



BC Parks

Accessible Trail Planning and Construction Guide

June 2026

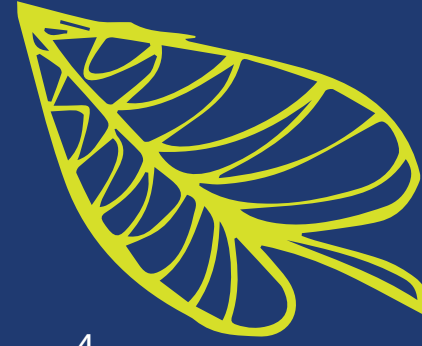


BC Parks



Indigenous land acknowledgement

We acknowledge all First Nations on whose territories BC Parks were created and honour their deep connections to the land which continue to this day. BC Parks is committed to developing a new relationship with First Nations based on respect and alignment with the principles of the United Nations Declaration on the Rights of Indigenous Peoples and the Truth and Reconciliation Commission's Calls to Action.



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1 | Purpose

In British Columbia there are approximately 30,000 km of formally recognized public trails managed by all levels of government – municipal, regional district, provincial, and federal. Approximately 19,000 km of these trails are managed by the Province through Recreation Sites and Trails BC and BC Parks.

Whether first-hand or through friends and family, everybody is exposed to disability in their lifetime. Disability can be episodic, permanent, or temporary; invisible or visible; acquired through injury, age, or disease; manifest in the body or mind; and it is a universal human experience.

For British Columbians, connecting with nature is a core value. Trails foster connection, build community, and support the social and health benefits that come from spending time outdoors. Despite 28% of British Columbians living with one or more diverse disabilities, guidance on reducing barriers through accessible trails remains limited.

This short guide fills this gap by providing guidance to managers, designers, planners, and maintenance personnel on prioritizing and delivering accessible pedestrian trails.

It is intended to support, but not replace, site-specific trail designs, trail standards, universal design principles, or accessibility standards.

Adaptive mountain biking and cycling multi-use trails are outside the scope of this resource.



2 | Introduction

Excellent design, construction, and maintenance of accessible trails is essential to connecting people with nature. Well-designed accessible trails extend the experience far beyond the parking lot, offering a seamless and continuous user experience across a site.

Successful accessible trails feel effortless to navigate and are built to endure. Design should fade into the background, allowing users to focus on their surroundings rather than the infrastructure itself. Accessible trails should minimize cognitive friction and avoid requiring concentration or excessive decision-making that detracts from the experience. Trail surfaces must be stable, firm, and slip-resistant, and designed for longevity with minimal maintenance. User safety and predictability are critical, particularly for people using mobility devices.

Clear public information for trip planning and wayfinding is essential to accessibility. Maps, signage, and digital tools help create a predictable trail experience and improve site safety. Excellent information also

reduces a key initial barrier to access – uncertainty about whether a trail is usable at a particular time – and enables better decision-making before people even get outside.

No single trail can meet every user's needs. A high-quality recreation landscape requires diverse accessible trail experiences. The next section breaks down considerations for different accessible pedestrian trail opportunities.



3 | Diversity of pedestrian trails

Accessibility is often viewed as a binary – trails are either ‘accessible’ or ‘not accessible’ – but both people and trails are far more complex. Accessibility standards provide critically important minimum requirements that can be measured and communicated to all users. Trails present the unique challenge of being shaped by site-specific factors such as terrain, weather, ecology, and visitor use patterns. While accessible standards for the built environment are strict and static, trails are dynamic. They resist simple categorization along their length, and conditions change with time and weather.

Recognizing this tension is essential to manage and communicate accessible trails. Trail accessibility exists on a continuum, and professional judgment is essential to balance technical standards with the constraints and opportunities of each site. A trail that is fully accessible to everybody, all the time, is probably not possible considering the diversity of trail conditions across all seasons, and people’s diverse abilities.

Likewise, accessibility is subjective. Users have personal perceptions of

what is accessible to them, and this changes over time.

A trail manager’s role is to design and maintain trails that accommodate as many people as practicable, without presuming the limits of users’ abilities. Equally important is communicating the trail experience, including barriers and trail features so users can make informed decisions. Describe what to expect from the trail experience rather than prescribing who can or cannot use the trail.



Like all users, people with disabilities value choice, variety, and challenge. Providing and communicating diverse trail options supports individuals’ independence and dignity by allowing them to choose trails that match their interest and desired level of challenge.

Accessible pedestrian trail terminology

This guide proposes the following trail naming convention for accessible pedestrian trails to reflect the nuance of common trail conditions:

Ultra accessible



Universal

- Cane-detectable edges
- Grade <5%
- Sensory features
- Tactile or audio interpretation
- Frequent benches

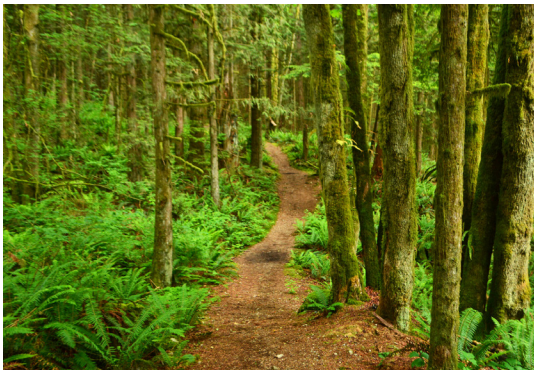
Developed

Less accessible



Accessible

- <5% grade preferred; max grade 8%
- Infrequent tread obstacles <13 mm
- Level threshold between surfaces
- Firm and stable surface



Low barrier

- Grade <14%
- Infrequent tread obstacles <50 mm
- Resting intervals not required
- Level threshold between surfaces
- Mostly firm and stable surface

Less developed

Figure 1. The accessible pedestrian trail experience spectrum

Low barrier trail

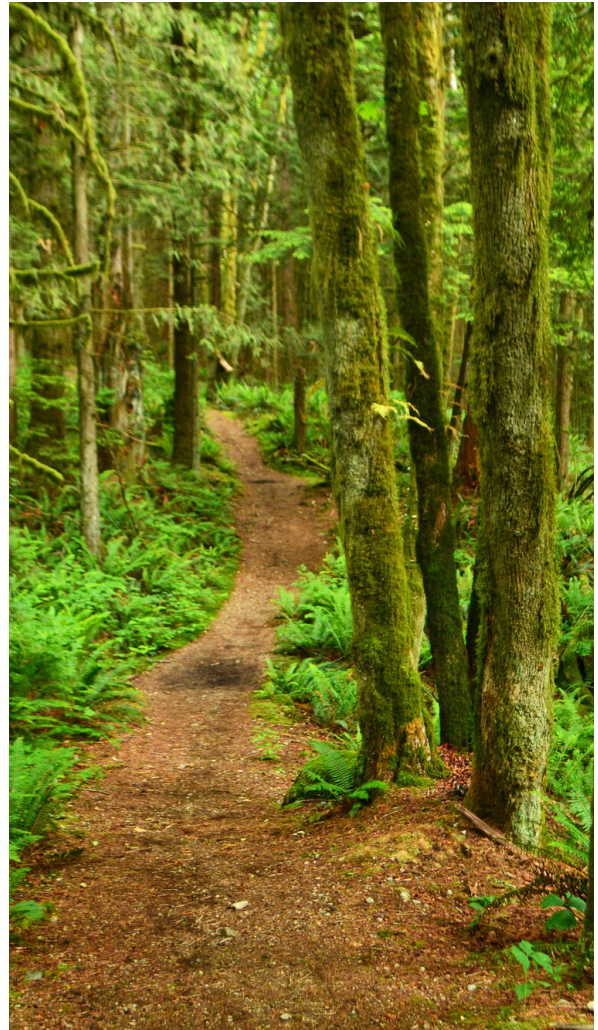
Many trails are misleadingly labeled as “accessible” despite not meeting established standards. The low barrier designation applies to pedestrian trails that are not fully accessible but remain usable for many people with disabilities. These trails are typically more difficult than those that meet accessible trail standards.

The low barrier classification was developed in recognition of common constraints in outdoor recreation settings that limit full compliance with accessibility standards. Its purpose is to expand and diversify trail experiences for users with disabilities by better reflecting real-world conditions.

This classification recognizes that accessibility exists along a continuum, rather than as a binary condition, and introduces nuances that are lacking in “accessible” and “not accessible” designations.

It also provides land managers with a flexible framework to balance accessibility with other objectives—such as user experience and conservation—and with site-specific constraints, including topography, budget, and the appropriate level of development.

This classification responds to growing demand for a wider range of accessible outdoor experiences, while acknowledging that it is not always appropriate or feasible to modify landscapes to fully meet accessibility standards.



A low barrier trail does not meet all accessible trail standards but avoids major barriers that would prevent access for many users of wheeled mobility devices.

Low barrier trails have no steps or full-tread width obstacles (e.g., large roots) and generally avoid steep grades (e.g., grades exceeding 14%) that significantly limit mobility device use. Low barrier trail specifications are outlined in Figure 2.

Low barrier trail

Applying this designation requires a strong understanding of accessibility principles and the diverse experiences of users with disabilities. Consultation with accessibility specialists is recommended.

In addition, low barrier trails require detailed and specific trail information to support trip planning. Refer to the “Trail Information” section for guidance.

This classification is primarily intended for single-use pedestrian trails but may be applied to multi-use trails where appropriate, based on site design and intended user experience.



Low barrier trails may have a more variable tread surface than accessible trails.



Accessible trail

The CSA/ASC B651-23 accessible trail standard has been adapted for application in provincial parks (Figure 2).

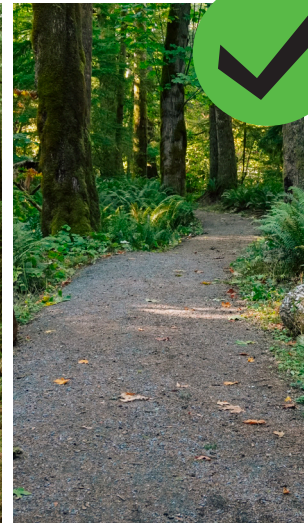
This standard meets the CSA/ASC B651-23 standard for firmness, stability, and cross slope and incorporates a more conservative grade threshold and practical trail width.

Passing spaces and rest areas are recommended as best practices, recognizing the rustic and undeveloped nature of many trails. Rest areas with benches will be prioritized in high-use locations.



An accessible trail must have a firm and stable surface that resists indentations when a person walks or rolls across the surface.

Surface examples: compact gravel, boardwalk, compact natural surface.



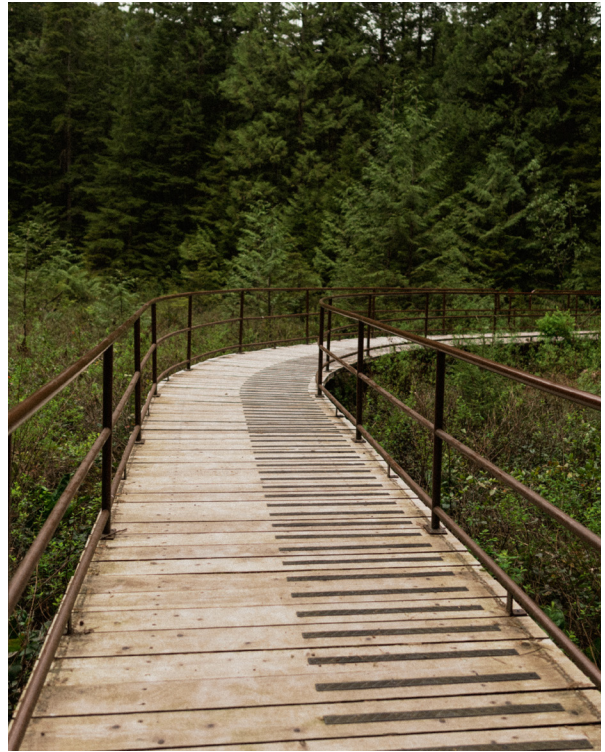
Universal trail

A universal trail exceeds accessibility standards to be accessible to the widest spectrum of users with a variety of mobility, sensory, and cognitive disabilities.

As there is no universal trail standard, these trails are guided by best practices and deep consultation with users and accessibility professionals for site-specific user needs.

Typical features of a universal trail are not limited to, but may include:

- A continuous high contrast raised edge or textural and visual edge contrast for white cane detection
- Tactile or audio interpretive signs
- Digital experience enhancements
- Trained staff onsite
- Adaptive equipment programs or rentals (e.g., off-road wheelchairs)
- Accommodations for custom personal supports, such as designing lift anchors into bathroom ceilings or making changerooms large enough to accommodate a helper
- Universal washrooms



Accessible and low barrier trail standards



	 Accessible	 Low barrier
Surface	<p>Firm and stable under typical seasonal conditions.</p> <p>A firm and stable surface resists indentations when a person walks or rolls over the surface.</p> <p>Surface material recommendation: For gravel surfaces, avoid oversized particles (>13 mm or ½”) and ensure fines are well-graded.</p>	<p>The majority of the trail (~90%) must be firm and stable under typical seasonal conditions.</p> <p>Up to 10% of the trail length may have a top layer <20 mm (¾”) thick of unconsolidated organic or gravel material.</p>
Width	<p>Average: 1500 mm (60”)</p> <p>Minimum: 1200 mm (48”)</p>	<p>Average: 1500 mm (60”)</p> <p>Minimum: 900 mm (36”)</p>
Average grade	≤ 5%	≤ 7%
Maximum grade and grade proportion	<p>5% to 8% for a maximum segment length of 20 m. Provide a resting interval at least 2 m in length between steep sections.</p> <p>The slope is 5% to 8% for a small portion of the trail, limited to <10% of the total trail length.</p>	<p>8% to 12% for a maximum segment length of 10 m for a small portion of the trail, limited to <10% of the total trail length.</p> <p>12% to 14% for a maximum segment length of 3 m for a small portion of the trail, limited to <5% of the total trail length.</p>
Cross slope	<p>Max 2% on paved or boardwalk surface</p> <p>Max 5% on natural surface</p>	<p>Max 2% on boardwalk surface</p> <p>Max 6% on natural surface</p>
Tread obstacles	Infrequent <13 mm (½”)	Infrequent partial-tread width obstacles up to 50 mm (2”)
Passing spaces	Best practice. Passing spaces should be provided at least every 100 m if the trail width is less than 1500 mm. Increase the frequency of passing spaces or widen the trail according to the anticipated traffic volume.	Best practice. Brief narrow trail sections may not permit side-by-side travel.
Supporting facilities	<p>Required: Accessible parking near the trailhead, accessible toilet facilities nearby, and an access route from the parking lot to the trailhead and supporting facilities</p> <p>Best practice: Resting benches periodically along the trail</p>	

Figure 2. Comparison of accessible and low barrier trail standards

Practical considerations

Not every trail can be universally accessible, nor is that desired by users. Make the trail accessible as site conditions allow and appropriate to site-specific user needs.

Incremental improvements still improve accessibility.

While it is important to strive to meet every technical requirement, it is not always practical, especially in rugged or remote settings. Due to difficult terrain in the majority of frontcountry and backcountry sites, low barrier trails may be the best practical trail option for a pedestrian trail.

Significant improvements can still be achieved through small, thoughtful investments:

- Firm surfaces are easier to navigate, regardless of grade.
- Addressing cross slopes greater than 6% improves usability and stability.
- Removing loose materials or obstacles reduces slip and trip hazards.



4 | Prioritizing trail improvements

The best way to understand what users want is to listen to people who have a lived experience with disability and partner organizations. Don't build accessible trails for people with disabilities, build them with the users for everybody. Before you engage, this guide offers a few tips to help prioritize trail accessibility improvements.

How to prioritize improvements

With limited resources, focus on trail upgrades that enable core user experiences and deliver the greatest impact. People that have transportation barriers to accessing trails tend to recreate very close to home.

High priority

- Trails that lead to iconic places and connect users with the essence of the place.
- Trails in busy sites near population centers or those with year-round use.

Medium priority

- Trails that support or extend the core experience of the site. These are often less busy, farther from communities, or redundant with other accessible offerings.
- Example: Loops branching off main trails or secondary features.

Low priority

- Trails that are lower use, more remote, lack an iconic destination, or are extremely difficult to upgrade or modify due to terrain.
- Trails that duplicate accessible experiences in busy sites or serve only a short seasonal window.

5 | Construction methodology overview

Accessible trail construction involves several integrated steps analogous to road construction. Each contributes to trail performance, durability, and long-term success.

The finished surface must be smooth, firm, and stable.

1. Plan

Begin by clearly defining the trail's purpose and setting. Identify the season of use, expected user volume, level of trail development, allowable activities (e.g., pedestrian, multi-use), tread width, clearing width, and target grades. Consider what overall site experiences the trail is meant to support.

This is the time to consult trail users with disabilities and to plan ahead for long-term trail maintenance. Maintenance planning is a crucial, and often overlooked, step to ensure the trail functions across its entire lifetime.

When planning trails consider the range of experiences in an area and aim to provide a variety of options.

Also consider the level of service offered to users: if a site has rugged and rustic services, a fully accessible trail may not match the surroundings. Likewise, a popular day-use area near a community needs a higher level of accessible features to match the anticipated and intended use.

Hiring a Rick Hansen Foundation Accessibility Professional is a helpful way to plan for trail accessibility.



After the trail is built, evaluate its accessibility with users with disabilities and accessibility consultants, and make any necessary adjustments before closing the job.

2. Design

Use best trail construction practices and refer to established trail standards during layout and design. One major accessibility consideration not typically addressed in trail manuals is safety related to risk exposure adjacent to the trail – particularly the consequence of a user falling off the trail edge. The nature of the outdoor built environment requires adapting designs to site-specific conditions and taking a larger view of the trail context.

3. Build

Layered material placement

After a trail is planned, designed, graded and the site is prepared, it is typically constructed like a road, but in miniature, using one to three compacted material layers, depending on the required depth and site conditions.

Some light-use trails on firm mineral soil can perform acceptably with a single well-compacted layer, and this technique is preferred when excavation and hauling multiple materials is impractical.

Multi-layer construction is more durable and provides better load-bearing strength, longevity, drainage, and surface performance. Each layer should be compacted in ≤ 150 mm (6") lifts to at least 95% Proctor density with appropriate moisture conditioning to achieve compaction.

A well-graded trail surface installed correctly will perform with basic maintenance for a long time.



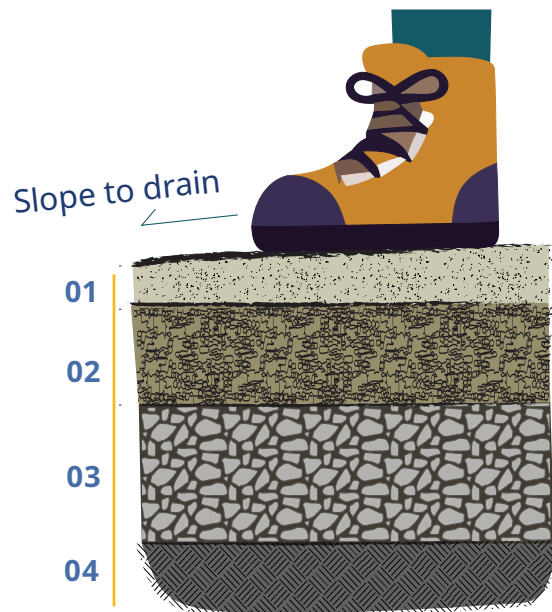
Poorly graded gravel and inadequate compaction can be challenging for people using mobility devices to navigate and requires considerably more maintenance time and effort.

3. Build

Structural layering conventions

01 - Surface Layer

A functional gravel specification is well-graded 10 mm or $\frac{3}{8}$ " minus crush (fractured rock) with high fines compacted to a minimum 95% Standard Proctor (ASTM D698). This layer provides the final trail surface for accessibility and comfort. Avoid oversized particles (>13 mm or $\frac{1}{2}$ ") and excessive fines. This material has a smaller maximum particle size and more fines than a typical road crush. **Typical layer thickness is 50–75 mm (2–3").**



02 - Base

1" minus crushed aggregate. Load-bearing, drains well, and adds compaction strength. **Typical layer thickness is 100–150 mm (4–6").**

03 - Sub-base

Coarse, well-graded granular material (e.g., 3" minus or pit run). Provides structure and drainage. Typically thicker than the base layer. May be omitted if total trail depth is <200 mm.

04 - Subgrade

Natural mineral soil found below organic soils. This is the trail foundation that will dictate the grade, compaction, drainage, and cross slope.

Sieve Size	% Passing
1/2" (12.5 mm)	100%
3/8" (9.5 mm)	90–100%
#4 (4.75 mm)	70–90%
#10 (2.00 mm)	50–70%
#40 (0.425 mm)	30–50%
#100 (0.150 mm)	15–35%
#200 (0.075 mm)	10–20%

High fines surface layer gradation guideline. Consult an engineer for site-specific gradation.

4. Maintain

Accessible trails are only accessible if they are maintained. Over time, even a well-built trail will degrade without regular care from the forces of water, frost, vegetation, heat, and traffic.

Loose rocks should never be present on the tread of accessible trails because they reduce firmness, create trip hazards, and can impair mobility devices.

Maintaining a firm, stable, slip-resistant surface is critical for trail usability and user confidence.

Build a maintenance plan into your trail project from the beginning. Performance over time is just as important as how the trail looks on opening day.

Essential maintenance task checklist:



- Protecting the trail surface from water damage with crowning and outsloping.
- Clearing drainage features such as ditches, culvert inlets and outlets, cross-drains, and swales.
- Sweeping and grooming the tread surface to remove organic matter and loose aggregate material.
- Re-compacting the surface periodically when it has a suitable moisture content to achieve compaction.
- Monitoring and topping up the fine trail particles that migrate with water, traffic, and dry dusty conditions.
- Inspecting during spring thaw, large rain events, or high-use periods to catch early signs of damage.
- Inspecting thresholds where trail surfaces meet other infrastructure (like boardwalks, bridges, or concrete pads).

6 | Accessible trail design considerations

Trailhead facilities

Accessibility standards require appropriate facilities anywhere accessible experiences or infrastructure are provided.

Accessible parking and washrooms are a more important barrier than any other infrastructure. If you can't get out of the car or use the bathroom, why would you go somewhere?

Ensure the trailhead facilities include access routes to facilities and trailhead information and accessible toilet(s) nearby. Leave at least 864 mm (34") between curb stops to ensure they don't impede access to facilities.



Leave at least 34" between curb stops.



Trail edges

Trail edges play a critical role in user safety and comfort, especially for people with low vision or those using mobility devices.

The best practice is a white cane-detectable, raised edge defining the trail surface that is continuous from the parking space(s) to key destinations.

Where budgets do not allow for raised physical edging, a textural or colour contrast can be created using native soils, seeded organic material, or woody debris defining the trail edge if it does not interfere with drainage.

Defined edges help reduce fall risk, ankle sprains, and mobility device rollover. Consider a curb or kick rail an important safety feature on trails with exposure where the consequence of a mobility device going off the trail is high.



Over time, trails naturally crown and the edges may become steep or visually indistinct from the shoulders.



An example of a textural and colour contrast edge.

Seasonal context

Accessibility is dynamic and seasonal. Trail firmness and compaction change with heat, moisture levels, frost, snow and high use.

Park users and managers must recognize that weather and seasons impact the accessibility of natural trail surfaces.



Trail information



Clearly communicate key trail information so users can make informed choices.

Regardless of a trail's accessible or inaccessible features, information is often the first barrier people encounter. Accurate trail descriptions of surface types, grades, distances, rest areas, and obstacles allow users to make informed decisions about what works for them.

Connect with accessibility experts to support this process.

Park Name

Trail Name
500 m

 **Grade**
Average: 4%
Max: 8% for 5 m

 **8%** Standard accessible ramp

 **Cross slope**
Average: 2.5%
Max: 4%

 **Trail width**
Average: 238 cm / 94"
Min: 198 cm / 78"

 **Surface description**
Firm and stable. Compacted crushed gravel

 **Distance between benches**
Max 100 m

*Trail conditions may have changed since January 2026 when this trail was last assessed.

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Engineered interventions

Every trail surface has pros and cons. Be cautious about using engineered products and elaborate development in trail construction.

Although geotextile fabric can be very useful to contain the trail surface in muddy areas, it is generally not recommended for trails in forested areas because roots tend to push it to the surface as the material above erodes.

Permeable trail surface containment grids or cell systems have promise, but long-term maintenance needs and environmental impacts of plastics are not yet well understood.

Boardwalks can be a great solution, but they are expensive to build and maintain.



Materials testing and remote sites

When constructing an accessible trail, the materials are important. Before construction begins, test local soils with soil samples for sieve analysis and Proctor density tests.

Prior to construction using hauled aggregates, require gravel suppliers to provide sieve gradation reports to verify that materials meet the construction specifications.

For remote sites, evaluate whether on-site borrow pits and material screening are feasible. Long haul distances can make simple trails prohibitively expensive.



Interfaces and transitions

The points where trails transition to other infrastructure surfaces – like bridges, boardwalks, parking lots, or concrete pads – are common obstacles because they erode at different rates.

Transitions at the corners of bridges and boardwalks are especially prone to erosion; stabilize them with coarser rock or an extended base layer to prevent corner blowouts and surface failure.



An example of stabilization at the corner of a bridge.



An example of a threshold where a trail transitions to another infrastructure surface.

Surface materials

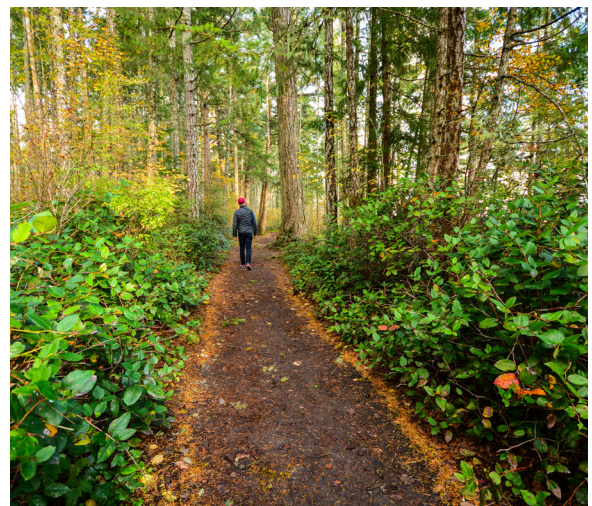
Surface materials can include natural surfaces, crushed gravel, boardwalk, concrete, asphalt, bricks, or gravel with a binding agent

The choice of surface material is directly related to how busy a site is, the maintenance available, climate, geography, and budget.

Hard surfaces such as brick, asphalt, and concrete are best for very busy sites with higher accessibility requirements. They typically have low annual maintenance requirements; however, they can have a short lifespan if there are poor subgrade conditions, ground movement, or shallow tree roots.

In contrast, gravel requires more frequent compaction and maintenance but is more adaptable to subgrade variability. Boardwalk is an expensive gravel trail alternative for extremely wet environments where an aggregate surface is not suitable.

Some natural soils can be compacted so they are firm and stable under certain moisture conditions. Natural trail surfaces can be improved with grid soil stabilization to increase firmness and reduce erosion.



Signage

Signage is an important part of the trail experience. Careful consideration of signage placement and materials enhances accessibility for all users.

Installation

Height: Signage should be mounted at a height that is easily readable for wheelchair users and people of shorter stature. The midpoint of a sign should be approximately 1350 mm (53)".

Location: Install signage as close to the trail as possible so people using wheeled mobility devices can approach and read the sign. Ensure the approach provides a firm and level surface.

Materials

Signage should have a glare-free surface. Avoid reflective backgrounds and placing signage beneath Plexiglass.



Top right: This park map is installed too high for users to easily see and read the information.

Bottom right: This signage is placed too far off the trail, and the steep trail crowning makes it difficult for wheelchair users to approach the sign.

Bottom left: Installing signage beneath Plexiglass can create glare, which can reduce readability for people with low vision.

7 | Conclusion

Trails are critical components of our social fabric and health infrastructure.

Well planned, designed, built, and maintained trails ensure that everyone can experience the benefits of spending time in nature.



8 | Additional resources

Related plans, policies, and information

- [Canadian Standards Association \(CSA\) accessible design for the built environment](#)
- [Trans Canada Trail national guidelines for trail classification](#)
- [Trans Canada Trail all persons trails guidelines](#)
- [2020 Standard specifications for highway construction volume 1 of 2](#)
- [US Forest Service accessibility resources](#)
- [State of California trails handbook](#)
- [American Trails YouTube seminars](#)



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