PARK HILL
K-8 SCHOOL

A 2005 Landscape Master Plan
For School Campus Improvements

Prepared For: Denver Public Schools
900 Grant St.
Denver, Colorado

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Course: Finding Common Ground
Exploring the Urban Experience
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Approved
Principal, Park Hill K-8 School

Approved
CDC Representative

Approved
P. M., DPS Facility Management

Approved
Grounds Supervisor, DPS
Facility Management

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PROJECT INTRODUCTION

EXECUTIVE SUMMARY
In 2006, Denver citizens will vote on a bond issue. If passed, part of these funds will be directed to upgrading and improving 15 elementary school playgrounds. This paper is a step by step Master Plan for how that money is to be used at Park Hill.

The main goals of this Plan are to:

- Improve diversity and quality of play.
- Provide play options for all age groups.
- Encourage community and neighborhood interaction.
- Incorporate educational aspects to outdoor play.
- Improve physical appearance of school grounds.

In reaching these goals, we will be investing in building community infrastructure as well as helping each student reach their maximum potential.

THE CHALLENGE
Studies show that a well-planned and equipped exterior play area enhances the learning environment resulting in improved learning and achievement. Such play areas provide physical and mental challenges that translate into improved health and learning attention. Furthermore, with proper design, these areas themselves become outdoor classrooms or learning landscapes. One of the principal secondary goals of all schools, including elementary, is to provide a focus for the community – a place to gather and to meet, a place to enjoy, a place that enhances the community’s appearance. A reflection of this community importance is Denver’s Mayor Wellington Webb’s statement, “As Mayor, I have long recognized that we cannot have a great city and great neighborhoods without great schools.”

Denver Public Schools [DPS] is an urban school district with many of the same challenges of other urban districts. The infrastructure is aging – the average facility is almost 50 years old. The ongoing 1998 General Obligation Bond [GOB] will increase the number of schools to 130 but contains no funding for existing elementary schools or any other existing school playground. Approximately 75 DPS elementary schools require moderate to extensive renovations or upgrades to meet adequate standards. These include replacing playground equipment, providing irrigation and sod [to eliminate gravel and dirt fields], providing American with Disability Act [ADA] accessibility, and providing an outdoor classroom learning environment. Approximately half of the 75 elementary schools are located within underserved neighborhoods. It is in these
neighborhoods where transforming the schoolyard is most pressing. These schools have chronic disciplinary problems that are disruptive to a school’s academic environment. Playgrounds lacking appropriate choices for children become arenas to bully and tease. Recess should be a positive experience that compliments their academic development, a place where children develop their emotional, physical and social skills.

THE SOLUTION

The ”Learning Landscape” program is an entrepreneurial community-minded alliance of public and private interests that seeks to strengthen Denver Public Schools and their surrounding neighborhoods by designing new multi-dimensional playgrounds and social gathering places. The success of this program is founded on a mutual respect of aesthetic, maintenance, safety, and recreational issues. The University of Colorado at Denver’s Landscape Architecture department offers a seminar course called FINDING COMMON GROUND—EXPLORING THE URBAN EXPERIENCE.

Students of landscape architecture, architecture and other disciplines have come together with Professor Lois Brink to research current educational, sociological, and environmental thought regarding urban space in general and elementary school grounds in particular. Each student in the course selects a school from a predetermined pool and uses this knowledge to develop a vision and master plan for each school. The master plan approach will suit a multi-faceted contemporary existence—engaging a child’s educational and recreational experience with that of the community at-large.

THE INTENT

The master plan is a written report and plan that sets forth the structure for future campus improvements. Each school has a vision that speaks to the desires of the school and surrounding community. The vision is further delineated into goals that identify the major goals for implementation. These goals are defined through the use of text and imagery. A programmatic list of uses is also developed. Lastly, each master plan sets forth the aesthetic ordering system or systems that will be used on the design phase to organize the programmatic uses. This plan, once approved, will provide a framework for fund raising and future construction.
ASSESSING THE PRESENT SITUATION

LOCATION

Park Hill Elementary is located at 5050 East 19th Avenue in Denver, Colorado. This school serves kindergarten through eighth grade students of the north and south Park Hill areas. Denver's Park Hill neighborhood is about three miles from the central business district and just east of City Park. The Park Hill neighborhood is east of Colorado Boulevard, west of Quebec Street, north of Colfax Avenue, and south of 32nd Avenue. It is one of the older communities in Denver, and was established in the first half of the 20th century. Park Hill has wide tree-lined streets in a neighborhood that is primarily residential. Park Hill is recognized for its historic homes, its proximity to downtown Denver and its welcoming community. ¹

HOUSING

Driving through the neighborhood of Park Hill is extremely pleasant because of its visual quality. The homes are custom made and range in size and style. Although some of the homes more than double the other adjacent homes, the sizes are not obtrusive, and the scale appears appropriate. Park Hill has a unique appearance due to the variety of styles of homes. Some of these styles include Tudor, Bungalow, Victorian, as well as a variety of custom homes. Park Hill is unique from surrounding neighborhoods throughout the Denver metro area because no two homes or yards are the same. Along with the homes, the yards are equally well maintained. Most homes have well-manicured grass lawns with plants spaced throughout the yards. Since Park Hill is an older neighborhood, there are countless mature trees lining the streets and on many of the properties. The variety of sizes, styles, and landscapes add to the neighborhoods pleasant atmosphere.

PARKS AND RECREATION OPPORTUNITIES

Although there are not many parks in the Park Hill neighborhood, there are several opportunities for kids to play in outdoor spaces. City Park is directly east of the neighborhood and offers plenty of open space, the Denver Zoo, the Museum of Nature and Sciences, and the City Park Golf Course. Park Hill has a long stretch of grass and trees that extend between both lanes of traffic on 17th Avenue. Although this area can be considered a traffic median, people walk their dogs, jog and play with their kids because this open space is wide and long enough so it functions as a park. The well-groomed yards of the homes and the safe feel of the neighborhood encourage people to utilize their personal outdoor space. Although there are open space areas offered to the Park Hill community, the safest and largest place for kids to play together during the school week and on the weekends is at the Park Hill Elementary School playground.
17th Avenue has well maintained yards and a wide median that functions as a park in the Park Hill neighborhood.

DEMOGRAPHIC PROFILE

The Park Hill neighborhood has 4,953 children and a total population of 18,798. The general demographic profile of the Park Hill neighborhood is analyzed from two areas north and south of 22nd Avenue. The elderly population (65 and older) is 1,247 people in the north and 663 people in the south. There are a variety of nationalities that vary in birth rates and populations. The south has the greatest percentage of white people with a 74.6% birth rate and 76.4% of the total population. There are fewer white people in north Park Hill with a 53.6% birth rate, and 27.6% population. The north has a greater percentage of African-Americans with a birth rate of 30.8% and a population of 50%. The south has fewer African-Americans with a birth rate of 9.4% and a population of 12.8%. A higher birthrate of white people suggest that they are becoming the majority of the population in north and south Park Hill. The number of Latinos is similar with a birth rate of 23.1% in the north and 12% in the south, and a Latino population of 10.9 in the north and 8.6 in the south. The are few Native Americans comprising of .5% in the north and .3% in the south, and Asians with 1.1% in the north and 2.1% in the south. The Park Hill k-8 school demographics are similar with 38.8% white students, 38% African American students, 19.6 Latino students, 3.8 Asian students, and .3% are Native American students.

One of the greatest differences is the teen (15 – 19) birth rate with a high 72.3% in the north and 26.1% in the south. Early and unplanned pregnancy indicates less education and fewer family connections and support. The north area of Park Hill has a higher rate of un-wed mother births with 30.8%, and the south at 15.7%. The north also has a larger rate of children living with a single parent with 32.5%, and the south with 22.6%. Single parents tend to have less free time because they have more responsibilities with little or no help.

Housing statistics are other indicators of the differences between the north and south Park Hill areas. There are a total of 7,795 housing units in Park Hill. About 16.1% of the population in the north and 15% in the south have lived in the neighborhood for less than one year. The south area has many more older homes with 65% built before 1940, while the north has about half with 33.6% build before 1940. Most residences are owner-occupied throughout Park Hill with 81.2% homes in the north and 75.4% homes in the south. These percentages of home owners are high which reveals a wealthy population in the Park Hill neighborhood. There is a wide price range in homes with the average home selling for about $232,273 in the north, and $377,147 in the south.
The economy also differs from the north and south areas of Park Hill. In the north there are 9.4% persons and in the south there are 6.9% persons living in poverty. Children, under 18, living in poverty in the north Park Hill neighborhood is 13.4% and 6.9% in the south. The average annual wage is $9,074 in the north, and $21,129 in the south. The average annual household income is $58,392 in the north, and $88,478 in the south. Both of these average annual wages are slightly greater than the surrounding Denver areas which has an average of $55,128.

Crime is also lower in the Park Hill neighborhood than other areas of Denver, except for burglary rates in south Park Hill. Crime per 1,000 persons is 47.8 in the north and 66.9 in the south. Burglary crime rate per 1000 households is 27.4 in the north and 36.2 in the south and 28.7 for the Denver average. High burglary rates in south Park Hill indicate nice homes with expensive commodities inside. Violent crimes per 1000 persons are 3.5 in the north and 4.6 in the south. Confirmed child abuse and neglect rates are 9.4 in the north and 2.5 in the south per 1000 households.
GENERAL OBSERVATIONS

Several observations can be concluded from demographic, housing, economic, and crime statistics. The Park Hill neighborhood varies significantly from the north to south areas. It appears that the north has a majority of African Americans and the south area has a majority of Whites. There are many more teen births and single parents in the north. The economic condition is better in the south part of Park Hill with a higher average home price, fewer people living in poverty and a higher average annual income. Crime and burglary rates are slightly lower in the north and confirmed child abuse and neglect rates are lower in the south. Since Park Hill K-8 School serves students in the north and south areas, it is important to provide for the diverse neighborhood. Park Hill K-8 School is situated in a unique and historic neighborhood and has the opportunity to educate children from a variety of backgrounds and lifestyles.

CONSTITUENT NEEDS AND DESIRES

The needs and desires of Park Hill K-8 School has been determined by analyzing members of the community through different constituent groups. The people most affected and involved with Park Hill determined the constituent groups to develop the program. The constituents include kindergarten to fourth grade students, fifth grade to eighth grade students, administration, teachers, maintenance staff, parents, and the community.

The methods for determining the needs in desires of the program for Park Hill were developed through focus group meetings, constituent surveys, and observations. Focus groups were informally interviewed to obtain specific information about survey results and observations. Constituent surveys include quotes, interviews, photo surveys, and determined visual preferences through photographs. Observations have been made on the school grounds and in the community on weekends and weekdays and in the morning and afternoon.

Central space on the Park Hill school grounds does not serve as a student or community gathering place.
### Chart Determining Constituents Needs and Desires

<table>
<thead>
<tr>
<th>CONSTITUENTS</th>
<th>CONCERNS / AMENITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-4 students, 5-8 students</td>
<td>Minimum amount of play equipment</td>
</tr>
<tr>
<td>maintenance, administration, community</td>
<td>Maintaining the community garden</td>
</tr>
<tr>
<td>community, administration, students</td>
<td>Neglected asphalt in need of repair (several cracks and fade in paint)</td>
</tr>
<tr>
<td>K-4 students, 5-8 students, maintenance</td>
<td>Sink holes due to inadequate site drainage</td>
</tr>
<tr>
<td>K-4 students, 5-8 students, teachers, parents</td>
<td>Injuries on school grounds</td>
</tr>
<tr>
<td>community, parents</td>
<td>Uninviting access to school grounds</td>
</tr>
<tr>
<td>K-4 students, 5-8 students</td>
<td>Minimum amount of shading devices</td>
</tr>
<tr>
<td>students, maintenance, administration, community, parents</td>
<td>Play equipment vandalism</td>
</tr>
<tr>
<td>parents, community, teachers</td>
<td>Involved parents and community</td>
</tr>
<tr>
<td>administration, community</td>
<td>Maintain historic school and neighborhood</td>
</tr>
<tr>
<td>K-4 students, 5-8 students, parents</td>
<td>Bus drop off designated along majority of school front</td>
</tr>
<tr>
<td>parents</td>
<td>Parent vehicular drop off undefined</td>
</tr>
<tr>
<td>K-4 students, maintenance</td>
<td>Large open field and asphalt areas</td>
</tr>
<tr>
<td>K-4 students, teachers</td>
<td>Lack of play equipment interest for 7th and 8th grade students</td>
</tr>
<tr>
<td>K-4 students</td>
<td>Old and new play equipment utilized</td>
</tr>
<tr>
<td>community, parents, administration, maintenance</td>
<td>Lack of vegetation and pleasant landscaping surrounding school grounds</td>
</tr>
<tr>
<td>K-4 students</td>
<td>Soft surface has compacted below 6 inches</td>
</tr>
<tr>
<td>community, K-8 students, teachers</td>
<td>Current site layout lacks creativity</td>
</tr>
<tr>
<td>teachers, 5-8 students</td>
<td>Improving trend in school CSAP scores</td>
</tr>
<tr>
<td>K-4 students, 5-8 students, teachers</td>
<td>Typical conflict of interests for various age groups at a K-8 school</td>
</tr>
</tbody>
</table>

Two concerns for the Park Hill school ground include the unpleasant appearance of graffiti on the play equipment (left) and maintaining the Denver Urban Garden (right).
## Wish List Chart for Park Hill School Grounds

<table>
<thead>
<tr>
<th>Element Type</th>
<th>Existing Element</th>
<th>Desired Element</th>
<th>Function</th>
<th>Constituents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Soft Surface</strong></td>
<td>Pea Gravel</td>
<td>Recycled Rubber Flooring</td>
<td>Prevent Falls / ADA compliant</td>
<td>K-8 students</td>
</tr>
<tr>
<td></td>
<td>Recycled Rubber Flooring</td>
<td>Engineered Wood Fiber</td>
<td>Prevent Falls / ADA compliant</td>
<td>K-8 students</td>
</tr>
<tr>
<td><strong>Hardscapes Areas</strong></td>
<td>Cracked Asphalt/Concrete</td>
<td>Repave Asphalt/Concrete</td>
<td>Improve Appearance / Eliminate Puddles</td>
<td>K-8 students</td>
</tr>
<tr>
<td></td>
<td>Limited Walkways</td>
<td>Define Paths/Walkways</td>
<td>Include Community, Improve Design</td>
<td>K-8 students, community</td>
</tr>
<tr>
<td></td>
<td>Limited Walkways</td>
<td>Stairs/Ramps</td>
<td>Include Community, Accessible</td>
<td>K-8 students, community</td>
</tr>
<tr>
<td></td>
<td>Faded Paint</td>
<td>Repaint Surface Play Areas</td>
<td>Improve Appearance / Quality of Play</td>
<td>K-8 students</td>
</tr>
<tr>
<td><strong>Hard Surface Play</strong></td>
<td>Cracked Asphalt</td>
<td>Improve Basketball Court</td>
<td>Improve Appearance / Quality of Play</td>
<td>K-8 students, community</td>
</tr>
<tr>
<td></td>
<td>Limited ECE Play</td>
<td>Limited ECE Play Set</td>
<td>Increase Play Options K-3 grades</td>
<td>K-3 students</td>
</tr>
<tr>
<td></td>
<td>Limited ECE Play Set</td>
<td>Additional ECE Play Set</td>
<td>Increase Play Options K-3 grades</td>
<td>K-3 students</td>
</tr>
<tr>
<td></td>
<td>Old Equipment</td>
<td>Sculpture</td>
<td>Historic / Comply with Safety Standards</td>
<td>K-8 students</td>
</tr>
<tr>
<td><strong>Playground Equipment</strong></td>
<td>Limited ECE Play Set</td>
<td>Boulders</td>
<td>Increase Play Options K-3 grades</td>
<td>K-3 students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Upper Body Strength Play</td>
<td>4-8 Play</td>
<td>K-8 students</td>
</tr>
<tr>
<td><strong>Site Furniture</strong></td>
<td>Limited Seating Benches</td>
<td>Include Community / Observe Play</td>
<td>community / staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Limited Tables</td>
<td>Picnic Tables</td>
<td>Include Community / Observe Play</td>
<td>community / staff</td>
</tr>
<tr>
<td></td>
<td>Unappealing Planters</td>
<td>Planter Seats / Seat Walls</td>
<td>Include Community / Observe Play</td>
<td>community / staff</td>
</tr>
<tr>
<td></td>
<td>Limited Trash Cans</td>
<td>Trash Cans</td>
<td>Improve Appearance</td>
<td>community/staff/students</td>
</tr>
<tr>
<td><strong>Art Pieces</strong></td>
<td>Limited Shade</td>
<td>Shade Structure</td>
<td>Community Gathering</td>
<td>community/staff/students</td>
</tr>
<tr>
<td></td>
<td>Limited Artistic Elements</td>
<td>Murals</td>
<td>Improve Appearance</td>
<td>community/staff/students</td>
</tr>
<tr>
<td></td>
<td>Limited Artistic Elements</td>
<td>Mosaic Game Tables</td>
<td>Improve Appearance</td>
<td>community/staff/students</td>
</tr>
<tr>
<td></td>
<td>Non Welcoming Entrance</td>
<td>Gateway</td>
<td>Community Gathering</td>
<td>community/staff/students</td>
</tr>
<tr>
<td></td>
<td>Limited Artistic Elements</td>
<td>Banners</td>
<td>Acknowledge School and Students</td>
<td>community/staff/students</td>
</tr>
<tr>
<td><strong>Vegetation</strong></td>
<td>Limited Vegetation</td>
<td>Plants</td>
<td>Community Gathering / Resting</td>
<td>community/staff/students</td>
</tr>
<tr>
<td></td>
<td>Limited Vegetation</td>
<td>Enhance Garden</td>
<td>Community Project / Student Project</td>
<td>community/staff/students</td>
</tr>
<tr>
<td></td>
<td>Limited Vegetation</td>
<td>Shrub's</td>
<td>Enhance Appearance</td>
<td>community/staff/students</td>
</tr>
<tr>
<td></td>
<td>Limited Vegetation</td>
<td>Trees</td>
<td>Enhance Appearance / Shade</td>
<td>community/staff/students</td>
</tr>
<tr>
<td></td>
<td>Cultural Landscapes</td>
<td>Cultural Landscapes</td>
<td>Cultural Diversity Recognition</td>
<td>community/staff/students</td>
</tr>
<tr>
<td></td>
<td>Drainage Issues</td>
<td>Irrigation</td>
<td>Eliminate Sink Holes and Puddles</td>
<td>students</td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td>No Intimate/ Quiet Spaces</td>
<td>Amphitheater</td>
<td>Gathering / Outdoor Class Space</td>
<td>community / students</td>
</tr>
<tr>
<td></td>
<td>Drop off on Street/Parking</td>
<td>Vehicular Drop off</td>
<td>Safety</td>
<td>students / parents</td>
</tr>
<tr>
<td></td>
<td>Open Field</td>
<td>Running Track</td>
<td>Encourage Outdoor Activity</td>
<td>students</td>
</tr>
<tr>
<td></td>
<td>Limited Bike Racks</td>
<td>Bike Racks</td>
<td>Encourage Outdoor Activity</td>
<td>students</td>
</tr>
<tr>
<td></td>
<td>Limited Educational Play</td>
<td>Educational Elements</td>
<td>Encourage Academics in Outdoor Play</td>
<td>students</td>
</tr>
<tr>
<td></td>
<td>No Intimate/ Quiet Spaces</td>
<td>Outdoor Classrooms</td>
<td>Private &amp; Class Use</td>
<td>students</td>
</tr>
<tr>
<td></td>
<td>Flat Surface</td>
<td>Varying Topography</td>
<td>Enhance Appearance</td>
<td>students</td>
</tr>
</tbody>
</table>

Elements from Wish List include improved appearance, increase opportunities for 6th to 8th grade students, and create outdoor gathering space. 6th to 8th grade students have fewer options for outdoor play, limited to asphalt and field (left), and central space is not a gathering place (right).
**STUDENT SURVEYS**

The Park Hill students were given two surveys to determine elements they enjoy on their playground and elements they would like to see in a new playground. Distributing cameras to students to establish what the students like and dislike on the school grounds, and a photo survey to conclude what the students would like in a new playground.

**CAMERA SURVEY**

The camera study involved five students with cameras to capture elements of the school grounds that they like and dislike. Each student was asked to take fifteen pictures of elements they like and the remaining pictures for elements that they dislike on the school grounds.

Photos taken by Park Hill students of objects they like, (Left) old play equipment, (Right) new play equipment.

All five of the cameras had similar results. Students utilized both the old and new play equipment. They enjoyed games on the hard surface, such as basketball, tetherball, foursquare, and hopscotch. Students also played football and tag on the grass field. All of the cameras had comparable detested elements including cracks in the asphalt, exposed electrical boxes, trash dumpsters, old planters, and graffiti on the play equipment.
PHOTO BOARD SURVEY

The photo survey showed nineteen examples of schoolyard play. Forty female and twenty male first through fifth grade students chose pictures of elements that they would enjoy on their playground. From the photo survey, I determined that students preferred climbing (photo #14). This indicates that students want play equipment that provides opportunities to use their upper bodies. Six female students were also interested in outdoor classrooms (photo #19) and four female students preferred sculptures (photo #5). Two male students were interested in shade structures (photo #2) and two male students enjoyed the art mural (photo #9). This indicates that students want quiet private spaces and variety in their playground. The photo survey produced ideas that are appealing to the students and would be beneficial by encouraging physical activity and academics.
Photo Survey Board to determine ideas students would like to have in their playground.

<table>
<thead>
<tr>
<th>#</th>
<th>Photograph</th>
<th># students</th>
<th># students</th>
<th>% m</th>
<th>% f</th>
<th>total</th>
<th>%</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>climbing</td>
<td>3</td>
<td>7</td>
<td>5.00%</td>
<td>11.67%</td>
<td>10</td>
<td>16.67%</td>
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<tr>
<td>19</td>
<td>outdoor classroom</td>
<td>1</td>
<td>6</td>
<td>1.67%</td>
<td>10.00%</td>
<td>7</td>
<td>11.67%</td>
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<tr>
<td>5</td>
<td>sculptures</td>
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<td>4</td>
<td>1.67%</td>
<td>6.67%</td>
<td>5</td>
<td>8.33%</td>
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<tr>
<td>4</td>
<td>basketball</td>
<td>2</td>
<td>2</td>
<td>3.33%</td>
<td>3.33%</td>
<td>4</td>
<td>6.67%</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>art mural</td>
<td>2</td>
<td>2</td>
<td>3.33%</td>
<td>3.33%</td>
<td>4</td>
<td>6.67%</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>water play</td>
<td>4</td>
<td></td>
<td>0.00%</td>
<td>6.67%</td>
<td>4</td>
<td>6.67%</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>game table</td>
<td>1</td>
<td>3</td>
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Photo Survey Board Data Results of Park Hill Students.
The Park Hill camera study and photo survey allowed students to express their play interests and suggest improvements for the school grounds. The studies help to determine an ideal design for the school ground of Park Hill based on the opinions of the students.

**SITE SAFETY**

The Park Hill school grounds have some general safety concerns. Pea gravel is the loose fall material under the play equipment at Park Hill. Currently the gravel is not the required depth of 12 inches because it has become compacted below 6 inches. Park Hill has used some of the gravel to temporarily repair several sink holes that have formed due to inadequate drainage. Frequently, the pea gravel gets scattered on the surrounding asphalt areas. According to Principal Peter Sherman, gravel on asphalt is one of the main safety issues that cause kids to fall, generating several injuries. The pea gravel spreading to the asphalt creates an ADA issues because it makes the playground non-accessible for wheelchairs.

The play equipment is not centrally located for easy supervision; instead it extends along the boundary of the school grounds. The equipment is scattered in three separate locations while the large field and asphalt are centralized. The school yard can be seen from the neighborhood, but there are fences separating the playground from the street and parking lot. Other than the mature trees near the basketball courts and along the west edge, there is minimal shade on the school property. Most of the play equipment and the majority of the fields and asphalt are exposed to the sun.

There is a variety of play equipment for the younger students. The majority of this equipment is new (within the last ten years) and the remainder is over fifty years old. Students utilize both styles of equipment. The most recent equipment is nice because it has various options of play for children, and it complies with playground equipment safety standards. The older equipment is also appropriate for Park Hill since its historical aspects are an important part of the neighborhood. There are travel rings, a tall slide, a large climber, a horizontal ladder, and swings. Some of the old equipment does not meet present safety requirements, such as a slide that is not covered and there are more than two swings side by side. Another safety concern is that there is no provision for keeping the swing area free from kids traveling across the playground.
Old swings at Park Hill are exposed to the sun and do not comply with safety standards because there are more than two swings per bay.

The playground and site concerns can affect the safety of children playing on the school grounds. It is important to analyze and respond to these concerns in order to prevent any future injuries and to make the Park Hill Elementary site the safest possible.

**School Profile**

Park Hill has a maximum enrollment of 609 students and there are currently 513 enrolled. Park Hill serves kindergarten through eighth grade, so the school is diverse in academics to accommodate for the range in age, knowledge, experience, and interests. The percent of students receiving free or reduced-price lunch at Park Hill is 33.1% while the district average is 76.8%. This significantly lower percentage of students receiving free or reduced-price lunch signifies a higher economic status of the students at Park Hill. The attendance rate for Park Hill is 95.5% and the district average is 91.4%. The suspension rate for Park Hill is 5.6% and the district average is 23.2%. A high attendance rate and low suspension rate at Park Hill indicates support from the community, excellent student programs, qualified staff, and an overall well-ran school. Park Hill K-8 School provides a multicultural environment providing diverse learning with several before and after school programs. Programs include English as a Second Language Resource program, Special Education Center Program, tutoring, chess activities, Shakespeare Festival, Science Fair, Book Fair, and other enrichment activities.

Literacy and math assistants in the classrooms and staff development have improved CSAP scores in recent years. The 2002-2003 CSAP performance had proficiencies of 65% in reading, 59% in math, and 50% in writing. The CSAP test score improvement for 2002-2003 was summarized at stable. Park Hill’s CSAP results are significantly greater than the Denver district average. Third grade students at Park Hill scored 60% in reading, and the district average was 38% in 2004. Fifth grade students scored 58% in math at Park Hill, and the district average was 35% in 2004. All CSAP results for Park Hill had a higher average than the district average in 2004.
**School Property**

Park Hill Elementary School is approximately a four acre site. The school covers about 20% of the property. There is a large field that covers about 30% of the site. It is centrally located and is utilized mainly by the older kids (5th to 8th grade). The field is used for organized games such as soccer, baseball, football, or for running games with fewer rules. Asphalt covers about 20% of the property, and includes a basketball court, tetherball, four-square, hopscotch, seating/picnic area, and parking. This area is next to the center of the school. There are cracks in the asphalt and there is little shade provided in this area.

![Cracks in the asphalt(left) and the school garden (right) at Park Hill.](image)

A moderately large school garden is the majority of the vegetation and comprises about 6% of the site. This is a Denver urban garden that reveals the community interest and involvement in the school. The playground covers about 7% and is dispersed throughout the site. There is a small early childhood area along the side of the school that has new play equipment intended for the youngest students. The third and largest playground extends furthest away from the school and is intended for older children (4th to 6th grade). This area has both new and old play equipment. The remaining 17% consist of sidewalks and landscape surrounding the school. Vehicular access (including bus drop off) is designated in front of the building. There is available parking along the streets of the neighborhood and there is a school parking lot on the east side of the property. There are about 32 parking spots in the lot to fulfill the minimum requirement. Pedestrian access is located in the front of the school at the drop off or through both sides of the playground in the back of the school.
Current site layout at Park Hill K-8 School.

<table>
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<tr>
<th>Site Areas</th>
<th>Square Feet</th>
<th>% of Site</th>
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<tbody>
<tr>
<td>School</td>
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</tr>
<tr>
<td>Grass Field</td>
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<tr>
<td>Asphalt</td>
<td>32,000</td>
<td>20</td>
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<td>Urban Garden</td>
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<td>ECE Play Equipment</td>
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<td>Walkways</td>
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<td><strong>Total</strong></td>
<td><strong>160,000</strong></td>
<td><strong>100</strong></td>
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Site Areas of Park Hill School Grounds
ADJACENT USES

Park Hill K-8 School is surrounded by the neighborhood. Narrow roads and a back alley are adjacent to the school followed by the historic homes, diverse in size and style, lining the extending streets. About two miles west, past Colorado Boulevard, is City Park. Although City Park is not directly adjacent to the school, it is relatively close which provides several educational and recreational opportunities for the students and community of Park Hill. Since homes extend several blocks from the school, there are no commercial uses near the school.
THE MASTER PLAN
CREATING THE FUTURE

INTRODUCTION
The Park Hill master plan envisions a safe place for students to play while encouraging neighborhood participation. Hands on academic elements incorporated into outdoor play and improved recreation are components that will enhance the environment at Park Hill. Surveys, studies, and research have determined that developing the landscape of Park Hill K-8 School will increase student achievement and encourage community interaction. Interviewing and surveying students, faculty, and the community led to an understanding of the needs and desires for the school grounds of Park Hill.

COMPONENTS
Six components establish the possibilities of a school ground design and begin the development for a learning landscape at Park Hill K-8 School. A vision statement for Park Hill K-8 School states the objective for the playground design based on the needs and desires of the constituents. Five goals describe how the vision will be accomplished. A list of programmatic elements outline the physical components imagined on the Park Hill landscape. Necessary zones on the school grounds are described in the spatial concept diagram. The spatial concept diagram provides ideas for the location of the programmatic elements and the relationships of the different zones. The organizational concept was established as a method to organize the programmatic elements on the school grounds. A cost estimate of $364,331 was determined based on the proposed program and specific playground elements for the Park Hill K-8 School landscape.

VISION
We celebrate our neighborhoods’ multicultural history by emphasizing international studies. Park Hill’s playground will be a safe gathering place that enhances educational and physical activities and encourages community interaction.

GOALS
1. Improve diversity and quality of play.
2. Provide play options for all age groups.
3. Encourage community and neighborhood interaction.
4. Incorporate educational aspects to outdoor play.
5. Improve physical appearance of school grounds.
**Programmatic Elements**

**Play Equipment**
- Primary Play Structure (25’x 35’)
- Climbing Wall
- 2 Bay Swings (x4)

**Gathering Areas**
- Outdoor Amphitheater
- Central Space
- Shade Structure
- Outdoor Classroom

**Educational Elements**
- Solar System Walk
- Word Mural
- Habitat Gardens

**Hard Surface Play**
- Foursquare Courts (16x16) (x2)
- Tetherball Courts (18’ Diameter) (x2)
- Climbing Wall
- Painted Surfaces
- Funnel Ball Court

**Gardens**
- Denver Urban Garden
- Butterfly Habitat
- Riparian Garden

**Site Furnishing**
- Benches
- Picnic Tables

**Entry**
- Signage (x2)
- Banner Pole (x2)
- Banners (x2)

**Soft Surface Play**
- Running Track
- Baseball Backstop

**Art Features**
- Sculpture
- Word Wall Ball
- Solar System Pathway Incorporated Throughout Site

**Service**
- Trash Receptacle
- Specialty Fencing Hide View to Service Area

Diagram organizing the zones of the Park Hill School Grounds.
**SPATIAL DIAGRAM**

Spaces on the Park Hill School grounds are currently undefined. A spatial diagram to develop an ordering system and defined zones would socially and aesthetically enhance the Park Hill school grounds. Important elements on the spatial diagram include a variety of play opportunities for all ages and to encourage student and community interaction. A central gathering place is defined in this spatial diagram to connect the students with the community.

Spatial Diagram of Park Hill K-8 School. Color range shows indicated zone.
ORGANIZATIONAL CONCEPT

The Park Hill K-8 School building has a distinct symmetrical appearance. Demonstrating this concept of symmetry throughout the school grounds will strengthen the connection of this historical building to its new landscape. Symmetry can provide several opportunities to define spaces throughout the property. Outdoor spaces will be defined from an overlaying grid and the reflection of the historic Park Hill building. Gathering spaces, circulation structure, and boundaries of the different zones begin to take form.
FULFILLING THE GOALS

Goal 1
Variety of play opportunities is important for the physical and academic development of the Park Hill students. The open grass field and asphalt provide for physical activity and both organized and unorganized games. Play equipment provides challenges and creativity to engage the students learning development.

Goal 2
Play opportunities for all age groups are an important aspect for Park Hill School since the student ages range from kindergarten to eighth grade. There are currently few play options for the older students (6th to 8th grade). Providing more upper body activities and defined spaces for organized games, such as a climbing wall, word wall ball, and baseball, will give play options for the older students.

Goal 3
A central large gathering area and several other gathering spaces throughout the playground will provide socialization for students and create a space for the community to interact. The gathering areas, such as the central space, outdoor classrooms, butterfly and community gardens, and entryways welcome the surrounding neighborhood and encourage community participation.

Goal 4
Incorporating educational aspects to outdoor play is important for the cognitive development of students. Elements such as a solar system walk way, word wall ball, number funnel ball, and geography features painted throughout the asphalt create a learning landscape. Students learn about the solar system, word spelling, numbers, and geography in a fun and exciting way as they play.

Goal 5
Improving the physical appearance of the school grounds will involve an ordering system of the landscape and elements to aesthetically enhance Park Hill, such as painted asphalt, shade structures, banners, and vegetation. Improving the physical appearance will encourage students and the community to respect and appreciate the school.