

FACILITIES MASTER PLAN & EDUCATION SPECIFICATION 2012-17



SEPTEMBER 2012

ALDO LEOPOLD HIGH SCHOOL

Official FMP/ED Spec for the ALHS Charter School as required by the Public School Facility Authority for planning the use of capital funds – both District and State sponsored dollars. As a living document, the FMP/Ed Spec may be updated on a regular basis in response to the needs of the ALHS students.

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ALDO LEOPOLD HIGH SCHOOL

INTRODUCTION

The Public Schools Facility Authority (PSFA), acting under direction from the Public School Capital Outlay Council (PSCOC), requires that all New Mexico public and state charter schools complete a five-year facilities master plan as a prerequisite for eligibility to receive state capital outlay assistance.

This document will be officially referred to as the Aldo Leopold High School Facilities Master Plan/Education Specification 2012-2017. The intent of the FMP is to record the state of the Charter's current facility, examine ALHS' educational model and future District goals, review enrollment, prioritize spatial needs considering creative resources and partnerships with community, and create a plan to guide capital expenditure decisions over the next five years. Capital projects are intended to support the school's educational mission, including anticipated changes and future structures.

This FMP/Ed Spec is designed to be a living document to present issues to the community, board of education, and ALHS staff for input and periodic revision. This document was prepared using a systematic process; the goal to identify needs and allocate capital resources for a facility that supports the educational program of this charter school. Capital funds are not as readily available to charter schools as they are to the public school districts; however, the State will waive certain adequacy standards if the creativity of the program provides a reasonable solution for the students. The State will consider capital support when it has been justified through this FMP process and is supported by funds generated through the community.

This FMP will answer four important questions:

- Where are we now? What is the current state of our facilities and can we meet future demands?
- What do we want to look like in the future? What are our district's facility goals?
- What does the 'road' to our goals look like? What are the enrollment projections, program changes, classroom needs, and financial resources?
- How will we get there? What does our district need to do to attain our ideal future state? What is our strategy to meet our needs and how much money will we need?

This FMP is comprised of FIVE sections:

Section 1

Goals/Process

Information about ALHS goals and the master planning process.

Section 2

Existing and Projected Conditions

Information regarding programs and program delivery, facilities, demographics, and enrollment.

Section 3

Facility Requirements (Educational Specification): Facility goals, concepts, spatial requirements, and implementation of space needs.*

Section 4

Capital Improvement Plan

Detailed information about capital needs, priorities, and strategies.

Section 5

Master Plan Support Material

Facility reports, site plans, floor plans, project lists, and FAD reviews. This section includes all buildings owned and/or leased by the School.

ACKNOWLEDGEMENTS

ALHS leaders and students wish to thank everyone for their invaluable contributions to the development of this document.

Eric Ahner-Director

Facility Committee Members:

Harry Browne-Business Manager/teacher

Deb Preusch-Staff

Steven Shelendich- Community member/Architect

Janet Gilchrist-Parent

Governing Council:

Jim Coates-Chair/Parent

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Mary Gruszka-Parent

Brian Reeves-Parent

Cedric Hayes-Student

Joshua Reeves-Student

Jim McIntosh-Teacher

Caleb Kalisher-Student

Community Organizations

Priscilla Lucero, Southwest NM Council of Governments



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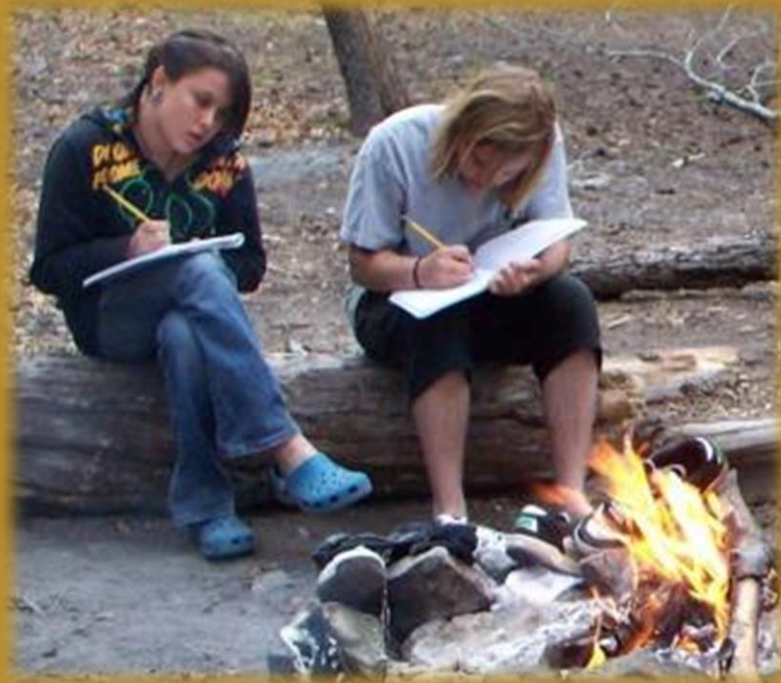
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SECTION 1: GOALS AND PROCESSES



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ALDO LEOPOLD HIGH SCHOOL

In this section, the Aldo Leopold High School team has defined the program and facility goals for their school. Additionally, the process, coordinated through the planning consultant, is explained both graphically and verbally. Finally, the acronyms and definitions used throughout this document are listed.

Section 1: Goals and Processes

ALDO LEOPOLD HIGH SCHOOL

1.1 GOALS

1.1.1 Mission

The Mission of Aldo Leopold High School (ALHS) is to prepare community leaders of the twenty-first century. The school carries out this mission by “providing an engaging and challenging program emphasizing direct experience, inquiry learning, stimulation of the creative process and involvement in the community and natural environment.” (Ahner, 2009)

Education Goals:

ALHS exercises inquiry-based learning to pursue depth and breadth of knowledge rather than superficial achievement. ALHS promotes a variety of independent, collaborative, and community based opportunities for students to interact with one another, and utilizes required Socratic Seminars.

To provide a safe learning environment in a culture of cooperation and communication to allow the growth of each student into a respectful and responsible person: Teaming; personal responsibility; involve students in planning & instructional delivery; enhance respect relationships among school community members; promote reflection and communication between students.

ALHS works to enhance all classes experientially, grounded with engagement in the natural and man-made environment, and to model environmental sustainability through responsible practices and community

commitment. ALHS aims to develop understanding of interrelationships & interactions among natural and social systems and their components and to create a continuum of learning, crossing grade levels and allowing for multi-year research and service-learning, through which students contribute to their community.

The above goals will inform the school's facilities, as will be seen in Section 3 of this FMP.

THE MISSION OF
ALDO LEOPOLD HIGH SCHOOL
(ALHS)
IS
“TO PREPARE
COMMUNITY LEADERS
OF THE
TWENTY-FIRST CENTURY.”

1.1.2 General Educational Philosophy

Inquiry-Based Curriculum

As stated in the 2009 Charter Renewal; ALHS curriculum is designed to be inquiry-based, experientially connected, and grounded in engagement in the natural environment. Basic academic courses are reinforced and enhanced by community-based elements of the curriculum. Students apply what they have learned within the community, thereby enhancing and reinforcing the curriculum.

Through inquiry, students are empowered to form their own conclusions with teachers teaching *how* to think, as opposed to *what* to think. Traditional disciplinary boundaries are crossed to develop more comprehensive understanding. As an example from the charter - each course integrates literature and writing across the curriculum, while NM state standards are addressed in every unit.

Environment as an Integrating Context for Improving Student Learning

The basis of the ALHS curricular frame is the Environment as an Integrating Context for Improving Student Learning (EIC Model™). This model emphasizes the use of local surroundings as the context for standards-based instruction. This model has demonstrated student performance improvement in core curricular areas along with growth in the area of problem-solving, strategic & creative thinking, information synthesis, and understanding complex interrelationships. The natural environment is the best laboratory in the world and many courses have an element of field study in a variety of landscapes. As the charter states, unifying concepts include social, ecological, and economic sustainability.

Connected, Active, Integrated Learning

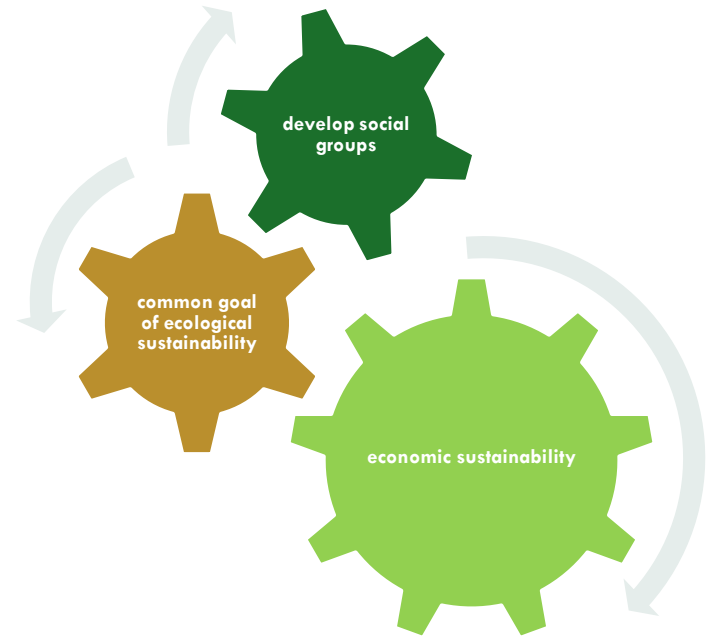
The curriculum at all grade levels is driven by science and social studies and language arts; classes present literature supporting studies in these areas. The Interactive Math Program (IMP) is also integrated into the curricula by anchoring instruction through real-world activities. As stated in the charter: cognitive mapping and multiple-solution approaches to solving problems in mathematics classes carry over into problem-solving skills utilized in other classes.

Learning takes place in cooperative-learning groups, brainstorming, Socratic questioning and Socratic Seminars. All classes tie their studies to the natural and man-made environments where much of the ALHS curriculum is carried out. Inquiry learning is the basis of the curriculum. By pursuing knowledge through exploration, discovery, and invention, the student begins to understand and not simply gather isolated information. The 2009 Charter Renewal states: *“At ALHS, inquiry learning becomes real through our Service-Learning and Outdoor Education Programs... Engagement in the natural environment at ALHS is modeled after the conservation work of Aldo Leopold.”*

This model addresses the health and education of the whole student, developing intellectual, emotional, and physical skills. Self-confidence, fitness, teambuilding and connectedness to the natural world are results of this environmental interaction.

This sustainability education program also teaches responsibility and stewardship in a world context. ALHS uses the Natural Step Theory that is infused throughout all subjects in the curriculum. This framework ties individuals to the greater concept of humanity and worldwide ‘web of life’ on the planet.

NATURAL STEP THEORY



Per the charter, there are **three steps** in this concept:

Developing healthy social groups with common goals, enabling them

to...

Work toward a common goal of ecological sustainability, which then naturally leads

to...

Economic sustainability.

Students, through inquiry, examine the ramifications of ecological responsibility/irresponsibility throughout civilization and technological development.

1.1.3 Serving the Community

Much of ALHS curriculum involves Service-Learning and Outdoor Education Programs. One particular required course called *Community Orientation* is a weekly series of interactive field trips designed to involve new ALHS students with the community and natural environment. Field trips and internships take students into various parks to maintain trails, learn about mining, waste management, etc. Students are required, after the first semester of attendance at ALHS, to work in an internship for a minimum of 72 hours per semester on Fridays, or after school and on weekends. They are trained in proper work behavior and attire and must keep a reflective journal of their experiences. These experiences are shared with peers and teachers and each student must make a presentation of their experience. Some examples of service learning: Youth Conservation Corps trail maintenance, digital graphics design, theater, and the Satellite Youth Center.

ALHS believes this service-learning is integral to the student's experience at the school and will continue to create opportunities for interaction with the community at large.

ALHS curriculum is aligned to New Mexico State Standards and benchmarks. At the same time the curriculum focuses on the needs and goals of the individual student. To enhance the development of academic skills, emphasis is also placed on other important life skills. Subsequent years' curriculum builds on learning from the previous year.

1.2 PROCESS

1.2.1 Data Gathering and Analysis

The planning team followed a participatory process

In keeping with the community involvement philosophy that is infused within all areas of ALHS, meetings were held which included students, staff, administration, community members, and steering committee members.

Creation of a Master Plan Steering committee.

Gathering of data necessary to complete the process.

Conducted separate Educational and Conditional Facility Assessments for the existing facility.

Steering committee, parents, and students met to complete the education specifications.

Second group meeting convened to prioritize spatial needs, adjacencies, and site issues.

Analyzed data, assessments, input, and financial records to develop a capital plan.

Submitted the Capital Plan for review and final approval by the Master Plan Committee.

Final document to school board and subsequently to the PSFA for approval.

1.2.2 Authority and Facilities Decision Making

The steering committee acknowledged in the introduction section of this document as well as below, was instrumental in developing this facility master plan. The participation was strong from the students, staff, parents, and community members.

Ultimately, the project list and facility plan will be prioritized and approved by the steering committee. That plan will be documented in this FMP/Ed Spec and submitted to the ALHS Governing Council for final approval.

The PSFA will also review the document and must approve prior to official acceptance and publication.

DOCUMENT APPROVAL AUTHORITIES



Process Participants

Eric Ahner-Director

Facility Committee Members:

Harry Browne-Business manager/Teacher

Deb Preusch-Staff

Steven Shelendich- Community member/Architect

Janet Gilchrist-Parent

Governing Council:

Jim Coates-Chair/Parent

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Jim McIntosh-Teacher

Caleb Kalisher-Student

1.3 ACRONYMS AND DEFINITIONS

ALHS – Aldo Leopold High School

BBER – University of New Mexico Bureau of Business and Economic Research

CIP – Capital Improvement Plan

CPTED– Crime Prevention Through Environmental Design. This is an approach to deterring criminal behavior by using the surrounding landscape and architectural design. CPTED strategies rely upon the ability to influence offender decisions that precede criminal acts.

COMMERCIALLY-VIABLE KITCHEN– The recommended space to deliver the program and student service needs of this school is a combination kitchen space that implements NM educational standards for food service to students and teaching space requirements, while also addressing the unique goals for this program to grow, prepare, serve, and sell food that is grown on campus in the outdoor learning spaces. Additional code to meet this need would be that of a small restaurant or farmers market; concept seeks self funding via the retail program which sells to students, staff, and public.

DCU – Deficiencies Correction Unit

DCP – Deficiencies Correction Program

Ed Spec – Educational Specification document, considers space needs of building and design based on the functional needs and adjacencies driven by program and teaching methods.

EETT – Enhancing Education Through Technology

EPSS – Educational Program for Student Success

FCI – Facility Condition Index (see NMCI), a ratio of facility value to cost of improvements

FMP – Facilities Master Plan

GIS – Geographic information system

GSF – Gross square feet, or the sum of net assignable square feet plus all other building areas that are not assignable. This “left over” area is called “tare.” Tare includes areas such as hallways, mechanical areas, restrooms, and the area of interior and exterior walls.

HVAC – Heating, ventilation and air conditioning

IT – Information technology

MACC – Maximum allowable construction cost. This cost is comparable to the contractor’s work bid.

NSF – Net Square Feet, or building area that can be assigned to specific task, not including building circulation, wall thickness, mechanical equipment and toilet facilities. Also referred to as net assignable square feet.

NMFCI – Weighted State Facility Condition Index, used in the State funding appropriation system to provide a means of comparison from one facility to another. Funds distributed to the highest number within a 1-100 ranking, i.e. 88.30 is higher than 14.35. NMFCI drives ranking numbers.

NMPED – New Mexico Public Education Department

PSCOC – Public School Capital Outlay Council appropriates all capital funds for schools throughout the State of New Mexico. A division of the financing arm of the State government.

PSFA – Public School Facilities Authority. Recommends capital projects to be funded by the PSCOC (above) based on their analysis of each school building and comparing it to all others in the State. Funds are intended to support the neediest projects throughout the State, as ranked against each other.

PTR – Pupil/teacher ratio- maximum number of students allowed per teacher according to grade level and considering total space of the classroom. PED standards are based on minimum classroom space of 750 -900 sf. PTR numbers within a district may be lower by district choice; the district must monetarily support this decision with additional capital funds.



SPED – Spec. ed. or special education

SF- or, Sq/ft – Square Foot

State ID – State Building Identification Number

SWNMCOG – Southwest New Mexico Council of Governments, local agency that aids in the development of area strategic plans, economic development, and demographic reports, for example.

TARE – SF beyond the educational program delivery spaces; tare includes circulation area, mechanical area, toilets and wall thickness. The Tare is calculated as a percentage of overall GSF.

VOC – Vocational and Agricultural (program, room, lab) ; also known as Vo/Ag or VOC AG

SECTION 2: EXISTING & PROJECTED CONDITIONS



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ALDO LEOPOLD HIGH SCHOOL

Section 2 will outline the education program and delivery methods. After a small review of area demographics and enrollment history & projections, the current site will be documented and assessed using the State educational adequacy standards. The Technology Plan and an Energy Management Plan are also documented in this section.

Section 2: Existing & Projected Conditions

ALDO LEOPOLD HIGH SCHOOL

2.1 PROGRAMS AND DELIVERY METHODS

2.1.1 Programs Overview

The grade configuration at ALHS is 9 – 12, with 7 periods (including lunch). The student/teacher ratio is 15:1 at ALHS in order to promote a small school learning environment and to give students the attention they require to thrive in the education environment.

The school's instructional program is founded upon inquiry based learning – both in the classroom and in the field. Knowledge is acquired through exploration, discovery, and invention. Aldo Leopold is a tight community where students work one-on-one with teachers and in groups for teaming and collaboration. Learning is active and hands-on to facilitate the connection of theoretical ideas to real-world situations. Science and social studies classes at each grade level drive the curriculum with concepts crossing over into all other classes, along with environmental issues.

Socratic Seminars and questioning form an important part of education; these types of seminars empower all students and teachers to dynamic interaction and questioning of concepts. They often take place in Socratic circles. Social studies classes may conduct dramatic simulations of historical/theoretical events, and all classes tie their studies to the natural and man-made environments – as stated in the charter – “place-based education”.

Spaces at their current school do not promote these basic premises of the educational program. To accommodate this active learning concept, science labs should be larger than minimum standards, and flexible spaces should be integrated to allow for small and large group collaboration and demonstration. In addition, to carry through their basic foundations of “connection” to the community, the environment, and the world, space for storage of tools and equipment, space for outdoor learning/garden, and a space in which to prepare and eat their harvest are integral to the goals of ALHS.



2.1.2 Anticipated Changes in Programs

Kitchen Space

While the current building is able to accommodate the current population, it falls short of fulfilling the school's stated goals: classrooms are awkwardly configured and do not contribute to the sense of community that is so important to ALHS. ALHS **does not have a contract with a Federal Food Program**, but would like to institute one to serve the population. In order to meet federal guidelines for this program, ALHS must have an adequate dining area as well as the proper kitchen facility to accommodate prep staff serving students. The current facility can only allow students to provide food for themselves; students bring their lunches or eat at local restaurants. Student Council sells healthy snacks (approved by the School Health Advisory Committee) during the lunch period and the students can access a microwave, refrigerator, toaster oven, and hot water in the student lounge.



Location, Location, Location

The current site is lacking in outdoor learning spaces to support the school's basic promise – to connect with the environment. Additionally, the location is not near recreational spaces needed, nor is it in a position to have a dynamic relationship with Western New Mexico University, another prominent ideal for the school's program.

The facility and site issues are one of the top priorities for ALHS within the next five years; there is no preference regarding a new building over a renovation of an existing facility – it is important, however, that the permanent “home” to ALHS fulfills the programmatic needs of the charter.

In keeping with the philosophy of sustainability and hands-on learning to tie real-world experience into theoretical concepts, ALHS will implement a school garden where students will cultivate, harvest,

prepare, and consume or sell their produce. For that reason, this master plan suggests additional funding to build a kitchen space that responds to the standard of the food service business while also meeting all minimums for a teaching space.

It will be an important process during facility design to review all standards and meet them in order to assure their ability to fully embrace their education program. The kitchen spaces should also have connectivity to larger collaborative spaces so that different groups can be accommodated in food events of all kinds.

Waived Spaces

ALHS will waiver spaces for special programs and some fine arts classes. For their charter, money is better spent providing space for science and food prep, plus collaborative space. Currently, health services and ot/pt are accomplished through contracted entities on an as-needed basis. Although the facility can accommodate the program on a daily basis, one of the major issues is providing space for these visiting programs; the programs are part of the basic educational offering. Physical Education is served via contracted physical fitness classes as well as use of community recreational facilities.

As a whole, the student body also receives physical fitness through their off-site activities and internship work, augmented by outdoor field trips and community service projects. The media space will combine with technology to be one central space that accomplishes administrative duties plus educational program enhancement. There is little need in the future for a stable of desktop computers, especially for students who travel outside the school regularly.



Charter Expansion

Although there are no other anticipated changes in program for ALHS, there is intent to expand the existing charter by adding middle school grades (6-8), at the current per grade level of 30 students. This will mean a growth of 90 more students to accommodate. The administrators would like to reach students at the middle school level to make the transition to high school a seamless experience. Should this be the case, ALHS and the Middle School would share a campus and incorporate learning spaces for an additional 90 students. Some core spaces could be shared or expanded with the change.

The planning team has evaluated space needs and is prepared to develop this concept in the charter. This master plan requires that the site have space to add the education specifications for the new grade levels. A rough concept has been included as an addendum to section 3, with the functional spaces flipped to mirror the 9-12 concept design.

2.2 ENROLLMENT

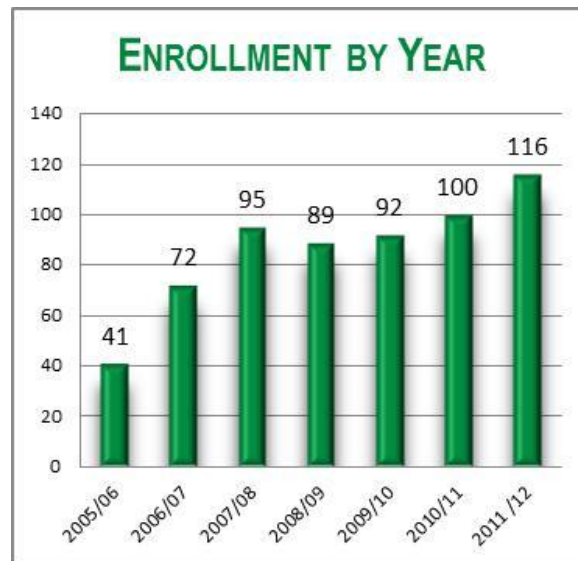
2.2.1 Historic and Current Enrollment

The school has a 120 cap, and classes average not more than 15 students. The enrollment in SY 2010/11 was 100 and the 40th day total for 2011/12 is 116 students. The school has essentially reached its full capacity.

TOTAL SCHOOL ENROLLMENT

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011 /12
Total High School	41	72	95	89	92	100	116

Note: This FMP is based upon 2010/2011 SY figures. Due to timing, the 2011/12 40th day enrollment numbers are available and they have been added in the appropriate column.



ENROLLMENT BY YEAR BY GRADE LEVEL (based upon 40th day enrollments)

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
High School							
Grade 9	31	30	29	26	28	35	52
Grade 10	10	27	22	29	26	17	26
Grade 11	0	14	28	19	24	26	31
Grade 12	0	1	16	15	14	22	7
Total High School	41	72	95	89	92	100	116

Total Regular Ed	41	72	95	89	92	100	116
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Note: These enrollment numbers are based upon the official 40th day counts. While enrollments may have fluctuated after the counts were turned in, they are not included in this chart.



2.2.2 Projected Enrollment

The charter renewal for ALHS continues the enrollment cap of 120 students. Prior to the 2011/12 SY, ALHS received more applications than the 120 cap, automatically triggering a lottery for the 120 slots. The following chart, Projected Enrollment, is from ALHS renewal charter.

ALHS PROJECTED ENROLLMENT

SCHOOL YEAR	GRADE LEVELS	TOTAL PROJECTED STUDENT ENROLLMENT	ACTUAL ENROLLMENT
2010 / 2011	9 - 12	105	100
2011 / 2012	9 - 12	115	116
2012 / 2013	9 - 12	120	120
2013 / 2014	6-12	160	0
2014 / 2015	6-12	180	0

ALHS Lottery for Student Enrollment



Silver City Sun-News

Author: Sun News Report

Article ID: 18497841

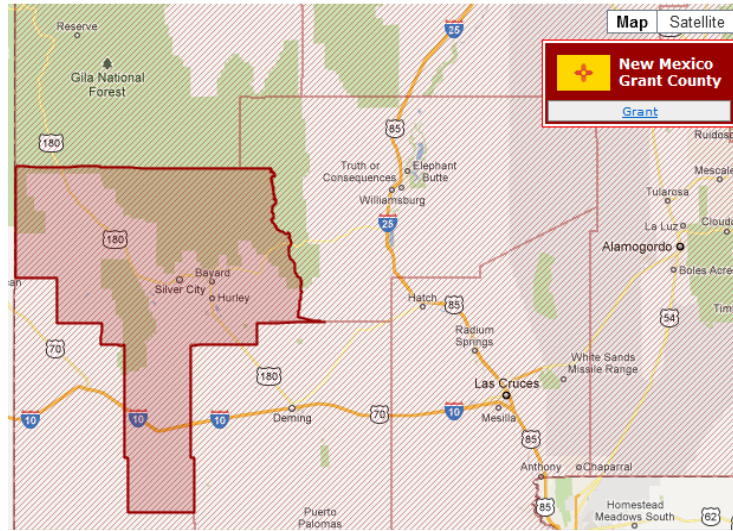
Date: July 17, 2011

Publication: Silver City Sun-News (NM)

Marisa Castrillo, of the Grant County Clerk's office, draws a numbered ball from a bingo basket as Aldo Leopold High School director Eric Ahner looks on. The ball represented the first student to be placed on a waiting list for enrollment at the school. For the first time in its six-year history, Aldo Leopold High School, Grant County's only charter school, has reached its enrollment cap of 120 students, and has had to create a waiting list for interested students

2.2.3 Student Origination

ALHS serves students in Silver City and the wider Grant County area. This area is located in rural Southwestern New Mexico.



The area has historically been dependent upon copper mining and the economic ebbs and flows within that industry. The mines have been in a downturn in recent years ultimately affecting the economy of the area. On a positive note, the mines have recently announced that there will be additional positions opening soon.

Other major industries / businesses in the area are Western New Mexico University (WNMU), the Gila Regional Medical Center, and the US Forest Service. The total population of Grant County in 2011, according to the SWNMCOG was 29,514 with a fairly high unemployment rate of 10.9%. This rate is higher than the State of New Mexico’s unemployment rate of 8.4%.

Unemployment Rates in New Mexico – Annual Averages – 2001 – 2010.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
CATRON	6.2%	6.2%	7.6%	7.4%	6.6%	5.2%	4.5%	5.3%	8.5%	9.5%
GRANT	6.3%	8.0%	10.3%	8.7%	6.0%	4.2%	3.6%	5.0%	12.2%	10.9%
HIDALGO	6.0%	4.4%	5.1%	6.0%	4.8%	3.4%	2.7%	4.2%	7.6%	7.9%
LUNA	16.5%	14.7%	15.9%	15.8%	12.8%	10.6%	9.4%	11.9%	16.5%	18.7%
NEW MEXICO	4.9%	5.5%	5.9%	5.8%	5.2%	4.1%	3.5%	4.5%	7.2%	8.4%
UNITED STATES	4.7%	5.8%	6.0%	5.5%	5.1%	4.6%	4.6%	5.8%	9.3%	9.6%

Source: SW New Mexico Council of Governments citing NM Department of Workforce Solutions.

Population in Grant County has decreased by 4.8% between the 2000 and 2010 Census. Only Hidalgo County, the area to the south of Grant County, had a higher rate of population decline.

POPULATION CHANGE FROM 1990 TO 2010 BY COUNTY

COUNTY	APRIL 1990	APRIL 2000	APRIL 2010	% CHANGE 2000 - 2010
CATRON	2,563	3,543	3,725	5.1%
GRANT	27,676	31,002	29,514	-4.8%
HIDALGO	5,958	5,932	4,894	-17.5%
LUNA	18,110	25,016	25,095	0.3%

Source: SWNMCOG citing Bureau of Business and Economic Research, University of New Mexico data.

The BBER does project growth for Grant County through 2035. Based on the data for the last 10 years, this FMP does not project that level of growth; however, if the population stays generally stable, ALHS should maintain full enrollment. As noted in the news article, ALHS did have an enrollment of more than their cap and were required to do a lottery for the first time since opening. As with all schools, once the school year began there was a slight decline in student population due to typical attrition.

POPULATION PROJECTIONS BY COUNTY

County	2010	2015	2020	2025	2030	2035	% Change
Grant	33,626	35,748	37,744	39,589	41,369	43,140	28.3%
Catron	3,881	4,040	4,176	4,263	4,292	4,292	13.2%
Hidalgo	6,300	6,667	7,061	7,420	7,739	8,051	27.8%
Luna	27,985	29,755	31,479	32,919	34,231	35,647	27.4%
New Mexico	2,162,331	2,356,236	2,540,145	2,707,757	2,846,796	3,018,289	39.6%

Source: Bureau of Business and Economic Research, UNM

2.2.4 Classroom Loading Policy

ALHS' education program is project based and interactive. Students are expected to meet in groups – both small and large to fully discuss issues. Typically, classes are no larger than 15 students in order to allow for this interaction. This PTR allows for more student– teacher and student-student interaction and collaboration following the educational philosophy of ALHS. In the current facilities, the science classes have to be limited to PTR rates of 9:1 or the proper investigative learning cannot take place. The small science lab does not allow for more than 9 students at once, so classes are managed by careful scheduling and balance between classroom time and laboratory time.



2.2.5 Classroom Need

The following chart shows Total Existing spaces at ALHS along with the total number of classrooms actually needed. Based solely upon numbers, ALHS needs an additional .5 of general classroom space. However the number of classrooms needed does not paint an accurate picture of the situation at the school. State standards say that a general classroom should be a minimum of 650sf. None of the general classrooms at ALHS meet this requirement, however because of the nature of Charter Schools and the ALHS student loading factor, four of these general classrooms are deemed adequate, while one is not. In addition, specialty classrooms such as Science and Computer Labs are inadequate. This issue of spatial adequacy is more fully discussed in section 2.3.5 of this document.

EXISTING CLASSROOMS

Total Existing Classrooms												
Total Existing Teaching Spaces (Classrooms/Program Spaces) on site												
Current Classroom Assignments												
TTL Perm	TTL Port	TTL Perm/Port	% Port	Pre K 4 yr. old prgm	3 & 4 Year Old	Kinder	TTL Gen. & Specialized Perm/Port	TTL SPED C/D Perm/Port	TTL Shared (ES only) Perm/Port	TTL Sp Prgm Perm/Port	Other Use exclude from Cap	Total Reg, C&D Classrooms
9.0	0.0	9.0	0%				8	1		0	0	9.0

See acronyms in section 1.3 of this document

CLASSROOM NEED

General & Specialized Classroom Need						
Classroom Need						
General & Specialized CR	SPED C/D CR	Total Reg and C&D CR needed	CR (Surplus)/deficit	Total Fed/Cat, A&B, Gifted, etc. CR	Calculated Fed/Cat, A&B, etc. CR & Resource Rms	Fed/Cat, A&B, etc. Classrooms (Surplus)/deficit
8	2.0	9.5	0.00	0.0	0.5	0.5

See acronyms in section 1.3 of this document

Special Program Space Need			Total Classroom/Space Need
Program Spaces Needed			
Total Fed/Cat, A&B, Gifted, etc. Classrooms	Calculated Fed/Cat, A&B, etc. Clrms & Resource Rms	Fed/Cat, A&B, etc. Classrooms (Surplus)/deficit	Total Regular Ed + SPED + Federal/Categorical
0.0	0.5	0.5	9.5

2.3 SITE AND FACILITIES

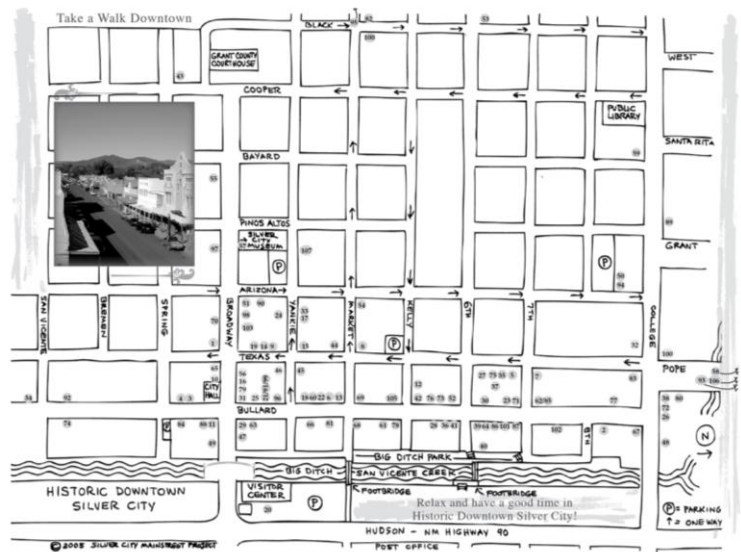
2.3.1 Location

The school is located just east of downtown Silver City, NM at 1422 Highway 180 E.

ALHS currently leases 10,822 square feet of classroom and administrative space on two acres of land within Silver City. The frame-and-stucco building has adequate heating, cooling, and ventilation, excellent cabling for networking and Internet access, and natural light in most classrooms. It features a well-equipped, but small science laboratory, a computer classroom with 18 workstations, five general classrooms, one special education classroom, a library, and a student lounge.



ALHS Location in Silver City



Source: ALHS Web Site

2.3.2 Site

The facility sits on a 2 acre site just off Highway 180 in Silver City, NM

ALDO LEOPOLD HIGH SCHOOL AERIAL SITE



2.3.3 Facility Inventory

The facility inventory chart is a display of all relevant facts about the existing facility. In Districts, there are numerous buildings to record. For a charter school in its first years of operation, the facility is usually a leased building. It is not eligible for capital funds. Adequacy standards will be waived for the first several years.

A full size chart is included on the following page.

2.3.3 Facility Inventory

FACILITIES INVENTORY DATA – ALDO LEOPOLD HIGH SCHOOL SY 2011 - 2012																					
Facility Name	Dist. ID	State ID	Address	ZIP	Phone	Principal	Open Date	Age (Yrs)	Const. Dates	NMCI	Site Acreage	Own/ Lease	TTL Perm Bldg Area	TTL Bldg Area (GSF)	Grades	Current Year Enrollment (40 day)	Full-Size CR	Half-Size CR	Gym / MP	TTL Perm. CR	GSF Per Student
ALDO LEOPOLD HIGH SCHOOL		532-001	1422 Highway 180 East	88062	575.538.2547	Eric Ahner	1970	42	1970	46.06/73.26	1.94	L	10,800	10,800	9-12	116	5	4	0	9	93

This facility is leased by the charter school. The open date is the actual construction date for this building. ALHS as a charter school program opened in 2005. The original design intent for the space is an office building.

2.3.4 Facility Evaluation

ALHS leases a privately owned facility in Silver City, NM. By using outsourced services and internship programs, leadership is able to accommodate the education program for all students. The planning consultant conducted both a condition assessment and an educational assessment to identify priority needs of this building. The summary report is part of the facility support materials in section 5 of this document with the full assessment included in the appendix.

The educational adequacy data was analyzed and used to complete the needs analysis shown in this section. Ultimately the Governing Council will make informed decisions for their future capital expenditures based on this data.

2.3.5 Statewide Adequacy Standards

The Planning Team has assessed the spaces at ALHS based upon NM State Educational Adequacy Standards and the following chart demonstrates the adequacy of rooms at the current facility:

The column “Minimum Additional Need” demonstrates approximate additional space needed per NM State Standards. For the small 269 sf classroom to be deemed adequate, approximately 269 additional square feet would be needed per State Standards. However, the space can be used at its existing site if a smaller number of students are housed in that space. This is determined by the minimum classroom square footage allowed per student. If the space is overcrowded, teaching and learning is severely affected for both the teacher and the student.

	Quantity	Square Feet	Maximum Students allowed	Adequate?	Minimum Additional Need
General CR @ 25sf/student	1	269	11	N	269 +/-sf
	1	519	21	Y	
	1	459	18	Y	
	1	546	22	Y	
	1	535	21	Y	
Computer @ 3nsf/student no less than 900 sf	1	269	11	N	631 sf
Science @ 4nsf/student or average cr size	1	510	20	Y	
Science Lab*					
With minimum storage/prep of 80 nsf min	1	239	9	N	225 sf plus storage
SPED/min 400 sf	1	326	15	N	74 sf

* The Science Lab should really be larger than the minimum size noted here because the entire program at ALHS is built around the environment and Science. Space is needed to exhibit projects

Actual recommended sizes for all spaces based upon the educational program will be made in section 3 (Educational Specification) of this FMP.

General Classrooms:

As previously mentioned in this FMP, NM State Standards require a general classroom to be at least 650 nsf. All classrooms do not meet this requirement; however given the smaller student loading factor at the school, most general classrooms are adequate for the population. One of the 5 general classrooms is inadequate even considering the lower student loading policy. This classroom represents the additional .5 classroom needed per the previous Classroom Need Chart.

Science Lab:

The Science Lab does not meet adequacy standards for both minimum size of the room and for minimum storage requirements. In addition, the ALHS student loading factor of 15 is not feasible in this room. NM Adequacy Standards state that Science Lecture and Lab rooms be no smaller than the average classroom with 4nsf per student of the planned program capacity and must contain 80 nsf of storage/prep.

The Science Lab at ALHS can only accommodate a maximum of 9 students and the lab has insufficient storage. Although the size requirement for Science could be waived for charter schools, this is not possible to adequately serve the education model at ALHS. Science, as has been stated in the program section, is one of the drivers of the entire curriculum at the school and the current lab does not fulfill the programmatic goals.

Students need additional space not only to conduct experiments, but also because the typical project may continue across multiple semesters and even years; space is needed to allow these projects to be worked on for long periods of time. Thus, storage and exhibition space is needed for both teaching materials and for student work.

Computer Lab:

The space reserved for computer class is woefully inadequate. Although the size of this specialty classroom could be waived for Charter Schools and technology-aided instruction could be distributed throughout the school, this space can only accommodate a maximum of 11 students. Electrical outlets are insufficient and 'daisy-chained' together and there is insufficient space for classroom equipment including dust-free writing boards, increased shelving, cabinets, and storage space.

Special Education:

The Special Education Room is adequate to accommodate the special education students at ALHS. However, it is recommended that two spaces be used for multiple uses including the health room, the special ed classes, the visiting ot/pt, the visiting arts and music programs, and other special programs or projects. As flexible spaces the total size is not inadequate because it can be used according to standards and by implementing flexible scheduling techniques. As a charter school, adequacy of size could be waived because alternate accommodations can be used. It is recommended, however, that if a special program space is going to be included in the facility plan, it should adhere to the minimum **size requirement of 400 sf**.

Other Spaces:

There are several other spaces that are not provided for in this floor plan. These include: kitchen facilities of any grade; outdoor learning space characterized by infrastructure access; a large, flexible/multi-use space within the school that can accommodate public meetings, Socratic Seminars, study or social space for students or community use; multi-purpose space for presentation, exhibition, assembly and display. These spaces will be discussed in section 3 of this FMP. The school needs at least one space that can accommodate the entire student body and staff in one sitting.

2.4 UTILIZATION AND CAPACITY

2.4.1. Utilization

Utilization refers to the way the school is using its space and could determine the number of classrooms needed to accommodate a given student enrollment. This facility's supply of classrooms is based on the identification of use and inventory of all instructional spaces available. These spaces house both general and special education. The demand for classrooms is determined by the school's enrollment cap and programmatic requirements. In addition, ALHS desires a lower than standard classroom loading factor of 15:1.

ALHS utilizes the entire building per their programmatic needs. Classrooms are small, but can generally accommodate the lower student loading factor. One general classroom as previously stated does not meet adequacy standards. As can be seen from the chart below, ALHS is lacking .5 classrooms to accommodate the full capacity- thus creating a 106% utilization rate.

Utilization		
Current CR Reg. Ed, SPED., & Spec Programs Perm/Port	Needed CR Reg. Ed, SPED & Spec. Program Perm/Port	Percentage Utilization
9.0	9.5	106%

2.4.2 Capacity

Capacity, while similar to utilization, identifies the number of students a facility can accommodate. The intent of capacity analysis is to determine how many students can be served in a facility. The formula provides several totals that consider the variability in facilities and locations. The PSFA table identifies a student maximum – or total students if every space was utilized for education program; working capacities – which actually allow for program considerations and absolutes, like art and music class in an elementary school. Because students travel to that classroom it must be available for use with no permanent residents assigned. And finally, the small district capacity considers the overall impact to population found in rural populations. The facility must still have a minimum amount of spaces for each program requirement of a school. The latter provides allowances for the restrictive location.

The existing facility for ALHS is broken down into maximum, working and small district capacities below.

Maximum Capacity		Working Capacity	Small District Capacity ³		
		Based on Existing Classrooms	Based on PED MEM Percentage		
All Classrooms	Total Maximum Capacity	Total Working Capacity	Reg Ed Capacity	Sp Ed C/D Level Enrollment Capacity	Total Enrollment Capacity
225	225	190	165	0	165

Capacity for Additional Students			
Current Enrollment (SY 2011/2012)	Maximum Capacity	Working Capacity	Capacity for additional Students Sm. District
116	74	49	49
116	109	74	49

Again, this chart does not accurately paint the entire picture at ALHS. The charter cap is 120 students and although the working capacity of the facility / small district is 165, the programmatic requirements along with the smaller student teacher ratio/ classroom loading policy do not allow for maximum capacity of 120 to be comfortable in the existing facility. More importantly, when the cap is reached the facility will still be inadequate for the stated mission, goals, curriculum, and other program requirements of ALHS.

The curriculum at ALHS has some unique requirements that are currently not being met in their existing facility:

Science: Science is extremely important at ALHS. Thus the need for a larger lab is critical. Currently, there is only space for a maximum of nine students at a time in the lab and general lab time is split between students with nine students in the lab and the remaining students in the classroom. There is no space for project display.

Flexible Spaces: Collaborative, active, teaming, inquiry based teaching and learning, along with the Socratic Method demand that the school have some larger and smaller flexible spaces – for small group collaboration and large group demonstration and exposition. The school requires a space large enough for the entire staff and student body to meet.

These spaces should be a combination of indoor / outdoor spaces to be consistent with the goal of connecting to nature and collaboration.

Environmental Education / Storage: The environment is the basis of all education at ALHS. Students are required to participate in community projects that necessitate tools and equipment, which in turn necessitate storage areas. The storage is inadequate at the school. Currently, they have leased 2 'pods' in which to store tools and equipment. The pods are not secure, not heated/cooled, and have no lights. They pose a safety hazard. In addition, the storage of chemicals and flammable materials is not adequate.

Sustainability: Sustainability within the school, the immediate community and the world at large is infused throughout all courses, physical education, and daily operations of the school. Integral to the philosophy of ALHS is the planting, growing, harvesting, preparation, and consumption of food. To accomplish these holistic goals, the school requires space for a garden, and preparation & cooking areas to enable students to view the entire seed-to-table food cycle. Additionally, the school seeks to be able to serve food that is self-prepared to staff, students, and community members.

Connection to Nature: The current location of the school allows no access to the natural environment without special field trips. Ideally, ALHS permanent site will be located in an area with some access to the local environment.

2.5 TECHNOLOGY

Although ALHS does not have a technology plan in place, this topic was thoroughly discussed during the planning process. ALHS' view of technology is that it is principally available to be used as a tool for program delivery to enhance the learning process.

Enhance Learning

Although the computer lab has 18 computer (PC) stations, NM State Standards limits the number of students to a maximum of 11 considering room size. ALHS staff member has a computer and each classroom has an additional desktop computer, with the exception of one room, which has a laptop. The library also has three PCs. The technology department also has 45 laptops on a mobile cart that students can use throughout the building.

The total number of computers available to staff and students is 81.

ALHS COMPUTER INVENTORY TABLE

	PC	LAPTOP	TOTALS
ADMINISTRATION	6		6
LIBRARY / MEDIA CENTER	3		3
COMPUTER LAB	18		18
SPED OFFICE	1		1
SPED CLASSROOM	1		1
MATH CLASSROOM	1		1
SPANISH CLASSROOM		1	1
WORLD HISTORY CLASSROOM	1		1
SCIENCE CLASSROOM	1		1
SCIENCE LAB	1		1
SOCIAL STUDIES CLASSROOM	1		1
LAPTOPS CHECKED OUT TO STAFF		10	10
LAPTOPS ON COMPUTER CARTS		35	35
YCC ROOM	1		1
TOTALS	35	46	81

Promote Connection

ALHS also believes in utilizing technology to enhance connection to the wider world. Internet availability and CATV is present at the school, but CATV is not wired into all classrooms. One goal is to deliver consistent internet throughout the school; the current internet system is intermittent and will need to be addressed.

2.6 ENERGY MANAGEMENT – OF EXISTING OR PROPOSED FACILITIES

Because ALHS is dedicated to sustainability, they are actively participating in good stewardship of their environment. They currently recycle and re-use items, lights are generally left off; they have adequate natural light in most classrooms, excepting the science lab because it is an interior classroom, although it does have a skylight, which is also used to vent fumes.

2.6.1 Energy Assessment

There has never been an assessment of the existing facility; built in 1970 as an office building, one can surmise that the space is not very energy efficient. The P & M assessor noted the above practices (2.6) during the general facility assessment. Again, given the leased facility, ALHS does what it can to minimize energy usage, although the facility itself does not have the most efficient lighting or HVAC systems. Simple principals such as turning off lights and computers help to minimize costs.

2.6.2 Energy Efficiency Recommendations, if available

Because ALHS is currently housed in a leased facility, they cannot implement major sustainable features. Should the District determine they would obtain or build a new facility, they would take other measures into consideration, including a community garden, water reclamation, mulching and compost, etc. in addition to sustainable building practices such as building orientation for passive heating/cooling, solar panels, water recycling, grey water, low water usage landscaping, etc.

2.6.3 Energy Management Plan

At this time there is no formal energy management plan, although smart energy conservation methods are undertaken daily. If ALHS does determine a move to a new facility is important, the planning team would suggest an energy audit, and a full-scale energy / sustainability management plan.

SECTION 3: EDUCATION SPECIFICATIONS



SEPTEMBER 2012

ALDO LEOPOLD HIGH SCHOOL

The Education Specification is unique to the Facility Master Plan for charter school facilities. This section helps to define the functional requirements of the building so that the facility that is leased or purchased works for the special program for which this charter was approved. The program should drive the space use – not vice versa. Additionally, there are waivers granted to charters to allow them to utilize alternative methods to serve their students, such as sharing a community use facility for physical education classes, etc.

Section 3: Education Specifications

ALDO LEOPOLD HIGH SCHOOL

3.1 FACILITY GOALS AND CONCEPTS

3.1.1 Goals

The following list outlines the broad spatial goals and concepts developed by ALHS during the FMP process and are firmly grounded in the school's Charter and Educational Philosophy:

Facility Goals:

- Commercially-viable, educationally adequate Kitchen Facilities
- Large gathering space for students, staff, teachers to enhance active learning, collaboration, socialization, Socratic Seminars, community meetings, and presentations
- A welcoming, warm ambience to stimulate emotional and intellectual response
- Small group gathering spaces to encourage collaboration
- "Open", flexible classrooms that accommodate various group sizes
- Student and community access to facility
- Project exhibition space
- Storage space for tools
- Technology to enhance learning and connect to larger community



3.1.2 Concepts

Learning Context

The most important overall concepts for education at Aldo Leopold High School, both in the current facility and in any future facility are: **Community, Safety, and Connection.**

Community

A feeling of real *community* should exist within ALHS. This community or “connectedness” promotes a feeling of safety and security among teachers, students, and staff. “Isolation leads to insecurity; Connection leads to security.” It is interesting to note when planners spoke to staff and students about security, the response was community. Initially we discussed items such as security cameras, etc., however we soon discovered that when a true sense of community is present, the spatial forms will enhance that community philosophy and naturally promote security of all facility inhabitants; a unique, but effective view of security. Thus, community and connection goals and security goals are synonymous to ALHS.

This feeling of community informs the spaces within ALHS:

- Classrooms should not promote isolation, rather create a feeling of ‘openness’ with spaces that are flexible for both large and small group teaming, collaboration, and discussion.
- Hallways should lend themselves to connection with nooks, perhaps with whiteboards, where collaboration can take place.
- Common areas should promote the feeling of internal connectedness – they should be large enough to allow staff, students, teachers, and community to gather.
- Services and spaces at ALHS should encourage all to stay on campus during school hours. The kitchen and space for communal meals should promote relaxation, socialization, and collaboration. These spaces may serve dual purposes; for example, the kitchen might be used as a teaching lab and as a serving kitchen during meals. The eating area would also be utilized for other gathering purposes throughout the day.
- The facility itself should have a welcome, warm look – both indoors and out – to draw people in emotionally and intellectually.

Safety and Security:

There should be safe access to school facility by bicycles and pedestrians. The school spaces should be easy to supervise. Again, the definition of safety to the staff of ALHS is synonymous with “Community”. By having a real sense of community where teacher spaces, administrative spaces, and student gathering spaces are intermixed and open, the school would then be considered safe.

The current location of the school is off a major Highway and there is no immediate secure access to a crosswalk or sidewalks. Students have to cross at least a quarter mile distant or dart across on-coming traffic. There are also no sidewalks leading through the adjacent parking lots to the school.



Connections:

Not only does ALHS value the interpersonal connection, but also connection to the larger community surrounding the school, globally, and connection to nature, which is the basis of all learning at ALHS.

Connection to the greater community

- Community garden at ALHS – space to plant and irrigate a garden and storage space for implements.
- Kitchen - Students growing, harvesting, preparing and potentially sharing with greater community, along with being able to offer free/reduced meals to students.
- Large, flexible spaces - Access to ALHS after school hours by parents, and community.
- Utilize community venues for ALHS functions; WNMU, other available indoor/outdoor venues
- Students volunteering in the community - exhibition space for projects and storage space for tools
- Technology as a tool to enhance learning - Connection to the international community.

Connection to nature

- Indoor learning spaces not isolated from outdoor spaces
- Outdoor learning spaces which are comfortable in summer or winter
- Amphitheatre
- Garden/greenhouse
- Easy access to natural outdoor spaces for inquiry-based studies, physical education, and community/team building
- Water reclamation on campus
- Building should function with nature aesthetically and sustainably

Learning Process

Curriculum Framework

ALHS' goal is to provide dynamic learning opportunities – inquiry-based, experientially connected, grounded in engagement in the natural environment.

Fundamental academic subjects are reinforced and enhanced by community based elements – students become actively involved in community processes, which are focused and relevant to the application of academic concepts. The curriculum includes multi-day field trips, for instance, to encourage patterns of inquiry, place-based learning, and teamwork.

The basis for the curriculum framework at ALHS is the environment. The model emphasizes use of local surroundings as the context of standards-based instruction. This model:

- encourages problem solving, strategic thinking, creative thinking, information synthesis, and examination of complex interrelationships.

- allows students to make sense of their academic subjects, but also of their world.
- integrates curriculum
- addresses the health and education of the whole student through direct experience with nature, using the outdoors as a learning laboratory.
- develops intellectual, emotional, and physical skills, develops self-confidence and improved fitness, and fosters teambuilding and connection to the natural world through outdoor activities.

ALHS curriculum is inquiry-based: students learn *HOW* to think, not *WHAT* to think in the pursuit of knowledge through exploration, discovery, and invention:

- across academic disciplines
- in community settings
- in natural settings
- in cooperative-learning groups
- through Socratic questioning and Socratic Seminars

Facility features that would support the ALHS curriculum include:

- Interior connected to outdoor spaces
- Outdoor learning spaces
- Easy access to nature
- Storage space on campus for tools and equipment
- Space to present nature findings
- Student kitchen to learn how to cook and sell what is grown on-site; should have direct access to an outdoor garden.



Spaces that support opportunities to learn patterns and language of thinking and questioning – including Socratic Seminars.

- Large room – egalitarian in nature for Socratic Seminars. This room would facilitate large group interaction and discussion, and would allow each participant to be empowered to stand and speak. This room could be round and/or could have white boards on all the walls.
- A large diamond shaped conference table where students and teachers could sit together.
- Open, roomy spaces.

Flexible Spaces that support interaction, inquiry, collaboration, experiential learning and connectivity

- Assembly/Multi-purpose space that could be also used for smaller groups – socially, collaboratively
- Good acoustics
- Good technological infrastructure – both for students and staff within the school, but also for connectivity with the international community. Cutting-edge technology.
- Flexible spaces to enhance the different types of learning/teaching. Movable walls perhaps or flexibility can be accomplished with furniture.
- Laboratory - Space where projects can be set up and observed for long periods of time, often spanning years.
- Wide hallways, allowing for collaboration/meeting nooks.
- Area where students may eat and purchase or prepare lunch.
- Space for students or for teachers to informally meet and/or learn.

Settings that support Integrated Learning

- Space for projects that involve students from different classes
- Easy access to the natural environment to promote active, inquiry based learning across subjects and including all students at all grade levels.
- Proximity to Western New Mexico University
- Proximity to hiking trails, streams, parks
- Functional/up-to-date communication and technology systems, promoting collaboration between ALHS students and the international/national community.
- Utilizing the building and environment as a teaching tool might include solar collection, water collection, recycling, building control systems such as HVAC, and gardening, harvesting, preparing, and serving produce.
- Spaces should accommodate technology as a tool to learning
- Smart boards
- Internet access
- LCD projectors
- Computers

Learning Organization

Concepts and Goals

- Strong community interaction
- Students volunteering in the community
- Cutting edge technology that works and enhances learning
- Highly qualified staff
- Outdoor learning opportunities - Learning settings should always be connected to nature: The environment is an Integrating Context for Improved Student Learning. The model emphasizes use of local surroundings as the context of standards-based instruction.
- Integrated learning
- Space for multi-year and class projects
- Small class size
- Interaction between high school students and middle grade level students – to be added to overall charter within the first year of this facility master plan timeline.

3.2 SPACE REQUIREMENTS

ALHS' mission is to prepare community leaders of the twenty-first century. To carry out this mission, ALHS provides an engaging and challenging program emphasizing direct experience, inquiry learning, stimulation of the creative process, and involvement in the community and natural environment. ALHS supports the intellectual, social, and personal growth of the individual while preparing students to take responsibility for themselves, their communities, and the natural environment. ALHS graduates learn to create sustainable futures.



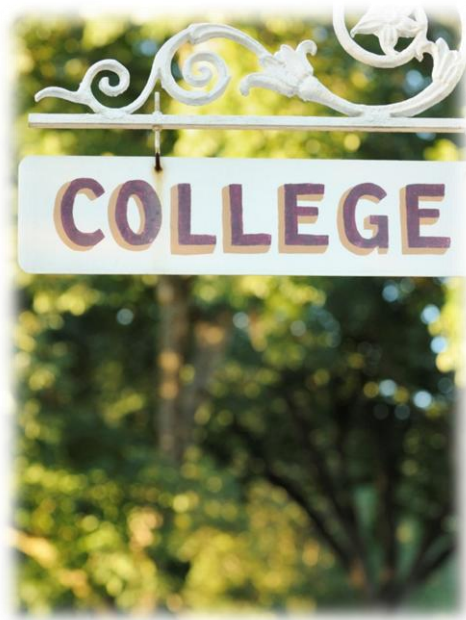
3.2.1 Space Summary

Space	# of spaces to meet adequacy per student	SF	Total SF	For Adequacy	Student Capacity Count	Type of space	Waiver?	Response	Description
Admin Area w counseling	1	1400	1400	y	0	support	n	Admin will be decentralized. Per standards: admin min of 338nsf, health/counseling - min 275nsf, teacher workspace/lounge: min 150nsf	Doubles as a school security system with admin around perimeters and as main gatekeeper
General Storage	1	120	120	y	120	support	n	General Storage, at least 1 nsf/student distributed in or throughout any type of room or space	this is in addition to the in classroom storage
In classroom storage	5	50	250	Y	120	classroom	n	2nsf/per student of dedicated classroom storage	50nsf per classroom
custodial rooms	1	63	63	y	120	support	n	.5nsf/student	
Educational Kitchen w prep	1	800	800	N	20	program	y	No lunch area - per standards - 650 sf min. may need unit kitchens, accommodate tables, counters, chairs. Adequate plumbing/drainage as well as electrical/gas connections and ventilation hoods.	Kitchen area for student learning as well as warming small group or meeting food service. Garden food can be prepped for sale by students here as well. No on site lunch Brought in or off campus.
Science Lecture/Labs	2	800	1600	Y	20	classroom	y		No smaller than average CR. 80nsf of storage/prep area.
Science Storage/prep	2	80	160	y		support			
General Classrooms	5	750	3750	Y	20	classroom	y		25sf per student for general classrooms. Aldo has average of 20 per classroom. Minimum of 900sf waived.
Specialized CR Spaces (OT,FED,after school, special education)	2	450	900	N		classroom	y	optional or can be accommodated in another manner	if provided, must be minimum of 450nsf. D level c/r must include a kitchenette. Rooms may be used for other purposes such as conference room
Computer Lab	1	1000	1000	Y	20	program	N	Technology Carts and one tech center . Adequacy standards require 3nsf per student, minimum of 900 sf	Building and campus wireless to accommodate the laptops and smartphones in the class, Tech center replaces both media center and computer lab to become one space that accommodates needs of global interaction and learning, research and media, online study, and off site communications.
Media Center	0	1000	0	Y	120	program	y	Accomplish through Tech Center	Combined technology and media center with accessible tech carts for use in classrooms. Per standards: min of 3nsf/student
Librarian Office	2	115	230	Y	0	support	y	Replaced by Tech Center 2 offices	
Storage	0	0	0	n			y	No - However special storage included in flexible space - for furniture	Recommended storage per adequacy may be accommodated in general storage.
Multipurpose/Auditorium	1	2500	2500		150	program	y	Outdoor space. Total space recommended to be 4000 SF but 1500 of those will be part of the Middle School Charter facility.	Sunken earth amphitheatre=Accomplish with downgrade steps, stage in center, tarp and solar on top. Add water collection at the bottom to accomplish net zero and program propertties
Gym	0	6500	0	Y	120	program	y	Will use community resources.	
2 locker rooms	0	150	0	Y		program	y	Will use community resources.	
Bleachers	0	0	0	y		program	y	Will use community resources.	BLEACHERS FOR 1.5 OF PLANNED SCHOOL PROGRAM CAPACITY = SEATING FOR 180
Music	0	750	0	Y		program	y	Will use community resources.	No smaller than average CR. Must provide storage, library, office, practice rooms
Art	0	750	0	Y		program	y	Will use community resources.	No smaller than average CR. Must provide Storage, Office
Outdoor learning spaces	3	500	1500	N	40	program	y	Physical activities to take place in these spaces.	May be considered the school;s play areas per standards,. These areas are intended to meet program needs.
Flexible Space	1	2500	2500	N		program	y	This Space will accomplish several program needs. Intent is to utilize academic space that has been waived per academic standards.	Space to include: 1. Student/community lounge and eating area. Approx. 800-1000 SF inc storage.2. Large open space that has whiteboard walls - both permanent and movable walls.Flexibility of use to be accomplished through the use of furniture and movable wall space. 500 SF of space is for storage of these items.
Sub-TOTALS:			16773	Does not include tare.					
Plus Tare (21%)			3522.33						
TOTAL Space and Cost			20295.33						

3.2.2 Site Requirements

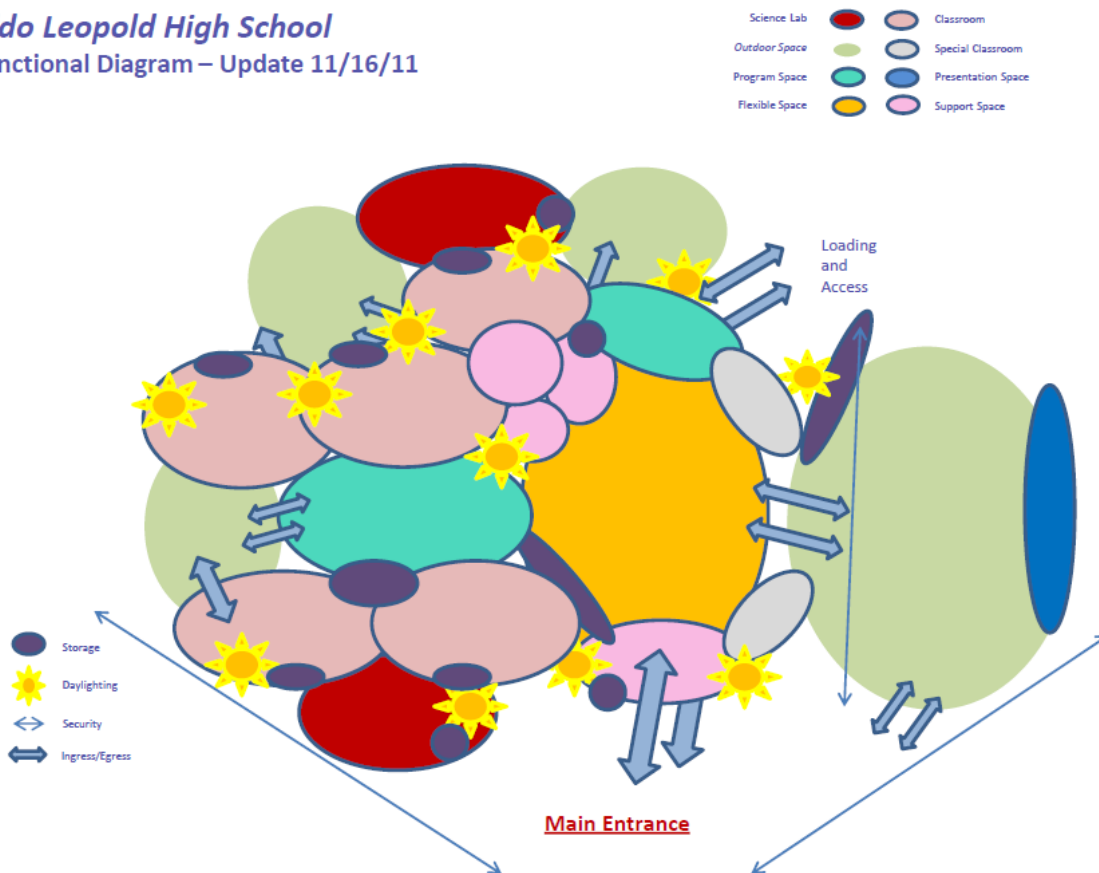
Site Goals:

- Safe pedestrian and bicycle access
- Proximity to community venues for ALHS functions; WNMU, other available indoor/outdoor venues such as the surrounding forest for hiking / physical activities
- Indoor learning spaces connected to outdoor spaces
- Outdoor learning spaces which are comfortable in summer or winter – shade structures, amphitheatre
- Sustainable campus - Garden/greenhouse, water reclamation on campus
- Building designed or repurposed to function with nature aesthetically and sustainably



3.2.3 Required Space Adjacencies

Aldo Leopold High School Functional Diagram – Update 11/16/11



The above adjacencies diagram was developed after several committee meetings in which the stakeholders went through the 'design down' process to create their priority space needs. As discussed in section 3.1 Goals and Concepts, the planning team identified the important elements that would be needed by an adequate facility to serve the education program as it is presented in the ALHS charter application. The program has been a tremendous success in the first five years of activity and the charter is in its first renewal term.

The most important elements found to be responsive to the program, and incorporated into the diagram, are:

- Community interaction – ease of access
- Flexible spaces to accommodate small to large group gatherings
- One very large space so that the entire school community, including business community, parents, higher education partners, students, and staff can gather
- A commercially viable kitchen
- Ease of access to business community and college campus
- Adequate science classroom and lab spaces
- Outdoor learning areas with access to the academic program areas

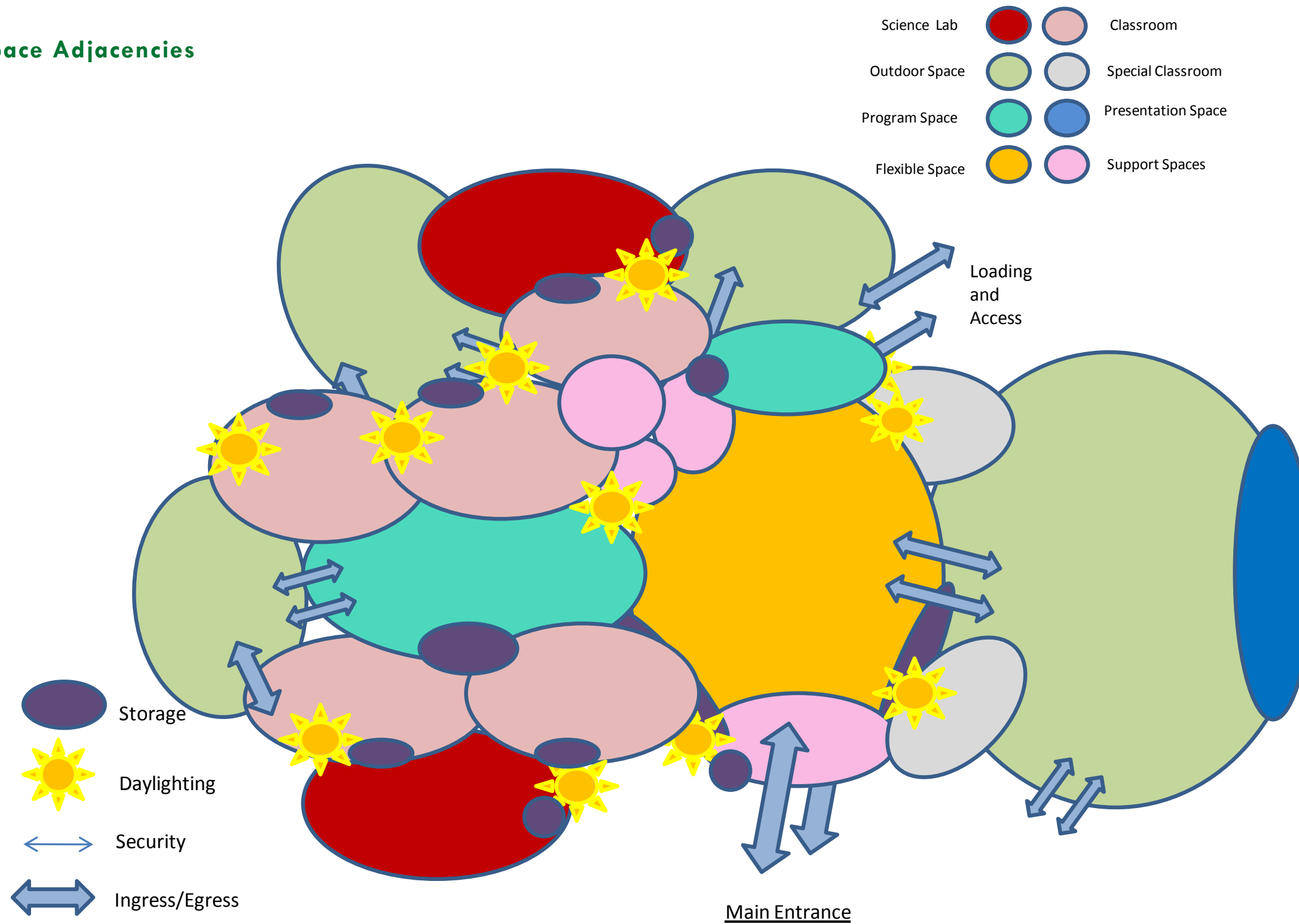
Included in Section 5.8, with our rubric for the ALHS search committee, we have included the adjacency diagrams for a campus that shows the relationship of space from the high school facility to the outdoor learning spaces to the middle school facility. Additional space needs are also considered in the overall flow of the site.

Although the leadership is very committed to adding the middle school grades to the existing charter, there is no guarantee that they will get the approval needed by PED. The expansion calls for the addition of three grade levels (6, 7, and 8) – with the expectation that the participation would be similar to the higher grades. Therefore, the additional students will be requested or capped at 30 students per grade. This will change the cap from 120 to 210 for the whole campus.

IMPORTANT NOTE: If approval is given, the facility committee must revisit this document and incorporate the additional education specification and capital needs plan into the FMP. This will need to be done at a cost to the school only. The PSFA will not provide funding for that additional work.

ON THE FOLLOWING PAGE, PLEASE SEE A LARGE VERSION OF THE ADJACENCY DIAGRAM FOR THE EXISTING PROGRAM.

3.2.3 Required Space Adjacencies



3.2.4 Alternative Methods

OT / PT and health services are accomplished through contract. Fine arts are also through contract on a weekly basis.

Currently, no provisions for meals are available at the school. The students must either bring their own or leave campus to eat. As has been discussed, this is not conducive to the stated charter and goals of ALHS; connecting internally, to the community, and furthering the educational basis of the school – connection to nature as an experiential tool to learning.

In addition to a student kitchen, in order to further the school philosophy, ALHS would like to have a commercial kitchen that can serve meals to students. The planning team recommends locating the student kitchen near or combined with the commercial kitchen to gain efficiencies with loading, unloading, storage, etc.



3.2.5 Space Needs

The chart below illustrates spaces, corresponding state standard, and whether adequate / inadequate in light of the stated goals and objectives in the district’s charter or per state adequacy standards. It should be noted that planners understand the nature of charter schools and that some spaces can be waived. The goal is to demonstrate those spaces that require adherence to state standards because they apply directly to ALHS’s charter goals and educational framework and philosophy. The classroom loading policy at ALHS is 15 students per class.

PROGRAM AREA	CURRENT SF	STATE STANDARD	ADEQUATE / INADEQUATE PER STANDARD OR EDUCATION PROGRAM
GENERAL REQUIREMENTS			
BUILDING CONDITION	NA	6.27.30.8 Structural, exterior envelope, bldg. structure, Systems, Interior finishes	
BUILDING SYSTEMS	NA	Roof, plumbing, phone, electrical / HVAC, fire alarm, 2-2ay internal comm., technological infrastructure & security system	Inadequate per Standard. No floor drains, bathrooms flood. No sprinkler system. Inadequate electrical outlets, too many ‘daisy-chained’ extension cords.
SCHOOL SITE	NA	6.27.30.10 – Sufficient size to accommodate safe access, parking, drainage & security.	Inadequate per Standard and ALHS charter. Site size does not fulfill ALHS EDUCATION PROGRAM goals: No access to natural environment. No space for garden. Not near WNMU.
SAFE ACCESS	NA		Inadequate – pedestrian / vehicle access not separate. No dedicated student drop off area
SECURITY	NA		Inadequate. Not fully fenced. . No crosswalks at HWY or sidewalks to school property.
SITE RECREATION & OUTDOOR PE	NA	6.27.30.11 – School facility shall have area, space & fixtures, HS – pave MP play surface & play field based on planned school program.	None. Inadequate per Standard BUT ELIGIBLE FOR WAIVER.
INTERIOR SQUARE FOOTAGE ADEQUACY STANDARDS			
Academic Space CR 1	535	6.27.30.12 – All CR space shall meet or exceed requirements: space, storage, work surfaces, erasable/projection, lighting, temp, acoustics Size: 25nsf/student	Size adequate – max 21 students Storage varies in classrooms. Some areas adequate, some inadequate.
Academic Space CR 2	546		Size adequate – max 22 students
Academic Space CR 3	459		Size adequate – max 18 students
Academic Space CR 4	519		Size adequate – max 21 students
Academic Space CR 5	269		Size INADEQUATE – max 11 students
TOTAL SF GEN CR	2,328		MAY BE ADEQUATE - WAIVERS
SPED C CR	326	6.27.30.14 – 16 students max. Minimum size 450nsf	Inadequate – Minimum size 450nsf per Standard.
TOTAL SF SPED C	326		ADEQUATE FOR POPULATION
SCIENCE CR	510	6.27.30.14 – 4nsf per student planned program. 80nsf securable, ventilated storage/prep.	Adequate size. Inadequate storage.
SCIENCE LAB	239	4nsf/student = 480nsf.	Inadequate size –Storage inadequate. Issue about ventilation – see assessment.
TOTAL SF SCI	749		INADEQUATE FOR PROGRAM
COMPUTER LAB	269	6.27.30.14 – 3nsf/student. Minimum 900nsf.	Inadequate size per Standard – 3nsf/student = 360sf. Min sf require is 900 per Standard.
TOTAL SF COMP	269		MAY BE ADEQUATE - WAIVER

Art – Visual Arts	0		Inadequate
Art – Music	0		Inadequate
Art – Performing Arts	0		Inadequate
Career Education	0		Inadequate
TOTAL SPECIAL USE CR	0		MAY BE ADEQUATE - WAIVERS
LIBRARY / MEDIA	582	6.27.30.16 3nsf/student = 360nsf.	Adequate
DATA STORAGE	118		Adequate
LIBRARIAN OFFICE	0		WAIVER
TOTAL LIBRARY / MEDIA	700		ADEQUATE FOR PROGRAM
DINING	585	6.27.30.17 – May be multipurpose. 15 nsf / seated student (3 seatings per meal period mas.) 1,700 sf Minimum per Standard.	WAIVER. Students currently go off campus or eat in the lobby near the entrance, which is used for multiple purposes. ALHS wants to keep students on campus, promote a sense of collaboration, socialization, and community. This space does not do that. More importantly, the school would like to bring the community in to serve commercially as well as be open for community use.
SERVING	0		ALHS would like a multi-p urpose kitchen allowing them to serve free/reduced meals to students as well as serve and sell meals or foods prepared by the students to the public. They are prepared to fund or partially fund this endeavor. There are actually 2 kitchen issues as described in more detail in this FMP – the possibility exists that both kitchens could be combined to gain efficiencies.
FULL-PREP KITCHEN	0	2nsf / meal served –1,700 sf minimum.	Inadequate- WAIVER
TOTAL FOOD SERVICE	585		INADEQUATE FOR PROGRAM
RECEPTION	160	6.27.30.18 – Min. 150nsf + 1.5nsf per student FOR ALL ADMINISTRATIVE AREAS	150 + TTL REQUIRED 330nsf. Adequate
OFFICE 1	259		
OFFICE 2	120		
OFFICE 3	100		
OFFICE 4	91		
TOTAL ADMINISTRATION	730		ADEQUATE FOR PROGRAM
STUDENT HEALTH /COUNSELING	0	6.27.30.18 – Space to isolate a sick student. Accessible to RR. Min of 1nsf / student of planned school program capacity, no less than 150nsf	Inadequate per Standard WAIVER VIA MOBILE NURSE
FACULTY WORKSPACE / TEACHER LOUNGE	197	6.27.30.18 – 1nsf / student planned school program capacity no less than 150nsf.	Adequate per Standard WAIVER ALSO SERVES AS PARENT ROOM
PARENT WORKSPACE	0	6.27.30.18 - .5nsf / student planned school program capacity no less than 150nsf. May be more than 1 room and have more than one function.	Inadequate per Standard WAIVER
TOTAL OTHER	197		ADEQUATE FOR PROGRAM

3.2.6 Detailed Space and Room Requirements

The ALHS community is interested in creating the ideal space to serve their unique education program. That may be one of three choices:

1. ALHS or another public entity to purchase current facility; they will renovate space to meet needs.
2. Find another existing facility that can be purchased by ALHS or another public entity and renovate to be a permanent facility for ALHS.
3. Find a site and build a new facility designed to meet the full space requirements of the ALHS education program.

The planning consultant has agreed to develop a rubric for the use of the facility committee which will incorporate all of the educational, site, sustainability, community, and flexible space needs of this school. The rubric is included in the appendix of this document and considers spatial measurements in addition to relevant features of a site that will enable a future dual school campus (middle and high school divisions) and a potential net zero energy policy. Another key need is to be interactive with the community for internships and with the college for dual credit programs.

Additionally, there is a plan to expand grades in the future to include middle school grades in order to develop students at an earlier age that will matriculate directly into the High School model. If approved, the expansion must be considered in the capital plan. An update to the education specifications and the capital improvement plan will be required to keep this document current.



3.3 IMPLEMENTATION OF SPACE NEEDS

3.3.1 Scenarios for Implementation

In New Mexico there are many areas where a charter school can waive requirements or find alternative means to fulfill them. However, the curriculum offered at the school must fulfill the goals, framework, program, and curriculum delivery methods stated in the school's charter. These items of course vary from school to school depending upon the charter itself. In the case of ALHS, there are several elements that may be waived and accomplished via alternative methods:

- a) Health Services – including nurse, OT/PT/RT, and counseling. These are accommodated through contracted services.
- b) Special Education Room – Although ALHS currently has a SPED room, these students can be accommodated either within the general population or through contracted services,
- c) Fine Arts – Accommodated via contracted services on a weekly basis.
- d) Classrooms can be smaller than NM State Standards; however, the lower student/teacher ratio at the school allows these classrooms to be adequate for the student population.

Through the process of this FMP, the planning team has held several formal and informal meetings with staff, students, and administration at ALHS, along with thoroughly reading their renewed charter. The results can be seen in the functional diagram 3.2.3.

There are elements that are integral to fulfill ALHS' charter that are currently not adequate and cannot be waived:

- Adequate science classroom and lab spaces
- Environment - Outdoor learning spaces, including space for a garden, the facility interior should be connected to the outdoors.
- A commercially viable kitchen – a. A student kitchen where foods may be prepared from items grown in the garden, and b. A commercial kitchen capable of serving lunches to students, including free and reduced meals.
- Community – ease of access to the facility; all learning spaces should be easily supervised – offices interspersed throughout, a flexible space to accommodate small/large groups along with Socratic Seminars.

In the leased facility as it is currently configured, these necessary components cannot be fulfilled. In order to implement the spaces needed to deliver the ALHS program one of the options in section 3.2.6 should be chosen after a step-by-step evaluation process:

- 1. Convene building committee.**
- 2. Determine funding options.**
- 3. Test the rubric at existing facility, and all potential facilities, to identify viable options.**
- 4. Evaluate results for each site that remains an option and apply capital monies to identify the ideal site/facility – proceed with planning for new or renovated facilities.**

SECTION 4: CAPITAL PLAN



SEPTEMBER 2012

ALDO LEOPOLD HIGH SCHOOL

The purpose of this section is to prioritize capital projects and apply available funding to the projects that have the greatest impact on the educational facility. The goal is to make sure that the students are provided the best possible environment in which to learn.

Section 4: Capital Plan

ALDO LEOPOLD HIGH SCHOOL

4.1 CAPITAL FUNDING

4.1.1 Historic and Current Funding

ALHS has never carried a designated fund for capital projects.

Current funding is designated for operations, program, and small maintenance issues only.

1. Operating funds - \$1,100,000.00
2. SB-9 - \$2000.00
3. Lease Assistance – \$66,000.00
4. Fees, Interest, and donations –\$ 20,000.00
5. Other Program Money (Title II, Idea-B, YCC, etc) - \$117,000.00

Although ALHS has never budgeted for the new site or facility, they are operating on a surplus and could begin the capital fund with some of those dollars. However, ALHS anticipates a slight drop in enrollment next school year. Some surplus may be needed to stay in the black. Therefore, it will be necessary to identify new resources to fund the site and facility

4.1.2 Current Capital Expenses

The facility assessment identified several projects in the existing facility including room expansion for the science lab and science classroom; electrical wiring; ventilation; and outdoor recreation areas. These projects are planned for the 2nd and 3rd years of the capital plan because the new facility is the priority. If that project is underway, ALHS will not use their capital funds on the existing facility.

4.1.3 Potential Future Sources of Revenue

ALHS has not utilized all the potential resources available to a charter school, nor have they reached out to the programs that are readily available to all schools, such as the federal food program and the e-rate program for technology. Those dollars may be significant and could contribute to the budget surplus. ALHS will put some effort into finding new grants for capital projects and specifically for “green” projects.

Silver City Schools is running a mill levy election to renew the SB-9 funds. As a city resident, ALHS is eligible to participate in the election and receive a portion of the annual award. The estimated annual income will be \$35,000 based on the valuation at this time. Over the last several years, ALHS has received only \$2000. Perhaps the district could be encouraged to go for GO bond which would provide so much more.

4.1.4 PSCOC Capital Outlay Funding

The lease assistance funds are provided by the PSCOC through an application process. If the new site/facility is acquired through a lease purchase this money can be used to pay the lease. There are currently no other capital funds for charter schools through the PSFA.

4.2 CAPITAL NEEDS

4.2.1 Projects

Project Type	Building/Area/Location	Classification	Priority No.	Project Name	Project Description	Cost Estimate	Funding Source	Funding Year
Capital Project	Science Classroom	Educational Adequacy	2	Separated Classroom Verification	Evaluate the instructional benefits and disadvantages of splitting the class into two separate instructional areas (understanding temporary space limitations).	\$ 3,000.00	Bonds	2014
Education Program	Building	Preservation of Property	3	Conservation	Recommend surveying the students for issues with this practice. There are obvious benefits, just recommend consideration of students wishes for their environments.	\$ 500.00	OPERATING	2013
Capital Project	Science Laboratory	Educational Adequacy	1	Confined Space Meet State Standard?	Expand the science lab space to accommodate current student use. Expansion recommended by 2013 if no immediate plan to purchase site.	\$ 4,000.00	Bonds	2013
Capital Project	Site	State Standards	1	Permanent Facility	Purchase site, ready site for construction	\$ 1,000,000.00	Federal charter grants or non-profit lease purchase program	2013
Capital Project	Planning & Design	State Standards	1	Permanent Facility	Revisit ed specs and finalize space needs and design	\$ 245,000.00	Federal charter grants or non-profit lease purchase program	2014
Capital Project	Site Improvements - education & preservation	State Standards	1	Permanent Facility	Outdoor classrooms, amphitheatre, landscaping for erosion control, outdoor seating, paving/parking areas	\$ 650,000.00	Federal charter grants or non-profit lease purchase program	2014
Capital Project	building	State Standards	1	Permanent Facility	Build new or renovate facility to accommodate the needs of the ALHS education program with reasonable concession for shared use of community resources for some of the core classes 20,000 GSF est.	\$ 2,800,000.00	Federal charter grants or non-profit lease purchase program	2015
Education Program	Technology	Educational Adequacy	1	Permanent Facility	Install full wireless system for communication, administration, security, and learning tools.	\$ 140,000.00	erate	2015
Maintenance	Science Laboratory	Life, Health, Safety	1	Inadequate Storage	1) Evaluate the storage requirements to store all chemistry equipment, chemicals, etc. 2) Organize storage spaces for proper separation of items, appropriate locations, and proper casework. Recommend 3rd party evaluation and plan. 3) Implement recommended plan. 4) Properly store all chemicals.	\$ 1,500.00	Sb-9	2014
Maintenance	Science Laboratory	Life, Health, Safety	1	Combustible Storage	Properly store all combustible materials	\$ 1,000.00	Sb-9	2014
Capital Project	Science Laboratory	Life, Health, Safety	1	Chemical Ventilation	1) Evaluate the adequacy of ventilation in room for use with chemicals. 2) Modify ventilation system with commercial equipment as required.	\$ 3,500.00	Bonds	2014
Maintenance	Science Laboratory	Life, Health, Safety	1	Fire/Smoke Detectors Required	Install proper detectors in this room that consider the functionality/use of the space.	\$ 500.00	Sb-9	2013
Maintenance	Science Laboratory	Life, Health, Safety	1	Fire Egress	Verify egress meets fire codes and requirements for space and use.	\$ 500.00	Sb-9	2013
Maintenance	Science Laboratory	Life, Health, Safety	1	Fire Extinguisher Upkeep	Recommend monthly inspection of fire extinguishers. Note: Fire extinguisher inspections/tags were up to date at the time of assessment. Verify inspections and tags are current.	\$ 500.00	Sb-9	2013
Capital Project	Science Laboratory	Life, Health, Safety	1	Electrical Hazard	Update electrical system in this room to meet the requirements for functionality and use of space.	\$ 2,200.00	OPERATING	2013
Capital Project	Outdoors	Educational Adequacy	2	Outdoor Amenities	1) In new space, consider that availability and location of space to outdoor amenities for student use. 2) Identify other ways to offer students recreational amenities around the community. See if discount rates are available for students or see if funds can be appropriated to offset student costs.	\$ 10,000.00	Bonds or Charter grants	2015
Maintenance	Janitorial storage	Life, Health, Safety	1	Fire Hazard - Combustible Storage	Install fire proof storage cabinets for combustible storage.	\$ 1,200.00	Sb-9	2015
						\$4,863,400.00		

This project list advances priority projects for the existing facility as well as the new facility. Therefore, the total project dollars will never be needed as a whole dollar amount because the plan is designed to put money toward one or the other of these directions. For example, the site should be identified and purchased within the first two years of this plan. If it is not, it is recommended that the science lab and science classroom be enlarged to accommodate the program. Outdoor learning areas should be addressed immediately if it is determined that an alternative location is not going to work.

4.3 IMPLEMENTATION STRATEGY

4.3.1 Project Prioritization

For this facility master plan, the planners met with the ALHS Facility Committee, which was made up of staff, students, community volunteers, and other stakeholders. There is a great cohesiveness within the support group for this school and they came to the meeting fully prepared to assess the reality of their situation, while also having the willingness to fight for the needs of the ALHS education program.

- A. Kickoff Meeting – information meeting intended to provide the committee with an understanding of the purpose and value of the planning process and the facility master plan itself. It will be up to this group to commit to regular updates to the plan.
- B. Facility Planning Meeting #1 – Group was taken through a step-by- step process of exploration loosely utilizing the “design down” system created by George Kopa of the University of Oregon. The planners gathered data that told them what was a priority to these stakeholders, and that information became the foundation for meeting #2.
- C. Facility Planning Meeting #2 – Planners presented the findings from meeting #1 and opened it up for discussion. It is imperative that these goals represent what the entire group believes. Using the program goals as a stepping stone, facility goals are put forth. The planners use the goals to develop functional diagrams of the learning environment. This is not design; it is identifying adjacencies and sizes relative to the overall facility. For ALHS, outdoor learning areas must be incorporated in a manner that allows for flexibility of use and access for all. The garden is important to this group and they wish for it to be easy access to their multi-purpose kitchen space.
- D. Site Selection Rubric – Goals from all meetings were incorporated into a tool that allows the site selection committee to look for a site that fits their needs. Although a new facility would be an exciting endeavor, the committee also realized the value of finding an existing building that has potential with some renovation. By renovating an existing facility, the committee feels they are being more sustainable.



4.3.2 Capitalization Analysis

There are several strategies that the committee may embrace in order to purchase their permanent facility:

1. **Capital Campaign:** Commit to a development program with a goal to reach the total need for the facility only. They have yet to identify grants or run any special fundraising activities, such as “Buy a Brick” or a direct mail request. This method is going to take commitment and passion to reach the donors and get them to embrace the project and fund it.
2. **Crowdfunding:** This is a relatively new and unique method for raising funds using social media. The whole facility could not be funded this way, but “projects” within the facility development and design process could be funded...perhaps the planning process – which should include many students and teachers plus a kitchen expert, in addition to the facility committee.
3. **Nonprofit Lease to purchase** – Turn Key facility is given to the nonprofit org that is associated with the ALHS charter school. The nonprofit pays the monthly mortgage payment based on an annual agreement for the lease purchase. In NM the lease/finance package cannot be signed for more than one year and the payoff will be closer to 20, although some are doing it in 8-10 years. The financier takes the chance on a public organization.

The nonprofit also holds the deed to the land and leases for \$1 per year. The finance team will come in and select all players for this project with the input of the school’s leaders for final selection. All initial team members will receive their contract payments upon receipt of the finance package from the bank. Because the finance package is made up of nonprofit bond money, the interest rate is typically 0.01 or 0.02% higher than the GO Bond that can only be acquired through public election.

But this type of package can be reached right away. Intriguing – YES? I have been following this package since I heard about it and I like to share it because you will have an essentially complete facility in weeks or days – and little payments outside the mortgage. In this scenario the building gets built and everyone is thrilled

4. **Bond or Mill Levy** - . If Silver City were to go for bond or mill levy, ALHS would be eligible for a percentage of that as well. That could be a possibility because it has been awhile since the District did a bond. The mill levy election will try to bring us \$35,000 rather than \$2,000 as our annual allotment. Oh, I think you need GO BOND money. I think SB-9 monies will get you in trouble – they are very specific funds for capital and maintenance projects.

SUMMARY OF CAPITAL PLAN

THE PROJECT LIST FOR ALHS INCLUDES SOME EXISTING FACILITY PROJECTS THAT WOULD IMPROVE THE LEARNING ENVIRONMENT. IN ADDITION, WE HAVE IDENTIFIED SOME LIFE, HEALTH, SAFETY ISSUES WHICH NEED TO BE ADDRESSED AS SOON AS POSSIBLE ACCORDING TO YOUR MEANS. IT IS RECOMMENDED THAT THE EXISTING FACILITY BE GIVEN SOME ATTENTION. YOU CAN MAKE IT A HAPPIER PLACE IMMEDIATELY WITH SOME COLOR AND MAYBE BY OPENING SOME SPACES. NO MATTER WHERE ALHS LANDS IT WILL MOST LIKELY BE IN THIS FACILITY A COUPLE MORE YEARS.

THE BULK OF THE CAPITAL PLAN IS CURRENTLY ASSIGNED TO THE NEW SITE/FACILITY.

SECTION 5: MASTER PLAN SUPPORT MATERIALS



SEPTEMBER 2012

ALDO LEOPOLD HIGH SCHOOL

This section provides data supporting discussion of the existing charter school facility. Materials include site and floor plans, condition assessment results, the Facility Assessment Database (FAD) review, and representative images from the current charter school facility and site.

Section 5: Master Plan Support Materials

ALDO LEOPOLD HIGH SCHOOL

5.1 SITE AND FACILITIES DATA TABLE

Name of facility – Aldo Leopold High School

State ID number – 023-011

Physical address – 1422 Highway 180 East, Silver City, NM 88062

Date of opening – 1970 facility construction / 2005 leased to ALHS

Dates of major additions/renovations – Does not apply

New Mexico Facility Condition Index (NMCI) – 46.09

Site owned or leased – Leased

Total building area gross sq/ft- 10,800

Site acreage- 1.94

Total number of permanent general classrooms – 6

Total number of permanent specialty classrooms - 3

Total number of portable classrooms – 0

Total number of classrooms – 9

Percentage of portable classrooms to total number of permanent classrooms – Does not apply

Total enrollment current year (40th day count) SPLC – 116

Number of gross sq/ft per student, most recent 40th day – 93



5.2 SITE PLAN



5.3 FLOOR PLAN

Outdoor Student Seating Area



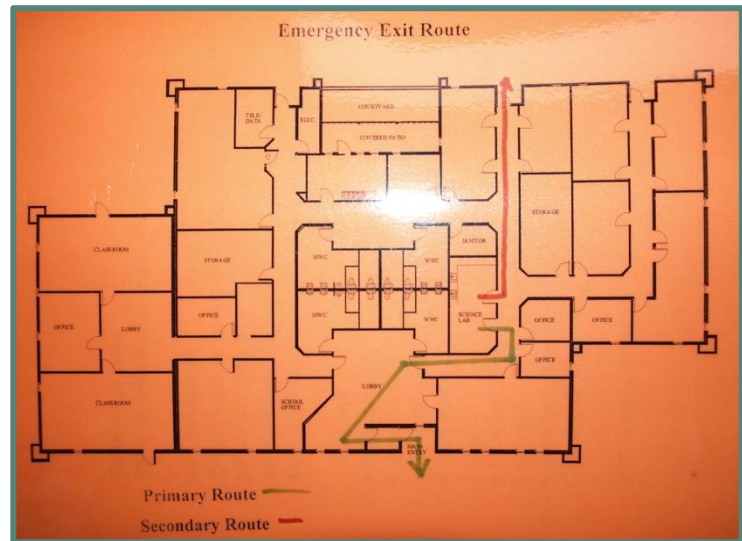
5.4 FACILITY SPACE INVENTORY TABLE

SPACE USE/ GRADE LEVEL	EDUCATIONAL SQUARE FOOTAGE
CLASSROOM 1	535
CLASSROOM 2	546
CLASSROOM 3	459
CLASSROOM 4	269
CLASSROOM 5	519
COMPUTER LAB	269
SCIENCE CLASSROOM	510
SCIENCE LAB	239
SPED	326
LIBRARY	582
OFFICE 1	259
OFFICE 2	120
OFFICE 3	100
OFFICE 4	91
OFFICE 5	108
OFFICE 6	131
DATA ROOM	118
STORAGE ROOM	266
SECURE FILE STORAGE	315
STAFF LOUNGE	197
WORKROOM	130
ELECTRIC	78
JANITOR CLOSET	76

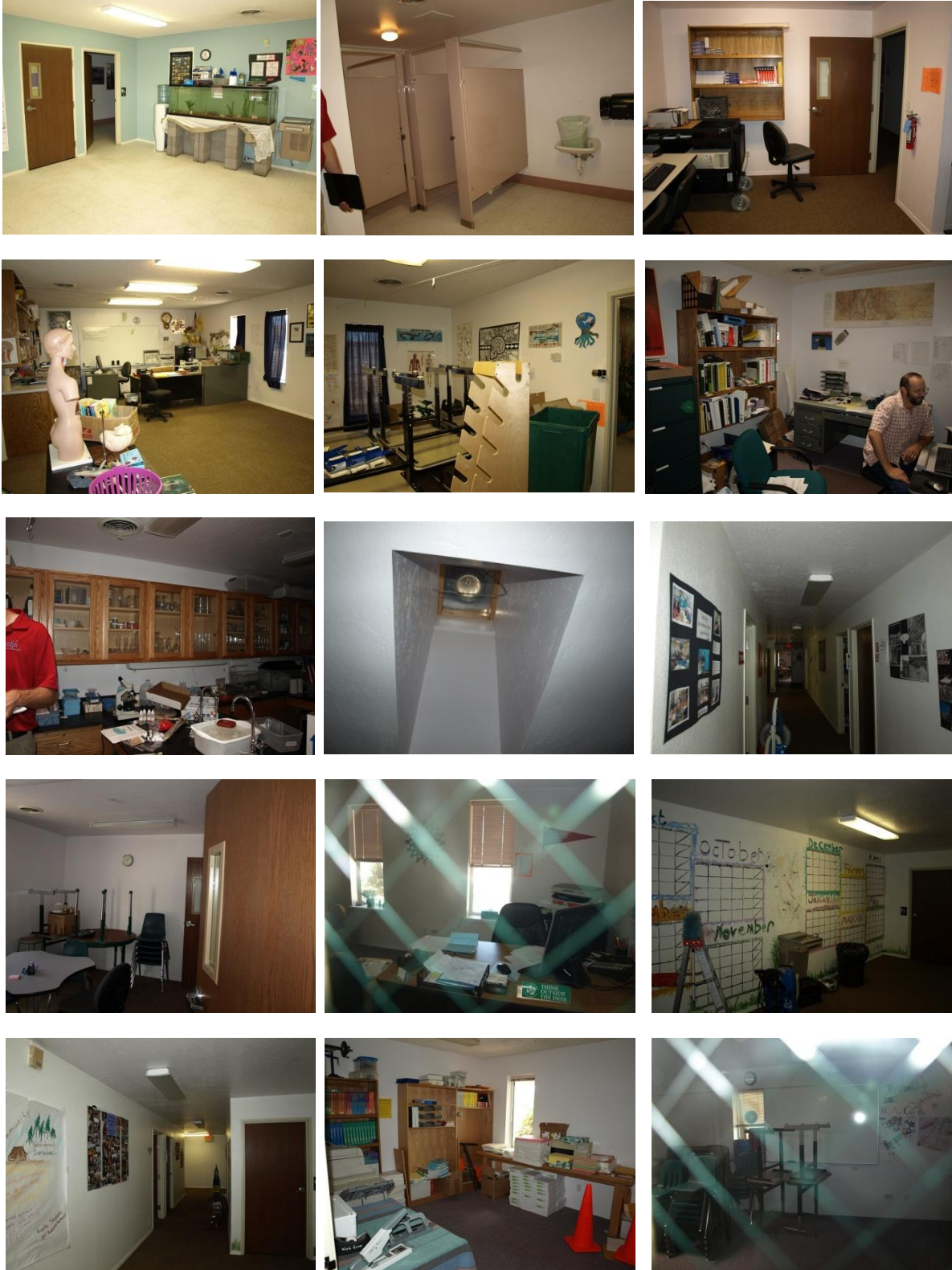
Total Net Square Feet: 6,243

The total SF does not include tare, restrooms, in-classroom storage but is representative of the available education program delivery space. Building gross square footage is 10,800.

2012 ALHS FIRE PLAN



5.5 PHOTOGRAPHS





5.6 FACILITY ASSESSMENT REPORT

One of the roles of the FMP planning team is to assess the existing facility according to a condition rating matrix that is based on the NM State Educational Adequacy Standards for school buildings. In addition to these standards, the assessment considers best practice recommendations from the professional educational facility planning association – Council of Educational Facility Planners International (CEFPI) – plus national research in healthy, high performing learning environments.

There are several major organizations that contribute to this body of research, including but not limited to, the Environmental Protection Agency (EPA); the American Institute of Architects (AIA); the Green Building Council (GBC); and Collaborative for High Performing Schools (CHPS), et al. All of these resources are maintained on a site provided by the National Building Institute of the federal government – the National Clearinghouse for Educational Facilities (NCEF), which is located on the internet at www.edfacilities.org.

The PM team maintains close ties to these resources, in addition to contributing a percentage of our time to a New Mexico based nonprofit organization – the National Center for the Learning Environment (NCLE). Assessment rubrics are reviewed and updated annually.

SCHOOL SITE

This summary is a combination of the findings of the Facility Condition Assessment, conducted by the planning team, and the principal survey, completed by the Charter Director.

School Location

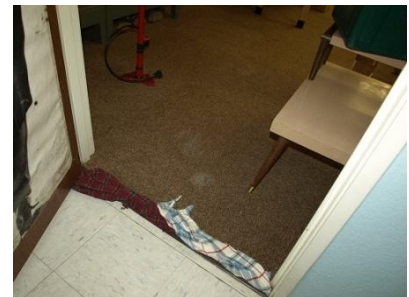
ALHS is located in Silver City, NM on the southern side of Highway 180 E. The surrounding area is comprised of businesses, government facilities, and a housing development behind the school site. The site is approximately 1.94 acres. It is unclear who is responsible for maintenance of the easement between the school and the highway; the school, the building owner, or Silver City. As a result the area is visually unkempt.

Pedestrian / Vehicle Access

The entry to ALHS is off Highway 180 E and accessed by passing through other business lots. The site is not conducive to pedestrian traffic; there is no crosswalk over this busy road near the school. The closest crosswalk is about ¼ mile away. The parking lot is small with approximately 56 staff parking spaces (3 handicap spaces) and not much space for a bus turn around, although students do not actually take a bus to school, however they do run ‘activity’ busses and there is no light at the nearest street, which creates difficulty in turning left out of the area and crossing the highway. Some parking spaces have been eliminated due to a large ‘pod’ for storage located in the lot, which is used for tools. According to the Director, there is very little parking for students, which leaves even less for visitors. Sidewalks are in generally good condition.

Site Safety / Security

The school site is located in a suburban / commercial area and is partially fenced. The southern section of the lot is located behind the school and a natural barrier of a large cliff prohibits ingress / egress. The fact that there is no near crosswalk to get to the school side of HW 180 and no sidewalk from the highway up the access road that leads to the school does pose a safety issue; many students bike and walk to school. The school campus is open and there is no place to secure the two activity busses; there is no exterior surveillance system thus the area is vandal – prone. Staff indicates there is a safety issue regarding the doors in the lobby; they open in an unsafe direction. One opens toward the Men’s restroom creating a partial blockage, which could become an issue during an evacuation of the facility.



SCHOOL PLANT

Structural Components

The facility was constructed in 1970 as an office building. It was leased by the school in 2005. The overall structure of the building is fairly sound. Staff indicates that the roof has numerous small leaks.

Energy / Mechanical / Plumbing / Electrical

The number of electrical outlets is insufficient, especially in the science and computer labs where extension cords are basically 'daisy-chained' together. This could present a hazard and the planning team would suggest an evaluation of power requirements, a potential update to the electrical system or at the very least use of wireways or wall mounted outlet strips to alleviate a potential electrical shock or fire hazard.

Also in the science lab there is one skylight used to house the vent to allow chemicals to be drawn into the atmosphere. The planning team would recommend an assessment to verify if the existing ventilation conforms in size with state requirements. If not, a modification of the ventilation system would be in order.

Staff indicated that there is adequate heating and cooling in the building, but it is very inefficient. Regarding plumbing, staff indicates that when toilets back up, there is no floor drainage in the bathrooms, which will flood. This occurs several times per year and is very unsanitary. Lighting, while sufficient, is not efficient, and students/staff would prefer non-fluorescent, or at least full-spectrum could be introduced to reduce eye strain.



Building Safety / Security



Building ingress / egress is generally secure. There are fire alarms and functioning exit signs in the building. There is no sprinkler system, nor is the building large enough for these to be required and no automatically closing fire doors. Student records are kept in a fireproof storage area.

In the Science lab there is inadequate storage for chemicals and equipment. These spaces should be organized for proper separation of items in appropriate locations and proper casework to maintain the safety of

students. Chemicals should be stored in locked cabinets and combustible materials in locked fire-rated storage. There is no smoke detector in the science lab. Planners would also recommend monthly inspections of all fire extinguishers in the building.

Technology

There are approximately 18 computer stations housed in one computer classroom in the school; each staff member has a computer and general classrooms are equipped with several stations each. Additionally, the school has approximately 35 laptops available for staff and students to use as needed. The only problem mentioned is the inconsistency of internet service.



Staff indicated the school does not have a PA system, a CATV system (although according to the FAD, they are wired for CATV), or a central clock system.

Building Accessibility

Classrooms are securable and are all interior. There is one main entry in the front of the building. There are no ADA issues reported.

Maintenance

Maintenance is handled by ALHS and the landlord. It depends on what needs to be repaired.



EDUCATIONAL ENVIRONMENT

Programmatic Adequacy / Flexibility

Classrooms are generally sized appropriately for the PTR at ALHS, with the exception of the computer lab, the science lab, and one very small classroom.

Although there is enough space in this facility, it come up short when the stated goals and education philosophy of the Charter is considered. Although the District can ‘make-do’ with this facility, in order to reap the full benefits of a unique, active, collaborative, holistic, and sustainable program, very different facilities should be considered. There is no indoor/outdoor area for a minimum level of physical education, outdoor learning classes, and the garden activities they want to do; for phys ed the school uses local parks and community centers. There is no area for large group assembly, which is extremely important to the goals of collaboration at ALHS.

Staff views the lack of a commercially-viable, multi-purpose kitchen as not fulfilling the school’s mission; they encourage healthy eating and exercise habits and their inability to showcase the natural food cycle does not enhance the environmental / sustainable aspect of the charter program.



Site organization

Because this is a leased facility, the configuration of the site is static. They have one building, in which all classrooms and shared spaces certainly are conducive to a feeling of community because it is small. The site and building do not enhance the ALHS program.

Community Use

Size limits community use of the facility. Instead ALHS students go out into the community at large to do community service projects and enhance the environment education component of the school’s program. The school does have before and after school programs.

Instructional Needs / Administrative Support

Storage is extremely limited. There is no nurses’ area and no dedicated staff restrooms.

School Image / Environment

The overall campus “look”, is industrial, however much has been accomplished inside the building to enhance the unique education experience that is ALHS. The school will be at capacity in 2012 and tighter than ideal. Should their proposed expansion into Middle School grade levels 6-8, adding 90 more students, would require an additional 6-8 classrooms. The school also is not central to the downtown area, which is a problem for transportation. There are also many students attending WNMU who do not have easy access to the university. Ideally, the permanent site for ALHS should be centrally located and closer to the university.

5.7 FAD REVIEW

The following information is inserted from the PSFA's state-wide facility database, also known as the Facility Assessment Database (FAD). This system keeps a full record of every facility in the state that is owned or leased by a school district or state chartered school. It is used to provide a comparison of equity in order to assign capital funding on an annual basis to the highest priority projects. Each district is responsible to keep their record in the system accurate; they should review this data annually.

District: State Chartered School: Aldo Leopold Charter School

ID: 023011

High Level Overview

General Information

Location: Silver City, NM 88061

Ed. Adequacy Model: Charter School Educational Adequacy

School Type: Charter Ed. Adequacy CCI: 88.30%

School Category: Charter/Alternative School

CCI City: ALBUQUERQUE, NM

NMCI Statistics

Number of Students: 116

Number of Buildings: 1

Growth Factor: 1.00

Number of Portables: 0

Total Gross Square Feet: 10,800

Building Square Feet: 10,800

Site Size (Acres): 1.94

Portable Square Feet: 0

NMCI School Metrics

Replacement Cost: \$1,871,676

Weighted Repair Cost: \$862,717

Unweighted Repair Cost: \$1,371,220

Weighted Educational Adequacy Cost: \$0

Unweighted Educational Adequacy Cost: \$0

Total Weighted Cost: \$862,717

Total Unweighted Cost: \$1,371,220

Weighted NMCI Score: 46.09

Unweighted NMCI Score: 73.26

NMCI Facility History

Last Assessment Date: 07-10-12

Previous Award, No, Year if Yes:

Closed: No

FAD General Description

Aldo Leopold Charter High School is located at 1422 Highway 180 East in Silver City, NM, and is a state authorized charter school. The campus contains one permanent building. Occupancy is 116 ninth through twelfth grade students with a staff of 10.

Site: The parking capacity of 56 (3 are handicap spaces) is sufficient for the population. Concrete sidewalks are in good condition and pose no tripping hazard. There is a small landscaped area. Site drainage is generally good.

Structure / Exterior Closure: The buildings typically rest on typical concrete footings on a mono slab floor that are showing no signs of settlement or damage. The roofs and walls are typically stucco with metal panel mansard parapet. Exterior doors are typically metal, and windows are typically aluminum frame, double pane, non-operational units.

Interiors: Partition wall types include painted drywall. The interior wall finishes are generally in fair condition. Most ceilings are painted gypsum board. Most ceilings are painted gypsum board. Flooring high use areas is tile or carpet. Interior doors are generally solid wood 20 minute rated in the one hour corridors.

Mechanical / Plumbing: Heating is provided by gas-fired furnaces and refrigerated air conditioning system delivered via flex duct. Fresh air is supplied by the HVAC system. Ceiling mounted exhaust fans are installed in the water closets and science lab. Ventilation is adequate. Plumbing fixtures are typically in fair condition and piping is original.

Electrical: The electrical system is fed from a pad-mounted, transformer that delivers 120/240 V., 1-phase, 3-wire power to the facility. Lighting is typically fluorescent and illumination is generally adequate. Emergency exit signs are operable. The school does not have an emergency generator.

Fire Protection/Life Safety Systems/Accessibility: The fire alarm system consists of audible/strobe annunciators. The system is activated by a central station at the main computer terminal and smoke detectors and is not centrally monitored. There are pull stations. The complex does not have a fire sprinkler system. The school does have a security system. The complex is generally handicap compliant.

The school does have a functioning two-way public address system through the phone system. The school has data ports; and the school has limited CATV wiring.



5.8 FACILITY COMMITTEE EVALUATION TOOL

ALHS does not have a dedicated stream of capital funding. It will be imperative for the charter leadership to identify a final budget for their facility needs once their site is selected and total space needs are finalized. **The addition of new grade levels to their existing charter will warrant a review and update of the Section 3: Education Specification and Section 4: Capital Improvement Plan recommendations presented in this FMP.**

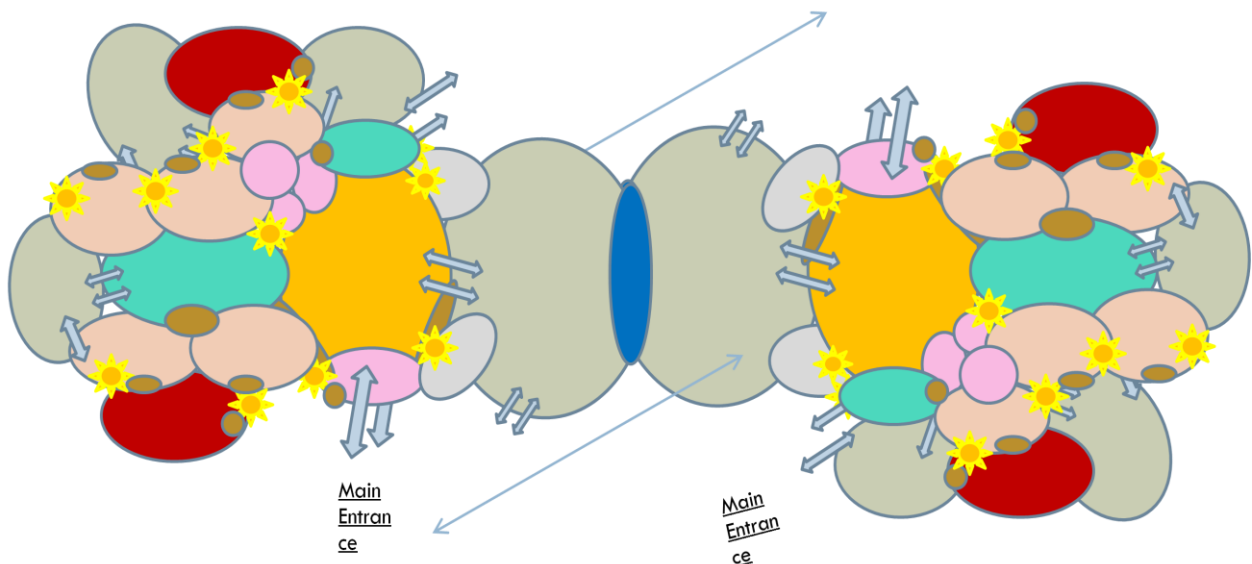
To support the process 100%, the planning team has designed a **site selection tool** which will guide the search for a proper location for this school.

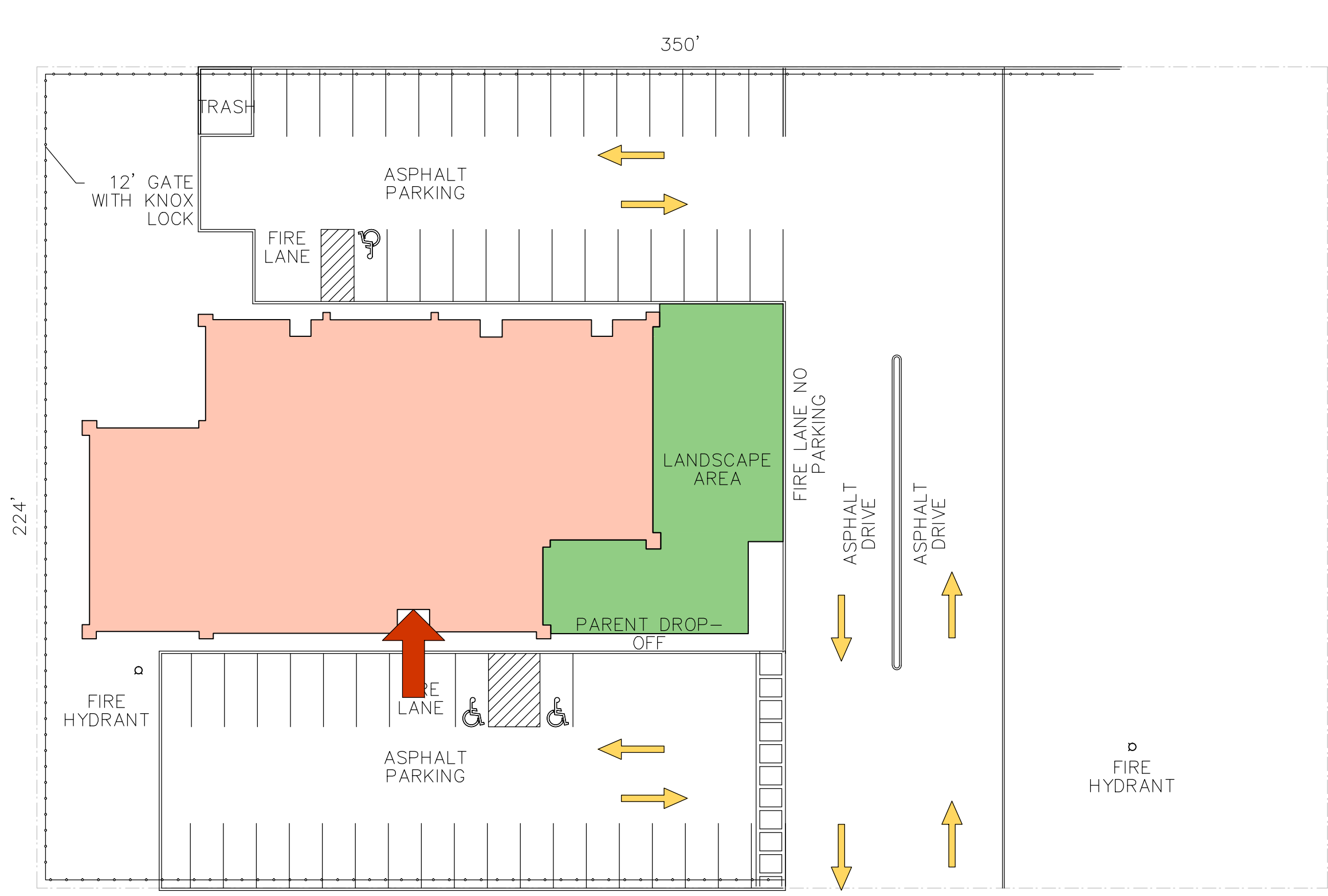
The ALHS program has been very successful and the leadership has determined that they will apply to the Public Education Department for an expansion of their existing charter; they want to add the three middle grade levels of 6, 7, and 8 in the same configuration as the high school – 30 students per grade level. The additional 90 students would almost double the space need for the facility.

During the planning meetings, the potential layout of an ALHS “campus” was explored and is based on a mirror-image of the main building supported by outdoor spaces that are used by both the middle and the high school programs.

Although the committee would need to update this plan for the additional information, one concept can be seen below with each grade level having a separate building and a large outdoor meeting area for the entire student body to meet at once with staff and even community members.

Aldo Leopold High School Shared Campus Concept Functional Diagram





Planning & More
A Professional Services Group

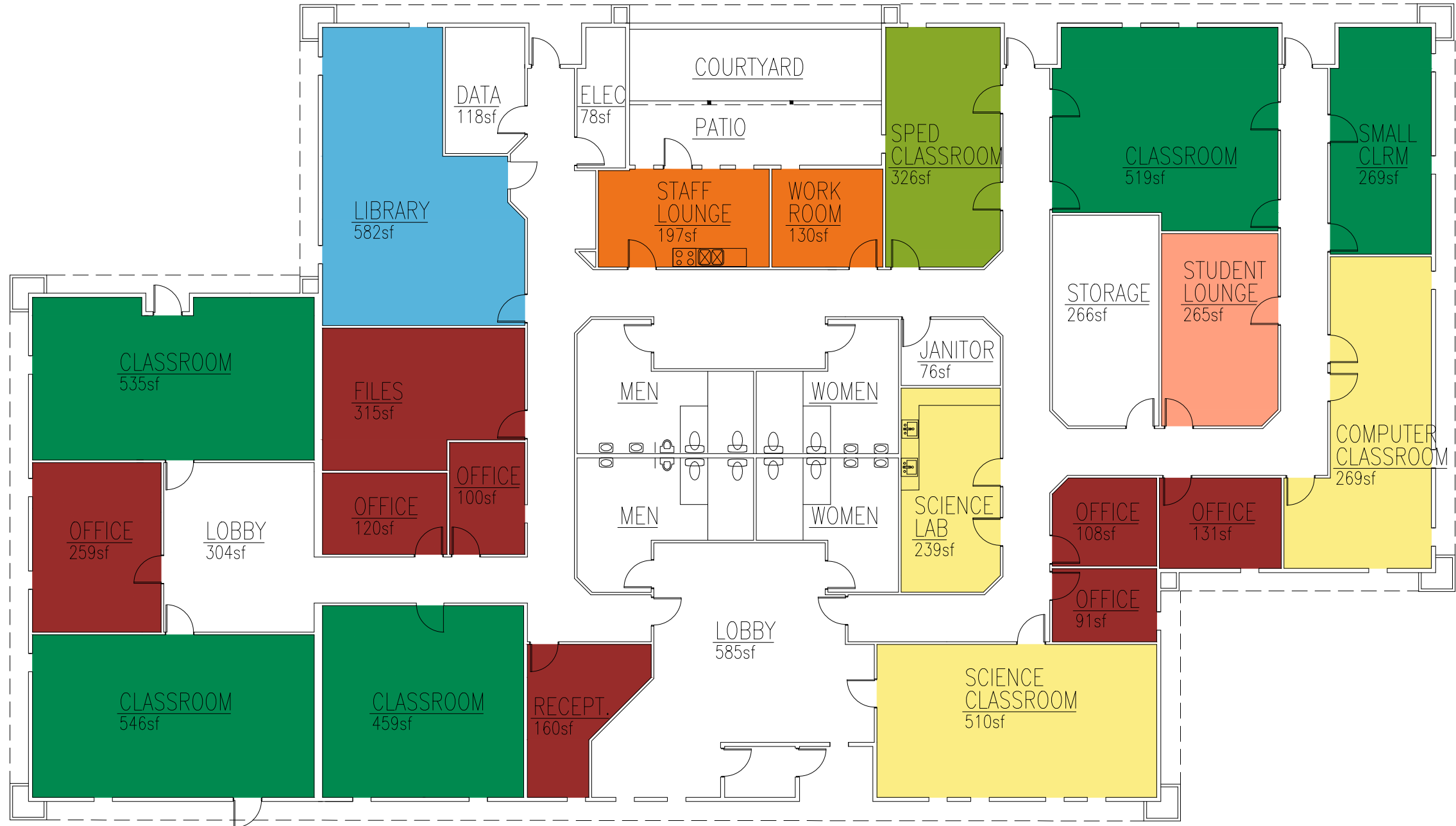
227 Jefferson Street NE
Albuquerque, NM 87108
Phone: 505.573.5583

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ARCHITECTURE

FACILITY MASTER PLAN
CAPACITY AND UTILIZATION DIAGRAMS
ALDO LEOPOLD CHARTER SCHOOL
SITE PLAN

- SCHOOL BUILDING
- PORTABLE BUILDINGS
- LANDSCAPE FEATURES/
ATHLETIC FIELDS
- PRIMARY ENTRANCE
- SECONDARY ENTRANCE OR EXI
- DIRECTION OF TRAFFIC FLOW

- GENERAL USE CLASSROOM
- SPECIAL EDUCATION CLASSROOM
- SPECIAL USE CLASSROOM
- LIBRARY/MEDIA CENTER
- ADMINISTRATION
- TEACHING SUPPORT
- STUDENT HEALTH/COUNSELING
- FOOD SERVICES
- FEED. CAT



FACILITY MASTER PLAN
CAPACITY AND UTILIZATION DIAGRAMS
ALDO LEOPOLD CHARTER SCHOOL
FLOOR PLAN

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ALDO LEOPOLD HIGH SCHOOL FLOOR PLAN

SCALE: NTS

