



Park Playground Design

Accessible Design

Nature Play

Inclusive Design

Universal Design

Traditional Play

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CITY OF MILWAUKIE

MORGAN GREENWORKS
CONSTRUCTION



Universal Design

Inclusive Design

Elements of Inclusive Design

Nature Play

Elements of Nature Play

Considerations

Project Example

DC Latourette Park

A photograph of a modern playground structure. The structure features a prominent wooden roof with a wide overhang. In the background, there is a yellow building with a gabled roof. The playground equipment is made of light-colored wood and is set on a dark, rubber safety mat. The scene is outdoors with trees and a cloudy sky in the background.

Universal Design

Universal Design is a process that enables and empowers a diverse population by imploring human performance, health and wellness, and social participation. – *Center for Inclusive and Environmental Access (IDeA Center), University of Buffalo School of Architecture and Planning*

Universal Design



7 Principles of Universal Design: created by Center for Universal Design at North Carolina State University in 1997 focused mainly on indoor use by adults

Principle 1: Equitable Use

Principle 2: Flexibility in Use

Principle 3: Simple and intuitive use


Principle 4: Perceptible Information

Principle 5: Tolerance for Error

Principle 6: Low Physical Effort

Principle 7: Size and Space for Approach and Use

Universal Design

A photograph of a park playground. In the foreground, there is a large wooden structure made of three thick logs forming a triangle. Behind it, there is a blue play area with various equipment, including a wooden tower and a slide. The playground is surrounded by lush green trees and a black metal fence. The text is overlaid on a semi-transparent grey box in the upper half of the image.

An **Inclusive Playground** is a universally designed, sensory-rich environment that enables all children to develop physically, socially, and emotionally. An engaging place that provides the just-right level of challenge and offers opportunities to succeed. A well-designed place that addresses all level of ability. A place that goes beyond minimum accessibility to create play experiences that meet a variety of needs and interests. At an inclusive playground, children of all abilities can interact with each other and do what all kids want to do: play.

– *Landscape Structures*

A photograph of a modern, inclusive playground. The scene is dominated by a large, leafy green tree on the left. In the foreground, a child in a purple shirt stands near a wide, orange slide that descends from a wooden platform. The platform has a slatted roof and is surrounded by wooden railings. Other children are visible on the platform and on a climbing structure to the right. The ground is covered in green artificial turf. The overall atmosphere is bright and natural.

Keys to Inclusion Play

- Engaging for all abilities
- Multiple levels of challenge
- Accessible playground surfacing
- Coolest thing in the playground is accessible to all
- Perimeter containment
- Orientation path
- Sensory rich environment
- Movement
- Cooperative play
- Cozy / Quiet spaces
- Social Places



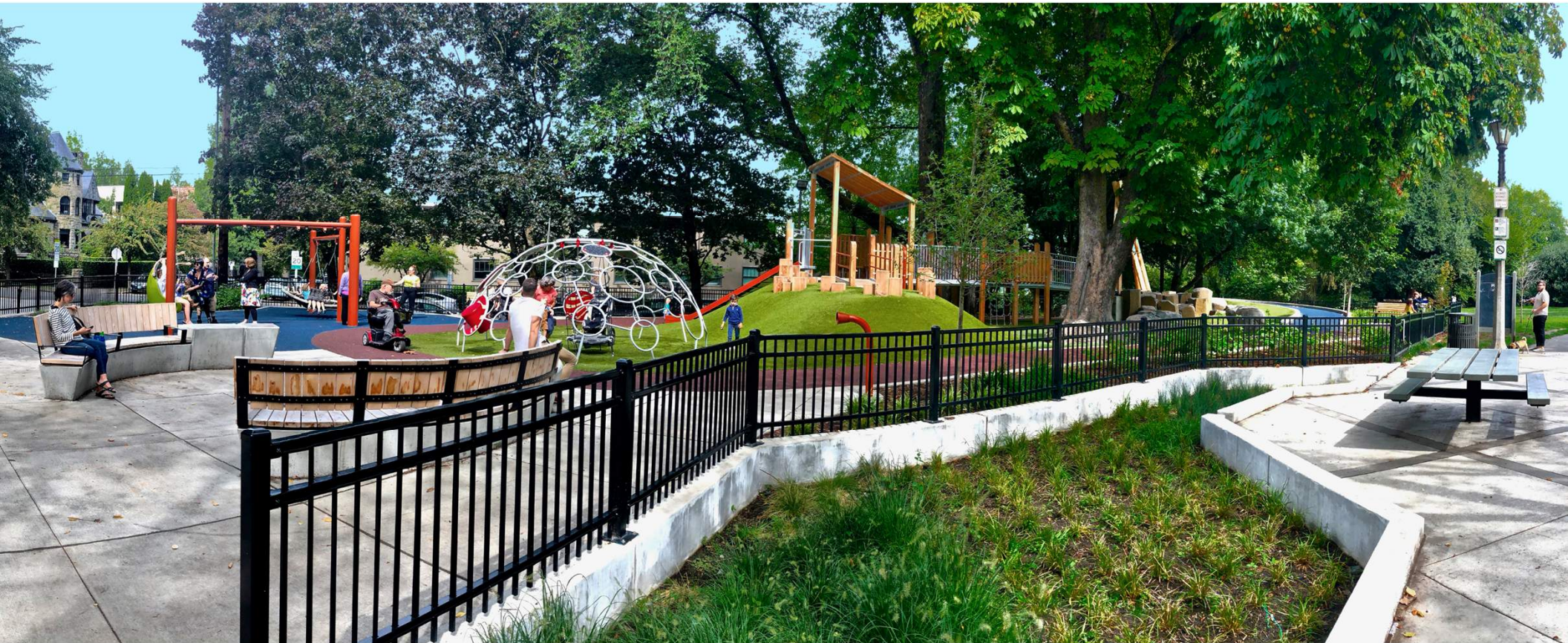
Engaging for all Abilities – Not Boring



Multiple Levels of Challenge: Climbing/Balancing/Elevation



Accessible Playground Surface



Perimeter Containment



Orientation Path



Cooler Things are Accessible



Sensory – Sound, Feel, Color, Texture, Smell



Movement



Cooperative Play





Quiet Places



Social Spaces



WHAT ARE NATURAL PLAY AREAS?

Natural Play Areas are outdoor spaces designed to facilitate fundamental play experiences with the use of natural components such as plants, logs, water, sand, mud, boulders, hills, etc.. The components represent the larger wild environment in a way that feels safe and manageable to young visitors and their parents while inviting imaginative and explorative play. It's a way to provide outdoor, natural experiences close to home to give children and caregivers the opportunity to get contact with nature on a more daily basis.

NATURE PLAY CONTINUUM



Oregon Natural Play Initiative, a group of professionals who support and promote natural play in Oregon defines Nature Play as:

“Natural Play challenges and fascinates children and teaches them about the wonders and intricacies of the natural world while they explore and play within it. It is intuitive and unstructured, constructive (or deconstructive), and timeless, encouraging interaction with natural materials, features, indigenous vegetation, and creative landforms. Natural Play is often a blend of materials and experiences to create purposely complex interplays of natural and environmental objects.”

NaturePlay



Types of Fundamental Play Relevant for Child Development:

- Physical
- Sensory
- Social
- Emotional
- Cognitive



Physical: Climbing/Balancing/Motion



Sensory – Sound, Feel, Color, Smell, Texture



Social



Emotional



Cognitive



CATEGORY	TRADITIONAL PLAY	NATURE PLAY
Warranty	Variable by manufacturer	Variable by manufacturer/fabricator
Risk	Subjective	Subjective
Safety	Assessed during the manufacturing	Assessed during design and the field
Maintenance	Ordering parts	Variable based on feature
Life Cycle	20-30 years	Variable based on species and treatment
Childhood Development	Prescriptive	Open-ended, Self guided
Cost	Variable	Variable



Considerations – Traditional Play –vs- Nature Play



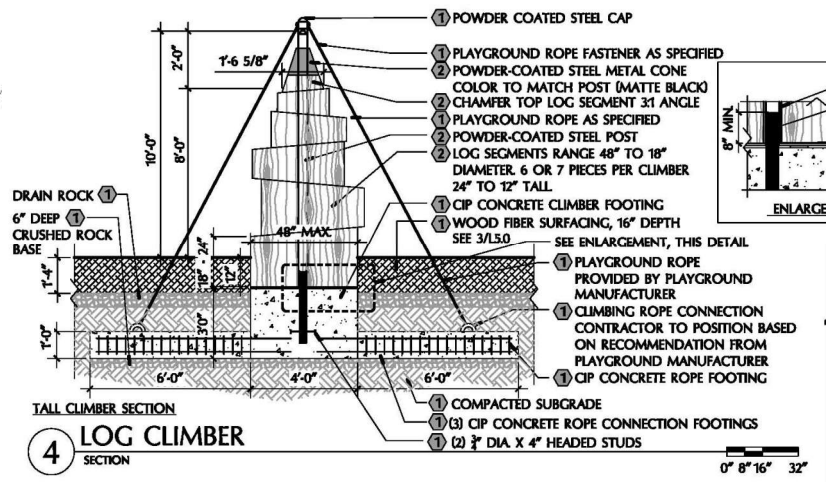
Provide multiple levels of challenge and risk for children to self assess and learn to master their abilities and gain confidence.

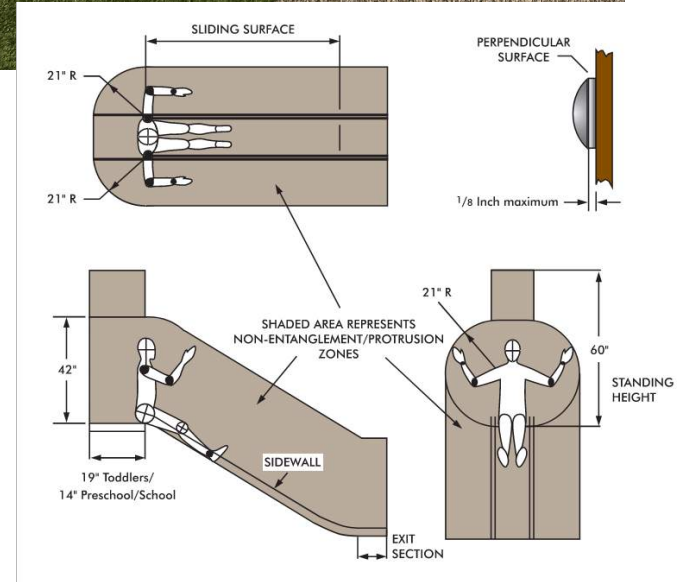
Considerations – Risk vs. Hazard



FALL ZONES

Considerations - Safety





Considerations – Safety - Slides



Year - 2014



Year - 2021

Considerations – Life Cycle of Wood



EWf - \$3/SF



Poured-in-Place - \$20/SF



Turf - \$15/SF



Tiles - \$20/SF

Considerations – Cost/Maintenance/Warranty: Surfacing



Log Structure: \$45K



Log Tower: \$166K



Modern Structure: \$55K



Traditional Structure: \$77K



Nature Themed Structure: \$63K



Embankment Slide: \$50K
Slide: \$10K
Boulder Scramble: \$40K

Considerations – Cost: Comparison



Columbia Tech

Considerations – Diversity



Project Example – DC Latourette Park



Project Example – DC Latourette Park



Project Example – DC Latourette Park



Projects	Total Project Size	Cost for All Features
DC Latourette Park Playground, Plaza	.5 Acre (2,700 SF play area)	~\$600K Playground, Basketball Court, stormwater planting, ADA access, plantings, and furnishings
Couch Park (reconstructed areas) Constructed - 2019	.4 Acre (8,000 SF Play area)	\$1.5 Million Playground, Plaza, Portland Loo
Westmoreland Park Constructed - 2014	.5 Acre (all play)	\$1 Million Nature play, water and sand play, pathways, plaza, landscape
Scott Park	.5 Acre	\$480K, all improvements
Balfour Park	.7 Acre	\$830K, all improvements
Bowman Brae Park	.6 Acre	\$580K, all improvements

Project Size Comparisons





THANK YOU!!

QUESTIONS

Further information please contact:
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