



Section 4 – Environmental Requirements

GENERAL

There are several steps that must be taken for all projects to receive proper environmental and cultural resources clearance. Items that may need to be addressed include but are not limited to historical buildings/complexes, archaeological sites, historic bridges, conversion of farmland, endangered species, wetlands, crossing of waterways regulated by the U.S. Army Corps of Engineers, and parklands. Described within this chapter are procedures to address each of these topics.

The Federal Highway Administration (FHWA) must approve the Categorical Exclusion, Environmental Assessment, or Environmental Impact Statement prior to 35% plan completion. Note that the Section 106 (cultural resources) clearance must also be approved before right-of-way acquisition can begin.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) CLASSIFICATION

The basic NEPA classifications are:

- Categorical Exclusion (CE)—typically sufficient for projects that do not individually or cumulatively have a significant environmental effect.
- Environmental Assessment (EA)—required for projects in which the environmental impact is not clearly established. Projects such as a two-lane relocation or adding lanes to an existing highway corridor generally require an EA.
- Environmental Impact Statement (EIS)—required for projects that may have significant adverse impacts or that are controversial. Projects such as a new controlled-access freeway, a highway project of four or more lanes on a new location, or new construction or extension of a separate roadway for buses or high occupancy vehicles not located within an existing highway facility typically require an EIS.

The environmental classification is based on the scope of the project and depends on the expected magnitude of the impacts from that project. The local agency initiates the NEPA classification process by preparing and submitting to the MoDOT district office the Programming Data Form ([Figure 3-1-1](#)) that is required for all federal-aid projects. After reviewing the information provided, the district will notify the local agency of the project's NEPA classification.

CATEGORICAL EXCLUSION (CE)

Certain categories of projects that will not individually or cumulatively have significant social, economic, or environmental impacts are excluded from the need to prepare a formal NEPA document (EIS or EA). The majority of projects in Missouri are classified as CEs and are processed in three ways—as a programmatic CE, a letter CE, and a CE2.

The MoDOT district contact will notify the local agency of the project's NEPA classification and will also indicate other environmental permits and clearances the local agency must obtain.

For projects that are generally anticipated to have low environmental impacts but do not meet the criteria for use of the programmatic CE, MoDOT may advise the local agency that the project requires a letter CE. In this case, the agency prepares a letter to MoDOT presenting a summary of anticipated impacts and requesting concurrence in a CE designation for a particular project. MoDOT staff review the information provided and submit it to FHWA for their approval. MoDOT will notify the project sponsor of the CE approval.

For projects where the CE classification is likely but not certain, MoDOT will advise the local agency to complete a CE2 form (Figure 4-1, Categorical Exclusion Determination) describing the proposed action, any impacts that will result from the action, and any mitigation measures that will be used to compensate for expected impacts. The information needed will include such items as federal project number, route, county, project termini and length, project description, current and future average daily traffic (ADT), right-of-way needs and displacements, and a location map. Figure 4-1-A provides instructions for preparing a CE2 form. For FHWA to classify the CE2 as a CE instead of an EA or EIS, the CE2 document must clearly demonstrate that the project will not have significant impacts and is, therefore, in a category excluded from the requirement to prepare an EIS or EA. MoDOT will notify the project sponsor of the CE approval, request for more information, or FHWA's decision that an EA or EIS needs to be prepared.

ENVIRONMENTAL ASSESSMENT (EA)

An EA is prepared when there is uncertainty about the significance of the impacts from a project. FHWA generally expects an EA for two-lane relocation projects and often for add-a-lane projects on new right of way; other types of projects may also require an EA. To avoid delays in project development, the local agency, or its consultant, should initiate preparation of the EA sufficiently early to ensure that NEPA compliance can be achieved before 35% design completion. An EA describes a project's purpose and need, identifies the alternates that are being considered, and discusses the expected impacts. It should discuss all topics required by FHWA regulations and guidance but should discuss in detail only those areas where there is potential for a significant impact. The EA should be concise and should not contain long descriptions or include detailed information that may have been gathered or analyses that may have been conducted for the proposed action. FHWA Technical Advisory T6640.8A "Guidance for Preparing and Processing Environmental and Section 4(f) Documents" (<http://environment.fhwa.dot.gov/projdev/impTA6640.asp>) provides additional direction on the information contained in an EA and the format. The project sponsor should contact the MoDOT district contact if a significant impact is identified at any time during the preparation of an EA. FHWA will determine whether an EIS needs to be prepared.

The project sponsor should begin consultation (through either an early coordination process or a scoping process) with interested regulatory agencies and others, at the earliest appropriate time, to advise them of the scope of the project. This consultation will help determine those aspects of

the proposed action having potential for social, economic, or environmental impact and identify other environmental review and consultation requirements that will be performed currently with the EA. Agencies with jurisdiction by law, such as the U.S. Army Corps of Engineers (COE) or the U.S. Fish and Wildlife Service (FWS), must be invited to become cooperating agencies. The local agency will provide the MoDOT district with draft letters requesting the COE and other agencies to be cooperating agencies and FHWA will send the letters. The project sponsor will also work with the FHWA to initiate consultation with federally recognized American Indian tribes determined to have an interest in the project area. Such consultation is conducted by FHWA on a government-to-government basis (FHWA determines which tribes and sends the letters); the consultation informs the tribes of the project, asks whether they have any specific concerns, and inquires whether they want to continue to consult on the project. The project sponsor or its consultant will prepare a draft letter for FHWA's use but will not contact the tribes. The EA must summarize the results of both agency consultation and public involvement. The local sponsor, or its consultant, will prepare a preliminary EA (pEA) that encompasses the following:

- Finalize the location study with all alternates considered, including those discarded, depicted graphically.
- Indicate the preferred alternate.
- Evaluate all proposed reasonable alternates equally; the EA must include more than a single build alternative as well as the no build alternate. Reasonable alternates addressed in the EA are those that may be constructed in the event that the preferred alternate is not selected.
- Identify all previously reported archaeological and historic sites located within the study corridor and all alternates being considered. FHWA will determine whether the location and current condition of previously reported resources require verification. Complete a Phase I archaeological survey for the preferred alternate. Identify all areas for which landowner access was denied or the survey was not conducted at the preliminary EA stage. Determine which sites identified in the project area require Phase II archaeological testing or evaluation. If the Missouri Department of Natural Resources (DNR) determines any sites require further testing, Phase II archaeological testing must also be completed unless coordination with FHWA and the district determine such testing may be postponed to a later time.
- Identify all buildings and bridges 50 years old or older within all alternates being considered and provide an initial assessment of the resources' potential eligibility to the National Register of Historic Places (NRHP). Submit all buildings, bridges, and culverts impacted by the preferred alignment, including those less than 50 years of age, to DNR's State Historic Preservation Office (DNR-SHPO) for concurrence in a determination of eligibility to the NRHP.
- If the proposed project will adversely impact any NRHP-eligible sites or historical structures, the pEA must include either a draft Memorandum of Agreement (MOA) or draft Programmatic Agreement (PA) identifying uncompleted or mitigation activities to be completed prior to project construction.

- Indicate impacts to parklands, wildlife refuges, or other publicly owned recreational use areas that may qualify for Section 4(f) protection, along with a statement as to the status of agency coordination on those impacts. The EA must include a Draft Section 4(f) Evaluation for impacts to these public lands, if applicable, or if the preferred alternate will cause adverse effects to certain kinds of cultural resources that require preservation in place, such as cultural resources that are NRHP-eligible for reasons other than the data associated with them (e.g., the location/setting is important, associated with significant historic events or people; distinctive characteristics of a type, period, or method of construction; involves human burial). Although prehistoric archaeological sites containing human remains will require Section 4(f) consideration, typically prehistoric sites not containing human remains will not require Section 4(f) consideration. A single Draft Section 4(f) Evaluation is prepared for all Section 4(f) resources, including both public lands and historic sites, potentially impacted by the project. This evaluation includes a consideration of all measures to minimize harm to the Section 4(f) resources.
- Identify any Section 6(f) resources the project will affect. Any Section 6(f)(3) Conversion Documentation required cannot be completed until the NEPA process is concluded because the Section 6(f) document must include copies of the approved FONSI signature page and/or signed Section 4(f) evaluation. However, elements of the Section 6(f) document may be assembled during preparation of the NEPA document.
- Conduct a preliminary wetland and stream evaluation to identify potential jurisdictional wetland areas and streams. Estimate the areas of wetlands in the project area for all alternatives using conventional mapping sources and windshield survey and document expected impacts.
- Determine the presence or absence of threatened or endangered plant and/or animal species within the project limits.
- Determine farmland impacts using either Form AD-1006 for site projects or Form SCS-CPA-106 for corridor projects.
- If applicable, perform a noise analysis that identifies noise sensitive receptors based on the Noise Abatement Criteria. Determine whether receptors meet the criteria for the installation of a noise wall. If the project sponsor does not have a noise policy, it is suggested that they use MoDOT's FHWA-approved noise policy. The location of any necessary noise walls is proposed (this may change subject to subsequent detailed design and public involvement with the affected residents).
- Determine the number of displacements, the effect on pedestrian and bicycle traffic, the secondary and cumulative impacts, and other social and economic impacts of the project.
- Conduct a records search to determine the presence of possible hazardous waste sites.
- Demonstrate that the proposed project is in compliance with the Clean Air Act.

The pEA is provided to MoDOT for distribution to FHWA and any formal cooperating agencies (identified as such on the pEA cover sheet) for their review and comment. The document is not to be distributed to anyone outside of these entities. When the project sponsor or its consultant

has addressed the review comments on the pEA, the EA is ready for FHWA's final review and approval, after which it is made available to the public as an FHWA document.

The EA must be made available for public inspection at the local agency's office and at the appropriate FHWA field offices as described in the next two paragraphs of this section. Although it is not a federal requirement that the document be circulated for comment, the project sponsor is encouraged to provide the EA to those federal, state, and local agencies likely to be affected by the action (those with regulatory or other responsibilities relating to the action). As a minimum, the local agency must send notice of availability of the EA, briefly describing the project and its impacts, to the affected units of federal, state, and local government and to Missouri Federal Assistance Clearinghouse, the state intergovernmental review contact established under Executive Order 12372.

MoDOT's normal practice is to hold a location public hearing for all EAs. Although FHWA regulations do not require public hearings for EAs, the FHWA encourages them on most EAs. For specific EAs depending on the situation, the FHWA division office may require a public hearing after signing the EA and before signing the FONSI. Detailed information on public hearings is located in [Section 7](#) – Right of Way and Public Hearings. When a public hearing is held as a part of the application for federal funds, the EA must be available at the public hearing and at the local agency's office and at the appropriate FHWA field offices for a minimum of 15 days in advance of the public hearing. The notice of the public hearing in local newspapers must announce the availability of the EA and where it may be obtained to review. The notice will include a statement advising that comments should be submitted in writing to the local agency within 30 days of the availability of the EA unless FHWA determines that a different period is warranted.

When a public hearing is not held, the project sponsor must place in the local newspapers a notice, similar to a public hearing notice and at a similar stage of project development, advising the public of the EA's availability at the local agency's office and at the appropriate FHWA field offices and where to obtain information concerning the project. The notice must invite comments from all interested parties. It will include a statement advising that comments should be submitted in writing to the local agency within 30 days of the publication of the notice unless FHWA determines that a different period is warranted.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Once the 30-day public comment period has ended and all comments from the public and other agencies have been collected, the project sponsor or its consultant prepares a letter to FHWA. The letter should summarize any public and/or agency coordination that occurred after the EA was signed. The letter must satisfactorily address all substantive comments on the EA provided during the 30-day comment period, including those from other agencies, the general public, and as a result of the public hearing. To ensure this, the project sponsor will provide the MoDOT district contact with a copy of the public hearing transcript and/or any other comments received for transmission to the FHWA along with the letter. The letter must describe any changes to the EA-designated preferred alternate and document any additional impact analyses performed for the final, selected alternate.

The letter must also document compliance with all applicable environmental laws and Executive Orders or provide reasonable assurance that their requirements can be met and briefly present why the action does not have a significant impact. If the proposed project will adversely impact any NRHP-eligible sites or historical structures, either an MOA or a PA executed by the DNR-SHPO, FHWA, Advisory Council on Historic Preservation (ACHP), and the project sponsor must accompany the letter. The MOA or PA will identify uncompleted or mitigation activities to be completed prior to project construction. If the project will impact prehistoric sites known or likely to contain human remains, the MOA or PA will also be provided to appropriate American Indian tribes with cultural interest in the region for review, comment, and signature if they desire. Accompanying documentation must also include the Final Section 4(f) Evaluation, when required, for any impacted historic structures and for parklands, wildlife refuges, or other public lands affected.

When the letter is completed and the listed items are included, the documentation is provided to MoDOT along with a FONSI signature page for distribution to FHWA (and to cooperating agencies for their review and comment if the selected alternate differs from the EA-designated preferred alternate).

If the FONSI is for a new controlled access freeway, a highway project of four or more lanes on a new location, or other action described in 23 CFR §771.115a, the letter to FHWA and accompanying documentation described above must also be made available for public review, including affected units of government, for a minimum of 30 days before FHWA issues a FONSI for the project. A notice similar to that for a public hearing must announce the availability of the documentation. If at any point in the EA process, FHWA determines that the action is likely to have a significant impact, the local agency will be required to prepare an EIS.

FHWA will review the letter, accompanying documentation, and any public hearing comments and other comments received regarding the EA. If FHWA determines after reviewing the documentation that there are no significant impacts associated with the project, the FONSI will be signed and a copy of the signed FONSI will be returned to the local agency.

After FHWA issues a FONSI, the project sponsor is encouraged to provide the FONSI to those federal, state, and local agencies likely to be affected by the action (those with regulatory or other responsibilities relating to the action). As a minimum, the local agency must send a notice of availability of the FONSI to the affected units of federal, state, and local government and the FONSI shall be available from the local agency and FHWA upon request by the public. Notice of availability is also sent to Missouri Federal Assistance Clearinghouse, the state intergovernmental review contact established under Executive Order 12372.

Timeframes

The project schedule should allow about two years for obtaining a FONSI.

ENVIRONMENTAL IMPACT STATEMENT (EIS)

Draft Environmental Impact Statement

An EIS is prepared for projects that have clearly identified and significant social, economic, or environmental impacts. FHWA indicates that an EIS is required for four-lane relocations as well as for major bridges or projects that are controversial. To avoid delays in project development, the local agency, or its consultant, should initiate preparation of the EIS sufficiently early to ensure that NEPA compliance can be achieved before 35% design completion.

An EIS describes a project's purpose and need, identifies the alternates being considered, and discusses expected impacts in detail. To the extent possible, it also indicates compliance with other regulations. The EIS includes procedures to minimize harm and details mitigation measures and all other environmental commitments. FHWA Technical Advisory T6640.8A "Guidance for Preparing and Processing Environmental and Section 4(f) Documents" (<http://environment.fhwa.dot.gov/projdev/impTA6640.asp>) provides additional direction on the information contained in an EIS and the format.

When FHWA determines that an EIS is required, the local agency will prepare and FHWA will issue a Notice of Intent for publication in the *Federal Register*. Local agencies are encouraged to announce the intent to prepare an EIS by appropriate means at the local level.

After publication of the Notice of Intent, the local agency will begin a scoping process to aid in identifying the range of alternatives and impacts and the significant issues to be addressed in the EIS. Scoping is normally achieved through public and agency involvement procedures. If a scoping meeting is to be held, it will be announced in the FHWA's Notice of Intent and by appropriate means at the local level. Agencies with jurisdiction by law must be requested to become cooperating agencies. Section 6002 (Efficient Environmental Reviews for Project Decision Making) of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2003 (SAFETEA-LU) updates the environmental review process by adding a new category of "participating agencies" for federal, state, and local agencies and tribal nations that have an interest in the project. The local agency will provide the MoDOT district with draft letters requesting the COE and other agencies to be cooperating and/or participating agencies as appropriate and FHWA will send the letters.

The project sponsor will also work with the FHWA to initiate consultation with federally recognized American Indian tribes determined to have an interest in the project area. Such consultation is conducted by FHWA on a government-to-government basis (FHWA determines which tribes and sends the letters); the consultation informs the tribes of the project, asks whether they have any specific concerns, and inquires whether they want to continue to consult on the project. The project sponsor or its consultant will prepare a draft letter for FHWA's use but will not contact the tribes.

Section 6002 stipulates that both participating agencies and the public will be given the opportunity to comment on the purpose and need and range of alternatives for a project. Previously only cooperating agencies were offered such an opportunity. Section 6002 also

mandates establishing a coordination plan for agency and public participation and comment. Further information on the SAFETEA-LU environmental review process can be found in FHWA's *SAFETEA-LU ENVIRONMENTAL REVIEW PROCESS FINAL GUIDANCE*, Publication L 109-59, November 15, 2006, at <http://www.fhwa.dot.gov/hep/section6002/>.

The project sponsor or its consultant will prepare a preliminary Draft EIS (pDEIS) that evaluates all reasonable alternatives to the action and discusses the reasons why other alternatives that may have been considered were eliminated from detailed study. The pDEIS also summarizes the studies, reviews, consultation, and coordination required by environmental laws or Executive Orders to the extent appropriate at this stage in the environmental process. A pDEIS requires completing the following work:

- Finalize the location study; all alternates considered, including those discarded, must be depicted graphically in the document.
- Indicate a preferred alternate if one stands out.
- Evaluate all proposed reasonable alternates equally. Reasonable alternates addressed in the EIS are those that may be constructed in the event that the preferred alternate is not selected. (Provisions of SAFETEA-LU allow FHWA to decide whether the preferred alternative may be developed to a higher level of design detail to facilitate either the development of mitigation measures or compliance with other environmental laws. See FHWA's 2006 *SAFETEA-LU FINAL GUIDANCE*, as cited previously, for details.)
- Identify all previously reported archaeological and historic sites located within the study corridor and all alternates being considered. FHWA will determine whether the location and current condition of previously reported resources require verification.
- Identify all buildings and bridges 50 years old or older within all alternates being considered and provide an initial assessment of the resources' potential eligibility to the National Register of Historic Places (NRHP).
- Indicate impacts to parklands, wildlife refuges, or other publicly owned recreational use areas that may qualify for Section 4(f) protection, along with a statement as to the status of agency coordination on those impacts. The DEIS must include a Draft Section 4(f) Evaluation for impacts to these public lands, if applicable, or if the preferred alternate will cause adverse effects to certain kinds of cultural resources that require preservation in place, such as cultural resources that are NRHP-eligible for reasons other than the data associated with them (e.g., the location/setting is important, associated with significant historic events or people; distinctive characteristics of a type, period, or method of construction; involves human burial). Although prehistoric archaeological sites containing human remains will require Section 4(f) consideration, typically prehistoric sites not containing human remains will not require Section 4(f) consideration. A single Draft Section 4(f) Evaluation is prepared for all Section 4(f) resources, including both public lands and historic sites, potentially impacted by the project. This evaluation includes a consideration of all measures to minimize harm to the Section 4(f) resources.
- Note the presence of any potential Section 6(f) resources. If Section 6(f)(3) Conversion Documentation is required, it cannot be completed until the NEPA process is concluded because the Section 6(f) document must include copies of the approved ROD signature

page and/or signed Section 4(f) evaluation. However, elements of the Section 6(f) document may be assembled during preparation of the NEPA document.

- Conduct a preliminary wetland and stream evaluation to identify potential jurisdictional wetland areas and streams and possible impacts to them.
- Determine the presence or absence of threatened or endangered plant and/or animal species within the project limits.
- Determine farmland impacts using either Form AD-1006 for site projects or Form SCS-CPA-106 for corridor projects.
- If applicable, perform a noise analysis that identifies noise sensitive receptors based on the Noise Abatement Criteria. Determine whether receptors meet the criteria for the installation of a noise wall. If the project sponsor does not have a noise policy, it is suggested that they use MoDOT's FHWA-approved noise policy.
- Determine the number of displacements, the effect on pedestrian and bicycle traffic, the secondary and cumulative impacts, and other social and economic impacts of the project.
- Conduct a records search to determine the presence of possible hazardous waste sites.
- Demonstrate that the proposed project is in compliance with the Clean Air Act.

The pDEIS is provided to MoDOT for distribution to FHWA and formal cooperating agencies (identified as such on the pDEIS cover sheet) and may be offered to participating agencies for their review and comment. The document is not to be distributed to anyone outside of these entities. When the project sponsor or its consultant has addressed the review comments on the pDEIS, the DEIS is ready for FHWA's final review. The FHWA, when satisfied that the DEIS complies with NEPA requirements, will approve the DEIS for circulation by signing and dating the cover sheet.

The project sponsor is responsible for printing the DEIS in sufficient quantity to accommodate circulation to those entities listed in the document as well as requests for copies that can reasonably be expected from agencies, organizations, and individuals. Normally, copies will be furnished free of charge. However, with FHWA concurrence, the party requesting the DEIS may be charged a fee that is not more than the actual cost of reproducing the copy or may be directed to the nearest location where the statement may be reviewed.

Once FHWA signs the DEIS, public and agency comments must be requested. The local agency, on behalf of FHWA, circulates the approved DEIS to federal and state agencies, local entities, elected officials, and others as appropriate for their review and comment. Upon circulation of the approved DEIS to the Environmental Protection Agency (EPA), the EPA publishes a Notice of Availability (NOA) in the *Federal Register*. Copies of the approved DEIS are also provided for public viewing and copying in the local agency's office and other public repositories such as libraries and city or county offices. The DEIS must be made available to the public and transmitted to agencies for comment no later than the time the document is filed with the Environmental Protection Agency. The DEIS shall be transmitted to:

1. Public officials, interest groups, and members of the public known to have an interest in the proposed action or the DEIS;
2. Federal, state, and local government agencies expected to have jurisdiction or responsibility over, or interest or expertise in, the action. Copies are provided directly to appropriate state and local agencies and to Missouri Federal Assistance Clearinghouse, the state intergovernmental review contact established under Executive Order 12372; and
3. States and federal land management entities that may be significantly affected by the proposed action or any of the alternatives. These copies shall be accompanied by a request that such state or entity advise the FHWA in writing of any disagreement with the evaluation of impacts in the statement. FHWA will furnish the comments received to the local agency along with a written assessment of any disagreements for incorporation into the final EIS.

The *Federal Register* NOA initiates a period of no less than 45 days for the return of comments on the DEIS. The notice and the DEIS transmittal letter must identify to whom comments may be sent.

A location public hearing is generally held for all projects requiring an EIS. Detailed information on public hearings is located in [Section 7 – Right of Way and Public Hearings](#). The DEIS shall be available at the public hearing and for a minimum of 15 days in advance of the hearing. The availability of the DEIS shall be mentioned and public comments requested in any public hearing notice and at any public hearing presentation. If a public hearing on an action proposed for FHWA funding is not held, a notice shall be placed in newspaper similar to a public hearing notice advising where the DEIS is available for review, how copies may be obtained, and where the comments will be sent.

Final Environmental Impact Statement

After circulation of a DEIS, when the 45-day comment period has ended and all comments from the public and other agencies have been collected, a preliminary Final EIS (pFEIS) is prepared. The FEIS identifies the preferred alternative and evaluates all reasonable alternatives considered. It should also discuss substantive comments received on the DEIS and responses thereto, summarize public involvement, and describe the mitigation measures that are to be incorporated into the proposed action. Mitigation measures presented as commitments in the FEIS must be implemented with the project. The following items of work are completed as part of the pFEIS:

- All substantive comments gathered on the DEIS during the 45-day comment period, including those from other agencies, the general public, and as a result of the public hearing, must be satisfactorily addressed. To ensure this, the project sponsor will provide the MoDOT district contact with a copy of the public hearing transcript and/or any other comments received for transmission to the FHWA along with the pFEIS.
- A preferred alternate must be declared.

- A Phase I archaeological survey must be completed for the preferred alternate(s) and all areas for which landowner access was denied or the survey was not conducted should be identified. A determination should be made of which sites identified in the project area require Phase II archaeological testing or evaluation. If the Missouri Department of Natural Resources (DNR) determines any sites require further testing, Phase II archaeological testing must also be completed unless coordination with FHWA and the district determine such testing may be postponed to a later time.
- All buildings, bridges, and culverts impacted by the preferred alignment that were not previously reviewed by the DNR's State Historic Preservation Office (DNR-SHPO), including those less than 50 years of age, must be submitted to DNR for concurrence in a determination of eligibility to the NRHP.
- If the proposed project will adversely impact any NRHP-eligible sites or historical structures, the pFEIS must include either a Memorandum of Agreement (MOA) or a Programmatic Agreement (PA) executed by the DNR-SHPO, FHWA, the project sponsor, and the Advisory Council on Historic Preservation (ACHP) (all PAs; MOAs if it chooses to participate). The MOA or PA will identify uncompleted or mitigation activities to be completed prior to project construction. If the project will impact prehistoric sites known or likely to contain human remains, the MOA or PA will also be provided to appropriate American Indian tribes with cultural interest in the region for review, comment, and signature if they desire.
- A Final Section 4(f) Evaluation, when required, must be included in the pFEIS for any impacted historic structures and for parklands, wildlife refuges, or other public lands affected.
- Identify any Section 6(f) resources the project will affect. Elements of the Section 6(f)(3) Conversion Documentation may be assembled during preparation of the NEPA document, even though the Section 6(f) document cannot be completed until the NEPA decision document has been issued.
- A preliminary jurisdictional wetland and stream delineation is conducted in the project area for the preferred alternative and expected impacts are documented.
- Identify any consultation with the U.S. Fish and Wildlife Service required to address threatened or endangered plant and/or animal species within the project limits and any mitigation resulting from the consultation.
- The location of any necessary noise walls is proposed (this may change subject to subsequent detailed design and public involvement with the affected residents).

The FEIS will also document compliance, to the extent possible, with all applicable environmental laws and Executive Orders or provide reasonable assurance that their requirements can be met. Every reasonable effort shall be made to resolve interagency disagreements on actions before processing the FEIS. If significant issues remain unresolved, the FEIS must identify those issues and the consultations and other efforts made to resolve them.

When the listed items are completed and included in a preliminary FEIS, the pFEIS is provided to MoDOT for distribution to FHWA and formal cooperating agencies (identified as such on the

pFEIS cover sheet) and may be offered to participating agencies for their review and comment. The document is not to be distributed to anyone outside of these entities. When the project sponsor or its consultant has addressed the review comments on the pFEIS, the FEIS is ready for FHWA's final review and approval. The FEIS will be reviewed for legal sufficiency prior to FHWA approval.

FHWA will indicate approval of the FEIS for an action by signing and dating the cover page. Approval of the FEIS does not commit the FHWA to approve any future request to fund the preferred alternative.

The project sponsor should print a sufficient quantity of the FEIS to accommodate circulation to the appropriate entities as well as requests for copies that can reasonably be expected from agencies, organizations, and individuals. Normally, copies will be furnished free of charge. However, with FHWA concurrence, the party requesting the FEIS may be charged a fee that is not more than the actual cost of reproducing the copy or may be directed to the nearest location where the statement may be reviewed.

When sufficient copies of the approved FEIS are transmitted to FHWA, FHWA circulates the document to the EPA along with an NOA to be published in the *Federal Register*. Publication of the NOA initiates a 30-day comment period on the FEIS. The local agency circulates the approved FEIS for review and comment to any persons, organizations, or agencies that made substantive comments on the DEIS or requested a copy, no later than the time the document is filed with EPA. In the case of lengthy documents, the agency may provide alternative circulation processes. The local agency shall also publish a notice of availability in local newspapers and make the FEIS available through the mechanism established pursuant to DOT Order 4600.13 which implements Executive Order 12372. When the FEIS is filed with EPA, it must be available for public review at the local agency's offices and at appropriate FHWA offices. A copy will also be made available for public review at institutions such as local government offices, libraries, and schools, as appropriate.

RECORD OF DECISION (ROD)

Substantive comments received on the FEIS are addressed in a Record of Decision (ROD) prepared by the local agency. The ROD also discusses the alternates that were considered for the project, identifies the selected alternate, and discusses why this alternate was selected. The ROD discusses commitments made in the document, including the measures that have been adopted to minimize harm, such as mitigation plans, and details any monitoring and enforcement program, if applicable. After comments are satisfactorily addressed, the ROD is presented to FHWA for approval. Once the ROD is signed by FHWA, the local agency can approve the location of the project and begin detailed design.

Timeframes

The timeframe for completing the EIS process varies. The timeline for completing consultant-prepared EISs is a negotiated item within the scope of work. A good rule of thumb is to allow at least 3 years to get to an approved ROD.

REEVALUATIONS

If an acceptable FEIS is not submitted to the Federal Highway Administration (FHWA) within 3 years from the date of the DEIS circulation, the local agency shall prepare a written reevaluation of the DEIS in cooperation with FHWA. This reevaluation is used to determine whether a supplement to the DEIS or a new DEIS is needed.

A written reevaluation of the FEIS may be required before further approvals are granted if major steps to advance the action (e.g., authority to undertake final design, authority to acquire a significant portion of the right-of-way, or approval of the plans, specifications, and estimates) have not occurred within three years after the approval of the FEIS, final EIS supplement, or the last major FHWA approval or grant.

Factors such as noteworthy changes in the scope and/or location of the project, whether the project is active or inactive, and changes in environmental laws or regulations can also require a NEPA document reevaluation. Once completed and approved, a NEPA document has a limited shelf life, even when portions of the project are under construction or have already been constructed, as is often the case for lengthy corridor projects. After approval of the ROD, FONSI, or CE designation and prior to requesting any major approvals or grants, the local agency shall consult with MoDOT to establish whether the approved environmental document or CE designation remains valid for the requested FHWA action. These consultations will be documented when determined necessary by FHWA.

Whenever the project scope or location changes, the local agency will submit to MoDOT a Programming Data Form that describes and shows the changes. Based on that information, the project will be reexamined to determine whether the proposed changes require a reevaluation.

When a reevaluation is needed, the project sponsor prepares the reevaluation documentation. In most cases, the reevaluation is submitted to the FHWA for review and approval. Documentation for reevaluations is based on the original NEPA document type. If the original NEPA document was an EA or EIS, the project sponsor prepares a letter documenting the reevaluation and submits it to MoDOT for FHWA's review and approval. Some projects with original NEPA classifications as CEs may also require reevaluations in the form of a letter. FHWA does not routinely require reevaluations in the form of supplemental EAs or EISs.

More detailed discussion of NEPA reevaluations can be found on FHWA's web site at:

http://edocket.access.gpo.gov/cfr_2002/aprqtr/pdf/23cfr771.129.pdf.

SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENTS

A DEIS, FEIS, or supplemental EIS may be supplemented at any time. An EIS shall be supplemented whenever FHWA determines that:

1. Changes to the proposed action could result in significant environmental impacts that were not evaluated in the EIS; or

2. New information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS.

Where FHWA is uncertain of the significance of the new impacts, the local agency will develop appropriate environmental studies or, if FHWA deems appropriate, an EA to assess the impacts of the changes, new information, or new circumstances. If based upon the studies, FHWA determines that a supplemental EIS is not necessary, FHWA shall so indicate in the project file.

A supplement is developed using the same process and format (i.e., DEIS and FEIS) as an original EIS except that scoping is not required.

In some cases a supplemental EIS may be required to address issues of limited scope, such as the extent of proposed mitigation or the evaluation of location of design variations for a limited portion of the overall project. Where this is the case, the preparation of a supplemental EIS shall not necessarily:

1. Prevent the granting of new approvals,
2. Require the withdrawal of previous approvals, or
3. Require the suspension of project activities for any activity not directly affected by the supplement. If the changes in question are of such magnitude to require a reassessment of the entire action, or more than a limited portion of the overall action, FHWA shall suspend any activities that would have an adverse environmental impact or limit the choice of reasonable alternatives until the supplemental EIS is completed.

More detailed discussion of supplemental NEPA documents can be found on FHWA's web site at http://edocket.access.gpo.gov/cfr_2002/apr/qtr/pdf/23cfr771.130.pdf.

GUIDANCE FOR COMPLIANCE WITH FEDERAL AND STATE ENVIRONMENTAL LAWS AND REGULATIONS

The following resource-specific discussions are intended to aid the project sponsor in achieving compliance with federal and state environmental laws and regulations. Ultimately the local agency is responsible for compliance with all applicable laws and regulations, regardless of the information, or lack thereof, contained herein. The local agency must ensure that all commitments identified in environmental documents are included in plans and job specifications as appropriate. The local agency is also responsible for implementing all commitments and monitoring identified in environmental documents.

Community Impact Assessment (Social/Economic/Environmental Justice)

Title VI of the Civil Rights Act of 1964 and Executive Order 12898 on Environmental Justice apply to federal activities. Compliance with the FHWA's NEPA process will accomplish appropriate implementation of Title VI and EO 12898. This process includes fully identifying

social, economic, and environmental effects; considering alternatives; coordinating with agencies; involving the public; and utilizing a systematic interdisciplinary approach. Addressing the issues coupled with full implementation of 23 USC 109(h) (e.g., community cohesion, availability of public facilities and services, adverse employment effects, etc.) will prevent the potential for discrimination or disproportionately high and adverse impacts. Community impact assessment is key to this preventive approach. Compliance with Executive Order 13166 on Limited English Proficiency should also be considered.

Additional information on environmental justice and community impact assessment can be found at the following websites:

- <http://www.fhwa.dot.gov/environment/ej2.htm>
- <http://www.fhwa.dot.gov/environment/cia.htm>

The local agency will provide a brief description of impacts, if any, to minorities, low-income populations, and the community in general. Most projects will be small and will have minimal to no impacts. If there are any commercial or residential displacements, the following text must be included in the NEPA documentation:

The project sponsor will conduct the acquisition and relocation of affected residential and commercial properties in accordance with the relocation procedures established in the Uniform Relocation Assistance and Real Property Acquisition Policies Act (referred to as the Uniform Act) of 1970, as amended. The Uniform Act and Missouri state laws require that just compensation be paid to the owner(s) of private property taken for public use. The Uniform Act is carried out without discrimination and in compliance with Title VI (the Civil Rights Act of 1964), the President's Executive Order on Environmental Justice, and the Americans with Disabilities Act.

The local agency must provide relocation services to all impacted households without discrimination under guidance of the Uniform Act.

Farmland Protection Policy Act

The Farmland Protection Policy Act requires that agencies identify and take into account the adverse effects of federal projects on farmland. The act requires that all federally funded projects be assessed for the potential conversion of farmland to non-farming purposes. Local agencies shall assess the impact of their projects in cooperation with the local Natural Resources Conservation Service (NRCS) office.

This assessment is not necessary if no additional right of way is needed. If the additional right of way the project requires is located within city limits and the affected land is entirely developed for uses other than agriculture (e.g., within city limits), the local agency may document this in their files and no further action is needed. If it is outside of established city limits, the project sponsor must complete a Form AD-1006 Farmland Conversion Impact Rating (or Form SCS-CPA-106 for corridor type projects) and forward it along with the preliminary layouts to the NRCS for agency review.

Figure 4-2 depicts Form AD-1006, including instructions for completing the form. Forms can also be obtained from the NRCS and may be reproduced. The local agency shall fill out Parts I and III, showing the acreage of new right-of-way and borrow areas, and submit three copies to NRCS. The submittal shall request that NRCS fill out Parts II, IV, and V. If desired, NRCS assistance in filling out Part VI can also be requested. The sponsor's submittal shall also ask NRCS to advise whether any land considered to be farmland is subject to any state or local government policy or programs to protect farmland.

When NRCS returns the form, the local agency shall complete it. If the total rating exceeds 160 points, the Farmland Protection Policy Act mandates further consideration of protection. Using the bottom portion of Form AD-1006 labeled "Reason for Selection," the sponsor will document why this site has been selected over the other alternative sites and submit one copy of the form along with the preliminary layout. This completes the processing. Under present directives, the local agency will have satisfied the requirements by considering the impact of converting any farmland to non-agricultural use and submitting the completed form. If the project is classified as other than a categorical exclusion, the completed form shall be included in the EIS or EA.

100-Year Floodplain and Regulatory Floodway

Executive Order 11988, Floodplain Management, and subsequent federal floodplain management guidelines mandate an evaluation of floodplain impacts. When available, flood hazard boundary maps (National Flood Insurance Program) and flood insurance studies for the project area are used to determine the limits of the base (100-year) floodplain and the extent of encroachment.

The Federal Emergency Management Agency (FEMA) and Federal Highway Administration (FHWA) guidelines 23 CFR 650 have identified the base (100-year) flood as the flood having a one-percent probability of being equaled or exceeded in any given year. The base floodplain is the area of 100-year flood hazard within a county or community. The regulatory floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without increasing the base flood elevation more than a specified amount. FEMA has mandated that projects can cause no rise in the regulatory floodway and a one-foot cumulative rise for all projects in the base (100-year) floodplain. In the case of projects proposed within regulatory floodways, a "no-rise" certificate, if applicable, should be obtained prior to issuance of a Floodplain Development Permit.

The project sponsor must complete and submit to the MoDOT district office an application that includes information regarding community participation in the National Flood Insurance Program (NFIP) and whether the project is located in a Special Flood Hazard Area (SFHA). If the community or county has not been mapped, the sponsor communicates this to MoDOT. If the community has been mapped, then the sponsor should identify whether the project is located in the 100-year floodplain and/or regulatory floodway. The district will identify the project sponsor's need to obtain a floodplain development permit (Figure 4-3) or "no-rise" certification (Figure 4-4) from the local floodplain administrator.

Local agencies that participate in the National Flood Insurance Program (NFIP) have the responsibility to ensure that floodplain developments meet the regulations established by the NFIP as identified in Title 44, Code of Federal Regulations, Parts 59 through 78. (Parts 59 and 60 contain the most applicable information for a typical project). These regulations are available on the Internet at http://www.access.gpo.gov/nara/cfr/waisidx_07/44cfrv1_07.html.

The engineer of record, with assistance from the local agency's floodplain administrator, is responsible for ensuring that FEMA NFIP requirements are met. In addition, the engineer of record will be responsible for attaining all required certifications before construction begins. It is advisable that the engineer of record investigates this in the early stages of the project, as the requirements of the NFIP may control the hydraulic design of the project. A current list of communities for which FEMA Flood Insurance Studies have been performed is available on the Internet in the National Flood Insurance Program Community Status Book at <http://www.fema.gov/fema/csb.shtm> (Missouri-only data at <http://www.fema.gov/cis/MO.pdf>).

For the convenience of local agencies and engineers, FEMA Flood Insurance Studies and flood maps pertaining to a project site can be viewed on the Internet at www.fema.gov by selecting "FEMA Flood Map Store." (Hardcopies of the FEMA Flood Insurance Studies and Flood Maps can also be ordered at the same site.)

State Emergency Management Agency (SEMA)/Federal Emergency Management Agency (FEMA) Buyout Lands

The Flood Disaster Protection Act of 1988 (The Stafford Act), identified the use of disaster relief funds under Section 404 for the Hazard Mitigation Grant Program (HMGP), including the acquisition and relocation of flood-damaged property. The Volkmer Bill further expanded the use of HMGP funds under Section 404 to "buy out" flood-damaged property that had been affected by the Great Flood of 1993.

There are numerous restrictions on these FEMA buyout properties. No structures or improvements may be erected on these properties unless they are open on all sides. The site can be used only for open space purposes and must remain in public ownership. These conditions and restrictions (among others), along with the right to enforce same, are deemed to be covenants running with the land in perpetuity and are binding on subsequent successors, grantees, or assigns. Any decision involving these properties should take into consideration that two to three years may be necessary to process an exemption from FEMA to utilize this parcel. This exemption would likely be a permanent easement rather than a transfer of property.

Section 404 Permits

If a project involves stream crossing(s) and/or wetland impacts under jurisdiction of the U.S. Army Corps of Engineers (COE), a Section 404 Permit or a written waiver thereof is necessary. If the COE issues an individual Section 404 permit, then the project sponsor must obtain an individual Section 401 Water Quality Certification from the Department of Natural Resources (DNR). If the COE issues a nationwide permit (NWP) for project activities, then the applicant

shall follow the conditions contained within DNR’s blanket 401 certifications, specific to the appropriate NWP to which it applies. For most NWPs, an individual request for DNR’s Section 401 Water Quality Certification is not necessary because the agency has granted blanket certification for the majority of commonly used NWPs. The applicant shall include the appropriate 401 certification conditions for their respective NWP(s) in the contract (see the web site referenced below).

A Section 404 permit may also be required for fill in any water body, which includes lakes, ponds, streams, rivers, and wetlands. The COE will make a final determination as to the extent of its jurisdiction and the appropriate permit(s) for all regulated activities. Stream and/or wetland impacts exceeding 0.5 acre or channelization beyond the minimum necessary to construct or protect the linear transportation project may result in the issuance of an individual permit. For individual Section 404 permits, duplicate applications should be sent concurrently to the COE and DNR. When the COE is ready to issue an individual permit, it will subsequently request 401 certification issuance from DNR. Both the 404 and 401 permits and conditions covered therein shall be included in the construction contract. A 404 permit application form is attached as **Figure 4-5**. The form can also be found on the COE web page (<http://www.nwk.usace.army.mil/regulatory/eng4345.pdf>).

For linear transportation projects, if permanent fills impacting waters of the U. S. (not including wetlands) do not exceed 0.1 acre, then the applicant is not legally obligated to submit an application to the COE. If this “no pre-construction notification” protocol is met for a project, the project sponsor will then be required to provide a written statement to MoDOT verifying that permanent project impacts will not exceed 0.1 acre. If either temporary or permanent impacts to wetlands will result from project construction, then a permit submittal will be required.

For impacts that exceed the nationwide permit pre-construction notification thresholds, the project sponsor must obtain a permit from the COE and provide it to MoDOT. In either the no pre-construction notification or the permit application submittal scenario, if NWP(s) apply, then the applicant shall be required to abide by all of the following conditions and include them in all contract proposals to validate the NWP(s):

1. The 28 Nationwide Permit General Conditions—The (28) **General Conditions for NWPs** can be accessed through the Internet at http://www.usace.army.mil/cw/cecwo/reg/nwp/nwp2007_gen_conditions_def.pdf. Once you have accessed the site, the general conditions are defined on pages 24–34.
2. The Regional Special Conditions for NWPs—The public notice announcing approval of the **Regional Special Conditions for NWPs** for the State of Missouri has been posted at <http://www.nwk.usace.army.mil/regulatory.htm>, under the topic “Nationwide Permits 2007.”
3. The State of Missouri Section 401 Water Quality Certification General & Specific Conditions—The public notice announcing approval of **401 Water Quality Certification** for Nationwide Permits in the State of Missouri has been posted at

<http://www.nwk.usace.army.mil/regulatory/regulatory.htm> under the topic “Nationwide Permits 2007.”

Channel Modification

Channel changes alter the conditions of the natural waterway and may cause an increase in velocity of the flowing water, sometimes enough to cause damage to the highway embankment near the stream or excessive scour around footings of structures. Because of the likelihood that these outcomes may result from channel modifications, such alterations should be avoided to the fullest extent practical. Where unavoidable, an evaluation must be made including consideration of the environment, hydraulic, legal, and geomorphic aspects involved. The investigation should determine the effect on peak flow downstream and the affected flow area. Relative to 404 permitting, any channelization should be kept to an absolute minimum and should only be undertaken to facilitate or protect a construction project. The project sponsor must include justification for any channel changes in the 404 permit application.

1. The new channel should duplicate the existing stream and floodplain characteristics as nearly as possible. These characteristics should include the stream width, depth, slope, flow regime, sinuosity, bank cover, side slopes, and flow and velocity distribution.
2. Major channel modification may be constructed if the average channel velocity would not be increased beyond the scour velocity of the predominant soil type at the project site.
3. The COE will require individual permit authorization for projects that involve major channel modification. Additionally, if the project sponsor is permitted to conduct the channel modifications under the terms of the individual permit, stream mitigation will be required. This can drastically add to the cost of a project and may require either a monetary contribution to an approved stream mitigation bank/in lieu fee program or the acquisition/restoration and/or, in very limited circumstances, protection of a previously impacted stream resource.

Stormwater and Erosion Control

Provisions of the federal Clean Water Act and related state rules and regulations require stormwater permits where construction activities disturb areas greater than one acre. MoDOT has a general permit (obtained from DNR) that allows them to accomplish road construction activities. The permit stipulates that MoDOT will follow certain erosion control guidelines and install temporary and permanent erosion control measures. This permit applies only to land disturbance activities associated with construction projects on MoDOT right of way.

A few cities (Kansas City, Columbia, and others) and counties have obtained their own land disturbance permits from DNR for generic land disturbance purposes. In these areas, the project sponsor (city or county government) would have their own restrictions and erosion control guidelines to meet the intent of their program. Prior to initiation of any federal-aid project, the local sponsor needs to determine the acreage that will be disturbed. If less than one acre is disturbed, the sponsor is exempt from the requirements of the Federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) program permits and DNR permit

applications. However, there may be other local ordinances that must be addressed. The sponsor should inquire whether or not there are local rules and regulations that govern clean water guidelines. If greater than one acre is to be disturbed, the project sponsor should determine whether their city or county is operating under a DNR-approved program. If so, appropriate erosion controls will be imposed by the local government jurisdiction.

If the city or county does not have a DNR stormwater program and the project will disturb more than one acre, the project sponsor will need to apply for a DNR permit. If the project is entirely within MoDOT right of way, the sponsor may use MoDOT's general permit. In either case, the sponsor will need to develop a site-specific stormwater pollution prevention plan for the project. The sponsor shall contact the DNR NPDES Storm Water Program office (573-751-1300 or 800-361-4827) for further directions. If any amount of acreage is to be disturbed, the local agency is responsible for providing a temporary erosion control plan to be included with the final plan submittal. The plans shall detail the types of temporary erosion control facilities to be used and the location of where the items shall be installed. Further information on the design criteria can be found in the MoDOT Engineering Policy Guide, Roadside Development, Category 806, Pollution, Erosion and Sediment Control at [http://epg.modot.org/index.php?title=Category:806 Pollution%2C Erosion and Sediment Control](http://epg.modot.org/index.php?title=Category:806%20Pollution%2C%20Erosion%20and%20Sediment%20Control).

Air Quality Requirements

The Clean Air Act defines requirements for transportation project air quality analysis. In Missouri, requirements are met through conformity demonstrations with established emission budgets contained in the State Implementation Plan (SIP). This process involves projects meeting the definition of 'regionally significant,' as described in 23 CFR 450.104. At a minimum, this includes all principal arterial highways and all fixed guideway transit facilities that offer a significant alternative to regional highway travel and would normally be included in the modeling of a metropolitan area's transportation network.

Generally, projects sponsored through the LPA manual processes will not meet the definition of 'regionally significant.' In the event a local project is determined to be regionally significant, conformity will be demonstrated through an established process for inclusion in a metropolitan TIP.

Noise Standards and Noise Abatement

Federal legislation in 1970 authorized the use of federal-aid highway funds for measures to abate and control highway traffic noise. MoDOT has a federally approved traffic noise policy (http://epg.modot.mo.gov/files/d/de/NOISE_POLICY.pdf) to define and conform to the requirements of Title 23, Article 772, Code of Federal Regulations (23 CFR 772) and the noise-related requirements of NEPA. The guidelines in the MoDOT Noise Policy are used to determine the need, feasibility, and reasonableness of noise abatement measures and provide the basis for statewide uniformity in traffic noise analysis. If the project sponsor does not have a noise policy, it is suggested that they use MoDOT's FHWA-approved noise policy.

The local agency is normally required to conduct a noise analysis during the project development stage to identify noise sensitive receptors. A noise analysis will not be necessary for the following types of projects since they are not likely to result in a significant increase in highway traffic noise:

1. Minor widening and resurfacing.
2. Signalization projects including intersection and ramp terminal widening.
3. Replacement of a bridge in proximity of the existing structure.

On projects involving partial or full control of access, environmental documents must address noise abatement at those receptors for which abatement levels are impractical or unfeasible. These must be approved prior to submitting final plans. The procedure for conducting a noise analysis is as follows:

1. Identify existing activities or land uses that may be affected by the project. The analysis may be terminated if it is analytically determined that activities or developed land uses are not sufficiently close to the proposed project to be adversely affected by the noise.
2. Predict the traffic-generated noise levels for each alternative being studied. The weighted sound pressure level reference used is dBA. The sound level shall be expressed as L_{eq} , which is the average equivalent energy sound level. The approved basis for computing noise levels is the current model version of FHWA's Traffic Noise Model (TNM) or any other model determined by the FHWA to be consistent with the methodology of the FHWA TNM. A method of displaying the predicted noise levels is to select locations on aerial photographs or preliminary maps, such as those used in preliminary design layouts, and show the computed general highway noise levels at these locations.
3. Determine the existing noise levels by field measurement.
4. Compare the predicted noise levels for each alternative under study with existing noise levels and the abatement criteria noise levels. It is also desirable to predict noise levels for a "no-build" alternative.
5. Determine whether receptors meet the criteria for noise abatement and evaluate alternative noise abatement measures for reducing or eliminating the noise impact for activities or developed lands.
6. Identify those lengths of roadway for each side of the highway and individual land uses where noise abatement measures appear impractical or not prudent.
7. Prepare a listing of abatement measures and locations based on the findings of the noise analysis items 1 thru 6 above. These shall be identified in the environmental document. Noise impacts for which no apparent solution is available are also to be listed. Plans and

specifications are to include those noise abatement measures that are reasonable and feasible.

Numerous abatement measures can be considered. Obvious measures are relocating the highway to a less sensitive area or shifting the alignment. Other actions that can reduce the noise levels include purchasing additional right-of-way to increase the distance from the noise source to the receptor, reducing operating speed, reducing the grade of the road, and using vegetation screens. More costly abatement measures include erecting sound barriers and the placement of earth berms.

Noise abatement measures are not required for lands that are undeveloped at the time of public knowledge of the proposed highway project.

FHWA concurrence in the environmental document will constitute its determination that noise abatement measures have been adequately considered.

Section 4(f) and Section 4(f) Evaluations

Section 4(f) lands are lands that are publicly owned or held by means of a long-term lease and are intended for use as public parks, recreation areas, wildlife and waterfowl refuges, or any significant public or private historical site.

The local agency will examine the project to see whether it will require the use of or have an impact on these lands. This evaluation is separate from the NEPA classifications discussed previously. However, if Section 4(f) lands are to be impacted by a project, the project sponsor must complete a Section 4(f) evaluation and FHWA must approve it before a CE can be approved. The Section 4(f) evaluation will be included in an EA or EIS. Figure 4-6 contains the LPA Section 4(f) compliance worksheet (for parks/refuges only).

FHWA may not approve the use of land (permanent or temporary) from a significant publicly owned park, recreation area, or wildlife and waterfowl refuge, or from any significant historic site unless a determination is made that:

1. There is no feasible and prudent avoidance alternative to the use of land from the property and
2. The action includes all possible planning to minimize harm to the property resulting from such use.

Supporting information must demonstrate that there are unique problems or unusual factors involved in the use of alternatives that avoid these properties or that the cost, social, economic, environmental impacts, or community disruption resulting from such alternatives reach extraordinary magnitudes.

Any use of lands from a Section 4(f) property shall be evaluated early in the development of the project when alternatives to the proposed project are under study. Consideration under Section

4(f) is not required when the federal, state, or local officials having jurisdiction over a park, recreation area, or refuge determine that the entire site is not significant. In the absence of such a determination, the Section 4(f) land is presumed significant. FHWA will determine whether Section 4(f) applies.

If FHWA makes a *de minimis* determination, the MoDOT district contact will notify the project sponsor, who will need to assemble the documentation required to support the finding.

Documentation requirements may be viewed at

<http://www.fhwa.dot.gov/hep/qasde minimus.htm>. A *de minimis* finding by FHWA means that if a transportation use of a Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a minimal impact to that property, an analysis of avoidance alternatives is not required and Section 4(f) is complete. The *de minimis* impact criteria and associated determination requirements specified in Section 6009(a) of SAFETEA-LU are different for historic sites than for parks, recreation areas, and wildlife and waterfowl refuges. *De minimis* impacts related to historic sites are defined as the determination of either “no adverse effect” or “no historic properties affected” in compliance with Section 106 of the National Historic Preservation Act (NHPA). *De minimis* impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not “adversely affect the activities, features and attributes” of the Section 4(f) resource.

FHWA has approved five nationwide programmatic Section 4(f) evaluations. The first one covers U.S. DOT assisted highway projects which use minor amounts of land from publicly owned public parks, recreation areas, and wildlife and waterfowl refuges. The second covers U.S. DOT assisted highway projects that use minor amounts of land from historic sites either on or eligible for inclusion on the National Register of Historic Places (NRHP). The third programmatic Section 4(f) covers the use of historic bridges. The fourth is for independent bikeway or walkway construction that requires the use of recreation areas or parkland. The fifth is the net benefit programmatic Section 4(f) evaluation for projects that will use property from a Section 4(f) park, recreation area, wildlife or waterfowl refuge, or historic property, which, in the view of the FHWA and official(s) with jurisdiction over the Section 4(f) property, will result in a net benefit to it.

Using the nationwide programmatic evaluations can streamline the processing of qualifying projects by eliminating a certain amount of project-by-project internal review and interagency coordination. The programmatic Section 4(f) evaluation satisfies the requirements of Section 4(f) for all projects that meet certain applicability criteria and no individual Section 4(f) evaluations need be prepared for such projects. The FHWA division administrator is responsible for reviewing each individual project to determine that it meets the criteria and procedures of the programmatic Section 4(f).

The programmatic Section 4(f) documentation is roughly equivalent in detail to that of an individual Section 4(f) evaluation. It must demonstrate that the applicability criteria for nationwide evaluation have been met, that avoidance alternatives have been evaluated, that the findings contained in the nationwide evaluation fit the project facts, and that appropriate mitigation measures have been included. It must include correspondence demonstrating that the official(s) with jurisdiction over the Section 4(f) lands agree with the assessment of impacts and

with the proposed mitigation measures. The documentation should be self-contained and self-explanatory since it will be available to the public upon request. The programmatic section 4(f) cannot be used on EIS projects, with the one exception being the programmatic 4(f) for historic bridges. The applicability criteria for the programmatic Section 4(f) evaluations are available from FHWA or MoDOT.

When federal lands or other public land holdings (e.g., state forests) are administered under statutes permitting management for multiple uses and, in fact, are managed for multiple uses, Section 4(f) applies only to those portions of such lands that function for or are designated in the plans of the administering agency as being for significant park, recreation, or wildlife and waterfowl refuge purposes. The determination as to which lands so function or are so designated, and the significance of those lands, shall be made by the officials having jurisdiction over the lands. FHWA will review this determination to assure its reasonableness. The determination of significance shall apply to the entire area of such park, recreation, or wildlife and waterfowl refuge sites.

In determining the application of Section 4(f) to historic sites, the local agency shall consult with the SHPO and appropriate local officials to identify all properties on or eligible for the NRHP. The Section 4(f) requirements apply only to sites on or eligible for the NRHP.

When adequate support exists for a Section 4(f) determination, the discussion in the Section 4(f) evaluation shall specifically address:

1. The reasons why the alternatives to avoid Section 4(f) property are not feasible and prudent and
2. All measures that will be taken to minimize harm to the Section 4(f) property.

FHWA will review the final Section 4(f) evaluation for legal sufficiency before issuing an approval. Project sponsors will not proceed with any action requiring the use of Section 4(f) property and proposed to be classified as a CE until notified by FHWA of Section 4(f) approval. For actions processed with an EA or EIS, Section 4(f) approval is documented with a separate signature page concurrently with FHWA's approval of the FONSI or final EIS. For EIS projects, the sponsor should briefly summarize the Section 4(f) impacts and mitigation measures in the ROD.

Circulation of a separate Section 4(f) evaluation will be required when:

1. A proposed modification of the alignment or design after the CE, EA, FONSI, draft EIS, final EIS, or ROD has been processed would require the use of Section 4(f) property;
2. FHWA determines that Section 4(f) applies to a property after processing the CE, EA, FONSI, draft EIS, final EIS, or ROD; or
3. A proposed modification of the alignment, design, or measures to minimize harm after the original Section 4(f) approval would result in a substantial increase in the amount of

Section 4(f) land use, a substantial increase in the adverse impacts to Section 4(f) land, or a substantial reduction in mitigation measures.

If FHWA determines that Section 4(f) is applicable after the CE, EA, FONSI, final EIS, or ROD has been processed, the decision to prepare and circulate a Section 4(f) evaluation will not necessarily require the preparation of a new or supplementary environmental document. Where a separate circulated Section 4(f) evaluation is prepared, such evaluation does not necessarily:

1. Prevent the issuance of new approvals,
2. Require the withdrawal of previous approvals, or
3. Require the suspension of project activities for any activity not affected by the Section 4(f) evaluation.

Content of a Section 4(f) Evaluation

A draft Section 4(f) evaluation shall include the following information:

1. Proposed Action—describe the proposed project and explain the purpose and need for the project.
2. Section 4(f) Property—describe each Section 4(f) resource that would be used by any alternative under consideration, including:
 - a. Detailed map or drawing of sufficient scale to identify the relationship of the alternatives to the Section 4(f) property.
 - b. Ownership (city, county, state, etc.) and type of Section 4(f) property (park, recreation, historic, etc.).
 - c. Location (maps or other exhibits such as photographs, sketches, etc.) and for parks, size (square feet or acreage) of the affected Section 4(f) property.
 - d. For historic properties, description of the significant features of the affected Section 4(f) property and explanation of the property’s significance, including applicable NRHP criteria.
 - e. Function of or available activities on the property (swimming, golfing, etc.) and description and location of all existing and planned facilities (ball diamonds, tennis courts, etc.).
 - f. Access (pedestrian, vehicular) and usage (approximate number of users/visitors, etc.).
 - g. Relationship to other similarly used lands in the vicinity.

- h. Applicable clauses affecting the ownership, such as lease, easement, covenants, restrictions, or conditions, including forfeiture.
 - i. Unusual characteristics of the Section 4(f) property (flooding problems, terrain conditions, or other features) that either reduce or enhance the value of all or part of the property.
 - j. Any other sources of federal funding.
3. Impacts on the Section 4(f) Property(ies)—discuss the impacts on the Section 4(f) property for each alternative. Where an alternative uses land from more than one Section 4(f) property, include a summary table to compare the various impacts of the alternatives. Quantify impacts that can be quantified, such as noise, and describe other impacts (such as visual intrusion), which cannot be quantified.
 4. Avoidance Alternatives—identify and evaluate location and design alternatives that would avoid the Section 4(f) property. Generally, this would include alternatives to either side of the property. Where an alternative would impact more than one Section 4(f) property, the analysis needs to evaluate alternatives that avoid each and all such properties. The design alternatives shall be in the immediate area of the property and consider minor alignment shifts, a reduced facility, retaining structures, etc. individually or in combination, as appropriate.
 5. Measures to Minimize Harm—discuss all possible measures that are available to minimize the impacts of the proposed project on the Section 4(f) lands. Detailed discussions of mitigation measures described in the EIS or EA may be referenced and appropriately summarized rather than repeated.
 6. Coordination—discuss the results of preliminary coordination with the public officials having jurisdiction over the Section 4(f) property and with regional (or local) offices of the U.S. Department of the Interior (DOI) and, as appropriate, the regional office of the U.S. Department of Housing and Urban Development (HUD) and the Forest Supervisor of the affected national forest (U.S. Forest Service). Generally, the coordination shall include discussion of avoidance alternatives, impacts to the property, and measures to minimize harm. In addition, the coordination with the public official having jurisdiction shall include, where necessary, a discussion of the significance and primary use of the property.

NOTE: The conclusion that there are no feasible and prudent alternatives is not normally addressed at the draft Section 4(f) evaluation stage. Such conclusion is made only after the draft Section 4(f) evaluation has been circulated and coordinated and any identified issues adequately evaluated.

A final Section 4(f) Evaluation must contain:

1. All the previously mentioned information for a draft evaluation.

2. A discussion of the basis for concluding that there are no feasible and prudent alternatives to the use of the Section 4(f) land. The supporting information must demonstrate that “there are unique problems or unusual factors involved in the use of alternatives that avoid these properties or that the cost, social, economic, and environmental impacts, or community disruption resulting from such alternatives reach extraordinary magnitudes.” This language shall appear in the documentation together with the supporting information.
3. A discussion of the basis for concluding that the proposed project includes all possible planning to minimize harm to the Section 4(f) property. When there are no feasible and prudent alternatives that avoid the use of Section 4(f) land, the final Section 4(f) evaluation must demonstrate that the preferred alternative is a feasible and prudent alternative with the least harm on the Section 4(f) resources after considering mitigation to the Section 4(f) resource(s).
4. A summary of the appropriate formal coordination with the headquarters offices of DOI (and/or appropriate agency under that department) and, as appropriate, the involved offices of the U.S. Forest Service and HUD.
5. Copies of all formal coordination comments and a summary of other relevant Section 4(f) comments received and an analysis and response to any questions raised. Where new alternatives or modifications to existing alternatives are identified and will not be given further consideration, the basis for dismissing these alternatives shall be provided and supported by factual information.
6. Concluding statement as follows: “Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the [*identify Section 4(f) property*] and the proposed project includes all possible planning to minimize harm to the [*identify the Section 4(f) property*] resulting from such use.”

Section 6(f) of the Land and Water Conservation Fund (LWCF) Act

The Land and Water Conservation Fund (LWCF) Act provides funds for the acquisition and development of public outdoor recreation facilities that could include community, county, and state parks, trails, fairgrounds, conservation areas, boat ramps, shooting ranges, etc. Section 6(f) of the LWCF Act places restrictions on public recreation facilities funded with LWCF monies; LWCF-assisted facilities must be maintained for outdoor recreation in perpetuity. Therefore use of such property for a transportation project will require mitigation that includes replacement land of at least equal value and recreational utility. Section 6(f) documents are lengthy, frequently taking one to two years to process, and also require a signed Section 4(f) document to be completed.

Historic and Archaeological Sites and Historic Bridges—Section 106

Consideration shall be given at preliminary engineering stage on the possible effects of the project on historic properties [i.e., buildings, bridges, and archaeological sites that are on or eligible for the National Register of Historic Places (NRHP)]. The local agency is responsible for obtaining concurrence from the State Historic Preservation Office (SHPO) of the Missouri Department of Natural Resources (DNR) that the project has complied with Section 106 requirements. The sponsor must complete the SHPO *Section 106 Project Information Form* (Figure 4-7 and at <http://www.dnr.mo.gov/forms/780-1027.pdf>) and submit it to DNR. If the project contains a bridge, the project sponsor must also complete a Bridge Inventory Survey Form (Figure 4-8) for submittal to DNR along with the project information form. The local agency can complete these forms without needing the services of a cultural resources consultant.

Using the information on the forms, the SHPO examines their records for previously identified historic resources. When these forms are submitted for projects utilizing previously disturbed ground, such as those on existing alignments, DNR usually recommends no survey work required. If the SHPO believes resources may be present on a project (e.g., new alignment, project affecting buildings or involving historic bridges on old or new alignments, those involving borrow sites), the SHPO will require a cultural resource survey to be conducted for the project. The local agency must hire a cultural resource consultant to conduct the survey. If any human remains (other than from a crime scene) are discovered during archaeological investigations on non-federal land, they are subject to the immediate control, possession, custody and jurisdiction of the SHPO, pursuant to the Missouri Unmarked Human Burial Sites Act, §§ 194.400 – 194.410, RSMo. The cultural resource consultant should examine the project location and/or search the archival records when necessary for the existence of any cultural resources eligible for listing on the NRHP. Additional information on Section 106 and a list of qualified professional cultural resource consultants can be accessed at <http://www.dnr.mo.gov/shpo/sectionrev.htm>.

Figure 4-9 contains a brief outline of the Section 106 process, followed by detailed procedures and a flow chart of the typical Section 106 process that the local agencies must follow. If a historic property will be adversely affected, an agreement document among FHWA, DNR, and the local agency on how to mitigate the adverse effect would be required for Section 106 compliance. FHWA has entered into agreements with the SHPO and the Advisory Council on Historic Preservation (ACHP) for procedures to clear historic bridges. A sample Memorandum of Agreement (MOA) for historic bridges and information to accompany are attached as Figure 4-10. This MOA includes advertising availability of the bridge for adaptive reuse.

NOTE: A compliance letter issued by SHPO is only for the project as it was submitted to SHPO. Any changes to project activities after submittal may void the project's Section 106 compliance. The project sponsor should contact SHPO to discuss the changes and the possible resubmittal and review by SHPO.

Threatened and Endangered Species

The Endangered Species Act, the Migratory Bird Treaty Act, and other state and federal laws protect plants and animals and their habitats. Local agencies shall submit the following to Missouri Department of Conservation (MDC):

- Brief description of project (e.g., bridge replacement)
- Explain what is involved (e.g., tree clearing, bridge piers in river, etc.)
- Number of acres impacted (e.g., clear 20 acres of trees)
- Include a map(s) showing location of project
- Include pictures if available

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The MDC will respond with a letter indicating whether any threatened or endangered species occur in the area. If state-listed species occur near the site, further coordination with the MDC will be necessary to minimize impacts to these species. If federally listed species are known to occur near the site, the project sponsor will need to contact MoDOT and MoDOT will coordinate with the U.S. Fish and Wildlife Service to avoid project impacts to the species and obtain clearance.

Report MDC's findings and attach MDC correspondence along with documentation of U.S. Fish and Wildlife clearance.

Hazardous Waste

There are several laws and regulations that deal with hazardous waste and both underground and aboveground storage tanks. Properties containing hazardous and non-hazardous solid wastes are frequently encountered in new right-of-way acquisitions. Some properties with extensive contamination and legal liabilities may warrant avoidance. For most sites, however, early identification and planning will allow selection of feasible alternatives with incidental costs. In addressing hazardous and solid wastes, the goals are to: 1) avoid unacceptable cleanup cost and legal liability and 2) comply with federal and state laws and regulations regarding cleanup. The most common type of hazardous waste site encountered is a petroleum underground storage tank (UST) site. Local public agencies shall evaluate proposed corridors for hazardous and solid waste sites by conducting a field check (if necessary) and a thorough database search. Below is a list of possible sources.

- Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS): <http://www.epa.gov/superfund/sites>, select CERCLIS Hazardous Waste sites
- DNR Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites in Missouri: <http://www.dnr.mo.gov/env/hwp/downloads/index.htm>
- DNR Missouri Hazardous Waste Generators List: <http://www.dnr.mo.gov/env/hwp/downloads/index.htm>
- DNR Missouri Hazardous Waste Treatment, Storage, and Disposal Facilities List: <http://www.dnr.mo.gov/env/hwp/downloads/index.htm>
- DNR Solid Waste Facilities List: <http://www.dnr.mo.gov/env/swmp/facilities/sanlist.htm>
- DNR Registered Underground Petroleum Storage Tank List: currently unavailable on DNR website, contact DNR
- DNR Leaking Underground Storage Tank List: currently unavailable on DNR website, contact DNR
- Petroleum Storage Tank Insurance Fund: <http://www.pstif.org/>, select tank site
- National Response Center Hotline: <http://www.nrc.uscg.mil/nrchp.html>, select service, then query/download-select Standard Report to run query
- EPA Envirofacts: <http://www.epa.gov/enviro/>, select maps, then enviromapper-select Go to Enviromapper
- Other lists as appropriate

Coordination with EPA and DNR will help to determine liability, regulatory requirements, and potential cleanup costs. The potential to encounter unknown wastes from sites not identified through database and/or site reviews by the local agency should always be a consideration. Any unknown sites that are found during project construction shall be handled in accordance with federal and state laws and regulations. Include resource agencies response letters in the NEPA document.

Borrow Guidance

Borrow sites may be selected that are outside the project footprint and therefore were not previously addressed by the NEPA document and other environmental approvals for the project. If the appropriate quantity of borrow material for a project is available from several sources, the sponsor is required to specify the source from which the materials are to be obtained. The project sponsor is responsible for ensuring that the contractor clears land disturbance areas for environmental concerns unless the necessary clearances have already been obtained, with the contractor providing documentation to the resident or liaison engineer. To eliminate possible delays, the local agency should specify in the engineering services contract that a proposed borrow site be investigated. Figure 4-11 provides guidelines for obtaining environmental clearance on borrow sites. This information is also available from the liaison or resident engineers or the MoDOT environmental unit.

The requirements of Section 106 of the National Historic Preservation Act apply to all areas of land disturbance. The local agency must complete the SHPO *Section 106 Project Information Form* (Figure 4-7 and at <http://www.dnr.mo.gov/forms/780-1027.pdf>) and submit it to DNR. The sponsor must provide written certification to the MoDOT district contact that the proposed site of land disturbance has been cleared of environmental concerns under all applicable federal and state laws and regulations. These include but are not limited to the Clean Water Act; Section 4(f) of the Department of Transportation Act; the Endangered Species Act; the National Historic Preservation Act; the Farmland Protection Act; Resource Conservation and Recovery Act; Comprehensive Environmental Response, Compensation, and Liability Act; and RSMo Chapter 194, Section 194.400, Unmarked Human Burial Sites. Certification will include all clearance letters and other evidence of coordination with the appropriate regulatory agencies.