A Cultural Resources Inventory of 1.0 Acre for the Sonoran Sky Offsite Sewer Line in Scottsdale, Maricopa County, Arizona

DECEMBER 2021

PREPARED FOR

Toll Brothers, Inc.

PREPARED BY

SWCA Environmental Consultants

A CULTURAL RESOURCES INVENTORY OF 1.0 ACRE FOR THE SONORAN SKY OFFSITE SEWER LINE IN SCOTTSDALE, MARICOPA COUNTY, ARIZONA

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PROJECT ABSTRACT

Report Title: A Cultural Resources Inventory of 1.0 Acre for the Sonoran Sky Offsite Sewer Line in Scottsdale, Maricopa County, Arizona

Report Date: December 2021

Project Sponsor: Toll Brothers, Inc.

Description of the Project/Undertaking: Toll Brothers, Inc., contracted SWCA Environmental Consultants (SWCA) to conduct a Class III cultural resources survey for a proposed offsite sewer line for the Sonoran Sky planned residential development. The sewer line extends 0.34 mile by 25 feet (1.0 acre) on private land, from 119th Way to the east and southeast towards the proposed Sonoran Sky development. The proposed development itself consists of approximately 41.21 acres, near the intersection of East Paraiso Drive and North Calle Miramonte in Scottsdale, Maricopa County, Arizona.

Agencies: City of Scottsdale (COS)

Applicable Regulations: COS Historic Preservation Ordinance 3242 (Scottsdale Revised Code [SRC] Appendix B, Article VI, *Supplementary Districts*) and Protection of Archaeological Resources Ordinance (SRC Chapter 46, Article VI).

Project Number(s): SWCA No. 69027; ASM Accession No. 2021-0442

Project Name: Toll Brothers Sonoran Sky Offsite Sewer Class III

Land Jurisdiction: Private

Project Location: East of 23397 N 119th Way, Scottsdale, Arizona, extending 0.34 mile by 25 feet (1.0 acre) generally to the east and southeast towards the proposed Sonoran Sky development. The project area is in the NW¼NW¼ and NE¼NW¼ of Section 14, and the NE¼NE¼ of Section 15, Township 4 North, Range 5 East, Gila and Salt River Baseline and Meridian, as depicted on the U.S. Geological Survey McDowell Peak, Arizona, 7.5-minute quadrangle.

Project Locator UTM: 423954 m E, 3728982 m N

Permit Number(s): N/A

Total Acres: 1 acre (1 acre surveyed; 0 acres not surveyed)

Consultant Firm/Organization: SWCA

Dates of Fieldwork: 11/15/2021

Number of Cultural Resources Recorded: 1 site, 0 buildings, 0 structures, 0 objects, 0 districts, 2 isolated occurrences

Eligible Resources: 1 (AZ U:5:335[ASM])

Ineligible Resources: 0

Unevaluated Resources: 0

Resources Not Relocated: 0

Assessment of Effects and Treatment Recommendations: SWCA recommends a conditional Certificate of No Effect be issued for the project, provided the site can be avoided by proposed ground disturbing project activities. No further cultural resource work is recommended.

Comments:

SWCA conducted a Class III pedestrian cultural resources survey of the proposed offsite sewer line for the Sonoran Sky Planned development in Scottsdale, Maricopa County, Arizona. The survey resulted in the identification of one cultural site (AZ U:5:335[ASM]) and two IOs. SWCA recommends site AZ U:5:335(ASM) eligible for listing in the Arizona and National Registers of Historic Places, and inclusion in the City of Scottsdale Historic Register. SWCA recommends ground disturbing activities avoid the site. The two IOs do not contain sufficient material to qualify as archaeological sites and do not possess the significance or integrity to meet the requirements for inclusions in the A/NRHP and COS Historic Register.

Development on the property is subject to the requirements of Scottsdale Revised Code, Chapter 46, Article VI, Protection of Archaeological Resources, Section 46-134, which states:

> When a previously unidentified archaeological site is discovered in the course of construction, the property owner immediately shall notify the City Archaeologist or Historic Preservation Officer. The property owner shall have a preliminary study made by a qualified archaeologist to determine the effect that the proposed development project may have on the site. The City Archaeologist and/or Historic Preservation Officer, with concurrence from the qualified archaeologist hired by the property owner, shall evaluate on-site the significance of the archaeological finding as soon as possible. When the Historic Preservation Officer, the qualified archaeologist hired by the property owner and the City Archaeologist concur that no adverse effect on the archaeological site will take place, the project may proceed immediately. Where an adverse effect on a significant archaeological site will take place, the project shall be referred to the Historic Preservation Commission at the commission's next regular meeting or a called meeting for review following the same procedure set forth for identified significant archaeological sites.

If human remains are identified during ground-disturbing activities, all work must immediately cease within 30 meters (100 feet) of the discovery and the area must be secured. If human remains and/or funerary items are found on private land, Arizona Revised Statutes § 41-865 requires that the Arizona State Museum be notified of the discovery, so that cultural groups who claim cultural or religious affinity to them can determine the most appropriate treatment or disposition of the remains. This may include the recovery, repatriation, and reburial of the remains.

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INTRODUCTION

Toll Brothers, Inc., contracted SWCA Environmental Consultants (SWCA) to conduct a Class III cultural resources survey for a proposed offsite sewer line for the Sonoran Sky planned residential development. The sewer line extends 0.34 mile by 25 feet (1.0 acre) on private land, from 119th Way to the east and southeast towards the proposed Sonoran Sky development. The proposed development itself consists of approximately 41.21 acres, near the intersection of East Paraiso Drive and North Calle Miramonte in Scottsdale, Maricopa County, Arizona.

The project area is located within the city of Scottsdale and is thus subject to compliance with City of Scottsdale (COS) Historic Preservation Ordinance 3242 (Scottsdale Revised Code [SRC] Appendix B, Article VI, *Supplementary Districts*) and Protection of Archaeological Resources Ordinance (SRC Chapter 46, Article VI). SWCA conducted a pedestrian survey of the entire 1.0-acre project area to determine whether any properties eligible for the National Register of Historic Places (NRHP), Arizona Register of Historic Places (ARHP) or the COS Historic Register are present within the project area.

PROJECT LOCATION

The project area is located east of 23397 North 119th Way, Scottsdale, Arizona, and extends 0.34 mile by 25 feet (1.0 acre) generally to the east and southeast towards the proposed Sonoran Sky development (Figure 1). The project area is in the NW¼NW¼ and NE¼NW¼ of Section 14, and the NE¼NE¼ of Section 15, Township 4 North, Range 5 East, Gila and Salt River Baseline and Meridian, as depicted on the U.S. Geological Survey (USGS) McDowell Peak, Arizona, 7.5-minute quadrangle (Figure 2).

PHYSIOGRAPHIC CONTEXT

The project area is located within the Basin and Range physiographic province, adjacent to an unnamed drainage at the north end of the McDowell Mountains (Trapp and Reynolds 1995). The elevation within the project area ranges from 2,740 to 2,825 feet above mean sea level. The underlying geology of the project area is Middle Proterozoic granitic rocks consisting of porphyritic biotite granite with large microcline phenocrysts, with local fine-grained border phases and aplite (Arizona Geological Survey 2000). Soils within the project area consist of Gran-Wickenburg complex and Tres Hermanos-Anthony complex (gravely sandy loam formed in mixed alluvium-colluvium) (Natural Resources Conservation Service 2021).

The project is within the Arizona Upland/Eastern Sonoran Mountains ecoregion and the Upland subdivision of the Sonoran Desertscrub biotic community (Brown 1994). Observed vegetation consists of saguaro, foothill paloverde, sweet acacia, mesquite, creosotebush, crucifixion thorn, prickly pear, jojoba, teddy-bear cholla, buckhorn cholla, barrel cactus, ephedra, white sage, various forbs, and grasses. The region is characterized by a desert climate with hot summers and moderate winters, with precipitation split between summer monsoons and winter rains (Western Regional Climate Center 2021). Historical climatological data are available from weather stations near Scottsdale, Arizona. From the period from 1968 to 1985, average total annual precipitation was 9.3 inches. The average summertime high temperature was 104.2 Fahrenheit (ºF), and the average winter low temperature is 37.5°F (Western Regional Climate Center 2021).

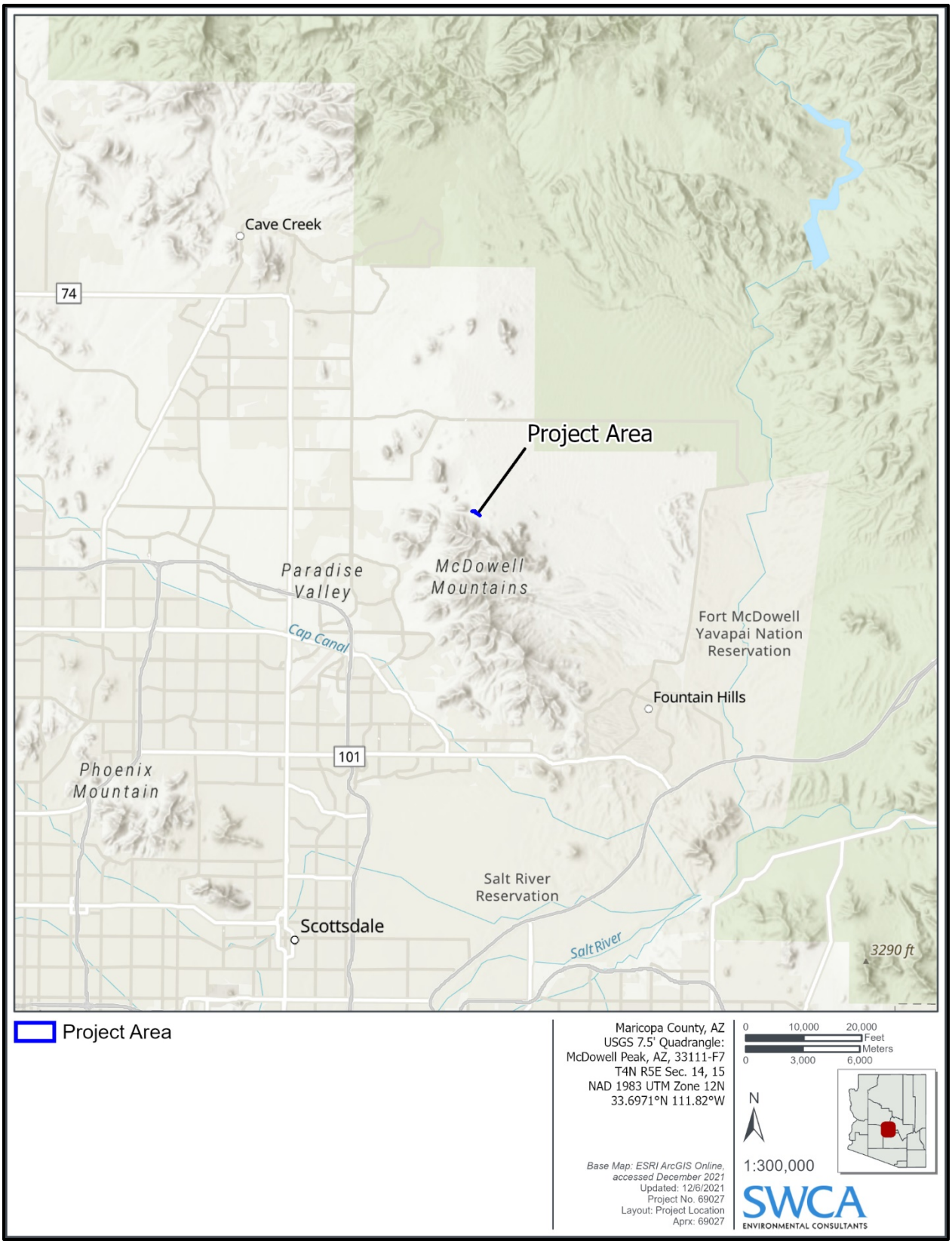

Figure 1. Project vicinity.

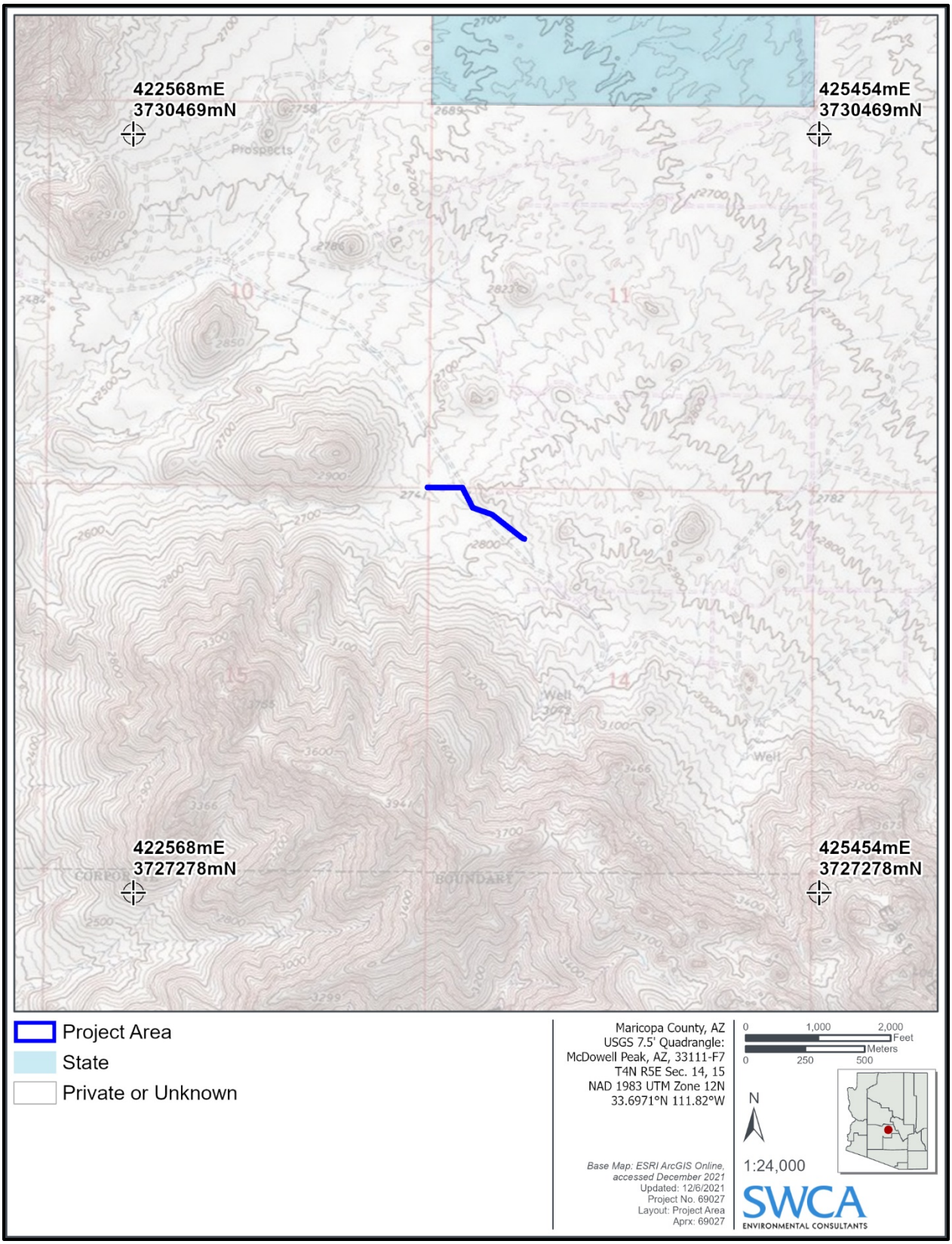

Figure 2. Project location.

CULTURE HISTORY

The south-central part of Arizona has been inhabited for millennia. The earliest evidence of human occupation, evidenced by only a few isolated Paleoindian Clovis projectile points, dates to about 11,000 years ago. The oldest archaeological sites in the region date to the Middle Archaic, approximately 5,000 years ago, and appear to represent use on a temporary basis by residentially mobile hunter-gatherers (Cordell 1997). Habitation structures are generally absent or, if present, they are ephemeral in construction (Cordell 1997). By 2,000 years ago, pit houses, ceramics, and intensively used ground stone assemblages signify the beginnings of sedentism (Huckell 1995). Evidence of agriculture is lacking at this time, which may support a model of short-term sedentism prior to the adoption of maize. However, cultigens are well documented elsewhere in central and southern Arizona, centuries before the Late Archaic period pit house sites known from the nearby Santa Cruz Valley (Huckell 1995:139). This strongly suggests that groups living in this area had adopted maize and other cultigens by at least 2,000 years ago.

The best-documented and most widespread archaeological remains in the Phoenix Basin are attributed to the Hohokam, prehistoric desert farmers who occupied much of central and southern Arizona (e.g., Bayman 2001; Crown and Judge 1991; Fish 1989; Gumerman 1991; Haury 1976). Although not necessarily recognizable as Hohokam, the earliest archaeological manifestation that probably gave rise to the Hohokam cultural tradition is assigned to the Red Mountain phase (A.D. 1–500) of the Pioneer period (A.D. 1–750) (Cable and Doyel 1987; Dean 1991; Hackbarth 1992, 2001; Morris 1969). Evidence from Red Mountain phase sites indicates that people subsisted on a mix of wild resources and agricultural products. Corn was the dominant crop, along with beans, squash, and cotton. The first evidence for canal irrigation along the Salt River is attributed to this time, A.D. 400 (Ackerly and Henderson 1989). Identified house forms include small circular and “bean-shaped” pit houses (Mabry 2000).

The period between A.D. 500 and 650 is defined as the Vahki phase. It appears that by this time, irrigation had become well established. Vahki phase canals have been identified at Snaketown (Haury 1976), as well as along the edges of the Salt River floodplain (Ackerly and Henderson 1989). Domestic architecture consists of square and rectangular pit houses of various sizes (Ciolek-Torrello et al. 2000; Crary and Craig 2001).

The Late Pioneer period (A.D. 650–750) saw the appearance of decorated pottery in southern Arizona. Hohokam decorated pottery has red painted designs on a light-colored buff or brown background (Abbott 2001; Haury 1976). The earliest decorated pottery types include Estrella, Sweetwater, and Snaketown Red-on-buff (Wallace 2001). House types associated with the Late Pioneer period vary greatly. Small, domed field houses made from bent poles and covered with brush served as temporary shelters in agricultural fields or at resource procurement and processing sites. Few artifacts are associated with the remains of these structures. Late Pioneer period habitation sites, on the other hand, contain moderately sized pit structures with square or rectangular floor plans and formal, plastered hearths. These are far more substantial than the field houses and were occupied for extended periods.

Late Pioneer period subsistence was based on a mixture of wild resources and agricultural produce. The use of irrigation expanded from the floodplains to include lands on terraces above rivers (Ackerly and Henderson 1989).

The Gila Butte and Santa Cruz phases make up the Colonial period (A.D. 750–950). This was a time of expansion and elaboration of the Hohokam culture, where the number and distribution of sites across the landscape increased considerably. Colonial period Hohokam artifacts have been found as far north as

Prescott, in north-central Arizona, and as far south as northern Mexico, extending to the west of Gila Bend in southwestern Arizona and into New Mexico to the east (Haury 1976). Abbott (1994, 2001) argues that the center for most of the decorated buff ware vessels produced during this time was the middle Gila River valley. Not only did the Hohokam expand their territory, they also intensified contact with their neighbors. Intrusive ceramics from the north, east, and west have been found at Hohokam sites dating to this time. It has been argued that Colonial period Hohokam social organization was tied to the exchange of ritual and subsistence goods (Doyel 1985). Across Arizona, networks of interaction spheres dominated the social landscape and facilitated exchange across the region. It was during this time that the Hohokam achieved their highest level in the production of arts and crafts. Ceramics and shell jewelry dating to this period are well made and elaborately decorated.

The large, square, communal structures found in earlier times ceased to be built during the Colonial period. Instead, ball courts, which were probably first built in the early A.D. 800s, became the dominant form of public architecture (Wallace 2001). Their appearance in southern Arizona has been thought to mark the appearance of a regional system with religious, economic, and political links that crosscut geographical boundaries (Abbott 2001; Wilcox and Shenk 1977). Subsistence was based on a mixture of wild resources and agricultural crops. Some wild species (e.g., little barley) were so intensively exploited they became as important as some domesticated species (Bohrer 1987). The use of irrigation expanded significantly throughout the Salt and Gila River valleys, and the construction and maintenance of canals had a significant impact on Hohokam social and political organization (e.g., Abbott 2000; Hunt et al. 2005).

With the onset of the Sedentary period (Sacaton phase, A.D. 950–1150), there was a decline in the quality of Hohokam material culture, especially in the production of ceramics and shell ornaments. Ball courts were still the dominant form of public architecture during the Early Sedentary period; however, by its end, few were being built. As the construction of ball courts diminished, the construction of capped mounds or platform mounds became more common. Platform mounds were built near village centers around plazas that are surrounded by domestic features. House types exhibit significant variability and are aggregated within courtyard groups or village segments (Wilcox et al. 1981).

Subsistence continued to be based on agriculture, although there was some emphasis on collecting certain wild plant species, such as cholla. Cotton was also of major importance: its fiber was used for weaving textiles and its seeds were eaten.

By the end of the Sedentary period, a major reorganization of Hohokam society had occurred. After a period of intensive growth and expansion, many villages and areas were abandoned. Populations began aggregating in larger villages along the Salt River. These changes in the social and political environment were reflected in changes in public architecture and ceramic and shell production.

The Sedentary period is followed by the Classic period, which is divided into the Soho (A.D. 1150–1300) and the Civano phases (A.D. 1300–1450). Differences in ceramic decoration and architectural styles separate these two phases. Red-on-buff ceramics continued to be produced during the Soho phase, although they occur in lower frequencies. Red wares became increasingly common during the Civano phase, and the introduction of long-necked jars marks a clear contrast with earlier ceramic styles.

Structures with post-reinforced adobe walls and surface structures were common during the Soho phase. However, during the Civano phase, adobe compounds—often containing small plazas—and adobe structures were built and used to the near exclusion of semi-subterranean structures. Puddled and coursed adobe construction generally replaced the use of structures with pole-reinforced walls, and the number and proximity of rooms within compounds increased.

Public architecture also underwent a change during the Early Classic period. There was a significant increase in the construction and use of platform mounds (Gregory et al. 1988). At the same time, the construction of ball courts declined to its lowest point. The apex of Hohokam public architecture was achieved during the Civano phase with the building of "big houses." The only remaining example of a big house is found today at Casa Grande Ruins on the outskirts of Coolidge. These structures probably served multiple functions. It has been argued that they were clear symbols of elite status within Hohokam society (Wilcox and Shenk 1977). Big houses often co-occur with platform mounds, with a central plaza separating the two. The introduction of big houses is as mysterious as their disappearance.
The construction and use of big houses may have been the result of changes within Hohokam society, and their abandonment may have been tied to attacks from outsiders (e.g., Teague 1989).

Red wares and the disappearance of buff wares mark the Civano phase, although plain wares continue to dominate the total ceramic assemblage. Polychrome pottery (in particular, Gila and Tonto polychromes) and local imitations were present after A.D. 1320 (Reid and Whittlesey 1992).

Canal irrigation was still very important during the Civano phase. Civano phase Hohokam depended greatly on corn, beans, and squash as the mainstays of their diet, although agave and cholla were also significant dietary components. Corn was certainly the most common domesticate, and the abundance of agave at many sites indicates that it, too, was extremely important. As evidenced at some sites, during the Late Classic period, the use of agave became increasingly important and the availability of agricultural produce declined (e.g., Miller 1994).

Hohokam social organization during the Civano phase was clearly different from what preceded and followed it. Population size and density at many of the large sites in the Salt River valley reached never-before-seen levels. Although the level of social and political organization actually achieved by the Hohokam has been much debated, some increase in social complexity was undoubtedly necessary to manage the higher population densities that developed. This greater social complexity may have been reflected in the construction and use of platform mounds and big houses.

The post-Classic period (A.D. 1450–1540) in the Phoenix Basin, referred to by some as the Polvorón phase, constitutes a somewhat hazy gap in occupation between the Late Classic period Hohokam and the first Europeans to arrive in the area (e.g., Bayman 2001; Chenault 2000; Henderson and Hackbarth 2000). Nevertheless, the traits used to identify the Polvorón phase include jacal structures, polychrome ceramics, and an abundance of obsidian. Many have argued that these characteristics are not sufficient to distinguish the Polvorón phase from the late Civano phase. Additionally, available chronological dates make it difficult to distinguish between Civano and Polvorón phase sites (Dean 1991:87).

By the late Civano phase, the success enjoyed by the Hohokam had vanished. High population densities, a decline in agricultural productivity, the failure of many irrigation systems, and the depletion of food resources, along with the presence of disease, malnutrition, flooding, and drought, are cited as reasons for the collapse of the Hohokam (e.g., Bayman 2001; Van Gerven and Sheridan 1994). Nevertheless, Bayman (2001) points out that the Hohokam may have continued to occupy the area until the early 1500s and that the debate over the cause or causes for the decline and disappearance of the Hohokam is far from resolved. Some have even argued that Hohokam and Salado may have directly encountered the Spanish (Reff 1992).

Following the collapse of the Hohokam regional system, Akimel O'odham (Pima) and Tohono O'odham (Papago) groups lived in the middle Gila River valley. For unknown reasons, the Salt River valley was either used sparingly or was abandoned following the Hohokam collapse. Akimel O'odham and Tohono O'odham groups lived in small rancherías, subsisting on agricultural products, wild plant foods, and game. The Pee Posh (Maricopa), who were migrants from the Gulf of California area, formed an alliance

with the Pima in the early 1800s and have lived in the Salt-Gila Basin ever since. All these groups continue to occupy the area, living on several reservations.

Historic factions began to arrive in appreciable numbers in the eighteenth century. The ensuing period of historical exploitation was marked by mining, ranching, and homesteading interests. These historical pursuits included the construction of new canals, as well as the reuse of prehistoric ones.

The village of Scottsdale was established in 1888 by Civil War Veteran Rev. Winfield Scott (Barnes 1988). The Arizona Canal had just been constructed and Scott purchased a section of land under the Desert Land Act for $2.50 an acre. The Desert Land Act required the land to be irrigated within three years, so Scott enlisted his brother, George Washington Scott, to help clear the land, build fences, and add irrigation ditches for the barley, citrus, and grapes he planted (Trimble 1986). George lived in a tent southwest of his brother's parcel and is considered to be Scottsdale's first resident. Rev. Scott was still enlisted in the army and was relocated to Fort Huachuca, leaving George in charge of the homestead (Barnes 1960), though Rev. Scott still preached at churches within the Phoenix metropolitan area (Trimble 1986). In 1893, Rev. Scott retired from the army to his homestead with his veteran mule, Old Maud. A painting of Old Maud hangs in the mayor's office of City Hall. Scottsdale grew in the image of "church-minded" people who wanted to keep the "vices and moral decadence out of Phoenix" (Trimble 1986). The Scottsdale Public School System was established in 1896.

Much of what became north Scottsdale was once the DC Ranch. Dr. W. B. Crosby established the DC Ranch in 1885. E. O. Brown later bought the ranch to add to a portfolio of local business interests. He acquired land by homesteading and by buying other failed homesteads. For example, Miguel Ochoa sacrificed his homestead to the DC Ranch in payment for a grocery bill at the E. O. Brown Mercantile Company (Burruel 2007:88). Brown shipped his first load of cattle to California in 1910 (Kelley 2013). E. O. Brown died in 1937, but the ranch continued to grow under the management of his son, E. E. Brown, who added purebred Brahmans to the herd of Herefords and Mexican Longhorns. His death in 1966 began the sale and division of the holdings. DC Ranch is now a residential community, although a considerable portion of the open range was incorporated into the McDowell Sonoran Preserve. Parallel with the establishment of ranches, prospectors explored the potential mineral resources of the McDowell Mountains from the 1880s onwards. General Land Office (GLO) records show E. O. Brown platted his own mineral claim—the Mountain Spring and Silver Leaf Lodes—in 1922. The prospectors met limited success. The Dixie Mine was the only significant mining development in the McDowell Mountains, incorporating a 300-foot-long tunnel and a 240-foot-deep shaft. Some copper, gold, silver, and tin ore was extracted, but the mine was at best only marginally profitable and changed hands several times before it was abandoned in the 1960s (Arizona Geological Survey 2004).

Artists and writers moved to Scottsdale in the early 1900s, and the first resorts—the Ingleside Inn (1909) and the Jokake Inn (1922)—opened (City of Scottsdale 2021). Population growth was spurred by construction of the Granite Reef Dam (1908) and the Roosevelt Dam (1911), but Scottsdale remained a small market town serving surrounding agricultural settlements. During World War II, a large prisoner-of-war camp was erected at Papago Park, to keep enemy naval personnel as far from the sea as possible. Several German prisoners, determined to escape, dug a 178-foot tunnel with spoons with the end goal of floating down the valley's system of rivers to Mexico. Within 6 weeks, all escaped prisoners had been rounded up and returned to the camp, having been thwarted by the Salt River's lack of water (Trimble 1986). After the war, Scottsdale made a conscious effort to promote an identity based on the Old West. The Scottsdale Chamber of Commerce, formed in 1947, adopted a Western design theme for the downtown area and the slogan "The West's Most Western Town" (City of Scottsdale 2021). Sustained residential growth proceeded from that time.

CLASS I PREVIOUS RESEARCH

AZSITE DATABASE

SWCA consulted the AZSITE database, which compiles records from the Bureau of Land Management, Arizona State University, the State Historic Preservation Office (SHPO), and the Arizona State Museum (ASM), to identify prior cultural resources projects and previously recorded cultural resource sites in the project area and within 1 mile from the project area.

A review of available records revealed that 22 cultural resource projects have been conducted within 1 mile of the project area. These projects were conducted from 1965 to 2014 for archaeological reconnaissance, residential development, telecommunication projects, park and trail development, and land acquisition. Of these, five projects intersect or abut the project area and have covered the entire current project area (Table 1; Appendix A). The most recent survey of the project area was conducted by Northland Research, Inc. (Northland) in 2007 for potential land development (Gage 2007).

Table 1. Previously Conducted Projects within a 1-Mile Radius of the Project Area

Agency Number	Project Name	Report Reference
1987-243.ASM	North Scottsdale Reconnaissance	RECON 1987
2012-10.ASM	DMB McDowell Mtn. Valley Survey	Breternitz et al. 2000
2012-182.ASM	120th Street and Pinnacle Peak Road	Gage 2007
68308.SWCA	Toll Brother Sonoran Sky Review	Alvarado 2021a
68309.SWCA	Toll Brothers Preserve IV Review	Alvarado 2021b

The prior projects identified 15 cultural resource sites within 1 mile of the project area. These sites are mostly Hohokam rock shelters, bedrock mortars, and artifact scatters. One site is a historic-period water tank. Of these sites, only one site intersects the project area, AZ U:5:335(ASM). This site was recorded by Northland as a Hohokam habitation site with bedrock mortars, three rock shelters, a midden, and an artifact scatter. The site was recommended eligible for listing in the NRHP under Criterion D (information potential) (Gage 2007).

Table 2. Previously Recorded Cultural Resources within a 1-Mile Radius of the Project Area

Site Number	Resource Type	Cultural/ Temporal Affiliation	Eligibility Status	Report Reference
AZ U:5:22(ASM)	Sherd scatter	Prehistoric Hohokam	Unevaluated	RECON 1987
AZ U:5:23(ASM)	Bedrock mortars and rock shelter	Prehistoric unknown	Unevaluated	RECON 1987
AZ U:5:24(ASM)	Artifact scatter	Prehistoric Hohokam	Unevaluated	RECON 1987
AZ U:5:25(ASM)	Water tank and pipes	Historic-period Mexican-American	Determined not eligible	RECON 1987
AZ U:5:26(ASM)	Sherd scatter	Prehistoric Hohokam	Unevaluated	RECON 1987
AZ U:5:27(ASM)	Bedrock mortars	Prehistoric Hohokam	Unevaluated	RECON 1987
AZ U:5:239(ASM) / AZ U:5:3(ASU)	Hergerger Site / Pinnacle Peak Village	Pre-Classic Period Hohokam	Recommended eligible, Criterion D	Opfenring 1965
AZ U:5:256(ASM)	Bedrock mortars and rock shelter	Prehistoric Hohokam	Recommended eligible, Criterion D	Breternitz et al. 2000

Site Number	Resource Type	Cultural/ Temporal Affiliation	Eligibility Status	Report Reference
AZ U:5:257(ASM)	Rock shelter	Prehistoric Hohokam	Recommended eligible, Criterion D	Breternitz et al. 2000
AZ U:5:258(ASM)	Bedrock mortars and rock shelters and rock alignments	Prehistoric Hohokam	Recommended eligible, Criterion D	Breternitz et al. 2000
AZ U:5:259(ASM)	Artifact scatter	Prehistoric Hohokam	Recommended eligible, Criterion D	Breternitz et al. 2000
AZ U:5:260(ASM)	Rock shelter and artifact scatter	Prehistoric Hohokam	Recommended eligible, Criterion D	Breternitz et al. 2000
AZ U:5:261(ASM)	Rock shelters and bedrock mortar	Prehistoric Hohokam	Recommended eligible, Criterion D	Breternitz et al. 2000
AZ U:5:335(ASM)	**Rock shelters and bedrock mortars**	**Prehistoric Hohokam**	**Recommended eligible, Criterion D**	**Gage 2007**
AZ U:5:336(ASM)	Rock rings	Unknown	Unevaluated	Gage 2007

Note: **Bold** denotes previously recorded sites that intersect the current project area.

REGISTERS OF HISTORIC PLACES

The National Park Service's NRHP database was searched to identify properties listed in the NRHP that are located in or within 1 mile of the project area. No NRHP-listed properties were identified within the search area. The ARHP and COS Historic Register were also consulted for listed properties located in or within 1 mile of the project area. No ARHP or COS Historic Register–listed properties were identified within the search area.

HISTORICAL MAP RESEARCH

SWCA also reviewed historical General Land Office (GLO) plat maps, historical topographic maps, and historical aerial imagery for the project area to identify any historic-period features that may still exist. The General Land Office original survey plat map of Township 4 North, Range 5 East, filed in 1920, depicts an unnamed northwest-southeast-trending road intersecting the project area in the NW¼ quarter of Section 14. A fence line is depicted in the NE¼ of Section 14, and "REFUGIA OCHOA" is depicted in the SW¼ of Section 14. This matches with a Homestead land patent filed in 1924 for Miguel Ochoa for the entire 640 acres of Section 14, Township 4 North, Range 5 East. Additional roads were plotted in Sections 10, 11, and 12, and Well and House plotted in SW¼ of Section 10.

The first available USGS topographic map is the 1904 USGS Camelback, AZ, 15-minute topographic quadrangle, which does not depict any resources in the project area or within 1 mile. The 1954 USGS Mesa, AZ, 30-minute topographic quadrangle depicts an unimproved road adjacent to the project area. The 1965 USGS McDowell Peak, AZ, 7.5-minute topographic quadrangle depicts an unimproved northwest-southeast-trending road intersecting the project area. Additional unimproved roads are depicted within the 1 mile from the project area, as well as two wells and a windmill.

Historical aerial photography available from the Maricopa County GIS portal indicates the project area has remained undeveloped since as early as 1953. The adjacent residential houses are visibly under construction 1996 aerial imagery (Maricopa County Assessor's Office 2021).

PREHISTORIC CONTEXT

While a broad understanding of Phoenix Basin prehistoric cultures and chronology have been achieved, studies within the project area may reveal localized variation. In order to adequately assess an archaeological site, researchers assign them to a general temporal category (i.e., prehistoric, ethnohistoric, historic, or modern). Other topics, such as trade interactions or settlement patterns, can only be addressed following chronological assessment. The cultural and temporal affiliations can then be further refined using diagnostic artifacts to the categories presented in the Culture History (e.g., Paleoindian, Archaic , Hohokam Ceramic, etc.). A cultural and temporal assignment of the cultural sites will provide for a better understanding of how they relate to the rest of the prehistoric cultural landscape.

Prehistoric peoples practiced varying settlement and subsistence strategies depending on temporal, environmental, and demographic factors. The extent and nature of these variables can shift greatly between localities. Studies related to prehistoric settlement and subsistence can aid our understanding of how populations within the project area adapted to their local conditions.

HISTORIC CONTEXT

The project area is north of the McDowell Mountains, an area that has not seen as much residential development or transportation corridors as other nearby areas to the west and south. Historical GLO and USGS maps depict a historic-period road and Miguel Ochoa's Homestead. Although no major roads are plotted near the project area, the remains of peripheral roads and other historic resources used by historic-period farmers and ranchers may be present. These resources could inform on the earliest known recorded settlement of this locality.

SURVEY EXPECTATIONS

Based on the results of the background research and what is known of the local cultural context, SWCA anticipated encountering one cultural resource site. The project area had been previously surveyed multiple times and site AZ U:5:335(ASM) intersects the current project area. It was previously recorded as a prehistoric Hohokam habitation site with bedrock mortars, three rock shelters, a midden and an artifact scatter (Gage 2007). Other prehistoric Hohokam sites have been recorded in the area, including site AZ U:5:239(ASM), formerly known as the Herberger Site or Pinnacle Peak Village. This site is possibly the largest Pre-classic Hohokam site in the northern Phoenix Basin. Additionally, historic-period isolated cultural resources were expected to be present, possibly relating to the Ochoa homestead.

SURVEY METHODS

SWCA archaeologist and Project Director, Andrew Vorsanger, surveyed the project area on November 15, 2021. Jerome Hesse served as the Principal Investigator. Since the project area is on private lands, no cultural resources permit was required. The boundary of the project area and adjacent known cultural sites were uploaded to a Samsung Tablet and accessed using the ESRI Field Maps application using SWCA’s secure enterprise GIS server. The tablet was Bluetooth paired to a Juniper Geode submeter global positioning system (GPS) unit. The project area was surveyed using parallel pedestrian transects spaced no more than 15–20 meters apart.

Field notes were taken during the survey describing the terrain, soils, vegetation, and observed cultural materials. Sites were recorded on standardized ASM site forms. No artifacts were collected.

GPS data were collected referenced to NAD83 and with real-time differential correction. The site boundary, all features, disturbances, point located artifacts, and photograph locations were recorded with the GPS.

Photographs were taken of the project area, features, diagnostic artifacts, and disturbances. These images were captured using the digital camera on the Samsung tablet, with a minimum resolution of eight megapixels.

Ceramics were identified to ware and type and by vessel form (when possible). The ceramic types were derived from the primary literature for the region (Abbott 2012; Haury 1976; Wallace 2001, 2004). Projectile-point identifications were identified by type or morphology, based on the primary literature for point types likely encountered during the survey (Justice 2002; Sliva 2015). Debitage was described using the triple cortex typology (Andrefsky 1998; Crabtree's 1972). Ground-stone artifact classifications followed Adams's (2002) nomenclature.

Diagnostic historic-period artifacts were classified based on the primary literature for different artifact classes. Glass bottles were typed based on Toulouse's (1971) and Lindsey's (2021) studies. Evaporated milk cans were typed and dated according to Reno's (2012) update to the Simonis guide; other tin cans were typed according to Rock's (1989) study.

RESOURCE DEFINITIONS

Archaeological resources were evaluated according to criteria established by the ASM (1995). The criteria recognize two classes of archaeological remains: the site and the isolated occurrence (IO). The archaeological site is defined under rules adopted for the administration of the Arizona Antiquities Act:

> "Archaeological site" means any area with material remains of past Indian or non-Indian life or activities that are of archaeological interest, including without limitation, historic or prehistoric ruins, burial grounds, and inscriptions made by human agency. (Arizona Antiquities Act, Arizona Revised Statutes 41-841, *et seq.*, Chapter 8-201, A.3).

As interpreted by the ASM, "remains of archaeological interest" may include "purposeful constructions" or simply concentrations of materials more than 50 years old. Additionally, sites should consist of at least one of the following:

- 30+ artifacts of a single class (i.e., 30 sherds, 30 tin cans) within an area 15 meters (50 feet) in diameter, except when all pieces appear to originate from a single source (i.e., one ceramic pot, one core, one glass bottle);
- 20+ artifacts which include at least 2 classes of artifact types (i.e., sherds, groundstone, nails, glass) within an area 15 meters (50 feet) in diameter;
- One or more archaeological features in temporal association with any number of artifacts;
- Two or more temporally associated archaeological features without artifacts.
- Non-linear, isolated features without associated artifacts may be recorded at the discretion of the archaeologists. An "isolated feature" is defined as a feature that does not have any other features within a 100-meter (325 feet) diameter. This might include isolated rock piles, mine shafts, prospecting pits or unidentified depressions without associated artifact associations. (ASM 1995)

An archaeological occurrence meeting these minimum criteria is recorded as a site. An occurrence not meeting these criteria is generally classified as an IO, although under exceptional circumstances an occurrence may be judgmentally classified as a site.

In February 2021, ASM issued a policy exempting historic-period waste piles from needing to be recorded as archaeological sites (ASM 2021). If a historic-period waste pile is composed primarily of mass-produced artifacts, does not qualify as an open dump, and is not located within 100 m of another historic-era feature, then it may be recorded as an IO.

ARIZONA AND NATIONAL REGISTER OF HISTORIC PLACES CRITERIA FOR EVALUATION

Four criteria are applied in the evaluation of cultural properties for inclusion in the ARHP/NRHP (36 Code of Federal Regulations 60.4; and Arizona Revised Statutes [ARS] §41-511 R12-8-302 *et seq.*). Normally, a significant property must be at least 50 years old and meet at least one of these four criteria to be considered eligible for listing in the NRHP. According to the NRHP criteria, the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

A. that are associated with events that have made a significant contribution to the broad patterns of our history; or

B. that are associated with the lives of persons significant in our past; or

C. that embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguished entity whose components may lack individual distinction; or

D. that have yielded, or may be likely to yield, information important in prehistory or history.

CITY OF SCOTTSDALE HISTORIC REGISTER CRITERIA FOR EVALUATION

Archaeological resources are significant in the City of Scottsdale when one or more of the following criteria are present on the property or are contained in the archaeological resources collected from the property:

1. The property represents a period or periods of prehistory or history in Scottsdale more than 50 years old. The property can be evaluated in comparison to similar known sites and compared to what is currently known of Scottsdale and the region's prehistory and history, and/or

2. Important information is present on the property, or from artifacts collected from the property, and/or

3. The property has research potential and research questions can be addressed through artifacts found on or collected from the property. The property has contributed important information regarding past human life and culture in Scottsdale and the desert, and/or

4. The property contains a high frequency, density, diversity, or substantial number of archaeological resources, and/or

5. The property's archaeological resources possess integrity that positively affects their significance and the potential for the resources to yield important information, and/or

6. If artifacts have been excavated from the property, the information yielded from the artifacts and excavation has contributed to the knowledge of past cultures or archaeological techniques, and/or
7. The property possesses resources, such as buildings or structures, which can be documented to be architecturally or historically significant in their own right, and/or
8. The archaeological resources on or from the property have been acknowledged by the Historic Preservation Commission or the City Council as resources of particular importance in the history of human activities or settlement in the City of Scottsdale, and/or
9. In cooperation with any Native American community, the Historic Preservation Commission or City Council has identified the types of resources on the property as important and significant to the prehistory or history of Native Americans.

SURVEY RESULTS

General conditions for the survey were good and ground visibility was between 60–80 percent (Figure 3). One prehistoric cultural site (AZ U:5:335[ASM]) and two cultural isolated occurrences were recorded during this survey (see Appendix B). The site is a previously recorded prehistoric temporary habitation and resource processing area.

Figure 3. Overview of the project area, facing northwest.

SITES

AZ U:5:335(ASM)

Site Type: Habitation and resource processing
Cultural Affiliation: Hohokam
Temporal Affiliation: Classic Period A.D. 1100–1450
Dimensions/Area: 184 × 102 m (1,253 m^2)
Elevation: 2,800 feet amsl
Vegetation: Saguaro, jojoba, buckhorn cholla, teddy-bear cholla, white sage, ephedra, coralbean
Local Topography: Gentle slope above a drainage
Land Jurisdiction: Private
A/NRHP Status: Recommended eligible under Criterion D

Site AZ U:5:335(ASM) is a composed of three rockshelters, four bedrock mortars, a midden, a thermal rock feature, and a light artifact scatter. The site is divided into a southern locus and a northern locus, with the majority of the site contained in the northern locus (See Appendix B). The site's proximity to site AZ U:5:239(ASM), a large Hohokam habitation site located to the northwest, suggests that this site may relate to it in some way. Ground surface visibility at the site is approximately 70 percent. Soils consist of a gravelly sandy loam. The site is in good condition, with the disturbances relating to erosion and modern use evidenced by trash.

Site AZ U:5:335(ASM) was recorded by Northland in 2007 and described as a Hohokam habitation and resource processing site with four bedrock mortars on a granite outcrop (Feature 1), three rockshelters (Features 2–4), a midden (Feature 5), and an artifact scatter. The site has two loci, divided into a southern and a northern outcrop of boulders. Recorded artifacts include Wingfield Plain sherds, buffware sherds, plainware sherds, vesicular basalt metate fragment, quartzite cobble mano, basalt flakes, quartzite flakes, schist flakes, and fire-cracked rocks. Northland suggested a Hohokam-period affiliation for the site, but mention the possibility for an Archaic period occupation from the presence of a small quartzite mano. They recommended the site eligible for listing in the A/NRHP under Criterion D.

SWCA revisited the site (Figures 4 and 5) and found the site relatively unchanged from the previous recording. The five preciously recorded features were all relocated, and an additional thermal feature was recorded. Features 1 and 2 are in the southern locus. Feature 1 is a large flat granite boulder measuring 4.4 × 2.5 × 1.4 m with four oval mortars on the top (Figure 6). Two mortars are oriented roughly 320 degrees azimuth (NW) and average 36 × 22× 9 cm in size. The other two mortars are oriented roughly 265 degrees azimuth (W) and average 31 × 15 × 7 cm in size. Feature 2 is composed of approximately six large granitic boulders forming a semicircular shape with an open area measuring approximately 2.7 m in diameter (Figure 7). It is possible this feature could have been used as a rockshelter. Although this feature was previously described as being surrounded by prehistoric sherds and flakes, SWCA only observed a single Gila Plain jar sherd during the current recording.

A light scatter of prehistoric sherds and flakes connects the southern locus to the northern locus. Feature 3 is a rockshelter created from a large granite boulder overhanging smaller boulders (Figure 8). The shelter measures 1.2 m tall, 2.2 m wide, and 3.6 m deep. Dark staining is visible on the angled roof, possibly from sooting. A few plainware sherds were observed within the rockshelter. Feature 4 is a rock shelter on the opposite side of the large granite boulder, created from an overhang of the boulder (Figure 9). Smaller granite boulders contribute to delineating the shelter, measuring 2 × 3 m. A few flakes and sherds and a vesicular basalt metate fragment were previously noted, but SWCA did not observe any artifacts during

the current recording. Feature 5 is an artifact concentration or midden extending southeast from the large granite boulder. The area is approximately 10 m in diameter (79.1 m^2) and contained darker soils than those outside. The midden contained 24 Wingfield Plain sherds, Gila Plain sherds, buffware sherds, basalt flakes, and a vesicular basalt metate fragment measuring 5 × 5 ×2.5 cm (A-1) (0.3 artifact/m^2). This vesicular basalt metate fragment may be the same one that was originally recorded by Northland near Feature 4. Feature 6 is a thermal feature, not previously observed by Northland. The feature is exposed in the side of an incised drainage within the midden feature (Figure 10). An approximately 40 × 40 cm profile of the feature is exposed in the NW wall of the drainage, containing charcoal and fire-cracked rocks. Additional buried thermal features are likely to be present within the midden area, contributing to the darker colored soil.

The site likely functioned as a short-term habitation and resource processing area, with multiple occupations. The diagnostic ceramics indicate a Hohokam use of the site during the Classic Period (A.D. 1100–1450). No evidence of an Archaic Period component was observed.

Site AZ U:5:256(ASM) is plotted approximately 30 m north of site AZ U:5:335(ASM) and was recorded by Soil Systems, Inc. in 2000 (Breternitz et al. 2000). The site was described as a granite boulder overhang creating a rockshelter, a bedrock grinding slick, a bedrock outcrop with five basin metates, and a midden with dark soils (Breternitz et al. 2000). The plotted location was briefly investigated, and no cultural materials were observed. Due to the similarity in the descriptions, sites AZ U:5:256(ASM) and AZ U:5:335(ASM) may be the same site, with the location of AZ U:5:256(ASM) misplotted.

Site AZ U:5:355 was previously recommended eligible for listing in the A/NRHP under Criterion D. SWCA concurs and recommends the site eligible for listing in the A/NRHP under Criterion D, and eligible for inclusion in the COS Register. It is not associated with significant events or persons, nor does it exhibit artistic values or distinctive characteristics of a type, period, or method of construction. There is a strong likelihood that there are additional intact archaeological deposits that could be used to address important research questions pertaining to prehistoric Hohokam resource use. SWCA recommends that the site be avoided by potentially ground-disturbing activities at this time.

Figure 4. Overview of AZ U:5:335(ASM), facing north.

Figure 5. Overview of AZ U:5:335(ASM), facing southwest.

Figure 6. Overview of F-1 from AZ U:5:335(ASM), facing southwest.

Figure 7. Overview of F-2 from AZ U:5:335(ASM), facing west.

Figure 8. Overview of F-3 from AZ U:5:335(ASM), facing southwest.

Figure 9. Overview of F-4 from AZ U:5:335(ASM), facing east.

Figure 10. Overview of F-6 from AZ U:5:335(ASM), facing northwest.

ISOLATED OCCURRENCES

Two IOs were recorded in the project area (see Appendix B). IO-1 was observed near the southeastern end of the project area and consists of a basalt tertiary flake and a Wingfield Plain sherd within 10 meters. IO-2 was observed near the northwestern end of the project area and consists of a 1919 GLO survey section marker. The IOs do not qualify as archaeological sites and do not meet the requirements for A/NRHP eligibility or any of the criteria of significance for inclusion in the COS Historic Register.

MANAGEMENT RECOMMENDATIONS

SWCA conducted a Class III pedestrian cultural resources survey of the proposed offsite sewer line for the Sonoran Sky Planned development in Scottsdale, Maricopa County, Arizona. The survey resulted in the identification of one cultural site (AZ U:5:335[ASM]) and two IOs. SWCA recommends site AZ U:5:335(ASM) eligible for listing in the Arizona and National Registers of Historic Places, and inclusion in the City of Scottsdale Historic Register. SWCA recommends ground disturbing activities avoid the site. The two IOs do not contain sufficient material to qualify as archaeological sites and do not possess the significance or integrity to meet the requirements for inclusions in the A/NRHP and COS Historic Register. SWCA recommends a conditional Certificate of No Effect be issued for the project, provided the site can be avoided by proposed ground disturbing project activities. No further cultural resource work is recommended.

Development on the property is subject to the requirements of Scottsdale Revised Code, Chapter 46, Article VI, Protection of Archaeological Resources, Section 46-134, which states:

> When a previously unidentified archaeological site is discovered in the course of construction, the property owner immediately shall notify the City Archaeologist or

> Historic Preservation Officer. The property owner shall have a preliminary study made by a qualified archaeologist to determine the effect that the proposed development project may have on the site. The City Archaeologist and/or Historic Preservation Officer, with concurrence from the qualified archaeologist hired by the property owner, shall evaluate on-site the significance of the archaeological finding as soon as possible. When the Historic Preservation Officer, the qualified archaeologist hired by the property owner and the City Archaeologist concur that no adverse effect on the archaeological site will take place, the project may proceed immediately. Where an adverse effect on a significant archaeological site will take place, the project shall be referred to the Historic Preservation Commission at the commission's next regular meeting or a called meeting for review following the same procedure set forth for identified significant archaeological sites.

If human remains are identified during ground-disturbing activities, all work must immediately cease within 30 meters (100 feet) of the discovery and the area must be secured. If human remains and/or funerary items are found on private land, ARS § 41-865 requires that the ASM be notified of the discovery, so that cultural groups who claim cultural or religious affinity to them can determine the most appropriate treatment or disposition of the remains. This may include the recovery, repatriation, and reburial of the remains.

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APPENDIX A

Class I Previous Research Results

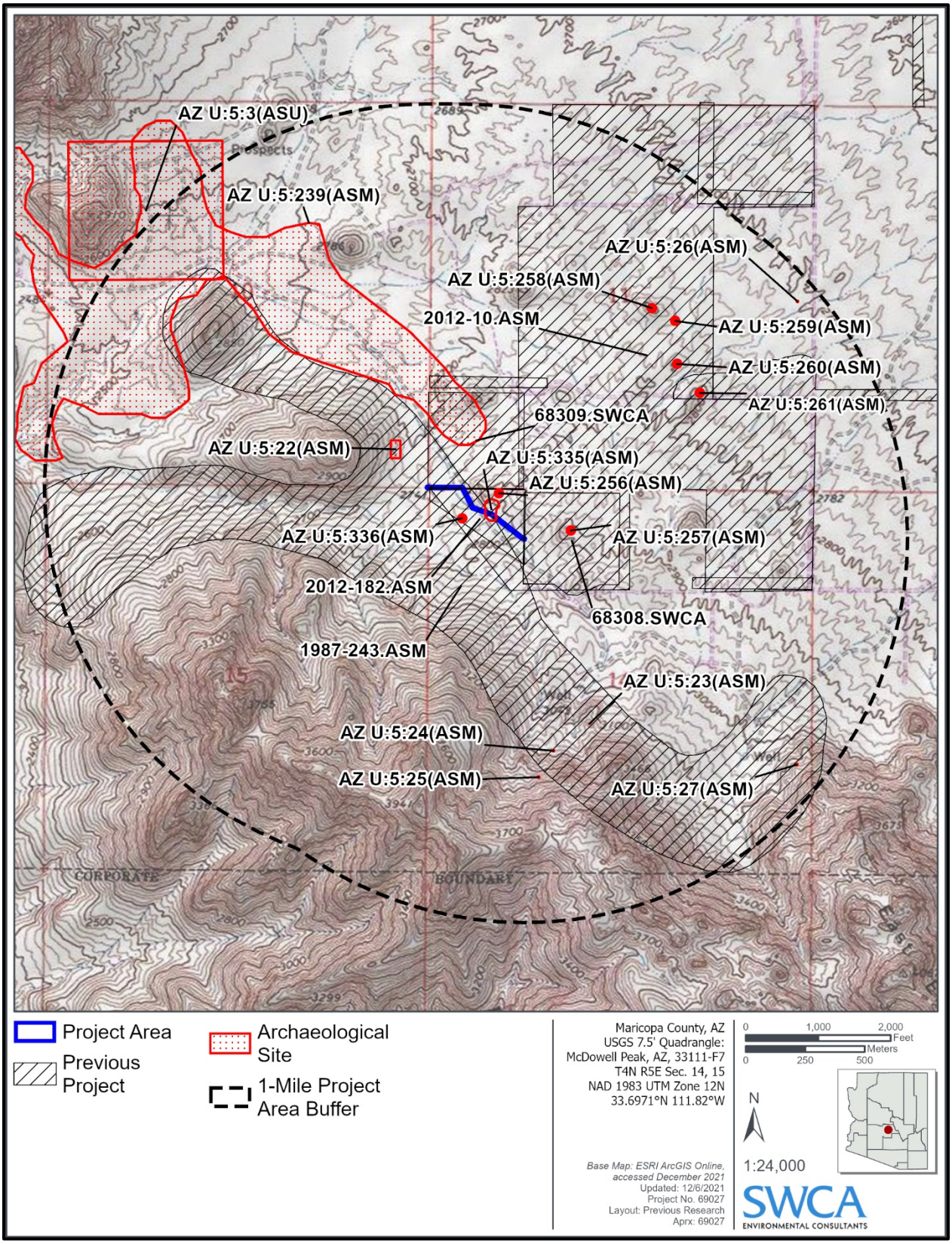

Figure A-1. Previously recorded sites and surveys within 1 mile of the project area.

APPENDIX B

Class III Survey Results

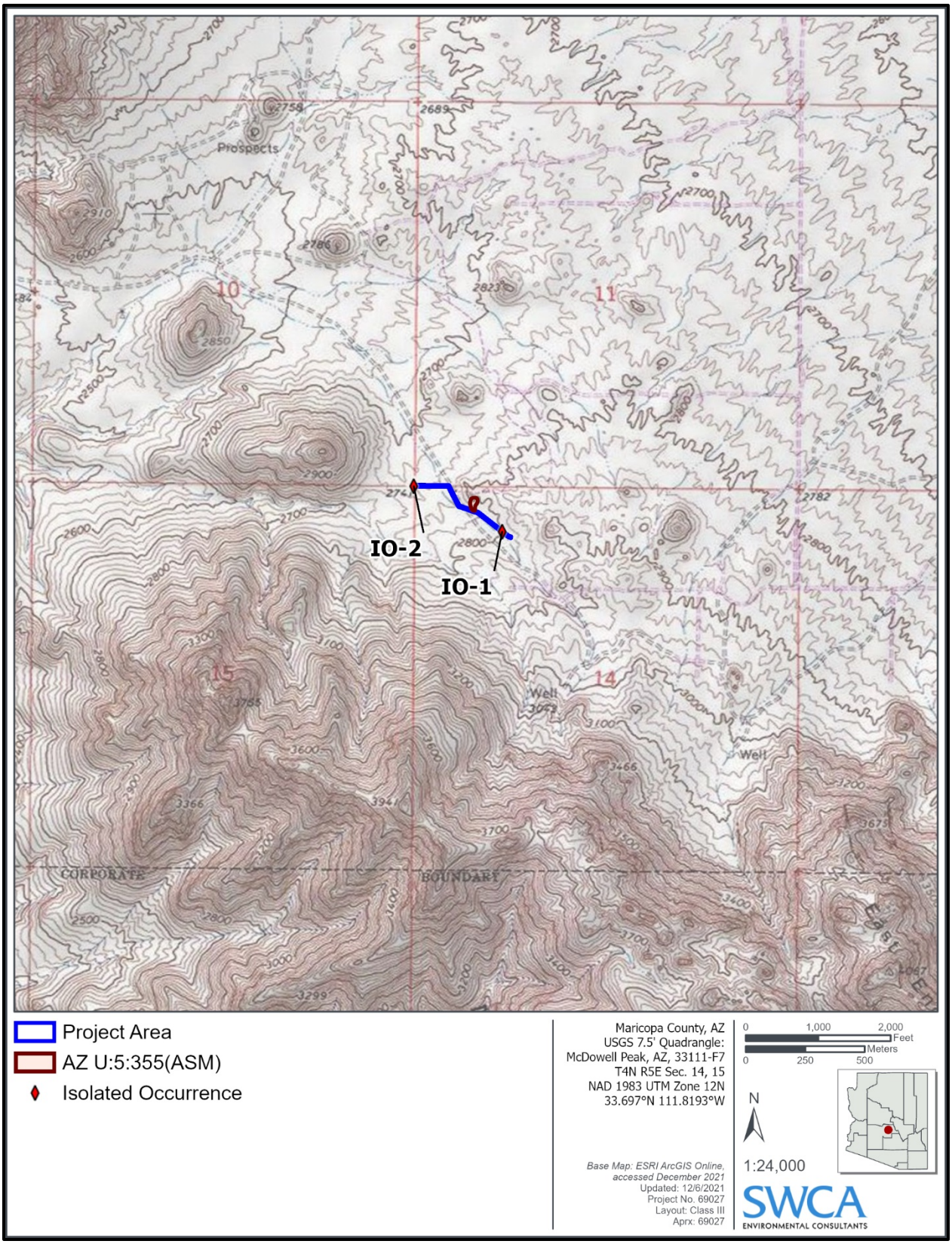

Figure B-1. Cultural resources recorded in the project area.

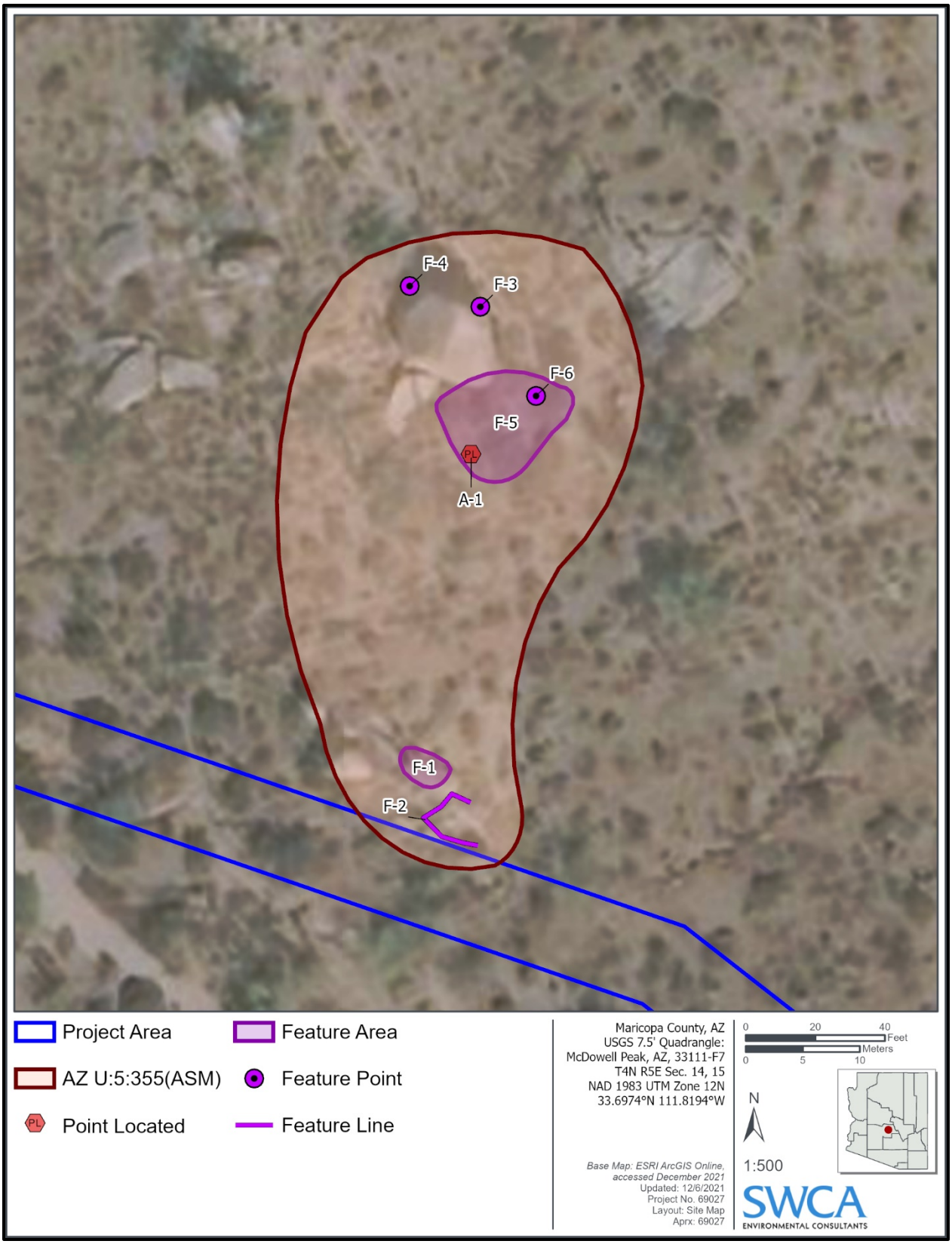

Figure B-2. Site map for AZ U:5:355(ASM).

Table B-1. Table of Isolated Occurrences (with UTMs)

IO Number	Description	Date Range	UTMs
IO-1	A basalt tertiary flake and a Wingfield Plain sherd within 10 meters	Classic Period, A.D. 1100–1450	424178.18 m E, 3728789.62 m N
IO-2	GLO survey section marker	1919	423805.84 m E 3728981.06 m N