:: VISION ::
To create a science, technology, and society themed landscape that inspires learning and community engagement.

:: GOALS ::
1) To create a landscape of rituals and interactivity to draw Hallett Elementary School and the Greater Park Hill Community together.

2) To incorporate science and technology curriculum objectives into the landscape.

3) To design a landscape that encourages positive socialization.

4) To provide a community landmark that will empower and instill a sense of pride and engagement.

:: PROGRAM ELEMENTS ::
INTERACTIVE SCIENCE AREAS
- Amphitheater
- Outdoor Classroom
- Art/Science Elements
- Interactive Computer Elements

SOFT SURFACE
- Multi-Use Grass Fields
- Soccer & Baseball Track

PAVILLION
- Rain Harvester
- Stage
- Weather Station

PLAY PITS
- ECE
- Primary
- Secondary
- Swings

HARD SURFACE
- Wall Ball Areas
- 2 Dodge Ball Rings
- 2 4-squares
- 3 Tetherballs
- Basketball Court
EDUCATIONAL STANDARDS

Recognizing that energy can affect common objects and is involved in common events. Kinetic sculpture as the gateway entrance illustrates that the playground responds to and is integrated with natural process. Also, heliotropic plants in the experimental garden area follow the energy of solar movement.

Distinguishing living from nonliving things. Variety of plants (and animals) among other surfaces and materials.

Giving examples of how organisms interact with each other and with nonliving parts of their habitat. Riparian/native area will develop as small scale ecosystems. Areas closest to the drainage area are reminiscent of lowland riparian ecosystems. Areas farther out from the moisture exhibit grassland and lower montane qualities.

Recognizing geometry in their world. Pavement markings, shade structure form, shadows were derived from mathematical or natural geometries. The forms can be recognized on many different levels, from their representational form to basic shapes.

Comparing a model with what it represents. Fort scalar model. A model of the footprint of the existing (and soon to be removed) wooden fort playground equipment is embedded in the asphalt. Other markers at the scale of the entire playground are located throughout the site. Each "post" in the map contains a clue to finding the corresponding post on the full scale playground model. The corresponding identifiers may be letters, numbers, shapes, equations, or words, for example. Images on the reduced scale model, may also translate to actual items in the landscape. For example, if a tree is on a marker on the map, it may correspond to a living tree at full scale. This element is a historical reference to a playground element that existed here for many years as well as, being referential, exploratory, and marks measured distances.

Measuring quantities associated with energy forms. Rain gauge measuring pools record the rainfall per storm event by the amount of viewable water in each of the pools as well as leaving a watermark on the stones that make up the bottom of the pools. Weather stations which are electronically linked to the classrooms located in various locations around the site. Elements such as wind speed, temperature, and precipitation are monitored, studied and possibly shared with other schools that have similar programs. The weather stations are located in the native/riparian area, the outdoor classroom near the entrance of the building, and the community garden.

Describing how an environment's ability to provide food, water, space and essential nutrients determines carrying capacity. Riparian/native area will develop as small scale ecosystem that will support various flora and fauna. The community garden and experimental garden demonstrate this standard as well.

Knowing, using describing and estimating measures of length, perimeter, capacity, weight, time and temperature. Stopclock on the playground for games, class activities for measuring time. Weather stations and rain gauge for capacity/temperature.

Motor skill development. Boulder hill - raised hill with embedded boulders. Provides an elevation change with boulders. Provides an elevation change in the ECE area. Allows for social interaction and development of basic motor skills.
PLANTING SCHEME

EXPERIMENTAL GARDEN
- Heliotropic Species

NATIVE/RAIN GAUGE GARDEN
- Grassland
- Lower Montane

ECE TEXTURE GARDEN
- Texture

COMMUNITY GARDEN
- Shrubs
- Herbs
### COMMUNITY GARDEN

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SV</td>
<td>Syringa vulgaris</td>
<td>Common Purple Lilac</td>
<td>3</td>
</tr>
<tr>
<td>BA</td>
<td>Buddleja davidii ‘Black Knight’</td>
<td>Purple Butterfly Bush</td>
<td>3</td>
</tr>
<tr>
<td>CC</td>
<td>Caryopteris x clandonensis ‘Blue Mist’</td>
<td>Blue Mist Spirea</td>
<td>9</td>
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<tr>
<td>BD</td>
<td>Buddleja davidii ‘Nanho Blue’</td>
<td>Compact Blue Butterfly Bush</td>
<td>3</td>
</tr>
<tr>
<td>PA</td>
<td>Perovskia atriplicifolia</td>
<td>Russian Sage</td>
<td>6</td>
</tr>
<tr>
<td>RO</td>
<td>Rosmarinus officinalis ‘Ap’</td>
<td>Lemon Rosemary</td>
<td>5</td>
</tr>
<tr>
<td>OL</td>
<td>Origanum libanoticum</td>
<td>Hopflower Oregano</td>
<td>5</td>
</tr>
<tr>
<td>SA</td>
<td>Salvia officinalis</td>
<td>Garden Sage</td>
<td>5</td>
</tr>
<tr>
<td>EV</td>
<td>Scutellaria alpina</td>
<td>Rainbow Skull Cap</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Ephedra viridis</td>
<td>Mormon Tea</td>
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</tr>
</tbody>
</table>

### PLANTING SCHEME - DETAIL

#### ECE GARDEN

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL</td>
<td>Chasmanthium latifolium</td>
<td>Northern Sea Oats</td>
<td>17</td>
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<tr>
<td>FG</td>
<td>Festuca glauca ‘Elijah Blue’</td>
<td>Blue Fescue</td>
<td>59</td>
</tr>
<tr>
<td>PA</td>
<td>Populus angustifolia</td>
<td>Narrowleaf Cottonwood</td>
<td>1</td>
</tr>
<tr>
<td>SB</td>
<td>Stachys byzantina ‘Silver Carpet’</td>
<td>Lamb’s Ear</td>
<td>14</td>
</tr>
<tr>
<td>SP</td>
<td>Syringa patula ‘Miss Kim’</td>
<td>Miss Kim Dwarf Lilac</td>
<td>7</td>
</tr>
<tr>
<td>RH</td>
<td>Rudbeckia fulgida ‘Goldsturm’</td>
<td>Black-eyed Susan</td>
<td>15</td>
</tr>
</tbody>
</table>

#### ECE TEXTURE GARDEN

- **CL**: Chasmanthium latifolium - Northern Sea Oats
- **FG**: Festuca glauca ‘Elijah Blue’ - Blue Fescue
- **PA**: Populus angustifolia - Narrowleaf Cottonwood
- **SB**: Stachys byzantina ‘Silver Carpet’ - Lamb’s Ear
- **SP**: Syringa patula ‘Miss Kim’ - Miss Kim Dwarf Lilac
- **RH**: Rudbeckia fulgida ‘Goldsturm’ - Black-eyed Susan
### PLANTING SCHEME - DETAIL

#### EXPERIMENTAL GARDEN

**SYMBOL** | **BOTANICAL NAME** | **COMMON NAME**
---|---|---
**Heliotropic Species**
HM | Helianthus maximiliani | Maximilian Sunflower
EC | Euploca convolvulacea | Heliotropem
HC | Heliotropium Curassavicum | Salt Heliotrope

#### NATIVE/RAIN GAUGE GARDEN

**SYMBOL** | **BOTANICAL NAME** | **COMMON NAME** | **QUANTITY**
---|---|---|---
**Riparian**
SA | Symphoricarpos albus | White Snowberry | 8
CS | Cornus stolonifera 'Flaviramea' | Yellowtwig Dogwood | 10
PA | Populus angustifolia | Narrowleaf Cottonwood | 3
SA | Salix amygdaloides | Peach-leaved Willow | 8
PR | Prunus americana | Wild Plum | 3

**Grassland**
CN | Chrysophanmus nauseosus | Rabbit Brush | 6
AG | Andropogon gerardii | Big Bluestem | 12
SS | Schizachyrium scoparium | Little Bluestem | 24
SC | Stipa comata | Needle-and-thread | NA
KL | Krascheninnikovia lanata | Winterfat | 3
YG | Yucca glauca | Yucca | 4

**Lower Montane**
CM | Cerocarpus montanus | Common Mountian Mahogany | 6
PM | Pseudotsuga menziesii | Douglas Fir | 1
DI | Distegia involucrata | Twinbery Honeysuckle | 3
Measuring, collection, and observation drive the concept behind the shade structure. An opportunity to collect rainfall and observe the effects reveals itself.
Concepts of collection and measuring are further developed into a practical application. Rainfall is directed from the roof of the shade structure and the surrounding hardscape into the collection pools. These pools are integrated into the landscape. They function as a native/riparian area which results in an increase in water quality and an educational element. Students can observe the system from a range of scales and meaning.

Cross section of one of the pools with a soft bottom to allow for infiltration. Boulders and cobble will be stained with a watermark to measure storm events.
Structural details of the rain guage are worked out. The hardscape underneath becomes a raindrop shaped social gathering area/ampitheater. The point where water impacts the ground becomes an epicenter that impacts form.
NOTES:
Sheet metal for roof is Cor-Ten.
Beams 4" x 6" steel tubing.
Posts are 6" x 6" steel tubing.

Posts and beams are to be acid washed and finished with clear coat to give a
similar appearance to the Cor-Ten roof.

27 degrees is the angle of the run on the
winter skyline. Only the north panel of
the roof will cast a shadow, displaying
only its geometry.

The connection between the panels
is to be crinkled to prevent water
from leaking at this connection.

The tip at the point of the roof mimics
the geometry of the parent structure.
It also assures the water flows off the
roof, preventing capillary action of
water directing it along the underside
of the roof.

RE: South Panel - Bottom Detail 4.L-8
RE: North Panel - Bottom Detail 2.L-8
RE: Footer Placement - Plan 1.L-8