

**Clear Creek County Annex
Community Development**

**Site Development
Driveway Design Standard
and Requirements**

**PO Box 2000/ 1111 Rose St,
Georgetown, CO 80444**

303-679-2352

303-679-2421

<http://www.co.clear-creek.co.us/index.aspx?nid=96>

Clear Creek County Site Development

The Clear Creek Board of County Commissioners has adopted design standards for the construction of driveways. These design standards were developed with the intent to provide reasonable ingress and egress for emergency vehicles. It is the responsibility of the Site Development Coordinator to make sure all driveways are constructed in accordance with the adopted design standards while also taking into consideration any constraints imposed by the nature of the parcel and the mitigation for erosion both during and after excavation.



The complete **Clear Creek County Driveway Design Standards** are available for all excavation contractors and all property owners who are planning on doing their own excavation and can access it at

<http://www.co.clear-creek.co.us/documentcenter/view/457>.

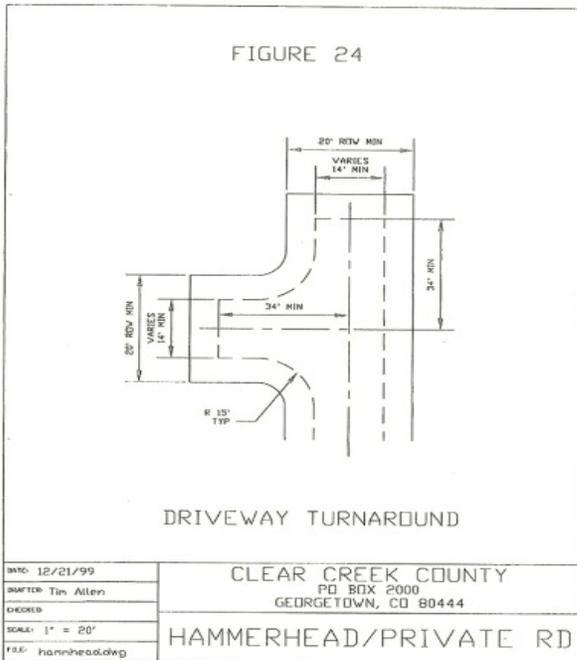
The basic requirements are as follows:



© ALL NEW DRIVEWAYS SHALL BE ENGINEERED BY A LICENSED COLORADO ENGINEER THAT MEETS ENGINEERED GRADING REQUIREMENTS OUTLINED IN *SECTION X107.4* OF THE 2009 IRC AND THE 2009 IBC.

© All driveways shall have a minimum driveway surface width of 12 feet if the driveway is less than 200 feet long or 14 feet if the driveway is equal to or greater than 200 feet long. These widths do not include additional width required for proper drainage.

- ⓐ All horizontal curves shall have a minimum curve radii of 30 feet measured from the centerline of the driveway to the center point of the curve.



Per Section 4.7.3.D.2 "Single family residence driveways in excess of 100 feet in length shall provide an adequate turnaround for emergency equipment to within 50 feet of the dwelling unit."

Radii or flares of 20 feet are required.

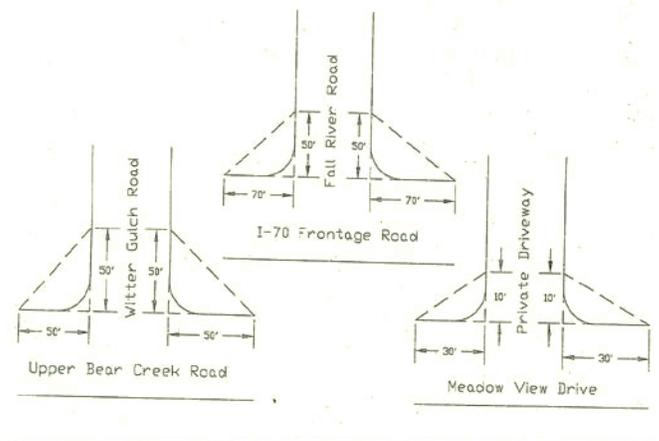
- ⓐ The maximum allowable grade on straight section of driveway is 10%. An exception of 12% can be requested under certain circumstances. Grades from 10% to 12% when allowed shall not continue for lengths greater than 150 feet. A maximum grade of 8% for curves with radius of less than or equal to 50 feet at centerline shall be maintained. Grades through a switchback shall not exceed 4%.
- ⓐ Cut slopes and fill slopes should be constructed no steeper than 1:1 slope (1 foot horizontal to 1 foot vertical). Cut slopes steeper than 1:1 shall be designed by a Colorado licensed engineer, prior to approval from the county. In areas of solid rock, slopes shall not be cut steeper than 1/2:1. Open rock cuts greater than ten (10) feet in height and steeper than 1/2:1 slope, or greater than twenty (20) feet in height and steeper than 1:1 slope shall be designed by a Colorado licensed engineer.

- ⓐ All driveways shall end in an approved turnaround area with a minimum 13.75 foot radius.

- ⓐ Sight distances at the intersection of the driveway with a public road shall be at least seven times the posted speed limit of the public road for speeds of 40 M.P.H. or less and grades of 6% or less. All other sight distances shall be at least eleven times the posted speed limit.

- ⓐ Driveways shall intersect a public road at right angles to each other. With supporting justification, a relaxation of up to 15° can be requested from the county. Driveways shall meet the county road at a positive 4% grade for the length of the Right of Way but not less than 10 feet.

FIGURE 10
EXAMPLES OF TYPICAL SITE DISTANCE TRIANGLES



- ⓐ All Driveway access from existing private or public roads, which interfere with a natural or constructed drainage course, shall provide a drainage culvert. The culvert shall be a minimum of 18 inch diameter or of a diameter which will carry the flow of a 10 year



Straw wattles preventing sediment from entering stream.

storm event, as determined by Site Development Coordinator. The culvert shall be positioned offset to the drainage ditch centerline and away from the traveled portion of access road.

- ⓐ Cross road drainage must be provided at a minimum of every 800 feet or where an identifiable drainage course is defined, with

culvert(s) a minimum of 18 inch diameter or of a diameter which will carry the flow of a 10 year storm event, as determined by the Site Development Coordinator.

- ⓐ The faces of cut and fill slopes shall be prepared and maintained to control against erosion. This control shall consist of effective planting as a permanent control measure. Permanent soil stabilization measures shall be installed within thirty days after final grade is reached. Planting shall occur within the



Erosion control blanket



next window of opportunity, should construction be completed during the winter months. Where necessary, check dams, cribbing, riprap or other devices or methods shall be employed to control erosion and provide safety. Existing trees, shrubs and grasses should be preserved where possible to prevent erosion.

- ⓐ All topsoil shall be salvaged and redistributed. Any applicant creating an earth disturbance greater than 2,500 cubic yards and/or 20, 000 square feet shall be required to apply for a **Soil Erosion Best Management Practices Permit**.
- ⓐ During construction, emergency access must be maintained at all times.
- ⓐ Failure to comply with any portions of these driveway and private road design standards and permit procedures shall be sufficient grounds for denial, suspension, or revocation of any necessary permit. Financial penalties may also be imposed.
- ⓐ All bridges shall be designed by a Colorado licensed engineer to meet Colorado Department of Transportation requirements and specifications. Bridges shall meet elevation requirements of the Clear Creek County Floodplain Regulations (2007) if located in zone A, as determined by the Flood Insurance Rating Map.
- ⓐ All driveways and roads, which cross water courses designated as “Waters of the State” by the Army Corps of Engineers, must meet the requirements set forth by the Army Corps of Engineers for permitting before the county permits can be issued.

- ⓐ A minimum 400 square foot parking area is required in lieu of meeting driveway design standards.



Department requirement packet.

When necessary, deviations from these standards may be requested. Deviations will not exceed 18%. If determined appropriate, or if the public roadway that accesses your property is not a county maintained road, the increased hazard will be required to be mitigated by conforming to the “**Wildfire Mitigation Point System,**” Please refer to the Building

Driveway and Site Excavation Application Requirements

All driveways, road cuts or building site excavations in Clear Creek County **MUST** have a driveway and excavation permit **applied for and issued** before any excavation has begun, whether the construction site is on a county maintained or non – maintained road. Please contact the Road and Bridge Department for any road cut permits needed for utility installation.

Unless otherwise required by the Site Development Coordinator, all new driveways shall be engineered by a licensed Colorado engineer that meets engineered grading requirements outlined in Section x107.4 of the 2009 IRC and the 2009 IBC.

The proposed driveway centerline, excavation site and/or building footprint and adjacent property lines shall be staked out in advance of the initial inspection.

The following detail must be depicted on both your application and scaled site plan:

| SCALED SITE PLAN (<u>MUST</u> BE COMPLETE with the following criteria) | | | |
|--|----|-----|---|
| SITE PLAN MUST INCLUDE THE FOLLOWING: | | | |
| YES | NO | N/A | (TO BE CHECKED BY COUNTY STAFF) |
| | | | • Plan is drawn to scale & is a common engineering scale (i.e. 1”=20’) |
| | | | • Scale is larger than 1”=50’ |
| | | | • Title block, written & graphic scale, north arrow designating true north |
| | | | • Legend, for engineered plans |
| | | | • Property boundary(s) of the subject property(s), indicating front, rear & side lines & dimensions |
| | | | • Total acreage or square footage of parcel |
| | | | • Driveway Turnaround (see Attached Figure, if applicable) |

| SCALED SITE PLAN (MUST BE COMPLETE with the following criteria) | | | |
|---|----|-----|---|
| SITE PLAN MUST INCLUDE THE FOLLOWING: | | | |
| YES | NO | N/A | (TO BE CHECKED BY COUNTY STAFF) |
| | | | <ul style="list-style-type: none"> • Building envelope(s), if applicable |
| | | | <ul style="list-style-type: none"> • Location and dimensions of all existing and proposed roads, both on and adjacent to the subject property, including access road, right – of – way, driveways, turnouts/turnarounds, easements (attach easements and CDOT assess permit if applicable) |
| | | | <ul style="list-style-type: none"> • Location and dimension of any PROPOSED building/structures, retaining walls |
| | | | <ul style="list-style-type: none"> • Location and dimension of any EXISTING building/structures, retaining walls |
| | | | <ul style="list-style-type: none"> • Location and dimension of any PROPOSED well, septic tank(s) & leach field |
| | | | <ul style="list-style-type: none"> • Location and dimension of any EXISTING well, septic tank(s) & leach field |
| | | | <ul style="list-style-type: none"> • Locations and dimension and count for all existing and proposed parking lots and spaces |
| | | | <ul style="list-style-type: none"> • Location and dimension of all existing and proposed utilities & utility easements, including water & sewer lines |
| | | | <ul style="list-style-type: none"> • Location and dimensions of all existing and proposed drainage devices |
| | | | <ul style="list-style-type: none"> • Erosion control features types and placement |
| | | | <ul style="list-style-type: none"> • Square footage of each building/structure’s footprint |
| | | | <ul style="list-style-type: none"> • Setbacks from building and structures (all sides), measured in feet. Setbacks must be identified from the nearest lot line, road right – of – way, or platted right – of – way, whichever is closest, to the eaves or projections from the building or structure (including decks) |
| | | | <ul style="list-style-type: none"> • Actual width of the access road as traveled, as well as the width of the right of way |
| | | | <ul style="list-style-type: none"> • Distance from the driveway to the nearest road intersection |
| | | | <ul style="list-style-type: none"> • Surface width of the proposed driveway, total length of the proposed driveway |
| | | | <ul style="list-style-type: none"> • Horizontal angle of the approach where the driveway intersects the access road must be shown. |
| | | | <ul style="list-style-type: none"> • Maximum grade of the proposed driveway and the length of any part(s) of the driveway which will exceed 10% grade must be shown. |
| | | | <ul style="list-style-type: none"> • Inside turning radius of each switchback of the proposed driveway must be shown. |
| | | | <ul style="list-style-type: none"> • Location and dimension of proposed rooftop runoff infiltration system (all roof structures in excess(1,750 sq ft) |

IF NO IS CHECKED OFF IN ANY CATEGORY, THE SITE PLAN WILL NOT BE ACCEPTED



"Honoring Our Past,
While Designing Our Future"

DRIVEWAY & BUILDING SITE EXCAVATION APPLICATION

CLEAR CREEK COUNTY SITE DEVELOPMENT DEPARTMENT

PO BOX 2000 / 1111 ROSE STREET, GEORGETOWN, CO 80444 ☎ 303-679-2352 ☎ 303-679-2421

☎ 303-569-1103 <http://www.co.clear-creek.co.us/index.aspx?nid=96>

If the applicant is not the legal owner of the property, a signed and notarized **Landowner Authorization** is required, appointing the applicant to process applications/forms for permits or other Community Development processes on the owner's behalf.

Fees:

See Fee Schedule

No person shall conduct any earth disturbing activity without first obtaining a permit. If work begins without a permit, all necessary permits will be double fee.

The applicant is responsible for the accuracy and completeness of all information submitted to the Site Development Department.

| SITE INFORMATION | |
|---|---|
| Parcel # or Legal description: _____ _____ _____ | Access Road Name or Number: _____ _____ Site Address(if existing): _____ _____ |
| APPLICANT | |
| Signed and notarized Landowner Authorization form <input type="checkbox"/> yes (please attach) <input type="checkbox"/> no (not applicable) | |
| Name: _____ _____ | Name: _____ _____ |
| Additional Name: _____ | Company: _____ |
| Mailing Address: _____ | Additional Name: _____ |
| City: _____ State: _____ Zip Code: _____ | Mailing Address: _____ |
| Phone: _____ Cell: _____ | City: _____ State: _____ Zip Code: _____ |
| Email: _____ | Phone: _____ Cell: _____ |
| | Email: _____ |
| PROJECT TYPE AND USE (Check all that apply) | |
| Project Type: <input type="checkbox"/> New <input type="checkbox"/> Addition <input type="checkbox"/> Alteration <input type="checkbox"/> Rehabilitation | |
| Primary Use: <input type="checkbox"/> Driveway <input type="checkbox"/> Building Site Excavation | |
| Building Type: <input type="checkbox"/> Single Family <input type="checkbox"/> Duplex/Townhome <input type="checkbox"/> Commercial <input type="checkbox"/> Multi-Family <input type="checkbox"/> Demo | |
| Accessory Use: <input type="checkbox"/> Garage _____ Attached _____ Detached <input type="checkbox"/> Accessory structure <input type="checkbox"/> Parking Area <input type="checkbox"/> Bridge | |
| <input type="checkbox"/> Retaining Wall <input type="checkbox"/> Other _____ | |

ALL NEW DRIVEWAYS SHALL BE ENGINEERED BY A LICENSED COLORADO ENGINEER THAT MEETS ENGINEERED GRADING REQUIRMENTS OUTLINED IN SECTION X107.4 OF THE 2009 IRC AND THE 2009 IBC.

| INFORMATION REQUIRED FOR ALL PROJECTS | | |
|---|--|--|
| <input type="checkbox"/> Zoning Approval Form (signed-off by Planning Department) | <input type="checkbox"/> Copy of easement(s) | <input type="checkbox"/> Copy of CDOT or other Access Permit(s), as required |
| <input type="checkbox"/> Scaled Site Plan (Refer to Application Information page for requirements) | <input type="checkbox"/> Copy of Army Corps of Engineers Permit(s), as required | |
| Frontage of lot along access road _____ ft | As-traveled width of access road _____ ft / Right-of-way width of access road, if different _____ ft | |
| Sight distance along access road from driveway: Left _____ ft Right _____ ft | | |
| Distance from driveway to nearest road intersection _____ ft | Horizontal angle of driveway approach to access _____ % | |
| Width of proposed primary driveway _____ ft | Total length of proposed primary driveway _____ ft | |
| If add'l. driveway requested, width of secondary driveway _____ ft | If add'l. driveway requested, length of secondary driveway _____ ft | |
| Maximum grade of proposed driveway _____ % | Length of section(s) exceeding 10% grade _____ ft _____ ft | |
| Inside turning radii of each turn: 1 st turn _____ ft 2 nd turn _____ ft 3 rd turn _____ ft | | |
| Is a culvert required <input type="checkbox"/> Yes <input type="checkbox"/> No | Size in Diameter _____ in Length _____ ft Material _____ ft | |
| Estimated total volume of earth to be moved (c.y.) _____ | | |
| Cut(c.y.) _____ Fill (c.y.) _____ | | |
| Total area of site disturbance (s.f.) _____ | | |
| Areas and types of proposed mitigation to control off-site erosion (attach description and indicate on Site Plan) _____ _____ _____ | | |
| Proposed revegetation schedule (attach description and indicate on Site Plan) _____ _____ _____ | | |
| NOTE: SCALED SITE PLAN MUST BE SUBMITTED WITH APPLICATION (See Site Plan requirements on permit information page) | | |

Disclaimer:

By signing below, I understand that:

- I (We) certify that the information I have provided is true and correct to the best of my knowledge.
- I (We) do hereby further agree to abide by the agreements, conditions and stipulations that are a part of this request.
- I (We) will allow the Site Development Department staff to go onto my property in order to process this request.

Applicant's Signature

Date