

CHAPTER 11 - ACCESS REQUIREMENTS AND CRITERIA

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CHAPTER 11 ACCESS REQUIREMENTS AND CRITERIA

11.1 GENERAL

Access to County Streets and Roadways is approved through one of two mechanisms. (1) For new developments, the Board of County Commissioners grants access through the approval of a Development or Site Plan. (2) Access from an existing developed property onto County streets is dependent on the zoning for the property in question, below details the mechanism based on the zoning.

- A. For Planned Unit Developments (PUD), new or altered access must be obtained through the County Administrative Amendment Process. This involves applying through the Planning Division to amend the property's Development or Site Plan. The application should be accompanied by appropriate plans detailing the proposed access location and technical justification supporting the proposed location as acceptable. The justification provided shall include the extent of improvements necessary at the proposed location.
- B. For straight-zoned property, application for access shall be made using Form 581 (Review and Approval). This application shall be accompanied by plans detailing the proposed access and technical justification supporting the proposed location and detailing the necessary public improvements.

11.2 CRITERIA FOR ACCESS ONTO ARAPAHOE COUNTY ROADWAYS

11.2.1 Access onto State Highways

- 11.2.1.1** The State Highway Access Code governs access onto State Highways.
- 11.2.1.2** All access onto State Highways is controlled by the State of Colorado. Arapahoe County takes no jurisdictional authority over access onto a State Highway. Arapahoe County reserves the right to deny any proposed access location.
- 11.2.1.3** Arapahoe County has the authority to administer the State Highway Access Code, published by the Colorado Department of Transportation (CDOT), prior to referral to the State for comments and/or issuance of access permits onto State Highways in Arapahoe County.

11.2.2 Freeways

- 11.2.2.1** The Colorado Department of Transportation (CDOT) and the Federal Highway Administration (FHWA) rules and regulations shall apply to all new freeway accesses.
- 11.2.2.2** The State of Colorado and the Federal Highway Administration control all accesses onto freeways and interstates. Arapahoe County takes no jurisdictional authority over access onto a freeway or interstate. Arapahoe County reserves the right to deny any proposed access location.

11.2.3 Major Arterials

- 11.2.3.1** An access permit must be obtained from the Public Works and Development Department, Engineering Division for any public or private access constructed to a major arterial. A detailed Traffic Impact Analysis shall be completed for any proposed access point on a major arterial to ensure adequate levels of service prior to issuance of an access permit.

11.2.3.2 Generally, no private direct access onto major arterials shall be permitted unless a signal progression plan has been approved and it is determined that the proposed access will cause no significant impacts to traffic operations. Private direct access to a major arterial may be permitted only when the property in question has no other reasonable access to the general roadway network, or when denial of a direct access to a major arterial will cause unacceptable traffic conditions and/or safety problems on an alternative lower classified roadway. When direct private access must be provided on a major arterial roadway, the following shall be considered prior to approval of the proposed access location:

- A. Such access shall continue only until such time that some other reasonable access to a lower classification roadway is available and permitted. The access permit should specify the future reasonable access location, if known, and under what circumstances the modifications will be triggered and what changes will be required.
- B. No more than one access shall be provided to an individual parcel or to contiguous parcels under the same ownership unless it can be shown that; (1) allowing only one access conflicts with safety regulations (i.e. Fire District requirements), or (2) additional access would significantly benefit safety and operation of the major arterial and is necessary to the safe and efficient use of the property.
- C. An access shall be limited to right turn only movements, unless (1) it has the potential for future signalization, (2) left turns would not create unreasonable congestion or safety problems and lower the overall intersection level of service, and (3) alternatives to the left turn movements would cause unacceptable traffic conditions and safety problems to the general roadway network.

11.2.3.3 Direct public access onto a major arterial roadway, where left turns are permitted, shall meet the signalization spacing criteria in Section 11.2.3.4. Those that do not meet these requirements shall be limited to right turn only movements unless they meet the requirements in Section 11.2.3.2.C. No local streets shall be permitted to intersect with major arterials.

11.2.3.4 Spacing and Signalization Criteria:

- A. In general terms, full access to major arterials shall be limited to one-half mile intervals plus or minus 200-feet, in order to achieve good speed, capacity and optional signal progression.
- B. However, to provide flexibility for both existing and future conditions, an approved engineering analysis of signal progression shall be completed to properly locate any proposed access that may require signalization. The specifics of this analysis are detailed in the "Guidelines for Traffic Impact Studies".

11.2.4 Minor Arterials

11.2.4.1 An access permit must be obtained from Arapahoe County Public Works and Development for any public or private access constructed to a minor arterial. A detailed Traffic Impact Analysis shall be completed for any new proposed access point on a minor arterial to ensure adequate levels of service prior to issuance of an access permit.

11.2.4.2 Generally, no private direct access onto a minor arterial shall be permitted unless a signal progression plan has been approved and it is determined that the proposed access will cause no significant impacts to traffic conditions. Private direct access to a minor arterial may be permitted only when the property in question has no other reasonable access to the general roadway network, or when denial of a direct access to a minor arterial will cause unacceptable traffic operations and/or safety problems on an alternative lower classified roadway. When direct private access must be provided on a minor arterial roadway, the following shall be considered prior to approval of the proposed access location:

- A. Does not have the potential for signalization as per the requirements of Sections 11.2.3.2.B and 11.2.3.2.C.
- B. Does have the potential for signalization, if it meets signal spacing requirements for intersecting public roadways stated below and does not interfere with the location, planning, and operations of the general roadway network and access to nearby properties.

11.2.4.3 Public direct access onto a minor arterial roadway, where left turns are permitted, shall meet the signalization spacing criteria in Section 11.2.4.4. Those that do not meet these requirements shall be limited to right turn only movements, unless they meet the requirements in Section 11.2.3.2.C. No local streets shall be permitted to intersect with minor arterials.

11.2.4.4 Spacing and Signalization

- A. In general terms, full access onto minor arterials shall be limited to one-quarter (1/4) mile intervals, plus or minus approximately 100-feet, in order to achieve good speed, capacity and optimum signal progression.
- B. However, to provide flexibility for both existing and future conditions, an approved engineering analysis of signal progression shall be completed to properly locate any proposed access that may require signalization. The specifics of this analysis are detailed in the "Guidelines for Traffic Impact Studies."

11.2.5 Major and Minor Collectors

11.2.5.1 The following curb opening and driveway criteria shall govern private access onto minor collectors. Single-family residential access onto collectors is not permitted within new developments and shall only be considered on existing residences if no other roadway of lower classification can be accessed.

11.2.5.2 Public roadway access separation onto major and minor collectors shall be determined by the traffic conditions and level of service evaluation in the Traffic Impact Analysis. Intersections shall not be spaced at any distance that will hinder traffic operations during the AM or PM peak hour in Design Year 2 of the proposed development area.

11.2.5.3 Public streets shall intersect collectors no closer than 330 feet from each other (centerline to centerline), and shall intersect major collectors no closer than 660 feet from each other (centerline-centerline). On minor collectors,

the closest local street intersection to an arterial shall be 330 feet (ROW line of arterial to centerline of local street) and on major collectors shall be 660 feet from the arterial (ROW line of arterial to centerline of local street). On minor collectors with an ultimate projected traffic volume of less than 2500 V.P.D., intersection spacing may be 250 feet (centerline to centerline) for the first intersection from an arterial and 210' from centerline to ROW of arterial.

11.2.6 Local Streets

- 11.2.6.1** The curb opening and driveway criteria in this Section shall govern access to local roadways.
- 11.2.6.2** Residential driveway locations shall be no closer than 20-feet from the Point of Curb Return (PCR) on any adjacent roadway.
- 11.2.6.3** Public roadway access separation on local roadways shall be determined based on the traffic conditions and level of service evaluation in the Traffic Impact Analysis. Intersections shall not be spaced at any distance that will hinder traffic operations during the AM or PM peak hour in Design Year 2 of the proposed development area. On local roadways, the intersection-to-intersection distance from arterial and collector roadway shall be evaluated for adequate traffic conditions in the Traffic Impact Analysis or subsequent addendum, prior to issuance of any access permits.
- 11.2.6.4** Public streets should not intersect local roadways closer than 150 feet from each other (centerline to centerline). On a local street, the closest intersection to a collector street shall be at least 200 feet (centerline to centerline), and to an arterial street the closest intersection shall be 200 feet (arterial ROW line to local street centerline). Further study may be required at the discretion of County Staff regarding access location and spacing.

11.3 BASIC PRINCIPLES FOR CURB OPENINGS AND DRIVEWAYS

- 11.3.1** Certain design criteria for curb openings and driveways require minimum dimensions in some instances and maximum dimensions in others. The design of curb openings and driveways within the range of these dimensions will provide for good service on the part of the motorist using the driveway while at the same time minimizing the interference to the traffic using the street. By controlling the location and width of openings or driveways along the street, it will be possible to avoid or eliminate long open stretches where motorists can indiscriminately access onto the street. The width of opening established in these Standards is based on studies, which indicate that the various width openings will accommodate vehicles of maximum size authorized on our County roadways. In case of conflict between requirements in the various sections of this chapter, the more restrictive condition shall normally apply.
- 11.3.2** The opening or driveway width should be adequate to properly handle the anticipated traffic volume and traffic characteristics, as well as being within the limits specified for the type of property development. The controls established for curb openings and driveways shall apply to existing streets as well as new streets that may be developed in the future.
- 11.3.3** To the greatest extent possible, all openings for driveways shall be located at the point of optimum sight distance along the street. For openings and driveways to commercial establishments and service stations there shall be sufficient space reasonably cleared of any obstructions such that drivers entering the property will have sufficient sight distance

to enable them to make proper and safe movements. The profile of a driveway approach and the grading of the adjacent area shall be such that when a vehicle is located on the driveway outside the traveled portion of street the driver can see a sufficient distance in both directions so as to enable him to enter the street without creating a hazardous traffic situation. The driveway profile grade within public right-of-way should not exceed four (4) percent.

11.3.4 Any adjustments which must be made to utility poles, street light standards, fire hydrants, catch basins or intakes, traffic signs and signals, or other public improvements or installations which are necessary as the result of the curb openings or driveways shall be accomplished without any cost to Arapahoe County. Also, any curb opening or driveway, which has been abandoned, shall be restored by the property owner except where such abandonment has been made at the request of, or for the convenience of, the County. Driveways shall not interfere with operations or locations of any drainage appurtenances or handicap ramps.

11.3.5 Driveway approaches, where the driveway is to serve as an entrance only or as an exit only, shall be appropriately signed by, and at the expense of, the property owner. The property owner will be required to provide some means of ensuring that the motorists will use the driveway either as an entrance only or an exit only, but not both.

11.3.6 Driveway locations shall be maintain a minimum of 20-feet of separation from the Point of Curb Return on any adjacent public or private roadway to the edge of driveway.

11.3.7 Rural Road Access from Private Property

New driveway accesses from private property to an existing graveled County road shall be required to install a minimum of six (6) inches, compacted Class 6 aggregate base course or equivalent material from the ROW line to the edge of the traveled roadway. The width of the driveway within the ROW shall be 24 feet and shall have a minimum 18" diameter corrugated metal pipe (CMP) culvert (design shall be provided for review and approval prior to access location) at the established ditch flow line. A sketch plan of the installation must be submitted with the access permit application. No construction permit will be issued until Public Works and Development, Engineering Division approves the access and its construction plans.

11.3.8 Access to Roadways with No Curb and Gutter

11.3.8.1 Drive shall extend from ROW line to edge of existing driving surface and shall be constructed of either:

- An 8" thick compacted Class 6 aggregate base material.

- A minimum of 3" thick asphalt pavement over 6" thick Class 6 aggregate base material.

11.3.8.2 The drive shall be a minimum of 16-feet wide or a maximum of 24-feet wide in the County ROW.

11.3.8.3 A minimum 18" diameter corrugated metal pipe (CMP) culvert shall be installed at the established roadside ditch flowline beneath the private drive access. The applicant is responsible for providing adequate design sizing for the CMP culvert with the Phase III Drainage Study or as a separate document.

11.3.9 Maintenance of Private Access Onto County ROW

11.3.9.1 Maintenance of the private driveway access and drainage improvements within the County right-of-way described in Sections 11.3.6 and 11.3.7 shall be the responsibility of the adjacent property owner.

11.4 DEFINITION OF TERMS

Several terms are used herein, which have a somewhat distinct meaning. For the purpose of clarity, the definition of some of these terms are listed below:

Width of Curb Opening (W) – The width of curb opening is the distance measured along the curb line from access flowline extended to access flowline extended.

Edge Clearance (E) – The distance measured along the curb line from the nearest edge of the curb opening to a point where the property line extended intersects the curb.

Corner Clearance (C) – At an intersecting street, the distance measured along the curb line from the projection of the intersection street right-of-way line to the nearest edge of the curb opening.

Distance Between Double Drives (D) – The distance measured along the curb line between the inside edges of two adjacent curb openings.

Setback (S) – The lateral distance measured perpendicular to the street right-of-way line and extending from the right-of-way line to the closest point on a gasoline service pump island.

Frontage – The distance along the street right-of-way line of a single property or development within the property lines. Corner property at an intersection would have separate frontage along each street.

Residential – Property used primarily for residential purposes such as single family, two family and multi-family units.

Single Family (SF) Residential – Single, detached family dwelling units or double bungalows or duplexes.

Multi Family (MF) Residential – Three or more attached dwelling units including townhouses, condominiums and apartments.

Commercial – Establishments where buying and selling of commodities, entertainment or services is carried on, excluding service stations. Included are such uses as office building, restaurants, hotels, motels, banks, grocery stores, theaters, parking lots, trailer courts and public buildings.

Service Stations – Any property where flammable liquids used as motor vehicle fuel are stored and dispensed from fixed equipment into fuel tanks of motor vehicles.

Industrial or Warehouse – Any establishment that manufacturers or stores an article or product.

11.5 GENERAL REQUIREMENTS

11.5.1 Number of Openings

SF Residential – In general, each SF residential property shall be limited to one access point.

MF Residential – In general, access shall be determined by information provided by owner/developer in the Traffic Impact Study and by comments generated during Arapahoe County's review and acceptance of the study.

Commercial – In general, commercial properties having less than 150-feet of frontage and located mid-block shall be limited to one access point to County roadways. An exception to this rule may be where a building is constructed in the middle of the lot and parking is provided for on each side of the building. A second access point may be allowed for commercial property located on a corner or for properties having greater than 150-feet of frontage, if the additional proposed access is determined by County Staff to be acceptable and the proposal is justified in the Traffic Impact Study.

Service Stations – Where there is a minimum of 150-feet of frontage, two access points to a County roadway may be permitted if the accesses are justified as acceptable within a Traffic Impact Study.

Industrial – Access shall be determined on a case-by-case basis. The County shall consider good traffic engineering practice and the information provided by the applicant in the Traffic Impact Study accompanying the submittal.

11.5.2 Amount of Curb Opening Permitted

The total length of curb opening on a roadway for access to a commercial property or service station shall not exceed 40% of the property frontage. This requirement does not apply to residential type curb openings.

11.5.3 Entrance Angle

In general, the entrance angle for all driveways shall be as near 90° to the centerline as possible. The minimum angle that will be permitted is 90° plus or minus 10°.

11.5.4 Joint Entrances

Whenever possible and feasible, joint entrances shall be provided to serve two adjacent properties. Joint entrances are to be centered on the common property line. Joint entrances shall require the execution of a Joint Access Easement Agreement between the adjacent property owners.

11.5.5 Access Approaches for Areas Requiring Backing Maneuvers

Access approaches shall not be permitted for parking or loading that requires backing maneuvers within County right-of-way. All off-street parking areas must include on-site maneuvering areas and aisles to permit user vehicles to enter and exit the site in forward drive without hesitation.

11.5.6 Minimum Throat Length for Access Roadways and Drive Aisles

The minimum throat length for an access drives shall meet the requirements for the following conditions:

For parking areas with unsignalized access – 75-feet.

For distance to minor intersection with unsignalized major intersection – 50-feet.

For distance from any signalized major intersection – 200-feet.

The distance shown above is measured from the edge of the major roadway's right-of-way to the nearest edge of the parking space or access aisle.

11.5.7 Un-utilized Access Points

If a parcel of land with direct access has been in a state of non-use for more than four years, recommendation of access use shall be considered a change in use. If the use of the access exceeds the design limitations of the access point or is non-conforming to present design criteria, a new permit shall be required.

11.5.8 Changes in Access Use

If the use of existing access to County right-of-way changes, or there is a change in the use of the property, a new access permit may be required. Change in access or property use may include, but is not limited to, change in volume or type of traffic, structural modifications to the building, remodeling of the structure, change in type of business, expansion in an existing business, change in zoning or change in property division creating new parcels.

11.6 CONTROL DIMENSIONS

To accomplish the objectives of the basic principles stated earlier, certain control dimensions are necessary. There are many variables that affect these control dimensions. Some of the variables are as follows: type of roadway classification, type of property development, volume of traffic and width of right-of-way.

11.6.1 Width of Curb Opening (W)

The total width of curb opening for properties on various function roadway classifications shall be in conformance with Table 13.1.

TABLE 13.1					
WIDTH OF CURB OPENING (W)					
	RESIDENTIAL		SERVICE		INDUSTRIAL
	SF	MF	COMMERCIAL	STATION	
FREEWAY	N/A	N/A	N/A	N/A	N/A
MAJOR ARTERIAL	IF ALLOWED UNDER 11.2.3.2.C, DESIGN AS A COLLECTOR				
MINOR ARTERIAL	IF ALLOWED UNDER 11.2.3.2.C, DESIGN AS A COLLECTOR				
MAJOR COLLECTOR	N/A	35-40'	35-40'	35-40'	35-40'
MINOR COLLECTOR	N/A	35-40'	35-40'	35-40'	35-40'
LOCAL	(**)	35-40'	35-40'	35-40'	35-40'

Notes: (1) Curb openings of 30-feet or more must be constructed with radius curb returns

** For Single Family Residential access to local streets

Local Suburban (with Curb, gutter and sidewalk) = 16-30-feet

Local Urban (without curb, gutter and sidewalk) = 20-30-feet

Local Rural (Agriculture Zoning) = 20-30-feet

11.6.2 Edge Clearance (E)

Residential

Arterial – None (may not be exceed the property line extended).

Local – None (may not exceed the property line extended).

Commercial and Service Stations

Arterial – 75-foot minimum

Local – 75-foot minimum

Traffic operations shall be evaluated in the Traffic Impact Study to ensure adequate levels of service with the minimum edge clearance distances prior to approval.

Note: Joint accesses with adjoining property are encouraged. Joint access shall be the only justification for reducing the minimum edge clearance dimension. Joint access points will require the two adjacent property owners to dedicate joint access easements to one another.

11.6.3 Corner Clearance

It is important to locate driveways away from major intersections. This constraint is as much for the ability to enter and exit the property as for the benefit of intersection safety and operations. Exiting a driveway during peak hour conditions at a signalized intersection is difficult because the queue of standing or slow moving vehicles may not allow a sufficient gap for entry from the driveway. Corner clearances shall be determined through evaluation of the intersection conditions in the Traffic Impact Study. Residential driveways shall be located a distance of 20-feet from the point of curb return of the intersection.

11.6.4 Sight Distance

Sight distance for curb openings to private property shall meet all sight triangle and sight line requirements detailed in Section 4.5.9.3. This does not apply to single-family residential projects using mountable curb, gutter and sidewalks.

11.7 UNPERMITTED ACCESS

Any access, driveway or curb cut that is constructed within public ROW without an access permit issued by Arapahoe County Public Works and Development shall be subject to a stop work order and shall be removed immediately upon demand from the Director, Department of PWD. Failure to remove the unpermitted access may result in removal of said access by the County (at the property owner's expense). Failure to comply with the "Stop Work Order" may result in County legal action and prosecution of violators.