Addendum

Re	Addendum to the Prime and Unique Farmland Report		
Project	Environmental Impact Statement: South Mountain Transportation Corridor in Maricopa County, Arizona		
Project numbers	Federal-aid Project Number: NH-202-D(ADY) ADOT Project Number: 202L MA 054 H5764 01L	Date	June 2014

Since publication of the Draft Environmental Impact Statement (DEIS), all technical reports supporting the DEIS have been updated to reflect current conditions. Changes to the Prime and Unique Farmland Report are underlined and presented below.

The primary update to this technical report involved examining the 2013 aerial photography and assessing agricultural lands converted to development. The Farmland Conversion Impact Rating for Corridor Type Projects form (NRCS-CPA-106) was resubmitted to the Natural Resources Conservation Service for scoring. Although the scoring update resulted in some alternatives falling below the 160-point threshold for protection consideration, the conclusions, in general, did not change. The update did not result in changes to the mitigation.

1. Project Description and Purpose and Need

Page 1-3, paragraph 4:

- From 1980 to 2010, the Maricopa County population more than doubled, from 1.5 million to 3.8 million.
- Phoenix is now the sixth-largest city in the country, and the region ranks as the 13th-largest metropolitan area in the country.

Page 1-3, paragraph 5:

- MAG projections (conducted in collaboration with the Arizona Department of Economic Security) indicate Maricopa County's population will increase from 3.8 million in 2010 to 5.8 million in 2035 (MAG 2013). It is projected that in the next 25 years, daily vehicle miles traveled will increase from 91 million to 149 million.

Page 1-4, paragraph 1:

- Even with anticipated improvements in light rail service, bus service, trip-reduction programs, and existing roads and freeways, vehicle traffic volumes are expected to exceed the capacity of Phoenix metropolitan area streets and highways by as much as 18 percent in 2035.
- A freeway within the SMTC would accommodate approximately 11 percentage points of the 18 percent of the unmet travel demand and would be part of an overall traffic solution.

2. Affected Environment

Page 2-1, paragraph 1:

- The Farmland Protection Policy Act (FPPA) (U.S.C. §§ 4201–4209 and 7 Code of Federal Regulations [C.F.R.] § 658) states that "the purpose of the Act is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses."

Existing Prime and Unique Farmland

Page 2-5:

Figure 2: Prime and Unique Farmland in the Study Area (see page 4 of this addendum)

3. Environmental Consequences

Impacts Associated with All Action Alternatives and Options

Page 3-2: Table 2

Table 2. Prime Farmland Impact Rating Analysis

Alternative/Alignment Option	Impact Rating Total Points
Western Section	
W59	159
W71	160
W101WPR	159
W101WFR	161
W101CPR	152
W101CFR	158
W101EPR	159
W101EFR	160
Eastern Section	
E1	103

Western Section Action Alternatives

Page 3-2: Table 3

Table 3. Farmland Conversion Acreage for Western Section Alternatives

Western Section Alternative/Alignment Option	Total Acreage to be Converted Directly (Part III of the NRCS-CPA-106 Form)
W59	588
W71	501
W101WPR	788
W101WFR	779
W101CPR	746
W101CFR	737
W101EPR	744
W101EFR	735

Page 3-3, paragraph 1:

- The combined LESA scores (Parts V and VI) for some of the action alternatives in the Western Section are 160 points or greater; therefore, technical assistance would be requested from the NRCS for the action alternatives in the Western Section.

Eastern Section Action Alternative

Page 3-3: Table 4

Table 4. Farmland Conversion Acreage for Eastern Section Alternative

Eastern Section Alternative/Alignment Option	Total Acreage to be Converted Directly (Part III of the NRCS-CPA-106 Form)
E1	135

4. Mitigation

Page 4-1, paragraph 1:

- The following describes potential mitigation measures for ADOT to consider as future commitments to be implemented as part of the project to avoid, reduce, or otherwise mitigate environmental impacts associated with the project. The discussion of these measures in this report does not obligate ADOT to these specific measures. ADOT, along with FHWA, may choose to modify, delete, or add measures to mitigate impacts. Final obligation of mitigation measures would be made in the record of decision.

5. Bibliography/References

Maricopa Area Governments (MAG). 2013. *Socioeconomic Projections: Population, Housing, and Employment by Municipal Planning Area and Regional Analysis Zone*. Phoenix.

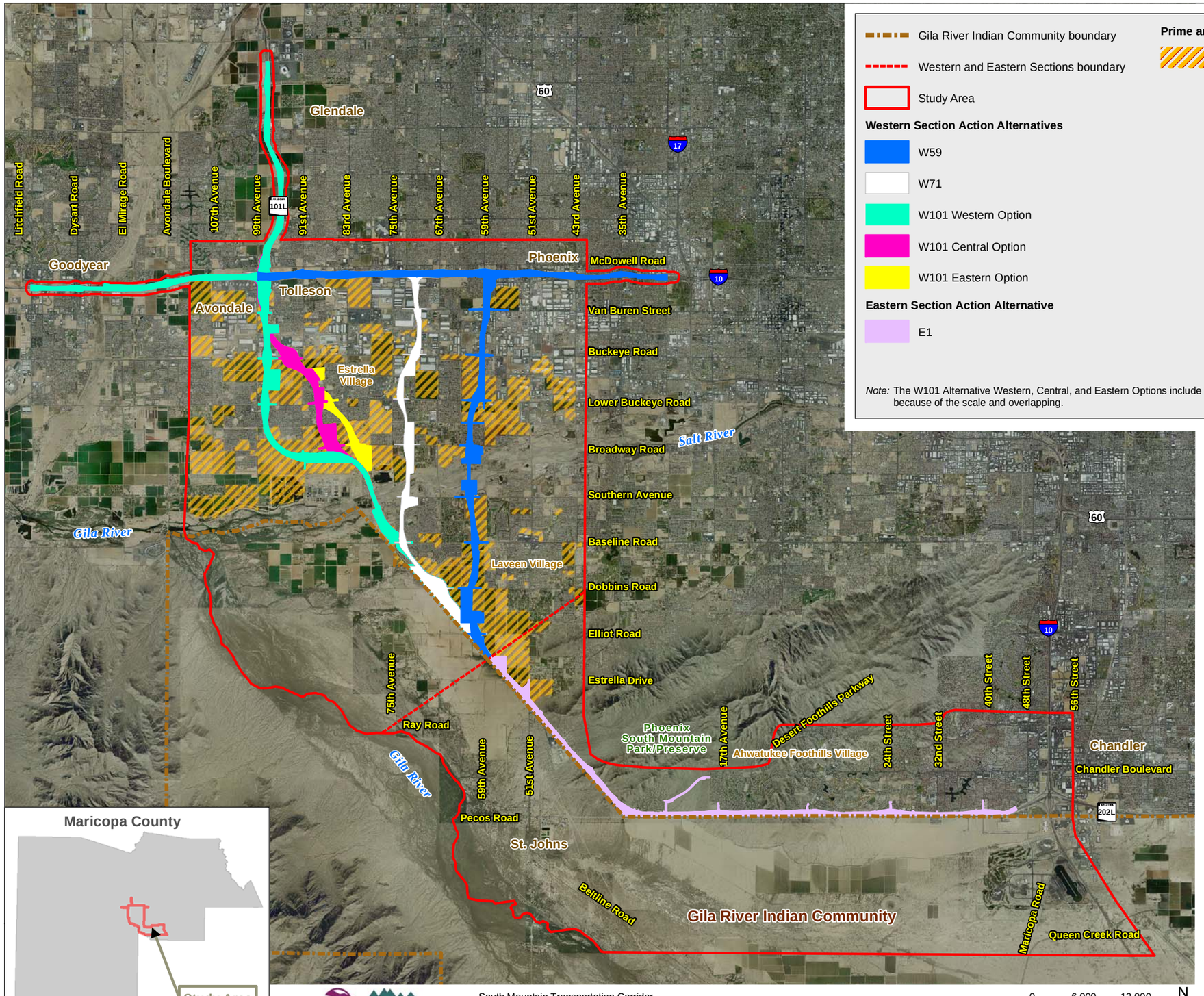

Figure 2

Prime and Unique Farmland in the Study Area

Prime and Unique Farmland Report

Source: HDR

Aerial photography date: July 2013

Appendix A

Title: Farmland Conversion Impact Rating for Corridor Type Projects (NRCS-CPA-106).
Scoring completed on January 31, 2014.

United States Department of Agriculture

NRCS

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

JAN 31 2014

Audrey Unger
HDR Engineering
3200 East Camelback Road, Suite 350
Phoenix, Arizona 85018

RE: Updated NRCS-CPA-106 FPPA Farmland Conversion Impact Rating
South Mountain Freeway

Dear Audrey Unger:

The Natural Resources Conservation Service (NRCS) has general responsibility, nationwide, for implementing the Farmland Protection Policy Act (FPPA) and reviewing projects that may affect prime and unique important farmland and/or wetlands associated with agriculture. This is an update to the NRCS-CPA-106 form for the South Mountain Freeway.

After reviewing information you provided, the following is noted:

1. The proposed project is subject to the FPPA because they are funded by a Federal agency or program (United States Code 4201 and 7 Code of Federal Regulations 658).

2. Analysis of 2013 NAIP Imagery for Arizona, along with the updated prime and unique farmland designation, reveals that the proposed project area has been changed since the previous evaluation.

Because this area is prime and unique farmland, we have modified the original NRCS-CPA-106 form (Farmland Conversion Impact Rating for Corridor Type Projects), which includes alternative corridors for the South Mountain Transportation Corridor (W59, W71, W101WFR, W101CPR, W101EPR, W101WPR, W101CFR, E1, W101EFR). Please select your preferred alternative by completing and returning the enclosed NRCS-CPA-106 form at your earliest convenience.

Should you have any questions, please contact Andrew Burnes, GIS Specialist, at 602-280-8840, or via email at andrew.burnes@az.usda.gov. Thank you for the opportunity to review the proposed project.

Sincerely,

KEISHA L. TATEM
State Conservationist

Enclosure

Helping People Help the Land

An Equal Opportunity Provider and Employer

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request **11/18/13**	4. Sheet 1 of 3
1. Name of Project **South Mountain Transportation Corridor**	5. Federal Agency Involved **Federal Highway Administration**	
2. Type of Project **EIS/LDCR**	6. County and State **Maricopa County, Arizona**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **11/18/13**	2. Person Completing Form **Andrew Burnes**	
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 ☑ NO ☐		4. Acres Irrigated **267,295**	Average Farm Size **302**
5. Major Crop(s) **alfalfa, cotton, grains**	6. Farmable Land in Government Jurisdiction Acres: **267,295** % **3.2**	7. Amount of Farmland As Defined in FPPA Acres: **190,182** % **3.2**	
8. Name Of Land Evaluation System Used **N/A**	9. Name of Local Site Assessment System **N/A**	10. Date Land Evaluation Returned by NRCS	

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment - Western Section			
	W59	**W71**	**W101WFR**	**W101CPR**
A. Total Acres To Be Converted Directly	**588**	**501**	**779**	**746**
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor	**588**	**501**	**779**	**746**
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	**588**	**501**	**779**	**746**
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	**24**	**25**	**25**	**23**
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)*	85	87	87	81
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	**10**	**9**	**10**	**9**
2. Perimeter in Nonurban Use — 10	**7**	**7**	**7**	**6**
3. Percent Of Corridor Being Farmed — 20	**12**	**12**	**12**	**11**
4. Protection Provided By State And Local Government — 20	**0**	**0**	**0**	**0**
5. Size of Present Farm Unit Compared To Average — 10	**5**	**5**	**5**	**5**
6. Creation Of Nonfarmable Farmland — 25	**10**	**10**	**10**	**10**
7. Availablility Of Farm Support Services — 5	**3**	**3**	**3**	**3**
8. On-Farm Investments — 20	**15**	**15**	**15**	**15**
9. Effects Of Conversion On Farm Support Services — 25	**8**	**8**	**8**	**8**
10. Compatibility With Existing Agricultural Use — 10	**4**	**4**	**4**	**4**
TOTAL CORRIDOR ASSESSMENT POINTS — 160	**74**	**73**	**74**	**71**
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V) — 100	85	87	87	81
Total Corridor Assessment (From Part VI above or a local site assessment) — 160	**74**	**73**	**74**	**71**
TOTAL POINTS *(Total of above 2 lines)* — 260	159	160	161	152

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 ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: | DATE

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

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FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request **11/18/13**	4. Sheet 2 of 3
1. Name of Project **South Mountain Transportation Corridor**	5. Federal Agency Involved **Federal Highway Administration**	
2. Type of Project **EIS/LDCR**	6. County and State **Maricopa County, Arizona**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **11/18/13**	2. Person Completing Form **Andrew Burnes**
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 ☑ NO ☐		4. Acres Irrigated **267,295** / Average Farm Size **302**
5. Major Crop(s) **alfalfa, cotton, grains**	6. Farmable Land in Government Jurisdiction Acres: **267,295** % **3.2**	7. Amount of Farmland As Defined in FPPA Acres: **190,182** % **3.2**
8. Name Of Land Evaluation System Used **N/A**	9. Name of Local Site Assessment System **N/A**	10. Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment - Western Section			
	W101EPR	**W101WPR**		**W101CFR**
A. Total Acres To Be Converted Directly	**744**	**788**		**737**
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor	**744**	**788**		**737**
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	**744**	**788**		**737**
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	**21**	**23**		**25**
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)*	88	85		85
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	**9**	**10**		**9**
2. Perimeter in Nonurban Use — 10	**6**	**7**		**7**
3. Percent Of Corridor Being Farmed — 20	**11**	**12**		**12**
4. Protection Provided By State And Local Government — 20	**0**	**0**		**0**
5. Size of Present Farm Unit Compared To Average — 10	**5**	**5**		**5**
6. Creation Of Nonfarmable Farmland — 25	**10**	**10**		**10**
7. Availablility Of Farm Support Services — 5	**3**	**3**		**3**
8. On-Farm Investments — 20	**15**	**15**		**15**
9. Effects Of Conversion On Farm Support Services — 25	**8**	**8**		**8**
10. Compatibility With Existing Agricultural Use — 10	**4**	**4**		**4**
TOTAL CORRIDOR ASSESSMENT POINTS — 160	**71**	**74**		**73**
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V) — 100	88	85		85
Total Corridor Assessment (From Part VI above or a local site assessment) — 160	**71**	**74**		**73**
TOTAL POINTS *(Total of above 2 lines)* — 260	159	159		158

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~~ ☐ ~~NO~~ ☐

5. Reason For Selection:

Signature of ~~Person Completing this Part:~~ | ~~DATE~~

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

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FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request	4. Sheet 3 of 3
1. Name of Project **South Mountain Transportation Corridor**	5. Federal Agency Involved **Federal Highway Administration**	
2. Type of Project **EIS**	6. County and State **Maricopa County, Arizona**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **11/18/13**	2. Person Completing Form **Andrew Burnes**	
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 ☑ NO ☐		4. Acres Irrigated **267,295**	Average Farm Size **302**
5. Major Crop(s) **alfalfa, cotton, grains**	6. Farmable Land in Government Jurisdiction **Acres: 267,295** **% 3.2**	7. Amount of Farmland As Defined in FPPA **Acres: 190,182** **% 3.2**	
8. Name Of Land Evaluation System Used **N/A**	9. Name of Local Site Assessment System **N/A**	10. Date Land Evaluation Returned by NRCS	

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Western & Eastern Sections			
	W101EFR	**E1**		
A. Total Acres To Be Converted Directly	**735**	**135**		
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor	**735**	**135**		
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	**735**	**135**		
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	**22**	**22**		
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)*	88	88		
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	**9**	**6**		
2. Perimeter in Nonurban Use — 10	**6**	**5**		
3. Percent Of Corridor Being Farmed — 20	**12**	**0**		
4. Protection Provided By State And Local Government — 20	**0**	**0**		
5. Size of Present Farm Unit Compared To Average — 10	**5**	**0**		
6. Creation Of Nonfarmable Farmland — 25	**10**	**0**		
7. Availablility Of Farm Support Services — 5	**3**	**0**		
8. On-Farm Investments — 20	**15**	**0**		
9. Effects Of Conversion On Farm Support Services — 25	**8**	**0**		
10. Compatibility With Existing Agricultural Use — 10	**4**	**4**		
TOTAL CORRIDOR ASSESSMENT POINTS — 160	**72**	**15**		
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V) — 100	88	88		
Total Corridor Assessment (From Part VI above or a local site assessment) — 160	**72**	**15**		
TOTAL POINTS *(Total of above 2 lines)* — 260	160	103		

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 ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: | DATE

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

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points