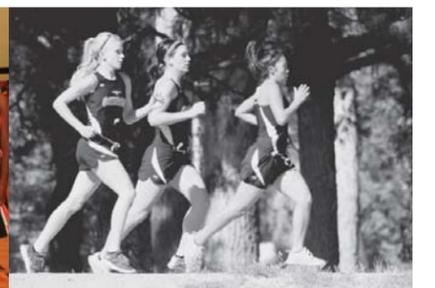
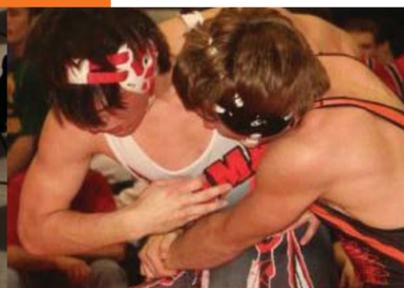
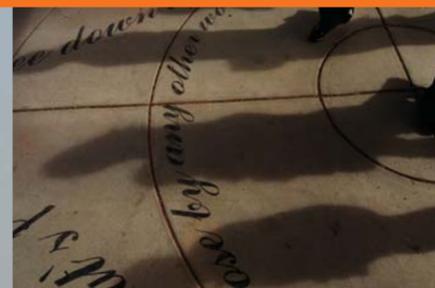
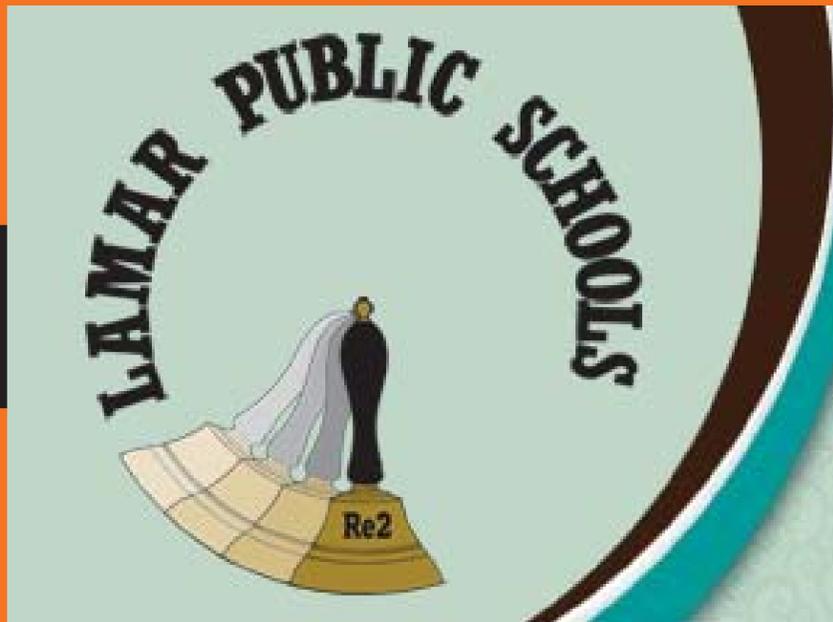




Lamar School District RE-2  
Learning Landscapes

# MASTER PLAN



Spring 2012

Lamar High School



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# Section One

1



## Executive Summary

- Introduction
- Lamar District RE-2 Background
- Master Plan Intent and Process
- Recommendations
- Learning Landscapes Background

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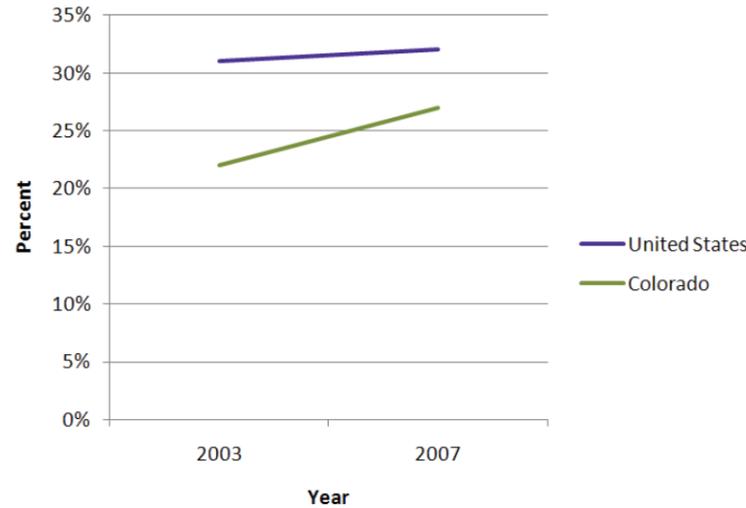


Lamar High School

**Introduction**

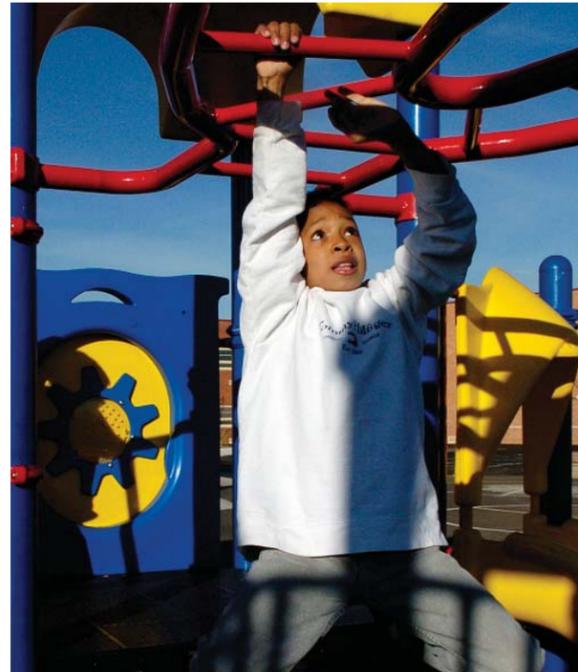
Schoolyards provide an opportunity for the built environment to promote increased physical activity for children and the surrounding community. In addition, studies show that well-planned and equipped schoolyards increase physical activity while also enhancing the learning environment resulting in improved 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; a place to gather and to meet, a place to enjoy, and 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.

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In the spring of 2012, Lamar School District RE-2 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, 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 a child’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 active play areas master plans for six schools within the Lamar School District RE-2.



The Learning Landscapes 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 in Denver and the greater rocky mountain region, the success of this program is founded on a mutual respect between aesthetic, safety, maintenance, and health 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.

CHF Vision:

Colorado will become the healthiest state in the nation.

CHF Mission:

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

To support the goal of Healthy Schools and Healthy Communities, the Foundation seeks to fund active play spaces for schools designed to promote play and other forms of physical activity. This includes inviting playgrounds with active play areas to facilitate games and other forms of movement.

The Active Play Areas Plan supports the Foundation’s following funding strategies:

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.

Implementation of the Active Play Areas Master Plan can be measured by the Foundation’s following measurable results:

- a) Increase the number of children and adults who engage in moderate or vigorous physical activity.
- b) Increase the number of children and adults who eat adequate amounts of fruits and vegetables daily.
- c) Increase the number of under-served Coloradans who have convenient access to recreational exercise and fruits and vegetables.



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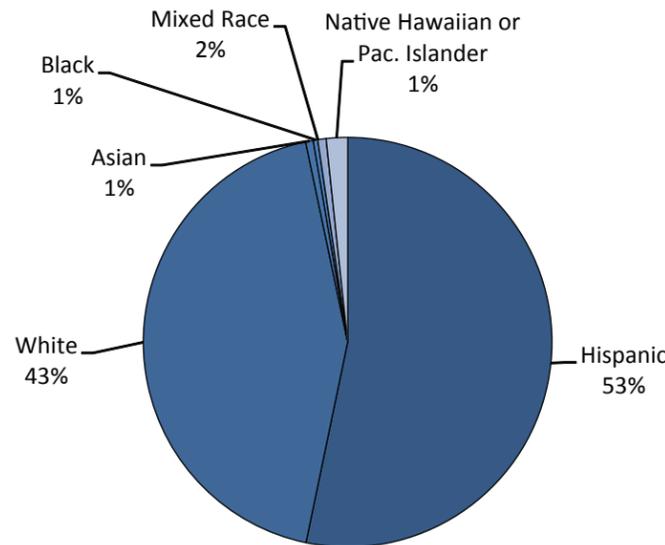


Lamar High School



Total Enrollment: 1,667  
 0.7% American Indian/Alaskan Native  
 0.4% Asian  
 0.6% Black  
 53.3% Hispanic  
 43.4% White  
 0.0% Native Hawaiian/Pacific Islander  
 1.7% Two or more

**Lamar District RE-2 Demographics**



which houses a fitness center offering traditional weight room facilities, aerobics and zumba classes, and yoga.

In 2009, the Colorado Department of Education awarded a school wellness grant to the Lamar School District RE-2. This grant awarded \$50,000 per year for the course of three years to support coordinated improvements to the counseling, health education, PE, nutrition, and health services programs in all of the district's schools. This award also allowed for the hiring of a district-wide health and wellness coordinator, Angel Sneller, who has been working to improve health education and physical education through curriculum expansion as prescribed by the district wellness policy.

A recent publication of the Prowers County Public Health & Environment Annual Report lists obesity among its "winnable battles" as described by the U.S. Department of Health and Human Services. The report notes that "creating healthier environments is a good starting place. When children have safe places to walk, bike, and play in their neighborhoods, they're more likely to be active and less likely to become obese." (www.prowerscounty.net)

**Lamar School District RE-2**

Lamar School District RE-2 is the 54<sup>th</sup> largest out of 183 districts in Colorado, with 1,667 students. The district has six schools: one preschool, two elementary schools, a K-6 charter school, and a middle and high school.

The mission of Lamar School District Re 2 is to provide, within a safe environment, meaningful opportunities, experiences, and guidance combined with high expectations that will enable each life-long learner to be a moral, ethical, responsible, and productive member of society. (<http://www.lamar.k12.co.us>)

Lamar School District RE-2 is representative of many cultures. The largest racial demographic groups are Hispanic (53.3%), and White (43.4%), with additional representation from Asian, Black, American Indian and mixed-race students.

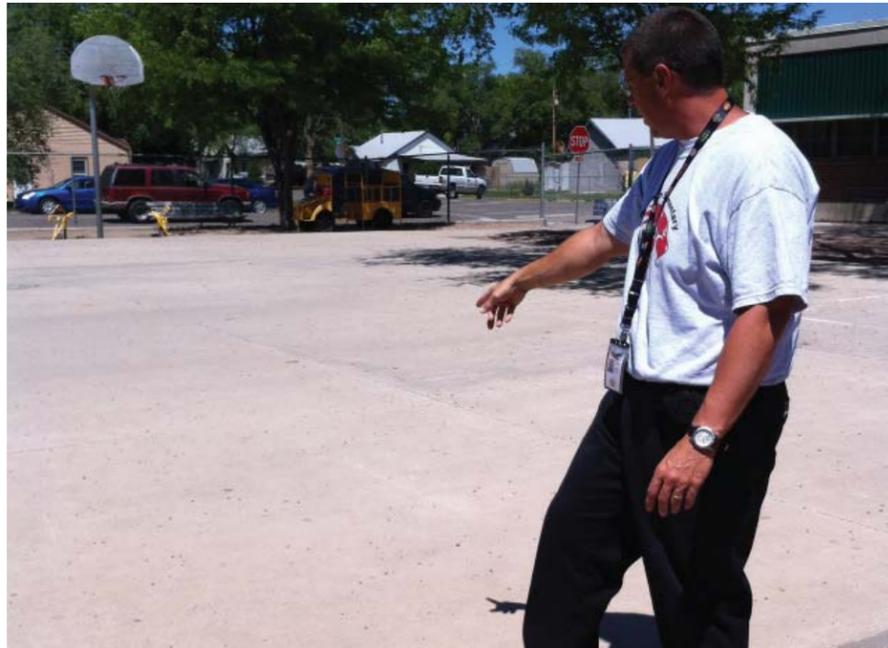
**Wellness**

Lamar's rural setting lends itself to a population with a strong work ethic and an appreciation for the outdoors. Lamar's Parks Department offers a range of activities for residents of all ages, and maintains about 109 acres of developed parks and public lands and 1.4 miles of trail. The Recreation Department offers recreational activities at the Lamar Community Building

**Intent of the Play Areas Master Plan**

The master plans for each school are intended to serve as a roadmap for developing strategies and tactics needed to create an inviting, safe and active play area to increase activity and improve the health of students and surrounding community members. The purpose of the master plan is for the selected schools from the Lamar School District RE-2 to be strategically poised to capture opportunities to improve and expand outdoor/ play areas as funding becomes available. The master plan is intended to be used as a tool for the staff, parents, and district administration to seek funding for future schoolyard renovations and wellness initiatives.

A 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



At the school level the collaborative process was guided by each school's design committee and facilitated by Learning Landscapes staff. The committee was comprised of the principal, staff, parents, and community members. The team members helped to identify issues with the existing site, form a vision and goals to guide the planning process, gather information and feedback from people outside the committee, provide feedback on iterations of the plan, administer photo surveys and collect student art work.

This collaborative effort allowed the school to develop an active play areas master plan to reflect the history, culture and curriculum unique to Lamar School District RE-2 in accordance with its mission statement.



components for implementation. These goals are defined through the use of text and imagery. A programmatic list of uses is also developed. Lastly, the 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 April to October 2012 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 Wellness Coordinator and school faculty and staff. 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 over all vision for the District. The team also discussed strategies for phasing, sustainable maintenance and funding for implementation.



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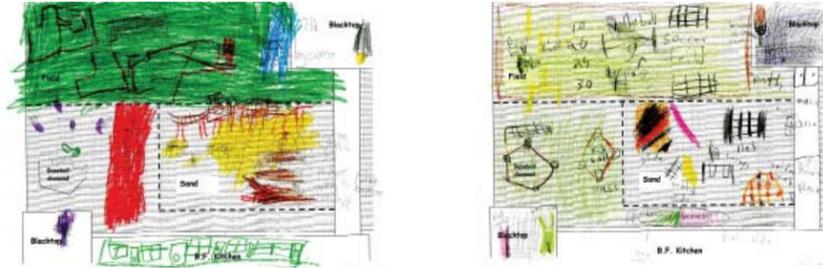


Lamar High School



The planning process consisted of the following tasks:

- o Design team meetings
- o Site inventory and analysis
- o Play equipment assessment
- o Schoolyard use assessment
- o Community engagement
- o Photo surveys and student drawings
- o Master Plan recommendations
- o Cost Estimates and prioritization



Example of Student Drawings depicting "My Dream Playground"

**Recommendations**

Improved play facilities will serve multiple purposes in not only engaging Lamar School District RE-2 students, but the entire community. The following are recommendations for implementation of the Active Play Areas Master Plan at Lamar School District RE-2's schools.

- 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 a Running Path
  - To provide opportunities for students, teachers, staff and community to be active and encourage each other to get moving.
- Install Climbing Structures
  - To increase upper body strength and coordination, and to enliven the existing active spaces.
- 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 Elements
  - Input from the design committee and student surveys suggested adding more color on the schoolyard. Students are excited by the color which sparks their creativity during play.
- Incorporate a Vegetable Garden
  - Involving a garden in the learning curriculum can promote healthy eating, community stewardship, educational opportunities, and food literacy.
- Develop Outdoor Learning Environments
  - Incorporate educational charts, graphs, and graphics within the schoolyard to promote continuous learning even during recess activities.
- Develop Community Gathering Spaces
  - Welcoming the neighborhood to gather, play, and exercise in the play areas will help build support stewardship of the community by providing a safe place to be active not just during recess but also after school and on weekends.

- Increase Opportunities for Shade
  - To protect students and visitors from the intense Colorado sun and to provide additional gathering spaces for community members.
- Create an Outdoor Classroom
  - Give teachers the option to instruct students outdoors to interact with and observe the local environment.



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**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 feed back 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.



Outdoor Art



Gateways



Climbing Structures



Shade Structure



Sports Fields



Outdoor Amphitheater



Habitat & Vegetable Garden



Small Group Gathering Spaces



Hard Surface Games



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, outdoor classrooms, gardens, traditional play elements and non-traditional play elements.

**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 form of games that are super imposed on the hard court surfaces 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 classrooms outside. Or the learning components can simply be whimsical things that all the kids do to use their imaginations while playing hopscotch, tetherball, or any activity.



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Lamar High School



## Section Two

# 2



- School Background
- Existing Conditions
- Recreation Area Assessment



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**School Background Information**

*Location and History:*

Lamar High School is located at 1900 S. 11<sup>th</sup> St. in Lamar, CO. The school has 431 students in grades 9 through 12. Lamar High School's student body is active in both student organizations and athletics. Among the student body organizations are the Future Students Leaders of America (FSLA), Future Farmers of America (FFA), Distributive Education Clubs of America (DECA), National Honors Society, the Savage Chieftan Newspaper, and the Student Council. The sports program as LHS supports competitive teams in baseball and softball, football, basketball, soccer, volleyball, wrestling, golf, cross country and track. The school mascot is the savages and the school colors are orange and black.



lhs.lamar.k12.co.us

*Neighborhood Context:*

Lamar High School is located at the south edge of Lamar, bordering residential neighborhoods to the north and open space areas to the south. The school offers a large outdoor space for community sports and activities. Local softball and little league teams use the LHS backstop for practice/games, and middle school programs use space for soccer and football. The school property is adjacent to the Lamar Sports Complex to the east that is utilized by the school's teams, the greater Lamar community, and for regional games and tournaments. There is also a dirt bike park to the south. The grounds at LHS are mostly used by sports teams and PE classes, but PE is only required for freshman students.



lamarledger.com

*School Mission:*

The mission of Lamar High School mirrors the mission of Lamar School District Re 2, to provide, within a safe environment, meaningful opportunities, experiences, and guidance combined with high expectations that will enable each life-long learner to be a moral, ethical, responsible, and productive member of society. (lamar.k12.co.us)

*School Demographics:*

Fall 2011 Enrollment: 431

Male Students: 236  
Female Students: 195

Free/Reduced Lunch: 51.04% of students

*Racial Make-up of Alta Vista Students:*

0.7%	American Indian/Alaskan Native
0.7%	Asian
1.4%	Black
49.4%	Hispanic
46.2%	White
0%	Native Hawaiian/Pacific Islander
1.6%	Two or more

*Grade Distribution of Students:*

9<sup>th</sup> grade: 110  
10<sup>th</sup> grade: 105  
11<sup>th</sup> grade: 108  
12<sup>th</sup> grade: 108



Lamar High School Aerial Plan



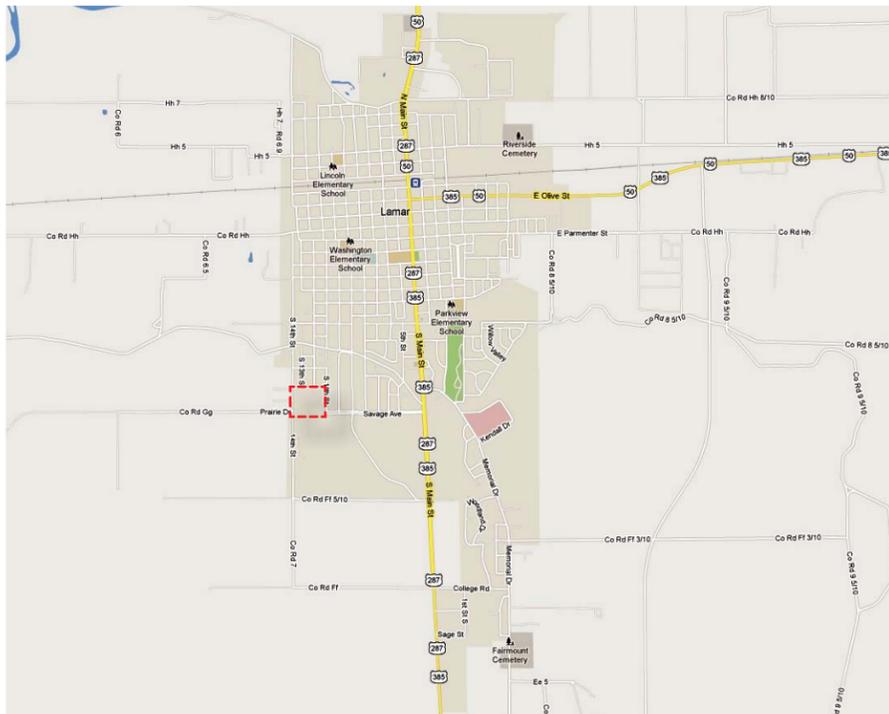
**Surrounding Area Demographics**

The city of Lamar is the County seat of Prowers County with an area population of 12,551. Lamar's population has decreased significantly between 2000 and 2010. According to US Census data, the current population is 14% lower than in 2000. Of these residents, the largest racial groups consist of whites at

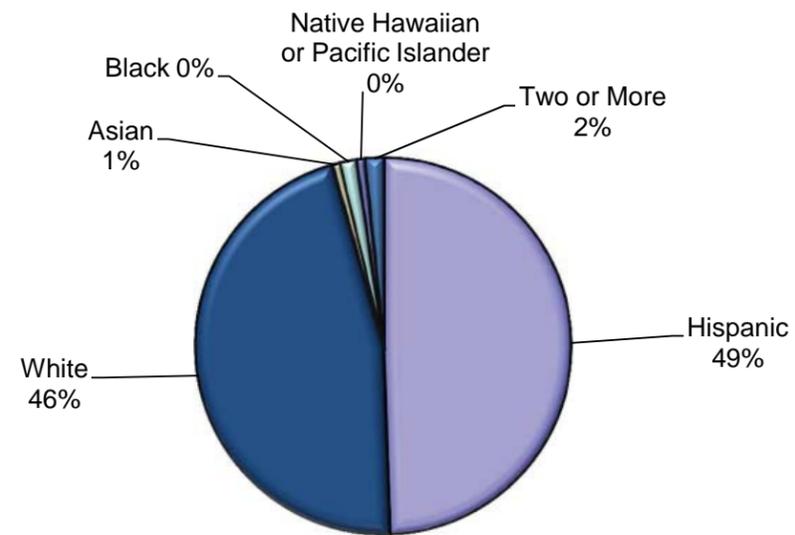
81% and people of Hispanic origin at 16%. The median age for Prowers County is 36.7 and the median annual household income is \$28,660.

**Catchment Area**

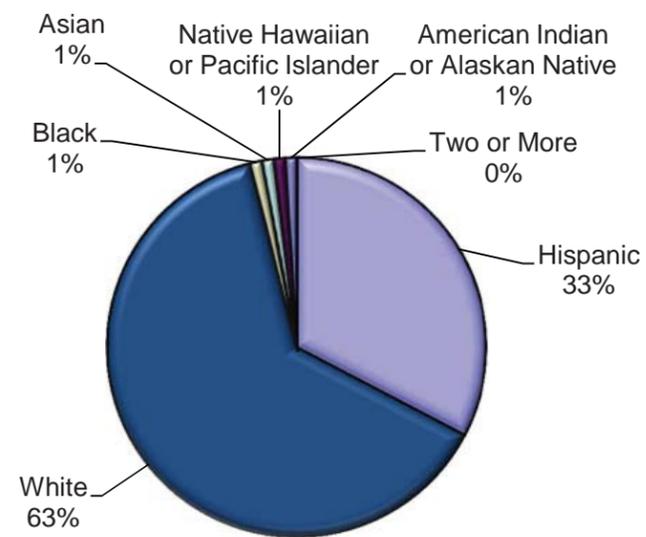
The catchment area for Lamar High School reaches throughout the city of Lamar, since it is the only high school within the Lamar School District RE-2.



**2011 Lamar High School Demographics**



**Surrounding Area Demographics**

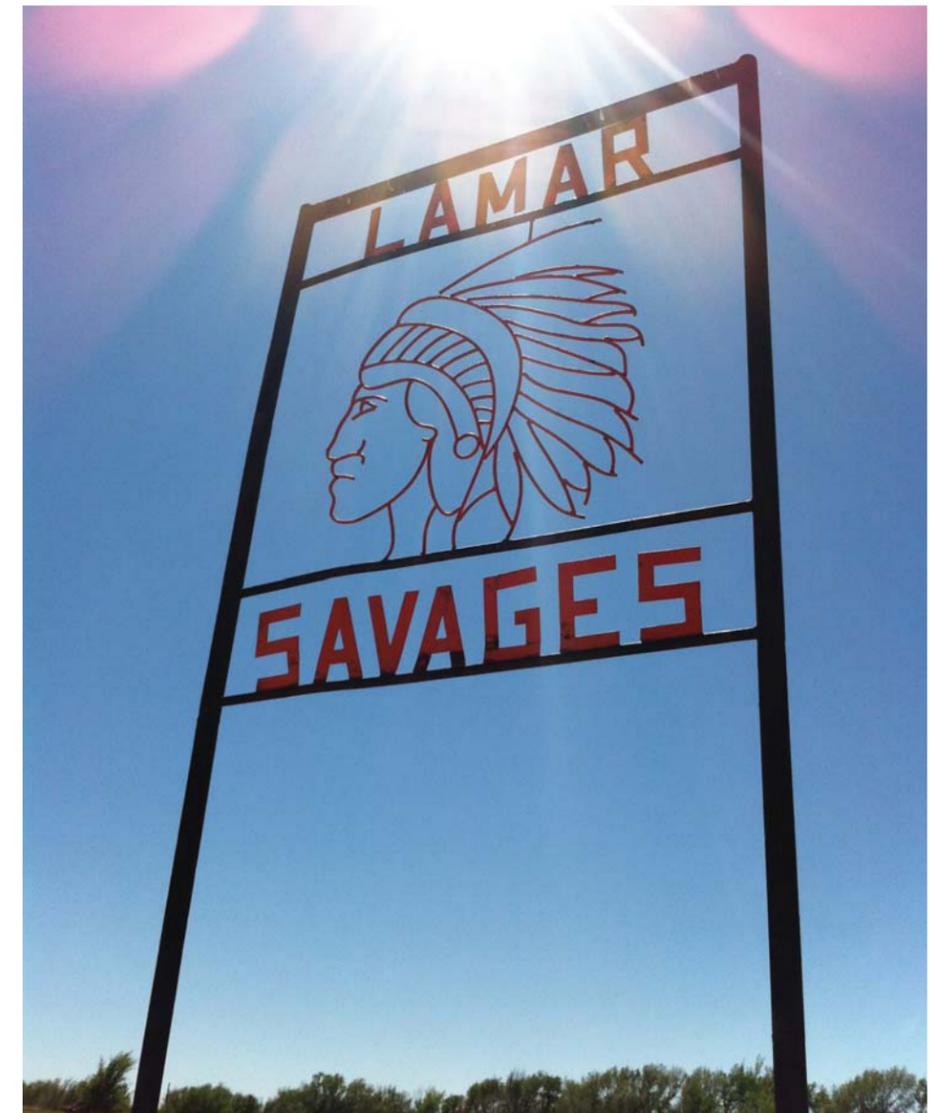


**Site Inventory**

**Existing Conditions:**

**Equipment & Materials**

The grounds at Lamar High School are well-maintained by the district. The large grass fields behind the school offer a large space for school and community-wide football, soccer, baseball/softball, etc. However, these sports fields could benefit from improved infrastructure



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such as walkways, lighting, seating, scoreboards, bathrooms and concessions facilities. The fields could also benefit from some minor grading and re-seeding to reduce the quantity of uneven surfaces and weeds. Additional hard-surface space could be added to allow for other sports like tennis or basketball.

### ADA Accessibility

Accessibility at Lamar High School is mostly compliant with applicable codes. One obstacle is that the field is surrounded with a small cable stanchion border that limits access. Additionally, some concrete paths within the field area would allow for improved access to the various fields. The final design will integrate ADA accessibility to ensure universal access to sports fields and activities spaces.



### Drainage

The drainage within the grounds of Lamar High School is mostly handled with surface swales. The large drainage swale on the east side of the field leads to area below willows at NW corner of school, which crosses the main access point from the school gym. A clearer path across the drainage swale would be beneficial.

### Safety

The following issues of safety were addressed by the design team during the meetings:

- Soccer field is poorly graded and full of holes from prairie dogs/settling. Some teams have refused to play on them.
- Windscreen trees on west side of fields are a nuisance w/ weeds, snakes, and overgrown vegetation. The district has recently made efforts to clean up this area.
- Uneven field surface leads to student injuries.

### Circulation and Site Accessibility

The grounds in front of Lamar High School are well-organized with walkways for circulation and access, but the outdoor space behind the school could benefit from improved circulation. A bus loop next to the gym allows for buses to drop off students from LHS and visiting schools. The soccer field and northern football fields are easily accessed from the gymnasium, but students must walk through a large weed patch to access the lower practice football field. On the north side of the school, a small gravel parking lot provides limited parking for sports spectators, but is bordered by another weed patch that visitors to the soccer field must walk through. Improvements to the circulation to and within the field should be addressed in the master plan.



### Parking

Parking at Lamar High School adequately provides space for students in front of the school entrance. Parking with convenient access to the rear of the school, however, is limited. There is a small parking lot (5,000 sf) behind the school providing access to the FFA and Agriculture Department building north of the gym. The only other parking area, a 15,000 sf gravel lot north of the school, allows only limited space for visitors and community members. The LMS staff noted that this lot fills up quickly and leads to parking congestion along Yucca drive on the north edge of the school grounds. This gravel lot could be expanded to allow for more off-street sports parking.

### Maintenance

Lamar High School's grounds are maintained by the school district. The expansive grass fields require frequent maintenance to keep them green and healthy. Some areas around the fields are overgrown and appear to be weed patches, but are used as buffers to trap tumbleweeds and other weeds from spreading seeds to the manicured grass area. The windscreen at the west side of the field is overgrown and, although the district has made efforts to clean up this area, it could benefit from more maintenance. The goal for the master plan is to incorporate landscape design elements that allow for ease of maintenance.

**Existing Landscape Conditions**

Lamar High School's grounds cover a large area that is mostly covered in grass. Besides some minor grading issues, the grass areas are in good shape. But they have the potential to offer increased usage by imposing a more ordered system within the space. The vast fields lack basic infrastructural elements like circulation paths, seating, and lighting. Also, the number of trees in the front of the school is much more than those planted in and around the fields. Improved circulation and shade are elements that will be addressed by the master plan.



The asphalt area covers 15,000 sf to the west of the gym. This space is currently unused, but has the potential to be re-purposed for hard-court activities such as tennis or basketball. This area could especially be useful for PE classes since it is in close proximity to the gym. The asphalt is not in good condition, but could be re-sealed and painted at a reasonable cost. This would help to expand the diversity of activities offered within the school grounds.

The major elements within the large grass area are three sports fields consisting of a 78,000 sf soccer field, and two 73,000 sf practice football fields. This area, totaling 224,000 sf of manicured



high school. The sports fields are flanked by two areas of non-mowed grass that act as buffers for wind and weed seeds covering 170,000 sf. There is a large vegetated wind-screen on the west side of the fields, along S. 14<sup>th</sup> Street, that does provide some wind protection, but has also been noted as overgrown and unsightly.



**Grounds Assessment:**

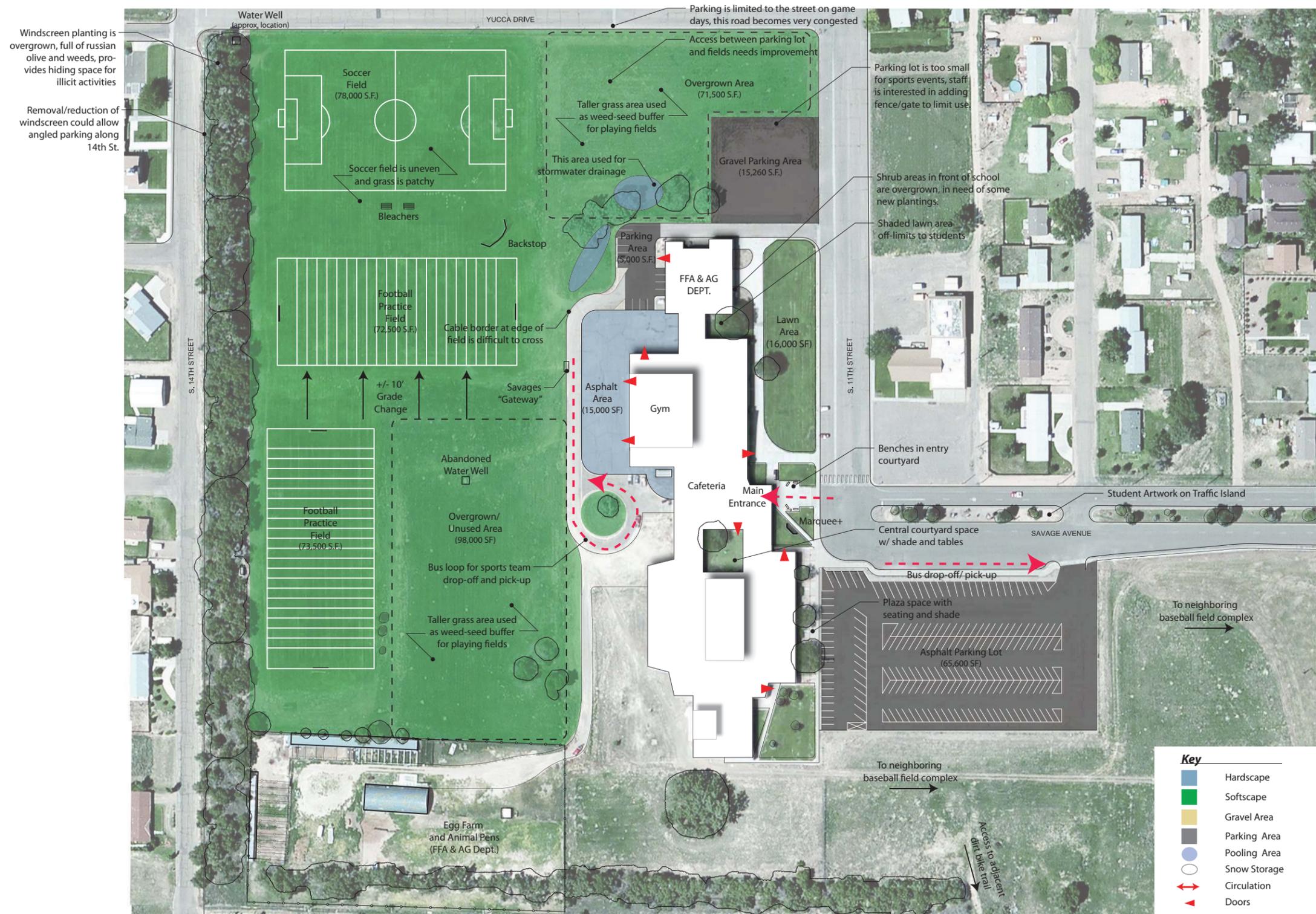
The grounds at Lamar High School can be divided into two main areas. These consist of an asphalt area adjacent to the gymnasium, and a large grass area with three sports fields located to the west and northwest of the school building.

grass, has some problems with settling and prairie dogs which create uneven surfaces that can cause injuries during practices and games- the soccer field is especially uneven and an opposing team once refused to play their scheduled game due to its condition. There is a backstop located between the soccer field and northern football field that is sometimes used by youth leagues but no longer is used by the

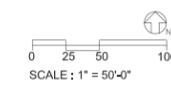


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LAMAR HIGH SCHOOL  
EXISTING CONDITIONS PLAN



## Section Three

# 3



- Design Advisory Team
- Vision, Goals, Wish List
- Master Plan



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## Design Advisory team

The Lamar High School Design Advisory Committee played an integral role in the active play areas planning process. The committee, comprised of the principal, staff, parents, and community members, provided valuable input regarding needs and desires of the Alta Vista schoolyard.



## Advisory Team Process

The design committee gathered input from Lamar High School students through the administration of photo surveys. Learning Landscape staff synthesized the information provided by the committee to develop drafts of the schoolyard master plan and the design advisory committee provided feedback on iterations of the plan. This collaborative effort allowed

the school to develop an active play areas master plan to reflect the unique wants and needs of Lamar High School.

## Constituent Concerns, Needs, and Desires

### Concerns:

- Solar exposure must be taken into account when selecting materials and activities.
- High winds- mostly from Southern origin- can carry tumbleweeds across field during games.
- Activities must stay clear of the EVA path running north-south through the playground.

### Needs:

- Protection from the intense sun and wind.
- Expanded parking infrastructure.
- Improved field grading and drainage.

### Desires:

- Shrub areas on east side of school could be tidied up with newer planting.
- Improved seating for sports events.
- Weed patch on north side of school is an eye sore that could possibly be utilized for additional parking.
- Parking lot on north side could be gated to limit access during school closure

## Defining the 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:

*"Lamar High School will create a strong, sports-focused recreation area to become a valuable amenity for the school and its surrounding community."*

### Goals:

- Create an inviting and safe environment for students and the surrounding community.
- Increase physical activity and sports infrastructure.
- Offer a variety of sports and fitness equipment that is appropriate for all age groups.
- Create a fully ADA accessible outdoor area.
- Increase the amount of shade and gathering spaces to encourage positive social activity.
- Beautify the schoolyard and highlight school spirit by incorporating the school mascot, school colors, student art, and other elements that students can be proud of.

### Wish List:

- Shade structure
- Outdoor seating
- Lights at fields
- Crusher fines jogging track with shaded rest areas
- Scoreboard for sports fields
- Concessions stand

*Student Wish List:*

The “Wordle” below represents elements students and staff would like to see in their outdoor area. The bigger the word, the more frequent the element was represented in the students drawings.



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Lamar High School

An ordering system or theme drawn from the school's own mascot, the Savages, can be used throughout the outdoor space to reflect the spirit of Lamar High School. The adjacent images show tribal territory of Native Americans in Colorado, as well as some artwork already on display within the school. These and other images can be used to customize certain elements within the master plan.

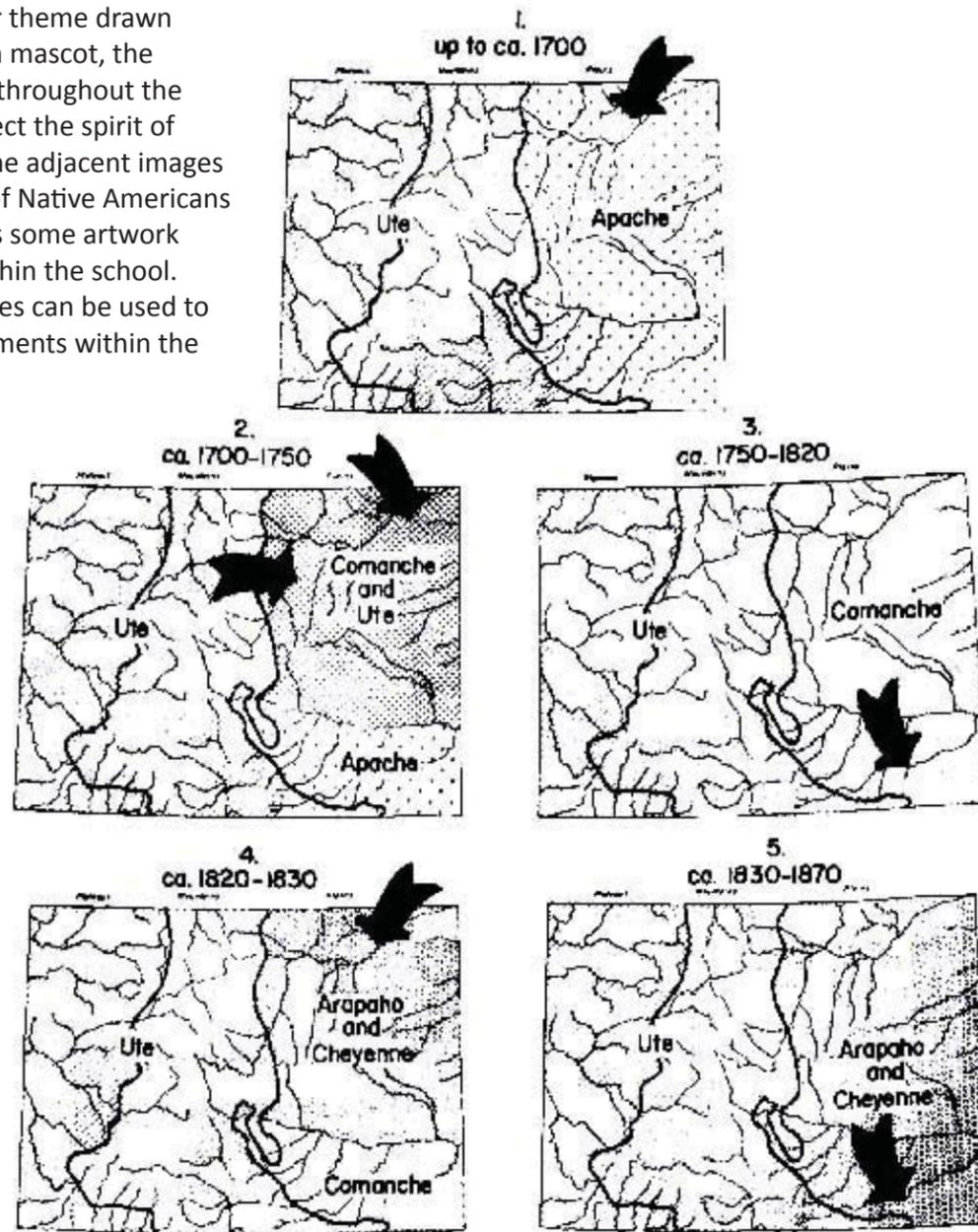


Figure 2

Cultural Succession in Colorado 1700-1870

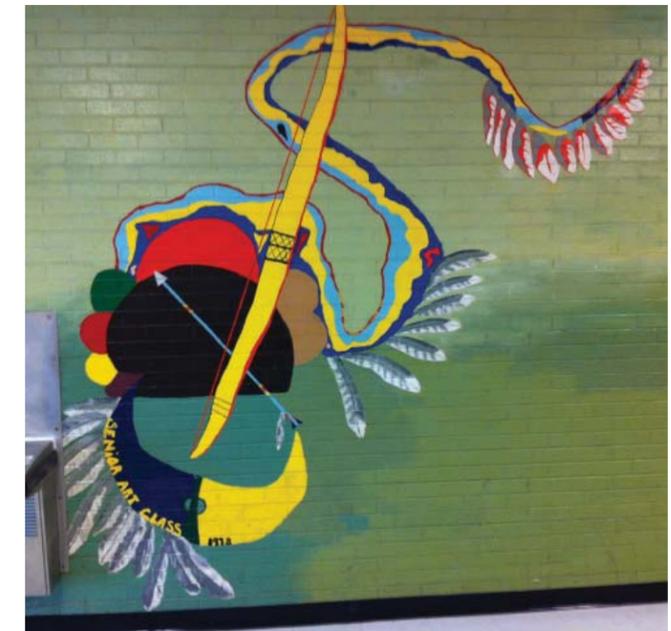
<http://history.fcgov.com/archive/ethnic/native4.php>



Artwork in the LHS Cafeteria



School Mascot

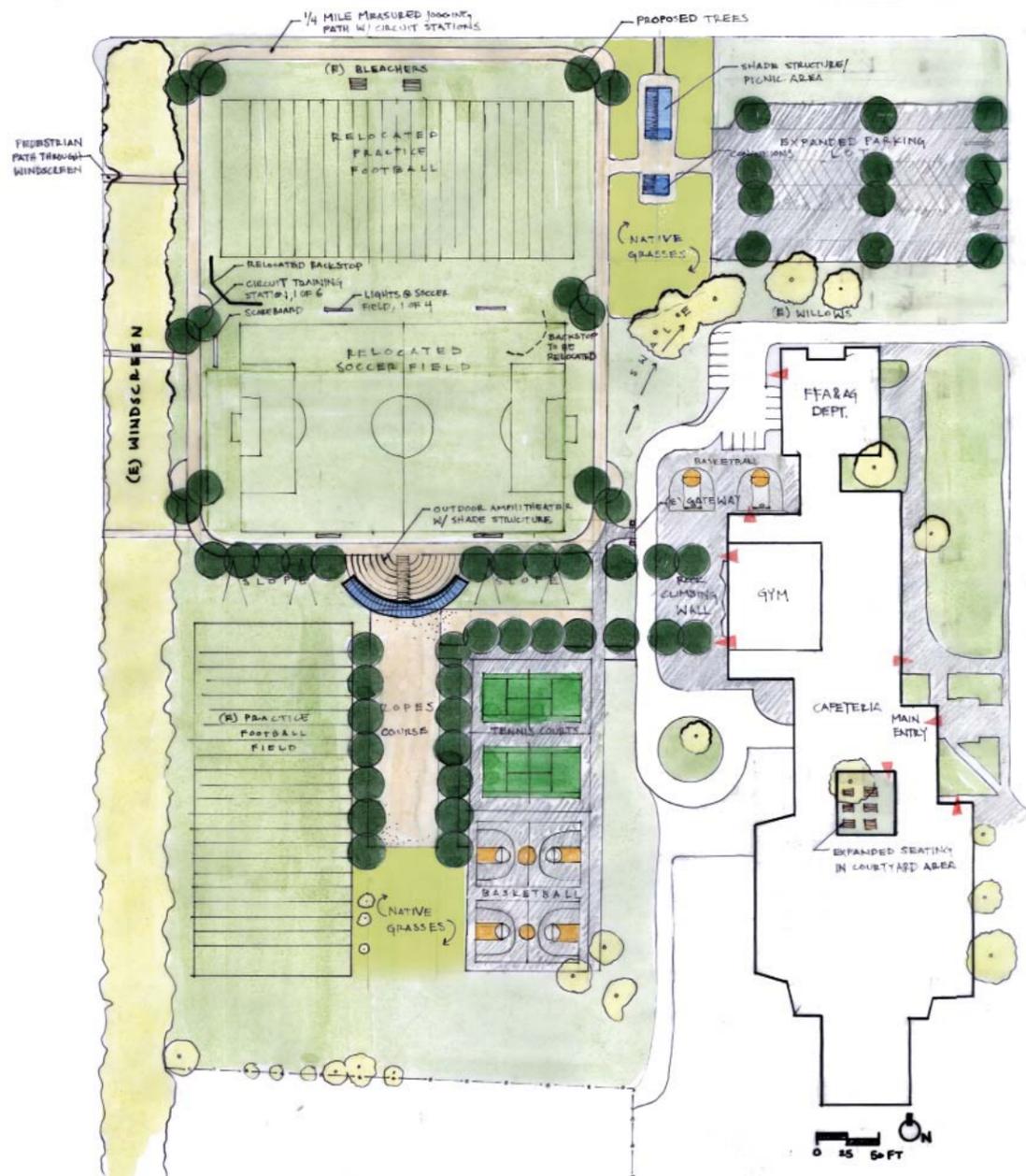


Artwork in the LHS Cafeteria

**Process Graphics:**

Learning Landscapes developed two conceptual layout plans and sent them to the design advisory team. Each plan shows different options for the layout and placement of certain items on the team's wish list. The placement of the gateway structure, outdoor amphitheater, shade structure, and sports courts varies slightly in between the plans.

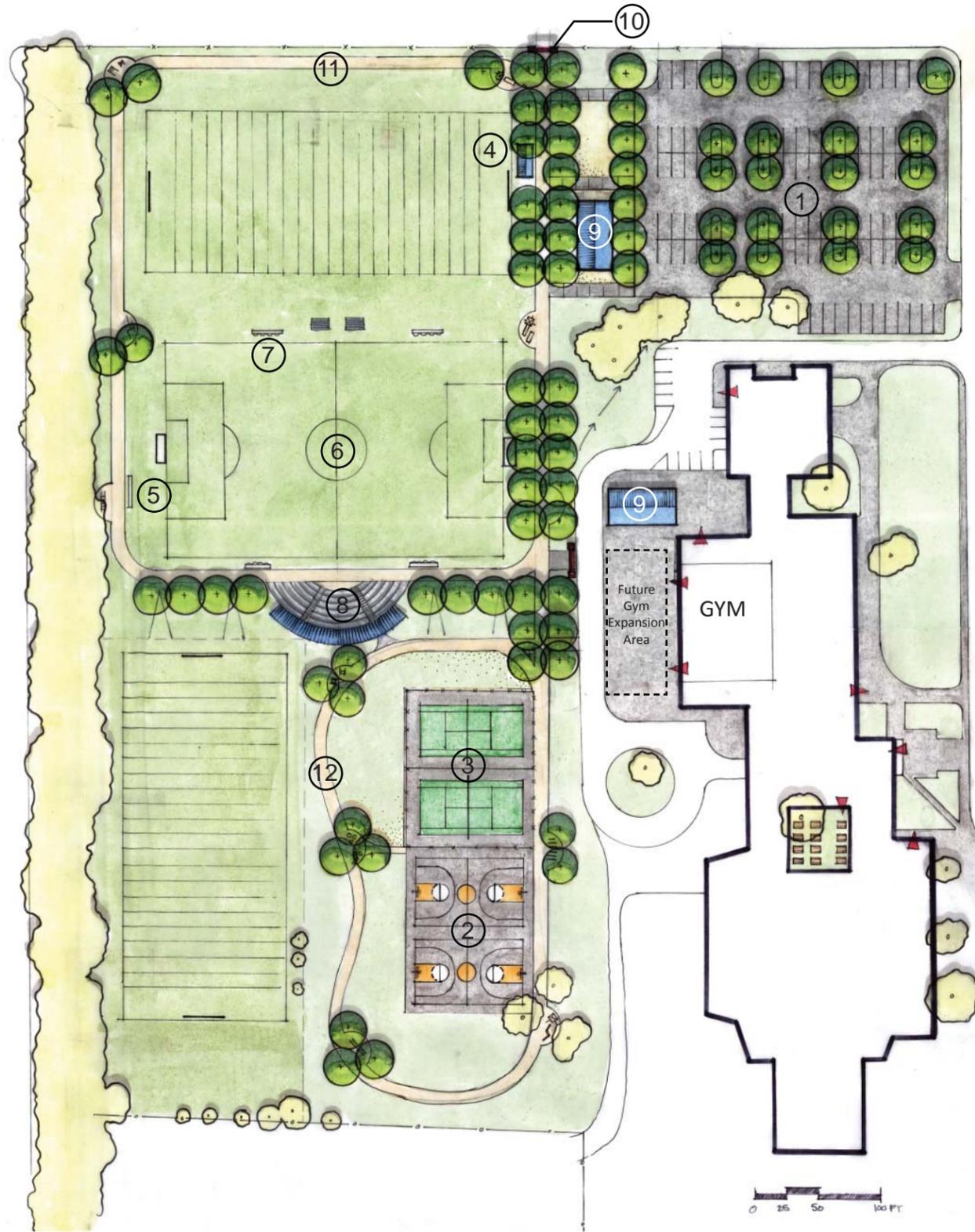
From the two concept plans, the design advisory team selected favorable parts of each to incorporate into the preferred site plan. This plan was developed based on the needs and desires of the school and its community. This master plan proposes an overall design for the playground at Lamar High School that can be installed either all-at-once or in staggered phases to suit the funding capabilities of the school. The general idea of the proposed recreation area is to provide Lamar High School with an environment appropriate for young adults, focused on the health of its students and community.



Conceptual Layout Plan Option #1



Conceptual Layout Plan Option #2



**Lamar High School Active Play Areas Master Plan Description**

Lamar High School’s administration and athletic staff gave input as to their priorities for improvements at their school. The school maintains a strong and successful athletic department, and so improving sports infrastructure was a major goal. Described below are the proposed changes to the LHS grounds in an effort to fulfill the vision and goals developed by the design team:



**1. Expanded parking lot**  
The existing gravel parking lot fills up quickly during school hours and sports events. The expansion of this lot with stronger infrastructure will allow for more regimented and safer parking for students and visitors.

**2. Basketball courts**

Additional court space would allow for recreational activities before and after school as well as additional practice space for the school's basketball teams.



**3. Tennis Courts**

Additional court space would allow for recreational activities before and after school as well as additional practice space for the school's tennis teams.

**4. Concessions**

A concessions stand and restroom facilities will improve the spectators' experience during sports events and allow for some funds to be raised for the school.



**5. Scoreboard**

A scoreboard is a valuable infrastructural improvement that will improve the experience for players and spectators at LMS' soccer games.



**6. Re-graded & relocated soccer field**

Relocating the soccer field south will allow for a closer distance from the school, and allow for the natural slope to be utilized as a seating area during games and practices.



**7. Lights at soccer field**

Adding lights will allow for sports events to extend later into evening hours. This is especially important in the Lamar community where practice and game space is limited.



**8. Outdoor amphitheater w/ shade structure**

This feature will provide much-needed seating for spectators during sports games, and also offer shade from the hot climate in Lamar. This amphitheater can also be used for conducting classes outside, or for small-scale assemblies and performances.

**9. Shade Structure**

The local climate in Lamar is known for its intense sun and heat. Incorporating a shade structure to the schoolyard will allow students, faculty, and staff to find refuge from the sun during hot days. This shelter can also be used as a shelter during wet weather or snow.



**10. Gateway Structure**

A gateway structure will announce the visitors' entrance into the LMS schoolyard and give its students and staff a sense of pride and ownership for their school grounds. The mascot, the savages, can be incorporated into the design to show school spirit.

**11. 1/4 mile jogging path w/ circuit training stations**

This path, made of stabilized crusher fines, will be used by the LHS track and cross country teams, for PE classes, and by visitors from the community. The path is measured at 1/4<sup>th</sup> mile to allow joggers to easily calculate their jogging distance, with shaded workout stations at spaced intervals.



**12. 1/5 mile jogging path w/ circuit training stations**



Presented by:



Lamar High School



Section Four

4



- Cost Estimate
- Resources
- Acknowledgements



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Lamar High School

**Lamar High School - Active Play Areas Master Plan**

**Estimate of Probable Landscape Costs**

This estimate includes the installation of an outdoor amphitheater, lights and a scoreboard at the soccer field, expanded concrete hard surface games, a gateway structure, shade structure/outdoor classroom, stabilized track surface with workout stations, grading and re-sodding fields, and expansion of the existing parking lot.

Category	Unit	Unit Cost	Quantities	Total Cost
<b>Play Equipment , Structures &amp; Surfacing</b>				
<b>Concrete &amp; ADA Accessibility</b>				
Concrete Flatwork @ parking lot- 6" depth	SF	\$4.00	27,430	\$ 109,720.00
Concrete mow band, 8"x6"	LF	\$11.00	0	\$ -
Concrete Curbing @ parking lot	LF	\$13.00	1,325	\$ 17,225.00
Concrete Amphitheater	EA	\$40,000.00	1	\$ 40,000.00
<b>SUBTOTAL</b>				<b>\$ 166,945.00</b>
<b>Site Work</b>				
<b>Grading &amp; Asphalt Striping</b>				
Earthwork and Drainage	LS	\$40,000.00	1	\$ 40,000.00
New Concrete, 4" depth	SF	\$1.80	0	\$ -
Reconditioned seal existing	SF	\$0.95	0	\$ -
Basketball Court Striping	EA	\$400.00	2	\$ 2.00
Tennis Court Striping	EA	\$400.00	2	\$ 800.00
<b>SUBTOTAL</b>				<b>\$ 40,802.00</b>
<b>School Design Elements</b>				
Outdoor Concessions	EA	\$25,000.00	1	\$ 25,000.00
Shade Structure	EA	\$20,000.00	1	\$ 20,000.00
Amphitheater Shade Structure	EA	\$20,000.00	1	\$ 20,000.00
Gateway Feature (Primary)	LS	\$5,000.00	1	\$ 5,000.00
Gateway Feature (Secondary)	LS	\$5,000.00	1	\$ 5,000.00
Work Out Station Eqpt.	LS	\$10,000.00	1	\$ 10,000.00
Field Lights	EA	\$1,500.00	4	\$ 6,000.00
<b>SUBTOTAL</b>				<b>\$ 91,000.00</b>

**Lamar High School - Active Play Areas Master Plan**

<b>Running Track</b>					
Crusher Fines, 4' WIDE X 4" depth	SF	\$1.00	29,095	\$	29,095.00
Crusher Fines Stabilizer	SF	\$1.20	29,095	\$	34,914.00
Steel Edging	LF	\$5.00	5,092	\$	25,460.00
<b>SUBTOTAL</b>				<b>\$</b>	<b>89,469.00</b>
<b>Site Furnishings, Athletic Equipment and Misc.</b>					
Picnic Table @ lunch area	EA	\$1,000.00	4	\$	4,000.00
Trash Receptacle	EA	\$650.00	4	\$	2,600.00
6' Bench	EA	\$850.00	0	\$	-
Basketball Goal	EA	\$1,200.00	4	\$	4,800.00
Permanent or Moveable Soccer Goals	EA	\$1,000.00	0	\$	-
Single Manual Cantilever Slide Gate (Parking)	EA	\$2,000.00	1	\$	2,000.00
<b>SUBTOTAL</b>				<b>\$</b>	<b>13,400.00</b>
<b>Landscape Planting and Irrigation</b>					
Shrub Bed Soil Prep	SF	\$0.30	0	\$	-
Sod and Soil Prep @ field and play areas	SF	\$0.55	124,594	\$	68,526.70
Irrigation, shrub beds	SF	\$0.75	0	\$	-
Irrigation, sod areas	SF	\$0.55	0	\$	-
Irrigation, tree bubblers	EA	\$60.00	12	\$	720.00
Shade Tree, 3" caliper	EA	\$400.00	79	\$	31,600.00
Deciduous Ornamental Tree, 2.5" caliper	EA	\$100.00	0	\$	-
Boulder-field	EA	\$150.00	6	\$	900.00
Shredded Mulch, 4" depth	SF	\$1.20	0	\$	-
<b>SUBTOTAL</b>				<b>\$</b>	<b>101,746.70</b>
				<b>Site Improvements Total</b>	<b>\$ 503,362.70</b>
<b>Project Start Up</b>					
Typical construction mobilization		\$10,000.00		\$10,000	
<b>Infrastructure</b>					
Typical infrastructure construction/repair		\$10,000.00		\$10,000	
<b>Demolition</b>					
Typical Demolition		\$25,000.00		\$25,000	
<b>Architecture Engineering and Coordination</b>					
8% of construction cost		\$40,269.02		<b>\$40,269.02</b>	
<b>Owner Representative Fees</b>					
5% of construction cost		\$25,168.14		\$25,168.14	
<b>Contingency Cost</b>					
10% of construction cost		\$50,336.27		\$50,336.27	
<b>Project Grand Total</b>				<b>\$</b>	<b>664,136.12</b>

**Resources**

National Center for Health Statistics,  
 National Survey of Children's Health, 2003–2007,  
 Centers for Disease Control and Prevention.  
 Health at a Crossroads  
 2010 Supplement to the Colorado Health Report Card –  
 Colorado Health Foundation  
 Lamar RE-2 School District website (<http://www.lamar.k12.co.us/>)  
 Lamar High School website (<http://lhs.lamar.k12.co.us>)

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 Lamar School District RE-2 Administration  
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University of Colorado Denver  
 College of Architecture and Planning  
  
 Colorado Center for Community Development  
  
 Learning Landscapes  
  
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Presented by:



Lamar High School