Inland & Coastal Waterways

1 Waterways

Waterways can be dangerous therefore, when planning the path which borders a waterway additional care needs to be taken in providing safety features. Where older and disabled people are likely users the path should provide tactile and colour warning of the edge or, alternatively guardrails.

Guardrails are likely to be more viable in urban areas than in rural districts. Formal warning pavers would be expensive if run along the edge of every waterway. However, it is desirable that some form of warning is provided a 600 mm wide grassed strip between the path and the water's edge provides tactile and visible warning and has a low cost impact.

1.1 Visitors and Trips

For the visitor with disabilities, children and older people routes near waterways pose an increased hazard. Trip organisers should be prepared and advise their trip groups of these hazards.

Inland water in the UK is most often cold to very cold and unsuitable for swimming, this is especially true of lakes, reservoirs and mountain fed streams. Where people with disabilities or those more sensitive to chill are included in the group organisers should consider and be prepared if their charges fall into the water.

Town living people are often unfamiliar with the temperature of natural water and the water and wind chill factors which apply. It is the organiser of the trip who must make sure that people are aware of the hazard and advise on suitable precautions.

Owner/managers should make suitable preparations and precautions to minimise these hazards and where possible provide suitable access to encourage visitors to remain where it is safe.

2 Waterway Features

2.1 Streams & Water Falls

The approaches and crossings are often marshy and scored by animal hooves. Owner/managers should ensure that the paths to these attractions are properly surfaced and well drained.

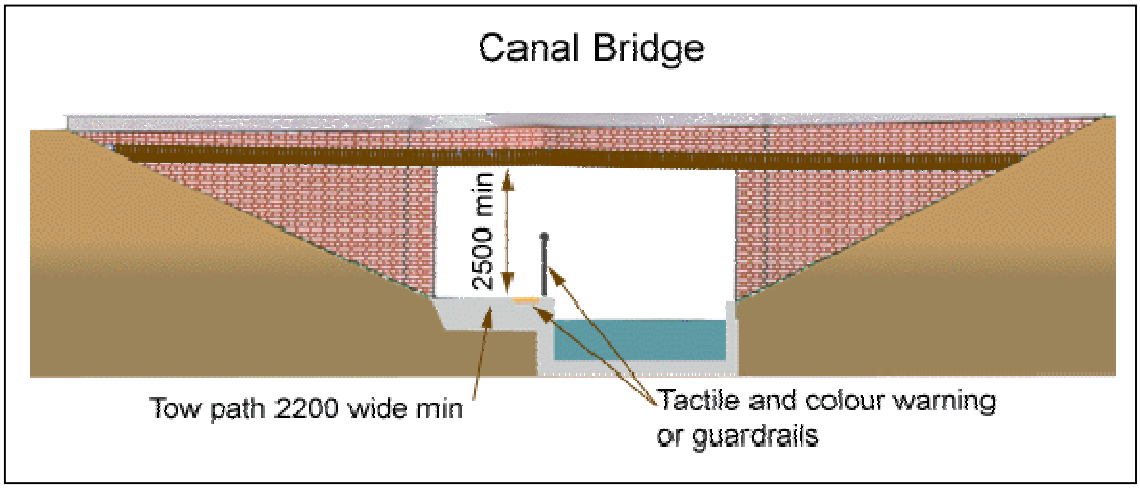
Guardrails and hazard warning tactile pavers should be used to warn of drops.

Provision of seating at the view point and possibly along longer routes should be considered. Every 300 metres is the suggested interval where inclines are 1:20 or less, the frequency should increase where steep sections of path exist. See our guide 'Street Seating'.

Walks along stream banks should be firm. Level and drained. Where there is a drop of more than 600 mm either guard-rails or a 600 mm wide dividing bank should be provided to warn of the drop hazard.

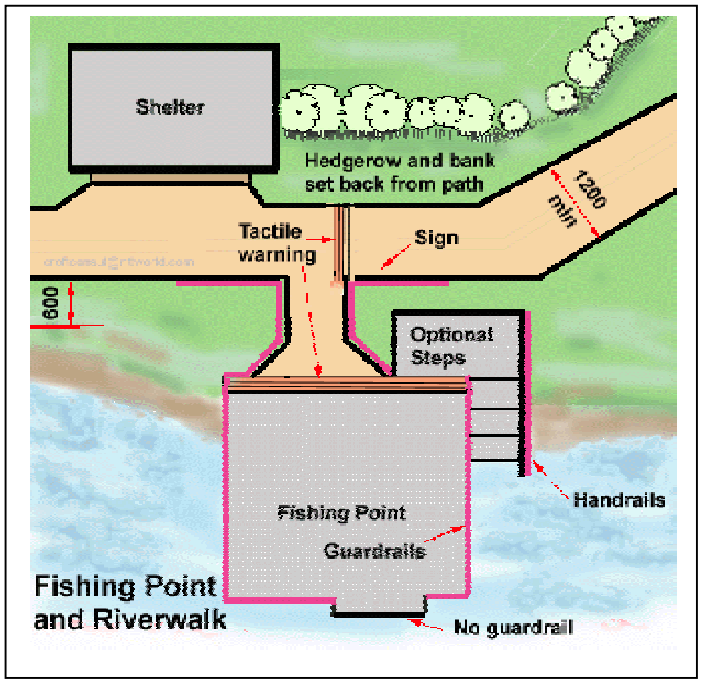
2.2 Lakes, Canals & Rivers

The banks and locks can be hazardous, find out what condition they are in before planning to take people with disabilities to the location.



Designed with a horse rather than a buggy or a wheelchair in mind, towpaths are not always the easiest places to reach or travel along. However, towpaths are often wide and not very steep, so can be ideal places for easy contact with the environment. Improving walking surfaces, providing rest places and guarding water edges make these routes readily improvable at minimal cost if this work is built into the normal maintenance cycle.

Canal towpaths are legally part of the canal. The towpath beside a canal is usually available for public use on foot, and sometimes by cycle. This is normally on a permissive basis but some towpaths are public rights of way. Many towpaths are owned by British Waterways. You should follow bylaws or restrictions on towpaths. Be especially careful with work at locks which are often a major hazard for people with disabilities due to the fixture clutter.



2.3 Paths

Owner/managers should

- **Pathways along banks and shores should be accessible and follow the Country Pathway and Surface' guide.**
- **Pathways are well maintained and do not form tripping hazards, ruts and erosion are common problems,**
- **Ensure that all low level obstacles are colour contrasted to the background e.g. Bollards, tapping and divider rails.**

- That adequate guard-rails and tactile warnings are in place. Place warnings of hazards or places where wildlife may be particularly sensitive.
- Use plantings and formal paths to guide visitors around and away from sensitive areas.
- Provide Viewing and Fishing Points which have accessible features and do not encourage people to block pathways.

Visitors should

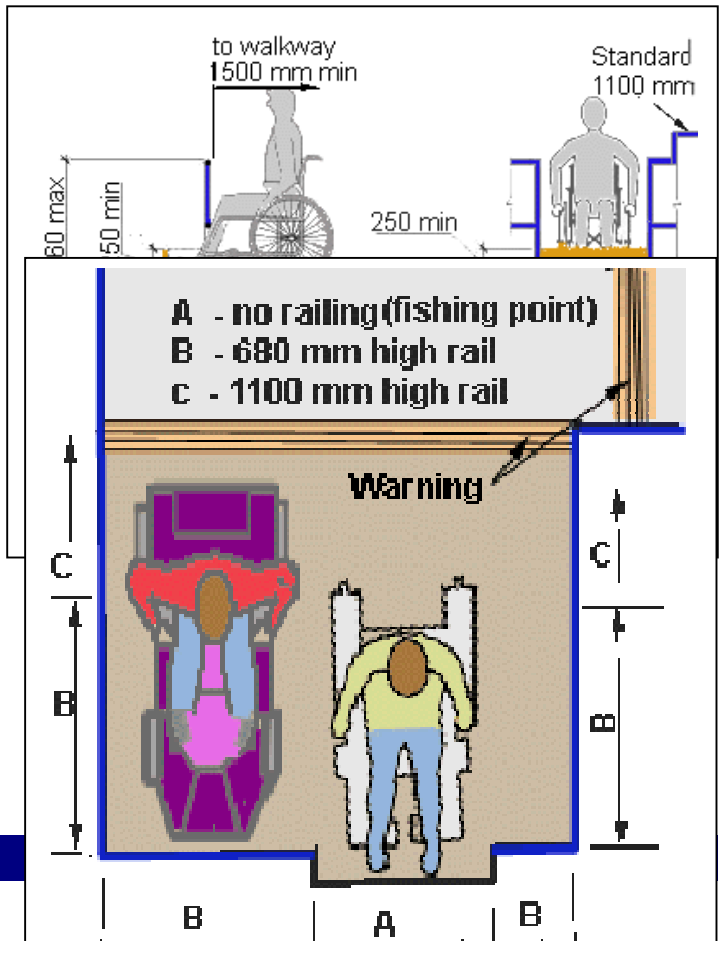
- You must avoid disturbance of birds and other wildlife.
- You should respect the interests of other people, particularly those who are fishing,
- Small water bodies can have limited capacity for recreation alongside other uses of the water and wildlife has less space to feed or take refuge. Be especially careful and follow any local guidance.
- Canoeing and rowing are permitted on canals but swimming, sailing, sailboarding etc. are not.

Dams & Reservoirs

While the public often have right of access to these locations, visitors do not have a right to access, control rooms, spillways, valve towers or the dam itself. Managers should ensure that adequate guard-rails and signage advise visitors of the limits and dangers.

2.4 Bank-side Fishing Points

This is another sedentary sport which can be enjoyed by people with disabilities. Fishing points need to be designed to promote the safety and accessibility required by people with a variety of impairments.



- Good firm surface on the approach.
- Level, railed platforms (see sketch) at least 1750 mm deep to provide space for a mobility vehicle plus carer.
- Space for at least two mobility vehicles or a mobility vehicle and a seat for a companion.
- A texture and colour change tile/paver strip should indicate the

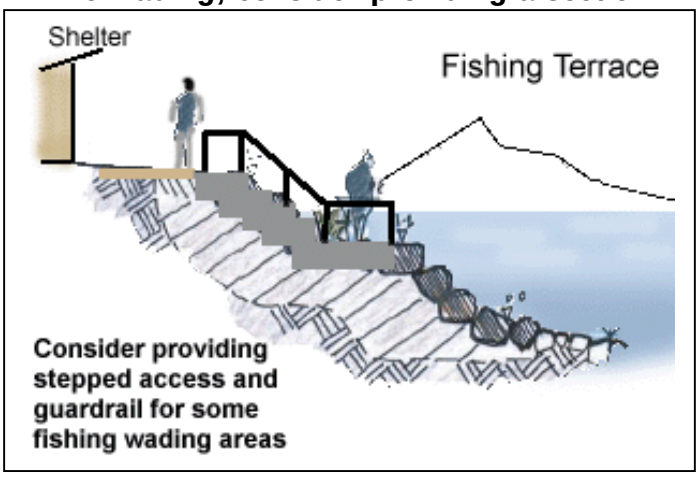
location of the fishing point.

- Signage should be sited in the 750 to 1200 mm height band at the entry to the fishing point bay.
- Signs should indicate that these fishing points have a priority for use by people with disabilities.
- Shelter should be provided either at the fishing point or within 50 metres along a firm level surface.

2.5 Fishing Terraces

Where people may wish to fish while wading, consider providing a section with stepped access and guardrails for use by people with low mobility to help them enter and stand safely in the water.

These could be on deep slow moving rivers, lakes, reservoirs and beaches. Similar guardrails and surfaced bottoms could be provided in shallower fast waters for fly fishing.

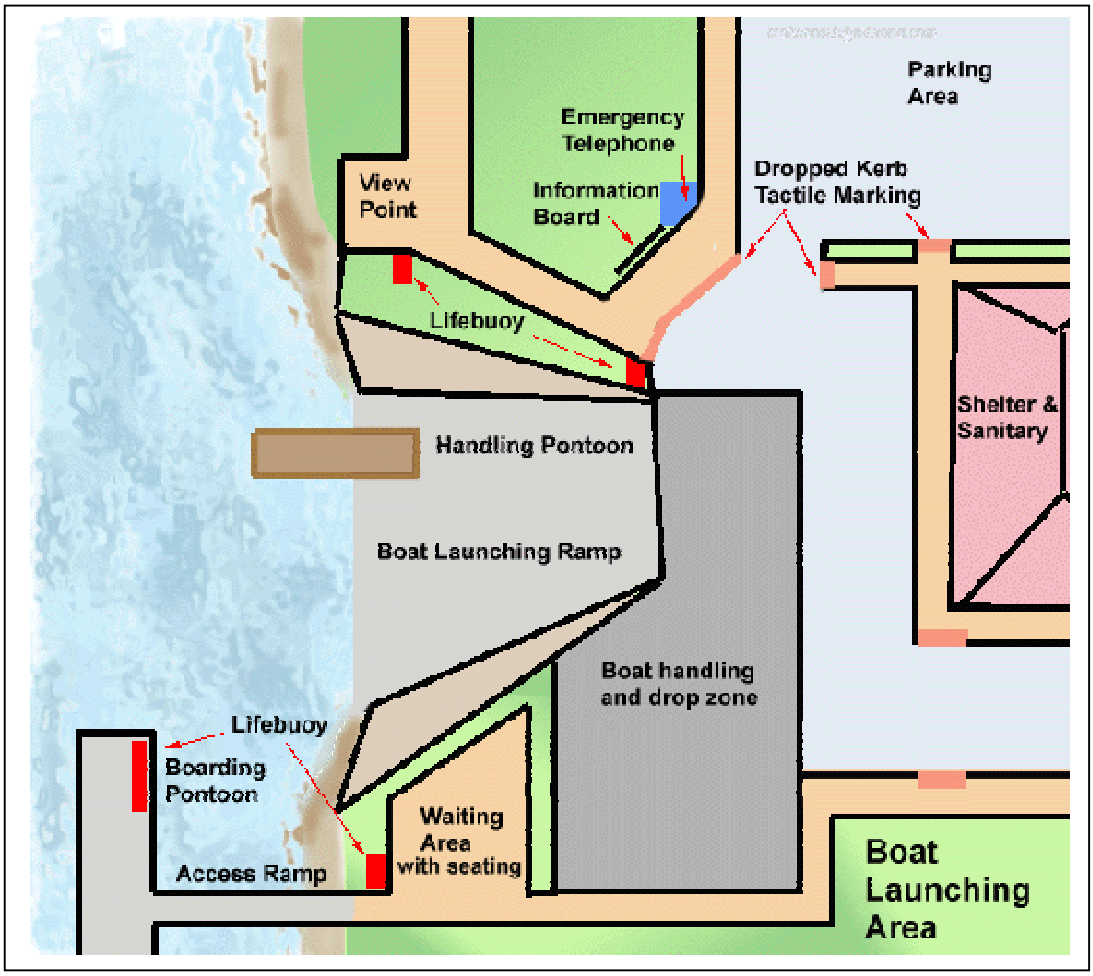


2.6 Boat Handling Facilities

Rivers, lakes and canals should have boat launching and handling areas where boating is permitted. The facilities provided should be similar to those at path heads and picnic areas.

- Good signage and information notices,
- Shelter and Sanitary facilities, Changing rooms where possible,
- Potable water faucet, outdoors for use when sanitary facilities are closed,
- A boat handling area on level ground,
- Parking for vehicles and trailers,
- A launching ramp 1:20 max. preferred,
- A handling & rigging pontoon, with ramped access,

- A passenger waiting area with a ramped access boarding pontoon, these ramps may be steeper than usual dependent on space availability, 1:15 (6.5%) should be the target maximum slope,

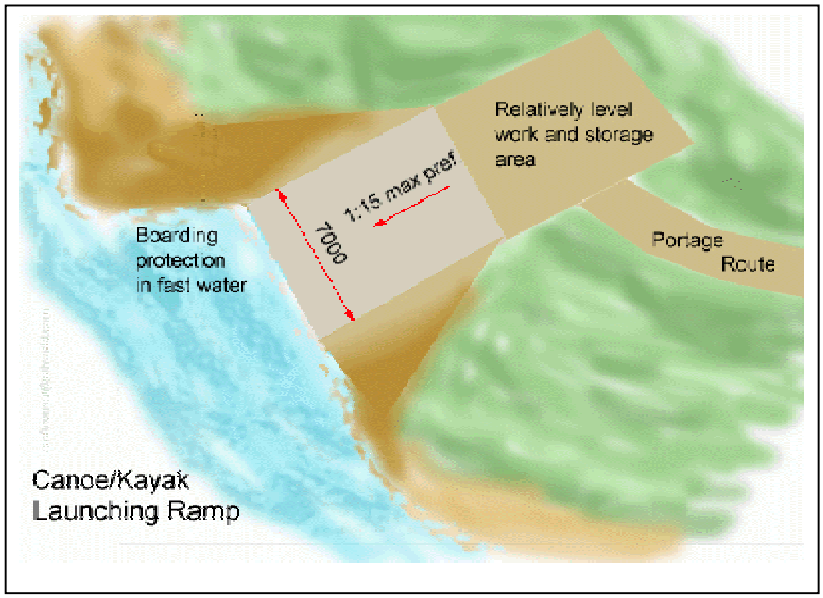


- An accessible public transport stop nearby, signage at the shelter should give service times,
- An emergency telephone with text and hearing amplification capability, clear directions for calling the rescue service,
- Emergency life buoys mounted near water access, clearly recognisable, no higher than 1200 mm, number should be based on how busy or hazardous the area is,

2.6.1 Canoes and Kayaks

- Canoes and kayaks need safe launching and portage routes on rivers, lakes and other waterways.
- These need to be sited at the head and foot of a route, with parking and other facilities similar to those for boating.
- Landing places for camp sites should be available every 30 Kilometres.
- Landings should also be provided at the start and finish of a portage section.

- **Providing an embayment or land projection to provide additional protection in fast water landings should be considered to assist people with mobility impairments to board.**
- **Signage along the route should give directions and cautions about the route.**

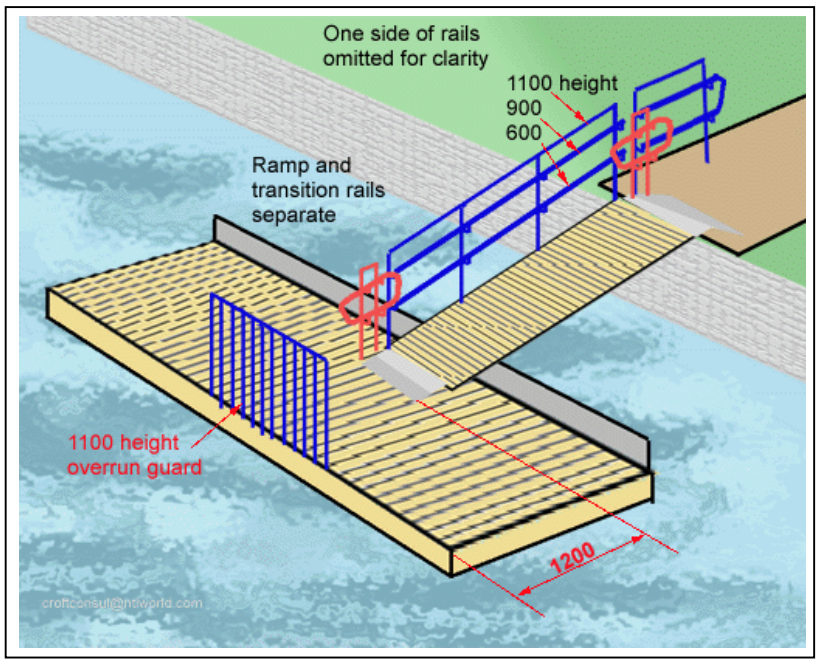


See also – Country pathways and surfaces.

2.7 Gangways and Boarding Ramps

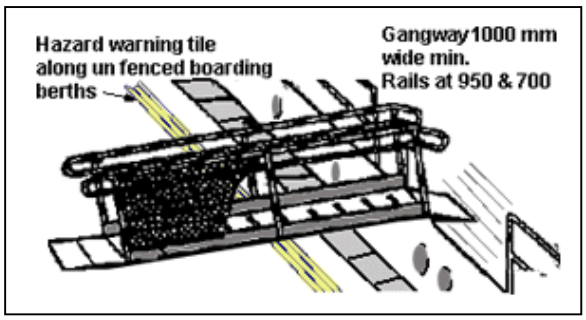
Floating structures designed to rise and fall with changes in water level can pose a problem for designers. The following should be included in the design

- **These should be designed to provide a maximum incline of 1:12 (8.33%) when water is at its (nominal) lowest level. This means the ramp may be less than 1:20 at higher water levels. In principle gangways should not be longer than 10 metres.**



- **Boarding gangways in tidal areas in general are not covered by the regulations regarding length and pitch as these are mobile items. However, if a gangway serves a fishing point or fishing pier or a view point, it is regarded as an extension of the walkway and should comply with all directives. Where the gangway serves a promenade with or without buildings it is regarded as part of the walkway and should comply in full.**

- Transition plates at head and foot of the gangway should help smooth the join between the ramp and the pontoon or land surface.
- Handrails should be fitted on both sides of the gangway at 900 (pref. for people with low mobility and short stature) and 600 (children) and 750-800 high (children and adults in wheelchairs) heights. Handrails should extend 300 mm beyond the transition plate. Handrail joins between the ramp rails, the transition rail and the pontoon and land handrails should be designed to prevent hands and arms becoming trapped. A tapping and slip protection rail should be provided up to 150 mm height. For best use handrails should have underside supports and project into the walkway this aids people who rest their lower arms on the rail and wheelchair riders.



- Ramp width should be 1200 mm minimum..
- Surface must be slip resistant.
- Some people with mobility impairments cannot negotiate a ramp organisations should provide an alternate route or have a manual wheelchair for their use.
- Gangway ramps should have a guardrail opposite the lower end of the ramp to catch runaways.
- On gangways with high rises or are subject to wave movement 11 to 1300 mm high guard rails should be provided along the ramp.

Piers and Promenades

Access routes to piers and promenades intended for leisure use must follow the accessibility rules. Where possible the same types of facilities should be available as for boat landings or path-heads. See Country Pathways and Surfaces.

- Widths of walkways should be calculated at 1200 mm minimum at pinch points for short distances.
- Where fishing points are included they need to be 1200 + 1350 for manual wheelchairs and where powered wheelchair and mobility scooter riders are likely users this should be increased to 1200 + 1800 to provide safe parking and passage of others.
- A 300 to 450 mm deep deck projection should be provided at the fishing point to allow wheelchair riders to approach the rail closely.
- Where fishing points are provided for mobility vehicle riders, the points should be available on all sides of the structure.
- Guardrails should be designed to discourage children from climbing on them and the 150 mm ball rule followed to prevent trapping of hands and heads.

- **On existing piers and promenades where the design width cannot provide the safe clearances noted above, consideration to providing projecting fishing points similar to those described above for river banks should be given.**