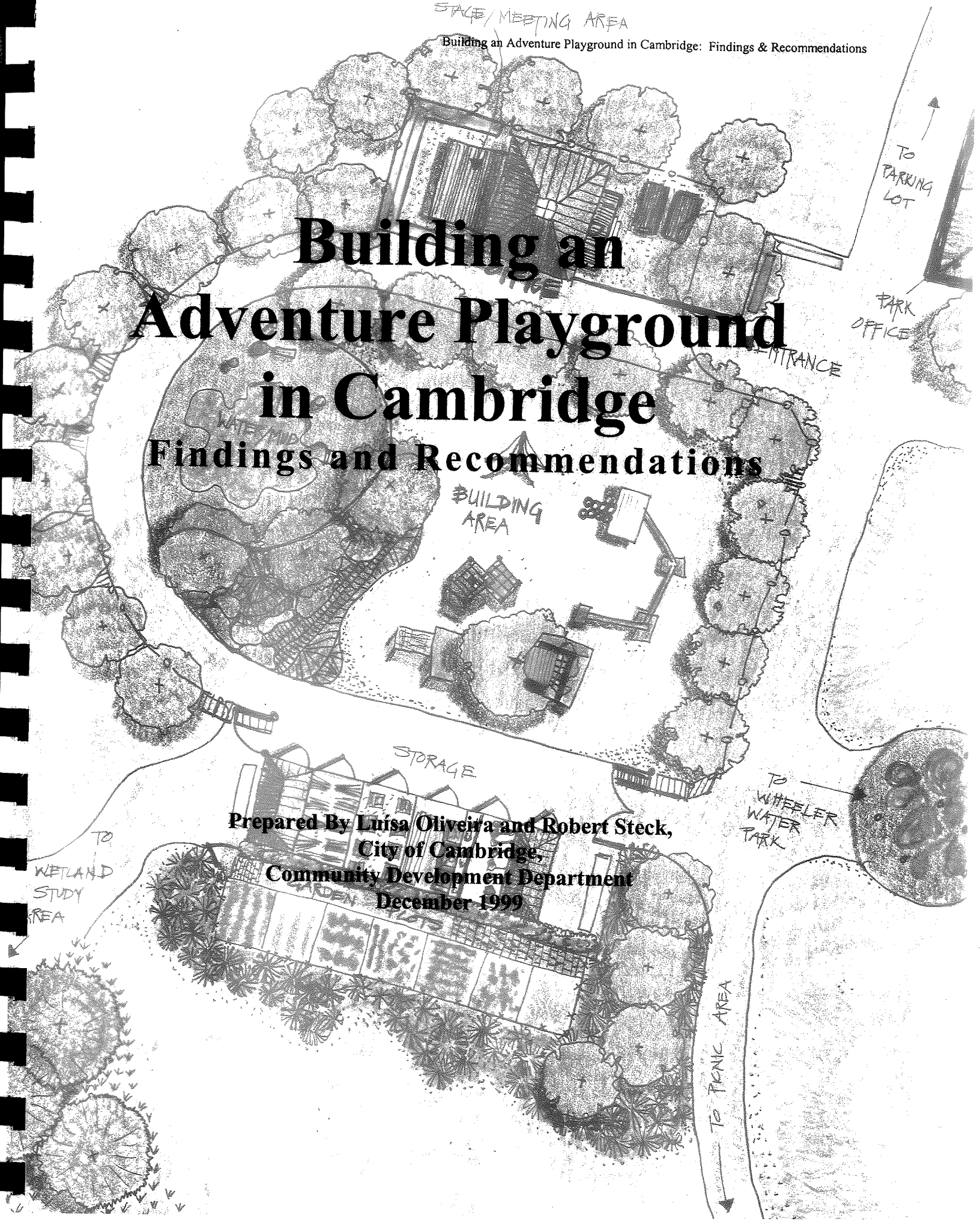

Building an Adventure Playground in Cambridge

Findings and Recommendations

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I. Summary

Report: The Adventure Playground

Play is a vital part of a child's life. Children develop through play while interacting with the environment and their peers. Cambridge has always shown a strong commitment to its children, their development, education and recreation. An innovative play-learning environment, such as an adventure playground, would continue this tradition.

The adventure playground maximizes the benefit of urban open space by recapturing some of the magic and excitement that "wild" places can provide. It is staffed by an adult play leader who assists kids and assures their safety, but does not dictate their play. The children are provided with raw materials and tools and they decide what they will build and how it will be done. The benefits of the adventure playground are that it can:

- develop problem solving skills
- facilitate cooperation and teamwork
- teach kids to socialize and settle disputes with peers from diverse backgrounds
- teach kids to assume the responsibility that comes with freedom in play
- be used to teach lessons in math, biology, physics, art, construction, etc.
- be adapted for kids with special needs

For all children, adventure playgrounds teach children valuable lessons and build self-confidence.

If this is such a beneficial experience, why don't more of these playgrounds exist? There are three main obstacles to building an adventure playground:

- **Adults perceive it as unsafe.** Studies have shown that an adventure playground is actually SAFER than a conventional playground. It is always staffed by an adult play leader, there are small groups of kids, and they are engaged in trying to accomplish a goal.
- **It can be unsightly.** Creating can be messy and neighbors do not want to have these disorderly lots in their neighborhood. But adventure Playgrounds can be designed to be a community asset and architecturally pleasing.
- **Liability.** Many municipalities are hesitant to build adventure playgrounds because they fear it could result in lawsuits. Actually, an adventure playground is no different from the situation in any of the City's playgrounds or programs. Kids are using tools, but there is adult supervision and children know that there are precautions and rules. A program that is carefully designed and controlled could protect against unforeseen lawsuits.

The positive benefits of an adventure playground far outweigh the negative. As the City's diverse communities grow, it is important to develop and nurture our future generations. Adventure playgrounds remind us all that, **"the child who plays more vividly, and subsequently feels it was fun, has more optimism, more confidence, and is better able to get on with his task of learning about man, society, culture and community."** [1]

[1] Brenda Fjeldsted, Journal of the Canadian Association for Young Children

Summary

Next Steps: The Advisory Committee

An advisory committee should be formed to further the process of building an adventure playground in Cambridge. This group should be composed of individuals from various City departments, as well as residents, parents and experts interested in children's issues. The committee would work cooperatively drawing from the expertise of City departments and individuals to create an interdepartmental team.

An example committee could be composed of individuals from:

Human Services Department
Cambridge Schools
Recreation Department
Parent's Groups
Neighborhood Groups

The interdepartmental advisory committee could meet every two weeks to achieve the following goals:

- Meet with City officials to continue the process of securing funding and support for constructing facility, operation and maintenance costs.
- Select a site. This would require an evaluation of the natural factors of the site as well as the cultural factors of the surrounding neighborhood. As detailed in the SITE STUDY section of this report, an assessment of various parks or undeveloped parcels of land would need to be carried out to determine the appropriateness of a potential site. The physical features of the site, its accessibility to the most children, as well as the neighborhood's support would all need to be analyzed and discussed.
- Research and write grants to secure funding for operational costs, maintenance expenses, educational and creative programs and additional staffing.
- Hire a qualified play leader and assistants as needed. Interview and assess the qualifications and experience of a play leader who would be responsible for the oversight and management of the playground.
- Involve schools and other City or community programs and groups in developing a range of play/learning activities and the projects and materials to facilitate them.
- Develop a preliminary schedule of who will use the playground during school, after school or during school vacations, etc.
- Develop rules of operation for staff and children including conduct, safety and site security procedures.

To assure that this project moves forward, it is important to create a committee of individuals who are enthusiastic and informed. With the work and dedication of an interdisciplinary team from the City as well as residents and parents, the adventure playground will move closer to becoming a reality.

II. Findings and Recommendations

1. Introduction

Can you remember how and where you played as a child? Most likely, you and your friends discovered a place where you could build a fort or clubhouse, pretend to run a store or kingdom or just hang out. Today, these magic places are almost nonexistent. Where do children in the city go to build, pretend and direct their own play?

As development threatens open space in many cities, the thoughtful planning of open space use becomes ever more crucial. In children's playgrounds, space must be used in an innovative and creative way to assure that children are provided with opportunities for more than physical activity. Adventure playgrounds teach valuable social and problem-solving skills to kids while fostering imaginative play in a supervised, but not completely controlled, setting.

Cambridge has a long tradition of innovative play and learning environments. Known as a leader in children's issues, the City has dedicated plentiful resources to assuring that children in Cambridge have places to play that are safe and interesting. To continue the practice of innovative parks and playgrounds, a summer intern examined the feasibility of building an adventure playground in Cambridge. What follows are the research and recommendations gathered during this period of time.

2. What is an Adventure Playground?

An adventure playground provides the opportunities for children to discover and build. It is an open space with few or no play structures, separated from the street by a fence, wall or plantings. Within the site there is a storage structure containing materials (wood, sand, water) and tools (hammers, shovels, buckets) for children to use. It is supervised by an adult play leader who has experience working with children, knowledge about construction and sound management skills. The play leader teaches the children how to use tools, helps them solve construction problems and assures their safety. He/she does not, however, direct the children's play. The children decide what they want to build, plan how they will do it, organize their materials and skills, build it and play on it. From imagining it to playing on it, the kids are learning valuable skills while shaping their own play space. Adventure playgrounds differ from conventional playgrounds in that they are supervised, always changing and child-directed.

3. An Adventure Playground in Cambridge

Cambridge has dedicated innumerable resources and energy to assuring that children in the City have the services and programs they need. The dedication to children from City departments has made the City a leader in innovative and educational programs. An adventure playground in Cambridge would continue the tradition of commitment to children and open space. An adventure playground provides children with the type of experiences that urban children lack-freedom in play in a natural environment. It also maximizes the benefits of open space by providing opportunities for experiential learning and development.

How could it work?

The adventure playground could be run as a summer, school or after-school camp. To assure that there are appropriate sized groups using the playground, the play leader would coordinate when a group would use the site. For example, Ms. Parker's 5th Grade science class from Happytime School could "reserve" the playground for two weeks. Everyday, the class would come in and with the guidance of their teacher and the play leader, they could work on building a windmill to generate electricity and study electrical currents.

In the summer, John Smith from the City's Human Services Department could reserve the playground for a week-long art camp. Or a neighborhood kids club could spend three weeks planning, designing and building their very own village at the playground. With the departure of each group, their projects would be demolished and salvageable materials could be reused.

The control of the number of children using the playground at one time, the age-appropriateness of the activity and the adult supervision would be coordinated by the play leader and the parents, camp counselor or teacher. This would assure the safety or the children and the security of tools and materials.

4. Key Issues

There are, of course, a number of issues concerning the building of an adventure playground in Cambridge. What follows is an attempt to address preliminary concerns:

A. Safety

An adventure playground, like all playgrounds, must put the safety of children before any play goals. This safety is assured by the play leader. The play leader assures that the children are able to handle tools and build safely. He/She would cater activities to specific age groups or groups with special needs. To maximize the attention given to the children's safety, small groups of children would need to use the playground and it would need to be properly secured while not in use. Studies have shown that adventure playgrounds are as safe or safer than conventional playgrounds because of the adult supervision and creative nature of play.[2]

[2] Wilkinson p 26, Eriksen p 138, *see research report*

B. Community Support

While no survey has been done of parents or children in Cambridge, in informal discussions, meetings and presentations with individuals who are involved in education or child services, a strong interest has been expressed in this alternative type of play environment.

Two groups of people were approached:
1) Those who work with children in Cambridge and 2) those who know about play, child development or education. For the first group, an explanation and presentation on adventure playgrounds was given and individuals were asked if such a resource would be of value to the children they serve. For the second group, the focus of discussions was on their past experiences with building alternative learning environments, their expertise on experiential play or child development and their project initiation experiences. All of these discussions proved that people from both groups are very interested in this idea and saw the playground as a beneficial resource for the City.

Among the individuals surveyed:

Margarita Alvarez, Principal , Longfellow School
Jim Conry, Director, School Department
Fred Druck, play equipment manufacturer and member of the International Play Association of North America
Paul Gauthier, South Hadley Recreation Department, Project Initiator for Skate Park
Lynne Hall, Cambridge School Department
Kitty Kramer, Children's Services
Jackie Neal, Human Services, Committee for Children
Eva Peterson, consultant who has worked on experiential learning projects, Education Professor at Leslie College
Paul Ryder, Recreation Department, City of Cambridge
Rozlyn Shoy, Human Services, City of Cambridge
Julie Stone, Boston Schoolyard Initiative

From the above conversations, it became quite clear that there are parents groups, community members, artists and child advocates who would be interested in becoming involved and perhaps volunteering in the effort to build an adventure playground.

C. Liability

An adventure playground is similar to other parks in the City. Existing programs conduct the same type of activities with children throughout the City. The program would need to be carefully designed and a formal review by the City's Law Department would be conducted. Control of who uses the playground and adequate supervision are crucial to preventing accidents. The play leader position is the most vital in terms of assuring safety and this individual must be chosen with care.

D. Design

Because of the messy nature of the adventure playground, the design must be sensitive to the desire for neatness expressed by neighbors and abutters of other adventure playgrounds. Park edges may need complete visual barriers, such as thick plantings or fences. Additionally, adequate and secure storage and office structures must be designed as part of the playground. The playground can be aesthetically pleasing while allowing for creativity by its users. (see Site Studies Section for example plans.)

E. Funding

The cost of designing and constructing an adventure playground in Cambridge would be comparable to the typical design and construction costs of other parks. The operational costs of the playground include the play leader's salary and the costs of materials. These operational costs would need to be renewed yearly. A preliminary list of available grants and estimated budget follows:

Possible Funding Sources

Cambridge Based Sources *

- Bruner Foundation, Inc.
- Cambridge Community Foundation
- Commonwealth Energy System Giving Program
- Fanny & Leo Koerner Charitable Trust
- The Arthur D. Little Foundation
- Lotus Development Corporation Philanthropy Program
- Polaroid Foundation, Inc.

Federal Grants

- National Park Service: 15.919 Urban Parks and Recreation Recovery Program
- Department of Education: 84.287 Twenty-First Century Community Learning Centers
- Department of Education: 84.215 Fund for the Improvement of Education
- Department of Education: 84.283 Comprehensive Regional assistance Centers
- Department of Housing and Urban Development: 14.218 Community Development Block Grants/ Entitlement Grants Department of Health and Human Services: 93.631 Developmental Disabilities Projects of National Significance

A number of additional grants exists under which the adventure playground could secure funding. Additional research must be done on these and other funding possibilities.

* grants giving activities exceed $200,000

Estimated Budget

DEMOLITION AND SITE PREPARATION	remove asphalt, excavation and grading	$10,000
DRAINAGE/ UTILITIES	water source and drains, security lighting, alarm	$30,000
WALKS, CURBING AND SAFETY SURFACING	internal walks, at entry and for truck access	$40,000
PERIMETER FENCE AND LANDSCAPING BUFFER	high fence or wall, landscaped area in front of wall or fence	$80,000
STORAGE SHED/OFFICE	for securing building parts, materials and tools	$70,000
TOOLS & EQUIPMENT	hard-hats, hammers, other building tools	$10,000
*MATERIALS	for building, painting, etc.	$20,000
*MAINTENANCE	maintaining plantings and structures, clean-up	$10,000
*PLAY LEADER	salary	$30,000
TOTAL		$300,000
20% CONTINGENCY		$60,000
		$360,000

* Operational costs - renewed annually.

F. Location

No location has been selected; however, two examples have been chosen for the purpose of estimating costs and examining design issues. They represent two very different sites, one in a busy, central neighborhood and the other in a large, natural park. Both enjoy heavy usage throughout the year. What follows is a Site Study of each site and example conceptual designs.

Site Study: Harrington School and Danehy Park

1. Site Overview

Charles G. Harrington Elementary School

The Charles G. Harrington Elementary School is located on Cambridge Street in North Cambridge between Willow and Berkshire Streets. Behind the school, the building forms a three sided courtyard facing southwest. This courtyard area is the possible site. It is adjacent to the totlot and playground and the Frisoli Youth Center to the west, with basketball courts and Donnelly Playing Field to the south. The East Cambridge branch of the Cambridge Public Library is connected to the school. (see contextual plan)

The site is located in a busy neighborhood and playground. There are possible connections to the school, the Youth Center , the library and the neighborhoods. The neighborhood is an ethnically diverse one with the school serving as the hub of children's activities.

Presently the site is covered in bituminous concrete except for a fenced-in square where a swingset stands.

Mayor Danehy Park

Mayor Danehy Park is located in West Cambridge between Sherman and Garden Streets. The possible site is located in the North corner of the site abutting the park office and the northern parking lot. St. Peter's field is to the East and Roethlisburger Memorial Park is to the southeast. Athletic fields, playgrounds and a nature area lie to the west of the site.

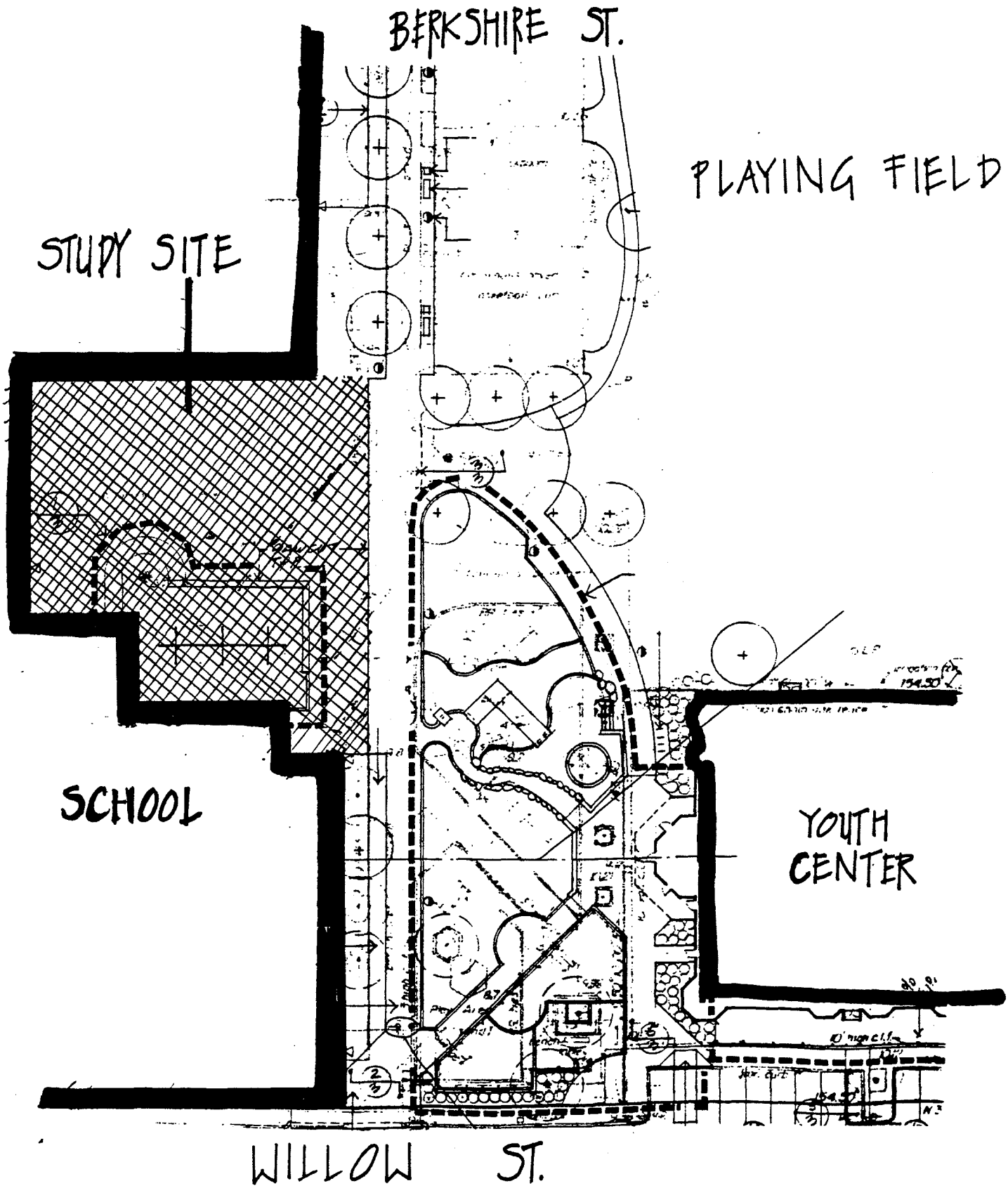
The site is located in the largest park in Cambridge. There are opportunities to connect directly to nature study areas, the Wheeler Water Park and numerous athletic fields. The site is set away from any residential properties in a natural environment surrounded by meadows and wetlands.

Presently the site consists of a playground with play structures on bark mulch. This playground is due to be renovated.

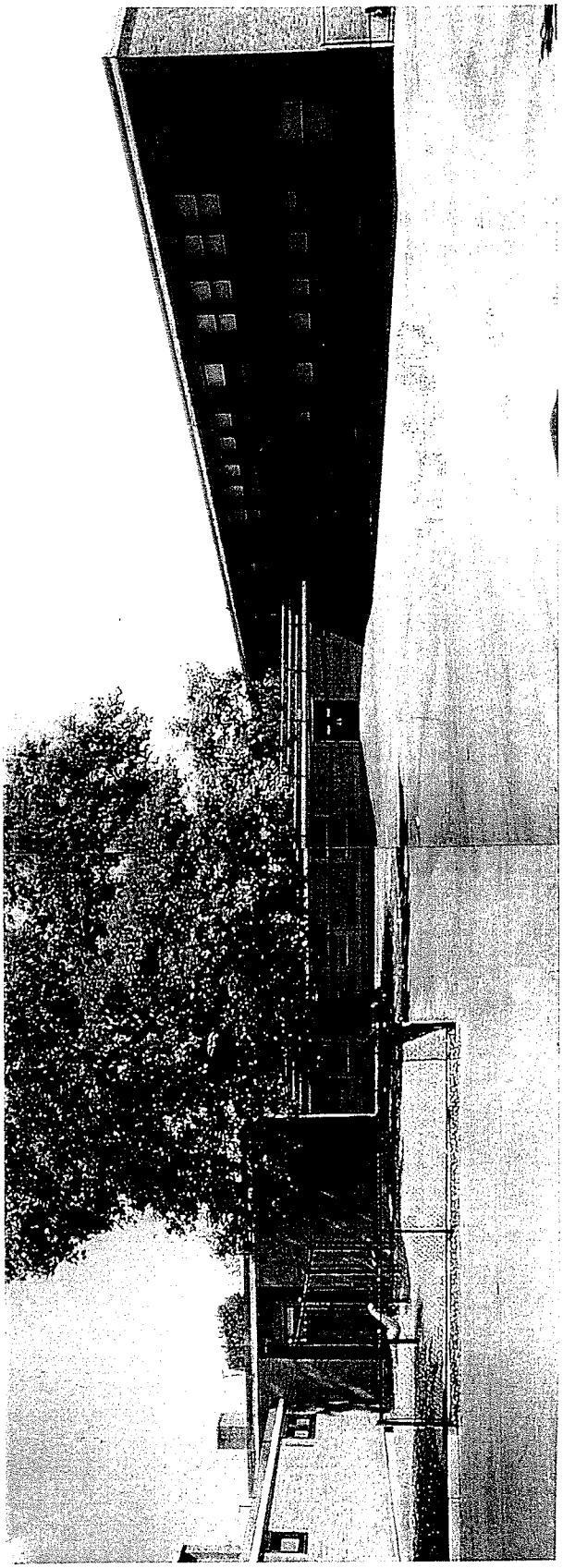
2. Site Comparison

	Harrington School	Danehy Park
Location	Behind the school, in 3 sided courtyard opening up to athletic fields and Frisoli Youth Center	Near park office in southeast corner of park, meadow and wetlands study areas and water play area
Approx. size	110' X 90'	80'x 65'
Site conditions	Partially enclosed, sunny with a large sycamore tree in middle. A swing set has been placed on left corner (see site plan)	Partially enclosed, away from residential properties, sunny and natural area (see site plan)
Electrical	yes	yes
Water	yes	yes, Wheeler Water Park
Surrounding structures	school building and Frisoli Youth Center	Park office building
Nearby playgrounds	totlot, playground, athletic fields and basketball courts	totlot, playgrounds, athletic fields
Possible storage	within school building with need for storage structure	need for storage structure
Possible play office	within school building or separate structure	within office building or separate structure
How would AP fit with surroundings	Could be locked up and used by school, could be shared with youth center for programs for younger kids	Could be locked up and used by neighboring schools, possibility of West Cambridge Youth Center in the future
Ground cover	Tarmac	bark mulch
Equipment	Existing swingset	Existing play equipment
CON's	problems in past with vandalism, building access, no natural features	summer & after school transportation is a problem
PRO's	very used park situated in a residential neighborhood with many children, connection to school and to youth center	large space with opportunities to connect to nature study area, Tobin, Montessori and Friends Schools nearby, possible youth center in the future

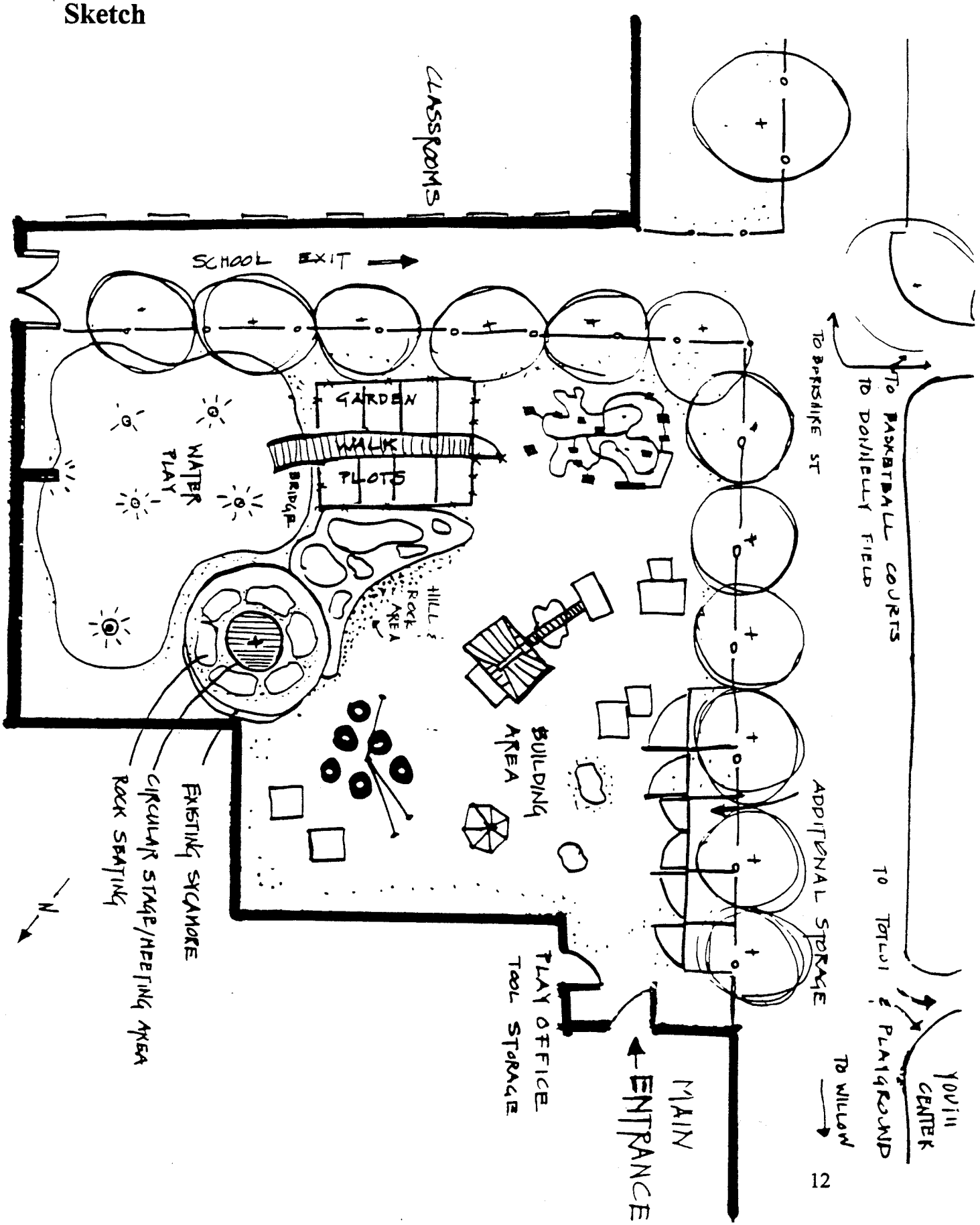
3. Example I : Harrington School Contextual Plan



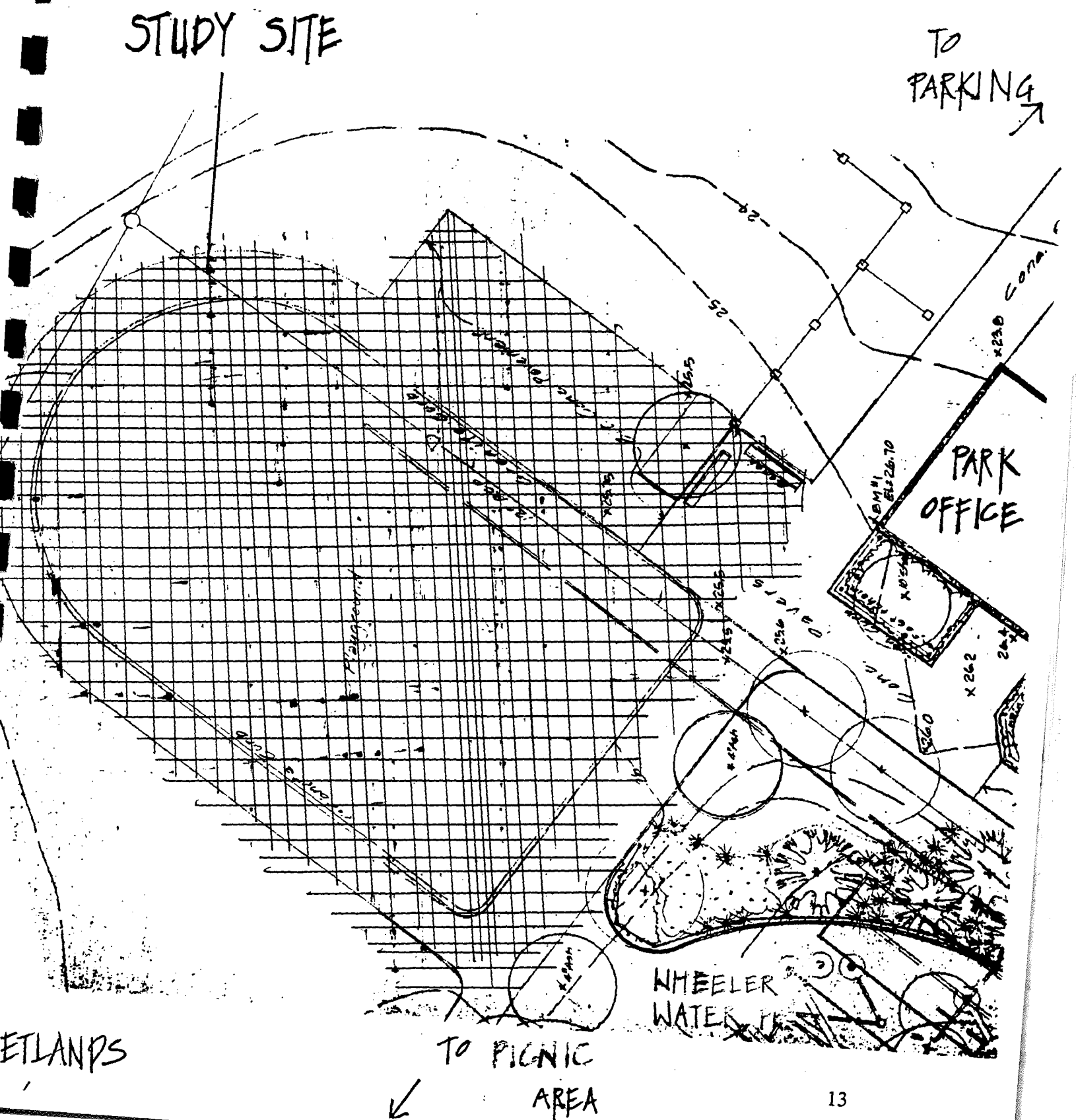
Example I: Harrington School Existing Conditions



Example I: Harrington School Adventure Play Concept Sketch

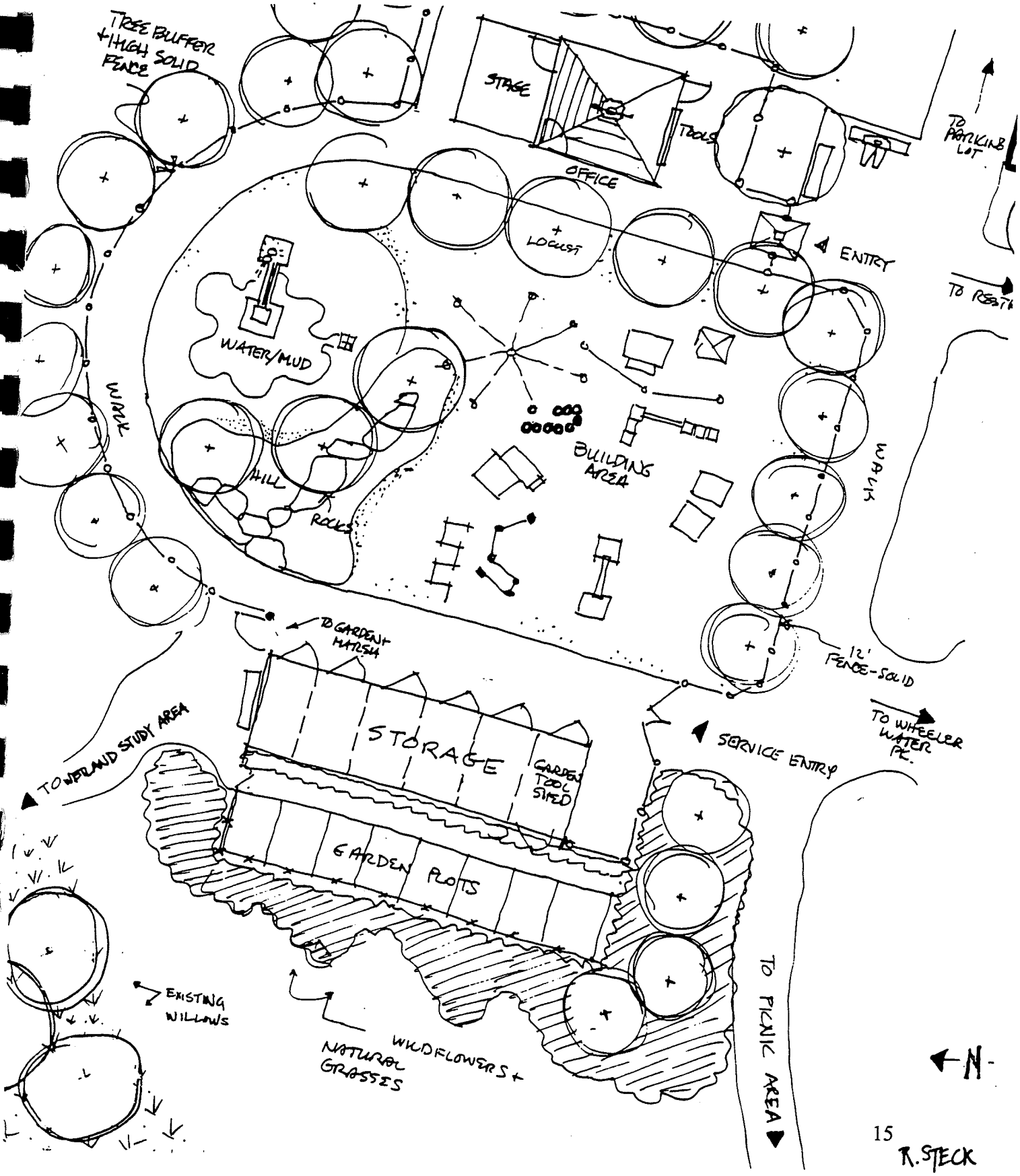


4. Example II: Danehy Park Contextual Plan



Example II: Danehy Park Existing Conditions

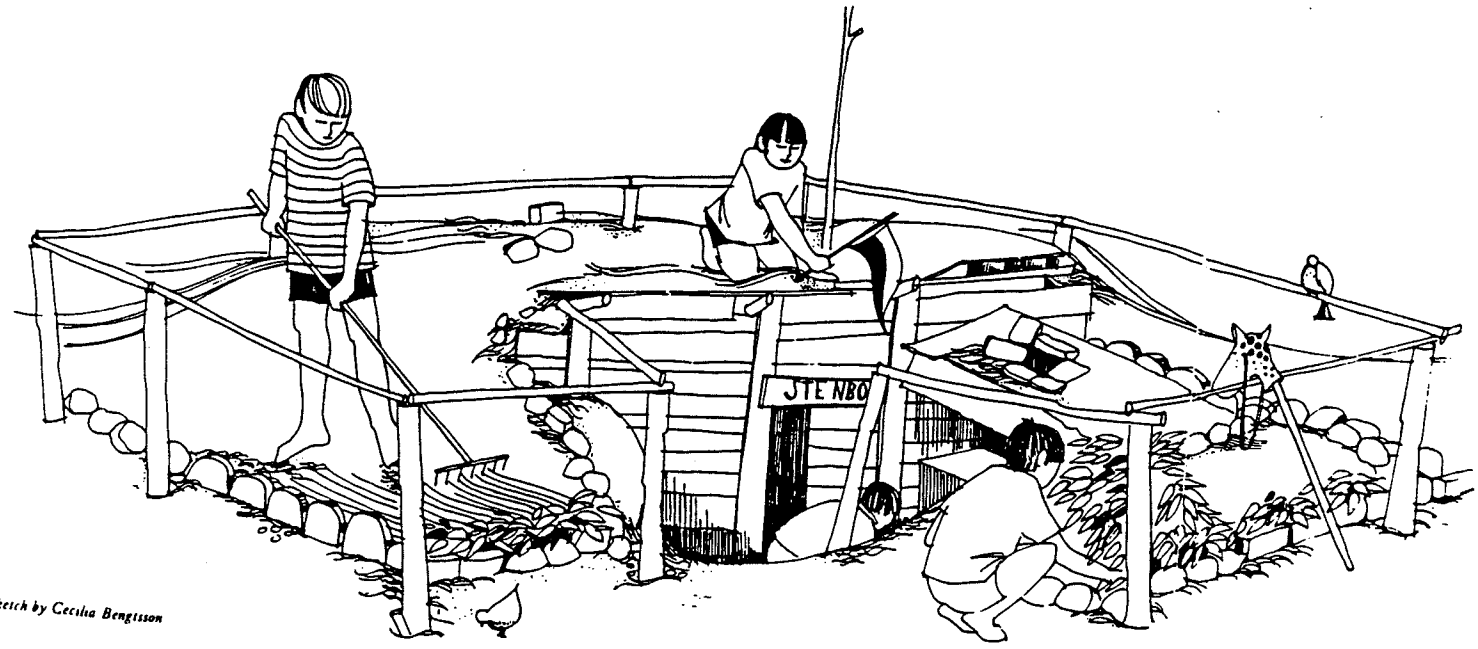
Example II: Danehy Park Adventure Play Concept Sketch



R. STECK

II. Research Report

The Adventure Playground:
For Children, By Children



sketch by Cecilia Bengtsson

August, 1999

Prepared by Luísa Oliveira
City of Cambridge, Community Development Department

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This report is based on a research paper for the Department of Landscape Architecture and Regional Planning, University of Massachusetts at Amherst

Introduction

With the worries of modern parents about their children's safety and the proliferation of litigation surrounding the building of play environments for children in present society, playgrounds have become so regulated that they are often lack any excitement or adventure for children. In cities across the United States, the small amounts of open space delegated for children's use and the decline of undeveloped land has created a need for play environments that are both productive and interesting for kids. Adventure playgrounds are one alternative to the conventional playground that can meet the need for stimulating play environments while providing a safe and exciting experience.

Historic Background

The history of playgrounds in America has been driven by two main concerns: safety and physical recreation. Responding to the critiques of social reformers as early as 1887, efforts were made to take children out of urban streets where they were in danger of traffic, immoral influences and the menace of strangers. [3] Creating areas in the city where children could be watched and controlled by adults was seen as an important social good. By 1907, "the Playground Association of America called public attention to the need for organized play, and manufacturers rushed in to fill the void."[4] The result was a proliferation of concrete, and often hazardous, equipment aimed at exercising a child's muscles. In the 1950's and 60's, novelty and mass-produced concrete objects filled playgrounds causing playground safety to become a growing concern by the 1970's. The government was forced to step in and establish safety guidelines for the design and building of playgrounds. The decade of the 80's witnessed an attempt at change with the invention of "community built" playgrounds favoring wood instead of metal. To this day, however, playgrounds in the United States consist of mainly the same designs and equipment as their predecessors, with some attempts made to prevent accidents incurred during physical play.

The Concept of "Play"

The lack of innovation in playgrounds, may stem from the very concept of play held by adults. "Play" is seen as an hiatus from school, responsibility and learning. It is a time for children to run, scream and release some of the energy that can be difficult for adults to manage if not allowed expression. While physical exercise becomes more vital as children hide behind computer screens, video games and televisions, prefabricated equipment and the predictability of playgrounds provide little incentive for kids to get outside.

Indeed, a reconsideration of the concept of "play" is needed to challenge designers and municipalities to create innovative play opportunities. The value of play goes well beyond jumping and climbing. "Play is a critical part of all human cultures. ...[Play] is 'a free activity, experienced as "make-believe" and situated outside of everyday life,

[3] Brett, et al., p 20
[4] Shell, p 82

nevertheless capable of totally absorbing the player.'"[5] The lessons learned through play are many. Educational theorists have well documented the importance of children's interaction with their environment and the connection of play to development. "Play, the frivolous, unimportant, behavior with no apparent purpose has earned new respect as biologists, neuroscientists, psychologists, and others see that play is indeed serious business and is perhaps equally important as other basic drives of sleep, rest, and food." [6] Especially in the early years of life, play is critical to the development of cognitive, motor, and language skills. It is also a time for children to interact with their peers and develop social and emotional skills. A better understanding of the connections between play and development by designers, educators and parents is essential in acquiring the knowledge to create a stimulating play environment. Put simply, the problem is that "Most people who care about child development know nothing about design and most people who design know nothing about child development."[7]

Playgrounds Today

In addition to the lack of knowledge about the importance of play, playgrounds are designed to respond to the adult's vision of what children want/need. Security, safety and tidiness are primary concerns for adults. Generally, playgrounds are fenced from the street and pleasantly landscaped. Concrete has been replaced by poured-in-place rubber or bark mulch and play surfaces and structures are made of plastic and rubber-coated metal, to help soften the blow of falls and bumps. Play spaces are organized to support and define specific activities, such as swinging, sliding and climbing or games like hopscotch. (see Appendix I) The city playground is a stagnant space; it will be the same tomorrow as it is today. As Roger Hart, director of the Children's Environments Research Group at the City University of New York Graduate Center, has written, "As society works to create safe environments for children, the environment ironically is becoming increasingly boring and unchallenging for them."[8] The conventional urban playground has failed in achieving what the child wants from play: the excitement of novelty, risk and discovery. The adventure playground, however, has been quite successful in both engaging children and employing their physical, cognitive and social abilities.

The Adventure Playground

Developed in Europe in the 1940's in response to observation of how happily children played in vacant lots filled with war debris, adventure playgrounds allow children the freedom, stimulus and risk that they look for in play. Advocates of this type of playground have included Danish landscape architect C. Th. Sorenson and British gardener Lady Marjorie of Hurtwood, who worked in London to organize the building of many such playgrounds.

Built on the concept that children know best how to play, adventure playgrounds allow them to create their own play environments. "[In the adventure playground,] children are

[5] Brett p 1
[6] Frost, Neuroscience...p 1
[7] Shell, p 81
[8] Hart, p 5

provided with opportunities to explore, investigate, manipulate and engage in epistemic behavior."[9] The success of the playground lies not in the equipment, but in the inherent ability of children to discover, learn and develop through play. There are no or few structures. Instead, children are provided with tools (hammer, nails, etc.) and raw materials (paints, wood, sand, bricks, rocks, cardboard, water, etc.) to build the structures they want to play in. Forts, gardens, castles, boats and other structures are built cooperatively through the children's initiative. "Children use real materials to construct their own playthings and the play occurs during the process of their building as well as their use."[10] Children are free to imagine, to plan and to create with their peers. (see Appendices I and II)

In urban areas, adventure playgrounds can be an exceptionally valuable resource. Children in rural areas have more access to natural play environments that allow them freedom and creativity. "The adventure playground seeks to provide certain elements of rural play to the urban child." [11] Because there are no or few activity-specific structures in the adventure playground, children use the materials within for many different uses and do not become bored with the predictability of specific-use objects. Additionally, adventure playgrounds are not rigidly organized into specific play areas. The playground is always changing. What is a fort one day can be a magical forest the next. Because of the dynamics of the adventure playground, children are much more engaged in play. Studies have shown that adventure playgrounds provide "more effective play experiences and [have proven] to be more stimulating than 'standard' playgrounds."[12]

The Play Leader

The freedom and excitement afforded to the child in the adventure playground, however, is not a reckless act. The safety of the children comes before all play goals. This safety is assured by a trained, adult play leader. The play leader guides the children and interferes in play only when it is necessary to assure safety. "The leader is not present to initiate or direct the play, but to support it, to step in with advice and assistance only when the children ask for it and to supervise building construction to ensure safety. Otherwise, children on adventure playgrounds are left free to pursue their own interests at their own pace."[13] The play leader is critical to the playground, both for safety and guidance. In Europe, individuals are trained to hold these positions in educational colleges. Training programs in Denmark "emphasize the an understanding of play and child development, and the development of arts and crafts skills and administrative techniques."[14] A successful adventure playground cannot exist without a play leader. To many, this is seen as an added expense. However, an investment in an adult who understands child development and play is arguably more beneficial to the development of children than swings or monkey bars.

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[9] Fjeldsted, p 34
[10] ibid.
[11] Wilkinson, p 23
[12] ibid.
[13] Wilkinson, p 26
[14] ibid., p 24

Advantages of the Adventure Playground

Some of the benefits of adventure playgrounds are improved motor skills, social skills, and problem solving abilities. Kids are encouraged to "test themselves against new challenges in complete freedom and to learn to come to terms with the responsibilities of freedom."[15] As they reach goals, they gain more confidence in themselves. Valuable experiences in diversity and cooperation are learned on the adventure playground because kids from different backgrounds come together to achieve a common goal.

In addition to being a place where children go after school, the adventure playground can extend the urban school environment. The playground can be adapted by educators to teach specific lessons in science, mathematics, art, and other disciplines. Adventure playgrounds can also be used by children with special needs, as they gain valuable knowledge of the materials and of working with others.

Challenges

Most adults today agree there is much lacking in play environments for the urban child. Yet, adventure playgrounds face many obstacles to being built and remaining operational. Perhaps an environment where children can play without adult interference makes American parents nervous? Or, as discussed above, it may be that play is not taken seriously enough. The strongest objection, however, is the perception that adventure playgrounds are unsafe. "The fact is, children learn to build well and safely under the guidance of the play leader. Adventure playgrounds have proven to be safer than traditional playgrounds with asphalt paving and fixed equipment"[16] Another objection is that adventure playgrounds are unsightly. This admitted fact can be minimized by implementing visual barriers, such as a fence, dense plantings or a wall, and by placing an attractive shed for storage and tools within the playground. Municipalities are often afraid to attempt alternative play environments because of liability and insurance issues. There are, however, many cases where similar environments are used by children in schools (workshop classes) and other precedent to be studied. All of these obstacles can be analyzed and overcome by creative planning and design backed by a strong commitment to children.

Conclusion

Adventure playgrounds provide the freedom for children to imagine and the materials and tools to realize their ideas. This is done in a supervised, nurturing environment. There are few places providing an outlet for kids to just be kids in today's city. When creating places for children it is vital to remember that "the child who plays more vividly, and subsequently feels it was fun, has more optimism, more confidence, and is better able to get on with his task of learning about man, society, culture and community."[17] The well being of children should the unifying goal for the designer, the parent, the educator and the community activist.

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[15] Bengtsson, p 8
[16] Wilkinson, p 26
[17] Fjeldsted, p 42

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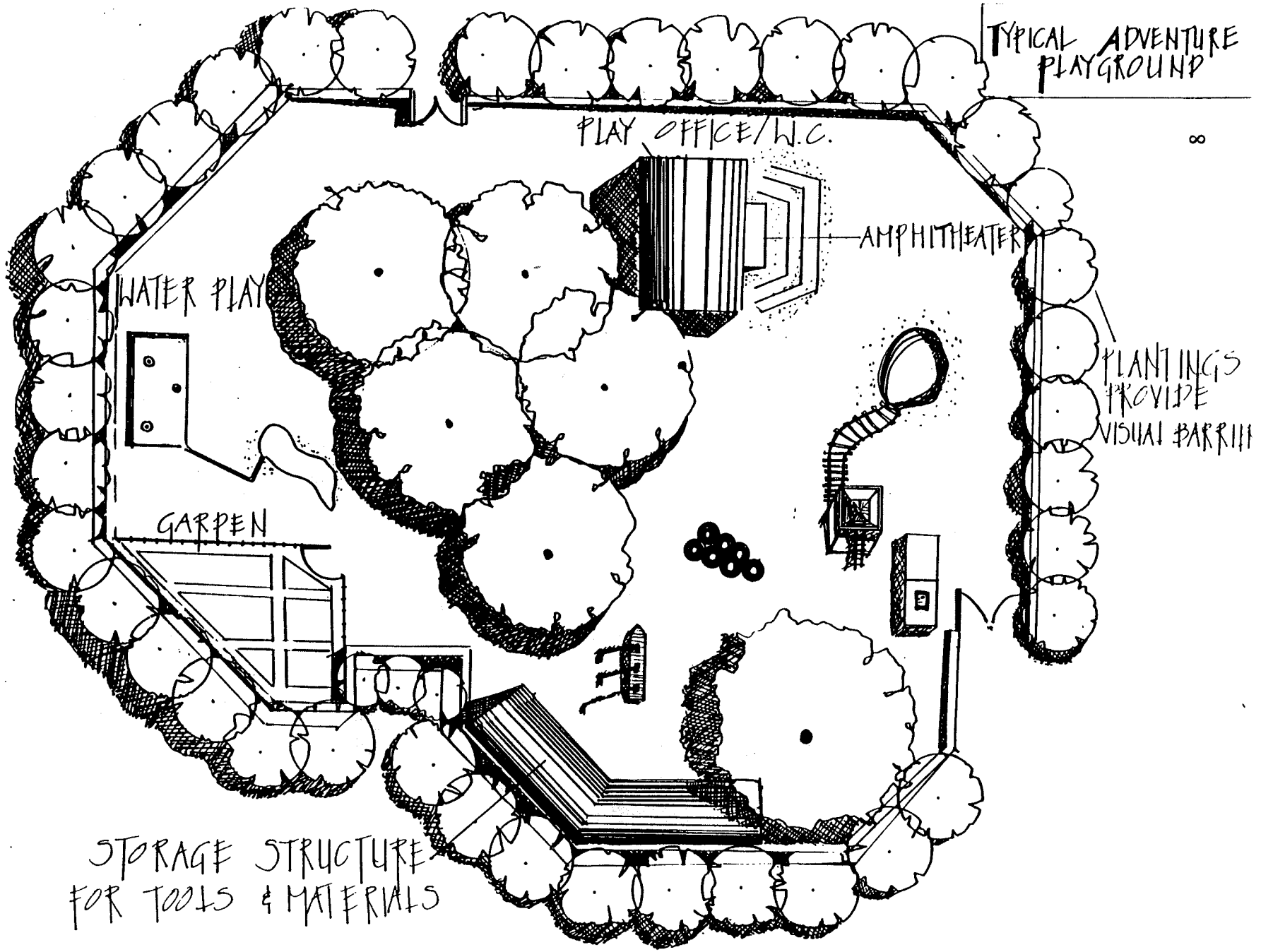
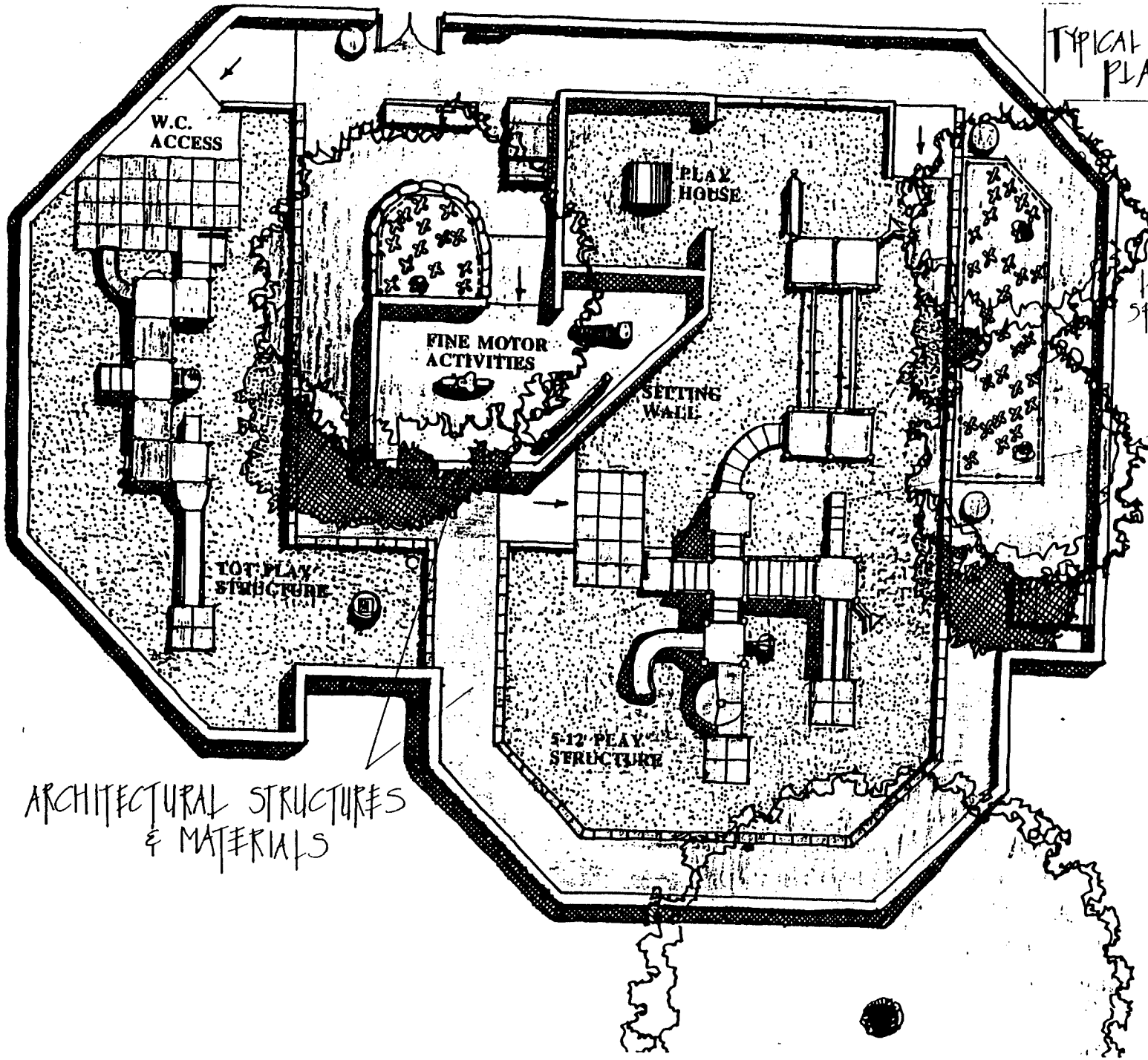
Appendix I:

Example plans for conventional and adventure playground


TYPICAL ADVENTURE PLAYGROUND
PLAY OFFICE/W.C.
AMPHITHEATER
WATER PLAY
PLANTINGS PROVIDE VISUAL BARRIER
GARDEN
STORAGE STRUCTURE FOR TOOLS & MATERIALS



TYPICAL CONVENTIONAL PLAYGROUND

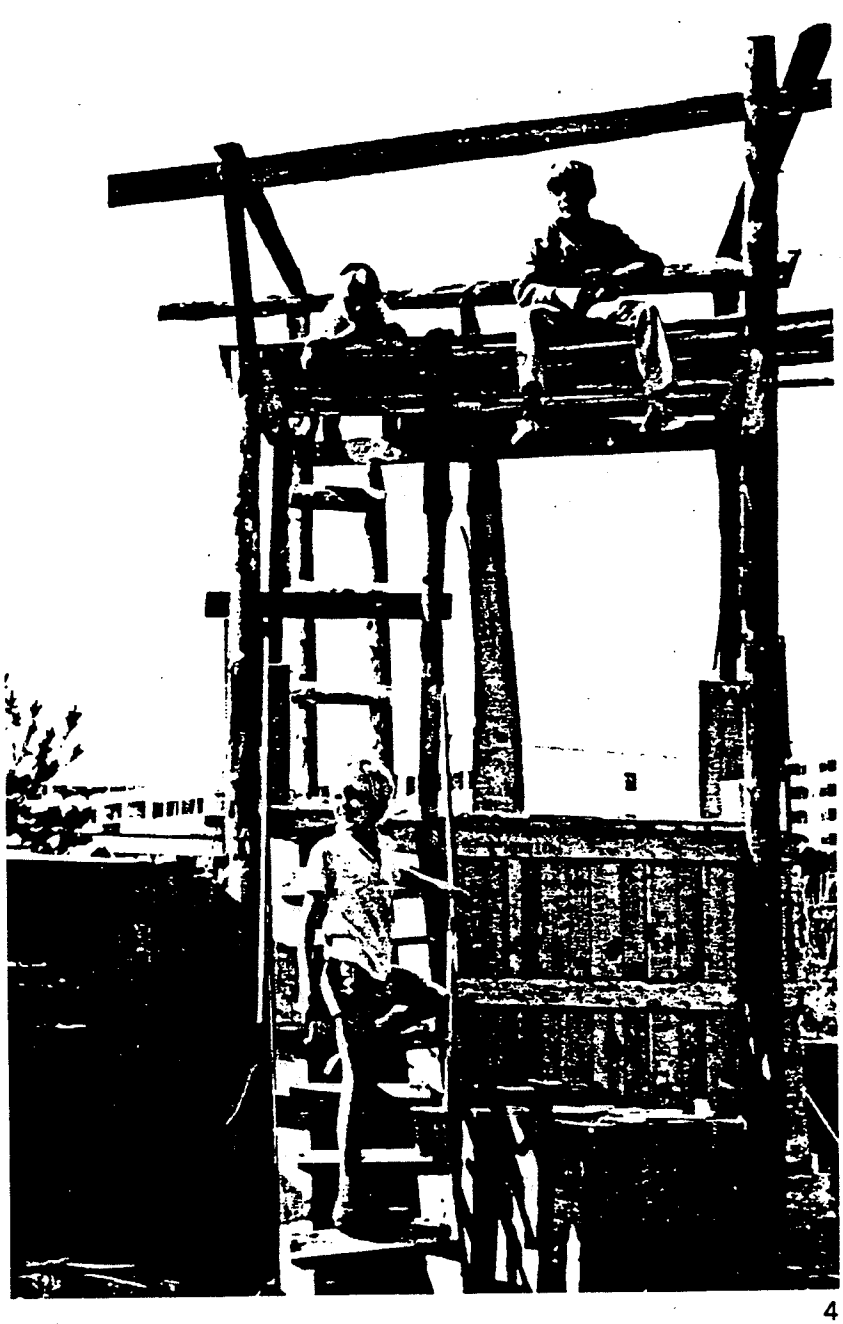
- CLEARLY DEFINED SPECIFIC-USE AREAS

- PLAY STRUCTURE

ARCHITECTURAL STRUCTURES & MATERIALS

Appendix II:

Photographic images of adventure playgrounds



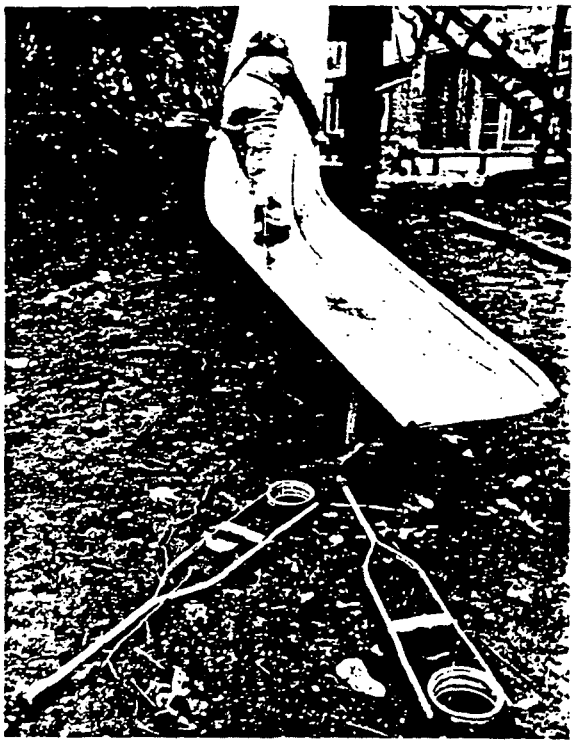
4

5

1, 2, 4 Construction
3 'No admittance.
We are trying to make a lawn. The Children'
5, 6 Good workbenches made of old railway sleepers

PHOTOS FROM: ADVENTURE PLAYGROUNDS.
ARVID BENGTSSON 1972

1



)ne of the most erceptive groups at the playground is the artially-sighted children

The responses of most children at the playground have been so normal that is questionable whether heir disability really should be the decisive factor when designing a lay area for the andicapped

DENING

e original clay soil has been re-ced by a deep layer of gravel to e the site more serviceable during weather, but for gardening this seless. In spite of this, brave mpts are frequently made to e gardens, and old beer casks n half have proved useful.