

Chapter 22

VISUAL RESOURCES/ AESTHETICS

MDT ENVIRONMENTAL MANUAL

October 2010

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Chapter 22

VISUAL RESOURCES/AESTHETICS

22.1 OVERVIEW

Visual resources include those physical features that define the visual and aesthetic character of an area. These can be important natural features or scenic vistas and can include man-made urban or community visual characteristics, including architecture, skylines or other aspects that create a visual definition for an area.

Visual resources are important because of their uniqueness and the emotion they can inspire. These features often provide a sense of community for the inhabitants of an area and may attract tourism that contributes to the local economy.

The presence of visual resources may influence the routing of a proposed project or its alternatives because the resources may need to be avoided if the roadway passes too closely, or it may be advantageous to enhance the view of a particularly important visual resource from the project or turnouts included in the project.

Visual and aesthetic considerations are a key component of MDT's Context Sensitive Solutions (CSS) procedures (see [Chapter 9 "Context Sensitive Solutions"](#)), are a factor in project design, and are evaluated as a part of the environmental process for proposed projects. Collect information on important visual resources early in the scoping process for consideration in project development.

This Chapter provides procedures for identifying visual resources and evaluating and documenting potential visual impacts and measures for avoiding and mitigating adverse visual impacts.

22.2 LAWS, REGULATIONS AND GUIDANCE

22.2.1 23 USC 131 “Control of Outdoor Advertising”

This Part of the *United States Code* (USC) codifies the provisions of the *Highway Beautification Act of 1965*. This Act called for control of outdoor advertising, including removal of certain types of signs, along the nation’s growing Interstate system and the existing Federal-aid primary system. It also required certain junkyards along Interstate or primary highways to be removed or screened, and encouraged scenic enhancement and roadside development.

22.2.2 23 USC 139 “Efficient Environmental Reviews for Project Decision-Making”

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

22.2.3 23 CFR 750 “Highway Beautification”

This Part of the *Code of Federal Regulations* (CFR) includes provisions for control of outdoor advertising and regulation of directional and official signs.

22.2.4 FHWA Technical Advisory T 6640.8A

The Technical Advisory, dated October 30, 1987, includes guidance for addressing visual impacts. The guidance provides that when the potential exists for project alternatives to involve visual quality impacts, the environmental document should:

- identify the impacts to the existing visual resource(s) and the relationship of the impacts to potential viewers of and from the project;
- identify measures to avoid, minimize or reduce the visual quality impacts; and
- explain the consideration given to design quality, art and architecture in project planning and development.

The guidance also states that when a proposed project will include features associated with design quality, art or architecture, the environmental document should be circulated to officially designate State and local arts councils and, as appropriate, other organizations with an interest in design, art and architecture.

22.2.5 Visual Impact Assessment for Highway Projects (FHWA-HI-88-054)

This field guide presents a detailed approach for identifying and assessing the nature and potential importance of visual effects of highway projects.

22.3 PROCEDURES

22.3.1 Information Gathering

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

For projects subject to the requirements of 23 USC 139 “Efficient Environmental Reviews for Project Decision-Making,” the PDE, in cooperation with the Federal Highway Administration (FHWA), collaborates with participating agencies in determining the appropriate methodologies to be used and the level of detail required in the analysis of visual resource/aesthetic impacts of project alternatives.

For projects determined to have potential for visual impacts, the PDE conducts appropriate surveys and research to identify locations in the project’s area of potential effect that may be sensitive to visual impacts. Examples of actions that may have visual impacts include projects on new location or that involve expansion, realignment or other changes that could alter the character of an existing facility. Examples of locations that may be sensitive to visual impacts include residential areas, areas of recognized beauty, geological features, parks and recreation areas, historic or other culturally important resources, water bodies and public facilities (e.g., hospitals, colleges, universities). The visual impact analysis should include identification and consideration of the project’s potential for affecting views from frequently used hiking trails, scenic byways or other routes that are enjoyed because of their views.

The PDE coordinates with appropriate local officials and State, Tribal and Federal agencies, and uses scoping, public involvement activities and the CSS procedures (see [Chapter 9 “Context Sensitive Solutions”](#)) to gather, refine and document information on the baseline conditions, visual/aesthetic features that are important to the affected community/area, and the sensitivity of the area of impact. Sensitivity is determined based on a range of factors (e.g., the type of users, amount of use, public interest, adjacent land uses, presence of special areas).

The PDE also coordinates with the DT to gather information on aesthetic enhancements (i.e., measures to improve the visual quality of the area) to be incorporated in the design of the project. Examples include:

- coordination of the horizontal and vertical alignment to enhance aesthetics of the facility to fit it into the landscape with minimal land form modification;
- opening the roadway to panoramic views that otherwise may be hidden by cuts (e.g., “daylighting”);

- minimizing removal of existing vegetation and providing landscaping, wildflower plantings, etc., for aesthetic purposes and to screen objectionable views from the roadway (e.g., junkyards); and
- integrating consideration of scale, proportion, form, line, material, texture, color and other principles of art and architecture in the design of aesthetically pleasing sound walls and roadway structures.

22.3.2 Analysis and Findings

The PDE coordinates with the DT to conduct a visual impact analysis for projects that have potential to change the visual environment. The level of analysis is commensurate with the complexity of the project and the potential for resulting in impacts to important visual resources. Projects that rehabilitate or replace existing facilities and that do not change the character of those facilities typically require minimal analysis. Projects on new location, or that involve expansion or substantial modification of an existing facility, require a correspondingly higher level of analysis. The extent of impact to visual resources is typically evaluated based on the importance of the affected resource to the community and the compatibility of the project with the visual character of the resource.

In assessing the effects, the PDE and DT consider direct impacts of project alternatives (e.g., removal or alteration of an important visual resource), compatibility of the project and its appurtenances (e.g., traffic signals, signage, landscaping) with the visual setting, the effects of the project on the viewshed (e.g., blocking the view of important visual features or introducing elements that are out of character with the scenic qualities of the viewshed) and the relationship of the impacts to potential views of and from the project. The PDE coordinates the effect findings with appropriate local officials, State, Tribal and Federal agencies and with the public through the project's public involvement activities, and document the results.

If adverse visual impacts are identified, the PDE and DT coordinate to evaluate measures to avoid, minimize or reduce the impacts. Examples of possible visual impact mitigation measures (i.e., to reduce potential adverse visual impacts associated with the project) include the following:

- minimizing cut and fill so a roadway's impact on the landscape is as small as practical;
- modifying facility shape, texture and color to help it blend with the surrounding landscape;
- using methods of blasting rock so that drill marks are not left visible;
- constructing the facility on the backside of hillsides in important viewsheds;
- realigning alternatives away from important visual/aesthetic resources;
- acquiring scenic easements to protect important visual/aesthetic resources;
- including turnouts, parking areas and signage that promote public enjoyment of visual/aesthetic resources from the project; and

- providing landscaping, which may include native flowers, plants and trees, to soften/minimize the appearance of cuts, fills, bridge abutments, etc.; replace vegetation removed due to the project and screen unaesthetic views.

The PDE ensures the results of the analysis of visual impacts and measures to avoid, minimize or reduce the impacts, are appropriately reflected in the project environmental documentation (see [Chapters 11 “Preparing Environmental Documentation,” 12 “Categorical Exclusion,” 13 “Environmental Assessment/FONSI” and 14 “Environmental Impact Statement/ROD”](#)) and included in the project file.

22.3.3 Mitigation and Commitments

The PDE and DT ensure the project plans accurately reflect the measures for avoiding, minimizing or reducing adverse visual impacts. To the extent possible, the PDE and DT should prepare the contract documents using the *MDT Standard Specifications* to minimize the need for special provisions.

The District Environmental Engineering Specialist monitors project construction to ensure that measures to avoid, minimize or reduce adverse visual impacts are implemented in accordance with the approved project plans, including, as applicable, obtaining commitments from adjacent landowners or community agencies/organizations for long-term maintenance of landscaping associated with the project.

