

## ARTICLE 23 DRIVEWAYS, STREETS AND SIDEWALKS

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### **23.01 Street Classification**

**23.01.01** Streets shall be classified as provided in Subsection 23.01.02.

- A.** The classification shall be based upon the projected volume of traffic to be carried by the street, stated in terms of the number of trips per day.
- B.** The number of dwelling units to be served by the street may be used as a useful indicator of the number of trips but is not conclusive.
- C.** Whenever a street continues an existing street that formerly or it is expected that a street will be continued at some future time, the classification of the street will be based upon the street in its entirety.

**23.01.02** The classification of streets shall be as follows:

- A. *Minor:*** A street whose sole function is to provide access to abutting properties. It serves or is designed to serve not more than nine (9) dwelling units and is expected to or does handle up to seventy-five (75) trips per day.
- B. *Local:*** A street whose sole function is to provide access to abutting properties. It serves or is designed to serve at least ten (10) but no more than twenty-five (25) dwelling units and is expected to or does handle between seventy-five (75) and two hundred (200) trips per day.
- C. *Subcollector:*** A street whose principal function is to provide access to abutting properties but is also designed to be used or is used to connect minor and local streets with collector or arterial streets. Including residences indirectly served through connecting streets, it serves or is designed to serve at least twenty-six (26) but not more than one hundred (100) dwelling units and is expected to or does handle between two hundred (200) and eight hundred (800) trips per day.
- D. *Collector:*** A street whose principal function is to carry traffic between minor, local, and subcollector streets and arterial streets but that may also provide direct access to

abutting properties. It serves or is designed to serve, directly or indirectly, more than one hundred (100) dwelling units and is designed to be used or is used to carry more than eight hundred (800) trips per day.

E. *Arterial*: A major street in the Town’s street system that serves as an avenue for the circulation of traffic into, out, or around the Town and carries high volumes of traffic.

**23.01.03** Private streets will be permitted to serve as access within residential developments, however, the dedication of public streets and other rights-of-way or easements may be required if they are indicated in official plans adopted by the Town Council.

**23.01.04** Public streets and or other rights-of-way or easements of public access over private streets will be required where the North Carolina Department of Transportation, or the Town of Boone Public Works Department determines that such access is necessary for promotion of public health, safety and welfare.

**23.01.05** Private streets shall meet the dimensional standards set forth in Section 23.05.

**23.01.06** Private streets may be utilized under the following conditions:

A. The applicant shall record with the Watauga County Register of Deeds an instrument setting forth provisions for the establishment of a property owners association for the purpose of assessing dues for maintenance of the roads by the purchasers of the property which will be served by the roads within the development.

B. The applicant shall maintain the road at least until such time that the property owner’s association assumes maintenance.

C. A subdivision disclosure statement is provided as required by G.S. 136-102.6, which fully discloses the status, whether public or private, of the road upon which the lots front.

**23.01.07** The area within the street right-of-way may not be used to satisfy lot area requirements.

**23.02 Access to Lots**

**23.02.01** Every lot shall have access to it that is sufficient to afford a reasonable means of ingress and egress for emergency vehicles as well as for all those likely to need or desire access to the property in its intended use.

**23.03 Driveways**

**23.03.01** A driveway may provide access to no more than two (2) lots.

A. When a single driveway provides access to more than one lot, easement rights in favor of each of the lots that rely upon the driveway for access shall be provided. These rights may be by means of a document recorded in the public records of Watauga County or by means of a notation on the plat of the subdivision that is recorded.

**23.03.02** All driveway entrances and other openings onto streets within the Town’s planning jurisdiction shall be constructed so that:

- A. Vehicles can enter and exit from the lot in question without posing any substantial danger to themselves, pedestrians, or vehicles traveling in abutting streets, and
- B. Interference with the free and convenient flow of traffic in abutting or surrounding streets is minimized.

**23.03.03** All driveways shall conform to the Boone Town Code, Chapter 98, or the North Carolina Department of Transportation Manual on Driveway Entrance Requirements, whichever is most restrictive.

**23.03.04** The maximum grade at any one point on a driveway used for a fire access roadway shall not exceed ten percent (10%) at any one point on the driveway unless approved by the Chief of the Boone Fire Department.

(Ord. 20160028, 05-19-2016)

**23.04 Relationship of Streets to Topography**

**23.04.01** Street grades shall conform as closely as practicable to the original topography.

**23.04.02** The maximum grade of any street used for a fire access roadway shall not exceed ten percent (10%) at any one point unless approved by the Chief of the Boone Fire Department.

(Ord. 20160028, 05-19-2016)

**23.05 Street Width and Drainage Requirements**

**23.05.01** Streets shall be constructed to meet the standards set forth in the table below.

Street Type	Minimum Right-of-Way Width (feet)	Minimum Pavement Width (feet)	Shoulder & Swale Allowed	Curb & Gutter Allowed
Minor	45	18	Yes	Yes
Local	45	18	Yes	Yes
Private	30	18	Yes	Yes
Subcollector	50	20	Yes	Yes
Collector	50	20	No	Yes

**23.05.02** Shoulders and drainage swales or curb and gutters may be utilized as allowed in the table above.

- A. Shoulders and drainage swales shall be a minimum of four feet (4’).
- B. Standard ninety-degree (90°) curb or roll type curb may be permitted along minor and local streets within residential subdivisions.
- C. Street pavement width:
  1. Shall be measured from curb face to curb face where ninety-degree (90°) curb is used; and

2. Shall be measured from the center of the curb to the center of the curb where roll type curb is used; and
3. Shall be measured from edge of pavement to edge of pavement where shoulder and swale are used.

**23.06 General Layout of Streets**

**23.06.01** Street systems shall be coordinated with existing, proposed, and anticipated streets as provided in this Section.

**23.06.02** Collector streets shall intersect with surrounding collector or arterial streets at safe and convenient locations.

**23.06.03** Subcollector, local, and minor residential streets shall connect with surrounding streets where necessary to permit the convenient movement of traffic between residential neighborhoods or to facilitate access to neighborhoods by emergency service vehicles or for other sufficient reasons.

- A.** Connections shall not be permitted where the effect would be to encourage the use of such streets by substantial cut-through traffic.

**23.06.04** Whenever connections to anticipated or proposed surrounding streets are required by this Section, the street right-of-way shall be extended and the street developed to the property line of the subdivided property (or to the edge of the remaining undeveloped portion of a single tract) at the point where the connections to the anticipated or proposed street is expected.

- A.** The permit-issuing authority may require temporary turnarounds to be constructed at the end of such the streets pending their extension when such turnarounds appear necessary to facilitate the flow of traffic or accommodate emergency vehicles.

**23.06.05** Subcollector, local and minor residential streets shall be curved whenever practicable to the extent necessary to avoid conformity of lot appearance.

**23.06.06** Cul-de-sacs and loop streets are encouraged so that through traffic on residential streets in minimized.

**23.06.07** All dead-end streets shall be developed as cul-de-sacs in accordance with the standards set forth in this Article. Except where no other practicable alternative is available, such streets may not extend more than 550 feet (measured to the center of the turnaround).

**23.06.08** The right-of-way of a cul-de-sac shall have a radius of fifty feet (50'). The radius of the paved portion of the turnaround (measured to the outer edge of the pavement) shall be thirty-five feet (35').

- A.** Alternative cul-de-sac designs published in NCDOT's "Subdivision Roads – Minimum Construction Standards" will be considered by the permit-issuing authority only in situations where, because of the physical characteristics of the site, the construction of a symmetrical "bulb" end design may not be in the public's best interest.

- 23.06.09** Half streets shall not be permitted except where such streets, when combined with a similar street (developed previously or simultaneously) on property adjacent to the subdivision, creates or comprises a street that meets the right-of-way and pavement requirements of this Ordinance.
- 23.06.10** Streets shall be laid out so that residential blocks do not exceed 1,800 feet, unless no other practicable alternative is available.
- 23.06.11** Streets shall intersect as nearly as possible at right angles, and no two streets may intersect at less than sixty degrees (60°).
- 23.06.12** Not more than two streets shall intersect at any one point, unless the Public Works Director certifies to the permit-issuing authority that such an intersection can be constructed with no extraordinary danger to public safety.
- 23.06.13** Whenever possible, proposed intersections along one side of a street shall coincide with existing or proposed intersections on the opposite side of such street.
- A.** In any event, where a centerline offset (jog) occurs at an intersection, the distance between centerlines of the intersecting streets shall not be less than 150 feet.
- 23.07 Construction Standards and Specifications**
- 23.07.01** All streets shall be constructed in accordance with the design construction standards promulgated by the North Carolina Department of Transportation (NCDOT), unless a more restrictive standard is herein, in which case the more restrictive standard shall apply.
- 23.08 Pedestrian Circulation and Sidewalk Requirements**
- 23.08.01 When Sidewalks Must Be Constructed:** Sidewalks shall be required for:
- A.** All new major subdivisions;
- B.** All new multi-family residential development;
- C.** All new office, institutional, commercial and industrial development;
- 23.08.02** An easement for the following items shall be conveyed to the Town where required due to insufficient right-of-way:
- A.** Public sidewalks; and
- B.** Any greenway or alternative method of pedestrian circulation as further described in Subsection 23.08.04; and
- C.** In the event that circumstances may change over time, any area as to which the applicant has been permitted to pay a fee-in-lieu rather than install required sidewalks as further described in Subsection 23.08.05.
- 23.08.03 Design Requirements.**
- A.** Sidewalks shall be required along the entire length of any portions of public streets which abut the development parcel.
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- B.** Sidewalks will be constructed in accordance with the Roadway & Sidewalk Program Handbook for the Town of Boone.
  - 1. Any deviation from the requirements must be approved by the Administrator.
    - a. Deviations may only be allowed when strict compliance with the Roadway & Sidewalk Program Handbook is not reasonably possible due to topography or other site conditions beyond the applicant’s control and not of the applicant’s making.
- C.** Whenever curb and gutter construction is used on public streets, wheelchair ramps shall be provided at intersections and other major points of pedestrian flow. Sidewalks, wheelchair ramps, and depressed curbs shall be constructed in accordance with the published standards of the North Carolina Building Code, Volume I-C, Accessibility.
- D.** In all multi-family residential development, sidewalks shall be provided linking dwelling units with other dwelling units, the public street, and on-site activity centers such as parking areas, laundry facilities, and recreational facilities.

**23.08.04 Alternative Methods for Pedestrian Circulation:**

- A.** When, with respect to a development parcel, a public greenway or other alternative walkway (for purposes of this section, “greenway”) has been identified in a duly-adopted government alternative transportation plan or other duly-adopted plan, or where a proposed public greenway will connect to an existing greenway or to a planned greenway that is expected with reasonable certainty to be constructed within the next five years or that is approved and funded by the North Carolina Department of Transportation, the following shall be required as applicable:
  - 1. The permit-issuing authority may allow or require the installation of a public greenway instead of sidewalk. A request to install a public greenway shall be supported by a site plan depicting the location and dimensions of the greenway, a description of the method of construction, and any other information deemed necessary by the Administrator.
  - 2. If a public greenway is to be constructed upon the development parcel at the expense of the town or another third party, instead of constructing the greenway the developer shall pay fee-in-lieu of construction as provided at 23.08.05(D).
  - 3. If a public greenway is already in place on the development parcel, the developer shall not be required to install the section of sidewalk that otherwise would be required to be installed along the same boundary or boundaries of the parcel.

**23.08.05 Fee-in-Lieu of Constructing Sidewalks**

- A.** An applicant may seek approval to pay a fee in lieu of construction as specified herein.
- B.** Fee-in-lieu may never be permitted on a Primary Sidewalk Priority Route where there is contiguous sidewalk infrastructure in place.

- C. Except as specified in the immediately preceding subsection (B), the applicant may, in lieu of constructing a particular section of sidewalk, deposit funds into a sidewalk fund maintained by the Town of Boone in any one of the following limited circumstances:
1. The Administrator finds, based upon clear and convincing evidence, that the building of a particular section of sidewalk is undesirable as the result of one or more of the following site-specific factors: (i) a steep slope or other site-specific factors making the use of that section of sidewalk is not reasonably possible or dangerous to the public; or (ii) the certainty or likelihood of damage resulting to sensitive habitat, natural watercourses, or mature or historic trees, where such damage cannot be mitigated by the use of an alternative path, which is not justified by a countervailing public interest in the addition of that particular area of sidewalk. In addition, the Administrator must find that there is no reasonable alternative manner of building that particular section of sidewalk (such as changing its location or using a different construction method) that would avoid the problems posed by the identified site-specific factors.
  2. The applicant is unable to secure permission from NCDOT to install sidewalks in compliance with the Town's requirements.
  3. The property being developed is a satellite parcel greater than one (1) mile from the Town's main corporate limits. However, this exemption shall not apply if any contiguous sidewalk infrastructure exists along the public street.
- D. Payment:
1. The applicant shall pay the fee-in-lieu prior to the issuance of a Certificate of Occupancy. The fee shall be a fixed amount per linear foot as per the Town's currently adopted fee schedule. The applicable fee shall be determined by the rate in effect on the date the fee is paid.
  2. All funds collected in lieu of construction shall be in addition to all other sidewalk funding and shall be placed in a separate account to be used only for costs associated with new sidewalk construction by the Town.

**23.08.06** Whenever the permit-issuing authority finds that a means of pedestrian access is necessary from the subdivision to schools, parks, playgrounds, or other roads or facilities and that such access is not conveniently provided by sidewalks adjacent to the streets, the applicant may be required to reserve an unobstructed easement of at least ten feet (10') in width to provide such access.

(Ord. PL02634-060519, 11-21-2019)

**23.09 Street Names and House Numbers**

**23.09.01** Street names shall be assigned by the applicant subject to the approval of the Town.

1. Proposed streets that are obviously in alignment with existing streets shall be given the same name.
2. Newly created streets shall be given names that neither duplicate nor are phonetically similar to existing streets within the Town's planning jurisdiction, regardless of the use of different suffixes.

**23.09.02** Building numbers shall be assigned by the Town.

**23.10** **Bridges**

**23.10.01** All bridges shall be constructed in accordance with the standards and specifications of the North Carolina Department of Transportation, except that bridges on roads not intended for public dedication may be approved if designed by a licensed engineer.