drexel Main Survey	Vint (1998b)
1998-173.ASM 22	Aragon Street Property	Madsen (1998)
2001-324.ASM 23	Valencia Road Cultural Resources Survey	Tucker (2001)
2002-369.ASM 24	West Valencia Booster Survey	Diehl (2002)
2003-25.ASM 25	Valencia Wash Scour Survey	Diehl (2003)
2004-367.ASM 26	Los Reales Road Pipeline Brackenbury Ct. to Sorrel Lane Cultural Resource Survey	Rose (2004)
2004-419.ASM 27	Sorrel Lane	Levstik (2004)
2004-770.ASM 28	Las Palomas B-C Booster Survey	Diehl (2004)

**Table A.1. Previous archaeological surveys within the project area and vicinity**

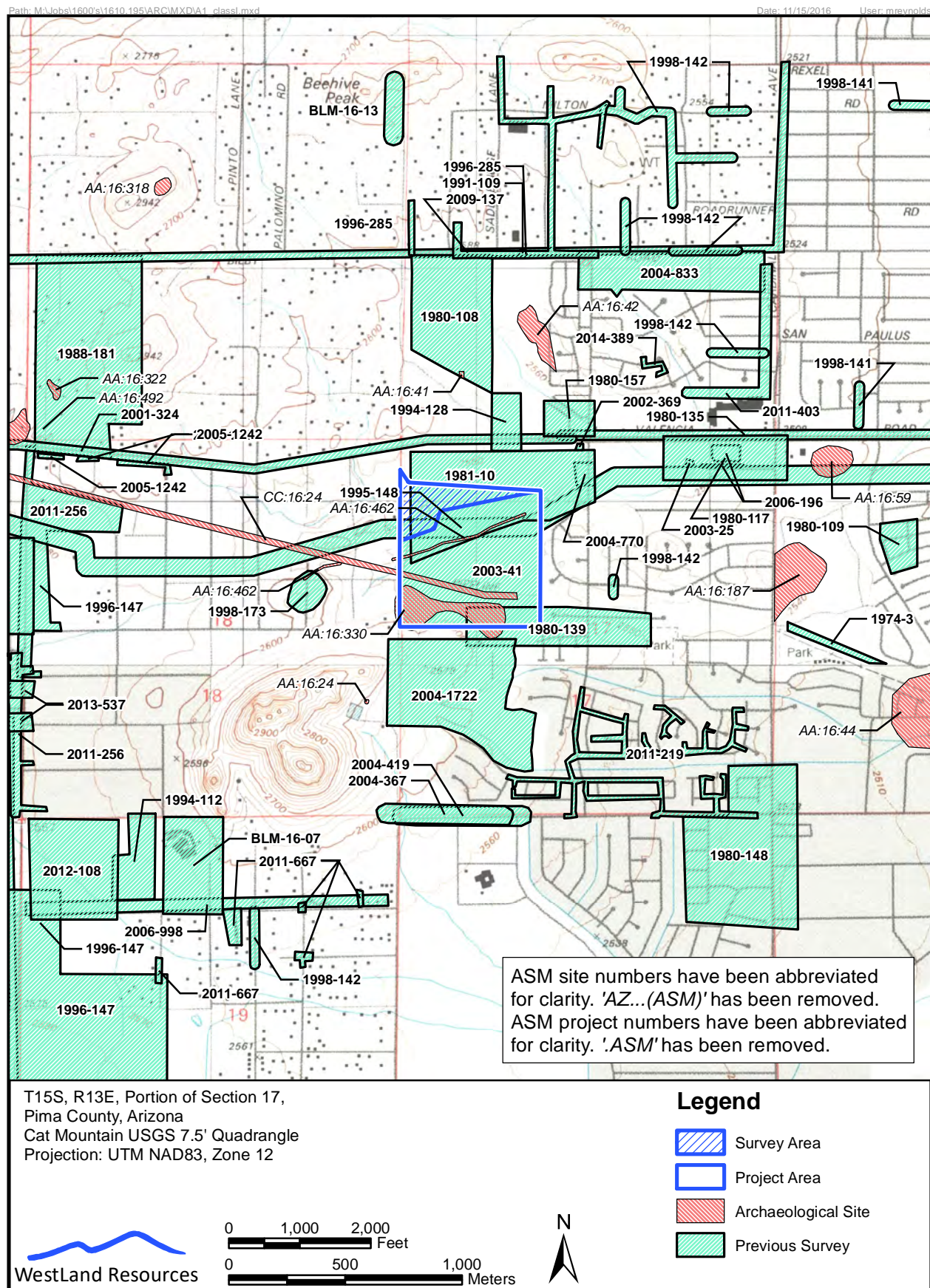
Agency Project No.	Project Name	Reference
2004-833.ASM 29	Bilby Road/Cardinal Ave. Survey	Ruble (2004)
2004-1722.ASM 30	Presidio Villas Survey	Craig (2004)
2005-1242.ASM 31	Valencia Supplemental CR Survey	Fahrni and Tucker (2006)
2006-196.ASM 32	Valencia and Cardinal Survey	Buckles and Mills (2005)
2006-998.ASM 33	Hohokam Middle School Multi-use Path	Fenicle (2007)
2009-137.ASM 34	Avra Valley TM Augmentation Survey	Wöcherl (2009)
2011-219.ASM 35	Camino de la Tierra Survey	Jones (2011)
2011-256.ASM 36	Camino de Oeste Survey	Whitaker and Doak (2011)
2011-403.ASM 37	West Valencia Road TW Telecom	Petersen (2011)
2011-667.ASM 38	Atlas 0503 Survey	Slawson (2011)
2012-108.ASM 39	Pasqua Yaqui	Jones (2012)
2013-537.ASM 40	Atlas 513 Survey	Slawson (2013)
2014-389.ASM 41	Tumbleweed Survey	Hamlin (2014)

**Note:** The projects in the project area are listed first.

**Table A.2. Known archaeological sites within the project area and vicinity**

Site Number (ASM)	Site Type	Age and Cultural Affiliation	Reference	NRHP Eligibility
AZ AA:16:330 1	Resource site	Formative, A.D. 1–1450; Hohokam	Billings (1989); Brack (2002)	Determined eligible – SHPO 2005
AZ AA:16:462 2	Linear site: road	Historic, A.D. 1871–present; Euroamerican	Brack (2002)	Determined ineligible – SHPO 2005
AZ CC:16:24 El Paso Natural Gas Line 1100 3	Linear site: natural gas pipeline	Historic, A.D. 1943–present; Euroamerican	Fahrni and Tucker (2006)	Determined eligible – SHPO 2012
AZ AA:16:24 4	Artifact scatter	Formative, A.D. 1–1450; Hohokam	Ingmanson (1957)	
AZ AA:16:41 5	Rock art site	<ul style="list-style-type: none"> <li>• Archaic, 8000 B.C.–A.D. 1;</li> <li>• Formative, A.D. 1–1450; Native American Culture</li> </ul>	Urban (1980a); Delaney (1989)	
AZ AA:16:42 6	Clearing in desert pavement	Prehistoric, 12,000 B.C.–A.D. 1450; Native American Culture	Hopkins (2005a, b); Vint (1998b)	
AZ AA:16:44 Salida del Sol Hohokam Site 7	Habitation	Late Formative, A.D. 1150–1450; Hohokam	DeCosta and Czaplicki (1979); Douglas (1991)	
AZ AA:16:59 8	Resource site	Formative, A.D. 1–1450; Hohokam	Vint (1998b)	
AZ AA:16:187 Buff's Quarry 9	Resource site	<ul style="list-style-type: none"> <li>• Archaic, 8000 B.C.–A.D. 1;</li> <li>• Formative, A.D. 1–1450; Native American Culture;</li> <li>• Historic, A.D. 1450–1950; Euroamerican</li> </ul>	Urban (1980b); Vint (1998b)	
AZ AA:16:318 Kup Mountain Site 10	Rock art site	Formative, A.D. 1–1450; Hohokam	Austin and Hughes (1987)	
AZ AA:16:322 11	Artifact scatter	<ul style="list-style-type: none"> <li>• Formative, A.D. 1–1450; Hohokam;</li> <li>• Historic, A.D. 1450–1950; Tohono O'odham</li> </ul>	Niles-Hensler (1988)	
AZ AA:16:492 12	Habitation	Historic, A.D. 1880–1950; Euroamerican	Fahrni and Tucker (2006)	

Note: The sites in the project area are listed first.





## CLASS I REFERENCES

Austin, Merry A., and Paul J. Hughes

1987 *Site Card for AZ AA:16:318(ASM)*. On file. Arizona State Museum, University of Arizona, Tucson.

Bentley, Jeff, and Susan A. Brew

1980 *Project Record for Mission Ridge Survey – US Homes*. On file. Arizona State Museum, University of Arizona, Tucson.

Billings, J. R. “Buff”

1989 *Site Card for AZ AA:16:330(ASM)*. On file. Arizona State Museum, University of Arizona, Tucson.

Brack, Michael L.

2002 *A Cultural Resources Assessment of the Belnor Vista Development, Valencia Road and Camino de la Tierra, Pima County, Arizona*. Project Report No. 02-156. Desert Archaeology, Inc., Tucson.

Brew, Susan A.

1980 *Project Record for Pima County Department of Transportation and Flood Control District Valencia Road Survey*. On file. Arizona State Museum, University of Arizona, Tucson.

Buckles, Avi, and Alexis Mills

2005 *A Class III Cultural Resources Survey of 206 Acres near Valencia Road and Cardinal Avenue, Pima County, Arizona*. Technical Report No. 2005-3. Northland Research, Inc., Tempe.

Craig, Douglas B.

2004 *A Cultural Resources Survey of 61.5 Acres in Presidio Villas near the Intersection of Sorrel Lane and Los Reales Road, Pima County, Arizona*. Technical Report No. 04-92. Northland Research, Inc., Tempe.

Creel, Darrell

1981 *Project Record for El Paso Natural Gas San Xavier Survey*. On file. Arizona State Museum, University of Arizona, Tucson.

DeCosta, Joan, and Jon S. Czaplicki

1979 *The Papago Housing Authority Survey*. Cultural Resources Management Section, Arizona State Museum, University of Arizona, Tucson.

Delaney, Jane

1989 *Site Report and Accompanying Photographs for the Ortiz Site (AZ AA:16:41[ASM])*. Arizona Archaeological and Historical Society Rock Art Course, Tucson.



Diehl, Allison Cohen

2002 *Cultural Resources Survey of a Parcel Located South of Valencia Road and East of Camino de la Tierra, Pima County, Arizona*. Project Report No. 02-171. Desert Archaeology, Inc., Tucson.

2003 *Cultural Resources Survey of a Parcel Located in the Vicinity of Valencia and Cardinal Roads, Pima County, Arizona*. Project Report No. 03-105. Desert Archaeology, Inc., Tucson.

2004 *Cultural Resources Survey of a Parcel near the Intersection of Valencia Road and Camino de la Tierra, Tucson, Pima County, Arizona*. Project Report No. 04-160. Desert Archaeology, Inc., Tucson.

Douglas, John E.

1991 *Excavations at the Salida del Sol Site (AZ AA:16:44[ASM]), a Classic Period Hohokam Village in the Tucson Basin*. Project Report No. 02-171. Center for Archaeological Field Training, Pima Community College – West Campus, Tucson.

Fahrni, Grant, and David B. Tucker

2006 *Supplemental Cultural Resources Survey of Selected Parcels in Support of Proposed Road Improvements along West Valencia Road, Pima County, Arizona*. Cultural Resources Survey Report No. 06-921. EcoPlan Associates, Inc., Tucson.

Fenicle, Diane L.

2007 *A Cultural Resource Survey of Proposed Enhancements for the Hohokam Middle School Bicycle and Pedestrian Project, West Tetakusim Road, Pima County, Arizona*. Technical Report No. 04-92. Northland Research, Inc., Tempe.

Hamlin, Jenna M.

2014 *A Class III Cultural Resource Survey for a Proposed Telecommunications Conduit Installation along South Tumbleweed Drive in Pima County, Arizona*. Archaeological Report No. 2014-108. Tierra Right of Way Services, Ltd., Tucson.

Hopkins, Maren P.

2005a *A Cultural Resource Survey of 39 Acres Northwest of the Intersection of Valencia Road and Camino de la Tierra, Pima County, Arizona*. Technical Report No. 05-83. Northland Research, Inc., Tempe.

2005b *Archaeological Testing at AZ AA:16:42(ASM), a Possible Prehistoric Site Northwest of the Intersection of Valencia Road and Camino de la Tierra, Pima County, Arizona*. Technical Report No. 05-118. Northland Research, Inc., Tempe.

Ingmanson, L. E.

1957 *Site Card for AZ AA:16:24(ASM)*. On file. Arizona State Museum, University of Arizona, Tucson.

Jones, Jeffrey T.

1994 *Archaeological Survey of 3 Acres for Mission View Assembly of God*. Letter Report No. 94-10. Old Pueblo Archaeological Center, Tucson.

2011 *A Class III Cultural Resources Survey of Proposed Rights-of-way for Buried Natural Gas Pipelines Totalling 2,503 m (8,213 feet) within the Presidion Hills Subdivision west of Tucson, Pima County, Arizona*. Archaeological Report No. 2011-75. Tierra Right of Way Services, Ltd., Tucson.

2012 *A Class III Cultural Resources Survey of Pima County Parcel 210-30-0070 Southwest of Tucson, Pima County, Arizona*. Archaeological Report No. 2012-17. Tierra Right of Way Services, Ltd., Tucson.

Levstik, Jennifer

2004 *A Cultural Resources Survey of 1,600 Linear Feet along Los Reales Road between Brackenbury Drive and Sorrel Lane in Tucson, Pima County, Arizona*. Archaeological Report No. 2004-35. Tierra Right of Way Services, Ltd., Tucson.

Madsen, John H.

1998 *Archaeological Clearance Survey Form: Aragon Street Property*. Arizona State Museum, University of Arizona, Tucson.

Niles-Hensler, Katherine

1988 *Cultural Resources of a West Valencia Property, Tucson*. Catalina Archaeological Services, Tucson.

Petersen, Eric S.

2011 *Cultural Resources Survey along Cardinal Avenue in Support of a Pima County Right-of-way Use Permit, Pima County, Arizona*. Cultural Resources Report No. 11-386. SWCA Inc., Tucson.

Rose, Courtney

2004 *Southwest Gas-related Cultural Resources Survey of a 1,600-foot-long Gas Pipeline Corridor along Los Reales Road from Brackenbury Drive to Sorrell Lane West of Tucson in Pima County, Arizona*. Letter Report No. 20032004.013. Old Pueblo Archaeological Center, Tucson.

Ruble, Ellen C.

2004 *Cultural Resources Survey of 34 Acres at the Southwest Corner of Bilby Road and Cardinal Avenue, Tucson, Pima County, Arizona*. Project Report No. 04-168. Desert Archaeology, Inc., Tucson.

Slawson, Laurie V.

1990 *A Cultural Resources Inventory for 11 CAP Pressure Regulating Valve Station Sites in Tucson and Pima County, Arizona*. Cultural and Environmental Systems, Tucson.

2011 *A Cultural Resources Inventory of 0.5 Acres for Southwest Gas Corporation Pipeline Improvements along Sparrow Avenue, Tetakusim Road, Gila Avenue, and Partridge Street in Pima County, Arizona.* Technical Report No. 2011-46. Aztlan Archaeology, Tucson.

2013 *A Cultural Resources Inventory of 2.9 Acres for Southwest Gas Corporation Pipeline Improvements between Valencia and Los Reales Roads in Pima County, Arizona.* Technical Report No. 2013-51. Aztlan Archaeology, Tucson.

Sliva, R. Jane

1996 *Archaeological Survey of Water Main Alignments in the Vicinity of Bilby Road and Camino de la Tierra, Tucson, Arizona.* Letter Report No. 96-167. Desert Archaeology, Inc., Tucson.

Sullivan, Mark E.

1994 *A Class III Archaeological Survey of the Hobokam Middle School Expansion, in Pima County, Arizona.* Cultural and Environmental Systems, Tucson.

Swartz, Deborah L.

1995 *An Archaeological Survey along Valencia Road, Tucson, Arizona.* Letter Report No. 95-137. Desert Archaeology, Inc., Tucson.

Terzis, Lee A.

1996 *A Class III Cultural Resources Survey of 434 Acres on State Land Adjacent to the Pasqua Yaqui Reservation, Pima County, Arizona.* Archaeological Report No. 96-50. SWCA, Inc., Tucson.

Tucker, David B.

2001 *The Valencia Road Survey: A Class III Cultural Resource Survey of Valencia Road between Camino de la Tierra and the CAP Aqueduct, Tucson, Pima County, Arizona.* Cultural Resources Report No. 01-8. SWCA, Inc., Tucson.

Urban, Sharon F.

1980a *Tierra Ridge, Valencia Road and Sorrel Lane.* Clearinghouse Project 80-85-0181. Arizona State Museum, University of Arizona, Tucson.

1980b *Salida del Sol II, Westover and Vereda de las Arboles.* Clearinghouse Project 80-85-0271. Arizona State Museum, University of Arizona, Tucson.

1980c *Mason Terrace.* Clearinghouse Project 80-85-0188. Arizona State Museum, University of Arizona, Tucson.

1980d *Mission West Unit No. 1, Southwest Corner of Los Reales and Cardinal.* Clearinghouse Project 80-85-0309. Arizona State Museum, University of Arizona, Tucson.

1980e *Cooper Ridge, Camino de la Tierra and Valencia.* Clearinghouse Project 80-85-0094. Arizona State Museum, University of Arizona, Tucson.

1981 *Project Record for Belnor Vista*. On file. Arizona State Museum, University of Arizona, Tucson.

Vint, James M.

1998a *Archaeological Survey of the Drexel/Mission Road Water Main Replacement Project Area*. Letter Report No. 98-157. Desert Archaeology, Inc., Tucson.

1998b *Archaeological Survey of Water Main Replacement Routes in the Vicinity of Sorrel and Drexel Roads*. Letter Report No. 98-158. Desert Archaeology, Inc., Tucson.

Whitaker, April, and David P. Doak

2011 *A Class III Cultural Resources Inventory Survey for the Camino de Oeste: Los Reales Road to Valencia Road Project, Tucson, Pima County, Arizona*. Archaeological Report No. 2011-111. Tierra Right of Way Services, Ltd., Tucson.

Wöcherl, Helga

2009 *Results of Cultural Resources Survey for the Avra Valley TM Augmentation Pipeline, Pima County, Arizona*. Project Report No. 09-104. Desert Archaeology, Inc., Tucson.

# **APPENDIX B**

## **RESULTS OF ARCHAEOLOGICAL SURVEY**

Table B.1. Site management  
summary

Table B.2. Isolated occurrences

Figure B.1. Results of the  
archaeological survey

**The following information is  
considered sensitive; may be  
protected under federal,  
state, and local laws; and may  
be removed from the report.**



**Table B.1. Site management summary**

Site Number (ASM)	New or Previously Recorded	Land Juris- diction	Legal Description	Location NAD83, Zone 12		Site Type	Age and Cultural Affiliation	NRHP Eligibility Status	Treatment Recom- mendation
				Northing	Easting				
AZ AA:16:330 <sup>1</sup>	Previously recorded	Private	T15S, R13E, a portion of Section 17	3554505	495995	Resource site	<ul style="list-style-type: none"> <li>• Archaic, 8500 B.C.–A.D. 1; Archaic</li> <li>• Middle to Late Formative, A.D. 1000–1450; Hohokam</li> </ul>	Determined eligible – SHPO 2005	None
AZ AA:16:462 <sup>2</sup>	Previously recorded	Private	T15S, R13E, a portion of Section 17	3554842	495979	Linear site: road	Historical, A.D. 1943– present; Euroamerican	Determined ineligible – SHPO 2005	None
AZ CC:16:24 <sup>3</sup>	Previously recorded	Private	T15S, R13E, a portion of Section 17	3554605	496000	Linear site: utility	Historical, A.D. 1947– present; Euroamerican	Determined eligible – SHPO 2012	None

**Table B.2. Isolated occurrences**

IO No.	Field No.	Age and Cultural Affiliation	Description	Location NAD83, Zone 12	
				Northing	Easting
1	1	Historic, A.D. 1935–1955; Euroamerican	All-steel cone-top beer can, ca. 1935–1955	3554986	495745
2	3	Historic (next year), A.D. 1967–1987; Euroamerican	Aqua glass scatter. Five fragments representing two bottles. Dr. Pepper applied-color-label shards and Glass Containers Corp. maker's mark, ca. 1967–1987	3554980	495926

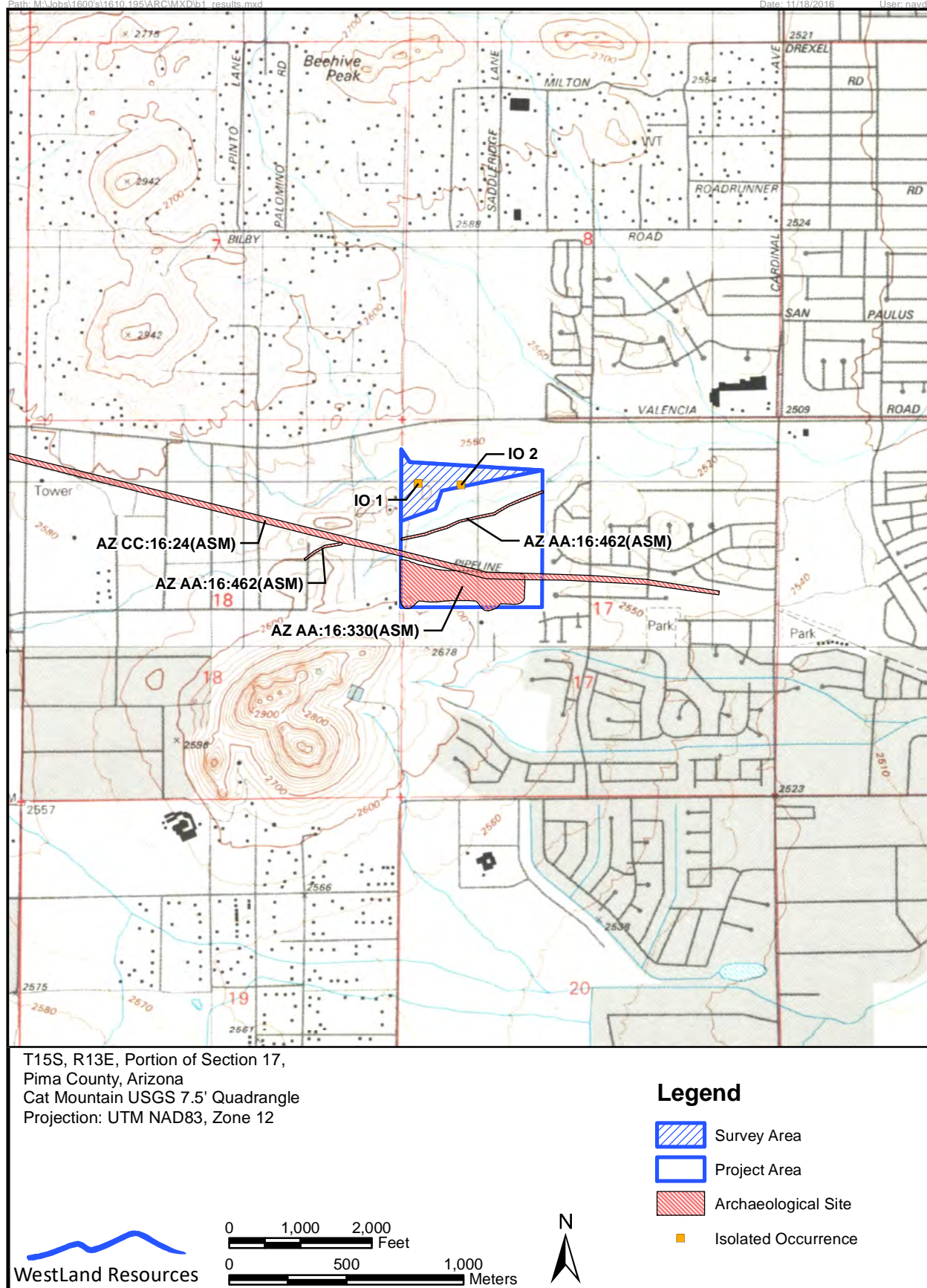


Figure B.1. Results of the archaeological survey

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**APPENDIX C**  
**HISTORICAL MAPS**  
**OF THE PROJECT AREA**

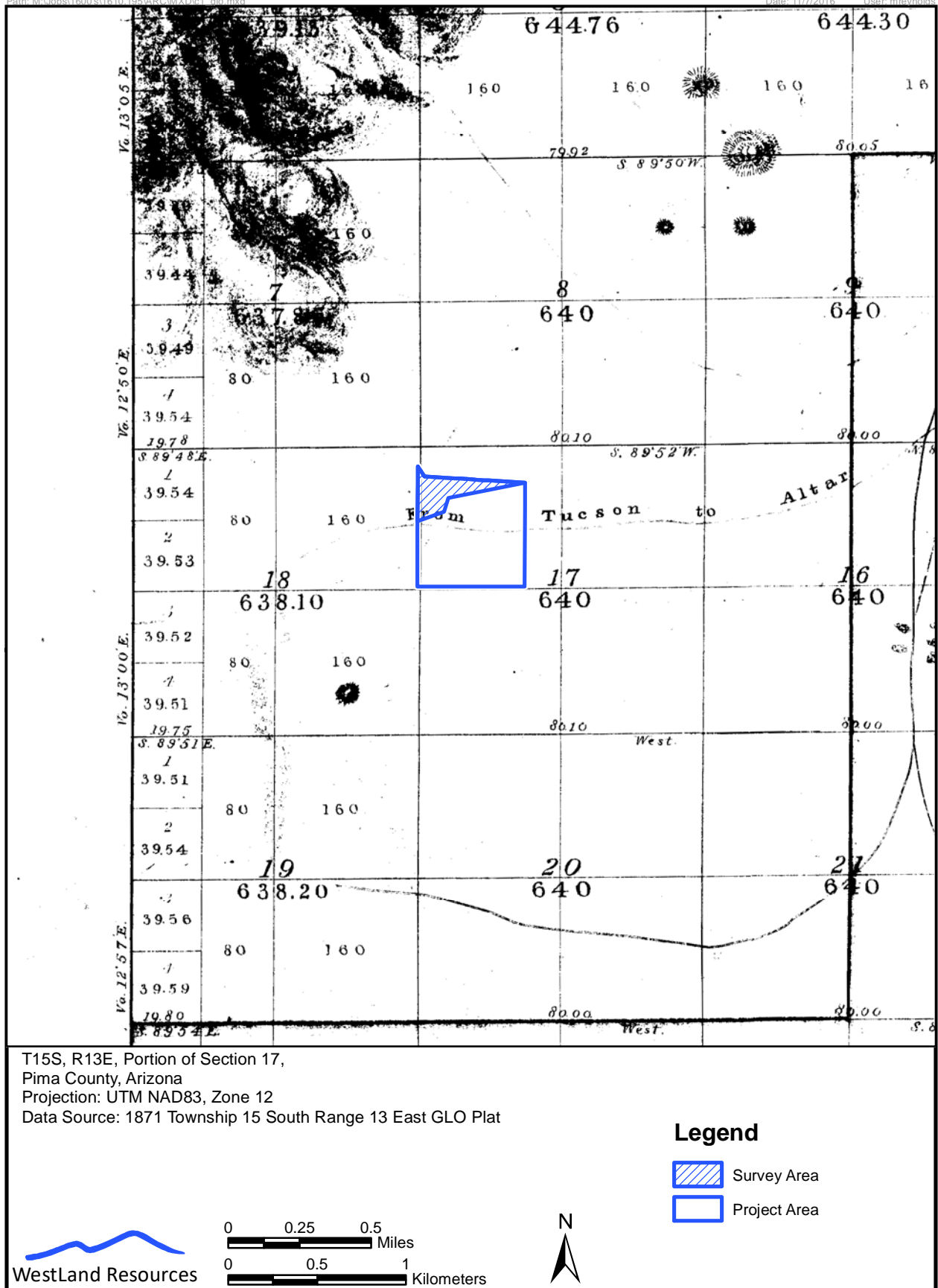
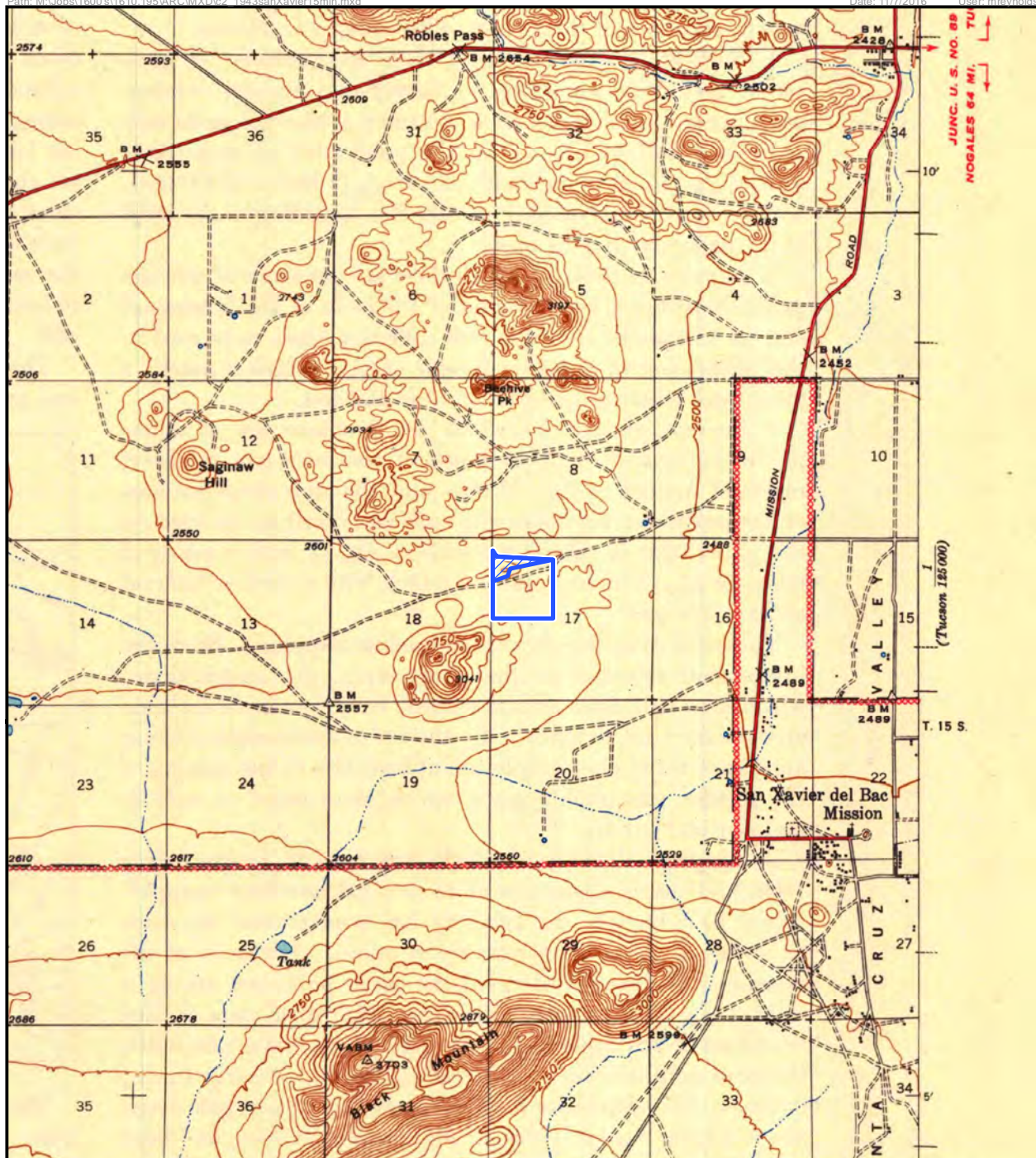




Figure C.1. Overlay of project area on 1871 Township 15 South Range 13 East GLO Plat





T15S, R13E, Portion of Section 17,  
Pima County, Arizona  
Projection: UTM NAD83, Zone 12  
Data Source: 1943 San Xavier Mission USGS 15' Quadrangle

### Legend

-  Survey Area
-  Project Area

WestLand Resources

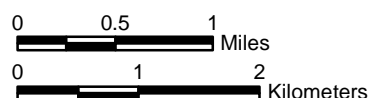
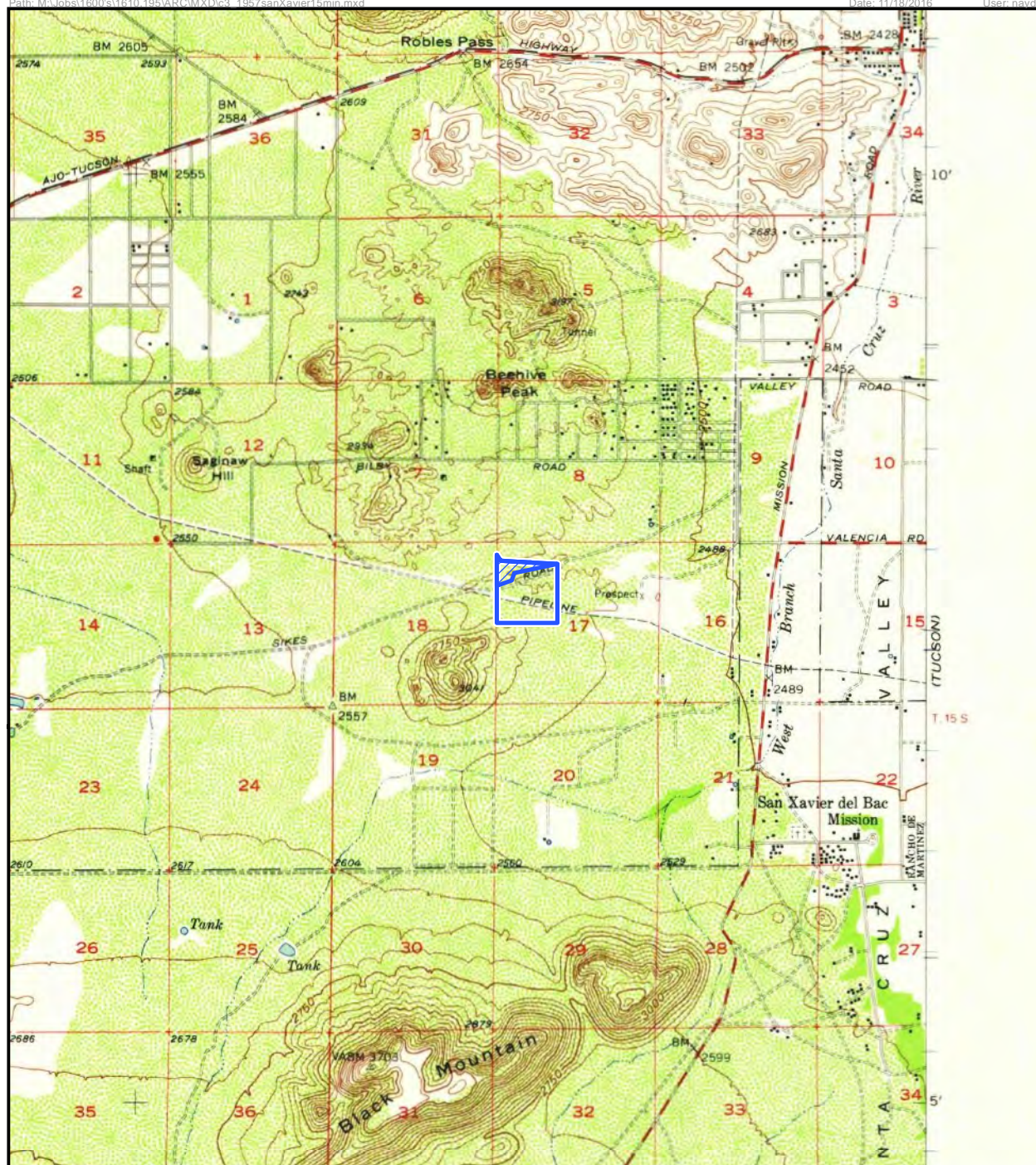



Figure C.2. Overlay of project area on 1943 San Xavier Mission USGS 15' quadrangle





T15S, R13E, Portion of Section 17,  
Pima County, Arizona  
Projection: UTM NAD83, Zone 12  
Data Source: 1957 San Xavier Mission USGS 15' Quadrangle

### Legend

-  Survey Area
-  Project Area

WestLand Resources

0 0.5 1 Miles  
0 1 2 Kilometers



Figure C.3. Overlay of project area on 1957 San Xavier Mission USGS 15' quadrangle

Form Results	
Disregard	***>>> DISREGARD The message above the Form Results ROW <<<***
Note about attachments	***>>> Pima County virus software CYLANCE automatically scans files. There IS NOT a right mouse scan this file option. Attachments are scanned by our email appliance when received, then again by Cylance when saved or opened. <<<***
Owner Name	Fidelity National Title Tr 60405, Attn: Southern AZ Land Tr Inc
Owner Address	3044 N Alvernon Way
Owner City	Tucson
Owner State	AZ
Owner Zipcode	85712-1431
Owner Phone	520-352-2626
Owner_Email	<a href="mailto:gregg@saltproperty.com">gregg@saltproperty.com</a>
Applicant Name	Brian Underwood - The Planning Center
Applicant Address	2 E Congress, Suite 600
Applicant City	Tucson
Applicant State	AZ
Applicant Zipcode	85701
Applicant Phone	520-209-2628
Applicant_Email	<a href="mailto:bunderwood@azplanningcenter.com">bunderwood@azplanningcenter.com</a>
Property Address	3463 W Valencia Road
Property Parcel Number	Belnor Vista II Subdivision Plat & APN's: 138-26-320B, -320C, -320D, -6880, & -319H
Property Acreage	125
Current Land Use Designation	MLIU (99.3 ac), HIU (17.4 ac), & CAC (8.3 ac)
Proposed Land Use Designation	MLIU (43.2 ac) CAC (81.8 ac)
Policies	Southwest Focused Development Investment Area / RP-71, W Valencia Rd and S-29, SWIP
Concurrent Property Acreage	125
Property Present Zone	CR-3 and GR-1
Property Proposed Zone	Specific Plan
FTP-Link	<a href="https://www.dropbox.com/sh/9l0dpp9jsm65h94/AADR1c8LquvfPiMigc41pAHJa?dl=0">https://www.dropbox.com/sh/9l0dpp9jsm65h94/AADR1c8LquvfPiMigc41pAHJa?dl=0</a>
Signature	I confirm the information provided is true and accurate to the best of my knowledge. I am the owner of the above described property or have been authorized by the owner to make this application. (By checking the box, I am electronically signing this application.)

Application Date	10-Aug-2020
More Information about this submission and submitter	
Submission ID	11460283
Date & Time	10th Aug 2020 5:33 PM
Form Location	--
IP Address	68.14.243.58
Browser info	Mozilla/5.0 (Windows NT 10.0; WOW64; Trident/7.0; rv:11.0) like Gecko
Predicted Country	--

April 27, 2020

Pima County  
Development Services Department, Planning Division  
201 North Stone  
Tucson, AZ 85701

Subject: **Belnor Vista Comprehensive Plan Amendment and Specific Plan  
On Belnor Vista II Subdivision Plat and Tax Parcels: 138-26-320B, 138-26-320C, 138-26-320D, 138-26-6880 and 138-26-319H  
TPC Job no. SLT-01**

To Whom It May Concern:

As owners of the above referenced tax parcels, I hereby authorize The Planning Center to act as our agent throughout the plan amendment and specific plan rezoning application process.

Very Truly Yours,

By:



Gregg T. Sasse  
Interim Executive Director  
Southern Arizona Land Trust Inc.

Property Owner:  
Fidelity National Title Tr 60405  
Attn: Southern Arizona Land Trust Inc.  
3044 N Alvemon Way  
Tucson, AZ 85712-1431