



COLORADO
Department of Transportation

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DATE: July 8, 2019

TO: Colorado Regional Planning and Environmental Managers

FROM: Rose Waldman, CDOT EPB Air Quality and Noise Program Manager

SUBJECT: Update to 2015 CDOT *Noise Analysis and Abatement Guidelines* – Non-CDOT, Non-Federally Funded Noise Barriers on State Highway Right-of-Way

Background: Section 6.3 of the 2015 CDOT *Noise Analysis and Abatement Guidelines* (NAAG) contains guidance regarding non-CDOT, non-Federally funded noise barriers built on state highway right-of-way (ROW) by private citizens or private citizens partnering with local government agencies. This guidance was written to address issues created by and CDOT's role in Colorado Revised Statute (C.R.S.) 43-2-401 through 43-2-404 (*Noise Mitigation*) and Code of Colorado Regulations (CCR), 2 CCR 601-17 (*Rules Regarding the Use of Waste Tires for Noise Mitigation Purposes Along Colorado State Highways Pursuant to § 43-2-401 C.R.S.*). Section 6.3 was most recently updated in January 2015.

Rationale for Update: Section 6.3 of the NAAG conflicts with the C.R.S. and CCR. Additionally, several topics within the section need clarification. The primary conflict deals with the definition of an applicant. The C.R.S. and CCR allow a private citizen to apply to build barriers on ROW without being partnered with a government agency or quasi-governmental entity. The 2015 NAAG requires citizens to partner with an agency or entity.

CDOT is in the process of updating the CDOT NAAG. However, because this section of the NAAG is not related to the primary purpose of the NAAG, which is to comply with Federal Highway Administration's (FHWA's) noise regulation¹, it is being published now. It will be moved from the body of the NAAG to an appendix of the NAAG when the revised NAAG is published.

Update Applicability: This updated guidance shall be used for all noise barrier applications submitted to CDOT on or after July 8, 2019.

Update: In addition to substantive changes to correct the conflict and provide clarification on topics, text was rearranged so that it is now organized by topic and references to the applicable

¹ The noise regulation is contained in Part 772 of Title 23 of the Code of Federal Regulations (23 CFR 772) and is titled *Procedures for Abatement of Highway Traffic Noise and Construction Noise*.

C.R.S. and CCR were added. Because of all of these changes, the redline version of the guidance is almost entirely red. Therefore, only the final version is being included here.

Non-CDOT, Non-Federally Funded Noise Barriers on State Highway Right-of-Way

Appendix Purpose

The purpose of this appendix is to establish consistent criteria regarding applications by applicants and application evaluation by Colorado Department of Transportation (CDOT) for non-CDOT, non-federally funded noise barriers on state highway right-of-way (ROW). These noise barriers must meet criteria established by CDOT.

Associated Regulation

Colorado Revised Statute (C.R.S.) 43-2-401 through 43-2-404² (*Noise Mitigation*) and Code of Colorado Regulations (CCR), 2 CCR 601-17³ (*Rules Regarding the Use of Waste Tires for Noise Mitigation Purposes Along Colorado State Highways Pursuant to § 43-2-401 C.R.S.*) contain requirements for citizens who want to build noise barriers on state highway ROW. The C.R.S. and CCR use different terms than CDOT for some things. For example, the C.R.S. and CCR refer to “noise mitigation measures” while CDOT noise guidance refers to “noise barriers.”

If the noise barrier is proposed to be built on interstate ROW, the National Environmental Policy Act (NEPA) and Federal Highway Administration’s (FHWA’s) noise regulation apply. The noise regulation is contained in Part 772 of Title 23 of the Code of Federal Regulations (23 CFR 772) and is titled *Procedures for Abatement of Highway Traffic Noise and Construction Noise*.

CDOT Contacts

The primary contact for requests from applicants is the CDOT Region Permitting Unit and/or CDOT Property Management where the proposed noise barrier would be located.

Applicant Definition

Per the C.R.S. and CCR, only qualified people, referred to as “applicants,” can submit applications to build a noise barrier on ROW. Definitions of “applicant” are available at C.R.S. 43-2-401(1) and 2 CCR 601-17, Rule 3.01.

It is the responsibility of the applicant to establish and prove that they qualify to be an applicant.

² The C.R.S. is available [here](#). This link may not work in the Google Chrome web browser.

³ The CCR is available [here](#).

Eligible Area/Barrier Location

Per the C.R.S. and CCR, applicants must reside in or be located in an eligible area to submit an application to build a noise barrier on ROW. Definitions of “Eligible Area” are available at C.R.S. 43-2-401(3) and 2 CCR 601-17, Rule 3.03. Additional requirements related to barrier location are available at C.R.S. 43-2-403(4) and 2 CCR 601-17, Rule 4.01.

It is the responsibility of the applicant to establish and prove that they reside in or operate in an eligible area.

Noise barriers built on private property are not subject to the C.R.S., CCR, or CDOT jurisdiction. Noise barriers may be built on ROW only if the applicant provides justification that no other reasonable alternative location is available. The justification shall use established CDOT approved engineering standards and show that no barrier placed on private property can reduce noise by the required amount⁴.

C.R.S. 43-2-401(3)(c) and 2 CCR 601-17, Rule 4.01 require that noise barriers be located within boundaries of a local government that, as of the date of the application, has adopted an ordinance or resolution to mitigate the effects of noise in future residential or other noise-sensitive development adjacent to state highways within the boundaries of that local government. The applicant must specify the applicable ordinance or resolution in the application.

Barrier Removal

Removal of noise barriers built on ROW is not addressed in the C.R.S. or CCR.

Noise barriers built on ROW under the C.R.S. and/or CCR may be removed at CDOT’s discretion without compensation as specified in the CDOT Special Use Permit. Barriers might be removed as part of a construction project, such as widening a highway. A new noise barrier may or may not be built in the same area. However, if built, it cannot be guaranteed that the replacement would provide the same noise reduction.

ROW Issues

C.R.S. 43-2-403(4) says that barriers may be built in ROW with CDOT’s approval or on private land. It also says that CDOT may sell ROW subject to the provisions of C.R.S. 43-1-210(5).

CDOT is only allowed to grant easements for public utility purposes per C.R.S. 24-82-201 and C.R.S. 24-82-202. Applicants should first explore buying ROW from CDOT. If the necessary ROW is purchased by the applicant, the noise barrier would be built on private property and would thus not be subject to the C.R.S., CCR, or CDOT jurisdiction.

⁴ The required noise reduction is defined by the CDOT *Noise Analysis and Abatement Guidelines*.

If ROW is not purchased, a noise barrier built on ROW needs a CDOT Special Use Permit. This permit includes requirements that must be met by the applicant.

Responsibility to Build/Construction

C.R.S. 43-2-402(5)(a) and C.R.S. 43-2-402(5)(b) indicate that CDOT is responsible to construct noise barriers that are funded at least 50 percent by local governments.

For noise barriers with less than 50 percent funding by local governments, the applicant is responsible to build the noise barrier. CDOT must approve the construction of the noise barrier, via the permit process.

Construction Funding

C.R.S. 43-2-403(2)(b) requires that applicants of privately funded noise barriers must specify the source of funding that will be used to build the noise barrier. C.R.S. 43-2-402(2)(b) and C.R.S. 43-2-402(3) describe additional funding related requirements.

Costs associated with the noise barrier application, construction, and maintenance, which include all studies and engineering design, will be the responsibility of the applicant. A decision will be made on a case-by-case basis whether to seek reimbursement for the cost of CDOT's review and coordination. Costs consistent with a typical permit review will be absorbed by CDOT.

Maintenance Funding and Performance

C.R.S. 43-2-403(5) requires that applicants of privately funded noise barriers be responsible for maintaining the noise barrier. 2 CCR 601-17, Rule 4.03 requires that applications for noise barriers must contain evidence satisfactory to CDOT that a Local Entity has committed to providing funding for noise barrier maintenance and repair.

Applicants shall maintain proposed barriers, including all repairs, regardless of the noise barrier funding source or type (e.g., material used in construction). Evidence of this commitment shall be documented using the following agreements:

- Intergovernmental agreement (IGA) between CDOT and the applicable local governmental agency (i.e., has jurisdiction in area in which the noise barrier will be built).
- Agreement between the applicant and the applicable local governmental agency. This agreement is required regardless of whether the local governmental agency provides any funding to the noise barrier.

Both agreements must be signed prior to noise barrier construction. The agreements will identify, at a minimum:

- Applicant's responsibility for all costs.

- Applicant's responsibility for repair and maintenance of the noise barrier following completion of construction.
- Applicant's agreement that if the applicant does not perform maintenance within a certain timeframe, to be determined by CDOT, the applicable local governmental agency will do the maintenance and charge the applicant.
- Applicant's responsibility to obtain all applicable permits, including a permit from CDOT. A permit, issued by CDOT, is required to do any work in ROW, including maintenance.

Application Requirements for Neighborhood Support

C.R.S. 43-2-402(2)(a), C.R.S. 43-2-403(2)(a), and 2 CCR 601-17, Rule 4.01.1.1(a) require applications for noise barriers to include a petition in support of the noise barrier that was signed by 75 percent or more of the households or homeowners in the eligible area who live up to 4/10ths of one mile from the nearest edge of the state highway ROW.

The petition must consider a minimum distance of 500 feet from the nearest edge of the traveled lane(s). The applicant shall obtain a land use list from the applicable county and include the list in the application. This will show the complete list of all addresses in the area that were to be considered for the petition. The area boundary should be shown on a map. A column shall be added to the list to indicate which households or owners signed the petition in favor of the noise barrier. This will allow a determination of whether at least 75 percent of the eligible households or owners signed the petition. A copy of the petition must be submitted as part of the application, in order to show the signatures and the petition language that was provided to households. Each page with petition signatures must include the petition language (e.g., to show that people knew what they were signing).

Application and Barrier Analysis

C.R.S. 43-2-403(3)(c)(I), C.R.S. 43-2-403(3)(c)(II), and 2 CCR 601-17, Rule 4.01.1.1 require that the noise barrier comply with the CDOT *Noise Analysis and Abatement Guidelines*. C.R.S. 43-2-403(3)(c)(III) and 2 CCR 601-17, Rule 4.01.1.2 require that noise barriers be compatible with any existing barriers in the eligible area. C.R.S. 43-2-403(3)(c)(IV) and 2 CCR 601-17, Rule 4.01.1.3 require that noise barriers comply with zoning and building requirements established by the local government. C.R.S. 43-2-402(2)(c), C.R.S. 43-2-403(2)(c), 2 CCR 601-17, Rule 4.01.1, and CCR 601-17, Rule 4.02 describe additional application related requirements.

Prior to application submittal, the applicant shall consult with a CDOT noise specialist to scope the noise analysis.

Complete proposals for noise barriers shall be submitted to the appropriate CDOT Region Permitting Unit and/or CDOT Property Management. The application shall include a

noise analysis documenting the justification, need, and effectiveness of the proposed noise barrier. The noise analysis shall be consistent with requirements of the CDOT *Noise Analysis and Abatement Guidelines* that are typically used for Type I projects. For example, a qualified person, as defined by CDOT, must use FHWA's approved noise model as part of the noise analysis.

If the barrier is going to be built on state highway ROW, CDOT may require analysis to understand potential environmental impacts and the need for mitigation. Consult with a CDOT NEPA specialist and CDOT's [NEPA Manual](#) to determine NEPA applicability and analysis requirements. A public meeting may need to be held by the applicant. If the noise barrier is going to be built on interstate ROW, NEPA applies and the action needs to be approved by FHWA.

Applications for a noise barrier shall include a design of the proposed barrier, which shall contain the endorsement seal of a Professional Engineer registered in the State of Colorado. In order for the proposed noise barrier to be built, the final design is subject to approval by CDOT. The design shall include all geometric, structural, and materials details and comply with the most recent CDOT Standard Specifications for Road and Bridge Construction. Designs shall not impair the highway nor interfere with the free and safe flow of traffic. CDOT will provide the following at no cost to applicants: standard noise barrier specifications and CDOT's *Noise Analysis and Abatement Guidelines*.

Application and Evaluation Timing

C.R.S. 43-2-402(1), 43-2-402(4)(a), 43-2-402(4)(b), 43-2-402(5)(c), 43-2-403(1), and 43-2-403(3)(a) describe application timing and the timing of CDOT's evaluation.

The same requirements shall apply to noise barrier applications under the CCR. Privately funded barrier applications have more latitude in when applications can be submitted to CDOT. Depending on the funding source and application date, CDOT may have less time to review the application. In no cases shall CDOT have less than three months to review the application. An application is not considered to be submitted unless and until it is submitted in full.

Application Evaluation by CDOT

C.R.S. 43-2-403(3)(b) and C.R.S. 43-2-404 contain information related to CDOT's evaluation of applications. 2 CCR 601-17, Rules 4.05 and 5.00 contain a procedure for CDOT to follow to rank noise barrier projects for noise barriers that incorporate recycled waste tires.

CDOT Permitting staff shall coordinate with CDOT staff such as Property Management, Region Engineering, Region Right-of-Way, Staff Bridge, Division of Highway

Maintenance, Environmental, and a CDOT Noise Specialist(s) during the noise barrier application evaluation.

All requests for noise barriers will be reviewed and evaluated in a fair and consistent manner. In evaluating each request, CDOT will consider whether all requirements are met from the C.R.S., CCR, other related statutory requirements, and CDOT's requirements. CDOT requirements are described in various documents, including this appendix, and include appropriate environmental documentation, plans for future transportation construction, and any other impacts or consequences of the proposed barrier.

All applications for a noise barrier shall be subject to approval by CDOT. In addition, noise barriers located on the interstate highway system shall be separately reviewed and approved by FHWA. CDOT's approval of a noise barrier by permit shall expire after three years unless actual construction of the project has been initiated and unless otherwise agreed to by CDOT.

Individuals/Entities Impacted by Procedural Directive: This memo applies to all divisions, Regions, offices and branches of CDOT. It also applies to private citizens and consulting firms performing work for them as well as Local Agencies and quasi-governmental entities partnering with private citizens to build non-CDOT, non-Federal barriers on state highway ROW.

Effective Date: Immediate

Please distribute this information to the appropriate individuals and offices in your Region. If there are questions or concerns regarding the guidance update, please contact me at (303) 757-9016 or rose.waldman@state.co.us.