

## Trail and Trail Head Design

The purpose of Appendix C is to provide trail design concepts and to serve as minimum development standards for trail (greenway) and water trail (blueway) facility development. These standards are not all inclusive. Projects must also comply with applicable standards as established in the Cabarrus County Development Ordinance.

### Trail Classifications

#### *Improved Multi-Purpose Trail*

- An improved multi-purpose trail provides opportunities for walking, running, cycling and in-line skating. It also accommodates strollers.
- These trails are typically a minimum of 8-10 feet wide to accommodate pedestrians and bicyclists at the same time. The width may increase depending on the intensity of use and trail location.
- Trails should be set back a minimum of 10 feet from any road right-of-way or edge of pavement.



- Asphalt, concrete, brick, pavers or an equivalent material, such as a stabilizer solution that can be mixed with crushed aggregate that is considered acceptable for a pedestrian accessible path, are the preferred materials for these types of trails.
- Trails shall be designed to drain properly so that standing water does not decrease the stability or life of the trail.
- A shoulder should be provided at the edge of the improved surface.
- To the greatest extent possible, trails shall comply with The North Carolina State Building Code for Accessibility and The Americans with Disabilities Act as it relates to Outdoor Developed Areas.

#### *General Purpose Trail*

- A general purpose trail provides opportunities for walking, hiking, and biking.
- These trails are typically 4-8 feet in width but may vary depending on the intensity of use and trail location.
- Trails should be set back a minimum of 10 feet from any road right-of-way or edge of pavement.
- In natural areas, underbrush should be trimmed so that it does not hang over the trail or obstruct the travel way.
- These trails may be surfaced with asphalt, concrete, brick, pavers, crushed stone, compacted earth or an equivalent material, such as a stabilizer solution that can be mixed with crushed aggregate that is considered acceptable for a pedestrian accessible path. Trail surfaces should be firm and stable.
- To the greatest extent possible, trails should comply with the American with Disabilities Act as it relates to Outdoor Developed Areas.



### *Boardwalks*

- Where appropriate, other materials, such as treated wood or composite lumber, may be used for boardwalks.

All trails shall be located a minimum of 60 feet from the top of the stream bank. See Chapter 4, Waterbody Buffer Zone for additional information.

Overlooks, observation decks, boardwalks, bridges or crossings should be located as close to perpendicular as possible from the primary trail to the river, stream or natural feature to minimize impact to the natural stream buffer required by the Waterbody Buffer Zone (See Chapter 4).

Neighborhood, County, City and regional trails shall be connected wherever possible to create an alternate transportation network.

### **Trail Head**

Trail heads and access points refer to parcels or areas specifically designed as a primary means of accessing a trail. They may include restrooms, maps of the trails, parking areas, picnic areas, play areas or other recreational amenities.

- Trail heads should be located where a trail begins or terminates or where an access point is located.
- Trail heads may be areas designed specifically for accessing trails or may be incorporated into parks, civic properties, schools, neighborhoods or commercial areas.
- Standalone trail head parking areas shall be no more than 60,000 square feet and shall be located a minimum of 20 feet from any adjacent property line.
  - Standalone trail heads for blueways or equestrian trails shall be designed to accommodate trailers and provide turn around areas.
  - Trail head parking areas may use alternate materials, such as a stabilizer solution that can be mixed with crushed aggregate considered acceptable for a pedestrian accessible path for the surface of the lot, instead of pavement. However, the minimum requirements of the North Carolina State Building Code for Accessibility, The American with Disabilities Act and for Fire Prevention must be met.
- Trail head parking areas shall be designed so that parking spaces are clearly marked and that circulation is maintained for Emergency Services.
- Amenity areas located at trail heads, such as play areas, picnic areas, restroom facilities, etc. shall meet the North Carolina State Building Code for Accessibility, The American with Disabilities Act and Fire Prevention.
- All parking areas shall be constructed with proper drainage and stormwater systems.

## Blueway (Water Trail)

Blueways are trails for watercraft that may be located along with a multi-purpose trail or greenway or may be a standalone recreational facility.



Blueway routes should be designed to offer safe and reliable passage on the river or stream, including enough water flow to accommodate watercrafts most of the time.



Access points should be sited where minimum disturbances to the Waterbody Buffer Zone will occur. Where disturbance is necessary, it shall be kept to a minimum and replanted (See Chapter 4).

Signage should be located along the blueway to inform users of distance, location and next available take out area.

## Trail Signage

Signage along trails is important to help increase safety and user comfort on the trails. Signs assist in the navigation of trails, warn of road crossings or hazards and may educate users about natural features or wildlife along the trail.

- Directional signs should be provided at access points and include trail names, mileage to point of interest or distance traveled, and general direction.
- Signs providing descriptions of the trail as required by the North Carolina State Building Code for Accessibility and The American with Disabilities Act shall also be provided at access points and along the trail as needed.
- Caution signs should be provided to warn of road crossings, grades, curves or other potential hazards.



- Regulatory signs should be provided at access points and trailheads that include the "Rules of Use" for the trail and should also include the address of the site and Emergency Contact information.
- Interpretative signs should be provided where educational opportunities are available.
- All signs should be located in places where they will be clearly visible.
- Signs should be placed at a constant edge along the trail for consistency, but should be a minimum of 2 feet from the improved trail surface.

All other signage shall be in conformance with Chapter 11, Signage.

## Use Conflict Avoidance

Trails shall be designed to minimize conflicts of use. This includes designing trails to accommodate novice and experienced users, protecting sensitive natural habitat areas and preserving historical areas. Restricted access by users in habitat and historical areas should be considered and incorporated into the trail design.

