

Chapter 33  
FARMLAND IMPACTS

**MDT ENVIRONMENTAL MANUAL**

*October 2010*



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## Chapter 33

# FARMLAND IMPACTS

### 33.1 OVERVIEW

Agriculture is a dynamic economic force in Montana and remains one of the State's most important industries. Although no State or Federal law explicitly prohibits conversion of agricultural land to other uses, the State and Federal government, and many local jurisdictions, have established policies and programs to encourage and support preservation of farmland for agricultural use. Despite these efforts, urban growth and development continue to convert agricultural land to other uses. Montana has nearly 60 million acres of farmland and while individual farmland losses may seem minor in comparison, each conversion can take on much greater significance when the quality of the land affected, the location and the impacts on local economics are considered.

Many of MDT's proposed projects are located in rural/agricultural areas and, therefore, have the potential to impact farmlands. MDT strives to minimize impacts to prime, prime if irrigated, unique and locally important farmlands.

The physical effects of a project located on farmland may go beyond the direct conversion of farmland. For instance, agricultural land that remains in production may be severed by new construction, and the proximity of a new or expanded roadway or other facilities may have other effects on a farm or ranch that increase its operational costs.

The Federal regulatory process authorized by the *Farmland Protection Policy Act* and described in the associated implementing regulations in 7 CFR 658 outlines the procedure for analyzing and addressing potential farmland impacts of projects with Federal involvement.

The following sections provide guidance for analyzing the impacts a project may have on farmland and for evaluating alternatives to minimize farmland conversion and other project-related farmland impacts.

## 33.2 LAWS, REGULATIONS AND GUIDANCE

### 33.2.1 7 USC 4201-4209 “Farmland Protection Policy”

These *United States Code* (USC) Sections codify the provisions of the *Farmland Protection Policy Act* (FPPA). The FPPA provides important protections to farmland but it does not authorize the Federal government to regulate the use of private or non-Federal land or, in any way, affect the property rights of owners. The FPPA’s stated purpose is:

*...to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government and private programs and policies to protect farmland.*

The FPPA defines the term “farmland” only as prime farmland, unique farmland and farmland of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forestland, pastureland, cropland or other land, but not water or urban built-up land.

### 33.2.2 7 CFR 658 “Farmland Protection Policy Act”

The Natural Resources Conservation Service (NRCS) of the US Department of Agriculture has issued regulations in Title 7 of the *Code of Federal Regulations* (CFR), Part 658 that implement the provisions of the FPPA. The purpose of these regulations is to set forth criteria for identifying the effects of Federal programs on the conversion of farmland to nonagricultural uses. Federal agencies are required:

- to use the criteria to identify and take into account the adverse effects of their programs on the preservation of farmland;
- to consider alternative actions, as appropriate, that could lessen adverse effects; and
- to ensure that their programs, to the extent practicable, are compatible with State, units of local government and private programs and policies to protect farmland.

The regulations affirm that “farmland” subject to the requirements of the FPPA only includes prime or unique farmland or farmland that is determined by the appropriate State or unit of local government agency or agencies, with the concurrence of the Secretary of Agriculture, to be farmland of statewide or local importance. The regulations include the following definitions of these terms:

1. Prime Farmland. Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops, and is also available for these uses (i.e., land that could be cropland, pastureland, rangeland, forest land or other land, but not urban built-up land or water). It has the soil quality, growing season and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. In general, prime farmlands have an adequate and

dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, few or no rocks and are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time and do not flood frequently or are protected from flooding.

2. Unique Farmland. Land other than prime farmland that is used for production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods (e.g., citrus, tree nuts, olives, cranberries, fruits, vegetables).
3. Additional Farmland of Statewide Importance. Land in addition to prime farmland and unique farmland that is of statewide importance for the production of food, feed, fiber, forage or oilseed crops. Criteria for defining and delineating this land are to be determined by the appropriate State agency or agencies. Generally, additional farmlands of statewide importance include those that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmlands if conditions are favorable.
4. Additional Farmland of Local Importance. In some local areas, there is concern for certain additional farmlands for the production of food, feed, fiber, forage and oilseed crops, even though these lands are not identified as having national or statewide importance. Where appropriate, these lands are to be identified by the local agency or agencies concerned.

### **33.2.3 23 USC 139 “Efficient Environmental Reviews for Project Decision-Making”**

For projects involving preparation of an environmental impact statement and for environmental assessments being prepared in accordance with the FHWA “SAFETEA-LU Environmental Review Process Final Guidance,” this part of the USC requires that, at appropriate times during the study process, the lead agency or agencies for the project collaborate with agencies serving as participating agencies to determine the methodologies to be used and the level of detail required for assessing impacts, including farmland impacts. See [Chapters 11 “Preparing Environmental Documentation,” 13 “Environmental Assessment/FONSI”](#) and [14 “Environmental Impact Statement/ROD”](#) for further guidance on this requirement.

### **33.2.4 FHWA Technical Advisory T 6640.8A**

The FHWA Technical Advisory T 6640.8A, dated October 30, 1987, includes guidance for addressing farmland impacts and documenting the results in a project’s environmental documentation.

The guidance notes that farmland includes prime, unique, other than prime or unique land that is of statewide importance, and other than prime or unique land that is of local importance.

The Advisory also indicates that the environmental document should summarize the results of early consultation with the Natural Resources Conservation Service (NRCS) (formerly the Soil Conservation Service (SCS)) and, as appropriate, State and local agriculture agencies where any of the four specified types of farmland could be directly or indirectly impacted by any alternative under consideration. Where farmland would be impacted, include a map showing the location of all farmlands in the project impact area, discuss the impacts of the various alternatives and identify measures to avoid or reduce the impacts in the draft environmental document. Process the appropriate Farmland Conversion Impact Rating Form (either AD 1006 or CPA 106) and include a copy in the environmental document.

Where the Land Evaluation and Site Assessment Score (from the Farmland Conversion Impact Rating Form) is 160 points or greater, submit the Form(s) to the local NRCS Field Office(s) for completion and include discussion in the draft environmental document on alternatives to avoid impacts.

If avoidance is not practical, evaluate measures to minimize or reduce the impacts and, where appropriate, include them in the proposed action.

### 33.3 PROCEDURES

Figure 33-1 presents a flowchart of the Farmland Impact Analysis procedures.

#### 33.3.1 Information Gathering

The Preliminary Field Review (PFR) is the initial step in the farmland impact analysis process for a proposed project. The Design Team (DT) notifies and invites appropriate MDT personnel, including the Project Development Engineer (PDE) within the MDT Environmental Services Bureau (ESB), to the field review. The PDE reviews the list of ESB attendees and includes others as necessary to ensure appropriate ESB personnel are in attendance. The PDE participates in the PFR to make a preliminary evaluation of available information on the project scope and the need for further detailed farmland impact analysis. Following the field review, the DT prepares a PFR Report summarizing the issues discussed during the PFR, including farmland issues. The DT distributes the final PFR Report for review and comment. Within ESB, the PDE serves as the document champion to collect and coordinate comments from the other Sections. The PDE compiles the comments into a PFR review memorandum for signature by the Environmental Services Bureau Chief.

The FPPA does not apply in some circumstances. In those cases, no farmland impact analysis or coordination with the NRCS is required. The NRCS website provides a list of activities not subject to FPPA. Some MDT projects are not subject to FPPA requirements. The most common reasons that an MDT project may not be subject to FPPA would be that the:

- project is located entirely within existing right-of-way that was purchased on or before August 4, 1984; or
- project is located on land already in urban development or used for water storage.

Another possible reason that an MDT project might not be subject to FPPA would be that it was being constructed for national defense purposes. See the NRCS website for a complete listing of activities not subject to FPPA.

The PDE reviews the exemption criteria and determines if any apply. If so, the PDE documents the basis for the exemption in the project files and in the environmental documentation for the project. If not, the PDE initiates information gathering to determine if the project may directly or indirectly result in impacts to prime or unique farmland or farmland of statewide or local importance, as defined in 7 CFR 658.2. This task is to be completed at the stage of project development when alternative right-of-way requirements have been conceptually defined.

The PDE contacts NRCS to discuss the location of property to be acquired and type of farmland at that location. The PDE also obtains soil survey maps and maps depicting the prime, unique and statewide and locally important farmlands. Those maps are available through webpages maintained by the NRCS. The PDE goes to the NRCS webpage for the “Web Soil Survey” and conducts the following:

- Click the command for “Start Web Soil Survey.”

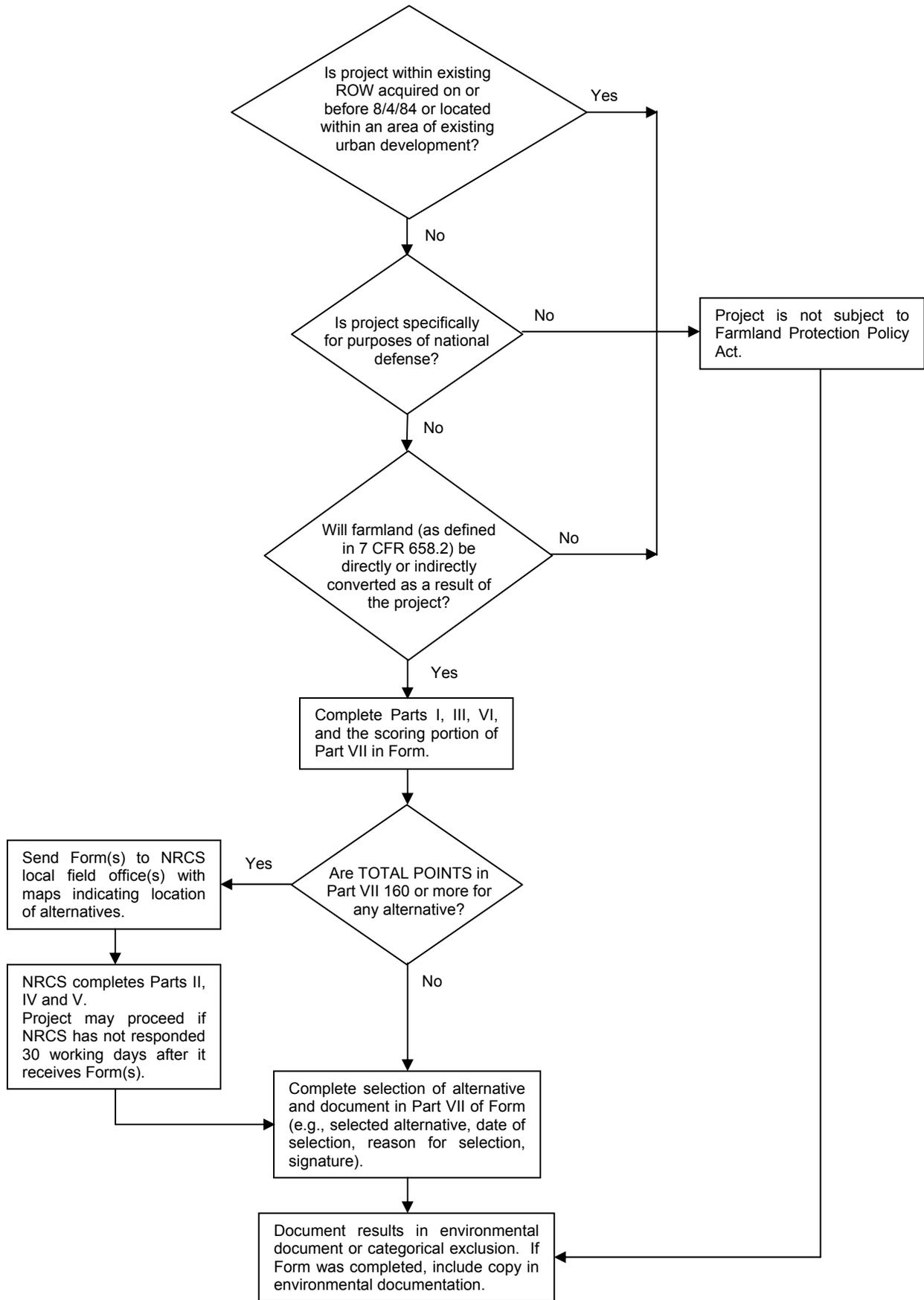


Figure 33-1 — FARMLAND IMPACT ANALYSIS

- Zoom in on the section of roadway located within the project limits using the map tools in the upper left hand corner of the map window, and the various search functions in the left hand column.
- Draw an appropriate Area of Interest (AOI) using the buttons on the top of the map using either a rectangular shape, or a custom shape.
  - + When the shape is closed, the program will automatically clip the web soil layer data layers.
- Click on the tab labeled "Soil Map". This will provide a map showing the soils information for the area located within the AOI. The table on the left will provide the definitions of the soils located within the AOI and a brief definition of the soil types.
- Click on the tab labeled "Soil Data Explorer". This will bring up a map showing the various soil types located within the AOI.
  - + On the left side of the screen, there will be a list labeled "Suitabilities and Limitations Ratings"
  - + Click on "Land Classifications". This will reveal additional choices.
  - + Click on "Farmland Classification". This will reveal additional choices.
  - + Click on "View Rating" button. This will color code the map and provide a listing of the soil classifications with regard to its status as a prime or important farmland.
  - + In the upper right hand corner click on "Printable Version."
  - + A dialog box will appear that will allow you to add a custom subtitle to the map. Once you have done this, click "View."
- The resulting map will include a color coordinated map showing the soil types located within the AOI, with green being the best farmland, and red being the least important farmland. Below the map is a table that provides specific information pertaining to the various soil types.

### **33.3.2 Analysis and Findings**

If it is determined the project will not directly or indirectly result in the conversion of prime or unique farmland or farmland of statewide or local importance and, therefore, is not subject to the FPPA, the PDE documents the basis for the determination in the project file and in the environmental documentation for the project. See [Chapters 11 "Preparing Environmental Documentation," 12 "Categorical Exclusion," 13 "Environmental Assessment/FONSI" and 14 "Environmental Impact Statement/ROD."](#)

If it is determined the project will result in conversion of prime or unique farmland or farmland of statewide or local importance, the PDE proceeds with processing of a Farmland Conversion Impact Rating Form, in accordance with the procedures in the following Sections.

### 33.3.2.1 Form AD-1006/Form NRCS-CPA-106

The PDE can generally conduct a preliminary analysis for completion of the necessary Form after preparation of the preliminary typical section. The Farmland Conversion Impact Rating Form (Form AD-1006 or Form NRCS-CPA-106) is available on the NRCS website, with associated detailed instructions. The process for completing Form AD-1006 (recommended for non-corridor type actions (e.g., rest areas, scale sites, Motor Carrier Services sites)) or Form NRCS-CPA-106 (recommended for most proposed highway projects) is described in the following Sections.

Note that for both Forms AD-1006 and NRCS-CPA-106, Parts II, IV and V are completed by the NRCS when submission of the Form to NRCS is required; see [Section 33.3.2.1.5 "Submission."](#)

#### 33.3.2.1.1 Part I Information

The PDE completes the information in Part I using the following guidance:

1. Name of Project. Provide the MDT project name, number and control number.
2. Proposed Land Use (Form AD-1006) or Type of Project (Form NRCS-CPA-106). Briefly describe the purpose for the land conversion. For Form AD-1006, typically descriptions may include highway rest area, highway right-of-way, etc. For Form NRCS-CPA-106, typical descriptions may include new highway construction, roadway realignment, new interchange, etc.
3. Date of Land Evaluation Request. Provide the month, day and year when Parts I and III were completed.
4. Federal Agency Involved. Enter the Federal Highway Administration.
5. County and State. Enter the county name(s) where the project is located in Montana.

#### 33.3.2.1.2 Part III Information

The PDE completes the information in Part III based on the following guidance:

1. Total Acres to be Converted Directly. Provide an estimated number of acres of farmlands required through the addition of new right-of-way for each project alternative.
2. Total Acres to be Converted Indirectly. Provide the estimated number of acres for each alternative that would be unusable for farmland due to access restriction.
3. Total Acres in Site. Provide an estimate of the total number of acres of existing plus additional right-of-way required for each alternative.

#### 33.3.2.1.3 Part VI Information

The PDE completes the information in Part VI based on the following guidance:

- The Site Assessment Criteria in this Part are to be used to assess the farmland impact of each specific site or design alternative within a project corridor alignment, including the rating score provided by NRCS in Part V of the Forms.
- The criteria to be assessed are taken directly from 7 CFR 658. Scores to be entered by MDT will range from 0 to some maximum. The higher the number, the greater the magnitude of the project's influence on the criteria.
- Note that the term "site" used in the directions for assessing the criteria means the farmland that would be converted by the proposed action.

The following provides an overview of the criteria and instructions for both Forms and provides an interpretation of the criteria as they relate to the scores to be entered on the Forms. Additional guidance on "Site Assessment Scoring for the Twelve Factors used in FPPA" is available on the NRCS website (under the Community Assistance Programs and Activities link, *Farmland Protection Policy Act*, Form AD-1006).

Complete the Forms using the following guidance:

1. Area in Non-Urban Use. Categorize how much land is in non-urban use within a radius of 1.0 mile from where the project is intended:
 

Greater than 90%	–	15 points
90% to 20%	–	14 to 1 point(s)
Less than 20%	–	0 points
2. Perimeter in Non-Urban Use. Indicate how much of the perimeter of the site borders on land in non-urban use:
 

Greater than 90%	–	10 points
90% to 20%	–	9 to 1 point(s)
Less than 20%	–	0 points
3. Percent of Site Being Farmed. Identify how much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last ten years:
 

Greater than 90%	–	20 points
90% to 20%	–	19 to 1 points
Less than 20%	–	0 points
4. Protection Provided by State and Local Government. Note if the site is subject to State, local or Tribal government policies or programs, or private programs, to protect farmland:
 

If yes	–	20 points
If no	–	0 points
5. Distance from Urban Built-Up Area. Indicate how close the site is to an urban built-up area:
 

2 miles or more	–	15 points
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More than 1 mile  
but less than 2 miles – 10 points

Less than 1 mile  
but not adjacent – 5 points

Adjacent – 0 points

*Note: This criterion is not applicable to linear or corridor-type projects. It is included on Form AD-1006, but not on Form NRCS-CPA-106.*

6. Distance to Urban Support Services. Indicate how close the site is to water lines, sewer lines and/or other local facilities whose capacities and design would promote non-agricultural use:

None nearer  
than 3 miles – 15 points

Some more than  
1 mile but less  
than 3 miles – 10 points

All exist within  
1/2 mile – 0 points

*Note: This criterion is not applicable to linear or corridor-type projects. It is included on Form AD-1006, but not on the Form NRCS-CPA-106.*

7. Size of Present Farm Unit Compared to Average. Indicate if the farm unit(s) containing the site (before the project) are as large as the average-size farming unit in the county:

As large or larger – 10 points

Below average – 9 to 0 points (Deduct 1 point for each 5% increment below the average, down to a minimum of 0 points if 50% or more are below the average.)

8. Creation of Non-Farmable Farmland. For each alternative, if that alternative is selected, specify how much of the remaining land on affected farms will become non-farmable because of interference with land patterns:

Acreage equal to or greater than 25% of  
the acres directly converted by the project – 10 points  
(25 points for corridor-type project  
assessments – Form NRCS-CPA-  
106)

Acreage equal to between 25% and 5% of  
the acres directly converted by the project – 9 to 1 point(s)

(24 to 1 point(s) for corridor-type project assessments - Form NRCS-CPA-106)

- Acreage equal to less than 5% of the acres directly converted by the project – 0 points  
(Same for corridor-type project assessments – Form NRCS-CPA-106)
9. Availability of Farm Support Services. Indicate if affected farmland sites have an adequate supply of farm support services and markets available (e.g., farm suppliers, equipment dealers, processing and storage facilities, farmers markets):
- All required services are available – 5 points  
Some required services are available – 4 to 1 points  
No required services are available – 0 points
10. On-Farm Investments. Identify if the site has substantial and well-maintained on-farm investments (e.g., barns, other storage buildings, drainage systems, irrigation systems, other soil and water conservation measures):
- High amount of on-farm investment – 20 points  
Moderate amount of on-farm investment – 19 to 1 points  
No on-farm investment – 0 points
11. Effects of Conversion on Farm Support Services. Analyze if converting farmland to non-agricultural use will 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 – 10 points  
Some reduction in demand for support services – 9 to 1 points  
No significant reduction in demand for support services – 0 points
12. Compatibility with Existing Agricultural Use. Determine if the project is sufficiently incompatible with agriculture and likely to contribute to the eventual conversion of the surrounding farmland to non-agricultural use:
- Proposed project is incompatible with existing agricultural use of surrounding farmland – 10 points  
Proposed project is tolerable of existing agricultural use of surrounding farmland – 9 to 1 points  
Proposed project is fully compatible with existing agricultural use of surrounding farmland – 0 points

Upon completion of all blocks in Part VI, add all the points and write the total in the row with the heading “TOTAL SITE ASSESSMENT POINTS” on Form AD-1006 or “TOTAL CORRIDOR

ASSESSMENT POINTS” on Form NRCS-CPA-106. Forms AD-1006 and NRCS-CPA-106 both include multiple columns to provide for comparative analysis of alternatives.

#### 33.3.2.1.4 Part VII Information

The PDE completes the information in Part VII based on the following guidance.

1. Relative Value of Farmland (from Part V). Enter the relative value of farmland to be converted indicated in Part V, if obtained from NRCS, or use the conservative default value of 100 Points.
2. Total Site Assessment (Form AD-1006) or Total Corridor Assessment (Form NRCS-CPA-106). Enter the total site/corridor assessment points from Part VI. The total number of points indicated in Part VII is used to determine the level of significance of the farmland involvement. Further assessment will be determined based on the following:
  - For sites receiving a total score of less than 160 points, only a minimal level of consideration for protection is necessary. No additional sites need to be evaluated.
  - For sites receiving a total score of 160 points or more, stronger considerations for protection are necessary. Give consideration to the use of existing structures or land that is not farmland and to alternative sites, locations and designs that would meet the proposed project but convert either fewer acres of farmland or other farmland that has a relative lower value.
3. Total Points. Add the values for “Relative Value of Farmland” and “Total Site Assessment.”

If the Total Points score for all alternatives is less than 160, the PDE proceeds to [Section 33.3.2.2 “Selection and Documentation of Alternative.”](#)

If the Total Points score is 160 or more for one or more alternatives, the PDE proceeds to Section 33.3.2.1.5 “Submission.”

#### 33.3.2.1.5 Submission

If the Total Points for any alternative exceeds 159, the PDE submits three copies of the Form, Parts I, III, VI and VII completed, along with maps indicating the location of the project alternative(s) to the NRCS local field office. The PDE retains a copy of the completed Form and the cover letter, which identifies all supporting information, for the project file.

NRCS field offices will complete Parts II, IV and V of the Form and will return two copies of the completed Form to MDT. Part V will contain a value rating between 0 and 100. The magnitude of the rating will correspond to the magnitude of the impact. After receipt of the completed Form from NRCS, or if NRCS does not respond within 30 working days of receipt of the Form, the PDE proceeds to Section 33.3.2.2 “Selection and Documentation of Alternative.”

### 33.3.2.2 Selection and Documentation of Alternative

The PDE coordinates with the Design Team to evaluate the Total Scores for each of the project alternatives and select the preferred alternative. For Form AD-1006, the PDE completes the information in Part VII for “Site Selected,” “Date of Selection,” “Was a Local Site Assessment Used?” and “Reason for Selection.” For Form NRCS-CPA-106, the PDE completes the information in Part VII for “Corridor Selected,” “Total Acres of Farmlands to be Converted by Project,” “Date of Selection,” “Was a Local Site Assessment Used?,” “Reason for Selection” and “Signature of Person Completing this Part.” The PDE provides a copy of the completed Form to the NRCS local field office and includes a copy in the environmental document or categorical exclusion for the project.

If the selected alternative has a total score of 160 or greater, the PDE submits a copy of the Form to the Soil Scientist in the local NRCS-Montana Field Office and coordinates with the NRCS staff and Design Team to determine appropriate avoidance and minimization measures for farmland impacts that can be incorporated in the project design. The PDE documents the decision on the selected alternative and farmland impact avoidance and minimization measures that will be implemented in the farmlands section of the environmental document or narrative categorical exclusion. See [Chapters 12 “Categorical Exclusion,” 13 “Environmental Assessment/FONSI”](#) and [14 “Environmental Impact Statement/ROD.”](#)

If the Total Points for all alternatives were less than 160, the PDE includes standard language to document this finding in the environmental document or categorical exclusion. The PDE also documents the decision on the selected alternative.

