

The Providence Green Schoolyards Guide

Created by the City of Providence
Healthy Communities Office



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The Providence Green Schoolyard Initiative

Narrative



The Providence Green Schoolyard Initiative

I. Introduction

Vision: Providence school grounds will be vibrant centers for 21st Century education that promote children's health, well-being and social-emotional development, and function as ecologically rich environments that contribute to the health of our urban surroundings. To accomplish this, Providence will launch a new Green Schoolyard Initiative across the school district to transform Providence schoolyards in the years to come.

This Providence Green Schoolyards guide will support schools and the Providence Public School District in transforming school grounds into natural spaces that improve student and teacher experiences; promote children's health and well-being; and create green and ecologically rich learning and play spaces that expose children to the natural world outside their classroom door, every day.

This Guide establishes standards for schoolyard improvements to help the schools, the City of Providence and community partners respond to the demand for improvements to school grounds and provides the school community with guidance on how to work with design professionals to create a Green Schoolyard that best serves each school. This Guide identifies supporting programs and overlapping efforts that can be leveraged to fund schoolyard transformation.

The accompanying Design Guide includes examples of materials, play equipment and other features that could be used to improve typical Providence schoolyards. The examples include sample budgets to help school communities understand the scope of funding necessary to transform a Providence schoolyard.

The guide was developed by the City of Providence Healthy Communities Office in coordination with Providence Public Schools and multiple City departments, with support from the National League of Cities and the Children & Nature Network.

Why the Providence Green Schoolyard Initiative?

Many Providence schoolyards are in poor repair and/or are covered in asphalt, failing to meet their potential as sites that encourage learning, physical activity and positive social interactions or contribute to the health of the school community and urban environment. These schoolyards are now outdated and incompatible with 21st Century education objectives. Many require significant improvement to meet their potential as spaces that positively engage the minds and bodies of Providence's children.

Teachers, administrators and school communities recognize the need for improvement of their schools' outdoor environment and frequently request help from the District, the City and outside funders in repairing and changing their schoolyards for the better. In their efforts to improve the school environment for their students, school communities frequently begin significant grassroots fundraising efforts and/or identify highly specific,

expensive equipment, without the opportunity to understand real opportunities, costs or processes associated with the desired improvements. This results in frustration and stagnation of the communities' efforts.

The Providence Green Schoolyard Initiative will improve efficiency and efficacy of schools' efforts to improve their grounds by establishing district-wide principles, approaches and guidelines. It will coordinate individual schools' efforts with a City- and District-wide vision to support each school in creating a healthy, creative outdoor space for their students, staff and community.

As acknowledged in the Providence Public School Wellness Policy, **“School gardens offer opportunities for physical activity by engaging students in such activities as planting, harvesting and weeding and can nurture social-emotional development, reconnect communities with schools and address disparities in access to green space and concerns about nature deficit disorder. ... Grounds, facilities and equipment for physical activity shall be safe and available for students and staff to be active. Thoughtfully designed schoolyards and outdoor school spaces have the potential to be vibrant extensions of the learning environment filled with engaging opportunities for physical activity, outdoor learning and connection with nature.”** The Providence Green Schoolyard Initiative will create a variety of healthy outdoor spaces for learning, physical activity, stewardship, community engagement and other activities that are vital to student success.

The Initiative will coordinate with and be supported by efforts across Providence to improve and update public properties to meet the social, environmental and fiscal needs of the city and its residents. These efforts include:

- **The Providence Parks Department** is a city and national leader in creating well-designed public spaces that encourage positive social engagement and physical activity and contribute to the environmental health of the city. The Parks Department promotes sustainability through creative design and innovative use of resources and materials, including supplementing traditional play features with repurposed, recycled and revitalized materials like tires, boulders and logs. Natural materials are used whenever possible to limit the amount of plastics in the city's environment. The Parks Department helps reduce flooding and cool Providence's communities by incorporating rain gardens and increasing tree canopy in the spaces it creates. With rare exceptions, the Parks Department does not use chemical fertilizers or herbicides. The Parks team is trained in Best Management Practices (BMPs) for landscape maintenance including storm water management and erosion mitigation. Parks' mobile welding initiative and ongoing skills training increase its capacity to repair rather than discard and make efficient use of the public funds that support all City properties. The Parks Department holds that all City spaces should reflect unified values and expectations for the quality of experience of Providence children. These values include the importance of free and open play for children and the importance of preserving and increasing natural landscapes in the urban environment. The Green Schoolyard Initiative will make best use of City resources by coordinating with the principles, skills and capacities of the Parks Department.

- **The \$300M Providence School Facilities Improvement Plan** The City's capital improvement strategies include significant improvements to school buildings and grounds, which are a significant part of the City's property holdings. These improvements prioritize building envelopes, ensuring that the facilities are "warm, safe and dry." When school grounds are included in improvement plans, Green Schoolyards principles will be engaged to leverage City capital improvement funds and create opportunities for transformation of the school's outdoor space.
- **The Providence Farm to School Initiative** Farm to School is a national movement to better connect local schools to the local food system, through integrating education about food production into school curriculum, increasing the amount of local food served through school meals and creating and supporting school gardens. Supported by the USDA, the City of Providence Healthy Communities Office and Providence Public Schools have created the **Providence Public School District Farm to School Action Plan** to develop a successful Farm to School program in Providence. By creating a sustainable system for developing, supporting and integrating school gardens into curriculum, Farm to School will support a key element of the Green Schoolyards Initiative.
- **Cities Connecting Children to Nature- Providence** In 2015, the National League of Cities and the Children & Nature Network selected the City of Providence as one of seven innovative US cities to join the [Cities Connecting Children to Nature \(CCCN\)](#) initiative. CCCN helps cities increase equitable access to nature to improve the wellbeing of children. Through this work, the City of Providence Healthy Communities Office partnered with the Parks Department, representatives of Providence Public Schools and multiple community agencies to conduct a needs assessment and create an action plan to increase equity in Providence children's opportunities to interact with the natural world around them. School grounds and City parks within walkable distance from schools were identified as key opportunities for increasing children's day-to-day exposure to nature. The Green Schoolyard Initiative emerged from this work and receives ongoing technical assistance from the National League of Cities and Children & Nature Network.

Providence joins cities across the country in developing Green Schoolyard strategies to improve the academic, social and health outcomes of its students. These cities include:

[Living Schoolyards for Oakland](#)
[Space to Grow Chicago](#)
[NYC Green Schoolyards](#)

II. What is a Providence Green Schoolyard?

Providence Green Schoolyards, in alignment with the Green Schoolyard definition established by the Children & Nature Network, will be multi-functional school grounds professionally designed for and by the school community that offer places for students, teachers, parents and community members to play, learn, explore and grow. Each Providence Green Schoolyard may include:

- outdoor classrooms
- native gardens
- storm water capture
- traditional play equipment
- nature play areas
- vegetable gardens
- trails
- shade trees
- and more

Providence's dense urban development limits available space for green improvements at some schools. Providence Green Schoolyards will include coordination with City parks and other available spaces to ensure equitable access for students at all schools through nearby nature. The school community, neighbors and partner organizations will be actively engaged in the development, maintenance and use of each Providence Green Schoolyard.

In order for Green Schoolyards to succeed, they need to be created by and for the schools and communities they serve. Providence Green Schoolyards will be designed and developed with meaningful participation and collaboration from students, families, school staff, and neighbors of each school. This student and community engagement shall be meaningful, inclusive, and provide ample opportunities for students, parents, community members, partners, district staff, and other stakeholders to participate. Participation will be ongoing and will cover the full life cycle of Green Schoolyard projects, including planning and design, construction, planting, use in and out of school time, stewardship and site management. Through this process, students will learn to become stewards of their shared green spaces.

Providence Public Schools' Community Use of School Facilities Policy states: **The Providence School Board believes the Providence School Buildings are an integral part of the local Community. The Board recognizes that there are many demands for the use of school buildings by the community and is committed to providing access to the buildings in a responsible manner.** Providence Green Schoolyards will support this principle by making school grounds open and accessible to the community in ways that are best suited to each school.

Organizations supporting Green Schoolyards across the country:

[Green Schoolyards America](#)

[The Children & Nature Network](#)

[The Trust for Public Land](#)

This initiative supports the [Providence Public Schools Turnaround Action Plan](#) by:

- Engaging families and the larger community in meaningful and sustainable ways by helping to shape their children's educational experience and the school environment.
- Increasing students' sense of belonging and positive perceptions of their school by fostering ownership and pride in the outdoor facilities students help to create.
- Upgrading school facilities and promoting excellence in learning by creating new outdoor educational spaces that support and offer new ways to engage with curriculum.
- Increasing equity in education and enrichment opportunities by making outdoor learning experiences easily accessible to urban students, and creating healthy natural environments that equitably engage students with a variety of learning and physical needs.



III. How will a Providence Green Schoolyard contribute to a school's success?

Providence Green Schoolyards will improve academic outcomes for Providence Public Schools students by creating outdoor environments optimized for 21st Century education.

Success in the 21st Century work world will require an understanding of traditional standards-based curricula; a mastery of basic technology grounded in a deep understanding of the real world; and strong interpersonal skills in collaboration, cooperation and empathy. This balance is difficult to achieve with classroom instruction and textbooks alone. Green Schoolyards provide a setting to support hands-on, experiential and small-group learning and to prepare children to be resourceful, resilient, and collaborative.

Green Schoolyards provide valuable teaching resources and hands-on experiences that are appropriate for all grade levels and subject areas. A growing body of research demonstrates that children benefit academically from outdoor learning. This includes increased student engagement in learning and time spent on task and enhanced academic performance in reading, writing, math, and science. Providence public school grounds will provide hands-on learning environments for students of all ages, to support standards-based curricula, as well as development of physical and social-emotional skills that prepare students for 21st Century life and careers. School grounds will be designed to foster place-based education and will help students understand the natural systems and processes in the world around them.

Providence Green Schoolyards will offer opportunities to increase students' physical activity and improve physical health.

The Providence Public Schools Wellness Policy States: **Physical activity outside of PE class is critical to maintaining a healthy lifestyle and has a direct influence on a student's ability to focus in the classroom.**

Providence Green Schoolyards will support the wellness policy's goals by fostering strong, healthy bodies and healthy brain development. A Green Schoolyard will offer diverse recreational options that actively serve the variety of students' needs and interests. The Schoolyards will offer creative opportunities for teachers to meet the required 100 minutes of weekly physical education, as well as for students to explore and develop their own ways of being physically active. The Green Schoolyard will be designed to help children develop physical skills by including engaging elements for every age.

Providence Green Schoolyards will create opportunities for improved mental health and social-emotional development.

Social-Emotional Learning helps students manage their personal attitudes and behaviors, as well as their relationships with others. By promoting kindness, sharing and empathy, these skills create a positive learning environment in which children can thrive.

The Providence Green Schoolyard Initiative supports schools' incorporation of social-

emotional skills into the school day by creating vibrant play and social environments that support social-emotional development and mental health. By using best design practices to shape positive, welcoming social interactions, the schoolyard will help ensure a positive, socially interactive experience during recess and other outdoor time and create opportunities for teachers to explore the social-emotional skills that have been integrated into Providence elementary classrooms.

As documented through numerous student surveys and other evidence, Providence public school children are significantly affected by stress, anxiety and impacts of trauma. Through thoughtful selection, arrangement, and management of trees, vegetation, and building materials, Green Schoolyards can support schools in creating environments that support students in these challenges.

Providence Green Schoolyards will provide calming spaces, with vegetation and trees that will help all students and adults restore their ability to concentrate. Schools will use outdoor curricula and school ground stewardship to help children express care for their community and the Earth.

Providence Green Schoolyards will leverage resources for and engage community in meeting schools' needs.

Providence Green Schoolyards will leverage diverse funding, strengthen community support for the school and serve as an important contributor to overall neighborhood well-being.

Effective and meaningful community engagement is imperative to creating schools that meet the needs of Providence's children. By engaging students, families, school staff and neighbors in designing the schoolyard for each school, Green Schoolyards will create ample opportunities for meaningful, inclusive engagement of families and the broader community. By developing community partnerships for development, programming and upkeep of the school grounds, and being open to the community in out-of-school hours, Providence Green Schoolyards will assist each school and the district as a whole to leverage diverse funding and develop the community-wide system of support that is necessary for school success.

Providence Green Schoolyards will contribute to the environmental health and sustainability of Providence's neighborhoods.

As documented in the City of Providence [Sustainability Plan](#), the City prioritizes sustainability when making decisions about public and private land use and development. As public properties, Providence schoolyards present opportunities to increase environmental health, foster stewardship for the City's natural spaces, and meet the City's sustainability goals.

Many Providence schools are impacted by the negative effects of unsustainable development practices and climate change. Lack of tree canopy coupled with paved surroundings contribute to extreme heat that impacts student's learning, leads to high

heating/cooling costs and takes a toll on aging heating/cooling systems; lack of permeable surface contributes to urban flooding that damages property and makes travel to school challenging for students and teachers; lack of safe, healthy play and outdoor learning space limits opportunities for creative education and physical activity, and may contribute to behavioral challenges. Furthermore, many schoolyards are located on sites that have been contaminated from Providence's industrial past. Green Schoolyards, developed in collaboration with the communities they serve, will help address these problems while contributing to the City of Providence's goals to become a more sustainable and equitable city for all.

Green Schoolyards will help Providence become a greener, healthier and more equitable city by:

- Increasing tree canopy and other vegetation in heavily-paved areas, reducing the urban heat island effect while improving the urban habitat for pollinators and other beneficial insects
- Creating opportunities for storm water capture, thereby mitigating urban flooding and protecting drinking water and habitats in our waterways
- Providing opportunities to learn holistically about natural systems critical to human health through gardening and composting and other waste diversion strategies
- Through school gardens, introducing students to local and healthy food produced in ways that are ecologically-sound



IV. How to Create a Providence Green Schoolyard.

Many parties are involved in decision-making about school grounds at Providence public schools. Providence school properties are used by Providence Public Schools but are owned by the City of Providence. The Rhode Island Department of Education (RIDE) ultimately approves any significant site changes and, since November 2019, takes an increasingly active role in decision-making and management of school operations. To gain support in improving a schoolyard or transforming it into a Providence Green Schoolyard, visit [the City of Providence's Green Schoolyards page](#).

Considerations

Here are factors that contribute to the design, planning and budgeting for each Providence Green Schoolyard:

- **Intended use**

Each schools' administrators and teachers will have unique insight into their own schools' needs and how they can be met by improving the outdoor space. Some use considerations may be:

- What are the number and ages of children who will be playing in recreation areas?
- What special needs of the student population should be addressed in the design?
- What's the right proportion of free play space, structured play space and outdoor classroom space?
- How many students will use the garden and how?
- What outdoor classroom equipment will best support the teachers?
- What space is needed for student pick-up/drop-off or other parts of the school's day-to-day?
- How can before and after school programs benefit from the Green Schoolyard, and what new programs may be possible with improved outdoor space?

- **Physical conditions/location**

- What are the opportunities and limitations of the size and shape of the school's existing outdoor space?
- What play structures currently exist in the schoolyard, and are they assets or liabilities?
- The City of Providence Parks Department is an enthusiastic partner in ensuring that Providence children have access to outdoor learning and recreation opportunities. This offers significant opportunities to schools with limited schoolyard space. What nearby City parks or other public spaces can be incorporated into a school's plans for outdoor learning or recreation?
- Does PPSD, the City of Providence or RIDE have plans for future construction or facility improvement that may interfere or conflict with plans for a Green Schoolyard?

- Are there documented environmental challenges or remediation on this property? Due to Providence's industrial history, disturbing the soil on many sites- including schools- may pose environmental health challenges. Environmental reviews are mandatory. If soil contamination is identified, remediation can add tens or even hundreds of thousands of dollars to any project. The more you know about the property going into the project, the better.

- **Maintenance & sustainability planning**

To create a successful Green Schoolyard, maintenance and sustainability plans need to be collaborative and built in from the start. In particular, strategies are needed to ensure that gardens and other plantings are well-maintained during the summer and other out-of-school times. It is recommended that all partners develop a Memorandum of Understanding (MOU) delineating maintenance responsibilities. What are the agreed-upon roles for each of these partners?

- Students
- Teachers
- PTO/Parent volunteers
- PPSD's facilities maintenance contractor (Aramark) and custodial staff
- City of Providence Department of Public Property

A Green Schoolyard can be an important community asset, and maintaining it offers opportunities to engage the broader community in the school's well-being. Maintenance of the Green Schoolyard can offer additional youth employment, education and training opportunities that engage and serve the community during the summer months. What are opportunities or areas of support needed from outside partners?

- Local non-profit organizations
- Neighbors and neighborhood associations
- Outside volunteers and community service organizations

- **Equipment considerations**

- Teachers and school administrators should be aware of the hard-sell tactics employed by many playground equipment manufacturers. Bright, new, plastic climbing structures may be presented as a solution to school needs but are often expensive and difficult to maintain. Play structures can be an important component of a larger schoolyard plan, but their purchase price can easily use all available funds without accounting for sitework, environmental clean-up or installation costs.
- Providence Parks Department staff are trained in inspecting and repairing the play components that the Department purchases for City parks. Coordinating schoolyard purchases with the Parks Department can offer efficiency of scale and opportunities for inexpensive repair. The following Green Schoolyards Design guide includes examples of the play equipment frequently purchased by the Parks Department.

- In its revitalization of City parks, the Parks Department regularly re-purposes materials such as boulders, logs and tires to create inspiring play environments. These materials are non-toxic, environmentally sound, inexpensive, sturdy, easily replaced and can significantly add to a nature-based design.
- Opting for hand-built components can offer additional financial savings while meaningfully engaging community partners in school improvement efforts. The following Green Schoolyards Design Guide includes examples and approximate materials costs for components that can be built by hand. Potential building partners include the Providence Career and Technical Academy carpentry program, [YouthBuild Providence](#), [DownCity Design](#), [The Steelyard](#) or community volunteers.



V. Additional Resources

[Resources for every stage of schoolyard greening, programming and maintenance](#)

[Boston Schoolyard Initiative Outdoor Classroom Design Guide](#)

[All Hands in the Dirt: A Guide to Designing and Creating Natural School Grounds](#)



Existing Green Schoolyard Examples

Narrative





Like many Providence schools, grounds at Veazie Street Elementary School were limited to a small paved area with space for ball court games and bus drop-off and pick-up. Iola French Park abuts the school and offered great opportunities to increase outdoor connections for the school.

Before the Providence Parks Department's intervention, an existing playground in the park was remote from the school, and high fencing surrounding the park did not invite the school community in.



Iola French
Before

The school community partnered with the Parks Department to design outdoor fitness and play equipment made from natural materials, to be in close proximity to the school. Wooden posts, beams and other structural elements provide an engaging, tactile and challenging play experience. Native plants are throughout the site.



Other natural features include native boulders for climbing or sitting and an earthen berm to use as an outdoor classroom. Wooden benches are located carefully at the base of existing evergreens, and a newly opened fence and gateway made of hardwood logs welcomes the school community into the park.



Iola French
After



William D'Abate school is in Providence's dense residential, commercial and industrial Olneyville neighborhood. Joslin Park abuts the school and offers great opportunities to increase natural play and outdoor learning.

The existing playground was worn down and lacked challenging and interactive play equipment. A new design created by the Providence Parks Department and community partners re-organized the space to include differing levels of challenge and contemporary play equipment.



Joslin
Before



The revitalized play area increases student-to-student and student-to-nature interactions by including natural materials and play elements such as logs and boulders.

Joslin
After



An existing field at Gatewood Elementary School in Seattle had significant drainage challenges and little programming to invite student and community interaction.

Improving drainage, installing natural log seating and engaging students in planting have activated the field as a place of nature-based learning and active play (right).



Gatewood
After



At Hawthorne Elementary School in Seattle, natural structures and new green spaces make great use of small spaces and create new opportunities for active play and learning.

Storm water management improves drainage challenges and offers opportunities for exploring environmental and life sciences.





Creative use of hardscape at Wollridge Elementary School in Austin, Texas.

Tree stumps create space for active play and seating for outdoor educational activities.



An outdoor classroom made of local Austin limestone fosters community gatherings.

Design Guide

Introduction

The following “Ideascape Concepts” illustrate configurations that could be appropriate to transform a typical Providence school yard into a Providence Green Schoolyard. Designs for a specific school must be created by a design professional working in partnership with that school’s administration and community.

The Ideascape Concepts are followed by examples of hardscape, softscape and play and educational equipment that are consistent with the Green Schoolyards vision and the Providence Parks Department standards. These examples are intended to help schools develop the vision for their own Green Schoolyard, not to serve as a list of available options.

Custom designed play structures must comply with all public safety guidelines and APA/ASTM standards for public playgrounds. It is recommended that all play equipment be designed by a CPSI professional.

Ideascape Concepts - Large Scale

Design Guide

*Provided sample budgets may differ due to unknown environmental costs etc.





Narrative

Sample Budget: \$1,112,000

Size: 100' x 100'

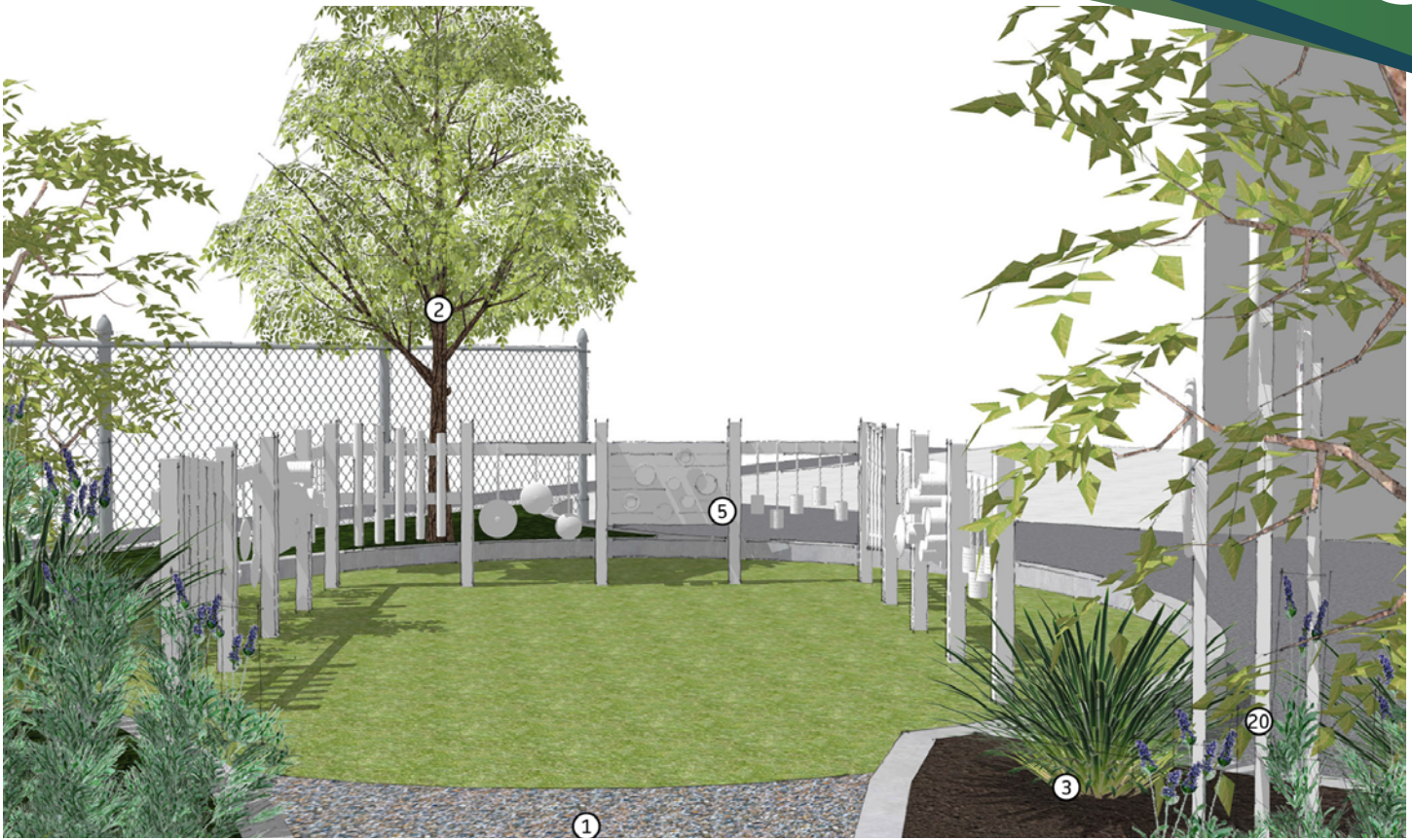
A large corner 100'x100' rectangular lot, equivalent to a paved area for approximately 30 vehicles, affords the opportunity to provide multiple zones of engagement, play and community use. Replacing areas of asphalt paving with soil and native trees, shrubs, and perennials is a cost-effective method of naturalizing schoolyards. Weaving primary, secondary and tertiary paths within a naturally landscaped buffer between the children and adjoining properties creates settings for movement and encourages exploration. Planting beds and constructed activity zones adjacent to pathways are strategic locations for plant diversity and natural play that attracts interest by children. In urban areas, vegetable gardens could be one of the most important natural play and learning settings. Community gardens provide both a social and emotional setting for students, as well as opportunities for science investigation and cultural connections to nature. Shaded areas and performance settings such as raised stages and amphitheaters serve as larger gathering settings. Additionally, structured play equipment can accommodate group sizes of about 50 children.

Item Key:

- | | |
|-----------------------|--------------------------|
| 1. Hardscape | 11. Obstacle Posts |
| 2. Softscape | 12. Climbing Wall |
| 3. Softscape | 13. Balance Beam Course |
| 4. Play Equipment | 14. Rain Wall |
| 5. Music Wall | 15. Shade Structure |
| 6. Outdoor Chalkboard | 16. Butterfly Cage |
| 7. STEM Table | 17. Outdoor Chalkboard |
| 8. Balance Beam | 18. Small Raised Planter |
| 9. Balance Platform | 19. Bird Feeder |
| 10. Sensory Pathway | 20. Bicycle Wheel Decor |









Narrative

Sample Budget: \$1,292,000

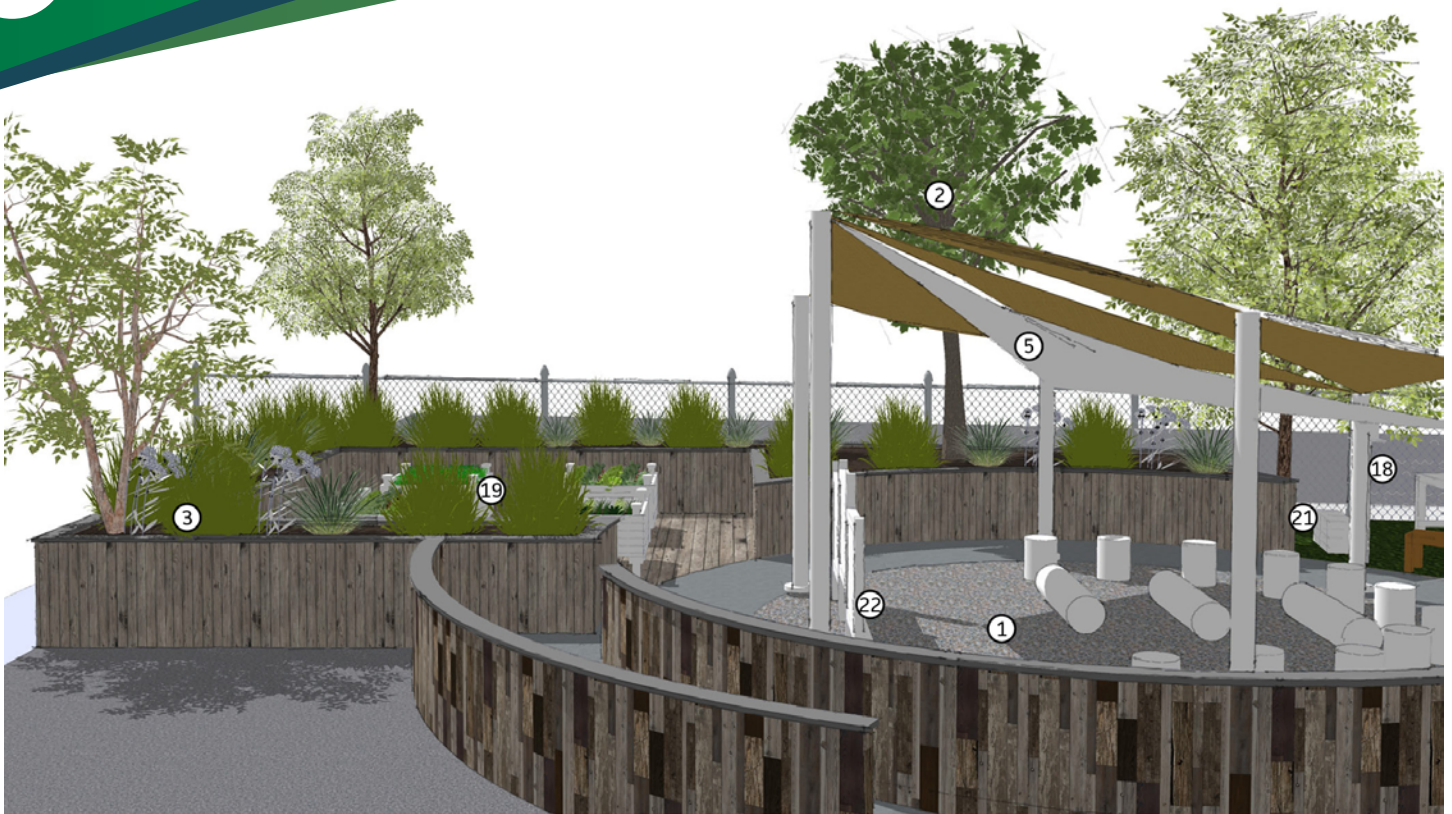
Size: 120' x 160'

A large corner 120'x160' triangular lot, with an internal vehicular pathway, is best defined by the use of boundaries, borders and paving. Enclosure of nature play and learning space is a key element; fences, borders, and enclosures are essential to ensure children's safety and security. Changes in paving can slow vehicular traffic through the site as well as serve as a graphic teaching and learning opportunity. Gathering settings placed within the borders are an essential attribute of nature play and learning places. Places for individuals and groups to gather can take several forms, including shade structures, natural elements, and benches. Additionally, structured play equipment can accommodate group sizes of about 50 children with varying activity zones along the perimeter. Replacing areas of asphalt paving with soil and native trees, shrubs, and perennials is a cost-effective method of naturalizing schoolyards. The use of trees as design elements create shady areas and spatial borders. Landscaping not only provides living elements, they afford children a range of natural play and learning opportunities. Vegetable gardening is one of the easiest and most popular natural learning activities. Vegetable gardening is best conducted in places where children can participate in the process each day.

Item List:

- | | | |
|-----------------------|-------------------------|--------------------------|
| 1. Hardscape | 9. Balance Beam | 17. STEM Table |
| 2. Softscape | 10. Balance Platform | 18. Bird Feeder |
| 3. Softscape | 11. Obstacle Posts | 19. Small Raised Planter |
| 4. Play Equipment | 12. Climbing Wall | 20. Bicycle Wheel Decor |
| 5. Shade Structure | 13. Balance Beam Course | 21. Bug Hotel |
| 6. Log Steps | 14. Sensory Pathway | 22. Outdoor Chalkboard |
| 7. Music Wall | 15. Rain Wall | |
| 8. Outdoor Chalkboard | 16. Butterfly Cage | |









Narrative

Sample Budget: \$687,000

Size: 90' x 120'

A large alcove lot 90'x120' with limited access, equivalent to a paved area for approximately 20 vehicles, is an opportunity for secure and centralized activity zones. A landscape boundary redirects focus inward and natural ground surfacing is an essential, low cost feature of natural play and learning. It protects the ground surfaces from erosion and provides varying sensory exploration. By integrating plants into all play and learning settings, rather than creating separate areas, users will perceive the built environment as a blend of living and nonliving elements within their green school yard. Replacing areas of asphalt paving with soil and native trees, low-growing shrubs, and perennials is a cost-effective method of naturalizing schoolyards. Circles of shrubs create intimate spaces where children can escape, relax, and socialize in small groups. Additionally, structured play equipment can accommodate group sizes of about 50 children with varying activity zones centrally located. Shade is provided by native trees and large shrubs which provide comfort and protect children from harmful exposure to ultraviolet light.

Item List:

- | | |
|--------------------------------|-------------------------|
| 1. Hardscape | 9. Rain Wall |
| 2. Engineered Wood Fiber Mulch | 10. Butterfly Cage |
| 3. Softscape | 11. Bicycle Wheel Decor |
| 4. Play Equipment | 12. Outdoor Chalkboard |
| 5. Music Wall | 13. Outdoor Chalkboard |
| 6. Letter Path | 14. Outdoor Chalkboard |
| 7. Sensory Pathway | 15. Raised Planter |
| 8. Bird Feeder | 16. Planter |







Ideascape Concepts - Medium Scale

Design Guide

*Provided sample budgets may differ due to unknown environmental costs etc.





Narrative

Sample Budget: \$672,000

Size: 200' x 50'

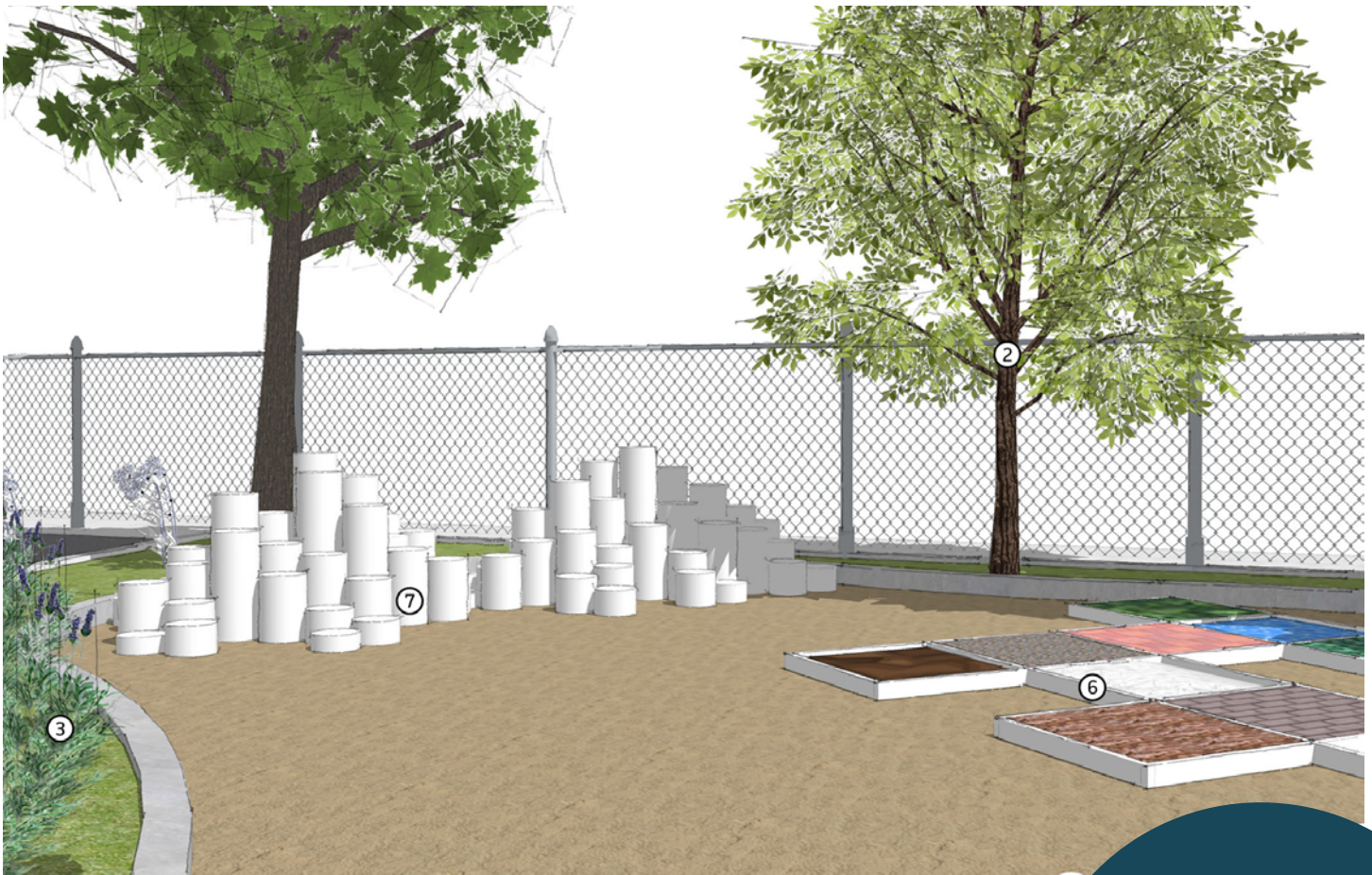
A medium sized long narrow 200'x50' lot, with an internal vehicular pathway, is best defined by the use of boundaries, borders and paving. Enclosure of nature play and learning space is a key element; fences, borders, and enclosures are essential to ensure children's safety and security. Changes in paving can slow vehicular traffic through the site as well as serve as a graphic teaching and learning opportunity. Places for individuals and groups to gather can take several forms, including shade structures, natural elements, and benches. Additionally, structured play equipment can accommodate group sizes of about 50 children combined in two different locations with varying activity zones centrally located. Replacing areas of asphalt paving with soil and native trees, shrubs, and perennials is a cost-effective method of naturalizing schoolyards. The use of trees as design elements create shady areas and spatial borders. Landscaping not only provides living elements, they afford children a range of natural play and learning opportunities. Vegetable gardening is one of the easiest and most popular natural learning activities. Vegetable gardening is best conducted in places where children can participate in the process each day. By cooperating with each other, children achieve immediate and visible results from their own hands-on activity.

Item List:

- | | |
|-----------------------|--------------------------|
| 1. Hardscape | 10. STEM Table |
| 2. Softscape | 11. Butterfly Cages |
| 3. Softscape | 12. Small Raised Planter |
| 4. Play Equipment | 13. Bug Hotel |
| 5. Shade Structure | 14. Bench |
| 6. Sensory Pathway | 15. Bird Feeder |
| 7. Log Steps | 16. Bicycle Wheel Decor |
| 8. Music Wall | 17. Outdoor Chalkboard |
| 9. Outdoor Chalkboard | |







Ideascape Concepts - Small Scale

Design Guide

*Provided sample budgets may differ due to unknown environmental costs etc.





Narrative

Sample Budget: \$585,000

Size: 100' x 50'

A small 100'x50' lot, equivalent to a paved area for approximately 15 vehicles, can be highlighted by select focus areas such as structured and natural play equipment and community gardening. These areas can accommodate group sizes of about 50. Vegetable gardening is one of the easiest and most popular natural learning activities. Vegetable gardening is best conducted in places where children can participate in the process each day. By cooperating with each other, children achieve immediate and visible results from their own hands-on activity. Natural play structures can take many forms. The most effective are often the simplest and least costly. Apart from their cost-effectiveness, an advantage of natural play structures is the flexibility offered to designers to create something innovative. Permanent play structures can be built from natural materials such as logs and other common materials.

Item List:

- | | |
|------------------------|-------------------------|
| 1. Hardscape | 8. Outdoor Chalkboard |
| 2. Softscape | 9. Climbing Wall |
| 3. Softscape | 10. Obstacle Posts |
| 4. Play Equipment | 11. Balance Platforms |
| 5. Music Wall | 12. Balance Beam |
| 6. Outdoor Chalkboard | 13. Bicycle Wheel Decor |
| 7. Balance Beam Course | 14. Rain Wall |









Narrative

Sample Budget: \$263,000

Size: 60' x 70'

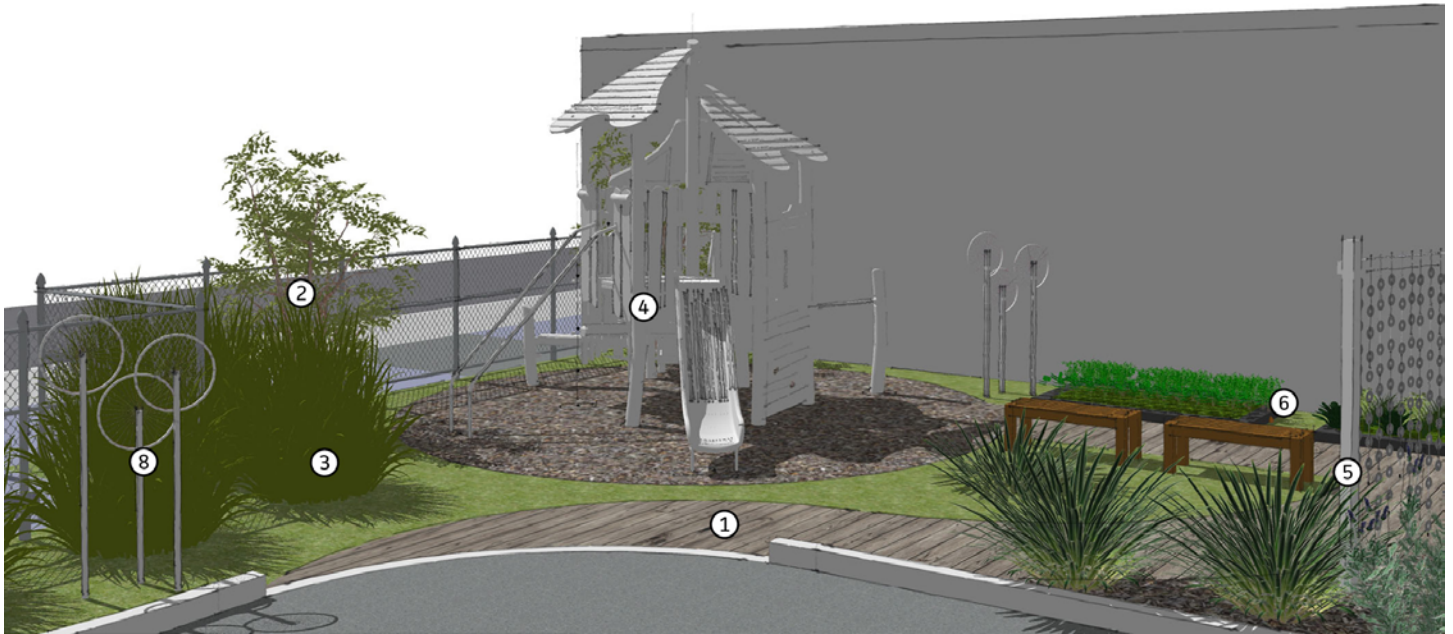
A small 60'x70' lot adjacent to vehicular parking is best defined by the use of native landscaping, plantings, shrubs and trees. Structured and natural play equipment can accommodate group sizes of about 35. Shrubs, plantings, and trees are a basic design element of natural play and learning places that are available in all kinds of shapes and sizes and seasonal characteristics. Shrubs and plantings can bring nature to children's experiential level. Shrubs and plantings can bring interesting foliage close to children as well as disguise existing site distractions. A vegetable and flower garden can be added as a play and learning setting and as a source of food and community learning. Gardens attract multiple species of birds and beneficial insects such as bees, butterflies and moths to help children understand the crucial role of pollinators.

Item List:

- | | |
|-------------------|------------------------|
| 1. Hardscape | 5. Rain Wall |
| 2. Softscape | 6. Raised Planters |
| 3. Softscape | 7. Music Wall |
| 4. Play Equipment | 8. Bicycle Wheel Decor |









Narrative

Sample Budget: \$371,000

Size: 35' x 75'

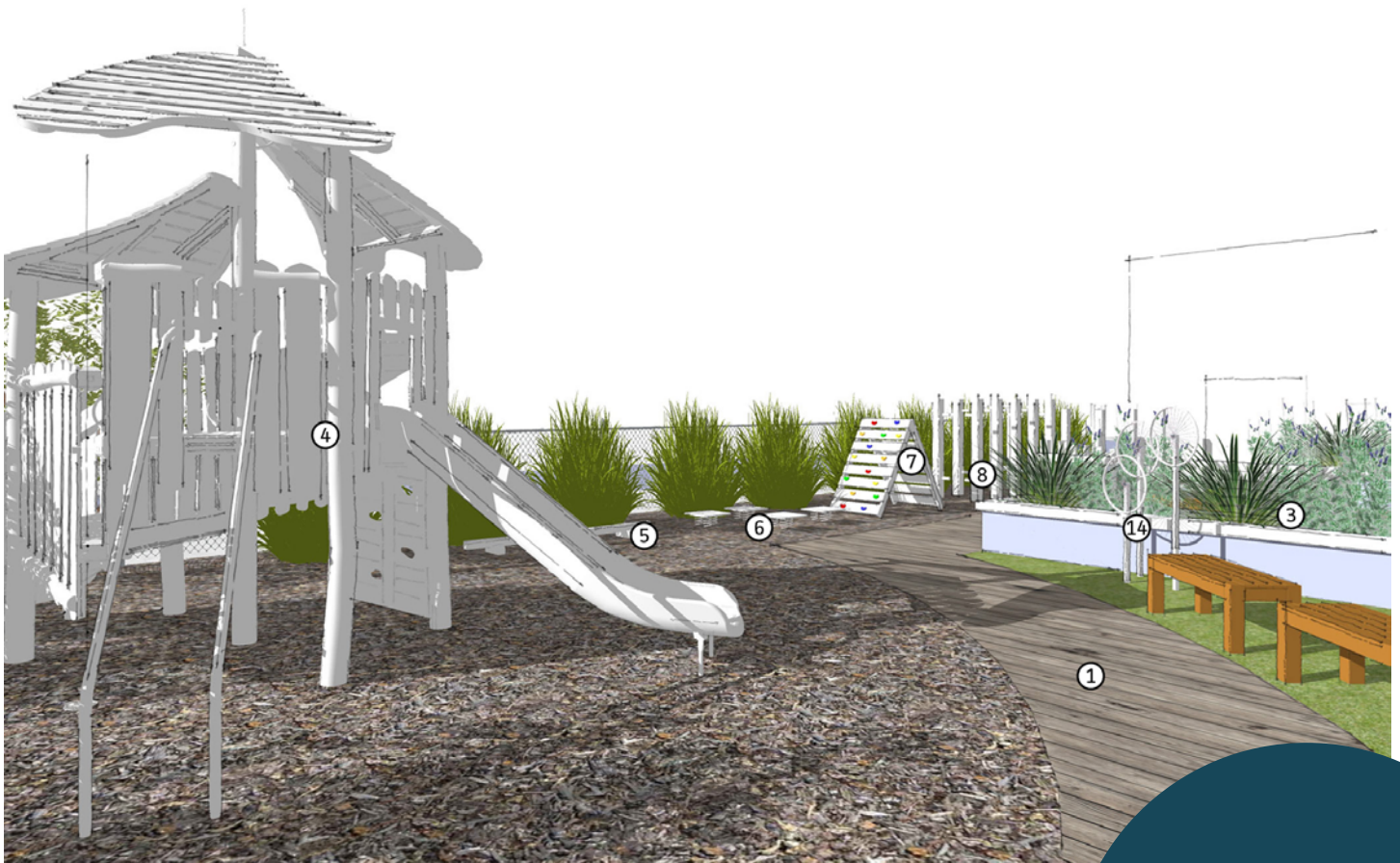
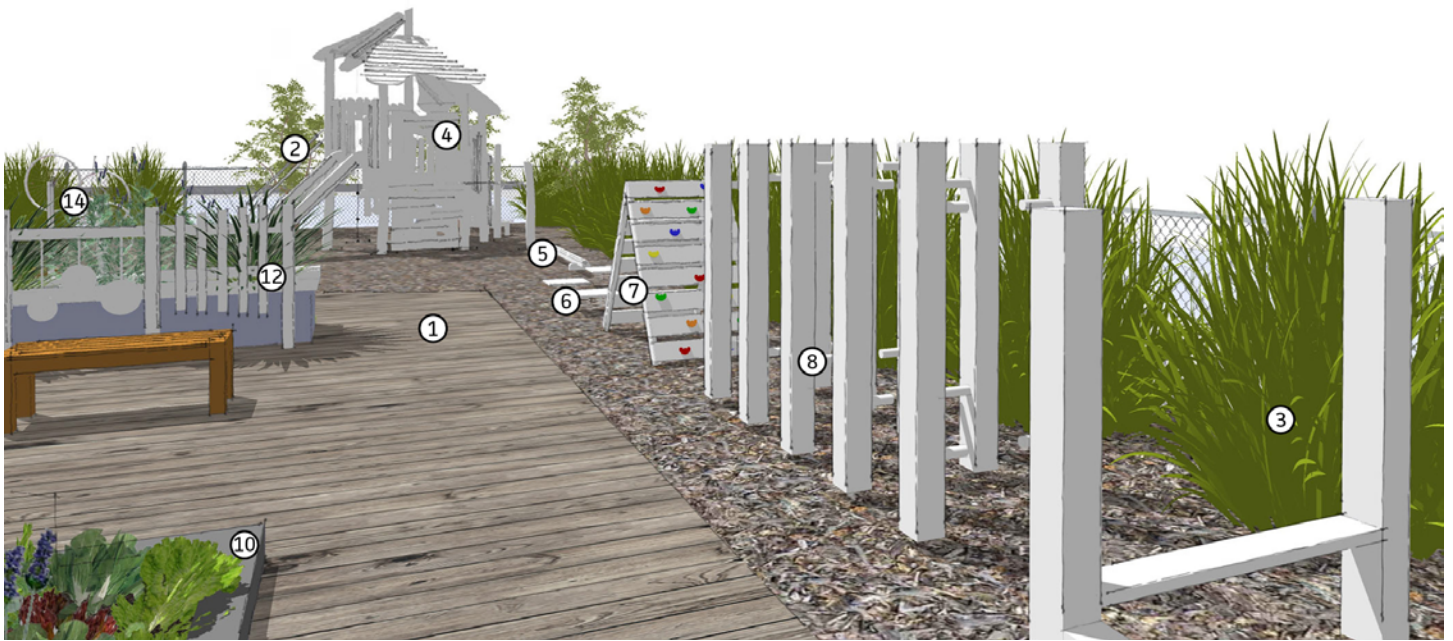
A small 35'x75' lot is able to sustain both structured play equipment for a group size of about 35 with natural opportunities for play, teaching and learning. Replacing areas of asphalt paving with sustainable surfacing and including pockets of native trees, shrubs, and perennials is a cost-effective method of naturalizing schoolyards. Planting beds and constructed activity zones adjacent to pathways are strategic locations for plant diversity and natural play that attracts interest by children. In urban areas vegetable gardens could be one of the most important natural play and learning settings. Community gardens provide both a social and emotional setting for students, as well as opportunities for scientific investigation and cultural connections to nature.

Item List:

- | | |
|---------------------|-------------------------|
| 1. Hardscape | 8. Obstacle Poles |
| 2. Softscape | 9. Balance Beam Course |
| 3. Softscape | 10. Raised Planter |
| 4. Play Equipment | 11. Outdoor Chalkboard |
| 5. Balance Beam | 12. Music Wall |
| 6. Balance Platform | 13. Rain Wall |
| 7. Climbing Wall | 14. Bicycle Wheel Decor |



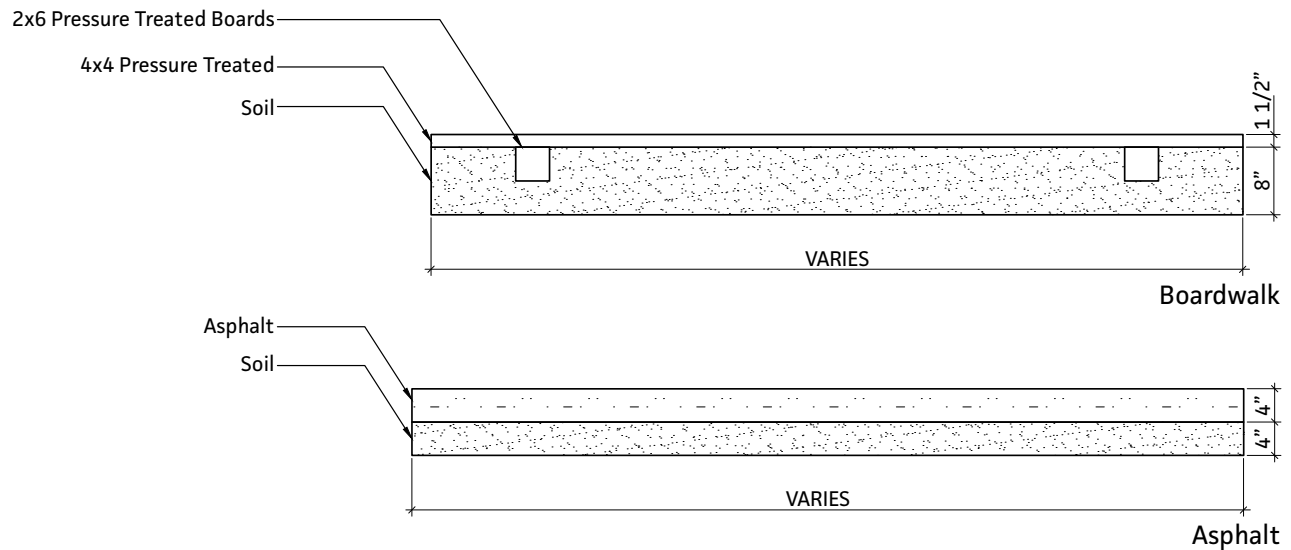
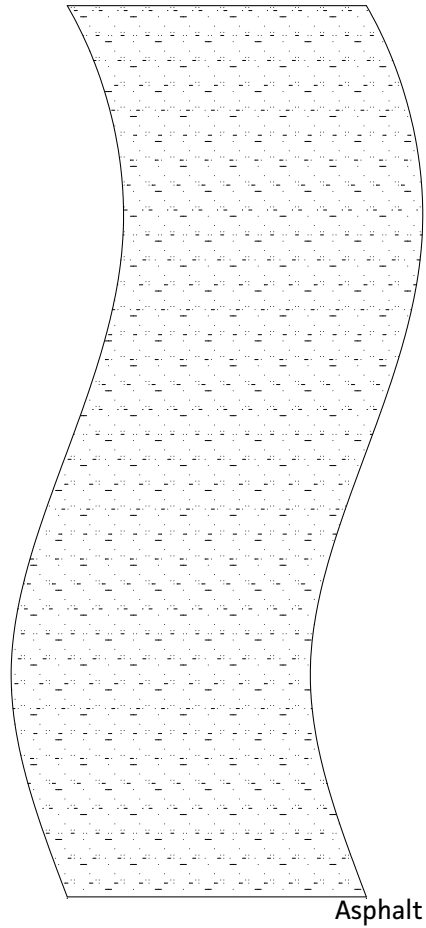
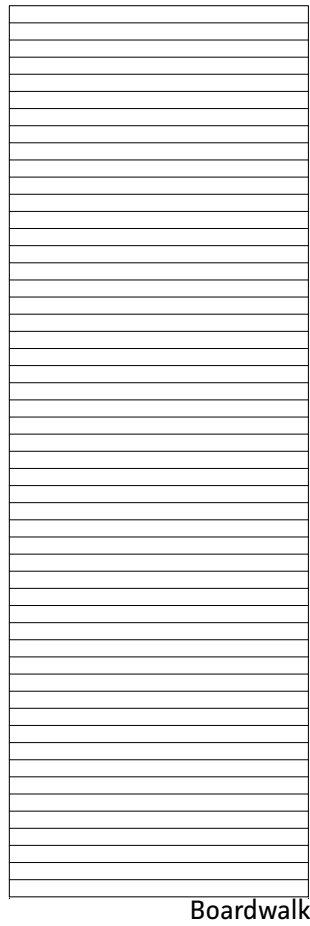




Surfaces

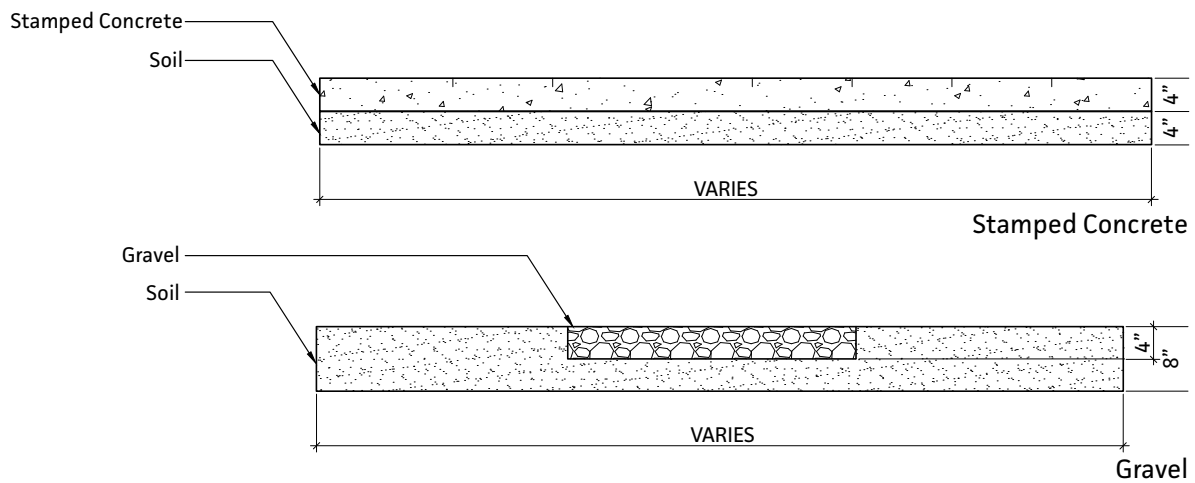
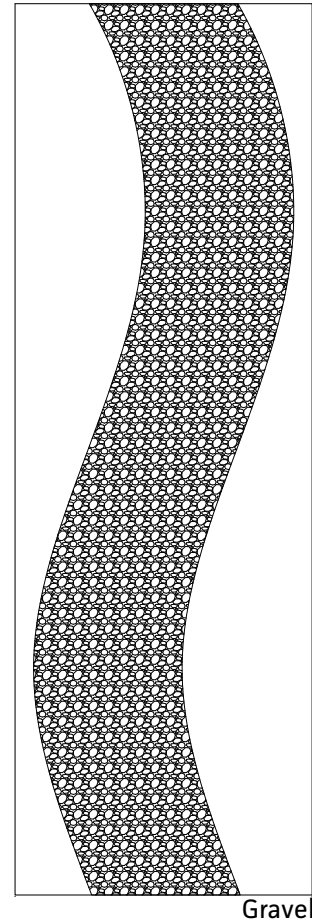
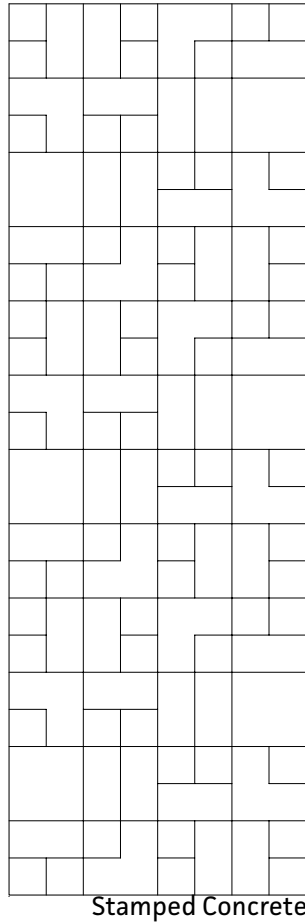
Design Guide





Cost Estimate

Item	Unit	Labor	Material	Total
Hardscape Walkway Boardwalk	PER SQ FT	\$29	\$20	\$49
Hardscape Walkway Asphalt	PER SQ FT	\$5	\$5	\$10



Cost Estimate

Item	Unit	Labor	Material	Total
Hardscape Walkway Stamped Concrete	PER SQ FT	\$39	\$10	\$49
Hardscape Walkway Gravel	PER SQ FT	\$5	\$5	\$10

Planting

Design Guide





Carex Pensylvanica
(Pennsylvania Sedge)



Deschampsia Cespitosa
(Tufted Hair Grass)



Eragrostis Spectabilis
(Purple Lovegrass)

Cost Estimate

Item

Softscape Concepts Grasses

Unit
EACH

Labor
\$90

Material
\$90

Total
\$180



Vaccinium Angustifolium
(Common Lowbush Blueberry)



Rhus Aromatica
(Fragrant Sumac)



Rubus Idaeus var. *Strigosus*
(Red Raspberry)

Cost Estimate

Item

Softscape Concepts Shrubs

Unit
EACH

Labor
\$100

Material
\$100

Total
\$200



Fragaria Virginiana
(Common Strawberry)



Eutrochium Purpureum
var. *Purpureum*
(Purple Joe-Pye Weed)



Asclepias Tuberosa
ssp. *Tuberosa*
(Butterfly Milkweed)

Cost Estimate

Item
Softscape Concepts Perennials

Unit	Labor	Material	Total
EACH	\$100	\$110	\$210



Acer Saccharum var. *Saccharum*
(Sugar Maple)



Prunus Serotina
(Black Cherry)



Quercus Rubra
(Northern Red Oak)

Cost Estimate

Item
Softscape Concepts Trees

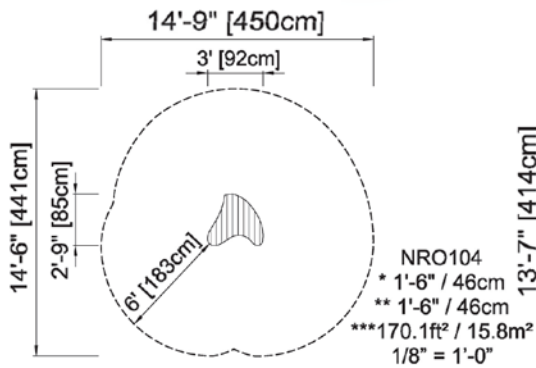
Unit	Labor	Material	Total
EACH	\$1,530	\$830	\$2,360

Softscape
Concepts

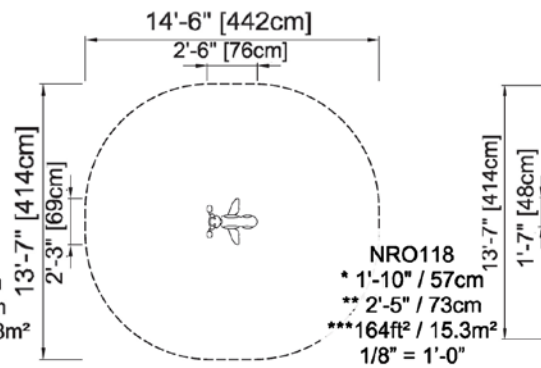
Play Equipment

Design Guide

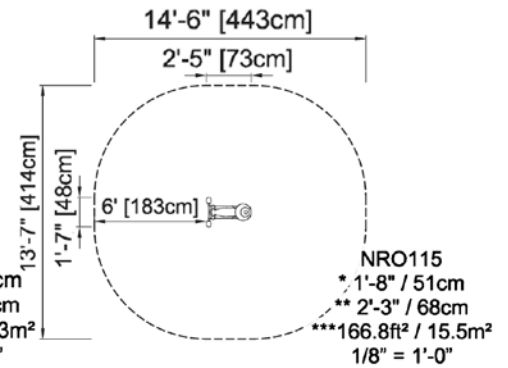




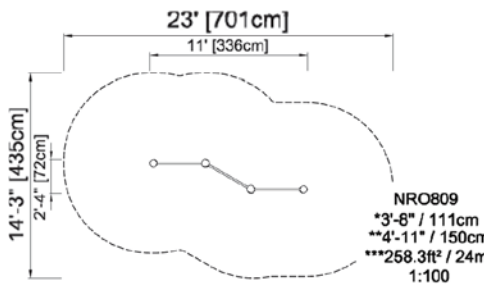
Multi-Springer



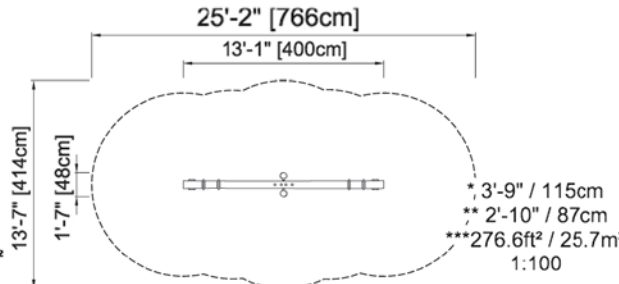
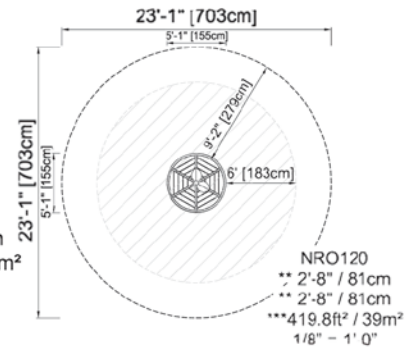
Bee Springer



Snail Springer

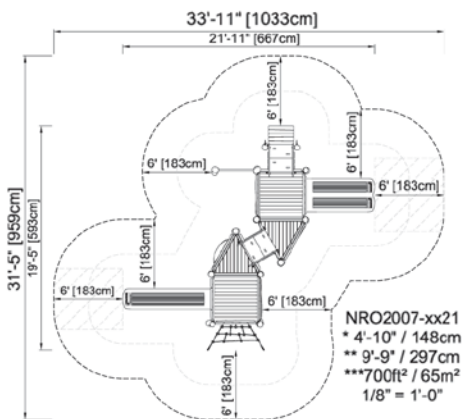
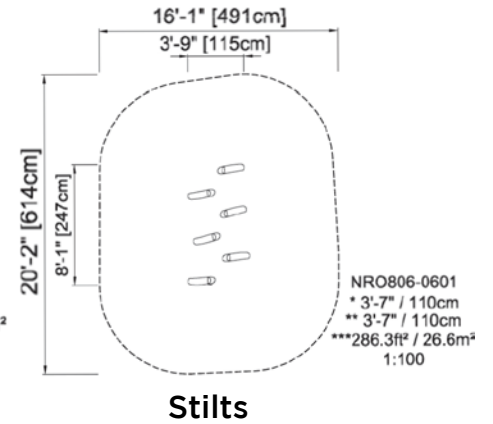
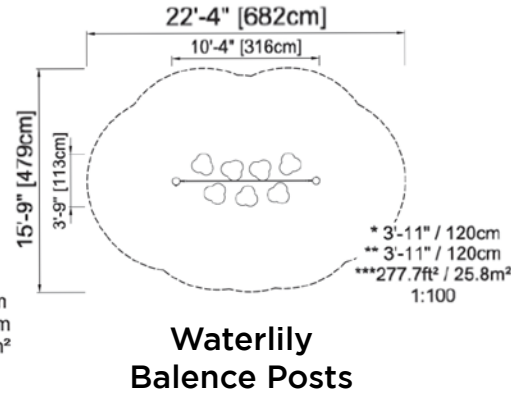
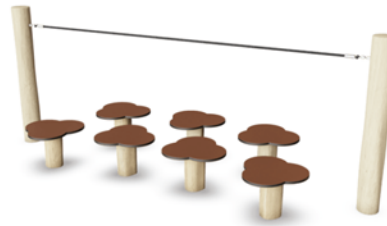
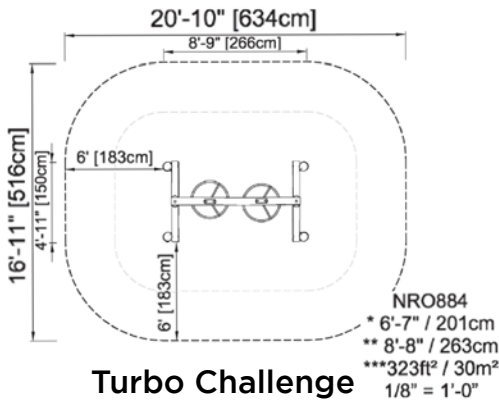


Triple Somersault

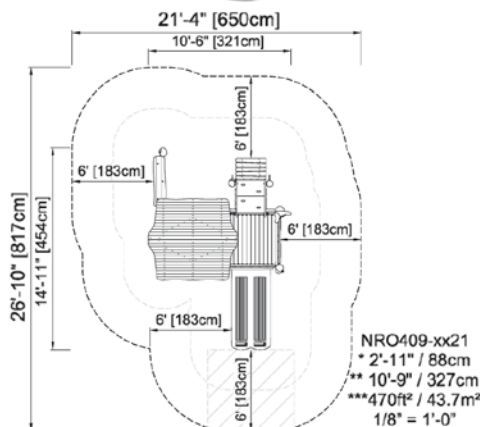
Four Seated
See-Saw

Carousel with Seats

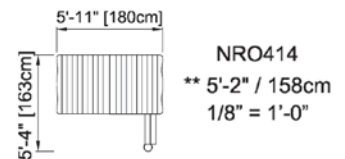
KOMPAN!
 Let's play



**Double Tower
with Two Slides**



Wizards Hideaway



Playhut

KOMPAN
Let's play

*Only some options depicted, many alternate brands and structures may fit as good substitutes
**Pricing may vary (throughout entirety of booklet)

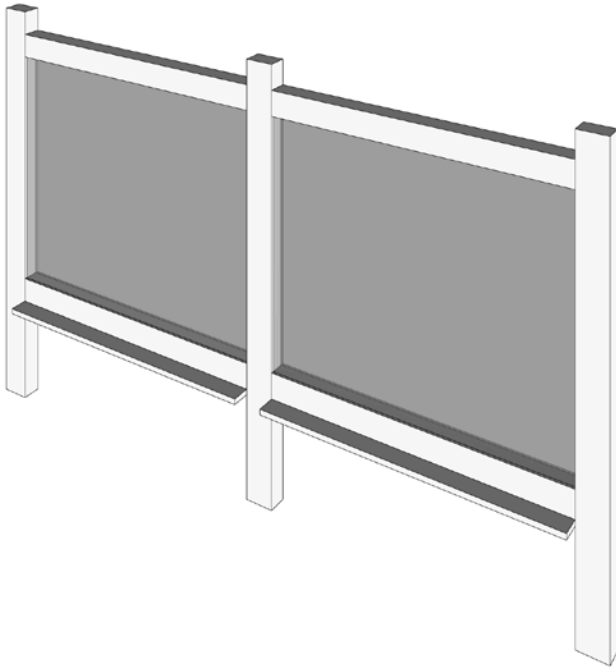
**Play
Equipment**

Art & Music Equipment

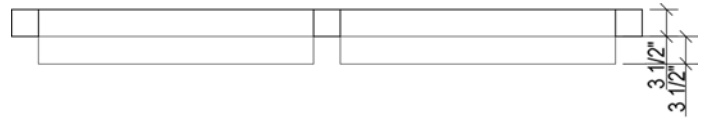
Design Guide



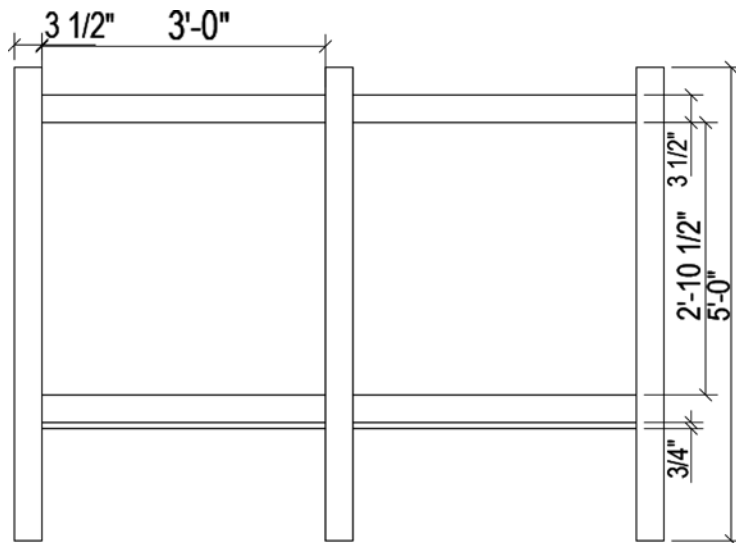
3-D View



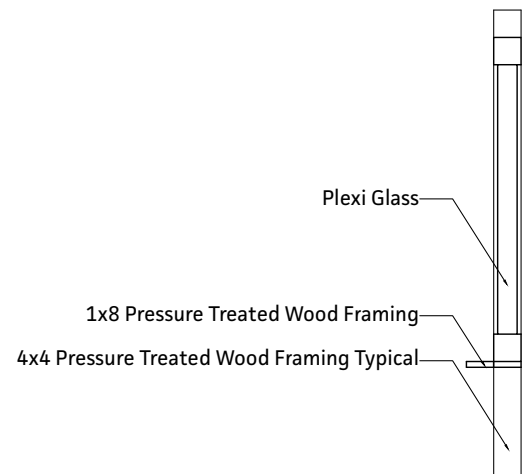
Plan



Elevation



Section

**Narrative**

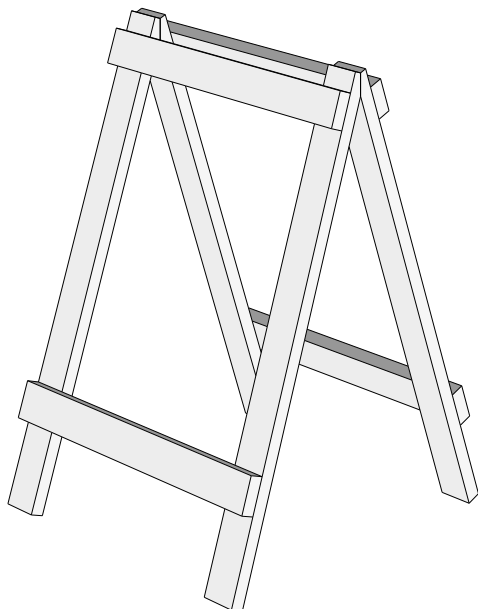
This easel made from plexi glass can support regular canvas painting, but does not require it. Students can paint right on the glass. and allows easy clean up with water.

Cost Estimate

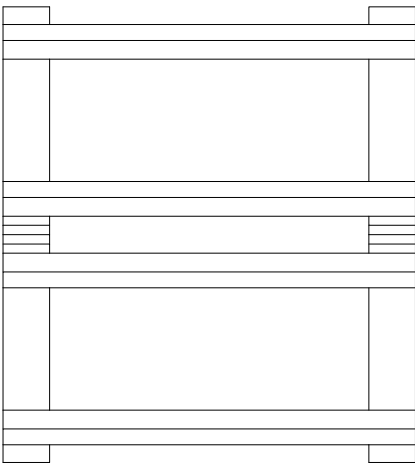
Item	Unit	Labor	Material	Total
A&M Easel	DOUBLE SET	\$6,600	\$1,500	\$8,100



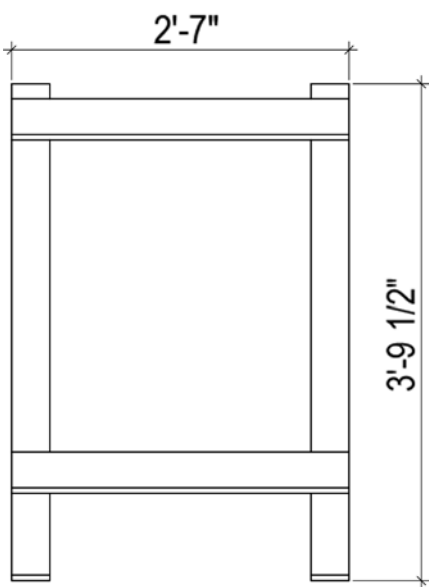
3-D View



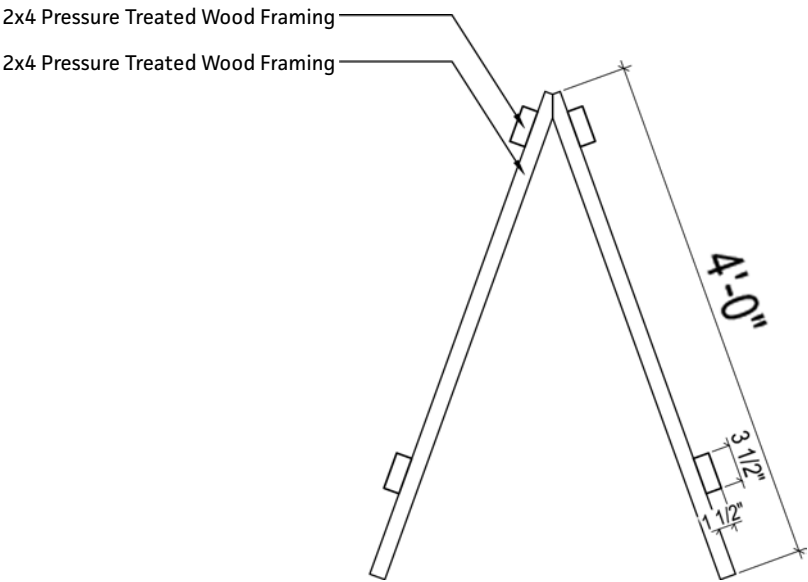
Plan



Elevation



Section



Narrative

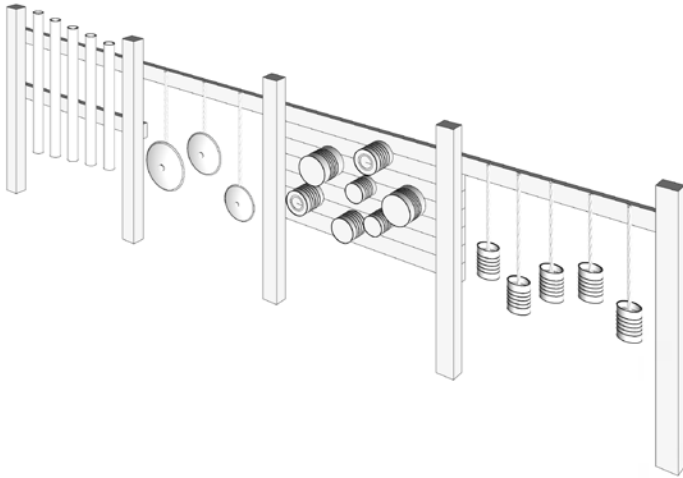
After students make art work, they can display it on this stand for the whole class to see. Also, multiple can be constructed to create a gallery. Easy to store and move.

Cost Estimate

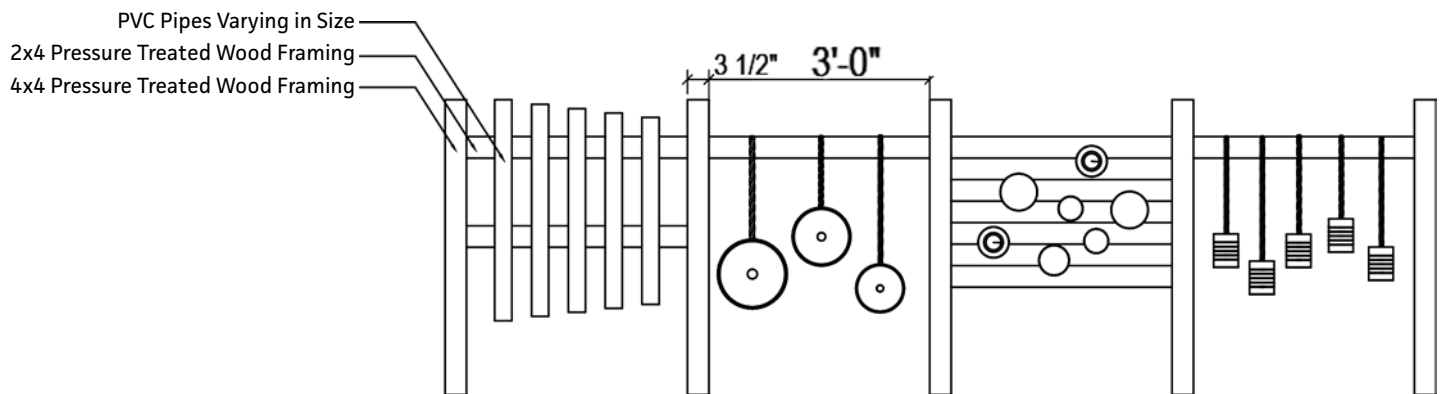
Item	Unit	Labor	Material	Total
A&M Art Display	EACH	\$1,500	\$250	\$1,750



3-D View



Elevation



Narrative

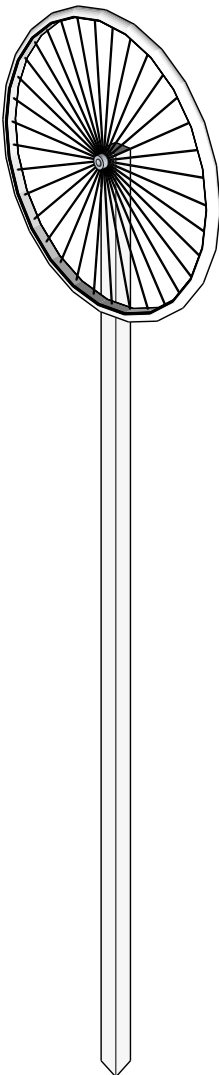
The music wall has different items on it that students can make music with. Inclusion of this in an outdoor learning space will enhance student's creativity and support social interaction.

Cost Estimate

Item	Unit	Labor	Material	Total
A&M Music Wall	QUAD SET	\$8,325	\$2,500	\$10,825



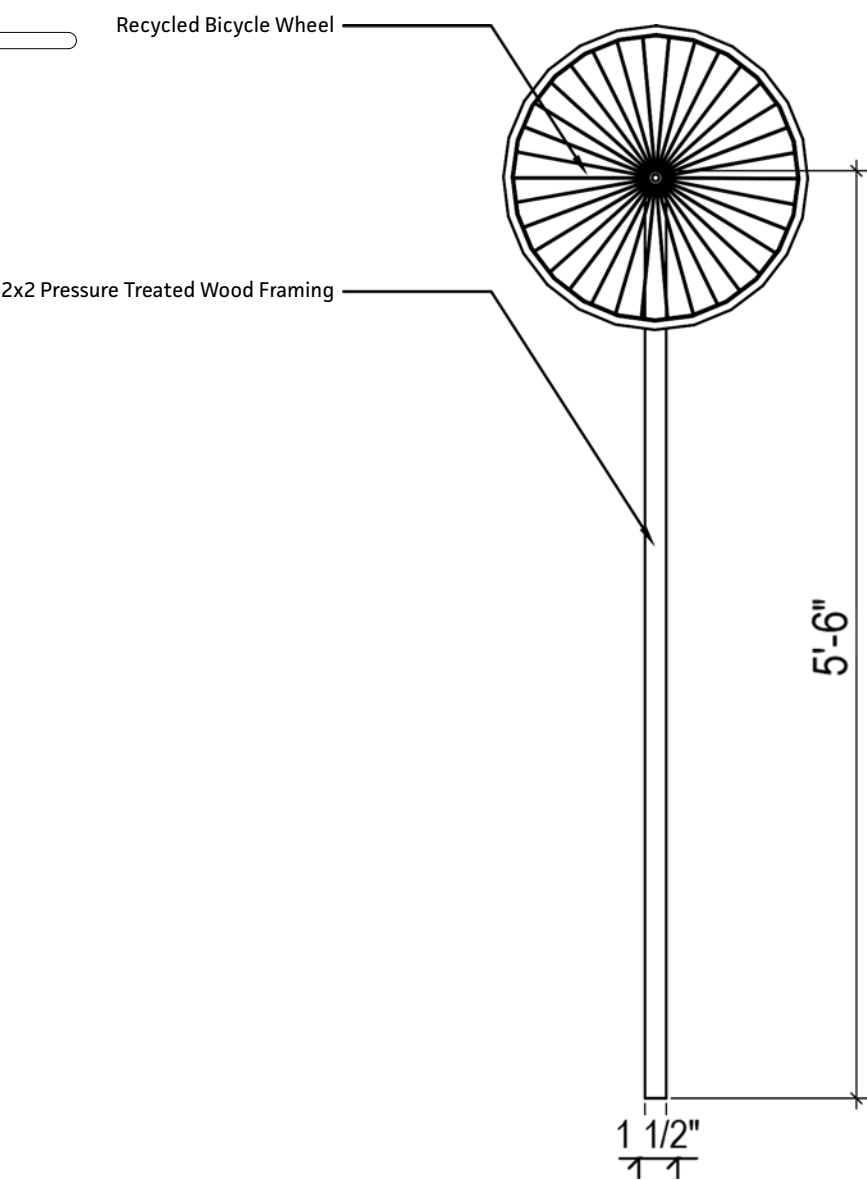
3-D View



Plan



Elevation



Narrative

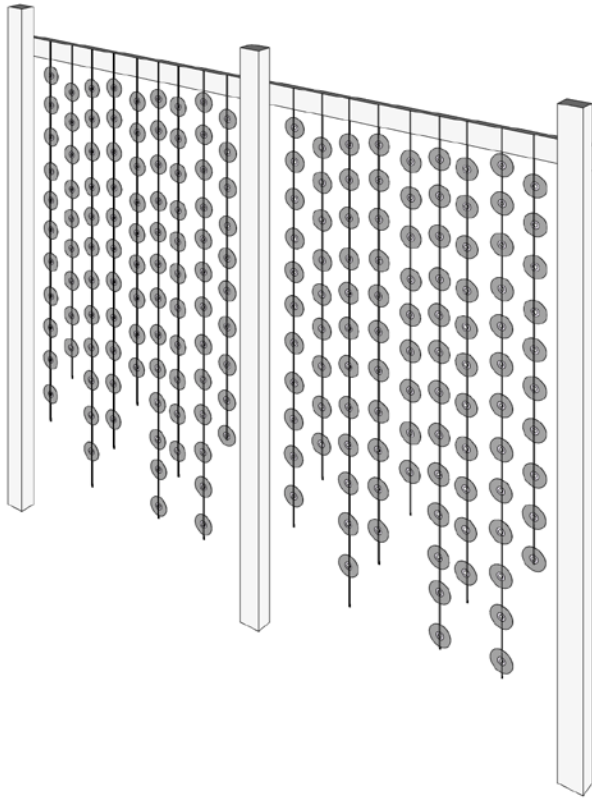
This is a decoration that is made out of recycled bicycle wheels. Students can decorate these with many different materials to make them unique.

Cost Estimate

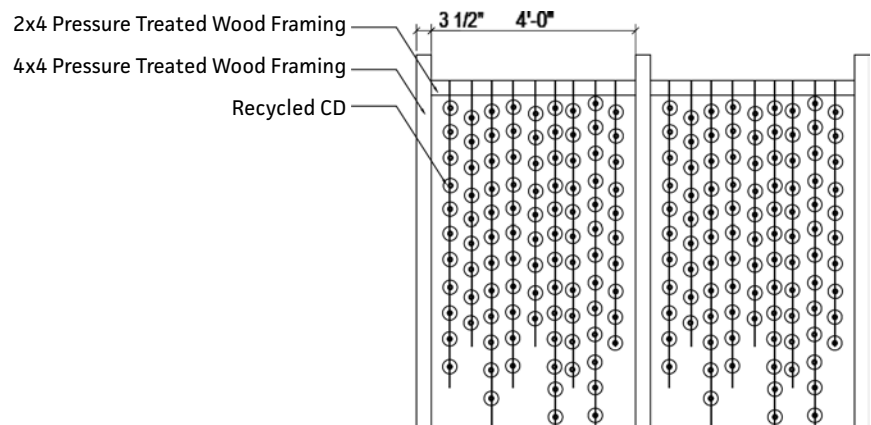
Item	Unit	Labor	Material	Total
A&M Bicycle Wheel Décor	EACH	\$2,200	\$300	\$2,500



3-D View



Elevation



Narrative

The rain wall is made of recycled CDs that students decorate as an art activity. Inclusion of this into an outdoor learning space creates audio and visual interaction.

Cost Estimate

Item	Unit	Labor	Material	Total
A&M Rain Wall	DOUBLE SET	\$8,325	\$2,500	\$10,825



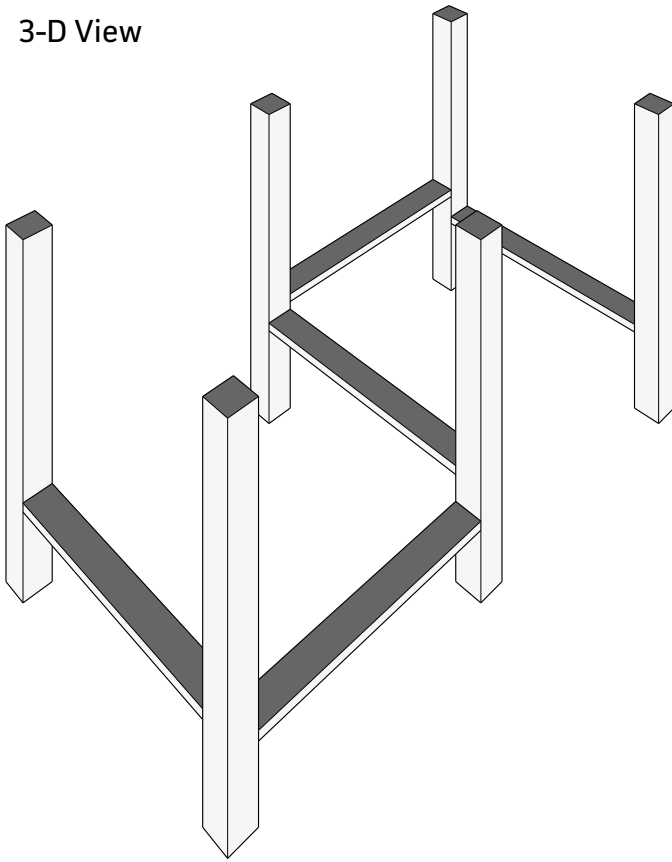
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Physical Education Equipment

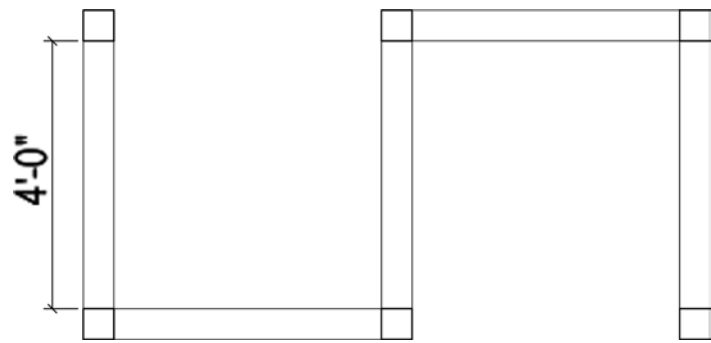
Design Guide



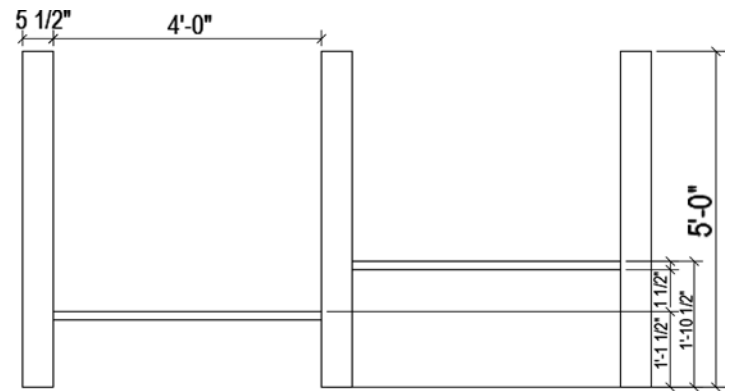
3-D View



Plan



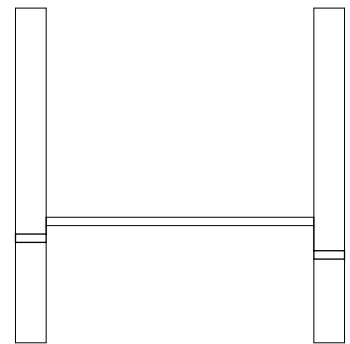
Elevation



Section

6x6 Pressure Treated Wood Framing

2x6 Pressure Treated Wood Framing



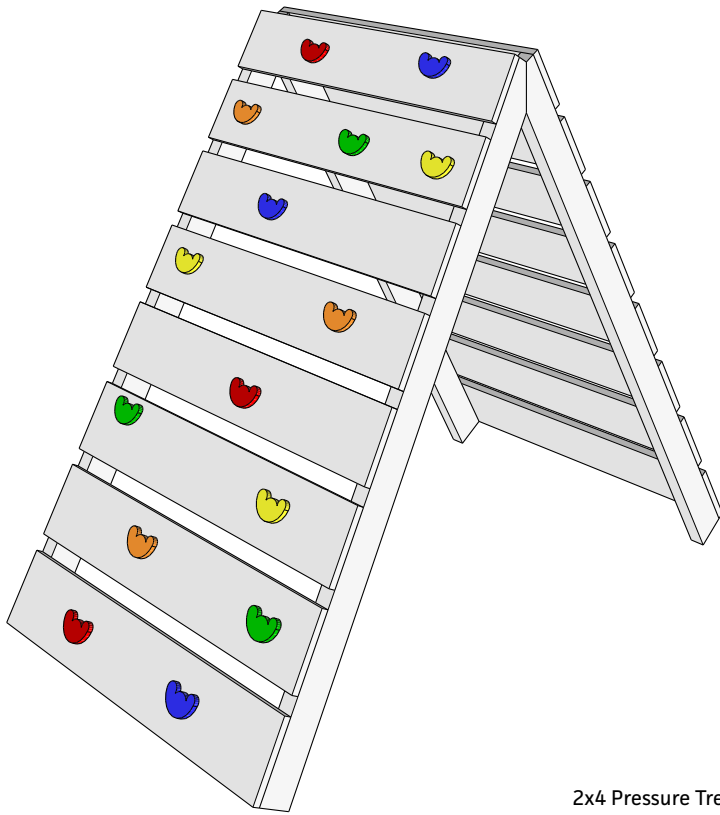
Narrative

This is a grouping of balance beams that is more interactive than an individual balance beam and has more room for multiple kids. It can be constructed in different variations to fit many space layouts. Use zones (space under and around the equipment) are not indicated in these illustrations and should be designed for unrestricted circulation around each piece of equipment.

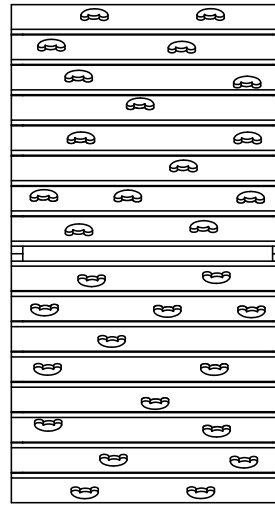
Cost Estimate

Item	Unit	Labor	Material	Total
PE Balance Beam Course	GROUP OF 5	\$6,680	\$2,000	\$8,680

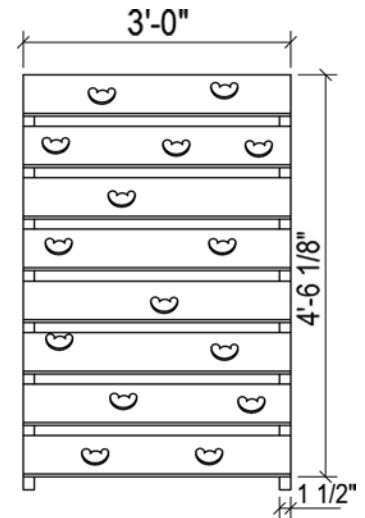
3-D View



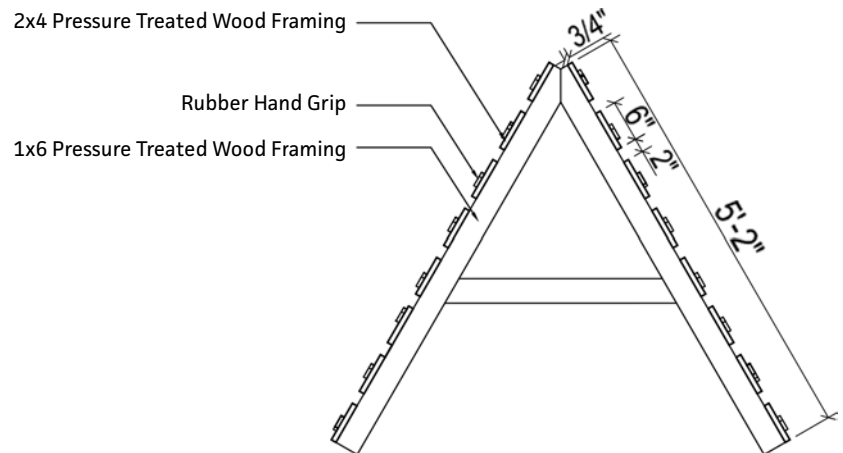
Plan



Elevation



Section



Narrative

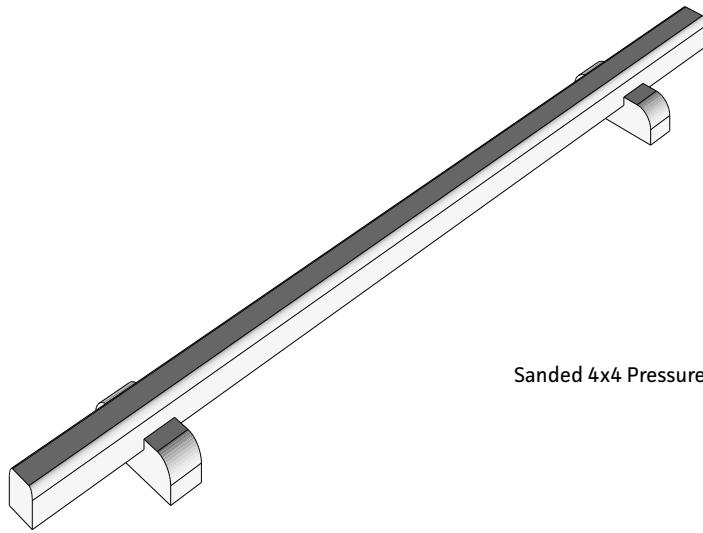
This wall is a safe version of rock climbing that teaches kids unique athletic skills. A climbing wall is a great tool to teach a feeling of accomplishment following hard work.

Cost Estimate

Item	Unit	Labor	Material	Total
PE Climbing Wall	EACH	\$2,000	\$800	\$2,800

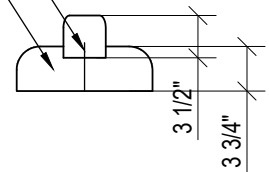


3-D View

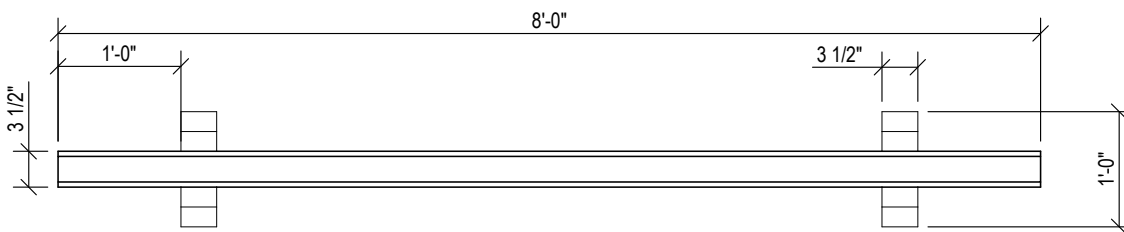


Section

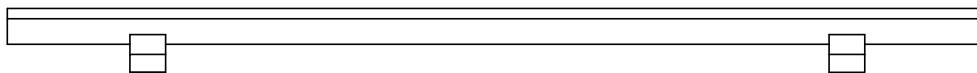
Hot Dipped Galvanized Anchor
Sanded 4x4 Pressure Treated Wood Framing Typical



Plan



Elevation



Narrative

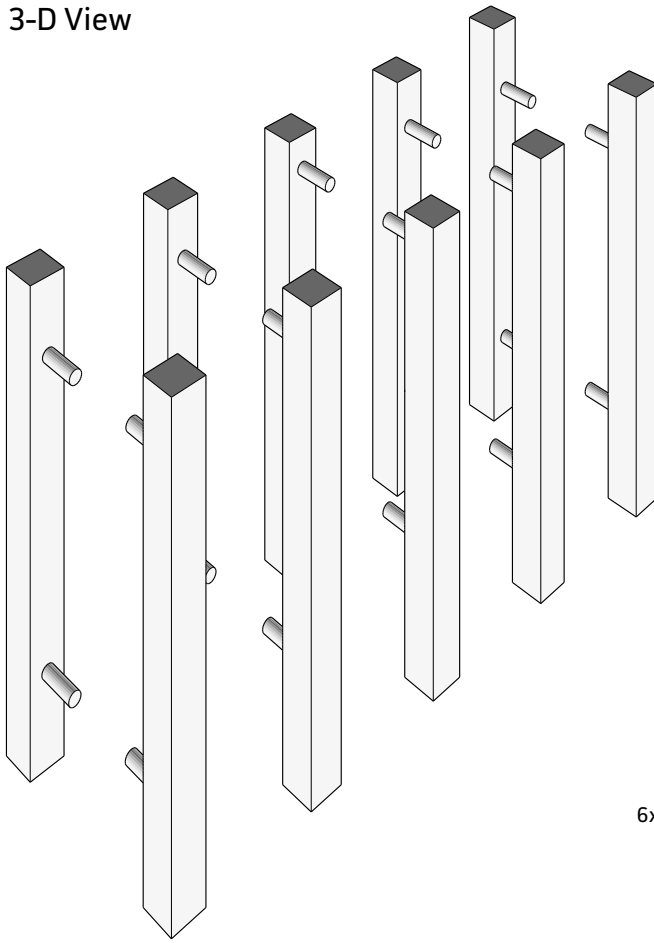
Balance beams engage kids in physical activity at an entry level to help teach coordination and balance.

Cost Estimate

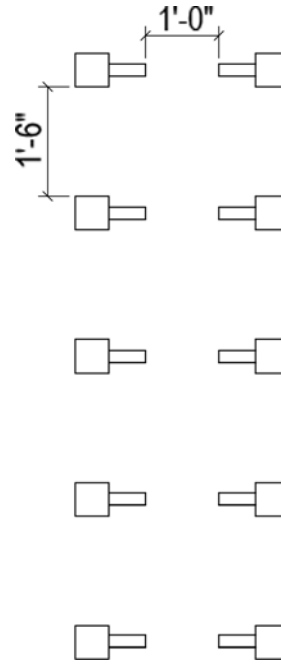
Item	Unit	Labor	Material	Total
PE Balance Beam	EACH	\$800	\$200	\$1,000



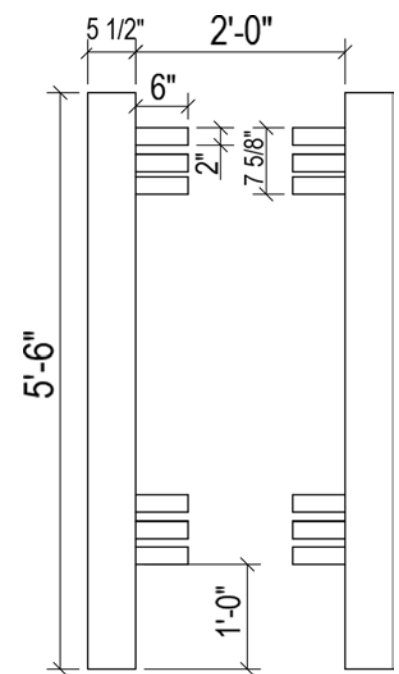
3-D View



Plan

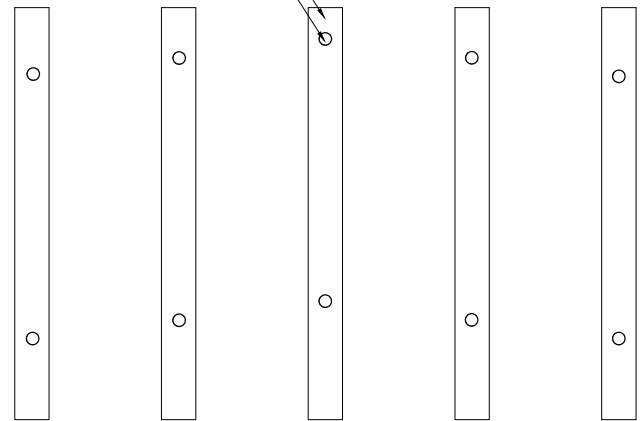


Elevation



Section

6x6 Pressure Treated Wood Framing
1" Radius Wood Knob



Narrative

This piece of equipment will engage kids in physical activity and help kids learn strength and agility.

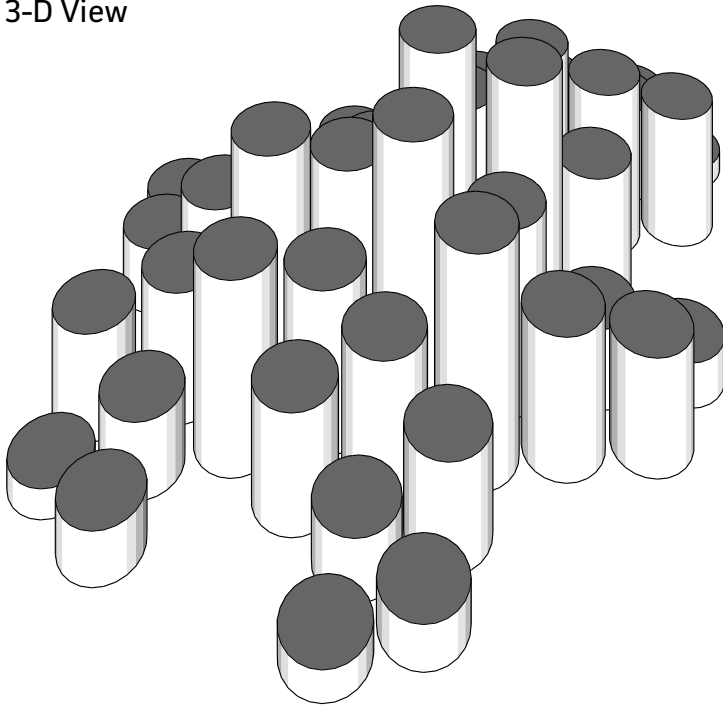
Cost Estimate

Item	Unit	Labor	Material	Total
PE Post Obstacle	GROUP OF 12	\$9,000	\$2,500	\$11,500

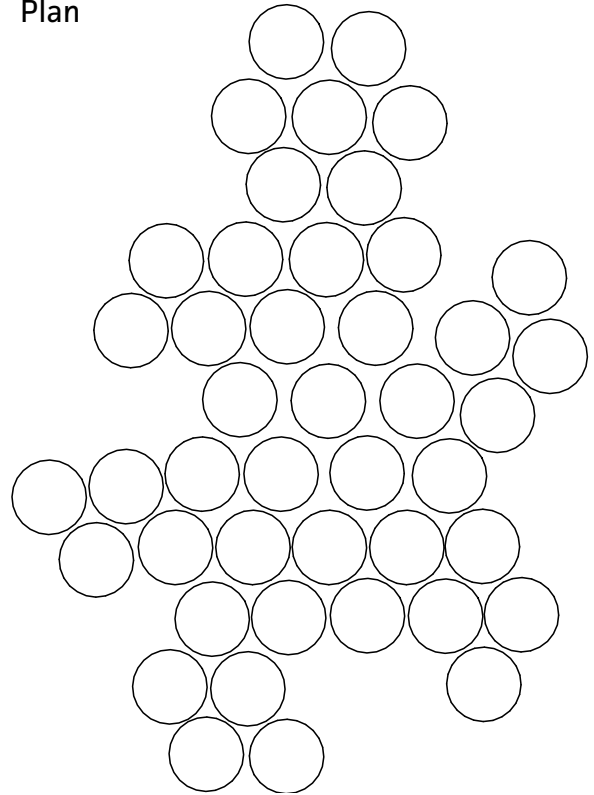


Physical Education
Obstacle
Posts

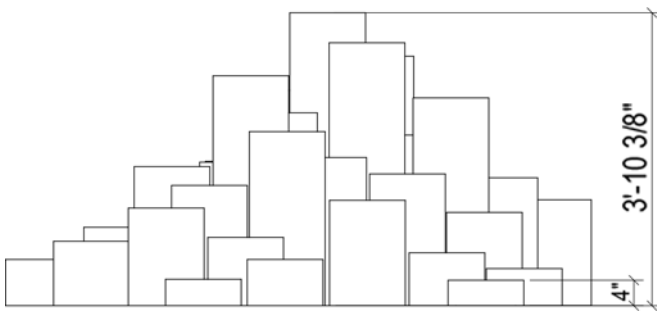
3-D View



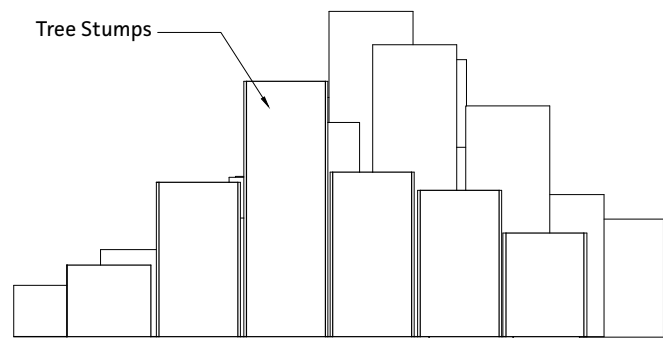
Plan



Elevation



Section



Narrative

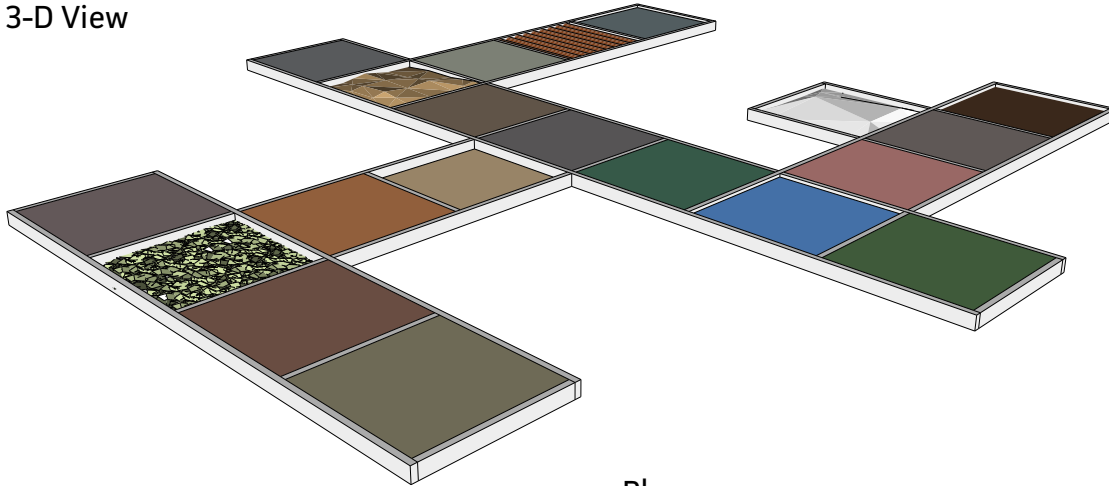
Log steps can provide for multiple sensory experiences and many users. They are a unique way to learn balance and agility, and can be used for group seating.

Cost Estimate

Item	Unit	Labor	Material	Total
PE Log Steps	GROUP	\$4,500	\$1,500	\$6,000

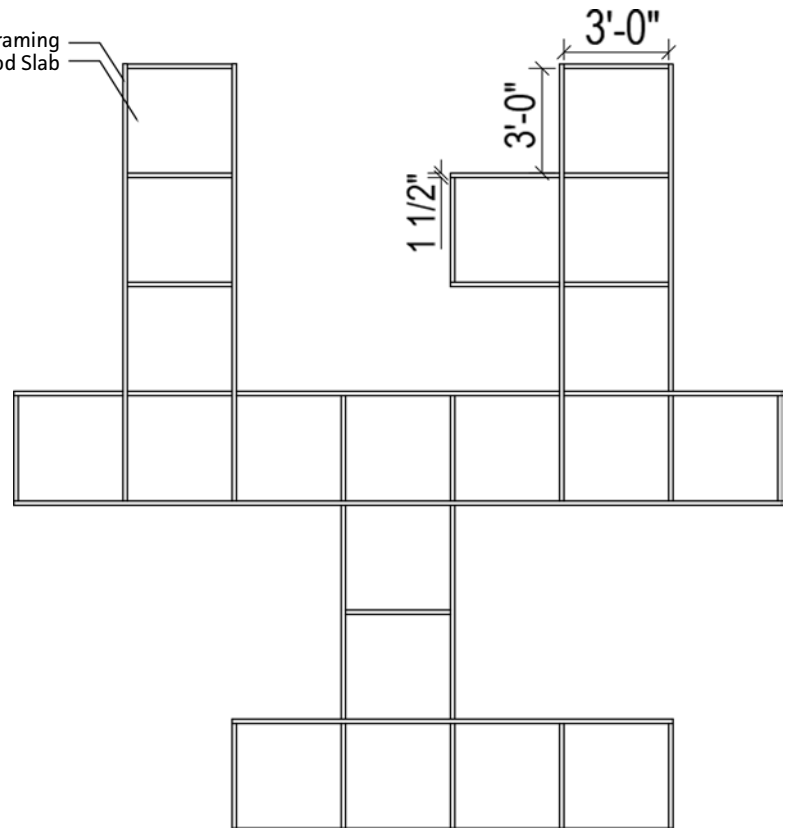


3-D View



Plan

2x4 Pressure Treated Wood Framing
5/8" Wood Slab



Narrative

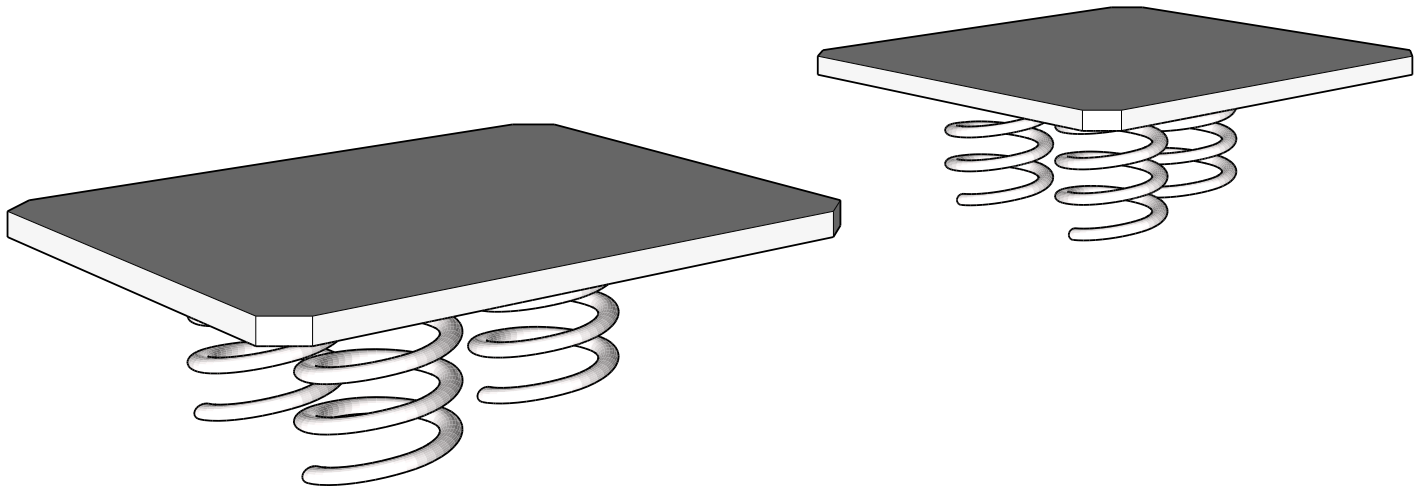
The sensory pathway is used for students to practice identifying different textures while supporting cognitive growth.

Cost Estimate

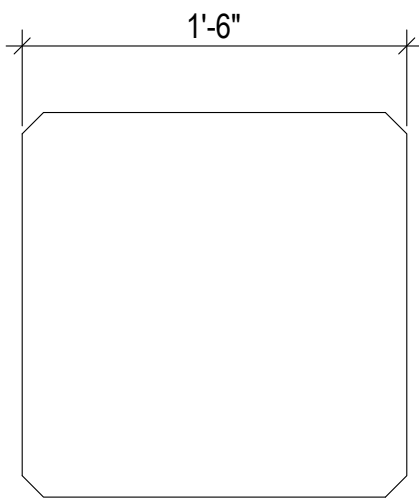
Item	Unit	Labor	Material	Total
PE Sensory Pathway	GROUP OF 20	\$7,200	\$6,300	\$13,500



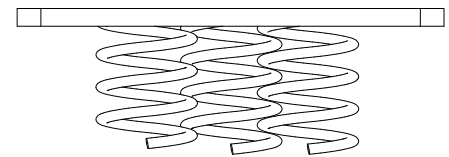
3-D View



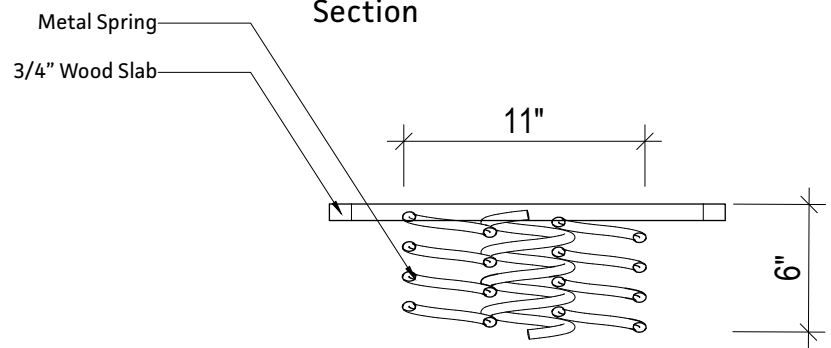
Plan



Elevation



Section



Narrative

The balance platform is a unique and fun way for kids to learn balance and coordination.

Cost Estimate

Item	Unit	Labor	Material	Total
PE Balance Platform	EACH	\$1,655	\$1,000	\$2,655

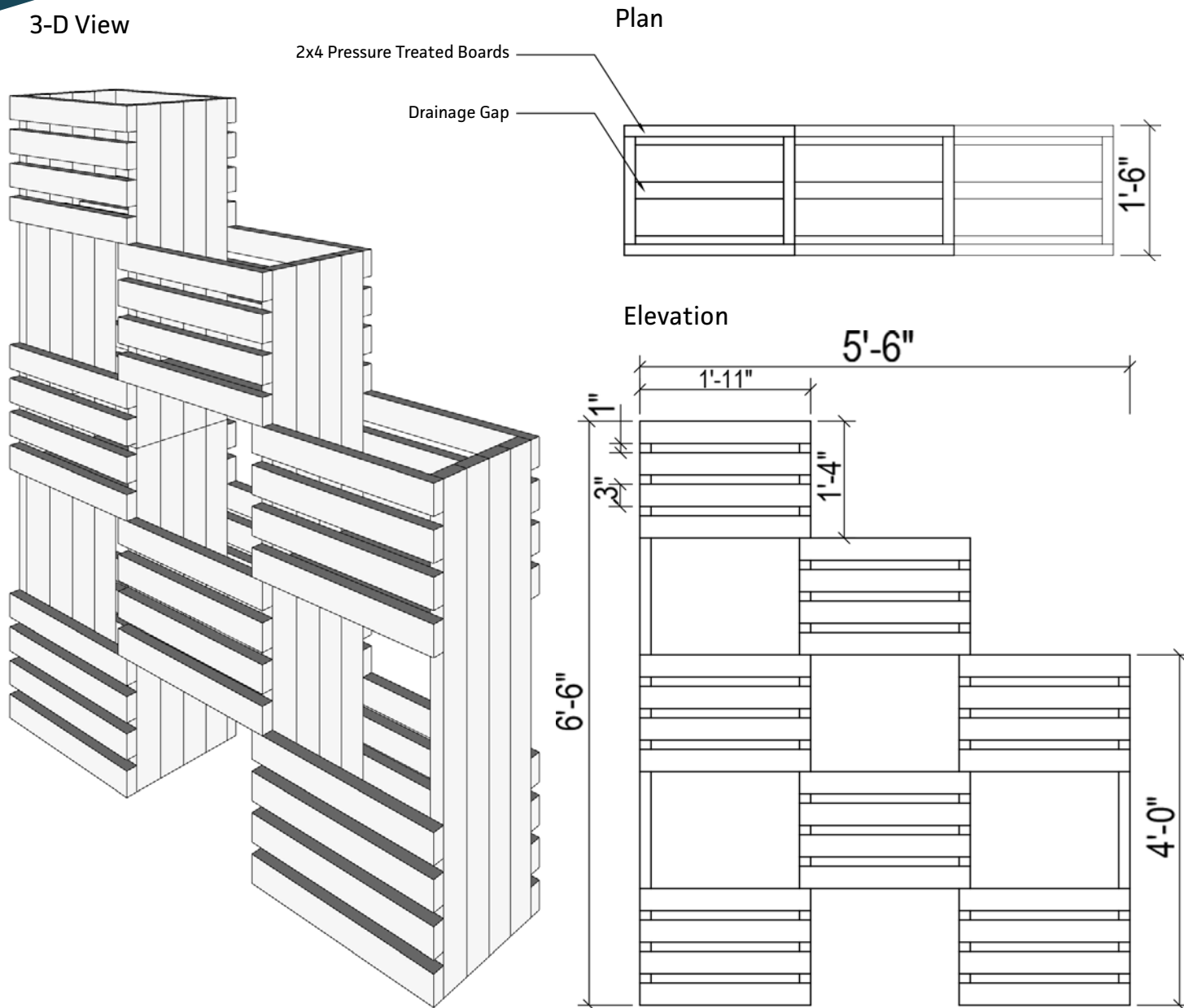


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Food Systems Equipment

Design Guide





Narrative

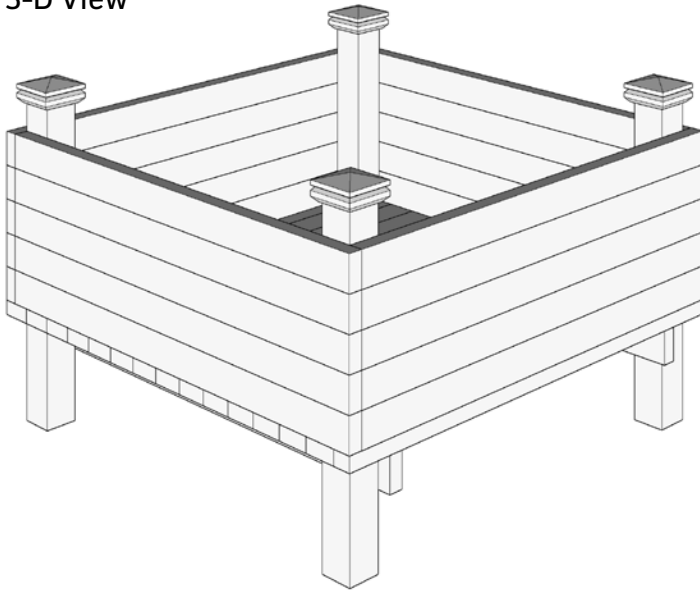
Verticle planters like these can be installed to teach students about growing fresh vegetables and herbs, food production, and healthy eating habits. All types of planters help build a sense of community among students as they work together to care for the vegetation.

Cost Estimate

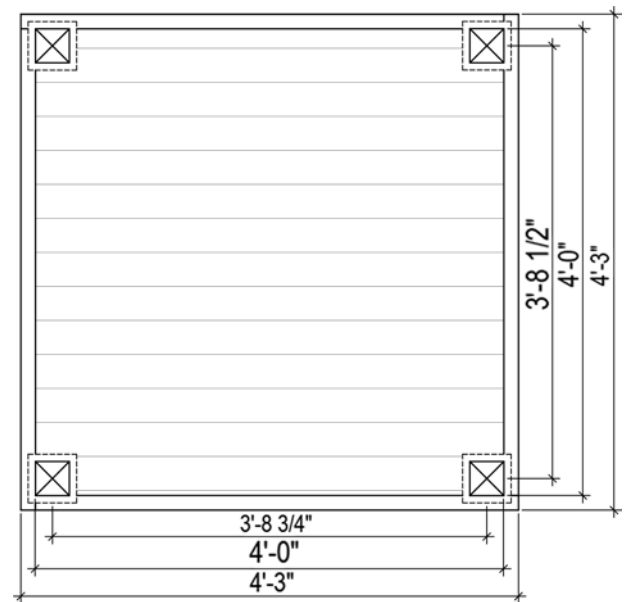
Item	Unit	Labor	Material	Total
FT Vegetable Garden	GROUP OF 7	\$4,000	\$3,200	\$7,200



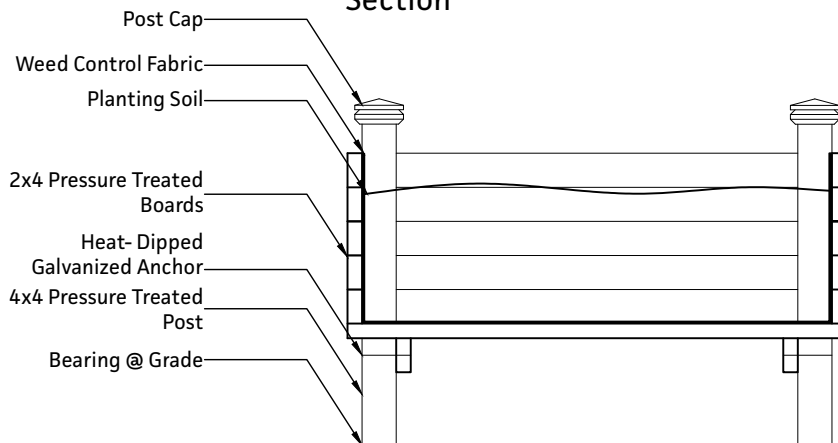
3-D View



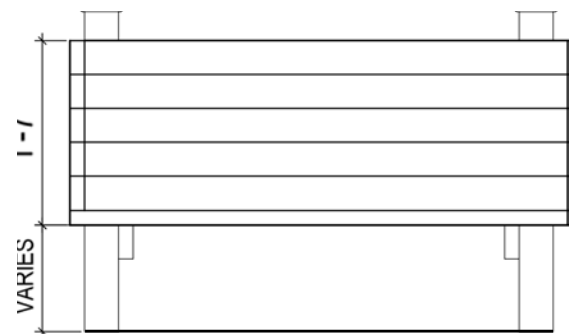
Plan



Section



Elevation



Narrative

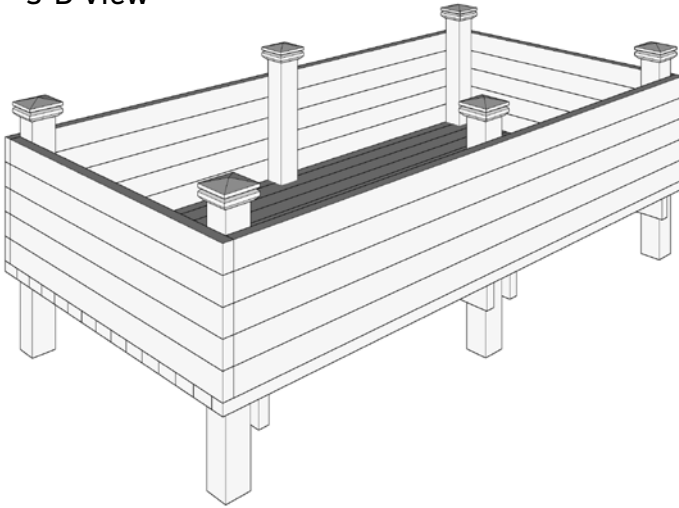
Planters like these can be installed to teach students about growing fresh vegetables and herbs, food production, and healthy eating habits. These small planters can be used to section off multiple kinds of vegetation when installing more than one in an area.

Cost Estimate

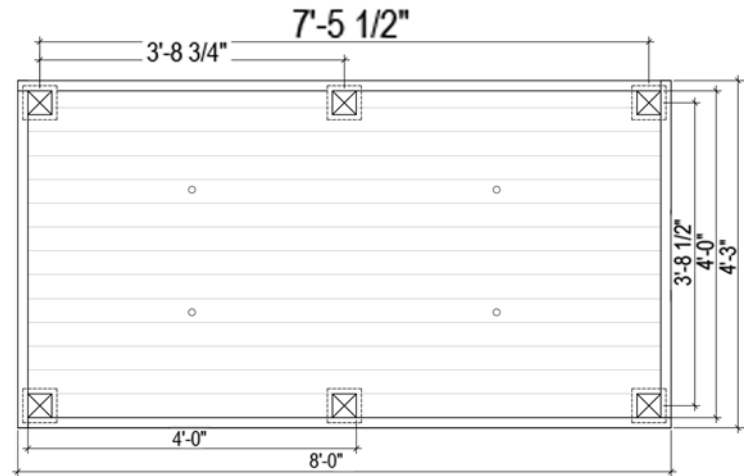
Item	Unit	Labor	Material	Total
FT Small Raised Planter	EACH	\$1,600	\$2,500	\$4,100



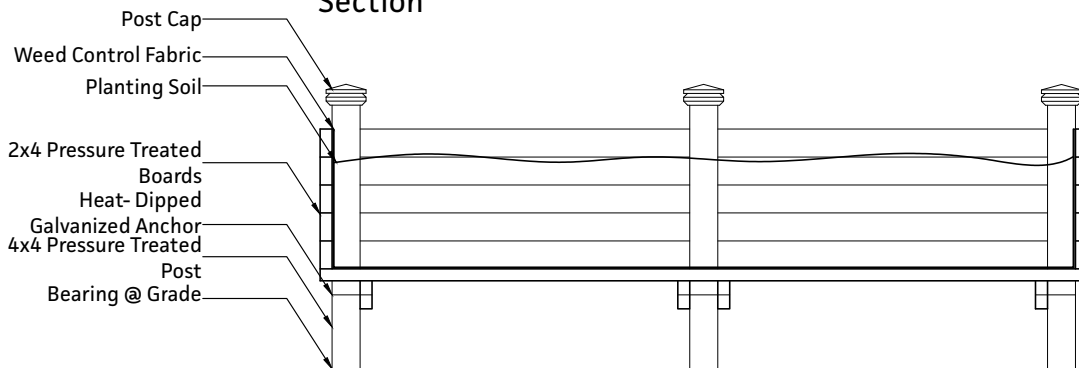
3-D View



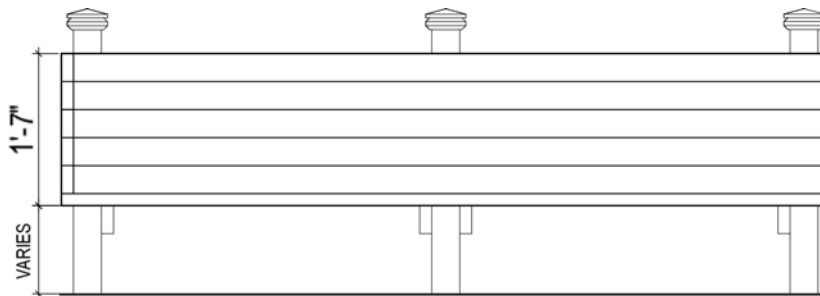
Plan



Section



Elevation



Narrative

Planters like these can be installed to teach students about growing fresh vegetables and herbs, food production, and healthy eating habits. These larger planters are great for growing entire gardens.

Cost Estimate

Item	Unit	Labor	Material	Total
FT Raised Planter	EACH	\$5,740	\$5,000	\$10,740



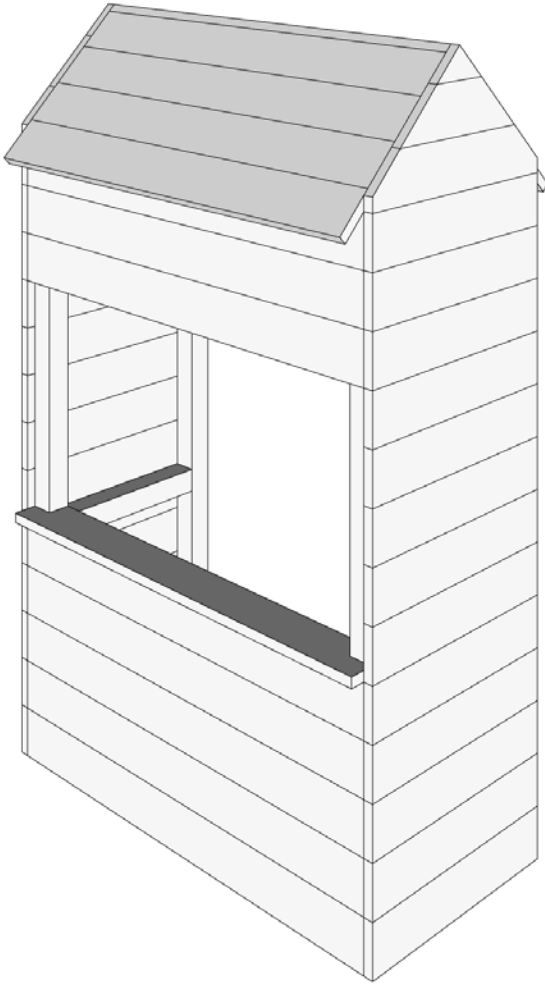
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English & Language Arts Equipment

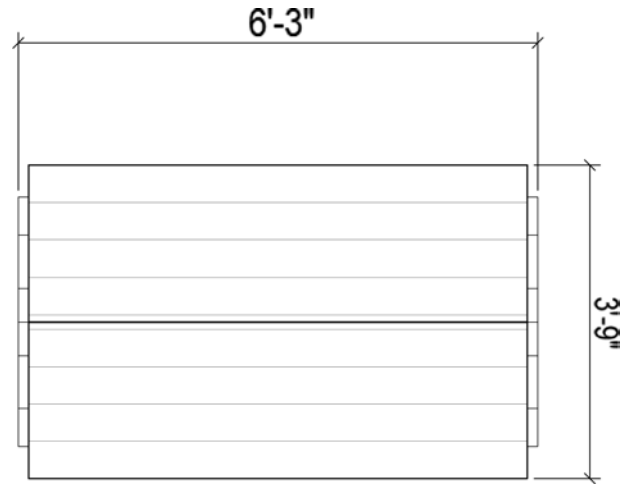
Design Guide



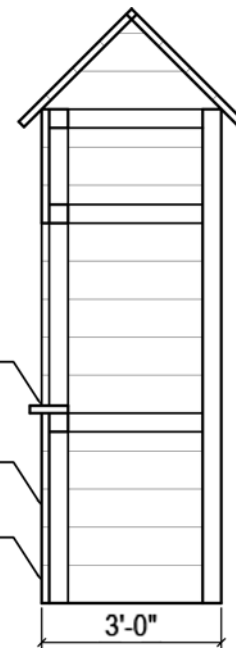
3-D View



Plan



Section

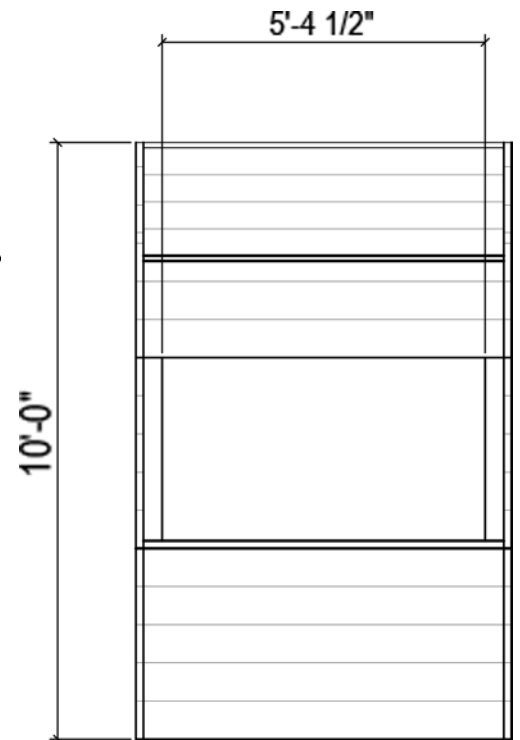


4x4 Pressure
Treated Wood
Framing

2x8 Pressure Treated
Wood Framing Typical

2x8 Pressure Treated
Wood Framing Typical

Elevation



Narrative

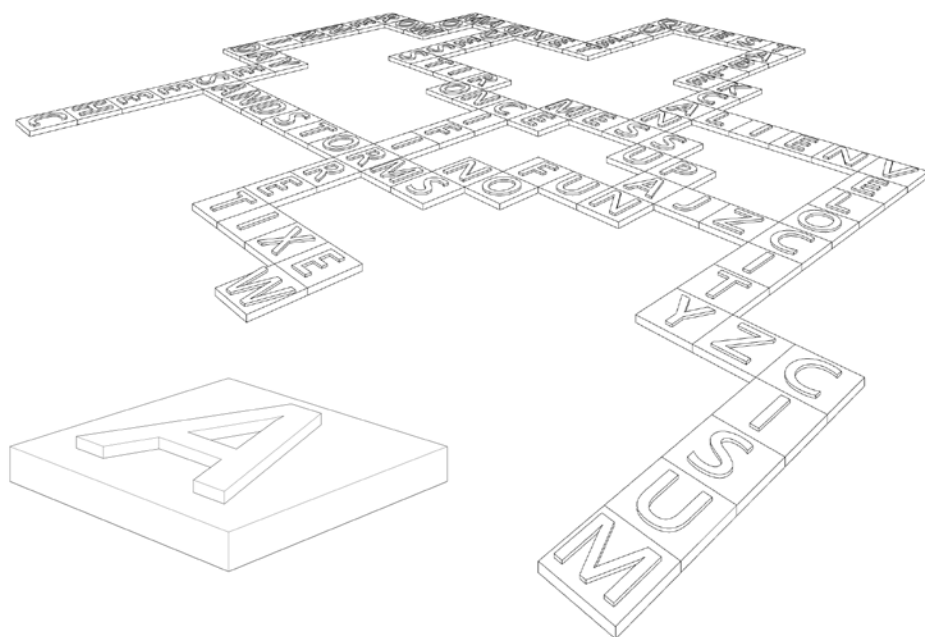
The puppet theater is used for dramatic play, which can increase creativity, social skills, and language development in students.

Cost Estimate

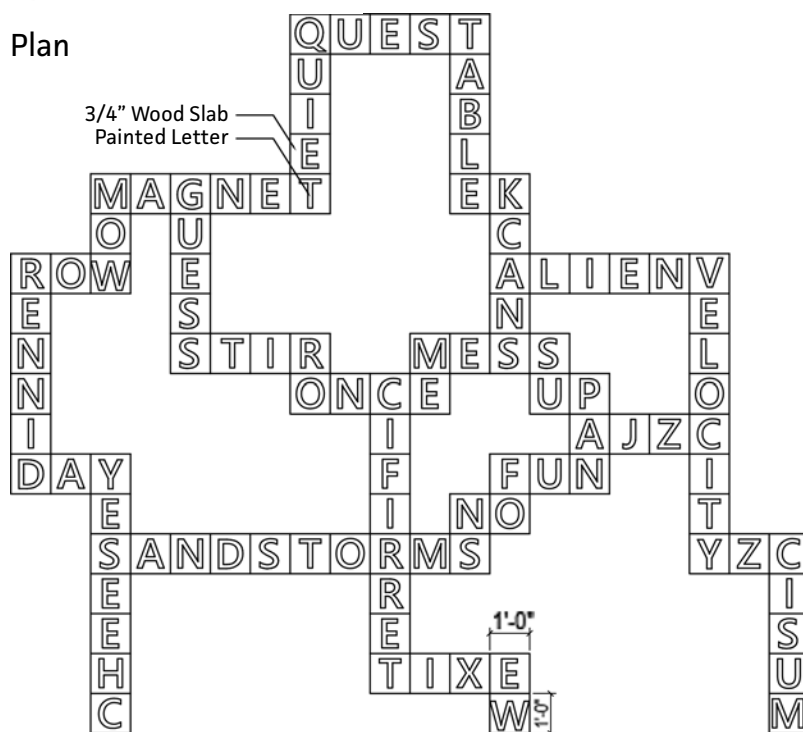
Item	Unit	Labor	Material	Total
E&D Puppet Theater	EACH	\$4,000	\$2,500	\$6,500



3-D View



Plan



Narrative

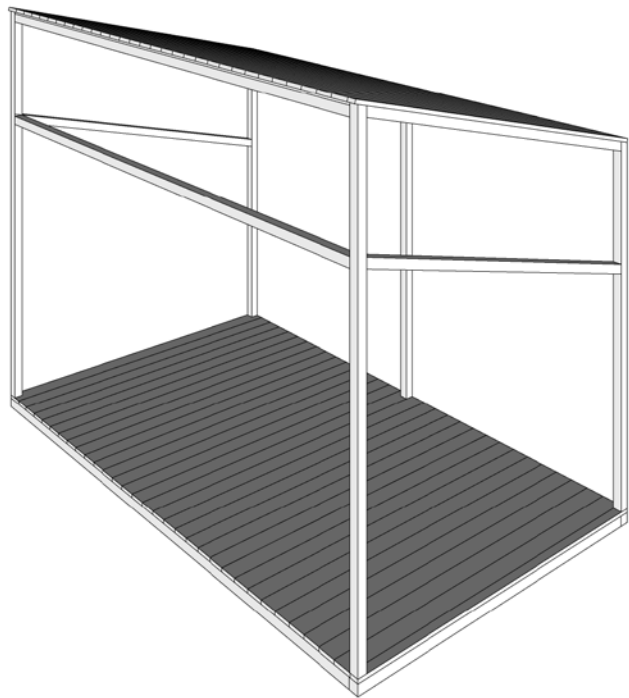
The letter path is a fun and interactive way for students to learn language and spelling.

Cost Estimate

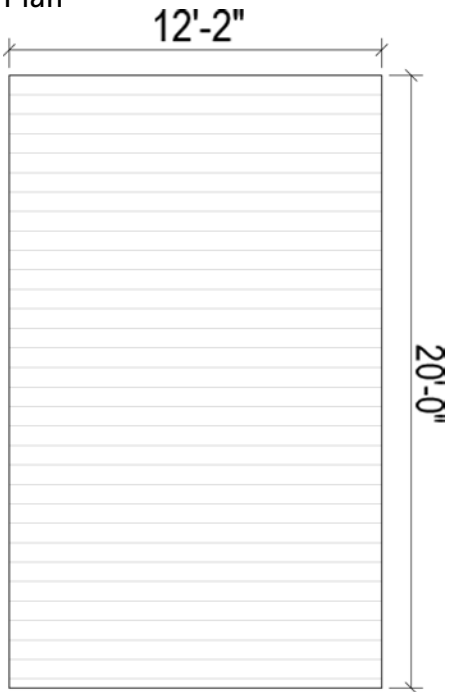
Item	Unit	Labor	Material	Total
E&D Letter Path	GROUP OF 32	\$8,365	\$4,505	\$12,870



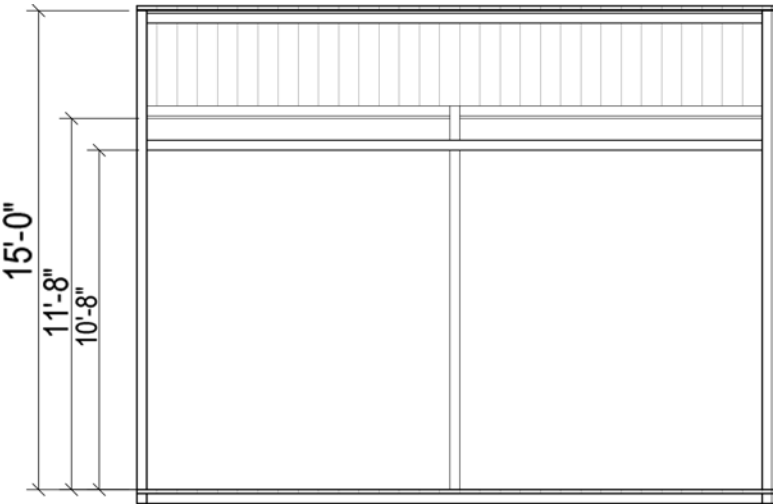
3-D View



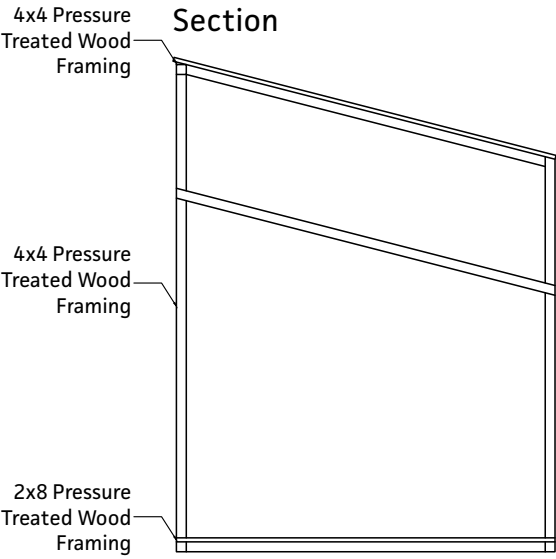
Plan



Elevation



Section



Narrative

The outdoor stage can be used for presentation or dramatic play, where students can gain social skills while also learning about and becoming more comfortable with public speaking.



Cost Estimate

Item	Unit	Labor	Material	Total
E&D Outdoor Stage	EACH	\$6,800	\$5,220	\$12,020

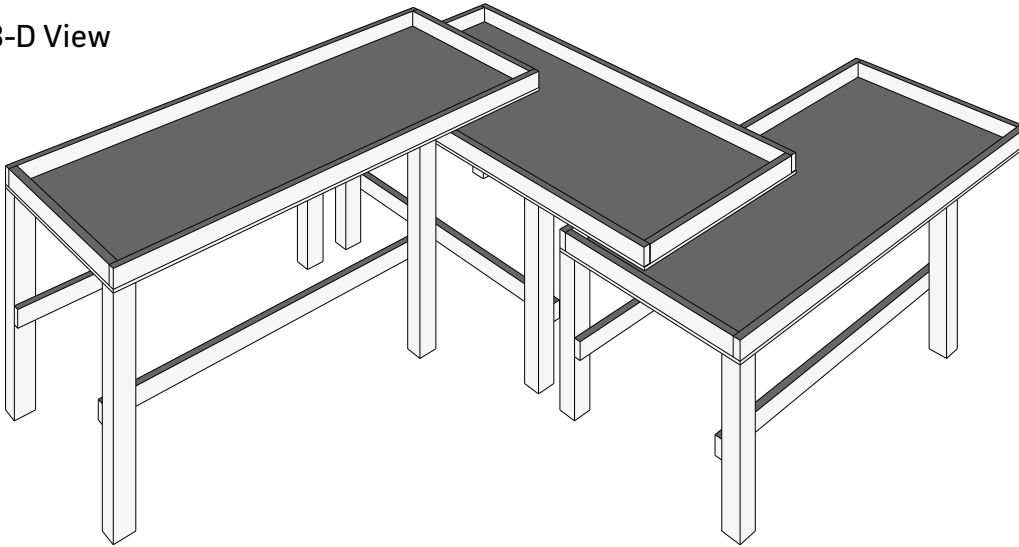
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Science & Math Equipment

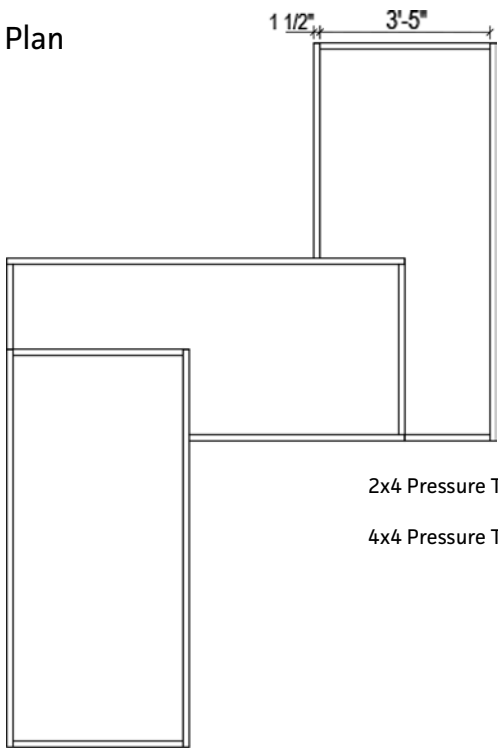
Design Guide



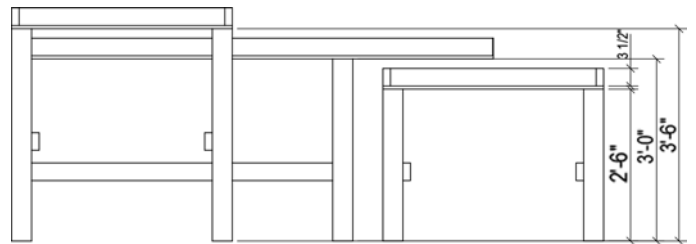
3-D View



Plan

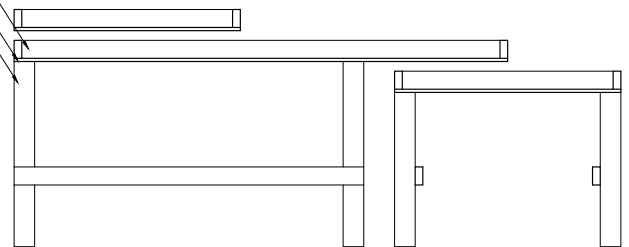


Elevation



Section

2x4 Pressure Treated Wood Framing
5/8" Thick Plywood
4x4 Pressure Treated Wood Framing



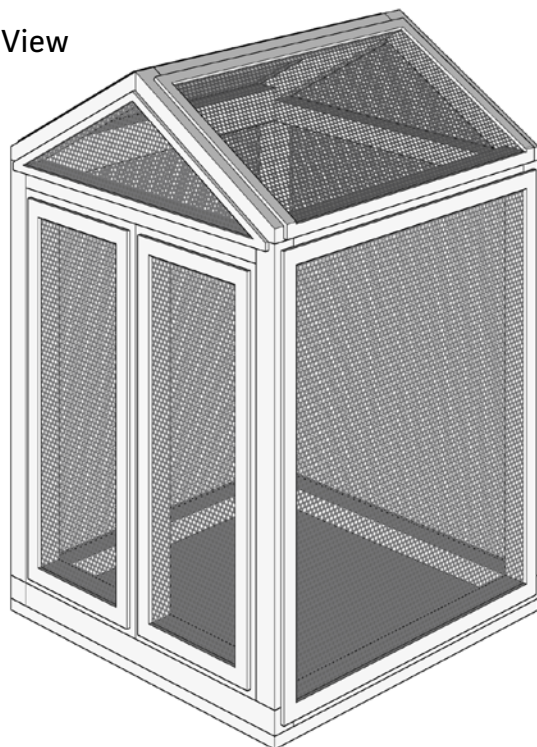
Narrative

This table is meant for activities involving STEM, accommodating several student heights while allowing for different types of learning and play.

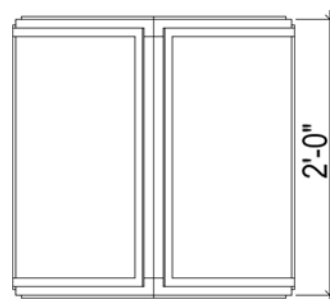
Cost Estimate

Item	Unit	Labor	Material	Total
S&M Stem Tables	GROUP OF 3	\$4,199	\$2,261	\$6,460

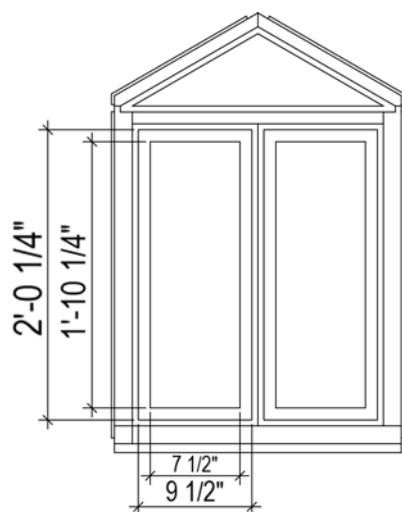
3-D View



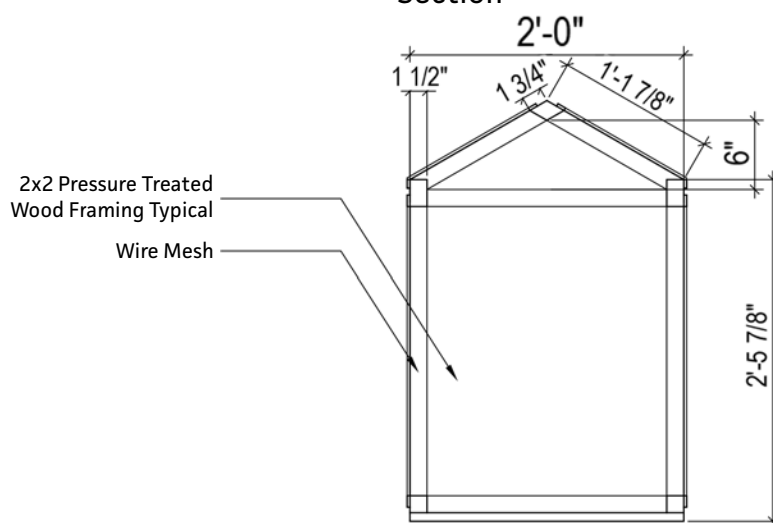
Plan



Elevation



Section

**Narrative**

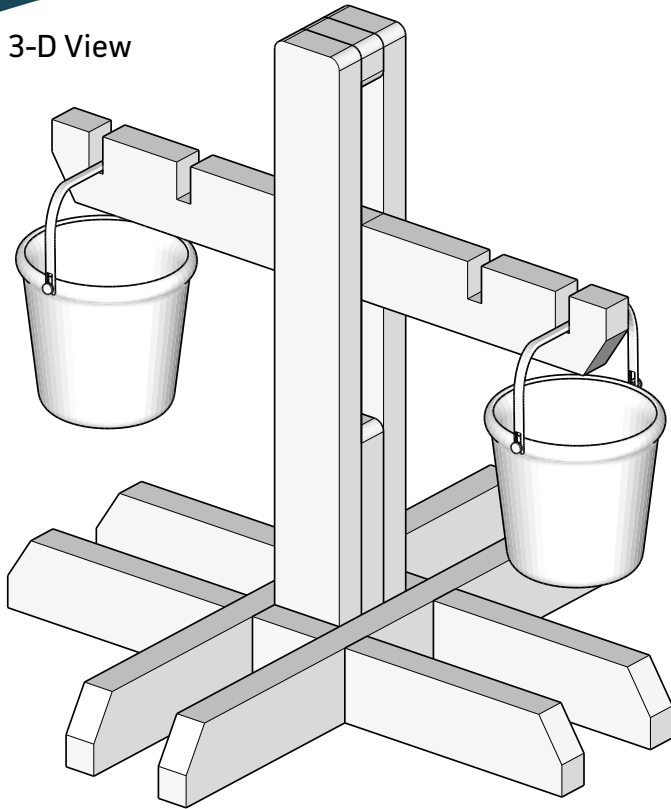
Butterfly cages allow for an in-depth observation of the growth and life cycle of caterpillars.

Cost Estimate

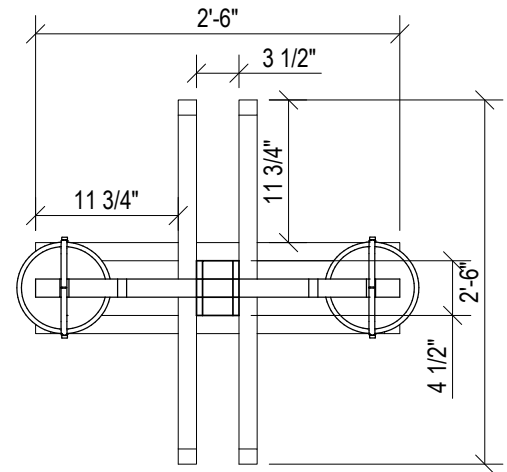
Item	Unit	Labor	Material	Total
S&M Butterfly Cage	EACH	\$1,500	\$1,000	\$2,500



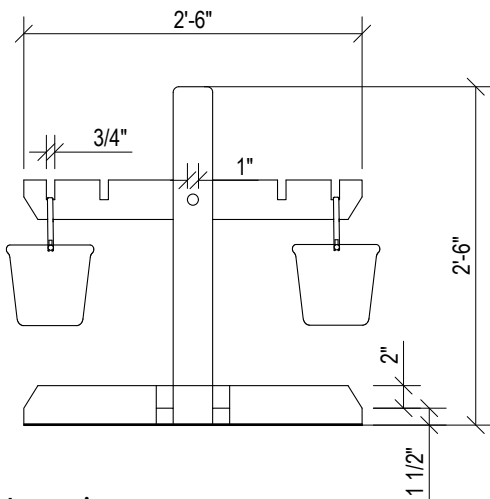
3-D View



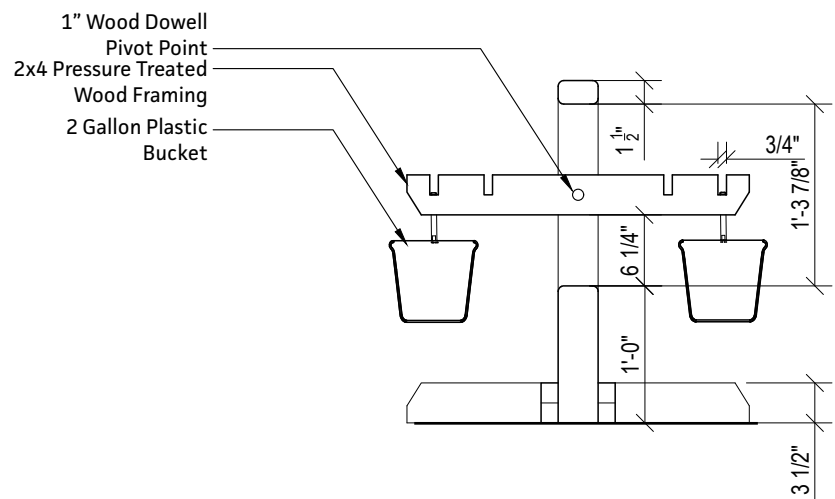
Plan



Elevation



Section



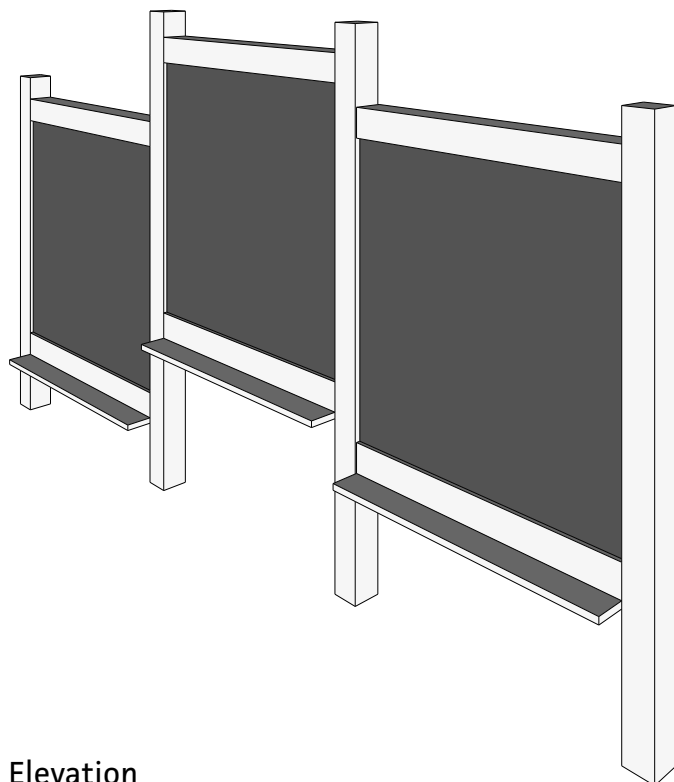
Narrative

An outdoor scale like this will peek a students interest and allow for outdoor science and math weight experimentation.

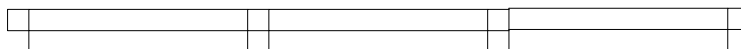
Cost Estimate

Item	Unit	Labor	Material	Total
S&M Outdoor Scale	EACH	\$1,520	\$350	\$1,870

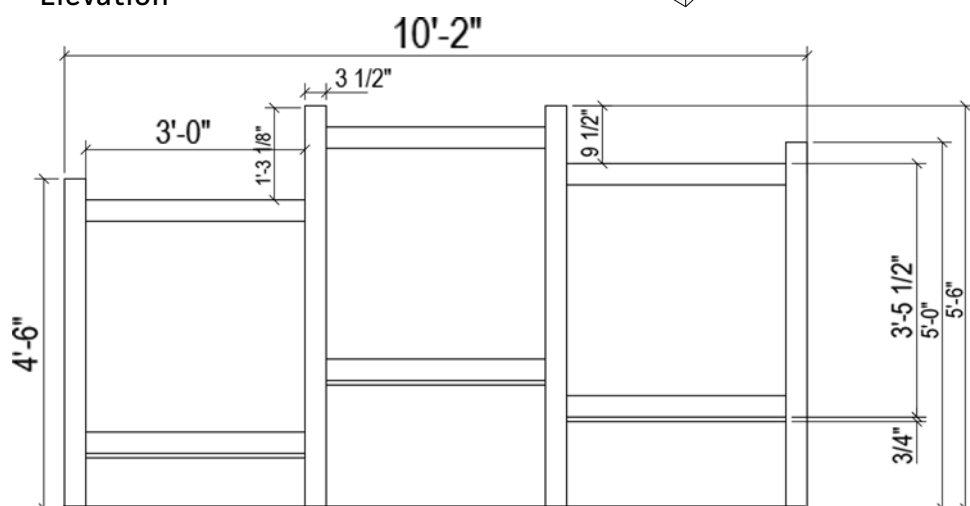
3-D View



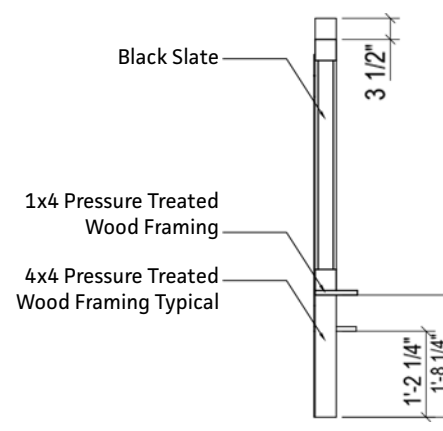
Plan



Elevation



Section



Narrative

Chalkboards will be used to create a fun, colorful environment for kids to explore collaborative learning and sharing.

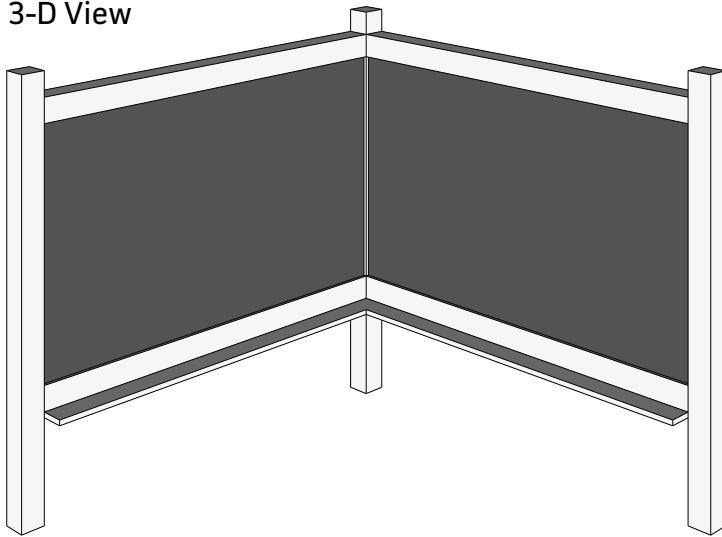
Cost Estimate

Item	Unit	Labor	Material	Total
S&M Straight Outdoor Chalkboard	TRIPLE SET	\$6,500	\$3,500	\$10,000

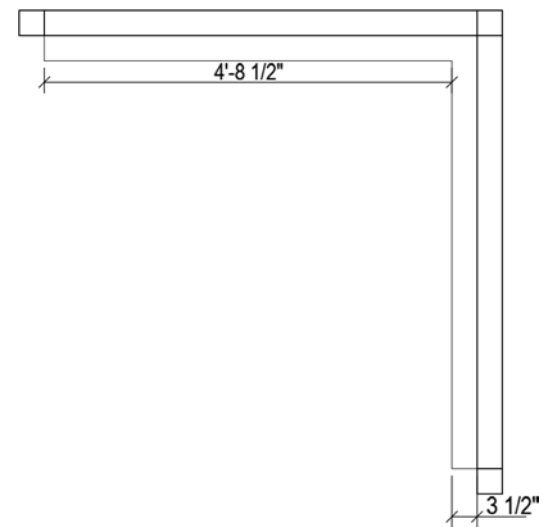


Science & Math
Outdoor
Chalkboard

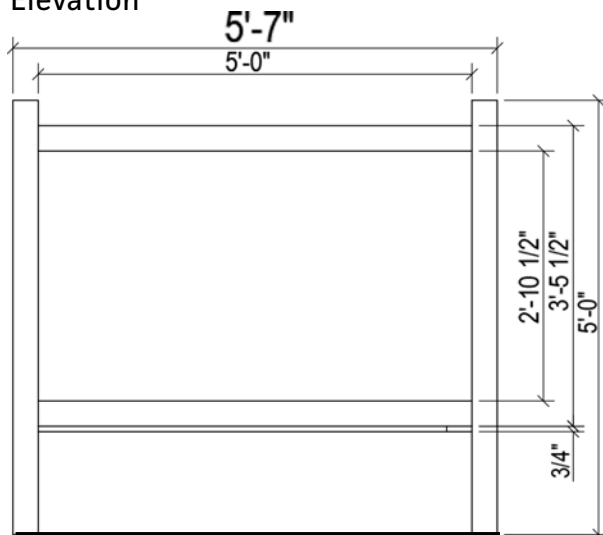
3-D View



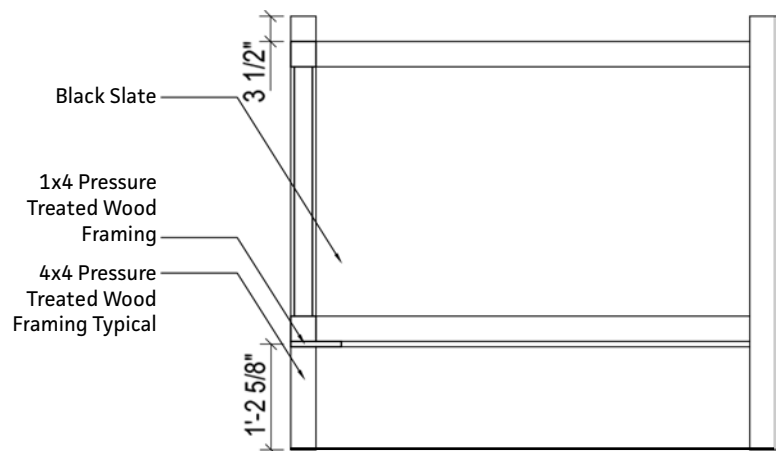
Plan



Elevation



Section



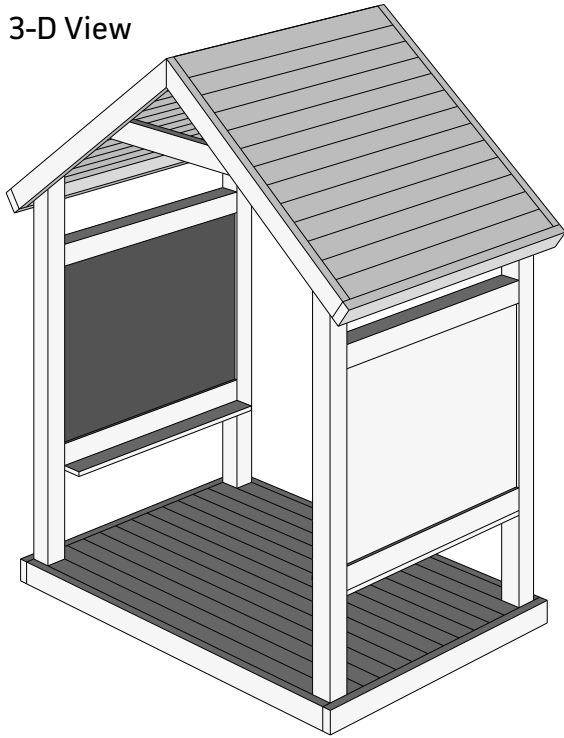
Narrative

Chalkboards will be used to create a fun, colorful environment for kids to explore collaborative learning and sharing.

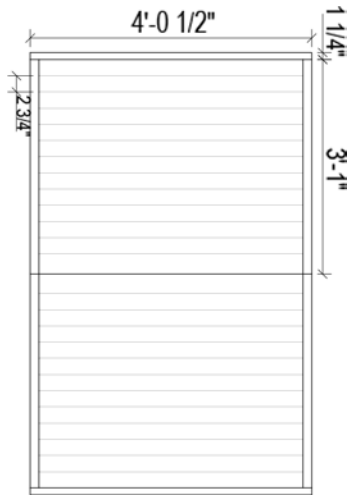
Cost Estimate

Item	Unit	Labor	Material	Total
S&M L-Shape Outdoor Chalkboard	DOUBLE SET	\$4,305	\$2,345	\$6,650

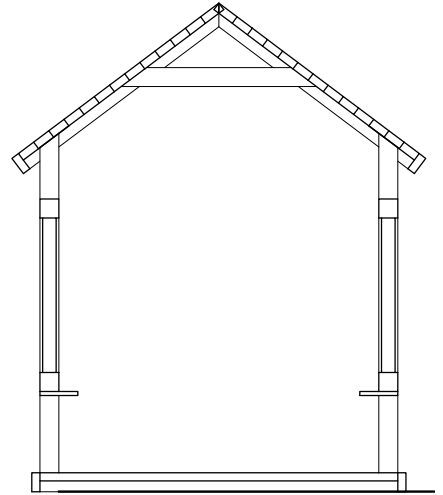
3-D View



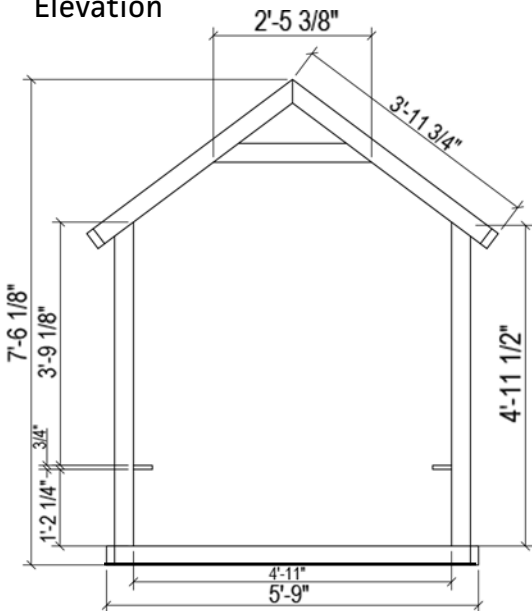
Plan



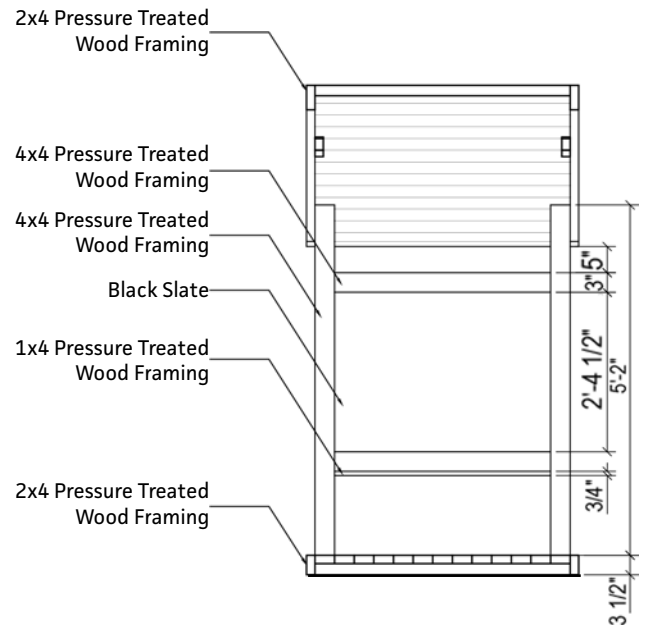
Section



Elevation



Section



Narrative

Chalkboards will be used to create a fun, colorful environment for kids to explore collaborative learning and sharing.

Cost Estimate

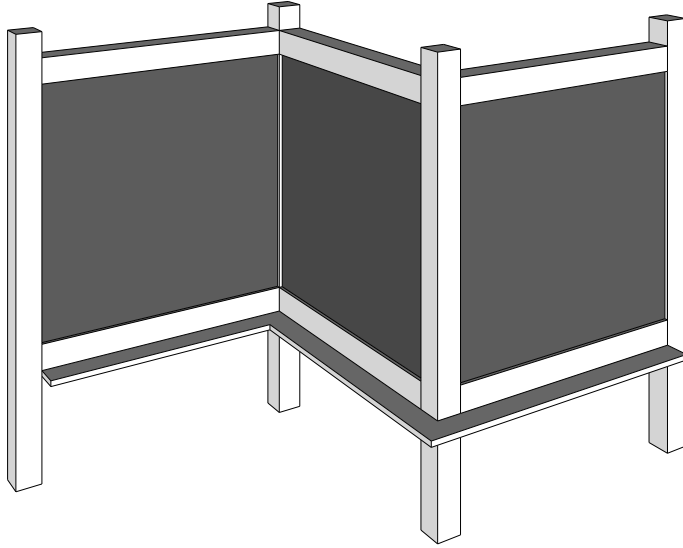
Item
S&M Outdoor Chalkboard w/Roof

Unit	Labor	Material	Total
EACH	\$6,000	\$4,320	\$10,320

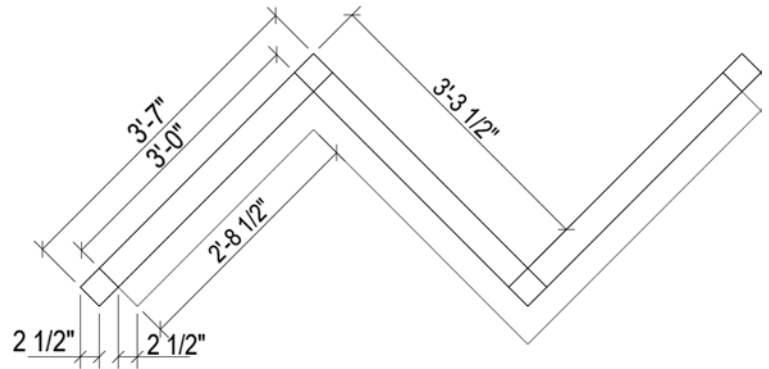


Science & Math
Outdoor
Chalkboard III

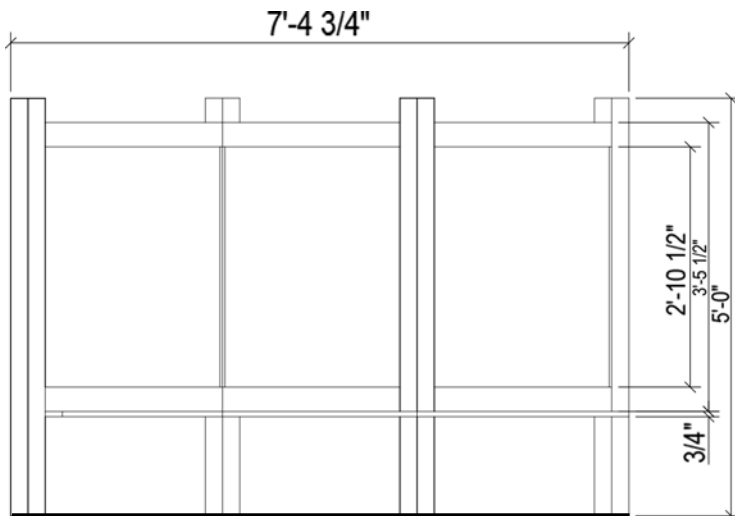
3-D View



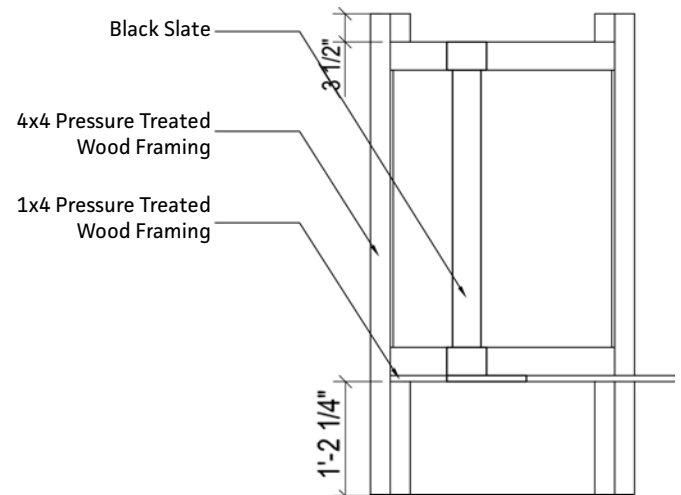
Plan



Elevation



Section



Narrative

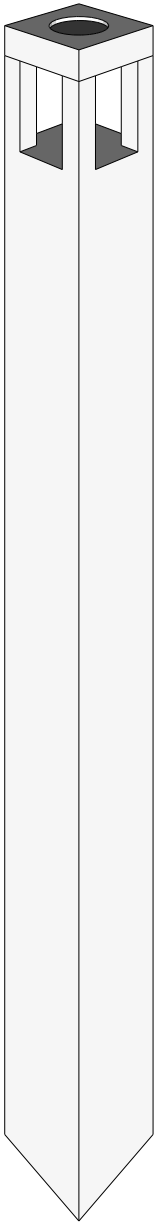
Chalkboards will be used to create a fun, colorful environment for kids to explore collaborative learning and sharing.

Cost Estimate

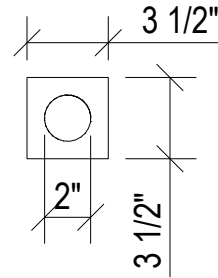
Item	Unit	Labor	Material	Total
S&M Z-Shape Outdoor Chalkboard	TRIPLE SET	\$6,500	\$3,500	\$10,000



3-D View



Plan



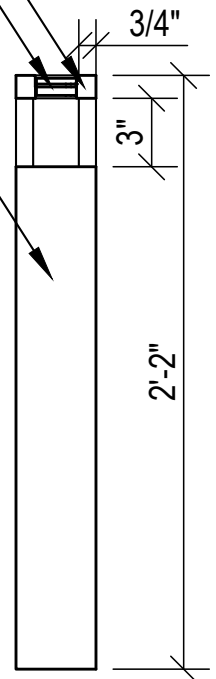
Elevation



1" Thick Plywood

Magnifying Glass
1" Radius4x4 Pressure Treated
Wood Framing

Section

**Narrative**

The magnifying glass allows more in depth learning opportunities when engaging with nature.

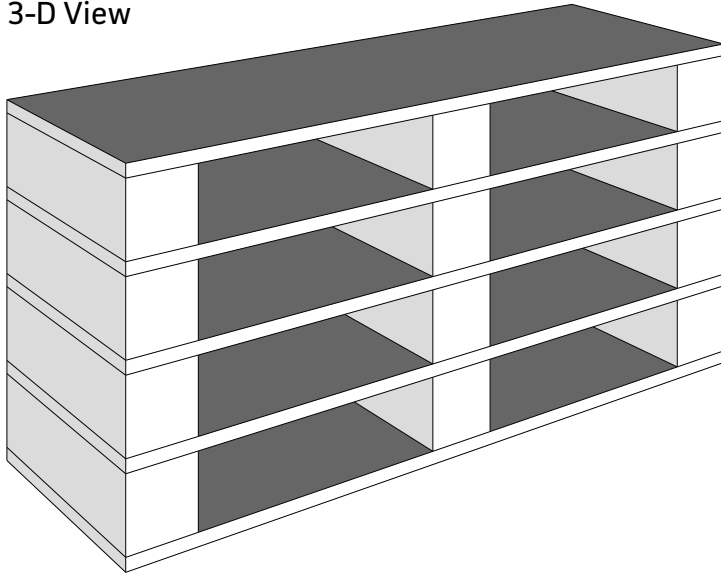
Cost Estimate

Item	Unit	Labor	Material	Total
S&M Outdoor Magnifying Glass	EACH	\$600	\$250	\$850

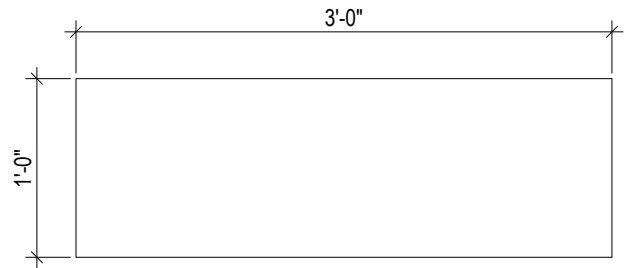


Science & Math
Magnifying
Glass

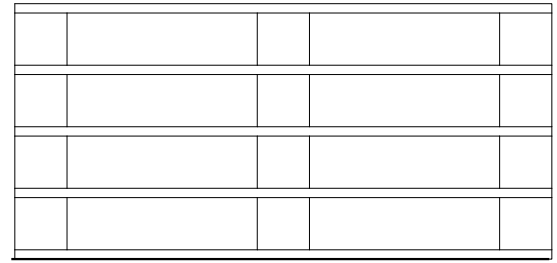
3-D View



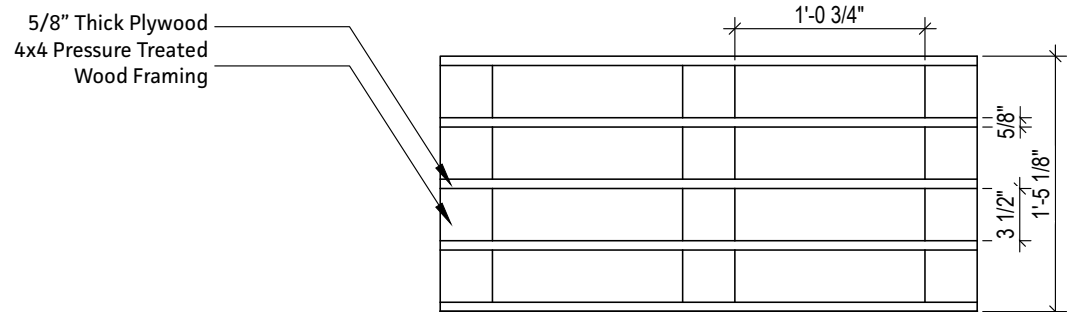
Plan



Elevation



Section

**Narrative**

Bug hotels allow students to create environments for bugs and other insects to inhabit. Many learning opportunities about community and science come from inclusion of this.

Cost Estimate

Item	Unit	Labor	Material	Total
S&M Bug Hotel	EACH	\$2,400	\$1,000	\$3,400



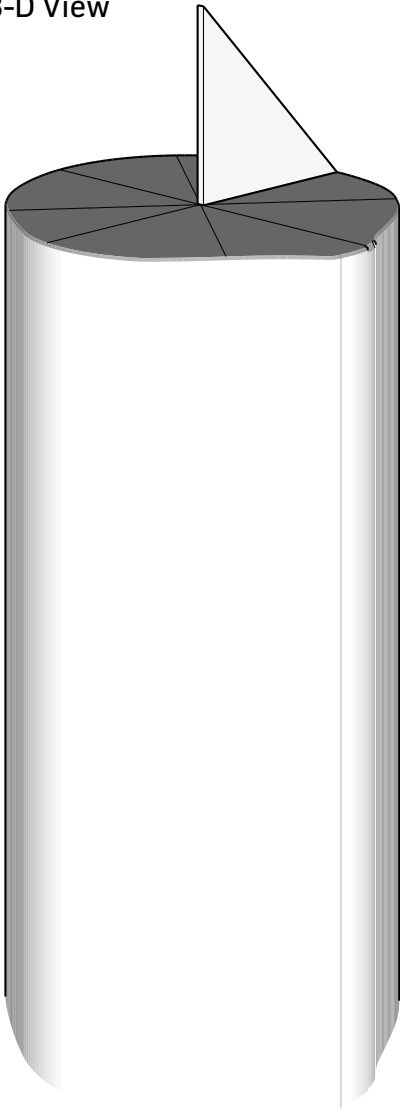
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Social Studies Equipment

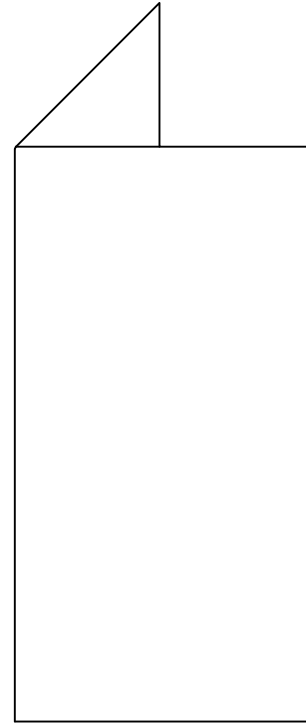
Design Guide



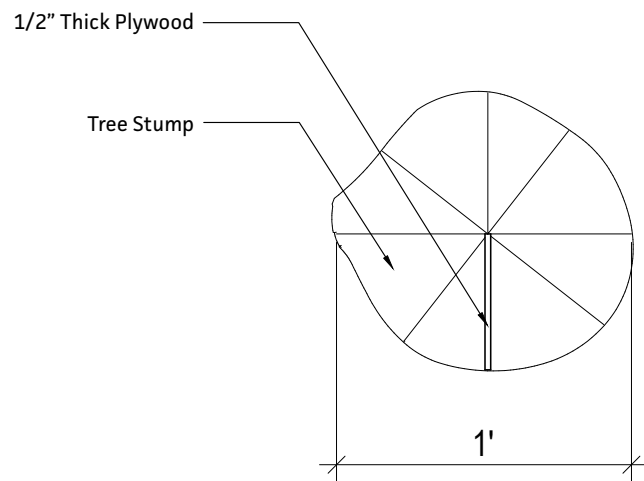
3-D View



Elevation



Plan



Narrative

Sundials are a hands on tool to help students understand the sun-path and telling time.

Cost Estimate

Item	Unit	Labor	Material	Total
G&H Sundial	EACH	\$600	\$750	\$1,350





Credits

Produced by StudioJAED for Providence Healthy Communities with support from the National League of Cities and the Children and Nature Network



HEALTHY COMMUNITIES OFFICE
CITY OF PROVIDENCE

providenceri.gov/healthy-communities

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For more information about Providence Green Schoolyards, visit: www.providenceri.gov/greenschoolyards



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Cities Connecting
Children to Nature

