



**Access Recreation Group, LLC**

Cindy Burkhour, MA, CTRS, CPRP

2454 Lamplighter Drive

Jenison, MI 49428-9127

Mobile (616) 560-2378

[AccessRecreationGroup@gmail.com](mailto:AccessRecreationGroup@gmail.com)

## Inclusive Universally Accessible Recreation Design Elements

Type of Recreation Element	Inclusive Universally Accessible Design Considerations
<p><b>Trails, nature trails, walkways, pathways, etc.</b></p>	<ul style="list-style-type: none"> <li>▪ Wider width so two people can walk side by side or people can pass, at least 6’.</li> <li>▪ Unitary surface like concrete, boardwalk or asphalt, crushed aggregate/screenings that have been “stabilized” or natural soils enhanced with soil stabilizers and provide assistive hiking mobility devices such as the Action Track Chair.</li> <li>▪ Contrasting color treatment of the surface and textured surface treatments such as brushed concrete at intersections or interpretive stations to cue people who have vision impairments that there is something to pay attention to at that spot</li> <li>▪ Close to level cross slopes (side to side) and very gentle running slopes less than 5%, no steep sections, larger (greater than 60”X60”, and the same width as the accessible route) level areas at all turns and intersections</li> <li>▪ Thoughtfully laid out on the site to maximize the experience with minimal difficulty</li> </ul>
<p><b>Picnic areas and elements:</b> pavilions, picnic tables, grills, fire rings, water pumps, etc.</p>	<ul style="list-style-type: none"> <li>▪ All accessible design elements, all tables, grills, fire rings, water pumps, etc.</li> <li>▪ All located on wider accessible routes at least 6’ wide</li> <li>▪ Level routes onto pavilions with no changes of level from path to pavilion surface</li> <li>▪ Wider routes &amp; clear space with firm surface around all elements so someone with mobility limits can easily move around the element (table, grill, etc.)</li> <li>▪ A variety of table styles, some with clear sitting space on the side, some with extended tabletops on the end</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Clear space all around each element so people can approach and use the grill, fire ring, etc. from the front, back and either side</li> <li>▪ Grills you can lower/raise the cooking surface with one hand</li> <li>▪ Raised fire building surfaces so you can place wood without leaning too far over from a standing or seated position</li> <li>▪ And...</li> </ul>
<b>Fishing dock/pier</b>	<ul style="list-style-type: none"> <li>▪ All lowered rails all the way around so everyone can fish from anywhere or no rails at all with only an edge treatment to prevent roll off</li> <li>▪ Sitting benches scattered about so anglers can choose to sit or stand to fish</li> <li>▪ Tackle box stands next to one bench end (not both) leaving one end clear space for sitting side by side with someone using wheelchair</li> <li>▪ A variety of fish landing cutaways strategically placed</li> <li>▪ Variety of opportunities over-water fishing/shore fishing/in-water fishing stations</li> </ul>
<b>Playgrounds</b>	<ul style="list-style-type: none"> <li>▪ Ramps and transfers</li> <li>▪ Both ramp and transfer access to all play components</li> <li>▪ Ramps to every "getting on spot" or "sit/stand &amp; do it spot" of every play component</li> <li>▪ Transfer system with 4" max. change of level from the ground up to the main deck located near the exits of slides and climbers furthest from the ramp onto the structure</li> <li>▪ Only unitary safety surface such as poured-in-place or rubber tiles NOT any loose fill materials like shredded rubber, wood chips or engineered wood fiber or any other non-unitary surface material</li> <li>▪ On deck transfer platform at the entry point of every slide</li> <li>▪ On deck transfer platform with one open transfer side and one side w/ transfer steps to every entry/exit point of every climber so kids climbing "up" can bump down to the deck to move to another component, as they may have left an assistive device at the ground</li> <li>▪ A good variety of things to manipulate that make noise or music, have high contrast/bright colors, games that that two kids can play (this fosters social interaction) Braille and sign language panels to teach awareness, easy to operate with just one hand with a whole fist (doesn't requires tight/pinch/grasp/wrist twist to operate)</li> <li>▪ Different high contrast colors for decks vs transfers so kids with low vision can perceive a change in level</li> </ul>

	<ul style="list-style-type: none"> <li>Play panels are located at heights that can be used from a seated position or standing</li> </ul>
<b>Restrooms</b>	<ul style="list-style-type: none"> <li>More than the minimum number</li> <li>Multiple unisex/single user toilet rooms/units so opposite sex care givers can assist, also good for parents of young children of the opposite sex so kids aren't sent alone into the multi-user restroom</li> <li>Thoughtfully located near areas of activity such as play areas, beaches, fishing piers, etc.</li> <li>All port-a-johns accessible design units, again, big enough for individual use or care giver assist and also good for families with young children who need assistance in a port-a-john.</li> </ul>
<b>Parking</b>	<ul style="list-style-type: none"> <li>More than minimum number of spots and all van accessible design</li> <li>Each connected directly to an accessible route to the park elements and NOT into the traffic flow</li> <li>Thoughtfully located nearest the activity entrance (some near the beach, some near the playground, some near the bath house, etc.)</li> </ul>
<b>Boardwalk:</b> Wetland and water Access	<ul style="list-style-type: none"> <li>Wider width so two people can walk side by side or people can pass, at least 6' wide</li> <li>Edge treatment to prevent roll/step off</li> <li>If side rails, <b>all</b> lowered for easy viewing, un-sit-able/un-stand-able top railing &amp; using materials that visually disappear such as back wire mesh or cables</li> <li>Interpretive information in a variety of alternative formats such as auditory, large print, Braille, pictures, etc.</li> </ul>
<b>Canoe/kayak/boat launch</b>	<ul style="list-style-type: none"> <li>Wider route so someone can hand wheel vessel on dolly to launch pulling vessel next to them if they are using a wheelchair or accommodate a two person carry down</li> <li>Accessible surface to water's edge and into water at launch area</li> <li>Gentler slopes for easier entry and exit when hand wheeling a vessel</li> <li>Some type of launch system such as the EZ Launch (the only universally accessible system to date) to stabilize vessel at transferable height then some type of mechanism/roller system to ease movement, while seated in the boat, into the water</li> <li>Some means of transfer assistance such as grab bars, and accessible transfer boarding bench with 4" max. changes of level with slide board so someone can slide over and position their body over the center of the vessel for a balanced entrance/exit</li> <li>Some type of pull rails to help pull boat out of water back onto the launch to exit/transfer out.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ If there is a dock provide a transfer system with 4" max. change of level on the dock so someone can bump down to be seated on the dock to transfer over to a vessel in the water</li> <li>▪ Shore station with a platform (instead of "V" rack) with a transfer system on the deck of the shore station, located next to a dock so someone could roll/get on the platform and lower it to the right level to transfer into a vessel</li> </ul>
<b>Campgrounds</b>	<ul style="list-style-type: none"> <li>▪ All sites and amenities</li> <li>▪ Accessible surface on all sites</li> <li>▪ Larger spaces to accommodate side lifts on campers and vehicles</li> <li>▪ Accessible tables, grills, and fire rings on all sites</li> <li>▪ Centrally located restrooms on easy routes from each site</li> <li>▪ Single user/unisex accessible shower/toilet rooms</li> </ul>
<b>Archery range</b>	<ul style="list-style-type: none"> <li>▪ All stations have accessible surface with extra-large space for maneuvering and positioning using larger out-door type mobility devices and to accommodate archers with shooting assistants</li> <li>▪ Accessible route to retrieval area for each target</li> <li>▪ Targets usable with cross bows as well as typical draw bows</li> <li>▪ Arrow back stop to limit retrieval distance</li> <li>▪ Equipment stands at accessible heights reachable from a standing or seated position at each station</li> </ul>
<b>Beach</b>	<ul style="list-style-type: none"> <li>▪ Routes over the beach and into the water, can be portable/temporary matting if it needs to be taken in and out for beach cleaning/dragging or in the off season</li> <li>▪ Wide enough for side-by-side walking/passing at least 6'.</li> <li>▪ At beach route end have a "hanging out" area at the waters edge large enough to get off the route end</li> <li>▪ With a transfer system with 4" max. changes of level at the water's edge so people can get down to the ground level and out into the water</li> </ul>
<b>Nature center</b>	<ul style="list-style-type: none"> <li>▪ All interpretive information in a variety of alternative formats such as auditory, large print, Braille, pictures, etc.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Creative use of technology such as I-Pods for auditory descriptions (this gives the info. directly to the individual) closed loop assistive listening devices and closed-circuit captioning of all interpretive presentations.</li> <li>▪ All displays at lowered heights for sitting or standing viewing</li> <li>▪ All operating mechanisms that are operable with one hand and do not require tight/pinch/grasp/wrist twist to operate</li> </ul>
<b>Skiing/sledding Hill</b>	<ul style="list-style-type: none"> <li>▪ Accessible route to top (no steps) maybe using a rope tow lift with the "magic carpet" (it's "carpet/mat" type thing you get on in your sled or sit on and it pulls the mat up the hill with you on it)</li> <li>▪ Level surface for sled mounting at hilltop</li> <li>▪ If staffed, provide ATV transport or have policy that allows personal ATV use</li> <li>▪ Transfer system with 4" max. changes of level at hilltop AND bottom to help bump transfer down to sled and bump back up into chair/walker</li> </ul>
<b>Camping cabins and yurts</b>	<ul style="list-style-type: none"> <li>▪ Larger clear space and maneuvering spaces in between all furnishings including when all are in use (beds, tables/chairs with people seated at the table, shelves within lowered reach ranges, lowered wall hooks, etc.)</li> <li>▪ Larger clear space thoughtfully located for typical portable items such as coolers, luggage, equipment/food bins/tubs, etc.</li> <li>▪ Ramps not steps</li> <li>▪ Wide perimeter decking</li> <li>▪ All accessible site amenities, tables, grills, fire rings, restrooms, etc.</li> </ul>
<b>Labyrinth</b>	<ul style="list-style-type: none"> <li>▪ Unitary surface like concrete, boardwalk or asphalt, crushed aggregate/screenings that have been "stabilized" or natural soils enhanced with soil stabilizers</li> <li>▪ Contrasting color treatment of the surface and textured surface treatments such as brushed concrete at intersections or interpretive stations to cue people who have vision impairments that there is something to pay attention to at that spot</li> <li>▪ Close to level cross slopes (side to side) and very gentle running slopes, no steep sections, larger (greater than 60"X60") level areas at all turns and intersections</li> <li>▪ Thoughtfully laid out on the site to maximize the experience with minimal difficulty</li> <li>▪ Plantings that provide sensory cues such as lavender at all intersections/turns</li> </ul>

	<ul style="list-style-type: none"> <li>▪ All interpretive information in a variety of alternative formats such as auditory, large print, Braille, pictures, etc.</li> </ul>
<b>Observation and viewing decks</b>	<ul style="list-style-type: none"> <li>▪ All lowered rails with un-sit-able top rail design</li> <li>▪ Using materials that visually disappear such as black wire mesh or cables or Plexiglas windows</li> <li>▪ If for safety reasons all lowered rail heights don't work then make the top rail above all viewers heads, either standing or sitting so everyone looks through the same mesh or cables &amp; this prevents climbing over or sitting toddlers on the top rail</li> <li>▪ Benches with clear space at both ends strategically located for the best seated views without others standing in front of someone who is seated</li> <li>▪ Gentle sloped route (under 5%) and no stairs, everyone goes the same way and make it interesting to get there</li> <li>▪ Observation scopes usable from a seated position (good for kids too!) and useable from a standing position</li> </ul>
<b>Dog parks</b>	<ul style="list-style-type: none"> <li>▪ Wider gates to accommodate someone in a larger outdoor wheelchair (or someone pushing a stroller...)</li> <li>▪ One hand operable latch mechanism located at a height that is easily reachable from a seated position</li> <li>▪ Wider accessible perimeter paths around all dog run areas with curb cuts or level transitions into the run area for doggie-do clean up</li> <li>▪ Doggie-do clean-up dispensers reachable from a seated or standing position and by kids!</li> <li>▪ Accessible design trash containers located away from tables and benches on the route out of the facility</li> <li>▪ Accessible clear space on both ends of <b>all</b> benches</li> <li>▪ <b>All</b> accessible picnic tables, located on accessible surface with large clear space all around</li> <li>▪ Shaded area with accessible sitting space connected to accessible perimeter route</li> <li>▪ Accessible water source for owners and pets with easy one-handed operating mechanism located at an easy to reach height from a seated or standing position (and reachable by kids too!)</li> </ul>

Inclusive Universal Design means you do **BETTER** than the minimum requirements of the Americans with Disabilities Act (ADA). Below are the ADA basic minimums for spaces, clearances, reaches, viewing and operation for quick reference.

These are **NOT** specific to each of the above types of recreation. **YOU MUST** look up in [ADA Accessibility Guidelines](#) (ADAAG) the specific type of recreation to find the specific scoping and technical requirement minimums SO YOU CAN FIGURE OUT HOW TO DO BETTER!

<b>Clear width:</b> 36" minimum for most accessible routes	<b>Maneuvering space:</b> = 60" x 60" minimum and level, at entries and change of direction
<b>Surfaces:</b> ¼" maximum change, slopes less than 5%, firm and stable	<b>Transferable height:</b> 17"-19" with transfer supports
<b>Head clearance:</b> 80" high and as wide as the route	<b>Knee clearance:</b> 27" high x 30" wide x 25" deep
<b>Clear space:</b> 36" wide x 48" deep minimum located at the element	<b>Table tops and rail heights:</b> 34" maximum height
<b>Viewing:</b> Clear from 32"-51"	<b>Reach range:</b> 48" maximum high forward/side; 15" minimum
<b>Operation:</b> Operating mechanism that is operable with one hand and does not require tight/pinch/grasp/wrist twist to operate.	

For more information, inclusive universal design consultation or training contact: Cindy Burkhour at 616-560-2378 or [AccessRecreationGroup@gmail.com](mailto:AccessRecreationGroup@gmail.com)