

APRIL 26, 2010

Northern Parkway

FINAL ENVIRONMENTAL ASSESSMENT

Federal Project No. STP-MMA-0(034)N
TRACS No. 0000 MA MMA SS593 01C



Federal Highway
Administration



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ENVIRONMENTAL ASSESSMENT
NORTHERN PARKWAY**

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April 26, 2010

ARIZONA DEPARTMENT OF TRANSPORTATION
Intermodal Transportation Division
Environmental Planning Group
1611 West Jackson Street
Phoenix, AZ 85007

**FINAL
ENVIRONMENTAL ASSESSMENT**

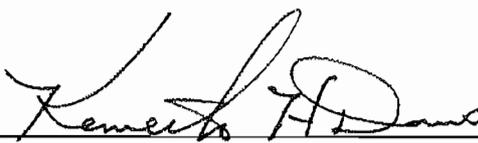
for

Northern Parkway
Maricopa County, Arizona

**STP-MMA-0(034)N
0000 MA MMA SS593 01C**

April 26, 2010

Approved by:  Date: May 5, 2010
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This Environmental Assessment has been prepared in accordance with provisions and requirements of Chapter 1, Title 23 USC, 23 CFR Part 771 relating to the implementation of the National Environmental Policy Act of 1969.

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LIST OF ACRONYMS AND ABBREVIATIONS

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
AASHTO	American Association for State Highway and Transportation Officials
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
AFB	Air Force Base
<i>ALCP</i>	<i>Arterial Life Cycle Program</i>
amsl	above mean sea level
APS	Arizona Public Service Company
BNSF	Burlington Northern Santa Fe Railway
CACTI	Citizens Advisory Committee for Transportation Issues
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CORRACTS	Corrective Action Sites
dBA	A-weighted decibels
DCR	Design Concept Report
EA	Environmental Assessment
EDR	Environmental Data Resources, Inc.
EPA	U.S. Environmental Protection Agency
EPNG	El Paso Natural Gas
ERNS	Emergency Response Notification System
FCDMC	Flood Control District of Maricopa County
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act
Grand Avenue	US 60
I-10	Interstate 10
L_{eq}	equivalent sound level
$L_{eq}(h)$	one-hour L_{eq}
LOS	Level of Service
LUST	leaking underground storage tank

MAG	Maricopa Association of Governments
MCDOT	Maricopa County Department of Transportation
MSATs	Mobile Source Air Toxics
mph	miles per hour
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NAP	Noise Abatement Policy
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
PM ₁₀	particulate matter equal to or smaller than 10 microns in diameter
PM _{2.5}	particulate matter equal to or smaller than 2.5 microns in diameter
ppm	parts per million
RAZ	Regional Analysis Zone
RCRA	Resource Conservation and Recovery Act
RTP	Regional Transportation Plan
SHWS	State Hazardous Waste Sites
SO ₂	sulfur dioxide
<i>SPUI</i>	<i>single point urban interchange</i>
SR	State Route
SRP	Salt River Project
US	United States
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
U.S.C.	U.S. Code
USGS	U.S. Geological Survey
UST	underground storage tank
VMT	vehicle miles traveled
vpd	vehicles per day
WQARF	Water Quality Assurance Revolving Fund

PART 1. INTRODUCTION

The Draft Environmental Assessment (EA) for Northern Parkway between Sarival Avenue and US 60 (Grand Avenue) was approved by the Arizona Department of Transportation (ADOT) on August 27, 2009, and by the Federal Highway Administration (FHWA) on September 4, 2009. The document evaluated the potential impacts to the human and natural environments that may result from implementation of proposed improvements for Northern Parkway between Sarival Avenue and US 60 (Grand Avenue).

Agencies and the public were invited to review and comment on the Draft EA for a period of 30 days, beginning on October 1, 2009. During this review and comment period, a public hearing for the project was held on October 14, 2009, at Raymond S. Kellis High School at 8990 West Orangewood Avenue, Glendale, Arizona.

Copies of the Draft EA were made available for review at the Glendale Public Library – Velma Teague Branch, Peoria Public Library – Main Branch, Youngtown Library, and Maricopa County Library – El Mirage Branch. The document was also posted on the project web site at www.northernparkway-info.com.

Comments received at the public hearing and during the public comment period are addressed in this Final EA. Comments were received through letters, e-mails, comment sheets, and on the project web site. Public hearing attendees also made comments that were transcribed by a court reporter. All the comments received, and responses to those comments, are included in Attachment 2.

This Final EA responds to all comments received during the comment period and provides additions and changes to the Draft EA, where necessary. This document should be used in conjunction with the Draft EA. It includes the complete list of mitigation measures, changes to the Draft EA (known as errata), public hearing information and transcripts (Attachment 1), the public comment log with responses (Attachment 2), the final Programmatic Agreement for cultural resources (Attachment 3), and copies of agency letters received during the public comment period (Attachment 4). With the completion of this Final EA and the issuance of a Finding of No Significant Impact by FHWA, the National Environmental Policy Act requirements have been met for this project.

PART 2. MITIGATION MEASURES

Mitigation measures have been defined to avoid or minimize the environmental impacts of the proposed project. These mitigation measures will not change without prior written approval from the Federal Highway Administration.

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION DESIGN RESPONSIBILITIES

1. The Maricopa Department of Transportation will coordinate and work with local jurisdictions (the cities of Glendale, El Mirage, and Peoria) regarding comprehensive city plans that would accommodate growth as a result of a new facility, along with future planned projects. (Refer to pages 57 and 68 of the Draft EA.)
2. During the design phase, the Maricopa County Department of Transportation will ensure that landscape and aesthetic treatment plans would be reviewed and approved by the City of Glendale, City of El Mirage, City of Peoria, and the Arizona Department of Transportation. (Refer to page 84 of the Draft EA.)
3. The Maricopa County Department of Transportation will ensure that relocation of residents and businesses would comply with the terms of the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. This would provide land owners the fair market value and equal treatment for all properties to be acquired for a new facility and relocation assistance for eligible residents and business owners. (Refer to pages 57 and 72 of the Draft EA.)
4. The Maricopa County Department of Transportation will ensure that noise abatement measures that may be required for the selected alternative are reasonable and feasible, in accordance with Federal Highway Administration regulations and the current Arizona Department of Transportation's Noise Abatement Policy. Actual types and locations of noise abatement mitigation will be analyzed in more detail during subsequent design phases for the selected alternative. (Refer to page 90 of the Draft EA.)
5. The Maricopa County Department of Transportation will ensure that detention basins are designed and installed to mitigate any increases in peak runoff rates. (Refer to page 121 of the Draft EA.)

6. The Maricopa County Department of Transportation will consult with the Federal Emergency Management Agency and the U.S. Army Corps of Engineers to identify and mitigate potential effects on floodplains or waters of the United States. (Refer to page 121 of the Draft EA.)
7. The Maricopa County Department of Transportation will design the new facility to minimize floodplain encroachments and ensure that the flood-carrying capacity of drainages that cross the study area would not be impaired. (Refer to page 121 of the Draft EA.)
8. During final design, the Maricopa County Department of Transportation will coordinate with the U.S. Army Corps of Engineers to complete the jurisdictional delineation to identify permit requirements formally under Sections 401 and 404 of the Clean Water Act and mitigate potential impacts from a new facility. (Refer to page 122 of the Draft EA.)
9. To lessen or avoid potential effects on wildlife in the study area, the Maricopa County Department of Transportation will ensure that removal or disturbance of vegetation would be minimized through project design as practicable. (Refer to page 130 of the Draft EA.)
10. During final design, the Maricopa County Department of Transportation will coordinate with the Federal Highway Administration to determine if a “no effect” is still warranted or if there needs to be consultation with the U.S. Fish and Wildlife Service and obtain a list of threatened, endangered, proposed, and candidate species. The Arizona Game and Fish Department’s Heritage Database Management System list of special status species will be reviewed by a qualified biologist to determine if any new species have been listed or any changes in listing status have occurred. The biological evaluation would be updated to reflect any changes, if needed. The amended Biological Evaluation would be submitted to the Arizona Department of Transportation for review, approval, and coordination with the Federal Highway Administration. (Refer to page 130 of the Draft EA.)
11. During final design, the Maricopa County Department of Transportation will contact the Hazardous Materials Coordinator of the Arizona Department of Transportation’s Environmental Planning Group (602.712.7767) to determine the need for additional site assessment. The Maricopa County Department of Transportation will make reasonable effort to locate and identify potentially hazardous materials and/or underground storage tanks within the project area prior to construction. (Refer to page 138 of the Draft EA.)

12. The Maricopa County Department of Transportation will coordinate with the City of Glendale and City of Peoria Parks and Recreation staff to ensure that the Northern Parkway improvements accommodate the proposed park and trail improvements at the New River and Northern Horizon Park.
13. During final design, the Maricopa County Department of Transportation will contact adjacent property owners where farming is occurring and coordinate relocation and reconfiguration of existing irrigation facilities.
14. The Maricopa County Department of Transportation will ensure that any activities related to wells such as installing a new well or abandoning a well would comply with Arizona Department of Water Resources regulations. Domestic water well relocation would also require plans review and approval from Maricopa County Environmental Services Department.
15. Relocation of sanitary sewer facilities including lift stations will require plan review and approval from the Maricopa County Environmental Services Department.
16. Any impacts to groundwater recharge facilities identified during final design would require coordination with the Arizona Department of Water Resources and possibly an Aquifer Protection Permit.

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION CONSTRUCTION RESPONSIBILITIES

1. Prior to construction, the Maricopa County Department of Transportation will coordinate relocation of affected utilities with utility purveyors as necessary. (Refer to page 58 of the Draft EA.)
2. The Maricopa County Department of Transportation will coordinate with local jurisdictions (e.g., City of Glendale, City of El Mirage, and City of Peoria) to develop specific plans that would accommodate emergency service vehicles and respond to public safety concerns during the construction and operations phases. (Refer to pages 56 and 72 of the Draft EA.)
3. The Maricopa County Department of Transportation will ensure that local agencies and jurisdictions (e.g., City of Glendale, City of El Mirage, and City of Peoria) would notify the public of the project's status through meetings and newsletters. Materials will also be produced in Spanish for the Spanish-speaking population along these areas. (Refer to pages 72 and 68 of the Draft EA.)

4. The Maricopa County Department of Transportation will ensure that there would be access to pedestrian and transit routes at all times for transit-dependent individuals. (Refer to pages 56 and 72 of the Draft EA.)
5. This project is subject to the Arizona Pollutant Discharge Elimination System. The Maricopa County Department of Transportation will direct its contractor to comply with general permit requirements for construction sites under the Arizona Department of Environmental Quality, the Arizona Pollutant Discharge Elimination System Construction General Permit. In addition, the Maricopa County Department of Transportation and the Contractor will submit the Notice of Intent and the Notice of Termination to the Arizona Department of Environmental Quality. (Refer to page 122 of the Draft EA.)
6. The Maricopa County Department of Transportation will ensure that “[t]he Contractor shall take sufficient precautions, considering various conditions, to prevent pollution to streams, lakes, and reservoirs with fuels, oils, bitumens, calcium chloride, fresh Portland cement, raw sewage, muddy water, chemicals, or other harmful materials. None of these materials shall be discharged into any channels leading to such streams, lakes, or reservoirs.” (Refer to page 123 of the Draft EA.)
7. The Maricopa County Department of Transportation will apply for and receive a Section 401/404 permit from the U.S. Army Corps of Engineers. The Maricopa County Department of Transportation will ensure that no work would occur within jurisdictional waters until the Section 401/404 permit is obtained. (Refer to page 121 of the Draft EA.)
8. The Maricopa County Department of Transportation will ensure that all necessary Federal, State, and local permits are obtained in accordance with applicable laws and regulations.

CONTRACTOR RESPONSIBILITIES

1. The Maricopa County Department of Transportation’s Contractor will ensure that traffic access continues to be provided throughout the construction phase of the new facility. Traffic control will be in accordance with the most current *Manual on Uniform Traffic Control Devices for Streets and Highways*, published by the Federal Highway Administration, including any revisions or additions, and/or associated provisions in the project plans, as determined by Arizona Department of Transportation’s Traffic Design Section during design. (Refer to pages 56, 71, and 68 of the Draft EA.)
2. The Maricopa County Department of Transportation’s Contractor will provide notice to residences and businesses adjacent to the project at least two weeks prior to construction.

The notice would provide information about construction activities and when those would occur. Notice distribution will occur via letters, door hangers, etc. Materials will also be produced in Spanish for the Spanish-speaking population along these areas. (Refer to pages 56, 71, and 68 of the Draft EA.)

3. The Maricopa County Department of Transportation's Contractor will provide elderly and disabled populations with contact information for demand-responsive transit services or other assistance. (Refer to page 72 of the Draft EA.)
4. The Maricopa County Department of Transportation's Contractor will ensure that construction noise would be controlled in accordance with the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction*, Section 104.08 (2008), special provisions, and local rules or ordinances. (Refer to page 90 of the Draft EA.)
5. The Maricopa County Department of Transportation's Contractor will ensure that each internal combustion engine used for any purpose on the project, or related to the project, would be equipped with a muffler recommended by the manufacturer. (Refer to page 90 of the Draft EA.)
6. The Maricopa County Department of Transportation's Contractor will ensure that noise abatement measures are reasonable and feasible to be recommended for implementation in accordance with the Federal Highway Administration's regulations and Arizona Department of Transportation's Noise Abatement Policy. (Refer to page 90 of the Draft EA.)
7. The Maricopa County Department of Transportation's Contractor will take precautions to prevent materials from being discharged into washes and channels to prevent construction materials from entering the Agua Fria River and New River in accordance with necessary permits under the Clean Water Act. (Refer to page 121 of the Draft EA.)
8. The Maricopa County Department of Transportation's Contractor will follow all requirements issued in the U.S. Army Corps of Engineers Section 404 and Section 401 permits. (Refer to pages 121 and 122 of the Draft EA.)
9. Because more than 1 acre would be disturbed during construction, compliance with the Arizona Pollutant Discharge Elimination System requirements administered by the Arizona Department of Environmental Quality is necessary. The Contractor shall take all necessary measures to assure compliance of employees and subcontractors with the Arizona Pollutant

Discharge Elimination System Construction General Permit for Arizona as well as other applicable Federal, State, and local laws, ordinances, statutes, rules, and regulations pertaining to stormwater discharge and air, groundwater, and surface water quality. As the permittee, the Contractor is responsible for preparing in a manner acceptable to the Arizona Department of Environmental Quality and the Environmental Protection Agency all documents required by regulation, which shall include but not necessarily be limited to the following:

- Notice of Intent (NOI)
- Stormwater Pollution Prevention Plan (SWPPP)
- Notice of Termination (NOT)

Preliminary copies of the Notice of Intent and the Stormwater Pollution Prevention Plan shall be submitted to Maricopa County Department of Transportation during the pre-construction conference and shall be subject to review by the Maricopa County Department of Transportation prior to implementation. Copies will be provided also to the Cities of Glendale, Peoria, and El Mirage.

The Contractor shall ensure the completed and duly signed Notice of Intent form(s) are submitted in a timely manner to prevent a delay to project construction. The Arizona Pollutant Discharge Elimination System form shall be submitted to the Arizona Department of Environmental Quality Phoenix, Arizona, office by certified mail or hand delivered to the address below:

Arizona Department of Environmental Quality
Surface Water Section/Stormwater & General Permits Unit
1110 West Washington, 5415A-1
Phoenix, AZ 85007

(Refer to page 122 of the Draft EA.)

10. The Maricopa County Department of Transportation's Contractor will ensure that all disturbed soils that would not be landscaped or otherwise permanently stabilized by construction would be seeded using species native to the project vicinity. (Refer to page 130 of the Draft EA.)

11. If protected native plants would be impacted by project activities, the Maricopa County Department of Transportation's Contractor would notify the Arizona Department of Agriculture at least 60 days prior to the start of construction so that the Arizona Department of Agriculture could determine the disposition of these plants. (Refer to page 130 of the Draft EA.)
12. The Maricopa County Department of Transportation's Contractor will prevent the introduction of invasive species seed and will ensure that all construction equipment would be washed at the Contractor's storage facility prior to entering the construction site. (Refer to page 130 of the Draft EA.)
13. To prevent the seeds of invasive species from leaving the site, the Maricopa County Department of Transportation's Contractor will inspect all construction equipment and remove all attached plant/vegetation debris and soil/mud prior to the equipment leaving the construction site. (Refer to page 130 of the Draft EA.)
14. The Maricopa County Department of Transportation's Contractor will suppress dust by stabilizing (e.g., water, chemical dust suppressants) all unpaved dust-producing surfaces to reduce dust entering ambient air and reduce short-term effects associated with an increase in particulate matter attributable to construction activity. (Refer to page 107 of the Draft EA.)
15. The Maricopa County Department of Transportation's Contractor will cover dump trucks transporting materials that might become airborne during transit. After dumping of such materials, the Contractor would either cover the truck bed or take measures to remove all residues that might become airborne (MCDOT Supplement to MAG Specifications Section 107.6.3). (Refer to page 107 of the Draft EA.)
16. The Maricopa County Department of Transportation's Contractor will minimize offsite tracking of sediments by washing, brushing, or blowing off wheels of construction vehicles, or any other method deemed appropriate by the Contractor, before those vehicles exit the construction site (MCDOT Supplement to MAG Specifications Section 107.6.3). (Refer to page 107 of the Draft EA.)
17. In the event hazardous material is found by the Maricopa County Department of Transportation's Contractor or subcontractors of any tier, during the performance of the work that is suspected to be hazardous, the Contractor would stop work at the affected area and remove all personnel from that area as well as barricade the area and provide traffic

control to prohibit unauthorized entry. The Contractor would immediately notify the Project Engineer to determine resolution of the matter. (Refer to page 139 of the Draft EA.)

18. The Maricopa County Department of Transportation's Contractor will dispose of construction debris on an as-needed basis to keep the site safe for the Contractor's personnel and the general public. Construction debris will be disposed of only in a manner or in a location approved by the Project Engineer. The Contractor would be responsible for the safe and clean condition of the site during the entire period the site is under the Contractor's care, custody, and control. (Refer to page 138 of the Draft EA.)
19. The Maricopa County Department of Transportation's Contractor will ensure that farm irrigation facilities remain operational during construction including construction of temporary irrigation facilities as required.
20. During construction, the Maricopa County Department of Transportation's Contractor will minimize land disturbance, stabilize the surface of soil piles, and create wind breaks to reduce disturbance of particulate matter including emissions off the construction site caused by strong winds.
21. When construction is complete, the Maricopa County Department of Transportation's Contractor will remove all unused material and soil piles via covered trucks.
22. The Maricopa County Department of Transportation's Contractor will ensure that no work would occur within the jurisdictional waters until the Section 401/404 permit is obtained.
23. The Maricopa County Department of Transportation's Contractor will ensure that no staging work during bridge construction over the New River would occur in the floodplain south of the proposed right-of-way. (Refer to pages 123 and 131 of the Draft EA.)

STANDARD SPECIFICATIONS INCLUDED AS MITIGATION MEASURES

1. The Maricopa County Department of Transportation will ensure that the project is designed according to Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction* (2008), Section 104, "Scope of Work," Subsection 09, "Prevention of Landscape Defacement: Protection of Streams, Lakes, and Reservoirs," which states "the Contractor shall give special attention to the effect of its operations on the landscape and shall take special care to maintain natural surroundings undamaged." (Refer to page 84 of the Draft EA.)

2. To minimize emissions from idling and slow-moving traffic in the construction zones, traffic control will be in accordance with the most current *Manual on Uniform Traffic Control Devices for Streets and Highways*, published by the Federal Highway Administration, including any revisions or additions, and/or associated provisions in the project plans, as determined by the Maricopa County Department of Transportation's Traffic Design Section during design. (Refer to page 106 of the Draft EA.)
3. According to the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction* (2008 edition), Section 107, "Legal Relations and Responsibility to Public," Subsection 05, "Archaeological Features," "[w]hen previously unidentified archaeological, historical, or paleontological features are encountered or discovered during any activity related to the construction of the project, the Contractor shall stop work immediately at that location and shall take all reasonable steps to secure the preservation of those resources and notify the Engineer." The responsible Engineer will, in turn, notify the Arizona Department of Transportation's Environmental Planning Group Historic Preservation Team (602.712.7767) to evaluate the significance of the resources.
4. According to the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction* (2008 edition), Section 104, "Scope of Work," Subsection 08, "Prevention of Air and Noise Pollution," "[t]he Contractor shall control, reduce, remove or prevent air pollution in all its forms, including air contaminants, in the performance of the Contractor's work." The Contractor will comply with all air pollution ordinances, regulations, orders, etc., during construction. All dust-producing surfaces will be watered or otherwise stabilized to reduce short-term impacts associated with an increase in particulate matter attributable to construction activity. (Refer to pages 107 and 106 of the Draft EA.)
5. The Maricopa County Department of Transportation would ensure compliance with the Maricopa County Department of Transportation Supplement to the Maricopa Association of Governments' Uniform Standard Specifications and Details for Public Works Construction, January 2008, regarding Section 107.2.1 Arizona Pollutant Discharge Elimination System Construction General Permit Requirements. (Refer to page 123 of the Draft EA.)
6. According to the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction* (2008 edition), Section 107, "Legal Relations and Responsibility to Public," Subsection 07, "Sanitary, Health, and Safety Provisions," should the Contractor encounter potential hazardous or contaminated material, the Contractor would immediately

stop work and remove workers, barricade the area, provide traffic controls and notify the Project Engineer. The Project Engineer would arrange for proper assessment, treatment, or disposal of those materials. Such locations would be investigated and proper action implemented prior to the continuation of work in that location. (Refer to page 138 of the Draft EA.)

7. According to the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction* (2008 edition), Section 1001, "Material Sources," Subsection 2, "General," any material sources required for this project outside the project area would be examined for environmental effects, by the Contractor, prior to use. (Refer to page 139 of the Draft EA.)
8. According to the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction* (2008 edition), Section 107, "Legal Relations and Responsibility to Public," Subsection 11, "Protection and Restoration of Property and Landscape," "[m]aterials removed during construction operations such as trees, stumps, building materials, irrigation and drainage structures, broken concrete, and other similar materials shall not be dumped on either private or public property unless the Contractor has obtained written permission from the owner or public agency with jurisdiction over the land. Written permission would not be required, however, when materials are disposed of at an operating, public dumping ground." The Contractor will dispose of excess waste material and construction debris at a municipal landfill approved under Title D of the Resource Conservation and Recovery Act, construction debris landfill approved under the Arizona Revised Statutes Title 49, Section 241, Permit Required to Discharge, administered by the Arizona Department of Environmental Quality, an inert landfill, or at another approved site. (Refer to page 139 of the Draft EA.)
9. The Maricopa County Department of Transportation's Contractor will comply with all air pollution ordinances, regulations, orders, etc., during construction including *Maricopa County Air Quality Rules 310 and 310.01 – Fugitive Dust Sources*, Arizona Administrative Code R18-2-604 through 607, Arizona Administrative Code R18-2-804, and any required air quality permits. (Refer to page 107 of the Draft EA.)

PART 3. ERRATA FROM DRAFT ENVIRONMENTAL ASSESSMENT

This section contains changes to the Draft EA that resulted from public and agency comments. The changes are presented below with references to the page numbers and, where applicable, the paragraphs where they occurred in the Draft EA in brackets. Draft EA text deletions are shown as strikethrough text (~~strikethrough~~), while additions are shown in blue italics (*italics*). Where applicable, the entire paragraph from the Draft EA has been included to provide the context for the changes.

Final mitigation measures are included in Part 2 of this Final EA. They supersede any mitigation measures listed in the Draft EA.

Some universal changes to the Draft EA text were made and are not shown in these errata. References to “Preferred Alternative” and “Proposed Alternative” are now “Selected Alternative.” References to “would” with regard to the Selected Alternative are now “will.” References to the “proposed project” or “proposed improvements” are now “project” or “improvements.” References to the project length of “12 miles” are now “12.5 miles.”

Section 1.3, Background

[Page 4 of the Draft EA, third paragraph]

To study the “super street” concept, a management committee and a technical advisory committee were formed ~~of all involved governmental jurisdictions~~*from the project partners and stakeholders including*: the City of Glendale, City of Peoria, City of El Mirage, *MCDOT*, Arizona Department of Transportation (ADOT), ~~MCDOT~~, Flood Control District of Maricopa County (FCDMC), MAG, and Luke AFB.

Section 1.3.1, Background of the Alternatives

[Pages 4 and 5 of the Draft EA]

CACTI identified the general vicinity of Northern Avenue for consideration as the location of the new “super street” facility for the following reasons:

- Northern Avenue and Camelback Road are the only continuous west-east arterials that extend from Grand Avenue to SR 303L that are within Glendale.
- Northern Avenue is centrally located between I-10 and Bell Road and has fewer developed properties abutting it than Camelback Road.
- Northern Avenue is a boundary street between Glendale and Peoria and between Glendale and El Mirage.

- ~~Glendale Avenue ends at Litchfield Road due to Luke AFB and does not continue through to SR 303L.~~
- ~~Bethany Home Road is not continuous west of SR 101L.~~

Section 1.3.1, Background of the Alternatives

[Page 5 of the Draft EA, last paragraph]

~~Funding for the new facility would come from a number of sources, including discretionary funds from the FHWA's Surface Transportation Program and MAG (known as STP-MAG), and could include regional funds from Maricopa County sales tax, funds from ADOT and FCDMC, and matching funds from MCDOT in any combination with the cities of Glendale, Peoria, and El Mirage. Northern Parkway is based on the passage of Proposition 400. The half-cent sales tax extension provided in Proposition 400 along with other funding sources included federal funds that are considered regional funds. Regional funds will account for up to 70% of the project costs or the amount allocated to the project whichever is less; while the minimum 30% local match will come from local funds from the cities of Glendale, Peoria, El Mirage, and MCDOT. Federal Surface Transportation Program (STP-MAG) funds have been designated as regional funds for the Northern Parkway project. These funds totaling \$228.0 million are allocated on an annual basis through 2025 as shown in the MAG 2010 Arterial Life Cycle Program (ALCP). Local match funds will be divided as follows in accordance with the approved intergovernmental agreement: Glendale (40%) – \$39.1 million, MCDOT (30%) – \$29.3 million, Peoria (20%) – \$19.5 million, and El Mirage (10%) – \$9.8 million. The total committed funding is \$325.7 million (2009 dollars).~~

Section 2.1.1, Serve Population Growth

[Pages 6 and 7 of the Draft EA]

According to MAG, the area west of the Agua Fria River in the West Valley is one of the fastest-growing areas of the Phoenix metropolitan area. Rapid population growth due to continued land development is occurring in this area and is expected to continue. Population within the regional study area, as detailed in Table 2-1, is expected to grow from about 652,219 residents in 2005 to over 899,150 residents by 2030, an increase of approximately 37.9 percent *or approximately 250,000 more people. In addition, employment within the study area is expected to grow from 161,365 in 2005 to 378,646 in 2030, an increase of approximately 220,000 or 135 percent.* The western portion of the study area in the vicinity of SR 303L (*RAZ 233, 254, 255, 265 in Table 2-1*) is expected to have the most significant growth, with *an increases of approximately 150-175 percent—~~or more~~ from 74,906 in 2005 to 206,421 in 2030, which is a total of approximately 130,000 more people.* The existing limited regional and arterial road network of two-lane roadways is unlikely to serve the transportation needs associated with anticipated future

growth west of the Agua Fria River adequately, ultimately resulting in an increase of traffic congestion from population *and employment* growth.

**Table 2-1
Regional Population Growth Projections**

Community	RAZ	Year 2005		Year 2010		Year 2020		Year 2030	
		Population	Employment	Population	Employment	Population	Employment	Population	Employment
Surprise	233	41,695	6,731	75,830	14,056	102,885	29,411	116,743	44,049
	234	9,557	2,491	11,224	2,966	14,458	3,392	14,761	3,318
Subtotal		51,252	9,222	87,054	17,022	117,343	32,803	131,504	47,367
El Mirage	235	31,935	2,858	34,819	5,001	38,620	9,276	38,717	11,528
Youngtown	236	6,011	1,657	6,820	1,667	7,275	1,988	7,359	2,042
Maricopa County	237	34,140	10,438	34,169	10,329	34,549	10,367	35,066	10,392
Peoria	238	54,417	16,477	57,589	19,940	61,436	25,181	62,288	25,001
	239	34,614	9,189	38,059	14,194	42,558	19,469	47,271	23,202
Subtotal		161,117	40,619	171,456	51,131	184,438	66,281	190,701	72,165
Glendale	240	46,030	16,834	46,882	21,586	48,103	22,147	48,558	22,002
	254	3,761	440	10,478	3,620	22,832	15,704	23,375	21,250
	255	11,225	1,904	14,793	2,874	18,254	7,918	21,252	9,619
	256	4,058	8,707	4,059	8,705	4,060	8,697	4,061	8,713
	257	41,944	12,039	49,777	19,155	62,376	36,817	64,906	43,250
	258	100,440	29,650	102,511	38,209	106,432	40,671	106,709	42,361
Subtotal		207,458	69,574	228,500	94,149	262,057	131,954	268,861	147,195
Goodyear	265	18,225	6,760	28,582	11,053	40,060	19,968	45,051	24,466
Litchfield Park	266	6,787	1,710	8,587	2,405	10,305	3,200	10,510	4,280
Phoenix	267	65,053	8,846	74,160	13,902	83,905	21,047	85,461	26,320
	268	93,685	14,646	98,189	17,775	100,854	19,026	101,551	19,696
Subtotal		183,750	31,962	209,518	45,135	235,124	63,241	242,573	74,762
Avondale	273	48,642	9,988	58,880	16,448	65,440	27,274	65,511	34,157
Total		652,219	161,365	755,408	223,885	864,402	321,553	899,150	375,646

SOURCE: Maricopa Association of Governments *Socioeconomic Projections of Population, Housing and Employment by Municipal Planning Area and Regional Analysis Zone, May 2007*. This report is based on 2005 census survey and projections are based on the latest version of each member agency's land use plan. The projections are subject to change.

NOTE: RAZ = Regional Analysis Zone. A RAZ is an area within a Municipal Planning Area (MPA). Maricopa Association of Governments defines an MPA as an "area of planning concern for a municipality and is based upon its anticipated future corporate limits" (Maricopa Association of Governments 2007).

Section 2.1.2, Improve Travel Time

[Page 7 of the Draft EA]

The regional north-south highways of SR 303L and US 60 are approximately 12.5 miles apart along the Northern Avenue corridor. If no roadway improvements were made, with no access control and existing signals remaining, the average speed along the project corridor in 2030 would be 19.3 miles per hour, and it would take motorists 42 minutes during peak hours to travel from SR 303L to US 60. The travel time needs to be improved to accommodate population *and employment* projections.

Section 2.1.7, Implement Regional and Local Plans

[Page 9 of the Draft EA, fourth bullet]

- The new facility is also included in the comprehensive performance-based RTP prepared by MAG. Northern Avenue is shown in the RTP as a “new/improved arterial” that would provide major capacity improvements and new connections for the regional arterial street network. The RTP (MAG 2004b) provides a vision for the regional transportation system, addressing freeways and other highways, streets, transit corridors, airports, bicycle and pedestrian facilities, freight facilities (rail routes), demand management, system management (including intelligent transportation systems), and safety in Maricopa County through fiscal year 2026. The RTP is the result of a major planning effort initiated in 2001 and completed in late 2003, when it received unanimous support from the Transportation Policy Committee and approval from the MAG Regional Council. The RTP—~~including the proposed project~~—is funded through *a variety of funding sources including the half-cent sales tax extension provided by Proposition 400*, which was approved by Maricopa County voters in November 2004. *Northern Parkway has been designated to receive a portion of the RTP’s federal funding allocation.*

Section 2.2, Purpose of the Project

[Page 10 of the Draft EA]

The purpose of the proposed facility improvement is to provide a high-capacity, west-east transportation corridor in the central portion of the West Valley to serve significant projected population *and employment* growth. This facility would serve the citizens of Glendale, Peoria, El Mirage, and unincorporated Maricopa County, as well as future residents and businesses in the rapidly developing West Valley, by providing better traffic flow and access to regional destinations via connections to the SR 303L and SR 101L freeways and to US 60.

Section 3, Alternatives

[Page 11 of the Draft EA, first paragraph]

This chapter describes the process used to identify and analyze the full range of alternatives for a proposed regional transportation facility improvement between SR 303L and US 60. Connection to SR 303L *consisting of fully directional ramps* is included in ADOT’s Loop 303 project *as defined in the SR 303L, I-10 to US 60 DCR and EA and both of these documents are posted on the ADOT EPG website.* Additional alternatives were considered and discarded because they would not be technically or economically feasible or practicable or would not satisfy the purpose and need for the new facility. The corridor alternatives are discussed in Section 3.1. The alternatives within the Northern Avenue corridor that were considered and discarded are discussed in Section 3.2. Alternatives studied in detail are described in Section 3.3.

Section 3.2, Alignment Alternatives Considered but Eliminated from Further Study

[Page 12 of the Draft EA, insert new paragraphs and revised second bullet]

Several alignment alternatives were considered within the Northern Avenue corridor, which includes Northern Avenue and the area approximately 0.5 mile to the north and south (for alignment flexibility). To assess in more detail the issues, concerns, and opportunities presented by each alternative, the alternatives were separated into four portions: (1) Sarival Avenue to Dysart Road, (2) Dysart Road to 115th Avenue, (3) 115th Avenue to 103rd Avenue, and (4) 103rd Avenue to 91st Avenue. No feasible alternative alignments other than Northern Avenue were found from 91st Avenue to US 60.

In general, the criteria used to evaluate the feasibility of potential alternatives are as follows (see DCR Appendices A, B, and D):

- *Minimize diagonal alignments across agricultural land or vacant land*
- *Avoid or minimize impacts to developed land including existing neighborhoods and businesses*
- *Minimize impacts to utilities*
- *Cross major cross streets at 90 degree angles*
- *Enhance constructability*
- *Minimize cost*
- *Minimize out-of-direction travel*

More specific evaluation criteria for each segment of the corridor will be discussed in this section of the report. Each final alternative and the no-build alternative will be described in Section 3.3 of the draft EA and evaluated relative to the purpose and need criteria (see Table 3-4 in the Draft EA).

A general summary of the alternatives eliminated from further study from Sarival Avenue to Dysart Road is provided below.

- An alignment along Northern Avenue from SR 303L to Dysart Road was eliminated due to concerns expressed by Luke AFB regarding placement of a high-volume roadway along the northern boundary of the Air Force Base (see Figure 3-1) and potential impacts on their flight operations that could result from elevated portions of the roadway near the end of the runways.

- Alternatives along Olive Avenue were eliminated because of concerns *related to safety and driver confusion* associated with combining local traffic with high volumes of regional parkway traffic at the planned SR 303L interchange at Olive Avenue. Additionally, there were issues related to the proximity to the Burlington Northern Santa Fe Railway (BNSF) with the Olive Avenue alternatives.

Section 3.3.1, Alternative 1 – Northern Avenue Alignment, Option 1 (with Two Traffic Signals)

[Page 15 of the Draft EA, second paragraph]

Design Features

*The western portion of Northern Parkway would have features similar to a freeway while the eastern portion would be an urban principal arterial with regional characteristics. Between Sarival Avenue and 115th Avenue, Alternative 1 would have full access control, a planned posted speed of 55 miles per hour (mph), six through lanes plus auxiliary lanes, and would be designed to American Association for State Highway and Transportation Officials (AASHTO) Urban Principal Arterial with Full Access Control standards. East of 115th Avenue, Alternative 1 would have partial access control, a planned posted speed of 45 mph, six through lanes plus auxiliary lanes, and would be designed to MCDOT Urban Principal Arterial standards. *Northern Parkway would be 6 miles north of I-10 and 6 miles south of Bell Road (a road of regional significance) and 8 miles south of the east-west portion of Loop 101.**

Section 3.3.1, Alternative 1 – Northern Avenue Alignment, Option 1 (with Two Traffic Signals)

[Page 17 of the Draft EA, Grade-Separated Intersections section]

Grade-Separated Intersections

Grade-separated intersections (GSI) are proposed at ~~the following~~ 10 arterial intersections for *the proposed Alternative 1 ~~sees listed in Table 3-1~~ (see and at locations shown in Figure 3-2. The GSI are generally single point urban interchanges (SPUI) as shown in Figure 3-4. SPUI intersections were selected due to their improved traffic operations including U-turn movements and they require less right-of-way. The reduced right-of-way requirement provided by SPUI intersections is especially important in developed areas similar to the eastern portion of Northern Parkway. Diamond type GSI are proposed on the western portion of the project where the area is less developed and right-of-way is less expensive, and projected 2030 intersecting arterial traffic is relatively low.*

During final design, the interchange types will be evaluated further using a “value engineering” process to ensure the most appropriate interchange configuration is provided to satisfy both the short term and long range traffic needs.

Section 3.3.1, Alternative 1 – Northern Avenue Alignment, Option 1 (with Two Traffic Signals)

[Page 20 of the Draft EA, insert new paragraph at the beginning of the Drainage Section]

Drainage

Drainage improvements are part of the Northern Parkway project to ensure the new roadway drains properly during storm events and that adjacent properties are not adversely affected. Since the project passes through several jurisdictions, various drainage standards were evaluated to determine the standards to be used for Northern Parkway. Drainage facilities for on-site pavement and right-of-way will be designed to accommodate a 10-year frequency storm event while regional channels adjacent to Northern Parkway and rivers that cross Northern Parkway would be designed to a 100-year storm event. Drainage basins will also be designed to a 100-year storm event. Drainage standards for regional channels were developed in cooperation with the Flood Control District of Maricopa County.

Section 3.3.1, Alternative 1 – Northern Avenue Alignment, Option 1 (with Two Traffic Signals)

[Page 21 of the Draft EA, Signalized Intersections section]

Signalized Intersections

With Alternative 1, there would be two signalized intersections: one at 111th Avenue and one at 107th Avenue. These intersections are retained in this alternative to maintain good access to residential neighborhoods on either side of Northern Avenue between 112th Avenue and 103rd Avenue. The inclusion of these two signals is a trade-off between greater neighborhood access compared to reduction in roadway capacity and a potential for an increase in crash rates. To maximize capacity at these two signalized intersections, Northern Parkway would be widened to eight through lanes plus exclusive right-turn lanes. The signalized intersections would be three phased to accommodate left turns and U-turns from Northern Parkway in one signal phase, through movements on Northern Parkway in another phase, and through movements and left turns on the side street in the last phase. Trucks, fire trucks, and buses would not be able to make U-turns at these intersections *similar to typical arterial intersections*. The City of Peoria and City of Glendale fire departments expressed concerns regarding the accident potential for the signalized intersections and the inability of fire trucks to make U-turns at these intersections. ~~The neighborhood connector streets and GSIs help to provide reasonable fire truck access to all~~

~~neighborhoods~~: *New connector streets will be added to help mitigate the loss of left turns and U-turns for fire trucks on Northern Parkway (see Figure 3-5). Coordination will take place with emergency services to ensure appropriate access is maintained to all commercial and residential properties.*

Section 3.3.1, Alternative 1 – Northern Avenue Alignment, Option 1 (with Two Traffic Signals)

[Page 25 of the Draft EA, fourth paragraph]

104th ~~Avenue-Drive~~ Closure: 104th ~~Avenue-Drive~~ intersection with Northern Parkway would be closed in Alternative 1 (see Figure 3-5). Eastbound traffic from Country Meadows Units 4 and 4A would access Northern Parkway at either 103rd Avenue or at 106th Avenue. Eastbound traffic using 106th Avenue would head west on Northern Parkway and make a U-turn at the 107th Avenue signalized intersection.

Section 3.3.2, Alternative 2 – Northern Avenue Alignment, Option 2 (No Traffic Signals)

[Page 34 of the Draft EA, last paragraph]

104th ~~Avenue-Drive~~ Closure: Traffic from Country Meadows Units 4 and 4A desiring to go eastbound on Northern Parkway would make a right turn onto Northern Parkway at 106th Avenue, head west approximately 1 mile to 115th Avenue GSI, and then make a U-turn or use the 103rd Avenue GSI.

Section 3.3.8, Project Costs

[Page 42 of the Draft EA, last paragraph]

Total project costs in 2009 dollars were estimated for each build alternative for comparison purposes as shown in Table 3-4. Alternative 1 is the least costly at \$612.6 million while Alternative 3 is the most costly at \$741.5 million. Since this project has been selected for federal funding and the total project costs exceed \$500 million, FHWA considers Northern Parkway a Major Project and must comply with additional FHWA requirements. One of the additional requirements is that FHWA must review the project cost estimate and that costs be expressed in terms of year of expenditure dollars (inflated dollars). A team from FHWA reviewed the project cost estimate for the proposed alternative (Alternative 1) to verify the accuracy and reasonableness of the current the estimate and to develop a probability range for the cost estimate. Based on the review and the project schedule which phases construction between 2010 and 2035, the total project cost in year of expenditure dollars (inflated) would range from \$9734 million to \$1.05+3 billion with a certainty level of 80 percent. Funding sources beyond 2025 have not yet been identified.

Table 3-4

[Pages 43 and 44 of the Draft EA]

**Table 3-4
Comparison of Alternatives**

Project Needs	Alternative 1 (Option 1 – Two Signals)	Alternative 2 (Option 2 – No Signals)	Alternative 3 (Southern Alignment)	No Build Alternative
1. Serve population growth (high-capacity route serving developing areas)	<ul style="list-style-type: none"> Offers a high-capacity route that would link western growth area and SR 101L commercial area 	<ul style="list-style-type: none"> Offers a higher-capacity route that links western growth area and SR 101L commercial area 	<ul style="list-style-type: none"> Offers the highest-capacity route, which would link western growth area with SR 101L commercial area and potential growth area south of Glendale Avenue 	<ul style="list-style-type: none"> Offers no additional capacity to accommodate growth
2. Improve travel time (from Loop 303 to US 60)	<ul style="list-style-type: none"> Provides direct travel path Offers good speeds, but signals increase travel delay (travel time = 24.2 minutes during peak hours) Results in an average speed of 32.6 mph during peak hours and 45 to 55 mph during off-peak hours 	<ul style="list-style-type: none"> Provides direct travel path Improves travel time by offering no signals and considerable access control (20.2 minutes during peak hours) Results in an average speed of 39.1 mph during peak hours and 45 to 55 mph during off-peak hours 	<ul style="list-style-type: none"> Offsets out-of-direction travel path with improved travel times Improves travel time by offering no signals and considerable access control (20.5 minutes during peak hours) Results in an average speed of 41.9 mph during peak hours and 45 to 55 mph during off-peak hours 	<ul style="list-style-type: none"> Increases travel time by providing no access control and numerous signals (41.6 minutes during peak hours) Results in an average speed of 19.3 mph during peak hours and 30 to 35 mph during off-peak hours
3. Provide regional connectivity (connect to freeway and to State highway system)	<ul style="list-style-type: none"> Provides regionally designated route Provides regional connection to SR 303L Provides enhanced connection to SR 101L Provides enhanced connection to US 60 	<ul style="list-style-type: none"> Provides regionally designated route Provides regional connection to SR 303L Provides enhanced connection to SR 101L Provides enhanced connection to US 60 	<ul style="list-style-type: none"> Provides regionally designated route Provides regional connection to SR 303L Provides regional connection to SR 101L Provides enhanced connection to US 60 	<ul style="list-style-type: none"> Provides no regional route Provides no enhanced connections
4. Improve regional facility spacing	<ul style="list-style-type: none"> Provides new regional corridor at desired spacing 	<ul style="list-style-type: none"> Provides new regional corridor at desired spacing 	<ul style="list-style-type: none"> Provides new regional corridor at desired spacing 	<ul style="list-style-type: none"> Does not provide new regional corridor
5. Provide Agua Fria River crossing	<ul style="list-style-type: none"> Provides new bridge crossing at Northern Avenue 	<ul style="list-style-type: none"> Provides new bridge crossing at Northern Avenue 	<ul style="list-style-type: none"> Maintains at-grade crossing at Northern Avenue. Provides new bridge crossing at Glendale Avenue adjacent to the existing bridge crossing 	<ul style="list-style-type: none"> Maintains at-grade crossing at Northern Avenue

Project Needs	Alternative 1 (Option 1 – Two Signals)	Alternative 2 (Option 2 – No Signals)	Alternative 3 (Southern Alignment)	No Build Alternative
6. Improve west-east street traffic flow	<ul style="list-style-type: none"> • Doubles capacity of route • Connects western Maricopa County to El Mirage, Peoria, Glendale, and Luke AFB, including future industrial areas, the commercial/ stadium area, and central Phoenix • <i>Parallel arterial street congestion reduced by 18%</i> 	<ul style="list-style-type: none"> • Triples capacity of route • Connects western Maricopa County to El Mirage, Peoria, Glendale, and Luke AFB, including future industrial areas, the commercial/ stadium area, and central Phoenix • <i>Parallel arterial street congestion reduced by 23%</i> 	<ul style="list-style-type: none"> • 3.5 times capacity of route • Connects western Maricopa County to El Mirage, Peoria, Glendale, and Luke AFB, including future industrial areas, the commercial/stadium area, and central Phoenix • <i>Parallel arterial street congestion reduced by 18%</i> 	<ul style="list-style-type: none"> • Does not increase capacity • Does not provide high-capacity linkage of activity centers • <i>No reduction in parallel arterial street congestion</i>
7. Implement regional and local plans	<ul style="list-style-type: none"> • Provides an alternative that is consistent with adopted transportation plans and ballot measures 	<ul style="list-style-type: none"> • Provides an alternative that is generally consistent with adopted transportation plans, but level of access control and elimination of signals were not anticipated in those plans 	<ul style="list-style-type: none"> • Is not consistent with corridor or concept shown on ballot measures • Use of Glendale Avenue segment is not consistent with plans for a transit corridor on this alignment 	<ul style="list-style-type: none"> • Would not implement adopted plans
8. Reduce crash rates	<ul style="list-style-type: none"> • Reduction in traffic signals and full to partial access control • Reduces crash rates over arterial street conditions • Remaining 2 signals on an otherwise high-speed free flow roadway could present some localized safety concerns 	<ul style="list-style-type: none"> • No signals and full to partial access control reduces crash rates over arterial street conditions 	<ul style="list-style-type: none"> • No signals and full to partial access control reduces crash rates over arterial street conditions 	<ul style="list-style-type: none"> • Little access control and numerous traffic signals result in high crash rates on existing arterials
9. Right-of-way impacts	<ul style="list-style-type: none"> • 305 acres • 224 “partial take” parcels • 26 “total take” parcels • Relocate 28 houses • Relocate 9 businesses 	<ul style="list-style-type: none"> • 313 acres • 230 “partial take” parcels • 26 “total take” parcels • Relocate 28 houses • Relocate 9 businesses 	<ul style="list-style-type: none"> • 426 acres • 229 “partial take” parcels • 18 “total take” parcels • Relocate 22 houses • Relocate 10 businesses 	<ul style="list-style-type: none"> •
10. Project cost (2009 dollars)	<ul style="list-style-type: none"> • \$612.6 million 	<ul style="list-style-type: none"> • \$651.6 million 	<ul style="list-style-type: none"> • \$741.5 million 	<ul style="list-style-type: none"> •

NOTES: AFB = Air Force Base, mph = miles per hour, SR = State Route, US = United States

Section 4.1.3, Mitigation

[Page 56, Mitigation No. 3 of the Draft EA]

3. The Maricopa County Department of Transportation's Contractor would provide notice to residences and businesses adjacent to the project at least two weeks prior to construction. The notice would provide information about construction activities and when those would occur. Notice distribution would occur via letters, door hangers, etc. *Materials would also be produced in Spanish for the Spanish-speaking population along these areas.*

Section 4.1.3, Mitigation

[Page 57, Mitigation No. 5 of the Draft EA]

5. The Maricopa County Department of Transportation would ensure that relocation of residences and businesses would comply with the terms of the Federal Uniform Relocation Assistance *and Real Property Acquisition Policies* Act of 1970, as amended. This would provide land owners the fair market value *and equal treatment* for all properties to be acquired for a new facility and relocation assistance for eligible residents and business owners.

Section 4.2.1, Affected Environment

[Page 57 of the Draft EA, second paragraph of Section 4.2.1]

Utility providers have a variety of facilities located throughout the entire corridor (e.g., transmission lines, stormwater catch basins, light poles, etc.). Utility purveyors (service providers) that serve the project corridor include Southwest Natural Gas, El Paso Natural Gas (EPNG), Arizona Public Service (APS), *Salt River Project (SRP)*, City of Glendale Water and Sewer, City of Peoria Water and Sewer, Cox Communications, Qwest, and various telecommunication providers.

Section 4.2.2, Environmental Consequences

[Pages 57 and 58 of the Draft EA, last paragraph of page 57 and first and second paragraphs of page 58]

Analysis of Alternatives 1 and 2

Construction of Alternatives 1 and 2 would require the relocation of several existing utilities along the project corridor. At the west end of the project, several irrigation wells and a domestic water well would require relocation. Alternatives 1 and 2 would encounter major utility conflicts east of 112th Avenue through developed areas including an EPNG pipe monitoring facility at 109th Avenue and a sewer lift station near 111th Avenue. The grade-separated intersections of 103rd, 91st, 83rd, 75th avenues and at US 60 would be the most disruptive to utility facilities.

Further coordination with local utility purveyors, however, would be ~~required prior to~~during the final design phase of the project to assure that ~~there would be no~~any conflicts with existing utility structures *would be minimized and resolved appropriately.*

Analysis of Alternative 3

Several utility structures and purveyors serve properties within the proposed alignment right-of-way, including EPNG, Southwest Gas Corporation, APS, and City of Glendale Water and Sewer. Alternative 3 would avoid the sewer lift station near 112th Avenue and the EPNG facility *near 109th Avenue* but would impact a groundwater recharge facility. As a result, coordination with the local utility purveyors would be required ~~prior to~~during the final design stage of the project to determine exact effects on utilities and potential temporary disruptions that might occur during construction.

Section 4.2.3, Mitigation

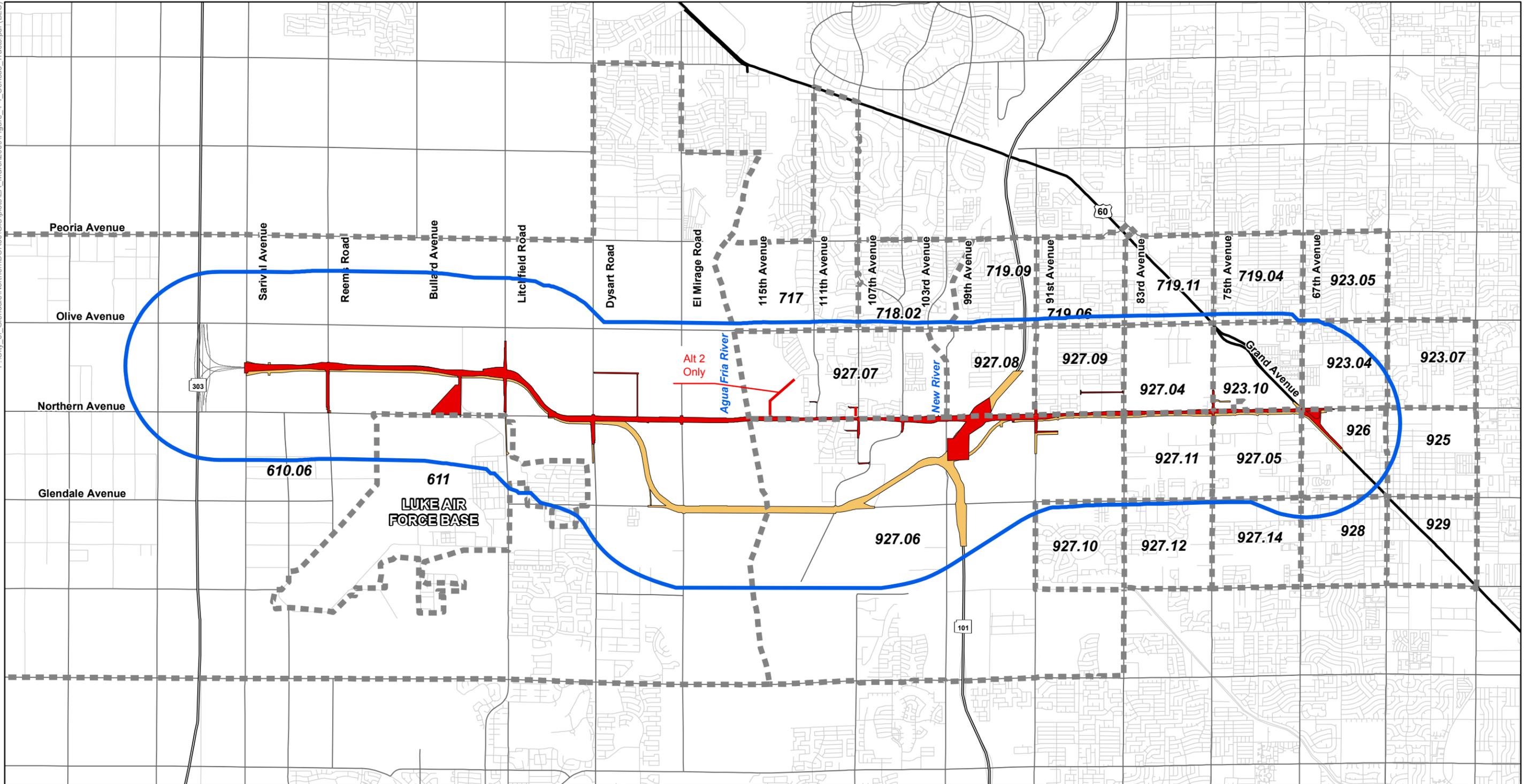
[Page 58 of the Draft EA, first paragraph of Section 4.2.3]

Effects on utilities would be minimized under all three build alternatives by implementing the following mitigation measures:

- Prior to construction, the Maricopa County Department of Transportation would coordinate relocation of affected utilities with utility purveyors as necessary.
- *Any impacts to groundwater recharge facilities identified during final design would require coordination with ADWR and possibly an Aquifer Protection Permit.*
- *The Maricopa County Department of Transportation would ensure that any activities related to wells such as installing a new well or abandoning a well would comply with Arizona Department of Water Resources regulations. Domestic water well relocation would also require plans review and approval from the Maricopa County Environmental Services Department.*
- *Relocation of sanitary sewer facilities including lift stations would require plan review and approval by the Maricopa County Environmental Services Department.*
- *The Maricopa County Department of Transportation will ensure that all necessary Federal, State, and local permits are obtained in accordance with applicable laws and regulations.*

Figure 4-4, Census Tracts

[Page 60 of the Draft EA]



Legend

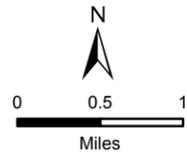
- Alternatives 1 and 2
- Alternative 3
- Census Tract Boundary
- 610.06 Census Tract Number

General Features

- Study Area
- Interstate/U.S. Highway
- State Highway
- Arterial Road
- Local Road

**Census Tracts
Northern Parkway**

Federal Project No. STP-MMA-0(034)N
 TRACS No. 0000 MA MMA SS593 01C



Source:
 Census Data - ESRI 2004
 Base Map - ALRIS 1997-2008; MAG 2008

Figure 4-4

Section 4.3.1, Affected Environment

[Page 63 of the Draft EA, third paragraph]

Various departments serving the City of Glendale occupy the Glendale ~~City Hall~~~~Civic Center~~, located on ~~5850~~ ~~5750~~ West ~~Glendale Avenue~~~~Glenn Drive~~, which provide ~~community~~ ~~social~~ services to city residents. The Community Center in Peoria provides the city's residents with various social services and is located on 83rd Drive and Jefferson Street, just 2 blocks south of Peoria Avenue. Youngtown Town Hall and El Mirage City Hall also provide social services to the citizens of their town and city, respectively.

Figure 4-5, Public Bus Routes

[Page 65 of the Draft EA]

Section 4.3.3, Mitigation

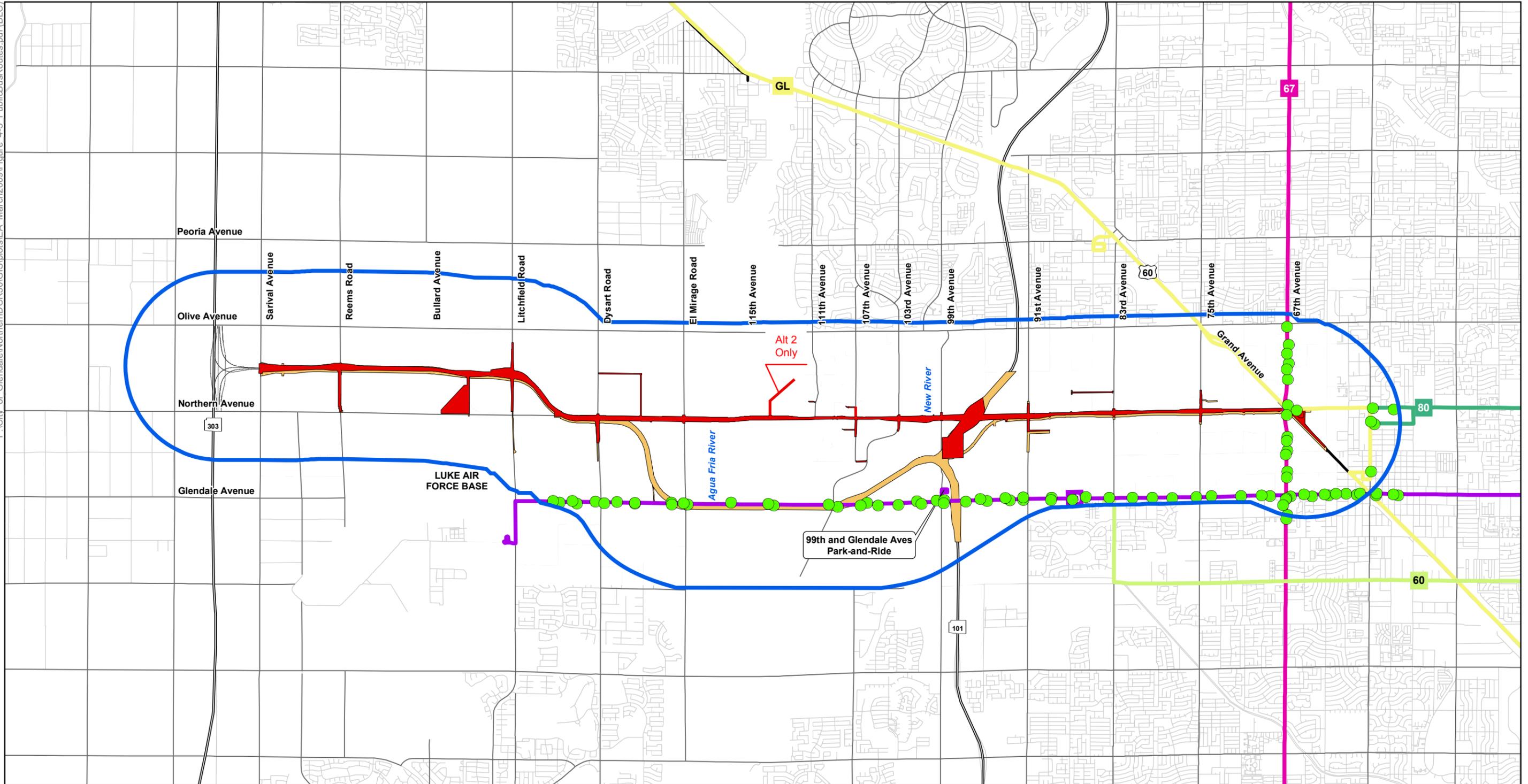
[Page 68 of the Draft EA, second bullet]

- The Maricopa County Department of Transportation would ensure that local agencies and jurisdictions (e.g., City of Glendale, City of El Mirage, and City of Peoria) would notify the public of the project's status through meetings and newsletters. *Materials would also be produced in Spanish for the Spanish-speaking population along these areas.*

Section 4.3.3, Mitigation

[Page 68 of the Draft EA, fourth bullet]

- The Maricopa County Department of Transportation's Contractor would provide notice to residences and businesses adjacent to the project at least two weeks prior to construction. The notice would provide information about construction activities and when those would occur. Notice distribution would occur via letters, door hangers, etc. *Materials would also be produced in Spanish for the Spanish-speaking population along these areas.*



Legend

- | | | |
|---|---|---|
| Alternatives 1 and 2 | Valley Metro Bus Routes | Valley Metro Bus Stops |
| Alternative 3 | 60 Bethany Home Rd | |
| | 67 67th Ave | |
| | 70 Glendale Ave/24 St | |
| | 80 Northern Ave | |
| | GL Grand Ave Limited | |

General Features

- | |
|---|
| Study Area |
| Interstate/U.S. Highway |
| State Highway |
| Arterial Road |
| Local Road |

**Public Bus Routes
Northern Parkway**

Federal Project No. STP-MMA-0(034)N
 TRACS No. 0000 MA MMA SS593 01C

Source:
 Base: ALRIS 1997-2008, MAG 2000
 Bus Routes: Valley Metro 2008
 Bus Stops: City of Phoenix 2009

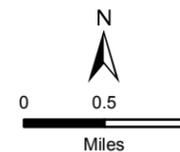


Figure 4-5

Section 4.4.3, Mitigation

[Page 72 of the Draft EA, first and second bullet]

- The Maricopa County Department of Transportation's Contractor would provide notice to residences and businesses adjacent to the project at least two weeks prior to construction. The notice would provide information about construction activities and when those would occur. Notice distribution would occur via letters, door hangers, etc. *Materials would also be produced in Spanish for the Spanish-speaking population along these areas.*
- The Maricopa County Department of Transportation would ensure that local agencies and jurisdictions (e.g., City of Glendale, City of El Mirage, and City of Peoria) would notify the public of the project's status through meetings and newsletters. *Materials would also be produced in Spanish for the Spanish-speaking population along these areas.*

Section 4.4.3, Mitigation

[Page 72 of the Draft EA, last bullet]

The Maricopa County Department of Transportation would ensure that relocation of residents and businesses would comply with the terms of the Federal Uniform Relocation Assistance *and Real Property Acquisition Policies* Act of 1970, as amended. This would provide land owners the fair market value *and equal treatment* for all properties to be acquired for a new facility *and relocation assistance for eligible residents and business owners.*

Section 4.9.1, Affected Environment

[Page 96 of the Draft EA, last paragraph]

The study area lies within nonattainment areas for ozone and particulate matter equal to or smaller than 10 microns in diameter (PM₁₀). The nonattainment area for eight-hour ozone is a large area of Maricopa County and a small portion of Pinal County (*see Figure 4-10*). The nonattainment area for PM₁₀ is an approximately 48-by-60-mile rectangular section of eastern Maricopa County plus a 6-by-6-mile section that includes the city of Apache Junction in Pinal County. *Maricopa County attained the 1997 National Ambient Air Quality Standard for 8-hour ozone and submitted a maintenance plan and request for redesignation to attainment status to EPA on March 24, 2009. EPA revised the 8-hour ozone NAAQS in 2008 from 0.08 ppm to 0.075 ppm. The Governor submitted a recommended Nonattainment Area designation for expanded boundaries to EPA on March 12, 2009. The Governor may revise the designation and boundary recommendation after the proposal is finalized.*

Section 4.9.1, Affected Environment

[Page 97 of the Draft EA]

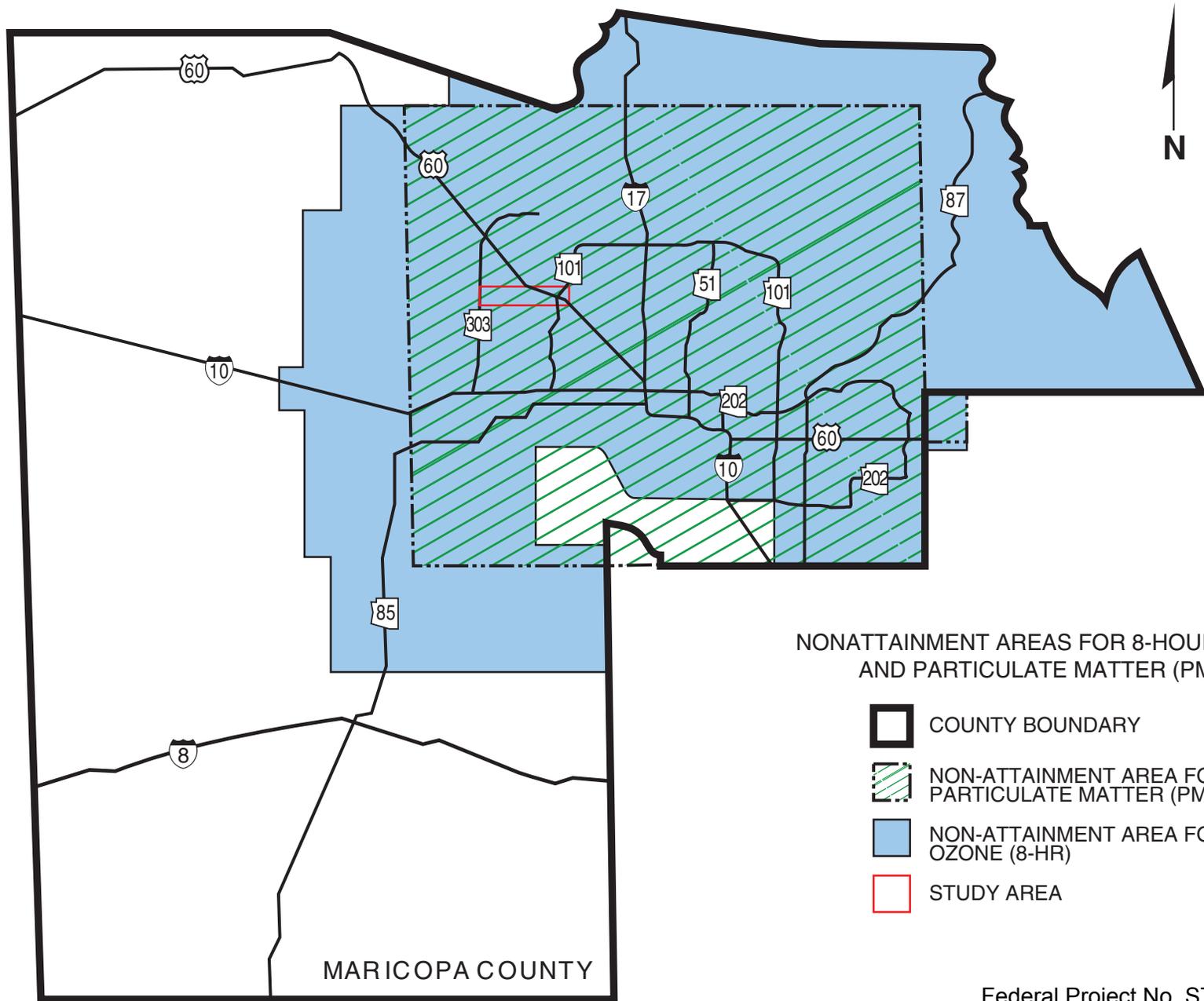
Ambient Air Quality Levels

The Maricopa County Air Quality ~~Division~~ ~~Department~~ and the Arizona Department of Environmental Quality (ADEQ) maintain a network of air quality monitoring sites throughout Maricopa County; the majority of these sites are located in Phoenix and the surrounding communities. Monitoring sites are not necessarily identical; some might only monitor one or two of the criteria pollutants. Air quality data from two locations were selected for presentation due to the pollutants monitored and/or their relative proximity to the study area. Concentrations obtained at these locations during ~~2009~~ ~~2005~~ are summarized in Figure 4-10.

During ~~2009~~~~2005~~, ~~none of~~ the maximum concentrations *of PM₁₀ (24-hour concentration) and ozone obtained at the two locations* exceeded the NAAQS *at both monitoring locations*. Maximum concentrations of CO were well below the NAAQS. *These results are As* illustrated in Table 4-5. ~~, maximum 24-hour concentrations of PM₁₀ observed at these locations during 2005 were below the standard; annual averages also were below the standard. Maximum concentrations of ozone were also below the NAAQS.~~

Figure 4-10 Nonattainment Areas for 8-Hour Ozone and Particulate Matter (PM₁₀)

[Page 98 of the Draft EA]



Source: Maricopa County Air Quality Division 2009
Not to Scale

NONATTAINMENT AREAS FOR 8-HOUR OZONE
AND PARTICULATE MATTER (PM₁₀)

-  COUNTY BOUNDARY
-  NON-ATTAINMENT AREA FOR PARTICULATE MATTER (PM₁₀)
-  NON-ATTAINMENT AREA FOR OZONE (8-HR)
-  STUDY AREA

Figure 4-10

Federal Project No. STP-MMA-0(034)N
TRACS No. 0000 MA MMA SS593 01C

Section 4.9.1, Affected Environment
 [Page 99 of the Draft EA]

Table 4-5
Air Quality Summary: 2006
Maximum Ambient Concentrations: ug/m³ (ppm)
Maricopa County, Arizona

Location	Pollutant	Averaging Time	Concentration	No. of Exceedances
Bell/Dysart roads Surprise, Arizona No. 1	PM ₁₀	Annual	29.0 ug/m ³	0
		24-hour	76 ug/m ³	0
	Ozone	1-hour	0.082 ppm ^a	0
		8-hour	0.073 ppm ^a	0
	CO	1-hour	1.7 ppm ^b	0
		8-hour	1.3 ppm ^b	0
6000 West Olive Ave Glendale, Arizona No. 2	Ozone	1-hour	0.096 ppm ^a	0
		8-hour	0.078 ppm ^a	0
	CO	1-hour	3.2 ppm ^b	0
		8-hour	2.4 ppm ^b	0
	PM ₁₀	Annual	29.0 ug/m ³	0
		24-hour	84 ug/m ³	0

Table 4-5
Air Quality Summary: 2009
Maximum Ambient Concentrations: ug/m³ (ppm)
Maricopa County, Arizona

Location	Pollutant	Averaging Time	Concentration	No. of Exceedances
Bell/Dysart roads Surprise, Arizona No. 1	PM ₁₀	Annual	24.2 ug/m ³	0
		24-hour	227 ug/m ³	1
	Ozone	8-hour	0.077 ppm ^a	1
		CO	1-hour	1.0 ppm ^b
		8-hour	0.9 ppm ^b	0
		6000 West Olive Ave Glendale, Arizona No. 2	Ozone	8-hour
	CO	1-hour	2.0 ppm ^b	0
		8-hour	1.3 ppm ^b	0
	PM ₁₀	Annual	28.5 ug/m ³	0
		24-hour	196 ug/m ³	1

SOURCE: Maricopa County Air Quality Division 2009 ~~2006~~

NOTES: ^a Seasonal average: April 1 to ~~October 31~~ ~~November 1~~

^b Seasonal average: September 1 to ~~March 31~~ ~~April 1~~

CO = carbon monoxide

ug/m³ = micrograms per cubic meter

No. = number

PM₁₀ = particulate matter equal to or smaller than 10 microns in diameter

ppm = parts per million

Section 4.9.3, Mitigation

[Page 107 of the Draft EA]

- The Maricopa County Department of Transportation’s Contractor would comply with all air pollution ordinances, regulations, orders, etc., during construction (including *Maricopa County Air Quality Rules 310 and 310.01 – Fugitive Dust Sources, Arizona Administrative Code R18-2-604 through -607, Arizona Administrative Code R18-2-804, and any required air quality permits*).
- The Maricopa County Department of Transportation’s Contractor would *suppress dust by stabilizing*e (e.g., water, *chemical dust suppressants*) all *unpaved* dust-producing surfaces to reduce *dust entering ambient air and reduce* short-term effects associated with an increase in particulate matter attributable to construction activity.
- The Maricopa County Department of Transportation’s Contractor would cover dump trucks transporting materials that might become airborne during transit. After dumping of such materials, the Contractor would either cover the truck bed or take measures to remove all residues that might become airborne (MCDOT Supplement to MAG Specifications Section 107.6.3).
- The Maricopa County Department of Transportation’s Contractor would minimize offsite tracking of sediments by *washing*, brushing, or blowing off *the wheels of* construction vehicles, or any other method deemed appropriate by the Contractor, before those vehicles exit the construction site (MCDOT Supplement to MAG Specifications Section 107.6.3).
- According to the Arizona Department of Transportation’s *Standard Specifications for Road and Bridge Construction* (2008 edition), Section 104, “Scope of Work,” Subsection 08, “Prevention of Air and Noise Pollution,” “[t]he Contractor shall control, reduce, remove or prevent air pollution in all its forms, including air contaminants, in the performance of the Contractor’s work.” The Contractor will comply with all air pollution ordinances, regulations, orders, etc., during construction. All dust-producing surfaces will be watered or otherwise stabilized to reduce short-term impacts associated with an increase in particulate matter attributable to construction activity.
- *During Construction, the Maricopa County Department of Transportation Contractor will minimize land disturbance, stabilize the surface of soil piles, and create wind breaks to reduce disturbance of particulate matter including emissions off the construction site caused by strong winds.*

- *When construction is complete, the Maricopa County Department of Transportation Contractor would remove all unused material and soil piles via covered trucks.*

Section 4.11.1, Affected Environment

[Page 110 of the Draft EA, second paragraph]

Surface Water Hydrology

There are two main watersheds bisecting the study area: the Agua Fria River and New River watersheds. The principal drainage is the main channel of the Agua Fria River, located approximately at Northern Avenue between El Mirage Road and 115th Avenue. The secondary drainage is the improved channel of New River, located approximately at Northern Avenue ~~and~~ *between 103rd Avenue and 99th Avenue.* Both drain north to south within the study area.

Section 4.11.1, Affected Environment

[Page 110 of the Draft EA, fifth paragraph]

The ~~New River and~~ Agua Fria River ~~channels are~~ *is* ephemeral, carrying water only during peak rainfall/runoff events. Northern Avenue crosses the ~~streambeds~~ *Agua Fria River* in two distinct shallow crossings, ~~with a median rise to grade.~~ Northern Avenue is closed to traffic whenever the channels are flowing over a base rate. ~~Both east and~~ *The* west riverbanks ~~are~~ *is* stabilized with soil cement, ~~with the and a portion of the east bank is~~ *stabilized* ~~eastern bank~~ protecting a large dike. This dike diverts surface water around the City of Glendale Municipal Landfill, ~~located north of the Glendale Airport just~~ *along the south side of Northern Avenue* east of the Agua Fria River. Additional information on surface water hydrology is located in Appendix E.

The New River has been channelized and the 100-year flows are contained within soil cement banks. Northern Avenue crosses New River on an existing bridge near 99th Avenue.

Section 4.11.1, Affected Environment

[Page 111 of the Draft EA, Floodplains section, second paragraph]

Both the Agua Fria River and New River drainages include tracts of regulated floodplain, per the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels revised on September 30, 2005. The FIRM maps for the study area label areas of flooding as Zone A, which are areas within the 100-year floodplain, as shown in Figure 4-11. The areas of notable flooding that are denoted on the FEMA FIRM maps include the following:

- Reems Road from Northern Avenue to Olive Avenue
- The west side of BNSF railroad spur, from Northern Avenue to Olive Avenue
- Agua Fria River at both shallow crossings

- The sand-and-gravel pit to the north of Northern Avenue from the Agua Fria River's east bank to 113th Avenue
- *North side of Glendale Avenue east of the Glendale Avenue Agua Fria River Bridge*
- *New River between existing soil cement channel banks*

Section 4.11.2, Environmental Consequences

[Pages 117 and 118 of the Draft EA]

Floodplains

Along the western portion of the study area, floodplain effects would be minimal. ~~Under the interim condition of widening the existing Northern Avenue crossing of the Agua Fria River, a low flow channel would continue to exist, if needed based on project implementation phasing. This road section might need to be closed under high flow or flooding conditions, as it is today. When the future river channelization project is completed (by others), the new bridge facility, structures, and related engineered improvements would be built to accepted engineered standards, meeting criteria for the 100-year and 500-year design events for floods.~~

Along the central portion of the study area, there would be a proposed ~~800-foot~~ bridge across the Agua Fria River, which would affect the existing river crossings. ~~The Agua Fria River crossing would remain an at grade crossing for interim phases of the project. The preliminary hydraulic analyses of the river crossing determined that~~ *If the river is channelized by others in accordance with the Agua Fria River Watercourse Master Plan, then an 800650-foot-long bridge, with channelization of the river 1 mile downstream and 1 mile upstream, was recommended to accommodate the 500-year flow.* ~~would accommodate the 100-year river flows at Northern Parkway.~~

~~Between the interchanges, the roadway would return to existing grade. There would be four lanes in each direction, with no vertical curb west of 112th Avenue. Any additional catch basins, median drains, retention basins, and minor roadside ditches or channels would be constructed along with the final roadway construction.~~

Channelization actions by the FCDMC are not included as part of this new facility. The downstream reach of the channel between Northern Avenue and Glendale Avenue must be completed prior to, or concurrent with, bridge construction for this project.

~~Improvement of the Agua Fria River channel must be completed prior to construction of the new bridge in Alternatives 1 and 2. Channel reconstruction under the new bridge and downstream to Glendale Avenue must be completed before or concurrent with construction of the new bridge~~

~~crossing. Upstream channel improvements between Northern Avenue and Peoria Avenue would improve the upstream hydraulics, but they are not as important as downstream channel improvements.~~

Alternatives 1 and 2 include ~~a replacement~~*additional* bridges across the New River, ~~which would impact the existing river crossings.~~ A new bridge ~~would be a six-span bridge that~~ would cross both New River and the eastbound Northern Avenue ~~bridges. A 1,125-foot-long bridge would be required to cross New River and the eastbound Northern Avenue ramp that crosses under the elevated portion of the new facility.~~ This ~~six~~*eight*-lane bridge would be located approximately 45 feet south of, and downstream from, the existing bridge. The bridge width would ~~vary from 129.2 feet at the west abutment to 100.8 feet for the eastern six spans~~ *be approximately 144 feet wide.*

Section 4.11.2, Environmental Consequences

[Page 118 of the Draft EA, next to the last paragraph of the Floodplains section]

No conceptual modifications are anticipated for the New River channel configuration or bank protection. No new grade-control structures are anticipated for the New River channel in this reach. The final pier locations, span lengths, abutment locations, and possible bank lining reconstruction must be addressed in detail during final design. *Disturbances within the New River will comply with the conditions of the Section 404 Permit No. 89-001-RD. This previous 404 permit has identified the New River channel as a mitigation area which requires disturbance be minimized. Current estimates indicate that approximately 2.7 acres would be disturbed during construction for Alternatives 1 and 2.*

Section 4.11.2, Environmental Consequences

[Page 119 of the Draft EA]

Floodplains

Effects on the floodplains would be similar to those identified for Alternatives 1 and 2 except the location of the river crossings would be different. Bridges exist at both the Agua Fria River and New River at Glendale Avenue. Northern Parkway would require two new bridges at the Agua Fria River and one bridge at the New River, which crosses the river at an angle. *It is estimated that approximately 6 acres of the New River channel would be disturbed during the construction of Alternative 3. Disturbances within the New River will comply with conditions of the Section 404 Permit No. 89-001-RD. This previous 404 permit identified this area of the New River Channel as mitigation area which requires disturbances be minimized. Other design modifications would be considered to reduce the area of disturbance in compliance with Section 404(b)(1).*

Section 4.11.3, Mitigation

[Page 123 of the Draft EA, top of the page]

The Arizona Pollutant Discharge Elimination System form shall be submitted to the Arizona Department of Environmental Quality Phoenix, Arizona office by certified mail or hand delivered to the address below:

~~Stormwater Program Water Permits Section/Notice of Intent~~
Arizona Department of Environmental Quality
Surface Water Section/Stormwater and General Permits Unit
1110 West Washington, ~~5415B-35415A-1~~
Phoenix, AZ 85007

Section 6, Public and Agency Involvement Process

[Page 150 of the Draft EA, second paragraph]

Since the project was initially conceived as part of the Glendale Onboard Transportation Program, it has been featured at annual public open houses for that program for the past ~~four~~ *eight* years, from 2002 to 200~~6~~*9*, and updates on the design progress have also been included in the annual Glendale Onboard Program informational brochure mailed to citizens of Glendale.

Section 6.5, Agency Involvement

[Page 154 of the Draft EA, second paragraph]

After the *Proposition 400* county-wide vote, the Northern Working Team was formed, which included representatives from Glendale, Peoria, El Mirage, MCDOT, MAG, Luke AFB, ADOT, FHWA, and FCDMC. This team, which now consists of an *executive* ~~management~~ committee ~~and a technical committee~~, has met monthly and has provided review and guidance for further development of the design concept. The design concept as presented herein has the concurrence of representatives from these agencies. An agency scoping meeting was held in February 2005. Agencies and stakeholders, including utility companies and landowners, presented their concerns and issues regarding the project.

Section 7.0, Bibliography

[Page 158 of the Draft EA]

Maricopa County Air Quality Division. ~~2009~~*2006*. *Air Monitoring Network Review*.

ATTACHMENT 1
PUBLIC HEARING INFORMATION

Public Hearing Summary Northern Parkway Project

Hearing Date: Wednesday, October 14, 2009

Hearing Time: 4:30 – 7:30 p.m. (brief presentation at 5:30 p.m.)

Location: Raymond S. Kellis High School
8990 W. Oranewood Avenue
Glendale, AZ 85305

Purpose of the Hearing:

The public hearing was held as part of the NEPA 30-day public comment period for Northern Parkway that extended from October 1 through October 30, 2009. The purpose of the public hearing was to present information about the proposed Northern Parkway project and the Draft Environmental Assessment (EA) conducted for the project area, and to invite public comment on the Northern Parkway Draft EA.

General Summary:

The hearing for the Northern Parkway Project was held in the library of the Raymond S. Kellis High School on Wednesday, October 14, 2009 from 4:30 p.m. until 7:30 p.m. Approximately 120 people attended the hearing, including representatives from the project team.

For the first hour of the meeting, information about the project and environmental studies was presented on a number of display boards. Project representatives were in attendance to answer questions and discuss the information presented. The display area was organized by station, with each station focusing on different aspects of the project. Station 1 was a welcome and sign-in area and featured information on the Northern Parkway project partners and other participating agencies. Attendees were encouraged to sign in and provide contact information so that they would be added to the mailing list. Public hearing programs, newsletters, speaker request cards, and comment forms were provided at this station. The newsletters and comment forms were provided in both English and Spanish. Attendees were also instructed in the various ways that comments could be submitted in writing, and how verbal comments could be made at the hearing that evening.

Station 2 featured information about the Northern Parkway project, including the project purpose and need, an explanation of why Northern Avenue was selected as the proposed route, a history of the project, and the proposed project implementation schedule. The project representatives at this station emphasized that the project is a multi-agency collaboration and intergovernmental agreements were approved by the elected officials of all of the city agencies. Funding would be provided through a partnership between the Cities of El Mirage, Glendale, and Peoria; FHWA; and MCDOT.

The project description and alternatives were presented at Station 3, with displays showing explanations and drawings of the project features and maps of the various alternatives being considered. The funding and phasing plan was also presented at this station. The project representatives at this station discussed the three alternatives and

the reasons for the proposed alternative. Copies of the Design Concept Report and the Draft EA were available at this station for viewing, and copies of the DCR Executive Summary were available for the public to take.

Information presented at Station 4 described the environmental assessment process. Display boards identified the factors considered in the EA, including subjects considering the human environment (land use, utilities, neighborhood and community continuity, relocations and acquisitions, social and economic conditions, recreation areas, visual resources, cultural and historic resources, noise, and hazardous materials) and the natural environment (air quality, water resources, biological resources, and soils and farmlands). Project representatives explained the requirements of complying with the National Environmental Policy Act of 1969. Copies of the EA were available at this station for viewing.

A court stenographer was stationed at Station 5 for individuals who wished to make a verbal comment in private rather than to speak during the hearing. This station was located in a separate area to provide privacy for the commenter and for the court report to be able to accurately record the comments.

The presentation began promptly at 5:30 p.m. in an area of the library where seating had been set up. The hearing was moderated by Ms. Sue Lewin, who made introductions of distinguished guests and explained the hearing process. She again stated how written and verbal comments could be submitted at the hearing, including submittals on comment forms or by speaking with the court reporter. At that point, a power point presentation reviewing the information provided in the display area was given to the group. Presentations were made by Mr. David French (project overview) and Mr. Lou Maslyk (environmental overview). Spanish translation services were also provided.

Following the presentation, an opportunity for the public to give verbal comments was provided. Prior to the presentation, each public commenter was asked to submit a speaker request card so that everyone could have a chance to speak. Additional request forms were provided until 6:30 p.m. to those that decided later that they wanted to speak. Speakers were asked to provide their comments at the microphones set up in two places in the room, and to observe a three-minute time limit. They were also asked to state their name prior to speaking, at which time the three-minute time period would begin. Ten individuals provided comments during the verbal comment period. A court stenographer recorded all proceedings of the introduction, presentation, and verbal comment period.

The formal presentation and verbal comment session concluded at approximately 6:45 p.m. A few members of the public stayed afterward to continue the one-on-one discussions at or near the graphic displays. In all, five written comments were submitted at the hearing and two verbal comments were given to the court stenographer prior the presentation.

The Cities of El Mirage, Glendale, Peoria, and The Maricopa County Department of Transportation, in Cooperation with Arizona Department of Transportation and Federal Highway Administration



PUBLIC HEARING

Your input is needed on the DRAFT Environmental Assessment for the proposed Northern Parkway Project

Wednesday, October 14, 2009
4:30 p.m. – 7:30 p.m.
Presentation at 5:30 p.m.

Raymond S. Kellis High School
8990 W. Orangewood Ave.
Glendale, AZ 85305



The Cities of El Mirage, Glendale, and Peoria as well as Maricopa County, in cooperation with Arizona Department of Transportation (ADOT) and Federal Highway Administration (FHWA), have prepared a Draft Environmental Assessment (EA) for the proposed Northern Parkway Project between Loop 303 and US 60 (Grand Avenue). The project would be developed and funded through a partnership between the Cities of El Mirage, Glendale, and Peoria; FHWA; and the Maricopa County Department of Transportation. The purpose of the project is to construct a regional transportation facility to improve regional connectivity from the West Valley to major roadways such as Loop 303, Loop 101, and US 60 (Grand Avenue), improve travel time, regional facility spacing, and west/east traffic flow and serve population growth.

The purpose of the public hearing is to provide information on the proposed improvements and receive comments on the Draft EA. The study team will be available to discuss the proposed project and answer questions. A court reporter will be available to record your comments. Copies of the Draft EA are available for review and comment at www.northernparkway-info.com and at the following locations during business hours:

Glendale Public Library – Velma Teague Branch 7010 N. 58th Ave. Glendale, AZ 85301 623.930.3430	Mon, Thu Tues, Wed Fri, Sat Sun	9am–9pm 9am–6pm 9am–5pm 1pm–5pm	Peoria Public Library – Main Branch 8463 W. Monroe St. Peoria, AZ. 85345 623.773.7555	Mon–Thu Fri, Sat Sun	9am–8pm 9am–6pm 1pm–5pm
Youngtown Library 12035 Clubhouse Square Youngtown, AZ 85363 623.974.3401	Mon – Fri Sat	10am–4pm 10am–1pm	Maricopa County Library – El Mirage Branch 14011 N. 1st Avenue El Mirage, AZ 85335 602.652.3000	Mon – Wed Thur Fri, Sat	9am–5pm 10am–7pm 9am–5pm

To submit comments in writing, please visit the project website, send an email to contact@northernparkway-info.com, or contact Sunny Bush, URS Corporation, 7720 N 16th Street, Suite 100, Phoenix, AZ 85020, fax 602-371-1615. Written comments must be received by October 30, 2009.

Americans with Disabilities Act: This notice may be available in an alternative format and persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Sunny Bush at the email above. Requests should be made as early as possible to allow time to arrange the accommodation.

John Dickson
ADOT Project Manager

Terry Johnson
Glendale Project Manager

Al Kattan
MCDOT Project Manager

TRACS No. 000 MA MMA SS593 01C • Federal Project No. STP-MMA-0(034)B



Las ciudades de El Mirage, Glendale, Peoria y el Departamento de Transporte del condado de Maricopa en cooperación con el Departamento de Transporte de Arizona y Administración Federal de Autopistas



VISTA PÚBLICA

Sus comentarios son necesarios para la evaluación del medioambiente borrador para el proyecto Northern Parkway

Miércoles, 14 de octubre de 2009

4:30 p.m. – 7:30 p.m.
Presentación a las 5:30 p.m.

Raymond S. Kellis High School

8990 W. Orangewood Ave.
Glendale, AZ 85305



En cooperación con el Departamento de Transporte de Arizona (ADOT) y la Administración Federal de Autopistas (FHWA), las ciudades de El Mirage, Glendale, y Peoria y también el condado de Maricopa han preparado una evaluación del medioambiente borrador para el proyecto de Northern Parkway entre las autopistas 303 y US 60 (Avenida de Grand). El proyecto será desarrollado y financiado con una sociedad entre las ciudades de El Mirage, Glendale, y Peoria; FHWA, y el Departamento de Transporte del Condado Maricopa. El propósito del proyecto es construir una facilidad de transporte regional para mejor conectividad regional del valle del oeste con las autopistas como la Loop 303, la Loop 101, y la US 60 (Avenida de Grand), para mejorar el tiempo de recorrido, el espaciamiento regional de la facilidad, la circulación del oeste al este, y el crecimiento demográfico de la población.

El propósito de la vista pública es para dar información de las mejoras propuestas y recibir comentarios de la evaluación del medioambiente borrador. Miembros del equipo del estudio estarán disponibles para hablar del proyecto propuesto y contestar a preguntas. Un reportero de corte estará disponible para anotar sus comentarios. Las copias de la evaluación del medioambiente están disponibles en www.northernparkway-info.com y en las localizaciones siguientes durante horas de oficina para leer y comentar:

Glendale Public Library – Velma Teague Branch 7010 N. 58th Ave. Glendale, AZ 85301 623.930.3430		L, J 9am–9pm M, X 9am–6pm V, S 9am–5pm D 1pm–5pm	Peoria Public Library – Main Branch 8463 W. Monroe St. Peoria, AZ 85345 623.773.7555		L – J 9am–8pm V, S 9am–6pm D 1pm–5pm
Youngtown Library 12035 Clubhouse Square Youngtown, AZ 85363 623.974.3401		L – V 10am–4pm S 10am–1pm	Maricopa County Library – El Mirage Branch 14011 N. 1st Avenue El Mirage, AZ 85335		L – X 9am–5pm J 10am–7pm V, S 9am–5pm

Para enviar sus comentarios por escrito, por favor visite la página web del proyecto enviando un correo electrónico a contact@northernparkway-info.com, o bien contactar con Sunny Bush, URS Corporation, 7720 N 16th Street, Suite 100, Phoenix, AZ 85020, fax 602-371-1615. Los comentarios realizados por escrito deben ser recibidos antes del día 30 de octubre de 2009.

Ley sobre Estadounidenses con Discapacidades (ADA, siglas en inglés): Este aviso puede estar disponible en un formato alternativo y las personas con discapacidades pueden comunicar con Sunny Bush enviando un correo electrónico a contact@northernparkway-info.com si requieren una comodidad razonable, tal como un intérprete del lenguaje de señas. Las peticiones se deben hacer con antelación para dar suficiente aviso para arreglar la comodidad.

John Dickson
Gerente del proyecto, ADOT

Terry Johnson
Gerente del proyecto, Glendale

Al Kattan
Gerente del proyecto, MCDOT

TRACS No. 000 MA MMA SS593 01C • Federal Project No. STP-MMA-0(034)BN



Este documento es una traducción del texto original escrito en inglés.
Esta traducción no es oficial y no está atando en este estado o una subdivisión política del estado.

Loop 303 to Grand Avenue

For the Proposed

NORTHERN PARKWAY

Design and Environmental Studies

PUBLIC HEARING PROGRAM

To Comment on the Northern Parkway
Draft Environmental Assessment



Wednesday, October 14, 2009

4:30 to 7:30 pm

Raymond S Kellis High School – Library

8990 W. Oranewood Ave.

Glendale, AZ 85305



Agenda

- 4:30 pm – Open house
- 5:30 pm – Presentation
- 6:00 pm – Comment period followed by open house

Informational Display Stations

- Station 1 – Sign-In and Orientation
- Station 2 – Project Introduction
- Station 3 – Project Description and Alternatives
- Station 4 – Environmental Assessment
- Station 5 – Court Reporter

Ways to comment

- **Tonight**
 - Verbally to court reporter
 - Submit a speaker request card to speak in front of the audience following the presentation
 - Respect time limit – no time sharing
 - State first and last name before commenting
 - Take seat after commenting
 - Be courteous to speakers and audience
 - Fill out comment forms available at sign-in table

- **By October 30, 2009**
 - E-mail: contact@northernparkway-info.com
 - Mail:
 - Sunny Bush
 - URS Corporation
 - 7720 N. 16th Street, Ste. 100
 - Phoenix, AZ 85020
 - Online: www.northernparkway-info.com
 - Fax: 602-371-1615

For the Proposed NORTHERN PARKWAY

Design and Environmental Studies



What: Public Hearing to Comment on the Northern Parkway Draft Environmental Assessment (EA)
When: Wednesday, October 14, 2009
Time: 4:30 p.m. to 7:30 p.m., with a brief presentation at 5:30 p.m.
Where: Raymond S. Kellis High School, 8990 W. Orangewood Ave. Glendale, AZ 85305

PURPOSE OF THE MEETING

The Cities of El Mirage, Glendale, and Peoria as well as Maricopa County, in cooperation with Arizona Department of Transportation (ADOT) and Federal Highway Administration (FHWA), have prepared a Draft Environmental Assessment (EA) for the proposed Northern Parkway Project between Loop 303 and US 60 (Grand Avenue). The project would be developed and funded through a partnership between the Cities of El Mirage, Glendale, and Peoria; FHWA; and the Maricopa County Department of Transportation. The purpose of the project is to construct a regional transportation facility to improve regional connectivity from the West Valley to major roadways such as Loop 303, Loop 101, and US 60 (Grand Avenue), improve travel time, regional facility spacing, and west/east traffic flow and serve population growth.

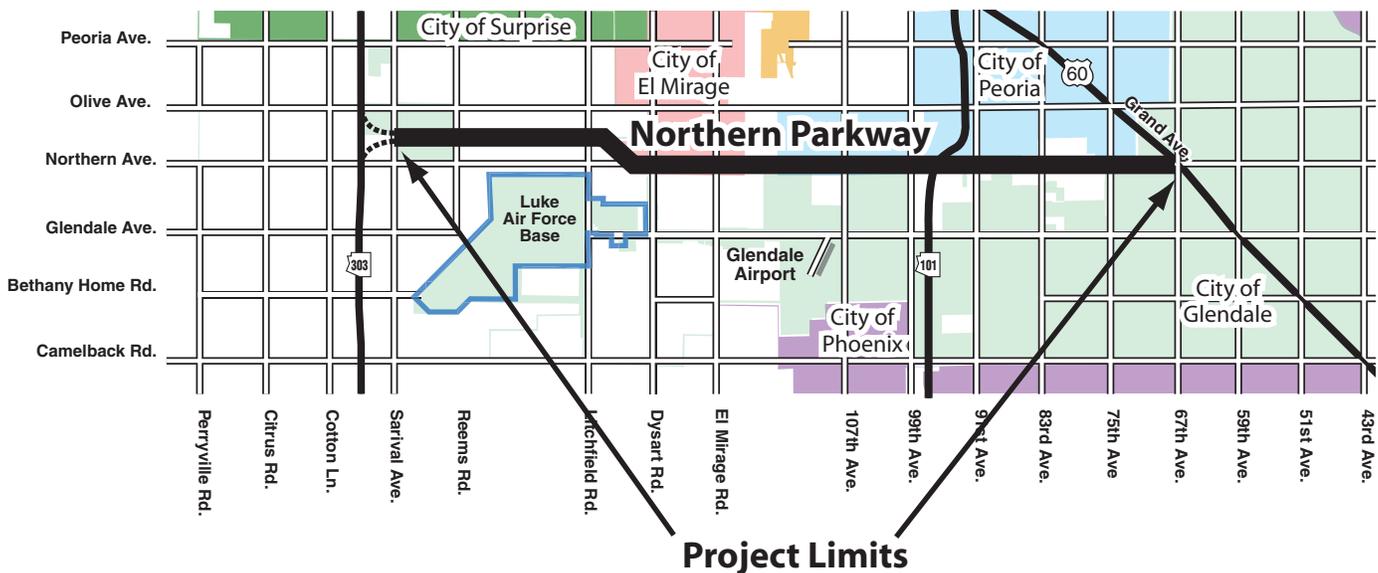
ABOUT THE EA

The purpose of the EA is to identify, analyze, and evaluate the potential impacts on the natural and human environment that could result from construction and operation of the Northern Parkway transportation facility. The EA also proposes measures to avoid or minimize potential impacts of the project. Impacts include those that are short-term, occurring during construction, or long-term impacts that would result from operation of the Northern Parkway facility.

At this stage in the planning process, the study team has completed the environmental studies and documented the results in a Draft EA. Agencies, tribes, and the general public are invited to provide comments on the Draft EA. These comments will be reviewed and responses will be provided in the Final EA. The Final EA also may include revisions or additions to the document, and will be prepared. EA will be approved.

PARTNER AGENCIES

- City of El Mirage
- City of Glendale
- City of Peoria
- Maricopa County Department of

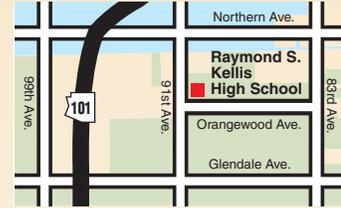


Loop 303 to Grand Avenue – Newsletter #5

Please join us for a Public Hearing to view informational displays of the proposed project components and to provide comments on the Northern Parkway Draft EA. The study team will be on hand to answer questions and to take your written comments. A court reporter also will be available to take verbal comments.



Wednesday, October 14, 2009
4:30 p.m. to 7:30 p.m.,
with a brief presentation at 5:30 p.m.
Raymond S. Kellis High School
8990 W. Orangewood Ave.
Glendale, AZ 85305



Review the Draft EA at www.northernparkway-info.com and at the following locations during business hours:

Glendale Public Library –

Velma Teague Branch	Mon, Thu	9am–9pm
7010 N. 58th Ave.	Tues, Wed	9am–6pm
Glendale, AZ 85301	Fri, Sat	9am–5pm
623.930.3430	Sun	1pm–5pm

Peoria Public Library –

Main Branch	Mon – Thu	9am–8pm
8463 W. Monroe St.	Fri, Sat	9am–6pm
Peoria, AZ. 85345	Sun	1pm–5pm
623.773.7555		

Youngtown Library

12035 Clubhouse Square		
Youngtown, AZ 85363	Mon – Fri	10am –4pm
623.974.3401	Sat	10am–1pm

Maricopa County Library –

El Mirage Branch	Mon–Wed	9am–5pm
14011 N. 1st Avenue	Thur	10am–7pm
El Mirage, AZ 85335	Fri, Sat	9am–5pm
602.652.3000		

If you cannot attend the Public Hearing, you may submit comments on the project website, send an email to contact@northernparkway-info.com, or contact Sunny Bush, URS Corporation, 7720 N 16th Street, Suite 100, Phoenix, AZ 85020, fax 602-371-1615. All formal comments must be submitted in writing and received by October 30, 2009.

Si usted quisiera hablar con alguien en español, por favor llame a Christina White at (602) 648-2555.

Americans with Disabilities Act: This notice may be available in an alternative format and persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Sunny Bush at the email above. Requests should be made as early as possible to allow time to arrange the accommodation.

Para el propuesto

NORTHERN PARKWAY

Diseños y estudios ambientales



Que: Vista pública para hacer comentarios en la evaluación del medioambiente borrador (EA)

Cuando: Miércoles, 14 de octubre de 2009

Horario: 4:30 a 7:30 p.m., con una breve presentación a las 5:30 p.m.

Localización: Raymond S. Kellis High School, 8990 W. Orangewood Ave, Glendale, AZ 85305

Propósito de la reunión

En cooperación con el Departamento de Transporte de Arizona (ADOT) y la Administración Federal de Autopistas (FHWA), las ciudades de El Mirage, Glendale, y Peoria y también el condado de Maricopa han preparado una evaluación del medioambiente borrador para el proyecto de Northern Parkway entre las autopistas 303 y US 60 (Avenida de Grand). El proyecto será desarrollado y financiado con una sociedad entre las ciudades de El Mirage, Glendale, y Peoria; FHWA, y el Departamento de Transporte del Condado Maricopa. El propósito del proyecto es construir una facilidad de transporte regional para mejorar conectividad regional del valle del oeste con las autopistas como la Loop 303, la Loop 101, y la US 60 (Avenida de Grand), para mejorar el tiempo de recorrido, el espaciamiento regional de la facilidad, la circulación del oeste al este, y el crecimiento demográfico de la población.

Acerca del EA

El propósito del EA es para identificar, analizar, y evaluar los posibles impactos sobre el medioambiente natural y humano que podría derivarse de la construcción y operación de la facilidad de transporte del Northern Parkway. El EA también propone medidas para evitar o reducir al mínimo los posibles impactos del proyecto. Impactos incluyen los que son de corto plazo, que se producen durante la construcción, y los impactos de largo plazo que se derivarían de la operación de la instalación de Northern Parkway.

En esta etapa del proceso de planificación, el equipo ha completado los estudios ambientales y documentado los resultados en el EA borrador. Agencias, tribus, y el público general están invitados a comentar en el EA borrador. Estos comentarios serán revisados y las respuestas serán incluidas en el documento, y se publicará. El EA Final será a

LAS agencias asociadas

- Ciudad de El Mirage
- Ciudad de Glendale
- Ciudad de Peoria
- Departamento de Transporte del



Loop 303 a al Avenida de Grand – Boletín #5

Por favor pasa el tiempo con nosotros en la vista pública para ver las muestras de información de los componentes del proyecto propuesto y someter sus comentarios sobre el Northern Parkway EA borrador. El equipo de estudio estará disponible para responder a sus preguntas y recibir sus comentarios escritos. Un reportero de corte también se pondrá a disposición de tomar a los comentarios verbales.



Miércoles, 14 de octubre de 2009
4:30 a 7:30 p.m., con una breve presentación a las 5:30 p.m.
Raymond S. Kellis High School
8990 W. Orangewood Ave.
Glendale, AZ 85305



Las copias del EA están disponibles en www.northernparkway-info.com y en las localizaciones siguientes durante horas de oficina para leer y comentar:

Glendale Public Library –

Velma Teague Branch	L, J	9am–9pm
7010 N. 58th Ave.	M, X	9am–6pm
Glendale, AZ 85301	V, S	9am–5pm
623.930.3430	D	1pm–5pm

Peoria Public Library –

Main Branch	L – J	9am–8pm
8463 W. Monroe St.	V, S	9am–6pm
Peoria, AZ. 85345	D	1pm–5pm
623.773.7555		

Youngtown Library

12035 Clubhouse Square	L – V	10am –4pm
Youngtown, AZ 85363	S	10am–1pm
623.974.3401		

Maricopa County Library –

El Mirage Branch	L–X	9am–5pm
14011 N. 1st Avenue	J	10am–7pm
El Mirage, AZ 85335	V, S	9am–5pm
602.652.3000		

Si Usted no puede estar presente en la Presentación o Conferencia, Usted debe enviar sus comentarios en la página web del proyecto, por correo electrónico a contact@northernparkway-info.com, o bien contactando con Sunny Bush, URS Corporation, 7720 N 16th Street, Suite 100, Phoenix, AZ 85020, fax 602-371-1615. Todos los comentarios formales deben ser enviados por escrito y recibidos antes del 30 de octubre de 2009.

Ley sobre Estadounidenses con Discapacidades (ADA, siglas en inglés): Este aviso puede estar disponible en un formato alternativo y las personas con discapacidades pueden comunicar con Sunny Bush enviando un correo electrónico a contact@northernparkway-info.com si requieren una comodidad razonable, tal como un intérprete del lenguaje de señas. Las peticiones se deben hacer con antelación para dar suficiente aviso para arreglar la comodidad.

Este documento es una traducción del texto original escrito en inglés. Esta traducción no es oficial y no está atando en este estado o una subdivisión política del estado.

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LOOP 303 TO GRAND AVENUE
FOR THE PROPOSED
NORTHERN PARKWAY
DESIGN AND ENVIRONMENTAL STUDIES

PUBLIC COMMENT HEARING
ON THE
NORTHERN PARKWAY DRAFT ENVIRONMENTAL ASSESSMENT

Glendale, Arizona
October 14, 2009
5:30 o'clock p.m.

ARIZONA REPORTING SERVICE, INC.
Court Reporting
Suite 502
2200 North Central Avenue
Phoenix, Arizona 85004-1481

Prepared for: By: KAREN L. KESSLER, RPR
Certified Reporter
Certificate No. 50821

1 BE IT REMEMBERED that the above-entitled
2 Public Comment Hearing came on regularly to be heard at
3 the Raymond S. Kellis High School Library, 8990 West
4 Orangewood Avenue, Glendale, Arizona, commencing at 5:30
5 p.m., on the 14th day of October, 2009.

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John Payne

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Sheryl Payne

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1 MR. PAYNE: We're against the eastern leg of the
2 parkway; in particular, east of the freeway

3 MS. PAYNE: East of the 101.

4 MR. PAYNE: East of the 101. We are homeowners
5 in that area and don't feel like that section needs to
6 change.

7 MS. PAYNE: So we would like to see it stay the
8 way it is. That's it. Pretty simple. Thanks.

9 (Public Comments concluded at 6:44 p.m.)

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1 STATE OF ARIZONA)
2) ss.
3 COUNTY OF MARICOPA)

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8 I, KAREN L. KESSLER, RPR, Certified Reporter
9 No. 50821 for the State of Arizona, do hereby certify
10 that the foregoing printed pages constitute a full, true
11 and accurate transcript of the proceedings had in the
12 foregoing matter, all done to the best of my skill and
13 ability.

14

15 WITNESS my hand this 22nd day of October,
16 2009.

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KAREN L. KESSLER, RPR
Certified Reporter
Certificate No. 50821

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LOOP 303 TO GRAND AVENUE
FOR THE PROPOSED
NORTHERN PARKWAY
DESIGN AND ENVIRONMENTAL STUDIES

PUBLIC COMMENT HEARING
ON THE
NORTHERN PARKWAY DRAFT ENVIRONMENTAL ASSESSMENT

Glendale, Arizona
October 14, 2009
5:30 o'clock p.m.

REPORTED BY: DONNA FORD TERRELL, RPR, RDR, RMR, CRR,
CERTIFIED COURT REPORTER #50250

PREPARED FOR: ARIZONA REPORTING SERVICE, INC.
2200 North Central Avenue
Suite 502
Phoenix, Arizona 885004-1481

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1 BE IT REMEMBERED that the above-entitled Public
2 Comment Hearing came on regularly to be heard at the
3 Raymond S. Kellis High School Library, 8990 West
4 Orangewood Avenue, Glendale, Arizona, commencing at 5:30
5 p.m., on the 14th day of October, 2009.

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9 APPEARANCES:

10 Moderator:

11 BY: Ms. Sue Lewin
 Lewin & Associates
12 1146 North Mesa Drive
 Suite 102-298
13 Mesa, Arizona 85201

14
15

16 SPEAKERS FOR URS CORPORATION:

17 BY: Mr. David French
 Mr. Lou Maslyk

18
19

20 INTERPRETER: Mr. Peter Martinez

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22
23
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1 MS. LEWIN: Welcome, everybody. Don, can you
2 hear us back there?

3 Welcome. My name is Sue Lewin, and I'll be your
4 official moderator for this evening's proceedings. We
5 have with us Peter Martinez, who's going to provide
6 Spanish translation services.

7 We'd like to recognize some distinguished guests
8 we have with us this evening. City of Glendale Council
9 Member David Goulet. Welcome, Councilman.
10 And City of Peoria Council Member Carlo Leone. Welcome.

11 Anyone else that -- any other elected officials
12 we have this evening. Council Member Joyce Clark.
13 Welcome. Thank you for coming.

14 We have with us two court stenographers this
15 evening. Donna, up front, is going to be recording the
16 proceedings and the verbal testimony in front. And then
17 Karen is in the reference room, if anybody would like to
18 just go speak privately and give their comments in the
19 back.

20 In case of an emergency, you have the exit you
21 came in. And there's an exit, of course, over this way.
22 And restrooms are out in the hall to my right.

23 Our agenda this evening is pretty packed here.
24 I'll be providing the introductions and the purpose and
25 format of the meeting. And then Mr. Dave French from URS

1 Corporation will provide a project overview. And then Mr.
2 Lou Maslyk also from URS Corporation will provide an
3 environmental overview.

4 After the formal presentation, we will have the
5 official hearing of public comments, and then we'll allow
6 time for an open house period where you can visit the
7 project exhibits and speak one-on-one with our team
8 members.

9 The Northern Parkway project has a number of
10 participating agencies and project partners. The project
11 partners are the cities of El Mirage, Glendale and Peoria,
12 as well as the Maricopa County Department of
13 Transportation.

14 Other participating agencies are the Arizona
15 Department of Transportation, Federal Highways
16 Administration, Maricopa Association of Governments, Luke
17 Air Force Base, and the Flood Control District of Maricopa
18 County.

19 These partners and participating agencies have
20 prepared an Environmental Assessment for Northern Parkway
21 from Loop 303 to U.S. 60, which is Grand Avenue. And they
22 are very interested in hearing comments from the public on
23 this document. That's the purpose of our hearing tonight.

24 We're also here to present the purpose of the
25 project and describe the alternatives considered, identify

1 the project partners proposed alternatives, summarize key
2 environmental findings, and as I mentioned earlier, obtain
3 your comments on the EA. That's going to be the most
4 important reason we're here tonight.

5 If you haven't had a chance to review the draft
6 Environmental Assessment, you can do so on the study
7 website or at your local library. And this information is
8 included in the handout you received at the sign-in table.

9 We also are offering a number of ways to provide
10 comments tonight. And you can use any one or all of the
11 methods listed. As I mentioned, you can go to the
12 reference room and speak privately one-on-one with the
13 court stenographer back there.

14 You can provide verbal comments before the
15 audience, but you'll need to fill out a speaker request
16 form that we provided at the sign-in table.

17 And if you have those, at any time you decide to
18 speak, if you'd like to just raise your hand with your
19 card, our staff members will come around and pick them up.

20 And you can also complete and return your
21 comment forms either at the sign-in table at tonight's
22 hearing, or prior to -- or by October 31st, you can send
23 them in via e-mail, U.S. mail, or on-line or via fax. And
24 that information is the included in your handout.

25 I'd like to turn the program over to Mr. Dave

1 French.

2 MR. FRENCH: Thank you. Good evening,
3 everyone. Can you hear me okay?

4 The Northern Parkway idea started in 2001 with
5 the Citizen Advisory Committee of the City of Glendale
6 that was looking at developing a long-range plan for
7 Glendale. And that plan was put together and then put
8 before the voters of Glendale in November of 2001. And
9 that vote passed to incorporate a half-cent sales tax
10 within the City of Glendale.

11 And that money has been funding many of the
12 improvements that you've seen around Glendale, also
13 provided the initial money to start planning this idea of
14 a Super Street, as it was called at that time, and became
15 known as the Northern Parkway.

16 So starting in 2002, early conceptual plans
17 were developed for the Northern Parkway. We had public
18 meetings, got your input on that.

19 The Northern Parkway was then incorporated into
20 the Maricopa Association of Governments' long-range
21 transportation plan. That plan then was put before the
22 voters of all of Maricopa County in November of 2004. And
23 that vote -- the voters voted to continue the half-cent
24 sales tax it's collected county-wide to support
25 transportation.

1 And that fund called the Regional Area Road
2 Fund provides the bulk of the money for Northern Parkway.

3 We continued the studies on Northern Parkway to
4 develop and refine that concept. We held public meetings
5 in 2005 and public meetings in many of the neighborhoods
6 in 2006. We continued refining the process and conducting
7 the Environmental Assessment.

8 And that environmental -- Draft Environmental
9 Assessment was completed in a draft form earlier this
10 year, and that prompted holding this public hearing.

11 What is the purpose of Northern Parkway?
12 Primarily, it's to serve as a major regional east-west
13 route, to serve the entire west valley, to reduce travel
14 time, to increase road capacity, to reduce the crash
15 rates, to promote economic activity, to serve the growth
16 that we expect in valley, provide a new crossing of the
17 Agua Fria river. So it has a number of broad purposes.

18 So why are we looking at Northern Parkway or
19 the Northern Avenue as our primary corridor? Well, in the
20 west valley, there's a major gap in the road system. We
21 have Interstate 10 at the south end. Loop 101 becomes
22 east-west way up here. There's 13 miles in between.

23 And within that 13 miles, you have some big
24 gaps in the arterial road system. Bell Road to Olive
25 Avenue, about six miles, there are no east-west continuous

1 roads. And from Northern to Camelback, again, three
2 miles, there are no east-west roads. So that means that
3 the remaining east-west roads have to carry an extra load.

4 And as the west valley develops, as we all
5 expect it to, these roads are going to have to carry an
6 extra load over and above what they would in the rest of
7 the metropolitan area.

8 So we started looking here in the middle
9 between the major roads that we have. You have Olive or
10 Northern. Olive goes through a portion of Peoria and El
11 Mirage. It's much more heavily developed in Peoria than
12 it is -- than Northern.

13 Northern is the boundary between Glendale and
14 Peoria, and Glendale and El Mirage. So it's a better
15 place for a major regional highway.

16 We considered four alternatives. First of all,
17 no-build. No-build is always an alternative until you
18 actually build something. And so we compared our proposal
19 to the no-build.

20 We looked at three build alternatives.
21 Alternative one has two traffic signals on it.
22 Alternative two has no traffic signals. It's free flow
23 all the way. And alternative three has a major departure
24 from the Northern alignment in it.

25 So let me describe those in general to you

1 tonight, and the detail, you can see on the boards
2 afterwards.

3 All of the alternatives begin on the west end
4 at Sarival Avenue, which is just east of Loop 303, which
5 has been approved and is under final engineering by
6 Arizona Department of Transportation. It is expected to
7 start construction in the next year or so.

8 So it begins at that point where there will be
9 a tie-in to 303, and continues for 12 and a half miles
10 across the Agua Fria River and all the way to Grand
11 Avenue.

12 It is envisioned as a controlled access
13 highway, meaning that there will be very few driveways and
14 local streets that intersect it. In fact, from the west
15 end, we don't expect to have any driveways or local
16 streets. On the eastern part of it, where there are many
17 streets today, many of those will remain.

18 We have departed from the Northern Avenue
19 alignment in response to comments from Luke Air Force
20 Base, where their runway comes very near Northern Avenue,
21 and moved that alignment a half mile northward to go
22 through the agricultural fields, and then swing down and
23 rejoin the Northern alignment at Dysart, and continue that
24 way all the way to Grand Avenue.

25 We have a fairly complex concept at Loop 101,

1 which comes through right here. The parkway would be on
2 an alignment just south of the existing Northern Avenue.
3 It would be elevated. It would go up over Loop 101 and
4 would be free flow through there, so that if you're going
5 all the way through on Northern Parkway, you would not
6 have to stop.

7 But we'd also retain a section of Northern
8 Avenue from approximately 103rd Avenue over to 91st
9 Avenue. That road would provide access to the businesses
10 along there, and also access to Loop 101 so that you have
11 a dual function there. You have the parkway to go
12 through, and you have Northern Avenue to provide the local
13 accesses.

14 At Grand Avenue, we propose a new flyover
15 bridge. You know there's 67th Avenue that goes over Grand
16 and Northern Avenue today. So this connection would be
17 above that one. And it would provide free-flow connection
18 from Northern onto Grand Avenue in this manner.

19 The parkway would go over the major north-south
20 streets in almost all locations. So it would be elevated
21 up over these streets. There would be ramps connecting to
22 the streets so the parkway traffic would be free flow.

23 You'd get on and off the parkway by way of
24 these ramps from those local streets or those arterial
25 streets, and they would have signals at those locations.

1 One of the unique parts of alternative one
2 occurs here at 111th and 107th Avenue. There, we have
3 neighborhoods on both sides of the parkway alignment.

4 We propose to retain two traffic signals: One
5 at 111th and one at 107th to provide access into and out
6 of these neighborhoods, and so they can go across the
7 parkway or go onto and off of the parkway.

8 We propose several new local streets that would
9 connect neighborhoods to those streets so that you could
10 go from a neighborhood and get to one of those streets
11 that lead to the traffic signal.

12 We have some other connectors shown in various
13 locations to do the same thing: That is, to retain access
14 to properties that would otherwise not be impacted
15 adversely.

16 Okay. Alternative two is identical to
17 alternative one, except in that area of around 111th,
18 107th, there we would propose not to have any traffic
19 signals.

20 Instead, we would have a new grade-separated
21 intersection at 115th Avenue with a road connecting up to
22 Butler Drive that would provide access to the
23 neighborhoods to the north. No signal at 111th.

24 107th, instead of having a signal, would bridge
25 up and over the parkway, with connecting roads so you

1 could turn right onto and off of the parkway on either
2 side.

3 Alternative three then is the same as
4 alternatives one and two from Sarival to Dysart, and
5 again, from 91st Avenue to Grand Avenue. However, in
6 between, there's a major departure.

7 Instead of staying on Northern Avenue, once we
8 get to Dysart, we swing down one mile to Glendale Avenue,
9 across the Agua Fria River, go past the landfill and the
10 end of the Glendale Airport, and then start curving back
11 north, go across the New River, and then have a major
12 interchange at Loop 101 and continue back up to the
13 Northern alignment.

14 So it basically swings down a mile, and comes
15 back up a mile. And that concept was considered in
16 response to some comments that we got from the
17 neighborhood as to find a different path. So we have
18 examined that alternative.

19 The partnering agencies have looked at this, as
20 I said, since 2002 when we started the studies. And they
21 have proposed alternative one as the best solution. And
22 why alternative one?

23 Well, compared to the no-build, alternative one
24 meets all of the purposes for considering the Northern
25 Parkway. It provides additional capacity. It reduces

1 travel time. It would reduce the crash rates on the
2 parkway compared to standard arterials.

3 It provides us a regional roadway to serve the
4 growth and the development that is expected in the west
5 valley. It provides a New River crossing and so forth.
6 So it meets all of the purposes for the project.

7 When you compare alternative one to alternative
8 two, alternative one requires less change to the access to
9 the neighborhoods than would alternative two. It requires
10 less new right-of-way, and it costs about 40 million
11 dollars less.

12 When you compare alternative one to alternative
13 three, alternative one has these advantages. It does not
14 require the one mile down and one mile back up out of
15 direction of travel.

16 It does not provide -- alternative three would
17 not provide a new crossing of the Agua Fria River in a new
18 location.

19 It's more -- alternative one is more consistent
20 with what was shown on the maps when the votes were taken
21 in Glendale and county-wide. It requires 121 acres less
22 new right-of-way, and would cost about 130 million dollars
23 less. So on that basis, the partnering agencies have
24 recommended or proposed to go with alternative one.

25 So the relative cost of the three projects,

1 based on construction costs today, 613 million for
2 alternative one, going all the way up to 742 million for
3 alternative three.

4 We took alternative one and looked at the
5 detail of how you build it out over a number of years.
6 And given the amount of revenue that we expect, we think
7 that it will take about 25 years to build this parkway, to
8 complete it about in approximately 2035.

9 So if you spread it out over that length of
10 time, and the place that's going to have its impact, and
11 on that basis, we're estimating that ultimately the
12 parkway would cost about a billion dollars.

13 Right now, we have revenue identified over the
14 next 15 years of 383 million dollars. That money, a lot
15 of that, comes from the MAG Regional Transportation Fund,
16 which is the half-cent sales tax.

17 But MAG has chosen to allocate a lot of the
18 federal funds that it gets for road construction, have
19 allocated that to Northern Parkway. And so most of the
20 money will be the federal money that MAG gets, rather than
21 the half-cent sales tax. That was their choice.

22 So 70 percent of the money that we currently
23 anticipate would be federal. 30 percent would be local,
24 matched with Glendale paying the largest percentage.
25 There are a couple of other minor funding sources that

1 will be utilized.

2 Now, we looked at in detail what would we build
3 with the money, the revenue that we currently expect. And
4 again, on alternative one, we would start at the west end
5 and build a four-lane divided roadway from Sarival to
6 Dysart. That would be the first phase. And that would be
7 built in the next three or four years.

8 Then the next construction would built, the new
9 eastbound roadway, and retain the westbound roadway all
10 the way to 111th, with some improvements over to Loop 101
11 on Northern Avenue.

12 Then you'd come back in and rebuild the section
13 through El Mirage, and then finally come in and widen and
14 improve the section from 111th over to 99th, and do some
15 minor intersection improvements over there.

16 So that's what we anticipate based on revenue
17 sources that we know of today. That's what we expect to
18 build by 2025. The remainder of the parkway would be
19 built after 2025. Probably over the next ten years beyond
20 that.

21 So what's next? The public comments are due by
22 the end of this month. We will respond to those comments,
23 prepare the Final Environmental Impact Statement, submit
24 that to A.D.O.T., and to the Federal Highway
25 Administration.

1 If they believe that everything is in order, we
2 would hope to get federal approval by January. And that
3 would release the federal funds to start buying
4 right-of-way, continue with the design of the project, and
5 we'd start construction in 2011.

6 I'll turn the program over now to Lou Maslyk.

7 MR. MASLYK: Thank you. Thank you, Dave. You
8 know, can y'all hear me back there?

9 My name is Lou Maslyk. And I would also like
10 to thank you all for coming this evening. What I'm going
11 to do is provide you with a brief overview of the
12 environmental process.

13 And before I go any further, what I'd like to
14 state is that the environmental process is not in any way
15 separate from the other tasks of the Northern Parkway
16 project.

17 In fact, it is just the opposite. The
18 environmental process is fully integrated with the
19 planning, the design, the engineering, and also the
20 construction of the project.

21 And this is done to ensure that the
22 environmental factors are considered all the way
23 throughout the process, and that they are managed and they
24 are monitored all the way through construction.

25 Secondly, the purpose of the EA is to comply

1 with the National Environmental Policy Act, or NEPA. You
2 saw on an earlier slide that approximately I believe it's
3 70 percent of the funding required for the Northern
4 Parkway project is federal. Therefore, the National
5 Environmental Policy Act then requires documentation. We
6 require documentation in terms of the Northern Parkway
7 Project.

8 So what we're doing is preparing an
9 Environmental Assessment for this specific project. And
10 the EA basically evaluates the environmental effects from
11 the construction and the operation of the project.

12 So basically, in broad terms, what the EA does
13 is it looks at the natural environment, such as wildlife
14 habitat, wet lands, and things of that nature. It also
15 looked at the human or manmade environment, looked at the
16 social and economic environment that takes place out in
17 communities and in your neighborhoods.

18 And finally, it also looks at the cultural
19 environment such as areas that we may want to preserve,
20 such as archeological sites or historic buildings.

21 So what I'd like to do now is briefly run
22 through some of the steps that we do when we prepare the
23 Environmental Assessment.

24 First, we do a scan of the entire corridor and
25 determine what the existing conditions are in the

1 corridor. We then identify what the important resources
2 or environmental factors are in the corridor. We then
3 determine the potential for effect by each alternative.
4 Or in other words, what is the effect that each
5 alternative could have on key environmental resources.

6 And then what we do is once we have that done,
7 is we first try to avoid. I couldn't tell if you were
8 hearing me or not. So we first try to avoid any adverse
9 impact to any of the resources.

10 If we can't avoid them, then we try to minimize
11 them. And if we can't minimize, then we have to mitigate.
12 And what that means, I'll give you a brief example.

13 Hypothetically, say we identify a wet land area
14 in the corridor. We first, early in the process, try to
15 avoid that wet land. And if we can't do that, then we
16 look at measures where we can minimize or reduce the
17 impacts on the wet land.

18 And if we actually have to take it, that is
19 mitigation. That means we would have to potentially
20 replace that wet land to another area or location so that
21 we do not lose that important environmental resource.

22 So I know this is a busy slide. This is a busy
23 slide. But these are all of the topics that we have
24 covered in the Environmental Assessment, basically broken
25 down into the human and the natural environment.

1 Now, early in the process, what we do is we
2 seek guidance and information from federal, state, and
3 local agencies, your municipalities and other governmental
4 agencies and/or bodies, and also you, the public.

5 I believe we've had two public meetings in the
6 past. We've also had actual meetings within your
7 individual neighborhood.

8 You can see from this slide that the -- that
9 there are four areas that we want to cover. So what we're
10 going to do now is take a look at four of the areas that
11 we think are important that you might want to know about.

12 First of all, land use. Now, Dave gave you a
13 very good understanding and summation of all the changes
14 that would take place in the alignment with regards to
15 frontage roads, connector streets, and how you would
16 maintain access.

17 So for all these alternatives, that would
18 require change in circulation pattern and also to the land
19 use within the Northern Parkway corridor.

20 The other thing I'd like to discuss on this
21 slide is the fact that the roadway will require property
22 to build the road. And this property will basically
23 involve a combination of undeveloped land, commercial
24 land, residential land, and also light industrial
25 throughout the corridor.

1 And as you can see from this slide,
2 alternatives one and two require just a little over 300
3 acres each, so not too much difference between one and
4 two.

5 Now, alternative three, you can see it requires
6 much more. Because as Dave showed you on the map, it goes
7 down a mile, then it comes back up a mile. So it will
8 require about 120 some-odd acres of additional acreage.

9 So then the other thing to note is that about a
10 third of the land that will be required is now in
11 agricultural use. That's an important point for you to
12 understand because that land in the future is designated
13 for other types of land uses, based on comprehensive
14 plans, capital improvement plans, or other land use plans
15 that have been prepared by your municipalities. So it's
16 not slated for agricultural.

17 So let's see what's happening out in the
18 communities in your neighborhoods that we found in the
19 Environmental Assessment. One of the main things that
20 we've found for all the alternatives is that the character
21 of the area is changing very rapidly from what once was a
22 rural agricultural area, to a very quickly-changing urban
23 growth area.

24 I don't think I have to tell you folks that
25 live along the corridor that you see this happening every

1 day. It is changing. And we have evaluated that in the
2 Environmental Assessment.

3 Now, on this slide, it also shows property
4 acquisition that could occur from each of the three
5 alternatives. And you can see from the slide that for
6 each of the three alternatives, most of the homes or
7 businesses would be taken in the latter part or the later
8 phases of the project.

9 For example, alternatives one and two, nine
10 homes and two businesses would be required in the first
11 phase of the project. And then 19 homes and seven
12 businesses would be required after 2025. As Dave said, I
13 believe the project goes to the year 2035.

14 Now, another area that's always important with
15 a highway such as the Northern Parkway is that of noise,
16 and specifically, traffic noise. So what we did is we
17 prepared a technical noise study in conjunction with the
18 EA.

19 This noise study was conducted in accordance
20 with A.D.O.T., which is the Arizona Department of
21 Transportation noise abatement criteria, which is some of
22 the most stringent in the country.

23 So what was done is that a scan of the corridor
24 was taken place, and we identified as many noise-sensitive
25 properties that we could, primarily homes and churches,

1 schools, hospitals, areas where increased noise would be a
2 factor.

3 Then what was done from all of the various --
4 well, the total noise-sensitive areas was a sampling
5 process where measurements were actually taken place in
6 the fields. Then those were compared to future traffic.
7 Because that's the basis of increased noise is increased
8 traffic noise. So about 40 percent was measured.

9 So from the slide, you can see -- and it's
10 interesting, if nothing is done to Northern Parkway, and
11 the so-called no-build alternative, approximately 50 of
12 the properties that we looked at or sampled would exceed
13 A.D.O.T. noise standards.

14 Now, for one and two, 62 and 63 respectively,
15 and it would be much less for alternative three because of
16 the alignment for alternative three, as Dave showed, goes
17 down to the south, which is pretty much undeveloped land,
18 then connects up to the west, and which is also pretty
19 much undeveloped land. So from that standpoint,
20 alternative three would have the least noise impacts.

21 So what we'll do right now -- what's happening
22 right now is that as the design process continues, we will
23 continue to study these noise-sensitive properties and
24 determine what the proper mitigation procedures would be.

25 And I think that's what I want to say on this

1 one.

2 So moving along to air quality. We also did an
3 air quality study in conjunction with the EA. The air
4 quality study was conducted in accordance with the Clean
5 Air Act Amendment of 1990, which requires us to study
6 various types of air pollutants that could be emitted from
7 the project that basically is not good for us to breathe.

8 And the key concentrations that we looked at
9 were that of ozone and particulates. So when we did the
10 scan and the study of the Northern Parkway corridor, we
11 found that the ozone and particulates were very well below
12 the Clean Air Act Amendment levels.

13 Now, also we found that the long-term operation
14 of the Northern Parkway would also be below the standards
15 required under the Clean Air Act Amendment. So that's a
16 bit of good news, as well as the air quality would not be
17 a significant environmental factor.

18 Now, in the short term, during the construction
19 period, MCDOT, which is Maricopa County Department of
20 Transportation, they're in charge of construction of the
21 project. They have highway construction standards in
22 place that would minimize and reduce the air quality that
23 would be emitted during construction.

24 An example would be watering, frequently
25 watering the construction site frequently. And all of the

1 mitigation measures for not only air quality, but also the
2 noise and the other environmental factors we looked at,
3 are itemized in the Environmental Assessment. So you
4 could review all of those as well.

5 So what are some of the key findings? Under
6 property acquisition, fair and equitable treatment will be
7 provided to all property owners under the Federal Uniform
8 Relocation Act in terms of how the acquisition property --
9 or the acquisition process would take place.

10 Neighborhood access would be maintained under
11 each alternative with additional connector streets, roads,
12 and things of that nature, so as not to negatively impact
13 your access in your neighborhood.

14 Noise mitigation. We'll adhere to A.D.O.T.
15 noise standards, which as I said, are some of the most
16 stringent in the country.

17 Also air quality would be met with each
18 alternative.

19 So my last slide basically shows where we are
20 in the process of EA. We have a Draft EA that is out for
21 circulation. The EA is also being reviewed by the
22 agencies. It's being reviewed by your municipalities,
23 other governing bodies. And it's also available for the
24 public to review.

25 So now is your opportunity to review the EA.

1 It's available. Sue will tell you where it's available to
2 review. And I highly recommend that you do so, to have
3 your voice heard in this process. And we have stations
4 over there along the wall for the environmental process.

5 So if you have any questions about noise or any
6 of the other environmental topics that we have covered in
7 the EA, please stop over, and I'll be glad to discuss them
8 with you.

9 So that concludes my remarks. And I would like
10 to turn the proceedings back over to Sue Lewin.

11 MS. LEWIN: Thank you, Lou.

12 This is the exciting part of the hearing.
13 We're proceeding to the place where we are going to hear
14 public comments. We'd like everybody to please turn off
15 their cell phones, and also to be sitting quietly while
16 speakers are up at the microphone so that we don't disturb
17 the court stenographer.

18 If you'd wish to speak verbally before the
19 audience, and you haven't already done so, please fill out
20 a speaker request form and raise your hand, and one of our
21 team members will come collect it. Sunny. And she has
22 extra cards. If you'd like one, you can raise your hand,
23 and she'll deliver them to you.

24 We're going to provide a three-minute time
25 period for comments. And we will not permit anyone to

1 donate their unused time to another speaker.

2 If you're with a group, in the essence of time,
3 it would be ideal if you could elect a speaker to
4 represent your group, and then the rest of your group can
5 submit their comments either one-on-one to the court
6 reporter back in the reference room, or via the comment
7 form.

8 And we're going to accept new speaker request
9 cards up until 6:30 p.m.

10 Now, Mike here will serve as our official
11 timekeeper. And he'll start the timer after you state
12 your full name. And then he will hold up a card when you
13 have 30 seconds remaining of your three minutes. And
14 he'll hold up another card to let you know when your time
15 is up.

16 We ask every speaker to be courteous in
17 observing the three-minute time limit, so that we allow
18 everyone who wishes to speak an opportunity to do so. And
19 again, please be courteous while other speakers are up
20 there speaking.

21 If you don't wish to comment in front of the
22 audience, as we mentioned before, you can speak either
23 one-on-one with the court reporter in the back room or
24 provide your comments by October 30th. You can submit
25 them via e-mail, U.S. mail, on-line via the project

1 website, or via fax. And all of this information is
2 listed in your handout as well, as where to identify where
3 to review the Environmental Assessment document.

4 This is a big question. What will happen to
5 your comments after this process? The study team is going
6 to review and respond to your comments. The responses
7 that they develop may result in revisions to the
8 Environmental Assessment and the design concept report.

9 And then the final Environmental Assessment
10 document will be submitted to the Arizona Department of
11 Transportation and the Federal Highway Administration for
12 their review and eventual approval.

13 Now, is the time for public comments. Do we
14 have speaker cards? Thank you, Sunny.

15 We'd like to call Sheryl Payne up to the
16 podium. And we'd like to get the next speaker sitting
17 down here waiting. And that would be Mark Burkhart. So
18 we'll call two speakers at a time.

19 And again, please state your full name, and
20 then we'll start the timer. And these are directional
21 microphones, so you want to speak straight into them.

22 I don't know if you can raise it. Sorry.

23 MS. PAYNE: Sheryl Payne. And I don't know if
24 this is right. I don't have a comment. I have some
25 questions. But it's generalized.

1 So is this project being approved as one whole
2 project or is it being approved in phases?

3 MS. LEWIN: We're going to address general
4 comments -- questions and comments at the end.

5 MS. PAYNE: Oh.

6 MS. LEWIN: But I think we can break up for
7 some specific comments.

8 MR. FRENCH: I can answer that.

9 MS. LEWIN: Okay.

10 MR. FRENCH: It's one project through the
11 Environmental Assessment.

12 MS. PAYNE: Okay. All the way to Grand Avenue
13 to the 303?

14 MR. FRENCH: Correct.

15 MS. PAYNE: Okay. What happens to the project
16 if the land south of Northern and west of 91st Avenue
17 becomes Indian property, Indian reservation?

18 MR. FRENCH: That will be a challenge.

19 MS. PAYNE: Okay.

20 MR. FRENCH: I guess we'll deal with that when
21 it comes.

22 MS. PAYNE: All right. What type of input will
23 we as homeowners and business owners have in each of the
24 phases as it goes along on the design of the plans?

25 MR. FRENCH: What?

1 MS. PAYNE: What kind of input would we have?
2 I'm mostly concerned with access into our particular area
3 because we only have one road that comes out. And sound
4 walls. Or what type of other noise mitigation is
5 available.

6 MR. FRENCH: The phase plan that you saw is
7 really maybe half of the parkway, involves half of it.
8 The rest of it is many years away. So I think when these
9 come in, there will be new hearings.

10 They'll have to be updated, the Environmental
11 Assessment updated concept reports. So there will be
12 future opportunities in those areas that are not going to
13 be built any time soon.

14 MS. LEWIN: Excuse me, folks. Speak right into
15 the microphone because our stenographer can't hear.

16 MS. PAYNE: Sorry.

17 I'm done.

18 MS. LEWIN: Will Mark Burkhardt please come to
19 the podium? Or speak into the microphone?

20 MR. BURKHART: Yeah, I'm a concerned homeowner
21 on. And I was just curious with the noise mitigation, I'm
22 assuming those are sound walls. How high are they, and
23 what are they made out of?

24 I noticed on air quality, you mentioned with
25 the new thoroughfare, "more than likely won't exceed". I

1 don't like that "more than likely". I'm right off the
2 freeway. It's kind of nice out there. I moved out there
3 because of clean air.

4 And also, I know this lady mentioned about the
5 access into the neighborhoods. I'm kind of concerned
6 about that. But if you put lights, in my opinion, at
7 111th, or 107th, you're kind of defeating the purpose of
8 the thoroughfare, in my opinion. You know, if I'm going
9 through. I don't want to be stopping.

10 But I live right there. I'm sure you're going
11 to make different ways in and out of it.

12 But that's pretty much all I needed. I'm done,
13 too.

14 MS. LEWIN: Thank you.

15 Will Betty Turner come to the microphone,
16 please?

17 MS. TURNER: My name's Betty Turner. I've been
18 a resident in Glendale for more than 20 years. I've been
19 involved in transportation for more than ten years.

20 For nine of those years, I spent my time trying
21 to not build roads, and trying to tell people to use
22 alternative modes, to ride the bus, to carpool, to van
23 pool. Ultimately, I hope I'll be able to tell them to use
24 Light Rail.

25 But it stands to reason that alternative modes

1 of transportation don't work everywhere. I've attended
2 meetings in the west valley. And with the phenomenal
3 growth that we've experienced out here, especially in the
4 Surprise area and as it goes further west, we're going to
5 face some serious challenges.

6 We can sit here today and say, "No, I don't
7 want this. I need to be able to get out of my driveway.
8 I need to be able to get out of my housing development
9 with that one or two roads that's already out there."

10 Think about what's going to happen as
11 development continues. If we don't do something now,
12 you're not going to be able to get out of there, and
13 you're not going to be able to get where you want to go.

14 I regret tremendously the loss of the
15 agricultural fields that we had in the west valley. I've
16 watched the rose fields and the cotton fields turn into
17 homes. And it seems like every one of us wants to be the
18 last person that lives here. "I want my two acres, and I
19 don't want anybody else to come back and live next to me."

20 But that's not the way of the future. We're
21 facing challenges. We're facing development. And we need
22 to deal with them.

23 I've watched the Northern Parkway develop over
24 the last eight years, since its first inception in 2001
25 with the Glendale transportation plan. And it seems like

1 a reasonable thing to do. And it seems like a reasonable
2 thing to do now.

3 And I urge you as individuals to keep an open
4 mind and to think about it. Will it impact you? Probably
5 some way, shape, or form. But if we don't do anything,
6 we're still going to be impacted.

7 So keep an open mind. Express your concerns to
8 these folks here tonight because they're the people that
9 can do something about it and can deal with it.

10 So one way or another, let's try to keep this
11 going, and let's make it happen, at least in the
12 beginning. And I hope it doesn't take 30 years to get it
13 done.

14 Thank you.

15 MS. LEWIN: Thank you for your comments.

16 Do we have any more speaker cards?

17 Our next speaker is Jeanette Fish. And before
18 Jeanette comes up, I also wanted to mention if anybody has
19 any mobility concerns and would like us to come to you
20 with a microphone, just let us know, and we'll be happy to
21 do that as well.

22 MS. FISH: Thank you. He says you have to talk
23 straight into it. It looks like you have to swallow it
24 and talk straight into it.

25 Good evening. My name is Jeanette Fish. I'm

1 the Executive Director of the Maricopa County Farm Bureau.
2 And as you might expect, I'm here to express some concerns
3 regarding the agricultural land.

4 It seems that we approach any kind of growth,
5 development, and new transportation modes with the idea
6 that agriculture is expendable. Yet if you want air
7 quality, what makes oxygen but plants?

8 So I understand that this is on a steamroller,
9 and that we probably aren't going to be able to make any
10 big changes. But we'd like to ask for some considerations
11 for the people who are involved in agriculture in the far
12 west valley.

13 First of all is irrigation. Wherever new road
14 construction goes, it interrupts the irrigation canals and
15 the irrigation systems on individual farms.

16 And therefore, we request that the design be
17 sure to include reconstruction of those, so that the lands
18 that remain in production can still have access to water.

19 Secondly, if the route and the construction is
20 to interfere with irrigation wells and force those wells
21 to be moved, remember that the State Law only allows to
22 you move those wells 660 feet.

23 That's been a problem in the east valley with
24 construction of freeways in that you can end up with a
25 situation where you cannot replace the well. And that, of

1 course, is fatal for a farming operation.

2 And lastly, we have farm fields along this
3 route where the fields on both sides, north and south of
4 the proposed routes, are owned by and operated by the same
5 farmers.

6 It is -- it would be a safety hazard to put
7 tractors and large farm equipment onto Northern Parkway to
8 get access to the other side. So while the design is
9 being created, there needs to be some way to go under that
10 parkway or over that parkway with our farm equipment in
11 these sensitive areas.

12 And lastly, I don't know if any of you have
13 noticed, but there seems to be this recession on. And tax
14 money is -- tax collections have gone down dramatically.
15 Are we really going to have money to start buying land in
16 2010?

17 Thank you.

18 MS. LEWIN: Thank you for your comments.

19 Do we have more speaker cards? Okay. We have
20 two more speakers. Simar Chahal, and then that will be
21 followed by Richard Wernecke.

22 MR. CHAHAL: My name is. My name is Simar
23 Chahal, and I own the Chevron station on 91st and
24 Northern. And what I've noticed is over the years, it's
25 always the small guy who gets the beating.

1 I mean, if we was a big corporation, hey,
2 there's no issue. "We work around you, sir. We have no
3 problem. We know you're doing so much for the country."

4 But the small guy is always beaten up, and,
5 "Hey, we're going to take you anyway." So it's -- all
6 these meetings are very nice. And you know, they
7 compensate you. But compensate for your dreams?

8 I don't think there they will compensate
9 anybody's thoughts or, you know, whatever you work for.
10 And nobody will work at something and five years down the
11 road, say I'm only doing this because I'm getting
12 compensated and relocated.

13 The idea that I worked for to put up that
14 station was, you know, I'm going to be at a nice location,
15 nice people, and that's about it. I can put up something
16 in south Phoenix. Nobody wants to touch south Phoenix,
17 right? No, we like Northern. We want to do Northern.
18 Well, that's great. That's very nice. But all I feel is
19 don't just open it up at the cost for the small guy.

20 That's it. Thank you.

21 MS. LEWIN: Thank you.

22 MR. WERNECKE: My name is Richard Wernecke. I
23 live on Northern Avenue between 103rd and 107th.

24 Now, what I understand, they're going to take
25 part of my property. That means my house is going to sit

1 50 feet from a parkway. Now, I'm not going to be around
2 when this is all done anyway. I'm in my 80s. So if I
3 ever sell it or want -- the people that's going to live
4 there is going to live 50 feet from a parkway. That ain't
5 going to be good.

6 Thank you.

7 MS. LEWIN: Thank you for commenting, sir.

8 Our next speaker is Councilman Leone.

9 COUNCILMAN LEONE: Thank you. I'm going to
10 take -- can you hear me? I'm going to take this off so I
11 can walk around.

12 I've been against this since 2001. And for
13 many reasons, but I'm not going to go through all of them.
14 One of them is that: Don't break it -- don't fix it if
15 it's not broken.

16 Northern Parkway is moving right along. We're
17 going to lose two houses in Country Meadows Estates.
18 We're going to lose property, homes and backyards that
19 faces Northern Avenue.

20 I came down -- I had the single light put in on
21 103rd all the way up, and 99th and 91st. The thing is
22 that I hear so much -- Mr. French I think I met him in
23 2001. I hear so much about traffic on Northern Avenue.
24 There was one incidence that somebody got killed. But
25 there was no lights. There was a stop sign.

1 Now, I don't know how many crashes is happening
2 in the 21 years that I've lived there. I don't think Mr.
3 French knows either. If he does, I'd like to know about
4 it.

5 The thing is that I went down Northern Avenue
6 yesterday morning about 8:00 o'clock, quarter past 8:00.
7 Traffic was wide open. You could move.

8 I went down Northern Avenue last night to Park
9 West at 5:15. Traffic coming towards Country Meadows --
10 is this thing on -- Country Meadows. There was a lot of
11 traffic, but it was moving. And the reason why it was
12 moving is because of the lights. So there's no reason why
13 that we have to touch Northern Avenue. Let it stay the
14 way it is.

15 The people of Peoria don't want it. Let's keep
16 it Northern Avenue instead of Northern Parkway.

17 I don't know where the streets are going to
18 come when they move that one house. But how about the
19 house next door? If it's going to come through there, I
20 believe he hadn't told us. Is it going to go through the
21 condos? I have no idea where it's going. I don't think
22 anybody else does either.

23 So I would just say I thought we had a good
24 committee on Country Meadows Estates, and we had meetings.

25 30 seconds. And as far as I know, everybody

1 that I talked to in my district, the Pine district,
2 doesn't want it. All I'm saying is that if you do have
3 it, I would go with number three. Let it gown down El
4 Mirage to Glendale and all the way down to the freeway.

5 But let's not mess up those homes and
6 backyards. And let's not lose the homes in Peoria.

7 Thank you.

8 MS. LEWIN: Thank you for your comment, sir.

9 I believe we have another speaker card. Can
10 Mark Howard come to the microphone, please?

11 MR. HOWARD: Hi. My name is Mark Howard. I'm
12 an architect, so I'm used to being on presentations like
13 things here. So I know what a tough job you have.

14 On the other hand, as an architect, I have a
15 little bit of a bent towards green design and those types
16 of issues. So I'm not in favor of seeing all this
17 agricultural land torn up.

18 I think a lot of the same issues came up when
19 they were talking about the 303. We had to get the
20 traffic out of the west valley. So let's take it down the
21 303 to I-10. So I don't think that I'm in favor of this.

22 I will make an exception though. I commute
23 into Phoenix on Northern everyday. And down by 75th and
24 Northern, let's see. I've passed out twice, thrown up
25 three times, and nearly passed out a dozen times from the

1 stench coming from that dairy farm. I'd like to know if
2 your Environmental Assessment has taken into account the
3 fumes that are coming off that thing.

4 You're talking more traffic coming down there.
5 I think that's a danger to drivers. I really do. That's
6 an awful fog in the morning. There's an awful fog in the
7 morning. There's a terrible smell. I'd hate to see more
8 people have to come past that, quite frankly.

9 So if you're going to take up agricultural
10 land, let's take that first.

11 MS. LEWIN: Thank you for your comments.

12 Our next speaker is Pat Tamer.

13 MS. TEMER: Temer.

14 MS. LEWIN: Temer. I'm sorry.

15 MS. TEMER: I live in Country Meadows Estates.
16 And we've been fighting the parkway for the last seven
17 years. And at last City Council meeting, the mayor told
18 us because Glendale kind of blackmailed us, they would not
19 sign a portion of what we needed for north Peoria without
20 signing off on the parkway.

21 So he said to us that's the way it's going to
22 be, whether you like it or not. So if you can stop it at
23 this point, you have a big fight ahead of you. All I know
24 is nine lanes of traffic are going to be down our road
25 behind our subdivisions.

1 We have a guy that's going to have an eight to
2 ten foot sound wall right next to his driveway. And this
3 will be the people's backyard fences. The fencing will be
4 removed, and these will be their fences, part of the sound
5 walls.

6 We were never guaranteed rubberized asphalt.
7 They said, "Oh, you will likely have it." Did anybody
8 ever find out if we will have it?

9 There's a lot of things we don't know about
10 drainage. We don't know where there's going to be
11 retention basins. They have to send this water somewhere.

12 But the biggest part is you're providing all
13 the business that could possibly be going through the city
14 of Peoria by going around it. So you may lose tax money
15 and everything else with this.

16 I mean, this was the project that -- they don't
17 even have enough water in this city. They're going to
18 have to start bringing it from the Sea of Cortez to even
19 support this much. And it's just plain the wrong thing
20 for anybody to get involved in this, in the city or
21 anyone. It's going to cost way too much money.

22 And has anybody addressed turning up new soil
23 that's never been turned up and the prospect of more
24 valley fever cases in the area? Because that's a distinct
25 possibility if you turn new soil.

1 So anyway, I've been against this from day one.
2 You know, it's like I was not coming tonight, but
3 curiosity played out best.

4 So I would say I'm against it. I don't know
5 whether you have a chance, and you don't want to stop it.
6 But, you know, guys, it's going to get shoved down your
7 throat because I don't think they listen. I don't think
8 any of them listen from day one.

9 That's all I've got to say. Thank you.

10 MS. LEWIN: Thank you. And just be assured
11 that your comments are being recorded and documented and
12 will be reviewed by the decision-makers. Thank you very
13 much.

14 Our next speaker is City of Glendale Council
15 Member Joyce Clark.

16 COUNCILWOMAN CLARK: Obviously, I support it.
17 So my remarks will reflect that support. But I think you
18 need -- I think you really need to be a little honest with
19 me.

20 Number one, when this project was started in
21 2001, Glendale didn't start it alone. It already had
22 partnerships with Peoria and El Mirage and Surprise.

23 Number two, county voters voted money toward
24 this particular freeway, as did Glendale voters.

25 But I think the more important thing -- I don't

1 think this is working.

2 I think the more important thing for you to
3 realize -- the more important thing for you to realize --
4 I've lost my train of thought -- is that growth is going
5 to come, period.

6 I heard of studies that say that the epicenter,
7 the geographical center of our entire valley will end up
8 being Glendale or Peoria, in that region. Okay?

9 Now, that means there has to be a tremendous
10 amount of growth that will occur out west, in the west
11 valley, to shift the geographical center of the valley so
12 far west.

13 Growth is coming. More cars are coming. More
14 people are coming, whether we want them or not. I think
15 the smartest thing I heard tonight was the comment about I
16 moved into my house, and I should be the last person.
17 Close the door.

18 We'd all like that. We'd all like to retain
19 what we bought and have no changes forever. But folks,
20 they're coming. They are.

21 When I first heard about the Northern Parkway
22 project, I pretty well felt about it the way I did about
23 the Paradise Parkway. I didn't like it either.

24 But over the years, as I've seen the growth
25 explode in the west valley, I know that we need an

1 east-west parkway. We need one. Otherwise, if you think
2 the traffic is bad now, just wait ten, 15 years from now.
3 I probably won't be around. Some of you won't be around.

4 But others will be. And it will be you and
5 your children that will be contending with the traffic
6 that we'll be seeing. It's not going to go away and it's
7 not going to get better.

8 All right. So we have to have some kind of
9 east-west connection. The City of Glendale originally
10 wanted it much further north, but was defeated with that
11 concept. We were not able to position it further north.
12 So then we have to look further south.

13 Well, I'm taking more than three minutes.
14 Okay?

15 What about Bethany? Bethany doesn't go through
16 to anywhere. Bethany never will go through to anywhere
17 until John F. Long decides to develop the property that
18 Bethany would go through. And I don't see that happening
19 for many, many, many years.

20 Glendale Avenue. As we said, we don't create
21 another crossing on the New River and the Agua Fria.
22 There are only so many options. When you look at Northern
23 on its western end, all the land is vacant. All the land
24 is vacant.

25 What better time to develop a freeway rather

1 than waiting until all the homes are planted there, and
2 then we have to contend with what we have to contend on
3 the east side of this design.

4 Which brings up another point. Tonight, they
5 are only showing you the alignment. The alignment. This
6 is not the definitive final design of the freeway.

7 So people ask about sound walls or asphalt or
8 irrigation canals. That's all part of the design work,
9 which is the next step. Tonight, it's just about
10 alignment and an Environment Assessment, how is the
11 alignment, and what do you think about the alignment?

12 The last thing I want to say is because I
13 really get upset when I hear my esteemed colleagues say
14 that we blackmailed Peoria or when the nice lady says we
15 blackmailed Peoria.

16 Peoria has been involved with this parkway
17 since its inception. It is committed to paying 20 percent
18 of a certain percentage of the matching that it has to
19 bear. Peoria knows full well what this parkway will do.
20 It's not a new concept to them.

21 Now, it's going to hurt people. I know it's
22 going to hurt people. It's going to hurt people in
23 Country Meadows. It's going to hurt other people
24 alongside Northern Avenue. It's going to hurt one
25 subdivision in my district, Rovey Farm. So I know that

1 it's going to hurt people.

2 My job is to help mitigate as much as possible,
3 to make it as easy and as painless as possible, because
4 there will be pain. And I understand that.

5 So my job is to try to help people get past
6 that and get treated fairly and get listened to by these
7 people working on the design. That's what needs to be
8 done.

9 I don't know. But it's coming, folks. You
10 can't stop it. Instead of fighting it, figure out how to
11 make it work for you as best as possible.

12 Thank you.

13 A VOICE: Thank you for keeping it to the
14 maximum amount of time. We appreciate that.

15 COUNCILWOMAN CLARK: You're welcome.

16 MS. LEWIN: Thank you.

17 Folks, let's try to keep moving here and be
18 courteous. Thank you.

19 If anyone else has a speaker card to submit?
20 Anyone? I believe Councilman Leone would like to speak
21 one more time.

22 COUNCILMAN LEONE: Thank you.

23 I don't want to start a war here, but I've got
24 to support my constituents. I'm on the City Council. It
25 came to a vote about I think it's Beardsley Highway and

1 Northern Avenue. I said, "Why can't we go separate on
2 each one of them?" The mayor said, "You can't. But if
3 you don't support Beardsley, you can't get it. Then
4 Northern has got to change."

5 I don't want to say that not to support
6 Beardsley. Glendale said we had to vote for Northern. I
7 was on the Council; still on the Council. Of course I
8 voted no on that. I just want to support my constituents.

9 Thank you.

10 MS. LEWIN: Thank you, Councilman.

11 I just wanted to let everybody know also that
12 anybody who commented tonight or sends comments in on
13 their comment forms, if you provide your address to us,
14 either on the sign-in sheets here at the sign-in table or
15 on your forms, you will be notified when the comments and
16 responses are posted to the website.

17 We encourage you to take some time and visit
18 the project exhibits and speak with the team members. And
19 if you would like, to provide comments privately to the
20 court reporter, she's still in the reference room.

21 Thank you very much for coming. And have a
22 safe trip home.

23 (The Public Comment Hearing terminated at 6:36
24 p.m.)

25 * * * *

1 STATE OF ARIZONA)
2) ss.
3 COUNTY OF MARICOPA)

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I, DONNA FORD TERRELL, RPR, RMR, RDR, CRR,
Certified Reporter No. 50250, for the State of Arizona,
do hereby certify that the foregoing printed pages
constitute an accurate transcript of the proceedings had
in the foregoing matter, all done to the best of my skill
and ability.

WITNESS my hand this 20th day of October, 2009.

Donna Ford Terrell, RPR, RMR, RDR, CRR
Certified Reporter No. 50250

ATTACHMENT 2
PUBLIC COMMENT LOG

Northern Parkway Draft Environment Assessment

Federal Project No. STP-MMA-0(034)N

ADOT Project No. 0000 MA MMA SS593 01C

Comments and Responses Report

Commenter ID:	11	Name:	Overson, Philip	Neighborhood:	143rd Ave.
Comment 1: (website)	<p>My property Parcel# 501-42-025K is on the south side of the parkway at 143rd Ave. The new plans, which were at the meeting of October 14, 2009, show you taking a strip of my land and removal of 1 building. There is another building which you do not show which would also be removed. I was told that the project would provide Relocation of residences and businesses. This would comply with the terms of the Federal Uniform Relocation Assistance Act of 1970, as amended. As it was explained to me you would provide replacement land if I could not relocate on my current property. Since the remaining property would be too narrow for required setback of the buildings from the property lines, it would require new land to be purchased. Since my property is under the USAF Accident Potential Zone (APZ) the value of my property is very limited compared to Commercial or Industrial land. Even if you provided this replacement land and replacement buildings (2) the resulting value would be impossible for me to afford the property taxes.</p>				
Response:	<p>The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) would be followed on the Northern Parkway project. The Uniform Act helps ensure that all property owners impacted by the project are treated in a fair and equitable manner as provided by the law. The concept plans for all of the build alternatives show a portion of your property would be needed for the construction of Northern Parkway. In addition, two buildings would be impacted. The Uniform Act stipulates that an appraisal would be completed and an independent review appraisal would be completed prior to making an offer. The property owner would be paid for the value of the land and buildings, which could be used to pay for new buildings on site. The value of the portion of the property needed for the project and constructive damages to the remainder will be presented to the property owner in an offer. If it is determined that the remaining property is an uneconomic remnant, then an offer would be made for the entire property (based on appraised value); however, the property owner is not obligated to sell the remainder property. If the property owner/business needs to move, the property owner/business would be reimbursed for eligible moving expenses. This response is general in nature. Specific acquisition and relocation determinations would be completed by right-of-way and relocation professionals during the acquisition phase of the project, which is scheduled to begin in 2010 on the western portion of the planned project.</p>				

Commenter ID:	11	Name:	Overson, Philip	Neighborhood:	143rd Ave.
Comment 2: (website)	<p>I strongly urge you to consider a concrete wall contained ramp for the railroad flyover instead of a dirt berm ramp. This would allow the parkway to be narrower at that location and not require taking my property and buildings, the residences and an additional well on the north side of the Parkway.</p>				
Response:	<p>The requirement in all of the build alternatives to provide an elevated bridge over the railroad spur tracks adjacent to 143rd Avenue is the reason some of your property may be needed for right-of-way. The Webb Spur is owned by BNSF Railroad Company and is currently used to store rail cars. BNSF has plans to extend and improve this spur and service future industrial sites south of the proposed parkway. The regional nature of Northern Parkway requires a grade separation with the railroad. Additional discussions with the railroad would occur during final design. A more detailed analysis comparing construction costs and right-of-way costs relative to constructing earthen slopes or concrete retaining walls would also be completed during final design. The analysis may show that it is feasible to build the retaining walls.</p>				

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Comments and Responses Report

Commenter ID:	11	Name:	Overson, Philip	Neighborhood:	143rd Ave.
Comment 3: (website)	If you do take my property it will put my nephew, who leases the other building, out of business. He is a beekeeper and processes his honey extraction and maintains his hives, storage, extraction equipment, etc., at this location.				
Response:	Under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, businesses that lease or rent space in buildings or on land planned for acquisition would be eligible for relocation assistance and benefits.				

Commenter ID:	11	Name:	Overson, Philip	Neighborhood:	143rd Ave.
Comment 4: (website)	Also if you could extend the span of the flyover just a little longer you would not need to take out and replace the well, which provides domestic water to the homes and properties along 143rd Ave. This would allow access under the Parkway along 143rd Ave. This would allow the maintenance of the water system to the properties between Olive Ave and Northern Ave along 143rd Ave. This is a local HOA water system, which is old and needs frequent repairs. This is maintained by one of the local residents who would need access across (under) the parkway. When a leak occurs, the main line needs to be turned off, either the north line or the south line, while the repair is completed. During this time many properties are without water. If we have to travel around the Parkway the repair time could be greatly extended.				
Response:	Widening the bridge 30 feet to span the existing 30-foot wide 143rd Avenue road easement would add significant costs to the project (approximately \$500,000). This proposed span would allow vehicular access from the south to the north sides of Northern Parkway as exists today. Also, the proposed span would allow a place for the water pipe and irrigation pipe to cross under Northern Parkway. 143rd Avenue is not publicly owned which complicates the situation (Docket 9509, pages 639, 653, 654; and Docket 11197, page 253). The additional bridge span would still require relocation of the water well. However, constructing the east approach to the railroad overpass with retaining walls instead of earthen slopes could potentially allow the well to remain via permit within what would become Northern Parkway right-of-way. These issues and alternatives would be evaluated during final design of Northern Parkway.				

Commenter ID:	11	Name:	Overson, Philip	Neighborhood:	143rd Ave.
Comment 5: (website)	Possibly the savings of not having to acquire so much land along Butler Ave. and relocate 2 residences, my land and relocate my 2 buildings, remove and replace the well at 143rd and Butler, the private well at the property which belonged to Thompson, would help offset the additional cost of the concrete wall contained ramp and slightly longer span.				
Response:	A more detailed analysis comparing construction costs, utility costs and right-of-way costs relative to constructing earthen slopes or concrete retaining walls would also be completed during final design of Northern Parkway. The analysis may show that it would be feasible to build the retaining walls.				

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Comments and Responses Report

Commenter ID:	42	Name:	Thompson, Robbie	Organization:	143rd Ave.
Comment 1: (website)	My property is parcel 501-42-025V-the northeast corner of 143rd Ave. & Butler Drive in Waddell. Many changes have occurred since the previous plan that involves the railroad on 143rd Ave. Another neighbor has posted comments to you-Philip Overson (parcel #501-42-025K). Please note that I concur with his comments & recommendations as our private Homeowner well is involved (irrigation ditches, water lines etc.) and the excessive need of easement with the present proposal with a dirt overpass. I no longer live in state and would not have known about the extreme changes on my property if I hadn't received notice of the meeting and my neighbor. The property is for sale and now disclosures have to be done with the listing, making a difficult property to sell in this area, even harder.				
Response:	The requirement in all three build alternatives to provide an elevated bridge over the railroad spur tracks adjacent to 143rd Avenue is the reason some of your property may be needed for right-of-way. The Webb Spur is owned by BNSF Railroad Company and is currently used to store rail cars. BNSF has plans to extend and improve this spur and service future industrial sites south of the parkway. The regional nature of Northern Parkway requires a grade separation with the railroad. Additional discussions with the railroad would occur during final design of Northern Parkway. A more detailed analysis comparing construction costs and right-of-way costs relative to constructing earthen slopes or concrete retaining walls would also be completed during final design. The analysis may show that it would be feasible to build the retaining walls. If the analysis shows that a portion of your property is required, the acquisition process would conform to the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), which would ensure fair and equitable treatment.				

Commenter ID:	42	Name:	Thompson, Robbie	Organization:	143rd Ave.
Comment 2: (website)	Please keep the landowners directly involved with better updates-not just with the once in awhile public meetings.				
Response:	The names of all persons who have submitted comments will be added to the mailing list for project updates. Please check the website from time to time (www.northernparkway-info.com) for updates.				

Commenter ID:	3	Name:	Payne, Sheryl	Neighborhood:	81st Drive
Comment 1: (website)	We just purchased this brand new home in 10/08. Our ONLY access out of our subdivision is Northern Avenue. All shopping and my son's school are to the west of our property. When this project is constructed, we will have to travel way out of our way to the east and then north to the railroad crossing (which holds us up many times going north). I realize that I am only one affected citizen, but I pay my taxes like all the other citizens and want to express my extreme displeasure with this project and the impact it will have on my family.				
Response:	All alternatives under consideration would maintain existing access to Northern Avenue in this area, but due to the proposed installation of a curbed landscaped median or median barrier, left-turns into and out of driveways and local streets from Northern Parkway would no longer be possible if the improvements are constructed. The purpose of eliminating the left turn movements would be to help reduce the number of crashes on Northern Parkway. The Northern Parkway improvements east of Loop 101 other than the intersection improvements at 91st, 83rd, 75th, and Grand avenues are not currently funded so the improvements are not anticipated until after 2025. If the improvements are completed as planned, in order to access destinations west of your home, you would have to turn right and go east ¾-mile to 75th Avenue and make a U-turn at the				

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Comments and Responses Report

	signalized intersection and head west on Northern Parkway. This improved condition as proposed may cause some out-of-direction travel for residents in this area.
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Commenter ID:	3	Name:	Payne, Sheryl	Neighborhood:	81st Drive
Comment 2: (Public Meeting)	So is this project being approved as one whole project or is it being approved in phases?				
Response:	The Environmental Assessment includes the entire project. If approved, the project would be built in phases over many years. Supplemental environmental documents may be required for later phases.				

Commenter ID:	3	Name:	Payne, Sheryl	Neighborhood:	81st Drive
Comment 3: (Public Meeting)	What happens to the project if the land south of Northern and west of 91st Avenue becomes Indian property, Indian reservation?				
Response:	The Tohono O'odham Nation owns approximately 135 acres southwest of the intersection of Northern Avenue and 91st Avenue. The Nation has filed an application with the United States Department of the Interior to have the property taken into trust for the Nation's benefit. If the application is successful, the Nation intends to construct and operate a destination resort and casino on the property. A portion of the property has been identified for new right-of-way for transportation improvements.				

Commenter ID:	3	Name:	Payne, Sheryl	Neighborhood:	81st Drive
Comment 4: (Public Meeting)	What type of input will we as homeowners and business owners have in each of the phases as it goes along on the design of the plans?				
Response:	Maricopa County Department of Transportation (MCDOT) would be the lead agency to develop final design plans and manage the construction of Northern Parkway as stated in the approved Intergovernmental Agreement signed by the partner agencies (MCDOT, Glendale, Peoria, El Mirage). MCDOT has an extensive public outreach program for both the design phase and construction phase of roadway improvement projects that would provide the public with opportunities to provide suggestions and ideas and also keep you informed of the status of the project. The Northern Parkway improvements east of Loop 101 other than the intersection improvements at 91st, 83rd, 75th, and Grand avenues are not currently funded so the proposed improvements are not anticipated until after 2025. Due to the anticipated gap between now and construction, conditions may change that would warrant changes in the design concept and new approvals may be necessary.				

Commenter ID:	3	Name:	Payne, Sheryl	Neighborhood:	81st Drive
Comment 5: (Public Meeting)	I'm mostly concerned with access into our particular area because we only have one road that comes out.				
Response:	All Northern Parkway alternatives under consideration would maintain existing access to Northern Avenue in your area, but due to the proposed installation of a curbed landscaped median or median barrier, left-turns into and out of driveways and local streets from Northern Parkway would no longer be possible if the improvements are constructed. The purpose of eliminating the left turn movements would help reduce crashes on Northern Parkway. According				

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	to the proposed alternative when the improvements are completed (most likely after 2025) in order to go to destinations west of your home, you would have to turn right and go east ¾-mile to 75th Avenue and make a U-turn at the signalized intersection and head west on Northern Parkway. This improved condition as proposed may cause some out-of-direction travel for residents in this area.
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Commenter ID:	3	Name:	Payne, Sheryl	Neighborhood:	81st Drive
Comment 6: (Public Meeting)	And sound walls. Or what type of other noise mitigation is available.				
Response:	The project partners for Northern Parkway have committed to mitigate potential noise impacts to ADOT standards, which are one of the most stringent standards in the Country. As final design progresses, the noise analysis that was completed as part of the draft EA would be refined and if needed specific noise mitigation measures would be evaluated and selected. Potential mitigation measures include noise walls, earth berms, or a combination of walls and berms.				

Commenter ID:	28	Name:	Payne, John and Sheryl	Neighborhood:	81st Drive
Comment 1: (Public Meeting)	We're against the eastern leg of the parkway; in particular, east of the freeway (Loop 101). We are homeowners in that area and don't feel like that section needs to change. So we would like to see it stay the way it is.				
Response:	Significant growth in population and employment is predicted in the future along the Northern Parkway corridor. According to Maricopa Association of Governments (MAG) population and employment within the Northern Parkway study area will increase by 250,000 and 220,000 respectively between 2005 and 2030 (see Table 2-1 in the EA). With this projected growth, traffic volumes will increase on Northern Avenue. Northern Avenue east of Loop 101 is operating at an acceptable level of service today. The most recent traffic information available indicates there is an average of 23,000 vehicles a day traveling on Northern Avenue between 91st Avenue and Grand Avenue. The projected traffic volume in 2030 for Northern Parkway in the same area is approximately 75,000 vehicles per day. If no improvements were made, Northern Avenue would be very congested in 2030.				

Commenter ID:	22	Name:	Arnst, Diane L.	Organization:	ADEQ
Comment 1: (Letter)	The Air Quality Division has reviewed the proposed project, described in your draft environmental assessment of July 2009, that you submitted for a General Conformity Determination with the Arizona State Implementation Plan in accordance with Clean Air Act Section 176(c)(1); 58 Federal Register 63214-63259; Title 40 Code of Federal Regulations Part 51, Subpart W §§ 51.850-51.860; Title 40 Code of Federal Regulations Part 93, Subpart B §§ 93.150-160; and Arizona Administrative Code R18-2-348 (approved into the Arizona State Implementation Plan April 23, 1999; effective June 22, 1999). The Air Quality Division has concluded that a General Conformity Determination is not required for the following reason(s): Project's total emissions of PM10 in a PM10 Maintenance Area would be less than de minimis levels in Title 40 CFR § 51.853(b) [and §93.153(b)] as described or calculated.				
Response:	Comment noted. The ADEQ Air Quality comment letter on the draft EA will be included in the attachments of the final EA.				

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Comments and Responses Report

Commenter ID:	22	Name:	Arnst, Diane L.	Organization:	ADEQ
Comment 2: (Letter)	We support the mitigation measures included on pages 106-107 to minimize PM10 emissions during construction. Maricopa County failed to attain the National Ambient Air Quality Standard for PM10 by December 31, 2006, and is required to achieve annual emission reductions of 5% until the standard is attained.				
Response:	Comment noted. The ADEQ Air Quality comment letter on the draft EA will be included in the attachments of the final EA.				
Location in EA:	Pages 106-107				

Commenter ID:	22	Name:	Arnst, Diane L.	Organization:	ADEQ
Comment 3: (Letter)	Figure 4-10, page 98 is out of date, as is information on pages 97 and 99. Monitoring data for 2008 have been reported to EPA's Air Quality System.				
Response:	In Section 4.9.1 Affected Environment, Ambient Air Quality Levels of Section 4.9 Air Quality, Figure 4-10 Nonattainment Areas for 8-hour Ozone and Particulate Matter, Table 4-5 Air Quality Summary-2006, and related air quality information regarding ambient air quality levels on pages 97, 98, and 99 in the draft EA will updated with the most recent air quality data in accordance with the comment. The most current data are the 2009 air quality monitoring data from the Maricopa County Air Quality Department.				
Location in EA:	Figure 4-10, pages 97-98				

Commenter ID:	22	Name:	Arnst, Diane L.	Organization:	ADEQ
Comment 4: (Letter)	Maricopa County attained the 1997 National Ambient Air Quality Standard for 8-hour Ozone and submitted a Maintenance Plan and request for redesignation to attainment status to EPA on March 24, 2009.				
Response:	This statement will be included in Section 4.9.1 Affected Environment, Nonattainment/Maintenance Areas of Section 4.9 Air Quality in the final EA to provide more up-to-date information.				
Location in EA:	Section 4.9.1, Affected Environment				

Commenter ID:	22	Name:	Arnst, Diane L.	Organization:	ADEQ
Comment 5: (Letter)	EPA revised the 8-hour ozone NAAQS in 2008. The Governor submitted a recommended Nonattainment Area designation for expanded boundaries to EPA on March 12, 2009 [www.azdeq.gov/enviro/air/plan/Ozone.html ; see items marked NEW in red]. EPA has announced its intent to reconsider the ozone NAAQS and issue a Notice of Proposed Rulemaking by December 21, 2009. The Governor may revise the designation and boundary recommendation after the proposal is finalized.				
Response:	This statement will be included in Section 4.9.1 Affected Environment, Nonattainment/Maintenance Areas of Section 4.9 Air Quality in the final EA to provide more up-to-date information.				
Location in EA:	Section 4.9.1, Affected Environment				

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Commenter ID:	22	Name:	Arnst, Diane L.	Organization:	ADEQ
Comment 6: (Letter)	<p>To comply with other air pollution control requirements and to minimize adverse impacts on public health and welfare, the following information is provided for your consideration during the project:</p> <p>REDUCE DISTURBANCE of PARTICULATE MATTER during CONSTRUCTION</p> <p>This action, plan or activity may temporarily increase ambient particulate matter (dust) levels. Particulate matter 10 microns in size and smaller can penetrate the lungs of human beings and animals and is subject to a National Ambient Air Quality Standard (NAAQS) to protect public health and welfare. Particulate matter 2.5 microns in size and smaller is difficult for lungs to expel and has been linked to increases in death rates; heart attacks by disturbing heart rhythms and increasing plaque and clotting; respiratory infections; asthma attacks and cardiopulmonary obstructive disease (COPD) aggravation. It is also subject to a NAAQS.</p> <p>The following measures are recommended to reduce disturbance of particulate matter, including emissions caused by strong winds as well as machinery and trucks tracking soil off the construction site:</p> <p>I. Site Preparation and Construction</p> <p>A. Minimize land disturbance;</p> <p>B. Suppress dust on traveled paths which are not paved through wetting, use of watering trucks, chemical dust suppressants, or other reasonable precautions to prevent dust entering ambient air</p> <p>C. Cover trucks when hauling soil;</p> <p>D. Minimize soil track-out by washing or cleaning truck wheels before leaving construction site;</p> <p>E. Stabilize the surface of soil piles; and</p> <p>F. Create windbreaks.</p> <p>II. Site Restoration</p> <p>A. Revegetate any disturbed land not used;</p> <p>B. Remove unused material; and</p> <p>C. Remove soil piles via covered trucks.</p>				
Response:	<p>Comment noted. These measures will be included in the mitigation measures in Section 4.9.3 Mitigation of Section 4.9 Air Quality with potential revisions, as may be required.</p>				
Location in EA:	Section 4.9.3				

Commenter ID:	38	Name:	Taunt, Linda	Organization:	ADEQ
Comment 1: (Letter)	<p>Based on the information provided in the Draft EA, ADEQ has the following comments related to water quality.</p> <p>The Draft EA acknowledges the need for water quality permits, specifically the CWA 401 Water Quality Certification and the Arizona Pollutant Discharge Elimination System's (AZPDES) Construction General Permit. For questions or additional information related to these permits:</p> <p>1) For the CWA 401 Certification, please contact Bob Scalamera at (602) 771-4502 or by e-mail at rs3@azdeq.gov. The CWA 401 application form can be downloaded from the agency website at: http://www.azdeq.gov/function/forms/appswater.html4dredge.</p> <p>2) For the Construction General Permit, please contact Chris Henninger in our Stormwater and General Permits Unit at (602) 771-4508 or by e-mail at cph@azdeq.gov. The Construction General Permit and associated forms are available on ADEQ's website at: http://www.azdeq.gov/environ/water/permits/stormwater.html#const. Please note the correct address for filing the Notice of Intent is Arizona Department of Environmental Quality; Surface Water Section / Stormwater & General Permits Unit, 1110 West Washington, 5415A-1; Phoenix, Arizona 85007. ADEQ now offers a Web-based service to assist individuals in applying for construction stormwater discharge permits, available as a Key Topic at the home page:</p>				

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Comments and Responses Report

	<p>http://www.azdeq.gov The WQD recently amended its surface water quality standards, which became effective January 31, 2009. The new surface water quality standards are available on ADEQ's website: http://www.azdeq.gov/environ/water/standards/index.html.</p>
Response:	<p>Comment noted. MCDOT is responsible for the design and construction of the proposed Northern Parkway project, as stated in the approved IGA and described in the draft EA. MCDOT would ensure that permits related to water quality are obtained in accordance with applicable federal, Arizona, and local statute and permit requirements. These requirements included in the ADEQ Water quality Division comment are identified in the Mitigation Measures section of the draft EA. Will modify address for ADEQ for NOI.</p>

Commenter ID:	38	Name:	Taunt, Linda	Organization:	ADEQ
Comment 2: (Letter)	<p>Some of the relocation activities on pages 57 – 58 of the Draft EA may require permits:</p> <p>1) Activities related to wells, such as installing a new well or abandoning a well, must comply with the Arizona Department of Water Resources' regulations. However, to install a well as a drinking water source for a public water system requires a plans review and approval. ADEQ has delegated plan review for public water systems to the Maricopa County Environmental Services Department (MCESD). Please contact MCESD at (602) 506-6666 or by e-mail at sdwquestions@mail.maricopa.gov for more information.</p> <p>2) Wastewater treatment facilities and sewer collection systems also are subject to plan review and approval. ADEQ has delegated plan review and approval to the Maricopa County Environmental Services Department (MCESD). Relocating a sewer lift station may require plan review. Please contact MCESD at (602) 506-6666 or by e-mail at sdwquestions@mail.maricopa.gov for more information.</p> <p>3) Groundwater recharge facilities are regulated by the Arizona Department of Water Resources. However if reclaimed water is used for the recharge, then the WQD requires an Aquifer Protection Permit.</p>				
Response:	<p>Comment 1, regarding public water systems and Comment 2, regarding wastewater treatment facilities and sewer collection systems, will be added as mitigation measures in the final EA in Section 4.2.3 Mitigation of Section 4.2 Utilities. Comment 3, regarding groundwater recharge facilities, in the final EA in Section 4.11.3 Mitigation of Section 4.11 Water Resources. Plus each will be added in the appropriate section of overall Mitigation Measures in the final EA. Also, we will add a statement to the final EA that MCDOT would ensure that all necessary Federal, state, and local permits are obtained in accordance with applicable laws and regulations.</p>				
Location in EA:	Pages 57-58, Section 4.2.3				

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Commenter ID:	13	Name:	Chan, Cecilia	Business:	Arizona Republic
Comment 1: (e-mail)	the 28 homes and 9 biz mentioned as being impacted by northern parkway project, which cities are they located in?				
Response:	Although the environmental assessment draft report is for the entire section of Northern Parkway from Sarival Ave. to Grand Ave., the portion funded by MAG and the local jurisdictions will cover the Western section from Loop 101 to Loop 303 by 2025. In the funded portion of the project, there are nine residential properties and two businesses that may need to be acquired. These are located in unincorporated Maricopa County and a couple in the city of Peoria. The remaining homes and businesses identified would be acquired after 2025. These properties are located in unincorporated Maricopa County and the cities of Glendale and Peoria (2 homes in Peoria in the funded portion).				

Commenter ID:	10	Name:	Jochums, Andy	Business:	BeusGilbert PLLC for Dysart and Northern LLC
Comment 1: (website)	As representatives of the owners of 170 acres at the corner of Dysart Road and Northern Avenue we want to express our support for the Parkway. It will bring a valuable roadway link between the Loop 303, Loop 101, and US 60 that will serve not only the area residents but the future employment and industrial planned around Luke Air Force Base. To not build Northern Parkway would be a severe detriment to the region.				
Response:	Your interest and support for the proposed project is recognized.				

Commenter ID:	25	Name:	Grover, Allan	Organization:	City of Glendale
Comment 1: (e-mail)	Now that you have successfully completed the EA and public hearing, this email is just a reminder of the minor change to the current EA I mentioned to you before, as follows: Section 6.0 / Public and Agency Involvement Process – 2nd paragraph: "... that program for the past eight years, from 2002 to 2009, and updates ..."				
Response:	We will make the change you suggested.				
Location in EA:	Section 6.0, Public Land and Agency Involvement				

Commenter ID:	37	Name:	Clark, Joyce	Organization:	City of Glendale
Comment 1: (Public Meeting)	Obviously, I support it. So my remarks will reflect that support. But I think you need -- I think you really need to be a little honest with me. Number one, when this project was started in 2001, Glendale didn't start it alone. It already had partnerships with Peoria and El Mirage and Surprise. Number two; county voters voted money toward this particular freeway, as did Glendale voters. I think the more important thing for you to realize is that growth is going to come, period. I heard of studies that say that the epicenter, the geographical center of our entire valley will end up being Glendale or Peoria, in that region. Okay? Now, that means there has to be a tremendous amount of growth that will occur out west, in the west valley, to shift the geographical center of the valley so far west. Growth is coming. More cars are coming. More people are coming, whether we want them or not. I think the smartest thing I heard tonight was the comment about I moved into my house, and I should be the last person. Close the door. We'd all like that. We'd all like to retain what we bought and have no changes forever. But folks, they're coming. They are. When I first heard about the Northern Parkway project, I pretty well felt about it the way I did about the Paradise Parkway. I didn't like it either. But over the years, as I've seen the growth				

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	<p>explode in the west valley, I know that we need an east-west parkway. We need one. Otherwise, if you think the traffic is bad now, just wait ten, 15 years from now. I probably won't be around. Some of you won't be around. But others will be. And it will be you and your children that will be contending with the traffic that we'll be seeing. It's not going to go away and it's not going to get better. All right. So we have to have some kind of east-west connection. The City of Glendale originally wanted it much further north, but was defeated with that concept. We were not able to position it further north. So then we have to look further south. What about Bethany? Bethany doesn't go through to anywhere. Bethany never will go through to anywhere until John F. Long decides to develop the property that Bethany would go through. And I don't see that happening for many, many, many years. Glendale Avenue. As we said, we don't create another crossing on the New River and the Agua Fria. There are only so many options. When you look at Northern on its western end, all the land is vacant. All the land is vacant. What better time to develop a freeway rather than waiting until all the homes are planted there, and then we have to contend with what we have to contend on the east side of this design. Which brings up another point. Tonight, they are only showing you the alignment. The alignment. This is not the definitive final design of the freeway. So people ask about sound walls or asphalt or irrigation canals. That's all part of the design work, which is the next step. Tonight, it's just about alignment and an Environment Assessment, how is the alignment, and what do you think about the alignment?</p>
Response:	<p>Comment noted for the record. In addition, it is noted that the first Northern Superstreet meeting was held on August 9, 2002 (not 2001) with representatives from URS, Peoria, ADOT, MCDOT, Glendale, and MAG in attendance. Representatives from El Mirage, Luke Air Force Base, and Flood Control District of Maricopa County were also invited but were unable to attend this initial kickoff meeting.</p>

Commenter ID:	37	Name:	Clark, Joyce	Organization:	City of Glendale
Comment 2: (Public Meeting)	<p>The last thing I want to say is because I really get upset when I hear my esteemed colleagues say that we blackmailed Peoria or when the nice lady says we blackmailed Peoria. Peoria has been involved with this parkway since its inception. It is committed to paying 20 percent of a certain percentage of the matching that it has to bear. Peoria knows full well what this parkway will do. It's not a new concept to them. Now, it's going to hurt people. I know it's going to hurt people. It's going to hurt people in Country Meadows. It's going to hurt other people alongside Northern Avenue. It's going to hurt one subdivision in my district, Rovey Farm. So I know that it's going to hurt people. My job is to help mitigate as much as possible, to make it as easy and as painless as possible, because there will be pain. And I understand that. So my job is to try to help people get past that and get treated fairly and get listened to by these people working on the design. That's what needs to be done. I don't know. But it's coming, folks. You can't stop it. Instead of fighting it, figure out how to make it work for you as best as possible.</p>				
Response:	<p>Comment noted for the record. In addition, it is noted that the first Northern Superstreet meeting was held on August 9, 2002 (not 2001) with representatives from URS, Peoria, ADOT, MCDOT, Glendale, and MAG in attendance. Representatives from El Mirage, Luke Air Force Base, and Flood Control District of Maricopa County were also invited but were unable to attend this initial kickoff meeting.</p>				

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Commenter ID:	44	Name:	Johnson, Terry	Organization:	City of Glendale
Comment 1: (e-mail)	Page 5, next to last line: Drop the word “any”.				
Response:	Comment noted and agreed. Will rewrite last paragraph on page 5 of the EA based on MAG comment #3.				
Location in EA:	Page 5				

Commenter ID:	44	Name:	Johnson, Terry	Organization:	City of Glendale
Comment 2: (e-mail)	Page 62, line 3: Census Tract 717 seems to be missing from Figure 4-4.				
Response:	Comment noted and agreed. Will add census tract 717 callout to Figure 4-4 of the final EA (page 60).				
Location in EA:	Page 62, line 3, Figure 4-4				

Commenter ID:	44	Name:	Johnson, Terry	Organization:	City of Glendale
Comment 3: (e-mail)	Page 63, line 9: Glendale social services are not provided from the Glendale Civic Center at 5750 West Glen Drive.				
Response:	Comment noted and agreed. This statement will be revised in the final EA with the correct information.				
Location in EA:	Page 63, line 9				

Commenter ID:	44	Name:	Johnson, Terry	Organization:	City of Glendale
Comment 4: (e-mail)	Page 117: Update for consistence with DCR.				
Response:	Comment noted and agreed. Section 4.11.2 Environmental Consequences, Floodplains in Section 4.11 Water Resources will be revised in the final EA to be more consistent with the DCR.				
Location in EA:	Page 117, Section 4.11.2				

Commenter ID:	44	Name:	Johnson, Terry	Organization:	City of Glendale
Comment 5: (e-mail)	Page 150, line 7: Update dates.				
Response:	Second paragraph of Section 6, page 150 of the final EA will be modified as follows: “Since the project was initially conceived as part of the Glendale Onboard Transportation Program, it has been featured at annual public open houses for that program for the past eight years, from 2002 to 2009, and updates on the design progress have also been included in the annual Glendale Onboard Program informational brochure mailed to citizens of Glendale.”				
Location in EA:	Page 150, line 7, Section 6.0				

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Commenter ID:	44	Name:	Johnson, Terry	Organization:	City of Glendale
Comment 6: (e-mail)	Page 154, line 20. The technical committee has not been active for some time.				
Response:	The second paragraph of Section 6.5 of the final EA will be modified to read as follows: “After the Proposition 400 county-wide vote, the Northern Working Team was formed, which included representatives from Glendale, Peoria, El Mirage, MCDOT, MAG, Luke AFB, ADOT, FHWA, and FCDMC. This team, which now consists of an executive committee has met monthly and has provided review and guidance for further development of the design concept. The design concept as presented herein has the concurrence of representatives from these agencies. An agency scoping meeting was held in February 2005. Agencies and stakeholders, including utility companies and landowners, presented their concerns and issues regarding the project.”				
Location in EA:	Page 154, line 20, Section 6.5				

Commenter ID:	34	Name:	Leone, Carlo	Organization:	City of Peoria
Comment 1: (Public Meeting)	I've been against this since 2001. And for many reasons, but I'm not going to go through all of them. One of them is that: Don't break it -- don't fix it if it's not broken. Northern Parkway is moving right along.				
Response:	Although population and employment growth in the Valley has slowed considerably during the current economic situation, significant growth in population and employment is predicted in the future along the Northern Parkway corridor. According to Maricopa Association of Governments (MAG) population and employment within the Northern Parkway study area will increase by approximately 250,000 and 220,000 respectively between 2005 and 2030 (see Table 2-1 in the EA). With this estimated growth, traffic volumes will increase on Northern Avenue. MAG traffic modeling predicts that traffic on Northern Avenue would increase from 13,000 vehicles per day to 41,000 vehicles per day in 2030 between 111th Avenue and 103rd Avenue even if no improvements were made (no-build alternative). Northern Avenue functions fine today but will experience significant congestion in the future without improvements. It would be wise to plan for the future now and make the improvements prior to congestion becoming a problem.				

Commenter ID:	34	Name:	Leone, Carlo	Organization:	City of Peoria
Comment 2: (Public Meeting)	We're going to lose two houses in Country Meadows Estates. We're going to lose property, homes and backyards that faces Northern Avenue.				
Response:	Considerable effort was made during the planning phase of Northern Parkway to avoid the necessity of acquiring homes and businesses. According to the conceptual plans for the proposed alternative in the design concept report (DCR) 3 backyards near 111th would be impacted slightly by the project while a small amount of property would be needed from the front of Country Meadows Townhomes located on the northeast corner of 107th and Northern Avenue. Finally, in addition to the two homes you mentioned in Country Meadows Estates there are two condominiums that would be acquired in the Country Meadows Condos Unit 2 development (County) on the south side of Northern Avenue west of 107th Avenue in order to provide alternative access to the condo development.				

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Commenter ID:	34	Name:	Leone, Carlo	Organization:	City of Peoria
Comment 3: (Public Meeting)	<p>I hear so much about traffic on Northern Avenue. There was one incidence that somebody got killed. But there was no lights. There was a stop sign. Now, I don't know how many crashes is happening in the 21 years that I've lived there. I don't think Mr. French knows either. If he does, I'd like to know about it. The thing is that I went down Northern Avenue yesterday morning about 8:00 o'clock, quarter past 8:00. Traffic was wide open. You could move. I went down Northern Avenue last night to Park West at 5:15. Traffic coming towards Country Meadows. There was a lot of traffic, but it was moving. And the reason why it was moving is because of the lights. So there's no reason why that we have to touch Northern Avenue. Let it stay the way it is. The people of Peoria don't want it. Let's keep it Northern Avenue instead of Northern Parkway.</p>				
Response:	<p>As part of the design concept report a traffic report was completed. Collision data along Northern Avenue from Loop 303 to Grand Avenue from January 1, 1999 to February 28, 2005 were obtained from ADOT Traffic Records Branch. 700 accidents were recorded of which 502 were intersection related. Removing signalized intersections by bridging over arterial streets and installing median barriers would potentially reduce crashes along Northern Avenue. Improvements are needed for safety and to accommodate future increased traffic volumes.</p>				

Commenter ID:	34	Name:	Leone, Carlo	Organization:	City of Peoria
Comment 4: (Public Meeting)	<p>I don't know where the streets are going to come when they move that one house. But how about the house next door? If it's going to come through there, I believe he hadn't told us. Is it going to go through the condos? I have no idea where it's going. I don't think anybody else does either. So I would just say I thought we had a good committee on Country Meadows Estates, and we had meetings. And as far as I know, everybody that I talked to in my district, the Pine district, doesn't want it. All I'm saying is that if you do have it, I would go with number three. Let it go down El Mirage to Glendale and all the way down to the freeway. But let's not mess up those homes and backyards. And let's not lose the homes in Peoria.</p>				
Response:	<p>The concept plans included in Volume II of the DCR shows the proposed new alternative access streets and the impacted homes for each alternative evaluated in the draft EA. According to the conceptual plans for the proposed alternative in the design concept report (DCR) that is available on the project website (www.northernparkway-info.com) 3 backyards near 111th would be impacted slightly by the project while a small amount of property would be needed from the front of Country Meadows Town homes located on the northeast corner of 107th and Northern Avenue (see sheets P71, P75, P77 of Volume II of the DCR). Finally, in addition to the two homes you mentioned in Country Meadows Estates the concept plans for the proposed alternative show two condominiums that would be acquired in the Country Meadows Condos Unit 2 (County) development on the south side of Northern Avenue west of 107th Avenue in order to provide alternative access to the condo development (see sheets P75, P164, P165 of Volume II of the DCR). Alternative 2 has similar impacts to homes in this area. Alternative 3 and the no-build alternative would avoid the impacts to homes in the Country Meadows area, however Alternative 1 is proposed since it avoids out-of-direction travel, provides a new crossing of the Agua Fria River, is consistent with the concept shown on the ballot measures, requires 121 acres less new right-of-way, costs \$130 million less than Alternative 3, and meets the purpose and need for the Northern Parkway project in more specific ways than Alternative 3.</p>				

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Commenter ID:	8	Name:	Kane, Richard	Neighborhood:	Country Meadows
Comment 1: (website)	What effect will this have on properties backing to Northern Ave. in the 104th Ave. area?				
Response:	<p>During the preparation of the concept plans, considerable efforts were made to minimize the potential impacts to the residential area of Country Meadows Units 4 and 4A located on the north side of Northern Parkway between 106th Avenue and 103rd Avenue. Early in the development of the Northern Parkway concept in response to concerns expressed by the residents it was decided that Northern Parkway would be depressed under 103rd Avenue rather than be elevated over 103rd Avenue (Alt. 1 & 2).</p> <p>The depressed parkway would likely reduce noise levels in your neighborhood as stated in the noise study conducted as part of the environmental assessment for Northern Parkway. Depressing the roadway below the level of the surrounding terrain, the ground surface adjacent to the roadway acts as a noise barrier reducing noise levels in the neighborhood. The study documented existing noise levels for the homes backing to Northern Avenue, and these noise levels approach the maximum allowable per ADOT Noise Abatement Policy. If Northern Parkway is constructed, the noise study indicates the need for additional mitigation measures in this area based on projected 2030 traffic volumes. The noise study would be refined and the selection of potential mitigation measures would be determined during final design of Northern Parkway.</p> <p>The depression of Northern Parkway at 103rd Avenue also would necessitate the closure of 104th Drive at Northern Parkway. This closure would require westbound Northern Parkway traffic to turn right on 106th Avenue to access residences along Loma Lane. Eastbound Northern Parkway traffic could access Loma Lane by turning left at 107th Avenue or 103rd Avenue.</p>				

Commenter ID:	9	Name:	Steger, Bruce	Neighborhood:	Country Meadows
Comment 1: (website)	I am concerned about the Country Meadows elementary school that is located at 111th Ave and Butler. I have 2 kids that currently attend this school. I see many kids walking to and from school and the park along Northern avenue. As it stands now this one lane road is basically a freeway going west from 107th Ave to Dysart. Currently speeds on this road are well over 60 mph and if you have traveled this route you will know what I am talking about. If a 6 or 8 lane road is put in the speeds will be equal to the 101 or I10 freeways 70+ mph. No one, adult or child should be expected to walk along either side of a 6 or 8 lane roadway such as this.				
Response:	<p>The planned concept for the proposed Alternative 1 as described in the draft EA and shown in the concept plans in the DCR includes pedestrian sidewalks along Northern Parkway. Most of the 6-foot wide sidewalk would be offset from the curb by 9 feet. In addition, the outside travel lane would be separated from the curb by approximately 5.5 feet providing additional separation between the sidewalk and traffic. The speed limit for Northern Parkway between 112th Avenue and 107th is planned to be posted at 45 mph, which is similar to typical arterials streets. Also, several alternative access streets would provide other routes for pedestrians including school children so that they don't need to walk along Northern Parkway. These additional street connections include Royal Palm Road from 111th Lane to 111th Avenue, Royal Palm Road from 108th Drive to 107th Avenue, Augusta Avenue from Country Meadows Unit 2 to 107th Avenue, and Orangewood Avenue from 107th Avenue to Glen Harbor Blvd. Pedestrians could cross Northern Parkway at the signalized intersections of 111th Avenue and 107th Avenue, and at the 103rd Avenue bridge. Pedestrian crossings at other locations between 111th and 103rd avenues would be prevented by physical barriers in the median. Additional pedestrian studies would be completed in the final design phase for Northern Parkway to ensure reasonable accommodations and protections are made for pedestrian movements.</p>				

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Committer ID:	9	Name:	Steger, Bruce	Neighborhood:	Country Meadows
Comment 2: (website)	I am also concerned that putting in a traffic signal will increase the amount of traffic driving by the school and the park that is located across the street from the school. This will end up as the major through way.				
Response:	The proposed Alternative 1 includes traffic signals at 111th and 107th Avenues. Since these intersections would be the only locations to make left-turns to and from Northern Parkway, traffic on 111th and 107th avenues in the vicinity of Northern Parkway could increase due to additional traffic from neighborhoods immediately adjacent to Northern Parkway. No widening on 111th Avenue is planned, as part of the Northern Parkway project while localized widening on 107th Avenue would occur north and south of Northern Parkway. The traffic signals would provide two signalized pedestrian crossing locations in the Country Meadows area.				

Committer ID:	9	Name:	Steger, Bruce	Neighborhood:	Country Meadows
Comment 3: (website)	With all of the open space and the alternatives available such as Glendale Ave it doesn't seem necessary to remove anyone from their home to build an access road. Myself along with many other people purchased my home with the expectation of eventually retiring here to this and other quiet neighborhoods in the area. Now we all have this potential freeway in our backyards looming over our heads.				
Response:	Although several alternatives were analyzed to accommodate the predicted increased traffic volumes, Alternative 1 on the Northern Avenue alignment (which includes 2 traffic signals) is proposed instead of Alternative 3 along Glendale Avenue because Alternative 3 costs \$130 million more, requires 121 acres more new right-of-way, adds 0.9 miles of out-of-direction travel, and does not provide for a new crossing of the Agua Fria River. Even if no improvements were completed (no-build alternative) traffic on Northern Avenue would increase but the purpose and need of the project would not be met.				

Committer ID:	20	Name:	Wilkinson, William	Neighborhood:	Country Meadows
Comment 1: (Public Meeting)	Use alt. #3 would be less home loss				
Response:	A significant effort was made to avoid the necessity of acquiring homes and businesses for all the alternatives for Northern Parkway. Alternative 3 – Southern Alignment would require 22 homes and 10 businesses while both Alternatives 1 and 2 would require 28 homes and 9 businesses. Although several alternatives were analyzed to accommodate the predicted increased traffic volumes, Alternative 1 on the Northern Avenue alignment including 2 traffic signals is proposed instead of Alternative 3 along Glendale Avenue because Alternative 3 costs \$130 million more, requires 121 acres more new right-of-way, adds 0.9 miles of out-of-direction travel, and does not provide for a new crossing of the Agua Fria River. The no-build alternative would require no acquisition of homes but would not provide for projected 2030 traffic volumes.				

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Commenter ID:	20	Name:	Wilkinson, William	Neighborhood:	Country Meadows
Comment 2: (Public Meeting)	And what kind of overpass at 91st Ave. & 103 Ave.?				
Response:	Early in the development of the Northern Parkway concept it was decided that Northern Parkway would be depressed under 103rd Avenue rather than elevated over 103rd Avenue as a result of concerns expressed by the residents (Alt. 1 & 2). The depressed parkway would likely reduce noise levels in your neighborhood as stated in the noise study conducted as part of the environmental assessment for Northern Parkway. The overpass at 91st Avenue would be elevated allowing free flow of traffic on Northern Parkway. Both 103rd Avenue and 91st Avenue would be connected to Northern Parkway with ramps in a planned grade separated intersection.				

Commenter ID:	20	Name:	Wilkinson, William	Neighborhood:	Country Meadows
Comment 3: (Public Meeting)	Who will enforce the speed laws?				
Response:	The speed limits planned for Northern Parkway would be 55 mph from Sarival Avenue to 115th Avenue and 45 mph from 115th Avenue to Grand Avenue. These speed limits would be enforced by the jurisdiction in which Northern Parkway is located, that is, Glendale, Peoria and Maricopa County according to an Intergovernmental Agreement (IGA) signed by the partner agencies.				

Commenter ID:	26	Name:	Gethard, Nancy L.	Neighborhood:	Country Meadows
Comment 1: (Public Meeting)	This parkway is not going to improve the traffic in the west valley. You need to seek an alternative to this plan. Other east-west and north-south streets in the west valley need to be two or more lanes in each direction so the traffic does not all have to flow into just one area. This will distribute the traffic flow pattern evenly throughout the west valley. I would like to hear your opinion on this.				
Response:	The Maricopa Association of Governments (MAG) uses sophisticated computer software to model existing and future traffic patterns in Maricopa County. The model is based on existing land use and street network for Maricopa County and uses municipal general plans, transportation plans, and population projections to predict traffic demand in the future. US Census data are used as a basis for population estimates. For Northern Parkway, a MAG model run for the design year of 2030 was used. Northern Parkway was placed in the 2030 MAG model, which included an improved street network, anticipated to be in place in 2030. An analysis was also completed with the 2030 MAG model that compared the no-build alternative and the 3 build alternatives impact on adjacent arterials. The results indicate that the parallel arterial streets consisting of Peoria Avenue, Olive Avenue, Glendale Avenue and Bethany Home Road experienced an average reduction of projected 2030 traffic of 20 percent when one of the build options was constructed when compared to projected 2030 traffic in the no-build condition. Peoria Avenue is not continuous due to the presence of Sun City while Glendale Avenue and Bethany Home Road are not continuous due to the presence of Luke AFB. The gaps in the normal one-mile grid of east-west arterial streets in the West Valley place much heavier burdens on the remaining streets. Based on the modeling data, Northern Parkway would improve east-west traffic flow in the West Valley in 2030 and would meet the needs identified in the draft EA.				

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Committer ID:	29	Name:	Burkhart, Mark	Neighborhood:	Country Meadows
Comment 1: (Public Meeting)	And I was just curious with the noise mitigation, I'm assuming those are sound walls. How high are they, and what are they made out of?				
Response:	The project partners for Northern Parkway have committed to mitigate noise impacts to ADOT standards, which are one of the most stringent standards in the country. As final design progresses, the noise analysis that was completed as part of the draft EA would be refined and specific noise mitigation measures would be evaluated and selected. Potential mitigation measures include walls, earth berms, or a combination of these measures. The height of noise walls if it is the selected mitigation measure would vary according to the recommendation contained in the final noise analysis and are generally constructed of concrete or concrete block and include aesthetic treatments.				

Committer ID:	29	Name:	Burkhart, Mark	Neighborhood:	Country Meadows
Comment 2: (Public Meeting)	I noticed on air quality, you mentioned with the new thoroughfare, "more than likely won't exceed". I don't like that "more than likely". I'm right off the freeway. It's kind of nice out there. I moved out there because of clean air.				
Response:	The wording "Long-term operation not likely to exceed allowable pollutant concentrations" was incorrect wording. It was not used in the draft EA in Section 4.9 Air Quality, but on a slide about air quality during the presentation of the environmental overview at the public hearing. The Arizona Department of Environmental Quality (ADEQ), Air Quality Division (AQD) reviewed the draft EA, per their letter of October 14, 2009. The ADEQ, AQD concurred with the finding in the draft EA that air quality would not constitute a significant long-term impact with the construction and operation of the proposed Northern Parkway.				

Committer ID:	29	Name:	Burkhart, Mark	Neighborhood:	Country Meadows
Comment 3: (Public Meeting)	And also, I know this lady mentioned about the access into the neighborhoods. I'm kind of concerned about that. But if you put lights, in my opinion, at 111th, or 107th, you're kind of defeating the purpose of the thoroughfare, in my opinion. You know, if I'm going through. I don't want to be stopping. But I live right there. I'm sure you're going to make different ways in and out of it.				
Response:	The traffic signals at 111th Avenue and 107th Avenue are included in the proposed alternative (Alternative 1) to facilitate access to the Country Meadows and Suncliff neighborhoods. These two traffic signals would impact through movements on Northern Parkway. The project partners agreed that providing better access to the neighborhoods was worth the trade-off of reduced through movement level of service on Northern Parkway. In addition to the traffic signals, the Northern Parkway project includes alternative access streets in the Suncliff, Country Meadows, Rovey Farms, and Summerset neighborhoods to help neighborhood circulation.				

Committer ID:	33	Name:	Wernecke, Richard	Neighborhood:	Country Meadows
Comment 1: (Public Meeting)	I live on Northern Avenue between 103rd and 107th. Now, what I understand, they're going to take part of my property. That means my house is going to sit 50 feet from a parkway. Now, I'm not going to be around when this is all done anyway. I'm in my 80s. So if I ever sell it or want -- the people that's going to live there is going to live 50 feet from a parkway. That ain't going to be good.				

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Response:	<p>According to the concept plans in the Design Concept Report (DCR) Volume II none of your property would be needed to construct Northern Parkway. The new north curb would be approximately 59 feet from the nearest corner of your house or about 6 feet closer than it is now. During the preparation of the concept plans, considerable efforts were made to minimize the potential impacts to the residential area of Country Meadows Units 4 and 4A located on the north side of Northern Parkway between 106th Avenue and 103rd Avenue. Early in the development of the Northern Parkway concept in response to concerns expressed by the residents it was decided that Northern Parkway would be depressed under 103rd Avenue rather than be elevated over 103rd Avenue (Alt. 1 & 2).</p> <p>The depressed parkway would likely reduce future noise levels in your neighborhood generated from Northern Parkway traffic as stated in the noise study conducted as part of the environmental assessment. The study documented existing noise levels for the homes backing to Northern Avenue, and these noise levels approach the maximum allowable per ADOT Noise Abatement Policy. If Northern Parkway is constructed, the noise study indicates the need for mitigation measures in this area based on projected 2030 traffic volumes. During final design of Northern Parkway, the noise study would be refined and the selection of specific mitigation measures would be determined.</p> <p>Regarding the potential future sale of your home, many factors affect property values near a major transportation facility. The general economic conditions of the nation and the state of Arizona have had tremendous affect on land values and home prices in the Valley. In addition, the age and condition of a home has direct impacts to the value of a property. The proximity of property to a major transportation facility can increase its value especially if it is combined with good access for commuting purposes. Residential properties may be affected in such a way that the long-term value of existing homes may not increase in value as quickly or in the same magnitude when compared with homes located further away from a major transportation facility. Determining the impact of only Northern Parkway on value fluctuations would be difficult.</p>
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Commenter ID:	36	Name:	Temer, Pat	Neighborhood:	Country Meadows
Comment 1: (Public Meeting)	I live in Country Meadows Estates. And we've been fighting the parkway for the last seven years. And at last City Council meeting, the mayor told us because Glendale kind of blackmailed us, they would not sign a portion of what we needed for north Peoria without signing off on the parkway. So he said to us that's the way it's going to be, whether you like it or not. So if you can stop it at this point, you have a big fight ahead of you. All I know is nine lanes of traffic are going to be down our road behind our subdivisions.				
Response:	<p>Significant growth in population and employment is predicted in the future along the Northern Parkway corridor. According to Maricopa Association of Governments (MAG) population and employment within the Northern Parkway study area will increase by 250,000 and 220,000 respectively between 2005 and 2030 (see Table 2-1 in the EA). With this projected growth, traffic volumes would increase on Northern Avenue. MAG traffic modeling predicts that traffic on Northern Avenue would increase from 13,000 vehicles per day in 2007 to 41,000 vehicles per day in 2030 between 111th Avenue and 103rd Avenue even if no improvements were made (no-build alternative). Northern Avenue functions fine today but would experience significant congestion in the future without improvements.</p> <p>If the proposed Alternative 1 is accepted and approved by ADOT and FHWA, then Northern Parkway in your area between 111th and 107th avenues would have three through lanes in each direction separated by a curbed landscaped median plus an auxiliary lane in each direction for right turn movements into existing driveways and streets.</p>				

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Commenter ID:	36	Name:	Temer, Pat	Neighborhood:	Country Meadows
Comment 2: (Public Meeting)	We have a guy that's going to have an eight to ten foot sound wall right next to his driveway. And this will be the people's backyard fences. The fencing will be removed, and these will be their fences, part of the sound walls.				
Response:	A noise study was conducted as part of the draft EA. Existing noise levels were measured and future noise levels were predicted based on forecast 2030 traffic volumes on Northern Parkway. Country Meadows was identified as a noise study area. Unlike typical street widening projects, the project partners for Northern Parkway have committed to mitigate noise impacts to ADOT standards, which are one of the most stringent standards in the country. As final design progresses, the noise analysis would be refined and specific noise mitigation measures would be evaluated and selected. If after further analysis, noise mitigation is required, a noise wall may be the selected measure to mitigate Northern Parkway noise. If a noise wall is planned, it is likely that a separate wall would be constructed without impacting the existing wall. In the case of the house on the corner of 108 th Drive and Northern Avenue which would be acquired according to the concept plans in the DCR, the City of Peoria may donate the excess right-of-way shown in the concept plans back to the owner of the remaining house which would move the potential wall further away from his driveway and home.				

Commenter ID:	36	Name:	Temer, Pat	Neighborhood:	Country Meadows
Comment 3: (Public Meeting)	We were never guaranteed rubberized asphalt. They said, "Oh, you will likely have it." Did anybody ever find out if we will have it?				
Response:	Asphaltic Rubber Friction Course (ARFC) would be included in the Northern Parkway project (Alternatives 1 and 2) from 115th Avenue to 103rd Avenue as stated in the Design Concept Report on p 5-67 (see DCR online at www.northernparkway-info.com). Specifics of the application of ARFC would be determined during final design of Northern Parkway.				

Commenter ID:	36	Name:	Temer, Pat	Neighborhood:	Country Meadows
Comment 4: (Public Meeting)	There's a lot of things we don't know about drainage. We don't know where there's going to be retention basins. They have to send this water somewhere.				
Response:	A conceptual drainage plan was developed as part of the Design Concept Report (DCR) and is shown on drainage plan sheets in Volume II of the DCR (www.northernparkway-info.com). In the Country Meadows area, the planned concept includes revisions to the existing drainage basin west of 112th Avenue, an expansion of the existing drainage basin west of 111th Avenue, and the installation of a new storm drain system (see drainage concept plan sheets D36-D41). During the final design process, these drainage concepts may be revised.				

Commenter ID:	36	Name:	Temer, Pat	Neighborhood:	Country Meadows
Comment 5: (Public Meeting)	But the biggest part is you're providing all the business that could possibly be going through the city of Peoria by going around it. So you may lose tax money and everything else with this.				
Response:	The project partners expended considerable effort to maintain and enhance existing and future business along Northern Parkway in Peoria, Glendale, and El Mirage. Special design features were added to the design concept contained in the DCR to help maintain business opportunities. Features added to Alternatives 1 and 2 include frontage roads between Dysart and El Mirage roads, the "bypass" frontage road combination between 103rd and 91st avenues, and the 93rd				

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	Avenue grade separated intersection at Peoria Crossings. Alternative 3 may move some future business opportunities to Glendale Avenue between El Mirage Road and 99th Avenue.
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Commenter ID:	36	Name:	Temer, Pat	Neighborhood:	Country Meadows
Comment 6: (Public Meeting)	I mean, this was the project that -- they don't even have enough water in this city. They're going to have to start bringing it from the Sea of Cortez to even support this much.				
Response:	Maricopa Association of Governments (MAG) is the designated Metropolitan Planning Organization (MPO) for transportation planning in the Maricopa County region. MAG uses sophisticated computer software to model existing and future traffic patterns in Maricopa County. The model is based on existing land use and street network for Maricopa County and uses municipal general plans, transportation plans, and population projections to predict traffic demand in the future. US Census data are used as a basis for population estimates. For Northern Parkway, a MAG model run for the design year of 2030 was used. Long-range water planning for the planned growth is not part of this project.				

Commenter ID:	36	Name:	Temer, Pat	Neighborhood:	Country Meadows
Comment 7: (Public Meeting)	It's going to cost way too much money.				
Response:	The project partners understand that the taxpayers are the basis for funding this project and that they should be wise in investing the public's money. The proposed Alternative 1 is the least expensive build alternative. The no-build alternative would have no cost associated with it but would not satisfy the purpose and need of the project. The estimated cost for Alternative 1 is \$613 million in today's dollars (2009). Since the estimated cost exceeds \$500 million and includes a large amount of federal funds, FHWA conducted a cost estimate review to ensure the reasonableness of the estimate. During final design of Northern Parkway additional ways to reduce costs will be explored by the project partners.				

Commenter ID:	36	Name:	Temer, Pat	Neighborhood:	Country Meadows
Comment 8: (Public Meeting)	And has anybody addressed turning up new soil that's never been turned up and the prospect of more valley fever cases in the area? Because that's a distinct possibility if you turn new soil.				
Response:	The mitigation measures included in the draft EA require the contractor to follow strict air quality standards during construction. Mitigation measures include stabilizing all dust-producing surfaces, covering dump trucks transporting materials that might become airborne during transit, washing or brushing sediments off construction vehicles before they exit the construction site, and compliance with all air pollution ordinances, regulations, orders, etc. including Maricopa County Air Quality Rule 310 – Fugitive Dust Sources. We understand your concerns with Valley Fever, as we all live in the same county and breathe the same air. It has been discovered that far more topsoil is disturbed by residential mass grading and home building activities and agriculture, than by roadway construction following proper dust control regulations.				

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Commenter ID:	36	Name:	Temer, Pat	Neighborhood:	Country Meadows
Comment 9: (Public Meeting)	So anyway, I've been against this from day one. You know, it's like I was not coming tonight, but curiosity played out best. So I would say I'm against it. I don't know whether you have a chance, and you don't want to stop it. But, you know, guys, it's going to get shoved down your throat because I don't think they listen. I don't think any of them listen from day one. That's all I've got to say.				
Response:	During the development of the Northern Parkway concept, there was extensive dialogue and discussion with residents of the Country Meadows neighborhoods adjacent to the proposed parkway. Four public meetings were held along with eight neighborhood meetings. Results from this public input included the creation of Alternative 3 (Southern Alignment), depressing the proposed parkway under 103rd Avenue (Alternatives 1 and 2), and providing traffic signals including left turns at 111th and 107th Avenues (Alternative 1). In addition, we understand that some residents adjacent to the proposed project would prefer the no-build alternative which is included in our evaluation of the alternatives in the draft EA.				

Commenter ID:	39	Name:	Grady, Dennis and Crystal	Neighborhood:	Country Meadows
Comment 1: (website)	It's nice to know Northern fits all your criteria, but you missed one glaring aspect that you gave no thought or importance to--the people that live off of Northern do not want this!! We moved out here to get away from that. Yes, it's growing, but there are other ways to manage the growth. We do not want a parkway in our backyard-literally!! Would you? Of course not. But it's obvious the people who live here don't figure into your equation at all. Loop 101 is only a mile or so away, and the noise from the traffic there is already bad in the mornings--there's a steady drone that goes on for a couple of hrs. God forbid, this roadway will be all of two houses away from us and almost in our laps.				
Response:	<p>During the development of the Northern Parkway concept, there was considerable dialogue and discussion with residents of the Country Meadows neighborhoods adjacent to the proposed parkway. Four public meetings were held along with eight neighborhood meetings. Public input from these meetings resulted in changes to the alternatives including the creation of Alternative 3 (Southern Alignment), depressing the proposed parkway under 103rd Avenue (Alternatives 1 and 2), and providing traffic signals including left turns at 111th and 107th Avenues (Alternative 1).</p> <p>Although Northern Parkway is not a freeway like Loop 101 anticipated increase in traffic would likely increase noise levels along the parkway in Country Meadows if the proposed alternative is selected (Alternative 1). The project partners for Northern Parkway have committed to mitigate noise impacts to ADOT standards, which are one of the most stringent standards in the Country. A noise study was conducted as part of the Environmental Assessment, which identified noise sensitive areas like residential areas along the proposed Northern Parkway. Existing noise levels were measured and future noise levels were predicted based on forecast 2030 traffic volumes. As final design progresses, the noise analysis would be refined and specific noise mitigation measures would be evaluated and selected.</p>				

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Commenter ID:	39	Name:	Grady, Dennis and Crystal	Neighborhood:	Country Meadows
Comment 2: (website)	<p>Are you willing to compensate the people who live here for basically ruining their quality of life and enjoyment of their own property as well as bringing down the value of their homes? We will not be able to give our house away with a parkway almost literally next door to us. And a lot of us cannot afford to move, nor do we want to. We like our quality of life here, that's why we all moved here, to get away from this kind of thing. We have a lot of children in these communities. Despite what your proposal says, Northern is very populated in this area, and has several newer subdivisions right on northern Ave.</p>				
Response:	<p>Significant growth in population and employment is predicted in the future along the Northern Parkway corridor. According to Maricopa Association of Governments (MAG) population and employment within the Northern Parkway study area will increase by 250,000 and 220,000 respectively between 2005 and 2030 (see Table 2-1 in the EA). With this projected growth, traffic volumes will increase on Northern Avenue. The project partners understand that there are important neighborhoods along Northern Avenue including Country Meadows. Our analysis showed that there were more homes along Olive Avenue than Northern Avenue when looking at the entire 12-mile route and that was one reason the Northern Avenue corridor was selected for Northern Parkway. Many factors affect property values near a major transportation facility. The general economic conditions of the nation and the state of Arizona have had tremendous affect on land values and home prices in the Valley. In addition, the age and condition of a home has direct impacts to the value of a property. The proximity of property to a major transportation facility can increase its value especially if it is combined with good access for commuting purposes. Residential properties may be affected in such a way that the long-term value of existing homes may not increase as quickly or in the same magnitude when compared with homes located further away from a major transportation facility. Determining the impact of only Northern Parkway on value fluctuations would be difficult.</p>				

Commenter ID:	39	Name:	Grady, Dennis and Crystal	Neighborhood:	Country Meadows
Comment 3: (website)	<p>We understand your argument about glendale ave.-but that seems to us to be the perfect compromise. It's mostly commercial, and it goes right past the stadiums, which everyone could use the parkway for, and there is a lot more traffic on glendale ave. Glendale ave. is a commercial street, busy. Northern is still a mainly suburban street, used by the people who live and work here, and the people who live here want to keep it that way. None of us voted for this, to remind you. None of us would have voted for it if everyone who is involved in all this would have been honest and not thrown it into some general improvements vote, which we understand may be what happened. It's a very fraudulent way of getting around people's concerns and complaints when you know they will not agree to it. This area and this house and this subdivision is our life-and you are setting out to ruin it with this parkway. Think about if you were in our shoes and someone were doing this to you--get a conscience and stop thinking about the almighty dollar and ruining people's lives because of it. It's amazing you can sleep at night when you do this. There has to be a better way for you to do this project-put it on glendale, and then bring it up to northern further out, where there are no subdivisions and people who live here that you will be destroying the quality of life for. If you would just work with us instead of acting as if you could care less about the negative impact this will have on all of us who live here, we might even embrace this project.</p>				

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Response:	The advantages and challenges for 3 build alternatives and the no-build alternative were evaluated with considerable input from the public and stakeholder agencies. Although Alternative 3 along Glendale Avenue would eliminate many of the concerns expressed by residents of Country Meadows, from a regional public perspective it has some challenges when compared to the proposed Alternative 1 because Alternative 3 costs \$130 million more, requires 121 acres more new right-of-way, adds 0.9 miles of out-of-direction travel, and does not provide for a new crossing of the Agua Fria River. A decision on the proposed alternative will consider public comments and if approved by FHWA will be documented in a written Finding of No Significant Impact (FONSI).
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Commenter ID:	41	Name:	Leone, Joan	Neighborhood:	Country Meadows
Comment 1: (Public Meeting)	I am not in favor of making Northern Ave. a “Parkway”. If Glendale is so anxious to get a “Parkway” let them put in on Glendale Ave. Option #3 is the better one. The residents of Peoria do no need to lose their homes for this.				
Response:	The advantages and challenges for 3 build alternatives and the no-build alternative were evaluated with considerable input from the public and stakeholder agencies. Although Alternative 3 along Glendale Avenue would eliminate many of the concerns expressed by residents of Country Meadows, from a regional public perspective it has some challenges when compared to the proposed Alternative 1 because Alternative 3 costs \$130 million more, requires 121 acres more new right-of-way, adds 0.9 miles of out-of-direction travel, and does not provide for a new crossing of the Agua Fria River. A decision on the proposed alternative will consider public comments and if approved by FHWA will be documented in a written Finding of No Significant Impact (FONSI).				

Commenter ID:	21	Name:	Burkhart, Mark Hansen, Sally	Neighborhood:	Country Meadows
Comment 1: (Public Meeting)	We like alternative 3 – less impact on residential housing				
Response:	The advantages and challenges for 3 build alternatives and the no-build alternative were evaluated with considerable input from the public and stakeholder agencies. Although several alternatives were analyzed to accommodate the predicted increased traffic volumes, Alternative 1 on the Northern Avenue alignment including 2 traffic signals is proposed instead of Alternative 3 along Glendale Avenue because Alternative 3 costs \$130 million more, requires 121 acres more new right-of-way, adds 0.9 miles of out-of-direction travel, and does not provide for a new crossing of the Agua Fria River. A decision on the proposed alternative will consider public comments and if approved will be documented by FHWA in a written Finding of No Significant Impact (FONSI).				

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Committer ID:	21	Name:	Burkhart, Mark Hansen, Sally	Neighborhood:	Country Meadows
Comment 2: (Public Meeting)	Extremely concerned with noise level – need high sound walls along all residential areas.				
Response:	Unlike typical street widening projects, the project partners for Northern Parkway have committed to mitigate noise impacts to ADOT standards, which are one of the most stringent standards in the Country. A noise study was conducted as part of the EA, which identified noise sensitive areas like residential areas along the proposed Northern Parkway. Existing noise levels were measured and future noise levels were predicted based on forecast 2030 traffic volumes. As final design progresses, the noise analysis would be refined and specific noise mitigation measures would be evaluated and selected. If noise walls are the selected mitigation measure they would vary in height according to the recommendation contained in the final noise analysis.				

Committer ID:	21	Name:	Burkhart, Mark Hansen, Sally	Neighborhood:	Country Meadows
Comment 3: (Public Meeting)	Spend the extra \$ and put in some light rail track along side the new parkway.				
Response:	Light rail along Northern Parkway is not consistent with the approved Maricopa Association of Governments Regional Transportation Plan (RTP). Alternative light rail routes are being studied to extend light rail service out to the Glendale sports complex at Glendale Avenue and Loop 101.				

Committer ID:	24	Name:	McGuire, Sallie	Organization:	Department of the Army – Corps of Engineers
Comment 1: (Letter)	<p>The Corps of Engineers regulates the discharge of dredged and/or fill material into waters of the U.S. including wetlands under Section 404 of the Clean Water Act. Examples of activities requiring a permit include but are not limited to placing bank protection, temporary or permanent stockpiling, grading including vegetative clearing operations, road or pad fills, any other activity that involves the filling of low areas or leveling of the land, and discharging dredged or fill material into waters of the U.S. as part of any other activity or any work at all which results in a change to the existing elevation of a water of the U.S.</p> <p>The proposed activity may require a permit under Section 404; however, there was not enough information for us to make this determination. Please provide more detailed information at your earliest convenience so we may make a determination. Please reference File Number SPL-2008-00925-SDM.</p>				
Response:	<p>In accordance with on-going coordination with the U.S. Army Corps of Engineers for the Northern Parkway project, official delineation of potential jurisdictional waters that may require permit under Section 404 has not yet been prepared. An assessment was, however, conducted in the draft EA of potential jurisdictional waters based on criteria used for the identification of ordinary high water marks, aerial imagery, and GIS calculations.</p> <p>Due to the lengthy time frame proposed for various project phases, the timing of actual construction versus the expiration date of approved delineations (should they be conducted at this time) would become an issue. As each phase of the project proceeds through final design, actual jurisdictional delineations would be undertaken to adhere to the requirements of the Section 404 process and enable USACE to make more precise delineation determinations.</p> <p>Lastly, there is also a planned channelization project for the Agua Fria River by the FCDMC, which could affect Northern Parkway construction plans. Continued coordination with FCDMC will be undertaken as the process for each project progresses.</p>				

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Commenter ID:	1	Name:	Sparrow, Mark	Neighborhood:	East of 101
Comment 1: (website)	How will this affect my property?				
Response:	<p>Thank you for your interest in the Northern Parkway project. In response to your question you submitted on the project website, your property located at 9401 W. Northern Avenue could be affected. Several alternatives for Northern Parkway have been studied and the final determination has not been made. However, the proposed alternative (Alternative 1) if approved and if funding is available would require the acquisition of your entire property based on the design concept. During final design, the right-of-way requirements may change. The current phasing plan indicates that this portion of Northern Parkway wouldn't be constructed until sometime after the year 2025. If Alternative 1 is approved, acquisition of the property may not occur until after 2025 as well. Conditions may change such that advanced acquisition may be warranted. In either case, the acquisition would follow the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), which would ensure fair and equitable treatment of all property owners, impacted by Northern Parkway.</p>				

Commenter ID:	48	Name:	Stevens, Bob	Organization:	FCDMC
Comment 1: (e-mail)	<p>The primary focus was placed on impacts to the Agua Fria and the New River channels from each of the roadway alternatives. It was documented that disturbances from the bridge options within the Agua Fria will comply with the conditions established in the Agua Fria Watercourse Master Plan. It was not documented that disturbances within the New River will comply with the conditions of Section 404 Permit no. 89-001-RD, which set aside specific mitigation areas within and outside of the channel to augment impacts to the floodway as a result of the channelization project completed in 1994. The mitigation area within the channel extend from Olive Avenue to the Bethany Homes Outfall and include small islands and conveyance and retention corridors for sustaining habitat and maintaining design capacity. Additional on-site mitigation areas outside of the channel include a 20-acre parcel of land at 99th Avenue and Glendale Avenue that was established by the District for habitat preservation in perpetuity.</p>				
Response:	<p>In accordance with the comment, the final EA will state that disturbances within the New River channel would comply with the conditions set forth in Section 404 Permit No. 89-001-RD. This previous 404 permit has identified the New River channel as a mitigation area, which requires any disturbance be minimized. This additional information will be placed in Section 4.11.2 of the final EA.</p>				
Location in EA	Section 4.11.2, page 118				

Commenter ID:	48	Name:	Stevens, Bob	Organization:	FCDMC
Comment 2: (e-mail)	<p>On page 77, Section 4.5.2 Parks and Recreational Amenities, it documents that impacts to the New River Channel from Alternatives 1 and 2 would impact approximately 2.7 acres; and impacts from Alternatives 3 would impact approximately 6 acres. Given the larger impacts at Alternative 3, other design modifications should be considered for impacts within the channel to minimize or avoid impacts from the bridge to existing mitigation areas in compliance with the conditions of the permit and in compliance with 404 (B) (1) guidelines.</p>				

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Response:	Should Alternative 3 be selected as the preferred alternative, other design modifications would be evaluated to reduce potential effects within the channel of the New River to avoid or minimize effects from the proposed Northern Parkway bridge in compliance with the existing Section 404 Permit No. 89-001-D and with Section 404 (b)(1) guidelines.
Location in EA	Section 4.11.2, page 119

Commenter ID:	17	Name:	Moser, Brent	Business:	Grubb & Ellis
Comment 1: (e-mail)	This improvement is crucial to the entire West Valley as Bell Road and I-10 cannot handle current or future traffic. Northern Parkway should be free flowing from Loop 101 all the way to Loop 303.				
Response:	Your interest and support for the proposed project is recognized.				

Commenter ID:	17	Name:	Moser, Brent	Business:	Grubb & Ellis
Comment 2: (e-mail)	Please have the signals removed in Peoria and figure out how to build that entire portion over the next couple years.				
Response:	The two traffic signals are in the proposed alternative (Alternative 1) in response to preferences expressed by people living in the nearby neighborhoods. Removal of the traffic signals at 111th Avenue and 107th Avenue would require additional funding (\$39 million) for an overpass at 107th Avenue and a new grade separated intersection at 115th Avenue as shown in Alternative 2. Committed funding through 2025 only allows construction of about half of the total Northern Parkway ultimate concept. Funding limitations require that the construction be phased between now and 2025. The project partners would continue to look for other funding sources to expedite construction.				

Commenter ID:	23	Name:	Kuwanwisiwma, Leigh J.	Organization:	Hopi Cultural Preservation Office
Comment 1: (Letter)	<p>The Hopi Tribe claims cultural affiliation to prehistoric cultural groups in Arizona, including the Hohokam prehistoric cultural group in southern Arizona, and the Hopi Cultural Preservation Office supports identification and avoidance of prehistoric archaeological sites and Traditional Cultural Properties. Therefore, we appreciate URS, FHWA and ADOT's continuing solicitation of our input and your efforts to address our concerns.</p> <p>The Hopi Cultural Preservation Office considers the archaeological sites of our ancestors to be Traditional Cultural Properties. We concurred with the Federal Highways Administration correspondence dated January 25, 2007, with an enclosed cultural resources overview, that an adverse effect determination was appropriate for this project due to the five prehistoric sites may be impacted along middle segment of the northern alignment, including the Quass Pueblo, AZ T:7:25 (ASM) described as a Hohokam village, and sites AZ T:7: 12, 13, 33, and 174 (ASM), described as artifact scatters with possible structures.</p>				

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Response:	The comment notes the potential adverse effects on archeological sites proximate to Alternatives 1 and 2, specifically AZ t:7:12,13,25, 33, and 174. The protection and management of these sites will be managed as part of the Programmatic Agreement enacted between the FHWA, the Arizona SHPO, and other signatories in December 2008, pursuant to regulations for Protection of Historic Properties (36 CFR 800). This agreement stipulates procedures for addressing effects on cultural resources eligible for the National Register by formalizing the inventory of cultural resources and developing and implementing a treatment plan concurrent with the final design phase of each portion of the project.
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Commenter ID:	23	Name:	Kuwanwisiwma, Leigh J.	Organization:	Hopi Cultural Preservation Office
Comment 2: (Letter)	We have now reviewed the enclosed environmental assessment. We deferred on the Programmatic Agreement but understand that at least one archaeological site will be adversely affected if Alternatives 1 or 2 are constructed, and at least two archaeological sites will be adversely affected if Alternative 3 is constructed. Therefore, we request continuing consultation on this proposal including to be provided with copies of and draft treatment plans and reports for review and comment.				
Response:	Comment noted for the record. The project partners agree to continuing consultation with the Hopi Tribe, regarding the implementation of the Programmatic Agreement for Cultural Resources for the various phases of the Northern Parkway project, as requested.				

Commenter ID:	47	Name:	Dubsky, Robert	Organization:	Luke AFB
Comment 1: (e-mail)	What is the maximum height for the NP overpass on Litchfield Road?				
Response:	A letter to Mr. Ed Beasley, Glendale City Manager from Mr. James Mitchell, Director, Community Initiatives Team, Luke AFB dated May 26, 2005 stipulates that the Northern Parkway maximum road surface elevation at Litchfield Road not be more than 13 feet above natural ground elevation and that street lights should not exceed 30 feet above the existing natural ground in the area. The Litchfield Road overpass concept included in the Draft DCR meets the requirements of Luke AFB. The profile grade of the roadway would be evaluated further in final design to ensure the Luke AFB requirements are met.				

Commenter ID:	47	Name:	Dubsky, Robert	Organization:	Luke AFB
Comment 2: (e-mail)	What is the maximum height of the NP overpass over the BSNF Railway spur?				
Response:	A letter to Mr. Ed Beasley, Glendale City Manager from Mr. James Mitchell, Director, Community Initiatives Team, Luke AFB dated July 3, 2007 stipulates that the maximum height of the improvements at the grade separation structure at the BNSF rail spur near 143rd Avenue including street lights should not exceed 1150 feet above mean sea level (AMSL), which is approximately 52 feet above the existing natural ground in the area. The BNSF railroad spur overpass concept included in the DCR meets the Luke AFB requirements. The profile grade of the roadway would be evaluated further in final design to ensure the Luke AFB requirements are met.				

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Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 1: (e-mail)	Length of facility is 12.5 miles. Text varies when discussing the length of the facility. Should be consistent throughout.				
Response:	Will change to 12.5 miles and be consistent for Alternatives 1 and 2.				
Location in EA:	Pages 1-3				

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 2: (e-mail)	Clarify the phrase “all involved governmental jurisdictions”...”To study the “super street” concept, a management committee and a technical advisory committee were formed of all involved governmental jurisdictions.....				
Response:	The agencies referred to in the phrase “all involved governmental jurisdictions” are listed in the 3rd paragraph on page 4 for of the EA. We will revise the wording as follows to clarify the sentence: “To study the “super street” concept, a management committee and a technical advisory committee were formed with representatives from the project partners and stakeholders including the City of Glendale, City of Peoria, City of El Mirage, MCDOT, ...”				
Location in EA:	Page 4				

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 3: (e-mail)	Funding sources discussed in last paragraph of page 5—should this be revised/updated?				
Response:	We will provide more detail on the funding and will replace the last paragraph on page 5 of the EA with the following: “Funding for Northern Parkway is based on the passage of Proposition 400. The half-cent sales tax extension provided in Proposition 400 along with other funding sources included federal funds that are considered regional funds. Regional funds would account for up to 70% of the project costs or the amount allocated to the project whichever is less; while the minimum 30% local match would come from local funds from Glendale, Peoria, El Mirage and MCDOT. Federal Surface Transportation Program (STP-MAG) funds have been designated as regional funds for the Northern Parkway Project. These regional funds totaling \$228.0 million are allocated on an annual basis through 2025 as shown in the MAG 2010 Arterial Life Cycle Program (ALCP). Local match funds would be divided as follows in accordance with the approved intergovernmental agreement: Glendale (40%)- \$39.1 million, MCDOT (30%) – \$29.3 million, Peoria (20%) – \$19.5 million, and El Mirage (10%) – \$9.8 million. The total committed funding is \$325.7 million (2009 dollars).”				
Location in EA:	Page 5				

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 4: (e-mail)	Provide additional information on the population growth in the western portion. Statement made —“The western portion of the study area in the vicinity of SR-303L is expected to have the most significant growth, with increase of 150 percent or more.” What were the 2005 numbers? The 2030 numbers? Figures may be misleading if the population increased from 10 to 25 versus 100,000 to 250,000.				

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Response:	<p>We will revise the first paragraph of Section 2.1.1 on page 6 of the EA to add 2005 and 2030 population numbers for the western portion of the study area and total increase in population for the west area. Also, we will define the RAZ that make up the western portion of the study area. In addition, we suggest that some text be added to describe employment increases in the study area. Accordingly, the paragraph will be revised to read:</p> <p>“According to MAG, the area west of the Agua Fria River in the West Valley is one of the fastest-growing areas of the Phoenix metropolitan area. Rapid population growth due to continued land development is occurring in this area and is expected to continue. Population within the regional study area, as detailed in Table 2-1, is expected to grow from about 652,219 residents in 2005 to over 899,150 residents by 2030, an increase of approximately 37.9 percent or approximately 250,000 more people. In addition, employment within the study area is expected to grow from 161,365 in 2005 to 378,646 in 2030, an increase of approximately 220,000 or 135 percent. The western portion of the study area in the vicinity of SR 303L (RAZ 233, 254, 255, 265 in Table 2-1) is expected to have the most significant growth, with an increase of approximately 175 percent from 74,906 in 2005 to 206,421 in 2030, which is a total of approximately 130,000 more. The existing limited regional and arterial road network of two-lane roadways is unlikely to serve the transportation needs associated with anticipated future growth west of the Agua Fria River adequately, ultimately resulting in an increase of traffic congestion from population and employment growth.”</p>		
Location in EA:	Page 6, Section 2.1.1		

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 5: (e-mail)	<p>Source of population figures is listed as MAG. More detail should be provided on the source. For instance, Census Data from 2000? Information should be included on who developed the data not just who conducted the analysis. Also, do we know what assumptions were made in the analysis?</p>				
Response:	<p>The source for Table 2-1 will be revised as follows: “Maricopa Association of Governments, Socioeconomic Projections of Population, Housing and Employment by Municipal Planning Area and Regional Analysis Zone, May 2007. The MAG report is based on 2005 Census Survey. Projections are based upon the latest version of each member agency’s land use plan. These projections are subject to change.”</p>				
Location in EA:	Table 2-1				

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 6: (e-mail)	<p>Comments state that the project is funded through Prop 400. Technically, It’s not because the project does not receive ½ cent sales tax funds. The project is actually funded through the RTP, which established the federal fund allocations.</p>				
Response:	<p>Will revise the last sentence in the last bullet of Section 2.1.7 in the EA as follows: The RTP is funded through a variety of funding sources including the half-cent sales tax extension provided by Proposition 400, which was approved by Maricopa County voters in November 2004. Northern Parkway has been designated to receive a portion of the RTP’s federal funding allocation.</p>				
Location in EA:	Chapter 2, Section 2.1.7				

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Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 7: (e-mail)	Elaborate on the type of connection at Loop 303 that is included in the ADOT project.				
Response:	We will elaborate on the type of connection at Loop 303 by revising the second sentence in the first paragraph on page 11 of the EA to read as follows: "Connection to SR 303L consisting of fully directional ramps is included in ADOT's Loop 303 project as defined in the SR 303L I-10 to US 60 DCR and EA and both of these documents are posted on the ADOT EPG website if you would like to review them."				
Location in EA:	Chapter 3				

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 8: (e-mail)	Elaborate on the type of connection at Loop 303 that is included in the ADOT project.				
Response:	The SR 303L connection is described in Chapter 3 of the EA (see previous comment). The SR 303L connection is not part of the Northern Parkway EA.				
Location in EA:	Chapter 4				

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 9: (e-mail)	Table 2-1 (Regional Population Growth Projections) has two errors: A.) 2030 employment for RAZ 273 in Avondale is projected at 37,157 not 34,157 B.) 2030 total projected employment for the study area employment is 378,646 not 375,646.				
Response:	The 2030 employment number is 37,157 for RAZ 273 and we will make the appropriate corrections in the table and text.				
Location in EA:	Table 2.1, pages 6-7				

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 10: (e-mail)	These all talk about freeway spacing criteria; Northern Parkway is not a freeway.				
Response:	The western portion of Northern Parkway is classified as an AASHTO Urban Principal Arterial with full access control, which has features similar to a freeway. The eastern portion of Northern Parkway is classified as an urban principal arterial. It is appropriate to use the Transportation Research Board suggested freeway spacing reference for the western portion of the project and the MAG suggested spacing for regional roads for the eastern portion. The suggested spacing for freeways and regional roads are virtually the same. Will revise FEA Section 3.3.1, Design Features, to clarify.				
Location in EA:	Page 8, Section 2.1.4				

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Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 11: (e-mail)	What was the criteria used to identify a alternative in a corridor as feasible? What criteria was used to discard the alternative as not feasible?				
Response:	<p>We will add a new paragraph to identify the criteria used to evaluate the feasibility of potential alternatives.</p> <p>“In general, the criteria used to evaluate the feasibility of potential alternatives are as follows – Minimize diagonal alignments across agriculture land or vacant land, avoid or minimize impacts to developed land including existing neighborhoods and businesses, minimize impacts to utilities, cross major cross streets at 90 degree angles, enhance constructability, minimize cost, and minimize out-of-direction travel (see DCR Appendices A, B, and D).</p> <p>More specific evaluation criteria for each segment of the parkway will be discussed in this section of the report and each final alternative and the no-build alternative will be described in Section 3.3 of the EA and evaluated relative to the purpose and need criteria (see Table 3-4 in the EA).”</p> <p>In addition, we will rewrite the first sentence of the second bullet of the second paragraph of Section 3.2 on page 12 of the EA as follows:</p> <p>“Alternatives along Olive Avenue were eliminated because of concerns related to safety and drive confusion associated with combining local traffic with high volumes of regional parkway traffic at the planned SR 303L interchange at Olive Avenue.”</p>				
Location in EA:	Page 12, Section 3.2				

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 12: (e-mail)	What were the design parameters, i.e., storm year, was used in the Northern Parkway design, related to drainage?				
Response:	<p>A new paragraph will be added at the beginning of the drainage section on page 20 of the EA as follows:</p> <p>“Drainage improvements are part of the Northern Parkway project to ensure the new roadway drains properly during storm events and that adjacent properties are not adversely affected. Since the project passes through several jurisdictions, various drainage standards were evaluated to determine the standards to be used for Northern Parkway. Drainage facilities for on-site pavement and right-of-way would be designed to accommodate a 10-year frequency storm event while regional channels adjacent to Northern Parkway and rivers that cross Northern Parkway would be designed to a 100-year storm event. Drainage basins would also be designed to a 100-year storm event. Drainage standards for regional channels were developed in cooperation with the Flood Control District of Maricopa County.”</p>				
Location in EA:	Page 20				

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 13: (e-mail)	The fire departments made comments about the difficulty of making a u-turn movement by emergency equipment will be following construction of Northern Parkway at the proposed signalized intersections. The document provides no discussion about mitigation or potential mitigation measures there may be for these vehicles. Question – Will there be properties – commercial or residential – that could be isolated from the inability of emergency vehicles to execute this maneuver as a result of the proposed action?				

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Response:	Emergency access would be maintained at all times throughout construction and after construction. Coordination would take place with emergency services to ensure access is maintained.	
Location in EA:	Page 21	

Committer ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 14: (e-mail)	Was there a traffic analysis completed justifying the higher type and more expensive single point-urban interchange geometrics at the grade-separated interchange locations along Northern Parkway? If so, why doesn't the document state this justification?				
Response:	<p>A traffic analysis was performed for each of the alternatives for Northern Parkway for the design year of 2030. The results are summarized in the Northern Parkway Draft Traffic Report dated July 31, 2008. The traffic report is summarized in the Northern Parkway Draft Design Concept Report (7/31/08) as well. The reports show that the single point urban interchange (SPUI) signalized intersections along Northern Parkway have level of service (LOS) values of C and D which indicates that the SPUI design provides an appropriate configuration for the anticipated traffic. In addition to the traffic operational benefits of a SPUI intersection, the SPUI configuration generally requires less right-of-way when combined with retaining walls. Since most of the SPUI interchanges provided for Northern Parkway would be constructed adjacent to existing development, minimal right-of-way requirements are preferred to lessen the impact to existing development.</p> <p>Additional text will be added to the Grade-Separated Intersection section of the EA on page 17 to explain why SPUI intersections were selected.</p> <p>“Grade-separated intersections (GSI) are proposed at 10 arterial intersections for the proposed Alternative 1 as listed in Table 3-1 and at locations shown in Figure 3-2. The GSI are generally single point urban interchanges (SPUI) as shown in Figure 3-4. SPUI intersections were selected due to their improved traffic operations including U-turn movements and they require less right-of-way. The reduced right-of-way requirement provided by SPUI intersections is especially important in developed areas similar to the eastern portion of Northern Parkway. Diamond type GSI are proposed on the western portion of the project where the area is less developed and right-of-way is less expensive, and projected 2030 intersecting arterial traffic is relatively low.”</p> <p>During final design, the interchange types would be evaluated further using a “value engineering” process to ensure the most appropriate interchange configuration is provided to satisfy both the short term and long range traffic needs.</p> <p>The MAG model run for Northern Parkway incorporated several assumptions to approximate the conceptual plan including diamond interchanges since the interchange types were still being determined. A new model run is currently being developed that included SPUI configurations. The modeled SPUIs did not produce reasonable results, so diamond interchanges will again be used to approximate 2030 traffic volumes. A more detailed analysis for each grade-separated intersection would be performed during final design.</p>				
Location in EA:	Pages 17, 20, 32, and 38; Tables 3-1, 3-2, and 3-3				

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Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 15: (e-mail)	There is no information about how well the regional roadway network operates outside of the study area. As Northern Parkway represents a significant regional investment, one could conclude that it improves the travel times on other parallel facilities, such as Bell Rd., US-60/Grand Ave, Olive Ave, Camelback Rd, Indian School Rd, and Interstate 10. In addition, it is important to know whether or not the construction of northern parkway has any adverse impact to principal north-south facilities intersecting these parallel routes as well...for example, does the new Northern Parkway prompt the need for intersection improvements at El Mirage Rd and US-60 because there is some traffic diversion? It would be important for the document to state that the facility does not adversely impact, or preferably improves traffic operations, on these routes.				
Response:	Table 3-4 of the EA provides a summary and comparison of how each alternative meets the project purpose and needs listed in Chapter 2 of the EA..An analysis was completed that compared the no-build alternative and the 3 build alternatives impact on adjacent arterial streets and the results are documented in Section 2.4.5 in the DCR and Section 3.2.3 in the Northern Parkway Traffic Report. The results indicate that the parallel arterial streets consisting of Peoria Avenue, Olive Avenue, Glendale Avenue and Bethany Home Road experienced an average reduction of traffic of 20 percent when one of the build options was constructed. The analysis also evaluated traffic volumes in the no-build alternative and the 3 build alternatives for intersecting north-south arterial and regional roadways The average results showed both increases and decreases in 2030 traffic volumes from the no-build to the build alternatives. Intersections with the arterials and connections to the regional roadways are designed to accommodate the projected traffic. A bullet under item 6 in Table 3-4 will be added for each build alternative stating “Congestion on parallel arterial streets would be reduced by 18%” and for the no-build alternative – “No reduction in parallel arterial street congestion”.				
Location in EA:	Pages 43-44, Table 3-4				

Commenter ID:	12	Name:	Strow, Tim	Organization:	MAG
Comment 16: (e-mail)	In referring to Environmental Justice populations, the mitigation section should note that appropriate notifications will be provided in Spanish for the Hispanic populations.				
Response:	Please see footnote on page 72 of the EA. The footnote will be added to the 2nd bullet of Section 4.4.3 as well.				
Location in EA:	Pages 71-72, Section 4.4.3				

Commenter ID:	31	Name:	Fish, Jeanette	Organization:	Maricopa County Farm Bureau
Comment 1: (Public Meeting)	And as you might expect, I’m here to express some concerns regarding the agricultural land. It seems that we approach any kind of growth, development, and new transportation modes with the idea that agriculture is expendable. Yet if you want air quality, what makes oxygen but plants? So I understand that this is on a steamroller, and that we probably aren’t going to be able to make any big changes.				

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Response:	FHWA and ADOT do, in fact, understand the importance of evaluating this important natural resource. NEPA guidelines for surface transportation facilities require the identification, analysis, and evaluation of the potential significance of effects on agriculture and farmlands, in accordance with the Federal Farmland Protection Policy Act of 1981. The draft EA for the Northern Parkway project provides a detailed analysis of potential effects to prime, unique and locally important farmlands within the corridors studied for each alternative in Section 4.10 Prime and Unique Farmlands, with supplemental information in Appendix K Prime and Unique Farmlands.
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Commenter ID:	31	Name:	Fish, Jeanette	Organization:	Maricopa County Farm Bureau
Comment 2: (Public Meeting)	But we'd like to ask for some considerations for the people who are involved in agriculture in the far west valley. First of all is irrigation. Wherever new road construction goes, it interrupts the irrigation canals and the irrigation systems on individual farms. And therefore, we request that the design be sure to include reconstruction of those, so that the lands that remain in production can still have access to water.				
Response:	There are approximately 131 acres of farmland that would be impacted with the proposed alternative (Alternative 1). The majority of this area (111 acres) is located west of Dysart Road. The project design team members met with the farmers and landowners in this area and developed irrigation relocation plans as part of the Northern Parkway Design Concept Report (Volume 2). The design plans would include new ditches, pipes, and wells to maintain irrigation on both sides of the new Northern Parkway so that these lands can remain in production (see www.northernparkway-info.com).				

Commenter ID:	31	Name:	Fish, Jeanette	Organization:	Maricopa County Farm Bureau
Comment 3: (Public Meeting)	Secondly, if the route and the construction is to interfere with irrigation wells and force those wells to be moved, remember that the State Law only allows to you move those wells 660 feet. That's been a problem in the east valley with construction of freeways in that you can end up with a situation where you cannot replace the well. And that, of course, is fatal for a farming operation.				
Response:	The irrigation relocation plans that are part of the design concept report (DCR) show five wells with the potential to be relocated west of Dysart Road based on conceptual plans for all three build alternatives. One of the wells is used for domestic water for the area adjacent to 143rd Avenue while another well on the west side of Dysart is used by Morton Salt operations. The need to relocate all 5 wells would be evaluated further in final design. The irrigation relocation plans show possible locations for the new replacement well sites and the maximum distance from the existing well site to the new well site is approximately 300 feet.				

Commenter ID:	31	Name:	Fish, Jeanette	Organization:	Maricopa County Farm Bureau
Comment 4: (Public Meeting)	And lastly, we have farm fields along this route where the fields on both sides, north and south of the proposed routes, are owned by and operated by the same farmers. It is -- it would be a safety hazard to put tractors and large farm equipment onto Northern Parkway to get access to the other side. So while the design is being created, there needs to be some way to go under that parkway or over that parkway with our farm equipment in these sensitive areas.				

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Response:	For all alternatives, Northern Parkway is proposed to be a fully access controlled roadway from Sarival Avenue to 115th Avenue. No slow moving farm equipment or tractors would be allowed on the mainline roadway. Unpaved farm field roads would be provided along the north and south sides of the parkway in the western portion of the project as shown in the irrigation relocation plans in the DCR to provide access to supply ditches and tailwater ditches and access to the fields. Crossing from the north side of Northern Parkway to the south side in this area would be provided under the parkway bridge structures at Sarival Avenue, Reems Road, Litchfield Road, and Dysart Road. Full access to the farm fields would be maintained along these streets as well as Olive Avenue ½-mile to the north and Northern Avenue ½-mile to the south. Since farming operations are not anticipated to continue to be the primary land use much longer due to future development plans, large investments for exclusive grade separated crossings do not seem reasonable. More detailed planning and design to accommodate farm operations would occur in the final design phase of the project.
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Commenter ID:	31	Name:	Fish, Jeanette	Organization:	Maricopa County Farm Bureau
Comment 5: (Public Meeting)	And lastly, I don't know if any of you have noticed, but there seems to be this recession on. And tax money is -- tax collections have gone down dramatically. Are we really going to have money to start buying land in 2010?				
Response:	Although tax collections are down locally, 70 percent of the funding for Northern Parkway is federal money. We understand the committed funding sources including federal funding and local match funding are firm and we anticipate beginning right-of-way acquisition between Sarival Avenue and Dysart Road in 2010 if the EA is approved.				

Commenter ID:	6	Name:	West, Jim	Business:	Martin and Bell
Comment 1: (website)	Curious about when the final alignment will be determined and the timing for land purchases and construction.				
Response:	The proposed alternative alignment identified in the draft EA is Alternative 1. When all the public and agency comments have been received and responses prepared, ADOT and Federal Highway Administration will review and consider the responses. Once the responses are approved, the preferred alternative would be selected and the final environmental assessment would be completed. Following the approval, final design and right-of-way acquisition would begin in the western portion of the project from Sarival Avenue to Dysart Road. Other portions of the project from Dysart to Loop 101 would be phased from 2012 to 2025. Improvements east of Loop 101 would not occur until after 2025 unless additional funding is obtained.				

Commenter ID:	6	Name:	West, Jim	Business:	Martin and Bell
Comment 2: (e-mail)	I am unable to attend this evening's open house, but I would like to obtain any of the handouts that might be available. If you could either email them to me or let me know where I can pick them up.				
Response:	All of the meeting material is available on the project website: www.northernparkway-info.com .				

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Commenter ID:	7	Name:	Hoover, Barbara	Neighborhood:	Meadowood Town Homes
Comment 1: (website)	what will happen to our townhomes				
Response:	The Meadowood Town Homes located on the north side of Northern Avenue west of 89th Avenue would not be impacted by right-of-way acquisition according to concept plans for all build alternatives in Volume 2 of the DCR and all the roadway widening would occur to the south of the existing Northern Avenue in this location.				

Commenter ID:	7	Name:	Hoover, Barbara	Neighborhood:	Meadowood Town Homes
Comment 2: (website)	How about the noise.				
Response:	Unlike typical street widening projects, the project partners for the proposed Northern Parkway have committed to mitigate noise impacts to ADOT standards, which are one of the most stringent standards in the Country. A noise study was conducted as part of the EA, which identified noise sensitive areas including residential areas along the proposed Northern Parkway. Existing noise levels were measured and future noise levels were predicted based on forecast 2030 traffic volumes. As final design progresses, the noise analysis would be refined and specific noise mitigation measures would be evaluated and selected. The Northern Parkway improvements east of Loop 101 are currently not funded and are not likely to occur until after 2025.				

Commenter ID:	7	Name:	Hoover, Barbara	Neighborhood:	Meadowood Town Homes
Comment 3: (website)	I do not see what purpose this will serve				
Response:	Significant growth in population and employment is predicted in the future along the Northern Parkway corridor. According to Maricopa Association of Governments (MAG) population and employment within the Northern Parkway study area will increase by 250,000 and 220,000 respectively between 2005 and 2030 (see Table 2-1 in the EA). With this projected growth, traffic volumes will increase on Northern Avenue. With this estimated growth, traffic volumes will increase and we need to plan for this eventuality.				

Commenter ID:	7	Name:	Hoover, Barbara	Neighborhood:	Meadowood Town Homes
Comment 4: (website)	It will affect our property values.				
Response:	Many factors affect property values. The general economic conditions of the nation and of Arizona have had tremendous affect on land values and home prices in the Valley. In addition, the age and condition of a home has direct impacts to the value of a property. The proximity of property to a major transportation facility can increase its value especially if it is combined with good access for commuting purposes. Residential properties may be affected in such a way that the long-term value of existing homes may not increase as quickly or in the same magnitude when compared with homes located further away from a major transportation facility. Determining the impact of only Northern Parkway on value fluctuations would be difficult.				

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Committer ID:	19	Name:	Harper, Ron Harper, Emery	Business:	Northeast Corner LLC
Comment 1: (Public Meeting)	The Parkway has impacted our property at the corner of El Mirage & Northern Ave. The ground is zoned C-3 & in 2005 was determined that the best use for this parcel would be for a mini-mart gas station. We became aware of the Parkway project when our consultant during his due diligence, was told by the City of Glendale that our project would not be permitted. The question I have is to the timetable for right of way purchases for Phases I, II, & III. At this point we have been negatively impacted for 4 years because of the ongoing process of this parkway.				
Response:	Planning and preliminary engineering for Northern Parkway has taken a long time due to the complexity of this 12-mile long major transportation project and due to the fact that there are many partners and stakeholder agencies. Final design, right-of-way acquisition, and construction cannot begin until the environmental assessment (EA) is completed and approved by the Federal Highway Administration (FHWA). There are additional federal requirements to meet due to the size of the Northern Parkway project. If federal approval is obtained, final design and right-of-way acquisition would begin for Northern Parkway from Sarival Avenue to Dysart Road with construction following in 2011 and 2012 (Phase 1). Right-of-way acquisition from Dysart Road to 111th Avenue for the proposed alternative would occur in Phase 2 and 3 (2012-2020) according to the approved phasing plan. The phasing plan could be refined as the final design process proceeds and as funding becomes available. Proposed development in the corridor is not denied but can serve as a basis for advanced right-of-way acquisition prior to development.				

Committer ID:	46	Name:	Hedt, Thomas	Organization:	NRCS
Comment 1: (Letter)	This response is in regard to your Draft Environmental Assessment delivered to our office on September 29, 2009 concerning the FHWA sponsored project for the construction of the Northern Parkway in Maricopa County, Arizona. The Natural Resources Conservation Service (NRCS) has general responsibility, nationwide, for implementing the Farmland Protection Policy Act (FPPA) and to review projects that may affect prime, unique, or statewide important farmland and/or wetlands associated with agriculture. You submitted the required form NRCS-AD-1006 with parts I, III, and VI completed for a three alternatives. After reviewing the information provided, the following has been determined: Approximately 158 acres of prime and unique farmland soils would be impacted under Alternatives 1 and 2. An additional 11 acres would be impacted under Alternative 3. Although there is additional cropland on the eastern portion of the proposed Northern Parkway, these cropland areas meet the definition of "land already committed to urban use." Additionally, since the total points in Part VII are less than 160, the entire project area officially meets the same definition of "lands already committed to urban use." Therefore, no further analysis or reporting is necessary for consideration of prime farmland effects.				
Response:	Comment noted and agreed. In addition, most of the land adjacent to the proposed Northern Parkway alignment in the western portion from Sarival Avenue to Dysart Road is also agricultural land that is planned for future urban use, per Figure 4-3B Planned Land Use in Section 4.1 Land Ownership and Jurisdiction of the draft EA.				

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Commenter ID:	46	Name:	Hedt, Thomas	Organization:	NRCS
Comment 2: (Letter)	Relative values of soils and acres affected may still be used as necessary for the alternative selection process. We have provided customized soil reports for the alternatives presented.				
Response:	Comment noted and agreed. The efforts of the Arizona NRCS to prepare customized soils reports for each alternative are appreciated. These reports will be included in the final alternative selection process and will be appended to the final EA.				

Commenter ID:	46	Name:	Hedt, Thomas	Organization:	NRCS
Comment 3: (Letter)	We do not see any immediate concerns or impacts that would directly affect wetland areas associated with agriculture.				
Response:	Comment noted and agreed.				

Commenter ID:	5	Name:	Ackzen, Brent	Neighborhood:	Other
Comment 1: (website)	No specific comments the plan looks good.				
Response:	Your interest and support for the proposed project is recognized.				

Commenter ID:	14	Name:	Duncan, Hugh	Neighborhood:	Other
Comment 1: (e-mail)	I think this is a great idea. A few years ago, they were talking about adding a bridge to Peoria Avenue and making it a main thoroughfare through Sun City. At the time, I wondered "Why not Northern Avenue??" It just seems like a natural since it is already wide on the eastern end of the proposed route and is sparsely populated on the western part.				
Response:	Your interest and support for the proposed project is recognized.				

Commenter ID:	15	Name:	Morton, Pat and Don	Neighborhood:	Other
Comment 1: (e-mail)	We live in the Cortessa Development just west of the 303 and north of Olive. We are very much in favor of construction of the Northern Avenue Parkway, which will be built between the 303 and Grand Avenue. There is a dire need for a better highway to handle the growing population in the immediate area of the proposed construction. Currently, Olive is over-burdened by the increasing traffic in this west valley location. Since getting this type of project off the ground usually takes many months or sometimes years. It is imperative that preparation and work on same be begun as soon as possible.				
Response:	Your interest and support for the proposed project is recognized.				

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Commenter ID:	30	Name:	Turner, Betsy	Neighborhood:	Other
Comment 1: (Public Meeting)	<p>I've been a resident in Glendale for more than 20 years. I've been involved in transportation for more than ten years. For nine of those years, I spent my time trying to not build roads, and trying to tell people to use alternative modes, to ride the bus, to carpool, to van pool. Ultimately, I hope I'll be able to tell them to use Light Rail. But it stands to reason that alternative modes of transportation don't work everywhere. I've attended meetings in the west valley. And with the phenomenal growth that we've experienced out here, especially in the Surprise area and as it goes further west, we're going to face some serious challenges. We can sit here today and say, "No, I don't want this. I need to be able to get out of my driveway. I need to be able to get out of my housing development with that one or two roads that's already out there." Think about what's going to happen as development continues. If we don't do something now, you're not going to be able to get out of there, and you're not going to be able to get where you want to go. I regret tremendously the loss of the agricultural fields that we had in the west valley. I've watched the rose fields and the cotton fields turn into homes. And it seems like every one of us wants to be the last person that lives here. "I want my two acres, and I don't want anybody else to come back and live next to me." But that's not the way of the future. We're facing challenges. We're facing development. And we need to deal with them. I've watched the Northern Parkway develop over the last eight years, since its first inception in 2001 with the Glendale transportation plan. And it seems like a reasonable thing to do. And it seems like a reasonable thing to do now. And I urge you as individuals to keep an open mind and to think about it. Will it impact you? Probably some way, shape, or form. But if we don't do anything, we're still going to be impacted. So keep an open mind. Express your concerns to these folks here tonight because they're the people that can do something about it and can deal with it. So one way or another, let's try to keep this going, and let's make it happen, at least in the beginning. And I hope it doesn't take 30 years to get it done.</p>				
Response:	Your interest and support for the proposed project is recognized.				

Commenter ID:	35	Name:	Howard, Mark	Neighborhood:	Rovey Farms
Comment 1: (Public Meeting)	<p>As an architect, I have a little bit of a bent towards green design and those types of issues. So I'm not in favor of seeing all this agricultural land torn up. I think a lot of the same issues came up when they were talking about the 303. We had to get the traffic out of the west valley. So let's take it down the 303 to I-10. So I don't think that I'm in favor of this.</p>				
Response:	<p>The amount of agricultural land impacted was considered for each alternative. However, much of the agricultural land in the West Valley is planned for future development. This future development would require both north-south regional routes like Loop 303 and east-west regional routes like the proposed Northern Parkway. In addition, coordination has been undertaken with the Arizona office of the Natural Resource Conservation Service (NRCS) regarding potential agricultural land impacts from the project. In their review of the draft EA, they have concluded that most of the land that is now in agricultural use are classified as "lands already committed to urban use," per their letter on October 29, 2009 and no further analysis is required.</p>				

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Comments and Responses Report

Commenter ID:	35	Name:	Howard, Mark	Neighborhood:	Rovey Farms
Comment 2: (Public Meeting)	I will make an exception though. I commute into Phoenix on Northern everyday. And down by 75th and Northern, let's see. I've passed out twice, thrown up three times, and nearly passed out a dozen times from the stench coming from that dairy farm. I'd like to know if your Environmental Assessment has taken into account the fumes that are coming off that thing. You're talking more traffic coming down there. I think that's a danger to drivers. I really do. That's an awful fog in the morning. There's an awful fog in the morning. There's a terrible smell. I'd hate to see more people have to come past that, quite frankly. So if you're going to take up agricultural land, let's take that first.				
Response:	The proposed Northern Parkway project would require some right-of-way and a few buildings from the property where the dairy is located along Northern Avenue west of 75 th Avenue. However, the amount of property needed is relatively minor and the dairy business could continue. The Northern Parkway improvements could help make the property more desirable for future development, which could result in relocating the dairy, which is currently in unincorporated Maricopa County.				

Commenter ID:	18	Name:	Chahal, Gurvinder and Simar	Business:	Stadium Chevron
Comment 1: (e-mail)	My question is that who will decide how much and what is a correct compensation for our business when you decide to acquire it?				
Response:	The federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) will be followed on the Northern Parkway project. The Uniform Act helps ensure that all property owners impacted by the project are treated in a fair and equitable manner as provided by the law. The concept plans show that virtually your entire property located on the southeast corner of 91st Avenue and Northern Avenue would be required to construct Northern Parkway. Construction of Northern Parkway east of Loop 101 is currently not funded and it is anticipated that construction would not begin until after 2025. So your property may not be needed or acquired until after 2025 unless additional funding is obtained. The value of your property would be determined by a certified appraiser and reviewed by a certified review appraiser immediately prior to making an offer.				

Commenter ID:	18	Name:	Chahal, Gurvinder and Simar	Business:	Stadium Chevron
Comment 2: (e-mail)	This station came up in 2004 and was made when this Parkway had already been decided, why and how did Maricopa County allow it to be built if it was only to be demolished. Does that not amount to gross negligence on the part of the County where they allowed this site to be developed?				
Response:	The initial design concept report was completed in October 2003. There was no service station on the southeast corner at that time. The Maricopa Association of Governments regional transportation plan (RTP) was approved in November 2003. Funding for the RTP was not available until Proposition 400 was approved by the voters in November 2004. More detailed planning for Northern Parkway began in 2005 and continued through 2008. Right-of-way is not normally acquired until final construction plans are completed.				

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Commenter ID:	18	Name:	Chahal, Gurvinder and Simar	Business:	Stadium Chevron
Comment 3: (e-mail)	How will it be appraised – we bought it at the peak of the real estate boom for 3.3 Million Dollars and now even though the economy is in doldrums it is allowing us to lead a relatively decent lifestyle – not close to better times but despite the slowdown not too bad.				
Response:	In accordance with the federal Uniform Act, the value of your property would be determined by a certified appraiser and reviewed by a certified review appraiser prior to making an acquisition offer.				

Commenter ID:	18	Name:	Chahal, Gurvinder and Simar	Business:	Stadium Chevron
Comment 4: (e-mail)	How will we be ever compensated for the way we brought up the business - the idea that it is gainful employment for our family and employees and the years spent apart from the further investments made to develop the location. How will we ever paid for projects started on the basis of the income generated by the business and the loss accruing from closures and other construction activities as well as the retirement plans we had and the residual income being generated by this site				
Response:	The federal Uniform Act is designed to compensate you for the fair market value of your property and your improvements needed for the proposed Northern Parkway and reimburse you for potential expenses incurred in moving your business to another site.				

Commenter ID:	18	Name:	Chahal, Gurvinder and Simar	Business:	Stadium Chevron
Comment 5: (e-mail)	We propose that you end the Parkway before 91st and Northern intersection so that we can carry on with our lives the way normal people do.				
Response:	<p>Significant growth in population and employment is predicted in the future along the Northern Parkway corridor. With this projected growth, traffic volumes would increase.</p> <p>The current phasing plan concentrates resources in the first phases on Northern Parkway west of Loop 101 to Sarival since this is the area that would likely experience the most growth. The first construction phases of Northern Parkway are planned to occur between 2010 and 2025.</p> <p>Improvements east of Loop 101 are not funded and construction is not anticipated until after 2025 assuming funding is obtained. It is important however to complete the Northern Parkway link to US 60/Grand Avenue as an alternative route to the urban center of the Valley. The most recent traffic information available indicates there is an average of 21,000 vehicles (Peoria 2007 Traffic Counts) a day traveling on Northern Avenue between 91st Avenue and Grand Avenue. The projected traffic volume in 2030 for Northern Parkway in the same area is approximately 75,000 vehicles per day (average of 89,450; 73,240; and 61,320). If no improvements were made, Northern Avenue would be very congested in 2030 and travelers would experience poor levels of service and significant delays.</p>				

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Commenter ID:	18	Name:	Chahal, Simar	Organization:	Stadium Chevron
Comment 6: (Public Meeting)	<p>My name is Simar Chahal, and I own the Chevron station on 91st and Northern. And what I've noticed is over the years, it's always the small guy who gets the beating. I mean, if we was a big corporation, hey, there's no issue. "We work around you, sir. We have no problem. We know you're doing so much for the country." But the small guy is always beaten up, and, "Hey, we're going to take you anyway." So it's – all these meetings are very nice. And you know, they compensate you. But compensate for your dreams? I don't think there they will compensate anybody's thoughts or, you know, whatever you work for. And nobody will work at something and five years down the road, say I'm only doing this because I'm getting compensated and relocated. The idea that I worked for to put up that station was, you know, I'm going to be at a nice location, nice people, and that's about it. I can put up something in south Phoenix. Nobody wants to touch south Phoenix, right? No, we like Northern. We want to do Northern. Well, that's great. That's very nice. But all I feel is don't just open it up at the cost for the small guy.</p>				
Response:	<p>We understand your concerns about your business. The project partners expended considerable effort to avoid impacting homes and businesses along the proposed Northern Parkway. Building Northern Parkway through an area with existing development is very difficult and all build options involve impacts to some businesses and houses. The number of businesses and homes and not the size of the business was a key criteria in evaluating each alternative. Federal law (Uniform Act) establishes a process to ensure that all property owners and businesses whether big or small are treated equally when property needs to be acquired. The no-build alternative would not impact businesses and homes directly but would not meet the purpose and need of the project.</p>				

Commenter ID:	2	Name:	Barton, Nicole	Neighborhood:	Summerset
Comment 1: (website)	<p>I am still extremely concerned to have traffic raised creating issues with noise pollution. A large portion if this project is through residential areas.</p>				
Response:	<p>Significant growth in population and employment is predicted in the future along the Northern Parkway corridor. With this inevitable growth, traffic volumes will increase and the associated noise levels generated by the traffic will increase as well. However, unlike typical street widening projects, the project partners for Northern Parkway have committed to mitigate noise impacts to ADOT standards, which are some of the most stringent standards in the country.</p> <p>A noise study was conducted as part of the draft EA, which identified noise sensitive areas including residential areas along existing Northern Avenue. Existing noise levels were measured and future noise levels were predicted based on a forecast of 2030 traffic volumes. As final design progresses, the noise analysis would be refined and specific noise mitigation measures would be evaluated and selected. Improvements to Northern Parkway east of Loop 101 are currently not funded and are not likely to occur until after 2025.</p>				

Commenter ID:	2	Name:	Barton, Nicole	Neighborhood:	Summerset
Comment 2: (website)	<p>I also do not see how the current traffic patterns on Northern indicate a need for this type of project. This project will make it unsightly and difficult to access homes and business along the route.</p>				
Response:	<p>Northern Avenue east of Loop 101 is operating at an acceptable level of service today. The most recent traffic information available indicates there is an average of 23,000 vehicles a day traveling on Northern Avenue between 91st Avenue and Grand Avenue. The projected traffic volume in 2030 for Northern Parkway in the same area is approximately 75,000 vehicles per day.</p>				

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	<p>If no improvements were made, Northern Avenue would be very congested in 2030 and travelers would experience poor levels of service and experience significant delays.</p> <p>Access to homes and businesses along the proposed Northern Parkway may be more limited, however some of the traffic movements may be safer to make. Access across the proposed Northern Parkway would be limited to arterial streets such as 91st and 83rd avenues. Left-turn movements and U-turn movements would also be made at signalized intersections separated from Northern Parkway through movements. Right turns in and out of existing streets and driveways would be maintained between the grade separated intersections. The proposed project includes raised landscaped medians, landscaping on both sides of Northern Parkway, offset sidewalk, and aesthetic treatments to retaining walls at the grade separated intersections in this area.</p>
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Commenter ID:	2	Name:	Barton, Nicole	Neighborhood:	Summerset
Comment 3: (website)	I would recommend if the project is “necessary” it be West of the 101 only as an extension off 101.				
Response:	<p>Significant growth in population and employment is predicted in the future along the Northern Parkway corridor. According to Maricopa Association of Governments (MAG) population and employment within the Northern Parkway study area will increase by 250,000 and 220,000 respectively between 2005 and 2030 (see Table 2-1 in the EA). With this projected growth, traffic volumes will increase on Northern Avenue.</p> <p>The current phasing plan concentrates resources in the first phases on Northern Parkway west of Loop 101 to Loop 303 since this is the area that would likely experience the most growth. The first phases of construction are programmed to occur between 2010 and 2025. Improvements east of Loop 101 except at the intersections of 91st, 83rd, 75th, and Grand are not funded and construction is not anticipated until after 2025 assuming funding is found. It is important however to complete the Northern Parkway link to US 60/Grand Avenue as an alternative route to the urban center of the Valley.</p>				

Commenter ID:	43	Name:	Norris, Jr., Dr. Ned	Organization:	Tohono O’odham Nation
Comment 1: (Letter)	<p>The Tohono O’odham Nation is a federally recognized Indian tribe that owns approximately 135 acres of land southwest of the intersection of Northern and 91st Avenues. The Nation has filed an application with the United States Department of the Interior to have the property taken into trust for the Nation’s benefit.</p> <p>The Nation intends to construct and operate a destination resort and casino on the property, with currently planned amenities including a six-hundred-room hotel, a convention center, a multi-use event center, a spa, and a variety of restaurants. The Nation’s property will be significantly impacted by the proposed Northern Parkway project, as two of the proposed routes would be adjacent to the Nation’s property and one would run through the Nation’s property. Each of the alternatives also assumes that a portion of the Nation’s property will be dedicated to the parkway project.</p>				
Response:	<p>All three build alternatives would impact vacant land that the Nation owns located south of Northern Avenue between the 95th Avenue alignment and 91st Avenue. The proposed alternative (Alternative 1) would require approximately 10 acres along the north side of the property based on concept plans included in the design concept report. The amount of right-of-way required may change as the project progresses through final design. However, Northern Parkway improvements east of Loop 101 are currently not funded and so construction in this area may not occur until after 2025, however, adopted priorities include funding for purchase of property to protect the right of way for the future parkway.</p>				

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Comments and Responses Report

Commenter ID:	43	Name:	Norris, Jr., Dr. Ned	Organization:	Tohono O’odham Nation
Comment 2: (Letter)	<p>The Nation has reviewed the Draft Environmental Assessment for the Northern Parkway dated July 2009 (the “EA”), which identifies the following purposes for the project: “to serve population growth, improve travel time, provide regional connectivity, improve regional facility spacing, provide a crossing at the Agua Fria River, improve west-east traffic flow, implement regional plans, reduce crash rates, reduce congestion, and improve emergency response times.”</p> <p>The Nation recognizes and appreciates the importance of these goals and the resulting need for all Interested governments, including the Nation, to work together to support this project. Many affected parties have had the opportunity to meet with project partners to discuss impacts on their properties and to attempt to mitigate any negative impacts. The Nation likewise looks forward to meeting with Northern Parkway project partners to discuss specific impacts on the Nation’s property and to work cooperatively to mitigate any negative impacts.</p> <p>The Northern Parkway project will significantly benefit the Nation, other area landowners, and the West Valley as a whole. Anticipating future collaboration with project partners, the Nation supports either Alternative 1 or Alternative 2 for-the Northern Parkway project, as identified in the EA. The Nation looks forward to working cooperatively with all stakeholders to move this project from concept to completion.</p>				
Response:	<p>If the proposed Northern Parkway project moves forward, MCDOT would engage the Tohono O’odham Nation in discussion of final design and managing the construction of the project in cooperation with all affected project partners and stakeholders including the Tohono O’odham Nation.</p>				

ATTACHMENT 3
PROGRAMMATIC AGREEMENT

PROGRAMMATIC AGREEMENT

AMONG

**FEDERAL HIGHWAY ADMINISTRATION
ARIZONA STATE HISTORIC PRESERVATION OFFICE
ARIZONA DEPARTMENT OF TRANSPORTATION
MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
SALT RIVER PROJECT
BUREAU OF RECLAMATION
LUKE AIR FORCE BASE
ARIZONA STATE MUSEUM
CITY OF GLENDALE
CITY OF PEORIA
CITY OF EL MIRAGE
UNITED STATES ARMY CORPS OF ENGINEERS
FORT MCDOWELL YAVAPAI NATION
GILA RIVER INDIAN COMMUNITY
AK-CHIN INDIAN COMMUNITY
SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY
HOPI TRIBE
YAVAPAI-APACHE NATION
SAN CARLOS APACHE NATION
TOHONO O'ODHAM NATION**

**REGARDING THE NORTHERN PARKWAY PROJECT [STATE ROUTE 303 TO US
HIGHWAY 60 (GRAND AVENUE)]
FEDERAL AID NO. STP-MMA-0(034)A
TRACS NO. 0000 MA MMA SS593 01C
MARICOPA COUNTY, ARIZONA**

WHEREAS, the City of Glendale, the City of Peoria, the City of El Mirage, and the Maricopa County Department of Transportation (MCDOT) (collectively referred to as the proponents) are planning the Northern Parkway Project (Project), a regional "super-street" (defined as a higher-speed, higher-capacity roadway with grade-separated intersections at major cross streets) that would extend approximately 12.5 miles between State Route (SR) 303 and US Highway 60 (Grand Avenue); and

WHEREAS, the area of potential effect (APE), for impacts that could potentially affect historic properties, is defined as including the parcels of property adjacent to the proposed alternative routes; and

WHEREAS, project construction will occur on lands under the jurisdiction of the City of Glendale, the City of Peoria, the City of El Mirage, and unincorporated Maricopa County; and

WHEREAS, the proposed project may have an adverse effect upon historic properties, which are defined as “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the National Register of Historic Places (NRHP), including artifacts, records, and material remains related to such property or resource” (National Historic Preservation Act [NHPA] 16 U.S.C. 470w, Title III, Section 301 [5]; and

WHEREAS, the Federal Highway Administration (FHWA) is providing technical and financial assistance for development of the Project, will assume lead responsibilities for compliance under Section 106 of the NHPA, and has consulted with, and will continue to consult with, the Arizona State Historic Preservation Office (SHPO) pursuant to 36 CFR Part 800 of the regulations implementing Section 106 of the NHPA (16 U.S.C. 470f) as revised in August 2004; and

WHEREAS, the Arizona Department of Transportation (ADOT), acting as agent for FHWA has participated in consultation and has been invited to be a signatory to this Programmatic Agreement (Agreement); and

WHEREAS, SHPO is authorized to enter this Agreement to fulfill the role of advising and assisting federal agencies in carrying out Section 101 and 106 responsibilities under 16 U.S.C. § 470a and 16 U.S.C. § 470f of the NHPA, pursuant to 36 CFR § 800.2(1); and

WHEREAS, the Advisory Council on Historic Preservation (Council) has been consulted pursuant to 36 CFR § 800.9, and has been invited to participate in this Agreement; and

WHEREAS, MCDOT, will have lead responsibility for final design and construction of the Project, and has been invited to participate in this Agreement; and

WHEREAS, the Project will be within rights-of-way held by the City of Glendale, the City of Peoria, and the City of El Mirage, they have been invited to participate in this Agreement; and

WHEREAS, a Clean Water Act Section 404 permit is required, the U.S. Army Corps of Engineers (USACE) has been invited to participate in this Agreement; and

WHEREAS, portions of the proposed parkway corridors cross undeveloped floodplains of New River and Agua Fria River, the Flood Control District of Maricopa County (FCDMC) has been invited to participate in this Agreement; and

WHEREAS, for testing and/or data recovery necessitated by the Project, the Arizona State Museum (ASM) has authority and responsibility for issuing permits and implementing the Arizona Antiquities Act (A.R.S. § 41-841 through § 41-847) on state lands (defined as land owned or controlled by state agencies and institutions, counties, and municipal corporations), and has been invited to participate in this Agreement; and

WHEREAS, Luke Air Force Base abuts approximately 2 miles of one of the proposed alternative alignment corridors, and has been invited to participate in this Agreement; and

WHEREAS, the Bureau of Reclamation and Salt River Project have been invited to participate in this Agreement to address potential impacts to canals within the proposed parkway corridors; and

WHEREAS, any testing and/or data recovery necessitated by the Project, that may be located on Federal land, must be permitted through an Archaeological Resources Protection Act (ARPA) permit and/or an Antiquities Act permit; and

WHEREAS, the FHWA has consulted with American Indian tribes that may attach religious or cultural importance to affected properties, including Fort McDowell Yavapai Nation, Gila River Indian Community, Ak-Chin Indian Community, Salt River Pima-Maricopa Indian Community, Hopi Tribe, Yavapai-Apache Nation, San Carlos Apache Nation, and Tohono O'odham Nation, hereafter referred to as the Tribes; and will be invited to participate in consultation [pursuant to 36 CFR § 800.2 (c)(2)(ii)(A-F)], and have been invited to be concurring parties in this Agreement; and

WHEREAS, by their signature all parties agree that the regulations specified in the ADOT document, "ADOT Standard Specifications for Road and Bridge Construction" (Section 104.12, 2000) will account for the cultural resources in potential material sources used in project construction; and

WHEREAS, an agreement regarding the treatment and disposition of Human Remains, Associated Funerary Objects, Sacred Objects and Objects of Cultural Patrimony would be developed for the Arizona State Museum (ASM) for state and private land, pursuant to A.R.S. § 41-844 and 41-865; and

WHEREAS, an agreement regarding the treatment and disposition of Graves and Human Skeletal Material would follow the Archaeological Resources Protection Act of 1979 (ARPA; Section 4.b.3 and 4.c) for federal land; and

WHEREAS, Human Remains, Associated/Unassociated Funerary Objects, Sacred Objects and Objects of Cultural Patrimony recovered will be treated in accordance with the Native American Graves and Protection Repatriation Act (NAGPRA) for federal land; and

NOW, THEREFORE, all parties agree that upon FHWA's decision to proceed with the Project, FHWA shall ensure that the following stipulations are implemented and take into account the effects of the Project on historic properties, and that these stipulations shall govern the Project and all of its parts until this Agreement expires or is terminated.

STIPULATIONS

The planning and development of the Project is being pursued in several phases-a) evaluation of alternative design concepts and routes, b) phased development of final designs (including geotechnical investigations) for different components of the Project, and c) phased construction of components of the Project estimated to occur between the years 2010 and 2030. The implementation of the following stipulations shall be coordinated with the phases of planning and construction.

FHWA will ensure that the following measures are carried out.

I. GEOTECHNICAL INVESTIGATIONS

As geotechnical investigation may adversely impact historic properties within the project's corridor, FHWA proposes that historic properties would be avoided by geotechnical investigations wherever possible. In the event that historic properties cannot be avoided, FHWA, in consultation with the consulting parties, shall determine appropriate treatment for the historic properties. Data recovery at geotechnical investigation locations requires a Work Plan, as described below, to be developed. Geotechnical investigations outside the boundaries of historic properties may proceed prior to the completion of any data recovery required at other locations.

II. INVENTORY, EVALUATION, AND EFFECT DETERMINATION

- A. FHWA, represented by ADOT, in consultation with all parties to this Agreement shall ensure that new inventory surveys of additional rights-of-way and temporary construction easements will include determinations of eligibility that are made in accordance with Section 106 for all historic properties, including any added staging or use areas. Should any party to this Agreement disagree with FHWA regarding eligibility, the SHPO shall be consulted and resolution sought within 20 calendar days. If FHWA and SHPO disagree on eligibility, FHWA shall request a formal determination from the Council.
- B. FHWA, represented by ADOT, will ensure that archaeological site areas needing testing, according to 36 CFR § 800.4(b)(2), will be investigated in a manner to evaluate them for eligibility for the NRHP. FHWA will develop a plan of work for Eligibility Testing (Testing Plan) for such areas, for submittal to all parties of the Agreement for review and comment prior to implementation of the Testing Plan. The review and comment of the Testing Plan will be consistent with the time frames specified in Stipulations III (A) and (B) below. The results of the testing will be detailed in an Archaeological Testing Report that will be reviewed and evaluated per Stipulations III (A) and (B) below.
- C. FHWA, represented by ADOT, has consulted with and will continue to consult with the Tribes, to help identify potential properties of religious and cultural significance within any additions to the APE, in any staging or use areas.
- D. FHWA, represented by ADOT, in consultation with SHPO, and other agencies with jurisdiction, shall apply the criteria of Adverse Effect in 36 CFR § 800.5 to all historic properties within the Project APE, including any area proposed for geotechnical testing or staging or use areas.
- E. If FHWA, SHPO, and agencies with jurisdiction over affected land agree (per Stipulations IV A and B) that a portion of the undertaking shall have no effect or no adverse effect on listed or eligible properties, FHWA may provide authorization to proceed with construction in that area, subject to obtaining any necessary permits and the conditions of any Monitoring or Discovery Plan developed for the Project, provided that construction does not preclude options for avoidance of historic properties in other segments.

III. DEVELOPMENT OF A DATA RECOVERY TREATMENT PLAN

- A. To the extent feasible, FHWA, as represented by ADOT, will avoid adverse effects to historic properties that are identified in the APE through project redesign or implementation of protective measures. Where avoidance is not feasible, FHWA, in consultation with SHPO, and other consulting parties, shall ensure that a data recovery treatment plan (Data Recovery Plan) is developed for the mitigation of anticipated effects on historic properties that will result from the Project and any related uses and activities.
- B. The Data Recovery Plan will be submitted by ADOT, on behalf of FHWA, to all parties of the Agreement for 30 calendar days' review. The Data Recovery Plan shall be consistent with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (48 FR 44716-44742) and the Council's Recommended Approach for Consultation on Recovery of Significant Information from Archaeological Sites (64 FR 95:27085-27087). Unless any signatory or concurring party objects to the Data Recovery Plan within 30 calendar days after receipt of the plan, FHWA shall ensure that it is implemented prior to construction.
- C. The Data Recovery Plan shall minimally specify the following:
 1. It will identify the historic properties to be affected by the Project as a whole and the nature of those effects. Identification and description of the traditional and/or religious significance of traditional cultural properties identified with Tribes may be done only with the permission of the appropriate Tribe(s).
 2. A Research Design will contain research questions and goals applicable to the Project area as a whole, which will be addressed through data recovery, along with an explanation of their relevance and importance. These research questions and goals shall reflect the concept of historic contexts as defined in National Register Bulletin 16, and shall take into consideration any such historic contexts established for the Project area.
 3. Field and analysis methods and strategies applicable to the Project area will be developed along with an explanation of their relevance to the research questions.
 4. The methods to be used in analysis, data management, and dissemination of data to the professional community and the public.
 5. A protocol for the treatment of human remains, in the event that such remains are discovered, describing methods and procedures for the recovery, inventory, treatment, and disposition of Human Remains, Associated Funerary Objects, and Objects of Cultural Patrimony. This protocol will reflect concerns and/or conditions identified as a result of consultation among parties to this agreement, and will be consistent with any Burial Agreement developed for this project.
 6. Monitoring procedures will be included to ensure that other potential historic properties are not affected by construction-related activities. These procedures shall specify the location of all identified properties and the means by which they

will be marked and avoided if construction or other ground-disturbing activities are allowed in nearby portions of the APE.

7. A Discovery Plan will be included to ensure adequate treatment of unanticipated discoveries taking into account the provisions of 36 CFR § 800.13 and A.R.S. § 41-844.
8. A proposed schedule for submission of progress, summary, and other reports to parties of this Agreement, as well as a proposed schedule for field work.

IV. COMMENTS ON TREATMENT PLANS FOR TESTING AND DATA RECOVERY

- A. Upon receipt of draft Treatment Plans acceptable to FHWA, as represented by ADOT, FHWA will then submit such drafts concurrently to all consulting parties to the Agreement for review. All parties will have 30 calendar days from receipt to review and provide comments to FHWA. Lack of comment within the review period may be taken as concurrence with the Treatment Plans.
- B. If revisions to the Treatment Plans are needed, all parties to this Agreement have 20 calendar days from receipt to review and comment on the revisions. If no comments are received within this period, FHWA may assume that the reviewer concurs with the revisions.
- C. Once the Treatment Plans have been determined adequate by all parties, FHWA shall issue authorization to proceed with the implementation, subject to obtaining all necessary permits.

V. REVIEW AND COMMENT ON PRELIMINARY REPORT OF FINDINGS

Such Preliminary Reports shall minimally contain the following:

1. Within two weeks following completion of fieldwork, the institution, firm, or consultant responsible for the work will prepare and submit a brief Preliminary Report of Findings that will demonstrate that the specifications of the consulted upon data recovery plan have been met.
2. Upon receipt of a draft of the Preliminary Report of Findings, FHWA, represented by ADOT, will review and subsequently submit such documents concurrently to all consulting parties for review. All consulting parties will have 30 calendar days from receipt to review and provide comments to ADOT. Lack of response within this review period will be taken as concurrence with the report.
3. If revisions to the Preliminary Report of Findings are made, all consulting parties have 20 calendar days from receipt to review the revisions and provide comments to ADOT. Lack of response within this review period will be taken as concurrence with the report.

4. Once the Preliminary Report of Findings has been accepted as a final document, FHWA, represented by ADOT, will notify appropriate project participants that construction may proceed.

VI. REVIEW AND COMMENT ON DATA RECOVERY REPORT

1. Within 180 days of completion of data recovery, a report will be prepared incorporating all appropriate data analyses and interpretations, and the report will be submitted to signatories and concurring parties who will be provided with 30 calendar days to review and comment upon the data report.
2. Upon receipt of the data recovery report, FHWA, represented by ADOT, will review and subsequently submit such documents concurrently to all remaining consulting parties for review. All consulting parties will have 30 calendar days from receipt to review and provide comments to ADOT. Lack of response within this review period will be taken as concurrence with the report.
3. If revisions to the data recovery report are made, all consulting parties will have 20 calendar days from receipt to review the revisions and provide comments to ADOT. Lack of response within this review period will be taken as concurrence with the report.
4. Once the data recovery report has been accepted as a final document, FHWA, represented by ADOT, will notify appropriate project participants that construction may proceed.

VII. DISCOVERIES

If potential historic or prehistoric archaeological materials or properties, or human remains are discovered after construction begins, the person in charge of the construction shall require construction to immediately cease with the area of the discovery, take steps to protect the discovery, and promptly report the discovery to the ADOT Historic Preservation Specialist, representing FHWA. The ADOT Historic Preservation Specialist, representing FHWA, shall notify and consult with appropriate agencies.

1. If the discovery, occurring on State or private land, appears to involve human remains or remains as defined in ASM rules implementing A.R.S. § 41-844 and 41-865, the Director of ASM shall be notified. In consultation with the Director, FHWA, represented by ADOT, and the person in charge of construction shall ensure that the discovery is treated according to the burial agreement.
2. If the discovery is located on Federal land and involves graves or human remains as defined in ARPA Section 3.1, the Federal Land Manager shall also be informed. In consultation with FHWA, represented by ADOT, the person in charge of construction shall immediately take steps to secure and maintain preservation of the discovery. FHWA, represented by ADOT, shall ensure that the discovery is treated according to the burial agreement.

3. If remains are not involved, and the discovery is located on state land, FHWA, represented by ADOT, shall notify ASM as required under A.R.S. § 41-844. ADOT, on behalf of FHWA in consultation with the Director and SHPO, if appropriate, shall determine if the Plan previously approved by ASM according to Stipulation II-B is appropriate to the nature of the discovery. If appropriate, the Plan shall be implemented by ADOT, on behalf of FHWA. If the Plan is not appropriate to the discovery, FHWA shall ensure that an alternate plan for the resolution of adverse effect is developed and circulated to the consulting parties, who will have two working days to review and comment upon the alternate plan. FHWA shall consider the resulting comments, and shall implement the alternate plan once a project specific permit has been issued.
4. If remains are not involved and the discovery is located on private land, FHWA, represented by ADOT, shall evaluate the discovery, and SHPO shall be notified as appropriate. The ADOT Historic Preservation Specialist, on behalf of FHWA, shall determine if the plan previously approved according to Stipulation II-B is appropriate to the nature of the discovery. If appropriate, the Plan shall be implemented by ADOT, on behalf of FHWA. If the Plan is not appropriate to the discovery, FHWA shall ensure that an alternate plan for the resolution of adverse effect is developed and circulated to the consulting parties, who will have two working days to review and comment upon the alternate plan. FHWA shall consider the resulting comments, and shall implement the alternate plan once a project specific permit has been issued.
5. If the discovery is located on federal land, FHWA, represented by ADOT, shall determine if the discovery classifies as an "archaeological resource" as defined in Section 3.1 of ARPA, or determine if the discovery classifies as an historical resource or resource with tribal significance, and the Federal Land Manager must then be contacted.

VIII. CHANGES IN CONSTRUCTION CORRIDORS AND ANCILLARY AREAS

Any changes or additions in construction corridors, staging areas, or use areas will be handled in a manner consistent with Stipulations I-IV.

IX. STANDARDS FOR MONITORING AND DATA RECOVERY

All historic preservation work carried out pursuant to this Agreement shall be carried out by, or under the supervision of, a person, or persons, meeting at a minimum the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-44739).

X. CURATION

All materials and records resulting from the data recovery program conducted within the Project area shall be curated in accordance with either ASM or ARPA.

1. For materials and records located on state or private land, curation shall take place in accordance with standards outlined in A.R.S. § 41-844, and guidelines generated by ASM. The repository for materials either will be ASM or one

located in Maricopa County that meets those standards and guidelines. Materials subject to repatriation under A.R.S. § 41-844 and A.R.S. § 41-865 shall be maintained in accordance with the burial agreement.

2. Archaeological Resources excavated or removed from federal land will be preserved by a suitable university, museum, or other scientific or educational institution (ARPA, Section 4.b.3). Resources having religious or cultural importance shall be maintained in accordance with the burial agreement until any specified analyses, as determined following the consultation with the appropriate Indian tribes and individuals, are complete and the resources are returned.

XI. DISPUTE RESOLUTION

Should any signatory or concurring party to this Agreement object within 30 days to any plan or report provided for review or to any aspect of this undertaking related to historic preservation issues, FHWA shall consult with the objecting party to resolve the objection. If the objection cannot be resolved, FHWA shall request further comments from the SHPO with reference only to the subject of the dispute; FHWA's responsibility to carry out all actions under this Agreement that are not the subject of the dispute will remain unchanged.

XII. CONFIDENTIALITY

The distribution of sensitive information about the locations and nature of inventoried historic properties shall be limited as provided for by Section 304 of the NHPA, Section 9(a) of ARPA, and ARS § 39-125. Pursuant to this stipulation, the participants to this Agreement agree to appropriately control the distribution of any confidential information they may receive as a result of their participation in this Agreement.

XIII. AMENDMENT

This Agreement may be amended by the signatories pursuant to 36 CFR § 800.6 (c)(7). FHWA shall file any amendments with the Council and provide notice to the parties.

XIV. TERMINATION

This Agreement shall be null and void if its terms are not carried out within 10 years from the date of initial project design plans, unless the consulting parties agree in writing to an extension for carrying out its terms. Any consulting party may terminate this Agreement by providing written notice within 30 calendar days to the other parties, provided that the parties will consult during that period to seek agreement on amendments or other actions that would avoid termination. In the event of termination or expiration, FHWA, represented by ADOT, shall either execute a new Agreement under 36 CFR § 800.7(a).

XV. FAILURE TO CARRY OUT THE TERMS OF THE AGREEMENT

In the event that the terms of this Agreement are not accomplished, federal agencies shall comply with 36 CFR § 800.3 through § 800.6 with regard to individual actions covered by this Agreement.

Execution and implementation of this Agreement is evidence that FHWA, represented by ADOT, has afforded the Council an opportunity to comment on the Northern Avenue Parkway project extending 12.5 miles from SR 303 to US Highway 60 (Grand Avenue) in Maricopa County, and its effect on historic properties. In so doing, FHWA, and SHPO have therefore satisfied the Section 106 responsibilities for all individual actions of this undertaking and have taken into account the effects of the undertaking on historic properties. Participation in this Agreement also satisfies the State Historic Preservation Act responsibilities of ADOT for this undertaking pursuant to A.R.S. § 41-864.

SIGNATORIES

FEDERAL HIGHWAY ADMINISTRATION

By Mary E. Lopez Date 12-12-2008
Title Environmental Coordinator

ARIZONA STATE HISTORIC PRESERVATION OFFICER

By James Garrison Date 12/23/08
Title ASHPO

INVITED SIGNATORIES

ARIZONA DEPARTMENT OF TRANSPORTATION

By Shir Anderson Date 12-11-08
Title Manager

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION

By _____ Date _____
Title _____

CONCURRING PARTIES

ARIZONA STATE MUSEUM

By *Beth Brinell*

Date *Dec 23, 2008*

Title _____

CITY OF GLENDALE

By _____

Date _____

Title _____

CITY OF PEORIA

By _____

Date _____

Title _____

CITY OF EL MIRAGE

By _____

Date _____

Title _____

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

By _____

Date _____

Title _____

LUKE AIR FORCE BASE

By _____

Date _____

Title _____

U.S. ARMY CORPS OF ENGINEERS

By _____

Date _____

CONCURRING PARTIES

ARIZONA STATE MUSEUM

By _____

Date _____

Title _____

CITY OF GLENDALE

By _____

Date _____

Title _____

CITY OF PEORIA

By _____

Date _____

Title _____

CITY OF EL MIRAGE

By _____

Date _____

Title _____

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

By _____

Date _____

Title _____

LUKE AIR FORCE BASE

By _____

Date _____

Title _____

U.S. ARMY CORPS OF ENGINEERS

By Mark Durham

Date 22 Dec 2007

Title _____
SALT RIVER PROJECT

By _____

Date _____

Title _____

BUREAU OF RECLAMATION

By _____

Date _____

Title _____

FORT MCDOWELL YAVAPAI NATION

By Dr. Cynthia M. Patton

Date 1-12-09

Title President

GILA RIVER INDIAN COMMUNITY

By _____

Date _____

Title _____

AK-CHIN INDIAN COMMUNITY

By _____

Date _____

Title _____

SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY

By _____

Date _____

Title _____

HOPI TRIBE

By _____

Date _____

Title _____

YAVAPAI-APACHE NATION

By _____

Date _____

Title _____

SAN CARLOS APACHE NATION

By _____

Date _____

Title _____

TOHONO O'ODHAM NATION

By _____

Date _____

Title _____

ATTACHMENT 4
AGENCY LETTERS



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Janice K. Brewer
Governor

1110 West Washington Street • Phoenix, Arizona 85007
(602) 771-2300 • www.azdeq.gov

Benjamin H. Grumbles
Director

October 14, 2009

Lou Maslyk, Senior Environmental Planner
URS Corporation
7720 North 16th Street, Suite 100
Phoenix, AZ 85020

Re: Maricopa County: EA Northern Parkway Draft Environmental Assessment Review -
Federal Aid

Project No. STP-MMA-0 (034)B Tracs No. 0000 MA MMA SS593 01 C.

Dear Mr. Maslyk:

The Air Quality Division has reviewed the proposed project, described in your draft environmental assessment of July 2009, that you submitted for a General Conformity Determination with the Arizona State Implementation Plan in accordance with Clean Air Act Section 176(c)(1); 58 Federal Register 63214-63259; Title 40 Code of Federal Regulations Part 51, Subpart W §§ 51.850-51.860; Title 40 Code of Federal Regulations Part 93, Subpart B §§ 93.150-160; and Arizona Administrative Code R18-2-348 (approved into the Arizona State Implementation Plan April 23, 1999; effective June 22, 1999). The Air Quality Division has concluded that a General Conformity Determination is not required for the following reason(s):

- Project's total emissions of PM10 in a PM10 Maintenance Area would be less than *de minimis* levels in Title 40 CFR § 51.853(b) [and §93.153(b)] as described or calculated

We support the mitigation measures included on pages 106-107 to minimize PM10 emissions during construction. Maricopa County failed to attain the National Ambient Air Quality Standard for PM10 by December 31, 2006, and is required to achieve annual emission reductions of 5% until the standard is attained.

Comments:

1. Figure 4-10, page 98 is out of date, as is information on pages 97 and 99. Monitoring data for 2008 have been reported to EPA's Air Quality System.
2. Maricopa County attained the 1997 National Ambient Air Quality Standard for 8-hour Ozone and submitted a Maintenance Plan and request for redesignation to attainment status to EPA on March 24, 2009.
3. EPA revised the 8-hour ozone NAAQS in 2008. The Governor submitted a recommended

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Nonattainment Area designation for expanded boundaries to EPA on March 12, 2009 [www.azdeq.gov/enviro/air/plan/Ozone.html; see items marked NEW in red]. EPA has announced its intent to reconsider the ozone NAAQS and issue a Notice of Proposed Rulemaking by December 21, 2009. The Governor may revise the designation and boundary recommendation after the proposal is finalized.

To comply with other air pollution control requirements and to minimize adverse impacts on public health and welfare, the following information is provided for your consideration during the project:

REDUCE DISTURBANCE of PARTICULATE MATTER during CONSTRUCTION

This action, plan or activity may temporarily increase ambient particulate matter (dust) levels. Particulate matter 10 microns in size and smaller can penetrate the lungs of human beings and animals and is subject to a National Ambient Air Quality Standard (NAAQS) to protect public health and welfare. Particulate matter 2.5 microns in size and smaller is difficult for lungs to expel and has been linked to increases in death rates; heart attacks by disturbing heart rhythms and increasing plaque and clotting; respiratory infections; asthma attacks and cardiopulmonary obstructive disease (COPD) aggravation. It is also subject to a NAAQS.

The following measures are recommended to reduce disturbance of particulate matter, including emissions caused by strong winds as well as machinery and trucks tracking soil off the construction site:

- I. Site Preparation and Construction
 - A. Minimize land disturbance;
 - B. Suppress dust on traveled paths which are not paved through wetting, use of watering trucks, chemical dust suppressants, or other reasonable precautions to prevent dust entering ambient air
 - C. Cover trucks when hauling soil;
 - D. Minimize soil track-out by washing or cleaning truck wheels before leaving construction site;
 - E. Stabilize the surface of soil piles; and
 - F. Create windbreaks

- II. Site Restoration
 - A. Revegetate any disturbed land not used;
 - B. Remove unused material; and
 - C. Remove soil piles via covered trucks.

The following rules applicable to reducing dust during construction, demolition and earth moving activities are enclosed:

- Arizona Administrative Code R18-2-604 through -607

Page 3 of 3
Lou Maslyk
October 14, 2009

- Arizona Administrative Code R18-2-804
- Maricopa County Code Rules 310 and 310.01

Should you have further questions, please do not hesitate to call Bonnie Cockrell at (602) 771-2378 or Dave Biddle at (602) 771-2376 of the Planning Section Staff.

Very truly yours,



Diane L Arnst, Manager
Air Quality Planning Section

Enclosures

cc: Henry R. Darwin, EV Administrative Counsel
David A. Biddle, Environmental Program Specialist
File No. 220060

ARTICLE 8. EMISSIONS FROM MOBILE SOURCES (NEW AND EXISTING)**R18-2-801. Classification of Mobile Sources**

- A. This Article is applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations.
- B. Unless otherwise specified, no mobile source shall emit smoke or dust the opacity of which exceeds 40%.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Amended effective February 3, 1993 (Supp. 93-1). Former Section R18-2-801 renumbered to Section R18-2-901, new Section R18-2-801 renumbered from R18-2-601 effective November 15, 1993 (Supp. 93-4).

R18-2-802. Off-road Machinery

- A. No person shall cause, allow or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.
- B. Off-road machinery shall include trucks, graders, scrapers, rollers, locomotives and other construction and mining machinery not normally driven on a completed public roadway.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-802 renumbered to Section R18-2-902, new Section R18-2-802 renumbered from R18-2-602 effective November 15, 1993 (Supp. 93-4).

R18-2-803. Heater-planer Units

No person shall cause, allow or permit to be emitted into the atmosphere from any heater-planer operated for the purpose of reconstructing asphalt pavements smoke the opacity of which exceeds 20%. However three minutes' upset time in any one hour shall not constitute a violation of this Section.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-803 renumbered to Section R18-2-903, new Section R18-2-803 renumbered from R18-2-603 effective November 15, 1993 (Supp. 93-4).

R18-2-804. Roadway and Site Cleaning Machinery

- A. No person shall cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.
- B. In addition to complying with subsection (A), no person shall cause, allow or permit the cleaning of any site, roadway, or alley without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions may include applying dust suppressants. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Amended effective February 3, 1993 (Supp. 93-1). Former Section R18-2-804 renumbered to Section R18-2-904, new Section R18-2-804 renumbered from R18-2-604 effective November 15, 1993 (Supp. 93-4).

R18-2-805. Asphalt or Tar Kettles

- A. No person shall cause, allow or permit to be emitted into the atmosphere from any asphalt or tar kettle smoke for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%.
- B. In addition to complying with subsection (A), no person shall cause, allow or permit the operation of an asphalt or tar kettle without minimizing air contaminant emissions by utilizing all of the following control measures:
1. The control of temperature recommended by the asphalt or tar manufacturer;
 2. The operation of the kettle with lid closed except when charging;
 3. The pumping of asphalt from the kettle or the drawing of asphalt through cocks with no dipping;
 4. The dipping of tar in an approved manner;
 5. The maintaining of the kettle in clean, properly adjusted, and good operating condition;
 6. The firing of the kettle with liquid petroleum gas or other fuels acceptable to the Director.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-805 renumbered to Section R18-2-905, new Section R18-2-805 renumbered from R18-2-605 effective November 15, 1993 (Supp. 93-4).

- c. If the burning would occur at a solid waste facility in violation of 40 CFR 258.24 and the Director has not issued a variance under A.R.S. § 49-763.01.
- E. Open outdoor fires of dangerous material. A fire set for the disposal of a dangerous material is allowed by the provisions of this Section, when the material is too dangerous to store and transport, and the Director has issued a permit for the fire. A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). The Director shall permit fires for the disposal of dangerous materials only when no safe alternative method of disposal exists, and burning the materials does not result in the emission of hazardous or toxic substances either directly or as a product of combustion in amounts that will endanger health or safety.
- F. Open outdoor fires of household waste. An open outdoor fire for the disposal of household waste is allowed by provisions of this Section when permitted in writing by the Director or a delegated authority. A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). The permittee shall conduct open outdoor fires of household waste in an approved waste burner and shall either:
1. Burn household waste generated on-site on farms or ranches of 40 acres or more where no household waste collection or disposal service is available; or
 2. Burn household waste generated on-site where no household waste collection and disposal service is available and where the nearest other dwelling unit is at least 500 feet away.
- G. Permits issued by a delegated authority. The Director may delegate authority for the issuance of open burning permits to a county, city, town, air pollution control district, or fire district. A delegated authority may not issue a permit for its own open burning activity. The Director shall not delegate authority to issue permits to burn dangerous material under subsection (E). A county, city, town, air pollution control district, or fire district with delegated authority from the Director may assign that authority to one or more private fire protection service providers that perform fire protection services within the county, city, town, air pollution control district, or fire district. A private fire protection provider shall not directly or indirectly condition the issuance of open burning permits on the applicant being a customer. Permits issued under this subsection shall comply with the requirements in subsection (D)(3) and be in a format prescribed by the Director. Each delegated authority shall:
1. Maintain a copy of each permit issued for the previous five years available for inspection by the Director;
 2. For each permit currently issued, have a means of contacting the person authorized by the permit to set an open fire if an order to extinguish open burning is issued; and
 3. Annually submit to the Director by May 15 a record of daily burn activity, excluding household waste burn permits, on a form provided by the Director for the previous calendar year containing the information required in subsections (D)(3)(e) and (D)(3)(f).
- H. The Director shall hold an annual public meeting for interested parties to review operations of the open outdoor fire program and discuss emission reduction techniques.
- I. Nothing in this Section is intended to permit any practice that is a violation of any statute, ordinance, rule, or regulation.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Correction, subsection (C) repealed effective October 2, 1979, not shown (Supp. 80-1). Former Section R9-3-602 renumbered without change as Section R18-2-602 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-602 renumbered to R18-2-802, new Section R18-2-602 renumbered from R18-2-401 effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-603. Repealed

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-603 renumbered without change as Section R18-2-603 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-603 renumbered to R18-2-803, new Section R18-2-603 renumbered from R18-2-403 effective November 15, 1993 (Supp. 93-4). Repealed effective October 8, 1996 (Supp. 96-4).

R18-2-604. Open Areas, Dry Washes, or Riverbeds

- A. No person shall cause, suffer, allow, or permit a building or its appurtenances, or a building or subdivision site, or a driveway, or a parking area, or a vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, without taking reasonable precautions to limit excessive amounts of particulate matter from becoming airborne. Dust and other types of air contaminants shall be kept to a minimum by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means.
- B. No person shall cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, trucks, cars, cycles, bikes, or buggies, or by animals such as horses, without taking reasonable precautions to limit excessive amounts of particulates from becoming airborne. Dust shall be kept to a minimum by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means.
- C. No person shall operate a motor vehicle for recreational purposes in a dry wash, riverbed or open area in such a way as to cause or contribute to visible dust emissions which then cross property lines into a residential, recreational, institutional, educational, retail sales, hotel or business premises. For purposes of this subsection "motor vehicles" shall include, but not be limited to trucks, cars, cycles, bikes, buggies and 3-wheelers. Any person who violates the provisions of this subsection shall be subject to prosecution under A.R.S. § 49-463.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-604 renumbered without change as Section R18-2-604 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-604 renumbered to R18-2-804, new Section R18-2-604 renumbered from R18-2-404 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-605. Roadways and Streets

- A. No person shall cause, suffer, allow or permit the use, repair, construction or reconstruction of a roadway or alley without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust suppressants, wetting down, detouring or by other reasonable means.
- B. No person shall cause, suffer, allow or permit transportation of materials likely to give rise to airborne dust without taking reasonable precautions, such as wetting, applying dust suppressants, or covering the load, to prevent particulate matter from becoming airborne. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-605 renumbered without change as Section R18-2-605 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-605 renumbered to R18-2-805, new Section R18-2-605 renumbered from R18-2-405 effective November 15, 1993 (Supp. 93-4).

R18-2-606. Material Handling

No person shall cause, suffer, allow or permit crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust without taking reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne.

Historical Note

Section R18-2-606 renumbered from R18-2-406 effective November 15, 1993 (Supp. 93-4).

R18-2-607. Storage Piles

- A. No person shall cause, suffer, allow, or permit organic or inorganic dust producing material to be stacked, piled, or otherwise stored without taking reasonable precautions such as chemical stabilization, wetting, or covering to prevent excessive amounts of particulate matter from becoming airborne.
- B. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to prevent excessive amounts of particulate matter from becoming airborne.

Historical Note

Section R18-2-607 renumbered from R18-2-407 effective November 15, 1993 (Supp. 93-4).

R18-2-608. Mineral Tailings

No person shall cause, suffer, allow, or permit construction of mineral tailing piles without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Reasonable precautions shall mean wetting, chemical stabilization, revegetation or such other measures as are approved by the Director.

Historical Note

Section R18-2-608 renumbered from R18-2-408, new Section R18-2-408 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-609. Agricultural Practices

A person shall not cause, suffer, allow, or permit the performance of agricultural practices outside the Phoenix and Yuma planning areas, as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210, including tilling of land and application of fertilizers without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.

Historical Note

Section R18-2-609 renumbered from R18-2-409 effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 6 A.A.R. 2009; effective May 12, 2000 (Supp. 00-2). Amended by final rulemaking at 11 A.A.R. 2210, effective July 18, 2005 (Supp. 05-2).

R18-2-610. Definitions for R18-2-611

The definitions in Article 1 of this Chapter and the following definitions apply to R18-2-611:

1. "Access restriction" means restricting or eliminating public access to noncropland with signs or physical obstruction.
2. "Aggregate cover" means gravel, concrete, recycled road base, caliche, or other similar material applied to noncropland.
3. "Artificial wind barrier" means a physical barrier to the wind.
4. "Best management practice" means a technique verified by scientific research, that on a case-by-case basis is practical, economically feasible, and effective in reducing PM₁₀ emissions from a regulated agricultural activity.
5. "Chemical irrigation" means applying a fertilizer, pesticide, or other agricultural chemical to cropland through an irrigation system.
6. "Combining tractor operations" means performing two or more tillage, cultivation, planting, or harvesting operations with a single tractor or harvester pass.
7. "Commercial farm" means 10 or more contiguous acres of land used for agricultural purposes within the boundary of the Maricopa PM₁₀ nonattainment area.
8. "Commercial farmer" means an individual, entity, or joint operation in general control of a commercial farm.
9. "Committee" means the Governor's Agricultural Best Management Practices Committee.
10. "Cover crop" means plants or a green manure crop grown for seasonal soil protection or soil improvement.
11. "Critical area planting" means using trees, shrubs, vines, grasses, or other vegetative cover on noncropland.
12. "Cropland" means land on a commercial farm that:
 - a. Is within the time-frame of final harvest to plant emergence;
 - b. Has been tilled in a prior year and is suitable for crop production, but is currently fallow; or
 - c. Is a turn-row.

#200060



Janice K. Brewer
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
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Benjamin H. Grumbles
Director

October 27, 2009

Mr. Lou Maslyk
7720 North 16th Street, Suite 100
Phoenix, AZ 85020

Re: Northern Parkway Draft Environmental Assessment Review

Dear Mr. Maslyk:

We received the September 29, 2009 Draft Environmental Assessment (EA) Review for the proposed Northern Parkway Project between Loop 303 and US 60 (Grand Avenue) in Maricopa County. The Arizona Department of Environmental Quality Water Quality Division (WQD) is responsible for ensuring the delivery of safe drinking water to customers of regulated public water systems under the Safe Drinking Water Act, permits for proposed discharges to surface waters of the United States under the federal Clean Water Act (CWA), permits under the state Aquifer Protection Program, and water quality certifications of certain federal licenses and permits. Based on the information provided in the Draft EA, ADEQ has the following comments related to water quality.

The Draft EA acknowledges the need for water quality permits, specifically the CWA 401 Water Quality Certification and the Arizona Pollutant Discharge Elimination System's (AZPDES) Construction General Permit. For questions or additional information related to these permits:

- 1) For the CWA 401 Certification, please contact Bob Scalamera at (602) 771-4502 or by e-mail at rs3@azdeq.gov. The CWA 401 application form can be downloaded from the agency website at: <http://www.azdeq.gov/function/forms/appswater.html#dredge>.
- 2) For the Construction General Permit, please contact Chris Henninger in our Stormwater and General Permits Unit at (602) 771-4508 or by e-mail at cph@azdeq.gov. The Construction General Permit and associated forms are available on ADEQ's website at: <http://www.azdeq.gov/environ/water/permits/stormwater.html#const>. Please note the correct address for filing the Notice of Intent is Arizona Department of Environmental Quality; Surface Water Section / Stormwater & General Permits Unit, 1110 West Washington, 5415A-1; Phoenix, Arizona 85007. ADEQ now offers a Web-based service to assist individuals in applying for construction stormwater discharge permits, available as a Key Topic at the home page: <http://www.azdeq.gov>

The WQD recently amended its surface water quality standards, which became effective January 31, 2009. The new surface water quality standards are available on ADEQ's website: <http://www.azdeq.gov/environ/water/standards/index.html>.

Northern Regional Office
1801 W. Route 66 • Suite 117 • Flagstaff, AZ 86001
(928) 779-0313

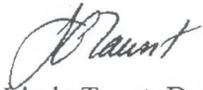
Southern Regional Office
400 West Congress Street • Suite 433 • Tucson, AZ 85701
(520) 628-6733

Some of the relocation activities on pages 57 – 58 of the Draft EA may require permits.

- 1) Activities related to wells, such as installing a new well or abandoning a well, must comply with the Arizona Department of Water Resources' regulations. However, to install a well as a drinking water source for a public water system requires a plans review and approval. ADEQ has delegated plan review for public water systems to the Maricopa County Environmental Services Department (MCESD). Please contact MCESD at (602) 506-6666 or by e-mail at sdwquestions@mail.maricopa.gov for more information.
- 2) Wastewater treatment facilities and sewer collection systems also are subject to plan review and approval. ADEQ has delegated plan review and approval to the Maricopa County Environmental Services Department (MCESD). Relocating a sewer lift station may require plan review. Please contact MCESD at (602) 506-6666 or by e-mail at sdwquestions@mail.maricopa.gov for more information.
- 3) Groundwater recharge facilities are regulated by the Arizona Department of Water Resources. However if reclaimed water is used for the recharge, then the WQD requires an Aquifer Protection Permit.

We appreciate the opportunity to review and provide comments. If you need further information, please contact Wendy LeStarge of my staff at (602) 771-4836 or via e-mail at w11@azdeq.gov, or myself at (602) 771-4416 or via e-mail at lc1@azdeq.gov.

Sincerely,



Linda Taunt, Deputy Director
Water Quality Division



CHAIRMAN

VICE-CHAIRMAN

October 8, 2009

Lou Maslyk, Roger Miles
URS
7720 North 16th Street, Suite 100
Phoenix, Arizona 85020

Re: Northern Parkway Draft Environmental Assessment

Dear Mr. Maslyk,

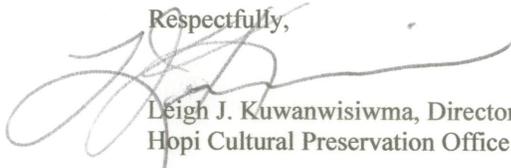
Thank you for your correspondence on behalf of the Federal Highway Administration (FHWA) and Arizona Department of Transportation (ADOT) dated September 28, 2009, with an enclosed draft Environmental Assessment for the Northern Parkway Project between Loop 303 and US 60, north of Luke Air Force Base and the Glendale Airport. The Hopi Tribe claims cultural affiliation to prehistoric cultural groups in Arizona, including the Hohokam prehistoric cultural group in southern Arizona, and the Hopi Cultural Preservation Office supports identification and avoidance of prehistoric archaeological sites and Traditional Cultural Properties. Therefore, we appreciate URS, FHWA and ADOT's continuing solicitation of our input and your efforts to address our concerns.

The Hopi Cultural Preservation Office considers the archaeological sites of our ancestors to be Traditional Cultural Properties. We concurred with the Federal Highways Administration correspondence dated January 25, 2007, with an enclosed cultural resources overview, that an adverse effect determination was appropriate for this project due to the five prehistoric sites may be impacted along middle segment of the northern alignment, including the Quass Pueblo, AZ T:7:25 (ASM) described as a Hohokam village, and sites AZ T:7: 12, 13, 33, and 174 (ASM), described as artifact scatters with possible structures.

We have now reviewed the enclosed environmental assessment. We deferred on the Programmatic Agreement but understand that at least one archaeological site will be adversely affected if Alternatives 1 or 2 are constructed, and at least two archaeological sites will be adversely affected if Alternative 3 is constructed.

Therefore, we request continuing consultation on this proposal including to be provided with copies of and draft treatment plans and reports for review and comment. Should you have any questions or need additional information, please contact Terry Morgart at the Hopi Cultural Preservation Office. Thank you again for your consideration.

Respectfully,



Leigh J. Kuwanwisiwma, Director
Hopi Cultural Preservation Office

xc: Arizona State Historic Preservation Office
Robert E. Hollis, FHWA, 4000 North Central Ave., Suite 1500, Phoenix, AZ 85012-3500

United States Department of Agriculture



Natural Resources Conservation Service
U.S. Courthouse – Federal Building
230 N. First Avenue, Suite 509
Phoenix, Arizona 85003-1733
(602) 280-8801

Lou Maslyk
URS
7720 N. 16th St, Suite 100
Phoenix, AZ 85020

October 29, 2009

Re: Northern Parkway

Dear Mr. Maslyk:

This response is in regard to your Draft Environmental Assessment delivered to our office on September 29, 2009 concerning the FHWA sponsored project for the construction of the Northern Parkway in Maricopa County, Arizona.

The Natural Resources Conservation Service (NRCS) has general responsibility, nationwide, for implementing the Farmland Protection Policy Act (FPPA) and to review projects that may affect prime, unique, or statewide important farmland and/or wetlands associated with agriculture. You submitted the required form NRCS-AD-1006 with parts I, III, and VI completed for a three alternatives. After reviewing the information provided, the following has been determined:

- 1- Approximately 158 acres of prime and unique farmland soils will be impacted under Alternatives 1 and 2. An additional 11 acres will be impacted under Alternative 3. Although there is additional cropland on the eastern portion of the proposed Northern Parkway, these cropland areas meet the definition of "land already committed to urban use." Additionally, since the total points in Part VII are less than 160, the entire project area officially meets the same definition of "lands already committed to urban use." Therefore, no further analysis or reporting is necessary for consideration of prime farmland effects.
- 2- Relative values of soils and acres affected may still be used as necessary for the alternative selection process. We have provided customized soil reports for the alternatives presented.
- 3- We do not see any immediate concerns or impacts that would directly affect wetland areas associated with agriculture.

Should you have questions, please feel free contact Stephen Smarik, Environmental Coordinator at 602-280-8785. Thank you again for the chance to review the proposed project.

Helping People Help the Land

An Equal Opportunity Provider and Employer



Sincerely,


Thomas Hedt
Assistant State Conservationist

Enclosures

cc: Corey Nelson, District Conservationist, NRCS, Avondale, Arizona
Stephen Smarik, Environmental Specialist, NRCS, Phoenix, Arizona

FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request	8/25/08	4. Sheet 1 of 1
1. Name of Project	Northern Parkways	5. Federal Agency Involved	Federal Highways Administration	
2. Type of Project	Transportation Corridor	6. County and State	Maricopa County, Arizona	
PART II (To be completed by NRCS)		1. Date Request Received by NRCS	8/29/08	2. Person Completing Form
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form.)		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	4. Acres Irrigated	Average Farm Size
5. Major Crop(s)	Alfalfa, Cotton, Vegetables	6. Farmable Land in Government Jurisdiction	Acres: 267,295	% 3.2
8. Name Of Land Evaluation System Used		7. Amount of Farmland As Defined in FPPA	Acres: 190,182	% 2.2
		9. Name of Local Site Assessment System		10. Date Land Evaluation Returned by NRCS
				10/29/08

PART III (To be completed by Federal Agency)	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	617	617	720	
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0	0	0	
C. Total Acres In Corridor	617	617	720	0

PART IV (To be completed by NRCS) Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	158	158	169	
B. Total Acres Statewide And Local Important Farmland	-	-	-	
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	.089%	.089%	.089%	
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	20%	20%	18%	

PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)				
	92	92	93	

PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))		Maximum Points			
1. Area In Nonurban Use	15	8	8	8	
2. Perimeter in Nonurban Use	10	5	5	5	
3. Percent Of Corridor Being Farmed	20	3	3	3	
4. Protection Provided By State And Local Government	20	0	0	0	
5. Size of Present Farm Unit Compared To Average	10	9	9	9	
6. Creation Of Nonfarmable Farmland	25	0	0	0	
7. Availability Of Farm Support Services	5	5	5	5	
8. On-Farm Investments	20	8	8	8	
9. Effects Of Conversion On Farm Support Services	25	0	0	0	
10. Compatibility With Existing Agricultural Use	10	5	5	5	
TOTAL CORRIDOR ASSESSMENT POINTS	160	43	43	43	0

PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)	100	92	92	93	
Total Corridor Assessment (From Part VI above or a local site assessment)	160	43	43	43	0
TOTAL POINTS (Total of above 2 lines)	260	135	135	136	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>

5. Reason For Selection:

Signature of Person Completing this Part: Polly Ready - URS Corporation DATE: 8/25/08

NOTE: Complete a form for each segment with more than one Alternate Corridor



United States
Department of
Agriculture



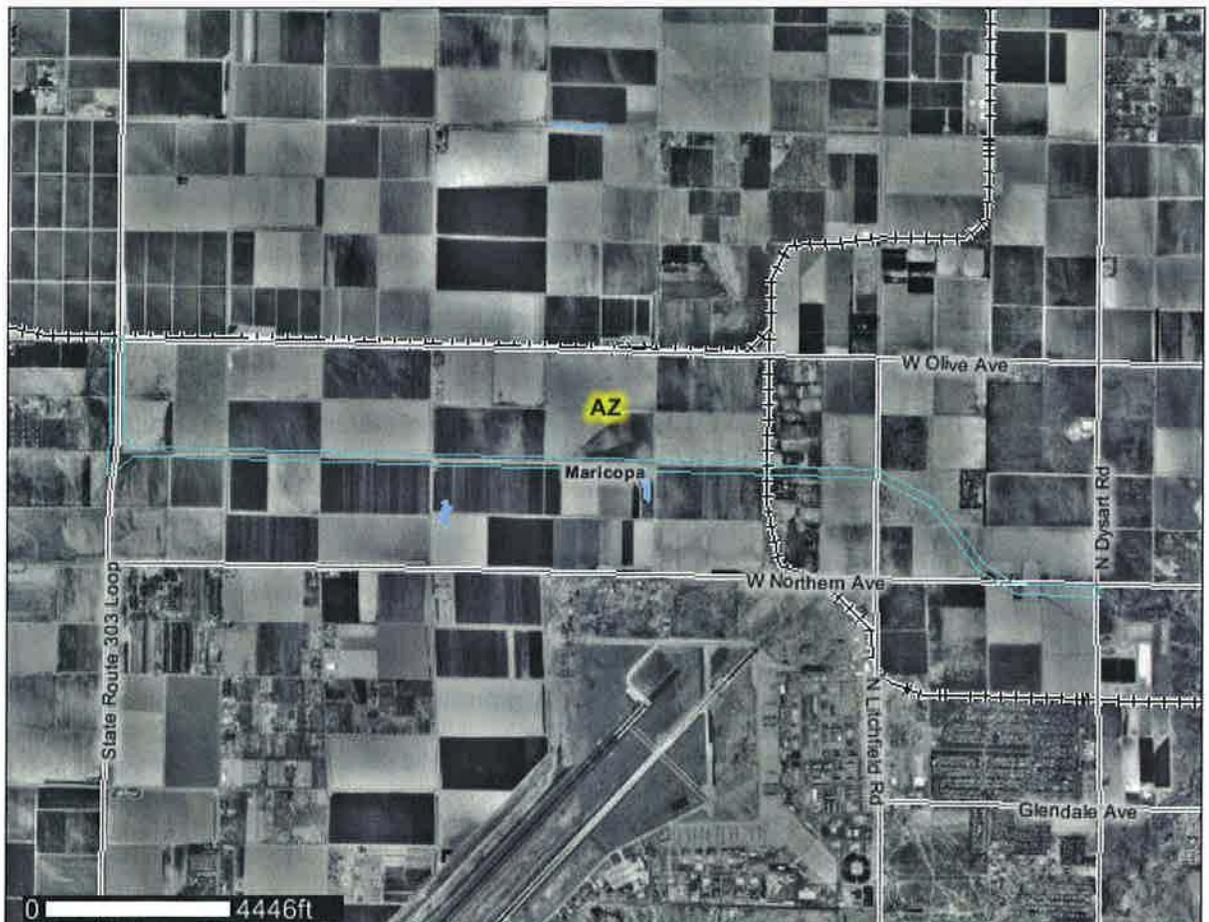
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Maricopa County, Arizona, Central Part

Alternative 1 & 2 - Northern Parkway



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nracs>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

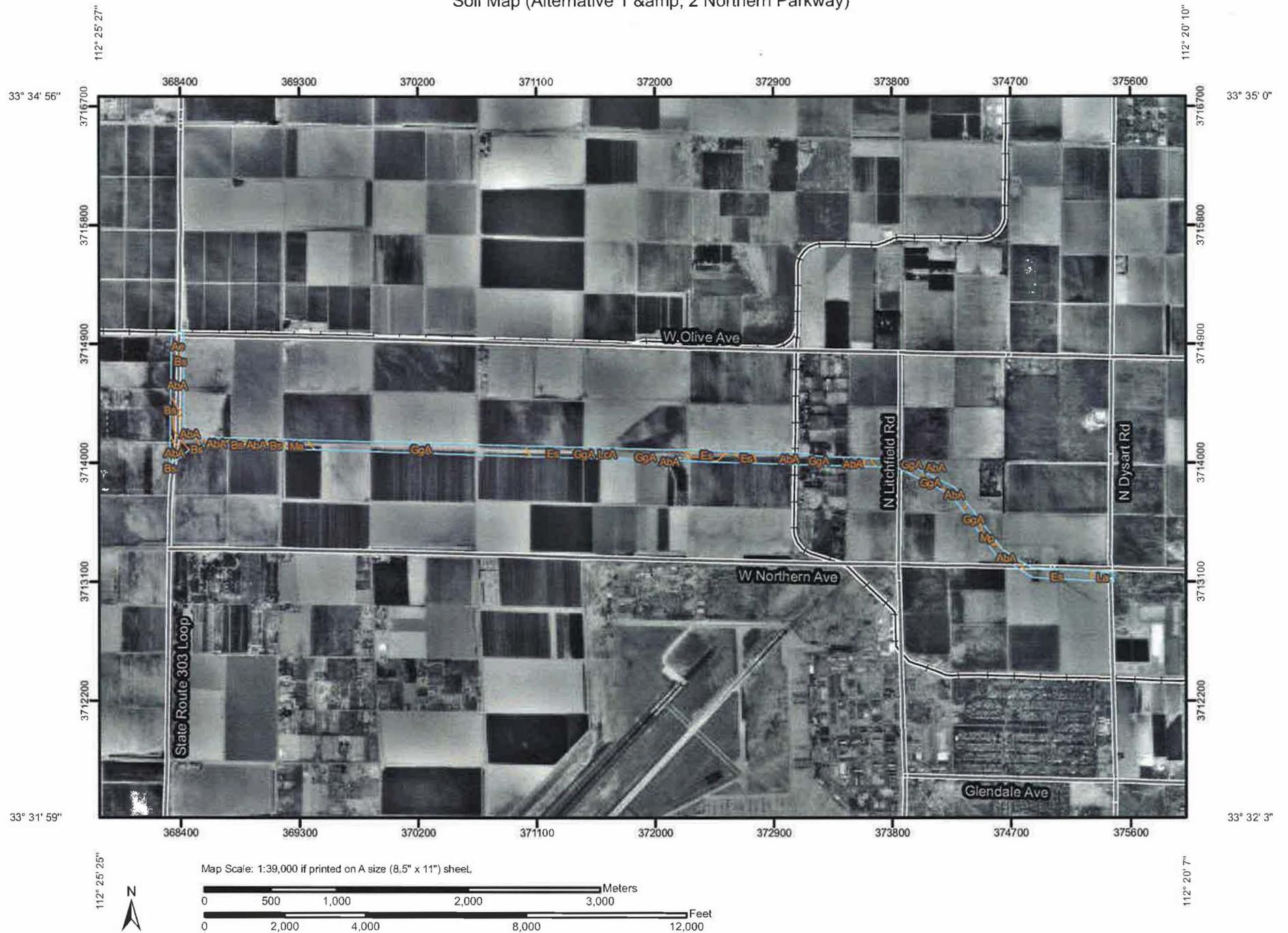
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (Alternative 1 & 2 Northern Parkway)



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

Special Line Features

-  Gully
-  Short Steep Slope
-  Other

Political Features

 Cities

Water Features

-  Oceans
-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:39,000 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 12N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Maricopa County, Arizona, Central Part
 Survey Area Data: Version 6, Aug 29, 2008

Date(s) aerial images were photographed: 9/6/1992

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (Alternative 1 & 2 Northern Parkway)

Maricopa County, Arizona, Central Part (AZ651)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AbA	Antho sandy loam, 0 to 1 percent slopes	36.3	22.9%
Ae	Antho-Brios sandy loams	4.0	2.6%
Bs	Brios sandy loam	10.2	6.4%
Es	Estrella loam	24.4	15.4%
GgA	Gilman loam, 0 to 1 percent slopes	73.2	46.3%
La	La Palma very fine sandy loam	2.9	1.9%
LcA	Laveen loam, 0 to 1 percent slopes	1.3	0.8%
Ma	Maripo sandy loam	3.8	2.4%
Mp	Mohall loam	2.2	1.4%
Totals for Area of Interest		158.3	100.0%

Map Unit Descriptions (Alternative 1 & 2 Northern Parkway)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the

Custom Soil Resource Report

contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Maricopa County, Arizona, Central Part

AbA—Antho sandy loam, 0 to 1 percent slopes

Map Unit Setting

Elevation: 850 to 1,400 feet

Mean annual precipitation: 6 to 8 inches

Mean annual air temperature: 69 to 74 degrees F

Frost-free period: 250 to 300 days

Map Unit Composition

Antho and similar soils: 100 percent

Description of Antho

Setting

Landform: Alluvial fans, stream terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Recent mixed alluvium

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 13.0

Available water capacity: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s

Land capability (nonirrigated): 7s

Ecological site: Limy Fan 7-10" p.z. (R040XB207AZ)

Typical profile

0 to 13 inches: Sandy loam

13 to 36 inches: Sandy loam

36 to 47 inches: Loamy sand

47 to 60 inches: Sandy clay loam

Ae—Antho-Brios sandy loams

Map Unit Setting

Elevation: 700 to 1,400 feet

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Mean annual precipitation: 6 to 8 inches
Mean annual air temperature: 69 to 74 degrees F
Frost-free period: 250 to 300 days

Map Unit Composition

Antho and similar soils: 45 percent
Brios and similar soils: 25 percent

Description of Antho

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Recent mixed alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability (nonirrigated): 7s
Ecological site: Limy Fan 7-10" p.z. (R040XB207AZ)

Typical profile

0 to 13 inches: Sandy loam
13 to 36 inches: Sandy loam
36 to 47 inches: Loamy sand
47 to 60 inches: Sandy clay loam

Description of Brios

Setting

Landform: Channels
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Recent alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

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Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability (nonirrigated): 7s
Ecological site: Sandy Wash 7-10" p.z. (R040XB216AZ)
Other vegetative classification: Sandy Bottom 7-10" p.z. (040XB216AZ)

Typical profile

0 to 14 inches: Sandy loam
14 to 22 inches: Coarse sand
22 to 60 inches: Stratified gravelly coarse sand

Bs—Brios sandy loam

Map Unit Setting

Elevation: 700 to 1,300 feet
Mean annual precipitation: 6 to 8 inches
Mean annual air temperature: 69 to 74 degrees F
Frost-free period: 250 to 300 days

Map Unit Composition

Brios and similar soils: 100 percent

Description of Brios

Setting

Landform: Terraces, alluvial fans
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Recent alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0

Custom Soil Resource Report

Available water capacity: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s

Land capability (nonirrigated): 7s

Ecological site: Sandy Wash 7-10" p.z. (R040XB216AZ)

Other vegetative classification: Sandy Bottom 7-10" p.z. (040XB216AZ)

Typical profile

0 to 14 inches: Sandy loam

14 to 22 inches: Coarse sand

22 to 60 inches: Stratified gravelly coarse sand

Es—Estrella loam

Map Unit Setting

Elevation: 800 to 1,400 feet

Mean annual precipitation: 6 to 8 inches

Mean annual air temperature: 69 to 73 degrees F

Frost-free period: 250 to 300 days

Map Unit Composition

Estrella and similar soils: 100 percent

Description of Estrella

Setting

Landform: Alluvial fans, plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Recent medium textured alluvium over older mixed alluvium

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 25 percent

Maximum salinity: Nonsaline to very slightly saline (2.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 13.0

Available water capacity: High (about 10.9 inches)

Interpretive groups

Land capability classification (irrigated): 1

Land capability (nonirrigated): 7c

Ecological site: Limy Fan 7-10" p.z. (R040XB207AZ)

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Typical profile

0 to 11 inches: Loam
11 to 24 inches: Loam
24 to 48 inches: Clay loam
48 to 60 inches: Gravelly clay loam

GgA—Gilman loam, 0 to 1 percent slopes

Map Unit Setting

Elevation: 800 to 1,400 feet
Mean annual precipitation: 6 to 8 inches
Mean annual air temperature: 60 to 73 degrees F
Frost-free period: 250 to 300 days

Map Unit Composition

Gilman and similar soils: 100 percent

Description of Gilman

Setting

Landform: Alluvial fans, plains, stream terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Recent mixed alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability (nonirrigated): 7c
Ecological site: Limy Fan 7-10" p.z. (R040XB207AZ)

Typical profile

0 to 18 inches: Loam
18 to 37 inches: Loam
37 to 64 inches: Very fine sandy loam

La—La Palma very fine sandy loam

Map Unit Setting

Elevation: 800 to 1,200 feet

Mean annual precipitation: 6 to 8 inches

Mean annual air temperature: 69 to 73 degrees F

Frost-free period: 250 to 300 days

Map Unit Composition

La palma and similar soils: 100 percent

Description of La Palma

Setting

Landform: Alluvial fans, plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Mixed alluvium

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: 20 to 40 inches to duripan

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 25 percent

Maximum salinity: Slightly saline to strongly saline (8.0 to 20.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water capacity: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): 3s

Land capability (nonirrigated): 7s

Ecological site: Loamy Upland 7-10" p.z. Saline (R040XB225AZ)

Typical profile

0 to 7 inches: Very fine sandy loam

7 to 27 inches: Loam

27 to 60 inches: Cemented material

LcA—Laveen loam, 0 to 1 percent slopes

Map Unit Setting

Elevation: 800 to 1,400 feet

Mean annual precipitation: 6 to 8 inches

Mean annual air temperature: 69 to 73 degrees F

Frost-free period: 250 to 300 days

Map Unit Composition

Laveen and similar soils: 100 percent

Description of Laveen

Setting

Landform: Alluvial fans, plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Mixed alluvium

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 13.0

Available water capacity: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 1

Land capability (nonirrigated): 7c

Ecological site: Limy Fan 7-10" p.z. (R040XB207AZ)

Typical profile

0 to 15 inches: Loam

15 to 50 inches: Loam

50 to 72 inches: Gravelly loam

Ma—Maripo sandy loam

Map Unit Setting

Elevation: 800 to 1,450 feet

Mean annual precipitation: 6 to 8 inches

Mean annual air temperature: 69 to 74 degrees F

Frost-free period: 250 to 300 days

Map Unit Composition

Maripo and similar soils: 100 percent

Description of Maripo

Setting

Landform: Alluvial fans, flood plains, stream terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread, dip

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Recent mixed alluvium

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 13.0

Available water capacity: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 3s

Land capability (nonirrigated): 7s

Ecological site: Sandy Wash 7-10" p.z. (R040XB216AZ)

Typical profile

0 to 13 inches: Sandy loam

13 to 34 inches: Sandy loam

34 to 60 inches: Gravelly sand

Mp—Mohall loam

Map Unit Setting

Elevation: 1,000 to 1,450 feet
Mean annual precipitation: 6 to 8 inches
Mean annual air temperature: 68 to 74 degrees F
Frost-free period: 250 to 300 days

Map Unit Composition

Mohall and similar soils: 100 percent

Description of Mohall

Setting

Landform: Plains, alluvial fans
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Mixed alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability (nonirrigated): 7c
Ecological site: Loamy Upland 7-10" p.z. (R040XB213AZ)

Typical profile

0 to 12 inches: Loam
12 to 26 inches: Clay loam
26 to 35 inches: Clay loam
35 to 42 inches: Loam
42 to 60 inches: Very fine sandy loam

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Vegetative Productivity

Vegetative productivity includes estimates of potential vegetative production for a variety of land uses, including cropland, forestland, hayland, pastureland, horticulture and rangeland. In the underlying database, some states maintain crop yield data by individual map unit component. Other states maintain the data at the map unit level. Attributes are included for both, although only one or the other is likely to contain data for any given geographic area. For other land uses, productivity data is shown only at the map unit component level. Examples include potential crop yields under irrigated and nonirrigated conditions, forest productivity, forest site index, and total rangeland production under of normal, favorable and unfavorable conditions.

Yields of Irrigated Crops (Map Unit): Alfalfa hay (Tons) (Alternative 1 & 2 Northern Parkway)

These are the estimated average yields per acre that can be expected of selected irrigated crops under a high level of management. In any given year, yields may be higher or lower than those indicated because of variations in rainfall and other climatic factors. It is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

In the database, some states maintain crop yield data by individual map unit component and others maintain the data at the map unit level. Attributes are included in this application for both, although only one or the other is likely to contain data for any given geographic area. This attribute uses data maintained at the map unit level.

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The yields are actually recorded as three separate values in the database. A low value and a high value indicate the range for the soil component. A "representative" value indicates the expected value for the component. For these yields, only the representative value is used.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby areas and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for the selected crop. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Soil Ratings

 ≤ 4

 > 4 AND ≤ 5

 > 5 AND ≤ 7

 > 7 AND ≤ 8.5

 > 8.5 AND ≤ 9

 Not rated or not available

Political Features

 Cities

Water Features

 Oceans

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

MAP INFORMATION

Map Scale: 1:39,000 if printed on A size (8.5" x 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 12N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Maricopa County, Arizona, Central Part
Survey Area Data: Version 6, Aug 29, 2008

Date(s) aerial images were photographed: 9/6/1992

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

**Table—Yields of Irrigated Crops (Map Unit): Alfalfa hay (Tons)
(Alternative 1 & 2 Northern Parkway)**

Yields of Irrigated Crops (Map Unit): Alfalfa hay (Tons)— Summary by Map Unit — Maricopa County, Arizona, Central Part				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AbA	Antho sandy loam, 0 to 1 percent slopes	7.00	36.3	22.9%
Ae	Antho-Brios sandy loams	4.00	4.0	2.6%
Bs	Brios sandy loam	4.00	10.2	6.4%
Es	Estrella loam	9.00	24.4	15.4%
GgA	Gilman loam, 0 to 1 percent slopes	9.00	73.2	46.3%
La	La Palma very fine sandy loam	4.00	2.9	1.9%
LcA	Laveen loam, 0 to 1 percent slopes	9.00	1.3	0.8%
Ma	Maripo sandy loam	5.00	3.8	2.4%
Mp	Mohall loam	8.50	2.2	1.4%
Totals for Area of Interest			158.3	100.0%

**Rating Options—Yields of Irrigated Crops (Map Unit): Alfalfa hay
(Tons) (Alternative 1 & 2 Northern Parkway)**

Crop: Alfalfa hay

Yield Units: Tons

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Higher

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Prime and other Important Farmlands (Alternative 1 & 2 Northern Parkway)

This table lists the map units in the survey area that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable

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acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

For some of the soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Report—Prime and other Important Farmlands (Alternative 1 & 2 Northern Parkway)

Prime and other Important Farmlands— Maricopa County, Arizona, Central Part		
Map Symbol	Map Unit Name	Farmland Classification
AbA	Antho sandy loam, 0 to 1 percent slopes	Prime farmland if irrigated
Ae	Antho-Brios sandy loams	Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

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Prime and other Important Farmlands– Maricopa County, Arizona, Central Part		
Map Symbol	Map Unit Name	Farmland Classification
Bs	Brios sandy loam	Farmland of unique importance
Es	Estrella loam	Prime farmland if irrigated
GgA	Gilman loam, 0 to 1 percent slopes	Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
La	La Palma very fine sandy loam	Farmland of unique importance
LcA	Laveen loam, 0 to 1 percent slopes	Prime farmland if irrigated
Ma	Maripo sandy loam	Prime farmland if irrigated
Mp	Mohall loam	Prime farmland if irrigated

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United States
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NRCS

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A product of the National
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Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Maricopa County, Arizona, Central Part

Northern Parkway Alternative 3



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nracs>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

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individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

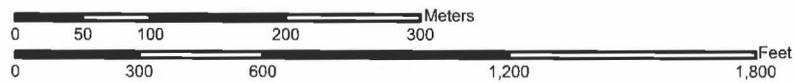
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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Soil Map (Alternative 3 Northern Parkway)



Map Scale: 1:5,580 if printed on A size (8.5" x 11") sheet.



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MAP LEGEND

Area of Interest (AOI)			Very Stony Spot
	Area of Interest (AOI)		Wet Spot
Soils			Other
	Soil Map Units	Special Line Features	
Special Point Features			Gully
	Blowout		Short Steep Slope
	Borrow Pit		Other
	Clay Spot	Political Features	
	Closed Depression		Cities
	Gravel Pit	Water Features	
	Gravelly Spot		Oceans
	Landfill		Streams and Canals
	Lava Flow	Transportation	
	Marsh or swamp		Rails
	Mine or Quarry		Interstate Highways
	Miscellaneous Water		US Routes
	Perennial Water		Major Roads
	Rock Outcrop		Local Roads
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		
	Spoil Area		
	Stony Spot		

MAP INFORMATION

Map Scale: 1:5,580 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 12N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Maricopa County, Arizona, Central Part
 Survey Area Data: Version 6, Aug 29, 2008

Date(s) aerial images were photographed: 9/6/1992

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (Alternative 3 Northern Parkway)

Maricopa County, Arizona, Central Part (AZ651)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LcA	Laveen loam, 0 to 1 percent slopes	4.8	45.2%
Mr	Mohall clay loam	3.9	36.5%
Tw	Tucson clay loam	1.9	18.3%
Totals for Area of Interest		10.6	100.0%

Map Unit Descriptions (Alternative 3 Northern Parkway)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that

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have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Maricopa County, Arizona, Central Part

LcA—Laveen loam, 0 to 1 percent slopes

Map Unit Setting

Elevation: 800 to 1,400 feet

Mean annual precipitation: 6 to 8 inches

Mean annual air temperature: 69 to 73 degrees F

Frost-free period: 250 to 300 days

Map Unit Composition

Laveen and similar soils: 100 percent

Description of Laveen

Setting

Landform: Alluvial fans, plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Mixed alluvium

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 13.0

Available water capacity: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 1

Land capability (nonirrigated): 7c

Ecological site: Limy Fan 7-10" p.z. (R040XB207AZ)

Typical profile

0 to 15 inches: Loam

15 to 50 inches: Loam

50 to 72 inches: Gravelly loam

Mr—Mohall clay loam

Map Unit Setting

Elevation: 1,000 to 1,450 feet

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Mean annual precipitation: 6 to 8 inches
Mean annual air temperature: 68 to 74 degrees F
Frost-free period: 250 to 300 days

Map Unit Composition

Mohall and similar soils: 100 percent

Description of Mohall

Setting

Landform: Alluvial fans, plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Mixed alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 13.0
Available water capacity: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability (nonirrigated): 7c
Ecological site: Clay Loam Upland 7-10" p.z. (R040XB205AZ)

Typical profile

0 to 12 inches: Clay loam
12 to 26 inches: Clay loam
26 to 35 inches: Clay loam
35 to 42 inches: Loam
42 to 60 inches: Very fine sandy loam

Tw—Tucson clay loam

Map Unit Setting

Elevation: 800 to 1,400 feet
Mean annual precipitation: 6 to 8 inches
Mean annual air temperature: 68 to 74 degrees F
Frost-free period: 250 to 290 days

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Map Unit Composition

Tucson and similar soils: 100 percent

Description of Tucson

Setting

Landform: Alluvial fans, plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Mixed alluvium

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 13.0

Available water capacity: High (about 11.5 inches)

Interpretive groups

Land capability classification (irrigated): 1

Land capability (nonirrigated): 7c

Ecological site: Limy Fan 7-10" p.z. (R040XB207AZ)

Typical profile

0 to 14 inches: Clay loam

14 to 65 inches: Clay loam

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Vegetative Productivity

Vegetative productivity includes estimates of potential vegetative production for a variety of land uses, including cropland, forestland, hayland, pastureland, horticulture and rangeland. In the underlying database, some states maintain crop yield data by individual map unit component. Other states maintain the data at the map unit level. Attributes are included for both, although only one or the other is likely to contain data for any given geographic area. For other land uses, productivity data is shown only at the map unit component level. Examples include potential crop yields under irrigated and nonirrigated conditions, forest productivity, forest site index, and total rangeland production under of normal, favorable and unfavorable conditions.

Yields of Irrigated Crops (Map Unit): Alfalfa hay (Tons) (Alternative 3 Northern Parkway)

These are the estimated average yields per acre that can be expected of selected irrigated crops under a high level of management. In any given year, yields may be higher or lower than those indicated because of variations in rainfall and other climatic factors. It is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

In the database, some states maintain crop yield data by individual map unit component and others maintain the data at the map unit level. Attributes are included in this application for both, although only one or the other is likely to contain data for any given geographic area. This attribute uses data maintained at the map unit level.

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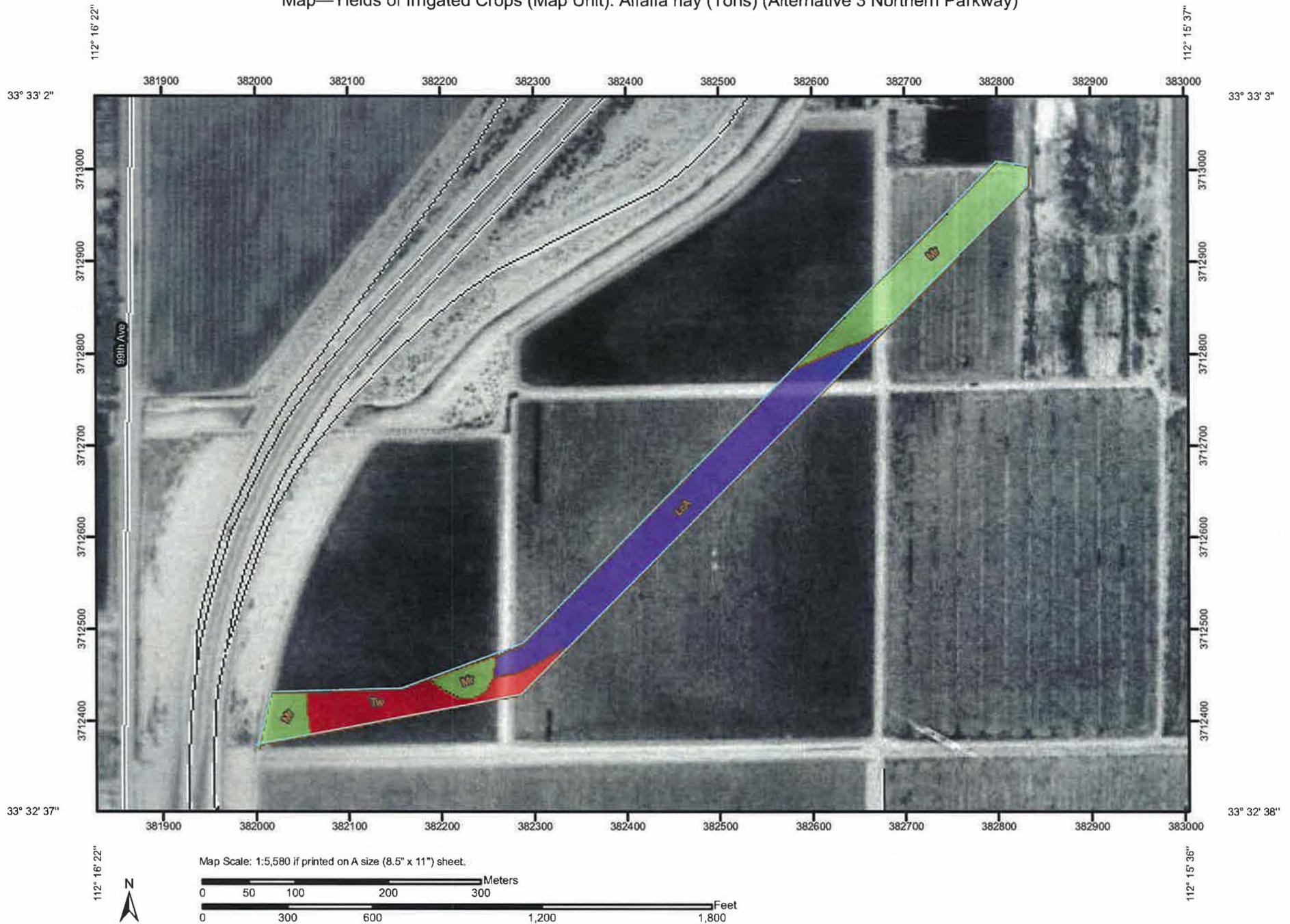
The yields are actually recorded as three separate values in the database. A low value and a high value indicate the range for the soil component. A "representative" value indicates the expected value for the component. For these yields, only the representative value is used.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby areas and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for the selected crop. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

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Map—Yields of Irrigated Crops (Map Unit): Alfalfa hay (Tons) (Alternative 3 Northern Parkway)



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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Soil Ratings

 ≤ 7.8

 > 7.8 AND ≤ 8

 > 8 AND ≤ 9

 Not rated or not available

Political Features

 Cities

Water Features

 Oceans

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

MAP INFORMATION

Map Scale: 1:5,580 if printed on A size (8.5" x 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 12N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Maricopa County, Arizona, Central Part
Survey Area Data: Version 6, Aug 29, 2008

Date(s) aerial images were photographed: 9/6/1992

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

**Table—Yields of Irrigated Crops (Map Unit): Alfalfa hay (Tons)
(Alternative 3 Northern Parkway)**

Yields of Irrigated Crops (Map Unit): Alfalfa hay (Tons)— Summary by Map Unit — Maricopa County, Arizona, Central Part				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
LcA	Laveen loam, 0 to 1 percent slopes	9.00	4.8	45.2%
Mr	Mohall clay loam	8.00	3.9	36.5%
Tw	Tucson clay loam	7.80	1.9	18.3%
Totals for Area of Interest			10.6	100.0%

**Rating Options—Yields of Irrigated Crops (Map Unit): Alfalfa hay
(Tons) (Alternative 3 Northern Parkway)**

Crop: Alfalfa hay

Yield Units: Tons

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Higher

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Prime and other Important Farmlands (Alternative 3 Northern Parkway)

This table lists the map units in the survey area that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable

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acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

For some of the soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Report—Prime and other Important Farmlands (Alternative 3 Northern Parkway)

Prime and other Important Farmlands— Maricopa County, Arizona, Central Part		
Map Symbol	Map Unit Name	Farmland Classification
LcA	Laveen loam, 0 to 1 percent slopes	Prime farmland if irrigated
Mr	Mohall clay loam	Prime farmland if irrigated
Tw	Tucson clay loam	Prime farmland if irrigated

Vegetative Productivity

This folder contains a collection of tabular reports that present vegetative productivity data. The reports (tables) include all selected map units and components for each map unit. Vegetative productivity includes estimates of potential vegetative production for a variety of land uses, including cropland, forestland, hayland, pastureland, horticulture and rangeland. In the underlying database, some states maintain crop yield data by individual map unit component. Other states maintain the data at the map unit level. Attributes are included for both, although only one or the other is likely to contain data for any given geographic area. For other land uses, productivity data is shown only at the map unit component level. Examples include potential crop yields under irrigated and nonirrigated conditions, forest productivity, forest site index, and total rangeland production under of normal, favorable and unfavorable conditions.

Irrigated Yields by Map Unit (Alternative 3 Northern Parkway)

The average yields per acre that can be expected of the principal crops under a high level of management are shown in this table. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

If yields of irrigated crops are given, it is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

Pasture yields are expressed in terms of animal unit months. An animal unit month (AUM) is the amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in the table are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

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The land capability classification of map units in the survey area is shown in this table. This classification shows, in a general way, the suitability of soils for most kinds of field crops (United States Department of Agriculture, Soil Conservation Service, 1961). Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels: capability class, subclass, and unit.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

- Class 1 soils have slight limitations that restrict their use.
- Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.
- Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
- Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
- Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.
- Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2*e*. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally

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designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4 and 3e-6. These units are not given in all soil surveys.

Reference:

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

Report—Irrigated Yields by Map Unit (Alternative 3 Northern Parkway)

Irrigated Yields by Map Unit- Maricopa County, Arizona, Central Part		
Map symbol and soil name	Land capability	Alfalfa hay
		<i>Tons</i>
LcA—Laveen loam, 0 to 1 percent slopes		9.00
Laveen	1	
Mr—Mohall clay loam		8.00
Mohall	1	
Tw—Tucson clay loam		7.80
Tucson	1	

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United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.



TOHONO O'ODHAM NATION

OFFICE OF THE CHAIRMAN AND VICE CHAIRMAN

We:sij T-we:m

ALL OF US TOGETHER

NED NORRIS JR.
CHAIRMAN

ISIDRO LOPEZ
VICE CHAIRMAN

October 29, 2009

Via facsimile (602-371-1615) and electronic mail (contact@northernparkway-info.com)

Sunny Bush
URS Corporation
7720 N 16th Street, Suite 100
Phoenix, AZ 85020

Re: Tohono O'odham Nation Comments on Draft Environmental Assessment for Northern Parkway, Maricopa County

Dear Ms. Bush;

The Tohono O'odham Nation is a federally recognized Indian tribe that owns approximately 135 acres of land southwest of the intersection of Northern and 91st Avenues. The Nation has filed an application with the United States Department of the Interior to have the property taken into trust for the Nation's benefit.

The Nation intends to construct and operate a destination resort and casino on the property, with currently planned amenities including a six -hundred-room hotel, a convention center, a multi-use event center, a spa, and a variety of restaurants. The Nation's property will be significantly impacted by the proposed Northern Parkway project, as two of the proposed routes would be adjacent to the Nation's property and one would run through the Nation's property. Each of the alternatives also assumes that a portion of the Nation's property will be dedicated to the parkway project.

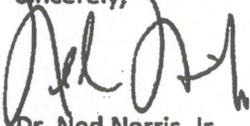
The Nation has reviewed the Draft Environmental Assessment for the Northern Parkway dated July 2009 (the "EA"), which identifies the following purposes for the project:

"to serve population growth, improve travel time, provide regional connectivity, improve regional facility spacing, provide a crossing at the Agua Fria River, improve west-east traffic flow, implement regional plans, reduce crash rates, reduce congestion, and improve emergency response times."

The Nation recognizes and appreciates the importance of these goals and the resulting need for all interested governments, including the Nation, to work together to support this project. Many affected parties have had the opportunity to meet with project partners to discuss impacts on their properties and to attempt to mitigate any negative impacts. The Nation likewise looks forward to meeting with Northern Parkway project partners to discuss specific impacts on the Nation's property and to work cooperatively to mitigate any negative impacts.

The Northern Parkway project will significantly benefit the Nation, other area landowners, and the West Valley as a whole. Anticipating future collaboration with project partners, the Nation supports either Alternative 1 or Alternative 2 for the Northern Parkway project, as identified in the EA. The Nation looks forward to working cooperatively with all stakeholders to move this project from concept to completion.

Sincerely,



Dr. Ned Norris, Jr.

Chairman

Tohono O'odham Nation



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
ARIZONA-NEVADA AREA OFFICE
3636 NORTH CENTRAL AVENUE, SUITE 900
PHOENIX, ARIZONA 85012

October 15, 2009

REPLY TO
ATTENTION OF:

Office of the Chief
Regulatory Division

Maricopa County Department of Transportation
c/o Lou Maslyk
URS Corporation
7720 North 16th Street, Suite 100
Phoenix, Arizona 85020

File Number: SPL-2008-00925-SDM

Dear Mr. Maslyk:

Reference is made to the September 29, 2009 request on behalf of the Maricopa County Department of Transportation for a Department of Army review of an Environmental Assessment for the proposed Northern Parkway (Section 36 of T3N, R2W; Section 31-36 of T3N, R1W; and Section 31-36 of T3N, R1E), Maricopa County, Arizona.

The Corps of Engineers regulates the discharge of dredged and/or fill material into waters of the U.S. including wetlands under Section 404 of the Clean Water Act. Examples of activities requiring a permit include but are not limited to placing bank protection, temporary or permanent stockpiling, grading including vegetative clearing operations, road or pad fills, any other activity that involves the filling of low areas or leveling of the land, and discharging dredged or fill material into waters of the U.S. as part of any other activity or any work at all which results in a change to the existing elevation of a water of the U.S.

The proposed activity may require a permit under Section 404; however, there was not enough information for us to make this determination. Please provide more detailed information at your earliest convenience so we may make a determination. Please reference File Number SPL-2008-00925-SDM.

The receipt of your letter is appreciated. If you have questions, please contact William Miller at (602) 640-5385 ext 221.

Sincerely,

A handwritten signature in blue ink that reads "Sallie McGuire".

Sallie McGuire
Chief, Arizona Branch
Regulatory Division

Enclosure