

RESOLUTION 2017-77

A resolution approving Boulder County Land Use Docket DC-15-0003 (Proposed Boulder County Land Use Code Amendments to Article 4 and Article 18 regarding firing ranges)

Recitals

A. The Board of County Commissioners of Boulder County (“the Board”) is authorized to amend the text of County's Zoning Regulations according to the procedures in the regulations and C.R.S. § 30-28-112, -116 and -133.

B. Under other statutory authority, the Board is empowered to adopt regulations related to the control of land use, including but not limited to Article 65.1 of Title 24 (Areas and Activities of State Interest); Articles 67 and 68 of Title 24 (Planned Unit Developments and Vested Rights); Article 20 of Title 29 (Local Land Use Enabling Act); Articles 11 and 15 of Title 30 (County Powers and Police Power); Article 1 of Title 32 (Special District Control); and Article 2 of Title 43 (County Highways), C.R.S.

C. By Resolution 94-185, adopted October 18, 1994, the Board approved a unified Boulder County Land Use Code (“the Land Use Code”), which the Board has amended on subsequent occasions.

D. In the present Docket, DC-15-0003 (the “Docket”), authorized by the Board at a public hearing on May 2, 2017, Boulder County Land Use staff proposed text amendments to Articles 4-510, 4-4-602, and 18, as set forth in the Boulder County Land Use Department’s memorandum and recommendation dated May 2, 2017, with its attachments (the “Staff Recommendation”)

E. The Boulder County Planning Commission (“the Planning Commission”) held a duly noticed public hearing on the Proposed Amendments on October 19, 2016. The Planning Commission recommended approval of the Proposed Amendments, and certified the Docket for action to the Board.

F. On May 2, 2017, the Board held a duly noticed public hearing on the Docket and considered the Staff Recommendation, documents and testimony presented by the County Land Use Department staff, and eleven members of the public (the “Public Hearing”).

G. Based on the Public Hearing, the Board finds that the Proposed Amendments included in Exhibit A meet the criteria for text amendments contained in Article 16 of the Land Use Code, in that the existing text is in need of amendment; the Proposed Amendments are not contrary to the intent and purpose of the Land Use Code; and the Proposed Amendments are in accordance with

the Boulder County Comprehensive Plan.

Therefore, the Board resolves:

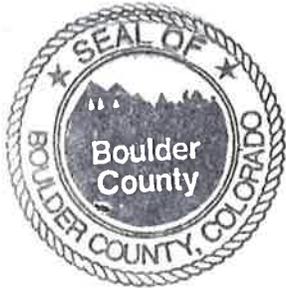
1. The Proposed Amendments in Exhibit A are approved for incorporation into the Land Use Code, effective May 2, 2017.

2. Under §30-28-125, C.R.S., the Board authorizes the Clerk to the Board to transmit this Resolution, with its Exhibit A, to the County Clerk and Recorder for filing and appropriate indexing. This transmittal should state recording Reference No. **2735571**, the recording of the Boulder County Land Use Code on November 4, 2005, which this transmittal amends.

A motion to approve the Proposed Amendments, was made at the Public Hearing by Commissioner Domenico, seconded by Commissioner Jones, and passed by a 3-0 vote.

ADOPTED on this 20 day of June, 2017 *nunc pro tunc* 2nd day of May, 2017.

**BOARD OF COUNTY COMMISSIONERS
OF BOULDER COUNTY:**



Handwritten signature of Deb Gardner in blue ink.

Deb Gardner, Chair

Handwritten signature of Cindy Domenico in blue ink.

Cindy Domenico, Vice Chair

Handwritten signature of Elise Jones in blue ink.

Elise Jones, Commissioner

ATTEST:

Handwritten signature of Cecilia G. Lacey in blue ink.
Clerk to the Board

Exhibit A

Proposed Amendments

Article 18 Definitions – (all are new definitions)

18-195A: Shotfall Zones: The area of a shotgun firing range where spent shotgun shot and projectiles fall to the earth and where development, other than trap or skeet houses or the equivalent facilities for other types of shotgun events, and human occupancy, other than operators of the trap, skeet or equivalent facilities, is prohibited.

18-196A: Skeet Shooting: a shotgun shooting sport where firer is on the firing line and fires at targets launched from two houses in somewhat sideways paths that intersect in front of the shooter.

18-209A: Trap Shooting: a shotgun shooting sport where a firer on the firing line shoots at targets launched from a single launching point and generally away from the shooter.

18-207A: Surface Danger Zone: The area, determined by an applicant's professional engineer registered in the State of Colorado or other equally qualified individual, in which projectile impact may occur. The boundaries of the zone (i.e., the length of the range and the width of the firing point or points) accommodate the ballistics of the highest powered firearms and the range of ammunition that may be used in the permitted firing activities, but can be shortened by physical barriers, range operations, or other devices which reduce the maximum distance of a bullet's trajectory. The zone is generally in the line of fire and spans the area that could receive projectile impact resulting from direct fire, including misdirected and accidental discharges, and ricochets from any firearm. The zone consists of three parts: the impact area, the ricochet zone, and the secondary safety zone. The impact area is that of the direct fire zone into which all shots are fired during the normal course of shooting and extends 5° to either side of the left and right limits of direct fire zone and downrange to the maximum range of any ammunition to be used on the range. This area includes all directions and angles of fire used on a firing range while shooting at a specific target, either stationary or moving, from a specific firing point. The ricochet area is 5° to either side of the impact area and extends downrange to the maximum range of any ammunition to be used on the range. The secondary danger area is that area paralleling, and 100 yards outside of, the outermost limits of the ricochet area and extending downrange to the maximum range of any ammunition to be used on the range.

18-196A: Sketch Plan becomes 18-196B Sketch Plan

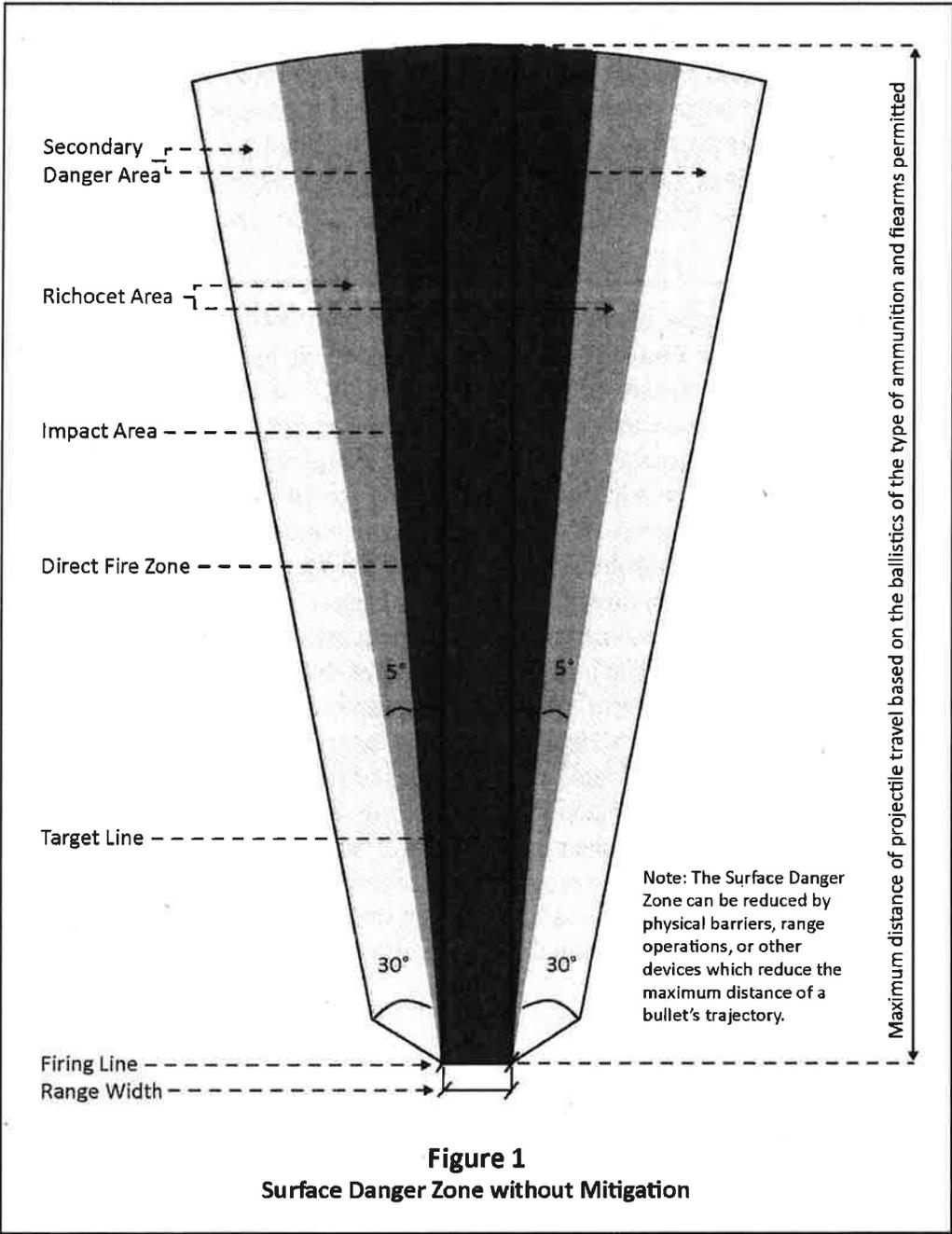


Figure 1
Surface Danger Zone without Mitigation

Adapted from a diagram in the U.S. Department of Energy - Office of Health, Safety and Security's *Range Design Criteria*, June 4, 2012.

Article 4-510 Recreation Uses – new use definition

A. Firing Range, Outdoor

1. Definition: A facility inclusive of its component shooting ranges, Surface Danger Zone or Shotfall Zones, parking areas, all structures for classrooms, administrative offices, ammunition storage areas and other associated improvements, for which the use is to provide a place for the discharge of various types of firearms. The definition excludes hunting and shooting activity occurring outside of identified and approved firing ranges, and occasional target practice by individuals on property owned or leased by the individuals.
2. Districts Permitted: By Special Use Review in F, A ,GI, LI,
3. Parking Requirements: 1.5 parking places for each firing position
4. Loading requirements: none
5. Additional Provisions:
 - a. Shooting and target area setbacks
 - (i) In the direction of fire and shotfall zone, at least the maximum distance of projectile travel from designated firing positions estimated to occur at the facility based on the ballistics of the type of ammunition and firearms permitted for use on the range. This distance can be reduced based on an engineered study and proper mitigation which reduces the Surface Danger Zone (see Article 18-207A for a diagram and definition of Surface Danger Zone), but except where noted below shall not be closer than 1,320 feet from residential structures (whether permanent or seasonal), lodging or other occupiable or occupied structures not on the subject property, a County platted subdivision, County townsites, designated recreational trails, open space areas where off-trail use is allowed, designated campgrounds whether public or private, and/or any other potential hazards as identified through Special Use Review. The 1,320 foot setback may be reduced with a signed agreement with neighboring property owners within 1,320 feet. In all other directions, the boundary of any outdoor shooting area shall be no closer than 400 feet from residential structures (whether permanent or seasonal), lodging or other occupiable or occupied structures not on the subject property, a County platted subdivision, County townsites, recreational trails, open space areas where off-trail use is allowed, designated campgrounds whether public or private, and/or any other potential hazards as identified through special use review. During the review process, a proposed decrease or increase in spatial requirements may be considered based on range design, operational plans, topographic features, noise studies, and/or manmade improvements, including but not limited to backstop and side berms, bullet traps, ricochet catchers, and overhead or ground safety baffles which provide sufficient safety measures to protect adjacent properties.

- (ii) Default zoning district setbacks are applicable to office, restrooms, classroom space, or other related range facilities where weapons are not being fired.

Table 4-510-A-5-a-i Setback Summary

Setbacks	Minimum Distance
Direction of fire and/or shotfall zone	<ul style="list-style-type: none"> • maximum distance of projectile travel unless mitigated • no closer than 1,320 feet from the list defined in 4-510(A)(5)(a)(i)
All other directions	<ul style="list-style-type: none"> • no closer than 400 feet from the list defined in in 4-510(A)(5)(a)(i)
Office, restrooms, classroom space, or other related range areas where weapons are not being fired.	<ul style="list-style-type: none"> • Default zoning district setbacks

4-602 Special Provisions - (new criteria/development standards)

F. Special Review for Firing Range, Outdoor

1. In addition to satisfying the special use criteria of Section 4-601, the following standards shall apply to the development of proposed outdoor firing ranges upon application for a special use permit. The County may vary from these standards where the applicant has demonstrated, and a professional engineer registered in the State of Colorado or other equally qualified individual has verified, that the proposed facility includes alternative designs and features, either natural or manmade, that will otherwise mitigate the potential adverse impacts to the health, safety and welfare of owners or users of neighboring properties and the general public. The County may also impose stricter standards based on range design, environmental resources and other site specific factors.

a. Range Design

- (i) **Pistol and Rifle Firing Ranges.** Pistol and rifle firing range design shall include sufficient land area under control of the applicant for the Surface Danger Zone to accommodate the ballistics of the highest powered firearms and the range of ammunition that may be used in the permitted firing activities. Such geographic areas shall be designed based on industry-accepted range design guidelines, standards, and best practices. Such spatial requirements may be reduced in consideration of natural topographic features or manmade improvements, including but not limited to, backstop and side berms, bullet traps, ricochet catchers, and overhead or ground safety baffles which will provide sufficient safety measures to protect persons or adjacent properties. The range design and operation will dictate the Surface Danger Zone. The Surface Danger Zone will, in turn, affect setback distances.

- (ii) Shotgun Ranges. Trap ranges shall have a shotfall zone on property under control of the applicant, as established by a line which extends 50 yards to the right and 50 yards to the left of, and perpendicular to the centerline of the trap house. From each end of said line, boundary lines having interior angles of 130 degrees shall extend down range for at least 300 yards with the actual distance determined by the maximum distance of the full range of ammunition and firearms permitted for use on the range. Skeet ranges shall have shotfall zones on property under control of the applicant which are a complete semi-circle with its center point located at the center point of a defined station and a radius of the semi-circle being at least 300 yards with the actual distance determined by the maximum distance of the full range of ammunition and firearms permitted for use on the range. Shotfall zones for trap live-bird simulators, sporting clays, or other shotgun firing ranges shall be determined on a case-by-case basis.
- b. Security. The entire perimeter of a Firing Range shall be fenced and signed to reduce the potential for trespass onto the property. In some areas topography or natural barriers may make fence placement unnecessary. In addition, warning signs identifying the range shall be posted around the perimeter of the parcel or parcels on which the firing range is located such that each sign is visible and legible from the next sign (generally 200 yards but more frequently placed, depending on topography and vegetation). Where wildlife is a concern, fencing should be designed and installed to be wildlife safe while maintaining all measures to secure a firing range and reduce potential for trespass on the property.
- c. Noise. All firing line locations shall be located and maintained such that the sound levels generated by the discharge of firearms on the range do not exceed a 65 dB peak impulse response at existing residential structures (whether permanent or seasonal), lodging or other occupiable or occupied structures not on the subject property. The applicant shall submit a noise study proving the proposed range will meet this standard at time of application. All noise studies shall be performed by a professional engineer registered in the State of Colorado or other equally qualified individual and shall take the topography of the surrounding area into account.
- d. Range Orientation. All firing lines should be aimed at target lines to the northeast, north or northwest unless sufficient screening, natural or manmade, is demonstrated to eliminate the effects of glare from the sun.
- e. All backstops shall have sufficient depth, based on industry-accepted range design guidelines, of sand or other similar soft earthen material that is free of rocks, stones and other hard objects that may result in ammunition ricochets. All manmade berms shall be designed to reduce the potential for erosion. All backstops and berms shall be maintained to perform their intended functions. Parallel ranges separated by bulletproof barriers or berms shall be a minimum eight feet high. Backstops shall be a minimum twenty feet high.

- f. Firing Ranges shall be developed such that there are no traveled roadways, trails, streams, ponds, lakes, or wetlands located within the Surface Danger Zone or within any Shotfall Zone.
- g. The developer or operator of the Firing Range facility shall provide to the Land Use Department, at the time of application for the building permit final inspection, a certification prepared by a professional engineer registered in the State of Colorado or other equally qualified individual confirming that the Firing Range facility has an Environmental Stewardship Plan. The Environmental Stewardship Plan may include semi-annual soil and water sampling, regular liming of the soil to prevent lead migration, reclamation and recycling of expelled ammunition and lead, and must comply with the Best Management Practices, specifically relating to lead management, as specified by the Environmental Protection Agency's (EPA's) most current edition of Best Management Practices for Lead at Outdoor Shooting Ranges.
- h. Operational Requirements
 - (i) Hours of operation will be limited to the hours between 7:00 a.m. to 7:00 p.m. with the exception of shooting for educational or law enforcement activities which will be allowed until 9 p.m. one day per week, unless more restrictive hours are necessary to address impacts to neighboring areas. Training areas are allowed to remain in operation up to two hours past sunset for up to five days per month.
 - (ii) Alcohol or drugs must not be permitted on site.
 - (iii) No tracer rounds or incendiary rounds permitted.
 - (iv) A Fire Safety and Response Plan must be filed and approved by the local fire protection district and Sheriff as part of the development agreement.
 - (v) At each Firing Range, there shall be operational large fire extinguishers, always immediately available for emergency use, stored at all shooting and target areas. Number of extinguishers to be determined during the Special Use Review process.
 - (vi) The site plan shall satisfactorily mitigate the risk of wildfire both to the subject property and those posed to neighboring properties in the surrounding area by the proposed development. In assessing the applicable wildfire risk and appropriate mitigation measures, the Director shall consider the referral comments of the County Wildfire Mitigation Coordinator and the applicable fire district, and may also consult accepted national standards as amended, such as the 2003 Urban-Wildland Interface Code; NFPA / 80A, 299, 1231; 2003 International Fire Code; and the 2003 International Building Code.
 - (vii) On site emergency communication system required.
 - (viii) A Safety Plan must be filed with and approved by the Land Use Department and the Sheriff and range rules must be posted on site.
 - (i) Supervision. To receive a reduction in setbacks: (1) a firing range shall have at least one trained safety officer present when open to

the public and (2) a range member who has passed the minimum training requirements of the range shall be present when the facility is closed to the public.

- (ix) Through the Special Review process the Board of County Commissioners (BOCC) may require periodic reviews to assure effective monitoring and operation of the range to protect the health and safety of those in the area and to ensure compliance with the Special Use Review approval. If at any time the BOCC finds the operation does not meet the design or operational expectations, they may modify existing conditions or impose additional conditions to address concerns including, without limitation, requiring on-site range staff, cameras, or corrective design measures.
- i. Enforcement.
 - (i) Firing range noise violations will be enforced if the following criteria are met:
 1. A civil action or criminal penalty shall only be commenced against an approved range or its owners or operators following a written complaint from a resident of Boulder County. Grounds for commencing civil action or penalty include noise in excess of permitted levels emanating from a range that results from the operation or use of the range.
 2. Written complaints must contain the name and address of the complainant, how long the complainant has resided at the address indicated, and the times and dates upon which the alleged excessive noise occurred. Enforceable complaints must meet the criteria of C.R.S. § 25-12-109, as amended.
 - (ii) Notwithstanding 4-602(F)1.j.(i) above, any other provisions of this section may be enforced under Article 17 of the Code, or by any legal or equitable means recognized by the Colorado State Statutes and the Colorado Court Rules, as amended.
- j. Any future expansion that results in additional firing positions, including without limitation a lengthened daily period of operations or increased length of the direct fire zone or the area of the shotfall zone to accommodate the use of firearms not identified in the then-existing Special Use permit application will constitute a substantial modification under 4-603 of the Code. Changes that are not a substantial modification and are routine maintenance include simple, small-scale activities (i.e., repairing structures such that a building permit is not required under the Code) associated with regular and general upkeep of an existing building, firing line, target line, parking lots, etc. Routine maintenance activities are associated with maintaining a facility, not expansion or new construction.