



*edu***VIRONMENTS**

by
Mathew Smith
A Terminal Project
Presented to the Faculty of
The College of Architecture at the University of Nebraska
in Partial Fulfillment of Requirements
For the Degree of Master of Architecture
Major: Architecture
Under the Supervision of Associate Dean Mark Hoistad
Lincoln, Nebraska
May, 2008



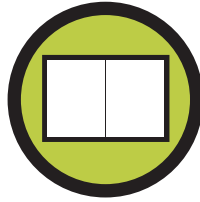
*For Jenn**

PROPOSAL + DESIGN INTENT



01*20

RESEARCH + ANALYSIS



21*62

CONCEPTUAL DESIGN



63*106

PROCESS DOCUMENTATION



107*134

FINAL DESIGN DOCUMENTATION



135*160

BIBLIOGRAPHY + THOUGHTS

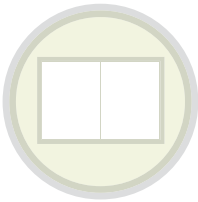


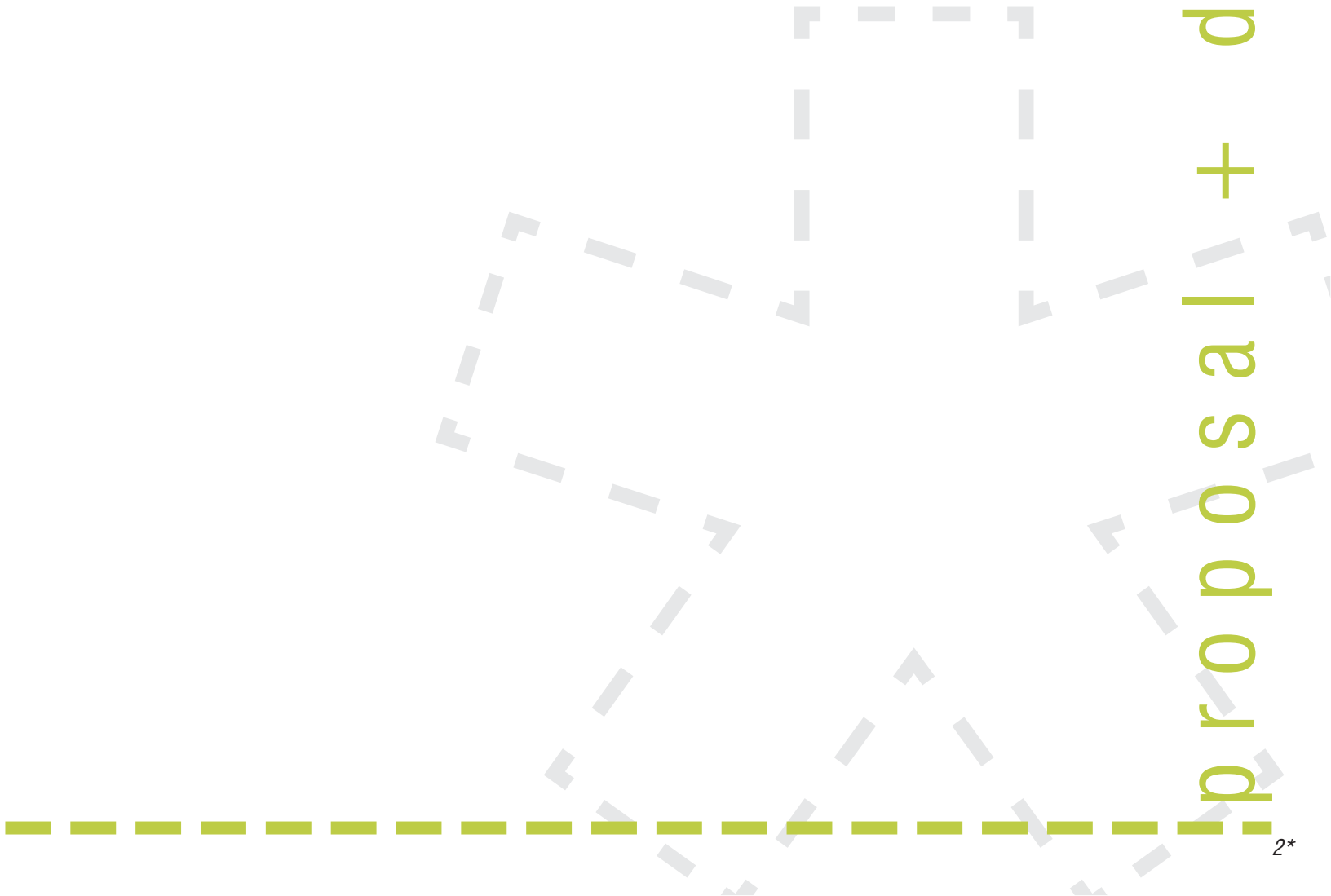
161*168

content

PROPOSAL + DESIGN INTENT

- _initial proposal
- _mission statement
- _main concepts





proposal + design intent



education and their environments

[fallbrook middle school project for lincoln public schools]

April 9th, 2007

[m a t h e w s m i t h]

student

[Mathew Smith]

mentor

[mark a. hoistad]

terminal project

[expanded proposal]

statement of intent_[expanded proposal]

Education on any level is vital for the development of the mind, body, and soul. Architects have a special responsibility to help expand the ability of young persons to gain knowledge through the design of learning spaces that enhance this activity. It is my goal to “learn about the way we learn”, and then to use these findings to make an accurate proposition about how the built environment effects the way in which we develop mentally, socially, and physically.

These findings will then assist in the process of developing a new middle school for Lincoln Public Schools with the inspiration of constructing a built environment that maximizes the potential for learning. This proposed public school will be located in the new Fallbrook development in Lincoln, and will have to take into account the “self-sustaining” ideas of New Urbanism that the development is modeling itself after. Because of this idea of “self-sustaining”, this school will not only serve as a place for education, but will be a town center for the community as well. With this added challenge, I hope to provide a learning environment that not only will cater to the people within the development, but to others outside as well

naab criterion

[expanded proposal]

1. Speaking and Writing Skills

Ability to read, write, listen, and speak effectively

I will use and develop my abilities to clearly communicate with others through the research process, critiques, reviews. I will also use writing and speaking skills to communicate clearly to others outside of the design profession.

2. Critical Thinking Skills

Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test them against relevant criteria and standards

The ability to raise questions about learning environments and then to analyze and process those answers will be critical to understanding the selected topic. Also a number of previously learned critical thinking skills will have to be used in order to use other acquired information in the design.

3. Graphics Skills

Ability to use appropriate representational media, including freehand drawing and computer technology, to convey essential formal elements at each stage of the programming and design process

Being able to clearly communicate the main ideas of the design through graphic representation will enable persons related in the design field and those who are not to understand the scope of the project at each stage.



naab criterion

[expanded proposal]

4. Research Skills

Ability to gather, assess, record, and apply relevant information in architectural coursework

The research and application of the various types of learning spaces will be critical to the success of the designed learning environments.

5. Formal Ordering Systems

Understanding of the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition, and urban design

Throughout the thesis process, especially in the design process the fundamental perception and systems of order will be used to dictate the design of the building.

6. Fundamental Design Skills

Ability to use basic architectural principles in the design of buildings, interior spaces, and sites

I will address these skills throughout the design process of the learning environments.

11. Use of Precedents

Ability to incorporate relevant precedents into architecture and urban design projects

The research portion of this project will depend on the findings of precedents of previous learning environments. This use of these examples will be critical to the projects direction.



naab criterion

[expanded proposal]

12. Human Behavior

Understanding of the theories and methods of inquiry that seek to clarify the relationship between human behavior and the physical environment

Understanding human behavior and how a person learns is critical to the design of this middle school. Human behavior will single handedly decipher how certain spaces are designed and function.

13. Human Diversity

Understanding of the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity for the societal roles and responsibilities of architects

Certain types of students will need to be addressed in a manner that is conducive to their special needs. It is important for the design to accommodate all types of children since the school will be publicly funded by LPS.

14. Accessibility

Ability to design both site and building to accommodate individuals with varying physical abilities

Since this is a public building, ADA accessibility requirements will be met through the design of the building in order to accommodate properly such students in need.

15. Sustainable Design

Understanding of the principles of sustainability in making architecture and urban design decisions that conserve natural and built resources, including culturally important buildings and sites, and in the creation of healthful buildings and communities

The ideas of sustainable design should be factored into all designed environments. By incorporating these ideas, this school should be able to be made more self-sustaining; saving the people it serves money that can be used to better the education itself.

16 Program Preparations

Ability to prepare a comprehensive program for an architectural project, including assessment of client and user needs, a critical review of appropriate precedents, an inventory of space and equipment requirements, an analysis of site conditions, a review of the relevant laws and standards and assessment of their implication for the project, and a definition of site selection and design assessment criteria

Assessing client and user needs will be critical to the design of the program for this environment. Other criteria such as site location and precedents will be used in the development of the program for the design of the school.

17. Site Conditions

Ability to respond to natural and built site characteristics in the development of a program and the design of a project

The physical site conditions, as well as the conditions that the new urbanist development has, will greatly affect the design of the building. These conditions will be taken into effect especially in the design process.

naab criterion

[expanded proposal]

20. Life Safety

Understanding of the basic principles of life-safety systems with an emphasis on egress

Life safety is a key issue in any building but especially when the building is designed for the use of children. This issue will be addressed so the building meets all codes and include the required life safety design issues within the school.

23. Building Systems Integration

Ability to assess, select, and conceptually integrate structural systems, building envelope systems, environmental systems, life-safety systems, and building service systems into building design

Throughout the design process, these systems will have to be incorporated to function as a collaborative system in order to make the building efficient.

24. Building Materials and Assemblies

Understanding of the basic principles and appropriate application and performance of construction materials, products, components, and assemblies, including their environmental impact and reuse

In the design, materials and their assemblies will be incorporated to invoke the learning spaces and heighten the children's senses who use them.

28. Comprehensive Design

Ability to produce a comprehensive architectural project based on a building program and site that includes development of programmed spaces demonstrating an understanding of structural and environmental systems, building envelope systems, life-safety provisions, wall sections and building assemblies and the principles of sustainability

This criteria will be met by the final built project and presentation of this project. All required representation to express the concepts and design of the building will be made available at the commencement of the terminal project.

site description

[expanded proposal]

The site for the proposed middle school is located in the New Urbanist Fallbrook Development in Lincoln, Nebraska. This development is located in North Lincoln and will serve as a New Urbanist model for Lincoln. The area allotted in the development will also be accompanied by a YMCA and Community Park, strengthening this area even more as the town's community center.

The community will be accompanied by other various services that pertain to typical new urbanist developments. Proposed within the community will be a town center, business parks, a medical plaza, and various housing options. An extensive bike path and walking trail is looped throughout the development as well, and will have to be taken into account as well during the design process. There will also be a number of community green spaces throughout the area that will be taken into thought when laying out the school also.



site discription

[expanded proposal]



Fig. 1 – From:
<http://www.balanceisgood.com/>

site description

[expanded proposal]



Fig. 2 - From:
<http://www.balanceisgood.com/>

site discription

[expanded proposal]



methodology/approach

[expanded proposal]

The idea of this project will allow me to explore the different ways in which learning environments affect the learning process, with the idea of expanding and discovering new ways in which to achieve this. This first research phase will be vital to the success of the project in whole and will be approached in a very structured manner in order to keep on schedule and in the spirit of the project. It will consist of discovering many precedents, talking with architects who have experience in the field, discovering teaching styles through a series of interviews with teachers in practice, and also learning from the students who are currently in these environments.

The next phase of the semester will be to study how this school will impact the community with which it is a part of. I will study what it is to be a school within the ideas of new urbanism; how this school will affect the neighborhood cohesion; what kind of impact the identity of this school has on the Fallbrook community and other various issues that arise. This is a vital phase, because it will enable the design to coexist with its community seamlessly, providing a foundation for the area and its members.

The final phase of the project will employ the ideas revealed from the first and second phases and incorporate them into an actual design of a learning environment. This phase will be extremely important to the project because it will give a case of how the researched material can be successfully put into affect within an educational environment. By applying all of the methods and approaches towards design, I hope to create an environment that will go beyond conventional educational environments and set a new standard in how schools and communities coexist.

what is the typical learning environment?



how does this affect the way we learn?



what weight does design have on learning?



the learning environment
[expanded proposal]

what role does the school play within the community?



middle school

how can schools help to develop their community?



community involvement

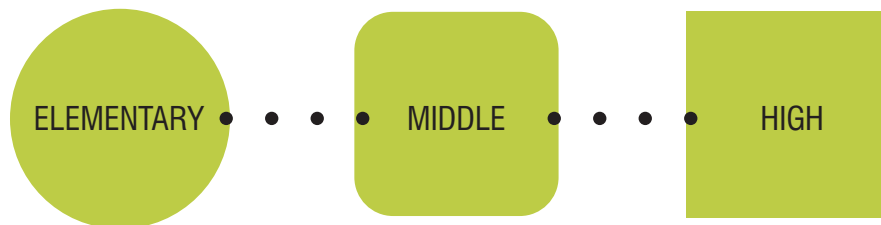
[expanded proposal]





The goal for the middle school is to create a place which first looks at the way in which we learn and then uses these findings in its design decisions in a way which will best maximize a students ability to learn not only in an **educational** sense, but **physically** and more importantly **socially**.

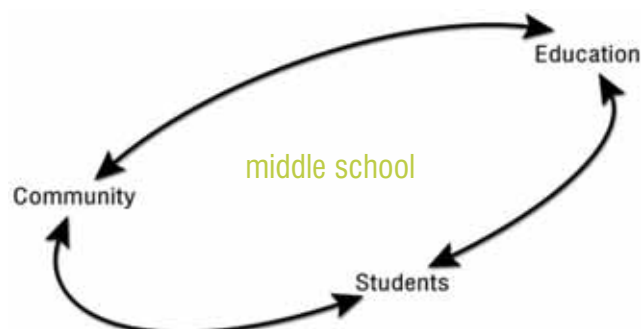
A Child's transition from a protected environment such as elementary setting to a final destination of an independent environment such as a primary school is a huge step in their lives. A setting that best accommodates this **transition** from these two vastly different situations is what I hope to accommodate with the design of my school.



The Second challenge will be to design a school that enhances the sense of **identity** within the **community** that it is located. Research of other public institutions will help to understand what goes into designing a public facility; especially one whose community is based on the New Urbanist ideas of self-sustainment and a heightened sense of community.

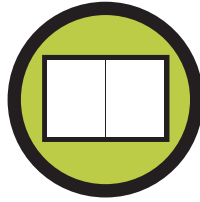


Creating a bond between the **school** and the **community** in which it serves by not only the use of shared spaces within the building, but also promoting the beneficial relationship between the students and the residents of the community.

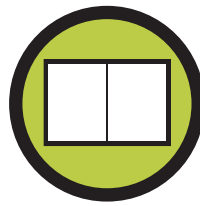


RESEARCH + ANALYSIS

- _programmatic report
- _program of spaces
- _site analysis
- _interviews
- _this we believe
- _precedents



research + analysis



This is the initial programmatic report that was completed at the beginning stages of the project. Some of the information has changed as more research was completed and the project developed further.

Purpose

The goal of this terminal project is to create a middle school facility for 6th, 7th, and 8th grade students that maximizes a child's ability to learn during this major physical and emotional transition period for the student. Another goal of this project will be to incorporate the surrounding community into the design of the school. By nature a school gives an identity to its community and is a place where one would want its community to grow around. The goal is to enhance this bond through the design of a space that serves its initial purpose as a place of learning for children; but then steps outside of its boundaries, strengthening the people of the community.

Main Issues

- 1) Creating a bond between the school and the community in which it serves by not only the use of shared spaces within the building, but also promoting the beneficial relationship between the students and the residents of the community.
- 2) How the project will nurture a child's ability to learn during this critical developmental period and cultivate the relationships between student and teacher. One of the major components of these relationships will be the use of space not only from a planning standpoint, but also looked at as a way to cultivate one's mind to better gain the knowledge one is trying to receive.
- 3) The third challenge will be to design a school that enhances the sense of identity within the community that it is located. Research of other public institutions will help to understand what goes into designing a public facility; especially one whose community is based on the New Urbanist ideas of self-sustainment and a heightened sense of community.

Criteria for Evaluation

This project should address the three main issues in depth and the resulting project should reflect these three main issues through its design. Throughout the entire semester; research, case studies, interviews, and other means of information gathering will help to understand the building type and its application better. The end result should be a fully developed building with all forms of research playing a role in determining the design throughout the process. Adequate execution of these criteria along with other criteria the may be added at a later date will prove that the project has fulfilled the necessary criteria for being given permission to move along to the next semester.

All representations should follow a similar format and be collated into a singular set for final documentation at the end of the project.



Schedule (Fall Semester)

Week 1-3 – Program Draft

- Programmatic Draft Due
- Survey/Questionnaire Developed

Week 4

- Research Development – Education Design Techniques
- Case studies/building tours (Scott & Lux Middle Schools)
- Meet with Scott Wieskamp – LPS Facilities Director
- Read “This we Believe”
- Site Analysis & Topographic Studies
- Programmatic Space Analysis

Week 5

- Research Development – Middle School spatial planning & teaching techniques
- Case studies – Cutting edge schools
- Meet with the teachers
- Meet with John Lefebvre – UNL College of Secondary Education Professor
- Align Guest critics for Week 8 Program Review & set time and location

Week 6

- Research Development – Community and Education
- Meet with the users – children
- Organize and analyze interview data sets
- Initial Programmatic Design/Space Planning

Week 7

- Research Development – New Urbanism Public Facilities
- Case studies – new urbanism/sub-urbanism public facilities
- Continue to organize and analyze interview data sets
- Continue Programmatic Design & prepare for Program Research Review

Week 8 – Program Research Review

- Presentation for guest critics
- Critical analysis of review and guest comments
- Line up Interim Review Critics & set up review time and location

Week 9

- Review of Programmatic Design and start of conceptual design schemes
- Continue research of design techniques in education
- Site studies and building location studies



Week 10 - 11

- Continue conceptual design – floor plan layouts, building elevations, sections, etc.
- Continued Site work layout and analysis

Week 12 – Interim Review

- Review
- Analyze and assess critic's comments

Week 13

- Continue Conceptual Design and extend on critics comments
- Eat Turkey and Relax for a little bit...

Week 14 – 15

- Conceptual Design work and Design Development
- Start to think of Presentation methods to best display to silent jury

Week 16

- Prepare presentation work for Faculty Silent Review

Week 17 – Faculty Presentation

- Silent Jury – Faculty Review

Project Issues

Audibility

- Good learning environments allow for the student to hear the teacher and fellow students; the classrooms should accommodate tolerable audible levels for both full lecture teaching and also small breakout groups
- Large public spaces such as Cafeteria, Gymnasiums, and Performance Auditoriums need to deaden unwanted noise

Solutions:

- Use of sound deadening materials such as composite flooring and fabric walls
- Basic geometry and layout of the spaces
- Use of more passive systems within the building will remove unwanted noise and eliminate unneeded distractions



Circulation

- All children must be able to move throughout all parts of the building with ease; Universal Design
- Design for circulation spaces within each “school within a school”; these can also serve as a dual purpose of corridor and group meeting space
- Allow circulation spaces that act as main “street” between smaller schools within the school
- Vehicles need to be efficiently directed around site at certain times of the day
- Allow for easy student access to main entrance of building and monitoring and funneling of out side visitors towards this same entrance
- Incorporate bike paths and skate paths into site layout and design

Solutions:

- Group common areas together to dismiss the need to travel through unneeded spaces and disrupt others
- Develop and incorporate gradual ramps where level changes are needed
- Create different entrances for buses, staff, and parents in order to ease flow of traffic at peak periods (morning and evening)
- Place driveways in areas away from heavy pedestrian use to minimize danger
- Create an inviting notable entrance that can easily be found by visitors
- Entrance should be located next to administration for easy check-in because of security purposes
- Take existing planned paths and incorporate them when accessing the site
- Create entrances away from Alvo Road which is a main through road in the development

Comfort

- Create a productive, physically relaxed environment that enhances a child’s ability to learn
- Use different design techniques to allow the physical building systems to become more efficient and maintain a level of comfort that is most conducive to learning

Solutions:

- Use lighting, colors, materials, space layout, etc. in order to enhance the experience and heighten the child’s senses
- Maximize orientation to the south to allow for solar heat gain during winter months to reduce heating costs for the school
- Allow for westerly breezes to be collected during spring and fall to naturally ventilate the used learning spaces which will help to efficiently maximize comfortability for the students

Durability

- Create spaces that will withstand multiple kinds of uses
- Building must endure over the years in the physical aspect of usability, but also the ability of it to serve as an icon for future generations
- Allow for heavy traffic areas to be easily maintained
- Site layout and planning decisions made will maximize the landscape potentials
- Use materials to reduce vandalism and maintenance to the building and its components

Solutions:

- Use of materials that can serve two or more purposes in a room
- Use hard surfaces or easily replaceable systems in areas of high traffic such as com



mons area, corridors, entrances, etc.

- Design the layout of the site that allows for easy/minimal maintenance by placement of sidewalks, plant specifications, selection of exterior materials, etc.

Energy Efficiency

- Maximize efficiency of building systems to reduce cost to school and community

Solutions:

- Orientation of building and placement of programmed spaces

- Use of new technology to create an alternative energy source

- Maximize natural day lighting to not only reduce energy cost, but also to enhance the child's ability to learn

Flexibility

- Allow certain spaces to become multipurpose spaces

- Design spaces so they are able to adapt to what the use is

- Allow for spaces to be expanded, contracted, or divided up

Interaction

- Design a building where the interaction between community and students can be either separate or shared

- Maximize spaces for group interaction/participation to help the child grow socially

- Maximize interaction between student and teacher through the design of the spaces

Privacy

- Design spaces that are private from the public spaces in order to allow for children to focus and not be distracted when necessary

- Create a private space for staff to work

- Permit spaces for intimate focused learning (one on one work)

Safety

- Reduce areas such as high landings and slick steps to minimize accidents

- Allow teachers to easily keep watch of the kids in any area of the school

- Reduce number of long corridors and entrances to minimize unwanted guests

Security

- Design entrance locations to minimize unwanted and unauthorized access to the building

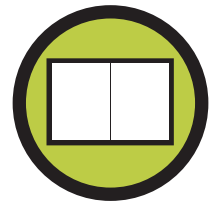
- Place administration offices near or next to main entrance, or even allow visitor main entrance through administration area

- Create spaces that allow for multi-use by school and community while still creating a secure boundary for the school and its students

Visibility

- Allow for the teachers to keep track of students for the majority of the time

- Design spaces where a limited number of teachers can keep track of a large number of students at one time



Site Conditions

- Sewer easement and wetland easement along west side of site divides the west corner of the site from the rest of the site
- No relative wind protection from northwest will effect placement of exterior spaces, placement of the main entrance, use of natural ventilation, etc.
- Dense single family housing to the south and west of site will help to slow traffic along Penrose Drive to allow for entrance possibilities
- Large gradual slope will allow for stepping into the hill to allow for the horizontal nature of middle schools
- Minimal noise from existing highway to the west and is also buffered even more by vegetation along main drainage area of development
- Maximize view potential looking south towards downtown cityscape of Lincoln

Traffic

- High traffic road along north side of site (Alvo Road) will not be a good place for main entrance into the site
- Entrances for buses, staff, and parents/visitors need to be accounted for along the site boundaries
- Allow for the easy access of pedestrians and bicyclists to the site and locate bike racks for those who need it near entrance area
- Keep main entrances or crosswalks away from the round-a-bouts in order to reduce risk to pedestrians and traffic “backup”

Building Information

Activity

- Place of learning academically and socially
- Place for community to gather and grow

Age Group

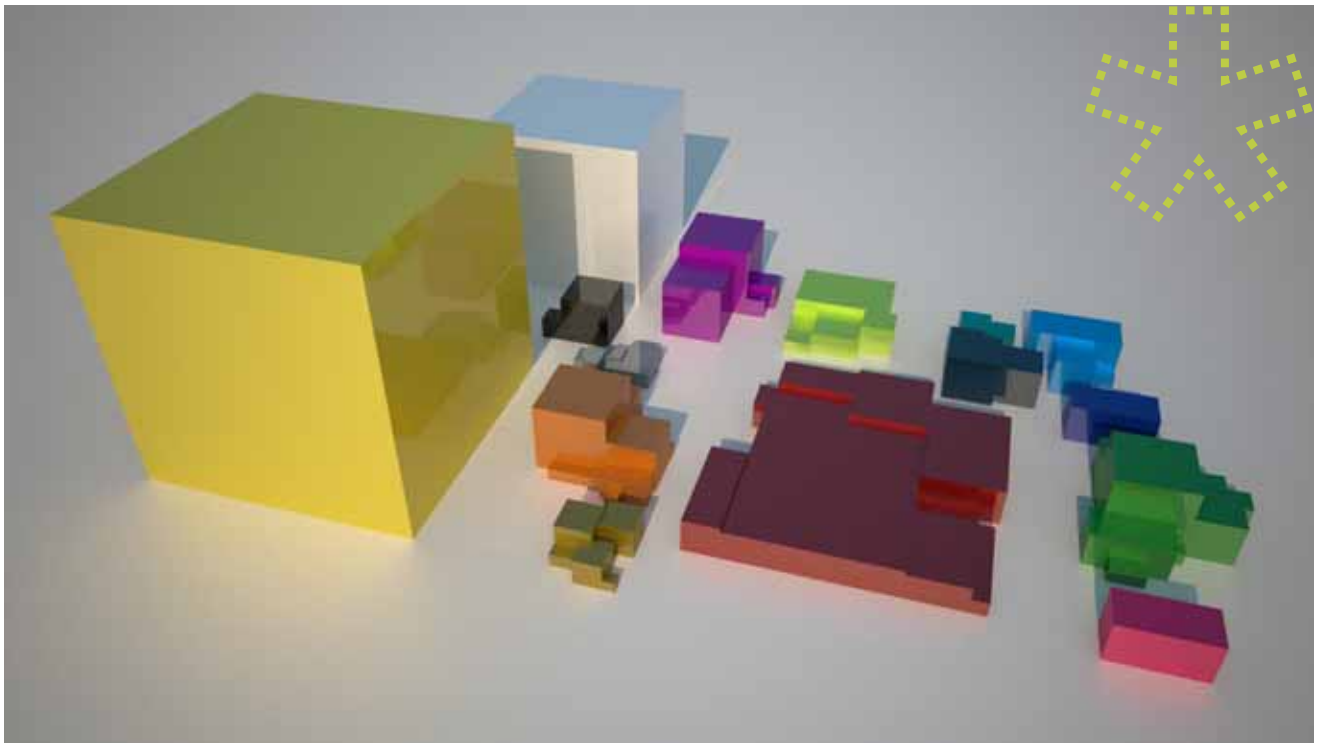
- 6th, 7th, and 8th graders
- Community members for shared spaces to be used by all

Numbers of Occupants

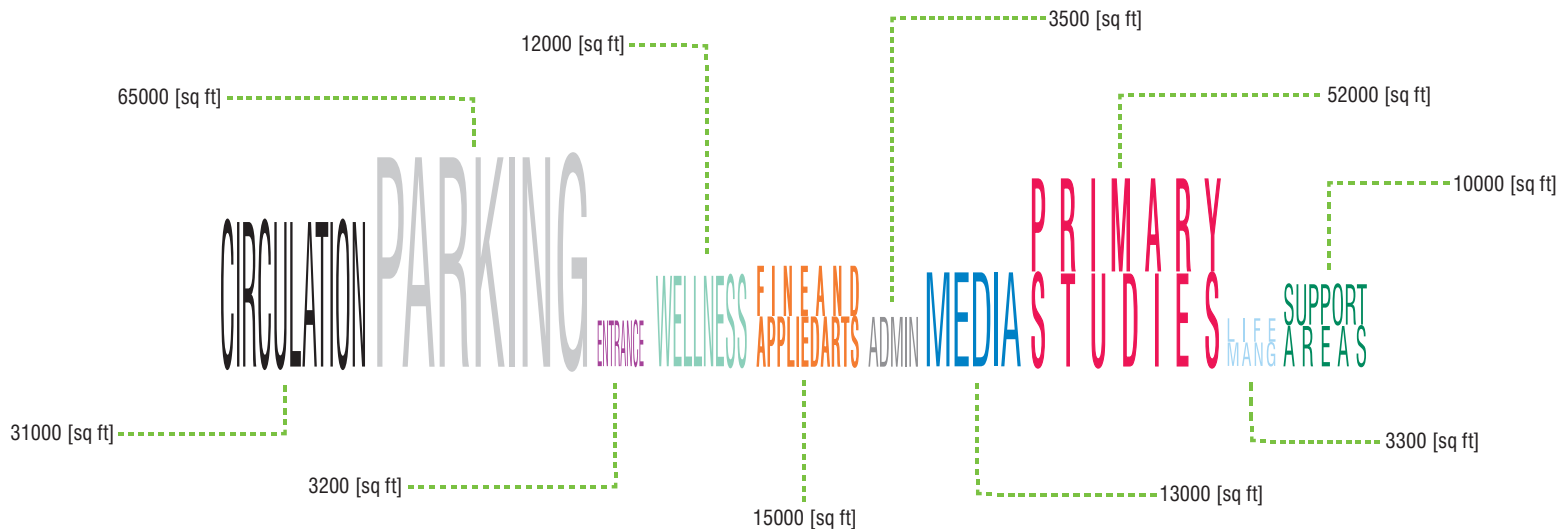
- 750 students -> potential growth to 900 students
- Potential large group community gatherings of 100-300 people

Program of Spaces

- Overall Building Footprint: 160,000 – 165,000 square feet



PROGRAM OF SPACES



Detailed Breakdown of Programmed Spaces

[circulation] = 31000

[parking] = 65000

[entrance] = 3200

500	_vestibule
2500	_lobby
100	_elevator
50	_elevator equip.

[wellness] = 12000

4200	_youth gym
1500	_gym storage
1000	_multi-exercise
50	_exercise storage
500	_cardio
75	_cardio storage
150	_PE office
2x1000	_health instruction
1000	_boys showers
1000	_girls showers
2x200	_staff showers

[fine & applied arts] = 15000

[art]	
1350	_instruction
300	_storage
100	_kiln
100	_mud room

[music]

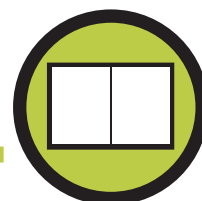
2200	_instruction
1500	_vocal music
1000	_multi-use room
3x40	_practice room
200	_music storage

[instructional tech]

1300	_machine lab
2x1750	_instruction
160	_tool room
120	_finish room

[administration] = 3500

375	_reception
4x250	_clerical support
250	_work room
250	_conference
250	_parent room
2x200	_office(a)
2x150	_office(b)
600	_staff lounge
500	_health office
150	_personal care



[media] = 13000

[secondary space]

2x150 _work room
1000 _keyboarding
200 _keyboarding storage
825 _business
600 _planning center
100 _planning center conf.

6x600 _team planning
6x200 _planning storage
12x100 _planning conference
6x1200 _team common

[life management] = 3300

2x1400 _lab
275 _laundry
300 _storage

[main space]

4350 _primary space
1900 _support space
2x1000 _computer labs
4x125 _interate spaces
200 _speech pathologist
400 _OT/PT
3x150 _counseling

[support areas] = 10000

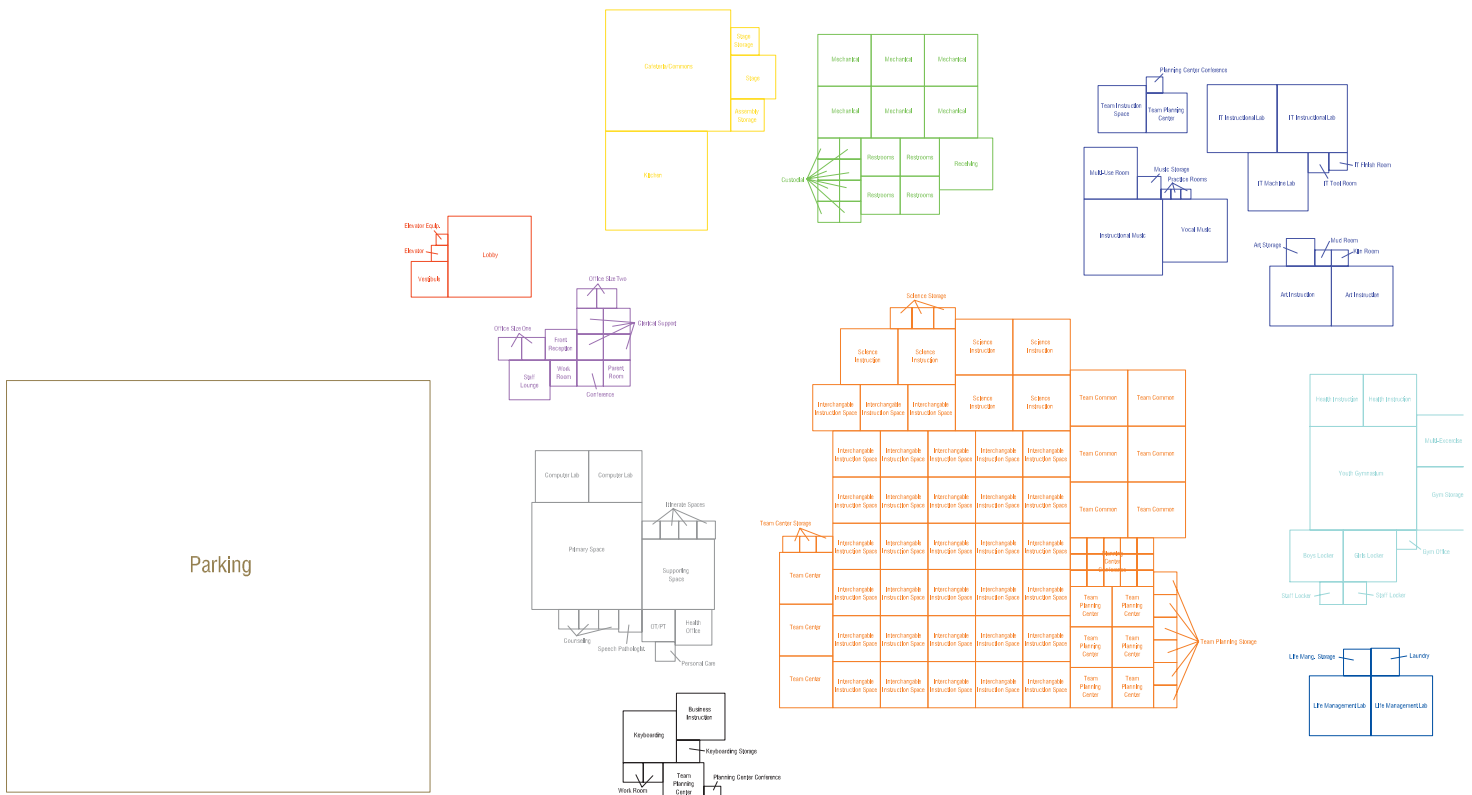
5600 _cafeteria/commons
400 _assembly storage
750 _stage
300 _stage storage
3680 _kitchen

[primary space] = 52000

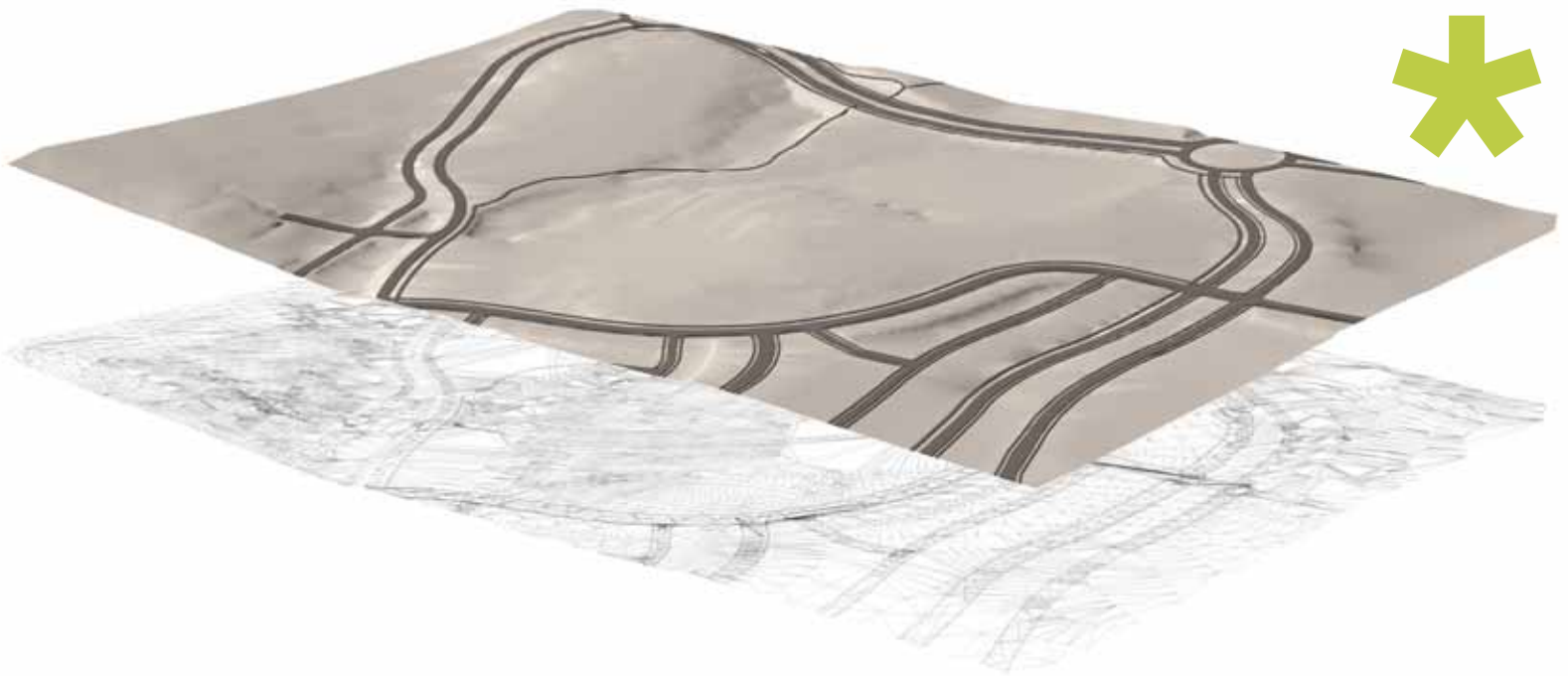
33x825 _instruction
6x1200 _science instruction
3x170 _science storage
3x1000 _team center
3x100 _team storage

[misc] = 11000

8x175 _custodial
4x550 _restrooms
1000 _receiving
6x1000 _mechanical



Programmed Space Layout Diagram

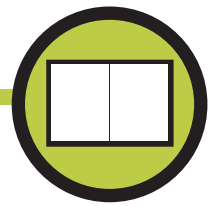




Site Location

- _ northwest lincoln, nebraska
- _ fallbrook “new urbanist” development
- _ joint YMCA and school within the 30.5 acre site
- _ total development consists of 1500 homes + 700 k of commercial + retail





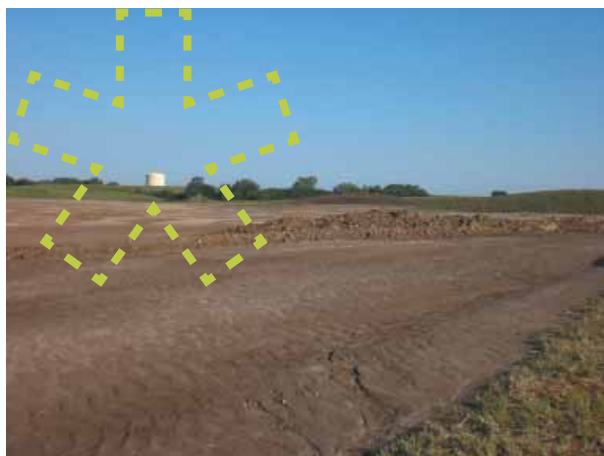
- *multi-family housing*
- *single family housing*
- *townhouses*
- *business parks*
- *medical plaza*
- *town center*
- *bike and walking trails*
- *neighborhood parks*
- *middle school*





Site Images







Site Adjacency Analysis

_single family housing surrounds most of the site on 3 sides

_multifamily housing occupies the northwest corner of the area

_future residential and natural areas will flank the southwest

_neighborhood park system to the southeast will enable opportunities to tie into site some greenspace opportunities



Circulation Analysis

_ Alvo Road to the north will serve as a main corridor through the development, making it one of the higher traffic streets around the perimeter of the site

_ Pedestrian traffic should be minimal near the two round-a-bouts as they are extremely dangerous areas for pedestrians

_ Narrow streets to the south of the site along the single family housing areas will slow traffic and provide optimal crosswalk opportunities for pedestrians

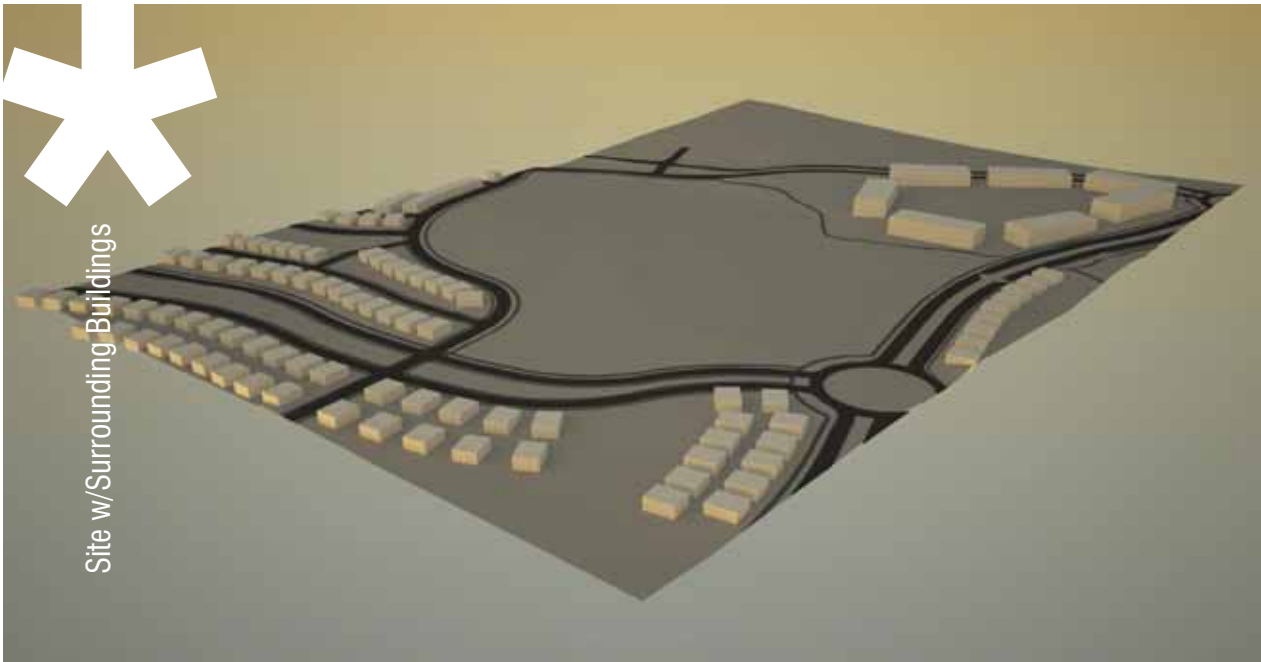
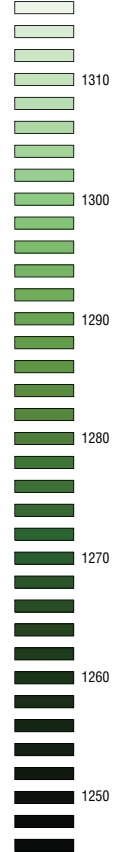
_ Safe crosswalk opportunities can also arise near midpoints between intersections of heavy traffic roads



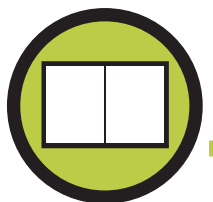
Site Restraints

_ Sewer/runoff easement and bike trail divide west corner of property line from the rest of the site

_ Minimal wind protection from north/northwest direction will effect entrance locations, potential outdoor areas, and building orientation



Site w/Surrounding Buildings



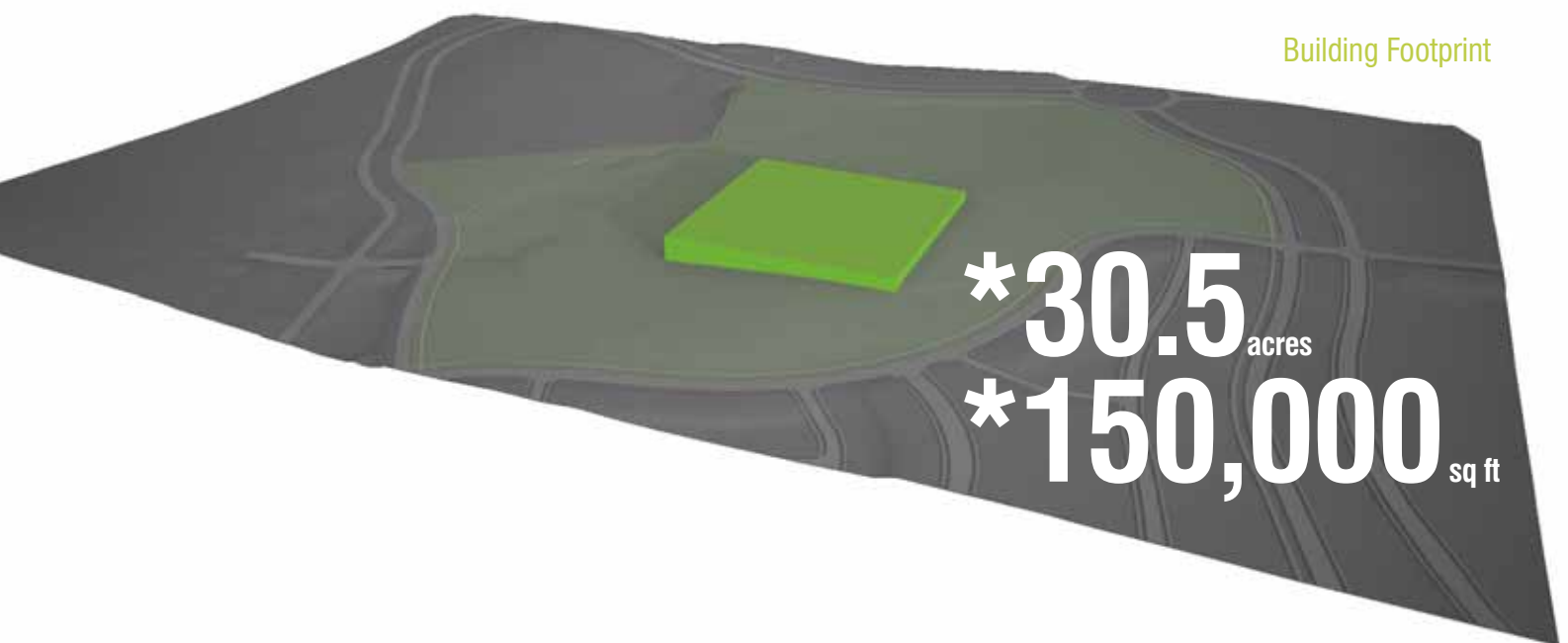
Topography Analysis

_The site has a rather significant slope running from high points on the northeast corner down to the southwest sewer/runoff easement

_Exposed areas to the north and east will affect design decisions dealing with ventilation, daylighting, and other passive systems

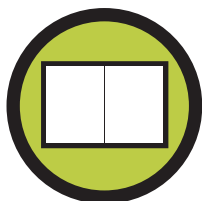
_Steep street along southeast side of the property may cause problems during winter months and should be addressed by the placement of minimal entrances and exits along that road

_Sloping site will affect the overall design of the school and how it is set into the site, allows for the horizontal nature of





Existing Site Model





At the start of the year I meet with two people to talk about aspects of the school and school design in general. The first person I talked with was Dan Spirey of BVH Architects, who is designing the actual school that is being built on the site. I also got a chance to meet with Dennis Van Horn, who is the LPS Associate Superintendent of Business Affairs . And I talked with Bill Bucher, who is the Principle at LUX Middle School in Lincoln, Nebraska. The final person I talked with was Scott Wieskamp who is the Director of Facilities and Maintenance. The following is a questionnaire developed for these meetings and meeting notes from Dan Spiry and Dennis Van Horn.

- (1) What is your official position within the school setting?
- (2) The middle school is a vital transitional period for the attending age group; if you had your preference, should there to be a divide between each grade level, or could there be more integration between the grade-levels?
- (3) My research has shown that the social growth of a child is most critical and apparent when they are transitioning into middle school. What spaces has the school developed to meet the demand of the student's social development and growth?
- (4) Has the school looked into the development of interdisciplinary study spaces? If so, do the spaces allow for flexibility within each teachers curriculum? If so, what works and what doesn't?
- (5) Numerous studies have shown that day light has an effect on a person's ability to learn; do you believe in this and if so what effect does natural day light have on students while they're in the classroom setting of your school?
- (6) Technology has changed the way teachers teach and children learn; do you see a need for expanded technology support in the classrooms...in the school as a whole as well?
- (7) Team/group learning is a growing trend in the educational field today; do you see a need for this in a middle school setting? Has your school provided any "school within a school" learning spaces that would allow for this activity to occur?
- (8) What community activities that you know of take place within the school property? If there are activities at what time do they usually take place? Do you see a security issue with any of these outside groups using the facilities?
- (9) Are there any outside opportunities for outdoor learning labs within the immediate grounds? If so do you believe that they are utilized to the fullest?
- (10) Is there a significant tie between the core classes (science, math, english, social studies) and the fine and applied arts (art, instrumental music, vocal music, industrial tech., etc...)?
- (11) If you could change one thing about the school, what would that item be and why?
- (12) How would you rate the comfort of the environment in your school?
(scale of 1-10; 1-unbearable/10-perfect)
- (13) How would you rate the natural lighting in the school spaces?
(scale of 1-10; 1-unbearable/10-perfect)
- (14) How would you rate the circulation patterns throughout your school?
(scale of 1-10; 1-obtrusive/10-perfect)
- (15) How efficient are the acoustics within the classrooms...common spaces?
(scale of 1-10; 1-inaudible/10-perfect)



Meeting with Dan Spiry – BVH Architects

9.4.07

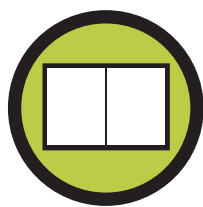
- Drop off time and pick up time for students critical
- Split entrances for split uses
- Alvo road – more public road
- School – 750 students – grow to 900 potentially
 - Lux and Scott middle schools program are about the same
 - made for 825 students
- separate parent /staff/bus parking
- separate entrances for grades
- Security is a big issue
- will be a satellite kitchen preparing meals for other schools
- split up the grades into their own “pods”
- every grade has their own guidance counselor
- secure entrances
- 167,000 sq. ft. for the school
- 50,000 sq. ft. for the YMCA
- Department style teaching or split up by grade
- Interdisciplinary work is the idea behind splitting up school by grade
 - children are able to make connections between subjects

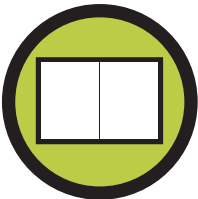


Meeting with Dennis Van Horn – LPS Facilities

9.4.07

- Security Issues
- Scott and Lux Middle School
 - Multi-Story Site
 - “Mall” main hallway crated corridor
 - Lux principle -> Bill Buker
- use light for a welcoming environment
- teachers have planning office/centers
- media center -> hub->equal access
- Public/Private use
- well rounded experience -> let kids explore
- orienting -> lead away from team sports
- no bleachers -> downplay competitive sports
- Fitness area -> focused first
- two anchors on each end of school
- Shared facilities -> public/private
- community schools -> uses
 - churches start in schools
 - rent out space during off hours
- Bike paths/trails
- outdoor learning labs
- community <-> school
- need for school...
 - Purchased in 2000
 - Original students to be elementary
- Steve Hendrickson – city county planning
- Scott Weiskamp – 436-1072 – LPS Facilities director – will have program for the school
- Dr. All Hall – Middle School teacher program director
 - Jr. High <-> middle school
 - “We Believe” document





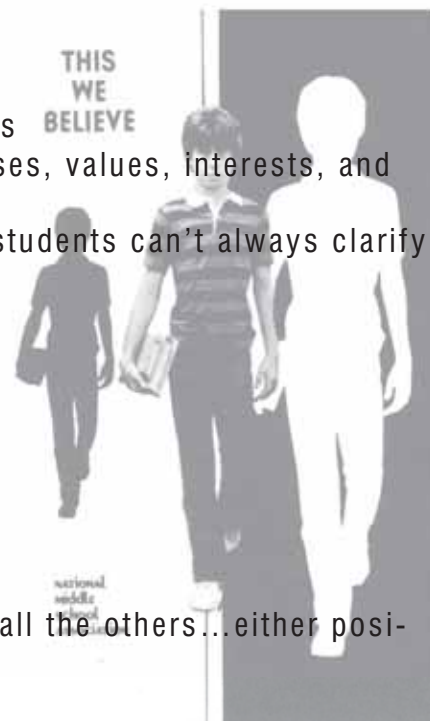
This We Believe:

- _transescents for children to young adults
- _middle school is the educational response to the needs and characteristics of transescents
- _also deals with the full range of intellectual and developmental needs

Educational Elements to a Middle School:

- (1) Educators knowledgeable about and committed to transescents
 - _full understanding of the students' human growth and development
 - _higher development of peer group communication
- (2) A balanced curriculum based on Transescent needs
 - _curriculum will be largely based on student needs
 - _balance academic needs and other human development needs
 - _do not ignore non-cognitive objectives
 - _climate for learning is just as important as the content itself
- (3) A range of organizational arrangements
 - _organization should not be elementary or high school
 - _“who needs what math” instead of “when will we teach math”
 - _middle school should employ varied organizational arrangements
- (4) Varied instructional strategies
 - _achievement does not proceed uniformly
 - _small group methods provide opportunities for peer interaction
 - _transescents are curious, creative, and the like to experiment
 - _learning can and does take place without a teacher present
- (5) A full exploratory program
 - _inclusion of brief but intensive interest-based activities
 - _keep their attention focused
- (6) Comprehensive progress for students
 - _body development, social acceptance, conflict with adult norms, and expectations
 - _desire to try new ideas and beliefs and desire to experiment
- (7) Continuous progress for students
 - _students progress at different rates
- (8) Evaluation procedures compatible with nature of transcents
 - _help student discover and understand their strengths, weaknesses, values, interests, and personality
 - _educators should communicate directly with parents, because students can't always clarify and explain their progress in school
- (9) Cooperative planning
 - _interdisciplinary team planning
 - _teams also need to work with fine and practical arts teams
- (10) Positive school climate
 - _overall climate of the school itself is itself a “teacher”
 - _should show evidence of caring, warmth, and respect
 - _become conscious of adult models

*The school is a social organism, and each element impacts on all the others...either positively or negatively

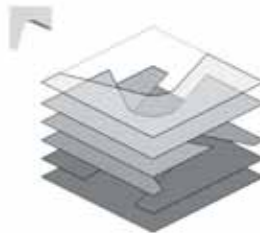
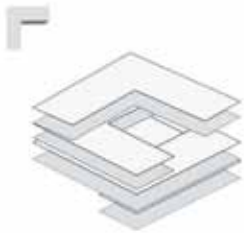




3Xn

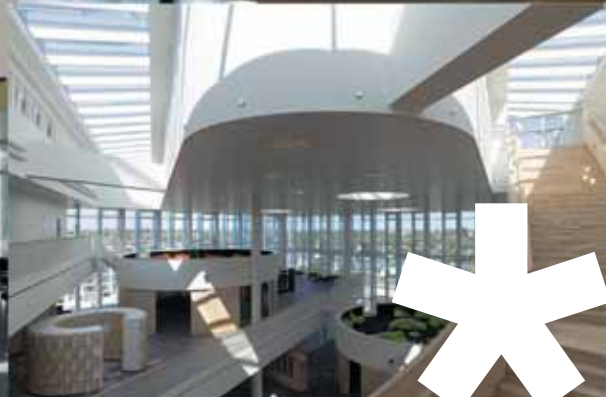


Orestad College_Copenhagen, Denmark



9-12

Orestad college was built in Copenhagen, Denmark to battle the growing need for more study spaces in the town center. A growing number of 16-19 year olds has allowed the city to develop this center as not only a place of learning, but serving as a city center for the whole town. This school focused on a particular field of education in the field of science, with each level serving as study rooms for the four specializations served by the school. Each floor is linked visually and physically around an open core in order to provide optimal opportunities for interdisciplinary learning. The building is also built around a linear grid system allowing for flexibility in spaces and uses of those spaces.





**[Orestad College – 3XN]
Copenhagen, Denmark**

- _Designed to strengthen and renew the students professional capabilities
- _Laptops are given to all school and the entire school is wireless
- _Focused curriculum on science, social science, and human science
- _Profile of media, communication, and culture



**[Sidwell Friends School – Kieran Timberlake]
Washington D.C.**

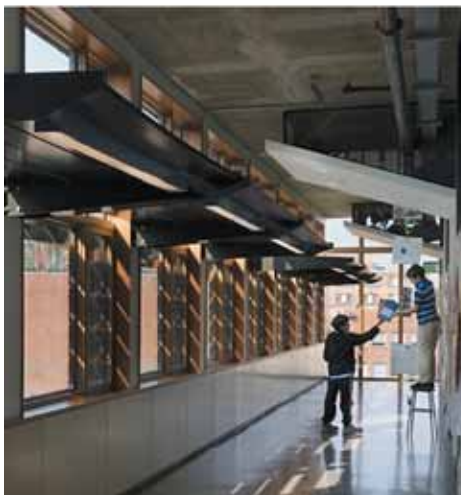
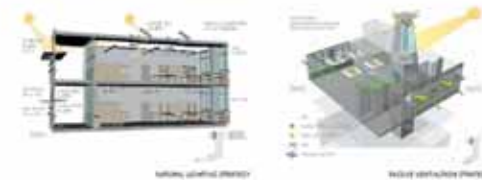
- _Renovation of a fifty year old facility
- _Transformed the school into an exterior and interior teaching landscape
- _Seeking a LEED Platinum rating
- _The building and its surrounding landscape will co-exist within each other, demonstrating a broader network of systems to its students
- _Teaches human systems...our inter-relationships with resources

KIERAN TIMBERLAKE ASSOCIATES LLP



Sidwell Friends School_Washington, D.C.

6-8



Sidwell Friends School is a major renovation project to transform an awkwardly sited and undersized facility into and exterior and interior teaching landscape. The project includes various sustainable techniques and is undergoing LEED Platinum Certification to display its high performance building design and operations. The building takes into account "Human-Scapes" which are meant to demonstrate our inter-relationships with resources and teach the student through the building technology of the impact we have on the built environment. The school was designed with almost every aspect of sustainable design included: Land and Water, Air and Energy, Materials, Collecting Water, Recycling Water, Responding to Sunlight, Passive Energy Systems, Photovoltaic's, Sustainable Materials, etc.



Alpine Prototype Middle School_Alpine, Utah



7-9



The Alpine Prototype Middle School is one of two similar design solutions for a fast growing region in Utah. The building provides support to an integrated curriculum, encourages collaboration and group work, facilitates curriculum flexibility for teachers, create a community within the school, pique student interests through the architecture of the structure itself. The classrooms are arranged into three grade-level specific, double-loaded learning centers that surround a central collaboration/learning space. Uses the "school within a school" concept to help break down the numbers of students down to manageable learning families.



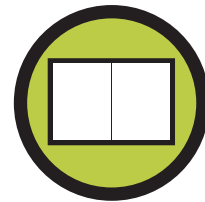
**[Alpine Prototype School – VCBO Architecture, LLC]
Alpine, Utah**

- _arrangement of classrooms into three grade-level specific, doubled lobed academic learning centers, surrounding a lively central collaboration space
- _support an integrated curriculum
- _encourage collaboration, accommodate teaming and collaboration across discipline
- _facilitate curriculum flexibility of spaces
- _enhance environmental educational space with natural day lighting, great acoustics, and year round environment

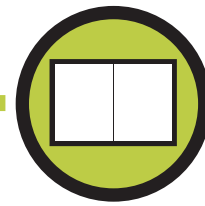


**[Kingsdale School, Music + Sports- drMM]
Dulwich, South East London**

- _ Multi-Use facility of sports and music
- _ Building system made entirely of prefabricated solid timber
- _ Material offers structure and internal finish as one process, only requiring woodfibre insulation and weatherproof cladding







**[Silver Lake Regional Middle School – Drummy Rosane Anerson, Inc]
Kingston, Massachusetts**

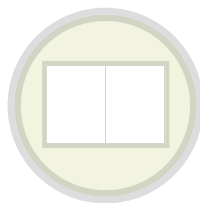
_Produce a learning environment that would facilitate team teaching and help students to create their own identity

_each cluster of classes includes English, Social Studies, World Language, Special Education, Math, and Science

_Topography influenced the design greatly with a split level school design approach

_Organized into smaller communities or teams for learning

CONCEPTUAL DESIGN
_initial ideas + concepts
_adjacency studies
_initial schemes
_december review



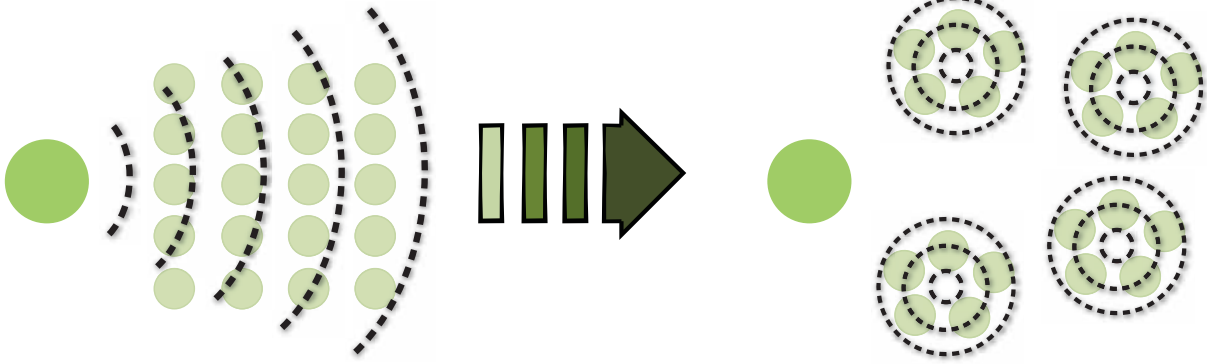
conceptual design



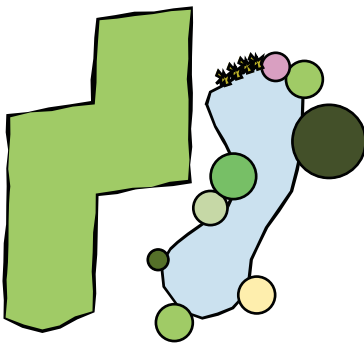


Why do we need classrooms?

_lecture style teaching is being replaced by small group discussion and project based curricula

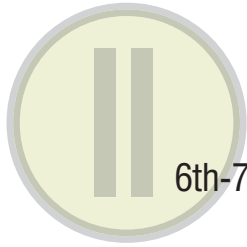


_new technology will allow the classroom to be anywhere, anytime...

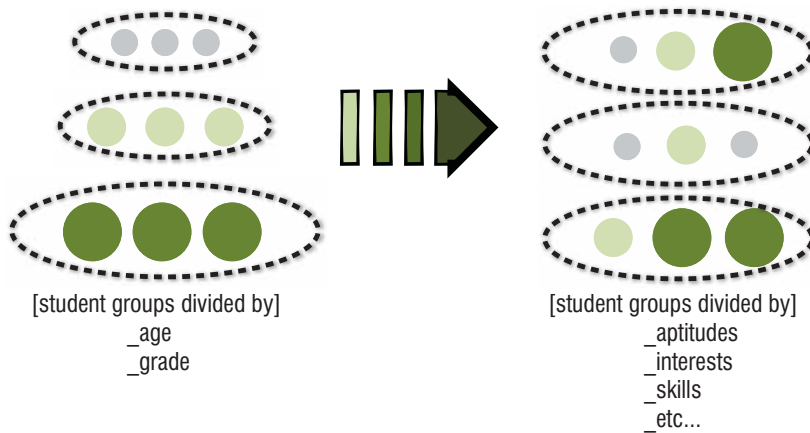


_ "classrooms" can take place at alternative locations for "hands on" experience, such as outdoor learning labs...

*new ideas vs



6th-7th-8th...Is there a need for a division of grades?

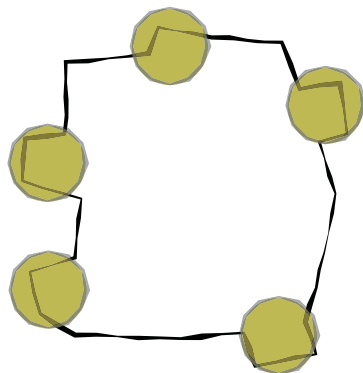


_in the workforce, do all of the 34 year olds work together...do all of the 47 year olds work together...
can school mimic this more, or take from it better ideas of teaching...

_give the students more responsibility...something they will care for
_every student has their own work space, "home base", to
work on projects and assignments



Provide breakout spaces to reduce structure of standard schools...



_provide places to think and relax...or places for groups to gather

old standards

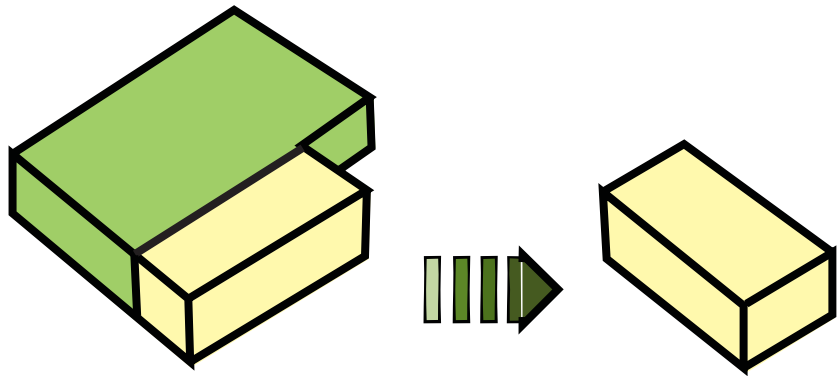


Keys to successful community integration...

- _integrate community involvement
- _school will help to define the communities identity
- _shared spaces for community use

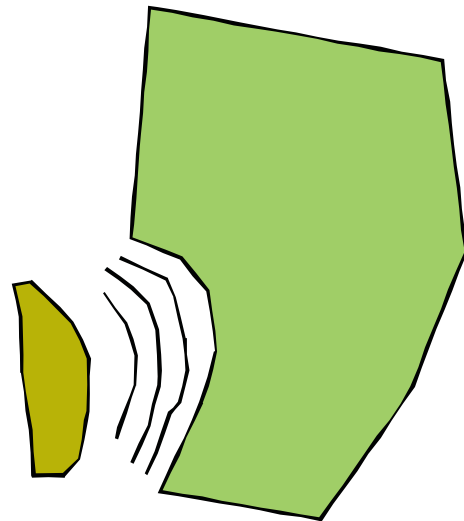
Library and Media Center

- _allows community access to...
- _technology
- _resources
- _meeting spaces
- _also use spaces to show public what school is doing
- _spaces becomes shared, yet seperate entity



Outdoor Spaces

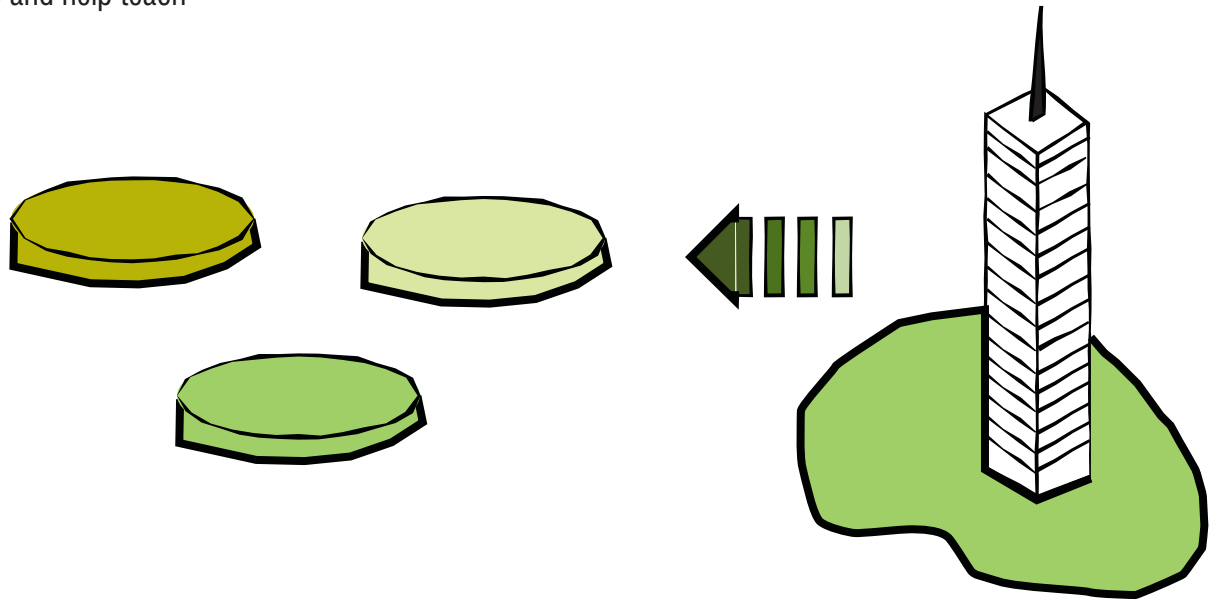
- _provide spaces such as an outdoor amppitheater for school and public use
- _also provide other spaces that can be accessed without access to inside school



*middle school

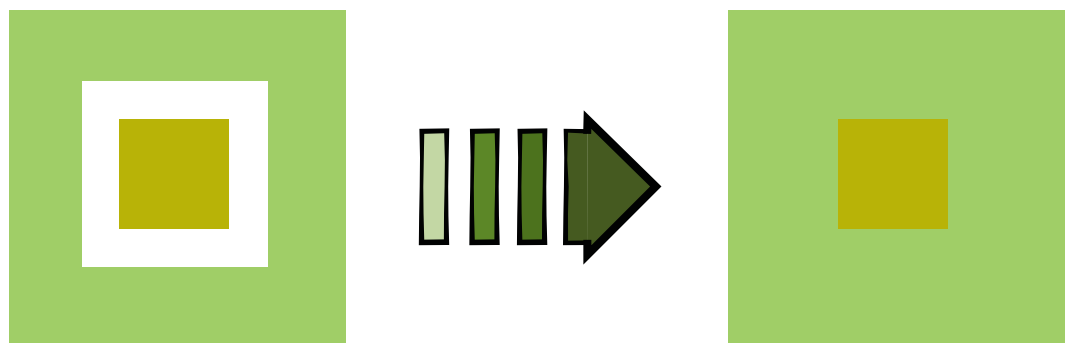
Community Involvement

_provide “incubator” spaces for outside business people to come and help teach



Community Incorporation

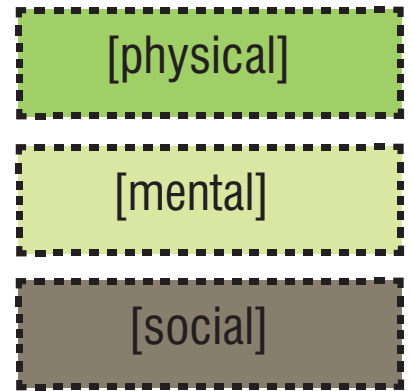
_blend the barriers between the community and school
_allows school to become part of the community; not a separate entity



l + community

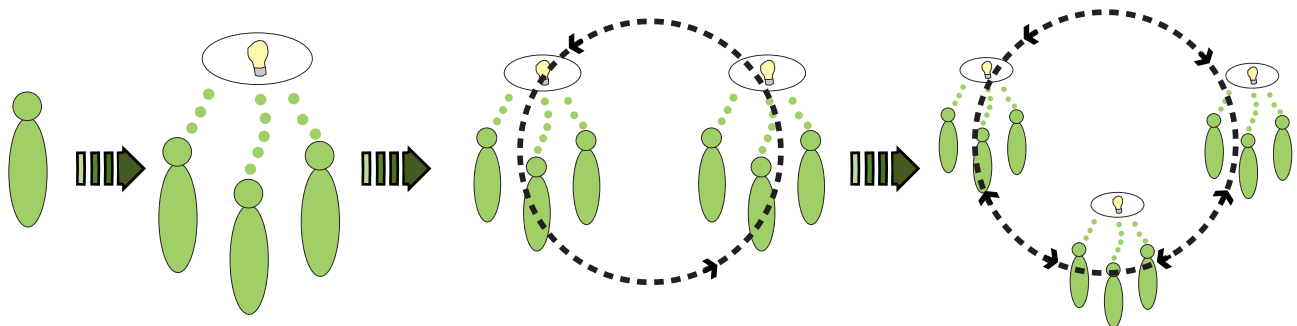


Three keys will help the school meet the demands of the student and help that person become a well-rounded individual



Group Learning

- _ involves social interaction
- _ collaboration brings about new ways of thinking
- _ teamwork is how "real" world works and prepares the student for the future
- _ critical thinking taught
- _ integrate with technology



*school + stud



Creative Thinking Subjects

- _art
- _band
- _vocal
- _design
- _industrial tech
- _trade skills

core classes

english
e

social studies
ss

science
s

math
m

elective classes

computers
c

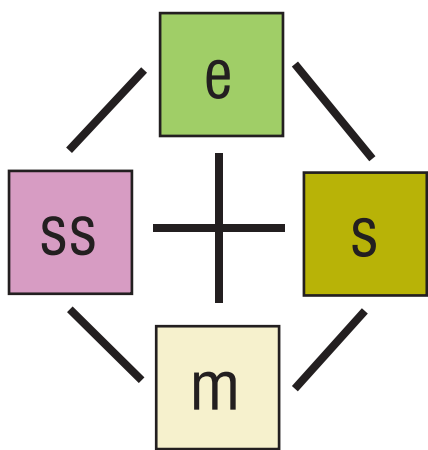
industrial tech
it

arts
a

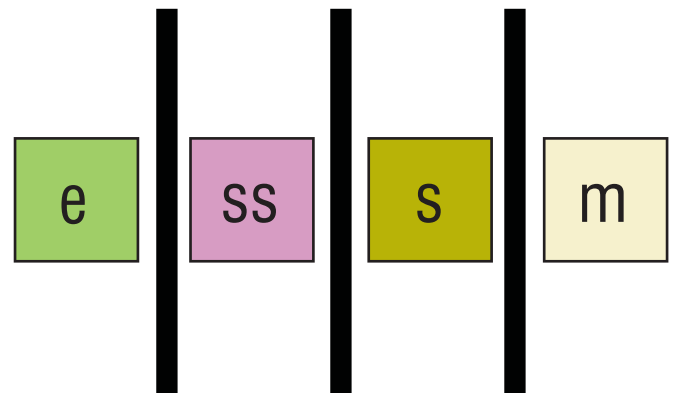
music
m



Standardized testing forces teachers to teach subject matter,
causing interdisciplinary learning to fail

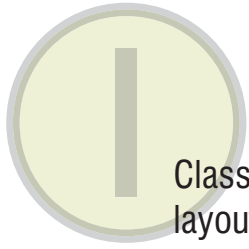


interdisciplinary

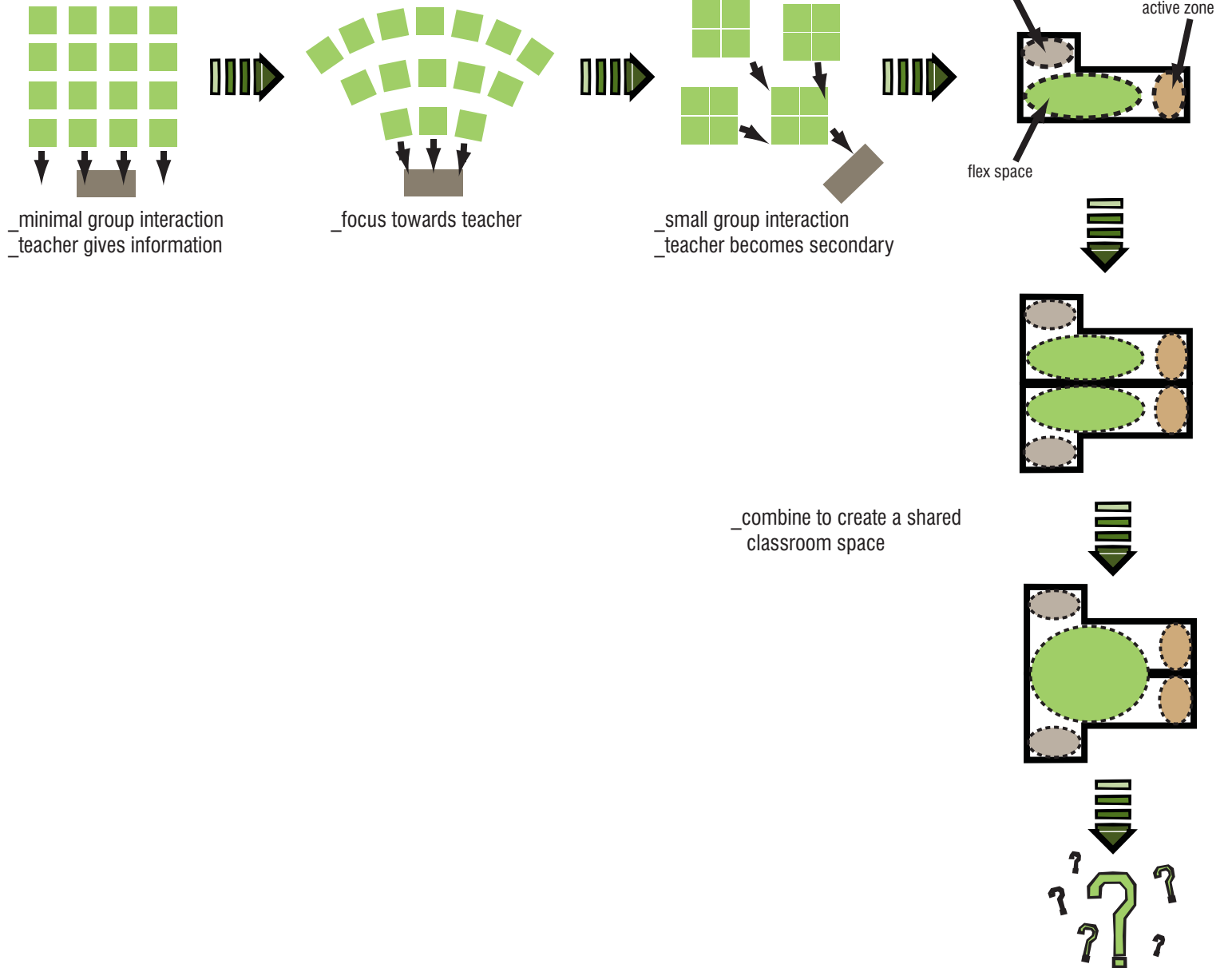


single subject

ent development



Classroom Ideas and evolution of spaces and classroom layouts



*classroom layout



COMMUNITY SCHEME

[shared spaces by community and school]

- _gymnasium
- _media center - “global learning center”
- _art rooms, industrial tech, music
- _classrooms for small group meetings
- _larger meeting areas for community gatherings

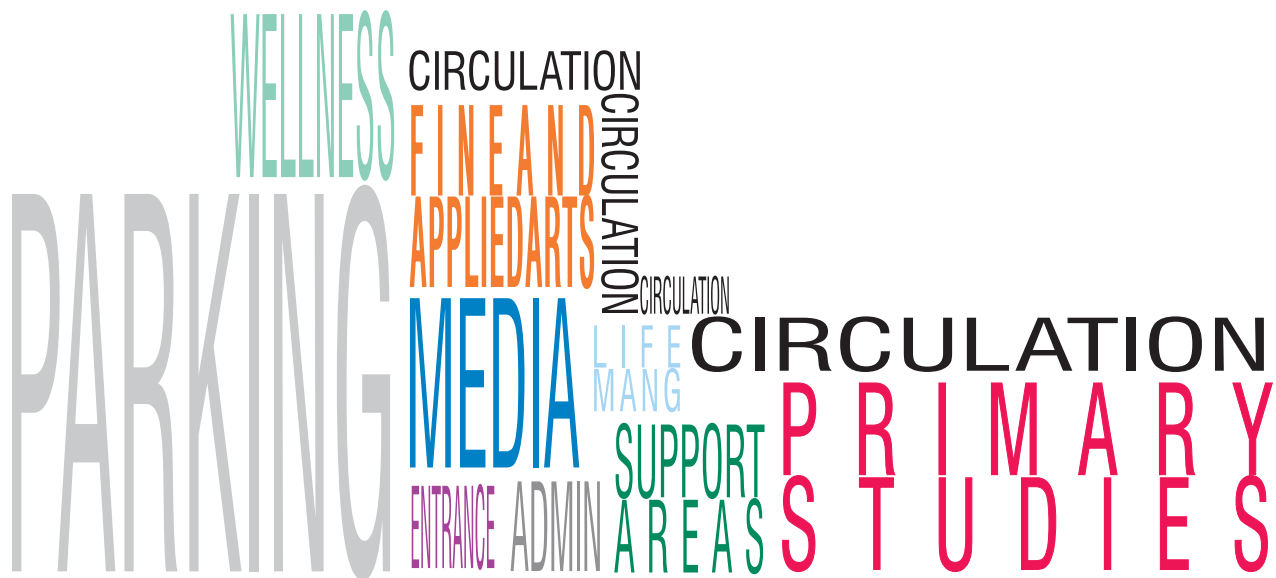
[accessible individually but still connected for school use]

[defines the community in which it lies]

[enhances community involvement in schools]

- _allows for better opportunities for outside learning
- _professionals in “real world applications” can share and teach experiences

[allow for easy access to and from school by multiple modes of transportation]





STUDENT DEVELOPMENT SCHEME

[middle school age is the most rapid and apparent growth time in a persons life]

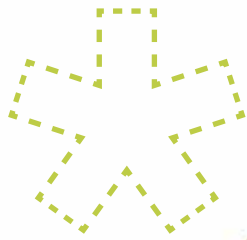
- _socially
- _physically
- _mentally

[central meeting spaces and gathering spaces become dominant over others]

[classrooms intergrate and boundaries are broken]
_group learning opportunities

[provide equal spaces for student to grow and find thier niche]
_develop many spaces for interest based learning
_provide them with the tools needed to grow and be productive in society





[get rid of grade based teaching and switch to interest based]

_areas bleed into each other and feed off of each other

—have “required” curriculum, but can be taken at anytime within three years

[set up home studios where each kid has his/her own space]

_teaches responsibility

_allows student to study thier interests

[classroom spaces, circulation, and other areas blend together]

defies existing notion of structured classroom and allows for more critical thinking

_creativity is spawned from this, not regurgitation of facts

[technology is big key to success]

flexibility of classrooms hinge on use of technology to communicate

not hard to do, just thought of because it is not normal





CURRENT DAY SCHEME

[classes are split up by grade]

- _then split up into manageable teams within grades
- _then broken down into smaller groups from there

[mall corridors are used to promote interaction]

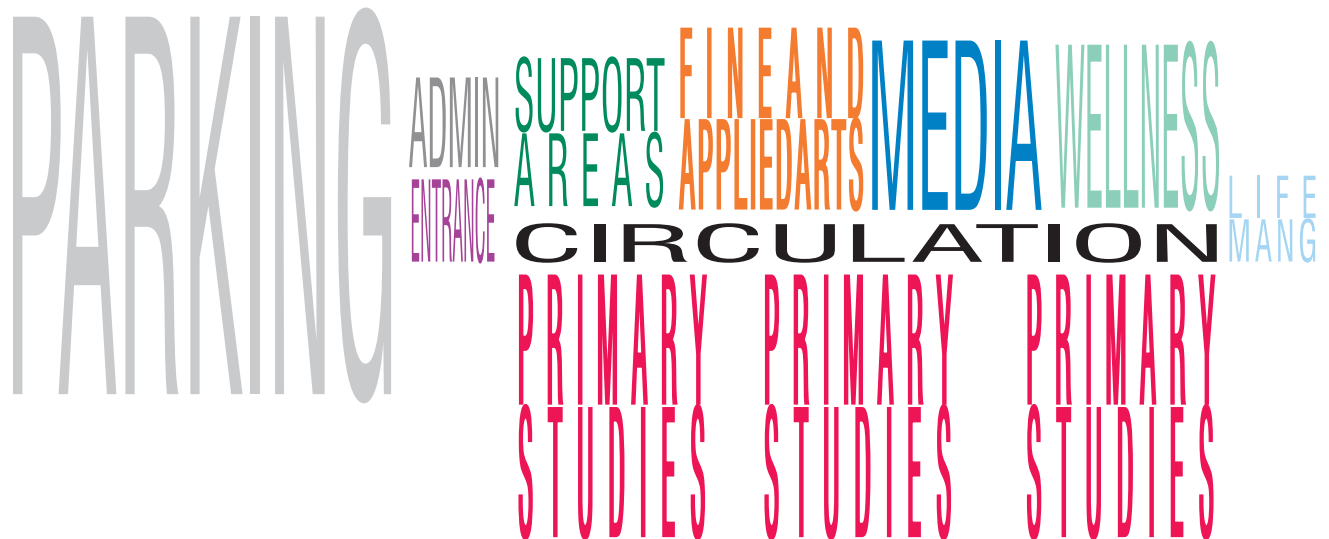
- _connect all of the learning pods
- _serve as a “main street to the school”

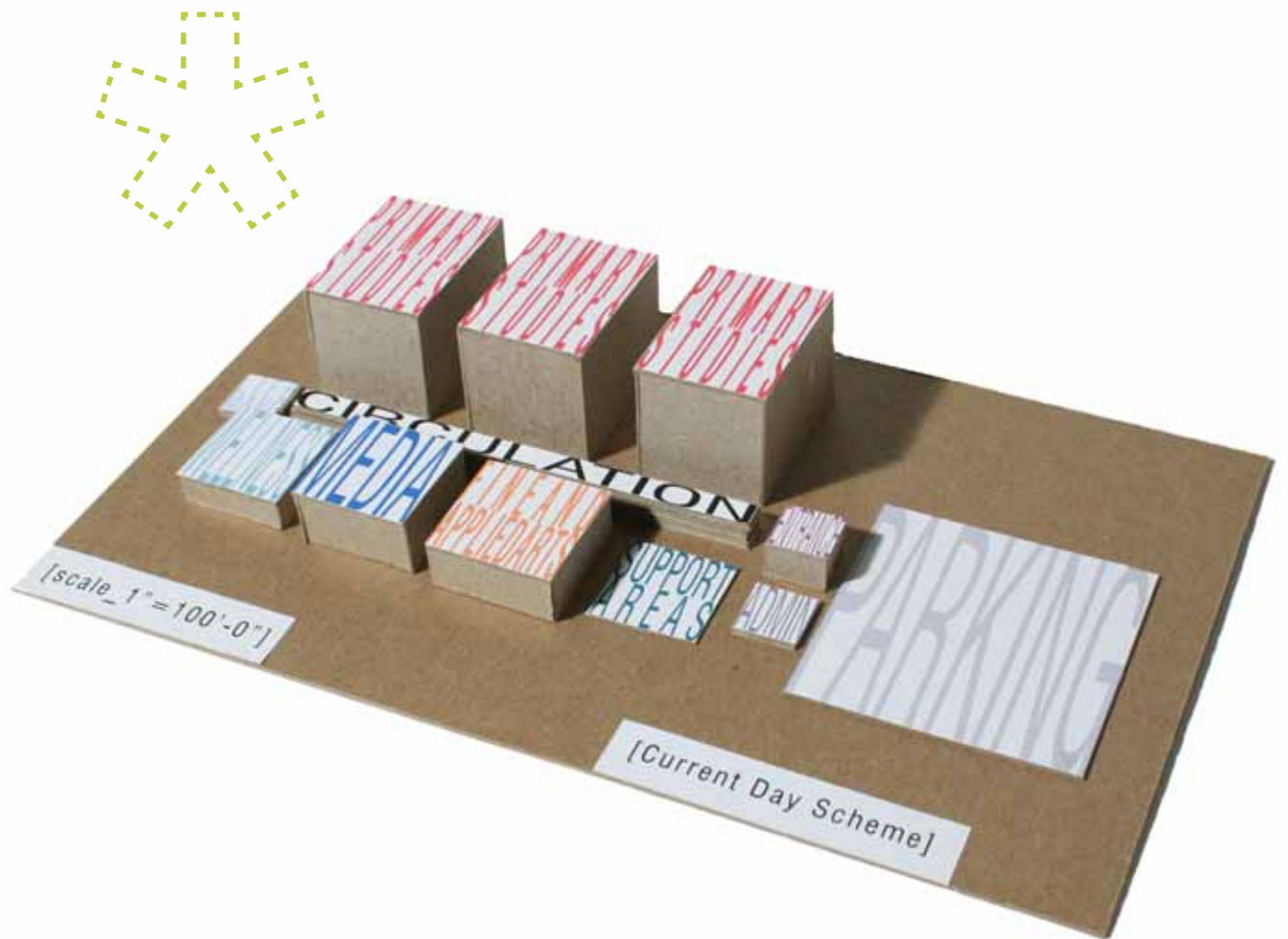
[teachers are given workrooms to coloborate and call their own]

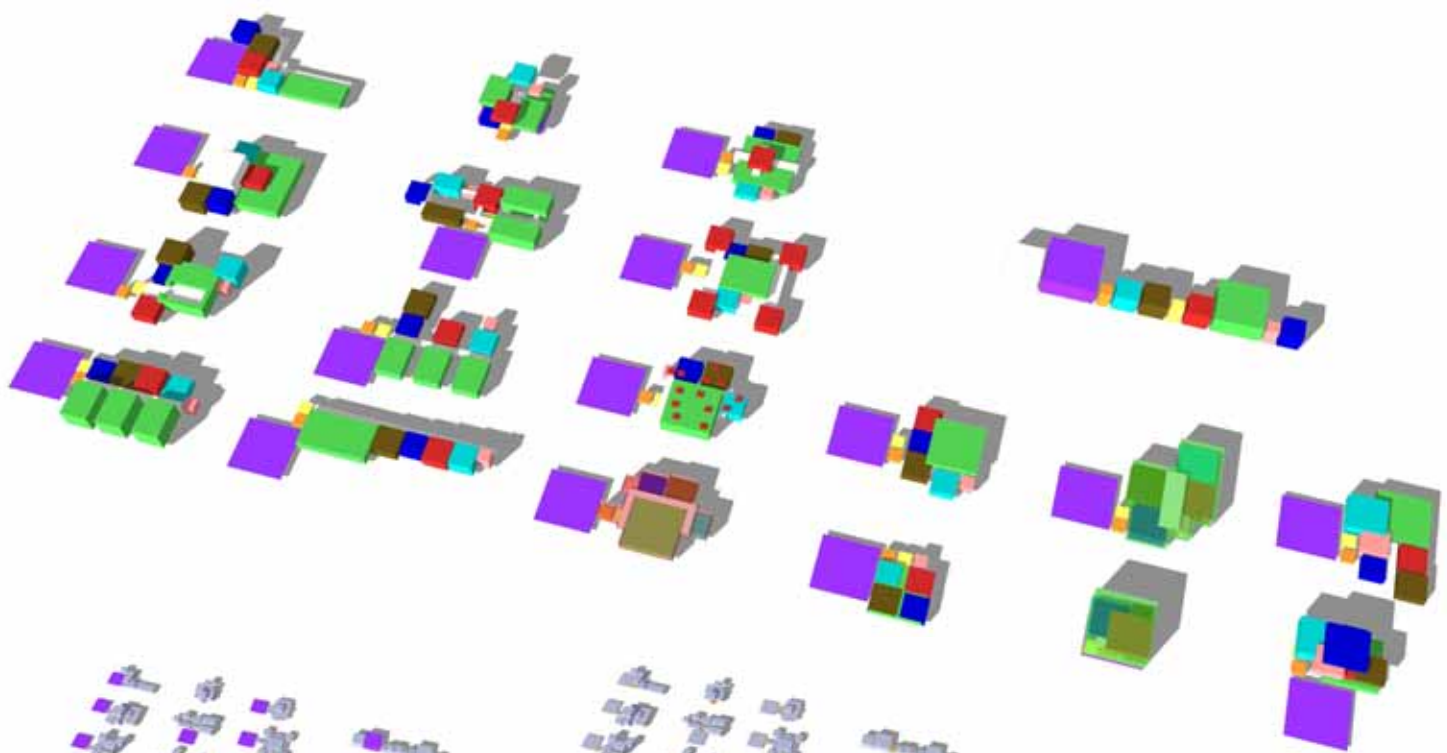
- _classrooms become flexible to allow for multiple subjects to be taught in the same room

[security is a key issue today]

- _monitored hallways and locked doors reduce potential security threats
- _take away from incorporating community, almost serves as a barrier



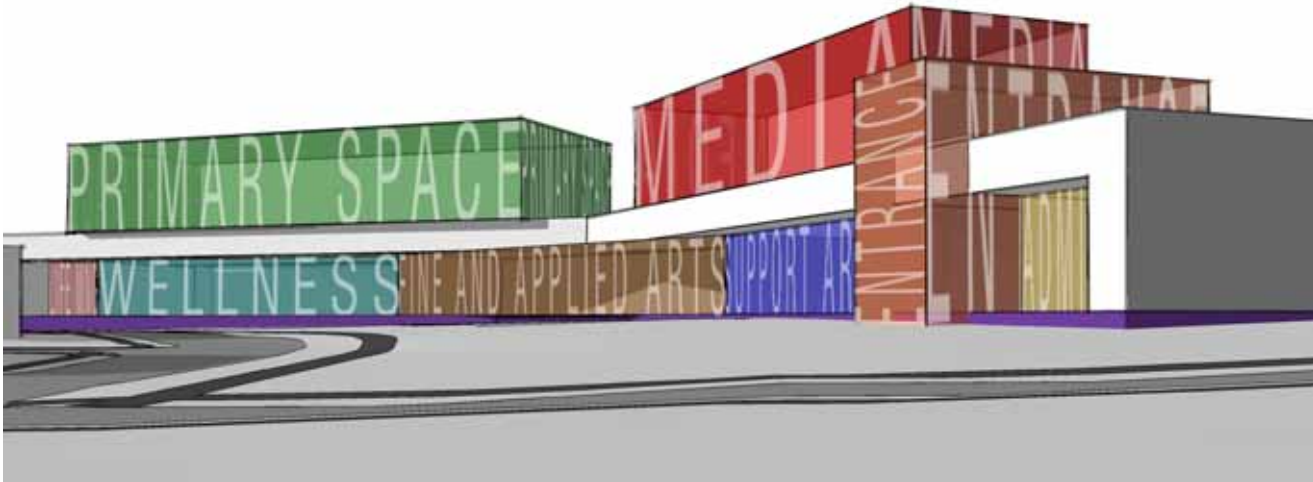




✱ Additional Studies



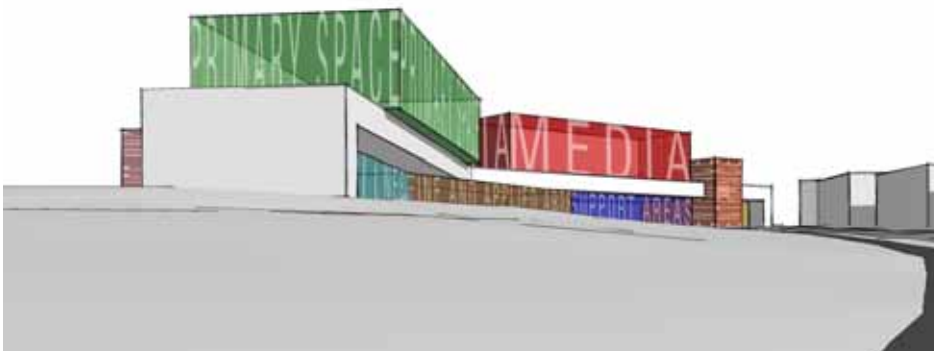
[horizontal scheme 1]



[horizontal schemes 1 & 2]

- keep the building width down to maximize ventilation and day lighting opportunities
- place common community spaces along first floor area
- every space is enlarged to allow for the opportunity for classroom-less learning opportunities
- start to become interest and skill base oriented other than subjective based
- allow circulation corridors to be placed along the outside of the building leading the students through each of the different learning opportunities
- placement of the building on the top of the hill and its orientation allows for maximum natural ventilation

[horizontal scheme 1]



[horizontal scheme 2]



[horizontal scheme 2]



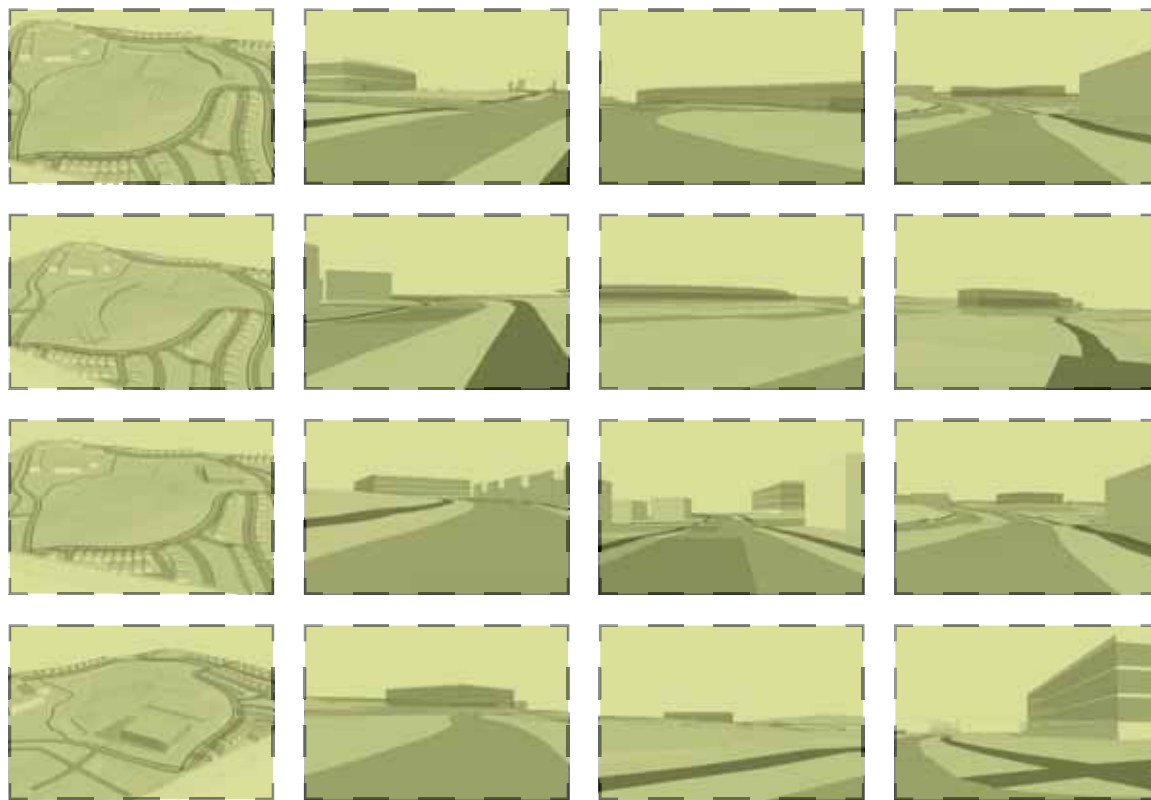
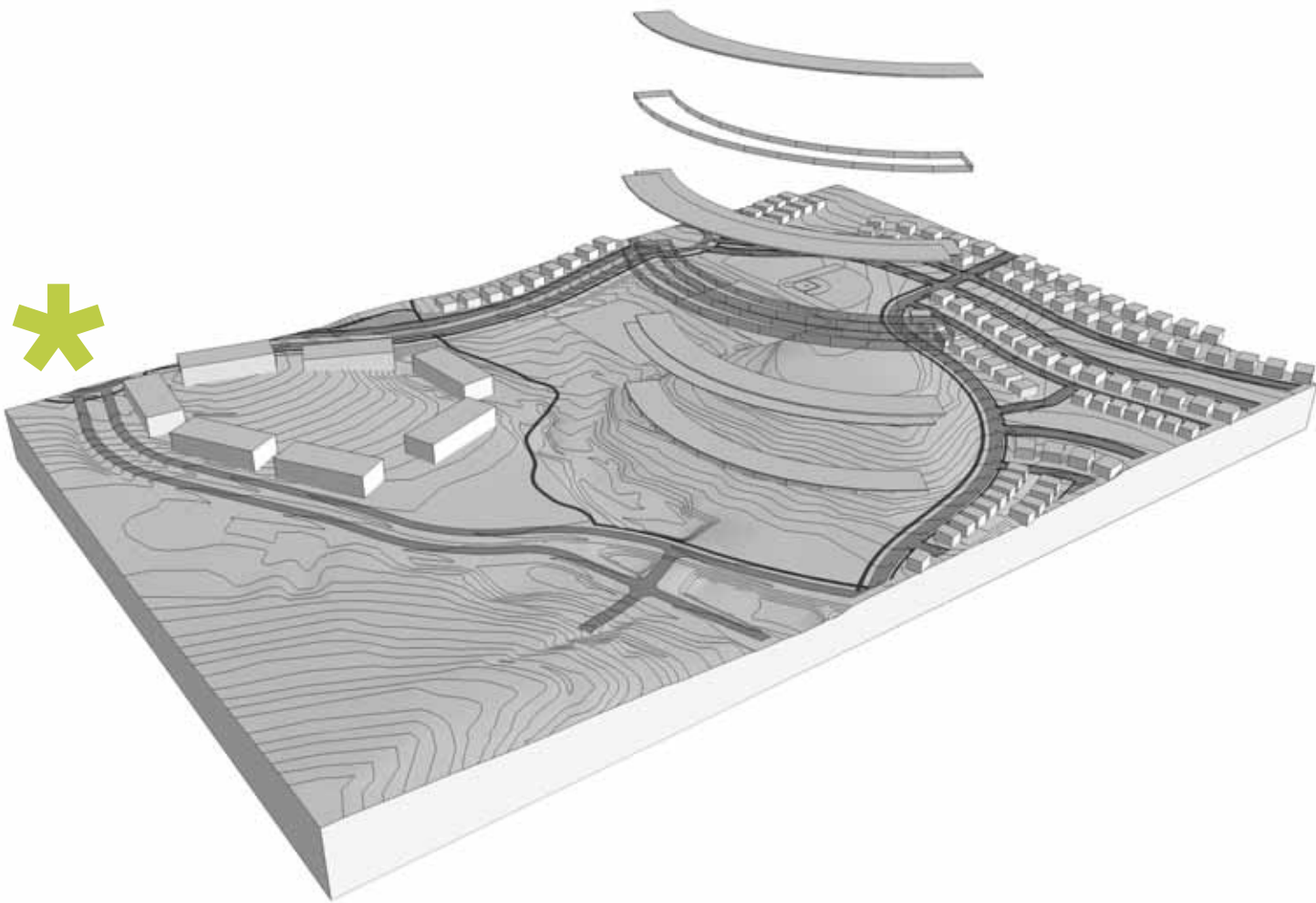
[multi_story scheme]



[multi_story scheme]

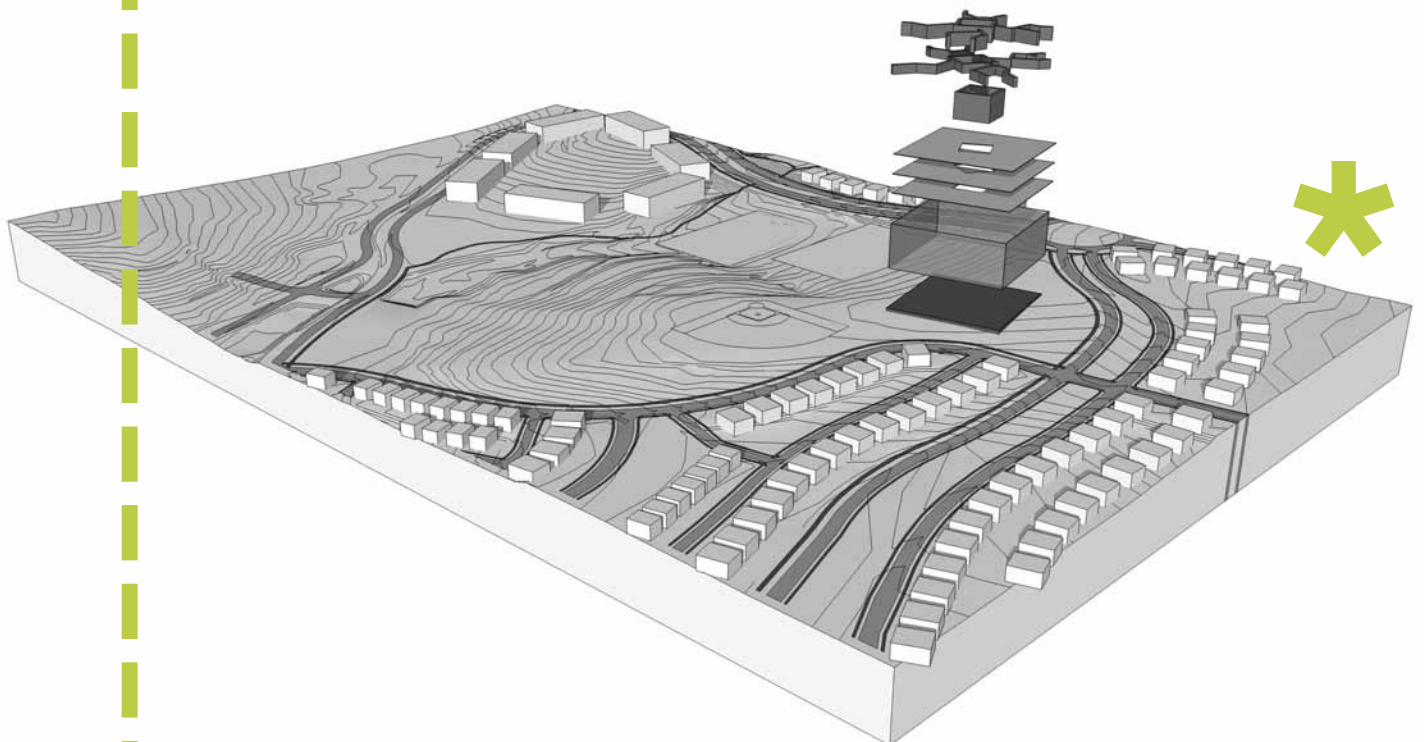
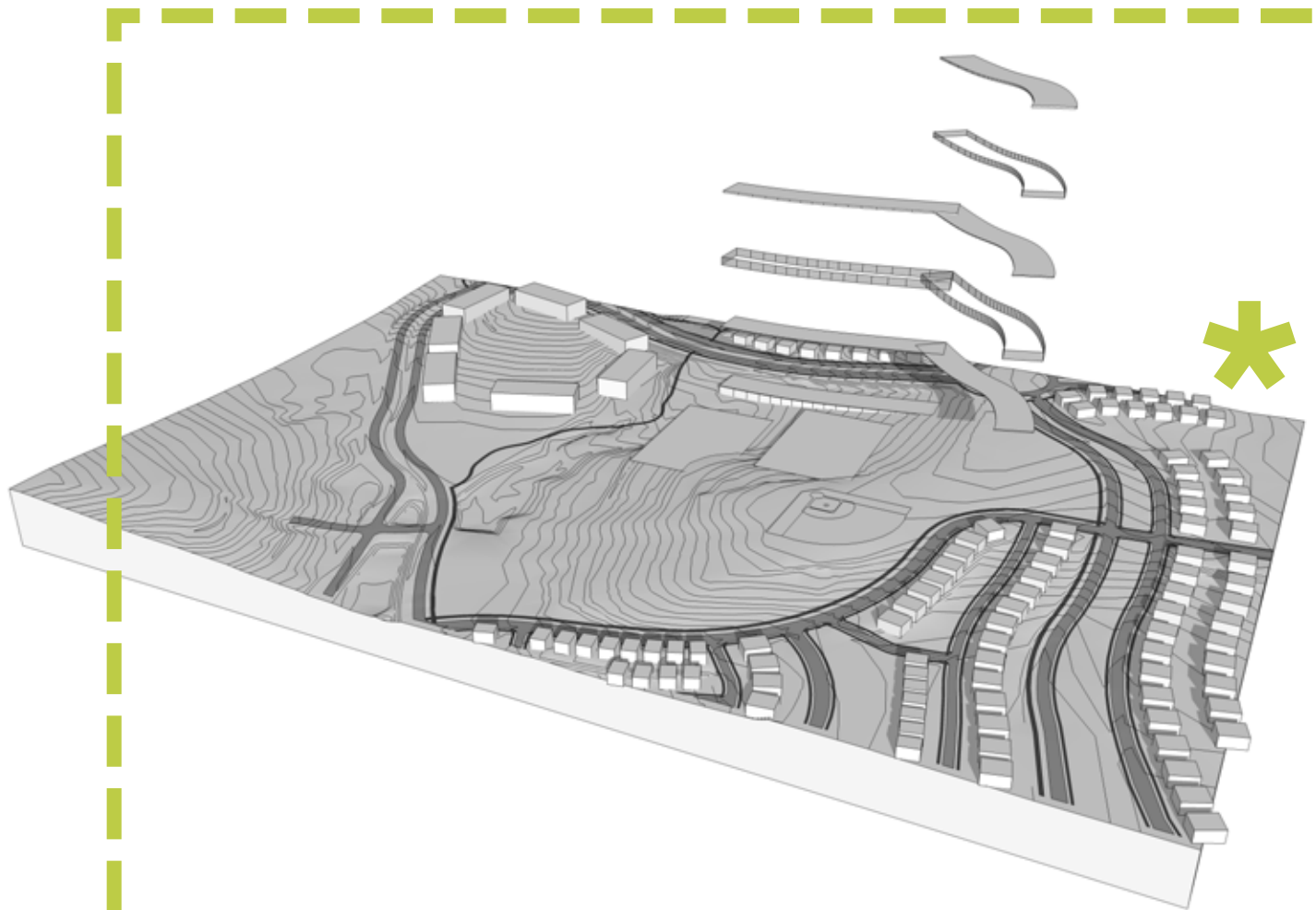
- stress verticality to minimize buildings footprint on the given site
- shows students the ability to reduce sprawl...serves as a model
- minimize amount of space certain functions use...serve as flex spaces
- allow for underground parking for visitors and staff
- place shared community facilities close to entrance or ground level for ease of use during off hours
- circulate from the buildings core to the outskirts of the building...some what like a growing tree





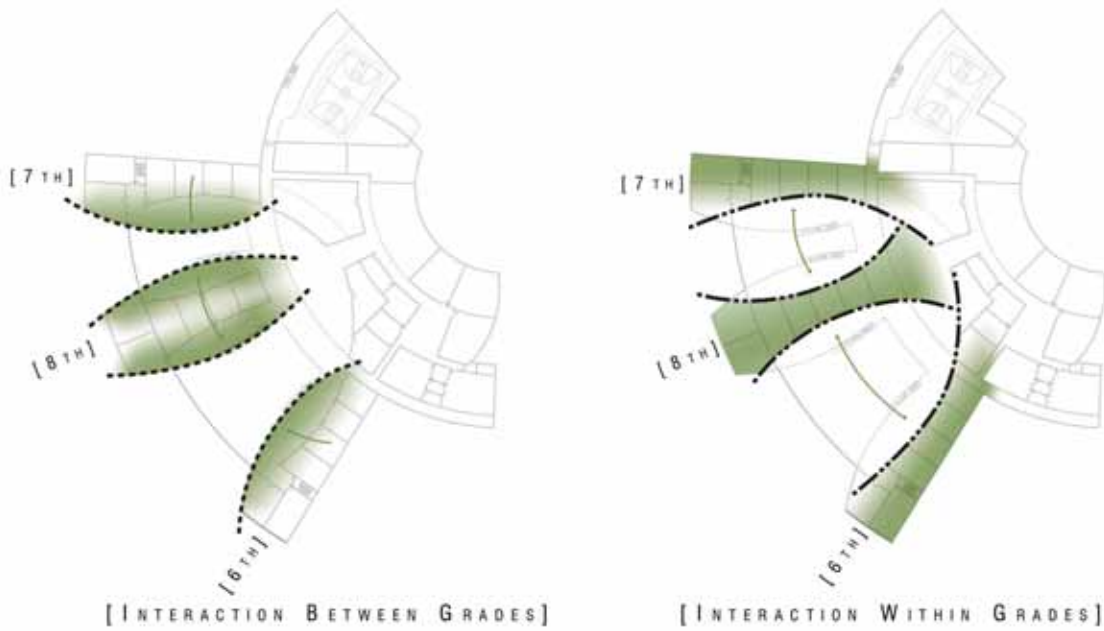
initial developed schemes







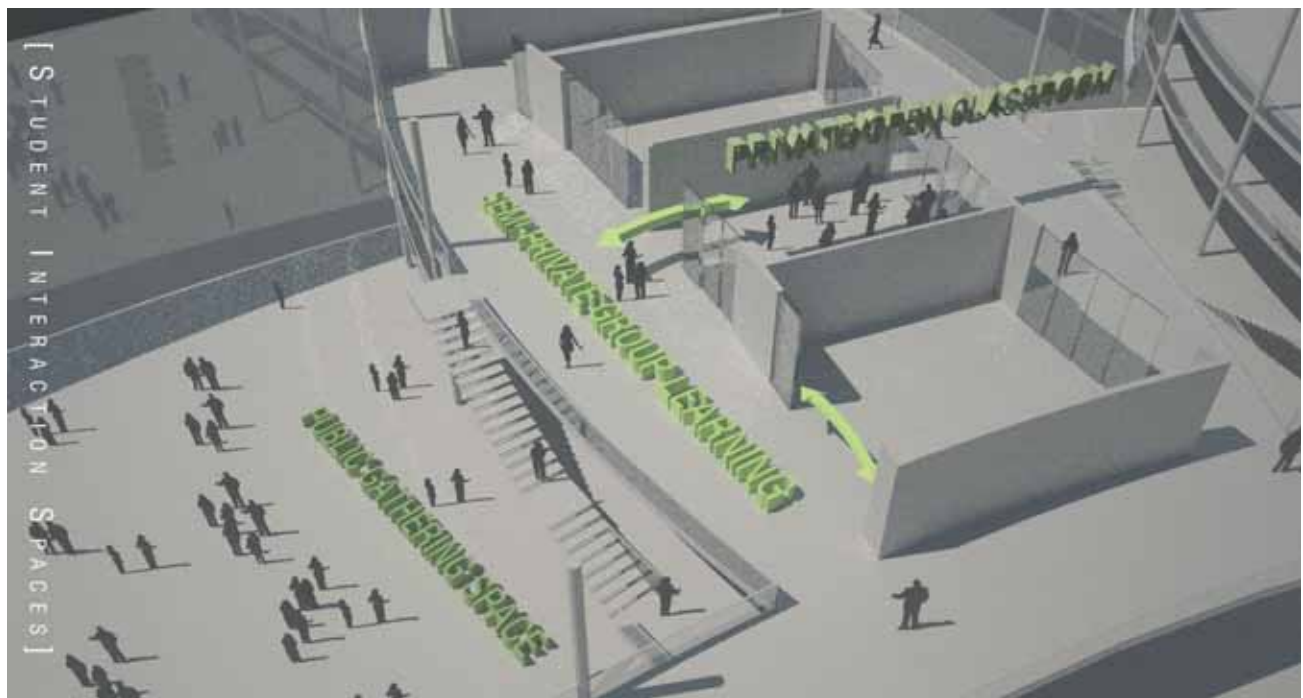




By allowing the balcony spaces to open out towards the center, interaction between the different grades is suggested with the common ground in the middle. Also a visual connection that stimulates interaction between the grades can be made from all three floors to the adjacent three floors across. This was deliberately done to give a sense of connection within the school as a whole, while still obtaining that structured learning environment needed within the students everyday curriculum.

[SEPERATION OF GRADES]





Creating three different levels of interaction spaces will give the student opportunities to grow mentally and socially. The private/open classroom structure will allow for structured attentive learning, but also leave open the opportunities for class collaboration and interdisciplinary learning. The next level of space is the semi-private group learning space. This space is meant to allow multiple classes from multiple grades to be able to gather and collaborate with each other. The third and final space is the public gathering space where the student will be giving the opportunity to grow socially along with their peers.

*MAIN DESIGN IDEAS

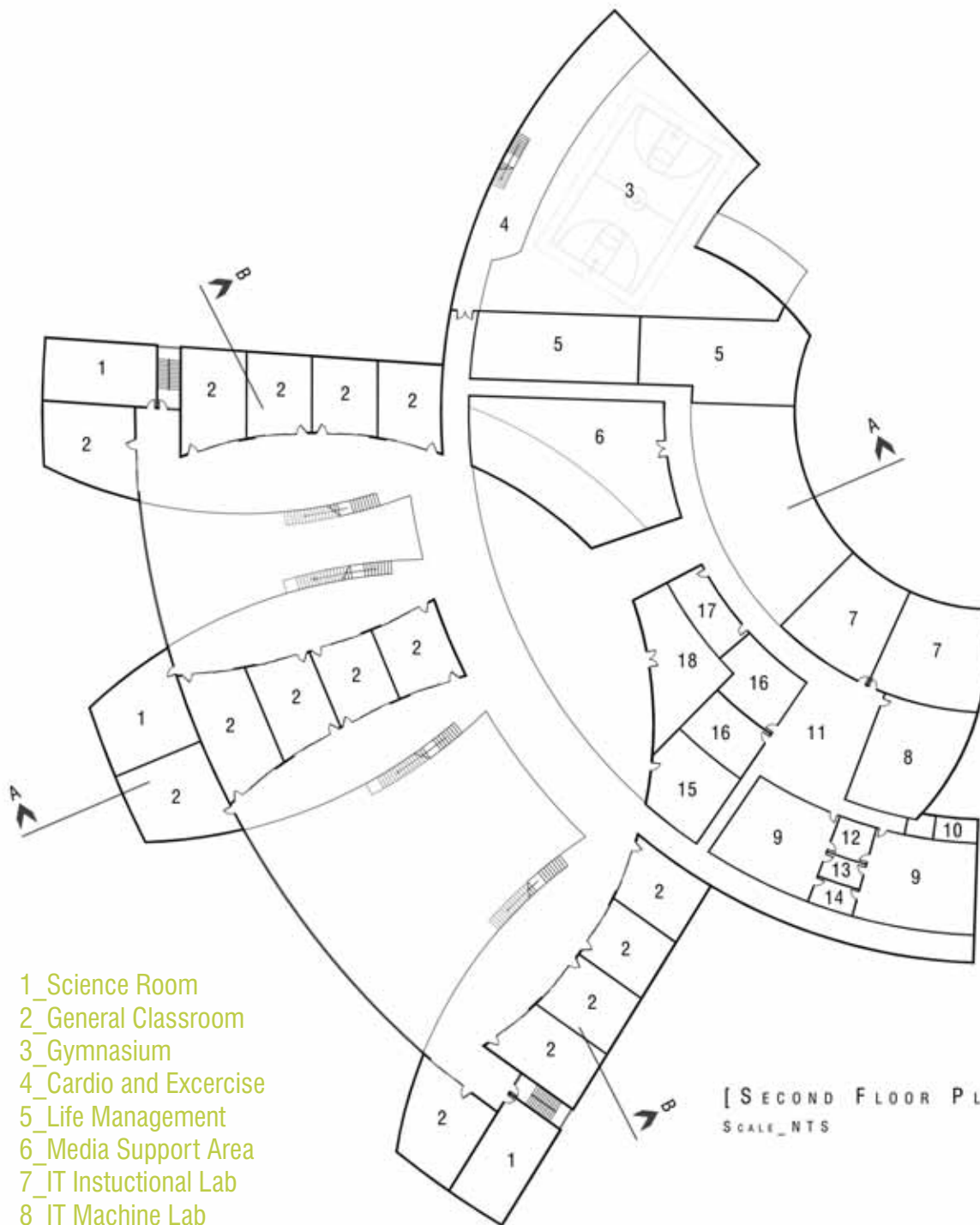
The way separation in schools usually works is by the breakdown of grades into separate smaller “learning groups”. For the design of this middle school, a modified approach at how the division within the school was taken into heavy consideration. Each grade is separated by the different “fingers” that protrude from the center core area reaching outward over the site. Each grade’s location was deliberately chosen to provide the best opportunities for the school and its students. The 6th grade area is separated from the 7th and 8th grade area because this transition is the biggest and hardest for this age group. The central location of the 8th grade allows that grade level to become the leaders of the school and become mentors for the younger students below them.



- 1_Science Room
- 2_General Classroom
- 3_Gymnasium
- 4_Staff Lockers
- 5_Staff Office
- 6_Girls Locker
- 7_Boys Locker
- 8_Health
- 9_Media Center
- 10_Entry Lobby
- 11_Restrooms
- 12_Computer Lab
- 13_Health Office
- 14_OT/PT
- 15_Speech Pathologist
- 16_Clerical Support + Front Reception
- 17_Office One
- 18_Office Two
- 19_Conference
- 20_Staff Lounge
- 21_Parent Room
- 22_Work Room
- 23_Multi-Use Room
- 24_Practice Rooms
- 25_Music Commons
- 26_Kitchen + Recieving
- 27_Instructional Music
- 28_Vocal Music
- 29_Cafeteria/Assembly



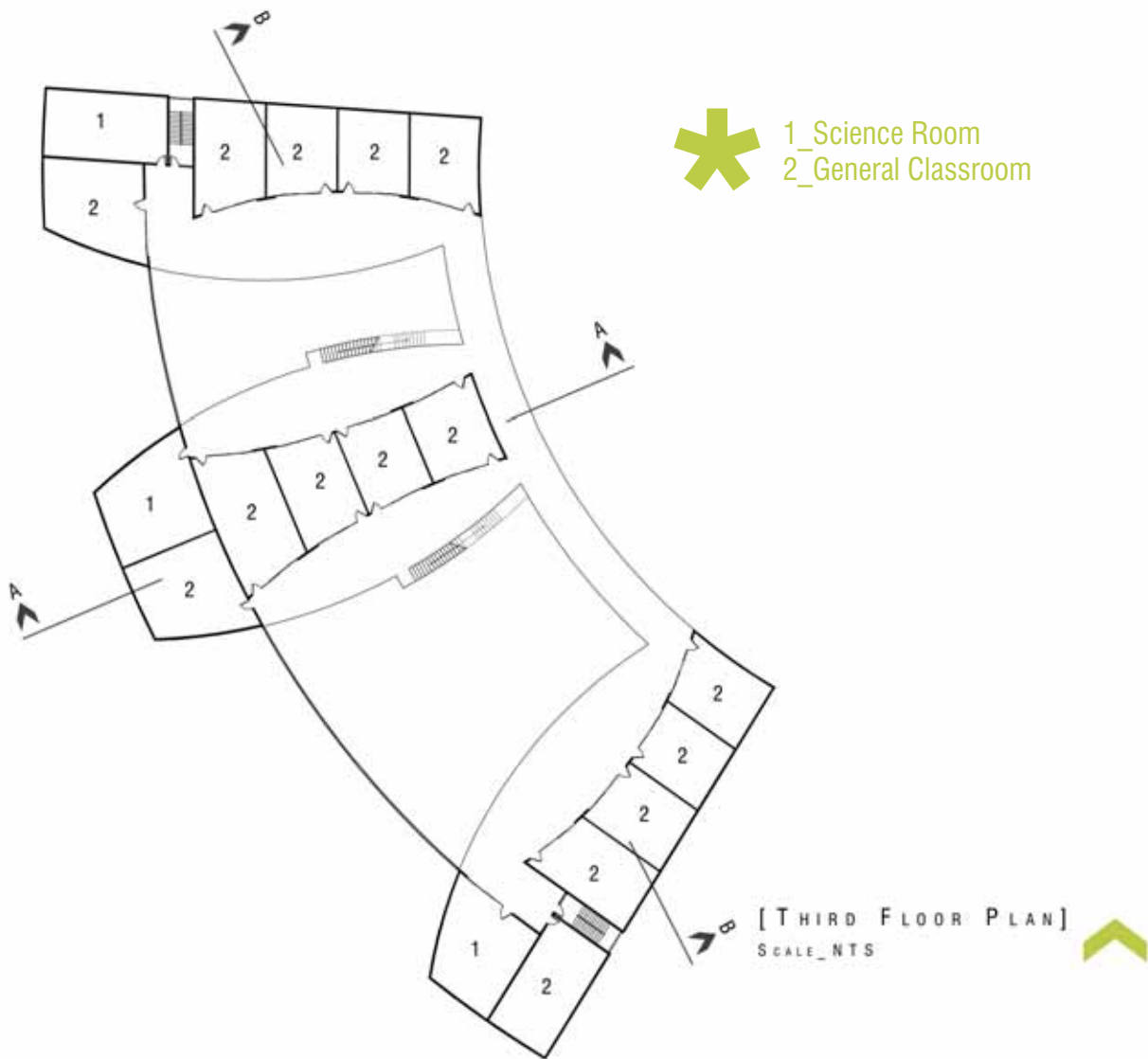
[FIRST FLOOR PLAN]
SCALE_NTS



- 1_Science Room
- 2_General Classroom
- 3_Gymnasium
- 4_Cardio and Exercise
- 5_Life Management
- 6_Media Support Area
- 7_IT Instructional Lab
- 8_IT Machine Lab
- 9_Art Instruction
- 10_IT Tool Room
- 11_Art + IT Commons
- 12_Art Storage
- 13_Mud Room
- 14_Kiln Room
- 15_Keyboarding
- 16_Business Instruction
- 17_Restrooms
- 18_Computer Lab

[SECOND FLOOR PLAN]
SCALE_NTS



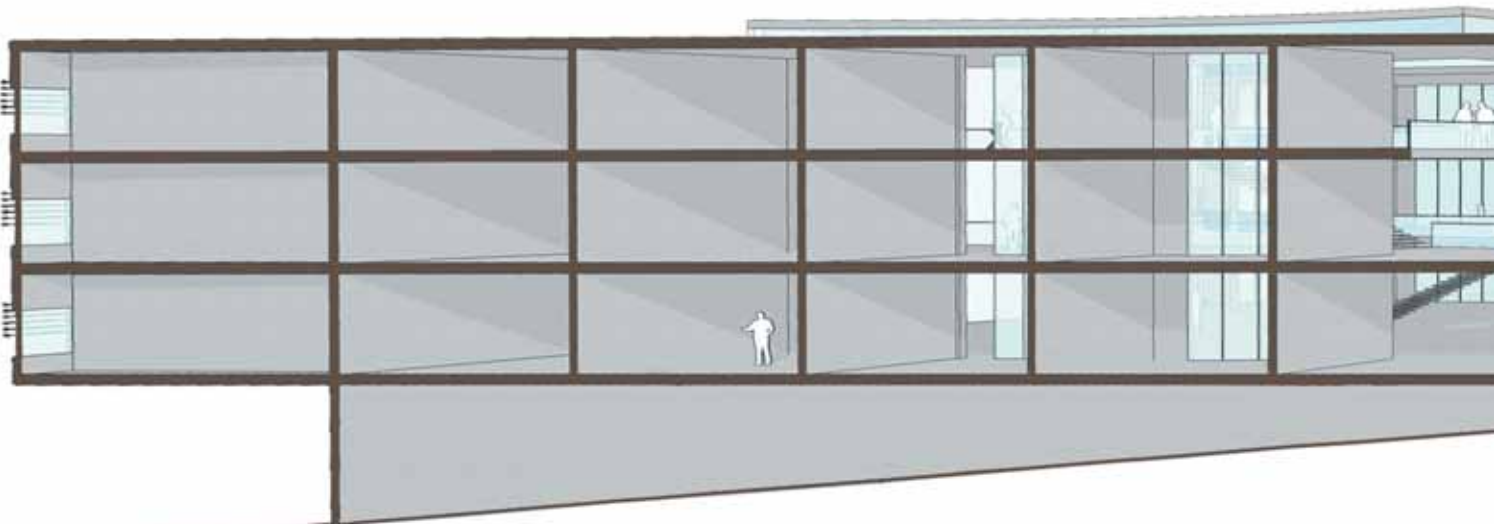
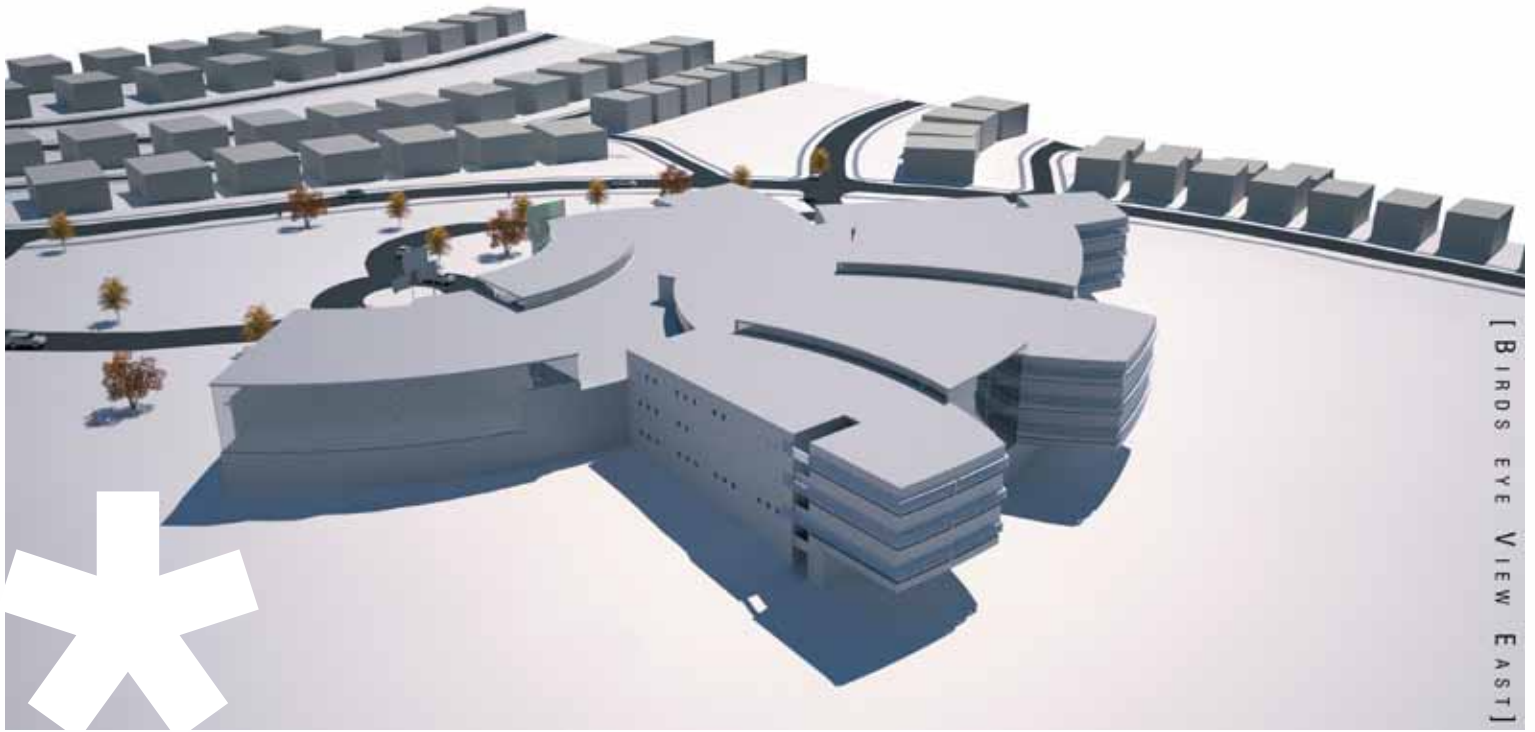


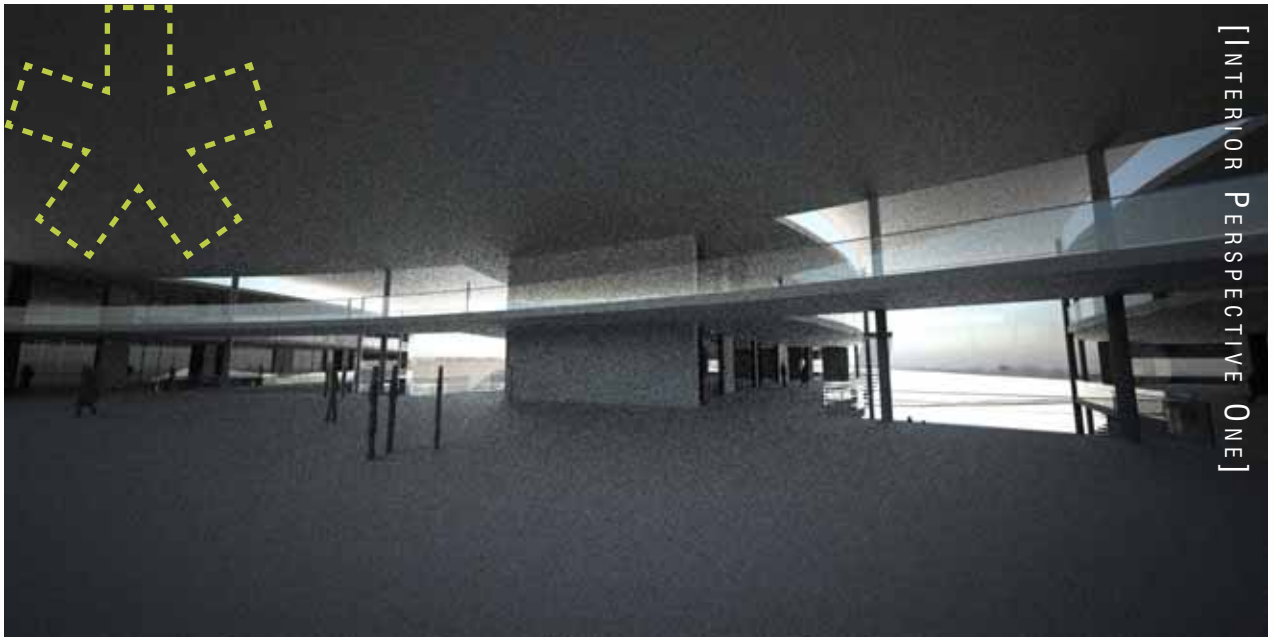


[SITE PLAN]
SCALE NTS



[BIRD'S EYE VIEW WEST]

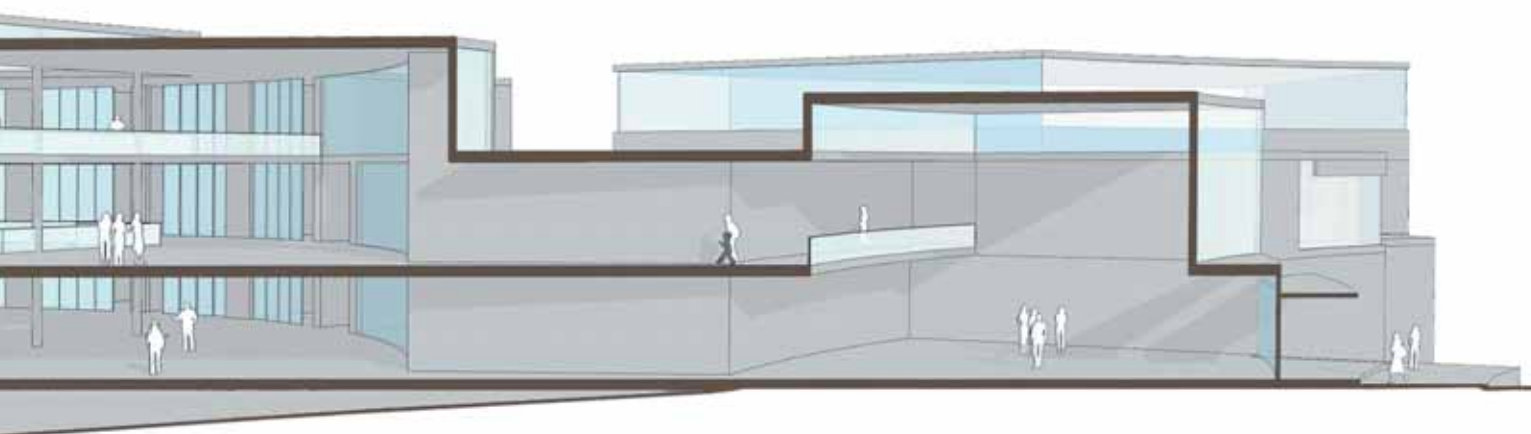




[INTERIOR PERSPECTIVE ONE]

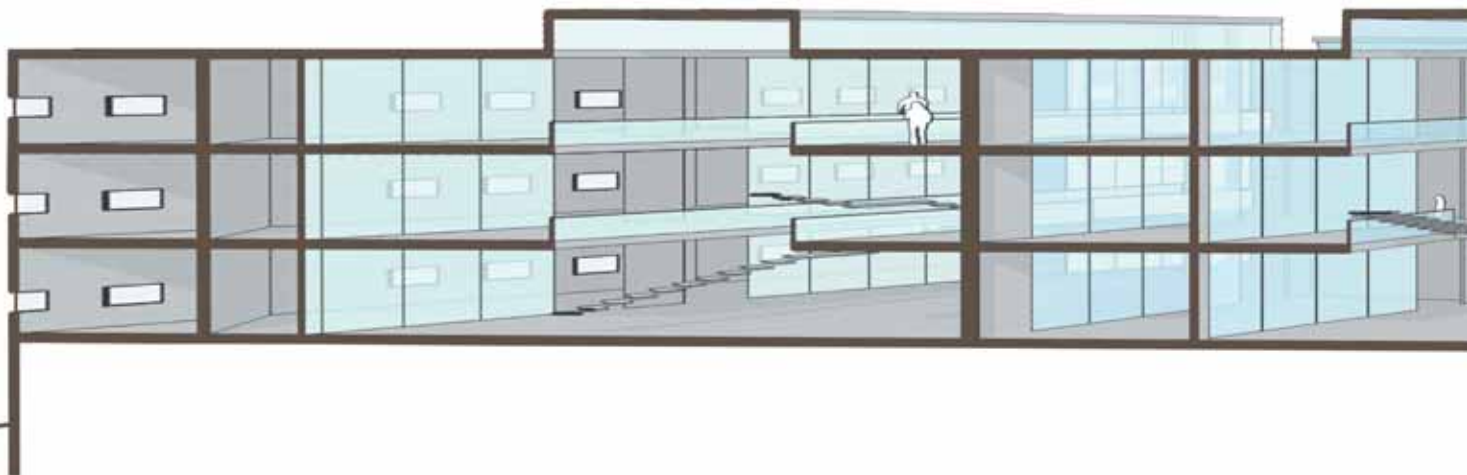


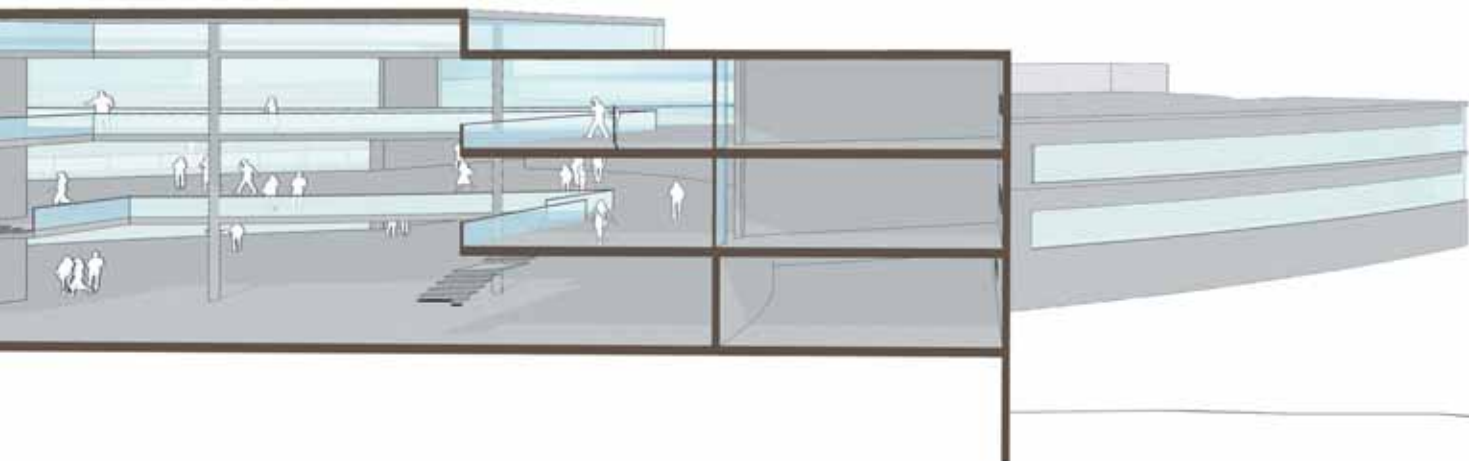
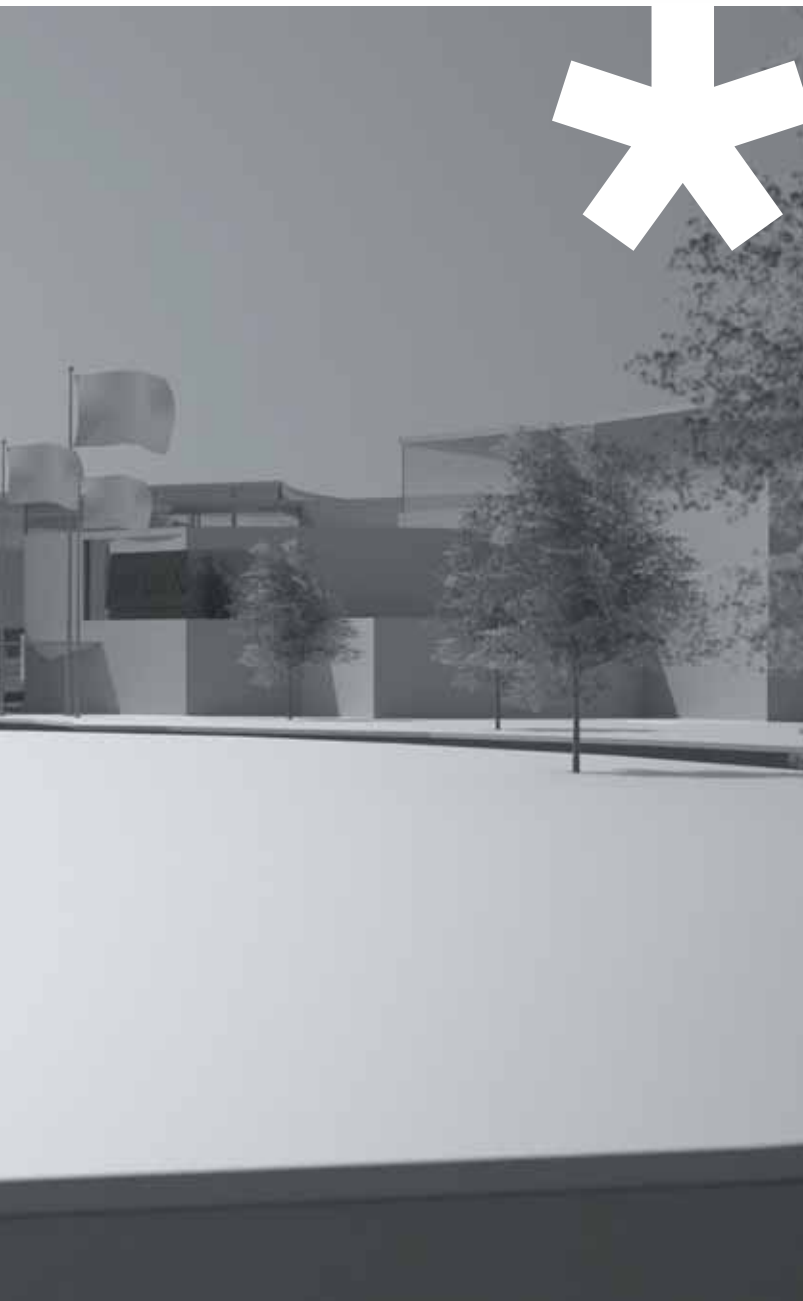
[INTERIOR PERSPECTIVE TWO]



[SECTION AA]
SCALE_ NTS



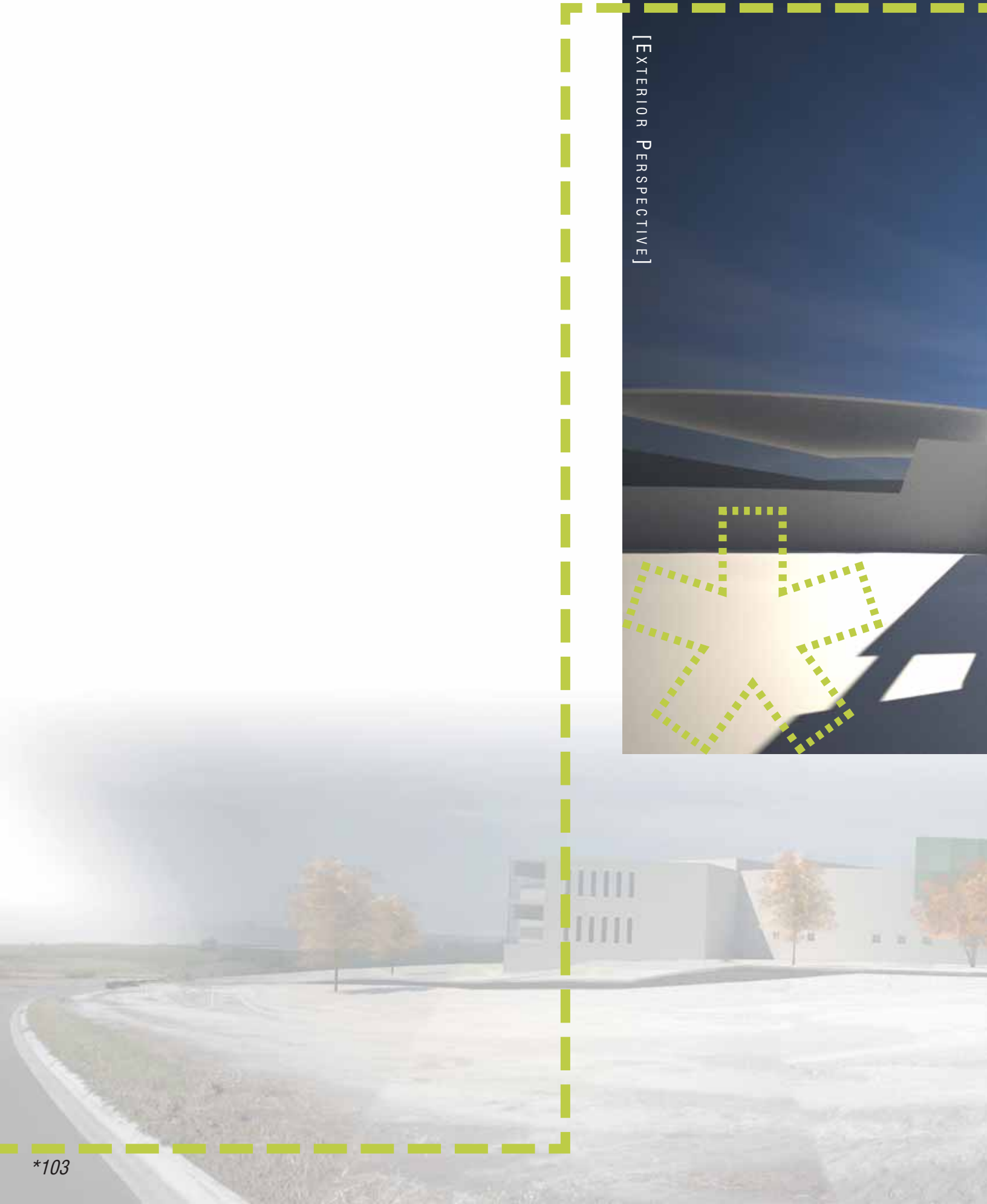
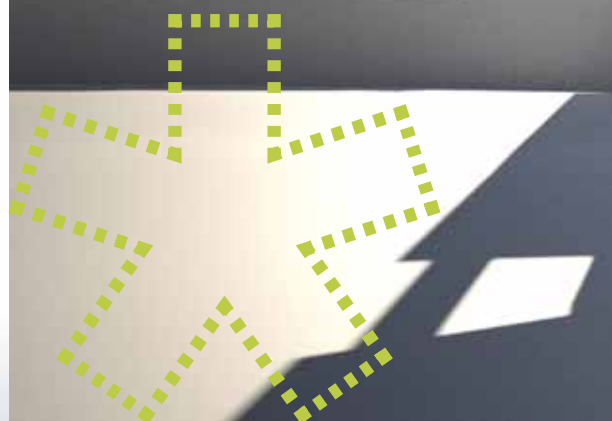


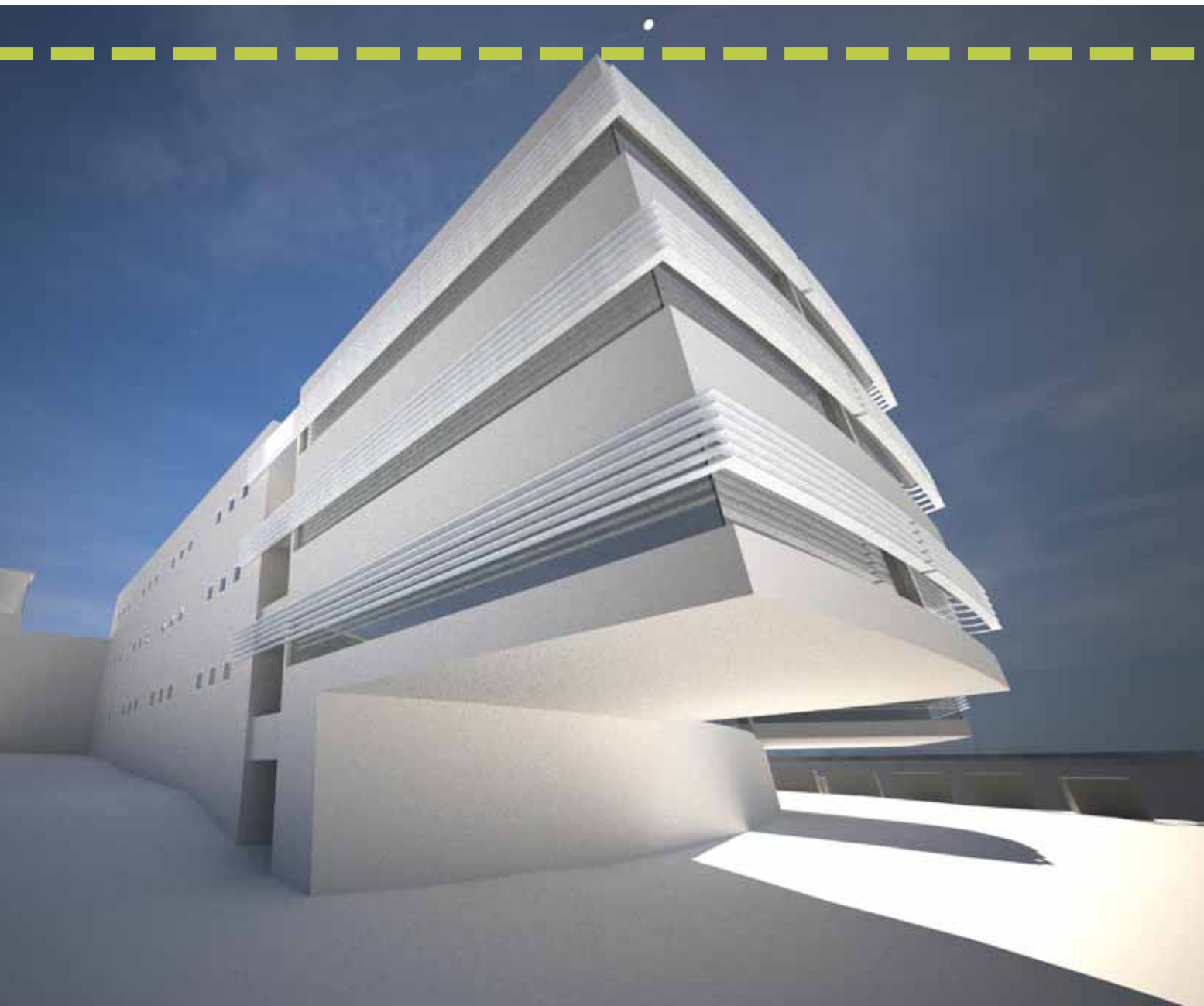


[SECTION BB]

SCALE $1/16" = 1' - 0"$

[EXTERIOR PERSPECTIVE]

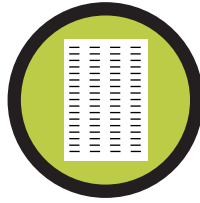
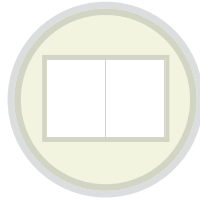






December Presentation Boards

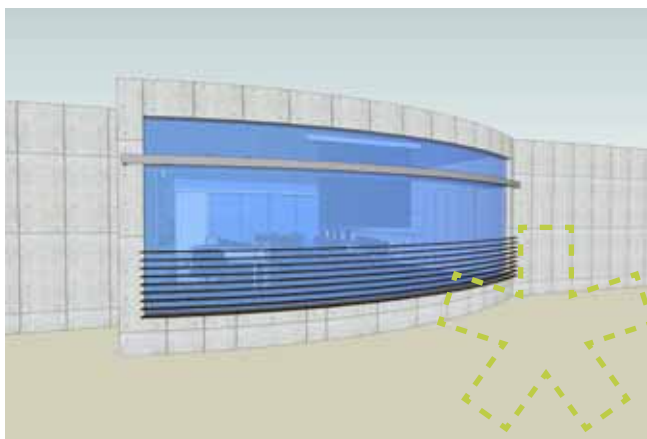
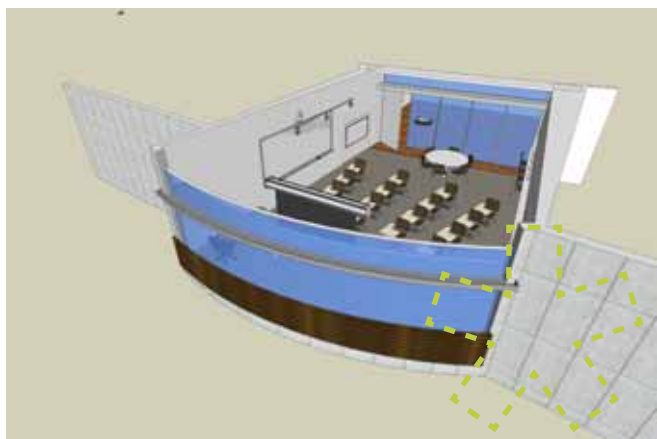
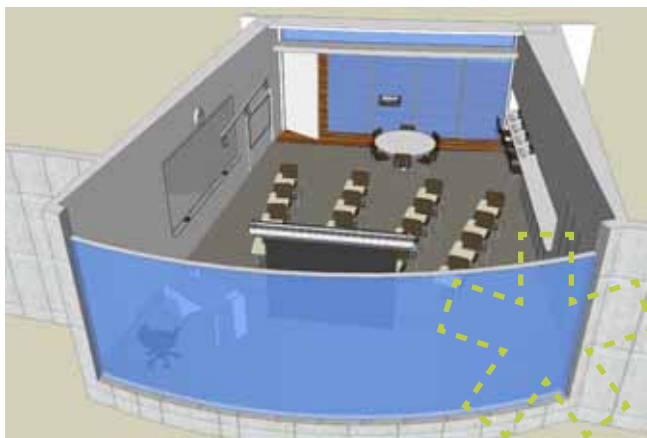
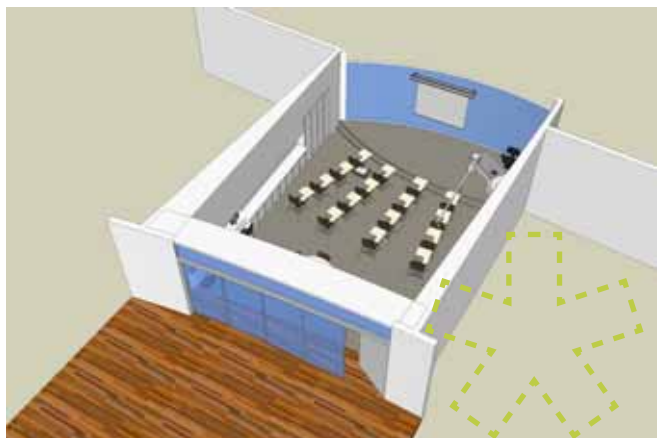




PROCESS DOCUMENTATION
_classroom design
_site development
_building development

process documentation



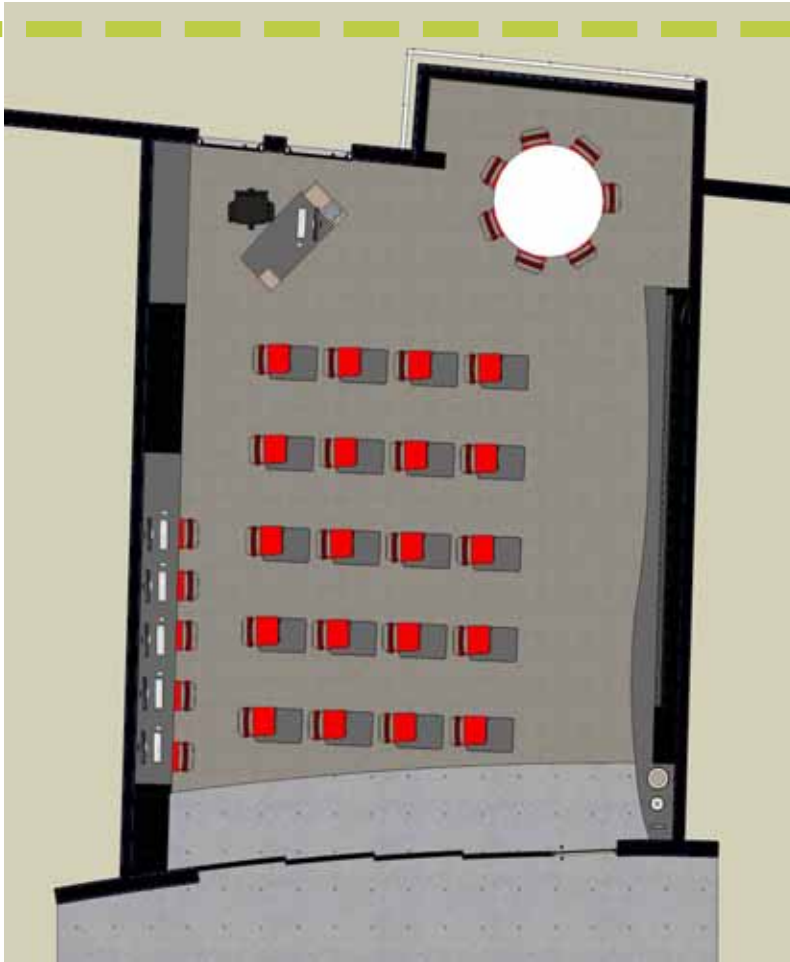




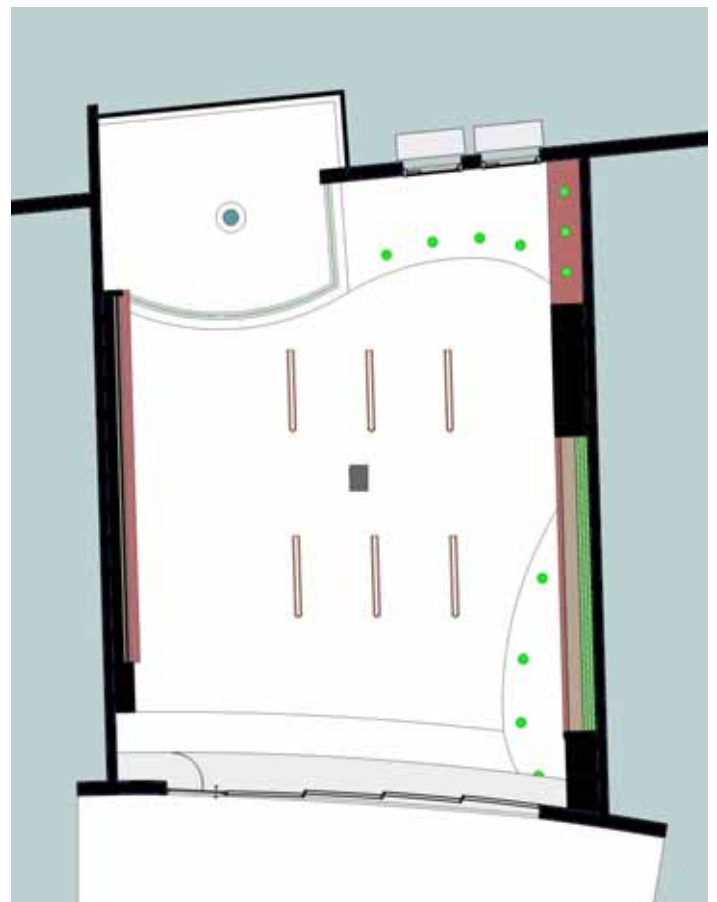
[classroom schematic design]

- _two different schemes were developed...one being a more open flex space with multiple breakout areas, the other being a more standard lecture classroom with a raised teaching/presenting area
- _each scheme allows the classroom to open into the shared space in order to facilitate interdisciplinary learning
- _providing multiple different learning areas was a concern for allowing the most flexibility for all teaching styles and learning opportunities



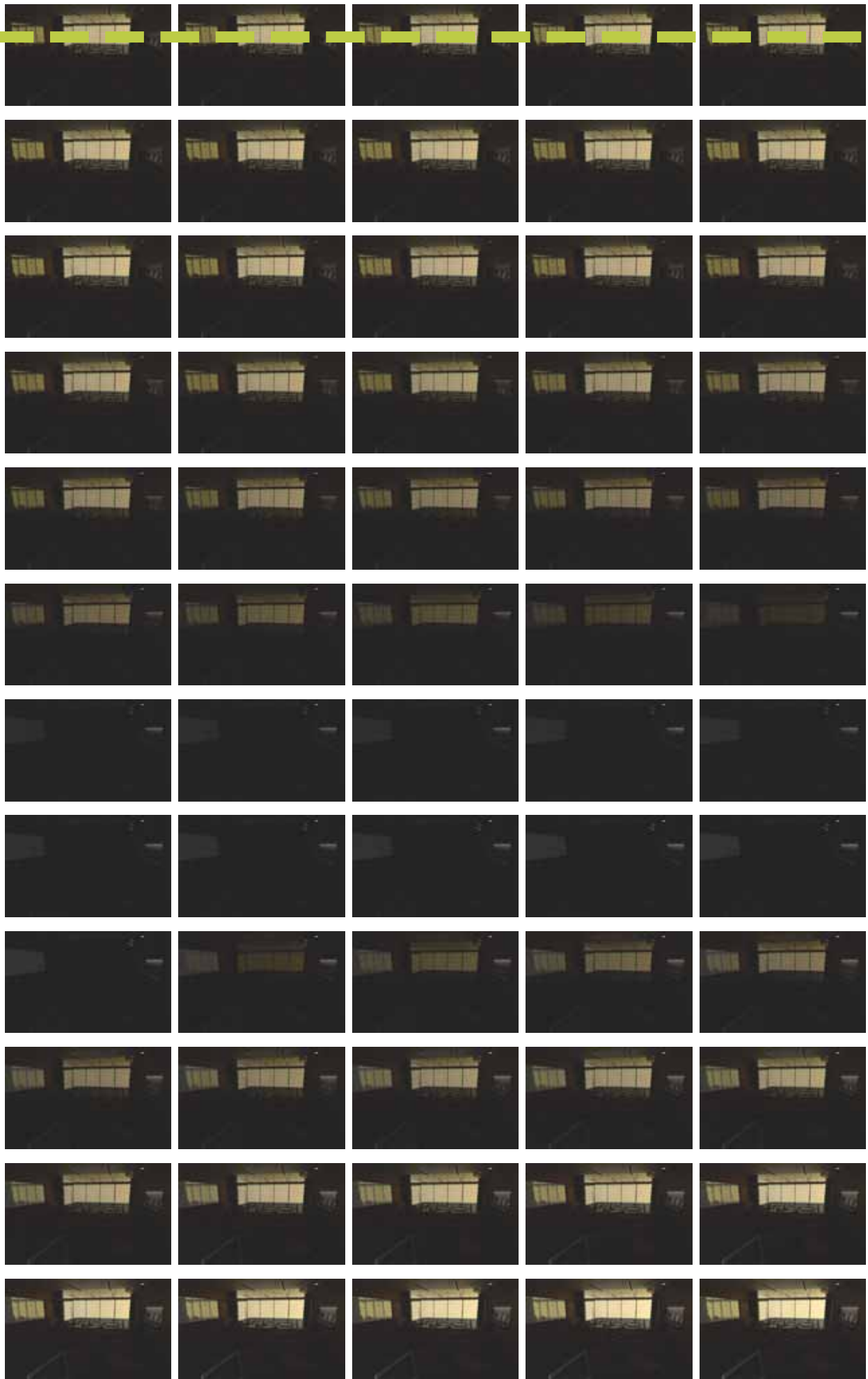


[floor plan - NTS]



[reflected ceiling plan - NTS]





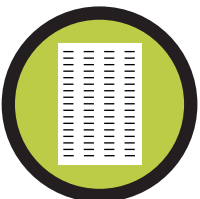






[site development]

- _ numerous schemes were developed that the main idea was to separate the car from the pedestrian
- _ integration into the community by other modes of transportation was critical
- _ the incorporation of community-use ballfields
- _ allow for a smooth transition from the community and the new school
- _ incorporate landscape from the school into community to make the school more integrated into the community
- _ main entrance plaza and outdoor common spaces needed to be provided to serve as a buffer for the community, as well places for socialization outside the school walls





SITE PLAN STUDIES

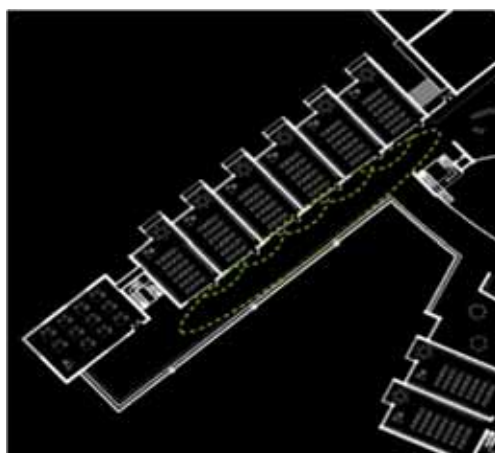
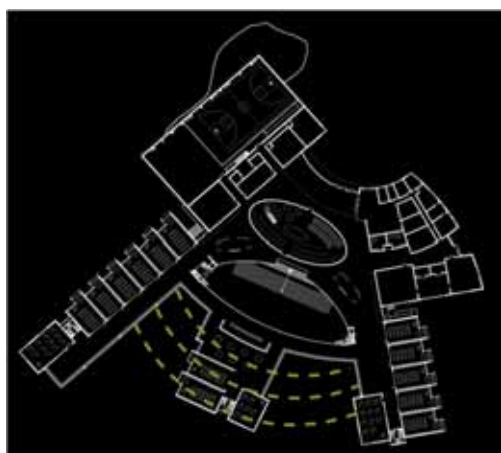
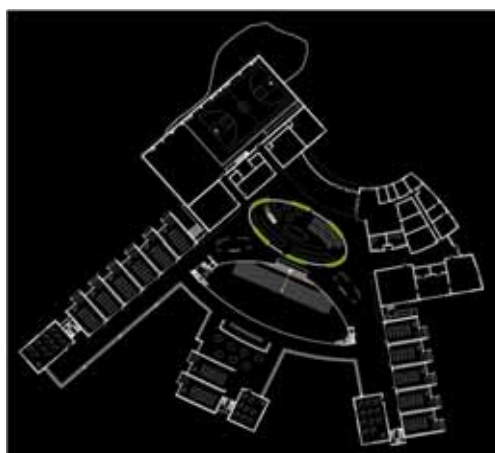
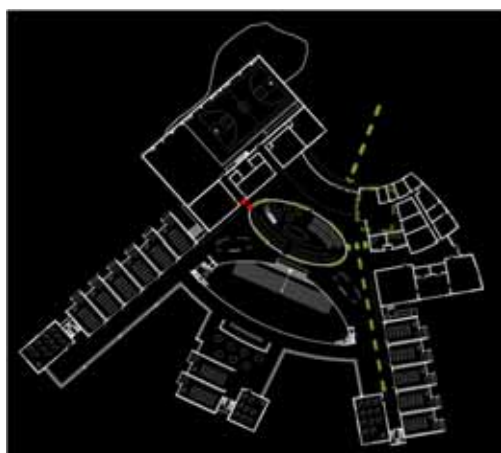
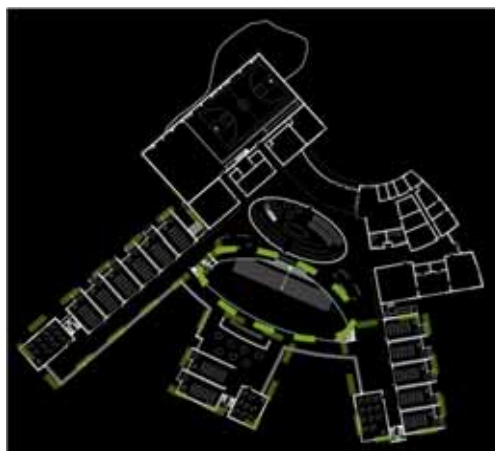
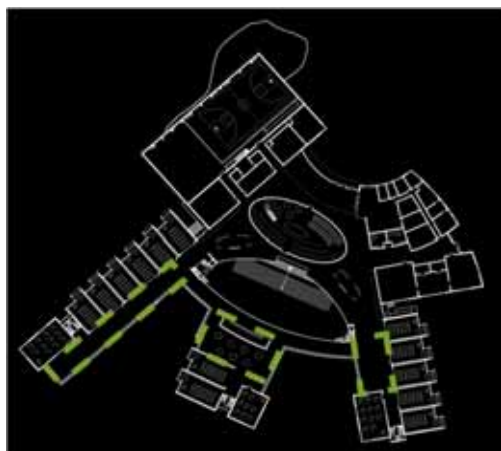
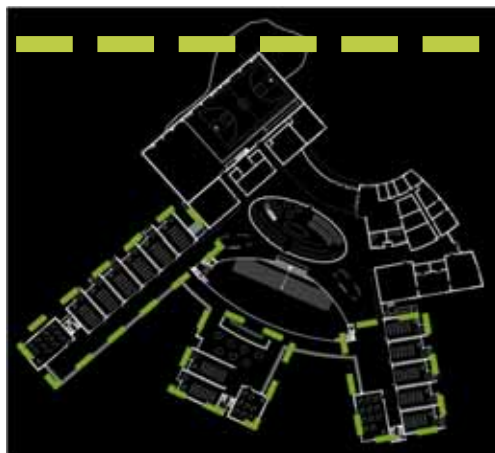
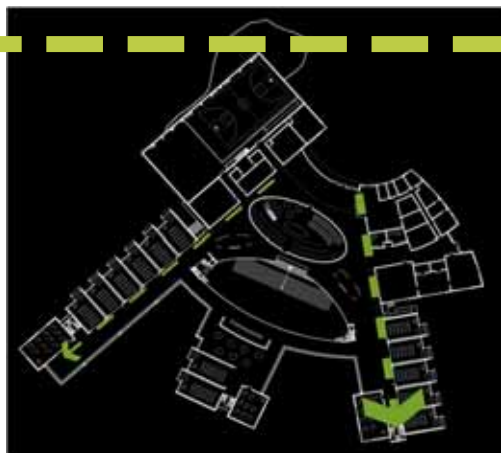


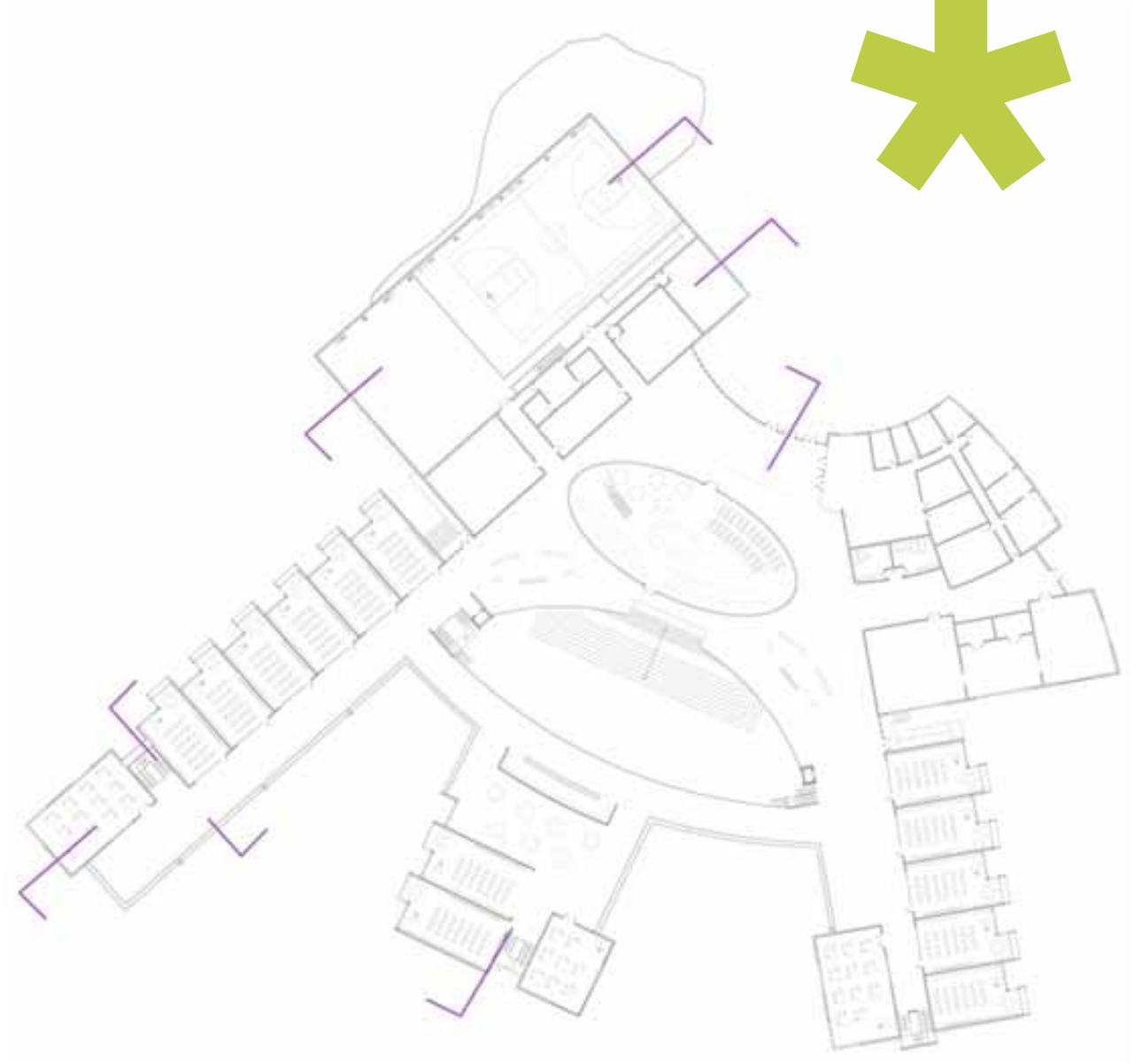


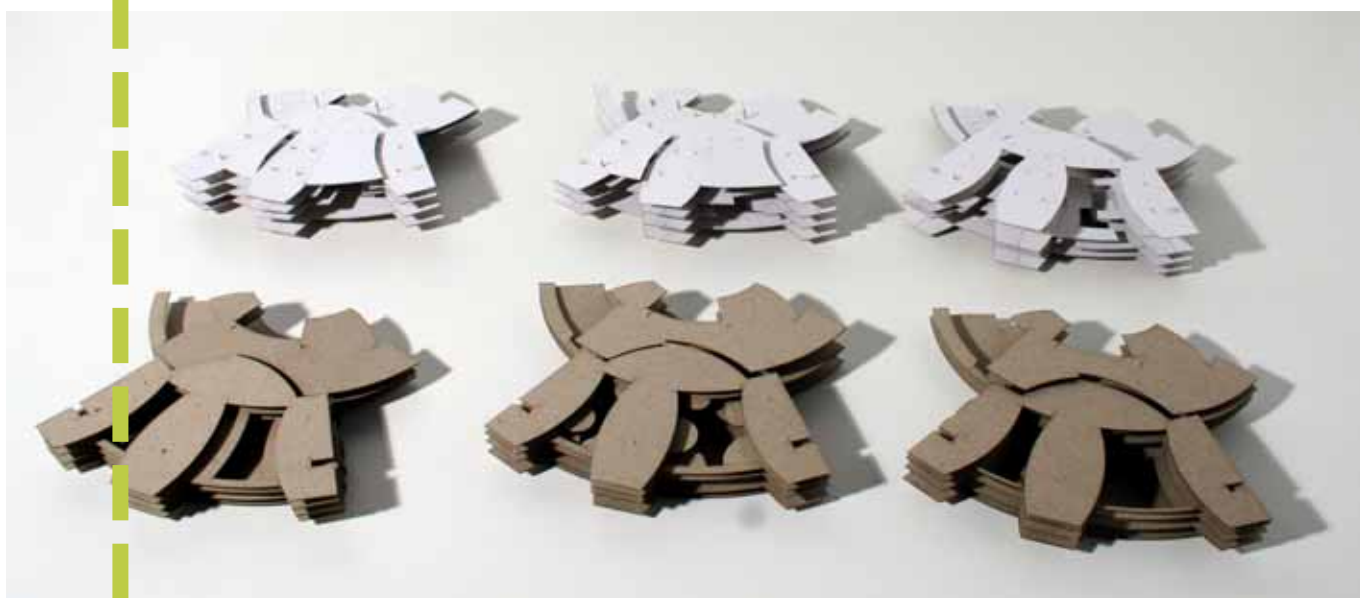


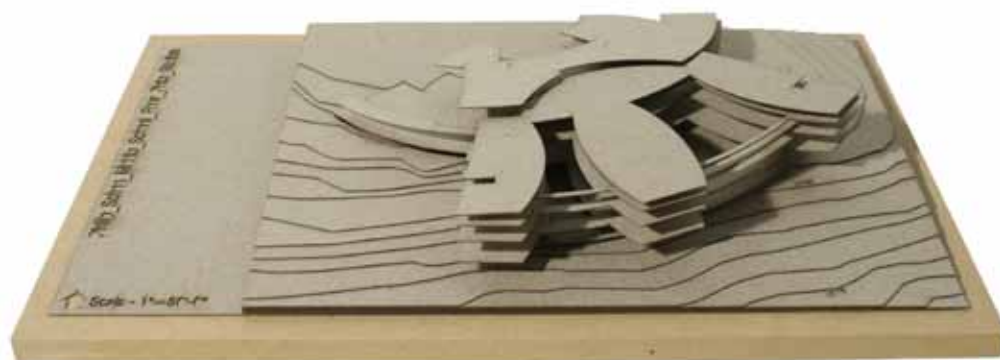
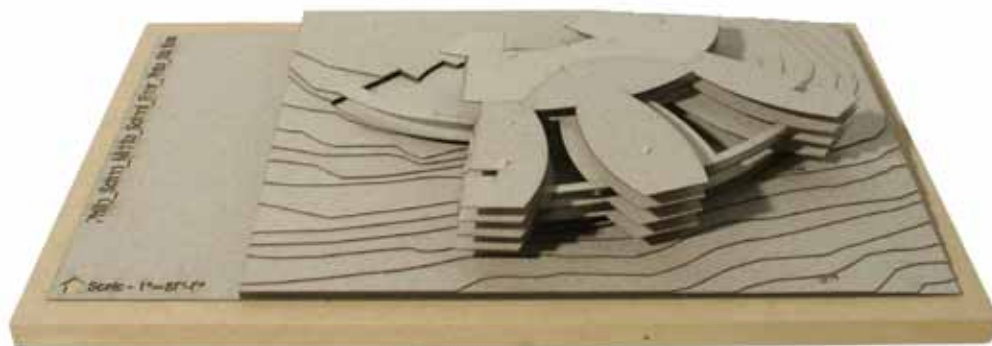
[building development]

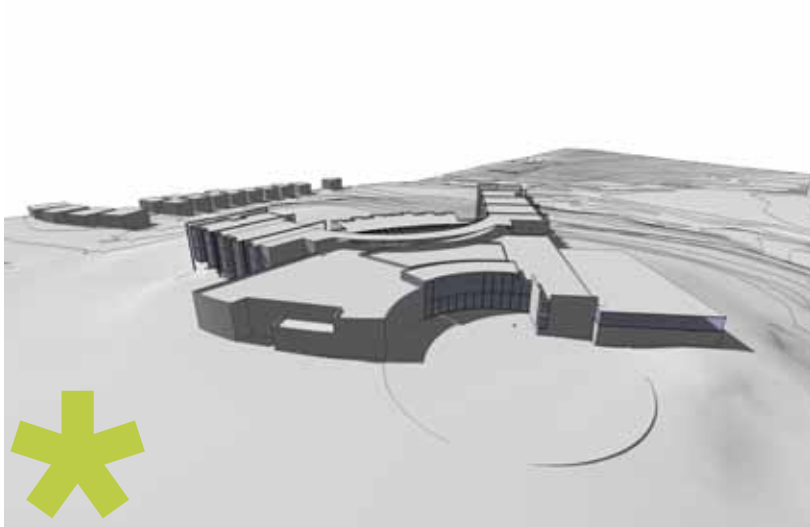
- _tying all three grade areas together, but allowing each to have its own breakout space is a key factor in facilitating interdisciplinary learning
- _orientation south and using the landscape to project the building towards the open field will allow for further expansion at a later date
- _southern exposure will reduce heating and cooling costs for the building overall
- _media center will act as an object within the design, which heightens its importance within the school setting
- _the main atrium will be a place for gathering and growing for all students
- _by orienting the front doors to one side, the user is forced to go past the administration area which will greatly help with security issues
- _sixth grade wing is most sheltered and divided from the rest of the school to ease the transition from elementary to middle school
- _seventh grade wing stretches out towards landscape, representing the need to become thier own person and find themselves
- _eighth grade area is center of school allowing for those students to become mentors for the rest of the school



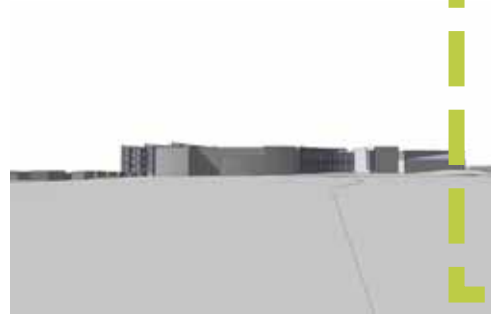
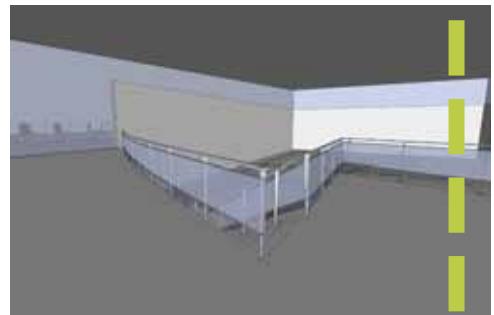


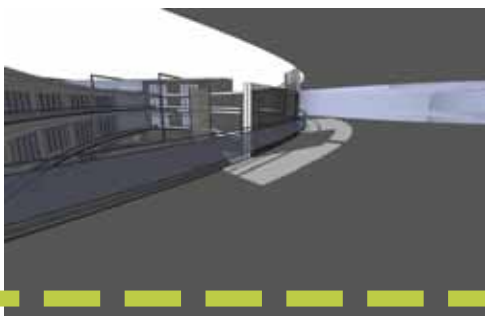
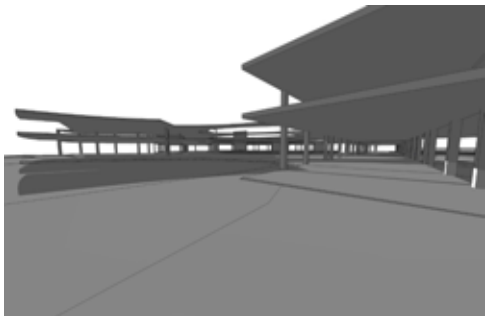
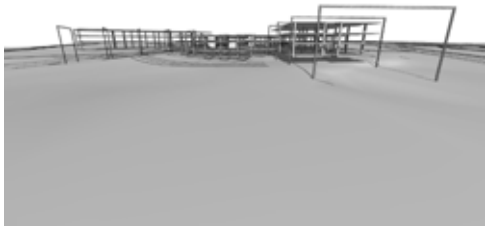
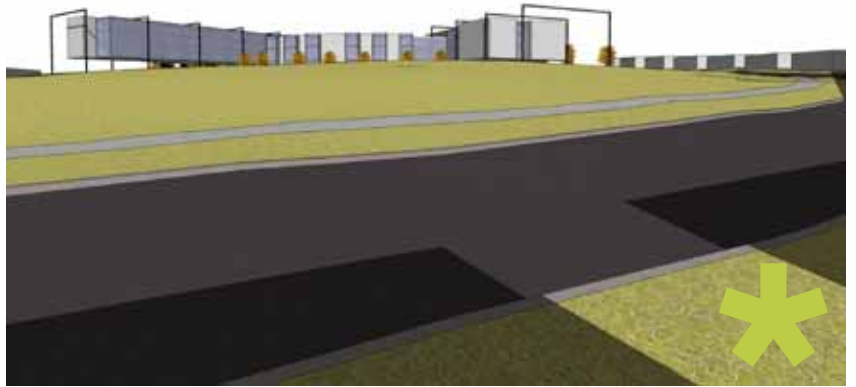
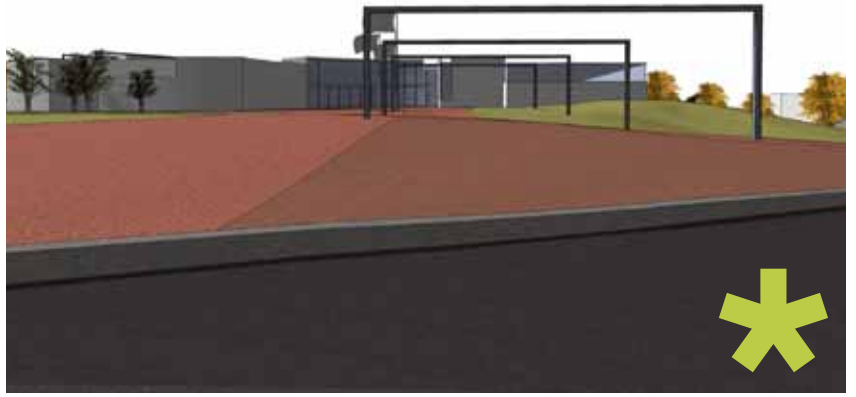
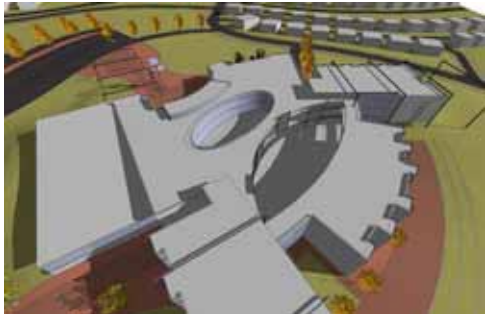


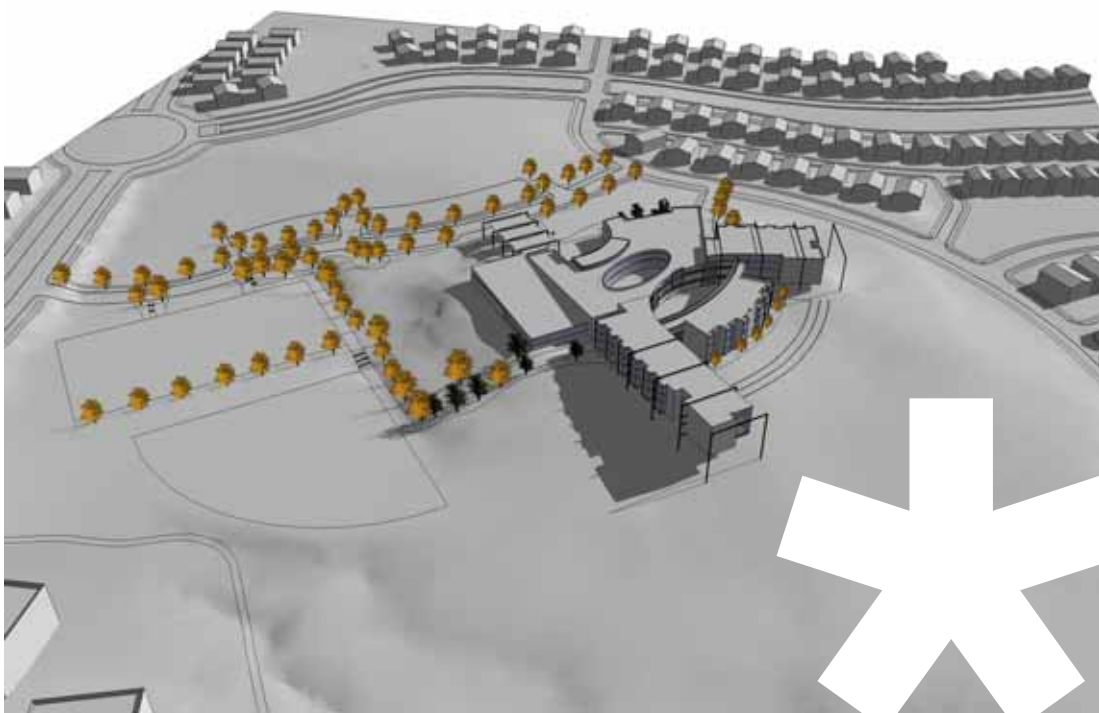


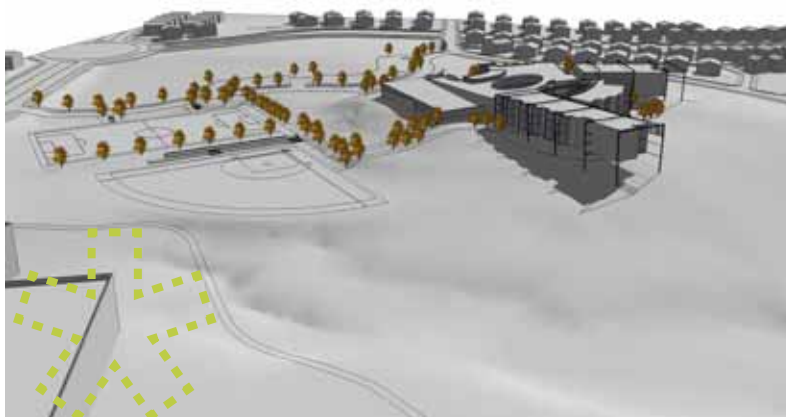
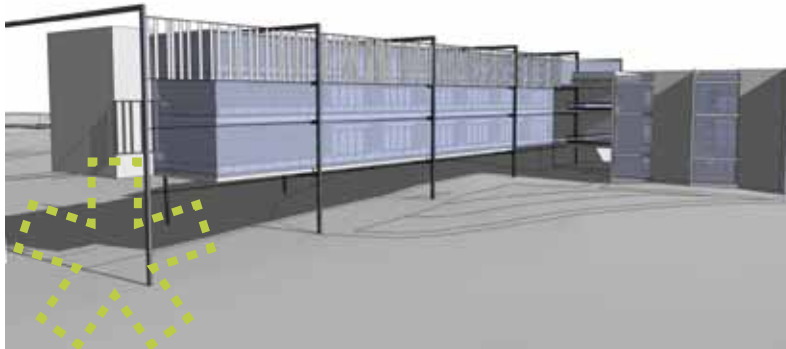
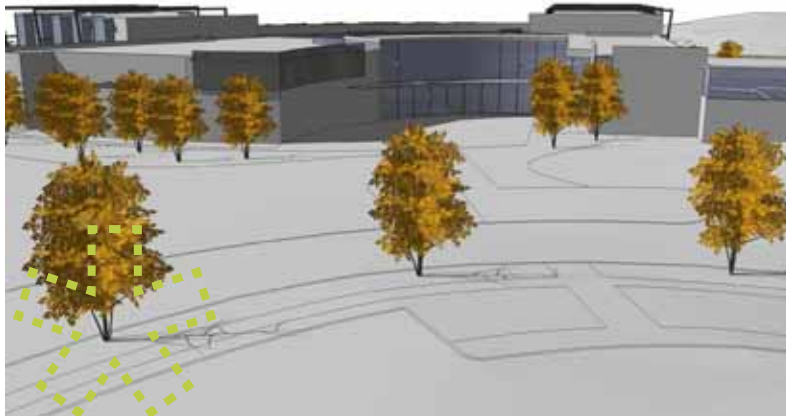


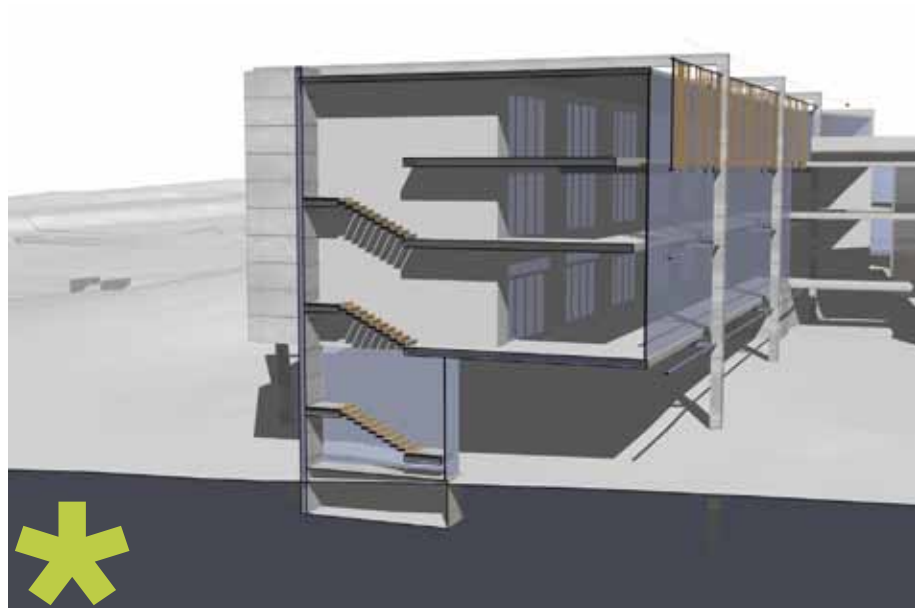
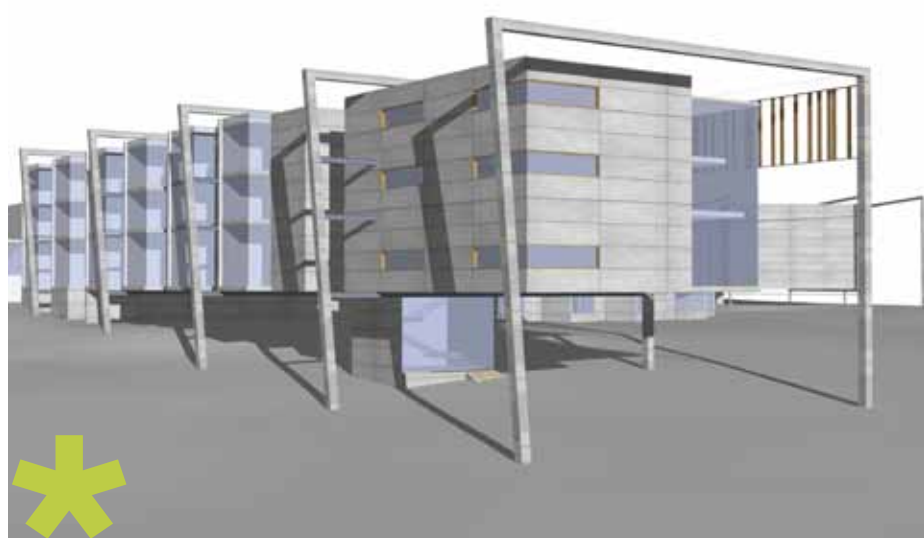
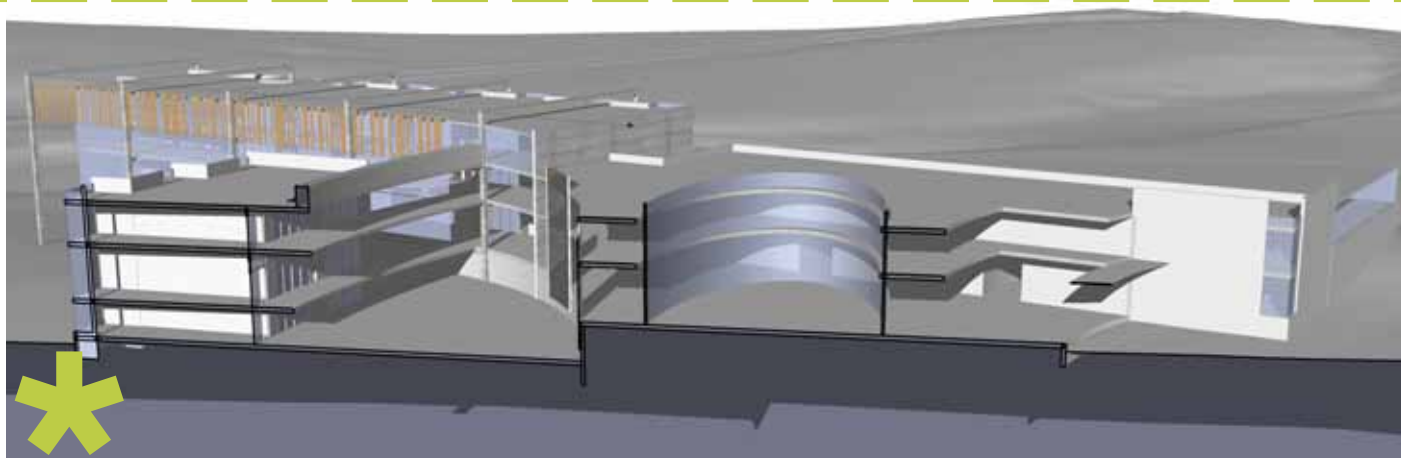
BUILDING DEVELOPMENT







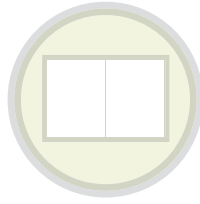






BUILDING DEVELOPMENT





FINAL DESIGN DOCUMENTATION

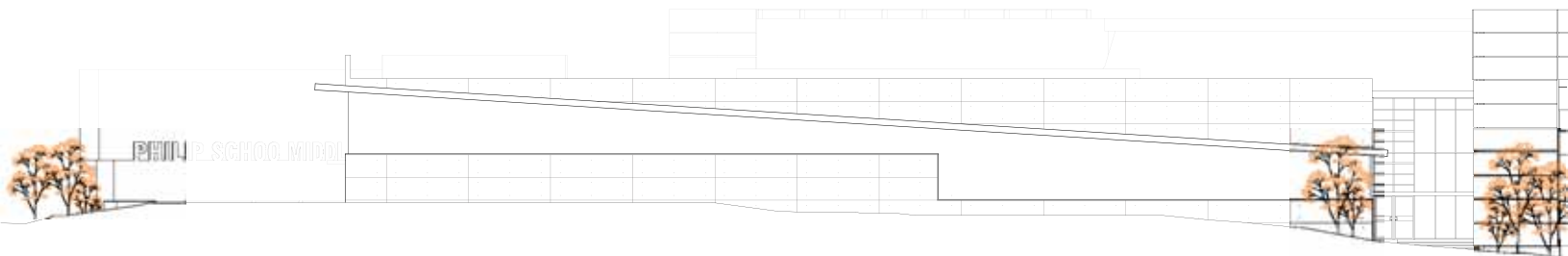




Birds Eye Perspective Looking North



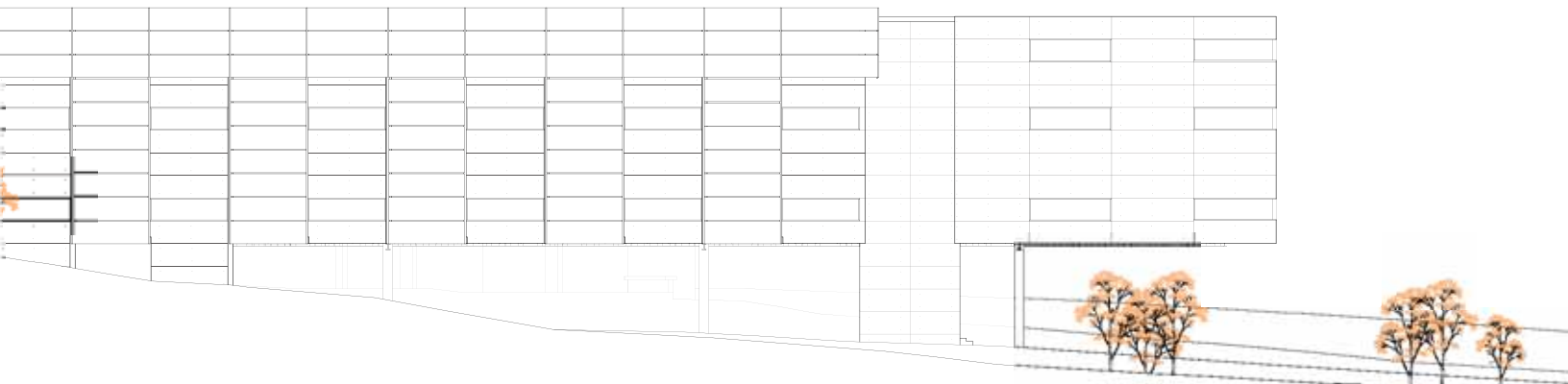
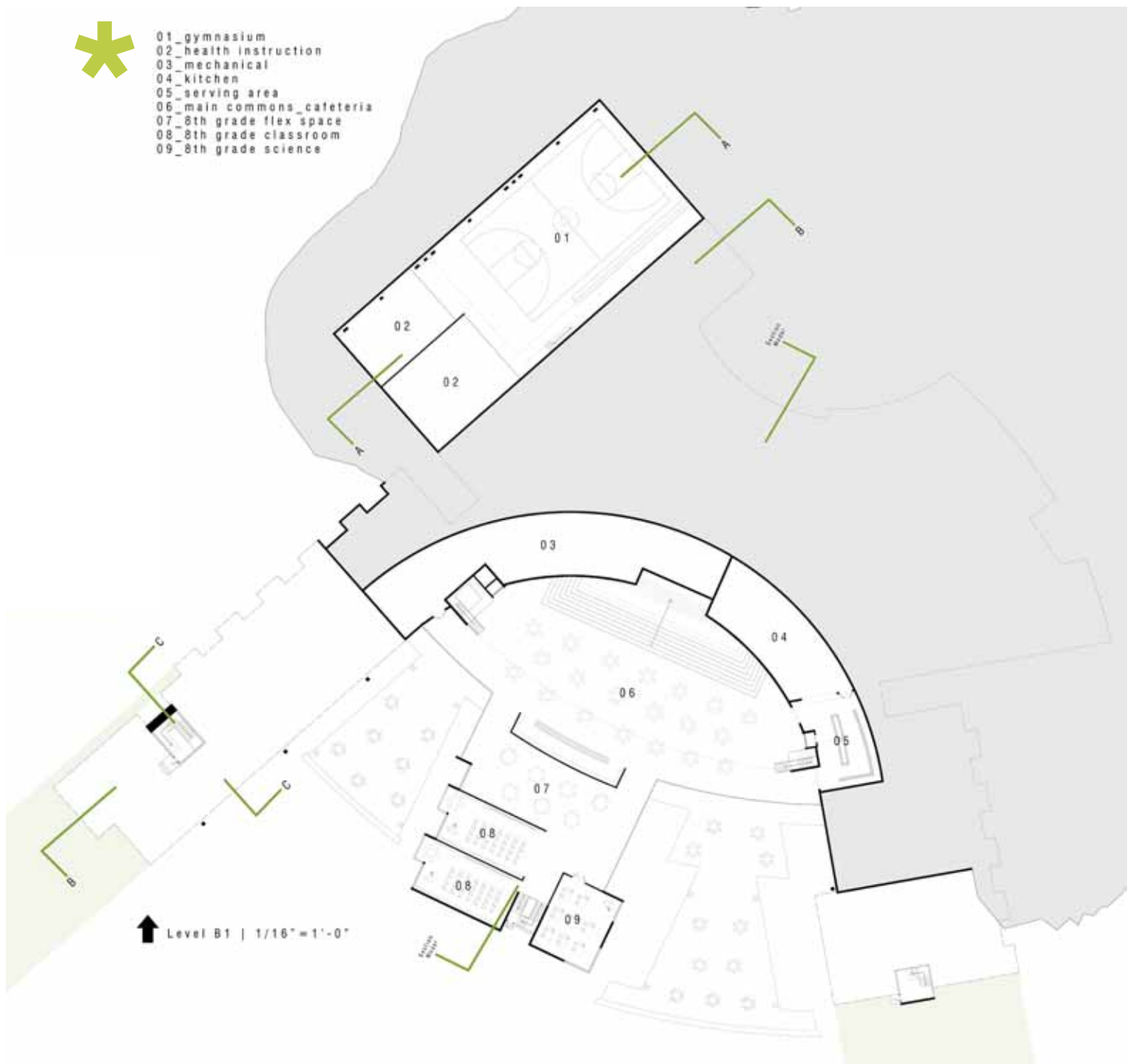
Site Plan - NTS



West Elevation - NTS

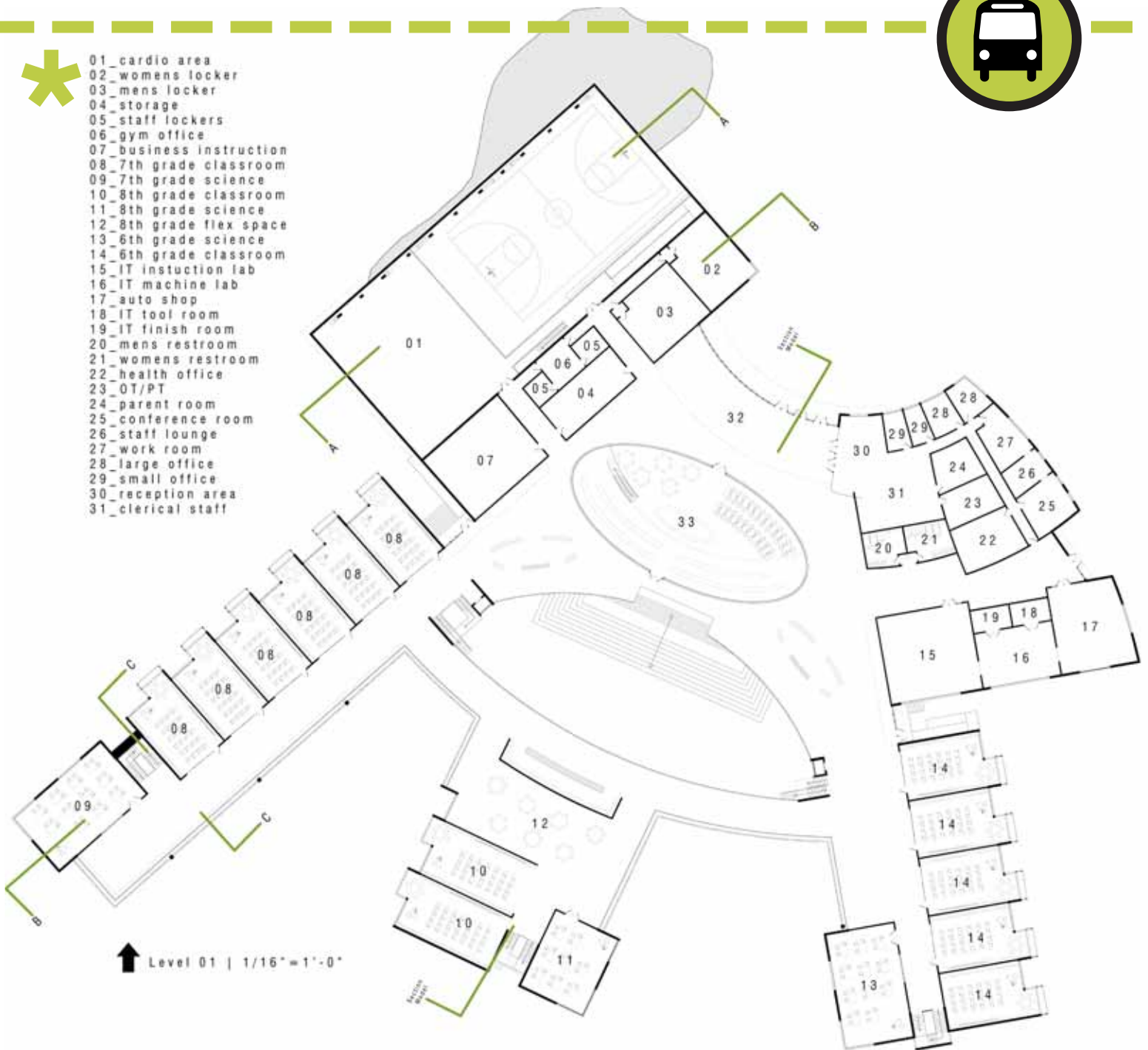


- 01_gymnasium
- 02_health instruction
- 03_mechanical
- 04_kitchen
- 05_serving area
- 06_main commons_cafeteria
- 07_8th grade flex space
- 08_8th grade classroom
- 09_8th grade science





- 01_cardio area
- 02_womens locker
- 03_mens locker
- 04_storage
- 05_staff lockers
- 06_gym office
- 07_business instruction
- 08_7th grade classroom
- 09_7th grade science
- 10_8th grade classroom
- 11_8th grade science
- 12_8th grade flex space
- 13_6th grade science
- 14_6th grade classroom
- 15_IT instruction lab
- 16_IT machine lab
- 17_auto shop
- 18_IT tool room
- 19_IT finish room
- 20_mens restroom
- 21_womens restroom
- 22_health office
- 23_OT/PT
- 24_parent room
- 25_conference room
- 26_staff lounge
- 27_work room
- 28_large office
- 29_small office
- 30_reception area
- 31_clerical staff



↑ Level 01 | 1/16" = 1'-0"

PHILIP SCHOOL MIDDLE

Section BB - NTS

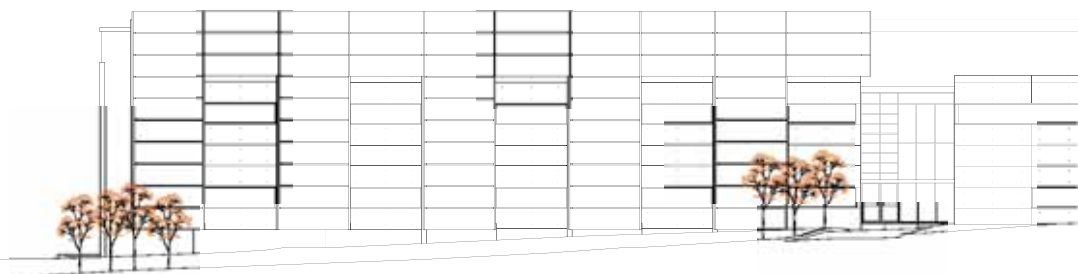
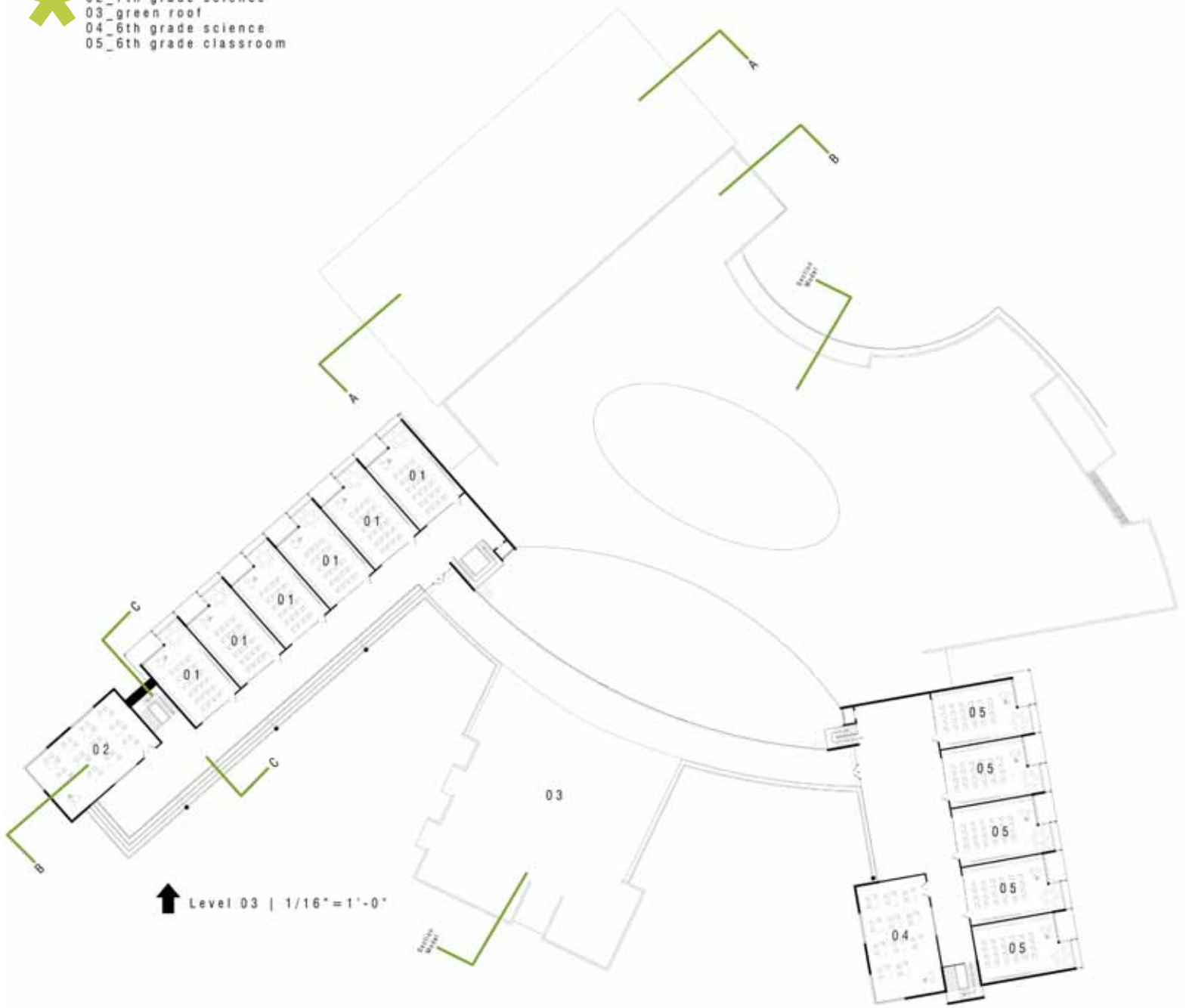


- 01_life management lab
- 02_keyboarding
- 03_computer labs
- 04_7th grade classroom
- 05_7th grade science
- 06_8th grade classroom
- 07_8th grade science
- 08_8th grade flex space
- 09_6th grade science
- 10_6th grade classroom
- 11_instructional music
- 12_multi-use room
- 13_vocal music
- 14_practice rooms
- 15_lounge space
- 16_womens restroom
- 17_mens restroom
- 18_kiln room
- 19_mud room
- 20_art storage
- 21_art instruction
- 22_outdoor patio





- 01_7th grade classroom
- 02_7th grade science
- 03_green roof
- 04_6th grade science
- 05_6th grade classroom

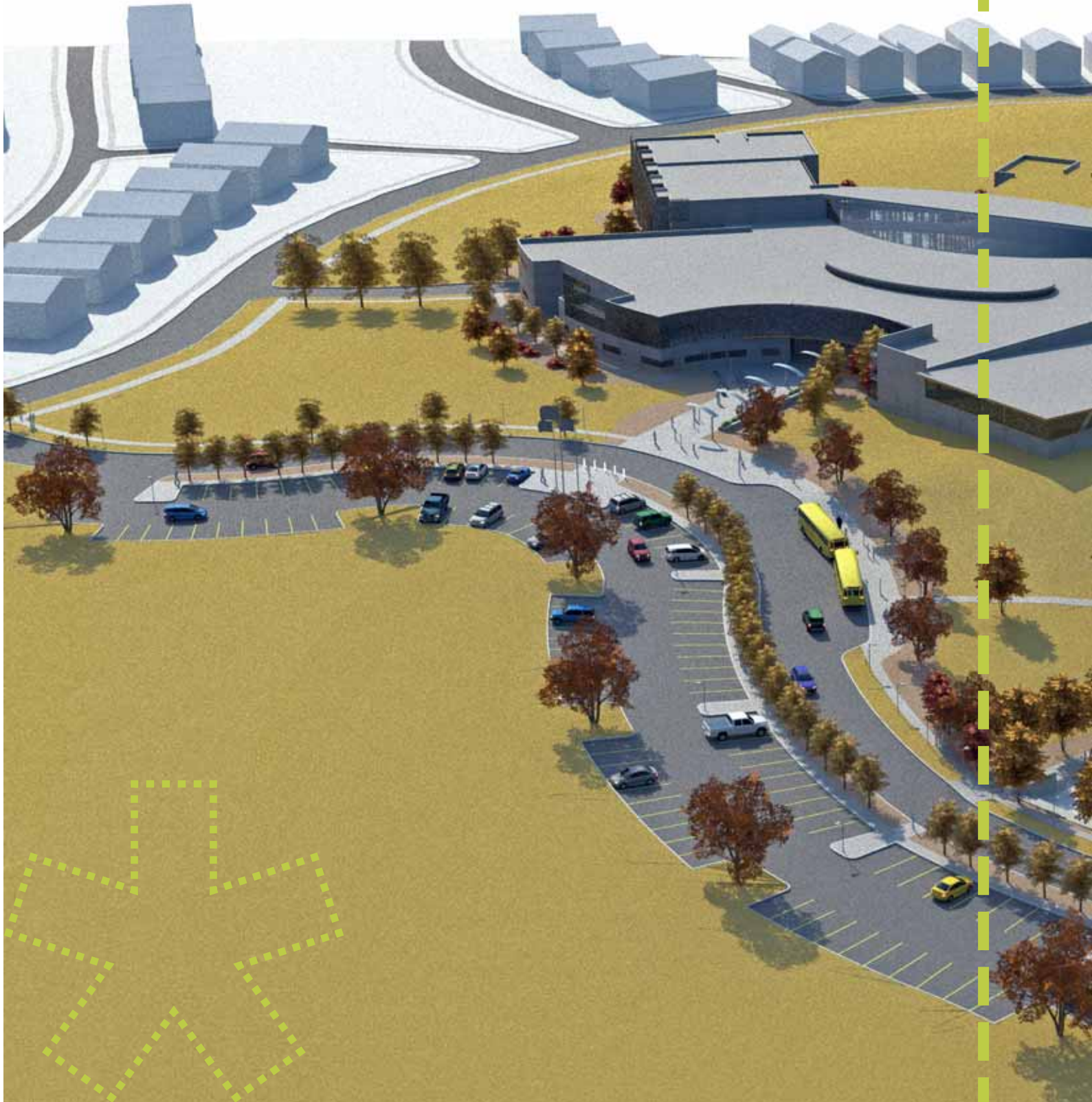




Shading Detail



East Elevation - NTS





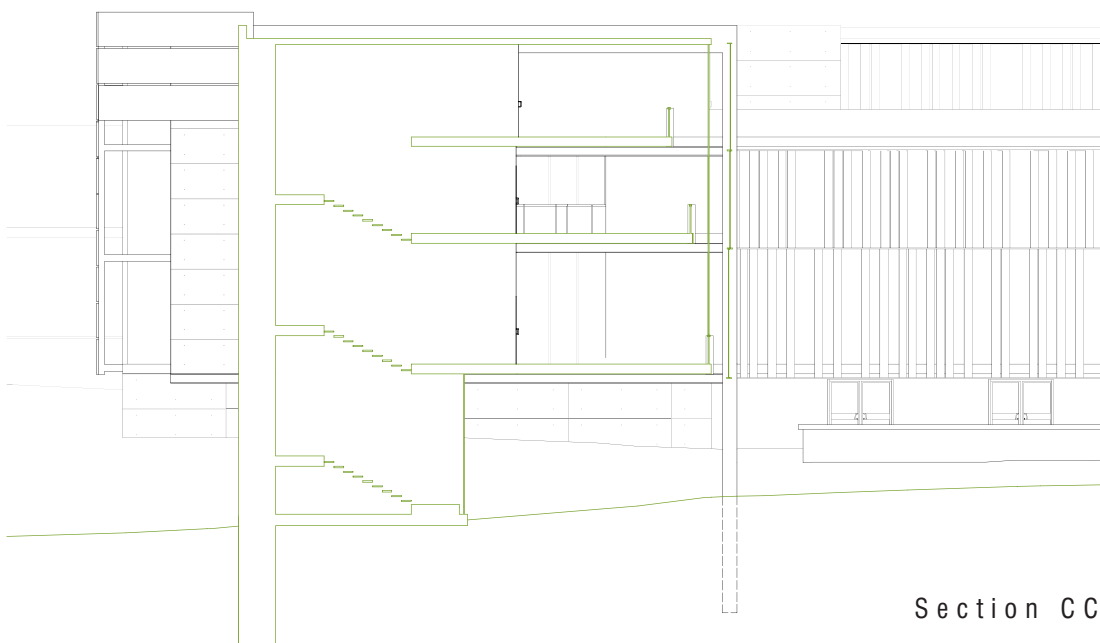
Birds Eye Perspective Looking South



Lobby Rendering



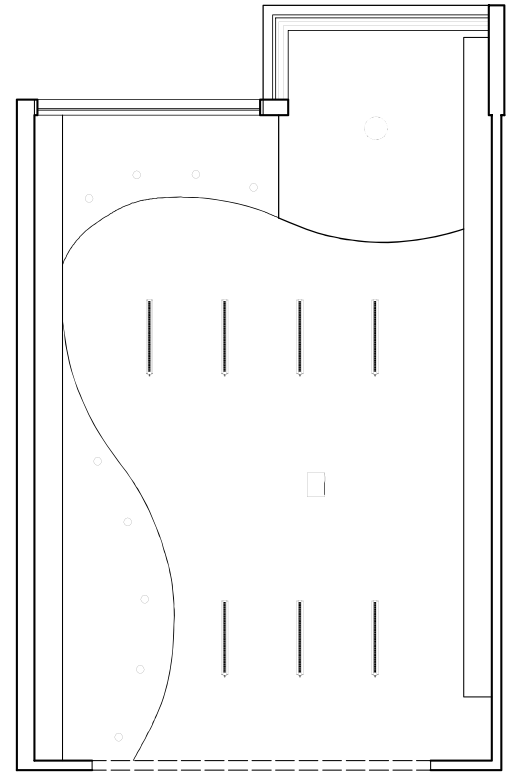
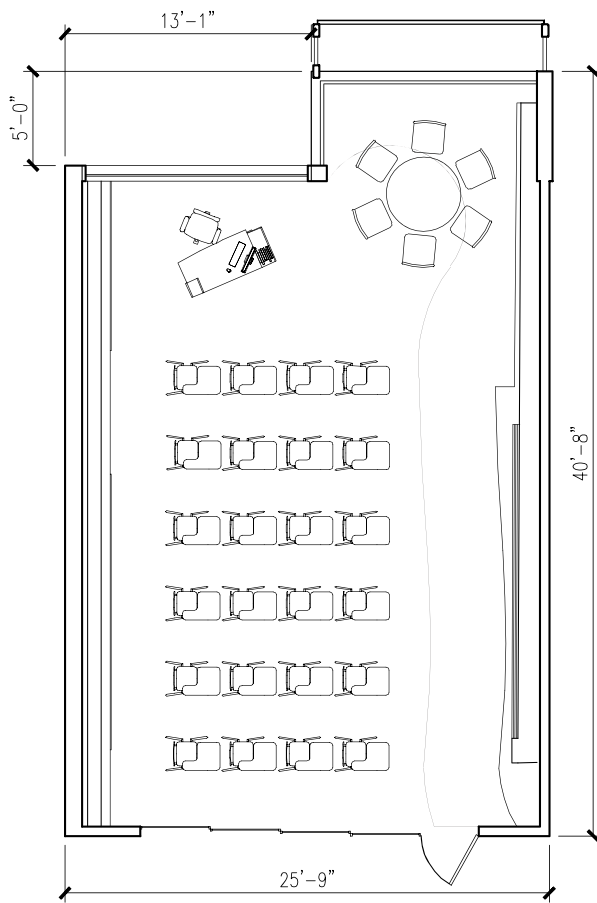
Shading + Screen Device



Section CC - NTS



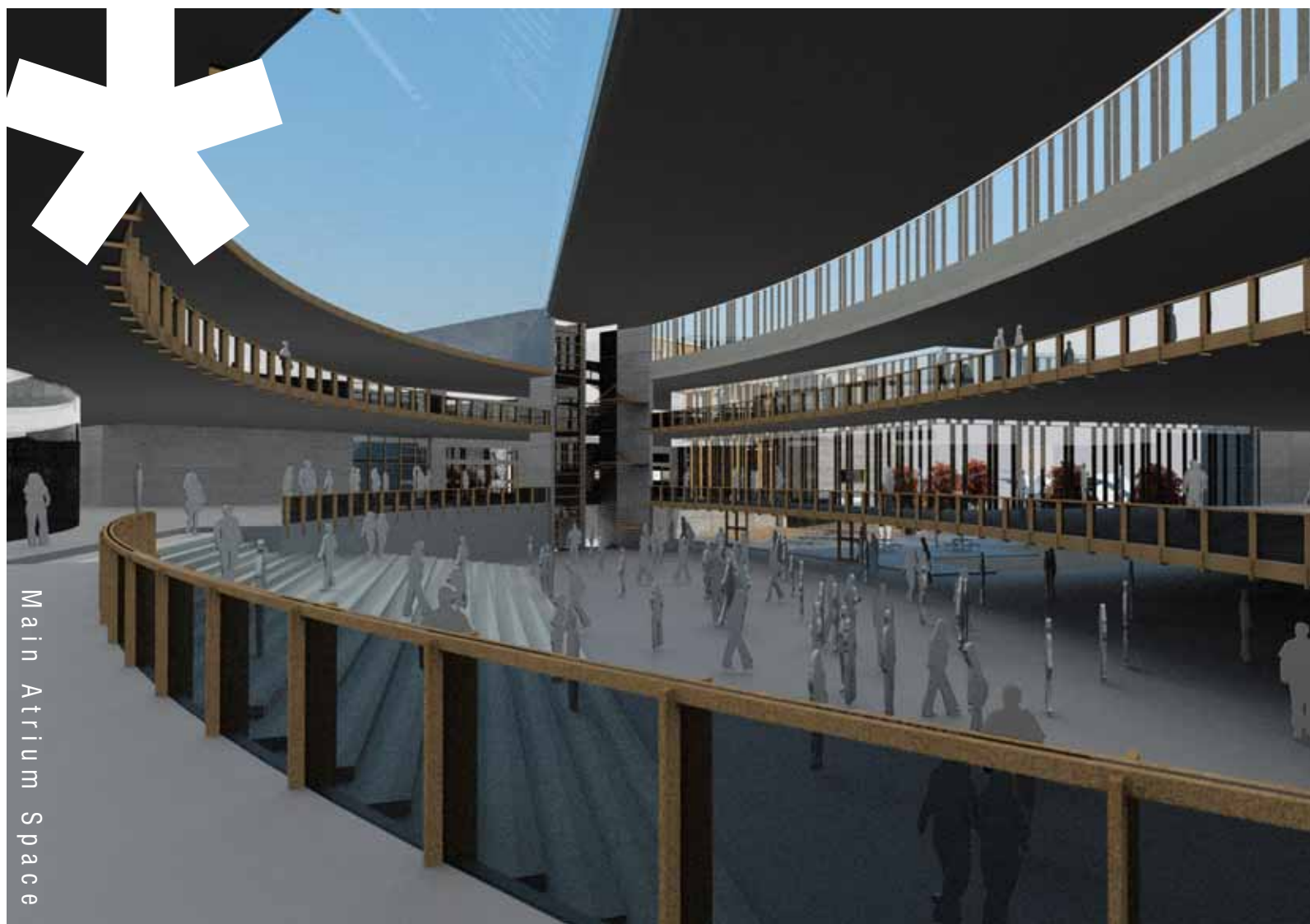
Typical Classroom Render



Typical Class Floor Plan and RCP - NTS



Typical Classroom Render

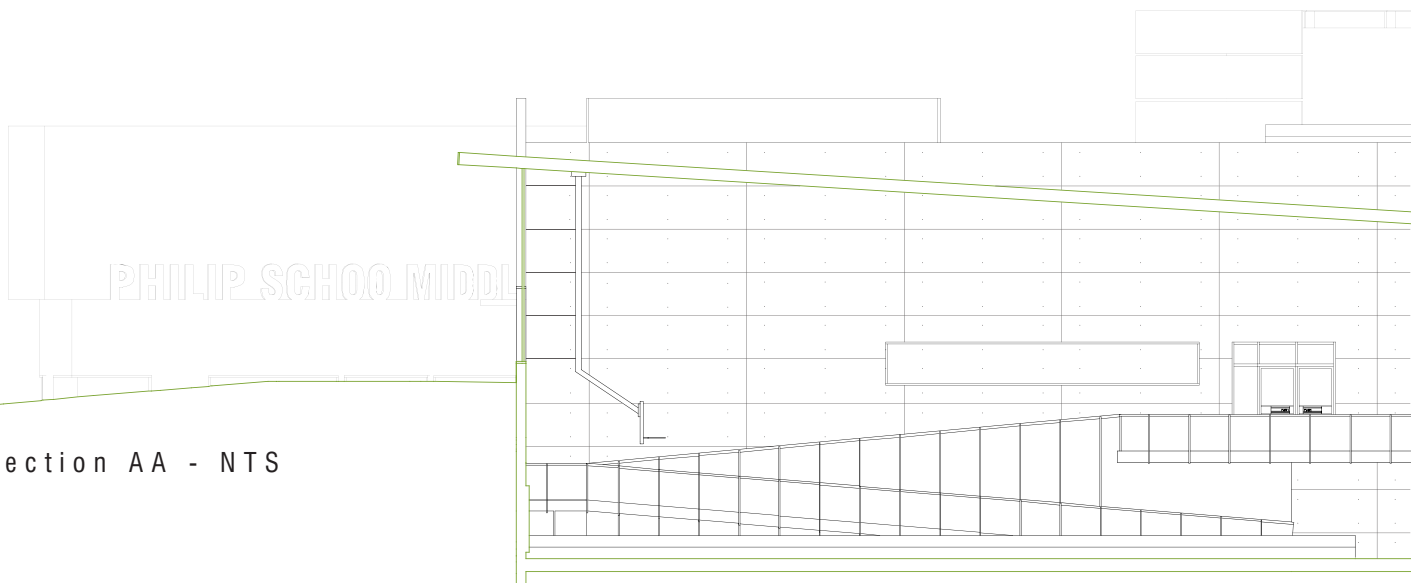


Main Atrium Space



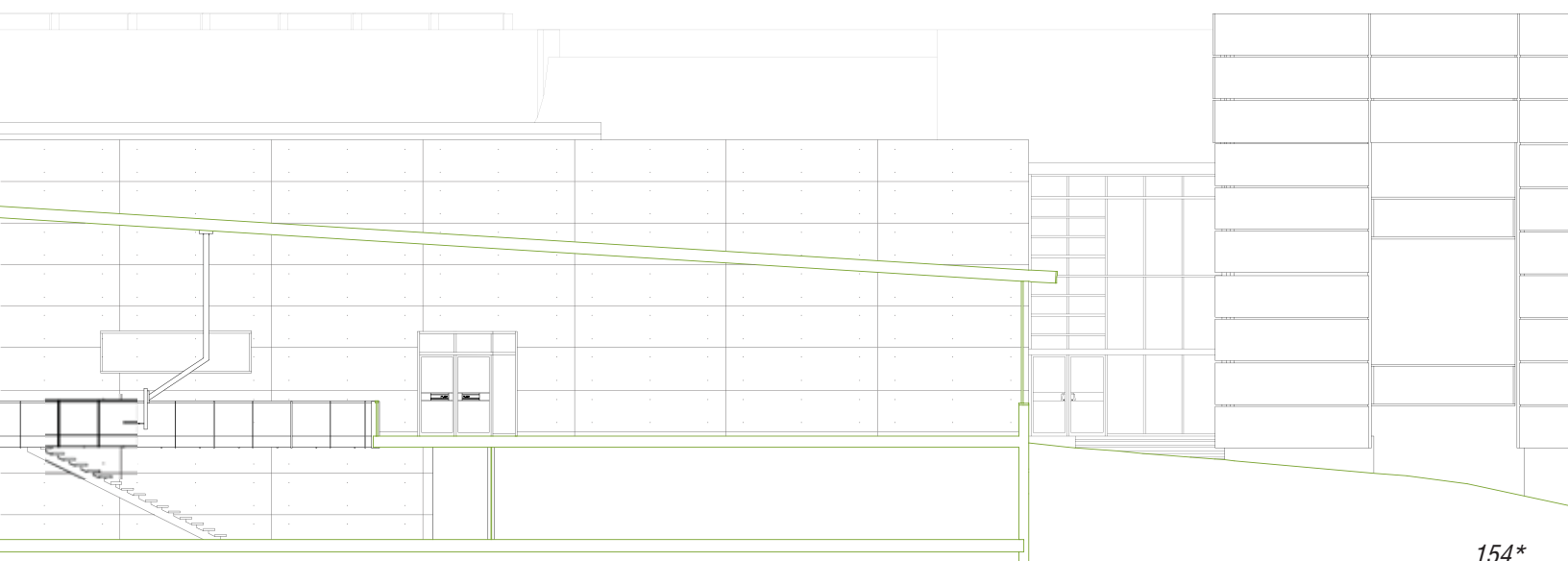


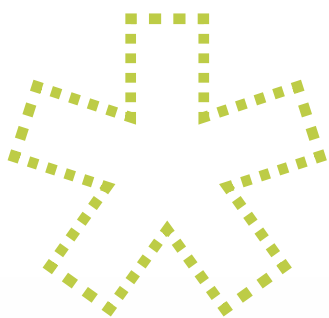
South Elevation - NTS



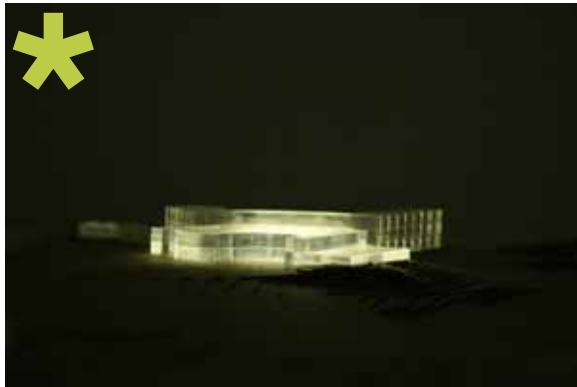


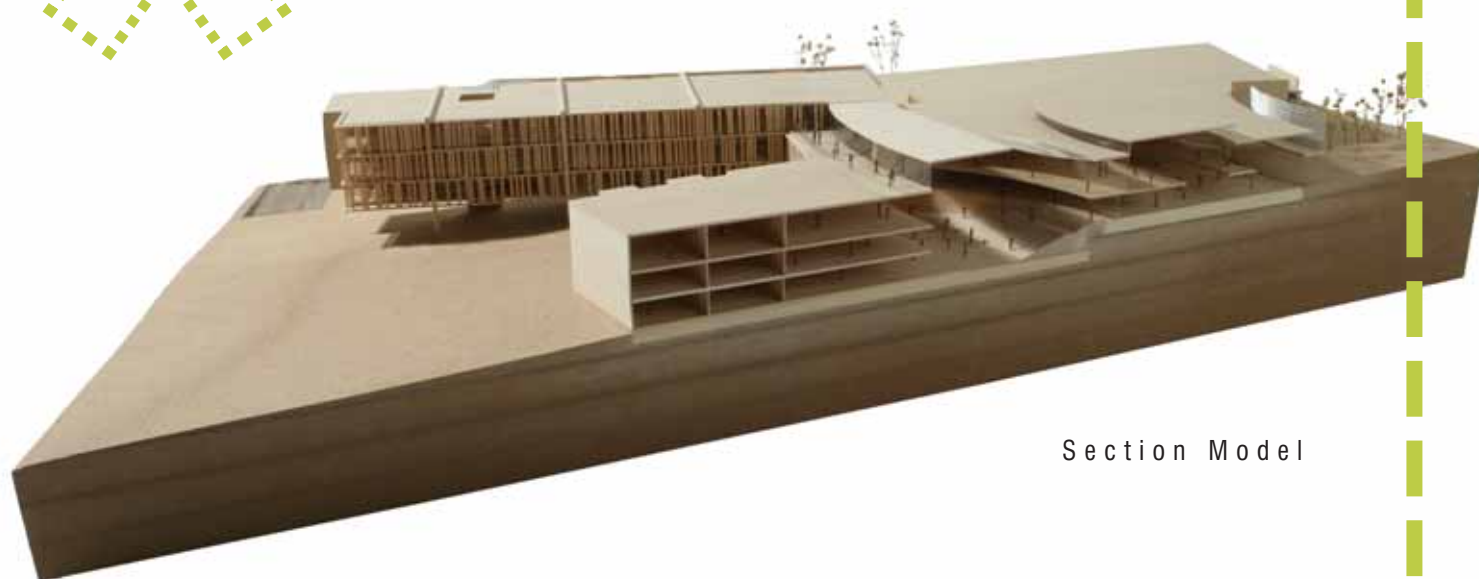
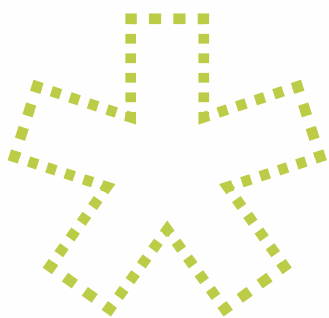
Main Courtyard Area





Site Model

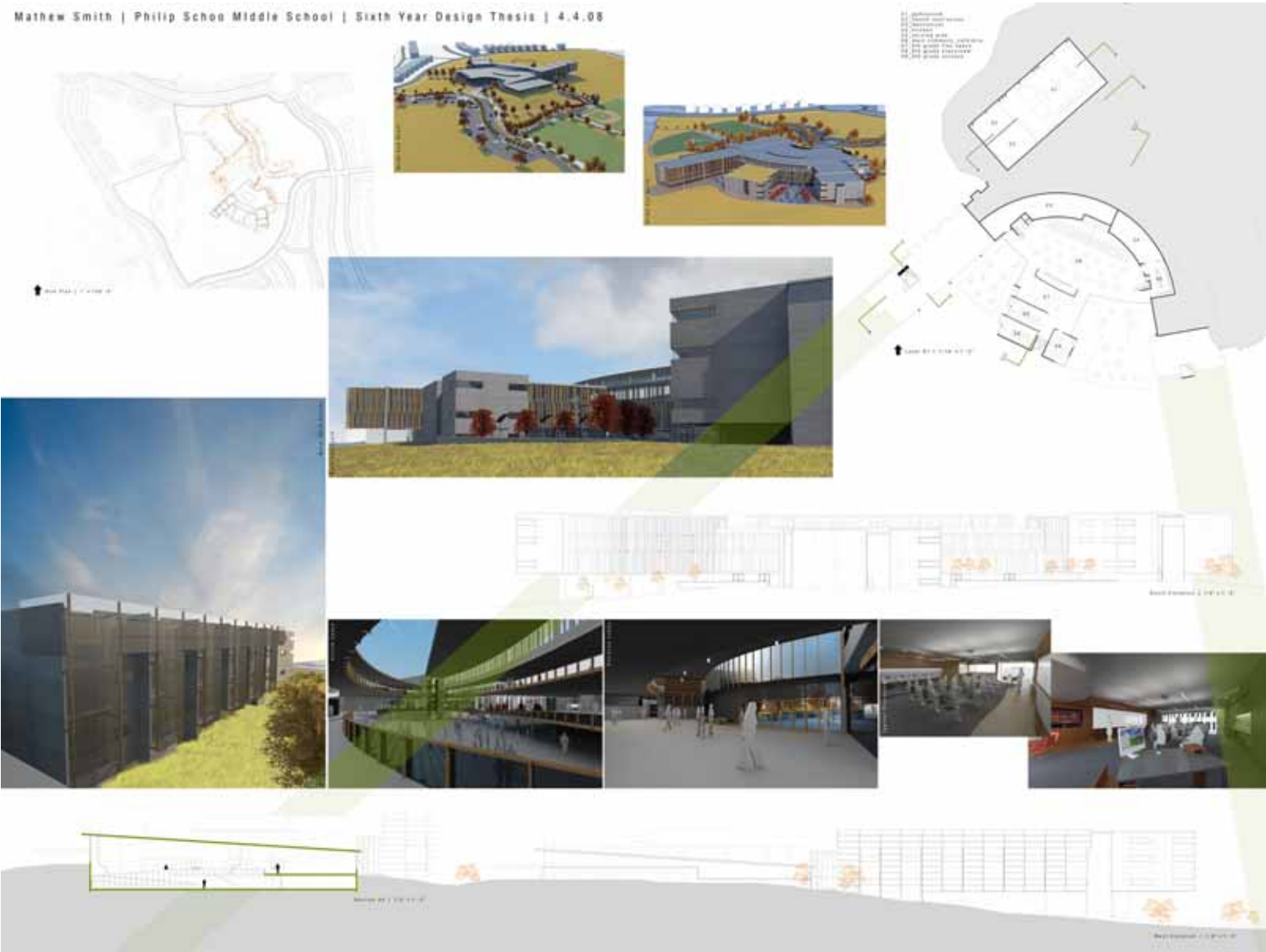




Section Model

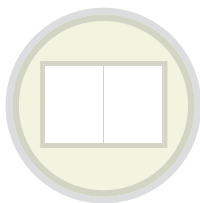








Final Presentation Boards



BIBLIOGRAPHY + THOUGHTS

bibliography + thoughts



3XN. (2008). 3xn. Retrieved October 2007, from <http://www.3xn.dk>

Architecture, V. (2008). VCBO Architecture. Retrieved October 2007, from <http://www.vcbo.com/index.html>

Association, N. M. (1982). This We Believe. Columbus, Ohio: National Middle School Association.

Bassler, B. (2000). Architectural Graphic Standards. New York, New York: John Wiley & Sons, Inc.

Bucher, B. (2007, September). (M. Smith, Interviewer)

DesignShare. (2007). DesignShare Home. Retrieved October 2007, from <http://designshare.com/index.php/home>

drMM. (2008). drMM [de Rijke Marsh Morgan Architects]. Retrieved October 2007, from <http://www.drmm.co.uk/>

Drummey Rosane Anderson, I. (2006). Drummey Rosane Anderson, Inc. Retrieved October 2007, from <http://www.draarchitects.com/index.cfm?f=1>

Duerk, D. P. (1993). Architectural Programming: Information Management for Design. New York, New York: John Wiley & Sons, Inc.

LLP, K. T. (2007). KieranTimberlake Associates LLP. Retrieved October 2007, from <http://kieran-timberlake.com/home/index.html>

Nair, P., & Fielding, R. (2005). Language of School Design: Design Patterns for 21st Century Schools. India: DesignShare.com.

NEBCO. (2007). Fallbrook-Lincoln, Nebraska's premier residential and commercial neighborhood. Retrieved August 2007, from <http://balanceisgood.com>

Schools, L. P. (2008). Lincoln Public Schools | Home Page. Retrieved September 2007, from <http://lps.org/>

Spirey, D. (2007, September). (M. Smith, Interviewer)

Van Horn, D. (2007, September). (M. Smith, Interviewer)

Wieskamp, S. (2007, September). (M. Smith, Interviewer)

Will, P. +. (2006). Commercial Building Architect, Interior Design, Sustainable Design. Retrieved October 2007, from <http://www.perkinswill.com/>

Throughout this last year, the thought of a new archetype for educational spaces has raised many questions for myself. I personally have learned a huge amount about this specific age group and their needs when it comes to their development socially, mentally, and physically. The spaces in which a designer creates whether beknown to the child or not affects them greatly and needs to not only be addressed, but it needs to be taken advantage in order to allow for the best opportunity for growth.

The design attempted to stress the most important factors that were researched to have an effect on the way we learn. In addition to these factors were age specific factors that were then introduced to make the design specific to the middle school students. Basing the design on the transitions undertaken by the students and allowing the architecture to facilitate this was the main idea of the design. There were criticisms about the design, but the overall concept was accepted to be important to the design and development of learning spaces.

In the final critique there were a lot of great ideas to strengthen the design and make it an even better place for the students to grow. One of the main criticisms was about the individual classroom space and the need for the design of each classroom to vary and have their own identity. The repetition takes away from the students experience to have their own space, thus taking away their desire to find their own identity.

Another item that was the need for more open spaces within the scheme and also the material choice that doesn't really allow for this openness to happen. A series of smaller common spaces was discussed instead of one large main open space. This would allow for a different kind of social interaction between the students and maybe a happy medium between a large open space, and smaller more intimate spaces would be more suitable.

Overall, the design was decently successful and the ideas brought about a good discussion about how one learns, and how one learns in today's world. After the final review, I felt good about where the project was, but like in every project you feel like you can always do more to further the design. But this was definitely a learning experience, and I hope that in my future career I will get the chance to put some of these findings to use in a related project type that deals with learning spaces in some manner.



THANK YOU

I want to thank everyone who has made this possible. Thanks to my friends and family for all the support, love, and MONEY to get me through these last six years. I want to thank my parents for all of their support and love for not only these last six years, but for my 23 years of life so far. Thanks to my sister for getting a job and a new car before her older brother, I hope that life brings you everything that you could ever want.

I also would like to thank all of my teachers, mentors and friends here at Architecture Hall. Even though we won't miss the late nights and the deadlines...I will miss all of you, and you all have made an enormous impact of my life. Thank you to everyone and I hope nothing but the best for everyone.

And to my future wife Jennifer...I cannot put it into words how much I love you and could not have done this without you. I cannot wait to start our lives together and to start having memories of our own. Now you finally don't have to "hate my major" anymore...you can "hate my career". [Just Kidding] I love you so much now and forever.

-Matt

