



NORTH SHORE RECREATION AREA

EASTER LAKE PARK

UNIVERSAL PARK DESIGN SERIES

- TOOLS

1. PROGRAMMING
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- 4. PLAYGROUNDS, TRAILS, & GREEN SPACES**
5. BEACHES & WATER ACTIVITIES

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Disclaimer: This toolkit is a joint effort between Polk County Conservation, Shive-Hattery, and Uncurbed (“Parties”). This toolkit provides main summary and technical criteria of universal design considerations related to park design; however, the Parties do not warrant or guarantee the accuracy, completeness, adequacy, or currency of any information referenced or linked within this document. In no event, shall the Parties be liable for any direct, indirect, or incidental damages, injuries, losses, costs, or expenses, howsoever caused, arising out of, or resulting from access to, possession of, or use of this toolkit. The detailed guidance provided here does not represent the only possible solution. Clients or designers may develop additional solutions to meet a diversity of users. New materials and technologies that emerge may present further possibilities for accommodating the diversity of users. Each project should engage the services of a qualified and professional access consultant to ensure that project anomalies or other factors do not adversely affect the design intent.

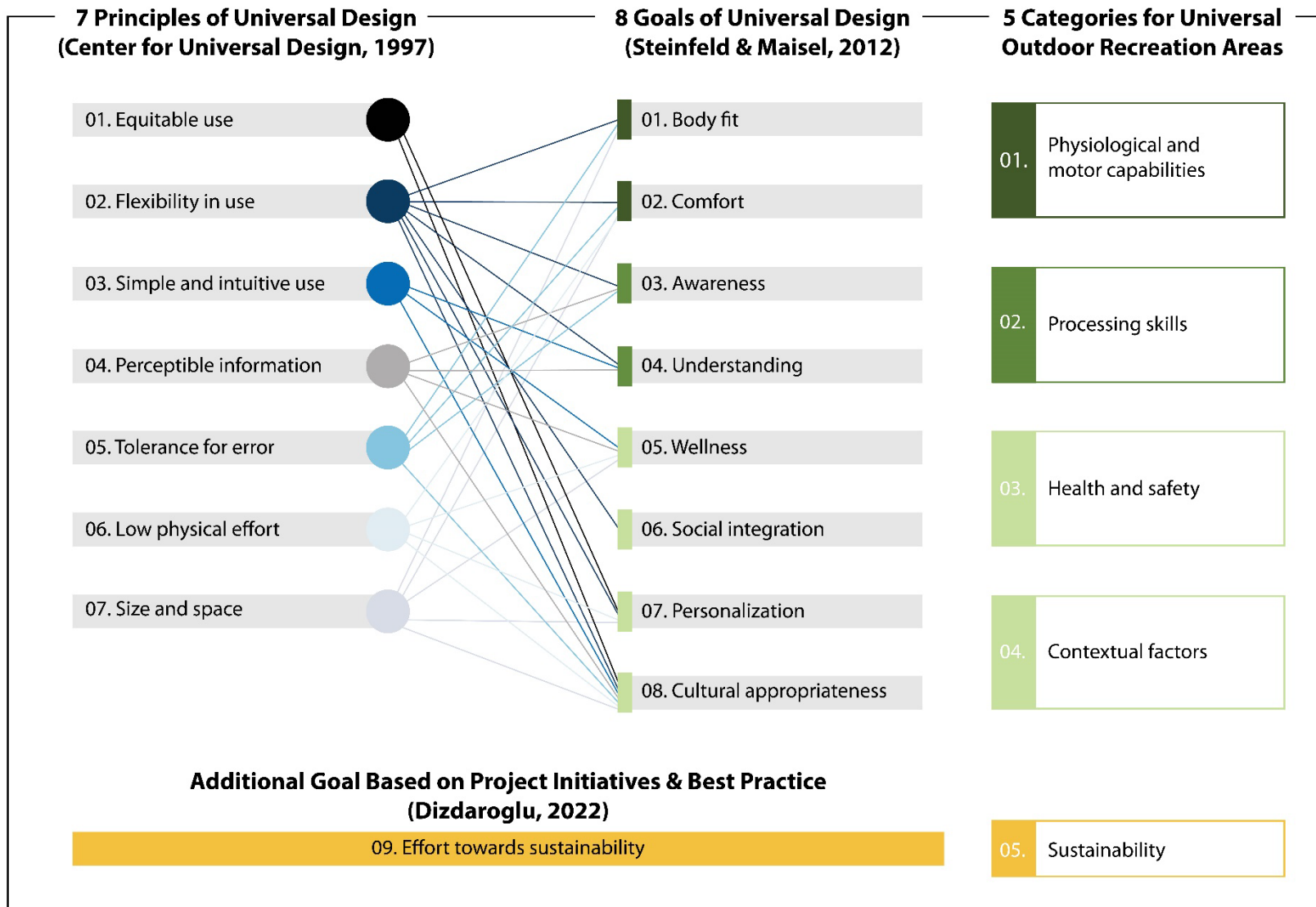
COVER PAGE

UNIVERSAL PARK DESIGN TOOL – PLAYGROUNDS, TRAILS, & GREEN SPACES

This tool is a compilation of academic, user, and practical research intended for use during the park design process to help list key universal design (UD) considerations needed to support design decision-making for the design of **playgrounds, trails, & green spaces**. It is recommended that this tool be prioritized last, if necessary. This tool is not a one-size-fits-all. It is one component of the universally designed process used during the design of Athene's Easter Lake North Shore Renovation Project. Each project should incorporate the practice of co-design, engaging active participation from diverse end-users and subject matter experts in universal design and/or other related fields and methodologies (i.e., human-centered design, design thinking, inclusive design, co-design, accessible design, occupational science, etc.) to ensure that project anomalies or other factors do not adversely affect the design intent. UD considerations are provided throughout the tool and while they provide a summary of main considerations and technical criteria, they should not be regarded as an exhaustive list. The detailed guidance provided here does not represent the only possible solution. Members of a co-design team may come up with other ways to meet a diversity of users. New materials and technologies that emerge may open up further possibilities for accommodating the diversity of the population.

Each tool is organized into **5** Categories for Universal Park Design, expanding on the original 7 Principles of Universal Design¹ and 8 Goals of Universal Design¹⁰ to include an effort toward sustainability² ([see Figure 1](#)). These categories were selected based on project initiatives and themes collected from academic, user, and practical research. Variation exists in the categories of **playgrounds, trails, & green spaces** design due to differences in operations, organizational goals between different clients and designers, and user perspectives. The priorities you have set in place for your particular project, the UD categories, user input, and the key questions that you must ask yourself as clients and designers, are the foundation of this tool. Before using the tool, please first go to the [Home Page](#) to learn more about the UD goals, categories, and how to communicate project priorities.

Figure 1. Crosswalk (between the 7 Principles of Universal Design¹, 8 Goals of Universal Design¹⁰, and 5 Categories for Universal Park Design based on project initiatives and themes collected from academic, user, and practical research for Athene’s Easter Lake North Shore Renovation Project.



The [Tool Page](#) lists key questions relevant to the 5 specific UD categories for consideration. Below each question, a detailed design feature list is provided and serves as a menu item for clients to choose from and share with the design team at the onset of any park project based on the foundations of UD mentioned above. Designers can refer to the selected menu items throughout the design process and use the tool to validate their design choices. The design considerations and features are based on a review of research literature, best practices, and expert opinions. Clients and/or designers can add new design features based on their literature review, experiences, or user input. There may be instances of trade-offs between the UD categories, and there may be instances where you use some, but not all of the features, depending on the evaluation of value vs. cost by the client (see important notes).

Notes:

Each tool is not meant to be an exhaustive list of minimal standards already covered in available design guidelines. Rather, it provides a structured way for clients and designers to consciously focus on key evidence-based design considerations to optimize design decision-making resulting in the best value for the investment.

Gathering user input is one important step in decision-making. This is referred to as co-design. As a design tool, this is not meant to be a one-size-fits-all prescription for design. In many cases, no prescriptive numbers (e.g., space size or length of headwall) are provided because the optimized numbers depend on a thorough understanding of the needs of those affected by the project and the constraints of the project (e.g., operations and costs). Clients and designers should use the key design considerations and design features included in the tool as a basis to determine what are “adequate” or “sufficient” numbers or sizes. Likewise, the client and future users should be consulted regarding subjective aspects (e.g., attractive design). Environmental simulation (e.g., mock-ups, and renderings) may be used in gathering input on these issues.

Disclaimer: The tool is based on currently available research evidence and expert opinions therefore may not exhaustively cover all design aspects impacting outcomes. The results produced by using the tool may vary depending on conditions/users.

HOME PAGE

UNIVERSAL PARK DESIGN TOOL - PLAYGROUNDS, TRAILS, & GREEN SPACES

To begin, please complete the following information:

Client Name:

Project Name:

Client Contact Person:

Lead Designer:

Tool Completion Date:

On the next page is a list of each universal design goal and category, in addition to the category of sustainability. Some goals and categories may be more important for a particular park project. If you are the client, please confirm or change priority ratings based on their relevance to **playgrounds, trails, & green spaces** design by selecting a rating (High, Medium, or Low) from the dropdown list in each cell of Column C. It is recommended to limit the 'High' priority rating to 4 UD goals and categories.

8 Universal Design Goals ¹	5 Universal Park Design Categories ^{1, 2, 10}	Priorities (Insert High, Medium, Low)
1. Body Fit	1.1. Physiological & Motor Capabilities	
2. Comfort	1.2. Physiological & Motor Capabilities	
3. Awareness	2.1. Processing Skills	
4. Understanding	2.2. Processing Skills	
5. Health & Wellness	3. Health & Safety	
6. Social Integration	4.1. Contextual Factors	
7. Personalization	4.1. Contextual Factors	
8. Cultural Appropriation	4.1. Contextual Factors	
	5. Sustainability	

TOOL PAGE

UNIVERSAL PARK DESIGN TOOL - PLAYGROUNDS, TRAILS, & GREEN SPACES

The below tool is more than a tick box. It is a menu list and communication tool for potential UD considerations relevant to **playgrounds, trails, & green spaces** design for clients and designers. Marked boxes should be reviewed by both clients and designers to determine whether a UD consideration is applicable, relevant, and achievable for your park project.

Complete the following steps at the onset of a project:

If you are the client:

1. Place an **X** in the Client column to indicate which design features should be considered for the project. Items selected should be consistent with project goals, user and expert input, and prioritized based on budget. The Notes column can be used to elaborate on each UD consideration as needed. Please include the date when inserting a note. It is recommended that clients engage in user and professional input when determining a UD consideration.
2. If a UD consideration is not relevant to the project, clients should leave the UD consideration in the Client column unmarked.
3. Share the completed tool with the Lead Designer by the agreed-upon completion date.

If you are a designer:

1. Discuss each marked UD consideration with the client and add to the Notes column to further elaborate on specifications (please include the date).

In general:

1. If you are the client or a designer and wish to add additional design features to the tool, you can add them in the cell beginning with "other:" under each UD category. Please enter only UD considerations supported by academic (newly published or existing unpublished research conducted by design firms, and others), user, and practical research.

Complete the following steps throughout the project as needed:

If you are a designer:

1. Place an **X** in the Designer column to indicate whether a UD consideration is included in the current design.
2. If during the design process, a UD consideration is no longer achievable due to unknown or unforeseeable circumstances, designers can flag a UD consideration by placing an **R** in the Designer column to indicate that the UD consideration requires further review with the client.
3. If a UD consideration can only be partially met, place a **P** in the Designer column, and explain in the Note column (please include the date). This explanation may include an alternative option.

UNIVERSAL PARK DESIGN TOOL – PLAYGROUNDS, TRAILS, AND GREEN SPACES

Client	Designer	
		<p style="text-align: center;">LEGEND</p> <p>X in the Client column indicates that a UD consideration has been requested</p> <p>X in the Designer column indicates that a UD consideration has been met</p> <p>R in the Designer column indicates that a UD consideration requires review</p> <p>P in the Designer column indicates that a UD consideration was partially met</p> <p>Reminder: UD considerations left unmarked indicate that they are not relevant to the project</p>

PLAYGROUNDS, TRAILS, AND GREEN SPACE			NOTES
Client	Designer		
TRAILS			
4.1. How should or will trails promote social integration?			
		Trail access to park from neighboring communities.	
		Trails or connecting paths are concrete, asphalt, or composite decking.	
		Educational slanted panels that are accessible and include a variety of alternative communication formats are provided at various checkpoints along a trail.	
		Trails are wide enough to promote side-by-side communication. It is recommended that all main circulation areas have a minimum of 8' in width. All secondary trails should be a minimum of 6' to allow for two wheelchairs to propel side-by-side.	
		Trails or connecting paths are concrete, asphalt, or composite decking to allow persons using mobility devices to navigate the trails rather than be isolated from others.	
		Other:	
1.1. How should or will trails accommodate a variety of body sizes and activities?			
		Main walkways, trails, and connecting paths are 6 to 8 feet wide.	
		Main walkways, trails, and connecting paths have slopes that are 1:20 or 5% grade. Railings are recommended in all areas where it exceeds a 5% grade.	
		Railings at various heights are provided in busy traffic areas or in areas with uneven terrain.	
		Designate between multiuse trails (i.e., biking, walking) or walking only trails.	
		Other:	
2.1. What clear visual cues should or will be integrated into the design to promote awareness?			
		Transition plates, contrasting colors or textured surfaces are located on main walkways when a change in terrain or direction occurs.	
		Glow in the dark paint or photoluminescent signage is used on the main walkways or on signage to communicate direction of and distance to amenities.	
		Braille is provided on signage and/or railings to describe scenery or educational information.	
		Other:	
1.2. What types of areas for rest and shade should or will be provided along trail routes?			
		Provides multiple covered bench seating with arms and back support.	
		Seated areas with charging stations provided.	
		Naturally shaded areas provided along trail route.	

		Provide seating at regular intervals, away from line of travel; Recommended max distances without rest: - Ambulatory without walking aids: 326' - Use of mobility aids: 164'. ⁴	
		Provide a variety of seating options such as covered seating, seating with and without arms and back rests, and seating with charging outlets for powered mobility devices, respirators, and/or phones.	
		Benches are to be stable and, in public space situations, are required to be anchored to a concrete pad. ²	
		The CSA requires a bench seat to be at a height of 1' 6" to 1' 8". ²	
		The front face of benches should be set back from the path of travel at least 2' so the required set back or depth for a seating area is 4'. ²	
		The length of the bench space is dependent on the designer's intent, but the space should always include an additional 2' 6" to 2' 11" wide by 4' deep space to allow a person in a wheelchair to park near other seated people. Extra space also allows an assistive dog to sit by their wheelchair companion. ²	
		Trail provides views, interesting terrain, shade, proximity to streams, lakes, wildlife, and plant life. ¹⁰	
		Other trails are in the area that offer similar terrain. ¹⁰	
		Trail creates a loop or a connection to another trail. ¹⁰	
		Limited number of trail uses that may cause conflict (e.g., a high level of dog walking or bike usage). ¹⁰	
		Other:	
3. How should or will trails promote safety?			
		Lighting provided to the main paths of parks that remain open after dark. ⁴	
		Emergency poles located along trail route. ²	
		Having fluorescent signage is very useful for walking at night and is recommended to be applied to signage that follows roadways in campsites to comfort stations. ²	
		Where practical, exterior lighting should be provided along all accessible walkways providing access to/from park facilities. ²	
		Pedestrian scale lighting or wall-mounted lights that protrude should provide a minimum of 6' 6" overhead clearance. ²	
		Where practical, exterior lighting should be provided along all accessible walkways providing access to/from park facilities. ²	
		Stabilizing materials are used on trails or sections of trails where there is loose granular or soft soil surfaces. Examples include crushed rock, wood chips, fine granular stone, or recycled materials.	
		Edge protection is provided along trails or sections of trails with drop-offs of 6 inches or higher or sharp changes in direction and should be at least 3 inches high. If the drop-off is less than 6 inches, but greater than 1 inch, the edge must be beveled.	

		Provide charging stations along trail route for wheelchair users every 5 miles, but must include at least one.	
		Other:	
5. How should or will trails follow proper technical guidelines to sustain trail longevity?			
		Trails should traverse side slopes instead of travelling down the fall line. ¹⁰	
		Reducing running (linear) grades of trails decreases erosion as well as creating greater access for a broader range of users. ¹⁰	
		Firm and stable trail tread surfaces (as opposed to loose granular or soft soil surfaces) offer more sustainability as well as greater range of access for users. ¹⁰	
		Out-sloped tread — This practice encourages sheet flow of runoff at low velocities, away from the trail, rather than down the trail. ¹⁰	
		Frequent linear grade reversals — This BMP minimizes erosion by slowing the velocity of water (and the materials it carries) along the trail, thereby increasing sustainability of the trail's tread surface. ¹⁰	
		Trail structures incorporated into the trail to protect natural resources (for example, boardwalks over wetlands) can also provide universal access to users. ¹⁰	
		Low maintenance needs — One example is the use of rolling grade dips and grade reversals (rather than water bars and check dams) to control water and limit erosion of the trail tread. ¹⁰	
		Consult Outdoor Guidelines, ABA Accessibility Guidelines, PROW Guidelines, and ADA for minimum technical standards.	
		Other:	
2.2. How should or will signage offer a variety of formats and in universal terms?			
		Trail information is provided in multiple formats.	
		A trailhead map containing text, grade profiles with surface information, a top view map with symbols showing the location of major obstacles, and other critical information provided. ¹⁰	
		A trail map summarizing TAI with symbols and measurement numbers formatted as a slim strip that can be attached to trail posts and located at trailheads or trail intersections provided. ^{10,9}	
		An informational flier that can be provided at the trailhead or visitor center summarizing TAI with symbols and measurement numbers, trail grade profile, description of the trail, and location of trailhead provided. ⁹	
		A short audible narrative with descriptions of trail conditions and details about the trail environment. This format may benefit individuals who have vision impairments or who have limitations reading in English. ¹⁰	
		A trail map featuring trail descriptions, TAI, and a grade profile that folds up to fit into a pocket provided. ¹⁰	

		A trail manual containing TAI, interpretive information, scenic photographs, directions to the trailhead, and other information about trails within a given recreational area provided. ¹⁰	
		An interactive accessible computer displays at a visitor center providing trail selection tools, TAI, and visual and audio descriptions of images at selected destinations provided. Guidelines for making kiosks accessible to people with mobility and vision impairments through the U.S. Access Board implemented. ¹⁰	
		To assist people with visual impairments, it is recommended to use tactile signs with raised lettering for urban/rural trail systems and roaded natural settings where reasonable. ²	
		Characters should be raised 0.8 mm [0.03"] and be between 16 mm [0.63"] and 50 mm [2"] in height. Characters shall have a width-to-height ratio between 3:5 and 1:1, and a stroke width-to-height ratio between 1:5 and 1:10. If larger print height is required, consult with the signage department in City Hall to obtain information relating to print size, legibility, and viewing distances. ²	
		If a display case is put on the site, it should be at a comfortable height and/or at an angle that a child can peer in. A mounting height of 600 to 750 mm [2' to 2' 5"] is ideal. Care must be taken to include a 30-to-45-degree inclination toward a viewer. ²	
		Interpretative signage mounted at 600 to 750 mm [2' to 2' 5"] allows most park visitors to read information provided. Pictures and graphics are legible to everyone. ²	
		Other:	
2.2. How should or will signage offer clear, critical information?			
		Signage includes the following (See ABA Guidelines): <ul style="list-style-type: none"> • Length of the trail or trail segment; • Surface type; • Typical and minimum tread width; • Typical and maximum running slope; and • Typical and maximum cross slope. 	
		If a trail is accessible, it should have the Universal Design trail difficulty rating system applied. ²	
		A map of trail systems should also provide information on whether there is an accessible bus stop near the trailhead, accessible washrooms, and an accessible phone. ²	
		Interpretive displays, signs, and related materials should be installed at site entrances, along trails, and in visitors' centers. ²	
		All signage should be facing the path of travel and mounted to a height between 4'-0" and 5'-10" above grade. ²	
		The primary trailhead signage area should be adjacent to the path of travel but offset such that an area of 5'-11" depth x 8'-8" width is available in front of the sign board and on a level and firm surface with positive grading at 2% for drainage of water to perimeter edge. ²	

		The interpretive trail signage should be aligned adjacent to the path of travel and offset from the main trail. If there are space constraints, the space requirements in front of the interpretive signage can be at the minimum of 5'-0" x 5'-0". ²	
		Primary trail head signs should be located in well-lit areas, and glare free surfaces should be used. ²	
		Signs along trails must clearly inform users of site conditions related to accessibility. ²	
		Provide accurate and complete information on trail conditions and characteristics of the site. The four basic requirements are grade, cross-slope, width, and surface. ²	
		Incorporate the trail difficulty rating system developed by Beneficial Designs Inc. in California, the U.S. Forest Service, and the National Parks Service. ²	
		Other:	

5. What opportunities should or will there be for trash and waste removal along trails?

		Trash receptacles are located along an accessible route.	
		Doggie waste removal bags mounted at accessible height at regular interval along access route.	
		Other:	

1.2. How should or will trash receptacles be easily operable?

		An accessible trash receptacle should be operable (openable) with one hand and have a hinged door which swings inwards, 2' 5" to 2' 11" above the ground. ²	
		The force to open a hinged lid, whether it swings in, or swings up, must not exceed 22N. ²	
		Trash receptacles must not have sharp edges. ²	
		A minimum clear ground and floor space of 3' x 4' must be provided adjacent to a trash receptacle. The space is required for either a parallel or forward approach to the trash receptacle. ²	
		Other:	

3. How should or will trail light sources follow technical guidelines to promote safety?

		Light sources always should be properly baffled with louvers or lenses. ²	
		Lighting poles should be located outside the path of travel. ²	
		Bollards are spaced at least 3' 3" apart, ideally 1.6 m 5' 2" apart, so that circulation between the bollards is possible by everyone. ²	
		Bollards direct the light downward toward the pathway and the shrubbery. ²	
		Locate accessible parking spots close to trailhead areas where trail signage is posted. ²	
		Other:	

PLAYGROUND

1.1. How should or will the playground accommodate for a variety of body types and activities?

		The main pathway is accessible so that all individuals have equitable means of access to and travel throughout the play environment. ⁸	
		Access is provided to all the activities offered in the play area. If there are three swinging activities, at least one is accessible to the child with a disability. ²	
		Number of ground level activities exceed ADA requirements.	
		Gates provide a clear opening width of at least 36" and are self-closing. ⁴	
		Ground level activities include a raised alternative (i.e., raised garden beds, raised sandboxes, splashpad, cool mist).	
		Play activities allow a child to maintain their independence by playing with the use of their assistive device. ⁸	
		Play activities with adaptive elements, such as back support, in which children can participate without fine motor coordination and/or gross motor control are provided. ⁸	
		Variation in activities promote different types of stimulating movement (i.e., linear, rotational, vestibular).	
		Play activities for a variety of developmental stages are provided. ⁸	
		A variety of activities that allow children with disabilities to explore challenge and risk along a developmental continuum are provided. ⁸	
		Hard surface areas are clearly defined so children with disabilities can approach and transfer onto equipment. ²	
		Where possible, the specifying of play equipment includes features that can be used by all children and children with attendant adults, for example a double-width slide. ²	
		Adaptive play elements such as double-wide ramps and adaptive swing seats that support a child's independence are provided. ⁸	
		Ramps are 3' 11" wide and sloped no more than 8%, and include handrails at varying heights from 1' 9" to 3' 1" in vertical distance between the ramp surface and the top surface of the handrail. ²	
		Landings are a minimum of 4' 11" x 4' 11". ²	
		Unnecessary complexity with access, regress and entry points to and within the play environment have been eliminated. ⁸	
		Activities that offer immediate feedback (yet minimal physical exertion) from participation are provided. ⁸	
		The play environment includes entry archways, enclosures on open decks, and slide transfers to increase the tolerance for error. ⁸	
		Children can participate in play activities using either fine motor coordination or gross motor control. ⁸	
		Adequate space has been provided for movement throughout the play environment for individuals with assistive devices and/or personal assistance. ⁸	

		Play activities are placed at the proper accessible height and position for children to comfortably approach, reach, engage in play and sustain activity with peers. ⁸	
		Different play activities are offered throughout the play area to alternate areas for sustained physical effort with opportunities for sitting and resting. ⁸	
		Gates provide a clear opening width of at least 36" and are self-closing. ⁴	
		Other:	
2.1. What clear multi-sensory cues should or will be integrated into the playground to promote awareness?			
		Play area, particularly the activity areas and pathways, organized with consistent multi-sensory cues, such as contrasting colors and textures, to support orientation and navigation. ⁸	
		Multi-sensory experiences are incorporated into the playground or surrounding play area, such as auditory (music or noise-dampening areas like a de-escalation room), olfactory (smell of flowers), tactile (nearby water play or textured plants), taste (nearby concessions), and vision (calming colors such as green and blue versus red or orange).	
		Acceptable and appropriate behaviors and skills for play areas clearly displayed and/or implied.	
		Other:	
2.2. How should or will the play environment include design features or activities for children to intuitively engage in play?			
		Playground equipment that promotes natural 'looping' patterns to children to do the same activity over and over again is available.	
		Where appropriate, there are opportunities for children to engage in a play component through a variety of interpretive communication methods.	
		Play activities include visual, tactile, and audible information using contrasting colors, textures and sound. ⁸	
		Playground components are strategically placed to promote 'grade up/grade down' challenges.	
		When appropriate, playground surfacing is used to communicate information about play components.	
		Other:	
3. What sanitization measures should or will be available near the play environment?			
		A sanitization station with an automatic sanitizer dispenser and disposable wipes are provided by the play environment.	
		Desirable play activities are spaced out to promote social distancing when recommended.	
		A family restroom or single, non-binary restroom is within close proximity to the play environment and is visible from observation and supervision seated areas.	
		Other:	
3. How should or will the playground activities promote safety?			

		All children's play areas conform to the latest edition of Children's Playspaces and Equipment (CAN/CSA-Z614-03). ⁸	
		Level and cushioned surfacing is used on accessible routes and in safety zone areas (i.e., rubberized surfacing).	
		Comfortable spaces that can be used as observation and supervision points accompanying the play activity areas are provided. ⁸	
		Seated areas with charging stations.	
		Naturally shaded areas provided within the playground.	
		Rest areas are provided within the play area outside of the traffic pattern. ⁸	
		Provided convenient spaces, like cozy spots, that can be used for sensory relief throughout the play area and are in line of sight. ⁸	
		Hard surface areas are clearly defined so children with disabilities can approach and transfer onto equipment. ²	
		At any measured point, the play area and protective surfacing extends to a minimum of 6' 6" from the nearest piece of equipment. ²	
		Bulk fiber surfacing materials are installed around and beneath all accessible activities and components of the play structure. In some cases, synthetic surfacing materials is applied due to the accessibility requirement of the play structure and the level of maintenance required for upkeep of the play area. In addition, the fall tables are consulted for the depth of materials to be used under various equipment components. ²	
		Use durable products and building materials which have a record of longer life and reduced maintenance costs. ⁵	
		Other:	
4.2. How should or will the playground provide opportunities for personal choice?			
		At least one art activity is available. An example of an art activity is an art sculpture that serves as a border for a playground but also provides tactile and sensory input.	
		At least one music activity is available. An example of a music activity is an outdoor xylophone.	
		Gradations of activities for different ages and ability levels.	
		Number of ground level activities exceed ADA requirements.	
		Provided tactile activities like sand and water elements and/or accessible planting tables. ⁸	
		Large muscle, physical activities paired with areas for resting and sensory relief to reduce children's overstimulation anxiety and behavior are provided. ⁸	
		The play environment is usable by individuals with diverse abilities regardless of age, ability, gender, ethnicity, culture, and socio-economic status. ⁸	
		Other:	
4.1. Should or will there be playground equipment that is desirable for all individuals?			

		The 'funnest' activities are easily accessible and dispersed throughout the environment for an individual with a mobility impairment. ⁸	
		The play activities are fun for children at different developmental stages so more children can participate and progress developmentally to more challenging play opportunities. ⁸	
		There are a variety of different types of equally fun play activities (large muscle activities, social activities, dramatic play opportunities, etc.) available throughout the play area so children have a continuum of choices. ⁸	
		Comfortable jump-in points paired with the activity areas are provided. ⁸	
		A variety of multisensory experiences through the play equipment, the environmental design and natural elements such as landscaping have been provided. ⁸	
		Other:	
4.1. How should or will the playground promote social integration?			
		Gradations of activities for different ages and ability levels.	
		Number of ground level activities exceed ADA requirements.	
		Multiple covered bench seating with arms and back support are provided for caregivers.	
		Accessible ground surfacing around seated areas for wheelchairs.	
		Ground level activities include a raised alternative (i.e., raised garden beds, raised sandboxes, splashpad, cool mist).	
		Fun activities that encourage children to play side-by-side and cooperate, rather than compete, in order to participate in play are provided. ⁸	
		Auditory opportunities, like musical instruments, for nonverbal children to interact with others is provided. ⁸	
		Play activities that offer feedback such as auditory sound, play activities for exploring cause and effect, and play activities that offer social gathering places are provided.	
		The play environment is usable by individuals with diverse abilities regardless of age, ability, gender, ethnicity, culture, and socio-economic status. ⁸	
		People of all abilities can be included in physical and social play. ⁸	
		There are a variety of social play opportunities, at ground level and under play decks, throughout the play environment. ⁸	
		Play activities are placed at the proper accessible height and position for children to comfortably approach, reach, engage in play and sustain activity with peers. ⁸	
		Other:	
4.2. What opportunities to play year-round should or will be available?			
		Indoor play space is available.	
		To support diverse comfort characteristics, a range of environmental conditions with a nice mix of sun, shade, protection from the wind, and access to facilities has been incorporated into the play environment. ⁸	

		Other:	
4.3. What cultural factors should or will be considered within the play environment?			
		The play environment is usable by individuals with diverse abilities regardless of age, ability, gender, ethnicity, culture, and socio-economic status. ⁸	
		Other:	
5. How should or will the playspace require little to no maintenance?			
		Use durable products and building materials which have a record of longer life and reduced maintenance costs. ⁵	
		Building materials require little maintenance (painting, retreatment, waterproofing, etc.), or maintenance has minimal environmental impact where possible. ⁵	
		Water efficient equipment is installed.	
		Other:	
3. What materials used on the playground equipment should or will be safe for the environment and persons using the equipment?			
		Materials that off gas pollutants such as solvent based finishes, adhesives, carpeting, particle board, and many other building products that release formaldehyde and volatile organic compounds into the air have been avoided. ⁵	
		Other:	
5. What materials used as part of play activities should or will be produced locally?			
		Playground materials and plants are purchased locally when appropriate.	
		Other:	
GREEN SPACE			
1.1. How should or will the green spaces include design features that accommodate for a variety of body types, abilities, and supports?			
		Ground level activities include a raised alternative (e.g., raised garden beds).	
		There are a variety of seating options available within the gathering areas of the green spaces.	
		Service dog considerations (i.e., dog park in gated area, availability of doggy bags for waste removal, and water fountains) are available.	
		Covers and grates shall be flush with adjoining surfaces and have no openings larger than 0.5". ²	
		Other:	
3. What sanitary measures should or will be accessible to all in green spaces?			
		Provide accessible trash receptacles disbursed evenly throughout the green space.	
		Other:	
3. What design considerations based on a range of environmental conditions should or will be made to promote safety?			
		Natural shaded areas are included in green spaces.	

		Some built-in shade is provided on some seated areas within the green space and is accessible for persons with disabilities.	
		Water features to prevent overheating are provided in areas of full sunlight (e.g., cool mister, splashpad, accessible water fountains).	
		Other:	
4.1. How should or will the green space promote social integration?			
		Outdoor spaces or classrooms for social interaction and physical play are provided.	
		Other:	
5. What opportunities to use recyclable materials for environmental protections within the green spaces should or will there be?			
		Gray water collection is feasible and is used for landscape irrigation,	
		Other:	
5. How should or will the green spaces require little to no maintenance?			
		Water efficient and low maintenance landscaping is used.	
		Other:	
5. What should or will the areas be where the natural landscape is preserved?			
		There has been limited development on soils in some areas of the green spaces.	
		A soil management plan is created that incorporates the conservation or restoration of appropriate plant biomass on the site. ⁵	
		Opportunities to restore damaged ecosystems exist.	
		Other:	
5. How should or will the plants be used as part of the landscaping within the green spaces native plants?			
		Landscaping is designed first utilizing native plants and other appropriate drought resistant species. ⁵	
		Other:	
SHELTER			
1.1. How should or will shelters accommodate for a variety of body types and abilities?			
		Tables (some fixed), grills, and/or fire rings are along accessible route with clear signage.	
		There is at least 4' of hard surfacing and clear space around all elements (i.e., table, grills and/or fire rings, etc.).	
		Slip-resistant surfaces shall be used (i.e., brushed concrete, unit pavers, asphalt, compacted granite screenings, and fines). Gradients shall not exceed 2%. ²	
		Tables that accommodate wheelchairs are provided (e.g., extended table-tops).	
		The cooking surface for grills can be lowered/raised with one hand.	
		Clearances around tables meets or exceeds ADA minimums.	
		Paved access route to each shelter provided.	
		Other:	

3. What sanitary measures should or will be accessible to all in sheltered spaces?			
		Provide accessible trash receptacles.	
		Other:	
3. How should or will the shelters within the park promote safety?			
		Provide charging stations throughout park in shaded areas for power operated medical equipment.	
		Other:	
1.2. What design considerations based on a range of environmental conditions should or will there be?			
		Shelter with and without shade is provided throughout the park and along accessible routes.	
		Other:	
4.1. How should or will areas of shelter promote social integration?			
		Tables that promote social conversation for persons who are deaf/hard of hearing (e.g., circular tables).	
		Large tables for larger family gatherings.	
		Tables that promote social conversation are provided (e.g., circular tables).	
		Other:	
5. What appropriate environmentally sustainable measures should or will be taken?			
		All walkways, paths, curbs, entrances, etc. should be high albedo material (SRI > 29). Streets, driveways and other paved surfaces should be high albedo materials or, where required, asphaltic concrete pavement. Optimize shading of paved surfaces with planted trees.	
		Focus exterior lighting down, provide adequate pedestrian lighting and prevent light pollution. ⁶	
		Use building products made from recycled materials.	
		Where possible purchase locally produced building materials.	
		Design insect-resistant detailing that will require minimal use of pesticides. ⁵	
		Design to encourage and permit the collection of recyclables. ⁵	
		Situate buildings to benefit existing vegetation to maximize views of vegetation and quiet outdoor spaces. ⁵	
		Design buildings and park features to incorporate and use renewable energy. ⁵	
		Incorporate passive solar heating, day lighting, and natural cooling.	
		Cluster buildings or build attached units to preserve open space and wildlife habitats, avoid especially sensitive areas like wetlands. ⁵	
		Make the structure adaptable to other uses, and choose materials and components that can be reused or recycled.	
		Use vegetation to minimize building heat and cooling requirements.	

		Give preference to storm water quality best management practices (BMP), curb breaks, bioswales, rain gardens, etc. over direct connections to the municipal storm water system.	
		Maximize lot permeability with landscaping, permeable pavement and other surfaces, directing impervious to infiltration areas).	
		With the exception of where required for safety purposes, avoid light trespass on to neighboring sites. Integrate lighting with the site lighting of surrounding buildings and spaces.	
		Other:	
5. What appropriate socially sustainable measures should or will be taken?			
		Where possible purchase locally produced building materials.	
		Design insect-resistant detailing that will require minimal use of pesticides. ⁵	
		Situate buildings to benefit existing vegetation to maximize views of vegetation and quiet outdoor spaces. ⁵	
		Make the structure adaptable to other uses, and choose materials and components that can be reused or recycled. ⁵	
		Make provisions for storage and processing of recyclables: recycling bins near the picnic tables. ⁵	
		With the exception of where required for safety purposes, avoid light trespass on to neighboring sites. Integrate lighting with the site lighting of surrounding buildings and spaces.	
		Other:	
5. What appropriate economically sustainable measures should or will be taken?			
		Where possible purchase locally produced building materials.	
		Design insect-resistant detailing that will require minimal use of pesticides. ⁵	
		Situate buildings to benefit existing vegetation to maximize views of vegetation and quiet outdoor spaces. ⁵	
		Design buildings and park features to incorporate and use renewable energy. ⁵	
		Incorporate passive solar heating, day lighting, and natural cooling. ⁵	
		Make the structure adaptable to other uses, and choose materials and components that can be reused or recycled.	
		Use vegetation to minimize building heat and cooling requirements.	
		Give preference to storm water quality best management practices (BMP), curb breaks, bioswales, rain gardens, etc. over direct connections to the municipal storm water system.	
		Maximize lot permeability with landscaping, permeable pavement and other surfaces, directing impervious to infiltration areas). ⁶	

		With the exception of where required for safety purposes, avoid light trespass on to neighboring sites. Integrate lighting with the site lighting of surrounding buildings and spaces.	
		Other:	

References

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Sources:

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