

Ending of No Significant insact United States Department of the Interior

IN REPLY REFER TO:





FINDING OF NO SIGNIFICANT IMPACT

GUARDRAIL REPLACEMENT AND INSTALLATION BLUE RIDGE PARKWAY coadstac fill slopes. In plementation **2005, redot OCO** alternative will provide a or insistence comprehensive and adaptive and adaptive of the maximum and instribution that will maticiate readstore safet, while protecting of the maximum in steme

Based on the following summary of effects, as discussed in the attached environmental assessment (EA), it has been determined that the proposed action would not have a significant impact on the human environment. Environmental impacts that could occur are limited in context and intensity, with generally adverse impacts that range from localized to widespread, short- to long- term, and negligible to moderate. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law. Therefore, an environmental impact statement (EIS) is not required. Barrier Warr onting and Assessment of Adamse Lifeats Screen

Recommended by:

_ Date: _/0 ancessful and balanced collabs

Phil A. Francis, Jr., Superintendent, BLRI

Approved by:

rs from past apoil Date: 11/12 For David Vela, SE Regional Director

1

Finding of No Significant Impact Guardrail Replacement and Installation

This finding of no significant impact (FONSI) and the *Guardrail Replacement and Installation Programmatic Environmental Assessment* (EA) constitute the record of the environmental impact analysis and decision- making process for the Blue Ridge Parkway's (Parkway) guardrail and installation project. The National Park Service (NPS) will implement the preferred alternative (proposed action), which includes the replacement of both deteriorated guardrail and guardrail that does not meet current crashworthiness criteria along the Parkway, as well as the installation of guardrail at locations along the Parkway where necessary to address current safety standards at such locations as tunnel openings, stone masonry walls, bridge wing walls, parapet walls and roadside fill slopes. Implementation of the preferred alternative will provide a consistent, comprehensive, and adaptive approach to guardrail replacement and installation that will maintain roadside safety while protecting, to the maximum extent possible, the Parkway's significant historical and natural resources.

This document records 1) a Finding of No Significant Impact as required by the National Environmental Policy Act of 1969 and 2) a determination of no impairment as required by the NPS Organic Act of 1916.

PREFERRED ALTERNATIVE

As described in the EA, the preferred alternative consists of the implementation of a roadside barrier warranting and assessment of adverse effects screening methodology that would be applied on a project- by- project basis. The methodology is explained in Appendix B of the EA, *Roadside Cultural Resources Preservation: a Guide to Roadside Barrier Warranting and Assessment of Adverse Effects Screening Methodology Addressing the Effects of Roadside Safety Implementation on the Blue Ridge Parkway* (RCRP), of the EA.

The RCRP methodology provides a systematic, consistent, and objective process for evaluating roadside safety needs in a multi- year, multi- project context. It also provides an effective mechanism for the NPS and Federal Highway Administration (FHWA)-Eastern Federal Lands Highway Division (EFLHD) to continue their historically successful and balanced collaboration on protecting park resources and ensuring visitor safety. The RCRP addresses both the replacement of existing guardrail that does not meet current crashworthiness criteria, as well as the installation of new roadside guardrail or guardrail transitions to fixed objects in the clear zone. Consistent with standard NPS practice, the RCRP calls for replacing guardrail that is damaged or does not meet current crashworthiness criteria with steel- backed timber guardrails. However, the RCRP differs from past approaches to deciding where to add new roadside guardrail or new guardrail transitions to fixed objects in that it implements a three- step screening process: (I) a *roadside barrier warranting process* that determines whether placement of a roadside safety feature is warranted, (2) a *historic integrity and effects screening process* that determines whether sensitive cultural or natural resources or conditions are present and assesses the level of effect a roadside safety feature would have on these resources or conditions and (3) a findings evaluation and decision making step.

The RCRP also provides for the use of alternative (non-guardrail) roadside safety measures in certain situations or the use of safety variances. In accordance with the NPS Park Road Standards the park managers will invoke the use of a design exception or variance (as determined appropriate for that particular project) as allowed and recommended in such situations by the American Association of State Highway and Transportation Officials (AASHTO) guidelines and as allowed and recommended in such situations by the FHWA Highway Design Manual, in order to protect the integrity of the resource. NPS Park Road Standards includes as historic structures "...a number of park roads and parkways, or structures on them (e.g. bridges, walls and overlooks) are historic in themselves, and are in some instances listed on the National Register. Preservation or restoration may be the only option for such historic roadways or structures." Additionally, variances should be used in situations in which the application of roadside safety features that are warranted would result in unacceptably high costs or major impacts on the adjacent natural or cultural resources. For these instances, the design variance process allows for the use of criteria lower than those specified as minimum acceptable values in FHWA policy and AASHTO and National Cooperative Highway Research Program (NCHRP) guidelines.

The RCRP methodology embodies a five- step process: (1) evaluate the project area to determine if a safety feature is warranted; (2) inventory the existing conditions/resources of the project area; (3) assess the existing conditions to determine the roadside's ability to absorb the addition of a safety feature; (4) determine the level of adverse effect the addition of a safety feature would have on the existing conditions/resources; and (5) findings evaluation and decision leading to project implementation–install the safety feature, implement an alternative mitigation, or take no action utilizing the appropriate safety variance.

Six factors are considered in the warranting process. The first three factors—crash history, presence of fill slope vegetation and driver expectancy on the Parkway are important to consider in exercising professional judgment in determining the degree to which a barrier is warranted. The additional factors of hazard type, size and offset, unusual roadway geometric conditions and traffic growth are most directly used in the warranting process. This "Step 1" process indicates if a barrier is warranted and what safety feature action is to be evaluated in Step 2, the historic integrity and effects screening will involve preparing an inventory of roadway alignment, landform, and vegetation to assess the ability of the

landscape to visually absorb the proposed safety feature, and conducting a historic resource assessment to help determine to what degree historic resources would be impacted by the proposed feature.

MITIGATION

As described in the EA, the following mitigation measures were incorporated into the preferred alternative.

Cultural Resources

In order to mitigate any adverse effects to cultural resources and comply with Section 106 of the National Historic Preservation Act, the NPS negotiated a programmatic agreement (PA) among the State Historic Preservation Officers of North Carolina and Virginia and the Advisory Council on Historic Preservation. The PA recorded the terms and conditions agreed upon to resolve and mitigate the potential adverse effects associated with the replacement and installation of guardrail.

Soils

Soil material excavated for emplacing guardrail posts (save for what is needed for backfill) or terminal ends will be hauled off, the road shoulder recontoured, and exposed areas reseeded with grass to minimize erosion. No excavated materials will be stored within the construction zone. These practices will minimize disturbance to soils and vegetation due to construction activities.

Special Status Species

The NPS will avoid impacts to special status plant species by minimizing disturbance or removal of roadside turf grass, confining construction staging (including vehicle parking) to paved areas, limiting the period of construction to the plant species' dormant (non- growing) season, and requiring that replaced guardrail be hauled off site. When specific locations for projects have been determined, the NPS will fulfill compliance requirements for each individual site- specific project, e.g., surveys for the presence of federal or state listed or proposed threatened, endangered, or rare species.

Visitor Safety

Traffic management plans will be developed and implemented on a project-by-project basis during construction. These plans will include such measures as an accident prevention program outlining each phase of work and associated hazards and the methods proposed to ensure property protection and safety of the public. As a part of each project signs will be provided to warn travelers about road construction and traffic delays, and the use of alternative routes and destinations may be encouraged. During construction activities, traffic flows and safety will be maintained by using such measures as keeping construction equipment as far off the road as possible and by providing flag persons to assist traffic negotiating through construction areas. Single lane closures with flaggers will endeavor to limit construction caused delays to public traffic to a maximum of 15 minutes per passage through the project. Additionally, the hauling of equipment and materials will only be permitted from the nearest point of public access to the project site. Finally, only the length of guardrail that can be replaced in one work day will be removed.

Visitor Experience

NPS will use flat coloring on constructed elements to blend their appearance with the surrounding landscape. If practical, no work will be permitted on Sundays, National legal holidays or National legal holiday weekends. The NPS does not normally allow any type of construction on the mainline Parkway during the month of October. Also, the use of well- tuned construction equipment with properly operating mufflers will be required and an emphasis on performing the work during low visitation periods will be advised.

Park Operations

When hauling equipment and materials on the Parkway, the contractor must comply with all legal load restrictions as set forth by the NPS. Storage of construction materials will be confined to Parkway pullouts, as approved by the Parkway Superintendent or to private areas outside of the Park. All work operations will be confined to within the designated project limits.

Damage to the Parkway motor road surface, shoulders, ditches, cut or fill slopes or other road related structures will be mitigated, restored, repaired, or replaced by the contractor. Damage to natural or cultural resources will be mitigated, restored, or repaired by the contractor. The contractor will mitigate for the introduction of any exotic vegetation introduced into the park through the careless use of unclean turf establishment equipment by purchasing high quality, weed- free seed.

ALTERNATIVES CONSIDERED

The EA analyzed two alternatives in detail: the no action alternative and the preferred alternative, which was the proposed action. A third alternative was also considered, but eliminated from further evaluation in the EA.

No Action Alternative

The no action alternative would maintain all current management practices and levels of treatment for the resources. Guardrail maintenance and replacement work would continue at current levels. Existing guardrail that that does not meet current crashworthiness criteria would be replaced. New guardrail would be added in locations of demonstrated safety concern in accordance with NPS Park Road Standards and Management Policies and as corroborated by accident data. However, in some instances in recent years, new guardrail was installed based on current FHWA policy and guidelines rather than AASHTO and NCHRP guidelines. Additions occurred in

areas where no clear safety concern was demonstrated and not in accordance with NPS Road Standards or Management Policies. Guardrail replacements and additions would take place over several years, as funding becomes available. Design and safety issues would be addressed, and environmental and cultural resource compliance would proceed on a project- by- project basis.

Alternative Considered, But Eliminated From Further Evaluation

A third alternative was considered during the early stages of the planning process but was rejected because it would not be consistent with NPS Management Policies and would result in too great an impact on the Parkway's cultural resources. This alternative was based on rigid conformity with AASHTO roadside design guidelines and the EFLHD's *Project Design and Development Manual* (2005). While this alternative would achieve the desired safety goals recommended by the guidelines, it would also result in extensive adverse impacts on park resources, particularly the Parkway's historic architectural and cultural landscape (including scenic) resources.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

In accordance with DO- 12, the NPS is required to identify the "environmentally preferred alternative" in all environmental documents, including EAs. The environmentally preferred alternative is the alternative that will promote the national environmental policy expressed in NEPA (Sec. 101 (b)). This includes alternatives that, when compared with other alternatives under consideration, better meet the following criteria:

- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- (2) ensure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings.
- (3) attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- (4) preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- (5) achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
- (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

In other words, the environmentally preferred alternative would be the one that "causes the least damage to the biological and physical environment ... [and] ... best protects, preserves, and enhances historic, cultural, and natural resources" (NPS Director's Order No. 12 Handbook: 23).

The preferred alternative (proposed action) is the environmentally preferred alternative because it provides a consistent, comprehensive, and adaptive approach to maintaining roadside safety while protecting to the maximum extent possible the Parkway's significant cultural and natural resources. The preferred alternative identifies three major types of guardrail installation projects under which each specific project can be grouped, and sets forth a screening process using several safety and natural/cultural/social resource criteria that balances all aspects of the project for planners, designers and implementers. The preferred alternative provides for an adaptive approach to evaluating the guardrail installation program that ensures greater consistency over time in evaluating the cultural and natural resource factors, which better fulfills criteria (1), (2), and (4) than the no action alternative.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. A significant effect may exist even if the agency believes that on balance the effect will be beneficial. As described in the EA, there will be adverse, site- specific, short- term impacts of negligible to minor intensity on soils. Impacts to special status species could be site- specific, short- term and of minor intensity. The impact to the Parkway's cultural resources resulting from the replacement of existing guardrail that does not meet current crashworthiness criteria will be local, long- term, adverse and of minor intensity. Impacts associated with the installation of guardrail at the approaches to all fixed structures, such as tunnel openings, stone masonry walls, bridge wing walls, and parapet walls, as well as the installation of new freestanding guardrail where none previously existed, will result in local, long- term, adverse impacts of moderate intensity to park cultural resources. Impacts to visitor safety will be local, beneficial, long- term and negligible to minor intensity, while impacts to visitor experience will be local, of negligible to minor intensity, and adverse. There will be local, adverse effects of minor intensity to park operations.

Degree of effect on public health or safety. As described in the EA, the NPS will continue to replace existing deficient guardrail (i.e., impact damaged, deteriorated, or otherwise not crashworthy) or add new guardrail incrementally at locations where public safety concerns have been demonstrated (e.g. locations associated with increasing accident rates, fixed roadside objects, or shoulders that transition into steep topographical relief and stands of large roadside trees (>4 inches dbh (diameter at breast height)). Impacts to visitor safety will be beneficial, long- term and negligible to minor in intensity.

The preferred alternative will also more prudently explore the use of a combination of structural and non- structural techniques to improve visitor safety along the Parkway while retaining the unique historic qualities and characteristics of the roadway. Reduction in speed limits, additional road striping, unique signage, enhanced public education and increased ranger patrol and enforcement are techniques that will be combined with thoughtful placement of guardrail to increase public safety. Impacts to visitor safety will be beneficial, long- term, and of minor intensity with no impacts to natural and cultural resources.

During construction activities associated with guardrail implementation, the NPS will take steps to ensure visitor safety, e.g. temporary closing of lanes, sequencing of construction events to minimize impacts to traffic, or restricting contractor work to offpeak hours. Visitors will be notified of changes in traffic patterns, detours, and traffic delays through the use of vehicle messenger signs and public notifications. Implementation of such measures will ensure that any short- term, construction related adverse impacts to visitor safety are negligible.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. As described in the EA, replacement of existing guardrail has been, and continues to be, a common activity along the Parkway. The replacement guardrail will be the crash- tested, NCHRP 350- compliant guardrail, which is similar in composition, design, color, and texture to earlier guardrail types and, although the rail height is three to 12 inches higher compared to earlier types, is a compatible substitute. Guardrail installation projects involving the replacement of existing guardrail only will be considered "replacement in kind," which is an appropriate treatment in accordance with the 1983 Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation*. Because the replacement of existing guardrail will neither obscure or destroy character- defining features of the Parkway nor alter the overall historic character of the Parkway, the impact would be long- term and adverse but minor in intensity.

Guardrail will be installed at the approaches to all fixed structures along the Parkway (e.g., tunnel openings, stone masonry walls, bridge wing walls, and parapet walls) where deemed appropriate by the RCRP methodology. The materials used for the guardrails will be clearly distinguishable from the predominantly masonry components of the fixed structures, so as not to create a false historical appearance. However, installing guardrail at bridge, tunnel, or guardwall approaches, which will require specially designed terminal sections of guardrail with additional posts (including two steel I-beam posts anchored in concrete), an additional rub rail below the main rail, and an approved non- contact abutment, will obscure or otherwise alter the Parkway's character- defining features and diminish its historical integrity by introducing design elements that are not in character with the original design and construction of the

Parkway, altering the visual appearance of the structures, the historic relationship of the structures to the surrounding landscape, and the historic site patterns and views and vistas along the Parkway. The adverse impact would be moderate and long- term.

Freestanding sections of guardrail will also be installed along the Parkway where no guardrail existed before, where deemed appropriate by the RCRP methodology. The topography, vegetation, road alignment and circulation patterns, and land use patterns of the Parkway will be unaltered by the installation of the guardrail, but the scale and visual relationships among landscape features will be changed and the guardrail will alter the historic visual appearance of the Parkway. The guardrail will be incompatible with the historic surface and edge treatments of the Parkway. In addition, the guardrail will alter historic views or vistas from vehicles being driven along the Parkway. The adverse impact would be moderate and long- term.

Three perennial forb/herb species categorized as rare by the North Carolina and Virginia Natural Heritage Programs would potentially be impacted. The small grape fern (*Botrychium simplex*) and the Canadian burnet (*Sanguisorba canadensis*) are classified as significantly rare and rare, respectively, by the Virginia Natural Heritage Program. The sticky false- asphodel (*Tofieldia glutinosa*) is classified as rare by the North Carolina Natural Heritage Program. The sticky false- asphodel (*Tofieldia glutinosa*) is classified as rare by the North Carolina Natural Heritage Program. These three species occur infrequently in roadside areas (particularly ditches) along the Parkway. Their growing season ranges from mid- spring to fall. Habitat disturbance resulting from the replacement of guardrail that does not meet current crashworthiness criteria are expected to be short-term. If construction activities are scheduled for the non- growing season, there will be no impacts to individual plants of these three species. Areas denuded of ground cover to accommodate guardrail installation will be immediately reseeded with appropriate ground cover species so that the three rare plant species will be able to recolonize the disturbed areas during the following growing season.

Degree to which effects on the quality of the human environment are likely to be highly *controversial*. There were no highly controversial effects identified during either preparation of the EA or the public review period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks. There were no highly uncertain, unique, or unknown risks identified during either preparation of the EA or the public review period.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration. The proposed action neither establishes a NPS precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant, but cumulatively significant, impacts. The proposed action of the EA analyzed impacts to soils, special status species, cultural resources, visitor safety, visitor experience, and park operations. As described in the EA, the cumulative effects of past, present, and future actions in the area, combined with the impacts of the selected alternative, are not anticipated to produce any significant adverse cumulative effects.

The degree to which the action may adversely affect items listed or eligible for listing in the National Register of Historic Places, or other significant scientific, cultural or historic resources. As described in the EA, the impact to the Parkway's cultural resources resulting from the replacement of existing guardrail that does not meet current crashworthiness criteria will be local, long- term, adverse and of minor intensity. Impacts associated with the installation of guardrail at the approaches to all fixed structures, such as tunnel openings, stone masonry walls, bridge wing walls, and parapet walls, as well as the installation of new freestanding guardrail where none previously existed, will result in local, long- term, adverse impacts of moderate intensity to park cultural resources.

To comply with Section 106 of the National Historic Preservation Act (36 CFR Part 800), the NPS negotiated and signed a programmatic agreement with the North Carolina SHPO, Virginia SHPO, and the Advisory Council on Historic Preservation on October 17, 2010. The PA records the terms and conditions agreed upon to resolve and mitigate potential adverse effects to historic properties.

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973. The USFWS, the Virginia Marine Resources Commission, the Virginia Department of Game and Inland Fisheries, the Virginia and North Carolina Natural Heritage Programs, as well as the North Carolina Wildlife Resources Commission were consulted regarding potential impacts of the project on natural heritage resources, including rare, threatened, or endangered plant and animal species. As described in the EA, mitigating measures will be in place to avoid impacts to rare species and once specific project locations have been determined, the NPS will fulfill compliance requirements for each individual site- specific project, e.g., surveys for the presence of federal or state listed or proposed threatened, endangered, or rare species. Therefore, the proposed action is not anticipated to produce any significant adverse effects. These findings were confirmed in a response letter from the USFWS dated October 14, 2009, fulfilling the requirements under Section 7(c) of the Endangered Species Act.

Whether the action threatens a violation of federal, state, or local environmental protection law. The proposed action violates no federal, state, or local environmental protection laws.

APPROPRIATE USE, UNACCEPTABLE IMPACTS, AND IMPAIRMENT

Sections 1.5 and 8.12 of NPS *Management Policies* underscore the fact that not all uses are allowable or appropriate in units of the National Park System. The proposed action was screened to determine consistency with applicable laws, executive orders, regulations, and policies; consistency with existing plans for public use and resource management; actual and potential effects to park resources; total costs to the Park Service; and whether the public interest would be served. The NPS finds that the replacement and installation of guardrail on the Parkway is an appropriate use. Because the application of mitigating measures is expected to be successful in ensuring that no major adverse impacts would occur, implementation of the preferred alternative would not result in any unacceptable impacts.

In analyzing impairments in the NEPA analysis for this project the NPS takes into account the fact that if an impairment were likely to occur, such impacts would be considered to be major or significant under CEQ regulations. This is because the context and intensity of the impact would be sufficient to render what would normally be a minor or moderate impact to be major or significant. Taking this into consideration, NPS guidance documents note that not all major or significant impacts under a NEPA analysis are impairments. However, all impairments to NPS resources and values would constitute a major or significant impact under NEPA. If an impact results in impairment, the action should be modified to lessen the impact level. If the impairment cannot be avoided by modifying the proposed action, that action cannot be selected for implementation. In addition to reviewing the definition of "significantly" under the NEPA regulations, the NPS has determined that implementation of the preferred alternative would not constitute an impairment of the Blue Ridge Parkway's resources or values as described by NPS Management Policies (NPS 2006 § 1.4). This conclusion is based on the NPS' analysis of the environmental impacts of the proposed action as described in the EA, the public comments received, and the professional judgment of the decision- maker guided by the direction in 2006 NPS Management Policies. This conclusion is further based on the Superintendent's professional judgment. Although the proposed action will result in some adverse impacts, in all cases these adverse impacts are the result of actions taken to preserve and restore other park resources and values. Overall, the plan results in benefits to park resources and values, opportunities for their enjoyment, and it does not result in their impairment.

PUBLIC INVOLVEMENT

As described in the EA, two internal, multi- disciplinary workshops were held at the Parkway's Asheville Headquarters. The first meeting, in November 2005, was held to discuss potential elements of the proposed action, important resources and values that could be affected by the project, and project scheduling. The second meeting, in February 2006, focused on the formulation of alternatives, study methods, and data needs. This meeting also represented the formal kickoff meeting for preparation of the EA.

Public scoping letters were mailed in November 2005, December 2006, and February 2007. To engage as broad of public as possible in the planning process for the EA, a press release addressing the project and two upcoming public meetings was issued in December 2005. Public meetings were held, one in Vinton, Virginia, and another in Asheville, North Carolina, on January 17 and 19, 2006, respectively.

Agencies contacted during the planning process included the U.S. Fish and Wildlife Service, Advisory Council on Historic Preservation, North Carolina Department of Administration (State Clearinghouse), North Carolina Division of Archives and History, Virginia Department of Environmental Quality (Office of Environmental Review), and the Virginia Department of Historical Resources.

The EA was made available for public review and comment during a 30- day period ending November 2, 2009. Printed copies of the document were distributed to federal and state agencies, local organizations, and interested parties and a press release announced the availability of the EA. An electronic version of the EA was broadly available through a posting on the NPS Planning, Environment, and Public Comment (PEPC) website and linked to the park's public website.

One public respondent expressed support for the proposed action. A second public respondent expressed appreciation for the hiking trails along the Parkway.

The New River Valley Planning District Commission reviewed the EA and determined that the selected alternative is not in conflict with regional plans, policies or goals. The Commission noted that Appendix B of the EA required revision: "[t]here is a figure missing from page 14 and a figure I assume is meant to be on page 16 is partially at the bottom of page 15 with most of it missing." NPS will make the noted revisions to the appendix.

Twenty- four federal, state and county agencies either had no comments or conveyed support for the proposed action, while reminding the NPS of the need to continue complying with all applicable federal, state, and local laws and ordinances during the replacement or construction of new guardrail.