Archaeological Testing of the Northeastern Corner of the Court Street Cemetery, AZ BB:13:156 (ASM), and the Excavation of Burial Features 36 and 37, Tucson, Pima County, Arizona

City of Tucson Project No. 10-31



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Submitted to

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ABSTRACT

Desert Archaeology, Inc., implemented an archaeological testing project in the northeastern corner of the historic Court Street Cemetery, AZ BB:13:156 (ASM). The project area is at the southwestern corner of North Stone Avenue and West Speedway Boulevard, within the Catholic portion of the cemetery. The cemetery was in use for only 34 years, between 1875 and 1909, but research suggests that more than 8,000 individuals were interred during that time. The project was undertaken for the City of Tucson prior to improvements to Stone Avenue and the sale of a portion of the land. Archaeological investigations were conducted in three areas, all of which were tested through the backhoe stripping of the ground surface and the removal of overlying sediments. Previous archaeological investigations in other areas of the cemetery showed that backhoe stripping was an effective method for identifying the outline of burial plots and coffins. The goals of the testing program were to determine if human remains were present in the project area and to locate the eastern and northern edges of the cemetery.

The Court Street Cemetery was established in 1875 on what was then the far north side of Tucson. It was envisioned as the final resting place for city residents. The cemetery was divided into sections, including areas for religious and fraternal organizations, as well as a secular area for city residents. The Catholic portion of the cemetery encompassed around 50 percent of the total area. Efforts to enhance the physical appearance of the cemetery through landscaping and the fencing of the different sections were thwarted by the lack of water for vegetation, a high caliche level, and by the overall apathy of city residents. As Tucson grew northward, the Catholic Church and the Tucson business community opted in 1907 to open new cemeteries farther from town, remove the burials already present, and to use the land for residential and commercial development. However, problems in relocating graves, the lack of interested relatives and friends, and the relatively high cost of exhuming the remains, made efforts to remove the burials difficult, and many bodies were left behind, although the exact number is unknown.

The testing program identified two burials, both located beneath the recently demolished 1st National Bank of Arizona building, which was constructed in the late 1950s. The only other feature identified through testing was a circular tree-planting pit,

likely associated with the cemetery landscaping. Both of the bodies were buried within wood coffins. Feature 36 was a nearly complete skeleton of a 40-45 year old male of likely European ancestry, with most of the remains in their correct anatomical position. Associated artifacts included bone and metal buttons and small pieces of fabric, probably remnants of clothing. Feature 37 was a partial skeleton of a 45-55 year old male, also of probable European ancestry. Associated artifacts were mostly remnants of clothing along with eight complete and three broken embalming fluid bottles. Most of the skeleton was missing and the parts that remained were largely disarticulated, suggesting that the individual had been disinterred for reburial elsewhere. Interestingly, a spent bullet found within the Feature 37 grave may indicate that this individual died a violent death, although this could not be verified by the recovered remains. Burial records indicate that at least 27 individuals interred in the Catholic cemetery died from gunshot wounds, four of whom match the sex, age, and racial background of the Feature 37 individual.

Since 1949, archaeologists have documented 48 burials in the Court Street Cemetery, including the two recovered by the current project. The recovery of only two burials on this project was surprising, particularly because the Catholic Diocese of Tucson burial registers indicate that 5,072 individuals were buried in the Catholic portion of the cemetery between June 1875 and July 1909. Significant discrepancies between the burial register and information from death certificates further suggest that as many as 25 percent more individuals were interred in the cemetery than indicated by the register data. This means that as many as 6,300 burials may be present in the Catholic portion of the cemetery, which encompasses an area of 980,000 ft².

If the 6,300 estimated burials were evenly distributed across this area, the 30,840 ft² project area, which is around 3 percent of the total Catholic cemetery, should contain 198 burials. The recovery of only two burials from this area strongly suggests that the burials were not evenly distributed but instead were purposefully grouped in some manner, and will be tightly clustered in the remaining portion of the cemetery. Determining the reason for the grouping, which could be due to environmental or cultural factors, or a combination of the two, is a research question that can be addressed by future projects.

COMPLIANCE SUMMARY

Date: 12 November 2013

Report Title: Archaeological Testing of Portions of the Northeastern Corner of the Court Street Cemetery, AZ BB:13:156 (ASM), and the Excavation of Burial Features 36 and 37, Tucson, Pima County, Arizona

Client: City of Tucson

Client Project Name: Stone Avenue Improvement Project

Compliance Agency: City of Tucson

Compliance Level: State

Applicable Laws/Regulations: Arizona Historic Preservation Act; Arizona Antiquities Act; State Burial Act(s), ARS 41-844; City of Tucson Resolution No. 12443; City of Tucson Administrative Directive, Protection of Archaeological and Historical Resources in City Projects, issued by the City Manager in 1995 and updated in 2005.

Applicable Permits: Arizona Antiquities Act Project Specific Permit (2012-093ps), Arizona State Museum Burial Agreement 2012-024. Arizona State Museum Accession Number 2012-232.

Tribal Consultation: Tohono O'odham Nation, Arizona State Museum Burial Agreement 2012-024

Project Description: The City of Tucson is planning to make improvements to Stone Avenue between Drachman Street and 1st Street, including movement of a water main and the reconfiguration of a bus stop. The City of Tucson also plans to sell the parcel of land at the southwestern corner of N. Stone Avenue and W. Speedway Boulevard. The historic Court Street Cemetery, in use between 1875 and 1909, was in these areas (see Figure 1.2). Archaeological testing was conducted in three areas. The property at the southwestern corner of Stone and Speedway was completely stripped and two burials were located, which were subsequently excavated. A stripping trench was placed along the west side of Ash Alley, with no burials located. A 50-ft by 40-ft area beneath W. 1st Street, immediately west of N. Stone Avenue, was stripped and one planting pit, probably for a tree on the western edge of the cemetery, was located and tested.

Fieldwork Dates and Project Person-days: Fieldwork was conducted between 13 May and 16 June 2012. A total of 27 supervisory and 4 crew person-days was expended.

Final Disposition of project artifacts, field notes, data, and records: All project field forms, maps, and digital photographs will be curated at the Arizona State Museum as Accession 2012-232. The human remains and associated artifacts will be repatriated to the Catholic Church and interred in the Holy Hope Cemetery in Tucson.

Location:

Land Ownership: City of Tucson

County: Pima

Description: Section 12, Township 13 South, Range 14 East on the USGS 7.5 minute topographic quad Tucson, Arizona (AZ BB:13 [NW]).

Number of Sites: 1

List of Register-Eligible Properties: The Court Street Cemetery, AZ BB:13:156 (ASM). The National Register status has not been determined for the cemetery, according to the Arizona State Museum site card.

List of Register-Ineligible Properties: 0

Summary of Results: Archaeological testing was conducted in three areas in the northeastern corner of the Court Street Cemetery, which was in use between 1875 and 1909. The parcel at the southwestern corner of N. Stone Avenue and W. Speedway Boulevard, measuring 55 m (east-west) by 50 m (north-south) was completely stripped, revealing two burials, which were subsequently excavated as Features 36 and 37. The second area was a 69-m-long and 2-m-wide trench beneath N. Ash Avenue, south of W. Speedway Boulevard. No burials were located within this trench. The third area was a 15-m (east-west) by 11-m (north-south) area beneath W. 1st Street, which was stripped, revealing a planting pit for a tree or large bush.

Recommendations: Desert Archaeology, Inc., has successfully implemented the approved project treatment plan (Thiel 2012b). Therefore, it is recommended that the Stone Avenue Drachman Street to Speedway Boulevard Intersection and Roadway Improvements Project proceed. No burials were located in the stripped area beneath W. 1st Street.

The City of Tucson also requested that an adjacent property and alley be tested. The property at the southwestern corner of N. Stone Avenue and W. Speedway Boulevard, Pima County Assessor's Parcel 117-021-34B, was completely stripped down to caliche, and two burials were located and removed. Therefore, it is recommended that the City of Tucson proceed with the sale and/or redevelopment of this parcel.

There is a low likelihood that there are burials beneath N. Stone Avenue between W. 1st Street and W. Speedway Boulevard.

A stripping trench was placed beneath N. Ash Avenue, immediately south of W. Speedway Boulevard, and no burials were located. The remaining portion of the alley, west of Parcel 017-021-34B, was not examined due to the presence of a Cox Communication fiber optic line. A subsequent Pima County project included placement of a manhole in the alley, and no burials were located during that project. However, during the same Pima County project two burials were located in the intersection of N. Ash Avenue and W. 1st Street. It is therefore recommended that any work beneath N. Ash Avenue within the cemetery be monitored during future ground-disturbing activities.

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THE COURT STREET CEMETERY

Desert Archaeology, Inc., personnel conducted archaeological testing in three areas within the northeastern corner of the historic Court Street Cemetery. The City of Tucson is planning to make improvements to N. Stone Avenue between W. 1st Street and W. Drachman Street (Figure 1.1). These improvements include the replacement of a large water main beneath the street surface and the remodeling of the existing bus pull-out. Additionally, the City of Tucson has plans to sell the City-owned parcel at the southwestern corner of N. Stone Avenue and W. Speedway Boulevard. Historically, the project area was within the boundaries of the Catholic portion of the Court Street Cemetery, in use between 1875 and 1909. The goals of archaeological testing were to determine if burials were present and to locate the eastern and western edges of the cemetery. The testing program was undertaken between 13 May and 16 June 2012.

Prior to the fieldwork, a testing plan was prepared that guided the archaeological investigations (Thiel 2012b). Cultural resources compliance for City of Tucson projects is mandated by Resolution No. 12443 passed in 1983 and Administrative Directive "Protection of Archaeological and Historical Resources in City Projects," issued by the City Manager in 1995 and updated in 2005. This Administrative Directive, as well as the State of Arizona statute related to human burials (ARS § 41-844), the Arizona Historic Preservation Act, and the Arizona Antiquities Act are the primary cultural resources compliance mandates addressed in this project.

PROJECT LOCATION AND DESCRIPTION

The project area consists of three separate parts in the NE¼ of the NW¼ of Section 12, Township 14 South, Range 13 East, in Tucson, Pima County, Arizona (Figure 1.2). More specifically, the first portion of the project area is Pima County Assessor's Parcel 117-021-34B, located at the southwestern corner of N. Stone Avenue and W. Speedway Boulevard. The parcel measures approximately 55 m in length (eastwest) by 50 m in width (north-south). When the project began, the parcel was vacant, with the only visible features being a water meter, a concrete ramp leading into N. Ash Avenue from the former bank, and a short retaining wall along the southern and western sides of the parcel. A small amount of recent landscaping, including a small palm tree, was also present.

The second part of the project area was the portion of N. Ash Avenue extending from W. Speedway Boulevard south to the northern side of the Best Western Royal Sun Inn & Suites property. This portion was paved, and when blue-staked, a Cox Communication fiber optic line and a Southwest Gas line were found beneath the asphalt.

Finally, the third part of the project area was a portion of W. 1st Street, running west from N. Stone Avenue and measuring 15 m in length (east-west) by 11 m in width (north-south). The street surface held four layers of asphalt over a compacted layer of dirt and caliche pieces. A modern waterline is present, and several abandoned utility alignments were noted.

The overall project area is situated at 2,379 ft above sea level. During historic times, the area saw extensive leveling, in an attempt to flatten the area. In some portions, especially along the eastern side of the modern blocks, several feet of soil and caliche were removed and deposited on the western side of the blocks.

CULTURAL BACKGROUND OF THE PROJECT AREA

The history of the Greater Southwest and of the Tucson Basin is marked by a close relationship between people and the natural environment. Environmental conditions have strongly influenced subsistence practices and social organization, and social and cultural changes have, in turn, made it possible to more efficiently exploit environmental resources. Through time, specialized adaptations to the arid region distinguished people living in the Southwest from those in other areas. Development of cultural and social conventions also became more regionally specific, and by A.D. 650, groups living in the Tucson Basin can be readily differentiated from those living in other areas of the Southwest. Today, the harsh desert climate no longer isolates Tucson and its inhabitants, but life remains closely tied to the unique resources of the Southwest. The chronology of the Tucson Basin is summarized in Table 1.1.

Paleoindian Period (11,500?-7500 B.C.)

Archaeological investigations suggest the Tucson Basin was initially occupied some 13,000 years

ago, a time much wetter and cooler than today. The Paleoindian period is characterized by small, mobile groups of hunter-gatherers who briefly occupied temporary campsites as they moved across the countryside in search of food and other resources (Cor-dell 1997:67). The hunting of large mammals, such as mammoth and bison, was a particular focus of the subsistence economy. A Clovis point characteristic of the Paleoindian period (circa 9500 B.C.) was collected from the Valencia site, AZ BB:13:74 (ASM), located along the Santa Cruz River in the southern Tucson Basin (Doelle 1985:183-184). Another Paleoindian point was found in Rattlesnake Pass, in the northern Tucson Basin (Huckell 1982). These rare finds suggest prehistoric use of the Tucson area probably began at this time. Paleoindian use of the Tucson Basin is supported by archaeological investigations in the nearby San Pedro Valley and elsewhere in southern Arizona, where Clovis points have been discovered in association with extinct mammoth and bison remains (Huckell 1993, 1995). However, because Paleoindian sites have yet to be found in the Tucson Basin, the extent and intensity of this occupation are unknown.

Archaic Period (7500-2100 B.C.)

The transition from the Paleoindian period to the Archaic period was accompanied by marked climatic changes. During this time, the environment came to look much like it does today. Archaic period groups pursued a mixed subsistence strategy, characterized by intensive wild plant gathering and the hunting of small animals. The only Early Archaic period (7500-6500 B.C.) site known from the Tucson Basin is found in Ruelas Canyon, south of the Tortolita Mountains (Swartz 1998:24). However, Middle Archaic period sites dating between 3500 and 2100 B.C. are known from the bajada zone surrounding Tucson, and, to a lesser extent, from floodplain and mountain areas. Investigations conducted at Middle Archaic period sites include excavations along the Santa Cruz River (Gregory 1999), in the northern Tucson Basin (Roth 1989), at the La Paloma development (Dart 1986), and along Ventana Canyon Wash and Sabino Creek (Dart 1984; Douglas and Craig 1986). Archaic period sites in the Santa Cruz floodplain were found to be deeply buried by alluvial sediments, suggesting more of these sites are present, but undiscovered, due to the lack of surface evidence.

Early Agricultural Period (2100 B.C.-A.D. 50)

The Early Agricultural period, previously identified as the Late Archaic period, was the period

when domesticated plant species were first cultivated in the Greater Southwest. The precise timing of the introduction of cultigens from Mexico is not known, although direct radiocarbon dates on maize indicate it was being cultivated in the Tucson Basin and several other parts of the Southwest by 2100 B.C. (Mabry 2008). By at least 400 B.C., groups were living in substantial agricultural settlements in the floodplain of the Santa Cruz River. Recent archaeological investigations suggest canal irrigation also began sometime during this period.

Several Early Agricultural period sites are known from the Tucson Basin and its vicinity (Diehl 1997; Ezzo and Deaver 1998; Freeman 1998; Gregory 2001; Huckell and Huckell 1984; Huckell et al. 1995; Mabry 1998, 2008; Roth 1989). While there is variability among these sites, due to the 2,150 years included in the period, all excavated sites to date contain small, round, or oval semisubterranean pithouses, many with large internal storage pits. At some sites, a larger round structure is also present, which is thought to be for communal or ritual purposes.

Stylistically distinctive Cienega, Cortaro, and San Pedro type projectile points are common at Early Agricultural sites, as are a range of ground stone and flaked stone tools, ornaments, and shell jewelry (Diehl 1997; Mabry 1998). The fact that shell and some of the material used for stone tools and ornaments were not locally available in the Tucson area suggests trade networks were operating. Agriculture, particularly the cultivation of corn, was important in the diet, and it increased in importance through time. However, gathered wild plants, such as tansy mustard and amaranth seeds, mesquite seeds and pods, and agave hearts, were also frequently used resources. As in the preceding Archaic period, the hunting of animals such as deer, cottontail rabbits, and jackrabbits, continued to provide an important source of protein.

Early Ceramic Period (A.D. 50-500)

Although ceramic artifacts, including figurines and crude pottery, were first produced in the Tucson Basin during the Early Agricultural period (Heidke and Ferg 2001; Heidke et al. 1998), the widespread use of ceramic containers marks the transition to the Early Ceramic period (Huckell 1993). Undecorated plain ware pottery was widely used in the Tucson Basin by about A.D. 50, marking the start of the Early Agua Caliente phase (A.D. 50-350).

Architectural features became more formalized and substantial during the Early Ceramic period, representing a greater investment of effort in construction, and perhaps more permanent settlement. A number of pithouse styles are present, including small, round, and basin-shaped houses, as well as

STONE AVENUE: STREET DRACHMAN SPEEDWAY BOULEVARD INTERSECTION **IMPROVEMENTS**

NO. U-2009-047

TORACHMAN ST

GENERAL NOTES

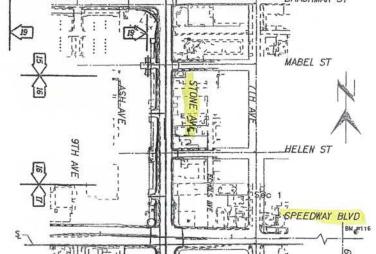
- Vertical Datum:
 The Basis of Elevation for this survey is COT BM #116, a chiseled "X" on SE corner of bus stop slab at the NE corner of Speedway Boulevard and Sixth Avenue, as recorded in COT Field Book 1989-1 page 9L with said elevation being NAVDBB Datum 2394,645.
- 2. Horizontal Datuma The Basis of Bearing for this project is the line between monuments at the intersections of Stone Avenue and Speedway Boulevard, and Stone Avenue and First Street as recorded on Right-of-Way Plan No. R-83-08 Pge 4 with said bearing S 00°23'38" E.
- 3. All construction shall conform to the 2003 Editions of the Pima County/City of Tucson Standard Specifications and Details for Public Improvements, except as modified on the plans.
- Offset and radil are measured to the front face of ourb at gutter line. Design Speeds
- Design Vehicles

Stone Avenue.......35 mph Drachman Street......35 mph Bus - Sun Tran

- If the contractor is required to trim tree branches or roots on any existing tree to remain, the contractor shall first call the City Landscape Architect at 837-6618.
- Immediately report any release of sewage, and/or any damage to, or the dropping of debris into, the public sanitary sewage conveyance system to either PCRWRD Field Engineering (740-2651) or PCRWRD Conveyance Division (443-6500). On weekends, holidays or between 5:00 PM and 8:00 AM. Immediately call Pima County Sheriff's communication center (295-4595 or 741-4900) and request a PCRWRD representative to be dispatched to the site.

 Take Immediate action to prevent or contain the sanitary sewage overflow (SSO) from the sewer system. The contractor shall be responsible for all costs to repair the system, forall expenses to mitigate the release and to disinfect the release areas, and for any regulatory penalties levied on PCRWRD because the SSO entered a natural or constructed storm water drainage system. The confractor shall repair all damage as directed and approved by PCRWRD.
- House or business connection sewers (HCS or BCS) are not part 8. of the public santary sewer conveyance system. Private connection sewers constructed prior to January 2006 are not required to be blue staked. An HCS or BCS encountered during construction shall be protected, repaired, or rerouted, as the situation dictates (COT/PC SD WWM 404) at no expense to the property owner or PCRWRD.
- City of Tucson/Pima County Standard Detail WWM 106 applies to this project.
- Sewer construction shall not commence until: (A) Contractor has obtained a public sewer construction permit from PCRWRD (740–6309). (B) A pre-construction meeting with the assigned Pima County Inspector is scheduled at least three (3) full working days prior to the start of sewer construction.

 (C) Flow Management plans shall be submitted to Field Engineering, thirty days (30) prior to the pre-construction
- Pima County shall not be held liable or responsible for any errors and or ommisions on these plans. Items not meeting Pima County standards shall be repaired or replaced at no cost to



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TO YE LOCATION PLAN 12. SWPP measures shall be installed so as to prevent all storm

water, construction water, fuels, chemicals, or liquids to be directed into or onto any sanitary sewer facilities. Protection of sanitary sewer facilities shall be part of the Approved Construction SWPPP and Best Management Practices.

Profection devices shall be installed and maintained around all potentially affected sanitary sewer facilities within the project limits. Additional measures shall include but not limited to to the use of rain stoppers and waterproof manhole covers as deemed necessary by PCRWRD.

13. It is the confractor's responsibility to adjust or reconstruct all sanitary sewer manhole structures to finished grade. All ring cover adjustments are to be in accordance with PC/COT standard detail WWW 304, WWW 305 or WWW 306 (as applicable) and WWW 307. While adjusting the manhole to finished grade, it is the confractor's responsibility to ensure that rings and covers are cleaned of any and all attached materials (asphali, concrete, etc.), and ensure that any vent holes are open and clear of obstructions. If the frames and covers are damaged or cannot be completely cleaned, then a new frame and cover is to be put in place, and the cost associated with these actions be the responsibility of the contractor. Refer to standard details WWM 213.0-314.3 for regulrements for rings and covers.

LEGEND Exist 1 Sanitary Sewer Manhole Water Valve -0-Fire Hydrant D Fire Protection T Slan Water Meter D_C Gas Meter D Street Light P.P. TEP Power Pole Mall Box Survey Monument AC Pavement

Concrete

Fence

Service Stub

Removal

8

11 CONGRESS STREE This Project VICINITY MAP NTS Sec 1 & 12, T14S, R13E G&SRM, Pima County, Arizona

SHEET INDEX Description Cover Sheet Typical Sections Details Sheet : , . . . 10 11-14 Survey Control Sheet Demolition Plans Plan and Profile Sheets 20-23 24-30 31-36 37-41 Staking Plans Intersection Details Storm Drain Plan & Profile Street Light Modifications Traffic Signal Plans Bench Mark 42-48 49-53 54-64 Striping Plans Water System Modification Plans SWWP Plans Sheet Number 65-66 67-73 Landscape Plans Native Plant Inventory Water Meter Relocation and Preservation Plan Service Line Adjustment 1-12 Cross Sections

ABBREVIATIONS AC = Asphaltic Concrete Cono = Conorele COT = City of Tucson Drwy = Driveway BCR = Begin Curb Return ECR = End Curb Return PCC = Point of Compound Curve BCSM = Brass Cap Survey Monument G = Gutter TC = Top of Curb

FSW = Front of Sidewalk

BSW = Back of Sidewalk

R/W = Right of Way

Pay't = Payement

SM = Survey Marker

W = Water

S = Sewer

NO. DATE REVISION

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DESIDE SECTION

TRAISFORTATION PLANNES

ENCACEDING ADMISSIATOR

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STONE AVENUE:

DEPARTMENT OF TRANSPORTATION/ENGINEERING DIVISION DRACHMAN STREET TO SPEEDWAY BOULEVARD INTERSECTION AND ROADWAY IMPROVEMENTS

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4 Chapter 1

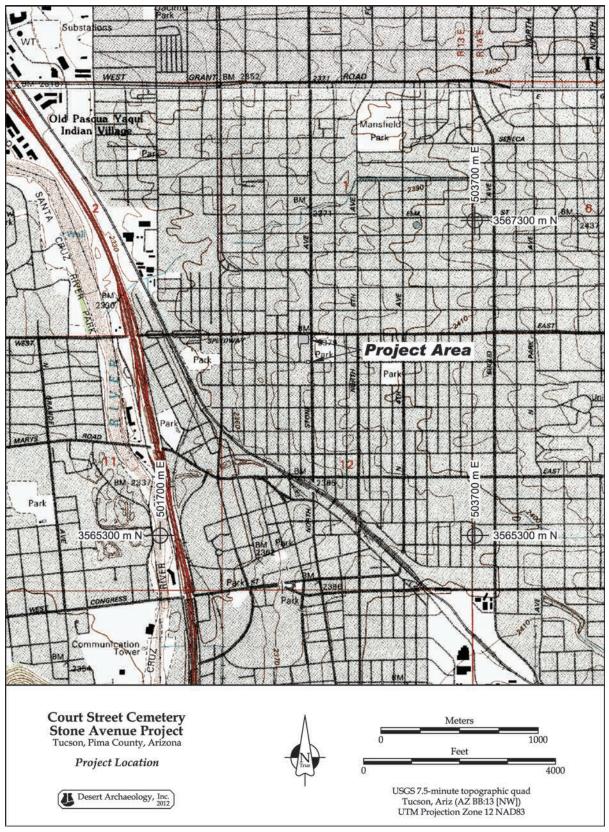


Figure 1.2. Reproduction of USGS 7.5-minute topographic quad Tucson, Ariz. (AZ BB:13 [NW]), showing location of the project area.

Table 1.1. Periods, phases, and chronology of the Santa Cruz Valley-Tucson Basin.

Era/Period	Phase	Date Range	
Historic			
American Statehood	-	A.D. 1912-present	
American Territorial	-	A.D. 1856-1912	
Mexican	-	A.D. 1821-1856	
Spanish	-	A.D. 1694-1821	
Protohistoric	-	A.D. 1450-1694	
Prehistoric			
Hohokam Classic	Tucson	A.D. 1300-1450	
Honokam Classic	Tanque Verde	A.D. 1150-1300	
	Late Rincon	A.D. 1100-1150	
Hohokam Sedentary	Middle Rincon	A.D. 1000-1100	
	Early Rincon	A.D. 950-1000	
	Rillito	A.D. 850-950	
Hohokam Colonial	Cañada del Oro	A.D. 750-850	
TT 1 1 D	Snaketown	A.D. 700-750	
Hohokam Pioneer	Tortolita	A.D. 500-700	
T 1 C	Late Agua Caliente	A.D. 350-500	
Early Ceramic	Early Agua Caliente	A.D. 50-350	
	Late Cienega	400 B.CA.D. 50	
Early Agricultural	Early Cienega	800-400 B.C.	
Larry Agricultural	San Pedro	1200-800 B.C.	
	(Unnamed)	2100-1200 B.C.	
	Chiricahua	3500-2100 B.C.	
Archaic	(Occupation gap?)	6500-3500 B.C.	
	Sulphur Springs-Ventana	7500-6500 B.C.	
Paleoindian		11,500?-7500 B.C.	

slightly larger subrectangular structures. As during the Early Agricultural period, a class of significantly larger structures may have functioned in a communal or ritual manner.

Reliance on agricultural crops continued to increase, and a wide variety of cultigens, including maize, beans, squash, cotton, and agave, were an integral part of the subsistence economy. Populations grew as farmers expanded their crop production to floodplain land near permanently flowing streams, and it is assumed that canal irrigation systems also expanded. Evidence from archaeological excavations indicates trade in shell, turquoise, obsidian, and other materials intensified and that new trade networks developed.

Hohokam Sequence (A.D. 500-1450)

The Hohokam tradition developed in the deserts of central and southern Arizona sometime around A.D. 500, and is characterized by the introduction of red ware and decorated ceramics: red-on-buff wares in the Phoenix Basin and red-on-brown wares in the Tucson Basin (Doyel 1991; Wallace et al. 1995). Red ware pottery was introduced to the ceramic as-

semblage during the Tortolita phase (A.D. 500-700). The addition of a number of new vessel forms suggests that, by this time, ceramics were utilized for a multitude of purposes.

Through time, Hohokam artisans embellished this pottery with highly distinctive geometric figures and life forms, such as birds, humans, and reptiles. The Hohokam diverged from the preceding periods in several other important ways: (1) pit-houses were clustered into formalized courtyard groups, which, in turn, were organized into larger village segments, each with their own roasting area and cemetery; (2) new burial practices appeared (cremation instead of inhumation), in conjunction with special artifacts associated with death rituals; (3) canal irrigation systems were expanded, and, particularly in the Phoenix Basin, represented huge investments of organized labor and time; and, (4) large communal or ritual features, such as ballcourts and platform mounds, were constructed at many village sites.

The Hohokam sequence is divided into the pre-Classic (A.D. 500-1150) and the Classic (A.D. 1150-1450) period. At the start of the pre-Classic, small pithouse hamlets and villages were clustered around the Santa Cruz River. However, beginning about A.D. 750, large, nucleated villages were established

along the river or its major tributaries, with smaller settlements in outlying areas serving as seasonal camps for functionally specific tasks, such as hunting, gathering, or limited agriculture (Doelle and Wallace 1991). At this time, large, basin-shaped features with earthen embankments, called ballcourts, were constructed at a number of the riverine villages. Although the exact function of these features is unknown, they probably served as arenas for playing a type of ball game, as well as places for holding religious ceremonies and for bringing different groups together for trade and other communal purposes (Wilcox 1991; Wilcox and Sternberg 1983).

Between A.D. 950 and 1150, Hohokam settlement in the Tucson area became even more dispersed, with people utilizing the extensive bajada zone, as well as the valley floor (Doelle and Wallace 1986). An increase in population is apparent, and both functionally specific seasonal sites, as well as more permanent habitations, were now situated away from the river; however, the largest sites were still on the terraces just above the Santa Cruz. There is strong archaeological evidence for increasing specialization in ceramic manufacture at this time, with some village sites producing decorated red-on-brown ceramics for trade throughout the Tucson area (Harry 1995; Heidke 1988, 1996; Huntington 1986).

The Classic period is marked by dramatic changes in settlement patterns, and possibly in social organization. Aboveground adobe compound architecture appeared for the first time, supplementing, but not replacing, the traditional semisubterranean pithouse architecture (Haury 1928; Wallace 1995). Although corn agriculture was still the primary subsistence focus, extremely large Classic period rock-pile field systems associated with the cultivation of agave have been found in both the northern and southern portions of the Tucson Basin (Doelle and Wallace 1991; Fish et al. 1992).

Platform mounds were also constructed at several Tucson Basin villages sometime around A.D. 1275-1300 (Gabel 1931). These features are found throughout southern and central Arizona, and consist of a central structure that was deliberately filled to support an elevated room upon a platform. The function of the elevated room is unclear; some were undoubtedly used for habitation, while others may have been primarily ceremonial. Building a platform mound took organized and directed labor, and the mounds are thought to be symbols of a socially differentiated society (Doelle et al. 1995; Elson 1998; Fish et al. 1992; Gregory 1987). By the time platform mounds were constructed, most smaller sites had been abandoned, and Tucson Basin settlement was largely concentrated at only a half-dozen large, aggregated communities. Recent research has suggested that aggregation and abandonment in the Tucson area may be related to an increase in conflict, and possibly warfare (Wallace and Doelle 1998). By A.D. 1450, the Hohokam tradition, as presently known, disappeared from the archaeological record.

Protohistoric Period (A.D. 1450-1694)

Little is known of the period from A.D. 1450, when the Hohokam disappeared from view, to A.D. 1697, when Father Kino first traveled to the Tucson Basin (Doelle and Wallace 1990). By that time, the Tohono O'odham were living in the arid desert regions west of the Santa Cruz River, and groups who lived in the San Pedro and Santa Cruz valleys were known as the Sobaipuri (Doelle and Wallace 1990; Masse 1981). Both groups spoke the O'odham language, and, according to historic accounts and archaeological investigations, lived in oval jacal surface dwellings rather than pithouses. One of the larger Sobaipuri communities was located at Bac, where the Spanish Jesuits, and later the Franciscans, constructed the mission of San Xavier del Bac (Huckell 1993; Ravesloot 1987). However, due to the paucity of historic documents and archaeological research, little can be said regarding this inadequately understood period.

Spanish and Mexican Periods (A.D. 1694-1856)

Spanish exploration of southern Arizona began at the end of the seventeenth century A.D. Early Spanish explorers in the Southwest noted the presence of Native Americans living in what is now the Tucson area. These groups comprised the largest concentration of population in southern Arizona (Doelle and Wallace 1990). In 1757, Father Bernard Middendorf arrived in the Tucson area, establishing the first local Spanish presence. Fifteen years later, the construction of the San Agustín Mission near a Native American village at the base of A-Mountain was initiated, and by 1773, a church was completed (Dobyns 1976:33).

In 1775, the site for the Presidio of Tucson was selected on the eastern margin of the Santa Cruz River floodplain. In 1776, Spanish soldiers from the older presidio at Tubac moved north to Tucson, and construction of defensive and residential structures began. The Presidio of Tucson was one of several forts built to counter the threat of Apache raiding groups, who had entered the region at about the same time as the Spanish (Thiel et al. 1995; Wilcox 1981). Spanish colonists arrived soon afterwards to farm the relatively lush banks of the Santa Cruz River, to mine the surrounding hills, and to graze cattle. Many indigenous settlers were attracted to

the area by the availability of Spanish products and the relative safety provided by the presidio. The Spanish and Native American farmers grew corn, wheat, and vegetables, and cultivated fruit orchards, and the San Agustín Mission was known for its impressive gardens (Williams 1986).

In 1821, Mexico gained independence from Spain, and Mexican settlers continued farming, ranching, and mining activities in the Tucson Basin. By 1831, the San Agustín Mission had been abandoned (Elson and Doelle 1987; Hard and Doelle 1978), although settlers continued to seek the protection of the presidio walls.

American Period (1856-Present)

Through the 1848 settlement of the Mexican-American War and the 1853 Gadsden Purchase, Mexico ceded much of the Greater Southwest to the United States, establishing the international boundary at its present location. The U.S. Army constructed its first outpost in Tucson in 1856, and, in 1873, founded Fort Lowell at the confluence of the Tanque Verde Creek and Pantano Wash, to guard against continued Apache raiding.

Railroads arrived in Tucson and the surrounding areas in the 1880s, opening the floodgates of Anglo-American settlement. With the surrender of Geronimo in 1886, Apache raiding ended, and settlement in the region boomed. Local industries associated with mining and manufacturing continued to fuel growth, and the railroad supplied the Santa Cruz River valley with the commodities it could not produce locally. Meanwhile, homesteaders established numerous cattle ranches in outlying areas, bringing additional residents and income to the area (Mabry et al. 1994).

By the turn of the twentieth century, municipal improvements to water and sewer service, as well as the eventual introduction of electricity, made life in southern Arizona more hospitable. New residences and businesses continued to appear within an ever-widening perimeter around Tucson, and city limits stretched to accommodate the growing population. Tourism, the health industry, and activities centered around the University of Arizona and Davis-Mon-than Air Force Base contributed significantly to growth and development in the Tucson Basin in the twentieth century (Sonnichsen 1982).

PREVIOUS HISTORIC CEMETERIES IN TUCSON

Four historic cemeteries are known to have been used in the downtown Tucson area prior to 1875.

The San Agustín Mission, located on the floodplain west of the Santa Cruz River near the base of A-Mountain, was established at an existing Piman village. A church was constructed at the site in the 1750s, and the mission complex was extensively remodeled in the late 1790s. Two cemeteries were present in the complex. The cemetery on the western side of the church was reserved for people of European ancestry, and the second cemetery along the interior of the northern side of the walled compound was the location of Native American burials (Hard and Doelle 1978; Thiel and Mabry 2006).

A protohistoric or perhaps early historic period Native American cemetery is located in the vicinity of W. 17th Street and S. 9th Avenue. At least three burials were located in 1954, during work on sewer lines. Two additional burials were found in 1995, during gas line replacement, a third during a home sewer installation, and two more in 2007, during utility work related to home construction. The burials are flexed, several have red ochre staining, the bones have a "fresh" appearance, and the individuals have both Native American and mixed Native American-Hispanic ancestry (Thiel and McClelland 2007; Thiel et al. 1997).

The Presidio San Agustín del Tucson was established in 1775, and a cemetery was located around and within the presidial chapel located on the eastern side of the fort, today beneath W. Alameda Street and adjoining areas west of N. Church Avenue. Burials were excavated in the cemetery in 1969, 1970, and 1991. Individuals were buried extended with their heads to the east or west, with more recent burials cutting through older burials, and the disturbed bones stacked up at the foot end of the new graves. Most individuals were not buried wearing clothing. Several children had wreaths of artificial flowers at their heads, represented by C-shaped pieces of copper wire. No coffins were used (Thiel et al. 1995).

The Alameda-Stone Cemetery, also called the National Cemetery, contained a military area, in use from 1862 to 1881, and a civilian area, probably used from the mid- to late 1850s until 1875. A large portion of the cemetery was excavated in 2007-2008, by Statistical Research, Inc., prior to construction of the Pima County Joint Courts. Archaeologists located 1,083 burial pits, which contained 1,006 burials, with the remains of 1,338 individuals. Between 1,800 and 2,200 burials were likely originally in the cemetery. Construction of the Tucson Newspaper building basement in the 1950s, within the southwestern corner of the cemetery, destroyed an unknown number of burials. Most of the burials in the cemetery were inside coffins (n = 909), which were hexagonal (shouldered), rectangular, and trapezoidal (wider at head, narrower at feet) in shape. Most individuals were buried wearing clothing, represented by buttons, rivets, cloth, belts, shoes, and other items (Heilen et al. 2010). The civilian portion was closed at the end of May 1875, and the cemetery was subsequently developed for residential housing.

THE COURT STREET CEMETERY

The Court Street Cemetery was established in 1875, on the northern outskirts of town (Figure 1.3). The cemetery was bounded on the west by N. Main Avenue, on the east by N. Stone Avenue, on the south by W. 2nd Street, and on the north by W. Speedway Boulevard. The Common Council of the Village of Tucson met on 18 May 1875, to plan the cemetery, whose location had been selected by the Committee on Cemeteries.

At a special meeting of the Common Council of the Village of Tucson, held on the 18th of May, 1875, it was Resolved, that on and after the 1st day of June, 1875, the new Cemetery will be open for the burial of the dead, and that from said date no more interments will be permitted in the old cemetery. By order of the Council, C. H. Meyers, Recorder (*Arizona Daily Citizen* 1875).

The Common Council passed a resolution that established Blocks 8, 9, 14, and 15 (east of N. 10th Avenue) as the Catholic Church cemetery and Blocks 10, 11, 12, and 13 (west of N. 10th Avenue) for non-Catholics (Wallace n.d.). These blocks were laid out in the 1872 survey and are numbered consecutively so that Block 8 is in the northeast corner, Block 11 is the northwest corner, Block 12 the southwest corner, and Block 15 the southeast corner of the cemetery.

When it was established and during its use, the cemetery did not have an official name. It later became known as the Court Street Cemetery, in reference to the north-south street dividing the cemetery. Today, this street is N. 10th Avenue. Burials within the cemetery began on 1 June 1875. The eastern half of the cemetery was the Catholic Cemetery, and the eastern half of the western half was the City Cemetery, although it was also called the Citizen's, County, Protestant, or Public Cemetery. Within the western half of the cemetery were smaller plots maintained by local organizations, including Negley Post No. 1 of the Grand Army of the Republic (GAR), the Tucson Volunteer Fire Department, the Independent Order of B'nai B'rith (IOBB), Pima Lodge No. 3 of the Independent Order of Odd Fellows (IOOF), Lodge 4 of the Ancient Free and Accepted Masons (AF & AM), the Tucson Lodge No. 9 of the Knights of Pythias, the Hall of Apache Lodge No. 8 of the Ancient Order of the United Workmen (AOUW), and Pima Lodge 10 of the Improved Order of Red

Men. These plots appear to have been assigned in chronological order, beginning with the firemen, probably in 1875, and ending with the Red Men in 1898.

The initial appearance of the cemetery concerned some Tucson residents.

There is more or less complaint about the appearance and management or utter lack of management of the new burying ground north of town. It is represented that our departed friends are, to use homely and pointed language, "planted promiscuously." We have been to the ground a number of times and our impression is that such is the case. There is a portion of the ground occupied by the Catholic church and there they lay away their dear friends, perhaps with some order in arrangement of the respective believers graves. Outside of this, it seems to us, the dead are buried as chance or momentary choice may dictate the location. This is wrong. Everything in death as in life should be done decently and in order. Economy is a good thing but don't let it commence with the dead, for whom there is nothing left but a decent burial (Arizona Weekly Citizen 1876:3).

The editorial continues with a recommendation to survey the cemetery to establish lots and the creation of avenues.

By 1877, editorials further suggested that leading residents thought the Court Street Cemetery was an eyesore and a nuisance. The *Arizona Weekly Citizen* (1877:3) reported:

The present cemetery is a drear bleak, desolate place and I deem it cruelty in the highest degree to compel parents, kindred and friends to entomb and take final leave of their dear departed ones in so drear and desolate place.

The author suggested that a new cemetery be laid out northeast of the city, in an area where trees and shrubs were present.

A Spanish language newspaper reported,

The cemetery is a disgrace. Coyotes dig up bodies and animals destroy tombs and the dirt is incredibly hard. It is terrible that our loved ones should have to rest in peace in this manner. We ask our bankrupt City Council to build a wall around our cemetery (*Las Dos Republicas* 1878:3:2).

The Mayor was directed to contract with W. O'Sullivan to place posts around the cemetery in May 1879, as a cost not exceeding \$1.50 per post (*Daily Arizona Citizen* 1879). Apparently, he worked too slow, and the Council subsequently ordered O'Sullivan to complete his contract as soon as possible (*Arizona Weekly Star* 1879). He eventually received \$112 for the work (*Arizona Citizen* 1879).

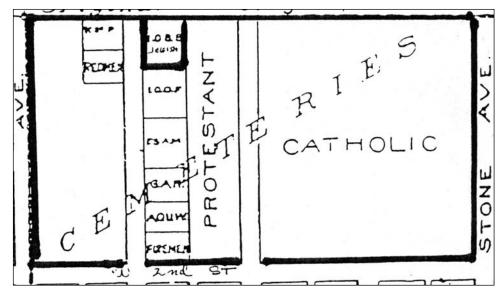


Figure 1.3. A 1905 map of the Court Street Cemetery.

In February 1883, there was, "a great deal of complaint against parties unknown for their damnable practice in making targets of the head boards on the graves in the new cemetery. Such outrages deserve severe punishment" (*Arizona Daily Star* 1883).

It was written that:

The Cemetery Committee reported the following [part-time] Sexton's fees: For digging graves for persons over twelve years of age, \$4; under twelve years, \$3; any party may dig a grave for a relative or friend, under the supervision of the Sexton, for \$1. Adopted (*Arizona Weekly Citizen* 1883a:3).

Following the death of his daughter Annie,

Mr. Pedro Charouleau who recently had the misfortune to lose his little daughter, is building a family vault for the reception of her remains. The vault will be of cut stone and iron, and will be the first of this kind ever built in this country (*Arizona Daily Star* 1884:4).

In August 1885, the City Council was asked to provide a sexton for the cemetery. The city declined, stating it did not have funds to build the sexton a house to live in or to pay wages (*Arizona Daily Star* 1885). No full-time sexton was hired.

Tucson residents attended Memorial Day ceremonies at the cemetery in the 1880s. These ceremonies were sponsored by Negley Post No. 1 of the GAR, the local Civil War Union soldiers' group. Graves were decorated, and a procession marched to the cemetery. Included in the procession were troops from Fort Lowell, the fire department, Confederate soldiers, Union soldiers, the volunteer firemen, a floral wagon, citizens in carriages, and a "floral Committee of Ladies" (*Arizona Daily Star* 1889c).

The GAR plot was marked by a large iron arch with the letters GAR in the center (MS 790, Arizona Historical Society). Fifteen headstones were placed on the graves of soldiers in early 1891 (*Prescott Morning Courier* 1891).

Other groups enhanced the cemetery. Dolores Aguirre de Samaniego raised money to erect a wooden arch (*enverjado*) at the Catholic Cemetery (*El Fronterizo* 1887). The fire department attempted to raise money to place a fence around its lot in 1889 (*Arizona Daily Star* 1889a). The City of Tucson paid Mr. Babcock \$180 to build a fence around the City Cemetery (*Arizona Daily Star* 1889b). The last unfenced plot was the Masons, and in 1890, the Masonic fraternity enclosed their burial area with a redwood post fence. The entrance to their lot, which measured some 179 ft by 22 ft, was marked by a 10-ft-tall, 12-ft-wide gate. (*Arizona Daily Star* 1890).

In January 1890, the Pima County Board of Supervisors selected the Smith Brothers undertaking parlor to bury indigent dead from St. Mary's Hospital and Tucson, the dead to be placed in plain coffins (*Arizona Citizen* 1890).

Problems occasionally arose over use of the cemetery.

Violent acts have been committed against the gravedigger at the Catholic Cemetery by people wishing to bury their dead without following rules. The most recent incident, trying to force the gravedigger to bury someone at an inopportune time of the night. Acts that provoke order, morals and good education should not be committed over the graves of the dead (*El Fronterizo* 1892b:3:2).

The following week, the same paper reported that the police were investigating vandalism after the metal cross on Jesús Montaño's headstone was broken off and a vase smashed. "Those who don't respect the sacred place where the dead lay, show their most perverted sentiments" (*El Fronterizo* 1892a:3:3).

"There is some complaint about the bad smells that arise from the Old City Cemetery, and as the city is growing in that direction it is very likely that the council will be petitioned to move the burial grounds a few miles further east" (*Arizona Weekly Citizen* 1893b:4).

In 1902, city residents complained about the desert landscaping of the cemetery, "Cemeteries are weird enough at any stage of the game, but especially so without foliage of some sort" (*Tucson Citizen* 1902:5). The newspaper suggested a water main be extended to the cemetery so the area could be watered and a lawn planted. It was noted that, "The ground was not good for growing grass and trees and the appearance of the place has been unsightly" (*Tucson Daily Star* 1907c:5).

Tucson grew steadily northward, and some members of the Tucson Council began to discuss moving the cemetery away from the edge of town, claiming that it depreciated city property and further, that the Court Street Cemetery was not large enough. In July 1904, the City Council had Mr. Griffith "report on a new site for the cemetery and removal of the old burial place" (Tucson Citizen 1904:8). In April 1906, councilman Mose Drachman organized a cemetery committee to look for a new cemetery location. A petition by the Fraternal Order of Eagles, a Masonic order, for two lots in the cemetery adjoining the Red Men's burial ground appears to have renewed discussion of the topic, which had been debated several months before. At that time, it brought forth a storm of protests from secret societies and from persons superstitious about removing the dead. "Councilman Drachman stated that Tucson is rapidly growing. He said that residences are being put up in the vicinity of the cemetery and that these lots had greatly depreciated in value owing to their proximity to the cemetery" (Tucson Citizen 1906a:8). What Drachmann did not discuss was the fact that he owned the land on the northern side of Speedway Boulevard, and that the presence of the cemetery reduced the value of his

A letter to the editor of the paper, written by C. E. Darrow, appeared the following day in the *Tuc-son Citizen* (1906b). He stated that he had friends and relatives buried there, had spent money beautifying lots, and that the northern edge of town was "not likely in fifty years, if ever, to grow to the cemetery" (*Tucson Citizen* 1906b:5). A map was prepared in that year showing the internal divisions of the cemetery (see Figure 1.3).

In early 1907, Councilman Gustav Hoff motored out to the cemetery to inspect it. He was the chairman of the City Council's cemetery committee.

Any visitor to the cemetery will remark upon the apparent careless manner in which it has been kept. The fences are unpainted and weeds and rank undergrowth have been allowed to spring up until it is a very unsightly place (*Tucson Citizen* 1907g:5).

Hoff planned to have trees planted along the fence on the eastern side of the cemetery. He also planned to fill in an arroyo that ran through the cemetery (*Tucson Citizen* 1907g). The following month saw workers digging tree holes along the fence (*Tucson Citizen* 1907b). In May, the annual Memorial Day observation began with a march from the Carnegie Library headed by Mayor Neustatter and J. S. Hopley. The Union veterans arrived at the GAR plot to find that the graves had fresh flowers already placed by children. The University Cadets played taps at the plot (*Tucson Citizen*, 30 May 1907d).

In July 1907, F. L. Culin again proposed the creation of a new cemetery along Mammoth Road (today's N. Oracle Road). He and a group of businessmen noted that the current cemetery was in the caliche zone, which made it difficult to beautify, while the new location was "beyond the caliche belt and easily irrigable" (Tucson Citizen, 10 July 1907f:5). The City Council viewed the proposed location of the new cemetery. Local businessmen purchased 240 acres and formed the Tucson Cemetery Association. Their offer to the city included the donation of 30 acres to be used as a pauper's cemetery and an offer to remove the dead from the pauper's area of the Court Street Cemetery. Another 30 acres was set aside so poor people could re-locate bodies, although they were to be charged \$50 a lot (\$1,300 in modern currency). The city passed an ordinance forbidding burial within city limits after 1 January 1908 (Tucson Citizen 1907c).

Many people were angry at the Common Council for the decision. Owen T. Rouse wrote a scathing letter published in the *Tucson Citizen*. He complained that there would be no oversight of the perpetual care fund for the cemetery, that there were no laws allowing a private corporation to operate a cemetery, and that poor people were going to be the victims of the greed of businessmen (*Tucson Citizen* 1907e).

A Common Council meeting held on 5 August 1907, saw E. J. Trippel, representing the fraternal organizations, complaining that the groups had plenty of room in their plots. Judge D. F. Glidden and A. W. Smith also testified in support of the fraternal groups. Councilman Gustav Hoff noted that the

Catholic plot "is overcrowded even now." The meeting then got quite contentious, the mayor having to pound with his gavel to bring order (Tucson Citizen 1907a:5).

However, on 17 August 1907, the Tucson City Council passed an ordinance allowing burials to continue until 1 July 1909 (Ordinance 264 1/2). The men planning the new Evergreen and Holy Hope Cemeteries moved forward with their plans, and burials were placed in both the old and new cemeteries.

In May 1908, members of the Grand Army of the Republic decorated the graves of their departed members. "A squad from the University cadet corps acted as a guard of honor for the veterans...Following the reading of the regular G.A.R. cemetery, the cadet squad fired a salute and the buglers then sounded taps" (Tucson Citizen 1908a:5). The following month saw the burial of Southern Pacific engineer John S. Stockham in the Fireman's plot, "Following an old custom, the fire bell was tolled 74 times while the services were in progress, denoting the age of the deceased who had been for many years connected with the department" (Tucson Citizen 1908b:8). In July 1908, a monument for R. S. Ramirez was unveiled in the AOUW plot (Tucson Citizen 1908c).

Catholic burial records indicate burials began at Holy Hope Cemetery on 7 June 1909, and that the last burial in the old cemetery was on 30 June 1909.

People began to move burials from the various plots in the cemetery to either Evergreen Cemetery or Holy Hope Cemetery. In October 1909, two councilmen visited the cemetery to determine if reports that exhumed graves had not been backfilled were accurate. They discovered that one grave in the Jewish section, seven in the City Cemetery, and four in the Catholic Cemetery were open. "

These were caused, it is explained, by the removal of bodies from the graves in the old cemetery to the new one, the sexton, it is stated, having failed to fill up the graves after the removal of the bodies. People had been claiming that bones were visible in one of the open graves in one of the coffins. "We went all over the cemetery," said Mr. Martin, "and found no grave. It is true that a number of the bones in which the coffins were buried have been left in the graves but no skeletons were found." Undertaker O. C. Parker today, in discussing the matter, explained that the removal of the old boxes to which the coffins had been buried, was, at times, impractable, and that the undertakers were not to blame for the fact that they were left in the graves (Tucson Citizen 1909).

On Memorial Day 1910, services were again held at the GAR plot (Tucson Citizen 1910). John Stockham's son visited the cemetery in August 1912,

and was horrified to see "that tombstones have been thrown down, graves tramped and small lamps and other such stone emblems on the tombstones have been defaced and broken." He noted that many people were still trying to save money to move the burials of their relatives and that the five year period for removal had not expired (Tucson Citizen 1912a:5).

The volunteer firemen held a meeting in September 1912, to discuss the movement of the burials in their plot. They planned to hire someone to do this (Tucson Citizen 1912b). In January 1913, two boys were being paid 20 cents to fill emptied graves. The boys were taking care of an elderly blind grandmother, and were stealing wooden headboards from the cemetery to use as firewood for their stove. Other children in the neighborhood were also taking headstones (Tucson Citizen 1913).

The Boy Scouts and members of the Women's Christian Temperance Union decorated the approximately 90 GAR graves in May 1915. About a dozen Union and Confederate soldiers rode in carriages out to the plot. Former Arizona governor L. C. Hughes read the Gettysburg Address as part of the ceremony (Tucson Citizen 1914).

In February 1915, the city began to consider the question of the ownership of those portions of the cemetery owned by fraternal groups. One of the groups had lost the paper copy of its deed and asked the city to replace it (Tucson Citizen 1915g). The meeting has held, and the city suggested an arrangement whereby the groups removed burials from their plots, and afterward, the city would provide them with a new deed, allowing them to sell the land and raise money to recompense burial removal costs (Tucson Citizen 1915p). The city thought the cemetery land would be worth \$50,000 when emptied of burials (Tucson Citizen 1915j).

Local funeral homes offered to remove remains, with two different advertisements appearing in the Tucson Citizen. "The Tucson Undertaking Co. has competent men for the removal of bodies from the old cemetery to the new ones. Mr. Arturo Carrillo, manager of the firm, will superintend this work in person" (Tucson Citizen 1915f:4). "Removal of Bodies from old cemetery properly attended to by Tucson Undertaking Co. 150 S. Stone" (Tucson Citizen 1915b:8).

In May 1915, the city published advertisements stating that people had 30-40 days to remove bodies. Raymond Kilburn would later recall moving the tombstones in the GAR plot in 1915 (Arizona Daily Star 1961).

1 July 1915 was set as the deadline for the removal of burials. Four of the fraternal groups advertised in the Tucson Citizen. "NOTICE TO MA- SONS. All bodies will have to be removed from our plot in the old cemetery by July 1. Those having friends or relatives there, should arrange for their removal at once. O. C. Parker, Master" (*Tucson Citizen* 1915d:8). Ads by the other groups were nearly identical, placed by the Knights of Pythias (*Tucson Citizen* 1915c:8), the Cemetery Committee of Pima Tribe No. 10 of the International Order of Red Men (*Tucson Citizen* 1915e:2), and F. Ganz of the AOUW (*Tucson Citizen* 1915a:4).

In April 1915, the remains of Father Bartolome Suastagui were removed from the cemetery and transported to Holy Hope Cemetery (*Tucson Citizen* April 1915o). The following month, Councilman A. C. Bernard urged people who wanted their family members and friends removed privately to do so as soon as possible. The city was planning to hire a contractor for a bulk removal of bodies from unmarked or unclaimed graves as early as June 1915 (*Tucson Citizen* 1915h).

Records created by the fraternal group the Knights of Pythias are held by the Arizona Historical Society (AHS) in Tucson as Manuscript Collection 1325. The local lodge formed in the early 1880s, and raised money for charity, as well as providing sickness and funeral benefits for members. Receipts from the 1890s indicate the funeral benefit was about \$50 at that time, and by the 1910s, a Pythias publication noted that members would receive a \$100 funeral benefit. As the decision was made to sell off the Court Street Cemetery, the Knights of Pythias "advertised in both papers regarding the removal of bodies from the old to the new cemetery" (AHS/SAD, MS 1325, Box 28).

At the 14 June 1915 meeting, it was reported that:

On motion the cemetery committee was instructed and empowered to lay out the plot of Lodge in Evergreen Cemetery into plots and the K. of R.S. was instructed and empowered to provide for the necessary supervision and marking of the graves of those removed from the old to the new Cemetery. On motion Bros. Gus Hoff was given the privilege of having members of his family buried in the old Cemetery removed to the new K. of P. Cemetery.

The 13 September 1915 meeting saw the Tucson Undertaking Company agree to move the bodies at "\$9.00 a piece and all of the monuments for \$30." The offer was accepted, and by 27 September 1915, the Tucson Undertaking Company was paid by check \$173, suggesting they moved at least 15 burials. At that meeting the official minutes recorded that: "The Cemetery Committee reported that the removal of the bodies from the old cemetery to the new Cemetery has been completed (AHS/SAD, MS 1325, Box 28).

In July 1915, the plan for the cemetery subdivision was submitted to the city manager. It was to be divided into 128 lots, each measuring 184.8 ft by 66.0 ft (Tucson Citizen 1915i). In August 1915, the Old Fellows were to receive a deed for their plot, having complied with the removal of bodies (Tucson Citizen 1915l). The following month saw the city offering deeds to all the fraternal groups (Tucson Citizen 1915n). The city planned to sell the lots as is, with no plans to clean them. "The addition is laid out with streets and alleys. It should be rapidly built up after being placed on the market" (Tucson Citizen 1915k:8). On 6 March 1916, the Tucson City Council reviewed plans for the sale of the "old and abandoned cemetery," and the 88 lots were sold on 21 March 1916 (Wallace n.d.). In 1917, the cemetery committee reported that after the sale of lots, the city had made a \$5,000 profit (Tucson Citizen 1916b). The next month saw the grading of two streets within the old cemetery (Tucson Citizen 1916a).

Similar to the previously abandoned historic cemetery, in the National Cemetery, also called the Alameda-Stone Cemetery, many burials were not moved between 1909 and 1916. Most of the undisturbed portion of the Alameda-Stone Cemetery was recently excavated by Pima County, and more than 90 percent of the burials had not been removed after the cemetery was closed (Heilen and Gray 2011).

Plots Within the Court Street Cemetery

The Court Street Cemetery was divided into 10 individual cemetery areas. Varying amounts of information are available for each. The following sections focus on the physical appearance of each cemetery area and notes the number of individuals that have been identified as being buried in each plot, as of January 2013. Additional research is expected to identify many other individuals, especially for the non-Catholic portion of the cemetery.

Catholic

The Catholic portion of the cemetery was bounded by W. Speedway Boulevard on the north, N. Stone Avenue on the east, W. 2nd Street on the south, and N. Court Street (today N. 10th Avenue) on the west. The front gate was located at about the intersection of N. 10th Avenue and W. 2nd Street, and it is likely that burials began in that area and expanded to the north and east.

In 1892, the Catholic Cemetery was described as:

here spread over a large acreage of ground, were hundreds of little crosses peering up over the graves and marble slabs and monuments and headstones marked the resting place of what appeared to be a city of the dead. One grave on a marble slab with the head pointing south and the feet north, bore the following inscription: 'Peter R. Brady, 1842' (*Arizona Weekly Citizen* 1892a:4).

To date, research has identified 5,518 persons buried in the Catholic portion of the cemetery.

Citizen, City, County, Protestant, and Public

The City Cemetery was located on the west side of N. Court Street (today's N. 10th Avenue) and extended one block to the west. This portion was called the Citizen, City, County, Protestant, and Public Cemetery in records.

In 1889, it was reported that:

Steps should be taken at once by the city authorities to fence and take proper care of the city cemetery. The state of affairs at present is absolutely disgraceful. Each of the plots assigned to the societies is nicely fenced, and the Catholic burying ground adjoining is fenced, but the city cemetery, which should be better taken care of than the others that are paid for out of private funds, is neglected; the graves are left as a possible highway for wagons, cattle, etc. Much has been said on this subject. On account of the fences now up, the city can fence their ground without much expense (*Arizona Weekly Citizen* 1889a:1).

The City Council decided to build the fence, and an advertisement for "Proposals to Build Fences" appeared in the *Arizona Weekly Citizen* (1889d).

Research utilizing death certificates and newspapers has identified many individuals buried in this portion of the cemetery: City (n = 456), Citizen (n = 88), County (n = 60), Protestant (n = 2), and Public (n = 13). There may be some overlap—that is, a person may have been referred to as being in the City plot in one record and the Public lot in another—and research is ongoing to identify additional burials.

Negley Post No. 1 of the Grand Army of the Republic (GAR)

GAR was a veterans group that formed after the Civil War. In Tucson, this group provided assistance to Civil War veterans and their wives and children in times of need. Members could be buried in their plot, and the local GAR officers would order a tombstone through the U.S. government.

GAR surveyed their plot in June 1891. At that time, there was space for 162 graves, with 16 "filled with deceased members of the post" (*Arizona Weekly Citizen* 1891b:4).

GAR regularly ordered batches of governmentprovided headstones for their deceased comrades. One problem they faced was that a few veterans had been buried in other portions of the cemetery, and their location of burial had been lost (*Arizona Weekly Citizen* 1892b, 1893d).

Research has identified 76 persons buried in the GAR plot.

Tucson Volunteer Fire Department

The Tucson Volunteer Fire Department was founded in 1881 (Sonnichsen 1982:110). The firemen held a ball on 15 April 1889, to raise money to construct a fence around their plot (*Arizona Weekly Citizen* 1889c). In June 1889, the firemen advertised for bids for the fence, which was to consist of

wire netting No. 14 with one strand barb wire running along the top of same, and barb wire, red wood or mesquite posts 8 feet apart, size of posts 4x4, same height of the fence, corner posts 8x8, well braced, and two feet in the ground. Two gates fancy pickets, posts 8x8 well braced, locks and hinges; size of opening 12 feet. All wood work to be painted and finished in a workmanlike manner (*Arizona Weekly Citizen* 1889e:4).

Mr. Reed began construction of the fence in October 1889. One goal was to keep animals out of the plot (*Arizona Weekly Citizen* 1889b).

The entrance to the Fireman plot had an arched gate with "the name written over the emblem of the anchor and flag" (*Arizona Weekly Citizen* 1892a:4).

Research has identified only four people buried in this plot.

Independent Order of B'nai B'rith (IOBB)

The IOBB was a Jewish service organization. In Tucson, the group was led by prominent business leaders. The B'nai B'rith purchased Lots 2, 3, and 6 from the City of Tucson for \$1.00 in April 1883 (*Arizona Weekly Citizen* 1883b). "In this some were buried laying north and south, some east and west. The following epitaphs were noted upon some of the gravestones: 'Lilie, beloved daughter of S.H. and Jennie Drachman,' 'Rubie, infant son of S. H. and Jennie Drachman' (*Arizona Weekly Citizen* 1892a:4).

Research to date has identified 15 individuals buried in this plot.

Pima Lodge No. 3 of the Independent Order of Odd Fellows (IOOF)

The IOOF was a temperance organization, working to ban the sale of alcoholic beverages. It was quite popular in the late nineteenth and early twentieth centuries, and this group helped pass prohibition in Arizona, which took effect on 1 January 1915. The

City of Tucson gave Lots 7, 10, and 11 of Block 10 for their cemetery (*Arizona Weekly Citizen* 1883c).

Research has identified 31 individuals buried in the IOOF plot.

Ancient Free and Accepted Masons (AF & AM)

The Masons were the last group to have an unfenced plot (*Arizona Weekly Citizen* 1889b). In 1890, however, a substantial wire fence was constructed (*Arizona Weekly Citizen* 1890). By February 1896, the Masons had dug a well, built a windmill and a 5,000-gallon tank, laid 300 ft of pipe for irrigation, and planted 100 trees (*Arizona Weekly Citizen* 1896a). The entrance to the Masonic plot was a gate with:

the compass and the square and in the center the letter G. Amongst other graves in this enclosure was one over which was erected a monument in beautiful marble bearing the inscription 'Born, Oct. 30th, 1857; died, March 21st, 1887, Sacred to the memory of Elizabeth Willett, wife of L. D. Chillson' (*Arizona Weekly Citizen* 1892a:4).

A total of 83 individuals buried in the Mason's plot have been identified.

Tucson Lodge No. 9 of the Knights of Pythias (K of P)

The Knights of Pythias was a fraternal organization whose members swore they were not professional gamblers or involved with drugs or alcohol, as well as believing in a Supreme Being. In Tucson, the group provided financial assistance to paying members during times of sickness and at death.

The Knights of Pythias had purchased Lots 1 and 4, but mistakenly buried members in Lots 2 and 3. The City of Tucson subsequently switched ownership to avoid having the Knights of Pythias move their burials (*Arizona Weekly Citizen* 1891a).

The Knights of Pythias "are fixing up their cemetery and are preparing to fence it properly and have already a new gate with a handsome design ready to be put in place" (*Arizona Weekly Citizen* 1892a:4). The fence was completed by late August (*Arizona Weekly Citizen* 1892b).

Twenty-seven persons buried in the Knights of Pythias plot have been identified.

Ancient Order of the United Workmen (AOUW)

The AOUW was a fraternal group established in 1868, that provided social and financial support to members in need.

The AOUW hired Mexican men to grade their plot. They were also cutting ditches for trees and shrubbery to be planted. Further, they had plans to install a windmill to pump water for irrigation from

a well (*Arizona Weekly Citizen* 1893a, 1893c). By January 1894, the windmill and a big tank had been erected. The pump was then put in. Several hundred ash and umbrella trees were ordered (*Arizona Weekly Citizen* 1894a). In June of 1894, it was reported that the trees were thriving (*Arizona Weekly Citizen* 1894b). The workmen held a dramatic and musical event at Reid's Opera House in January 1895, to raise more money to beautify their plot (*Arizona Weekly Citizen* 1895a). W. H. Read was in charge of the cemetery, and offered to sell flowers and shrubs to people to decorate graves (*Arizona Weekly Citizen* 1896c).

A total of 47 persons buried in the AOUW plot have been identified.

Pima Tribe No. 10 of the Improved Order of Red Men

Pima Tribe No. 10 of the Improved Order of Red Men was formed in October 1897, in Tucson. This fraternal group was known for its "Smoker" get togethers, during which members smoked cigars, drank alcohol, sang songs, and gave speeches. The group purchased a plot on the north side of the cemetery in January 1899 (Thiel 2012a).

Research identified 16 individuals buried in the Red Men plot. Archaeological strip trenching of the Red Men Cemetery identified 20 graves, 18 for adults and two for children. There was evidence that some of the burials had been exhumed after the cemetery was closed. The southwestern corner of the fence that enclosed the cemetery was also located (Thiel 2012a).

How Many Total Burials?

The total number of burials interred in the Court Street Cemetery between 1875 and 1909 is unknown. In March 1915, Councilman Bernard testified at a council meeting that, "There are 2,194 bodies in the old cemetery, 1,649 of which are remains of people of Catholic faith and 394 Protestant" (*Tucson Citizen* 1915m:3). How he obtained these counts is not known, but other records indicate he dramatically underestimated the number of burials.

Catholic burial records for the period between 1 June 1875 and 30 June 1909, list 5,071 persons buried in the cemetery (Table 1.2). No similar list of burials exists for most of the Protestant portion of the cemetery, although GAR records at AHS suggest approximately 85 people were buried in that plot.

Research is currently underway to create a list of individuals buried in the Court Street Cemetery using a variety of records, including the 1880 U.S. Census mortality schedule, Tucson newspapers, the Register of Funerals from the Parker Funeral Home, death certificates available online at <genealogy. az.gov>, tombstones moved to Evergreen Cemetery,

Year	Number	Year	Number	Year	Number	Year	Number	
1875	112	1884	122	1893	179	1902	178	
1876	133	1885	116	1894	118	1903	121	
1877	182	1886	142	1895	131	1904	162	
1878	100	1887	131	1896	137	1905	163	
1879	119	1888	171	1897	115	1906	194	
1880	153	1889	94	1898	164	1907	195	
1881	261	1890	129	1899	108	1908	183	
1882	142	1891	124	1900	141	1909	106	
1883	151	1892	175	1901	119	Total	5,071	

Table 1.3. Number of burials reported in the Court Street Cemetery between 1901 and 1908.

Plot	1901	1902	1903	1904	1905	1906	1907	1908
Ancient Order of Workmen	4	6	5	3	8	3	5	1
Catholic	145	232	153	206	227	287	276	236
City	40	58	42	57	52	66	91	47
Firemen	-	-	-	-	-	1	-	3
Grand Army of the Republic	2	6	5	-	2	3	1	-
Odd Fellows	2	3	3	1	5	6	2	-
Jewish	1	-	-	2	1	2	1	2
Knights of Pythias	1	4	2	4	2	2	8	-
Masonic	3	11	9	9	7	7	7	-
Red Men	3	3	2	1	-	2	2	2
Unknown	52	37	37	21	14	25	30	54
Total	253	360	258	304	318	404	423	345

and other sources. Counts of burials in the cemetery are provided in Table 1.3, sorted by plot, as reported in death certificates created by the City of Tucson between 1901 and 1908. Of particular note is that the number of burials reported for the Catholic Cemetery is consistently higher for death certificates than for the official burial register. Between 1900 and 1908, the register reported 1,315 burials, while death certificates reported 1,762 burials. Fully 25 percent of burials were not recorded in the register. In some cases, it is apparent that family members buried their relatives in the Catholic portion of the cemetery without a priest present. If this rate of underreporting was consistent through time, the total number of burials in the Catholic Cemetery was more than 6,300.

Reported Burial Discoveries, 1949-1986

The development of the Court Street Cemetery began in 1916, with cutting and filling of the ground surface and installation of water, gas, and sewer

pipes below the ground surface (the exact date of pipe placement is not known). By 1924, more than 50 residential structures were present within the cemetery boundaries. Many burials were disturbed during the grading, infrastructure installation, and home construction (*Tucson Citizen* 1967a). Although burials were revealed during this work, their discovery apparently went unnoticed by the local media, and any remains apparently were left in place.

Beginning in 1949, numerous burials had been located, and some were excavated by archaeologists and physical anthropologists (Table 1.4).

The first reported discovery took place in July 1949, when three coffins, stacked on top of each other, were located by archaeologist Julian Hayden (who also worked as a backhoe operator) during excavation of a sewer line at 1022 North "Penn" (probably Perry).

The upper coffin was in fragments...The lower coffin, apparently made of redwood, had col-

Table 1.4. List of burials located by utility workers and archaeologists in the Court Street Cemetery.

					Depth below				
				Single/	ground surrace to coffin or	n)		Associated Artifacts,	
Feature	Date Found	Section	Location	Double	remains (m)	Sex	Age	Comments	Reference
	July 1949	Catholic	1022 N. Perry	Double	I	Male	ı	Not excavated	Arizona Daily Star 1949
	July 1949	Catholic	1022 N. Perry	Double	I	Female	ı	Not excavated	Arizona Daily Star 1949
	July 1949	Catholic	1022 N. Perry	Single?	1	Child	ı	Not excavated	Tucson Citizen 1949
	October 1961	Protestant	N. Queen, south of W. Speedway)	I	ı	ı	14 coffins, not excavated	Arizona Daily Star 1961:B1;
									Longenbaugh 1961
	7 November 1967 Catholic	Catholic	1012 N. Perry	Double, with Feature 2	0.94	Male	50+	Coffin, preserved hair	Arizona Daily Star 1967; Tucson Citizen 1967b
7	7 November 1967 Catholic	Catholic	1012 N. Perry	Double, with Feature 1	0.56	Male	35-44	Coffin	ASM notes
E	September 1970	Protestant	935 N. Queen	Double, with Feature 4	I	Child	4.5-5.5	Also remains of child 7.5-8.5 years old	ASM notes
4	September 1970	Protestant	935 N. Queen	Double, with Feature 3	1.07	Male	40+	Coffin, second individual's ASM notes femur	ASM notes
гO	13 January 1981	Catholic	948 N. Perry	Double, with Feature 6	1.08	Female	35-40	Coffin, clothing	ASM notes
9	13 January 1981	Catholic	948 N. Perry	Double, with Feature 5	1.70	Female	1	Coffin wood, tacks, metal, cloth, crucifix	ASM notes
^	13 January 1981	Catholic	948 N. Perry	Unknown	I	Neonate	ı	Wood and metal rosary, safety pin, cloth	ASM notes
∞	3 May 1984	Protestant	N. Queen, between 1st and 2nd streets	Single	I	Male	1	I	Arizona Daily Star 1984
6	8 June 1984	Catholic	902 N. 10th Avenue	Single	I	Female	20+	Clothing, hair, nails	ASM notes
10	19 July 1986	Catholic	SW corner N. Perry and W. Speedway	Single	1.52	Male	15-16	Coffin with viewing window, clothing, hair	Revere 1986
11	27 September 1986 Catholic	, Catholic	151 W. Speedway	Single	ı	Child	ı	Coffin hardware, clothing	ASM notes
12	May 2005	Catholic	901 N. Perry	Single	I	Male	22-26	Coffin, dothing	Beck et al. 2005
13	12 October 2007	Catholic	904 N. Perry	Double, with Feature 14	0.57	Child	1	Coffin, clothing	Thiel and Margolis 2007

	Reference	Thiel and Margolis	7007	Maren et al. 2011	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	Thiel et al. 2012	This report	This report	Thiel et al. 2013
	Associated Artifacts,	Coffin, clothing, pocket	contents	Coffin, coffin hardware,	Coffin	ı	Coffin, clothing	Coffin	ı	ı	ı	ı	1	ı	ı	ı	Coffin	ı	ı	ı	ı	ı	1	1	Coffin, clothing	Coffin, clothing, embalming fluid bottles, bullet	Coffin, clothing, rosary
	Аое	38. 1	!	40-45	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	1	ı	ı	ı	ı	ı	40-45	45-55	19-30
a)	Š	Male	,	Male	Adult	Adult	Adult	Adult	Adult	Adult	Adult	Adult	Adult	Child	Adult	Child	Male	Male	Male								
Depth below ground surface	to coffin or	0.78		1.20	ı	ı	ı	1	1	1	I	I	1	1	I	I	ı	I	1	1	1	ı	ı	ı	ı	I	2.30
	Single/ Double	Double, with	Feature 13	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single
	Location	904 N. Perry		W. 1st Street and N. Queen Avenue	Salvation Army parcel	Salvation Army parcel		Salvation Army parcel		SW corner N. Stone and W. Speedway	SW corner N. Stone and Single W. Speedway	W. 1st Street east of N. 10th															
	Section	Catholic		Protestant	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Red Men	Catholic	Catholic	Catholic
	Date Found	15 October 2007	,	2 December 2010	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	August 2011	8 June 2012	11 June 2012	8 October 2012
	Беатиге	14	!	13	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38

Table 1.4. Continued.

					Depth below ground surface	o.			
				Single/	to coffin or			Associated Artifacts,	
Feature	Feature Date Found	Section	Location	Double	remains (m)	Sex	Age	Comments	Reference
39	8 October 2012	Catholic	W. 1st Street east of N. 10th	Single	2.10	Female	30-40	Coffin, clothing, picture frame	Thiel et al. 2013
40	8 October 2012	Catholic	W. 1st Street east of N. 10th	Single	1.54	Female	19-30	Coffin	Thiel et al. 2013
41	8 October 2012	Catholic	W. 1st Street east of N. 10th	Single	1.57	Child	4-6	Coffin	Thiel et al. 2013
42	19 October 2012	Catholic	Intersection W. 1st and N. Ash	Single	1.17	Female	15-23	Coffin, clothing	Thiel et al. 2013
43	18 October 2012	Catholic	Intersection W. 1st and N. Ash	Single	0.91	Adult	1	Coffin	Thiel et al. 2013
44	7 November 2012 Catholic	Catholic	Alley s. w. 1st St, between N. Perry and N. 9th	Double, with Feature 47(?)	1.57	Adult	l	Coffin	Thiel et al. 2013
45	8 November 2012 Catholic	Catholic	Alley s. w. 1st St, between N. Perry and N. 9th	Unknown	1	Unknown	1	1	Thiel et al. 2013
46	8 November 2012 Catholic	Catholic	Alley s. w. 1st St, between N. Perry and N. 9th	Unknown	1	Unknown	1	1	Thiel et al. 2013
47	8 November 2012 Catholic	Catholic	Alley s. w. 1st St, between N. Perry and N. 9th	Double, with Feature 44(?)	1	Child	1-2	Coffin, clothing	Thiel et al. 2013
48	16 November 2012 Catholic	2 Catholic	Alley s. w. 1st St, between N. Perry and N. 9th	Unknown	1.80	Unknown	1	Coffin	Thiel et al. 2013

lapsed. Hayden, who has studied archaeology, said the lower coffin held the body of a young man, judging by the bones. The upper coffin was apparently used for a woman, since a fragment of what seemed to be a dress was found in it (*Arizona Daily Star* 1949).

A third burial held a child (*Tucson Citizen* 1949). The burials were left in place.

In October 1961, a 6- to 7-ft-deep trench was excavated by Fisher Contracting Company on N. Queen Avenue near W. Speedway Boulevard for a waterline. "The outline of ten caskets lying beside each other then became visible about four feet below the ground, just north of W. 1st. Four additional graves were located a few yards south of Speedway Blvd. There were no traces of bodies found, only dust" (Arizona Daily Star 1961:B1). The trench cut through just the ends of the coffins, with 10 coffins in a 25-yard-long space and "the others scattered over the remainder of the block north of Speedway." A neighborhood resident, Oscar Alexander of 224 W. 1st Street, told a reporter that a few years earlier a grave had been found in a sewer trench south of his house. The city pathologist, Dr. Lewis Hirsch, was asked to inspect the graves and thought that it was "best to leave them be" (Longenbaugh 1961:43).

Burials found between 1967 and 1986, were disinterred or documented by osteologists and archaeologists from the University of Arizona. Little field documentation of the burials was prepared. A few handwritten notes and contemporary newspaper articles provide limited details. The human remains were inventoried by osteologists in 1997 and 1998. The following descriptions of Features 1-11 were prepared from these sources.

Two burials were discovered on 7 November 1967, at 1012 N. Perry Avenue by Russ Plumbing workmen digging a trench for a sewer line to Ed Adodeeley's new house (Arizona Daily Star 1967; Tucson Citizen 1967b). These were excavated by Walter Birkby and James Ayres of the University of Arizona. Burial Feature 1 was located 1.04 m west of the east curb of N. Perry Avenue, within the street surface in front of 1012 N. Perry Street. The top of the coffin was reported to be 94 cm below the modern ground surface. The coffin was constructed from hand-planed boards, one of which was 1 inch thick, 8 inches tall, and 20 inches long. Cloth was reported at the head end (western end) of the coffin, and some sort of metal items, perhaps coffin hardware, were present. The body lay in the coffin with the head to the west. The individual was a male, aged older than 50 years at death. The skeletal remains had osteophytes on the thoracic vertebrae and the sacrum, arthritis on the distal humerus and knees, and a lytic lesion on one of the first distal tarsal phalanges. Pehair was present.

Burial Feature 2 was located beneath the eastern curb and the adjacent lawn of 1012 N. Perry Street. The top of the coffin was 56 cm below the lawn surface. The eastern end of the coffin was 1.52 m east of the curb (the lower legs and feet were beneath the curb). The body lay in the coffin with the head to the east. The individual was a European male, aged 35-44 years old at death. The remains had a bregmatic ossicle, dental caries, an ossified zyphoid process, moderate lipping of most vertebrae, two thoracic vertebrae fused at the spinous process, and healed fractures of the left second rib and right clavicle. There was no evidence of dental fillings or

No dental fillings or restorations were noted. Black

Features 3 and 4 were discovered by Jack Leonard of the J. L. Plumbing Company, during excavation of a sewer trench for a new home at 935 N. Queen Avenue, in September 1970. James Ayres and Walter Birkby subsequently excavated the remains. Feature 3 was a 4.5- to 5.5-year-old child, who had been previously disturbed by either a water or sewer line within N. Queen Avenue, suggesting the remains were found within the street. The child's left parietal showed eight pits. A left rib was severely fractured at, or near, the time of death. Mixed with the remains of this child are a left tibia, fibula, and scapula of a second child, aged roughly 7.5-8.5-years at death.

restorations.

Feature 4 was located 1.07 m below the modern ground surface. The coffin was orientated east-west, and only the northern portion of the coffin was intact. The individual was a male, aged older than 40 years at death. The remains had spinal osteophytosis, compression fractures of the ninth through twelfth thoracic vertebrae, and schnorl nodes on the sixth through twelfth thoracic and all five lumbar vertebrae. Lytic lesions were present on the sacroiliac surfaces, on the medial right clavicle, and the left distal right tarsal phalanges. Periosteal reactive bone was visible on the shafts of the left ulna and radius. Two tarsal phalanges were fused. Arthritis was present on both gleno-humeral joints and the knees. A silver filling was present on a left maxillary molar, and three teeth had been lost prior to death, the right first and second premolars and the left mandibular third molar. The estimated height of this individual was 5 ft 8 inches. A robust, probably male, femur was also found with this burial.

Features 5, 6, and 7 were located on 13 January 1981, during sewer work in the front yard of 948 N. Perry Avenue (*Arizona Daily Star* 1981). The burials were excavated by Walter Birkby and Madeleine Hinkes. The Feature 5 coffin lid was located 1.08 m below the modern ground surface. The coffin was 1.8 m long and 37 cm wide. The individual was bur-

ied with their head at the western end of the coffin, with the right hand on the chest next to the chin and the left hand lying on the right side of the chest. The individual was a female, aged 35-40 years old at death. The individual had mild vertebral osteophytes, arthritis at the gleno-humeral joint, the proximal ulna and radius, and the right foot phalanges, and a possible fracture of a left rib. The woman had lost her mandibular molars prior to death, had periodontal disease, and displayed heavy dental calculus. Glass buttons and coffin nails were recovered from the grave.

The lid of the Feature 6 coffin was located 38 cm below the base of the Feature 5 coffin. The lid was reported to be 1.7 m below the modern ground surface. The coffin was 1.72 m long and was 35 cm wide at the head, narrowing to 30 cm at the waist. Tacks were present along the exterior of the coffin, with fabric impressions noted. The individual was reported to have their hands crossed and lying on the lower chest area. The remains were an older female. She was reported to have periodontal disease, osteophytes on the lumber vertebrae, and arthritis on a proximal metatarsal. A metal crucifix was present beneath the skull of this individual (*Arizona Daily Star* 1981).

Feature 7 was a neonate aged up to 6 months at death. Artifacts recovered from the burial included a wooden and metal rosary, a metal safety pin, and fragments of cloth.

Feature 8 was found on 3 May 1984, beneath N. Queen Avenue between W. 1st and W. 2nd streets by a backhoe operator digging a trench (*Arizona Daily Star* 1984). The burial was excavated by Walter Birkby and Mark Baumler. This individual was a mature male, who had dental caries.

Feature 9 was located on 8 June 1985, at 902 N. 10th Avenue. The burial was excavated by Walter Birkby and James Ayres. This female was older than 50 years at death. Numerous pathologies are visible on the remains. Abcesses are present on the maxilla and mandible, in addition to numerous dental caries and worn teeth. Lipping was noted on vertebrae and sacrum, as well as on the proximal ulnae and radii. The distal right radius and ulna were deformed from a healed fracture. Osteoporosis was also noted. Hair was present, and two buttons, fabric, and a nail were recovered from the grave,

Feature 10 was located by workers for Maya Construction on 19 July 1986, at the southwestern corner of N. Perry Avenue and W. Speedway Boulevard (Revere 1986). It was excavated by Walter Birkby, Donna Windham, and Michelle Napoli. The coffin was reported to be 1.52 m below the ground surface, and had a glass viewing window and crucifixes on the lid. The individual was a male, aged

mid- to late teens at death, European, and about 5 ft 6 inches tall. The individual's third molars were erupting, but were crowded toward the lingual plane. He had dark hair and was buried in a suit.

A child burial, Feature 11, was discovered on 27 September 1986, in the alley opening onto Speedway, just east of 151 W. Speedway Boulevard. It was excavated by Walter Birkby, Donna Windham, and Michelle Napoli of the University of Arizona. The coffin was 1.12 m long and at least 33 cm wide, measured at the knee area. The coffin was painted, and some escutcheons were present. The body lay with its head to the west. The child was 5-6 years old at death. Human hair, 2 white milk glass buttons, 1 shell button, 1 snap, 4 possible nails, and 1 piece of unidentified metal were recovered. A fragment from a juvenile distal femur was present with these remains, although it is not known where it originated.

Another set of partial remains, reportedly excavated by Walter Birkby and James Ayres in September 1970, was never assigned a feature number. No notes are known describing the location of the remains, although these were recovered at the same time as those from 935 N. Queen Avenue. The remains are from a male, aged 22-29 years old at death. The remains consist of the right mandible, left and right humerus, the left innominate, femur, and tibia, and the right femur and tibia. The right second and third mandibular molars have caries and silver fillings. A lesion is visible on the left tibia below the nutrient foramen.

Recently Located Burials

Burials continue to be located in the Court Street Cemetery as utility repairs take place, as homeowners dig holes on their properties, or when vacant land is examined.

On 5 June 2005, the homeowner at 901 N. Perry Street was replacing his mailbox and located human remains in the posthole he was digging. The remains were subsequently excavated by Lane Beck and John McClelland of the University of Arizona and Homer Thiel of Desert Archaeology, Inc. Feature 12 was an adult European male, aged 22-26 years old at death. Osteological analysis revealed evidence for workrelated stress on the arms and right knee. Three lesions were present on the interior of the skull, and may suggest meningitis or some other soft tissue inflammation. The male had calculus build-up on his teeth and crowding. He was buried in a plain pine wood coffin (the shape could not be determined) held together by nails. No thumbscrews, escutcheons, or handles were present. The individual was buried wearing clothing, and 3 brass pants rivets, 1 suspender or vest buckle, 2 white milk glass

buttons, and 4 shell buttons were recovered. The buttons probably came from a shirt and underclothing (Beck and McClelland 2005).

On 1 October 2007, a homeowner at 904 N. Perry Avenue discovered a sinkhole after a heavy rainstorm. After finding human bone and coffin parts in the hole, he contacted Desert Archaeology. The remains were within the City of Tucson's right-ofway, and the decision was made to remove the burial. Excavation took place on 12 and 15 October 2007. Two burials, Features 13 and 14, were located, both orientated north-south. The remains were in hexagonal coffins with identical hardware. A child's burial, Feature 13, was located 60 cm below the modern ground surface. This individual was 3-5 years old at death, and appeared to be Hispanic. A large number of buttons from several different pieces of clothing were discovered at the foot of the coffin, perhaps indicating an effort to dispose of the items.

Feature 14 was directly below, and was a Hispanic male, aged 25-35 years old. The skeletal remains exhibited numerous pathological conditions. These included third molars that were congenitally absent, a probable healed fracture of his left proximal ulna, fused toe phalanges on his right foot, an extra thoracic vertebrae, and an extra set of ribs. The man was buried wearing clothing that included a shirt, jacket, suspenders, and a pair of pants. His pockets contained three coins, a comb, a jackknife, and a change purse. This is very unusual, and suggests he was buried without having his pockets checked. The presence of extra clothing in the child's burial and the man with pocket contents may suggest the two died from an infectious disease (Thiel and Margolis 2007).

On 2 December 2010, KE&G workers repairing a broken sewer pipe encountered human remains beneath the intersection of N. Queen Avenue and W. 1st Street. Feature 15 was an adult male buried in a coffin, with his head at the western end of the grave, which was located within the Protestant, or City, Cemetery. The individual was 40-45 years old, had lost three molars prior to death, had calculus buildup on his teeth, and had suffered extensive injuries to his spinal column during his life. He was buried wearing a shirt with an attachable collar, possibly a vest, suspenders, pants, and a belt. The hexagonal coffin had been painted yellow, and was lined with red cloth attached by brass tacks. Thumbscrews and escutcheons that had been used to screw the coffin lid down were recovered, as were a pair of hinges, coffin wood, and nails (Hopkins et al. 2011).

Desert Archaeology, Inc., conducted archaeological testing of two parcels located on the western side of the Court Street Cemetery between 18 August and 1 September 2011. Strip trenching of the vacant par-

cel at the northeastern corner of N. Main Avenue and W. 1st Street failed to locate any burials, and the presence of a large wash running through the middle of the parcel probably indicates the land was never used for human burials. In contrast, the area on the eastern side of N. Alder Avenue, north of the present Salvation Army building, contained 20 burials associated with Pima Lodge No. 10 of the Improved Order of Red Men. This fraternal group received the burial plot in 1898, from the City of Tucson. Documentary research identified 16 individuals buried in the plot between 1901 and 1908, including two women and two children. The 20 burials were assigned Features 16-35. They were not excavated. Portions of five coffins were visible, and all appeared to be rectangular; at least three of the burials apparently had plate glass viewing windows. A 1924 aerial photograph suggests that many were probably exhumed after the cemetery closed. Tombstones for at least four of the individuals are currently in Evergreen Cemetery (Thiel 2012a).

A portion of the parcel at the southwestern corner of N. 10th Avenue and W. Speedway Boulevard was examined by Harris Environmental Group, Inc., in November 2011. The foundation trenches for a planned building were excavated by backhoe while an archaeologist monitored, later examining the walls of the trench. No burials were located (Quinn 2011).

After completion of fieldwork for the current City of Tucson project, Desert Archaeology monitored sewer line repairs in the cemetery for Pima County. A total of 11 burials, Features 38-48, were located in four areas within the Catholic Cemetery.

The entire cemetery has been designated by ASM as site AZ BB:13:156 (ASM) in 1983.

Post-cemetery Use of the Project Area

The cemetery area was surveyed and laid out for redevelopment prior to the sale of lots in 1916. The cemetery was divided into two rows of four blocks. The modern road and alley alignments were also laid out, and City of Tucson water and Pima County sewer pipes were installed at that time. The cemetery area was fairly flat, north to south, but sloped downward to the west, and extensive cutting and filling took place to level the area for development (Figure 1.4). The current elevation on the eastern side of the cemetery is 724.87-725.65 m above sea level, while the west side is 718.44-719.02 m above sea level.

A 1924 aerial photograph shows the Court Street Cemetery area (Figure 1.5). In the eight years after the cemetery was opened for development, 57 homes were constructed within the boundaries of the cemetery, mostly in the Catholic Cemetery. A large wash

is visible running east to west at a slightly northwestern course. The locations of the fraternal plots are visible due to the presence or absence of vegetation, fencelines, and disturbed areas where bodies had probably been exhumed (Figure 1.6). The 1924 aerial reveals that the project area was undeveloped except a row of trees planted along the western side of N. Stone Avenue, another line of trees along the eastern side of N. Ash Avenue, immediately south of W. Speedway Boulevard (Ash Avenue is unpaved at this time), and four sets of trees in the middle of the area between N. Stone Avenue and N. Ash Avenue, running south from W. Speedway Boulevard. These trees may mark the eastern edge of the Catholic Cemetery, and may have been planted during the beautification project in 1907, although this is uncertain.

The project area appears to have been continued to be vacant prior to the 1930 construction of the Duffey & Huffer Service Station at 1049 N. Stone Avenue, at the southwestern corner of N. Stone Avenue and W. Speedway Boulevard (Figure 1.7). This gasoline station was in use until at least 1960, changing ownership every few years (Figure 1.8).

By 1935, the Seaman Merrill Restaurant opened at 1041 N. Stone Avenue, south of the service station. By 1941, the restaurant had become the Thayer Motel. Numerous small motel units were present on

the western half of the current city-owned parcel. Operated by various owners, the motel remained in business until 1957, when it was demolished and the 1st National Bank of Arizona was constructed. This latter building stood until the early 2000s. Desert Archaeology monitored demolition of the bank, which had a partial basement. No burials were located (the depth of the basement would likely have removed any in this area).

SUMMARY

The Court Street Cemetery, AZ BB:13:156 (ASM), was used between 1875 and 1909, as what was envisioned as the final resting place for perhaps 8,000-9,000 Tucson residents. Efforts to enhance the physical appearance of the cemetery were thwarted by the high caliche, the lack of water, and the apathy of residents. As Tucson grew northward, businessmen and the Catholic Church opted to open new cemeteries and use the old land for residential and commercial development. Efforts to move bodies were difficult due to the high cost, the difficulty in locating some graves, and the lack of interested relatives and friends. Consequently, many bodies were left behind. Since 1949, archaeologists have documented 48 burials (Figure 1.9).

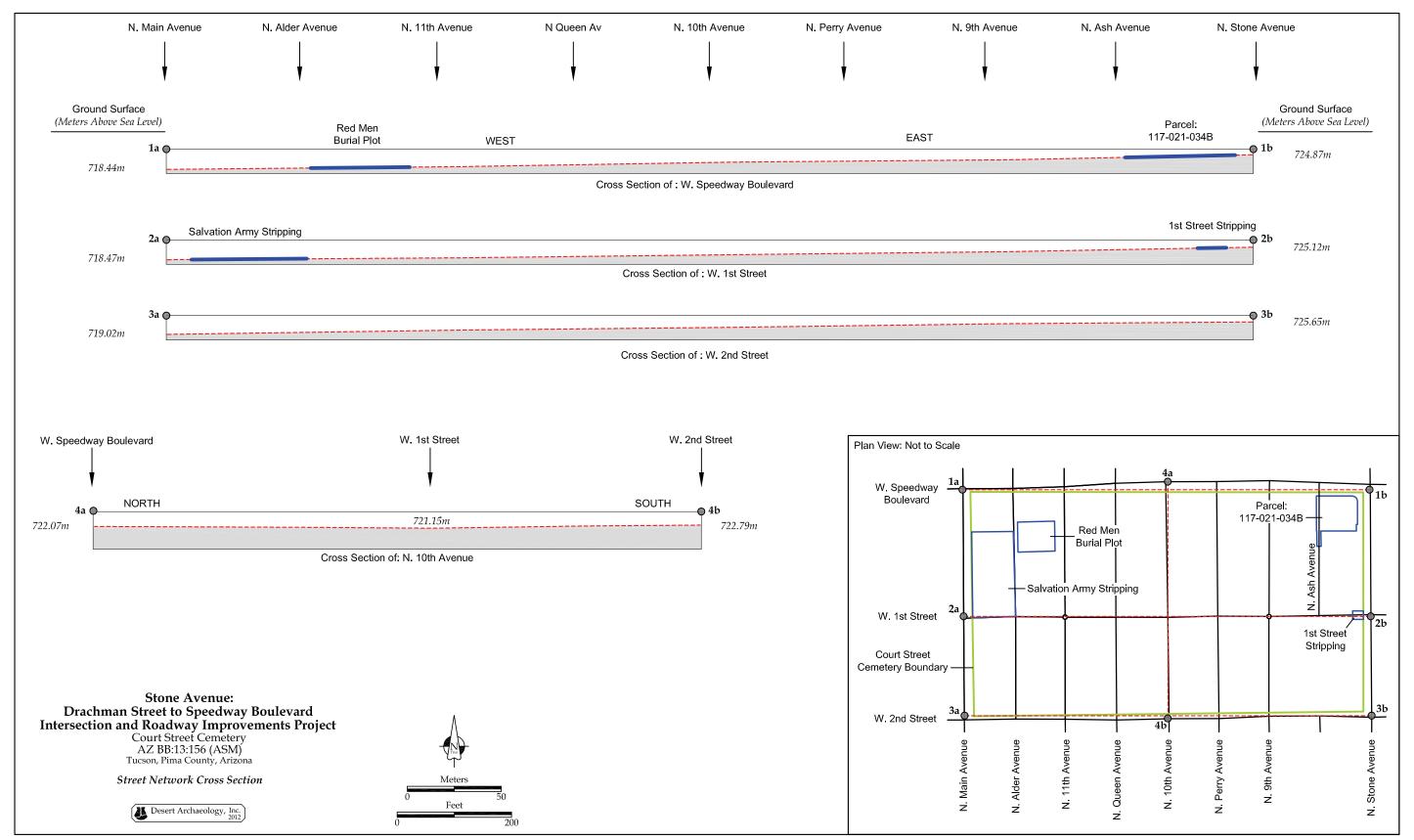


Figure 1.4. Modern topography of the Court Street Cemetery.



Figure 1.5. A 1924 aerial photograph of the Court Street Cemetery.

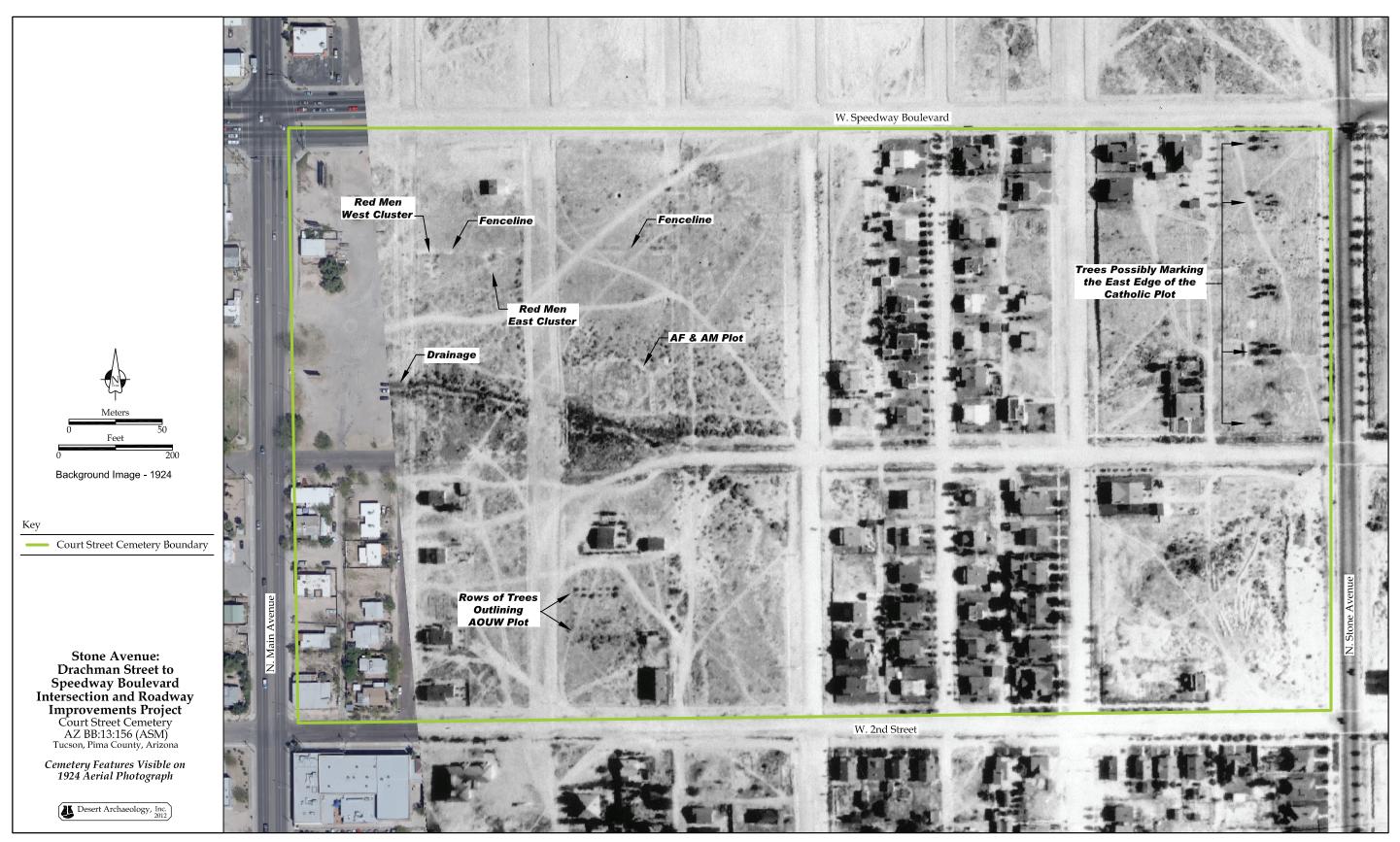


Figure 1.6. The 1924 aerial photograph with visible cemetery features noted.

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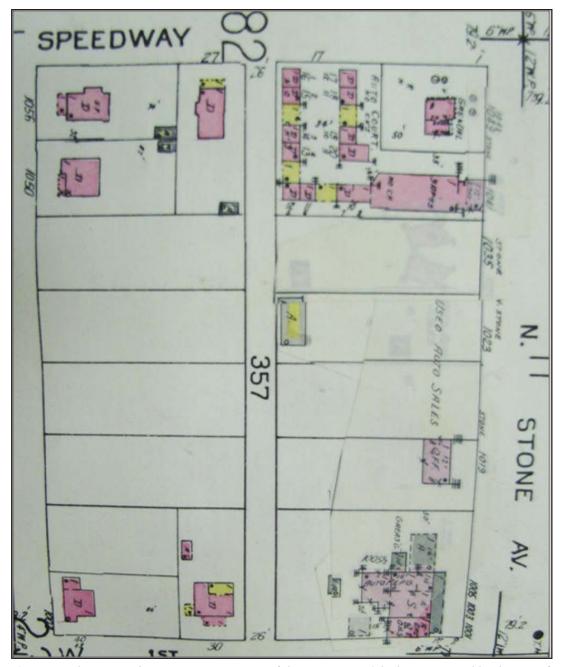


Figure 1.7. The 1949 Sanborn Fire Insurance map of the project area. (The lot now owned by the City of Tucson [upper right] had a gas station, restaurant, and motel, built in the 1930s.)

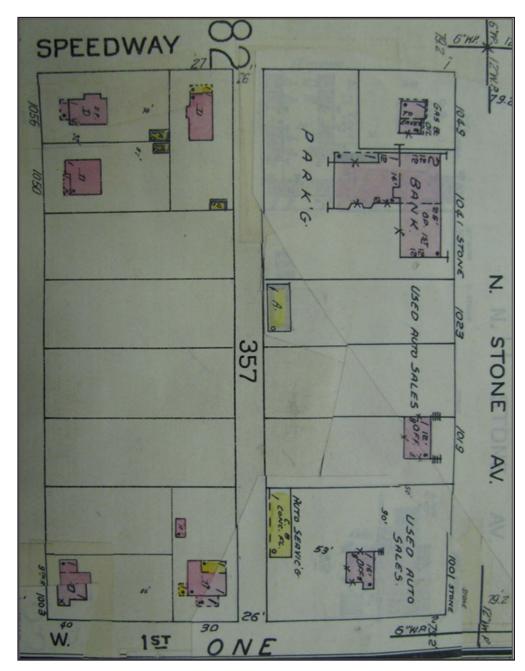


Figure 1.8. The 1960 Sanborn Fire Insurance map, showing the newly constructed 1st National Bank building. (The original gas station was still in use in 1960.)

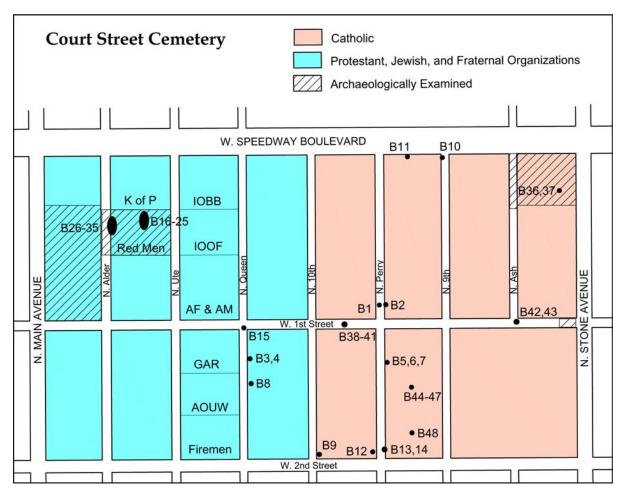


Figure 1.9. Location of all burials documented by archaeologists between 1949 and 2012, within the Court Street Cemetery, numbered in chronological order by date of discovery.

ARCHAEOLOGICAL TESTING AND THE EXCAVATION OF TWO BURIALS FROM THE COURT STREET CEMETERY

Three areas within the northeastern corner of the Court Street Cemetery were examined during the current project (Figure 2.1). The largest area was the vacant parcel at the southwestern corner of N. Stone Avenue and W. Speedway Boulevard, Pima County Assessor's Parcel 117-021-34B (Figure 2.2). The parcel measured 55 m long (east-west) by 50 m wide (north-south).

The testing plan called for placement of 7-ft-wide stripping trenches, alternating with 5-ft-wide swaths on which backdirt could be piled (Thiel 2012b). Unfortunately, the underlying caliche layer, a consolidated lime layer present throughout many areas of southern Arizona, was only a few centimeters below the modern ground surface. Thus, the stripping strategy was changed so that the entire ground surface of the parcel was stripped to ensure complete discovery of any human burials that might be present.

Stripping was completed in six days of fieldwork, with a total of 2,552 m² stripped within an area measuring about 55 m by 50 m. A few modern utility trenches, some planting pits associated with the house on the 1924 aerial photograph (see Figure 1.6) and the recently demolished bank, and the bank's drivethrough pneumatic tube system were noted during stripping. The only area not stripped was the concrete ramp at the southwestern corner of the parcel and the area inside the basement of the former bank.

Two burials were located on the eastern side of the property, some 5.5 m west of the western edge of the modern sidewalk (Figure 2.3). Of particular interest is that the two burials were located beneath the footprint of the former bank building, which suggests other burials are likely to lie intact beneath many of the other residential and commercial structures within the Court Street Cemetery.

The burials were designated Features 36 and 37 (burials located within the cemetery are assigned consecutive numbers as they are located), and they were excavated on 8 and 11 June 2012, after the City of Tucson obtained a Disinterment/Reinterment Permit from the State of Arizona. The excavations followed the procedures outlined in the Order Permitting Disinterment and Reinterment of Human Remains, obtained by the City of Tucson, from the Superior Court of Arizona in Pima County on 2 April

2012, along with the Arizona State Museum Burial Agreement 2012-024. The burials will be repatriated to the Catholic Diocese of Tucson for reburial in Holy Hope Cemetery. They were examined by James Watson and Danielle Phelps on 8 August 2012. Observations were limited to non-destructive methods outlined in Buikstra and Ubelaker (1994), and included: (1) an element inventory and condition assessment; (2) estimation of age and sex; and, (3) documentation of bone morphology, including observations of pathology and activity markers, metric variables, and developmental variants.

The second area examined was within N. Ash Avenue. A stripping trench was placed within the road, starting just south of W. Speedway Boulevard and extending to the Best Western Royal Inn & Suites (see Figures 2.1 and 2.2). The 69.0-m-long, 2.1-m-wide trench was placed on the western side of the alley. A Cox Communication fiber optic cable and a Southwest Gas line crossed the trench area. The backhoe carefully stripped away fill in the trench to the caliche layer, which was present at 10-20 cm below the modern asphalt surface. No archaeological features were located.

The original plan was to cut two stripping trenches within the alley. However, the presence of the fiber optic cable, which ran down the eastern side of the alley, in conjunction with the current high price of asphalt, resulted in the decision to not test that area. Burials from the Court Street Cemetery could be present in the eastern two-thirds of N. Ash Avenue, however, immediately east of the strip trench.

The third area examined was beneath W. 1st Street, immediately west of N. Stone Avenue (Figure 2.4). An area measuring 15.3 m in length (eastwest) and 11.0 m in width (north-south) was stripped of asphalt. The underlying soil was stripped to the underlying caliche, 20-30 cm below the modern road surface. No burials were located. A circular planting pit, designated Feature 998, was located (Figure 2.5). The pit was approximately 1.3 m in diameter. The southern half of the pit was excavated, revealing that the feature was 40 cm deep. Feature 998 contained some small fragments of glass, whiteware ceramics, and nails. The pit probably once contained one of the trees visible on the 1924 aerial photograph

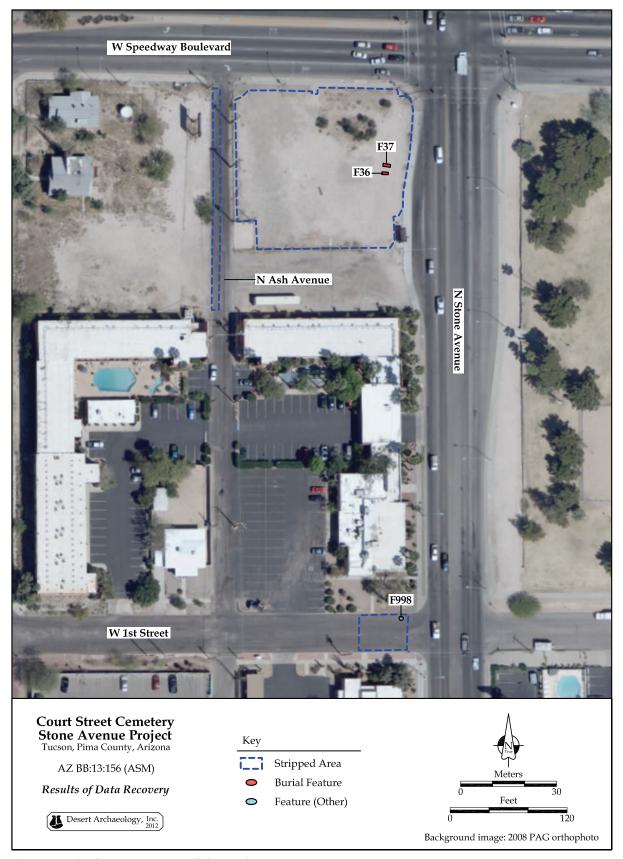


Figure 2.1. The three areas examined during the Court Street Cemetery project.



Figure 2.2. The portion of the project area beneath the vacant parcel at the southwestern corner of N. Stone Avenue and W. Speedway Boulevard and the adjacent N. Ash Avenue.

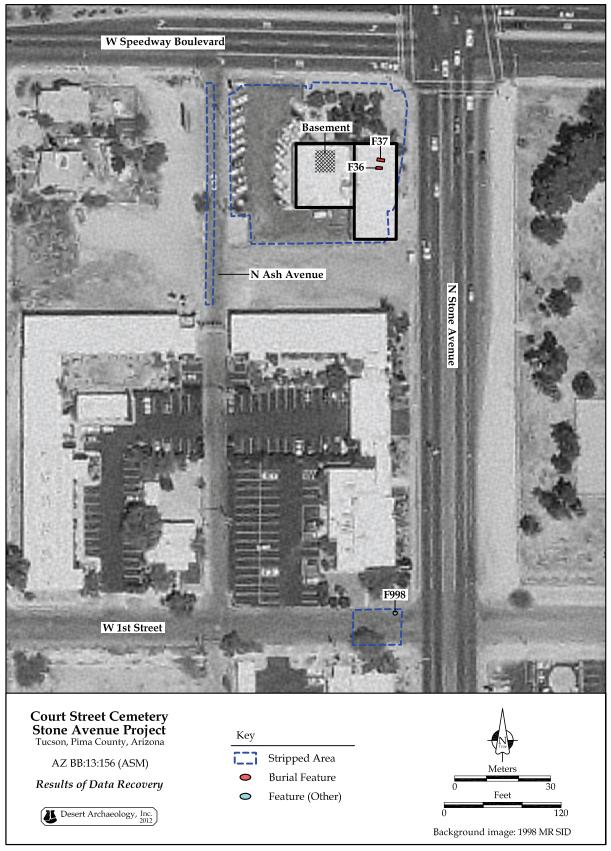


Figure 2.3. Location of the two burials beneath the now-demolished bank building, Court Street Cemetery.

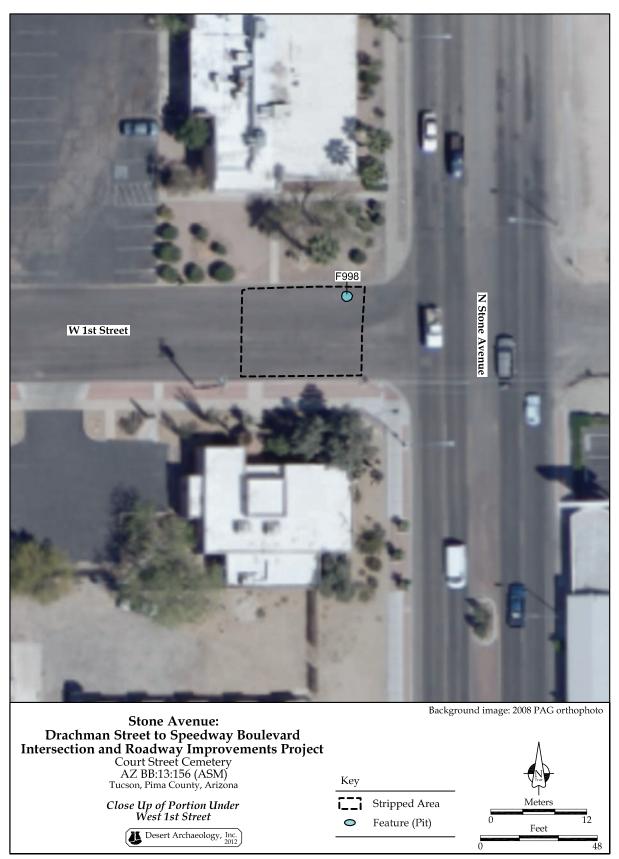


Figure 2.4. The portion of the project area beneath W. 1st Street.

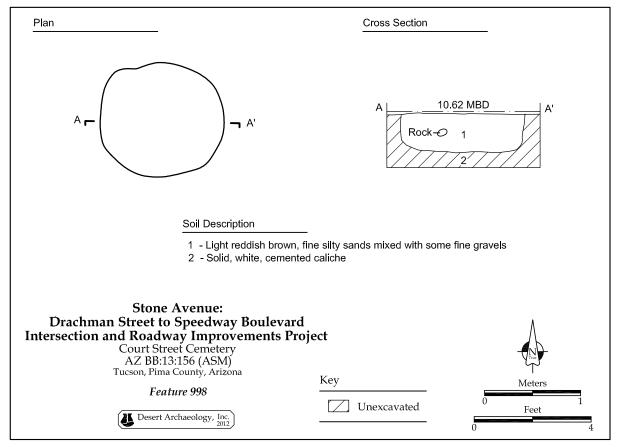


Figure 2.5. Plan view and profile of Feature 998, a planting pit.

(see Figure 1.6), perhaps planted when the blocks were laid out in 1924.

FEATURE 36

Burial Feature 36 was located during backhoe stripping when the top of the wooden coffin was uncovered (Figure 2.6). The excavation began by removing the fill inside the coffin. The soil was screened through stacked screens, the dirt passing through a ¼-inch screen into a 1/8-inch screen. Material remaining in the 1/8-inch screen was collected as a bulk sample, because many small fragments of coffin wood were present. The fill consisted of small pieces of caliche, brown sand, and organic material, probably from decomposition of the coffin, clothing, and human remains.

The burial was documented through plan view maps and a cross section drawing, as well as digital photographs.

Coffin

The coffin was fairly well preserved, with large areas of wood still present and the coffin hardware

in place, although many of the diamond-shaped decorative studs were brittle and crumbly.

The coffin was 2.13 m long, 61 cm wide, and 30.5 cm tall. It was manufactured from pine wood, based on an examination of wood fragments by Dr. Michael Diehl of Desert Archaeology, Inc. The coffin lid was partially in place at the head end, while a large portion had collapsed, folding downward along the left (north) side. The bottom of the coffin survived primarily as an organic stain.

The coffin was nailed together with iron nails, some with identifiable square heads, suggesting they were hand-wrought (Figure 2.7d). The metal was significantly corroded, distorting the shapes and sizing of most of the nails. Five complete nails were recovered, measuring about 2¾ inch, or 9d (penny), size; three complete nails that were 2½ inches, or 8d (penny), size were also recovered. One hundred and six nail fragments with heads and 163 nail fragments without heads were present. Many of the nails have wood still attached; several have 1 inch of horizontal-grained wood at the head of the nail, with vertical-grained wood on the nail shaft, suggesting they were used to nail the coffin lid to the side of the coffin. Tack fragments (n = 41) were found, which would have been used to attach a fabric lining to the interior of the coffin (see Figure 2.7e).

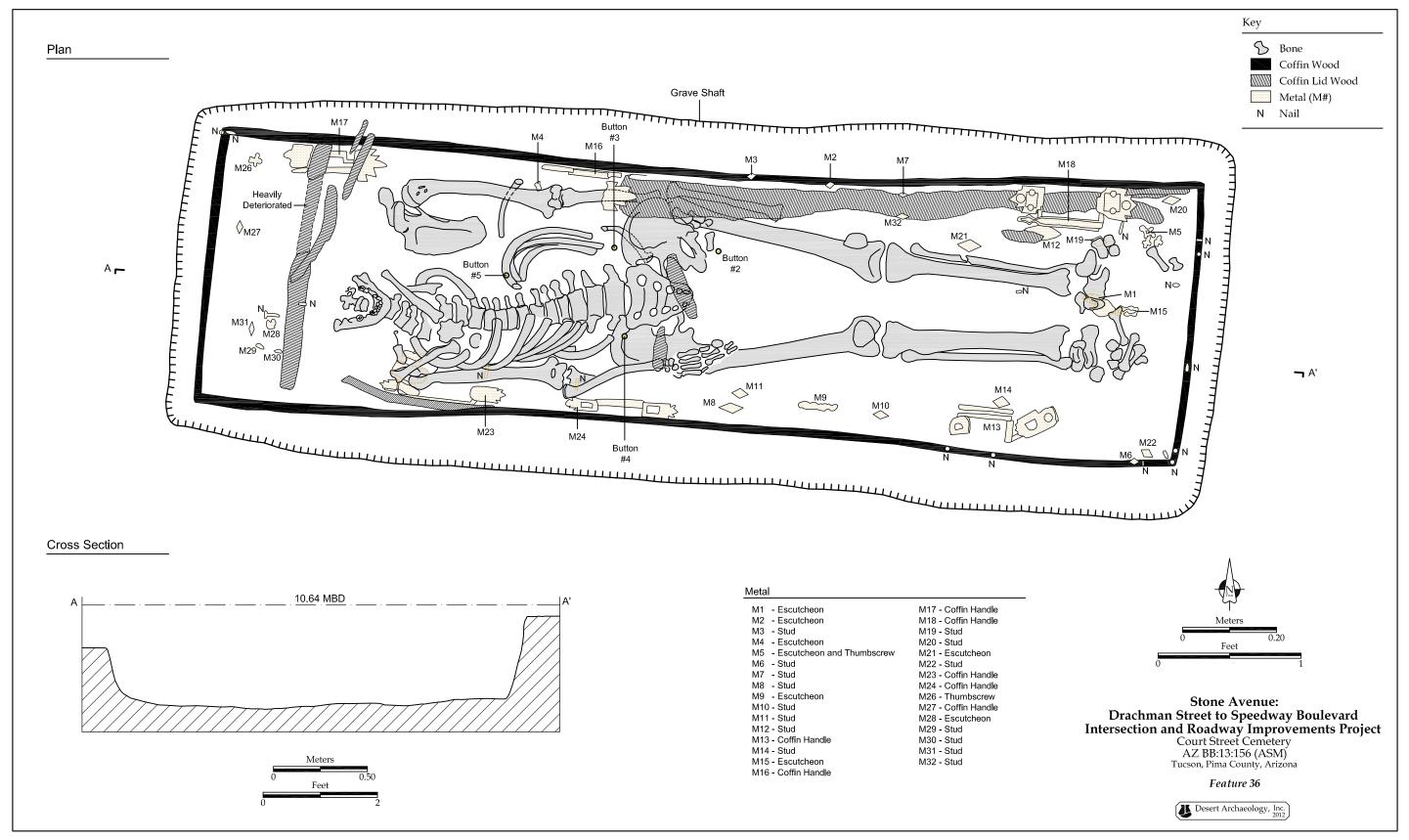


Figure 2.6. Plan view and profile of Feature 36, an adult male burial, Court Street Cemetery.

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Figure 2.7. Feature 36 coffin parts, Court Street Cemetery: (a) metal from a brass decorative stud preserved the wood from a portion of the coffin (FN 2000); (b) a brass escutcheon (FN 2017); (c) a thumbscrew (FN 2017); (d) a hand-wrought nail (FN 2003); (e) a tack (FN 2003).

The coffin lid had four brass escutcheons and four thumbscrews, all of which were poorly preserved (see Figure 2.7b). These decorative elements were used to attach the lid to the body of the coffin. The escutcheons resemble the silver-plate on white metal escutcheon No. 220 in the Harrisburg Burial Case Company catalogue (n.d.) (Figure 2.8b). The escutcheon had a circular center (none were well preserved), with clover-like bars extending from each side with a crucifix pattern. Small screw holes were present on each end of the escutcheon, allowing it to be screwed flat to the coffin lid. The central hole allowed the upright thumbscrews to be screwed into the escutcheons. One of the escutcheon fragments had cloth preserved on its underside, which suggests the coffin lid was covered with fabric.

The thumbscrews from Feature 36 have a diamond-shaped head with three small projecting tips, each having small raised stars on the flat surface of the thumbscrew (see Figure 2.7c). This style of thumbscrew is depicted in the Cincinnati Coffin Company (1906) (see Figure 2.8a). The thumbscrew would have been attached along the edge of the coffin at even intervals. Fragments of the escutcheons

with thumbscrews were recovered at the foot, sides, and head of the coffin. It has been suggested that perhaps a set of three thumbscrews and escutcheons would be used on each side of a coffin (Hacker-Norton and Trinkley 1984).

Fragments from 16 brass diamond-shaped studs were recovered, none of which were complete due to poor preservation (see Figure 2.7a). The decorations would have been stamped from a thin sheet of metal and attached with small tacks. The diamond shapes were elongated horizontally, and would have been placed along the top and side edges of the coffin, perhaps covering the coffin nails (see Figure 2.7d). The most complete fragment measures $1\frac{3}{4}$ inches in length, and $\frac{1}{2}$ inch in width. A few pieces of fabric, possibly velvet coffin lining, were still attached to some of the stud fragments.

The coffin had six handles attached to its sides (Figure 2.9). These were swingbail with tips (or tipped swingbail) handles. "They first showed up in the very late 1860s and continued to be sold into the twentieth century, though patents for swingbails ceased in the early 1880s" (Jeremy Pye, personal communication 2012). The swingbail handle was an

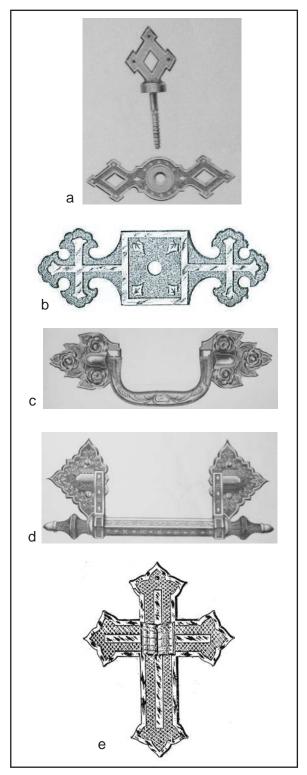


Figure 2.8. Coffin hardware illustrated in late nineteenth and early twentieth century catalogues: (a) Feature 36 thumbscrew (Cincinnati Coffin Company 1906:257); (b) Feature 36 escutcheon (Harrisburg Burial Case Company n.d.:49); (c) Features 36 and 37 handle lugs (Warfield & Co. n.d.:9); (d) Features 36 and 37 swingbail handle (Cincinnati Coffin Company 1906:13); (e) Cross (Meriden Britannia Company 1880:45).

octagonal swell style, hollow, and reinforced with a wood shaft. The Cincinnati Coffin Company catalogue (1906:13) (see Figure 2.8d) depicts the handle, and noted that it was sold "Bright Plated." A running design on the length of the bar consisted of a series of small horizontal diamonds interspersed with small x's. The ends of the bar then tapered into a finial style tip, a decoration to cover the end of the handle. The handles measure 7½ inches in length. The lug portion of the handle was decorated with three molded roses. This lug was depicted in the Warfield & Co. catalogue (n.d) (see Figure 2.8c).

Human Remains

The human remains were well-preserved and, for the most part, in the correct anatomical position, although the cranium and left ribs were largely missing due to a rodent or covote burrowing into the coffin. The coffin contained an adult male buried in a supine, extended position, with the head to the west and the feet at the east. The cranium was missing, except for a few loose teeth and a fragment of skull found at the top of the coffin fill. The mandible was upright, apparently in its original position. The vertebral column was missing the first cervical vertebra. The clavicles were close to their original position, as was the sternum. The manubrium was slumped down beneath the right ribs. Most of the left ribs were missing. The right arm was extended along the right side, with the hand lying on top of the right ischium. The left arm was also extended along the left side of the chest with the hand lying over the left ischium. The left radius was found lying next to the right proximal femur, probably dragged there by a rodent. The legs were extended, and the feet had fallen over onto their sides.

Description

The remains of the individual recovered from Feature 36 are largely complete. Most of the cranium, the first cervical vertebra, several ribs, and a few phalangeal elements from both the hands and feet are missing. Various taphonomic factors are largely responsible for these missing elements, specifically from rodent activity. Despite these missing elements, the cricoid and thyroid cartilage had ossified and were preserved with this individual.

Condition

Most elements are in moderate condition. Bone integrity is generally good, but some elements are weak, damaged, and fragile. In addition to breaks and exfoliation of the cortical surface, soil, cloth, and preserved tissue are present and adhering to sev-



Figure 2.9. Swingbail coffin handle from Feature 36, Court Street Cemetery.

eral elements. The os coxae are in the worst condition, and large segments are heavily fragmented.

Assessment of Age, Sex, and Stature

Age of the individual is estimated between approximately 40 and 45 years of age at death. All long bone epiphyses are completely fused. Assessments of the pubic symphysis (Brooks and Suchey 1990) and auricular surface (Lovejoy et al. 1985) identify similar age ranges between 40 and 45 years.

The individual is estimated to be male, and exhibits large long bones with very robust musculature. Primary sex morphological characteristics on the os coxa are masculine, including a narrow sciatic notch and no preauricular sulcus. The vertical diameter of the humeral head measures 50 mm, and falls well within the range expected for males (> 47 mm), as reported by Stewart (1979).

Stature for this individual is estimated at approximately 171.1 cm ± 3.94 (between 5′5" and 5′7"), using a formula developed by Trotter and Gleser (1952), based on maximum femoral length for American whites.

Osteological Observations

Wear on the teeth is moderate, although it is greater on the anterior teeth, with considerable dentin exposed. Maxillary teeth present include the right M3, PM1, C, I1, I2 and the left I1 and C. The mandible is complete, but the right M3 is missing congenitally; both M1s were lost during life, and the alveolar crest has completely remodeled. This individual exhibits numerous carious lesions across the dentition, most of which constitute developing carious pits at the cemento-enamel junction (CEJ), or on the proximal root surface immediately below the CEJ. These lesions correspond to significant resorp-

tion of the alveolar crest, characteristic of periodontal disease, across the entire mandible. Occlussal surface caries are also present on the mandibular molars and the left maxillary canine. Significant calculus deposits are present across the lingual surfaces of all four mandibular incisors and the mesial borders of both adjacent canines. Despite the numerous carious teeth, the individual completely lacked abscesses on the mandible.

Several pathological conditions are present on the remains. The sixth and seventh cervical verte-

brae are ankylosed, and the body of C7 is collapsed (compression fracture). Related pathologic changes include the presence of two small syndesmophytes on the inferior border of C7, and the right articular surfaces of C7 (inferior) and T1 (superior) exhibit extensive bone remodeling (Figure 2.10). Several Schmorl's nodes (the result of bulging intervertebral disks) are present on the lower thoracic vertebrae, including the superior and inferior body surfaces of T8 through T10, on the inferior body of T7, and on the superior body of T11. Small osteophytes associated with these bulging disks are present along the anterior margins of T7 to T10. The concentration and extensive nature of these vertebral lesions suggest the individual was likely in considerable pain. Laminal spurs are present on all of the thoracic ver-



Figure 2.10. Remodeling of the right superior articular facet of first thoracic vertebra of the Feature 36 individual, Court Street Cemetery.

tebrae. Additionally, the right costal articular facet on T12 has marked lipping, suggesting some localized stress or injury.

Several other bone lesions were also observed on this individual. A pseudoarthrosis at the costal end of the left first rib (Figure 2.11), and enthesopathies on the inferior medial surface (2.3 cm long lesion) of the right clavicle (Figure 2.12), at the insertion of the costoclavicular ligament, and the sternal ends of both clavicles, are likely the result of localized trauma. An enthesopathic lesion and proliferative reaction on the inferior aspect of the acromial end (attachment of the Trapezoid ligament) of the right clavicle may be partially related to the trauma to the upper chest. Further, a severe osteoarthritic lesion has significantly remodeled the lateral diaphysis and distal articular surface of the left first metatarsal (Figure 2.13). The extent of the lesion suggests localized trauma, and would have likely resulted in chronic pain for this individual.

Assessment of Ancestry

Estimation of ancestry is limited with this individual, because most of the cranium is missing. However, two morphological features are present that are generally consistent with an individual of European ancestry. When in anatomical position, the left zygomatic is apparently receding, with no inferior projection. Also, shoveling is absent on the upper incisors.

Associated Artifacts

Six buttons were present in the burial, representing two different material types (Figure 2.14b-c). Most were mapped in place during excavation. Five of the buttons were made from cattle bone (No. 1, 2, 3, 4, 5), and one was made from metal (Table 2.1). The bone buttons were two-hole sew-through style, and they measured 24 lignes. This



Figure 2.11. Pseudoarthrosis of the left first rib (superior view) of the Feature 36 individual, Court Street Cemetery.



Figure 2.12. Enthesophytes on the left clavicle (inferior view) of the Feature 36 individual, Court Street Cemetery. (Lesions are located at the attachment of the costoclavicular ligament and with the sterna articular surface.)

type of button was used as a fastener on underwear or trousers. Four of the bone buttons were recovered from the pelvic area. The metal button was too corroded to determine the style (2-hole, 4-hole, or shank), and it measured some 30 lignes. It was probably a trousers button.

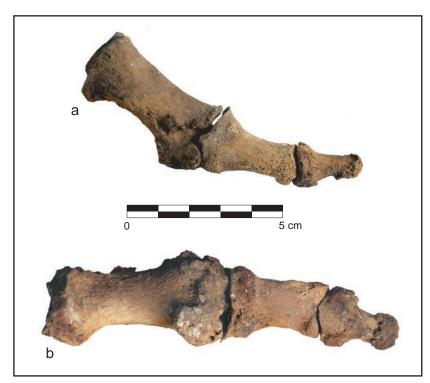


Figure 2.13. Osteoarthritic remodeling of the lateral diaphysis and distal articular surface of the left first metatarsal, Feature 36, Court Street Cemetery.



Figure 2.14. Clothing remnants and buttons from Feature 36, Court Street Cemetery: (a) brown trouser fabric (FN 2042); (b) bone button (FN 2020); (c) metal button (FN 2115).

Table 2.1. Feature 36 buttons, Court Street Cemetery.

Button No.	Material	Туре	Lignea	Comments
1, 2, 3, 4, 5	Bone	2-hole	24	Bone is warped; one button has brown wool fabric attached
	Metal	Unknown	30	From screen; very corroded

 $^{{}^{\}mathrm{a}}\mathrm{A}$ ligne is a unit of measurement, with 1 inch equaling 40 lignes.

Several small pieces of a dark brown fabric, possibly wool, were recovered from the pelvic area, and may represent trousers worn by the individual (Figure 2.14a). The remains of a possible pocket were also recovered near the front end of the coffin against the side wall.

One small fragment of historic glass was present in the feature fill. It was clear, and was likely from a container, such as a jar or bottle. No diagnostic features were present on the glass fragment.

FEATURE 37

Burial Feature 37 was located during backhoe stripping when a rectangular stain was found a short distance north of Feature 36 (Figure 2.15). The excavation began

2.15). The excavation began by removing the fill inside the stain; evidence for the coffin, wood fragments and a hollow area where wood had decomposed, were soon located. Excavation proceeded inside the coffin. The soil was screened through stacked screens, the dirt passing through the 1/4-inch screen into the 1/8-inch screen. Material remaining in the 1/8-inch screen was again collected as a bulk sample, as many small fragments of coffin wood were present. The fill consisted of many large pieces of caliche, brown sand, and organic material, probably from decomposition of the coffin, clothing, and human remains. It became clear during excavation that an effort had been made to remove the body when the cemetery was

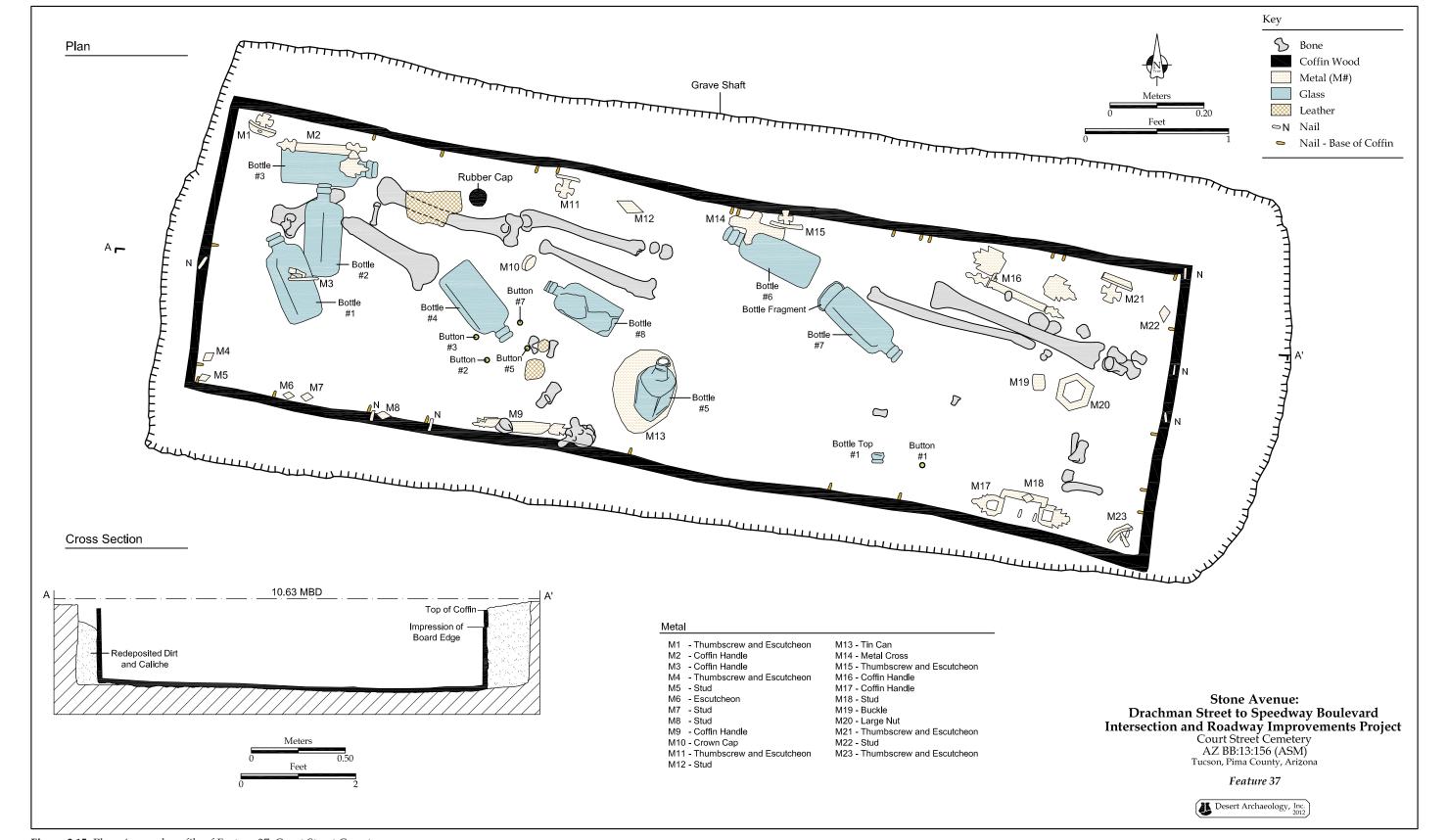


Figure 2.15. Plan view and profile of Feature 37, Court Street Cemetery.

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abandoned. The right humerus was broken and lay at the head end, close to the top of the coffin. In total, 11 glass embalming bottles were scattered throughout the fill of the coffin, as were a large iron nut, a piece of a beverage bottle, crown caps, and a composite material bottle lid.

Documentation includes a plan view map showing the coffin, human remains, and associated artifacts. A cross section and a map showing the coffin and burial shaft were also prepared. Digital photographs were taken during the course of the excavation.

Coffin

The coffin was fairly well preserved, with large areas of wood still present and the coffin hardware largely in place. Most of the diamond-shaped decorative studs present were brittle, and had fallen apart into many small fragments.

The coffin was 2.44 m long, 66 cm wide, and 41 cm tall. It was manufactured from pine wood, based on an examination of wood fragments by Dr. Michael Diehl of Desert Archaeology, Inc. The coffin lid appears to have collapsed downward onto the right side of the body. The bottom of the coffin survived primarily as an organic stain.

Three hand-wrought, square-headed iron nails were recovered (Figure 2.16d). They measured 3½ inches in length, or 12d (penny). The wood grain of the top 1 inch of attached coffin wood was horizontal, indicating it was from the coffin lid wood, while the wood grain on the nail shaft was vertical, having come from the coffin side wall. Some 69 square-headed nail fragments were recovered. Most had 1 inch of horizontal wood at the top from the coffin lid, while the wood grain was vertical on the nail shaft from the coffin side wall. Another 286 nail shaft fragments were recovered. Most of these also had coffin wood with a vertical grain attached to the nail shafts, while a few had horizontal wood grain.

Two complete metal tacks, 5 metal tacks with heads, and 10 metal tack fragments were recovered (see Figure 2.16f-g). Made from iron, the tacks have flat, round heads that are soldered to a tapering steel point. They would have been used to attach the coffin lining to the inside of the coffin. The complete tack measures about ½ inch in height, and 1/10 inch diameter. The grain of the coffin wood attached to the tack is horizontal. Tacks made of brass were occasionally used to create decorative designs or to spell out the initials of the deceased (Costello and Walker 1987:14-15).

Five screws were also present, which would have been used to attach escutcheons or handles to the coffin (see Figure 2.16h). Although corroded, they measure approximately 1 inch in length. Most coffin screws have an iron shank with decorative white metal slotted heads of various designs (Hacker-Norton and Trinkley 1984:11). However, preservation on the current coffin screws was poor, and no decorations were visible.

Seven thumbscrews and five escutcheons were once attached to the lid (see Figure 2.16b and e). These were made of the same material as the carrying handles, which was a heavy lead or zinc metal, possibly silver-plated lead. Six of the thumbscrews had a gothic cross motif on each side and were 1.75 inches tall. The five escutcheons were rectangular; they had a central cicular area with a hole for the thumbscrew and holes on each end of the rectangular plate for the escutcheon to be attached to the coffin lid. The escutcheon has two embossed crosses, one on either side of the handle, with sun rays, and each cross is surrounded by a foliage garland. Each was 2.75 inches long and 7/8 inch wide. Nearly identical thumbscrews and escutcheons are depicted in the Cincinnati Coffin Company catalog (1906). These thumbscrews were located at the foot and head ends of the coffin, as well as along the northern side. One, lacking an escutcheon, was also recovered in the screen. The seventh thumbscrew was a different style. The top of the thumbscrew is crown-like, with a five-petaled flower on each side, resting on top of a horizontal bar with vertical bars hanging downward on each side. It is 1.25 inches tall. This thumbscrew was also recovered from the screen.

At least 13 diamond-shaped studs were used to decorate the coffin (see Figure 2.16a and c). These were made of brass, and were the same shape and size as those used on the coffin in Feature 36. One had a raised foliage design on one of the triangular points. The metal was very corroded and fragmented, with some of the studs identifiable only as a stain on the coffin wood. The decorative studs would have been used to cover some of the coffin nails. One of the studs was found near the feet, three were at the head end, and several more were along the southern edge of the coffin lid, with only one along the northern edge of the coffin. The studs appear to have been interspersed with the escutcheons. Several had fabric on the underside, possibly velvet. The fabric could be coffin lining; studs were often placed over the fabric to conceal the tacks or nails holding the fabric in place.

A large metal cross was found, and was probably used to decorate the lid of the coffin (Figure 2.16i). The cross was made of the same white metal as the coffin handles, and was recovered along the northern, or middle, side of the coffin, beside one of the thumbscrews. It was attached by screws at the

Figure 2.16. Coffin parts from Feature 37, Court Street Cemetery: (a) decorative stud (FN 2062); (b) thumbscrew and escutcheon (FN 2076); (c) decorative stud (FN 2069); (d) nail with wood (FN 2063); (e) thumbscrew (FN 2094); (f-g) tacks (FN 2063); (h) screw (FN 2063); (i) cross (FN 2106).

ends of the vertical arms. A smaller cross is embossed inside the larger cross. An embossed bible or hymn book with open pages is embossed in the center of the arms. The cross measures 4 inches in length, 3 inches in width, and about ½ inch in thickness. The horizontal arms of the cross are approximately ¾ inch wide. Identical crosses are illustrated in at least four coffin hardware catalogues dating from 1880-1896 (Chicago Coffin Company 1896; Harrisburg Burial Case Company n.d.; Meriden Britannia Company 1880; Stolts, Russell & Company n.d.) (see Figure 2.8e).

The coffin had five handles attached to the sides (Figure 2.17). Two handles were present on each of the long sides, and a fifth handle was located near

the head end beneath two of the embalming fluid bottles. A sixth handle was not present; it was likely removed during disinterment of the remains. The handles were identical to those recovered from Feature 36. The handles were complete, with each one measuring $7\frac{1}{2}$ inches in length.

Human Remains

The human remains were poorly preserved, perhaps partly due to the contact with acidic wood, but also due to the disinterment process. Most of the skeleton was missing. An adult male was buried in the coffin in a supine, extended position. Only a



Figure 2.17. Coffin handle from Feature 37 (FN 2082), Court Street Cemetery.

small amount of the skeleton was in situ. The left arm (humerus, ulna and radius, and wrist) was extended along the left side. The left leg was also extended, and both feet were present at the foot end of the coffin, although largely disarticulated.

Description

The remains of the individual recovered from Feature 37 represent a partially complete skeleton. Elements present include 3 teeth and a partial hyoid, 12 partial vertebrae (cervical 1, 4, 5; thoracic 1, 5-9; lumbar 1, 4-5), fragments representing 3 left ribs, and the complete sternum (manubrium and body) from the axial skeleton. The appendicular skeleton is represented by both humerii, the left radius and ulna, the left patella, and the left tibia and fibula. The extremities are mostly complete, with only a few bones missing, including the left calcaneus and right talus.

Condition

The remains are in poor condition, with most elements damaged and fragile. There is evidence of insect damage, and soil is still adhering to several elements.

Assessment of Age, Sex, and Stature

Age of this individual is estimated between approximately 45-55 years of age at death, based largely on dental wear (Ubelaker 1989). The individual is estimated to be male, based on secondary sex characteristics of bone size and robusticity. Long bones are large and exhibit very robust musculature. The vertical diameter of the left humeral head measures 51 mm and falls well within the range expected for males (> 47 mm), as reported by Stewart (1979).

Stature for the individual is estimated at approximately 179.3 cm ± 4.57 (between 5'7" and 6'0"), using a formula developed by Trotter and Gleser (1952) based on maximum humoral length for American whites.

Osteological Observations

Tooth wear is moderate to heavy, and the right central maxillary incisor is chipped (antemortem damage). The right maxillary canine and the central incisor both exhibit lingual surface caries, but all the teeth lack calculus depos-

its. Although two of the three teeth present are carious, little can be said about the overall condition of oral health with this individual.

Despite the limited number of elements recovered, several skeletal lesions are present in this individual. The costal cartilage of the left first rib is partially ossified from the manubrium (Figure 2.18). Ossification of costal cartilage is a common phenomenon associated with the aging process, but usually originates from the costal end of the rib, not from the sternum. This ossification could have developed as part of the healing process originating with a trauma to the area.

Schmorl's nodes are present on the inferior body surface of the seventh thoracic vertebra and the superior body surface of the eighth thoracic vertebra and accompanied by buttressing (osteophytosis). A small Schmorl's node is also present on the inferior body surface of the eighth thoracic vertebra, but smaller osteophytes are present along the border. These lesions indicate this individual experienced localized stress or trauma to the mid-spine, which resulted in some bone formation and remodeling. Minor ostophytes are also present on the anterior lower border of the fourth lumbar vertebra.

The only other observation is distal symphalangism of the left fifth toe (middle and distal phalanges). While this is largely attributed to congenital malformation and is inherited, in some cases, it can result from trauma to the digit and fusion of the two elements. In this case, however, there is no evidence for healed fractures, suggesting the symphalangism is congenital.

Assessment of Ancestry

Estimation of ancestry is very limited in this individual, because the entire cranium is missing. However, the absence of shoveling on the upper incisors is generally consistent with an individual of

Figure 2.18. Ossified costal cartilage at the articulation with the first rib from the Feature 37 individual, Court Street Cemetery.

European ancestry. It is important to note that caution should be used when estimating ancestry from single or limited traits. These limited biological markers should be used as evidence to support contextual assertions for the estimation of ancestry among individuals.

Associated Artifacts

The individual buried in Feature 37 was buried wearing clothing, apparently a pair of trousers with suspenders, a shirt, a jacket, and leather footwear (Figure 2.19).

A total of 13 clothing buttons, a brass collar button, two suspender clip fragments, and a buckle were recovered. The buttons were represented by different material types including metal, cloth covered metal, porcelain and shell (Table 2.2; see Figure 2.19 a-f).

Shell and porcelain sew-through buttons came from a shirt. Based on the location of many of the buttons, recovered in the thoracic region, the shirt would have buttoned down the front,. A jacket was worn over the shirt, and was represented by two cloth-covered shank style buttons of different sizes. A small brass collar button, recovered from the screen, was poorly preserved.

The trousers were represented by metal sewthrough buttons, suspender clip fragments, and a cinch buckle (see Figure 2.19g-h). Cinch buckles were designed to slide along a strap of fabric or leather such that the teeth on the fastener would catch on the material to hold it in place, causing a cinched waist (Sewell et al. 2010:306). These buckles can be associated with trousers or vests, and were sewn on the back of both clothing articles to create a better fit. The buckle from Feature 37 was recovered with a metal button in the center of the lower leg area. A small piece of brown fabric was found embedded in a chunk of caliche with some shoe leather. The fabric may have been part of the trousers.

The individual was probably wearing footwear, based on the presence of several pieces of shoe leather found at the foot end of the coffin and near the right humerus (see Figure 2.19i-j). The absence of eyelets suggests the footwear was a pull-on style, perhaps a boot.

Other items present in the feature fill were associated with the partial removal of the remains (Figure 2.20). They include eight complete bottles and three broken

embalming fluid bottles. These were scattered the length of the coffin. The bottles are nearly square with rounded corners and are made of clear glass. They measure about 81/4 inches in height and 61/2 inches in width and thickness. They are molded with seams along one corner and at the junction of the neck and finish. The base is recessed, and the finish would have been sealed with a crown cap, several of which were randomly scattered in the feature fill. The bottles are embossed on one side with "THE EMBALMERS SUPPLY CO." and "WESTPORT CONN." Graduated markings in ounces, from 1-15, are embossed vertically the length of the bottle between the two lines of wording, which allowed the embalmer to determine how much fluid had been used to prepare a body.

The Embalmers' Supply Co. began in Brooklyn, New York, on 13 April 1886, as The Brooklyn Embalming Fluid Company. However, in 1890, it moved to Westport, Connecticut, at which time the firm was incorporated under the present name (http://www.embalmers.com). Thus, the bottles date to after 1890, and most likely after 1909, because they were associated with the post-cemetery removal of the remains. According to testimony in a 1901 coroner's inquest case for Pima County, two quarts of embalming fluid was used to prepare an adult male (Carl Neilsen file, Pima County Records, MS 183, Box 53, File 582, Arizona Historical Society, Tucson)

Another set of embalming fluid bottles have previously been found in 2007, south of the intersection of W. 2nd Street and N. Perry Avenue. While planting a tree, a homeowner found a pit containing embalming fluid, soda, and alcoholic beverage bottles. Three different embalming fluid companies were represented. One was the same, "THE EMBALMERS SUPPLY CO.," bottles found in Feature



Figure 2.19. Clothing remains from Feature 37, Court Street Cemetery: (a) metal button (FN 2064); (b) prosser button (FN 2113); (c) cloth-covered metal button (FN 2074); (d) metal button (FN 2089); (e) shell button (FN 2109); (f) collar button (FN 2062); (g) buckle (FN 2079); (h) suspender clip (FN 2084); (i-j) shoe fragments (FN 2098).

37. The second type of bottle was marked "CHAM-PION CONCENTRATED EMBALMING FLUID THE CHAMPION COMPANY SPRINGFIELD OHIO" on one side. The opposite side was marked "COMPLIES WITH ALL STATE LAWS" and graduated markings from 1-15. The bases of these bottles were marked "1152" and "2," with a triangle with a "T" inside it. The third bottle was marked "UNDER-

TAKERS'S SUPPLY CO. CHICAGO, ILL." on one side, with graduated ounce markings from 1-14. The base contained an Owens Illinois mark with a diamond with an "I" inside, along with a six or nine nearby. Because the pit was on private property, it was not formally recorded; however, the landowner replaced the bottles and refilled the pit. The recovery of embalming fluid bottles outside, but near, the

Table 2.2. Feature 37 buttons, Court Street Cemetery.

Button				
No.	Material	Type	Lignesa	Comments
1, 2, 7	Shell	4-hole	16	-
3, 5, 6	Shell	2-hole	16	#5-mother of pearl
9	Shell	4-hole	14	-
	Shell	4-hole	16	-
	Metal	?	28	Very corroded
	Metal	Shank?	28	Fabric covered
	Metal	Shank?	21	Corroded
	Metal	4-hole	28	Corroded
11	Porcelain	4-hole	18	Prosser, tire style
12	Brass	Collar		Corroded

^aA ligne is a unit of measurement, with 1 inch equaling 40 lignes.

Court Street Cemetery may suggest undertaking parlors routinely discarded waste in the vicinity of the cemetery.

Another find in Feature 37 was an octagonalshaped cap made of a light blue composite (rubber). It was located near the left humerus on the northern side of the coffin (see Figure 2.20c). A series of embossed letters curve around the rim on the exterior of the lid and read "CARTERS INKS," with an emblem of some sort in the center that is difficult to identify due to the degradation of the material. The cap measures approximately 11/4 inches in diameter and is about ¼ inch thick. Carter's Inks was founded in 1858, in Boston, Massachusetts, by William Carter, and evolved over time, becoming "The Carter's Ink Company" in 1895. In 1910, the factory was moved to Cambridge, where it continued the research and development of inks, glues, and related products (https://enwikipedia.org/wiki/Carter%27s_Ink Company). Thus, the cap postdates 1895.

Roughly 50 fragments of oxidized metal from a large tin can were recovered, with one of the embalming fluid bottles nested inside. No lettering was visible on the can. Another large, sanitary can with a folded rim was recovered from under bottle Number 5. It was very corroded and fragmented, with the largest piece measuring 2 inches in diameter. Two other heavy pieces of oxidized metal embedded in caliche and a small rectangular piece of crimped metal were also recovered from the feature fill, as were a large and a small metal machinery nut.

A pistol bullet was also recovered from the screen (see Figure 2.20e). The bullet is made of ordinary lead and is highly oxidized. It was not jacketed, and has a slightly hollow (concave) base. The bullet had been fired, and the remnant indicates a slight, right-hand twist. Based on the dimensions and weight of the bullet, it is a .32 caliber handgun or pistol car-

tridge. The .32 caliber series cartridges of this approximate weight and diameter were developed as black powder revolver cartridges in the late 1870s, and were used in popular handguns, such as the Colt New Police (1896) and Police Special (1906) revolvers. They continued to be used in handguns manufactured just prior to World War II, using "smokeless" based powders. It was not possible to identify the make or model of the handgun that fired it. However, it was probably a black powder/pre-World War II smokeless powder cartridge revolver as the bullet is not consistent with early models of semi-automatic .32 caliber handgun cartridges.

Desert Archaeology has been actively collecting information about the individuals buried in the Court Street Cemetery. The database currently contains 9,266 entries, representing perhaps between 6,000 and 6,500 individuals (there are many individuals with several entries from different data sources). Presently, 27 individuals buried in the Catholic Cemetery died from gunshot wounds (Table 2.3). The individual in Feature 37 was a male, aged 45-55, of probable European ancestry. It should be noted that many Mexican-Americans have European ancestry.

Five of the 27 individuals reported to have gunshot wounds were males aged between 45-55 with European (and more broadly Mexican) ancestry: Justo Carrillo, Eulalo Comacho, John Murphy, Benito Olivas, and Manuel Sotelo. Additional gunshot victims may be identified as research continues, as some of the death records are ambiguous, stating that someone was "killed," but not identifying the cause of death.

CONCLUSIONS

Archaeological testing was completed for the Stone Avenue Drachman Street to Speedway Boulevard Intersection and Roadway Improvements project. Two main goals of the project were to locate the eastern and northern edge of the Court Street Cemetery and to determine if burials were present within the project area.

No burials were located beneath the portions of N. Ash Avenue or W. 1st Street examined. Two burials were located on the vacant lot at the southwestern corner of N. Stone Avenue and W. Speedway Boulevard.

It was surprising that so few burials were located during the current project. The Catholic Diocese of Tucson burial registers list 5,072 burials between June 1875 and July 1909. However, the registers did not report all burials within the Catholic Cemetery. During the period between 1900 and 1908, the register reported 1,315 burials, while death certificates



Figure 2.20. Miscellaneous artifacts from Feature 37, Court Street Cemetery: (a) crown cap (FN 2104); (b) Embalmer's Supply Co. bottle (FN 2053); (c) Carter's ink bottle cap (FN 2078); (d) light blue beverage bottle finish (FN 2065); (e) fired lead bullet (FN 2092).

reported 1,762 burials, indicating that at least 25 percent more burials were reported in the death certificates than in the registers. Newspaper articles note

that, in some cases, family members buried their relatives in the Catholic Cemetery without a priest present. If this rate of underreporting was consistent through time, the total number of burials in the Catholic Cemetery was over 6,300.

Determining how many burials might be present in any one portion of the cemetery is difficult, if not impossible. No plot records survive. Burials may be more dense closer to the front gate, which was located near the modern-day intersection of W. 2nd Street and N. 10th Avenue (formerly Court Avenue). Burials were probably less dense toward the edges of the cemetery, away from the front gate. The descriptions of the cemetery are vague, and do not indicate how the cemetery was filled in through time. The current project area is located at the farthest point from the main gate, and prior to the project, it was thought likely that there would be a low density of burials in the area.

The Catholic Cemetery measures 980,000 ft². If the 6.300 estimated burials were evenly distributed in this area, there would be one burial for each 156 ft² of land. The current project stripped 2,865.2 m² (30,840 ft²) of surface area, about 3 percent of the Catholic Cemetery. If burials were evenly distributed, there should have been 198 burials instead of the two located. This suggests the burials are even more tightly clustered in the remaining portion of the cemetery.

The 1924 aerial photograph of the cemetery (see Figure 1.6) indicates a line of trees were present in a north-

to-south line from W. Speedway Boulevard to W. 1st Street, about 30 m (98 ft) east of N. Ash Alley. This may mark the eastern edge of the Catholic por-

Table 2.3. List of persons with gunshot wounds buried in the Catholic portion of the Court Street Cemetery.

Year of Death	Surname	Given Name	Birth Place	Sex	Age	Cause of Death	Source	Ethnicity
1904	Aguirre	Jose Ma.	Tucson	M	29	Gunshot wound/pulmonary hemorrhage	genealogy.az.gov, death certificate	Mexican
1906	Bouviolle	Edwarde	France	M	57	Suicide/gunshot in head	genealogy.az.gov, death certificate	European
1907	Comacho	Eulalo	Mexico	M	55	Gunshot wound of abdomen/peritonitis	genealogy.az.gov, death certificate	Mexican
1895	Carrillo	Justo		M	48	Shot in face and neck	Arizona Weekly Citizen 1895b	Mexican
1905	Cota	Guillermo		\mathbb{Z}	About 26	Gunshot wound in head	genealogy.az.gov, death certificate	Native American
1906	Derrenbecker	Petre	Paris, France	Σ	61	Gunshot in head	genealogy.az.gov, death certificate	European
1908	Gomez	Elio	Magdalena	M	19	Pistol shot/suicide	genealogy.az.gov, death certificate	Mexican
1885	Gray	Frank	United States	M	35	Shot	Catholic Burials 3:13	European
1902	Hogan	John	Ireland	M	39	Gunshot to back, several fingers shot off	Arizona Daily Citizen 1902	European
1907	Lovato	Severo		M	20	Gunshot	genealogy.az.gov, death certificate	Mexican
1905	Marquez	Monico	Sacaticas, Mexico M	Σ	23	Gunshot wound of shoulder/septic infection	genealogy.az.gov, death certificate	Mexican
1908	Moreno (Esquipula)	ы		Z	About 40	Gunshot wound/suicide	genealogy.az.gov, death certificate	Mexican
1908	Murphy	John	Ireland	M	55	Suicide/gunshot wound	genealogy.az.gov, death certificate	European
1902	Ochoa	Esteban	Mexico	\mathbb{Z}	32	Gunshot	genealogy.az.gov, death certificate	Mexican
1905	Ochoa	Nieves	Sonora, Mexico	щ	19	Gunshot wound/suicide	genealogy.az.gov, death certificate	Mexican
1907	Olivas	Benito		M	About 46	Gunshot/accident	genealogy.az.gov, death certificate	Mexican
1883	Pacheco	Sabas	Sonora	M	28	Shot	Catholic Burials 3:06	Mexican
1908	Rodriguez	Juan	Mexico	Σ	About 25	Pistol shot	genealogy.az.gov, death certificate	Yaqui Indian
1907	Rodriguez	Mateo		M	16-18	Gunshot	genealogy.az.gov, death certificate	Mexican
1903	Sanaripa	Francisco	Mexico	M	40	Gunshot wound	genealogy.az.gov, death certificate	Mexican
1903	Santiestevan	Fred	Mexico	M	35	Gunshot wound	genealogy.az.gov, death certificate	Mexican
1903	Sotelo	Manuel	Arizona	M	45	Gunshot wound	genealogy.az.gov, death certificate	Mexican
1901	Soto	Antonio	Tucson	M	16	Gunshot	genealogy.az.gov, death certificate	Mexican
1907	Tacho	Jose	Solomonville, Arizona	Σ	26	Gunshot wound of abdomen/peritonitis	genealogy.az.gov, death certificate	Mexican
1903	Torrales	Angel	Mexico	\mathbb{Z}	About 31	Gunshot wound	genealogy.az.gov, death certificate	Mexican
1906	Valenzuela	Miguel	Tucson	\mathbb{Z}	15	Gunshot wound/hemorrhage	genealogy.az.gov, death certificate	Mexican
1908	Vega	Jose	Arivaca, Arizona	M	19	Gunshot/self-inflicted	genealogy.az.gov, death certificate	Mexican

tion of the cemetery. The most likely reason for the lack of burials between N. Ash Alley and the line of trees is the physical distance from the cemetery entrance and, perhaps, the desire to place individuals in close proximity to family members and friends in other portions of the cemetery. The two burials located during the current project may represent individuals who were placed outside the physical boundary of the cemetery, perhaps because they were not considered Catholics in good standing.

The two burials located were excavated following the procedures established in the City of Tucson's Court Order for Disinterment. One burial was fairly complete, while the other had been mostly disinterred in the late 1910s, when funeral homes and private individuals were removing remains and transferring them to Evergreen and Holy Hope Cemeteries.

Both individuals were buried in coffins. The coffin handles and decorative studs were identical, while the other coffin hardware—thumbscrews, escutcheons, and a cross—differed between the two burials. The two may have been buried at the same time, or perhaps by the same funeral home.

Osteological analysis revealed that both individuals were estimated to be older adult males, aged 40-55 years at death. The remains of the more complete individual, Feature 36, present several skeletal pathologies reflecting poor oral health, severe stress and pain in the mid-spine, and healed trauma to the upper chest and left big toe. These lesions would have negatively impacted the quality of life for this individual, and he would have likely experienced considerable pain and had restricted flexibility. The remains of the less complete individual, Feature 37, present less skeletal pathology but demonstrate similar evidence of stress in the mid-spine. Although these lesions could be the result of heavy labor, accidents, advanced age, and lifestyle, including activity levels and smoking, play significant roles in the expression of herniated disks, in particular. Skeletal traits suggest both were of European descent.

Clothing artifacts indicate both men were dressed when buried. A spent bullet found within the Feature 37 grave may indicate a violent death, although this could not be verified by the remains that were present. At least 27 individuals buried in the cemetery died from gunshot wounds, and historical research has identified four men who match the sex, age, and racial background of the Feature 37 individual.

RECOMMENDATIONS

Desert Archaeology, Inc., personnel conducted archaeological testing in three areas within the his-

toric Court Street Cemetery following the measures laid out in the approved project testing plan (Thiel 2012b). The large parcel at the southwestern corner of N. Stone Avenue and W. Speedway Boulevard, Pima County Assessor's Parcel 117-021-34B, has been completely stripped, with two burials located. Desert Archaeology, Inc., has completed the excavation and removal of the historic human remains and associated grave goods and recommends that the parcel can be sold and/or developed with no further archaeological work necessary.

Due to the presence of the two burials within 25 ft of N. Stone Avenue and the reported but unconfirmed by archaeologists presence of burial shafts along the eastern side of N. Stone Avenue, noted in the early 1980s, by Jim Glock, retired City of Tucson Transportation Director (personal communication 2011), Desert Archaeology recommends the forthcoming excavation work within N. Stone Avenue between W. 1st Street and W. Speedway Boulevard be monitored by a qualified archaeologist. Monitoring should also be conducted for work beneath the sidewalks along the south side of W. Speedway Boulevard and along the western side of N. Stone Avenue, because a burial was previously located at the intersection of W. Speedway Boulevard and N. 9th Avenue, a short distance from the project area.

No burials were located within a strip trench placed in N. Ash Avenue, immediately west of the parcel. However, the eastern two-thirds of N. Ash Avenue, adjacent to the strip trench, were not examined due to the presence of a fiber optic cable and the cost of asphalt re-paving. This portion of the alley should be monitored during ground-disturbing activities.

The third area examined was within W. 1st Street, immediately west of N. Stone Avenue. No burials were located in the area, although a tree planting pit that was likely associated with the cemetery was located and documented. It is recommended that the road improvement project proceed in this area.

By mid-2013, a total of 48 burials have been located and documented by archaeologists within the Court Street Cemetery, with 17 additional burials located by utility workers and not documented by archaeologists. Over the last decade neighborhood residents have told this report's principle author that they found suspected graves in their residential backyards, but that they have left them alone, undisturbed.

Numbered in order of discovery, eleven of these burials were located in a sewer line repair project that took place following the completion of the testing project described in this report. Of the thirteen burials excavated since 2005, four had been exhumed in the period between 1907 and 1915 and the remaining nine left in place. This may suggest that the

majority of burials within the cemetery were not exhumed after the cemetery was closed in 1909. Additional archaeological fieldwork is needed to ascertain whether this is correct.

Desert Archaeology, Inc., recommends that the Stone Avenue: Drachman to First Street Road Improvements project proceed as planned with archaeological monitoring in the locations described. The likelihood is low that human burials will be lo-

cated beneath N. Stone Avenue between W. 1st Street and W. Speedway Boulevard. However, if evidence for burials, either in the form of human remains, coffin remnants, or rectangular shafts cut into the caliche, are located during the course of the project, work should be immediately halted and the Arizona State Museum Repatriation Coordinator be contacted, as required by Arizona Revised Statute 41-844.

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