

ALL CHILDREN'S NATURE PLAYSPACE

DURANT NATURE PRESERVE



Concept Plan Report

AUGUST 28, 2020



REPORT PREPARED BY TIMMONS GROUP FOR
CITY OF RALEIGH PARKS, RECREATION AND
CULTURAL RESOURCES



ACKNOWLEDGMENTS

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INTRODUCTION

The City of Raleigh Parks, Recreation and Cultural Resources Department (PRCR) and Timmons Group, in conjunction with invited experts from the Nature Learning Initiative at NCSU, engaged with the local community to develop a Concept Plan for the future **All Children's Nature Playspace** located at Durant Nature Preserve in Raleigh.

The site for the future playspace is a near 8,000 square foot area of wooded land within Durant Nature Preserve at 8305 Camp Durant Rd, Raleigh. The park was designated as a Nature Preserve in 2010 with the goal of protecting and preserving the area's significant natural resources and providing nature-based recreation and environmental education experiences.



1.1 Vicinity Map.

The intent of the concept plan is to create the framework for an accessible nature play environment for children that supports positive mental health. The playspace will support the 100 vulnerable families that are currently served through PRCR's Specialized Recreation and Inclusion Services (SRIS). SRIS brings additional vulnerable populations to Durant for programming including the Quest Adult day programs. Durant is a host site for other City of Raleigh summer camp field trips where SRIS supports inclusion for children who are high functioning but need special assistance. Camp Friendly, a summer day camp for children with disabilities, has been in operation at Durant Nature Preserve for over 30 years.

PROJECT SCHEDULE

The planning for this playspace was divided into three phases. The first phase consisted of conducting an analysis of the site's opportunities and constraints for development. Input from the public at large was received through an online survey. It should be noted that the COVID-19 pandemic affected the ability of the design team to conduct in-person workshops with the community.

Developing a concept plan through a consensus-seeking process was the main focus of the second phase of the project. This process involved working with the advisory group, including representatives of several different departments within the City, invited experts and the design team, to develop a vision statement and concept that was inclusive of the community's desires while fitting with the character of Durant Nature Preserve.

The third and final phase of the concept planning process was to synthesize the feedback from the advisory group and survey results into a final Plan. The final concept plan will be used for a future implementation phase.



1.2 Durant Nature Preserve.

PLACES KIDS GROW GRANT

In October 2019, the City Grants Committee authorized Parks, Recreation and Cultural Resources to proceed with a grant application to fund a conceptual design for an accessible nature play space at Durant Nature Preserve. The play space will compliment Camp Friendly, a PRCR summer camp for individuals with disabilities, current programming and add to the amenities at Durant Nature Preserve.

The City of Raleigh was awarded a \$6,000 grant from **The Kaleidoscope Project's** Places Kids Grow grant program to create accessible nature play environments for children that support positive mental health.

The Kaleidoscope Project is based on two important ideas:

1. The places where young children up to 8 years old spend time can have a lifelong impact on their social and emotional well-being.
2. The relationships children have with each other and adults can build their resilience, give them the tools they need when times are difficult and arm them with confidence as they grow into adulthood.





1.3 *The Advisory Group walking through the site at the Kick-off Meeting.*

ADVISORY GROUP

The advisory group was consulted throughout the concept plan process. The group included representatives of several different departments within the City, invited experts from the Natural Learning Initiative and the design team. The design team met with the advisory group four times and also held an online survey, reaching the wider community. The public engagement process sought to reach out directly to community members identified by SRIS and was open to the general public as well.

Project Goals for the All Children's Nature Playspace project, stated below, were the result of several rounds of review and discussion among members of the Advisory Group. These goals helped define the desired outcome of the Concept Plan. They should also provide a road map for any future development phase, to ensure the project is a success.

PROJECT GOALS

- To provide access to nature play for people of all ages and abilities
- To provide opportunities for social interactions to help develop community bonds
- To serve as a resource for community organizations, public programs, City programs (such as Camp Friendly) and daily visitors.
- To provide play elements that connect visitors with nature through sensory experiences that stimulate creativity, learning and communication.
- To provide a safe space for all users with well-defined natural boundaries supporting the designated playspace.
- To provide materials that are sourced in a sustainable manner and easy to maintain
- Respond to community needs and preferences in developing a plan for the playspace



“

This space needs to be accessible to all children and act as an outdoor learning environment where children learn about natural processes and their environment.

WHAT WOULD YOU LIKE TO SEE IN THE FINAL CONCEPT PLAN?



1.4 Advisory Group Feedback: Dean Perry, City of Raleigh Project Manager.

VISION STATEMENT

The Vision Statement built upon the project goals defined by the Advisory Group. This statement provided direction during conceptual design and was used as a check to ensure commitment to the process. Durant Nature Preserve’s vision of an All Children’s Nature Playspace is to:

Provide a universally accessible space where people of all abilities and ages can come together to experience play, imagination, and exploration in nature. We envision our community brought closer together through shared outdoor nature play experiences that help foster social bonds, healthy bodies, and healthy minds for children and “children at heart”.



“

This playspace should be fun, educational and encourage children to explore their natural environment. Native plants, natural materials and imaginative play spaces should be included in the final design.

WHAT WOULD YOU LIKE TO SEE IN THE FINAL CONCEPT PLAN?



1.5 Advisory Group Feedback: Amy Eckberg, Durant Nature Preserve Park Manager.

SITE INVENTORY & ANALYSIS

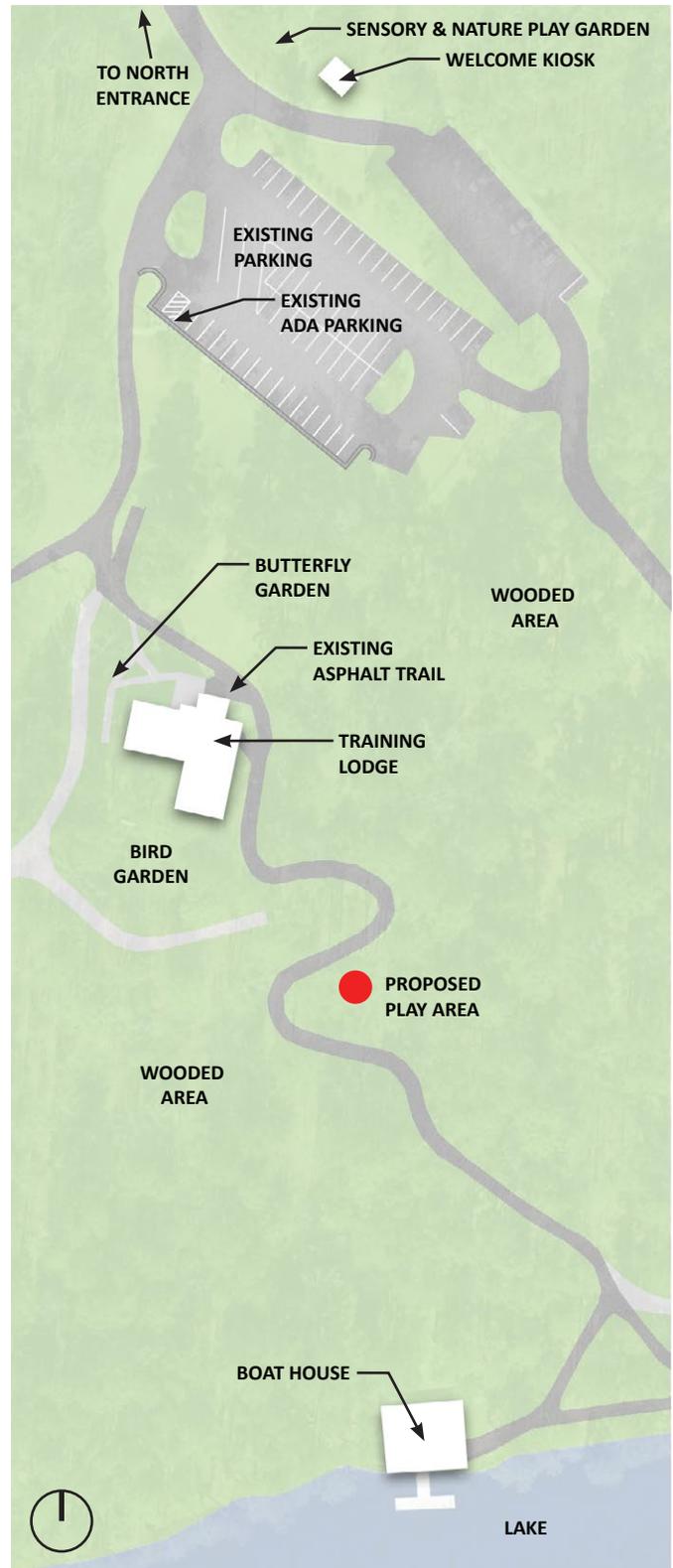
CONTEXT

Durant Nature Preserve is 237 acres in size with woodlands, lakes & wildlife, plus hiking trails & fishing. Durant's annual public visitation is around 130,000.

The site of the proposed playspace is accessible from the North Entrance of the park, adjacent to the **Training Lodge**, the **Bird Garden** to the south and a **Butterfly Garden** to the west.

Durant offers year-round general public programs for all ages, as well as self-guided interpretive gardens and 5 miles of trails which highlight the park's unique habitats and abundance of plant and animal life.

The Park has an existing **Sensory and Nature Play Garden** located north of the parking lot next to the welcome kiosk. The garden includes extensive native plants, a sand feature, rock garden, fairy home building, toad houses, ponds, and art installations.



2.1 Existing Welcome Kiosk next to the Sensory and Nature Play Garden.

2.2 Overall site.



2.3 Paths in the Nature Garden.



2.4 Painted tiles next to Nature Garden.



2.5 Signage in the Nature Garden.



2.6 Welcome gate to the Butterfly Garden.



2.7 Arbor and seating in the Butterfly Garden.

SITE DESCRIPTION

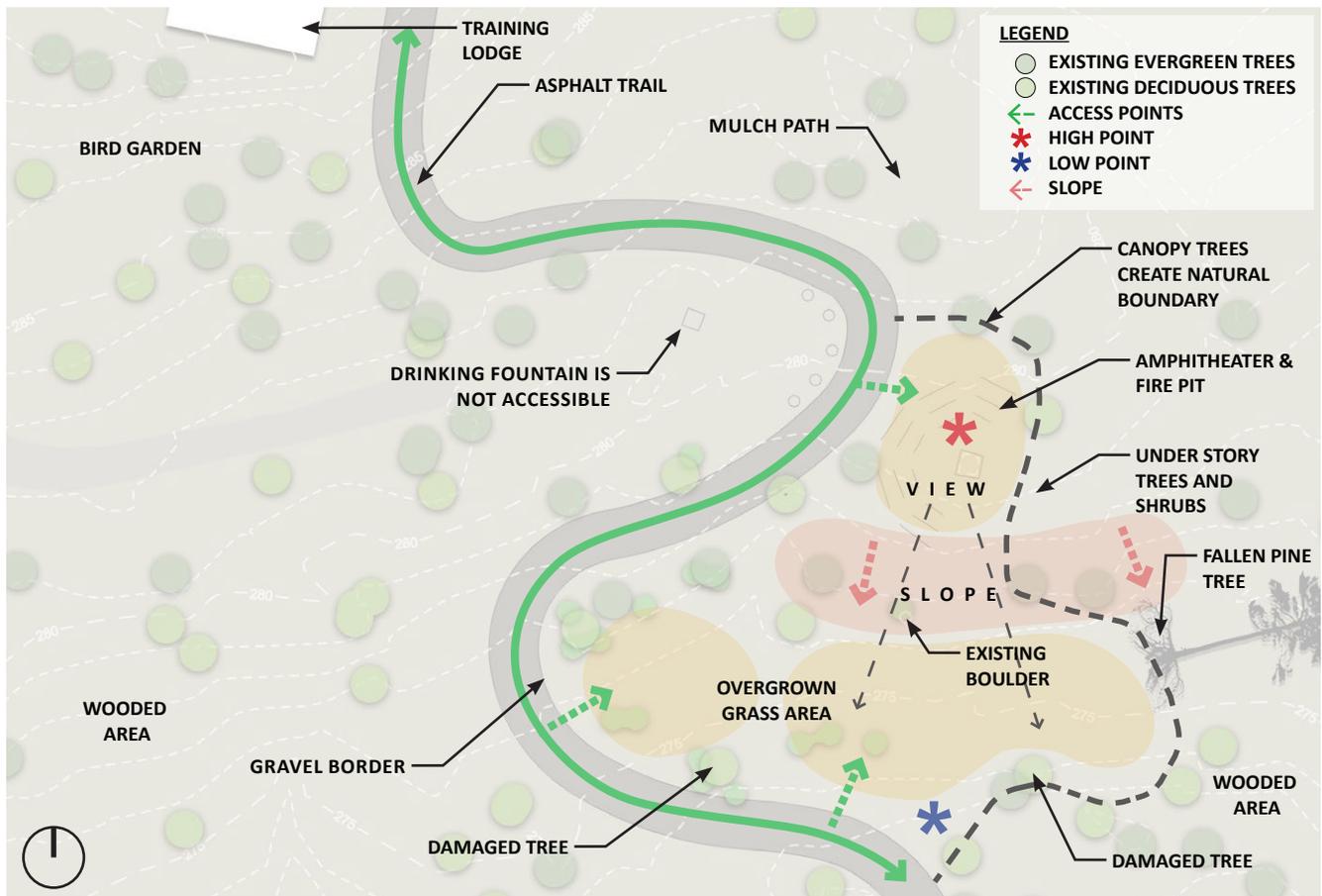
The site is **accessible** from the North Entrance parking lot via an asphalt trail. The trail was designed to be ADA accessible. A cleared area close to the trail contains an existing amphitheater and fire pit. The amphitheater sits on a high point which allows good visibility down to the lower area.

The overall **topography** of the site slopes down towards the large lake at the center of the Preserve. A slope dissects the play space site. Accommodations will be needed to provide flat accessible internal access paths. This will require some grading work.

An existing drinking fountain sits in the wooded area adjacent to the trail and is not currently easily accessible.

The existing **vegetation** on site is reflective of the natural character of Durant Nature Preserve. The proposed play area is shaded by a mix of large hardwood and evergreen trees including sweetgums, poplar, oak and pine trees. The trees create a natural boundary, indicated in Figure 3.

Pine cones, pine straw and sweetgums cover the natural surface of the space.



2.8 Site Analysis Diagram.



2.9 Existing boulder on site.



2.10 Pine cones and pine straw on surface.



2.11 View from existing paved trail in Winter.



2.12 View from existing paved trail in Summer.



2.13 Existing drinking fountain.



2.14 Accessible parking at North Entrance.



2.15 View of lower area.



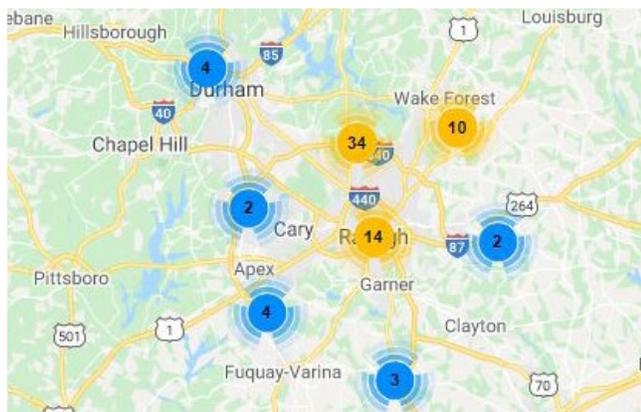
2.16 Existing amphitheater and fire pit.

PUBLIC INPUT SURVEY

The survey was developed by the Natural Learning Initiative and reviewed by the advisory group prior to posting. The survey was available on the internet only and distributed by advertisement on the Durant Nature Preserve web page, the City of Raleigh’s GovDelivery email update service, and via email from SRIS to their program participant email lists. The survey was active from June 10 to June 19, 2020. The survey had 112 participants.

The purpose of the survey was to identify community needs and to make sure community input was integral in the creation of the concept plan for the playspace. The survey sought to identify the demographics of future users and asked what natural play experiences the local community wanted to see included in the play space.

The survey additionally was used to help identify any mobility challenges that should be accommodated in the final design. Survey participants were also asked what other local nature playspaces they enjoyed going to in Raleigh, in order to assess existing nature play opportunities in the Triangle, but also point the advisory group to successful projects and playspace features.



Where do you live?

Conclusions:
The majority of responders were from the North Raleigh area. Due to the size of the proposed playspace, most users will likely come from this area, although the accessible nature of the final design may draw in families from further away.

Please select the number of children in your household for each age category.

	0	1	2	3	4+
Birth - 5 years old	31	24	18	1	2
6 - 10 years old	29	40	4	0	0
11 - 14 years old	40	18	2	0	0
15 - 18 years old	45	9	2	0	0

Conclusions:
Of the 76 respondents, 59% had children between 0-5 years old. Of all the children recorded, 74% were under 11 years old.

Although most of the children are young, the playground should accommodate children with a range of skill levels.



2.20 Sensory & Nature Play Garden.



2.21 Welcome sign to the Bird Garden.

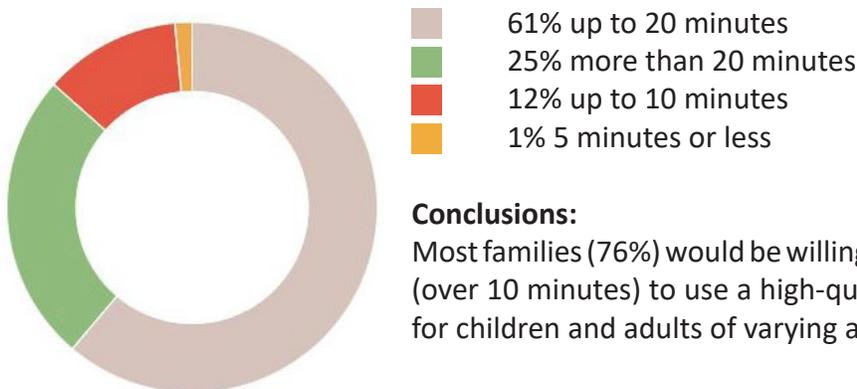
What is your age?

40%	36-45	16
38%	46-55	15
15%	26-35	6
5%	59-65	2
3%	18-25	1
3%	66-75	1
0%	Under 18	0
0%	Over 75	0

What is your race/ethnicity?

90%	White	37
5%	Black or African-American	2
5%	Asian	2
2%	Native Hawaiian or Other Pacific Islander	1
2%	I prefer not to answer	1
0%	Hispanic, Latino, or Spanish	0
0%	American Indian or Alaska Native	0
0%	Other	0

How far would you be willing to travel to use a high-quality, accessible play space designed for children and adults of varying abilities? Please select all that apply.



Conclusions:

Most families (76%) would be willing to drive beyond their neighborhood (over 10 minutes) to use a high-quality, accessible play space designed for children and adults of varying abilities.

It will be important that the play space caters to users or varying abilities.

Please select any mobility accommodations that you may need in a play area.



- 55% Wheelchair Access
- 25% Other (Please Specify)
- 20% Walking Aids

Notable Responses:

"It is important to me that these kids with no mobility issues can play with and appreciate children who do have mobility issues."

"Agree that a trail through natural areas is great. Be sure it is paved, so that those in strollers or wheelchairs can also enjoy it."

"Ramps or ways for someone with low muscle tone to access."

"None needed for my children. Expect to see them for others, though."

"Stroller friendly."

"Flat pathways with little to no barriers for transition between areas."

"The park should have multiple access points and various challenge levels. My daughter has Down syndrome and needs easy access."

"My special needs daughter struggles with stairs so wheelchair access set up would be good for her."

Conclusions:

Flat, stable and hard surfaces should be provided for all primary access paths within the play space. Wheel friendly surfaces are encouraged.



2.22 Word Cloud created by WordCloud Generator by MonkeyLearn.

Other feedback themes:

Fenced in area with good sight lines:

"Good sight lines for a parent/guardian/caregiver to be able to sit or stand to the side and easily see their children across the space. Closed off so that it is not easy for a child to run out of the area with out their grownup."

"Good sight lines for parents to be able to sit on a bench/stand to the side and easily see their kids across the area."

"Keep it fenced in so kids can't run off and give good sight lines so parents can sit and see the kids."

"Some type of natural enclosure so kids don't wander/know boundaries."

"Good sight lines from a seating area that is shaded for parents. Fence or natural barrier so kids don't run off."

Climbing and balancing:

"Things to climb and balance on"

"A climbing rock area, a cave or a tunnel to climb through or hide in."

"Anything that our child can climb on or through."

Shade, benches and picnic areas:

"Bathrooms, shade, and seating for parents would be priorities for me."

"Shade. Water fountains bathrooms close by."

"Close restrooms and places for parents to sit closely"

"Keep it green so it doesn't get as hot in the summer."

"Keep trees for shade."

"Benches and places to sit are nice."

"Some shady areas, benches/picnic area, restrooms too."

Natural materials and mud play:

"A way to create with natural materials (Mud pies, an outdoor "kitchen" etc)"

"Water pump to play with mud and sand."

"We love to create and get messy! A water table would also be fun."

"A natural playground, with a mud kitchen"

What barriers or challenges may limit your participation in nature play at the All Children's Nature Play Space?

53%	Lack of time	20
39%	Distance to location	15
29%	Activities/amenities are not suitable for my family	11
5%	Transportation	2
0%	Other (Please Specify)	0

Conclusions:

Busy families have a limited amount of time to drive to nature play spaces. It is important that the space allows for easy access, efficient use of space and good visibility of play areas.

Please tell us about your favorite place to experience nature. What is it and what makes it special?

Notable Responses:

"Prairie Ridge Eco-station - I love the variety of things to explore as a family. We love the play space (esp the water feature and digging options), the butterfly garden, and the trails."

"Durant Nature Park, Greenway, Museum of Life and Science in Durham"

"Blue Jay Point Park and Wilkerson Preserve. They are close by, super great trails that are well maintained. Trails go by water which is a huge plus."

"We go to Kids Together or Prairie Ridge almost weekly. The new mist station that is wheelchair accessible is a big draw for kids with all abilities! And it is great that kids can enjoy it together"

"My daughter loves Prairie Ridge. She loves playing in one section and "cooking" and making camp sites. Life and science center she likes playing in the hideaway woods. Mill Bridge Nature Park she likes walking through the stream and collecting rocks and exploring. She likes playing at 3 bears acre in the mud kitchen and the outdoor art area. "

"I have noticed my son loves instruments. It would be wonderful to see a outdoor xylophone here. Some musical options are great for all kids, whether it is the 'whisper phones' or wind chimes, or xylophone"

Conclusions:

The integration of water and messy play was a recurring theme.

While staff have concerns about maintenance and drainage, water may be interpreted through a dry stream bed or through organized programs.



2.23 *Blanchie Carter Discovery Park, Southern Pines, NC*



2.24 *Prairie Ridge Eco-station, Raleigh, NC*



2.25 *Kids Together Playground, Cary, NC*

Nature play provides many unique benefits to children. How important are the following attributes of nature play to your family?



	Not Important	Somewhat Important	Important	Very Important
Sensory stimulation	3%	11%	44%	41%
Social interaction	3%	29%	34%	33%
Manipulation of natural materials	5%	7%	45%	43%
Physical challenge	8%	25%	34%	32%
Creativity and imagination	2%	8%	27%	63%
New experiences	2%	13%	44%	42%
Encourages movement	2%	6%	37%	55%
Accessible and inclusive play	5%	16%	33%	46%
Flexible features	0%	23%	53%	24%
Provides shade	2%	5%	20%	73%
Accessible routes	2%	26%	39%	34%
Safety surfaces	2%	26%	49%	26%
Enclosed space	37%	28%	23%	12%

Nature Play Attribute Preferences. 2.26A Social Interaction: Performance space at Rock Ridge Park, NC, 2.26B Creativity and Imagination: Painted tree at J C Raulston Arboretum, 2.26C Provides Shade: Shady bench at J C Raulston Arboretum.

Conclusions:

Shade, flexible features and safe surfaces were considered most important. It will be crucial to identify and protect existing canopy trees on site.

Enclosed spaces may have been interpreted as indoor spaces. It was discussed within the advisory group that quiet spaces shall still be accommodated.

Does your child enjoy organized nature play activities such as instructor-led programs or unorganized nature play activities such as wildlife watching? Please explain below.

Notable Responses:

"They enjoy both. I really like when they learn new skills from an instructor led program that can be applied on family walks/hikes/explorations."

"My 3 year old unstructured while my 6 year old prefers more structure."

"Our children enjoy both organized and unorganized play opportunities. Our older child has enjoyed short programs (1 hour or less) led by educators who offer hands-on samples and then take kids on a walk to explore (check out Prairie Ridge Eco-Station youth programs for examples)."

"Yes - group activities are appreciated and guidance from someone other than parents usually gets more attention."

"They also should have plenty of free-play opportunities. Include natural elements like tree cookie stepping stones, and maybe fairies and gnomes with wooden "houses" to arrange in the forest."

Conclusions:

A combination of adult and child led play opportunities is recommended. Flexible spaces that accommodate both are desirable.



2.27 Flexible spaces are great for programmed activities.
Library Story Park, Wilmington, NC.

SUMMARY OF PUBLIC INPUT

The following themes were identified within the survey responses:

- The need for flat, hard surface paths that are wheel friendly and allow universal access for all children;
- Natural barriers around perimeter of play space to stop children from running off but allow for independent play;
- Shady seating areas with good sight lines that allows parents a place to sit to watch their kids;
- The integration of natural materials, that allow children to interact with nature and learn about native animals and habitat;
- A mixture of adult-programmed and child-directed settings;
- Social interaction, creativity and imaginative play were identified as important components of the play space design.
- “Messy play” involving the use of water was a common desire. This may require a hose down area or outdoor shower. Noted that this can be a maintenance burden.

The conclusions and themes drawn from the survey responses provided a strong foundation to begin design work grounded in the community’s priorities for a new nature playspace at Durant Nature Preserve.

CONCEPT DEVELOPMENT

PROGRAM DEVELOPMENT

Program elements reflect feedback from the online survey and comments from the advisory group. Flat, hard surfaces, perimeter fencing, shade, natural materials and providing a variety of play spaces were the most desired characteristics of the proposed playspace that emerged from the survey. These elements have been explored with precedent images of other natural playspaces. Precedent images are used to represent potential play and outdoor learning settings and materiality. These precedents will be a guide for including various play settings in the overall design and will need to be adapted to the site within Durant Nature Preserve.

The site analysis and inventory phase showed how Durant Nature Preserve already has an established character of creative and tactile natural spaces, such as the Nature Play and Sensory Garden and the Butterfly Garden. It will be important that this proposed playspace fits within the natural character of the Preserve.

This playspace should cater to existing Camp Programs and be a place for children of all abilities to experience and interact with nature in creative ways.

PRECEDENT IMAGES



3.1 ENTRANCE ARCHWAY
A vertical threshold that defines the entrance to the playspace.



3.2 TELESCOPE
Engages visual senses and links play settings together.



3.3 DISCOVERY TRAIL
Looped path encourages continuous movement & links adjacent settings.



3.4 DECORATIVE ROPE FENCE
Defines a boundary and creates a visual barrier.



3.5 BIRD HOUSE
Promotes wildlife habitat and opportunities for learning about nature.



3.6 ARBOR
Shaded rest area with benches that celebrates native vines.



3.7 ACOUSTIC PLAY AREA
 Play with sounds of natural materials e.g. bamboo chimes, xylophone.



3.8 SOUND TUBES
 Encourages cooperative and social play.



3.9 TUNNEL ARCHWAY
 Varying levels of physical challenge and links play settings together.



3.10 NATIVE PLANTINGS
 Promotes learning about local natural environment.



3.11 TEE PEE VILLAGE
 Creates enclosed spaces for imaginative and cooperative play.



3.12 DRY STREAM BED
 Visual representation of natural processes.



3.13 GATHERING CIRCLE
 Small gathering spaces support the development of social skills.



3.14 MESSY PLAY MUD KITCHEN
 Stimulates tactile senses and allows for cooperative and imaginative play.



3.15 OUTDOOR CLASSROOM
 Setting for adult-programmed learning environment.



3.16 NATURAL FENCE BARRIER
 Defines a space and creates a visual barrier.



3.17 VERTICAL LOGS
 Vertical elements create way finding points along the path.



3.18 SENSORY PATH
 Engages visual and tactile senses and links play settings together.

SPATIAL DIAGRAMS

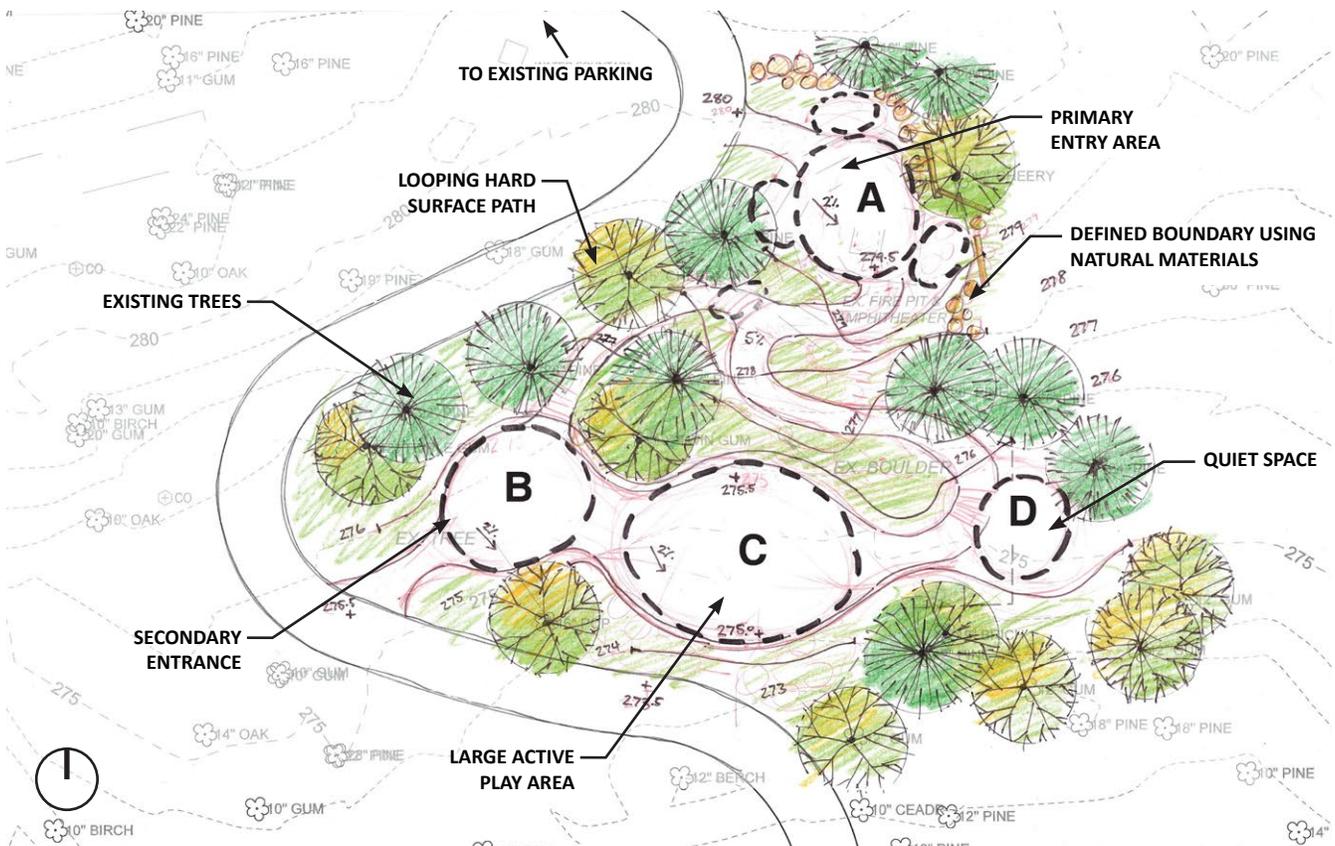
The purpose of the spatial diagrams is to define usable spaces and the connections between them, based on site analysis information and survey data.

SPATIAL DIAGRAM 1 - CENTRAL LOOPING PATH

This diagram displays a central looping path connecting the entry area to the large play area below. The layout of the path allows all users an equal ability to navigate the playground and affords good visibility of the entire area for parents and caregivers. The path has been designed to retain as many existing canopy trees as possible, while also responding to the natural rooms created within the spaces between these trees.

SUMMARY OF STAKEHOLDER INPUT

- The group responded well to this option, as it allows for easy access and visibility for all children and caregivers.
- Urban forestry staff urged designer to identify which existing trees are critical to retain. As a general rule, disturbance of 30% or more of the critical root zone will require tree removal. This is subject to variables such as proximity to tree trunk, type of construction and disturbance to multiple sides of the tree. Hand digging and mulch paths may be appropriate in sensitive areas.
- Maintenance staff asked that the designer be aware of existing/proposed trees adjacent to primary paths that drop gum balls, such as Sweetgum trees. It was also noted that these trees may serve a purpose for imaginative play in the right location.



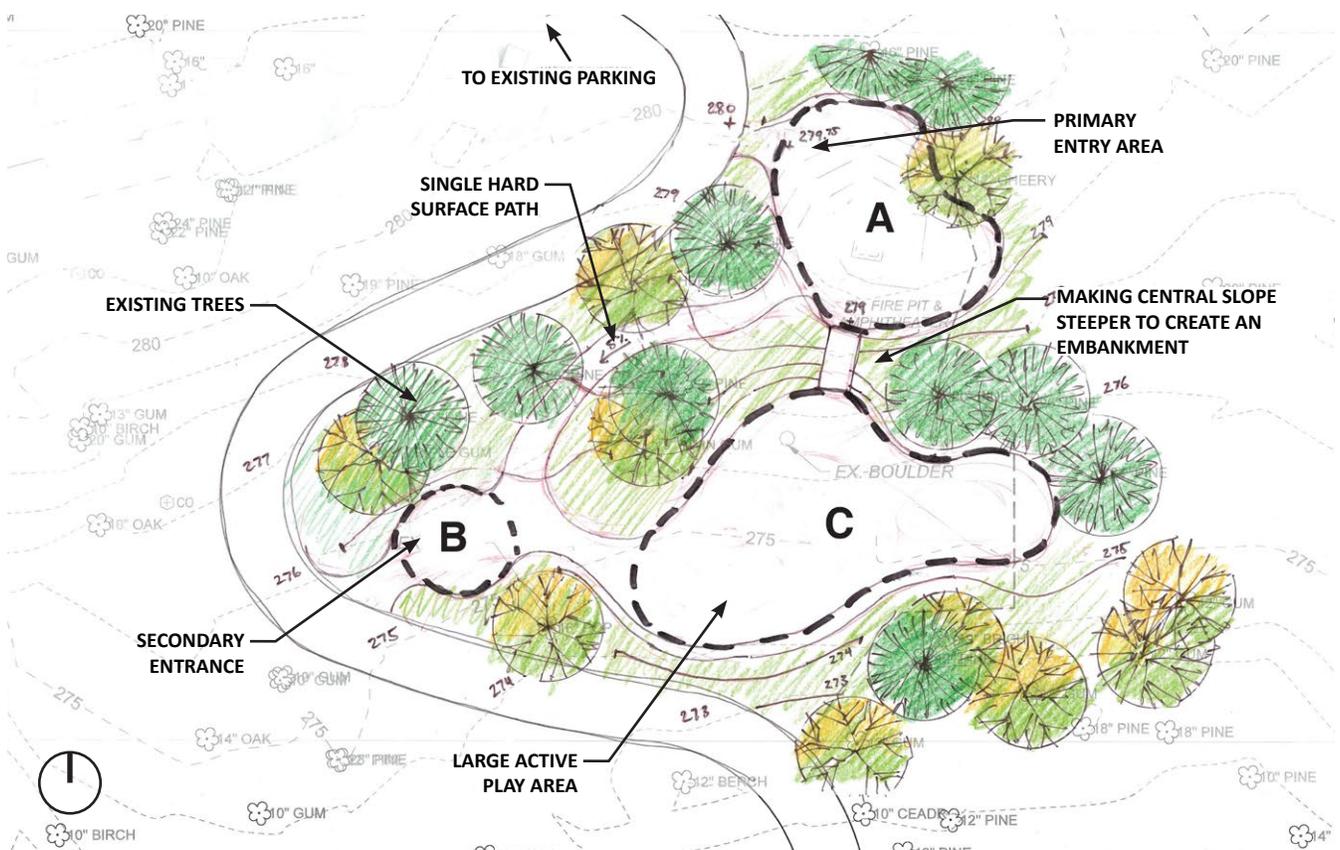
3.19 Spatial Diagram 1.

SPATIAL DIAGRAM 2 - LARGER OPEN SPACES

In this option, the topography has been manipulated to create two larger flat areas, separated by a 4' high embankment. This slope provides an opportunity to connect the two areas with an embankment slide. A single 5' wide accessible path connects the entry area to the large play area below.

SUMMARY OF STAKEHOLDER INPUT

- While staff liked to see large open play areas, there is some concern that visibility will decrease with the distinct level change
- Any stairs, steep ramps or slides would not be accessible to all children.



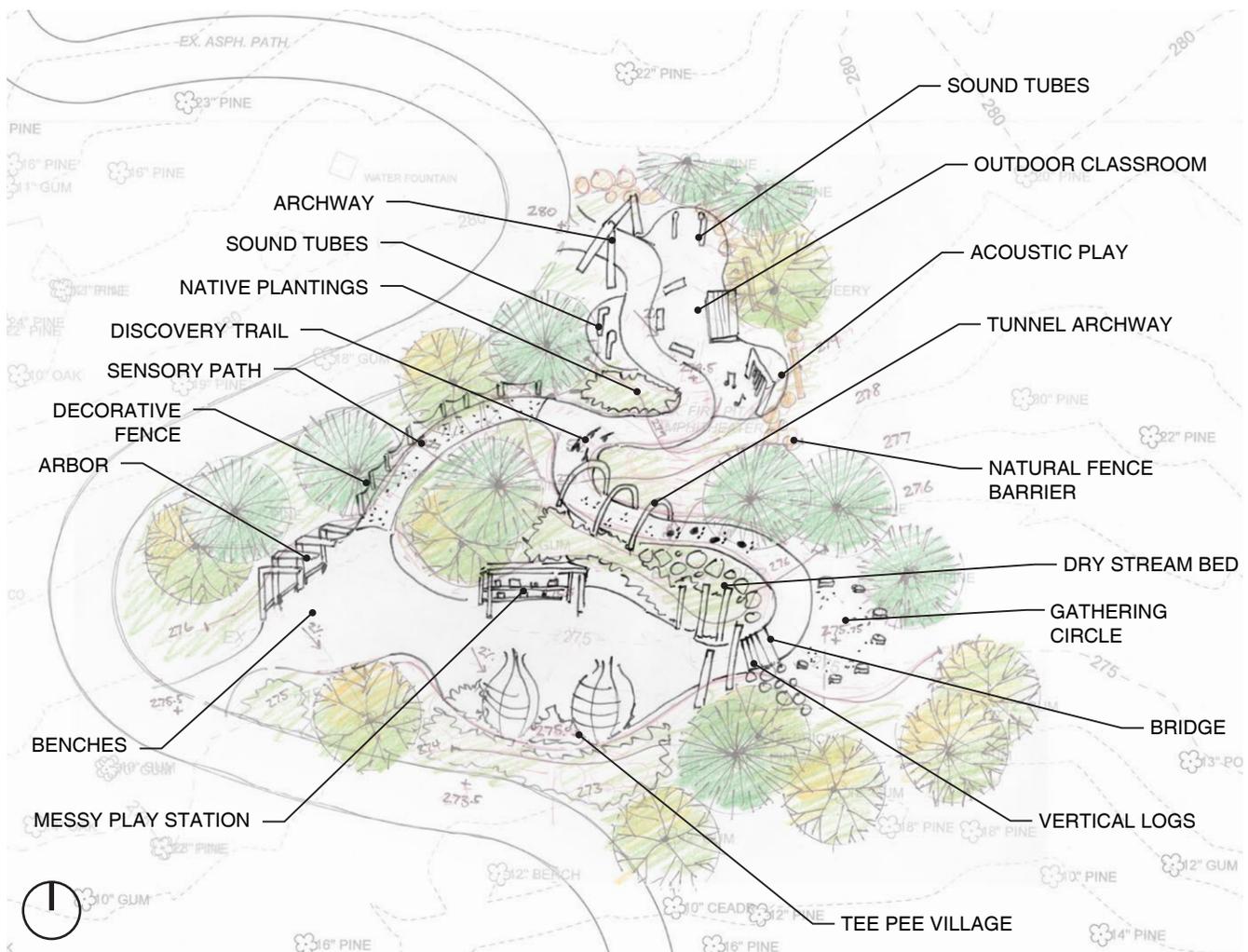
3.20 Spatial Diagram 2.

CONCEPT OPTION 1 - CENTRAL LOOPING PATH

Option 1 displays a central looping path. As shown below, an accessible 5' wide path connects the entry area to the large play area below. The layout of the path allows all users an equal ability to navigate the playground and affords good visibility of the entire area for parents and caregivers. Various play opportunities are situated along the path such as acoustic play, a tunnel archway, tee pee village and messy play station.

SUMMARY OF STAKEHOLDER INPUT

- Keep acoustic play away from outdoor classroom space.
- Structures and settings that allow limited mobility children to socially interact with able bodied children are encouraged.
- Messy play station should be easily accessible. Consider moving it closer to the existing trail.
- Native vines could be incorporated into the archway and tunnels, in keeping with the overall nature play theme.
- Staff liked the discovery trail and the overall 'snake' shape of the trail.



3.21 Concept Option 1.



3.22 Discovery Trail at White Deer Park, Garner, NC.



3.23 Tee Pee Village at Braithwaite Park, Western Australia.



3.24 Messy Play Mud Kitchen



3.25 Dry Stream Bed and Bridge at White Deer Park, Garner, NC.



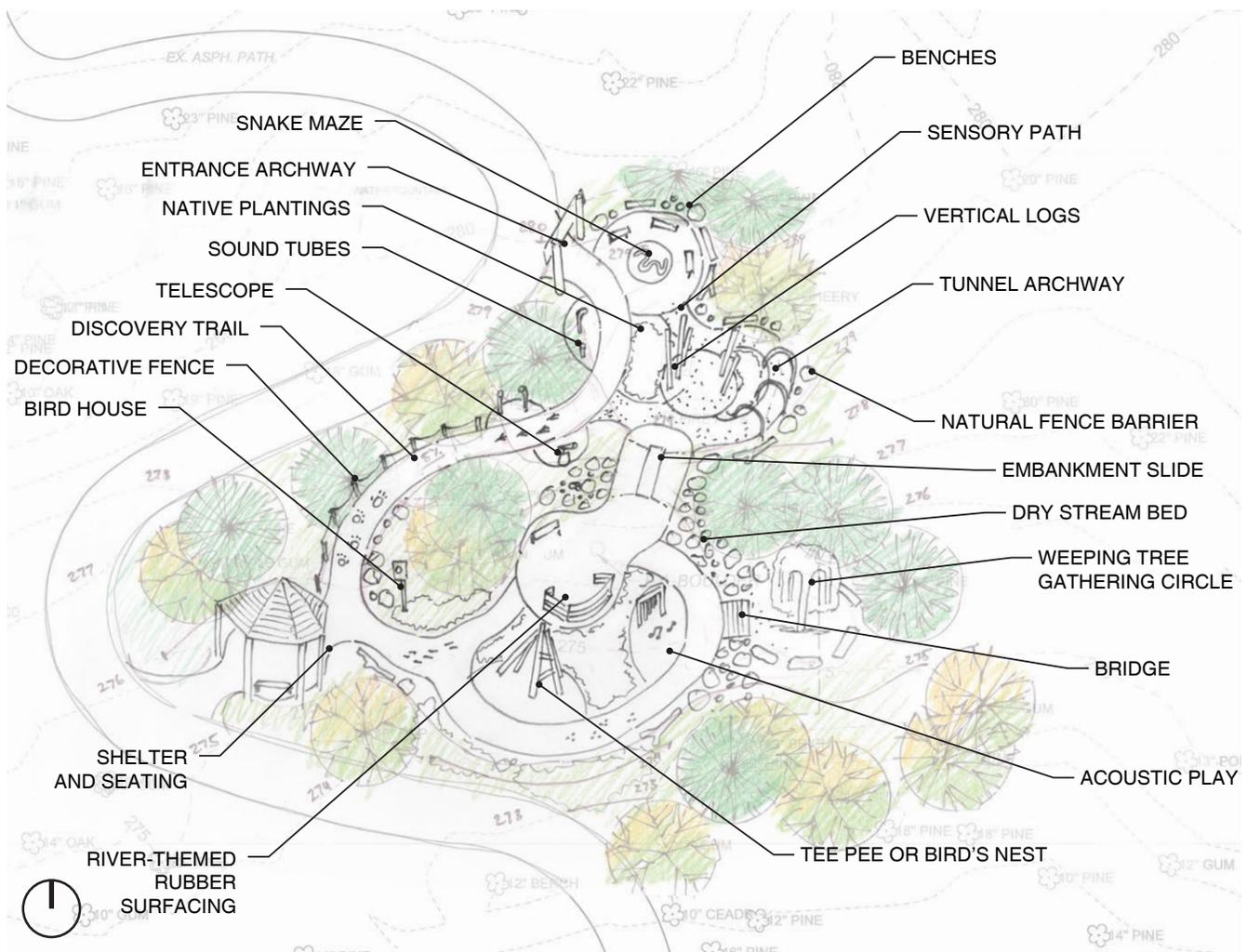
3.26 Native Plantings at NC State University, Raleigh, NC.

CONCEPT OPTION 2 - EMBANKMENT SLIDE

Option 2 displays an embankment slide as the primary play feature. The topography has been manipulated to create two larger flat areas, separated by a 4' high embankment. This slope provides an opportunity to connect the two areas with an embankment slide. A 5' wide accessible path connects the entry area to the large play area below adjacent to the existing trail.

SUMMARY OF STAKEHOLDER INPUT

- The group decided that the embankment slide was not appropriate for this site, due to the challenge to make the slide universally accessible.
- Park staff would prefer to see more natural materials and elements with an emphasis on creative, free play as much as possible.
- As shade was a big priority in the survey, staff liked the Gazebo structure. This structure could be simple, whimsical and made from natural materials. Note that the structure should be moved away from the primary access path.
- Boundaries should be clearly defined.



3.26 Concept Option 2.



3.27 Accessible Embankment Slides at Bunbury Accessible Playground in Bunbury, Western Australia.



3.28 Caregivers can interact with children in the Bird's Nest at Silver Falls State Park, Oregon.



3.29 Picnic Shelter at Blanchie Carter Discovery Park, Southern Pines, NC.



3.30 River-themed Rubber Surfacing at Harris Lake County Park, New Hill, NC.

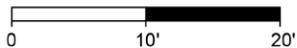
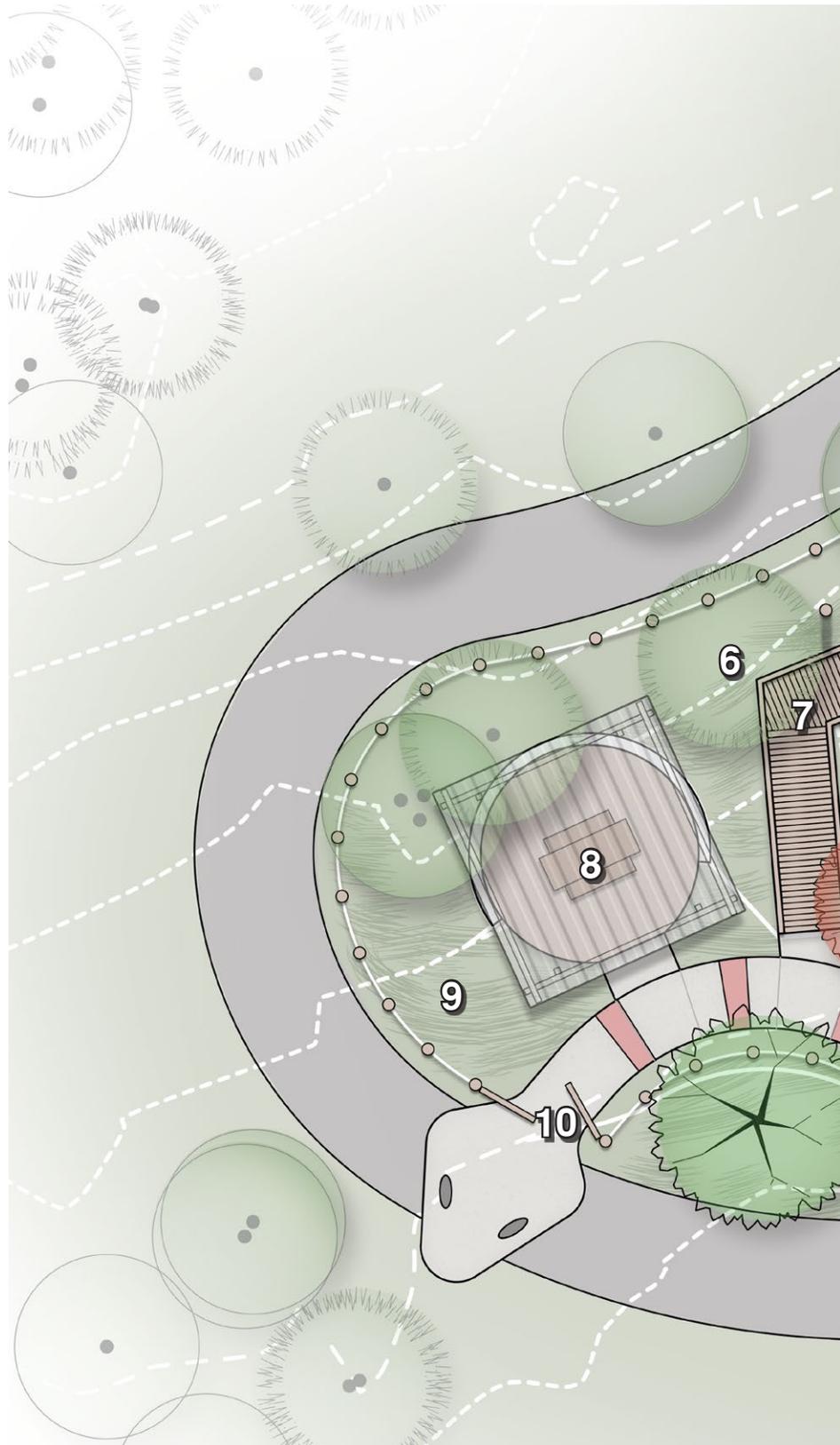


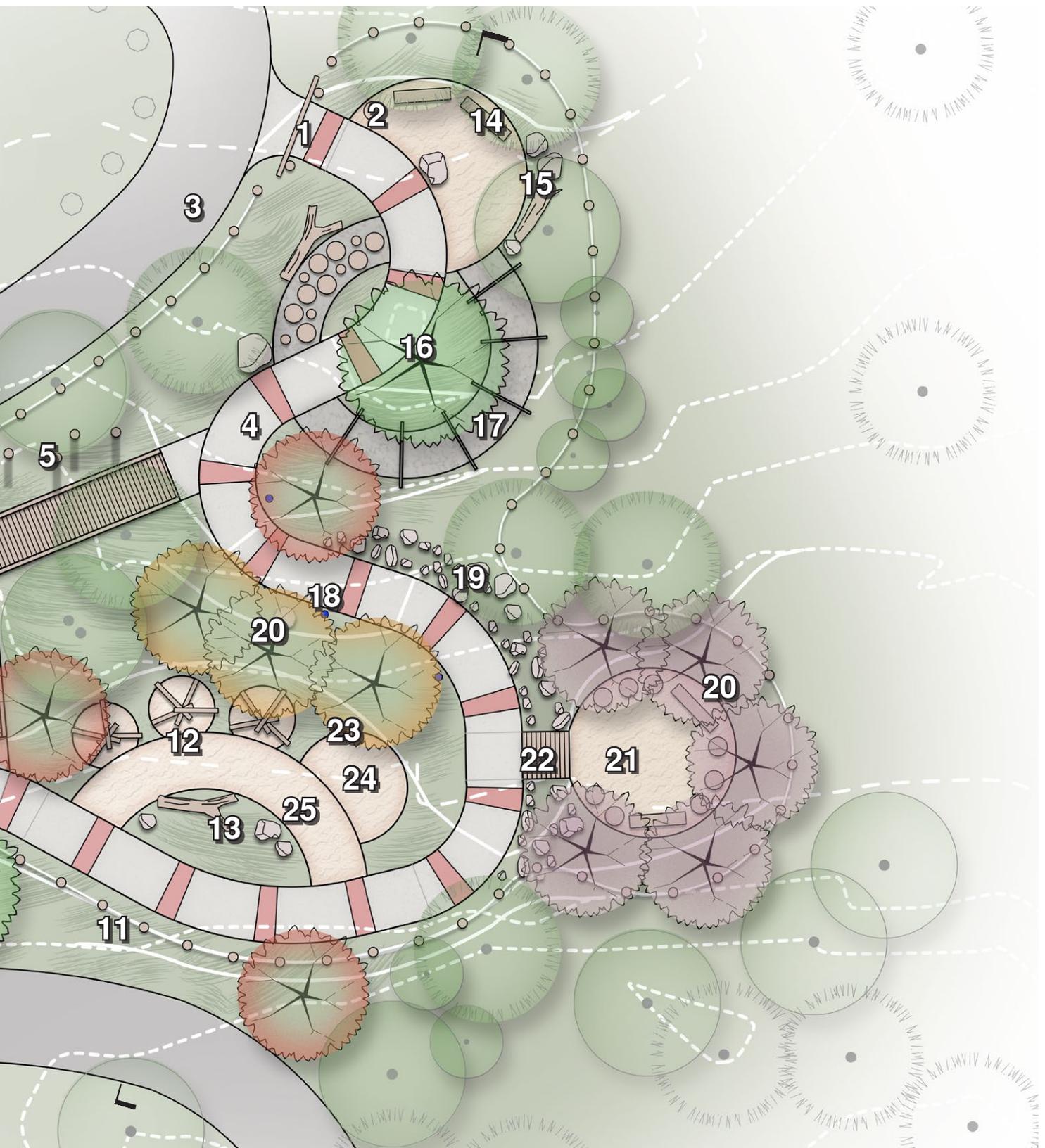
3.31 Acoustic Play at Library Story Park, Wilmington, NC.

FINAL CONCEPT PLAN

LEGEND

1. ENTRANCE ARCHWAY
2. WATER FOUNTAIN
3. EXISTING ASPHALT TRAIL
4. 6' WIDE CONCRETE PATH WITH COLOR SNAKE PATTERN
5. PAINTED VERTICAL TIMBER LOGS
6. EXISTING TREES
7. BOARDWALK DISCOVERY TRAIL
8. SHELTER WITH TABLE
9. NATIVE PLANTINGS
10. GATE
11. DECORATIVE FENCE
12. TEE PEE VILLAGE
13. LOGS & BOULDERS
14. LOG BENCHES
15. NATURAL FENCE BARRIER
16. CANOPY TREE
17. TUNNEL ARCHWAY ON GRIT PATH
18. SOUND TUBES
19. DRY STREAM BED
20. FLOWERING TREES
21. GATHERING CIRCLE
22. BRIDGE
23. HOSE BIB
24. MESSY PLAY STATION
25. CHAPEL HILL GRIT PAVING





4.1 Final Concept Plan.

CONCEPT PLAN NARRATIVE

The playspace design takes advantage of the site's natural character, featuring active play spaces in the flattest areas of the site, framed by the large existing trees. The primary serpentine path snakes through the site and links play settings and passive recreation spaces. The path works with the site's existing sloping typography to make an accessible connection from the primary entrance to the north, to the southern entrance below. A boardwalk discovery trail is suggested in the more sensitive natural areas adjacent to large existing trees. Bird houses, educational signs, artistic elements and native plantings adjacent to the path create a sense of exploration and are in keeping with the natural character of Durant Nature Preserve.



4.2 Boardwalk discovery trail.

TYPES OF PLAY AND PLAYSPACE CHARACTER

There are ample opportunities for directed and imaginative play, as well as a variety of gathering spaces aimed at accommodating large and small groups. Looping circuits encourage continuous movement to various settings within the playspace boundary. The central snaking path, tee pee village and messy play area promote social and imaginative play, while the discovery trail, sound tubes and tunnel archway stimulate tactile, visual and audible senses.

A hose bib has been shown adjacent to the messy play area. A water line will need to connect from the existing drinking fountain.

Native plantings have been proposed to encompass the play area to provide educational opportunities and to stimulate the senses. The playspace should feel like an extension of the existing garden spaces within Durant Nature Preserve, and reflect the natural character of its context.

SEATING AND SUPERVISION

Both formal and informal seating opportunities for parents and guardians to view play areas have been distributed throughout the proposed play area. Park benches and picnic tables are recommended at the entrances to the playspace, while timber logs, stumps and boulders provide informal seating while also adding to the playspace's natural aesthetic.

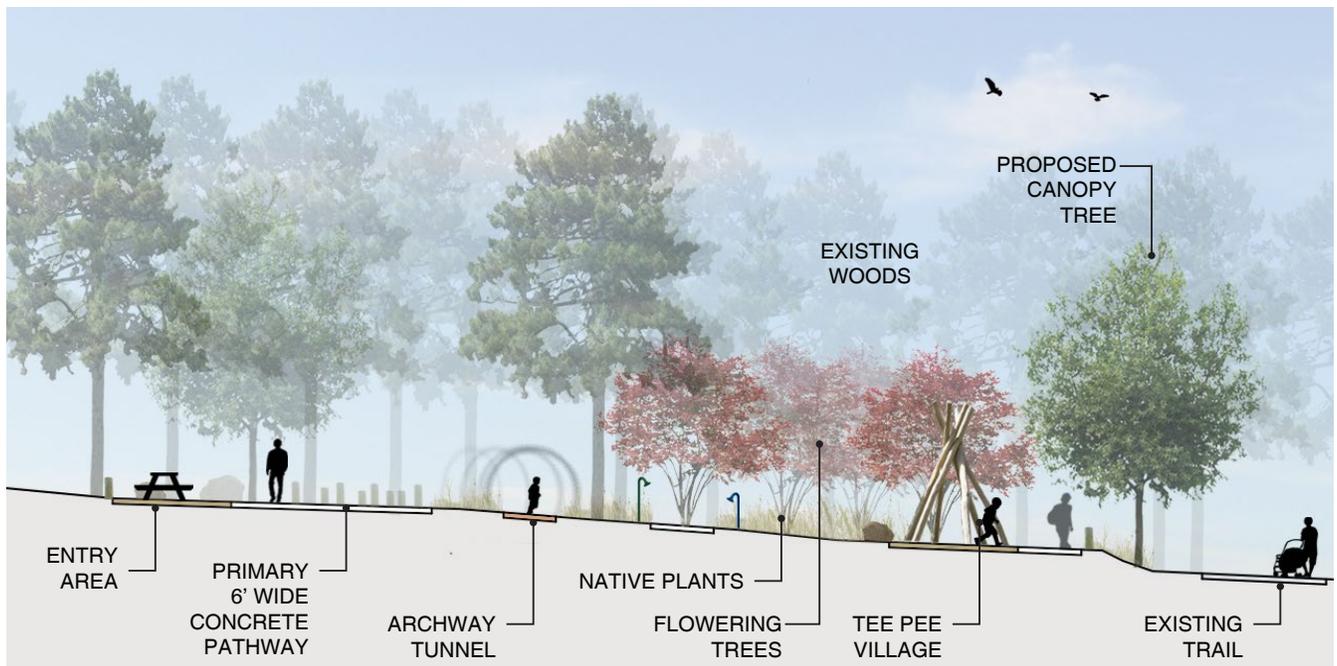
The central location of the primary path affords good visibility of entire play area, allowing guardians to keep watch of their kids from most vantage points.

SHADE

A small overhead canopy structure is suggested adjacent to the secondary entrance. A wheelchair accessible picnic table is proposed under this shade structure. Existing canopy trees will also provide shade throughout the playspace. Where existing trees are to be removed, new canopy trees such as oaks and maples are recommended.



4.3 Southern entrance to playspace.



4.4 Play settings have been integrated into the natural topography of the site.



4.5 Play settings are linked together by the primary accessible path.

PLAYSPACE BOUNDARY

A low decorative fence runs provides a defined boundary to the playspace. Natural fence materials such as logs and boulders also frame the edges of various play settings. This prevents kids from running away into the wooded park area but also affords them freedom to navigate the enclosed playspace independently. Low plantings can also be used to define spaces, which allows children to focus on their play setting.

SURFACING AND ACCESSIBILITY

Hard surface materials have been chosen to ensure all play areas are accessible to mobility challenged children. An array of paved surfaces including grit stone, brick, concrete and composite timber decking are recommended to stimulate tactile senses.

The boardwalk should have a toe kick railing. Any transitional surfaces should be smooth flush concrete. The snake pattern in the concrete path should be stained with a tactile imprint to give it a natural texture. Chapel Hill grit stone paving with a binding agent has been recommended for large open play areas.



4.6 The snaking primary path.

PHASING

Installing the accessible concrete path is the first priority for developing the playspace. This will require select tree removal and demolition as well as grading work to provide accessible slopes for the path and flat areas for future play settings. Grading and site preparation for future play spaces should also be considered part of the first phase. The path, even without additional play settings, runs through a natural area with large existing trees. This path is the skeleton for future playspace development.

Adding flat, hard surfaces and seating areas to the playspace will be an important second phase. The priority should be to develop the entrance area, where the existing amphitheater is located, as it is already flat and cleared.

Larger structures such as the picnic shelter and boardwalk may come in a future phase, depending on funding for custom features.

PERMITTING

Permitting from the City of Raleigh will be required for the construction of the play space. As this project will be funded by PRCR, it will qualify for internal sketch plan review with City of Raleigh Development Services. This process will help to determine the actual permit requirements before permitting will begin.

City of Raleigh Permitting

- *Administrative Site Review (ASR)* followed by a *Site Permit Review (SPR)*
 - If both reviews are required, it is possible these can be submitted concurrently. Timetable should allow for the likelihood of 3 review cycles, therefore a 2 to 3-month approval is to be expected.
- *Tree Conservation Permit*
 - A tree survey, within and adjacent to the defined limits of disturbance, identifying all trees 3 inches diameter at breast height (DBH) and greater is required. All trees 10 inches DBH and greater within 10 feet of the limits of disturbance cannot have more than 30% of the critical root zone (CRZ) impacted. The radius of the CRZ is determined by DBH multiplied by 1.25.
- *Stormwater Impact Analysis*
 - Although a Stormwater Permit will not be required, as the project requires less than 12,000 square feet of land-disturbing activity, a Stormwater Impact Analysis may need to be performed in order to prove the playspace will have no negative impacts to the existing stormwater infrastructure on site.

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Concept Plan Report



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