Adams 14 Elementary Schools
Learning Landscapes

MASTER PLAN

- Alsup Elementary
- Central Elementary
- Dupont Elementary
- Kemp Elementary
- Monaco Elementary
- Rose Hill Elementary
- Hanson K-8

COLORADO HEALTH FOUNDATION

Spring 2011
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Section One

Executive Summary

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Introduction

Schoolyards provide an opportunity for the built environment to promote increased physical activity for children and the surrounding community. In addition, studies show that well-planned and equipped schoolyards increase physical activity while also enhancing the learning environment resulting in improved achievement. Such play areas provide physical and mental challenges that translate to improved health and learning attention. Furthermore, with proper design, these areas themselves become outdoor classrooms or learning landscapes and fulfill, a secondary goal for many schools to become a positive focal point of the neighborhood, place to gather and to meet, a place to enjoy, a place that enhances the community’s appearance.

Children Who Are Overweight or Obese

Improving schoolyards is a proactive way to benefit health at the community level. The surge in childhood obesity, in recent years, threatens the future health of Colorado. According to the Colorado Health Report Card published by the Colorado Health Foundation, “Colorado ranks 23rd among the states in the category of childhood obesity dropping in rank from 3rd to 23rd in just four years. The current ranking signals a rapid increase in the prevalence of childhood obesity that negatively impacts the overall health and well-being of Colorado’s children. Preventing and combating the childhood obesity epidemic will require a multi-faceted approach. “It means changing behaviors around food intake, physical activity and our residential community. It means addressing the environment in schools and rethinking our culture to emphasize good health” says James O. Hill Professor of Pediatrics and Medicine at the University of Colorado School of Medicine.
In January 2011 the Adams County School District 14 was awarded an Active Play Areas planning grant from the Colorado Health Foundation. The Colorado Health Foundation believes that if kids are a part of a “healthy school” including but not limited to access to physical activity and healthy foods, then they will be more likely to learn better and maintain a healthy lifestyle throughout life. In addition, The Foundation upholds that thoughtful design of a new or renovated activity space at the children’s school can promote greater levels of moderate or vigorous physical activity and decrease sedentary activity.

The Active Play Areas planning grant provided an opportunity for the school district to partner with Learning Landscapes at the University of Colorado Denver to develop seven elementary school Active Play Area Master Plans.

The Learning Landscape program within the Colorado Center for Community Development at the College of Architecture and Planning seeks to strengthen elementary schools and their surrounding neighborhoods by designing playgrounds to promote physical activity and social interaction. With over ninety schoolyard renovations complete, the success of this program is founded on a mutual respect of aesthetic, maintainability, safety, and recreational issues.

Colorado Health Foundation

The Foundation seeks to fund active play spaces for schools designed to promote play and other forms of physical activity. This includes field/ground designs or markings that facilitate games and other forms of movement.

Healthy Schools & Healthy Communities

Vision:
Colorado will become the healthiest state in the nation.

Mission:
To improve the health and health care of Coloradans by increasing access to quality health care and encouraging healthy lifestyle choices.

The Foundation’s seven Funding Strategies are:
1. Develop healthy schools -- Expand the number of public schools and preschools that provide health care services, have health and nutrition education, physical education, healthy food in cafeterias and vending machines, and opportunities for physical activity.
2. Promote healthy communities -- Expand access to healthy and affordable foods; provide safe options for physical activity; teach individuals how to manage their chronic disease; and engage parents in raising healthy kids.

Numeric milestones used to gauge progress toward the Foundation’s goals.

The 12 Measurable Results are:
1. Increase the number of children and adults who engage in moderate or vigorous physical activity.
2. Increase the number of children and adults who eat adequate amounts of fruits and vegetables daily.
3. Increase the number of underserved Coloradans who have convenient access to recreational exercise and fruits and vegetables.
Adams 14 - Background

Adams County School District 14

Adams 14, located in Commerce City, is Colorado’s 23rd largest school district, serving nearly 7,000 students and 33,000 residents annually. Adams 14 strives to ensure academic success for every student by providing highly effective classroom instruction, supplemental enrichment opportunities and parent/family collaboration opportunities.

Commerce City is a highly-industrialized community bisected by industry and busy roadways, with limited walkable and accessible play spaces. Schools and neighboring communities become little ‘islands’ unto themselves, establishing a premium on available areas to play and recreate.

The Adams-14 community has a high population of low income residents with 82 percent of students in the district qualify for free or reduced lunch. Additionally, 81 percent of students are Hispanic, with 57 percent identifying Spanish or another language as their primary language.

Total Enrollment 6,702  
77% Hispanic  
18% Anglo  
3% African American  
2% American Indian  

Hispanic children in Colorado are three times more likely to be obese, further emphasizing the importance of providing quality play spaces.  
(Colorado Health Report Card)

We learn, we move, we enjoy healthy foods, it is part of who we are!

Wellness

Adams 14 schools are engaged in a number of wellness initiatives, including school gardens, youth farmers’ markets, the flat fourteeners running program and serving healthier cafeteria foods. Adams 14 decision makers believe that healthy students are healthy learners. The District is developing a culture of school wellness and active play areas.

Increasing physical activity not only aligns with the District’s Wellness initiatives but with the surrounding community’s as well. Commerce City is one of 16 Colorado municipalities recognized by the White House as a “Let’s Move City,” for its ability to promote and provide services that reduce childhood obesity. “Commerce City believes in promoting the health and well-being of all residents by offering services and amenities that promote an active lifestyle,” said Mayor Paul Natale. (Commerce City Press Release February 5, 2011)
Existing Challenges
Adams County School District 14 is an urban school district facing challenges common to other urban districts. The infrastructure is aging – the average facility age is over 50 years - and maintenance funding is limited leaving little if any budget available to improve schoolyards and play areas. Several Physical Education teachers and District Administrators have commented on the lack of play areas and equipment available for their students to be active. They have shared observations of students sitting around at recess and after school because they lack quality equipment and active play areas. The Adams 14 operations team agrees that the District’s playgrounds and active play areas are the most neglected of all of initiatives, due to lack of funding. Most A-14 elementary schools require moderate to extensive renovations or upgrades to meet adequate playground standards. These include replacing playground equipment, providing American with Disability Act [ADA] accessibility, and providing an outdoor classroom learning environment. Playgrounds lacking appropriate choices for children tend to become arenas for bullying and teasing. Recess should be a positive experience that compliments academic development, a place where children develop their emotional, physical and social skills.

In 1997 the District updated play equipment at several school sites. The equipment installed during this time consisted of one play space for all age groups at each school. Although these spaces were designed to be appropriate for ages 5-12, there is a lack of physically challenging equipment for intermediate students. In addition, updates made to play spaces in 1997 predated the expansion of Adams 14’s early childhood programs. Thus, amendments and improvements to play facilities do not accommodate the District’s youngest learners.

As a consequence, Adams 14’s playgrounds are grossly underserved preschool students with outsized, outdated and often unsafe equipment.

Related Efforts and Integration
In spring 2010 the District worked with consultants H+L Architecture to develop a district-wide facilities master plan. The Comprehensive Facilities Master Plan focuses on the conditions of building and the interior of the schools. The two master planning projects complement each other well and provide the school district with a comprehensive facility and grounds plan.

The Comprehensive Facilities Master Plan lists 3 major Educational Planning Goals to direct improvements. Implementation of the Active Play Areas Master Plan will specifically help to reach Goal # 3 for Neighborhood Schools.

Goal 3: Neighborhood Schools
**Intent:** Providing structures that encourage school-community connections.

- Welcoming architecture
- Safety and security
- Respect pride in neighborhood schools
- Student engagement
- Parents/community
- Curb appeal
- Early Childhood Center (age-appropriate equipment and safety)

Schoolyards have the ability to provide a safe welcoming space for students and community, raise neighborhood pride, and provide curb appeal for the school.
Intent and Process

Intent of the Master Plan
The master plan is intended to serve as a roadmap for proactively developing strategies and tactics needed to develop sound, safe and active play areas that are proven to increase activity for its students and surrounding community members. The purpose of the master plan is for A-14 to be strategically poised to capture opportunities to improve and expand play areas as they become available. The A-14 Active Play Areas Master Plan is intended as a tool for schools, parents, and district administration to seek funding for future schoolyard renovations and wellness initiatives. 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 components 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 suggested for use during the design phase to organize the programmatic uses. This plan will provide a framework for fund raising and future construction.

Planning Process
The Master Plan process took place from February to June 2011 and involved input at both the district level as well as the individual school level. At the district level the collaborative process was guided by the Grants and communication office, the Wellness Coordinator, and the Facility Management division. Learning Landscapes staff consulted with the district team members to ensure the individual school master plans aligned with the existing facility master plan, and the overall vision for the District. The team also discussed strategies for phasing, sustainable maintenance and funding for implementation. At the school level the collaborative process was guided by schoolyard improvement committees and facilitated by Learning Landscapes staff. The schoolyard committees were generally comprised of the principal, PE teacher, and pre-k teacher, members of the school’s wellness team, parents, and teachers. The team members helped to identify issues with the existing sites, formed a vision and goals to guide the planning process, gathered information and feedback from people outside the committee, provided feedback on iterations of the plan, administered photo surveys and collected student art work.

This two-tiered collaborative effort allowed the individual schools to develop a schoolyard master plan to reflect the history, culture and curriculum unique to each school and at the same time aligned the needs of the individual school with those of the District.
**Recommendations**

Improved play facilities will serve multiple purposes in not only engaging Adams 14 students, but also the entire community. The following are recommendations for implementation of the Active Play Areas Master Plan at each Adams-14 elementary school.

- **Install New Age Appropriate Play Equipment**
  - To increase physical activity for all ages and to provide a variety of safe, challenging activities for all students.

- **Install Running Tracks and Walking Paths**
  - To provide opportunities for students, teachers, staff and community to track their distance and encourage each other to get moving.

- **Install Climbing Structures**
  - To increase upper body strength and coordination.

- **Improve ADA Accessibility**
  - Each play area should be accessible to all the students in the school. It is important for all students and community members regardless of mobility, to be able to interact and be active with one another.

- **Provide More Hard Surface Games with Educational interactive elements**
  - At each school, the design committees requested more color on the schoolyard. Students are excited by the color and it sparks their creativity during play.

- **Install Vegetable Gardens**
  - To promote healthy eating, community stewardship, educational opportunities, and food literacy.

- **Develop Outdoor Learning Environments**
  - Spaces for teachers to bring students outside and to practice inquiry and to interact with the landscape as an educational system

- **Develop Community Gathering Spaces**
  - Welcoming the neighborhood to gather, play, and exercise in these public areas will help build support stewardship of the community. It is important for the students to have a safe place to be active not just during recess but also after school and on the weekends.

- **Increase Opportunities for Shade**
  - To protect students and visitors from the intense Colorado sun and to provide additional gathering spaces for community members. The following are recommendations for implementation of the active play areas master plan at each Adams-14 elementary school.
LEARNING LANDSCAPE HISTORY
The first Learning Landscape was built at Bromwell elementary school in 1998 as a result of a six-year collaboration of parents, elementary students, staff, faculty, neighbors, local businesses and University of Colorado Denver (UCD) landscape architecture graduate students. The vast expanse of asphalt and pea gravel on the Bromwell playground resembled a prison yard, not an environment encouraging activity and child development. Bromwell parents and community members took action to transform the schoolyard into an active and aesthetically pleasing place for learning and physical activity.

Bromwell’s schoolyard renovation project coincided with the end of mandatory busing at Denver Public Schools (DPS). Cessation of mandatory busing meant a renewed interest in Denver neighborhood schools and soon the Bromwell Learning Landscape project evolved into a citywide urban initiative evoking social change and physical transformation of public grounds.

UCD encourages faculty to connect the campus to the community. Landscape Architecture Professor, Lois Brink’s Learning Landscapes course proved a tremendous opportunity for civic engagement. Through Learning Landscapes, UCD graduate students are able to stretch the boundaries of landscape design, engage the community and gain real-world design experience. In 1999 (UCD) College of Architecture and Planning entered into a formal agreement to plan, design, and help build Learning Landscapes at DPS elementary schools throughout the district. The partnership between UCD and DPS has resulted in the transformation of 81 neglected public elementary schoolyards into Learning Landscape Playgrounds.

In 2008 Denver voters expressed satisfaction with the program by passing a multi-million dollar bond initiative to fund the redevelopment of every DPS elementary schoolyard into a learning landscape by 2013.

WHAT WE DO
With a budget of approximately $450,000 per playground, Learning Landscapes leads UCD students, elementary schools and community members in the redesign of schoolyards into fun multi-use parks designed to reflect the culture of the surrounding community. The Learning Landscapes project helps reconnect communities with neighborhood schools. The graduate students get meaningful, hands-on experience working with the community to create master plans and designs for a Learning Landscapes schoolyard.

HOW WE DO IT
By listening and actively involving the school community throughout the planning, design, construction, and maintenance of the Learning Landscape schoolyard. Each school is asked to form a Learning Landscape team to help inform design and programming decisions as well as keep a watchful eye for vandalism and maintenance issues after construction is complete. The Learning Landscapes team recruits students, parents and surrounding community help to build, maintain and improve the Learning Landscape. Each new learning landscapes has a volunteer build day where the school and community volunteers develop a sense of ownership and civic pride by creating outdoor artwork planting gardens, laying sod or building play equipment.

We document and distribute site-specific resources for educators and community members on the outdoor educational elements unique to each Learning Landscape schoolyard. Promoting the programmatic use of the Learning Landscape is critical for the long-term viability and sustainability of these projects.

Community Involvement
Inevitably each site is used by the community when the schools are not in session. As such we feel it is important to work with community leaders to get feedback on the communities needs and desires to determine how the communities use the site and what other organizations help maintain the site - like the Parks and Recreation, softball leagues, soccer leagues, gardening clubs, etc.
A **learning landscape** is a multi-use park for outdoor learning, discovery, creativity and play that celebrates the unique character of the **school and community**.

**Learning Landscapes** are comprised of grass playing fields, age-appropriate play equipment, trees, shade structures, gateways, artwork, class room gardens, traditional play elements and non-traditional play elements among other things.

Learning Landscapes function as local public parks providing much needed open space and social gathering places while fostering neighborhood pride for local communities.

**Educational Elements** tend to be focused on the unique curriculum of each school. Educational elements also tend to be derived from the schools theme, mascot, motto, etc. These components come in the shape of games that are super imposed on the hard court surfaces and or words, poems, mathematical formulas etc. These educational elements can be tied to the school’s curriculum whereby school teachers can use these elements by bringing their classroom outside. Or the learning components are simply whimsical things that all the kids to use their imaginations while playing hopscotch, tether ball, what have you.
Section Two

- School - Background
- Existing Conditions
- Playground Assessment
**School Background Information**

**Location and History**

Kemp Elementary School is located on 68th and Oneida Street within a residential neighborhood in south Commerce City, CO. Kemp Elementary enrolls grades Pre-K to fifth grade and draws students from the central eastern area of Commerce City. The school was originally constructed as an elementary school in 1951. A separate building on the southeast end of the property houses the Kemp’s preschool program.

The total site is approximately 8.9 acres and is bordered by streets on three sides with its boundaries being 68th Avenue to the north, Niagara Street to the west, Oneida street to the east and the southern portion of the site is bounded by homes.

The Kemp Elementary mascot a shooting star and their school colors are purple and silver. As of spring 2011 the enrollment was 483 students. According to the District’s 2010 Facilities Master Plan, enrollment exceeds the capacity of Kemp Elementary by nearly 100 students.

**Neighborhood Context**

The neighborhood around Kemp is mostly comprised of single-family detached housing on small neighborhood streets. The Kemp schoolyard is the only playground and open space within the neighborhood. East of the school, across Quebec Street is the Rocky Mountain Arsenal Wildlife Refuge which was established in 1992, and is a recently completed superfund site being restored to native prairie grassland. The Wildlife Refuge is home to several species of animals including buffalo.

**School Mission**

"Kemp Elementary and faculty have developed the STARS program based on PBS (Positive Behavioral Support). This program focuses on expectations rather than rules. The expectations are clearly set out throughout the classrooms, hallways, and any other areas where children may be. Our program STARS focuses on five expectations: Self Responsibility, Team Work, Attitude, Respect, Safety” (School Website).
**School Demographics**

Spring 2011 Enrollment: 483 students

- Male Students: 242
- Female Students: 241

Free/Reduced Lunch: 90.5% of students

English is not primary language: 55.5% of students

Demographic Make-up of Students:

- Hispanic: 71%
- White: 21%
- African American: 3%
- American Indian or Alaska Native: 4%
- Asian or Pacific Islander: 0.1%

**Grade Distribution of Students:**

- Preschool: 64
- Kindergarten: 76
- 1st grade: 78
- 2nd grade: 70
- 3rd grade: 58
- 4th grade: 68
- 5th grade: 70

**Surrounding Area Demographics**

As of the 2010 Census there were approximately 2,166 people living in the area surrounding the school, with about 92% of housing units occupied. According to the 2005-2009 American Community Survey estimate, the median annual household income for residents within the Adams 14 School District was $41,382, and 68% of units were owner-occupied compared to 32% rented.

**Catchment Area**

Kemp draws students from the central geographical area in the district. The attendance boundaries are Quebec Street to the east, 72nd Ave to the north, 64th Ave to the south and Kearney street to the West. The internal pedestrian and bicycle connectivity of the catchment area is good, comprised of small streets and small blocks. The streets surrounding the school are disconnected from the N-S grid pattern, making access to the site slightly difficult.
Existing Conditions:

Equipment & Materials
The Kemp Elementary schoolyard is a large park-like space with several mature trees and rolling topography. The playground is located on the south and west sides of the school and is comprised of a large asphalt play area with two basketball courts, two tetherball courts, multiple four square and hopscotch, one softball field, large grass areas, and three play structure areas.

ADA Accessibility
All building entrances are accessible with a ramp at the south entrance into the building. Multiple play structures on the site are not ADA accessible due to a lack of ramps into play pits, lack of appropriate safety surfacing and outdated play equipment.

Drainage
Overall drainage on the site is adequate with water flowing away from the building to the south and west. There are a few areas of the schoolyard that are susceptible to poor drainage. Water collects in areas north and south of the Pre-K play area as well as underneath the pre-K tire swing. Icy conditions exist in front of the modular building due to water collecting as well as freeze thaw in the asphalt area.

The facilities department plows snow to the west and south of the asphalt area.

Safety
Issues of safety were addressed by the design team during the meetings:
  - Broken arms in play area due to the only equipment being for intermediate students and none available for primary students
Presented by:  
Kemp Elementary

Problems/Concerns

- Gravel from play area getting on to the walkways making it hard for special needs students to access
- Gang activity after school hours near the sloping area of the playground
- Students cannot be supervised in the sloping natural amphitheater area next to the playground
- The pre-k play area is not fenced making supervision difficult
- A majority of the schoolyard is not visible from the street making it difficult to police

Circulation-pedestrian & vehicular
Kemp has one primary entrance into the school that is at the front door located on Oneida street. The school ground has two pedestrian access points for students and parents along Niagra Street. Students walk to school through a cul-de-sac at the southern edge to the school grounds, and near the Pre-K area at the southeastern edge of the playground. Recess is accessed from a door at each end of the school. The northwestern exit is the building access for younger students and the older students exit and enter the building using the southeastern access door.

Deliveries and trash service are coupled with the parking lot on the north side of the building. The utility access road is located west of the parking lot and runs south toward the asphalt.
Parking

Kemp has one parking lot with forty-one spaces, including two designated handicap spaces. The parking is adequate for staff but there is no additional parking available for parents. During pickup and drop off hours, parents park along the surrounding streets causing congestion in the area. During events and activities, parents have to park along the street due to the lack of spaces. The parking lot is used for trash pick up, and deliveries to the school.

Maintenance

The entire schoolyard is equipped with an irrigation system. The grass fields and existing trees and shrubs are well maintained. The school reported issues of vandalism and has installed security cameras as an effort to prevent future acts of vandalism.

Environment Plant conditions

Kemp’s fields are maintained by the Adams School District 14 service center. Most of the school ground is covered by a grass lawn area that is well maintained and has very few weeds. Kemp has very pastoral landscapes due to the amount of mature trees and sloping landscape on site. The majority of the mature trees are located in the southern and central areas of the site. There are trees that flank the fence along the corner of Niagra Street and E. 68th Avenue. Also there are a few shrubs located at the front doors of the classrooms and the existing unused planting bed near the entrance into the Pre-K building.

Playground assessment and Capacity

The playground area has a large asphalt play area with two basketball courts, one softball field, large grass areas, and three play structure areas. The grass area located to the west of the school building is primarily used for soccer.

The first play structure area is comprised of antiquated metal monkey bars and swings located in a play pit filled with pea gravel. The equipment is not age appropriate for the primary age group and is not ADA accessible.

The second play area is intended for intermediate aged students. This area consists of one large play structure installed in 1998 with engineered wood fiber surfacing underneath. The equipment is considered ADA accessible. The existing equipment in this area is in good condition, but it’s not appropriate for students of younger ages. Next to the intermediate play equipment are two sets of antiquated metal swings. Both swing sets have non-ADA compliant pea gravel underneath although one swing set has a ramp rubberized pad for ADA accessibility. The play area surrounding the swings is expansive and could accommodate more equipment for students.

The third area is the Pre-K play area located on the southeast section of the schoolyard next to the preschool building. The play structure was installed in 2009 and is age-appropriate. The area surrounding the pre-k play

Primary Play Area

Intermediate Play Area

Pre-K Play Area
Section Three

- Design Advisory Team
- Vision/Goals/Wishlist
- Ordering System
- Master Plan
structure has a nice grass lawn and a few mature trees. The Pre-K area will need additional items such as fencing, a sandbox and a shade structure to meet state licensing requirements.

**Design Advisory team**
The playground design advisory team played a critical role in creating the Kemp Elementary Schoolyard Master Plan. The design team was made up of the Principal, Health Clerk, P.E teacher, Pre-K teacher, other teachers and staff members, two parents and Learning Landscape staff member. Attendance to each meeting varied based on staff availability.

The team met multiple times throughout the master planning process to discuss issues, concerns, desires and other important information regarding the schoolyard. At each meeting various scenarios, proposals, and questions were brought to the table. Input from the team helped to refine the vision, goals and layout for the master plan.

**Defining a School’s Vision**
Over the course of several meetings with the design team and teachers, the Learning Landscapes staff helped the school formulate the following vision and list of goals based on the school’s desires and needs.

**Vision**
The vision for Kemp is an "All Star" schoolyard that is welcoming, safe, and accessible. The schoolyard will encourage Kemp students to learn and to move by offering places for activities to promote educational and physical development.

**Goals**
- To incorporate various educational elements, and increase physical activity
- To provide a variety of play equipment that is appropriate for all age groups
- Create an ADA accessible playground
- Create an inviting, colorful, and safe environment for students and families

**Wish list**
- Increase educational elements to support language, literacy, and math on the playground
- Add habitat areas to planting beds in front of the Pre-K building
- Create additional shade for the playground
- Create a walking path around the schoolyard
- Add a vegetable garden to promote healthy eating
- Seating for parents to watch children on the weekend
- Age appropriate climbing structures for the students
- Add seating for parents in the Pre-K area, near the primary play equipment and ball field
- More games, discovery maps, number grids and number lines to asphalt
- More tetherball
- Add bike racks in secure areas
- Add primary play equipment to the playground
- Add a Shade structure
- Outdoor classroom – Located in the sloped area underneath the existing trees
- Play equipment storage
- Sand box

**Constituent Issues, Needs, and Desires**
**Issues:**
- Lack of age appropriate play equipment for primary age group
- The play equipment is too far from the primary classrooms
- Not enough age-appropriate play equipment for Intermediate Students
- Natural amphitheater area is not possible to supervise during recess
- There is not enough shade on the playground
- Need better drop-off areas for busses and cars
- The drop-off area to the south of the school is not safe
- Areas of the playground are not visible from the street creating safety issues.
- Gravel from the playground travels onto the asphalt and the sidewalks creating safety issues. Please get rid of the gravel!
Desires:
- More asphalt games to cover the large area and give students more options during recess
- Increase educational elements to support language, literacy, and math on the playground
- Start using the planting beds in front of Pre-K building
- Create additional shade for playground
- Create a walking path around the school yard
- Add a vegetable garden to promote healthy eating at school
- Seating for parents to watch children on the weekend
- More age appropriate climbing structures for the students
- Add seating for parents in Pre-K area, near the primary play equipment and ball field
- Add a NEOS electronic play system

Student Wish List:
The “Wordle” below represents elements students would like to see in their playground based off drawings of their dream playground. The bigger the word, the more frequent the element was represented in the students drawings.
Vision/Goals/Wishlist

Needs:
- Add primary play equipment to the playground
- Promote healthy eating and active living at school
- The long jump pit is also used as a make-shift sandbox. Need to add a dedicated sandbox for younger students.
- Pre-K area is new but needs additional items such as a sandbox, seating, and shade.
- Long lines form for the tetherballs so additional tetherball courts are requested to reduce wait time during recess.
- The community uses the baseball field on the west side of the schoolyard so it is important to the community not to cut into the field.
- The paved maintenance road leading into the site from 68th ave must be kept clear of obstruction.
- Add a sidewalk from the amphitheater area to the Modular – where there is an existing wear pattern
- The playground is used often on weekends and during the summer keep the space as a safe community gathering area.

Add color to playground with a “Walk of the Stars” asphalt games.
Ordering System

Ordering Systems are a unique way of organizing the site in a sort of abstract way. We look at unique influences of each school and neighborhood for inspiration. As such, the ordering systems tend to become an abstraction that unifies a number of different influences and can act as a philosophical manta of sorts. In some cases the ordering systems might be interpreted literally in other cases they remain a thematic device. Either way, the ordering systems are an important part of a Learning Landscapes and can offer the whimsy and inspiration that these sites and their users desire by keeping ideas fresh and fun.

Kemp Ordering System

The Kemp ordering system is inspired by the school’s mascot a shooting star.

Concepts for the ordering system could include a walk of the stars, constellation maps, stellar maps, the solar system, and moon cycle diagrams. In addition, thematic artwork and designs can be used to spark students interest and learning opportunities related to science, and astronomy.

Kemp Master Plan Description

The Kemp Active Play Areas Master Plan was developed based on the needs and desires of the school. Described below are the proposed changes to the Kemp schoolyard in an effort to fulfill the vision and goals developed by the design team.

1. New play equipment with ADA accessibility
   a. New age-appropriate primary play equipment.
   b. Update pre-K play area with fencing and add elements such as shade shelter, seating and a sandbox.
   c. Update the swings
   d. Add age-appropriate climbing structures to encourage physical activity
   e. Update intermediate play area with age-appropriate and challenging play equipment.

2. Walking path around the grass fields made of crusher fines.
3. Add color with a “Walk of the stars” and additional asphalt games
4. Shade structure and shade trees
5. Additional seating for community use and social gathering.
6. Community vegetable garden to promote healthy eating.
7. Community gateway
8. Outdoor classroom
Kemp Elementary
Alternative Plan

- Walk of the Stars
- Walking Path
- Open Play Area
- All Stars Bike Parking
- Shade Structure and Community Gateway
- Baseball Field Seating
- Landform Play
- Outdoor Classroom

- Proposed Trees
- Proposed crusher fines track
- Proposed seating
- Proposed shade structure
- Proposed Gateway

Presented by:
2011 University of Colorado at Denver
Kemp Elementary
Section four

- Cost Estimate
- Resources
- Acknowledgements
- Master Plan Poster
## Category | Unit | Unit Cost | Quantities | Total Cost
---|---|---|---|---
### Play Equipment, Structures & Surfacing
#### Play Equipment
- ECE Sandbox w/ sand LS | $2,000.00 | 1 | $2,000.00
- ECE Sandbox cover LS | $40.00 | 1 | $40.00
- Climbing Structures LS | $5,000.00 | 1 | $5,000.00
- Cool Topper LS | $3,400.00 | 1 | $3,400.00
- ECE Rec Plus - Play Equipment LS | $25,000.00 | 1 | $25,000.00
- ECE Swings LS | $5,000.00 | 1 | $5,000.00
- Intermediate Play Equipment installed LS | $35,000.00 | 1 | $35,000.00
- Primary Play equipment Installed LS | $35,000.00 | 1 | $35,000.00
- Swings (3 bay 6 seat) LS | $4,000.00 | 1 | $4,000.00
#### SUBTOTAL | | | | $114,440.00
#### Play Surfacing
- Play Surfacing (12” EWF Delivered/Installed) SF | $2.50 | 2,594 | 6,485.00
- Primary Play Area SF | $2.50 | 3,578 | 8,945.00
- Intermediate Play Area SF | $2.50 | 3,000 | 7,500.00
- Swing Area SF | $2.50 | 3,564 | 8,910.00
#### SUBTOTAL | | | | $31,840.00
#### Concrete & ADA Accessibility
- Concrete Seat-Wall LF | $29.00 | 0 | -
- Concrete Flatwork, 6” depth SF | $4.00 | 567 | 2,268.00
- Concrete mow band, 8”x6” LF | $11.00 | 200 | 2,200.00
- Concrete Curtwall @ play pits SF | $20.00 | 800 | 16,000.00
- Concrete Pan SF | $5.00 | 0 | -
- Concrete Ramp at Play Pits EA | $800.00 | 3 | 2,400.00
- Concrete Stairs LF | $37.00 | 0 | -
#### SUBTOTAL | | | | $22,868.00
#### Site Work
- Asphalt Striping and painting
  - Earthwork and Drainage 1 | $15,000.00 | 1 | $15,000.00
  - New Asphalt, 4” depth SF | $1.80 | 5,637 | 10,146.60
  - Reconditioned seal existing SF | $0.85 | 25,569 | 24,290.55
  - Outdoor Classroom EA | $10,000.00 | 1 | $10,000.00
  - Map Striping EA | $1,500.00 | 1 | $1,500.00
  - Tetherball Striping EA | $150.00 | 6 | 900.00
  - Hopscotch Striping EA | $400.00 | 5 | 2,000.00
  - Basketball Court Striping EA | $400.00 | 2 | 800.00
  - 4-Square Striping EA | $250.00 | 5 | 1,250.00
  - Funnel Ball Striping EA | $200.00 | 0 | -
  - Painted Line-Up Lines LS | $200.00 | 0 | -
  - Painted Goal Posts EA | $50.00 | 10 | 500.00
#### SUBTOTAL | | | | $51,387.15
### Running Track
- Crusher Finest, 4’ WIDE X 4” depth SF | $1.00 | 4,432 | 4,432.00
- Crusher Finest Stabilizer SF | $1.20 | 4,432 | 5,318.40
#### SUBTOTAL | | | | $9,750.40
### Site Furnishings, Athletic Equipment and Misc.
#### Picnic Table EA | $1,000.00 | 3 | $3,000.00
#### Trash Receptacle EA | $650.00 | 3 | $1,950.00
#### 6’ Bench EA | $850.00 | 6 | $5,100.00
#### Banner Pole and Banners EA | $900.00 | 6 | $5,400.00
#### Basketball Goal EA | $1,200.00 | 4 | $4,800.00
#### Tetherball Poles EA | $350.00 | 6 | $2,100.00
#### Permanent or Moveable Soccer Goals EA | $1,000.00 | 2 | $2,000.00
#### Backstop with Hood EA | $2,500.00 | 1 | $2,500.00
#### Shade Structures @ Plaza EA | $25,000.00 | 1 | $25,000.00
#### Gateway Feature LS | $10,000.00 | 1 | $10,000.00
#### SUBTOTAL | | | | $61,850.00
### Gardens, Planting and Irrigation
#### Shrub Bed Soil Prep SF | $0.30 | 1,800 | 540.00
#### Seed, low grow-no mow areas SF | $0.07 | 0 | -
#### Irrigation, shrub beds SF | $0.75 | 1,800 | 1,350.00
#### Irrigation, sod areas SF | $0.55 | 0 | -
#### Irrigation, tree bubblers EA | $60.00 | 40 | 2,400.00
#### Shade Tree, 3” caliper EA | $400.00 | 20 | 8,000.00
#### Deciduous Ornamental Tree, 2.5” caliper EA | $100.00 | 0 | -
#### Boulton-feather EA | $150.00 | 18 | 2,700.00
#### Shredded Mulch, 4” depth over fabric SF | $1.20 | 1,800 | 2,160.00
#### SUBTOTAL | | | | $17,150.00
### Vegetable Garden
#### Soil Amendment CY | $35.00 | 15 | 525.00
#### 4’ Chainlink Fence LF | $20.00 | 160 | 3,200.00
#### Chain Link Gate, 4’ width EA | $150.00 | 2 | 300.00
#### Irrigation EA | $1,500.00 | 1 | 1,500.00
#### Compost Storage & Accessories EA | $1,000.00 | 1 | 1,000.00
#### SUBTOTAL | | | | $8,375.00
### Metal
#### Steel Edger LF | $5.00 | 2,726 | 13,630.00
#### 4’ Chainlink Fence (at ECE Play Pit and Garden) LF | $20.00 | 669 | 13,380.00
#### Chain Link Gate, 8” wide (at ECE Play Pit and Community Garden) EA | $250.00 | 2 | 700.00
#### Chain Link Gate, 8’ wide - Infl. double swing EA | $1,200.00 | 0 | -
#### SUBTOTAL | | | | $27,710.00
### Site Improvements
#### Typical construction mobilization 1 | $10,000.00 | 1 | $10,000
#### Typical infrastructure construction/repair 1 | $10,000.00 | 1 | $10,000
#### Typical Demolition 1 | $25,000.00 | 1 | $25,000
#### Architecture Engineering and Coordination 1 | $27,629.64
#### 5% of construction cost 1 | $34,537.06
#### Contingency Cost 1 | $34,537.06
#### SUBTOTAL | | | | $452,537.25
Resources

Commerce City Press Release February 5, 2011
Colorado Children’s Campaign
Education News Colorado “Child obesity threatens Colorado’s future” by Diane Carman on Feb 14th, 2011
Health at a Crossroads
2010 Supplement to the Colorado Health Report Card – Colorado Health Foundation
National Center for Health Statistics,

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Adams County School District 14 Facility Maintenance
Adams County School District 14 Communications
Adams County School District 14 Wellness
Commerce City Parks and Recreation
Recreation Plus

University of Colorado Denver
College of Architecture and Planning
Colorado Center for Community Development
Learning Landscapes
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Executive Director
Cate Townley
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Resources and Acknowledgements
VISION
The vision for Kemp is an "All Star" schoolyard that is welcoming, safe, and accessible. The schoolyard will encourage Kemp students to learn and to move by offering places for activities to promote educational, and physical development.

GOALS
1. To incorporate various educational elements, and increase physical activity
2. To provide a variety of age-appropriate play equipment for all
3. Create an ADA accessible playground
4. Create an inviting, colorful, and safe environment for students and families
5. Build outdoor "living" classrooms

EXISTING CONDITIONS

Equipment & Materials
The Kemp Elementary schoolyard is large and park-like with several mature trees and rolling topography. The playground, on the south and west sides of the school, includes a large asphalt play area with basketball, tether ball, four square and hopscotch. There is a softball field and large grass area with three play structures.

ADA Accessibility and Site drainage
Although building entrances are ADA accessible multiple play structures are not ADA accessible due to lack of ramps into play pits, lack of appropriate safety surfacing. Two areas of the schoolyard are susceptible to poor drainage with ice in winter.