Accessible Trails

Since the passage of the American With Disabilities Act (ADA) in 1990 there has been increased interest in designing new or modifying existing trails to make them accessible to persons with disabilities. Currently no official standards exist for creating accessible trails, however guidelines from the American With Disabilities Act Accessibility Guidelines (ADAAG), the Uniform Federal Accessibility Standards (UFAS), and the American National Standard Institutes (ANSI) provide good starting points. Efforts are underway to develop national standards for universal access in outdoor recreation, including trails. While it is neither practical nor desirable to conform all park trails to accessibility standards, every effort should be made to ensure that persons with disabilities have the opportunity to enjoy Virginia's natural, cultural, and historical resources.

Other terms describing the effort to make trails and other recreation structures accessible, include "barrier-free design," or Auniversally accessible. There is a range of disabilities that must be considered, and there are two major categories of people with disabilities: those who have a disability but are ambulatory, and those who must use wheelchairs. Because of the dimensions and unique physical limitations, the wheelchair is viewed as the common denominator for barrier-free designs, and as such, an assumption is made that an area accessible to a wheelchair will also be accessible for people with other disabilities. This has created some problems for individuals with some other disabilities such as visual limitations. Thus, the universal design approach came about, and is still under development.

Design and construction standards set forth for accessible trails as follows are an attempt to provide accessibility for individuals who use wheelchairs and hopefully be inclusive of many other disabilities. As new standards for design unfold, our approach may change.

Some of the guidelines and literature available for accessible trail design have different levels of standards based on the type of trail (shorter/developed vs. longer/ less developed) and level of accessibility (easy, moderate, difficult). We have adopted the more conservative standards to encompass the "easy" to "moderate" level of accessibility on a shorter trail. It is important to keep in mind that while providing access is important, and even imperative, in and around the developed area of the park and main recreational elements, modifying a trail solely for accessibility purposes at the expense of the recreational experience and state of the natural environment is inappropriate. There are varying levels of accessibility.

Refer to the Basic Construction Standards and Specific Trail Types presended earlier in this section to compliment the special standards for accessible trails, and refer to the publications specific to accessible standards for more detailed information.

Trail Layout-Trails should be designed to blend with the site's topography and natural setting as much as possible. Design guidelines for different trails within the same site will vary based on the type of access being provided, which is determined in part by the type of recreational activity offered, and the expected level of accessibility. There will be varying degrees of accessibility to a site's trail system.

In planning an accessible trail, choose a site that will not require steps, and that can provide for adequate resting, passing and turning spaces at recommended intervals.

Trail Width-Access routes and trails must be a minimum of 36 inches wide with passing surfaces of 60 inches by 60 inches. Passing surfaces shall be placed at the maximum interval of every 300 feet. The clear width may reduce to 32 inches for a maximum distance of 2 feet.

Vertical Clearance-The clear head space over the accessible route should provide 80 inches. Clear head room offers protection for persons with visual impairments.

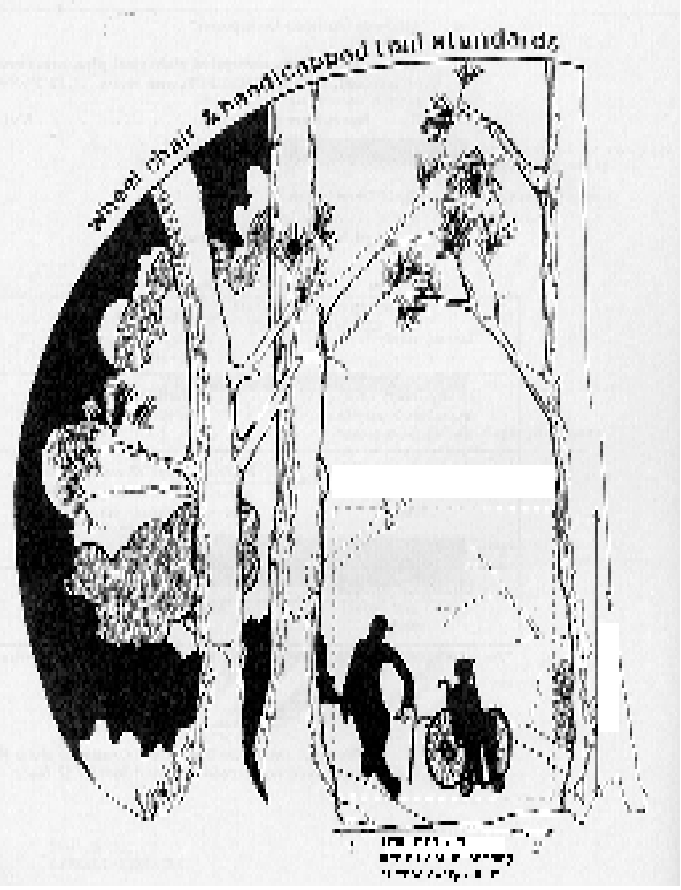

Figure 4-43: Accessible Trail Clearing Standards

Trail Surface-The accessible route surface should be stable and firm. Changing surface levels should not exceed 2 inch. An example is where a boardwalk or bridge meets another trail surface.

Where wood decking is used, planks must run perpendicular to the direction of travel and joints must be no more than 2 inch.

Trail Grade-The grade of a trail should not exceed 10 percent (1:10 slope) with an overall maximum running slope of 5 percent (1:20 slope)

Level of Difficulty- It should be noted that the above mentioned requirements represent the minimum standards for an accessible trail. When planning a barrier-free trail one should consider whether the trail will serve all disabled persons who wish to use it. The following table provides design standards for two levels of accessible trails.

Special Considerations-

Parking

Accessible parking spaces shall be the spaces located closest to the accessible trailhead.

An accessible parking space must be 96 inches wide with an aisle way 60 inches wide beside it. The access aisle way must be part of an accessible route to the trailhead.

The surface of the parking area must be level and made of a hard, non-skid surface.

Accessible parking spaces shall be designated as reserved for people with disabilities by a sign showing the international symbol of accessibility. Such signs shall not be obscured by a vehicle parked in the space.

	Easy	Moderate
Width	48 inches	36 inches
Passing Spaces	200-foot maximum interval	300-foot maximum interval
Maximum grade	8 percent (1:12 slope)	10 percent (1:10 slope)
Sustained running slope	5 percent (1:20) maximum	5 percent (1:20) maximum
Distance allowed at maximum grade	30 feet maximum	50 feet maximum
Cross slope	3 percent (1:33) maximum	3 percent (1:33) maximum
Clear head space	80 inches	80 inches
Rest areas/Landings	400-foot maximum interval	900-foot maximum interval
Edge Protection and Curbs	Provide 4-inch curb on downhill side of trail & at landings	Provide 4-inch curb at dangerous and difficult locations & at landings
Handrails	Provide 34"-38" railings at dangerous or difficult locations and at bridges...etc.	Provide 34"-38" railings at dangerous or difficult locations & at bridges...etc.
Level Changes	2 inch maximum	2 inch maximum
Surface	Hard, skid resistant surface	Very firm, compacted, skid-resistant surface

Table 4-1: Summary of Accessible Trail Design Standards

×✉ Directional signs shall indicate where accessible entrances, parking, restrooms, and other accessible facilities are located.

Required Special Structures

✉ Rest areas or landings are required at the top and bottom of each maximum grade segment and where trails change direction (switchbacks) on maximum grade sections. Landings must be a minimum of 60 inches long, the width of the trail and level.

✉ Edge protection at dangerous sections of trail and at landings shall have curbs, walls, or railings that prevent people from traveling off the trail. Curbs or barriers shall be a minimum of 4 inches high.

✓✉ Handrails for ramps, bridges, boardwalks, etc. shall be mounted between 34 and 38 inches above the trail or structure surface and shall maintain a consistent height.

Signage

✉ Trail signs should be located at the edge of the trail, and not protrude into accessible route of travel.

✉ Trail signs should include accessibility information, however, the format is not presently standardized. Signage and universal signage is a topic under review among leaders in the accessibility field and standards may be adopted in the near future.

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