

# CENTRAL MESA LRT EXTENSION

DRAFT ENVIRONMENTAL ASSESSMENT



## ARCHAEOLOGICAL ASSESSMENT

February 2010



**AN ARCHAEOLOGICAL ASSESSMENT FOR THE  
CENTRAL MESA LRT EXTENSION  
ENVIRONMENTAL ASSESSMENT**

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HDR Cultural Resources Report 09-22

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**February 12, 2010**



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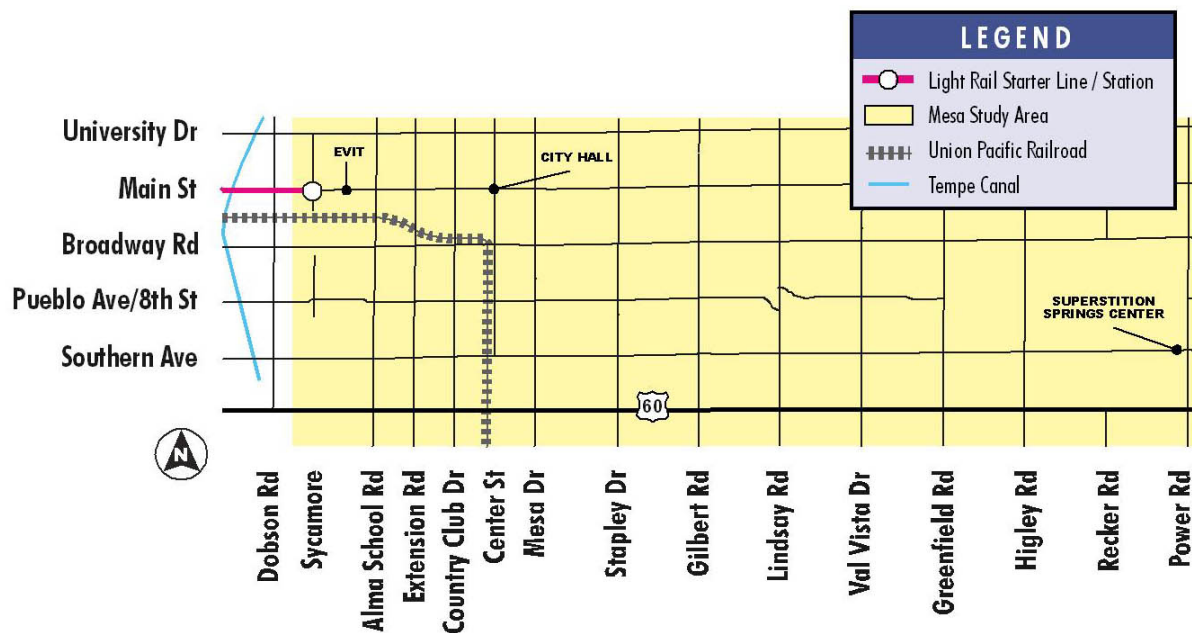
## 1.0 INTRODUCTION

This archaeological assessment technical report is being prepared to support the Environmental Assessment (EA) for high capacity transit improvements being considered in the study area for the Central Mesa Light Rail Transit (LRT) Extension. This report begins with a short background of the study and a description of the alternatives being considered in the EA, and then follows with a review of the archaeological record checks, literature reviews, and field survey conducted for the project, and concludes with a summary of potential project effects for the build alternative.

### 1.1 STUDY BACKGROUND

The Central Mesa LRT Extension study area is bounded on the west by the Light Rail Starter Line's eastern terminus at Sycamore/Main Street; University Drive to the north; Power Road to the east; and the Superstition Freeway (U.S. 60) on the south (Figure 1).

**FIGURE 1: CENTRAL MESA STUDY AREA**



Source: METRO (2009).

A two-tiered alternatives development process was implemented to evaluate the Central Mesa Study Area conceptual alternatives. The first phase (Tier 1) included a conceptual level evaluation that analyzed the advantages and disadvantages of the initial list of potential alternatives to address the transportation needs of the study area (see separate *Tier 1 Evaluation of Alternatives Report*, October 2007, for more information). The initial alternatives considered both LRT and bus rapid transit (BRT) modes.



All alternatives began at the eastern terminus of the recently opened LRT Starter Line Station at Sycamore/Main Street and extended east to the Superstition Springs Center area via Main Street (with 1<sup>st</sup> Street and 1<sup>st</sup> Avenue suboptions downtown) and Power Road. Fixed guideway (via LRT or BRT) generally extended east to about Horne (between Mesa and Stapley Drives) with BRT offering limited stop express service further east in existing travel lanes (similar to Valley Metro Link) to Superstition Springs Center. LRT consisted of a dedicated fixed guideway with two tracks (one track in each direction) that ran mostly in the middle of the existing street system. BRT also had a dedicated fixed guideway for a portion of the project as previously mentioned. The initial alternatives were subject to a “fatal flaw” screening at the Tier 1 phase; the most feasible alternatives were identified and retained for further analysis, and the alternatives deemed unresponsive to Tier 1 evaluation criteria were eliminated from continued study.

The alternatives that remained after the Tier 1 analysis and public, agency, and other stakeholder input were then subjected to a more detailed evaluation (Tier 2). The Tier 2 evaluation continued to consider both LRT and BRT build alternatives. The criteria developed to analyze all of the build alternatives in Tier 2 began to quantify ridership potential, capital and operating and maintenance costs, land use and economic development impacts, traffic issues, environmental factors, conceptual engineering, and public preferences. See the complete *Tier 2 Evaluation of Alternatives Report*, December 2008, which defines the Tier 2 alternatives considered and details the results of the evaluation.

Based on the results of the Tier 2 evaluation, public meetings, and agency and other stakeholder input, the recommended build alternative is to advance LRT as the preferred technology and Main Street as the preferred alignment. The locally preferred alternative (LPA) includes a light rail extension on Main Street east to an interim end-of-the-line near Mesa Drive as Phase 1. See the complete *Recommended Alternative Report*, Draft June 2009 for discussion of the rationale for selection of the LPA. The Phase 1 project is scheduled to begin operations in 2016 and is the major focus of the EA being prepared pursuant to the National Environmental Policy Act (NEPA). The No-Build Alternative will also continue to be considered as specified by NEPA. The Phase 1 project connects logical termini and has independent utility meaning that the project is a reasonable expenditure even if no additional transportation improvements are made in the area.

## **1.2 BUILD ALTERNATIVE**

The LRT Main Street Alternative was selected as the recommended LPA for more detailed analysis in the EA. This LPA recommendation was approved by the City of Mesa City Council (May 2009) and the METRO Board of Directors (June 2009). The LPA has two design options for Main Street in the area east of Country Club Drive: 1) 2 Lanes; and 2) 4 Lanes. The design options are described at the end of this discussion.



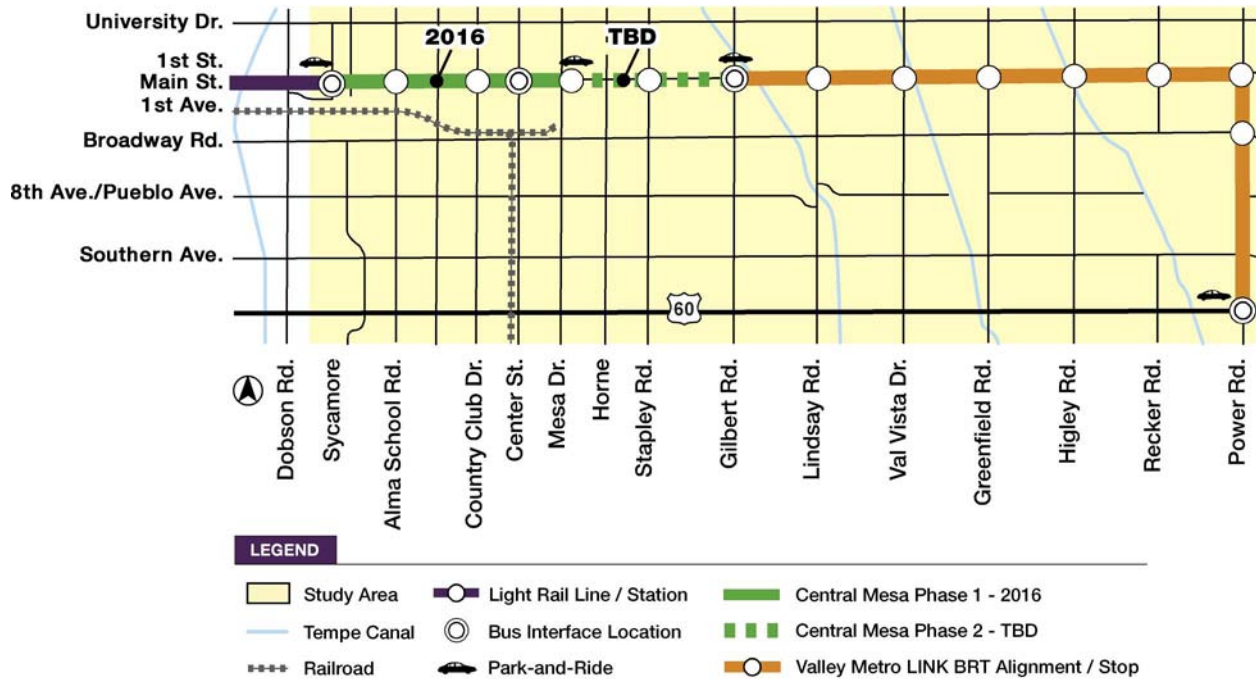
Whether to implement the Build Alternative, 2-Lane Option or the Build Alternative, 4-Lane Option will be decided after completion of a series of public workshops, the Draft EA, and receipt of input during the Draft EA public comment period.

The Build Alternative, or LPA, is shown in Figure 2. The Build Alternative includes a double-track LRT guideway that would operate along the middle of Main Street from just east of Sycamore to just east of Mesa Drive, a distance of 3.1 miles. LRT is electrically powered and receives its power from overhead power lines within the street right-of-way. LRT operations would include a traffic signal priority system (predictive priority), to allow for faster travel times. The light rail vehicles will be the same as the ones currently being used for the LRT Starter Line. Major operating plan features are listed in Table 1.

**TABLE 1: LRT OPERATING PLANS**

<b>Headways</b>	All day except late evening: Late evening:	10 minutes 20 minutes
<b>Number of Vehicles</b>	6 – Central Mesa LRT Extension 50 – LRT Starter Line and Northwest LRT 56 – Total fleet	
<b>Line-haul Capacity</b>	2,700 passengers per peak hour per direction (Based on 3 vehicles per train and 150 passengers/vehicle)	
<b>Hours of Operation</b>	Daily = ~20 hours	

**FIGURE 2: LOCALLY PREFERRED ALTERNATIVE**



Rev. 08-28-09



This alternative is an extension of the LRT Starter Line that opened in December 2008 and would provide a seamless connection (no transfer required) from the current eastern terminus of the LRT Starter Line at Sycamore and continues east to just east of Mesa Drive. Tail tracks would continue east of the station platform to a point approximately 425 feet east of Hobson.

East of Mesa Drive to Superstition Springs Center (near Power Road/US 60), the existing Valley Metro LINK BRT would connect to LRT and operate in mixed traffic as it does today as a skip-stop express service. As a result of the Build Alternative, Valley Metro LINK BRT service would be discontinued along Main Street between Sycamore and Mesa Drive to eliminate service duplication, and its operational frequency in the off-peak will increase from 30 to 15 minutes. However, service during peak periods will remain the same as today (15 minutes). Other than that, no other changes to the LINK operations or facilities will be necessary for the Phase 1 LRT extension being evaluated in the EA. LRT stations/LINK BRT stops, bus interface locations, and park-and-ride locations are identified in Table 2. A new bus interface location would be constructed by the City of Mesa as part of a separate project in the downtown area. A new park-and-ride facility would be built near the end-of-line LRT station at Mesa Drive. The facility would encompass two sites at the Main Street/Lesueur intersection: 1) northwest quadrant; and 2) southwest quadrant.

Also recommended as funding becomes available is a future (Phase 2) extension of LRT to Gilbert Road. This extension would provide enhanced regional transit connections and opportunity for a larger regional park-and-ride facility. At this time, Phase 2 is not identified in the MAG Regional Transportation Plan (RTP) and is not evaluated in the EA. However, the Phase 2 recommendation has been forwarded to MAG and has been identified as an “illustrative project” for inclusion in the RTP. Should the Phase 2 project move forward, it will be subject to NEPA compliance.

Construction of the Build Alternative would include installation of trackwork, an overhead contact system (OCS) for the distribution of electricity to LRT vehicles, traction power substations, and signaling and communication systems. The LRT transit way would consist of tracks formed of continuously welded rails. The rails would be embedded track supported on a concrete slab. The depth of construction disturbance along the track corridors would be 2.5 feet deep.

The OCS would consist of steel or concrete poles installed along the operating right-of-way to support the electrical power line. Poles would be about 25 feet tall and typically installed at intervals from 90 to 170 feet. The OCS would be designed to be compatible with visual and aesthetic characteristics of the corridor. The poles would generally be located in the center of the two tracks, wherever possible. In some locations, catenary poles may be located on the side of the LRT trackway with the overhead electrical line suspended over the LRT tracks.





Electricity for LRT operations would be supplied to the OCS from traction power substations (TPSS) located along the proposed LRT alignment. These electrical substations would be enclosed structures approximately 20-by-40 feet (30-by-60 feet including the grounding mat around the substation) located proximally to the LRT alignment. One TPSS would be required for roughly each mile of track. Specific locations will be determined as design is further refined.

**TABLE 2: STATIONS, TRANSIT CENTERS, AND PARK-AND-RIDES**

Station/Stop	Type of Station	Park-and-Ride	Bus Interface	Location/ Platform Configuration
<b>LRT Facilities (Stations)</b>				
Sycamore/Main St. (LRT Starter Line End-of-Line Station)	Regional	Yes	Yes	East of intersection Center platform Facility not attributable to LRT extension
Alma School/Main St.	Community	No	No	West of intersection Center platform
Country Club/Main St.	Regional	No	No	East of intersection center platform
Centennial/Main St.	Community	No	Yes	West/east of intersection center platform Bus Facility is a separate project and is not attributable to LRT extension
Mesa/Main St.	Community	Yes	No	Station—East of intersection Station—Center platform Park-and-Ride—2 sites (northwest and southwest quadrants of Lesueur/Main intersection)
<b>Valley Metro Link BRT Facilities (Existing Stops—Facilities not attributable to LRT extension)</b>				
Stapley/Main St. <sup>1</sup>	Neighborhood	No	No	East of intersection
Gilbert/Main St. <sup>1</sup>	Neighborhood	No	No	West/east of intersection
Lindsay/Main St. <sup>1</sup>	Neighborhood	No	No	East of intersection
Val Vista/Main St. <sup>1</sup>	Neighborhood	No	No	West/east of intersection
Greenfield/Main St. <sup>1</sup>	Neighborhood	No	No	West/east of intersection
Higley/Main St. <sup>1</sup>	Neighborhood	No	No	East of intersection
Recker/Main St. <sup>1</sup>	Neighborhood	No	No	West/east of intersection
Power/Main St. <sup>1</sup>	Community	No	No	West of intersection
Broadway/Power <sup>1</sup>	Community	No	No	North of intersection
U.S. 60/Power (Superstition Springs Center) <sup>1</sup>	Regional	Yes	Yes	North of intersection

<sup>1</sup>Station locations as part of existing Valley Metro LINK BRT project. Station locations and amenities would remain. Source: METRO (2009).

LRT vehicles for the Central Mesa LRT Extension would be maintained and serviced at the existing LRT Starter Line Operations and Maintenance Center (OMC), located south of Washington Street between State Route (SR) 143 and Loop 202. The OMC will have sufficient capacity to service LRT vehicles allocated to the Central Mesa LRT Extension, and no additional facility will be required.

The existing traffic lane capacity along Main Street would be maintained between Sycamore and Country Club Drive. Typical cross sections are presented in Figure 3. For the segment east of Country Club Drive to the LRT eastern terminus near Mesa Drive, two design options are being considered:



- Build Alternative, 2-Lane Option
- Build Alternative, 4-Lane Option

These design options are further described below.

### **1.2.1 Build Alternative, 2-Lane Option**

Main Street's traffic lane capacity would be reduced from two lanes in each direction to one lane in each direction from Country Club Drive to Hobson. Acquisition of additional right-of-way along the alignment would be minimal to accommodate the proposed project as a result of the reduction of travel lanes. Typical cross sections at various locations along the Build Alternative, 2-Lane Option are shown in Figure 4. All of the stations, park-and-ride, and bus interface facility locations are shown in Table 2.

### **1.2.2 Build Alternative, 4-Lane Option**

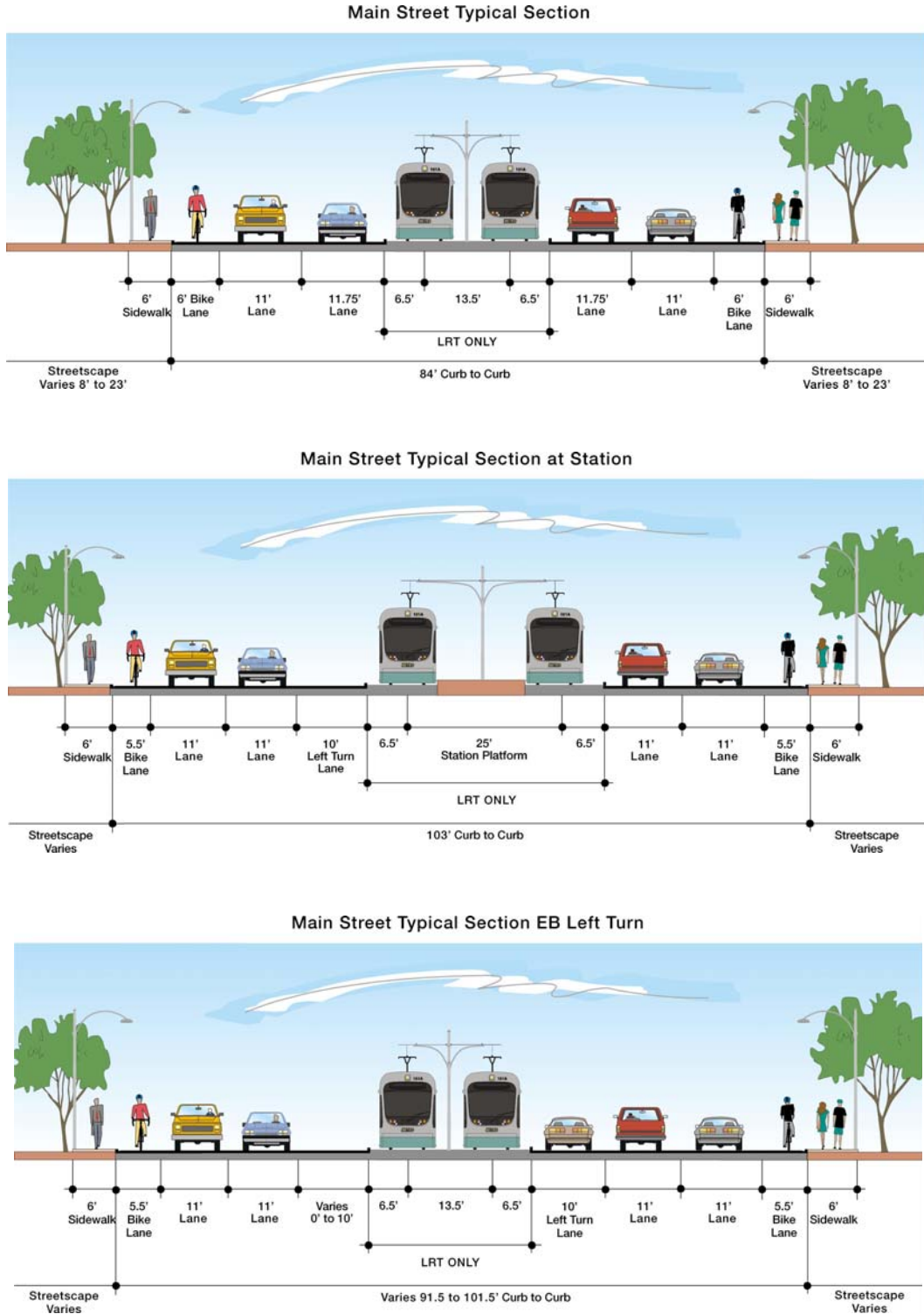
Main Street's traffic lane capacity would be maintained from Country Club Drive to Hobson. Acquisition of additional right-of-way would be required to accommodate the proposed project as a result of maintaining the existing numbers of lanes. Typical cross sections at various locations along the Build Alternative, 4-Lane Option are shown in Figure 5. All of the stations, park-and-ride, and bus interface facility locations are as illustrated in Table 2.

### **1.2.3 Unresolved Issues**

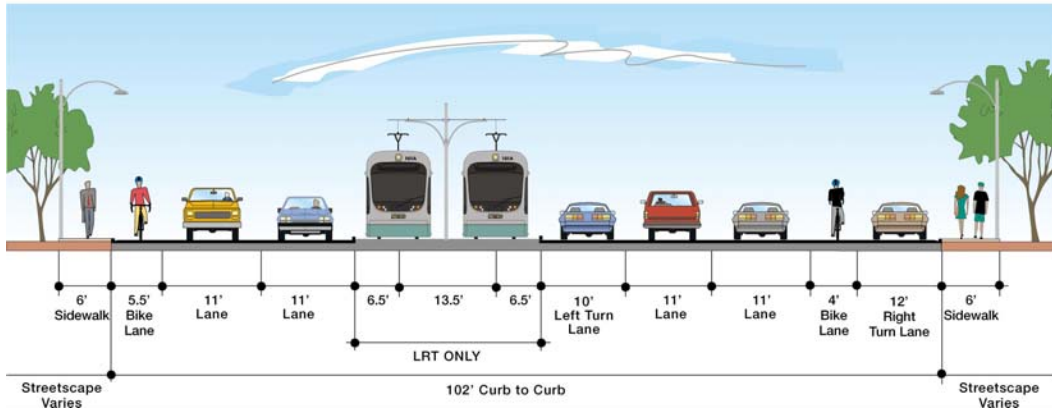
Several issues remain to be decided and will be further considered as the EA proceeds and community outreach continues. In addition to the previously discussed optional traffic design configurations downtown, decisions will need to be made about the following:

- On-street parking
- Bicycle facilities
- TPSS location
- OCS
- Left turn requirements
- Pedestrian access points
- Park-and-ride sizing, layout and capacity
- Station design
- Urban design/public art
- Refinement of utilities and location
- Construction staging

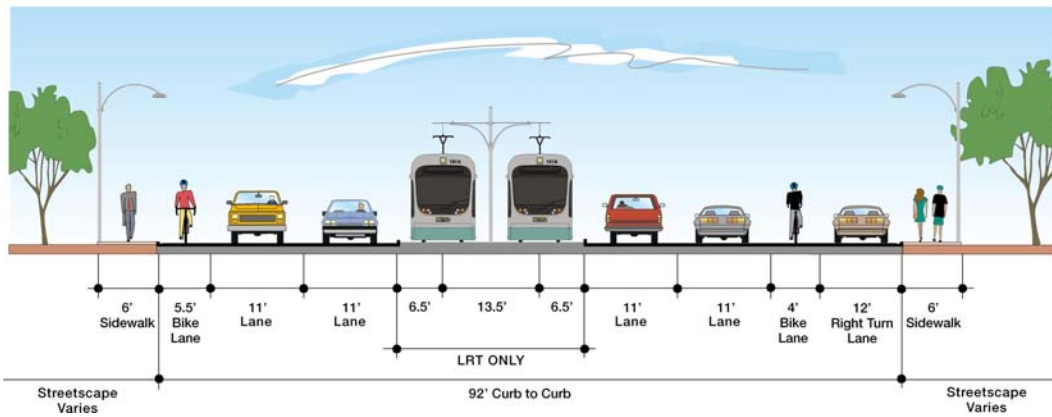
**FIGURE 3: BUILD ALTERNATIVE, SYCAMORE TO COUNTRY CLUB DRIVE**



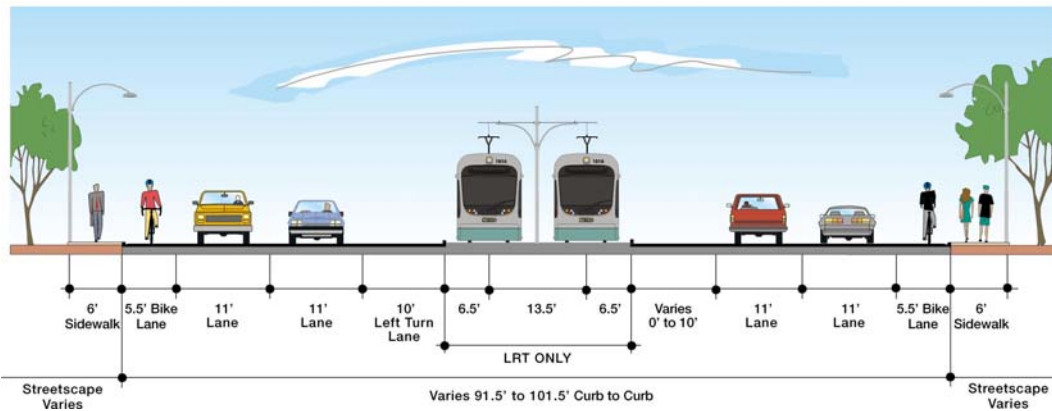
Main Street Typical Section EB Left and Right Turn



Main Street Typical Section EB Right Turn

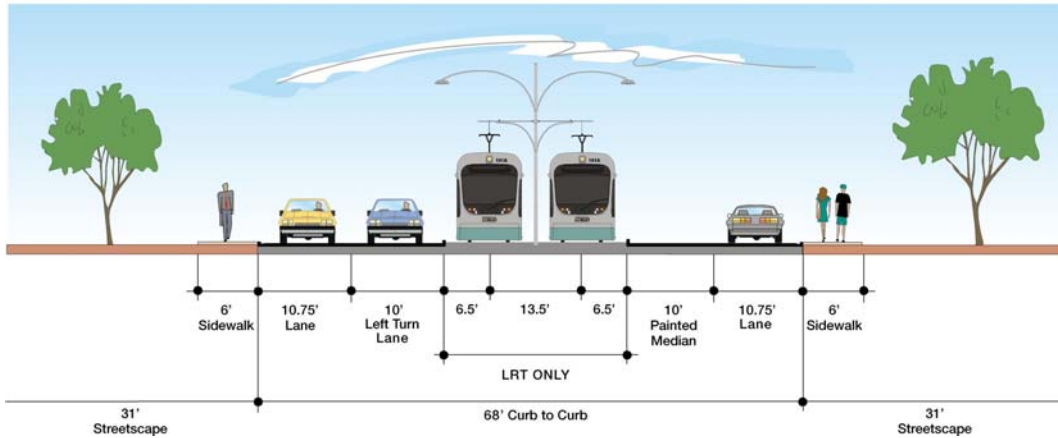


Main Street Typical Section WB Left Turn

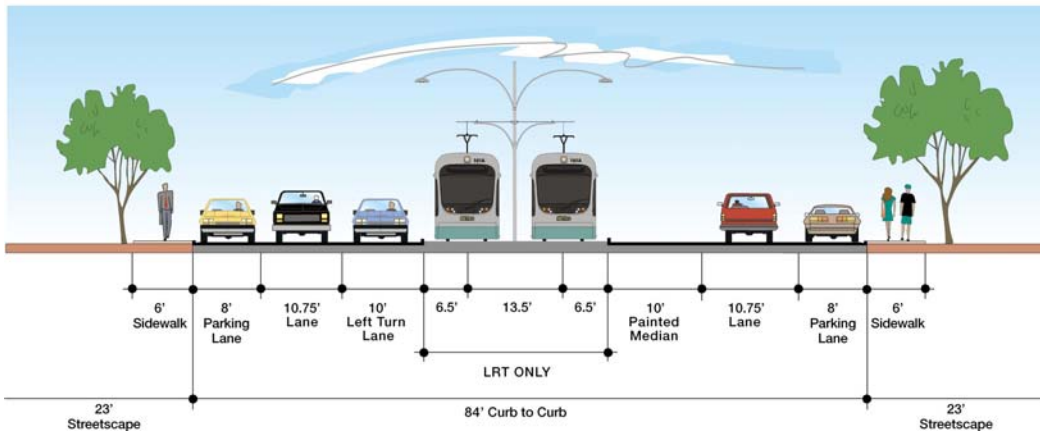


**FIGURE 4: BUILD ALTERNATIVE, 2-LANE OPTION  
COUNTRY CLUB DRIVE TO HOBSON**

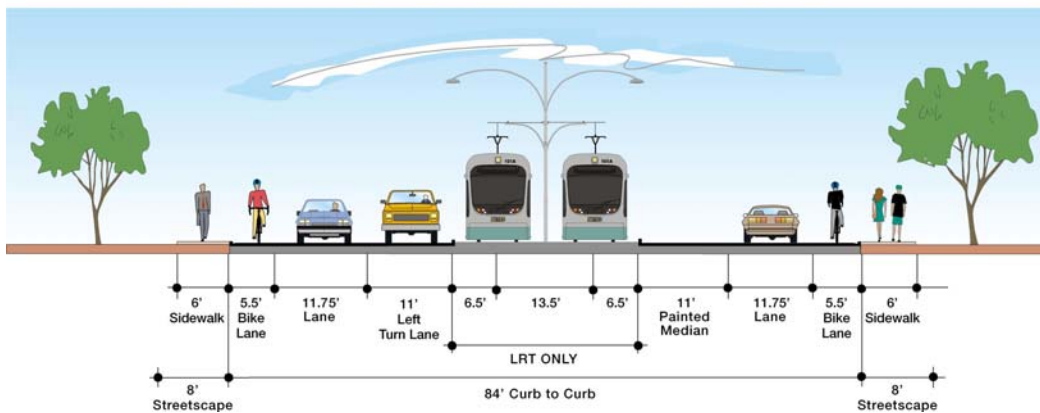
**Main Street 2-lane Typical Section Without Parking Lane**



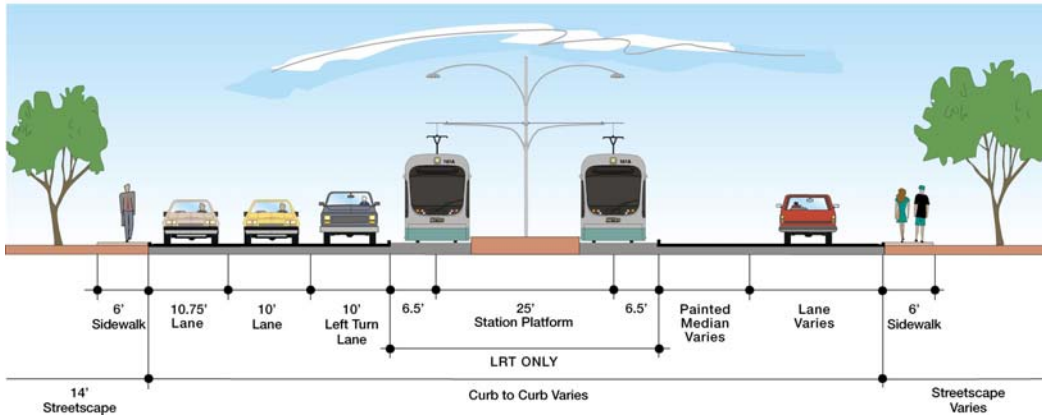
**Main Street 2-lane Typical Section with Parking Lane**



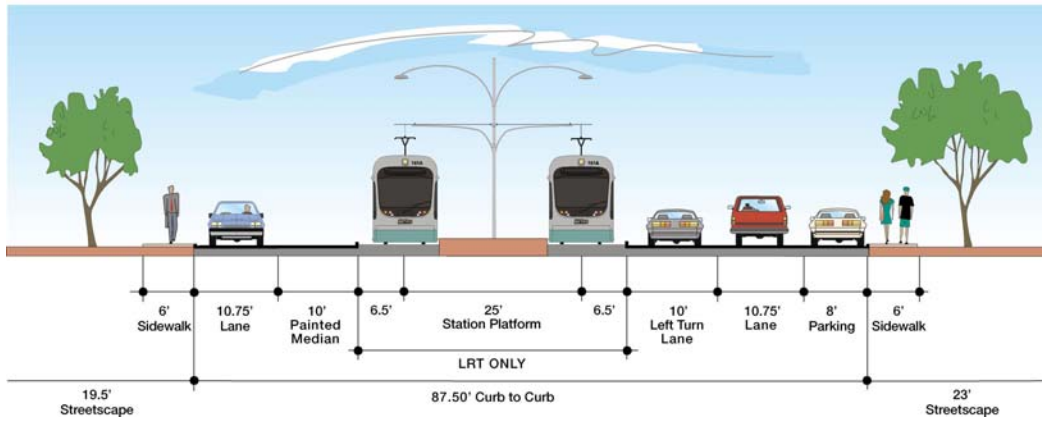
**Main Street 2-lane Typical Section (Between Lesueur and Hobson with Bike Lane)**



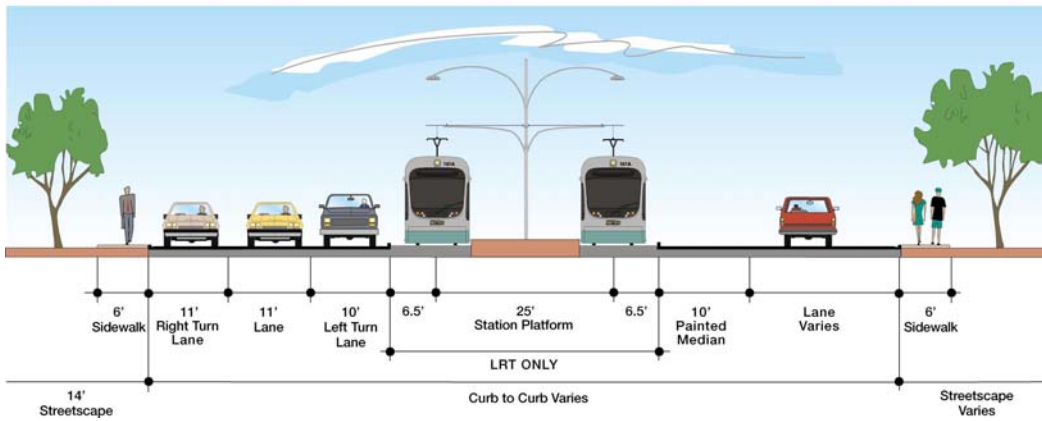
Main Street 2-lane Typical Section at Country Club Drive Station



Main Street 2-lane Typical Section at Centennial Way Station

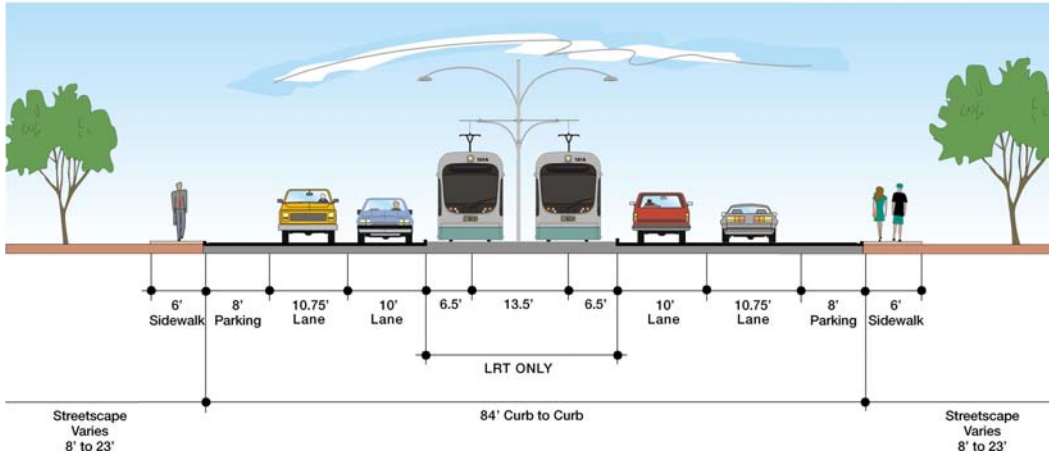


Main Street 2-lane Typical Section at Mesa Drive Station

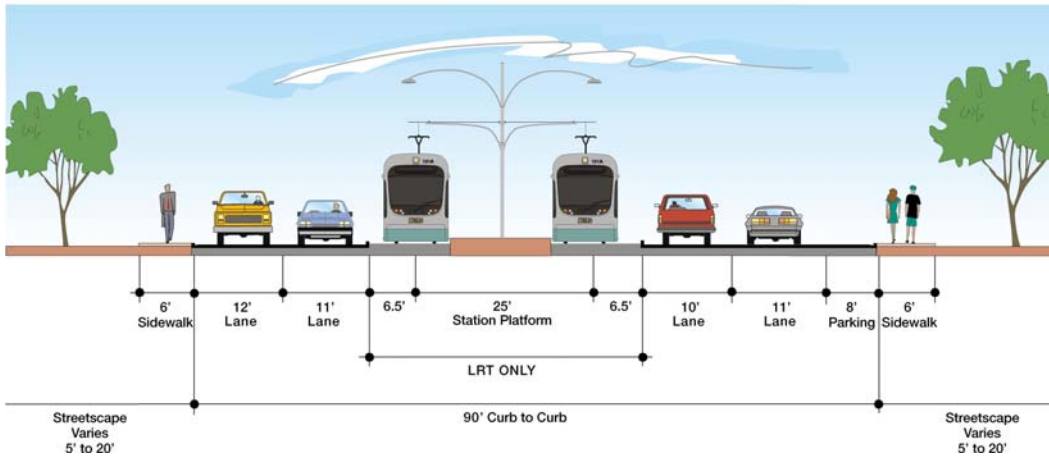


**FIGURE 5: BUILD ALTERNATIVE, 4-LANE OPTION  
COUNTRY CLUB DRIVE TO HOBSON**

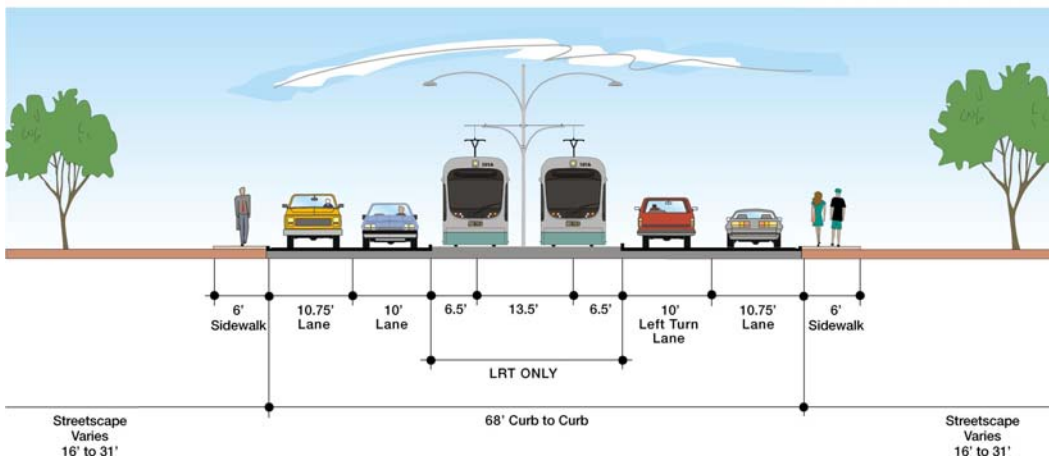
Main Street Typical Section 4-lane



Main Street Typical Section 4-lane at Station



Main Street Typical Section 4-lane EB Left Turn





## 2.0 Regulatory Context

The area of potential effects (APE) for the assessment of potential direct and indirect impacts to cultural resources by the project is defined as the alternative routes and adjacent parcels of property (identified by County Assessor maps) (Rogge et al 2007; Erickson et al. 2008). Cultural resources generally include archaeological sites, historic buildings and structures, artifacts, and places of traditional, religious, and cultural significance. An “historic property” refers to cultural resources that are included in or eligible for inclusion in the National Register of Historic Places (National Register). This technical report addresses archaeological resources that could potentially be affected by the project. The National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470) requires federal agencies to take into account the effects of their undertakings on historic properties, and afford the State Historic Preservation Office (SHPO) and other parties with a demonstrated interest a reasonable opportunity to comment on such undertakings. Regulations for Protection of Historic Properties (36 CFR Part 800) implement Section 106 of the NHPA. These regulations define a process for responsible federal agencies to consult with the State or Tribal Historic Preservation Officer (S/THPO), Native American groups, other interested parties such as the City of Mesa Historic Preservation Officer, and when necessary, the Advisory Council on Historic Preservation (ACHP) to ensure that historic properties are duly considered as federal projects are planned and implemented. FTA is the lead federal agency responsible for Section 106 compliance for the Central Mesa LRT Extension Project. On behalf of FTA, METRO is coordinating the Section 106 compliance activities (Appendix A).

To be determined eligible for inclusion in the National Register, cultural resource properties must be important in American history, architecture, archaeology, engineering, or culture. In addition, properties must possess integrity of location, design, settings, materials, workmanship, feeling, and association, and meet at least one of four criteria:

Criterion A: be associated with events that have made a significant contribution to the broad patterns of our history

Criterion B: be associated with the lives of persons significant in our past

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

Criterion D: have yielded, or may be likely to yield, information important in prehistory or history





Properties may be of local, state, or national importance. Typically, historic properties are at least 50 years old, but younger properties may be considered for listing if they are of exceptional importance.

### 3.0 Historic Context

To evaluate the historical significance of cultural resources and their eligibility for inclusion on the National Register, a site or property must be understood within an appropriate interpretive context. The National Park Service (NPS) provides guidance regarding significance and eligibility which is based on the application of *historic context*:

To qualify for the National Register, a property must be significant; that is, it must represent a significant part of history, architecture, archaeology, engineering, or culture of an area, and it must have the characteristics that make it a good representative of properties associated with that aspect of the past. The significance of a historic property can be judged and explained only when it is evaluated within its historic context. Historic contexts are those patterns, themes, or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within prehistory or history is made clear (NPS 1990).

Historic contexts are established by theme, time period, and geographic limits and provide guidance for assessing sites associated with the context. The historic context for prehistoric and historic archaeological resources was developed as part of the initial cultural resources records and literature review and therefore is not reproduced in this document (Erickson et al. 2007:7-11).

In brief, the context defines four main archaeological time periods which represent the major trends of cultural development for the region: the Paleo Indian Period, the Archaic Period, Formative Period, and the Historic Period. The Paleo-Indian Period (10,000–8,000 B.C.) represents the earliest evidence of human occupation in south-central Arizona and was characterized by small groups of highly mobile hunter and gatherers whose subsistence was partially derived from hunting now extinct large game and wild plant foods.

Following climatic changes at the end of the Pleistocene epoch, when warmer, more arid conditions prevailed, the Archaic period (about 8,000 B.C. to A.D. 150) was characterized by the development of more regionally diverse subsistence economies with small, mobile bands of hunter-gatherers foraging within seasonal rounds and exploiting wild foodstuffs and smaller animals such as deer and rabbits. In some locations, evidence of increased reliance on agriculture and sedentism occurs toward the end of the Archaic Period, ca. 1500 B.C.–A.D. 150. Where evidence of the



agricultural trend has been found, such as in the Tucson Basin, this period is now thought of as the Early Agricultural period rather than the Late Archaic period.

The Formative period (about A.D. 150-1450) is characterized by sedentism, agricultural intensification, and the emergence of the Hohokam cultural tradition. The Hohokam culture was distinguished by the development of hierarchical settlement systems, large-scale irrigation agriculture, production of red-on-buff pottery, highly stylized artifacts made of shell, stone, and bone, wide-ranging trade networks, a highly developed burial ritual involving cremations, and the development of public architecture that included ball courts and platform mounds.

Finally, the Historic Period begins with the arrival of Europeans in the seventeenth century and ends with the post-World War II trends of urban development that shaped the Central Mesa Extension LRT Study Area. It is generally assumed that the Akimel O'odham (Pima) and Tohono O'odham (Papago), who were living in south-central Arizona when Europeans first arrived, are the descendants of the Hohokam. Other groups such as the semi-nomadic Western Apache and Yavapai tribes occupied areas north and east of the Salt River Basin, but the full extent of their settlement-subsistence range is unknown. The Historic Period is marked by dramatic cultural change for indigenous peoples, the settlement of Arizona, and the emergence of the Phoenix metropolitan area, which includes the City of Mesa. For a complete discussion of the prehistoric and historic cultural contexts used for the study see Erickson et al. 2007:7-11.

#### **4.0 Previous Research**

Initially, a cultural resource records and literature review was prepared for the project which provided the base data for the subsequent Tier 1 and Tier 2 alternatives screenings (Erickson et al. 2007). The Study Area for the review covered east-west from Sycamore Street to Power Road and north-south from University Drive to the Superstition Freeway (US 60). The review included a search on the AZSITE online data base and record checks at the SHPO, Arizona State Museum (ASM), Mesa Historic Preservation Office, Arizona Museum of Natural History, and selected reports. In addition, General Land Office plats were reviewed for indications of potential unrecorded historical resources. A series of 1961 aerial photographs on file at the Mesa Public Library and 1969 Landiscor aerial photographs also were reviewed and compared with current aerial photographs to identify buildings and subdivisions constructed during the historic period.

The records check identified 9 previously documented archaeological sites and 50 previous cultural resource studies (Erickson et al. 2007). The prior projects included 33 surveys for wireless telecommunications facilities, 7 surveys for residential and commercial developments, 4 surveys for fiber-optic line installation projects, 2 surveys along Salt River Project (SRP) canals, and two testing projects at site AZ U:9:150



(ASM), also known as the Turney 8 site. Seven of the sites were remnants of large Hohokam village sites that were recorded decades before the area was developed. The other two sites were investigated more recently.

None of the known archaeological sites are directly within the selected Build Alternative APE. One of the previously documented archaeological sites is in close proximity, however. AZ U:9:150 (ASM), also known as Turney 8, is located on the south side of Main Street between Sycamore Drive and Alma School Road. The property was originally developed for agriculture and was part of the University of Arizona Experimental Farm. Recently, the campus for the East Valley Institute of Technology was constructed on the site. Erickson et al. (2007:21) described the prior work at the site:

Testing was conducted at site AZ U:9:150(ASM), which was at the location of a village that Turney (1929) had mapped decades earlier and is now known as Turney 8. However, instead of the remnants of a village, the testing found only nine ambiguous features and recovered fewer than 100 Hohokam and early twentieth-century artifacts (DeMaagd et al. 1996). No further investigations were conducted at the site before the parcel was sold and subsequently redeveloped as the East Valley Institute of Technology. Subsequent testing in conjunction with a new building on the campus of the institute found no buried archaeological deposits (Jerry Howard, Curator of Anthropology, Arizona Museum of Natural History, personal communication, September 2007).

Based on the results of the prior testing at AZ U:9:150 (ASM), there is no evidence to suggest significant archaeological deposits exist along Main Street north of the site. Therefore, archaeological testing within the Build Alternative adjacent to the site should not be warranted.

Following the records and literature review, a Tier 1 alternative screening was conducted (Rogge et al. 2007). The Tier 1 assessment qualitatively compared alternatives with respect to resources within the APE of the Tier 1 alternatives, which were limited to the Mesa Town Center (or Segment 2 of the project between Country Club Drive and Horne). The evaluation was the first step in evaluating unrecorded historic-age buildings and structures that might be eligible for the National Register. That first step involved preliminary evaluation of historic integrity to identify those historic-age properties that were so highly modified that they would not be eligible for the National Register. The Tier 1 study included considerations of alternative impacts to archaeological resources. The study concluded that the alternatives were likely to have no more than limited impacts on archaeological resources, if any (Rogge 2007:25).

Tier 2 screening involved a comparison of potential impacts to cultural resources between alternatives (Erickson et al. 2008). The goal of the Tier 2 study was to compare the alternatives quantitatively with respect to potentially adverse effects on significant archaeological, historical, and traditional cultural resources. The analysis used



information compiled during the records and literature review (Erickson et al. 2007) and Tier 1 evaluation (Rogge et al. 2007), as well as additional evaluation of unrecorded historic-age buildings (Erickson et al 2008:4). For archaeological resources, the study noted that all the alternatives had potential for encountering segments of prehistoric canals that were part of Canal System 11 as documented by Turney (1929). Only one of the alternatives impacted a known archaeological site, the First Street option which passed through the Casa Alma site. The First Street option was eliminated from further consideration following the Tier 2 screening. Furthermore, the study found that the alternative which would ultimately be carried forward to the EA as the selected Build Alternative, or LPA, did not impact any known archaeological sites. In the end, the alternative analysis concluded that the potential impact on archaeological resources would be relatively minor, and that because there is good potential for satisfactory mitigation of those impacts, archaeological considerations were not a crucial factor in selecting a locally preferred alternative (Erickson et al. 2008:28).

## 5.0 Archaeological Survey

The Central Mesa LRT Extension project area is a developed urban setting covered by pavement, buildings, and landscaping. As a result, archaeological survey was not possible for most of the project area. An attempt was made, however, to survey the two proposed park-and-ride locations on the northwest and southwest corners of Main Street and Lesueur Street which consisted of vacant lots. The results were reported in *A Class III Archaeological Survey for Two Proposed Park-And-Ride Locations for the Central Mesa LRT Extension Environmental Assessment* (Brodbeck 2009). The report is included as Appendix B.

The park-and-ride lot on the southwest corner of the intersection was made up of fourteen property parcels. A series of 1940s-era commercial buildings once sat on the north side of the lot facing Main Street and a 1940s-era residence located on the south side of the lot faced Lesueur Street (Brodbeck 2009). All the buildings were razed within the last few years. The lot was recently bladed and covered with a fresh layer of decomposed granite, which prevented inspection of the ground surface and precluded any type of archaeological survey.

The park-and-ride lot on the northwest corner was surveyed. It was made up of four property parcels. The lot had two residences on it in the early 1900s, and then the Utahna Motel and a commercial building from the 1940s through the 1980s. The properties were razed in the early 1990s. No archaeological sites were identified by the survey. A few remnant concrete foundations and patches of asphalt were observed. These remnant architectural features were not considered historically significant resources and were recommended as not eligible for listing on the National Register. Based on the results of the survey, a recommendation that a finding of “no historic properties affected” was appropriate for the development of the park-and-ride facilities (Brodbeck 2009).



---

## 6.0 Traditional Cultural Resources

METRO initiated Section 106 consultations with potentially interested American Indian tribes by sending a letter on 10 August 2007. The letters provided information about the project, requested information about places and resources that might have traditional cultural values for their communities, and solicited comments about any concerns the tribes might have about the project. METRO contacted the Ak-Chin Indian Community, Fort McDowell Yavapai Nation, Gila River Indian Community, Hopi Tribe, and Salt River Pima-Maricopa Indian Community. METRO also contacted the Inter-Tribal Council of Arizona to determine if the Council wanted to participate in the Section 106 consultations. To date, only the Ak-Chin Indian Community and the Hopi Tribe have responded (Appendix B). The Ak-Chin Indian Community indicated that they defer to the Salt River Pima-Maricopa Indian Community to review and comment on the project. The Hopi Tribe indicated that they do have traditional cultural affiliations with the project area, but do not want to be a participating agency in the environmental review process. They did request to be consulted if the studies indicate that prehistoric cultural resources would be affected adversely and asked that copies of the cultural resource survey report and draft treatment plan be forwarded to them for review.

Tribes often consider it inappropriate to divulge information about some cultural traditions to non-tribal members, and only limited inventory information about traditional cultural resources is available. No specific traditional cultural resources have yet been identified within the study area, but it is known that all of the tribes with traditional cultural affiliation with the project area have concerns about the treatment of human remains, funerary objects, sacred objects, and objects of cultural patrimony that might be buried in archaeological sites within the area of potential effects.

## 7.0 Summary

This report presents the results of the archaeological assessment for the Central Mesa LTR Extension EA. The project area is a developed urban setting, and as a result, archaeological survey was not possible for the most part. The proposed park-and-ride location on the northwest corner of Main Street and Lesueur Street was surveyed and no archaeological sites or historically significant resources were observed. The park-and-ride lot on the southwest corner of Main Street and Lesueur Street could not be surveyed due to gravel and landscaping. A review of past archaeological studies in the area indicated that a few large Hohokam village sites had been documented in the vicinity prior to development in Mesa and that the several prehistoric canals were observed crossing through the project area. The current condition and precise location of the canals are unknown. Excavations in the Phoenix Basin have demonstrated that there is potential for deeply buried intact prehistoric features and deposits preserved below the old plow zones and layers of modern development. Nevertheless, if archaeological sites are unexpectedly encountered during the project, any negative



impacts could be mitigated through data recovery excavations. Therefore, it is not anticipated that the project would result in significant impacts to archaeological resources.

Based on the results the records check, field survey, and Native American consultations, there is not sufficient direct evidence of known archaeological sites in the project area to warrant archaeological monitoring during construction. Furthermore, the depth of construction disturbance along the track corridors would only be about 2.5 feet deep, therefore observations of subsurface exposures would be limited.

Should unanticipated buried cultural resources be discovered during construction, including prehistoric canals, activities should cease immediately until a qualified archaeologist can be contacted to make an assessment for the proper treatment of those resources. If human remains or associated funerary objects are discovered, the Arizona State Museum must be notified as required by A.R.S. Section 41-865.



## 8.0 References

Brodbeck, Mark

2009 *A Class III Archaeological Survey for Two Proposed Park-and-Ride Locations for the Central Mesa LRT Extension Environmental Assessment*. HDR Cultural Resource Report 09-20. HDR Engineering, Inc., Phoenix.

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2007 *Central Mesa Corridor High Capacity Transit Improvements Project: Cultural Resource Records and Literature Review*. URS Cultural Resource Report 2007-58(AZ). URS Corporation, Phoenix.

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1990 *How to Apply the National Register Criteria for Evaluation*. *National Register Bulletin 15*. Revised for the Internet 2002. National Park Service, United State Department of the Interior, Washing D.C.

Rogge, A.E. (Gene), Kirsten Erickson, and Don W. Ryden

2007 *Central Mesa Corridor High Capacity Transit Improvements Project: Cultural Resources Tier 1 Alternatives Analysis Technical Memorandum (draft)*. Valley Metro Rail, Phoenix

Turney, Omar A.

1929 *Prehistoric Irrigation in Arizona*. Arizona State Historian, Phoenix.



## 9.0 Appendix A: Consultation Letters





08-23-07P12:46 RCVD

U.S. Department  
of Transportation  
**Federal Transit  
Administration**

REGION IX  
Arizona, California,  
Hawaii, Nevada, Guam  
American Samoa,  
Northern Mariana Islands

201 Mission Street  
Suite 1650  
San Francisco, CA 94105-1839  
415-744-3133  
415-744-2726 (fax)

**AUG 13 2007**

Mr. James Garrison  
State Historic Preservation Officer  
Arizona State Parks  
1300 West Washington Street  
Phoenix, Arizona 85007

re: Section 106 Consultation for Central Mesa  
Corridor Study

Dear Mr. Garrison:

The Federal Transit Administration (FTA) is currently working with Valley Metro Rail as sponsoring agency on the Environmental Impact Statement for the proposed Central Mesa Corridor Study.

FTA has delegated Valley Metro Rail the authority to work directly with your office on FTA's behalf, pursuant to 36 CFR 800.3-800.4. We understand that FTA remains legally responsible for all findings and determination pursuant to 36 CFR 800. We request your agreement with this delegation.

If you have questions, please call Mr. Hymie Luden, City and Regional Planner, at (415) 744-2732.

Sincerely,

Leslie T. Rogers  
Regional Administrator

→ cc: Mr. Richard Simonetta, Valley Metro



August 10, 2007

James Garrison  
State Historic Preservation Office  
Arizona State Parks  
1300 W. Washington Street  
Phoenix, Arizona 85007

**RE: CENTRAL MESA ALTERNATIVE ANALYSIS  
SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT**

Dear Mr. Garrison:

Valley Metro Rail (METRO) has initiated planning to extend high capacity transit to downtown Mesa and into the eastern part of the city. The enclosed scoping brochure provides an overview of the study process, scoping process, the Study Area and the project development process.

The project is a federal undertaking and could result in effects to historic properties, cultural resources or traditional cultural properties. Therefore, METRO, on behalf of the Federal Transit Administration (FTA) is hereby initiating consultation with interested parties pursuant to Section 106 of the National Historic Preservation Act (Title 16, USC, Section 470).

**Interested Parties**

We have identified the following parties as having interest in the effects of the proposed undertaking on Historic Properties:

1. State Historic Preservation Office;
2. Mesa City Historic Preservation Office;
3. Salt River Pima-Maricopa Indian Community;
4. Gila River Indian Community;
5. Fort McDowell Yavapai Nation;
6. Hopi Tribe;
7. Inter-Tribal Council of Arizona; and
8. Ak-Chin Indian Community.



August 10, 2007

Ms. Diane Enos  
President  
Salt River Pima-Maricopa Indian Community  
10005 E. Osborn Road  
Scottsdale, AZ 85256

**RE: CENTRAL MESA ALTERNATIVE ANALYSIS  
SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT**

Dear Ms. Enos:

Valley Metro Rail (METRO) has initiated planning to extend high capacity transit to downtown Mesa and into the eastern part of the city. The enclosed scoping brochure provides an overview of the study process, scoping process, the Study Area and the project development process.

The project is a federal undertaking and could result in effects to historic properties, cultural resources or traditional cultural properties. Therefore, METRO, on behalf of the Federal Transit Administration (FTA) is hereby initiating consultation with interested parties pursuant to Section 106 of the National Historic Preservation Act (Title 16, USC, Section 470).

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2. Mesa City Historic Preservation Office;
3. Salt River Pima-Maricopa Indian Community;
4. Gila River Indian Community;
5. Fort McDowell Yavapai Nation;
6. Hopi Tribe;
7. Ak-Chin Indian Community; and
8. Inter-Tribal Council of Arizona.



August 10, 2007

Carol Antone, Cultural Resource Manager  
Ak-Chin Indian Community  
Ak-Chin Him-Dak Eco Museum  
47685 N. Eco Museum Rd.  
Maricopa, Arizona 85239

RE: CENTRAL MESA CORRIDOR HIGH-CAPACITY TRANSIT IMPROVEMENTS  
PROJECT

Dear Ms. Antone :

Valley Metro Rail (METRO) has initiated planning to extend high capacity transit to downtown Mesa and into the eastern part of the city. The enclosed scoping brochure provides an overview of the study process, scoping process, the Study Area and the project development process.

The project is a federal undertaking and could result in effects to historic properties, cultural resources or traditional cultural properties. Therefore, METRO, on behalf of the Federal Transit Administration (FTA) is hereby initiating consultation with interested parties pursuant to Section 106 of the National Historic Preservation Act (Title 16, USC, Section 470).

### **Interested Parties**

We have identified the following parties as having interest in the potential effects of the proposed undertaking on Historic Properties:

1. State Historic Preservation Office;
2. Mesa City Historic Preservation Office;
3. Salt River Pima-Maricopa Indian Community;
4. Gila River Indian Community;
5. Fort McDowell Yavapai Nation;
6. Hopi Tribe;
7. Ak-Chin Indian Community; and
8. Inter-Tribal Council of Arizona.



August 10, 2007

The Honorable Raphael Bear  
President  
Fort McDowell Yavapai Nation  
P.O. Box 17779  
Fountain Hills, AZ 85269

**RE: CENTRAL MESA ALTERNATIVE ANALYSIS  
SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT**

Dear President Bear:

Valley Metro Rail (METRO) has initiated planning to extend high capacity transit to downtown Mesa and into the eastern part of the city. The enclosed scoping brochure provides an overview of the study process, scoping process, the Study Area and the project development process.

The project is a federal undertaking and could result in effects to historic properties, cultural resources or traditional cultural properties. Therefore, METRO, on behalf of the Federal Transit Administration (FTA) is hereby initiating consultation with interested parties pursuant to Section 106 of the National Historic Preservation Act (Title 16, USC, Section 470).

**Interested Parties**

We have identified the following parties as having interest in the potential effects of the proposed undertaking on Historic Properties:

1. State Historic Preservation Office;
2. Mesa City Historic Preservation Office;
3. Salt River Pima-Maricopa Indian Community;
4. Gila River Indian Community;
5. Fort McDowell Yavapai Nation;
6. Hopi Tribe;
7. Ak-Chin Indian Community; and
8. Inter-Tribal Council of Arizona.



August 10, 2007

Mr. William Rhodes  
Governor  
Gila River Indian Community  
P.O. Box 97  
Sacaton, AZ 85247

**RE: CENTRAL MESA ALTERNATIVE ANALYSIS  
SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT**

Dear Mr. Rhodes:

Valley Metro Rail (METRO) has initiated planning to extend high capacity transit to downtown Mesa and into the eastern part of the city. The enclosed scoping brochure provides an overview of the study process, scoping process, the Study Area and the project development process.

The project is a federal undertaking and could result in effects to historic properties, cultural resources or traditional cultural properties. Therefore, METRO, on behalf of the Federal Transit Administration (FTA) is hereby initiating consultation with interested parties pursuant to Section 106 of the National Historic Preservation Act (Title 16, USC, Section 470).

**Interested Parties**

We have identified the following parties as having interest in the potential effects of the proposed undertaking on Historic Properties:

1. State Historic Preservation Office;
2. Mesa City Historic Preservation Office;
3. Salt River Pima-Maricopa Indian Community; ✓
4. Gila River Indian Community; ✓
5. Fort McDowell Yavapai Nation; ✓
6. Hopi Tribe; ✓
7. Ak-Chin Indian Community; and (?)
8. Inter-Tribal Council of Arizona. ✓



August 10, 2007

Mr. Benjamin Nuvamsa  
Chairman  
Hopi Tribe  
P.O. Box 123  
Kykotsmovi, AZ 86039

**RE: CENTRAL MESA ALTERNATIVE ANALYSIS  
SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT**

Dear Mr. Nuvamsa:

Valley Metro Rail (METRO) has initiated planning to extend high capacity transit to downtown Mesa and into the eastern part of the city. The enclosed scoping brochure provides an overview of the study process, scoping process, the Study Area and the project development process.

The project is a federal undertaking and could result in effects to historic properties, cultural resources or traditional cultural properties. Therefore, METRO, on behalf of the Federal Transit Administration (FTA) is hereby initiating consultation with interested parties pursuant to Section 106 of the National Historic Preservation Act (Title 16, USC, Section 470).

**Interested Parties**

We have identified the following parties as having interest in the potential effects of the proposed undertaking on Historic Properties:

1. State Historic Preservation Office;
2. Mesa City Historic Preservation Office;
3. Salt River Pima-Maricopa Indian Community;
4. Gila River Indian Community;
5. Fort McDowell Yavapai Nation;
6. Hopi Tribe;
7. Ak-Chin Indian Community; and
8. Inter-Tribal Council of Arizona.



August 10, 2007

Mr. John Lewis  
Executive Director  
Inter-Tribal Council of Arizona  
2214 N. Central Avenue, Suite 100  
Phoenix, AZ 85004

**RE: CENTRAL MESA ALTERNATIVE ANALYSIS  
SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT**

Dear Mr. Lewis:

Valley Metro Rail (METRO) has initiated planning to extend high capacity transit to downtown Mesa and into the eastern part of the city. The enclosed scoping brochure provides an overview of the study process, scoping process, the Study Area and the project development process.

The project is a federal undertaking and could result in effects to historic properties, cultural resources or traditional cultural properties. Therefore, METRO, on behalf of the Federal Transit Administration (FTA) is hereby initiating consultation with interested parties pursuant to Section 106 of the National Historic Preservation Act (Title 16, USC, Section 470).

**Interested Parties**

We have identified the following parties as having interest in the potential effects of the proposed undertaking on Historic Properties:

1. State Historic Preservation Office;
2. Mesa City Historic Preservation Office;
3. Salt River Pima-Maricopa Indian Community;
4. Gila River Indian Community;
5. Fort McDowell Yavapai Nation;
6. Hopi Tribe;
7. Ak-Chin Indian Community; and
8. Inter-Tribal Council of Arizona.



# AK-CHIN INDIAN COMMUNITY

Cultural Resources Office

42507 W Peters & Nall Road • Maricopa, Arizona 85239 • Telephone: (520) 568-1369 • Fax: (520) 568-1366



September 4, 2007

Jerri Horst  
Environmental Manager  
Metro  
101 N. 1<sup>st</sup> Ave, Suite 1300  
Phoenix, AZ 85003

Dear Jerri Horst:

The Ak-Chin Cultural Resources Office did receive a letter dated August 10, 2007 regarding the Central Mesa Corridor High-Capacity Transit Improvements Project.

At this time, our office will defer comments on this project to the Salt River Pima-Maricopa Indian Community.

Thank you for informing our office about this project. If you have any questions, please call me at (520) 568-1369.

Sincerely,

A handwritten signature in black ink that reads 'Gary Gilbert'.

Gary Gilbert  
Cultural Resources Technician II  
Cultural Resources Office  
Ak-Chin Indian Community

THE



# HOPÍ TRIBE

Hopi Cultural Preservation Office

P.O. Box 123

Kykotsmovi, AZ 86039

(928) 734-3622

FAX: (928) 734-3629

Benjamin H. Nuvamsa  
CHAIRMAN

Todd Honyaoma, Sr.  
VICE-CHAIRMAN

August 15, 2007

Richard J. Simonetta, Chief Executive Officer  
Valley Metro Rail  
101 N 1<sup>st</sup> Ave., Suite 1300  
Phoenix, Arizona 85003


Dear Mr. Simonetta,

This letter is in response to your correspondence on behalf of the Federal Transit Administration dated August 3, 2007, regarding the High Capacity Transit Improvements in the Central Mesa Corridor. Because the Hopi Tribe claims cultural affiliation to prehistoric cultural groups in Arizona, including the Hohokam prehistoric cultural group, and the Hopi Cultural Preservation Office supports identification and avoidance of prehistoric archaeological sites and Traditional Cultural Properties, we appreciate your solicitation of our input and your efforts to address our concerns.

The Hopi Cultural Preservation Office does not wish to be a participating agency in the environmental review process. However, if prehistoric cultural resources are identified in the project area that will be adversely effected by project activities, we request additional consultation on this proposal, and request to be provided us with copies of the cultural resource survey report and draft treatment plan for review and comment.

Should you have any questions or need additional information, please contact Terry Morgart at the Hopi Cultural Preservation Office at [tmorgart@hopi.nsn.us](mailto:tmorgart@hopi.nsn.us). Thank you again for your consideration.

Respectfully,



Leigh J. Kuwanwisiwma, Director  
Hopi Cultural Preservation Office

MR21036



## 9.0 Appendix B: Class III Archaeological Survey Report

**A CLASS III ARCHAEOLOGICAL SURVEY FOR TWO PROPOSED  
PARK-AND-RIDE LOCATIONS FOR THE CENTRAL MESA LRT EXTENSION  
ENVIRONMENTAL ASSESSMENT**

Prepared for  
**Valley Metro Rail, Inc.**  
101 N. 1st Avenue, Suite 1300  
Phoenix, Arizona 85003

Prepared by  
Mark Brodbeck, MA RPA  
**HDR Engineering, Inc.**  
3200 East Camelback Road, Suite 350  
Phoenix, AZ 85018

HDR Cultural Resources Report 09-20

Restricted Distribution

To avoid vandalism, restrict information in this report about the location of archaeological sites, as provided for by Section 304 of the National Historic Preservation Act, Section 9(a) of the Archaeological Resources Protection Act, and Section 39-125 of the Arizona Revised Statutes.

**November 2009**

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## **Abstract**

- Agencies:** Federal Transit Administration  
State Historic Preservation Office  
Mesa City Historic Preservation Office  
Valley Metro Rail, Inc. (METRO)
- Report Title:** A Class III Archaeological Survey of Two Proposed Park-and-Ride Locations for the Central Mesa LRT Extension Environmental Assessment. November 2009
- Report Date:** November 16, 2009
- Project Numbers:** HDR Project Number 62139
- Permit:** Arizona State Antiquities Act Permit No. 2009-047bl
- Location:** The proposed park-and-ride lots are located on the northwestern and southwestern corners of the intersection of Main Street and Lesueur Street in Mesa, Maricopa County. The parcels surveyed are in the NW $\frac{1}{4}$  and SW $\frac{1}{4}$  of Section 23, Township 1 North, Range 5 East (Mesa, AZ United States Geological Survey [USGS] 7.5' topographic quadrangle; Gila and Salt River Baseline and Meridian).
- Jurisdiction:** Private
- Project Description:** METRO implemented a two-tiered alternatives development process to evaluate the Central Mesa Study Area conceptual alternatives for the extension of the transit systems into downtown Mesa and into the eastern part of the city. Based on the results of the alternatives evaluation process, public meetings, and agency and other stakeholder input, the recommended build alternative is to advance light rail transit as the preferred technology and Main Street as the preferred alignment. The locally preferred alternative (LPA) includes a light rail extension on Main Street east to an interim end-of-the-line near Mesa Drive as Phase 1. The Phase 1 project is scheduled to begin operations in 2016 and is the major focus of the Environmental Assessment being prepared pursuant to the National Environmental Policy Act (NEPA).
- As part of the planning process, two potential locations for park-and-ride facilities have been proposed in downtown Mesa at the intersection of Main Street and Lesueur Street. This report presents the results of an archaeological survey of the

two proposed park-and-ride locations in compliance with NEPA, the National Historic Preservation Act, the Arizona Antiquities Act, Arizona Historic Preservation Act, and the City of Mesa Historic Preservation Ordinance.

**Project Funding:** Federal  
**Acres Surveyed:** 4.8 acres  
**Number of Sites:** 0

**Management**

**Recommendations:** No archaeological sites were identified during the survey. The proposed location on the southern side of Main Street was covered with a layer of decomposed granite, which precluded inspection of the ground surface. A few motel building foundations and driveway remnants were documented in the park-and-ride lot on the northern side of Main Street. The motel remnants are not historically significant resources and are recommended as not eligible for listing on the National Register of Historic Places. Given the results of the survey, it is recommended that a finding of “no historic properties affected” would be appropriate for the development of a park-and-ride facility at either location.

However, should unanticipated buried cultural resources be discovered during construction, activities should cease immediately until a qualified archaeologist can be contacted to make an assessment for the proper treatment of those resources. If human remains or associated funerary objects are discovered, the Arizona State Museum must be notified as required by Arizona Revised Statutes Section 41-865.





## Introduction

Valley Metro Rail, Inc. (METRO) implemented a two-tiered alternatives development process to evaluate the Central Mesa Study Area conceptual alternatives for the extension of the transit systems into downtown Mesa and into the eastern part of the city. Based on the results of the alternatives evaluation process, public meetings, and agency and other stakeholder input, the locally preferred alternative (LPA) is light rail transit as the preferred technology and Main Street as the preferred alignment. The LPA includes a light rail extension on Main Street east to an interim end-of-the-line near Mesa Drive as Phase 1. The Phase 1 project is scheduled to begin operations in 2016 and is the major focus of the Environmental Assessment being prepared pursuant to the National Environmental Policy Act (NEPA).

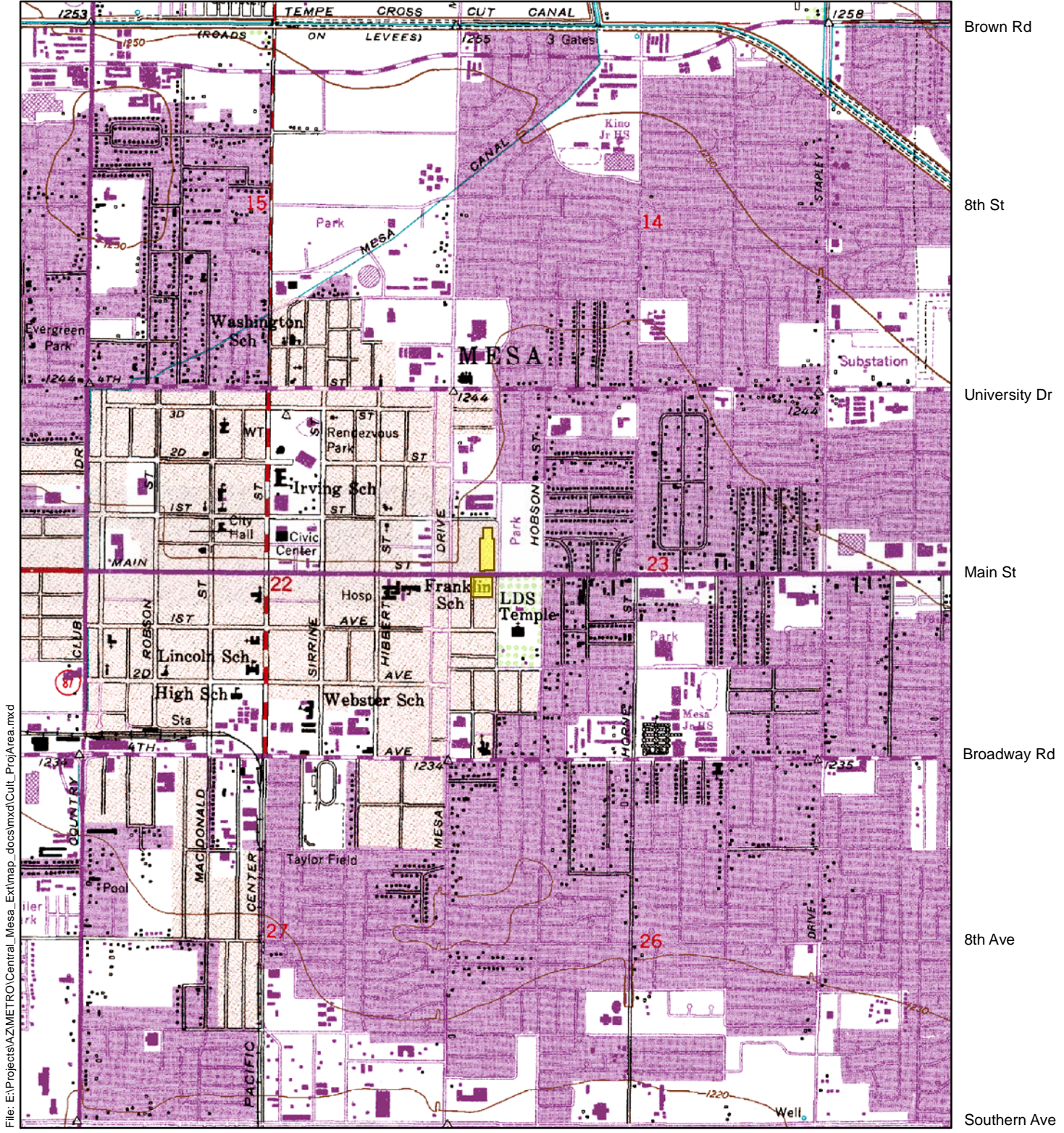
As part of the planning process, two potential locations for park-and-ride facilities have been proposed in downtown Mesa at the intersection of Main Street and Lesueur Street. The project is using federal funds administered by the Federal Transit Administration (FTA) and, therefore, qualifies as an undertaking subject to Section 106 review under the National Historic Preservation Act (16 United States Code [U.S.C.] 470). On behalf of FTA, METRO is coordinating Section 106 compliance activities for the project.

At the request of METRO, HDR Engineering, Inc. (HDR), conducted a Class III archaeological survey of the two proposed park-and-ride lots to determine whether significant archaeological resources are present that could potentially be affected by the undertaking. HDR conducted the survey on October 21, 2009. The work was authorized under Arizona State Antiquities Act Permit No. 2009-047bl. This report presents the results of the archaeological survey and provides management recommendations.

## Location

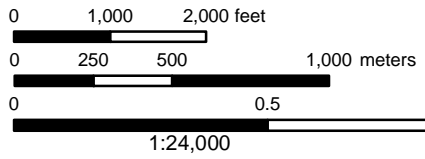
The proposed park-and-ride lots are located on the northwestern and southwestern corners of the intersection of Main Street and Lesueur Street in Mesa, Maricopa County (Figures 1 and 2). The Temple Historic District is located immediately south of the proposed park-and-ride lot south of Main Street, and the Mormon Temple is to the east across Lesueur Street. Pioneer Park is east of the proposed park-and-ride lot on the northern side of Main Street, with a mix of historic and modern commercial and residential development to the north and west. The parcels surveyed are in the NW $\frac{1}{4}$  and SW $\frac{1}{4}$  of Section 23, Township 1 North, Range 5 East (Mesa, AZ United States Geological Survey [USGS] 7.5' topographic quadrangle; Gila and Salt River Baseline and Meridian).

The proposed park-and-ride lot on the northwestern corner of Main Street and Lesueur Street includes four property parcels, totaling 2.6 acres. The proposed park-and-ride lot on the southwestern side of the intersection is made up of 14 property parcels, totaling 2.2 acres. A summary of the property parcels is provided in Table 1.



File: E:\Projects\AZ\METRO\Central\_Mesa\_Ext\map\_docs\mxd\Cult\_ProjArea.mxd

Country Club Dr                      Center St                      Mesa Dr                      Horne St                      Stapley Dr



**Figure 1. Project area**

 Project area

Base: USGS 7.5' Quadrangle; Mesa, AZ (1982)



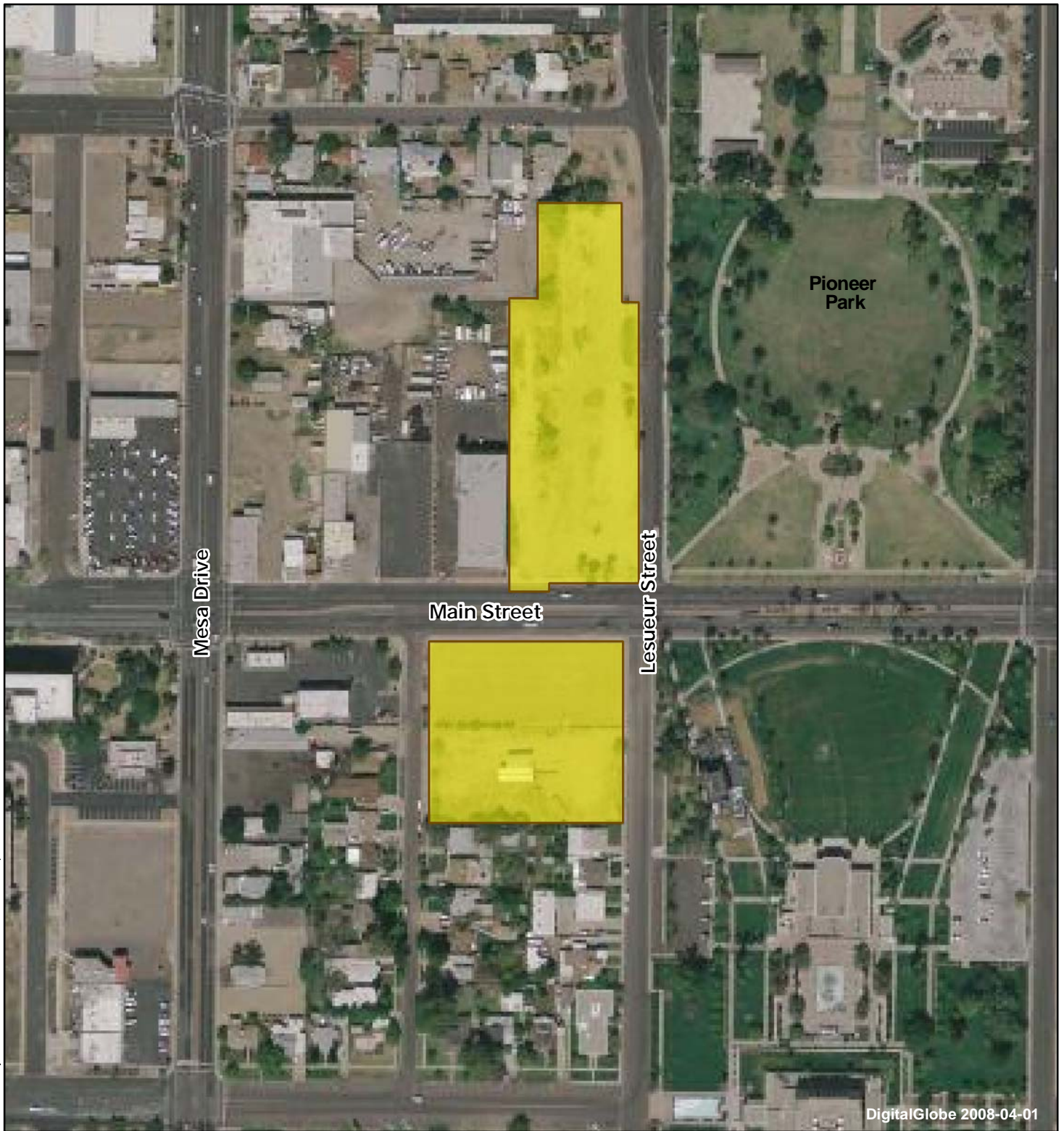


Figure 2. Survey area

 Project area



0 250 500 feet

0 50 100 200 meters



The park-and-ride lot on the northern side of Main Street had two residences in the early 1900s and then a motel and commercial building from the 1940s to the 1980s. The motel and store were razed in the early 1990s. The lot is now a vacant lot. The park-and-ride lot on the southern side had a series of 1940s-era commercial buildings facing Main Street and a single late-1940s residential house at 30 S. Lesueur Street. The buildings were recently razed. The property is now a vacant lot covered with a recently deposited layer of decomposed granite.

**Table 1. Property parcels surveyed**

	<b>Parcel Number</b>	<b>Address</b>	<b>Acres</b>
North side of Main Street	138-26-013	456 E. Main Street	1.835
	138-26-016A	None	0.168
	138-26-010A	None	0.291
	138-26-010B	None	0.341
South side of Main Street	138-27-001	135 E. Main Street	0.183
	138-27-002A	443 E. Main Street	0.064
	138-27-002B	None	0.027
	138-27-003	443 E. Main Street	0.037
	138-27-004	None	0.156
	138-27-005	None	0.181
	138-27-006	None	0.181
	138-27-007	31 S. Udall Street	0.181
	138-27-013	453 E. Main Street	0.156
	138-27-014	455 E. Main Street	0.156
	138-27-015	465 E. Main Street	0.156
	138-27-016	None	0.181
	138-27-017	None	0.181
	138-27-018	30 S. Lesueur Street	0.181

## Regulatory Context

Cultural resources generally include archaeological sites, historic buildings and structures, artifacts, and places of traditional, religious, and cultural significance. “Historic property” refers to cultural resources that are included in or eligible for inclusion in the National Register of Historic Places (National Register). The National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470), requires federal agencies to take into account the effects of their undertakings on historic properties, and afford the State Historic Preservation Office (SHPO) and other parties with a demonstrated interest a reasonable opportunity to comment on such undertakings.



Regulations for Protection of Historic Properties (36 Code of Federal Regulations Part 800) implement Section 106 of the NHPA.

These regulations define a process for responsible federal agencies to consult with the State or Tribal Historic Preservation Officer (S/THPO), Native American groups, other interested parties such as the City of Mesa Historic Preservation Office, and when necessary, the Advisory Council on Historic Preservation (ACHP), to ensure that historic properties are duly considered as federal projects are planned and implemented. FTA is the lead federal agency responsible for Section 106 compliance for Central Mesa LRT Extension Project. On behalf of FTA, METRO is coordinating the Section 106 compliance activities.

To be determined eligible for inclusion in the National Register, cultural resource properties must be important in American history, architecture, archaeology, engineering, or culture. In addition, properties must possess integrity of location, design, settings, materials, workmanship, feeling, and association, and meet at least one of four criteria:

Criterion A: be associated with events that have made a significant contribution to the broad patterns of our history

Criterion B: be associated with the lives of persons significant in our past

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

Criterion D: have yielded, or may be likely to yield, information important in prehistory or history

Properties may be of local, state, or national importance. Typically, historic properties are at least 50 years old, but younger properties may be considered for listing if they are of exceptional importance.

## **Previous Research**

### *Prehistoric Archaeology*

A cultural resource records and literature review was prepared for the Central Mesa Light Rail Transit (LRT) Extension Project by URS Corporation (Erickson et al. 2007). The Study Area for review covered the portion of Mesa, east-to-west from Sycamore Street to Power Road and north-to-south from University Drive to the Superstition Freeway (US 60). The overview provided a summary of past projects and previously documented prehistoric and historic cultural resources, including those within a 1-mile



radius of the proposed park-and-ride locations. In addition to these studies, HDR reviewed the AZSITE online database to check for any new projects that might have taken place since the time of the URS review.

The two proposed park-and-ride lots had not been previously investigated for archaeological resources. The records review indicated that seven compliance surveys have taken place within approximately 1 mile of the survey areas, but no archaeological sites had been identified (Table 2). This is probably largely due to the built-out urban nature of central Mesa, where most of the natural land surface has been covered over with pavement, buildings, and landscaping.

**Table 2. Previous projects**

<b>Project Number</b>	<b>Project Name</b>	<b>Results<sup>a</sup></b>	<b>Reference</b>
1999-587.ASM	PBNS Fiber-Optic Line Survey	No sites	Doak 1999
2000-723.ASM	AT&T NexGen/Core Project Fiber-optic Line Survey	No sites	Kearns et al. 2001
2000-751.ASM	Family Violence Communications Facility Survey	No sites	Lundin 2000
SHPO-2001-2211	Sun YMCA Telecommunications Facility Survey	No sites	Howard 2001
SHPO-2002-856	Qwest Stapley Park Telecommunications Facility Survey	No sites	Luhnow and Dobschuetz 2002
2004-357.ASM	AT&T NexGen/Core Project Fiber-optic Line Survey (four reroutes addendum)	No sites	Wheeler et al. 2004
2004-524.ASM	Kerby's Furniture Telecommunications facility survey	No sites	Jones 2004

<sup>a</sup> results within approximately 1 mile of the survey areas



Perhaps more telling with regard to the potential for archaeological deposits below the urban layers are the findings of early researchers that documented sites prior to the development of the area. The URS literature review for the project identified nine previously recorded archaeological sites within the overall project Study Area (Erickson et al. 2007). Casa de Fe, La Casa De Mesa, and Casa Alma were large Hohokam villages located within 1.5 miles of the proposed park-and-ride lots. These large Hohokam village sites were documented by early researchers in the early and mid-1900s, although substantial excavations were never carried out (Haury 1945; Midavale 1945; Schroeder 1940; Turney 1929). Nevertheless, the presence of these sites in the area is testament to the intensity of prehistoric occupation of the region, which would have included an abundance of smaller habitation and activity sites. Excavations in Mesa and throughout the Phoenix Basin have demonstrated that there is often potential for deeply buried intact prehistoric features and deposits preserved below old plow zones and layers of modern development. In addition, remnants of prehistoric Hohokam canal systems may also be preserved subsurface in the area. As documented by Turney (1929), the Hohokam Canal 11 irrigation system traversed the Study Area west of Gilbert Road.

### *Historic Archaeology*

In addition to considering the potential for prehistoric resources, HDR reviewed historical aerial photographs and Sanborn Insurance maps to determine the potential for historic-period archaeological resources within the two proposed park-and-ride lots. None of the Sanborn maps covered the area of the proposed park-and-ride lot on the southern side of Main Street. The park-and-ride lot on the northern side of Main Street parcels is covered by the 1915, 1923, and 1948 Sanborn Insurance maps. The 1915 and 1923 Sanborn maps shows two houses on the property parcels 138-26-101A and 138-26-013 (Figure 3).

The 1948 Sanborn map shows a series of “auto camp cabins” along with the earlier house in parcel 138-26-013 and small store facing Main Street in front of the house on parcel 138-26-010A. The auto camp was the Utahna Motel, which was in operation from the 1940s to the 1980s, then razed in the early 1990s (Figures 4–6). The type of business that operated in the small commercial store is unknown. The original house on 138-26-013 parcel likely served as an ad-hoc office when the motor court first opened. The motel office shown in a 1950s postcard is a brick construction with metal casement windows and, therefore, likely replaced the original house (Figure 76). The locations of both residences in the northern park-and-ride lot are not one of the known early Victorian homes of Mesa. The original residences shown on the 1915 map were likely built about that time and would have had indoor plumbing. Therefore, there is little to no potential for significant subsurface historical archaeological resources.

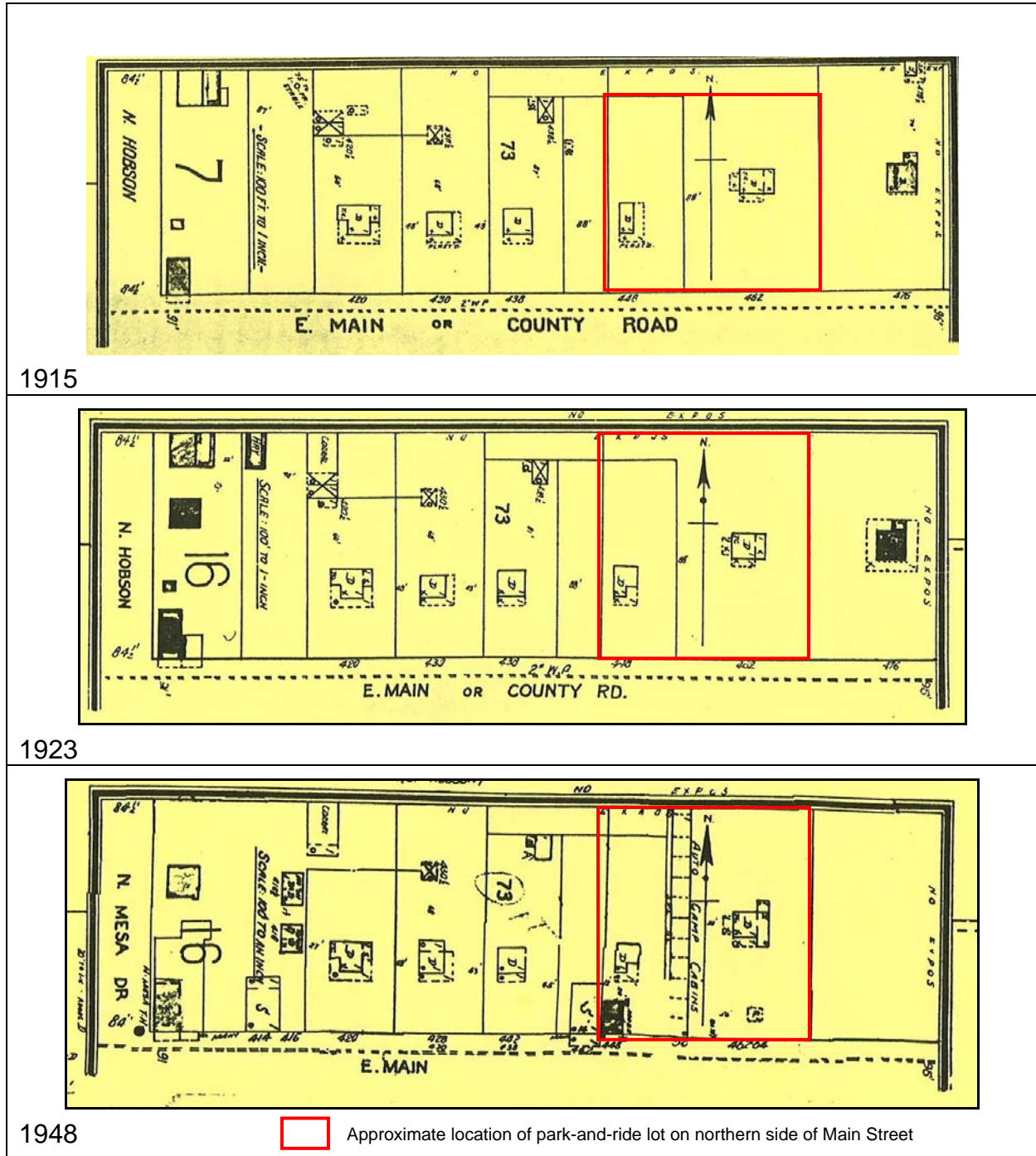


Figure 3. Sanborn maps





Figure 4. Park-and-ride lot north of Main Street, 1949 aerial photograph



Figure 5. Park-and-ride lot north of Main Street, 2001 aerial photograph



Figure 6. Park-and-ride lot north of Main Street, 2002 aerial photograph



Figure 7. Utahna Motel, 1950s postcard



There were no Sanborn maps showing the area for the park-and-ride lot on the southern side of Main Street. Historical aerial photographs, however, show a series of commercial buildings on the northern side facing Main Street and a single residence at 30 S. Lesueur Street (Figures 8 and 9). The commercial buildings and residence were built in the late 1940s. The buildings were razed in the last few years. Given the age of the buildings, there is no potential for significant subsurface historical archeological resources.

## Survey Methods

HDR conducted a full-coverage pedestrian survey of the project area with transects spaced 10 meters apart. The field crew consisted of qualified archaeologists who meet standards outlined in *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines*. Archaeological sites and isolated occurrences were defined according to site-recording criteria established by the Arizona State Museum (ASM 1998):

- a) any concentration of 30 or more artifacts or other cultural items of a single class in a discrete scatter
- b) any concentration of 20 or more artifacts of more than one artifact class in a discrete scatter
- c) one or more archaeological features in temporal association with any number of artifacts
- d) two or more temporally associated features without artifacts

Cultural manifestations not meeting these criteria were recorded as isolated occurrences unless otherwise noted at the discretion of the field supervisor. Intuitively, sites are locations with artifacts and/or features that have integrity and are potentially interpretable in terms of past human behavior and activities. In contrast, isolated occurrences are single artifacts or relatively few artifacts spatially scattered and/or disassociated manifestations lacking contextual information. All cultural resources were recorded in the field through written notes, digital photographs, and sketch maps. Site locations were recorded with Global Positioning System units and plotted on United States Geological Survey topographic quadrangles.



Figure 8. Park-and-ride lot south of Main Street, 1949 aerial photograph

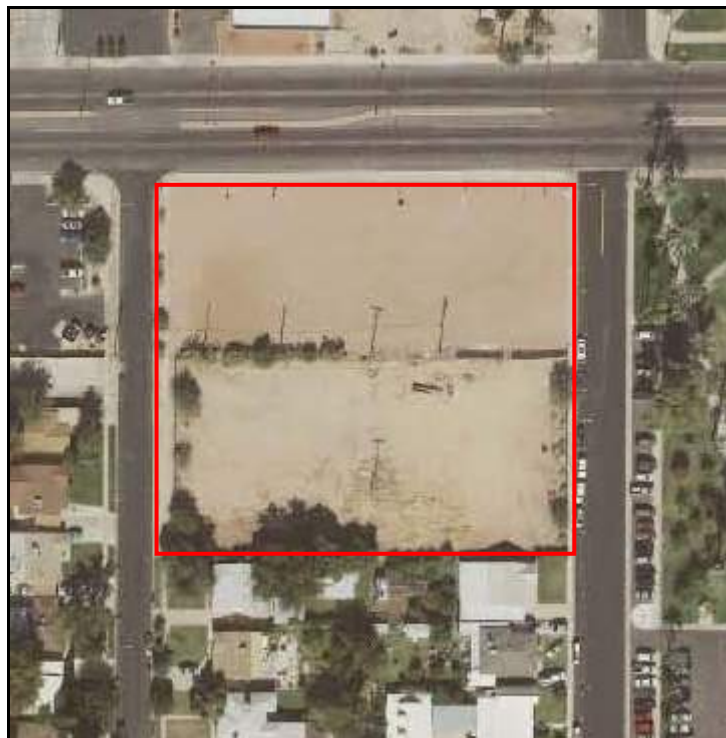


Figure 9. Park-and-ride lot south of Main Street, 2009 aerial photograph

## Survey Results

The survey was performed on October 21, 2009. No archaeological sites were observed. The proposed park-and-ride facility on the southern side of Main Street was bladed and covered with about a 1-inch-thick layer of recently deposited decomposed granite (Figure 10). The east and west ends of the southern half of the proposed park-and-ride lot were also recently landscaped with low berms and desert vegetation. The landscaping and ground cover precluded inspection of the surface, which had essentially no visibility. No artifacts or evidence of the former buildings was observed.

The proposed location for the park-and-ride lot on the northern side of Main Street was heavily disturbed by earth moving activity (Figure 11). Much of the surface was covered with gravel. Surface visibility was about 75 percent, but most of what was observed was heavily disturbed soils and fill materials. A few remnant foundations and asphalt from the 1940s Utahna Motel and commercial building were observed (Figures 12–14). A discontinuous light scatter of trash, mostly broken bottle glass, was dispersed across the lot, but none was distinctively historic. No prehistoric artifacts were observed.



Figure 10. Park-and-ride lot south of Main Street



Figure 11. Park-and-ride lot north Main Street



Figure 12. Utahna Motel, remnant concrete foundations



Figure 13. Utahna Motel, asphalt driveway and concrete pad



Figure 14. Commercial building foundation on north side of Main Street.

A cluster of palm trees at the southern end of the lot near the street corner are the only remaining recognizable features of the Utahna Motel (Figure 15). Tamarisk trees along the western side and northern end of the lot, visible in the 1949 aerial photograph, may have been associated with a residence that predated the motel.



Figure 15. Utahna Motel, palm trees at corner of Main Street and Lesueur Street

## Summary

At the request of METRO, HDR conducted a Class III archaeological survey of two proposed locations for park-and-ride facilities as part of the Central Mesa LRT Extension Project. No archaeological sites were identified during the survey. The proposed location on the southern side of Main Street was covered with a layer of decomposed granite, which precluded inspection of the ground surface. A few remnant building foundations were documented in the parcel on the northern side of Main Street. The foundations are not historically significant resources and are recommended as not eligible for listing on the National Register. Given the results of the survey, it is recommended that a finding of “no historic properties affected” would be appropriate for the development of park-and-ride facilities at either location.





However, should unanticipated buried cultural resources be discovered during construction, activities should cease immediately until a qualified archaeologist can be contacted to make an assessment for the proper treatment of those resources. If human remains or associated funerary objects are discovered, the Arizona State Museum must be notified as required by Arizona Revised Statutes Section 41-865.



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