Pea Gravel Field

4’ to 6’ retaining Wall

Outdated Play Structures

Parking Lot Used by Parents to Pick up Students

Area of Poor Visibility

Narrow Stairway Entryway

Fenced Playground Creates A Blockade

500’ Retaining Wall

Pea Gravel Field

Narrow Stairway Entryway

Poorly Defined Playground Entry
<table>
<thead>
<tr>
<th>Goals</th>
<th>Educational Opportunities</th>
<th>Community Needs</th>
<th>Natural Elements</th>
<th>Diversity of Play Options</th>
<th>Non-Traditional Play</th>
<th>Playground Aesthetics</th>
<th>Overall Goal Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a foundation that utilizes educational and play elements to promote multidisciplinary learning</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Create multi-functional space that fosters school and community gathering</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Provide a wide variety of places for students, teachers, and neighbors to be interactive and inventive</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Create a welcoming, safe, fun and aesthetically pleasing playground</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Create an area that increases social interaction, creativity, and enjoyment</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Theme Achievement**

- 

**By Utilizing a new ordering system based upon geology, geography, and natural systems, and by implementing a refined spatial arrangement, the learning landscape at Palmer Elementary has the potential to achieve all five project goals. Additionally, implementation of the revised ordering system and spatial organization will ensure that the themes, needs, and desires of all constituent groups are fully met.**
Goals

| Create a foundation that utilizes educational and play elements to promote multidisciplinary learning | X | | | | |
| Create multi-functional space that fosters school and community gathering | | X | | | |
| Provide a wide variety of places for students, teachers, and neighbors to be interactive and inventive | X | X | | | |
| Create a Welcoming, Safe, Fun and aesthetically pleasing playground | | X | | |
| Create an area that increases social interaction, creativity, and enjoyment | X | | | |

Theme Achievement

Based upon the spatial diagram for Palmer Elementary, which is inspired by an ordering system of Euclidean geometry, our research indicates that the learning landscape at Palmer will fail to achieve four out of the five project goals. Additionally, none of the broad themes, desires, and goals expressed by all constituent groups will be fully achieved. This potential lack of success is based primarily upon the fact that many of the desires of teachers, students, parents, staff and community members are unfulfilled. Further, we believe that an ordering system based upon geometry does not fully reflect the curriculum of Palmer, and thus has limited potential as an organizing theme for the playground.
In 2004 an extensive survey was conducted to measure the needs and desires of various constituents at Palmer Elementary. These constituent groups included students, parents, teachers, school staff, and community members. Based on the needs and desires of these groups, as well as the results of an extensive community photo survey, we have identified several primary areas of focus for our design of Palmer’s Learning Landscape.

**Most Desired Elements**
Needs and Desires identified by at least four out of five constituent groups

- More Seating
- Grass Field
- Trees
- Track and Obstacle Course
- Native/xeric plantings
- Non-Traditional play equipment
- Drinking fountain

- Game Tables
- More shade
- Expansion of gardens
- Diversity in play equipment
- Climbing Boulders
- Outdoor Classroom
- Entry Gateway

**Commonly Desired Elements**
Needs and Desires identified by three out of five constituent groups

- Outdoor learning area
- Safer vehicular drop-off
- Quite spaces
- Outdoor restrooms
- Inclusion of simple machines
- Sculptures and murals

- Soccer goals
- Greater ADA access
- New play equipment
- Mitigation of site erosion
- Central viewing area
- Water feature

**Least Desired Elements**
Needs and Desires identified by two or less constituent groups

- Playground signage
- Less masculine play equipment
- Fabric woven into fence
- Reduction in trip hazards

- More swings
- Geographic maps
- Outdoor eating areas
- More room for ball games
Palmer Elementary School
Existing Conditions

Scale: 1” = 20’ - 0”
Palmer Bioswale Plant Species

Plant species are selected to provide a broad assortment of dry, moderate and water-loving species. All species function well in a working bioswale, provide bird and insect habitat, and demonstrate the principals of a wetlands ecology.

**Xeric Species**

- **Honey Locust**
  - *Gleditsia triacanthos*
- **Ponderosa Pine**
  - *Pinus ponderosa*
- **Sunburst Locust**
  - *G. triacanthos ‘sunburst’*
- **Cockspur Hawthorn**
  - *Crataegus crusgalli*
- **Rabbitbrush**
  - *Chrysothamus viscidiflorus*
- **Sand Sagebrush**
  - *Artemisia filifolia*
- **Fringed Sage Brush**
  - *Artemisia frigidia*
- **Fourwing Salt Brush**
  - *Atriplex canescens*
- **Blue Grama Grass**
  - *Bouteloua gracilis*
- **Little Bluestem**
  - *Schizachyrium scoparium*

**Mesic Species**

- **Burr Oak**
  - *Quercus macrocarpa*
- **Golden Rain Tree**
  - *Koelreuteria paniculata*
- **Catalpa**
  - *Catalpa speciosa*
- **Ohio Buckeye**
  - *Aesculus glabra*
- **St. Johns Wort ‘ames’**
  - *Hypericum kalmianum*
- **Russian Sage**
  - *Perovskia atriplicifolia*
- **Hummingbird Flower**
  - *Zausihneria garrettii*
- **Fragrant Sumac**
  - *Rhus aromatic*
- **Wild Mock Orange**
  - *Philadelphus lewisi*
- **Sideoats Grama**
  - *Bouteloua curtipendula*

**Hydic Species**

- **Plains Cottonwood**
  - *Populus deltoides*
- **Sandbar Willow**
  - *Salix exigua*
- **Narrowleaf Cottonwood**
  - *Populus angustifolia*
- **Corkscrew Willow**
  - *Salix matsudana*
- **Rock Sedge**
  - *Carex saxatilis*
- **American Water-willow**
  - *Justicia americana*
- **Woolly Sedge**
  - *Carex lanuginosa*
- **Chestnut Rush**
  - *Juncus castaneus*
- **Slender Sedge**
  - *Carex lasiocarpa*
- **Rough Horsetail**
  - *Equisetum hyemale*
- **Narrow-Leaf Cat-tail**
  - *Typha angustifolia*