



# South Mountain Transportation Corridor Study

Citizens Advisory Team  
Technical Report Summary

## Draft Cultural Resources

### ***What are cultural resources?***

Cultural resources are the prehistoric and historic sites, structures, places, landscapes, and objects that are important to a culture or community for historic, scientific, traditional, religious, or other reasons. They are a non-renewable resource that link us with our past and define our heritage and social identity at the local, state, and national levels. Examples of cultural resources identified in the South Mountain Transportation Corridor include prehistoric archaeological sites, historic houses and farms, railroads, and irrigation canals.

Cultural resources also include traditional cultural properties (TCP). TCPs are places considered important for their association with cultural practices or beliefs of a living community that are rooted in that community's history, and are important in maintaining the continuing cultural identity of the community. Often, TCPs are places on the landscape that are important culturally, but may not be distinguished by physical manifestations resulting from human activity. For example, TCPs could be: a location associated with the traditional beliefs of a Native American group about its origins or its cultural history, or a location where Native American religious practitioners have historically gone, and are known to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice.

### ***Why study cultural resources in the Environmental Impact Statement (EIS)?***

Cultural resources hold an intrinsic value in that they provide us with a direct link to our past, help us define and understand our heritage, and afford us an opportunity to study and learn how and why our culture and society has developed over time. Both the federal government and the State of Arizona acknowledge the importance of Arizona's cultural heritage to its citizens and recognize these links to our past should be preserved for future generations. Where preservation is not possible, the mitigation of effects to these resources is warranted.

The South Mountain Transportation Corridor study is a federal undertaking requiring regulatory compliance with the National Historic Preservation Act (NHPA). Section 106 of the NHPA requires federal agencies to take into account the effects of their activities and programs on cultural resources eligible for the National Register of Historic Places (NRHP). Regulations for Protection of Historic Properties, which primarily implement Section 106, were most recently amended in 2004. These regulations define a process for responsible federal agencies to consult with the State or Tribal Historic Preservation Officers (S/THPO), Native American groups, other interested parties, and, when necessary, the Advisory Council on Historic Preservation in Washington D.C. to ensure cultural resources are duly considered as federal projects are planned and implemented.

To be determined eligible for the NRHP, properties must be important in American history, architecture, archaeology, engineering, or culture. They also must possess integrity of location, design, settings, materials, workmanship, feeling, and association, and must meet at least one of the following four criteria:

- a) Are associated with events that have made a significant contribution to the broad patterns of our history;



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- b) Are associated with the lives of persons significant in our past;
- 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;
- d) Have yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

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.

### ***What kind of impacts would occur from construction?***

Direct impacts on cultural resources from construction would result in their partial or total destruction. Cultural resources such as archaeological sites and historic buildings are non-renewable resources that once destroyed are lost forever. By law, adverse impacts on cultural resources that are determined eligible to the NRHP must be mitigated.

Direct impacts from construction on cultural resources deemed sacred by Native American groups or others would result in religious desecration. A potential indirect impact is the loss of access by Native American groups to culturally important places as a result of construction restrictions.

### ***How do the alternatives differ in construction-related impacts?***

All action alternatives would impact prehistoric and historic cultural resources as shown in the tables. All but one of the prehistoric sites are considered eligible to the NRHP and would require mitigation if affected by construction. Although the E1 Alternative has the most prehistoric sites, they are typically small sites representing a limited set of activities, such as rock art and resource collecting areas. In contrast, while the Western Section Alternatives would affect fewer sites, they include the remains of large prehistoric villages with extensive archaeological deposits, some measuring over 0.5 mile in diameter. Similarly, all the alternatives would affect historic sites. Most of the historic sites are not eligible for the National Register. All the alternatives would cross the historic South Pacific Railroad which is NRHP-eligible. Similarly, all the alternatives would intersect the Roosevelt Canal. The segments of the Roosevelt Canal that would be crossed by the W55 and W71 Alternatives are considered eligible as they represent the original construction, whereas the segments that would intersect the W101 Alternatives are not eligible because they are not historic but rather modern realignments.



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Cultural Resources (Prehistoric Sites)			
Alternative/Option	Number of Prehistoric Sites	Number of Prehistoric Sites Eligible for the National Register	Number of Prehistoric Sites Ineligible for the National Register
<b>Western Section Alternatives</b>			
W55	6	6	
W71	4	4	
W101W	3	3	
W101W99	3	3	
W101C	2	2	
W101E	2	2	
<b>Eastern Section Alternative</b>			
E1	7	6	1

Cultural Resources (Historic Sites)			
Alignment/Option	Site Type	Number of Sites Eligible for the National Register	Number of Sites Ineligible for the National Register
<b>Western Section Alternatives</b>			
W55	Canal	1	
	Farm Property		1
	Commercial Property		2
	Railroad	1	
	Highway		1
W71	Canal	1	
	Farm Property		3
	Railroad	1	
	Highway		1
W101W	Canal		1
	Farm Property		4
	Railroad	1	
	Highway		1
W101W99	Canal	1	1
	Farm Property		4
	Railroad	1	



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Cultural Resources (Historic Sites)			
Alignment/Option	Site Type	Number of Sites Eligible for the National Register	Number of Sites Ineligible for the National Register
	Highway		1
	Canal		1
W101C	Farm Property		2
	Railroad	1	
	Highway		1
	Canal		1
W101E	Farm Property		3
	Railroad	1	
	Highway		1
<b>Eastern Section Alternative</b>			
E1	Artifact Scatter		1

### ***What kind of freeway operational impacts (post-construction) would occur?***

The continued operation of the freeway could interfere with ceremonial practices and religious activities of some Native American groups.

### ***How do the alternatives differ in operational-related impacts?***

Once constructed, the Western Section action alternatives should not result in operational impacts on cultural resources. Operational impacts from the Eastern Section action alternative could affect traditional activities of Native American groups.

### ***What if the project was not constructed?***

Due to the urban growth of the Phoenix metropolitan area as it is currently planned, it is likely that cultural resources in areas zoned for development, such as in agricultural fields, would eventually be disturbed. Furthermore, if these lands are developed by the private sector, there is no protection afforded in the form of mitigation. Cultural resources in protected areas, such as the South Mountain Park/Preserve, would be preserved from construction.

### ***Are there any specific and/or unique impacts from the build alternatives?***

Archaeological sites and places considered culturally important by Native American groups would be affected. While still in the process of determining eligibility, it appears likely South Mountain will be determined through the Section 106 consultation process to be NRHP-eligible as a TCP. The mountains appear to have exceptional importance to the Gila River Indian Community (GRIC). Further, the South Mountain Park/Preserve appears to be NRHP-eligible as a historic property for its National Park Service master plan design that set historical precedent in planning natural parks and its associations with Civilian Conservation Corps New Deal programs in Phoenix during the Depression era.



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### ***Are there things that could be done to reduce or avoid impacts?***

Much has already been undertaken to avoid direct impacts on cultural resource sites throughout the Study Area. For example, adjustments to the W55, W71, and W101 alternatives have been made to avoid such resources. However, it appears that not all cultural sites would be avoided by the action alternatives. There are a range of activities ADOT could undertake to reduce impacts during construction and operation of the freeway. Below are some measures ADOT could undertake. Measures will be presented in the Draft EIS and finalized during the final design process after the EIS process is completed.

The degree of impact on these sites could be reduced by minimizing the construction footprint to the greatest extent possible. Impacts on historic buildings could be reduced through relocation of the structures. Impacts on cultural resources in the construction footprint that could not be relocated could be reduced through mitigation, such as archaeological excavations and architectural/engineering documentation prior to their destruction.

### ***If cultural resources cannot be avoided, what is the process for mitigating the adverse impacts?***

Specific mitigation strategies will vary depending on the type cultural resource being treated. For prehistoric sites, work plan and research designs are developed that describe the methods and excavation strategy that will be used. In addition, a burial agreement with Arizona State Museum and concerned Native American tribes is developed that outlines the procedures for proper removal, treatment, and reburial of any human remains and associated funerary objects that might be encountered. The mitigation field work is typically performed in two phases. The first phase involves testing a sample of the site to assess the type, condition, and distribution of features present below the ground surface, and in turn, to determine if there is a need for a more extensive program of data recovery excavations. This is typically accomplished in the Phoenix area by excavating a series of backhoe trenches sometimes coupled with some limited test excavation units (see Photo 1). If warranted, the second phase involves data recovery excavations where large excavation units are opened up over targeted features (see Photo 2). Sediments overlaying features are sometimes stripped away mechanically. The features are then excavated by hand in horizontal levels.

Mitigation strategies for historic cultural resources can be varied. For historic artifact deposits, such as an historic trash dump, where the cultural material is below ground, a phased mitigation strategy is used similar to that of prehistoric sites. Mitigation for buildings typically involves a combination of architectural assessments, historical research, and archival quality photographic documentation. Mitigation for historic structures, such as canals and bridges, involve a similar approach, usually with the preparation of an Historic American Engineering Record (HEAR) which follows the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation.



**Photo 1 – Phase I Archaeological Testing**



**Photo 2 – Phase II Data Recovery Excavation**



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### ***Are the conclusions presented in this summary final?***

The conclusions in this summary are not final. An assessment of TCPs within the Study Area is on-going and could result in the identification of additional cultural resources eligible for the NRHP. In addition, many of the agricultural fields in the alternative footprints have been in production with crops such as alfalfa, and have therefore prevented the inspection of the ground surface for cultural resources. Future cultural resources surveys of these parcels could result in the identification of additional sites.

In situations such as this, where the effects of a project to cultural resources cannot be fully determined prior to the approval of the undertaking, a Programmatic Agreement (PA) is prepared that specifies the steps and procedures that will be used to address the effects as they become known. On behalf of FHWA, ADOT is in the process of developing a PA for the South Mountain Freeway project. Participating agencies will include FHWA, ADOT, the Arizona State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation, and any Native American tribes or other interested Federal, State, or Municipal agencies and that choose to participate. To date, several draft PA's have been circulated to the interested parties for comment and it is anticipated that the Final PA will be sent out for signature in February 2006.

### ***As a member of the Citizens Advisory Team, how can you review the entire technical report?***

The cultural resources technical reports are confidential due to the cultural importance and sensitivity of their content. The reports are only available for review with explicit permission from ADOT's Historic Preservation Team.