May 1st, 2010

Masters Project

Ben Spicer

The Charles A. Smith Charter School for Urban Agriculture and the Culinary Arts

Table of Contents

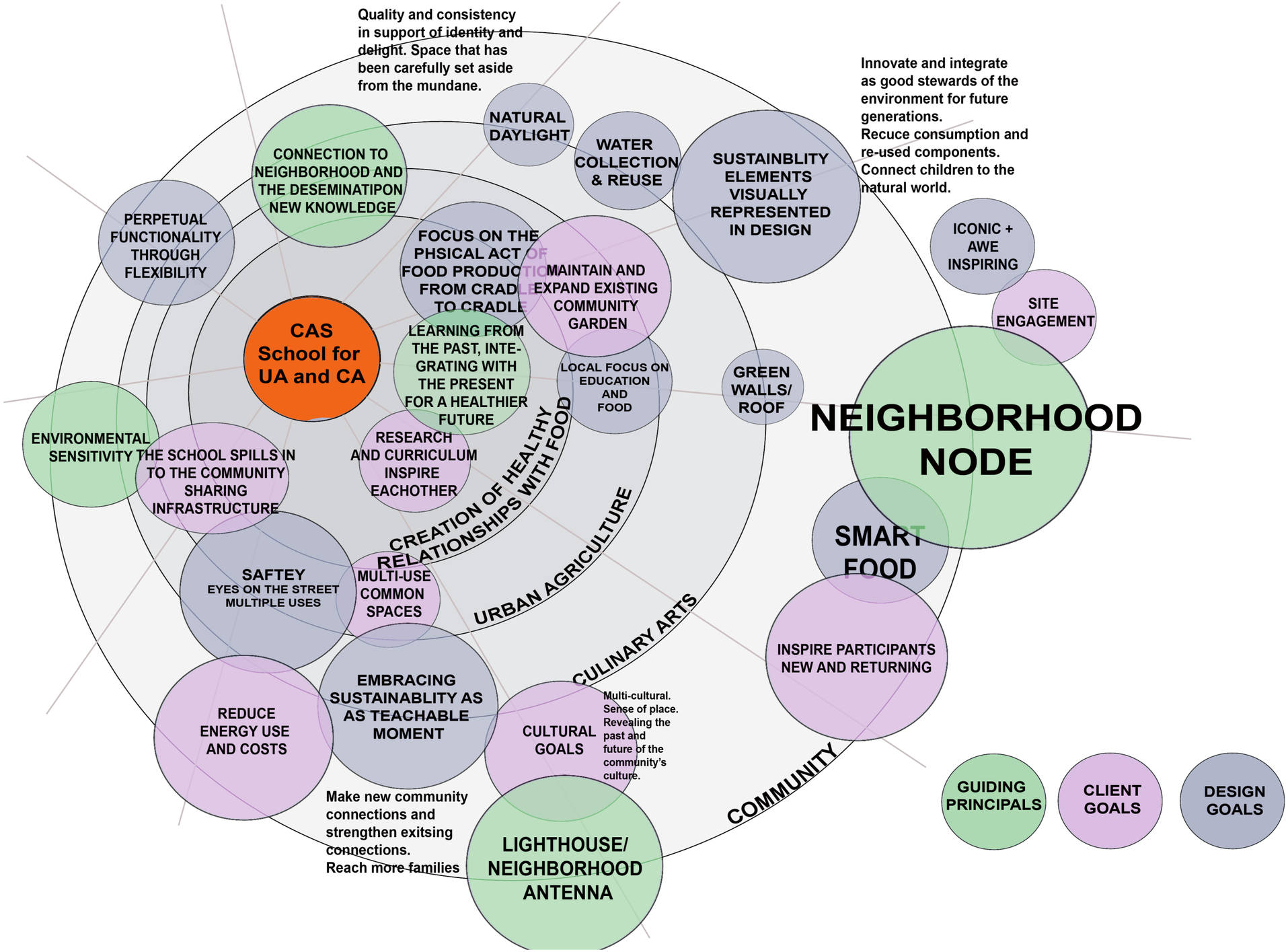
Conceptual Narrative

First we eat, then we do everything else.
--M.F.K.Fisher

Our relationship to the production, preparation and consumption of food is becoming dangerously unsustainable. We believe that a robust and thoughtful urban agriculture program can begin to address some of this problem's constituent issues including social, community, health and energy use. The Charles A. Smith Charter School for Urban Agriculture and the Culinary Arts proposes to participate in this effort by training 200 High School students to become the next generation of leaders in the food world, creating community infrastructure that will alleviate food desert conditions for 10% of Chicago's approximately half million residents that live in food deserts, and create a dense network of community organizations and participants by acting as a center of gravity for existing and new organizations dedicated to food justice.

The aim of the specialized education at Charles A. Smith will be to prepare young adults to become leaders in developing a healthier and more sustainable systems for the production and consumption of food. As the population of the world continues to urbanize at an extraordinary rate and the production of food becomes more and more industrialized it is crucial that we as a culture re-examine our relationship with the food that sustains us. This school will attempt to begin this important work through the implementation a new curriculum based on theoretical and hands-on work, and a focus on community involvement. A partnership with the University of Chicago will be formed that will allow the school to become a testing ground for cutting edge ideas as well as inform future research at the University. The graduates of this program will be prepared to open restaurants, develop innovative new culinary and agriculture technologies, impact political and planning decisions, and spread their knowledge to others through community involvement and organization. The school is located in the Woodlawn neighborhood on the border between the affluent and intellectual neighborhood of Hyde Park and one of the largest food deserts in Chicago. The school will strive to bridge this palpable divide with involvement in both communities. In addition to theoretical studies the students will run and staff a public restaurant and manage a community garden that will be available to local residents. As food is ultimately a communal endeavor the school will act as a community of learners who exist as a group within the context of the greater urban fabric, dedicated to advancing and improving our knowledge and understanding of How, Why, Where, and When we eat.

To eat is a necessity of life. The act of eating binds us to the land every day from birth to death. In the search for food, not only did we invent agriculture and technology, but also created culture and organized society. The history of the world, with its exchange between mankind and nature, is really the story of food, diversity and cooking. --Jacques Lefort


Quality and consistency in support of identity and delight. Space that has been carefully set aside from the mundane.
Innovate and integrate as good stewards of the environment for future generations.
Recuce consumption and re-used components.
Connect children to the natural world.
NATURAL DAYLIGHT
WATER COLLECTION & REUSE
SUSTAINBLITY ELEMENTS VISUALLY REPRESENTED IN DESIGN
CONNECTION TO NEIGHBORHOOD AND THE DESEMINATIPON NEW KNOWLEDGE
PERPETUAL FUNCTIONALITY THROUGH FLEXIBILITY
ICONIC + AWE INSPIRING
SITE ENGAGEMENT
FOCUS ON THE PHSICAL ACT OF FOOD PRODUCTION FROM CRADLE TO CRADLE
MAINTAIN AND EXPAND EXISTING COMMUNITY GARDEN
CAS School for UA and CA
LEARNING FROM THE PAST, INTE-GRATING WITH THE PRESENT FOR A HEALTHIER FUTURE
LOCAL FOCUS ON EDUCATION AND FOOD
GREEN WALLS/ ROOF
NEIGHBORHOOD NODE
ENVIRONMENTAL SENSITIVITY
THE SCHOOL SPILLS IN TO THE COMMUNITY SHARING INFRASTRUCTURE
RESEARCH AND CURRICULUM INSPIRE EACHOTHER
CREATION OF HEALTHY RELATIONSHIPS WITH FOOD
URBAN AGRICULTURE
CULINARY ARTS
COMMUNITY
SMART FOOD
SAFTEY
EYES ON THE STREET
MULTIPLE USES
MULTI-USE COMMON SPACES
INSPIRE PARTICIPANTS NEW AND RETURNING
REDUCE ENERGY USE AND COSTS
EMBRACING SUSTAINABLITY AS AS TEACHABLE MOMENT
CULTURAL GOALS
Multi-cultural. Sense of place. Revealing the past and future of the community's culture.
Make new community connections and strengthen exitsing connections.
Reach more families
LIGHTHOUSE/ NEIGHBORHOOD ANTENNA
GUIDING PRINCIPALS
CLIENT GOALS
DESIGN GOALS

guiding principals

1) community

Interaction with the community is essential to this project's success. Due to the Fortuitous location on the frontier of Hyde Park and Woodlawn, there are tremendous potentials for network building and community development. The school will strive to be not just an eight to three endeavour, but a continuous beneficial presence for the neighborhood and city. The school will encourage the students to take an active role in the development of their community.

2) learning

The school facilities are broken down in to three major functions, the commons areas which house less determined educational and gathering spaces, the learning labs which contain a variety of learning space typologies to foster creativity and flexibility in the learning environment and gardens which are spread throughout the neighborhood. The lab spaces wrap around the commons creating variety of spacial adjacencies.

3) energy

A major contributing factor to the unsustainablity and unsalubriousness of our food production system is the tremendous volume of energy that is expended processing, packaging and transporting food. Urban Agriculture has the potential to alleviate much of this waste while producing tastier, healthier food. This school will train young adults to research and develop new and imaginative methods of urban food production.

4) food justice

The state of food availability is becoming increasingly dire, this project will strive to address this issue by training young people and community members in healthy food production and preparation methods. The school will also provide much needed infrastructure in the form of partnership with a restaurant and a market which will also generate some funding for the school, allowing it to provide high quality service to the students and the community.

5) urbanism

As our nation and the world become increasingly urbanized and energy sources become increasingly scarce creative solutions to food production will become ever more crucial. This school will approach these issues head on and strive to develop methods of insuring increased food availability and healthy communities.

distance to nearest supermarket

= 5 minutes walking

Chicagoans living in food deserts

= 50,000 people

incidents of childhood obesity in America

= 1,000,000 people

energy used in food production in America

= 1 quadrillion BTU

Proportion of food production energy used in transport, industrial agriculture, processing and packaging

= 10 percent

food miles embedded in an average American breakfast

= 3,000 miles

Americans living in urban areas

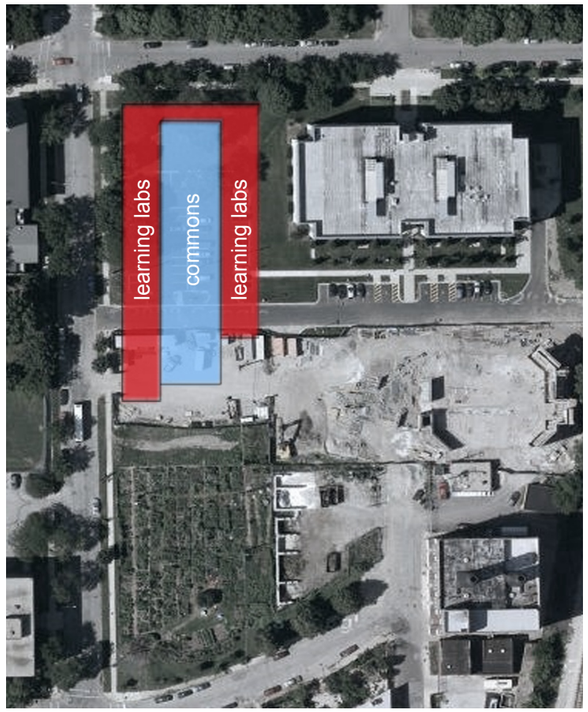
= 20,000,000 people

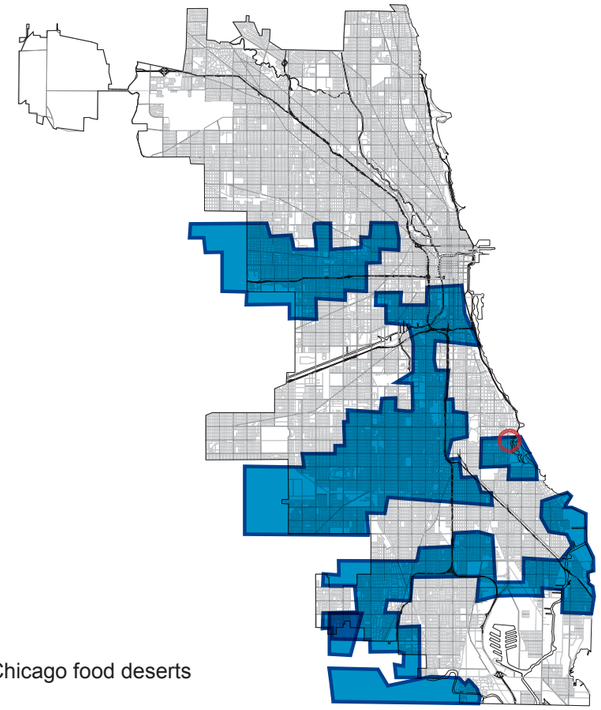
Vacant lots in Chicago

= 5,000 lots

potential profit from farming a single lot

$ = $2,000





Chicago food deserts

Food Justice

A food desert is a district with little or no access to foods needed to maintain a healthy diet but often served by plenty of fast food restaurants.

The concept of ‘access’ can be interpreted in three ways.

‘Physical access’ to shops can be difficult if the shops are distant, the shopper is elderly or infirm, the area has many hills, public transport links are poor, and the consumer has no car. Also, the shop may be across a busy road, difficult to cross with children or with underpasses that some fear to use because of a crime risk. For some, such as the disabled, the inside of the shop may be hard to access physically if there are steps up or the interior is cramped with no room for walking aids. Carrying fresh food home may also be hard for some.

‘Financial access’ is difficult if the consumer lacks the money to buy healthy foods (generally more expensive, calorie for calorie, than less healthy, sugary, and fatty ‘junk foods’) or if the shopper cannot afford the bus fare to remote shops selling fresh foods and instead uses local fast food outlets. Other forms of financial access barriers may be inability to afford storage space for food, or for the very poor, living in temporary accommodation that does not offer good cooking facilities.

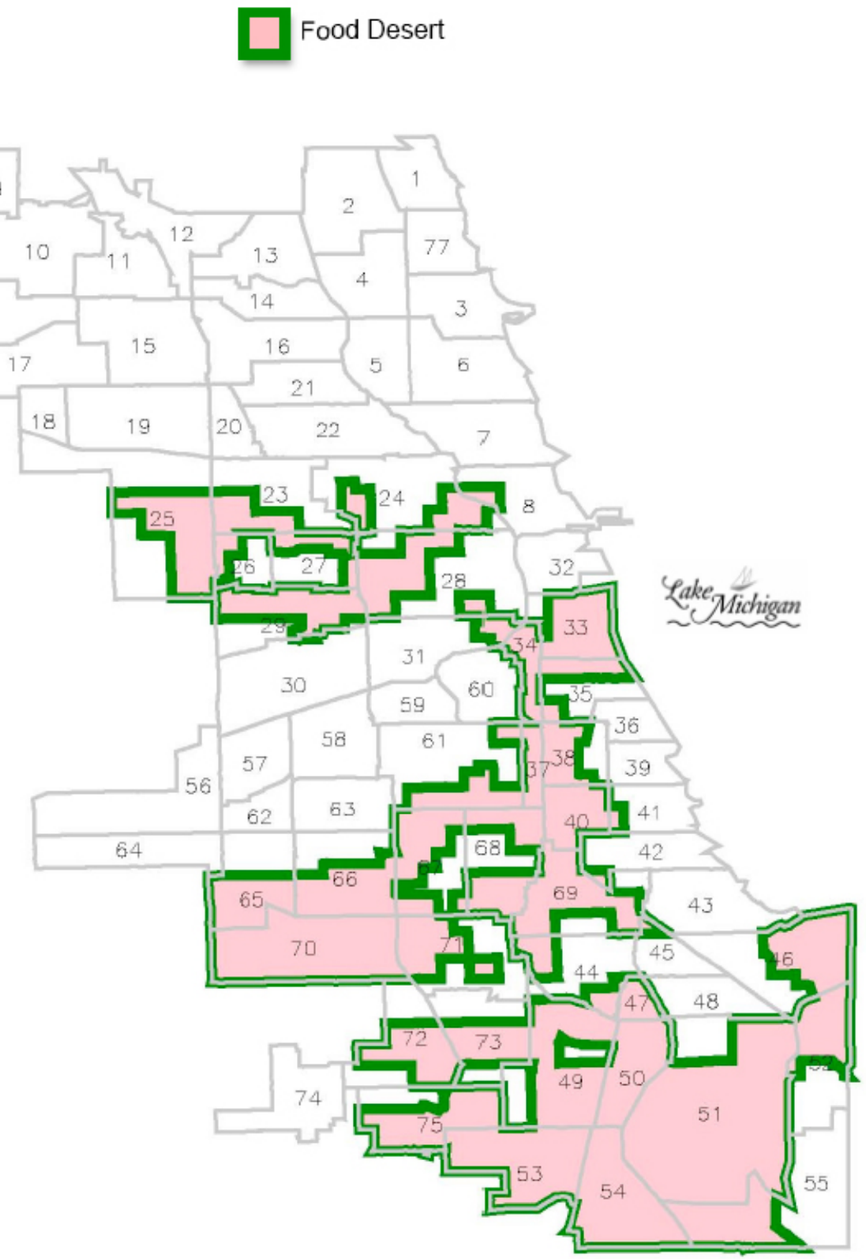
Mental attitude or food knowledge of the consumer may prevent them accessing fresh vegetables. They may lack cooking knowledge or have the idea that eating a healthy diet isn’t important.

More than 500,000 Chicagoans live in food deserts. This project sees alleviating the effects of this issue as essential to successfully forming healthier more sustainable urban environments. Creating a dense network of organizations and infrastructure will create the community resiliency necessary to provide the food and information now and in the future. The Charles A. Smith School will achieve this by creating a center of gravity for the currently disconnected community organizations engaged in this work, provide a restaurant and food market, and by training the next generations of leaders in this field.

#	Community Name	#	Community Name
1	ROGERS PARK	40	WASHINGTON PARK
2	WEST RIDGE	41	HYDE PARK
3	UPTOWN	42	WOODLAWN
4	LINCOLN SQUARE	43	SOUTH SHORE
5	NORTH CENTER	44	CHATHAM
6	LAKE VIEW	45	AVALON PARK
7	LINCOLN PARK	46	SOUTH CHICAGO
8	NEAR NORTH SIDE	47	BURNSIDE
9	EDISON PARK	48	CALUMET HEIGHTS
10	NORWOOD PARK	49	ROSELAND
11	JEFFERSON PARK	50	PULLMAN
12	FOREST GLEN	51	SOUTH DEERING
13	NORTH PARK	52	EAST SIDE
14	ALBANY PARK	53	WEST PULLMAN
15	PORTAGE PARK	54	RIVERDALE
16	IRVING PARK	55	HEGEWISCH
17	DUNNING	56	GARFIELD RIDGE
18	MONTCLARE	57	ARCHER HEIGHTS
19	BELMONT CRAGIN	58	BRIGHTON PARK
20	HERMOSA	59	MCKINLEY PARK
21	AVONDALE	60	BRIDGEPORT
22	LOGAN SQUARE	61	NEW CITY
23	HUMBOLDT PARK	62	WEST ELSDON
24	WEST TOWN	63	GAGE PARK
25	AUSTIN	64	CLEARING
26	WEST GARFIELD PARK	65	WEST LAWN
27	EAST GARFIELD PARK	66	CHICAGO LAWN
28	NEAR WEST SIDE	67	WEST ENGLEWOOD
29	NORTH LAWNDALE	68	ENGLEWOOD
30	SOUTH LAWNDALE	69	GREATER GRAND CROSSING
31	LOWER WEST SIDE	70	ASHBURN
32	LOOP	71	AUBURN GRESHAM
33	NEAR SOUTH SIDE	72	BEVERLY
34	ARMOUR SQUARE	73	WASHINGTON HEIGHTS
35	DOUGLAS	74	MOUNT GREENWOOD
36	OAKLAND	75	MORGAN PARK
37	FULLER PARK	76	O'Hare
38	GRAND BOULEVARD	77	EDGEWATER
39	KENWOOD		

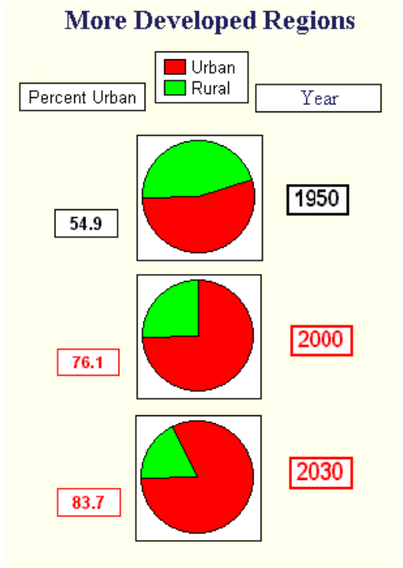
Map #1

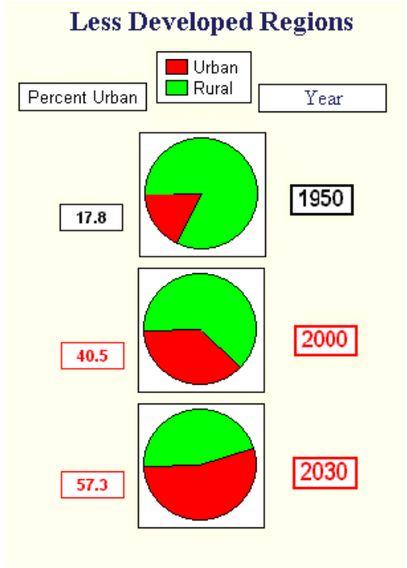
Chicago's 3 Revised 2009 Food Deserts By Tract With Community Area Boundaries

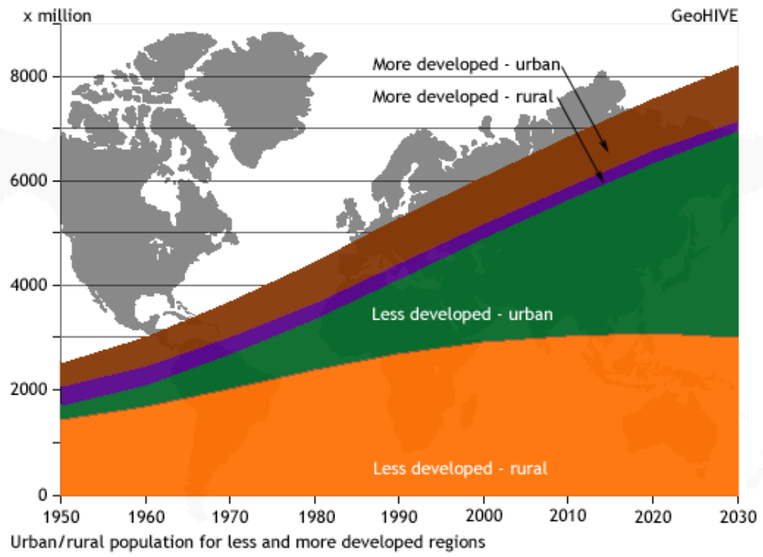


Urbanization

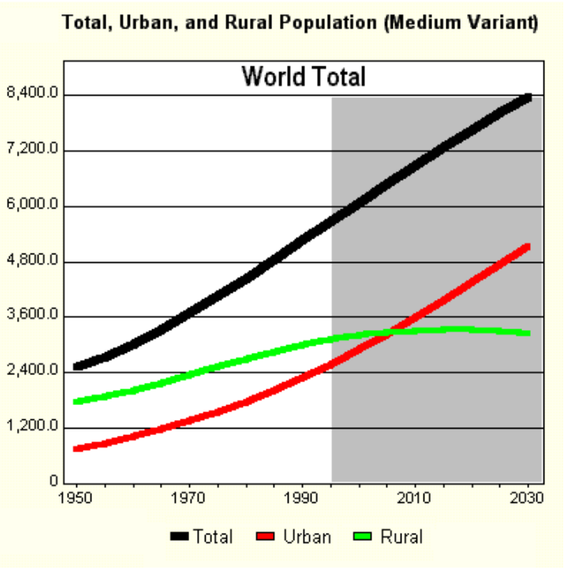
As a greater proportion of the world's population moves to urban areas there will be increased pressure on the food production and distribution systems. This will not only continue to strain our transportation networks and consume large amounts of energy, it also disconnects urban dwellers from the production of food. One method of alleviating this will be to produce food closer to the places where it is consumed. Chicago currently has over 70,000 vacant lots. We see these as a tremendous resource for the production of food close to where it will be prepared and consumed. We also believe that the development of these lots as urban farms, the majority of which are in at risk neighborhoods, will be a positive influence on the residents and spur growth. By demonstrating the benefits and profit potential of urban lot reclamation we hope to generate greater interest in producing food in urban areas around the country. The school will also develop methodologies to make the creation additional interventions easier to implement.







Urban/rural population for less and more developed regions



The new urban world

The earth reaches a momentous milestone: by next year, for the first time in history, more than half its population will be living in cities. Those 3.3 billion people are expected to grow to 5 billion by 2030 – this unique map of the world shows where those people live now

At the beginning of the 20th century, the world's urban population was only 220 million, mainly in the west

By 2030, the towns and cities of the developing world will make up 80% of urban humanity

Key

- Predominantly urban 75% or over
- Predominantly urban 50–74%
- Predominantly rural 25–49% urban
- Predominantly rural 0–24% urban
- Cities over 10 million people (greater urban area)

Urban growth, 2005–2010

- Africa 3.2%
- Arab States 2.8%
- Asia 2.4%
- Latin America & Caribbean 1.7%
- Oceania 1.3%
- North America 1.3%
- Europe 0.1%
- Eastern Europe -0.4%

3,307,950,000

The world's urban population – from a total of 6,615.9 million

SOURCE: UNFPA GRAPHIC: PAUL SCRUTON

BEN SPICER
THE CHARLES A. SMITH CHARTER SCHOOL

The Environmental Impact of Sustenance and “Food Miles”

Food miles is a term which refers to the distance food is transported from the time of its production until it reaches the consumer. Food miles is one method of determining the environmental impact of the food that we consume. The typical American breakfast has approximately 24,000 embedded food miles. This is nearly the circumference of the earth. As more of the world’s population moves to urban areas the impact of food transportation becomes greater. Currently almost 60% of the energy spent in the production of food could be alleviated by growing food directly in urban areas. Urban farming can also connect people to the food that they consume and create educational opportunities for the communities where the farms exist. We propose that a robust urban farming effort can substantially reduce energy use and promote healthy lifestyles in cities. Additionally, training the next generation of chefs, restaurateurs, and food policy makers in the benefits of highly local production will generate larger markets and support expansion of these programs in the future.

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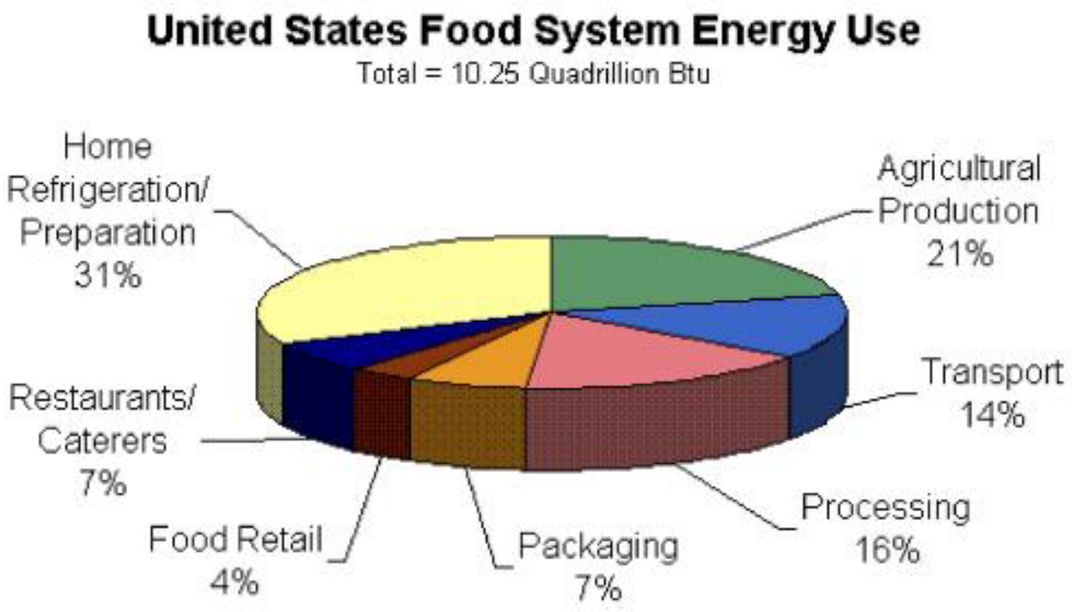
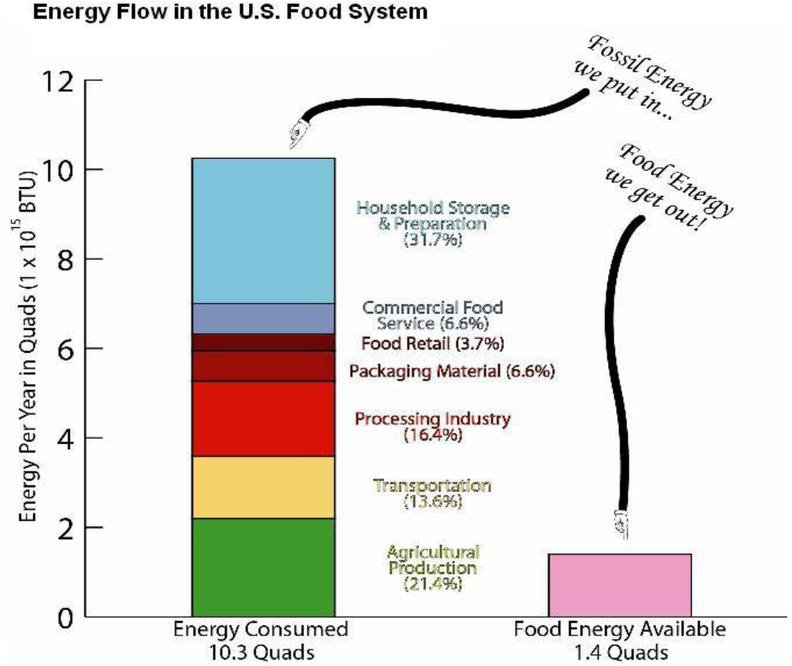




Fund the Facts <http://css.snre.umich.edu/facts>

Climatic Research

The location for the school presents many opportunities for thoughtful responsiveness to the prevailing climatic conditions. Chicago is a true four season climate requiring a thoughtful approach to both heating and cooling loads. The proximity to the University of Chicago steam and chiller plants may provide some possibility of sharing resources. The use of green screens that shade the space in summer while allowing for winter solar gain and vertical shading on the east and west faces will allow the school to respond directly to the day to day solar conditions. Natural ventilation coupled with earthtubes will allow for passive heating and cooling in transition seasons . The Chicago climate also affords the opportunity to create a daylighting situation where artificial lighting use can be seriously diminished durring daylight hours.

PLOT CRITERIA:

10.0	DEFAULT Low Temperature (°F)
110.0	DEFAULT High Temperature (°F)

DESIGN TEMPERATURES:

0.0	Outdoor DESIGN LOW Temperature as % of Hours Below
1.0	Outdoor DESIGN HIGH Temperature as % of Hours Above

DESIGN STRATEGY CRITERIA:

1. COMFORT ZONE: California Energy Code

70.0	Comfort Low - Min. Comfort Dry Bulb Temp (°F)
75.0	Comfort High - Max. Comfort Dry Bulb Temp, up to 50% RH (°F)
80.0	Max. Relative Humidity (measured at Min. Comfort Temp) (%)
27.0	Min. Dew Point Temperature (°F)

2. SUN SHADING ZONE: (Defaults to Comfort Low)

70.0	Min. Dry Bulb Temperature when Need for Shading Begins (°F)
50.0	Min. Global Horiz. Radiation when Need for Shading Begins (Btuh/sq.ft.)

3. HIGH THERMAL MASS ZONE:

15.0	Max. Dry Bulb Temperature Difference above Comfort High (°F)
5.0	Min. Nighttime Temperature Difference below Comfort High (°F)

4. HIGH THERMAL MASS WITH NIGHT FLUSHING ZONE:

30.0	Max. Dry Bulb Temperature Difference above Comfort High (°F)
5.0	Min. Nighttime Temperature Difference below Comfort High (°F)

5. DIRECT EVAPORATIVE COOLING ZONE: (Defined by Comfort Zone)

65.7	Max. Wet Bulb set by Max. Comfort Zone Wet Bulb (°F)
49.7	Min. Wet Bulb set by Min. Comfort Zone Wet Bulb (°F)

6. NATURAL VENTILATION COOLING ZONE:

40.0	Min. Velocity to Effect Comfort (fpm)
300.0	Max. Comfortable Velocity (fpm)
6.6	Increase in comfort temperature limit (°F)
90.0	Max. Relative Humidity (%)
72.0	Max. Wet Bulb Temperature (°F)

7. FAN-FORCED VENTILATION COOLING ZONE:

160.0	Max. Mechanical Ventilation Velocity (fpm)
5.4	Increase in comfort temperature limit (°F)

8. INTERNAL HEAT GAIN ZONE:

10.0	Max. Dry Bulb Temperature Difference Below Comfort Low (°F)

9. PASSIVE SOLAR DIRECT GAIN LOW MASS ZONE:

50.0	Min. Beam Radiation for 10° F Temperature Rise (Btuh/sq.ft.)
3.0	Thermal Time Lag for Low Mass Buildings (hours)

10. PASSIVE SOLAR DIRECT GAIN HIGH MASS ZONE:

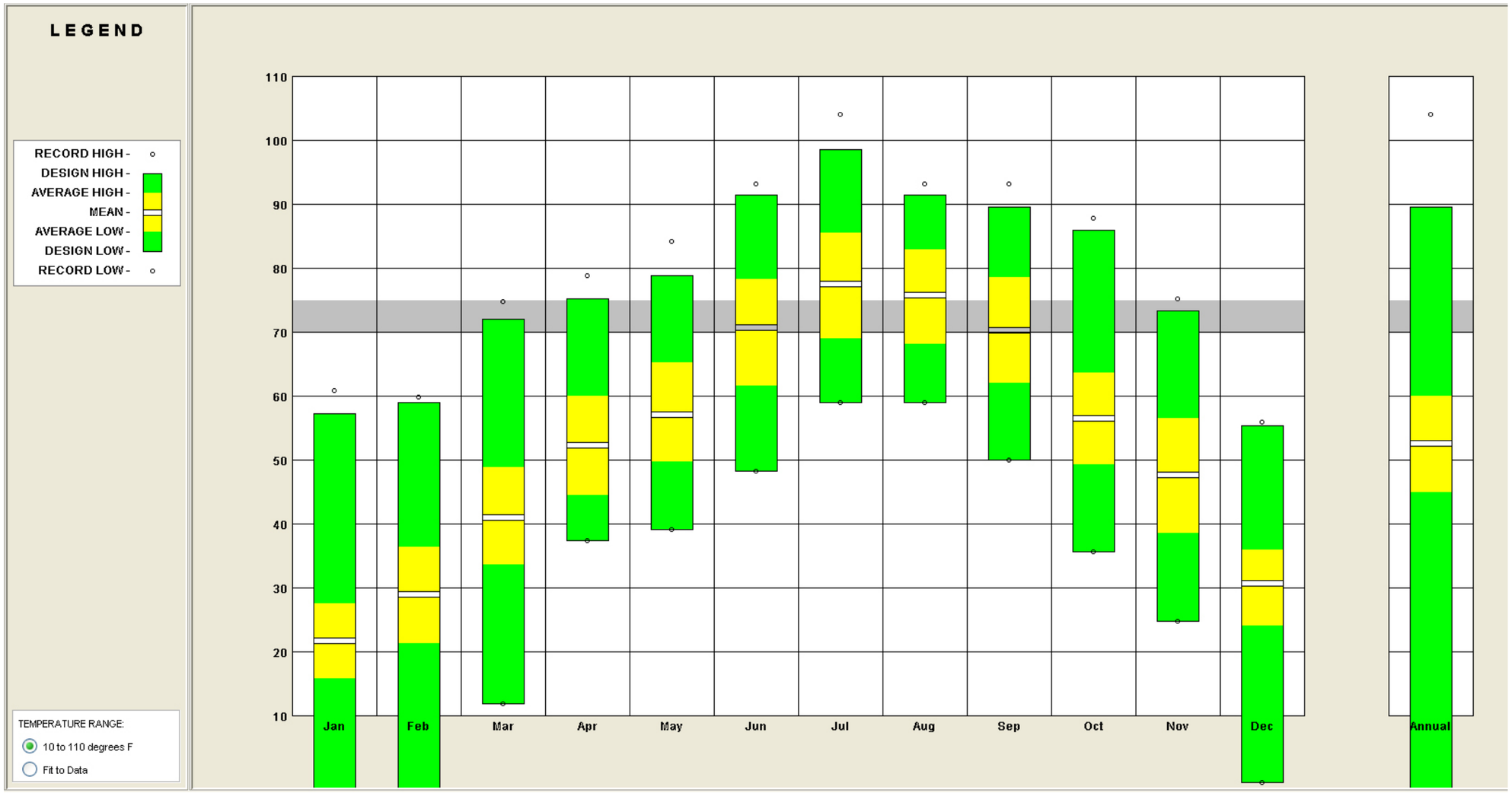
100.0	Min. Beam Radiation for 10° F Temperature Rise (Btuh/sq.ft.)
12.0	Thermal Time Lag for High Mass Buildings (hours)

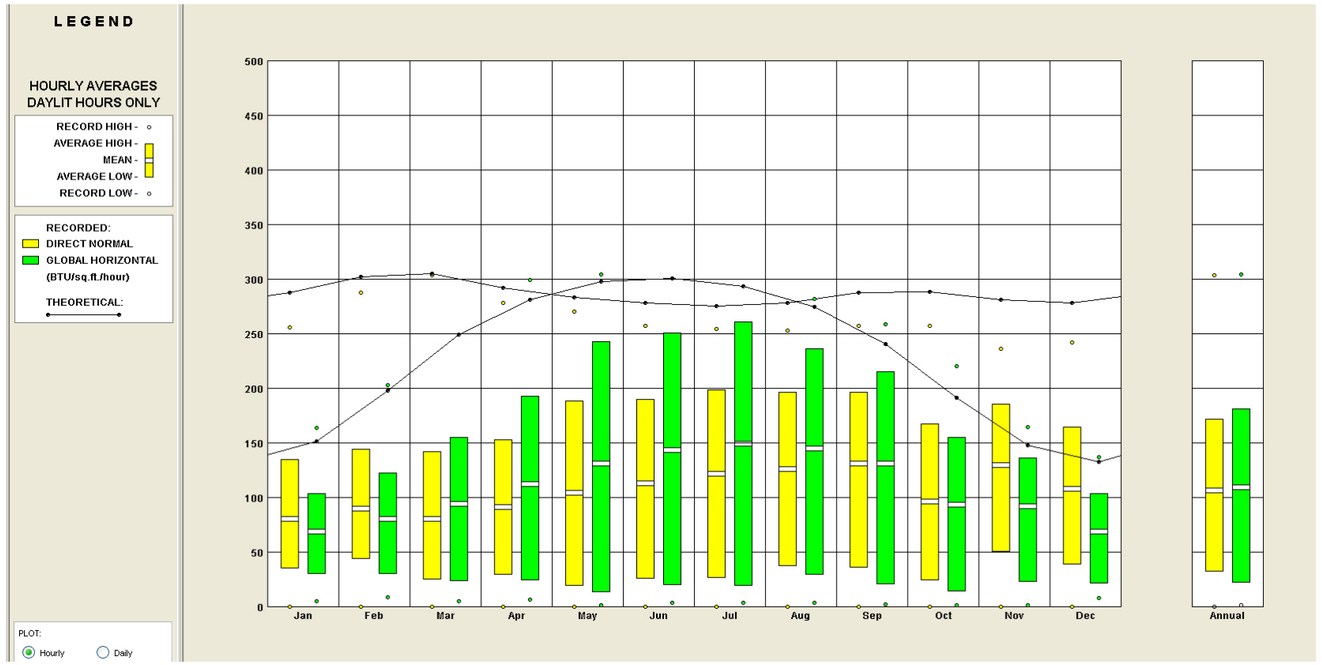
11. HUMIDIFICATION ZONE: (Defined by Bottom of Comfort Zone)

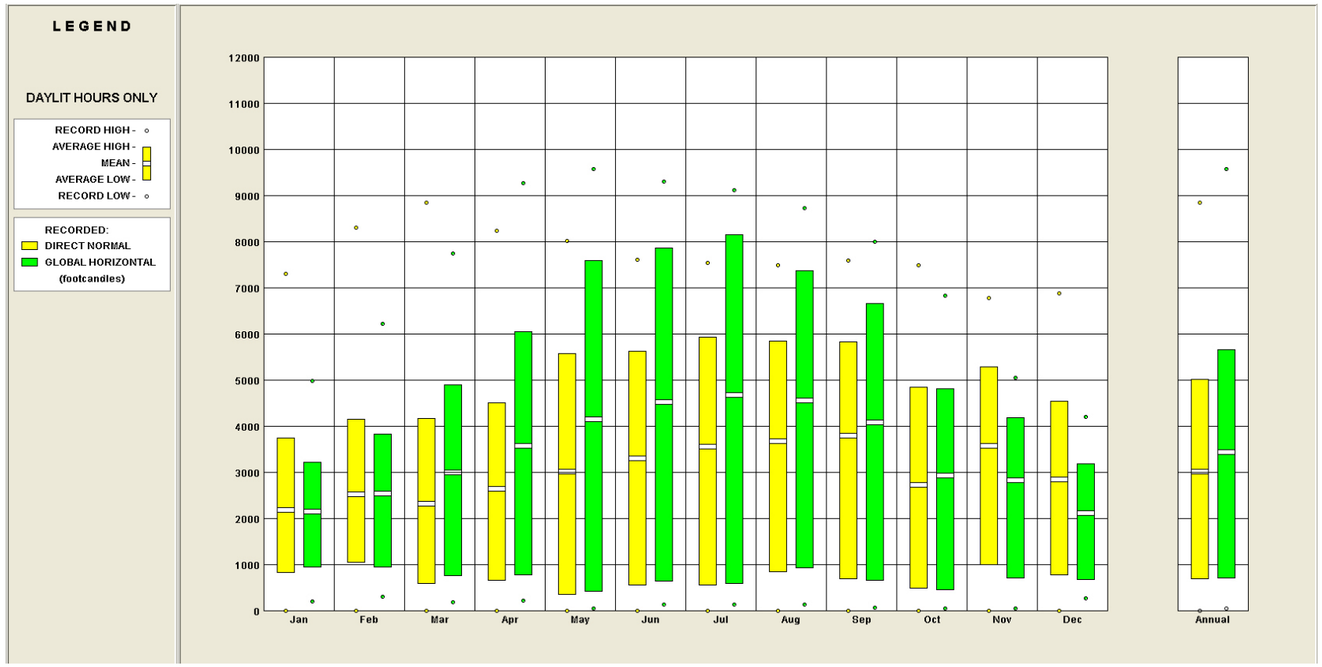
27.0	Dew Point Temperature below which Humidification is Needed (°F)

12. WIND PROTECTION ZONE:

10.0	Min.Velocity above which Wind Protection is Desirable (mph)
20.0	Min. Dry Bulb Temperature Difference Below Comfort Low (°F)


LEGEND
RECORD HIGH -
DESIGN HIGH -
AVERAGE HIGH -
MEAN -
AVERAGE LOW -
DESIGN LOW -
RECORD LOW -
TEMPERATURE RANGE:
10 to 110 degrees F
Fit to Data
110
100
90
80
70
60
50
40
30
20
10
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Annual


LEGEND
HOURLY AVERAGES
DAYLIT HOURS ONLY
RECORD HIGH -
AVERAGE HIGH -
MEAN -
AVERAGE LOW -
RECORD LOW -
RECORDED:
DIRECT NORMAL
GLOBAL HORIZONTAL
(BTU/sq.ft./hour)
THEORETICAL:
PLOT:
Hourly
Daily
500
450
400
350
300
250
200
150
100
50
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Annual


LEGEND
DAYLIT HOURS ONLY
RECORD HIGH -
AVERAGE HIGH -
MEAN -
AVERAGE LOW -
RECORD LOW -
RECORDED:
DIRECT NORMAL
GLOBAL HORIZONTAL
(footcandles)
12000
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Annual

SUN SHADING CHART

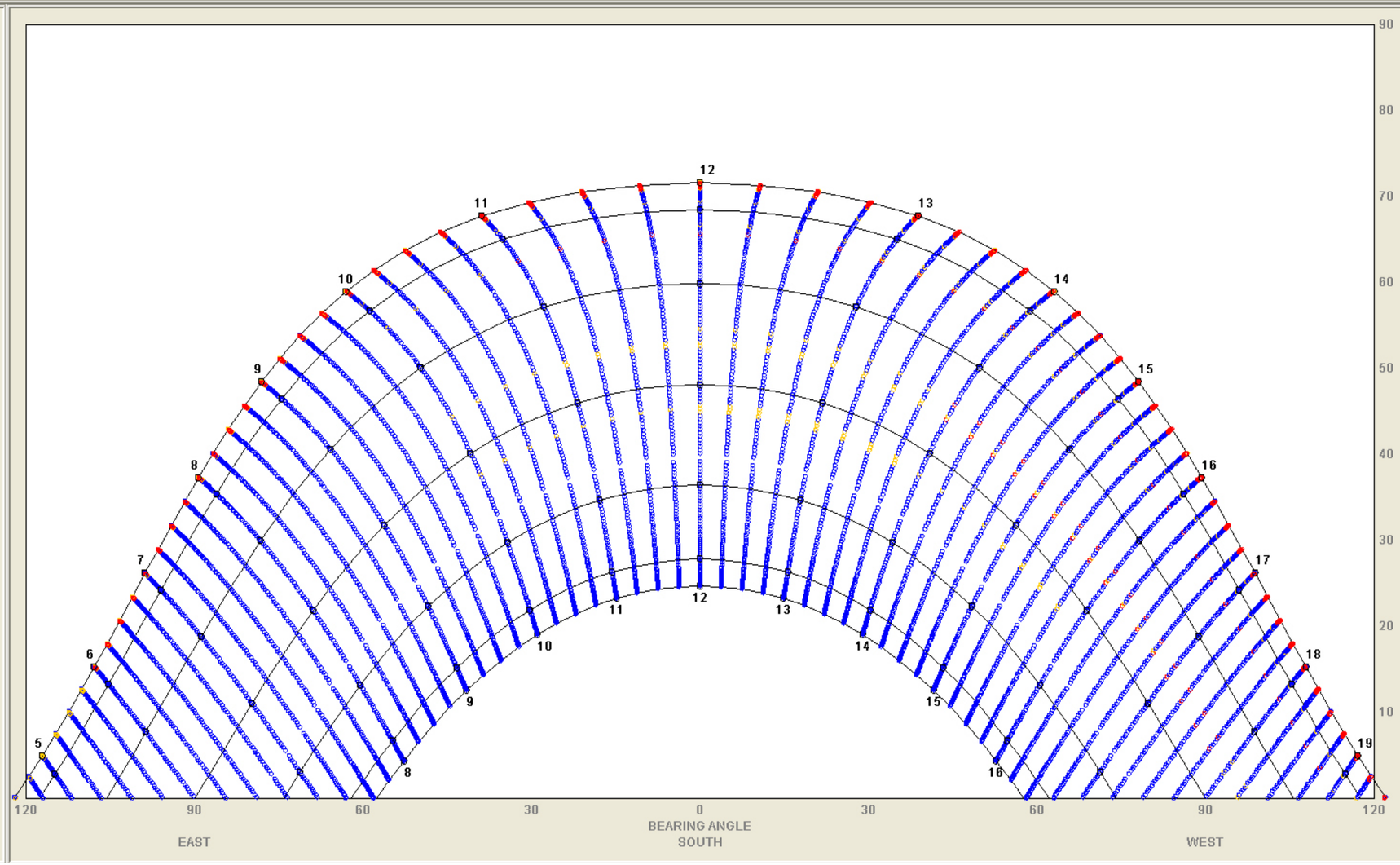
LOCATION: Chicago Midway Ap, IL, USA
Latitude/Longitude: 41.78° North, 87.75° West, **Time Zone from Greenwich** -6
Data Source: TMY3 725340 WMO Station Number, **Elevation** 610 ft

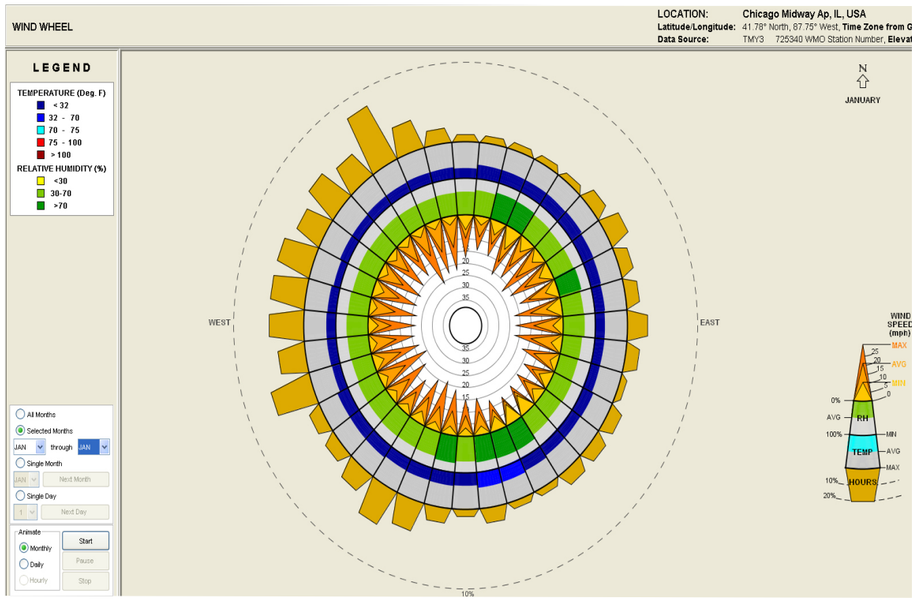
LEGEND

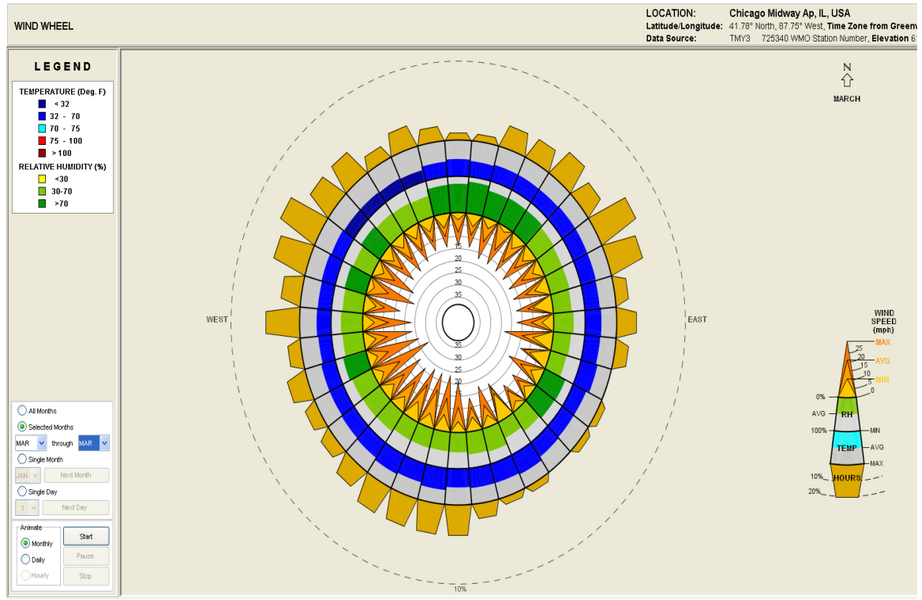
- WARM/HOT (SHADE NEEDED) > 75 degrees F
- COMFORT (SHADE HELPS) > 70 degrees F
- COOL/COLD (SUN NEEDED)

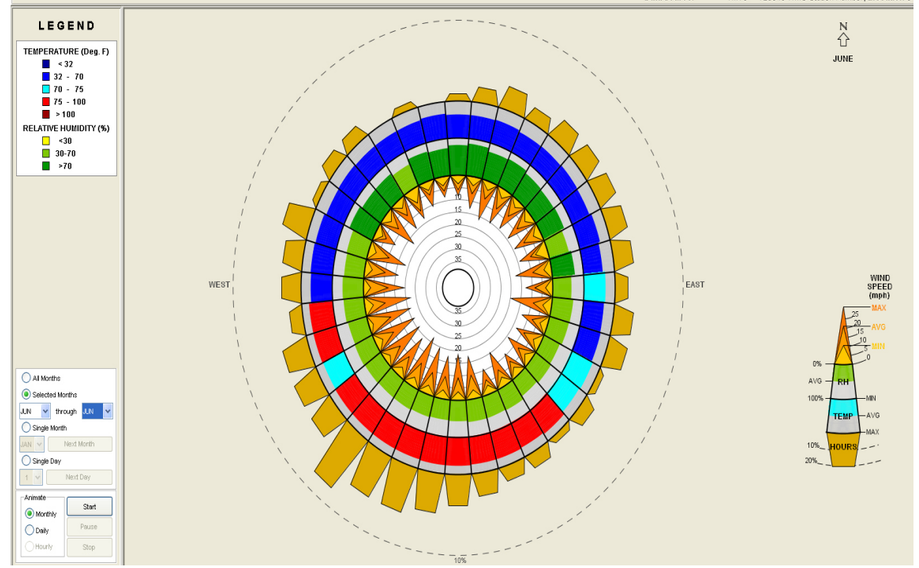
PLOT MONTHS:
WINTER SPRING
December 21 to June 21
SUMMER FALL
June 21 to December 21

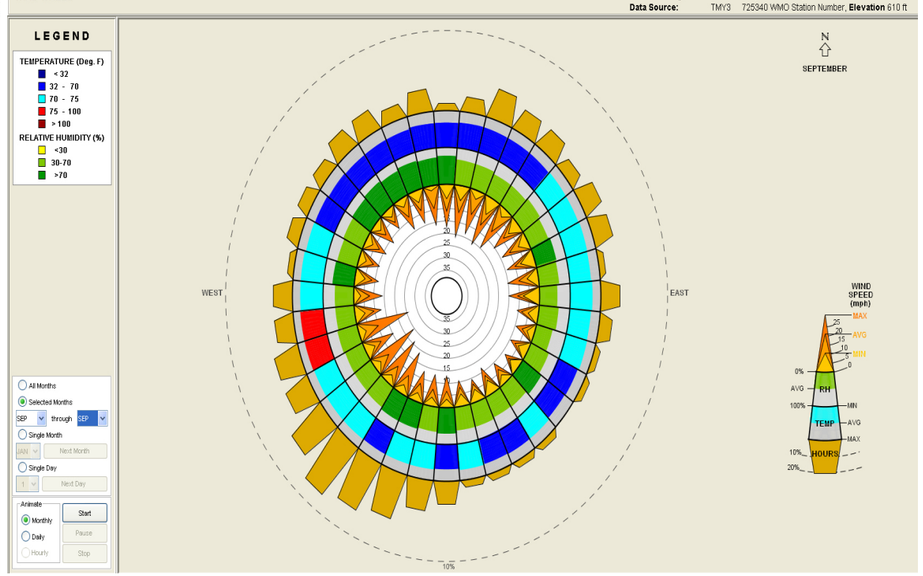
Display Grid
Display Shading Calculator




WIND WHEEL
LOCATION: Chicago Midway Ap, IL, USA
Latitude/Longitude: 41.78° North, 87.75° West, Time Zone from G
Data Source: TMY3 725340 WMO Station Number, Eleva
LEGEND
TEMPERATURE (Deg. F)
< 32
32 - 70
70 - 75
75 - 100
> 100
RELATIVE HUMIDITY (%)
<30
30-70
>70
N
JANUARY
WEST
EAST
10%
WIND SPEED (mph)
MAX
AVG
MIN
RH
TEMP
HOURS
All Months
Selected Months
JAN through JAN
Single Month
Next Month
Single Day
Next Day
Animate
Monthly
Daily
Hourly
Start
Pause
Stop


WIND WHEEL
LOCATION: Chicago Midway Ap, IL, USA
Latitude/Longitude: 41.78° North, 87.75° West, Time Zone from Greenv
Data Source: TMY3 725340 WMO Station Number, Elevation 6
LEGEND
TEMPERATURE (Deg. F)
< 32
32 - 70
70 - 75
75 - 100
> 100
RELATIVE HUMIDITY (%)
<30
30-70
>70
N
MARCH
WEST
EAST
10%
WIND SPEED (mph)
MAX
AVG
MIN
RH
TEMP
HOURS
All Months
Selected Months
MAR through MAR
Single Month
Next Month
Single Day
Next Day
Animate
Monthly
Daily
Hourly
Start
Pause
Stop


WIND WHEEL
LOCATION: Chicago Midway Ap, IL, USA
Latitude/Longitude: 41.78° North, 87.75° West, Time Zone from Greenv
Data Source: TMY3 725340 WMO Station Number, Elevation 6
LEGEND
TEMPERATURE (Deg. F)
< 32
32 - 70
70 - 75
75 - 100
> 100
RELATIVE HUMIDITY (%)
<30
30-70
>70
N
JUNE
WEST
EAST
10%
WIND SPEED (mph)
MAX
AVG
MIN
RH
TEMP
HOURS
All Months
Selected Months
JUN through JUN
Single Month
Next Month
Single Day
Next Day
Animate
Monthly
Daily
Hourly
Start
Pause
Stop


WIND WHEEL
LOCATION: Chicago Midway Ap, IL, USA
Latitude/Longitude: 41.78° North, 87.75° West, Time Zone from Greenwich -6
Data Source: TMY3 725340 WMO Station Number, Elevation 610 ft
LEGEND
TEMPERATURE (Deg. F)
< 32
32 - 70
70 - 75
75 - 100
> 100
RELATIVE HUMIDITY (%)
<30
30-70
>70
N
SEPTEMBER
WEST
EAST
10%
WIND SPEED (mph)
MAX
AVG
MIN
RH
TEMP
HOURS
All Months
Selected Months
SEP through SEP
Single Month
Next Month
Single Day
Next Day
Animate
Monthly
Daily
Hourly
Start
Pause
Stop

Trias VMBO, Atelier PRO Architects
Krommenie, The Netherlands

This school for Preparatory Vocational Education imitates the real world of workrooms of all types of jobs, including an office environment, spaces for care, catering and workshops for engineering and fashion design. All of them have their own ‘shop’ located at the ‘village square’ at the heart of the school. “Preparatory Vocational Education is all about practicing the Hands, the Head and the Heart.” Ability (hands), Knowledge (head) and Passion (heart): all of them should be practiced equally. For future professionals they’re of great importance. How do I do? What do I do? And I care about what I do! “All occupations should be showed.” The students of the lower classes have a difficult choice to make: what job to practise the rest of their lives. To simplify that choice, they are being contacted with the different occupational profiles in an early stage. Every course has its own ‘shop’, located at the Brink. In this way they are showed to the younger student that still follow the main courses. So they can see what’s ‘for sale’. So they can ‘taste’ the different spheres. “The building has to be an educational aid.”

A school with a village square

Literally on a crossing of roads and public transport a property was obtained. The school was designed as a huge factory-like block with facades of tiles, found in the region’s historic big sheds. On the side of the busy provincial road and train track, all the workrooms are situated in this ‘factory’. Here, students learn to work together on all manner of materials. Alongside this ‘factory’, a huge central covered ‘village square’, ‘the Brink’ is the centre of the school. It is in this square that students gather, in the morning after they have put away their bike, and during breaks. The Brink is multifunctional and also the place for school parties, and events like mock Trade Fairs where industries can exhibit to get students interested in working with them.

A school with several scales

Wings are situated cross-wise on the Brink, with ‘glasshouses’ in between, and ending in a pond, thus avoiding fences around the school. In these wings, clusters of classrooms on two floors, together with teachers’ rooms and a common room offer a ‘home’ for groups of children so they will not feel lost in the big building. These clusters are also used for practical teaching such as ‘real’ office environments, fashion workrooms, exercise areas for health care, and restaurants.

A school as facility

During the day, the school uses the sports centre, in the evening it is public domain. Like the Brink, the sports centre has a ‘square’ where people can meet after their sporting activities. The Auditorium in between the school and the sports centre, thus usable by both, is situated above the connecting road of two quarters, with a glass façade symbolically showing to the surroundings what is happening in the school.

A school as learning environment

The school itself is designed as a ‘learning environment’. Much effort was put into using many different materials, interesting connections, combination of installations, all to teach students the practice of building, by looking to their own school building. These children, especially, need to be helped to find a positive life goal. That’s why the school building is an example of sustainability. An example is a pipe system which is inserted in the floors for low temperature heating in wintertime and cooling in summertime. The classrooms have natural ventilation. Winter gardens provide special teaching environments. The use of sustainable materials helps the students to learn how to be respectful of our earth’s resources. The layout and separation walls of the school are flexible to enable changes of use in the future. Sunlight collectors on the roof of the sporting facilities provide hot water for the showers. The students can measure all the principles of the different measures. In the near future a collection of different windmills for generating electricity will be added.

Oslo School of Architecture, Jarmund/Vigsnæs AS Architects MNAL
Oslo, Norway

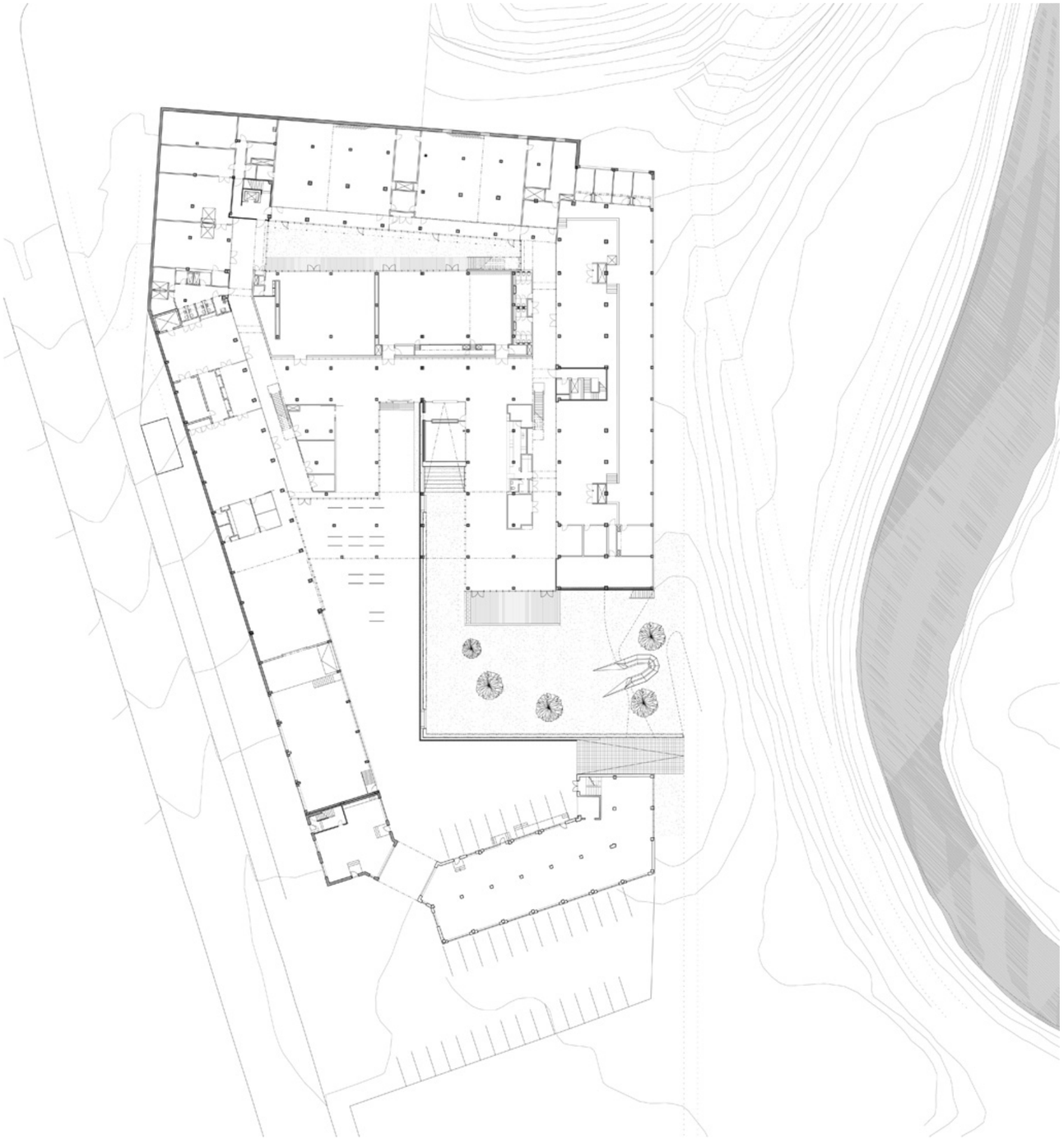
The new Oslo School of Architecture is based in an existing building from 1938, located by the Akerselva River in the eastern part of Oslo. The school is part of a larger effort to revitalise this former industrial area for education-related use. The long-term aim is a campus for arts education along the riverbank. The project won 1st prize in an open architectural competition in 1998. The exterior of the existing building has a conservation status. The architects have kept the block open towards the river, and combined the new programme with the logic of the existing building together with the surroundings in one spatial sequence.

An access court has been cut out of the existing 1st floor slab, marking the entrance and bringing daylight in to the ground floor foyer. A strip has been cut out of the existing slab along the inside of the existing building, bringing daylight to the surrounding functions. A simple U-shaped circulation zone is established along the strip. A new string of teaching rooms completes the U and forms a bridge across the entrance area. The ground floor is occupied by communal functions such as canteen, auditoria an exhibition spaces, workshops an library. All design studios and teaching rooms are on the 1st floor, with a view of the open interior courtyard. Offices for the research- and administration staff are on the 2nd floor.

New external walls are made by an insulated facade system, with double-glazing units in three different colours. The interior is intended to retain the workshop character of the existing building. The existing concrete structure has been exposed an chalk-blasted, and all cutting surfaces are left untreated. Floors in the main circulation spaces are polished concrete, with linoleum elsewhere and special oiled ash on floor and walls of the auditorium. Internal partitions on ground and 1st floor are covered with varnished fibrocement boards, with painted plasterboards partitions on the 2nd floor. Extensive use of glass partitions serves to retain a maximum overview and transparency.

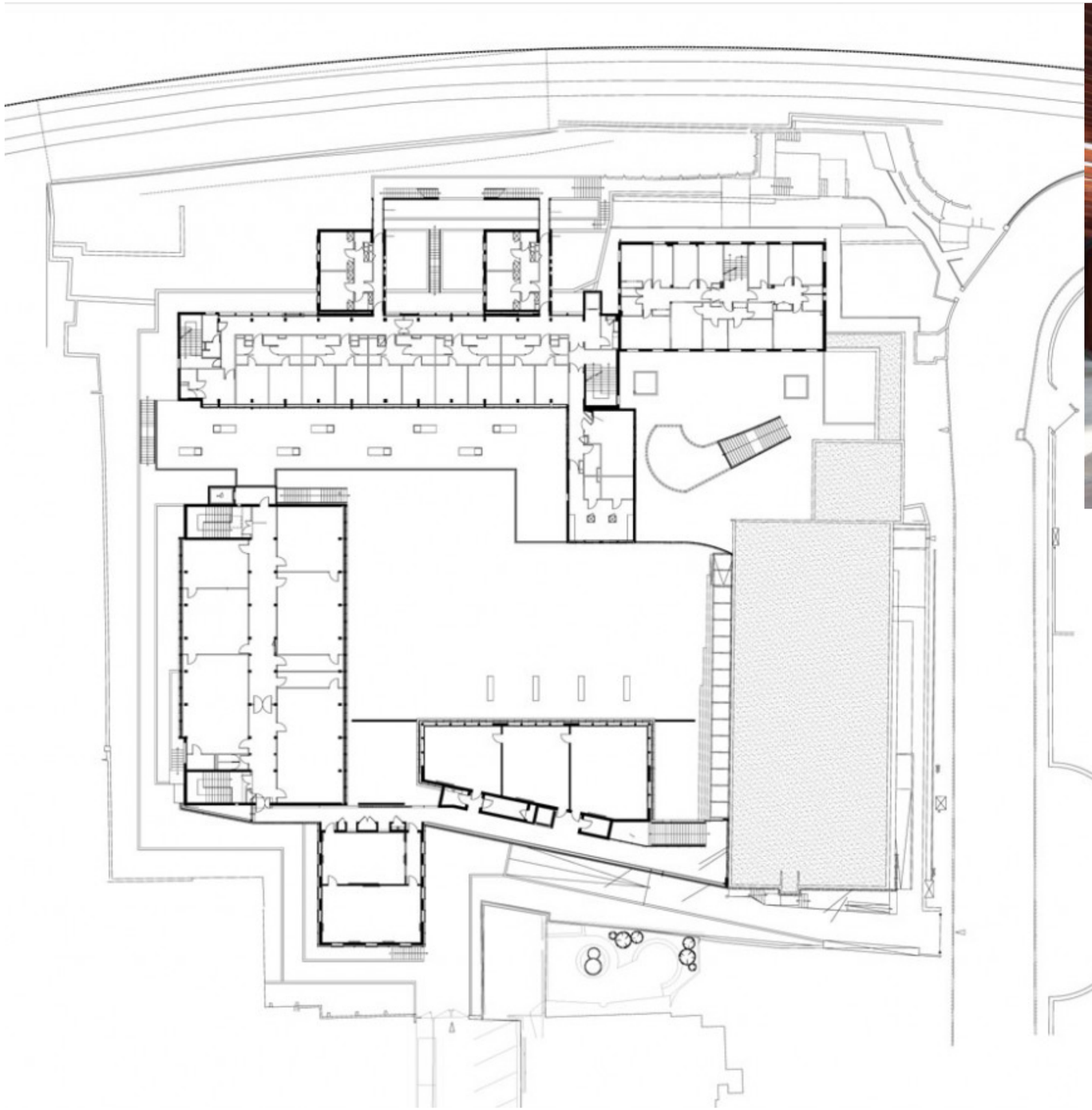
Roof garden and covered areas have diffusion watering systems. Lawn areas subject to heavy wear and tear have been reinforced with metal grilles.

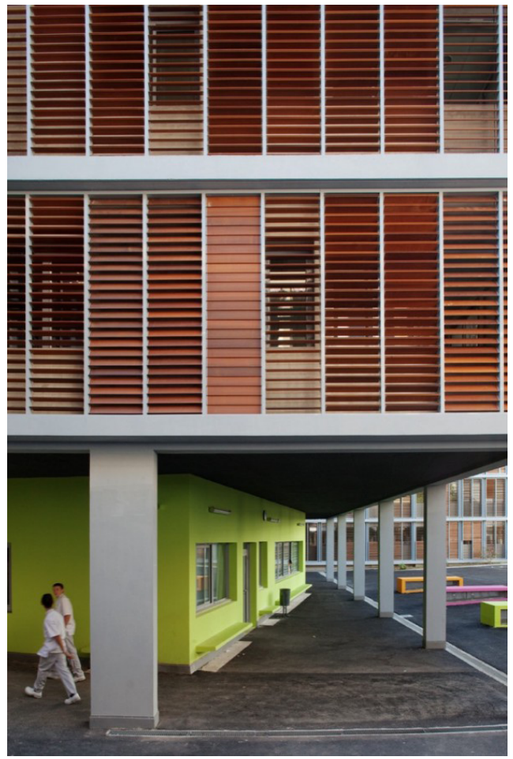
New service installations have been concentrated into seven exposed ventilation plats on the roof, to minimise horizontal ducting. The building has sprinkler projection throughout.



Paul Valery High School, N+B Architectes
Menton, France

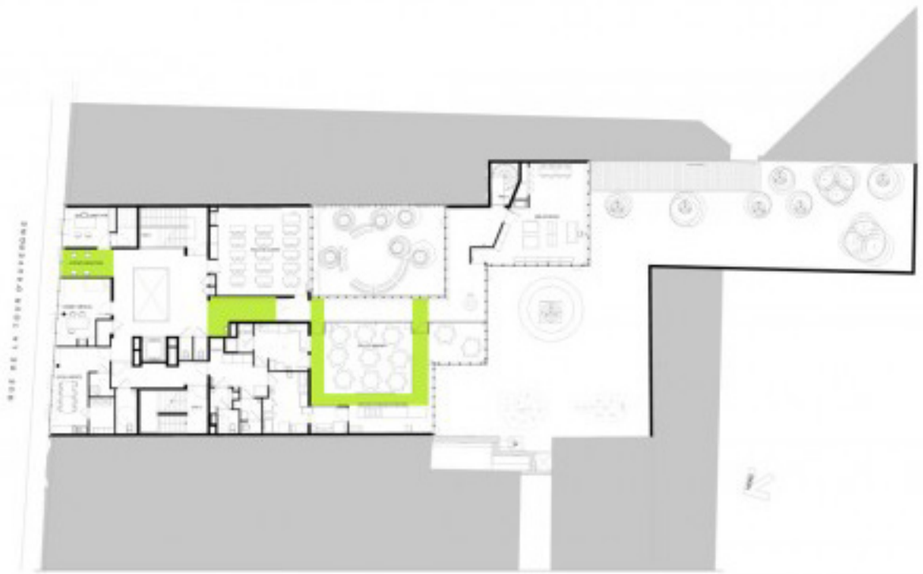
The project takes into account the notions of flexibility, of environmental awareness, of simplicity of use, of functionality, of coherence that enable the programmatic entities to be linked together around exterior spaces that are re-dimensioned and re-planned. The scale of the place was found thanks to the location of buildings with appropriated dimension. The care of spaces is thought as for an urban entity, like a microcosm offering a diversity of landscapes. The new buildings take place in the heart of the gardens: gardens with plants for the boarding school, but also “urban garden” and mineral one for the teaching places. The ambition of this project is to offer a coherence set in a specific environment.





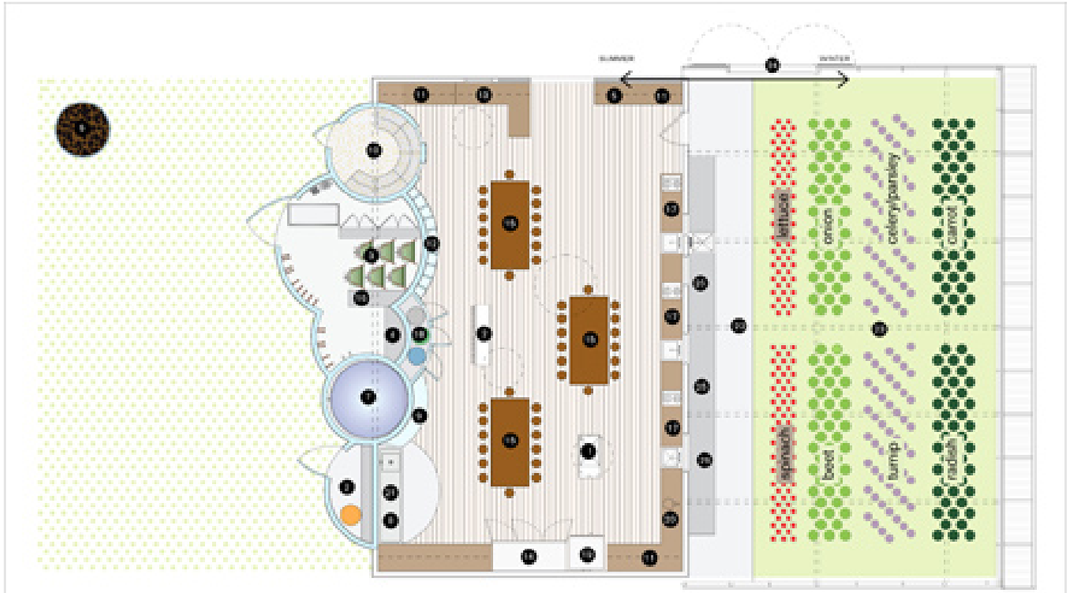
Elementary school, Hamonic + Masson architects
Paris, France

Old stone walls and towering Parisian apartment blocks enclose this deep, irregular plot, acting as a setting for this gem-like elementary school. Playfully twisting through the site, the building's serpentine form creates a dense series of courtyards and classrooms, leaving no corner unused. The choice of rich materials, bright colours and playful forms leaves users with a lasting impression, forming an identity for the school through its unique architecture. Central to this architecture is the serpentine circulation spine, stretching from the street through to the very rear of the site and wrapped in a serigraphed glass cladding that provides a game of transparency and reflection. The bamboo stem motif cheekily mimics the true landscaping works throughout the project: the vegetalised party walls, grassy mounds on the first floor and the educational garden on the third. This last space allows the two apartments (one for the guardian, the other for the school's principal) to be pulled back from the street facade, recreating a urban setting three floors above road level.



Edible Schoolyard, Work AC
New York City

Work AC, in collaboration with Edible Schoolyard NY and the Alice Waters' Chez Panisse Foundation, has designed a new schoolyard for PS216 that will offer the young New Yorkers a different learning experience. The Edible Schoolyard is designed as a series of interlinked sustainable systems where the building will produce energy and heat, collect rainwater, process compost and sort waste with an off-grid infrastructure. The school includes a kitchen classroom and mobile greenhouse where children are brought together in a learning environment that also promotes eco-friendliness. The roof of the kitchen classroom, a room that provides the facilities for up to 30 students to prepare meals together, channels rain water for reclamation. The mobile greenhouse extends the growing season by covering 1600sf of soil in the colder months and gardens will allow the children to care for plants. A systems wall, a series of spaces that include a cistern, space for composting and waste-sorting, solar batteries, dishwashing facilities, a tool shed and a chicken coop, rests on the opposite side of the yard. The project is a great way to introduce sustainable methods into children's lives at an early age. The "edible" element will definitely pique children's interests and help the next generation realize the importance of the eco-friendly movement.



KITCHEN CLASSROOM PLAN

School of One

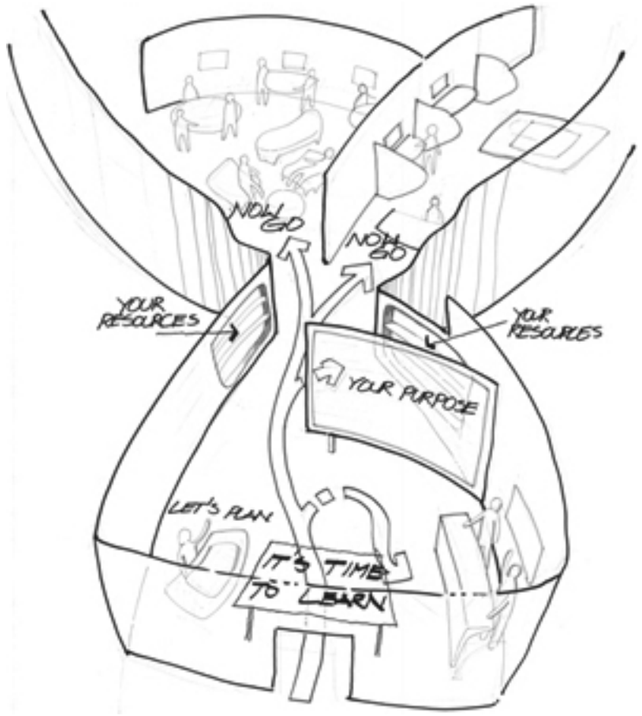
The School of One's mission is to provide students with personalized, effective, and dynamic classroom instruction customized to their particular academic needs, interests, and learning preferences. To organize this type of learning, each student receives a unique daily schedule based on his or her academic strengths and needs. As a result, students within the school and receive profoundly different instruction. Each student's schedule is tailored to ability and to the ways he or she learns best. Teachers acquire data about student achievement each day and then adapt their live instructional lessons accordingly.

The New York State Department of Education prescribes the specific skills that students must master at each grade level. Those particular skills, when properly sequenced so that one skill builds upon the next, are called a learning progression. In a traditional classroom, teachers lead students through the set curriculum of a particular grade level. All students cover the same material at the same time, regardless of whether some students are behind or ahead of others. In the School of One, the learning progression serves as the basis for all content, but students start at different places along the progression and move through it at their own pace. At the beginning of the program, state test results and additional diagnostic assessments help to determine on which skills each student should focus. These skills are called the student's playlist.

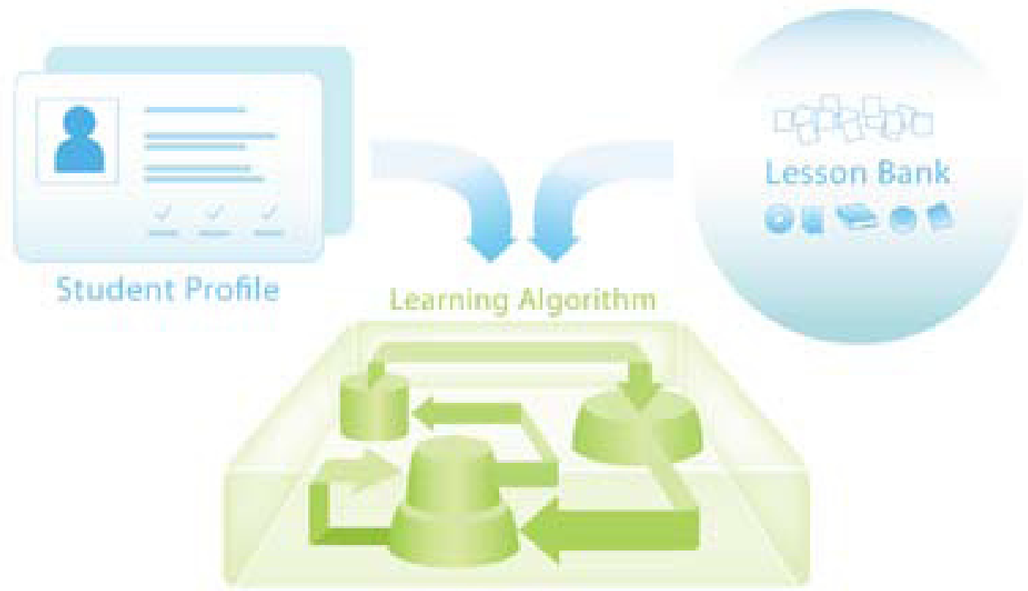
Students learn in different ways. Some thrive in a traditional classroom environment where teachers deliver instruction to a large number of students. Others perform best while interacting with software. Still others may learn effectively while interacting with classmates to collectively solve a particular problem. Beyond these preferences, all bring their own interests and life circumstances into the classroom each day, many of which affect how they learn. In a typical classroom, teachers are responsible for identifying these differences.

The challenge of gathering that information, much less using it to provide personalized instruction to a class of 28 students, is a tall order for even the best teachers. In the School of One, students take a comprehensive survey that informs their student profile. Parents and teachers also provide survey information in order to get a more complete picture of the most effective strategies for each learner. This information provides an initial hypothesis of how best to reach each student that can be modified and updated throughout the program.

In most classrooms, teachers are responsible for teaching all of the standards set forth by the state from September to June. Lessons are delivered to all students at once and teachers generally do not deliver the same one again in the course of a school year. This is true for both early career and veteran teachers, whose job responsibilities are indistinguishable despite their differences in skill. The School of One human capital model works differently. Teachers are responsible for a defined set of skills on the learning progression, rather than all of them. Lessons are delivered to groups of students that can range from as few as three and as many as twenty-four. Because students are progressing at their own rate, teachers frequently deliver the same lesson more than one time in a school year, albeit to different groups of students. This allows them to refine their understanding of common misconceptions about each skill and to refine the quality of their lessons based on data. Additionally the role of early career teachers (whom we call teacher residents) is focused initially on small group instruction and supporting online instruction until they are ready for more complex assignments.


NOW GO
NOW GO
YOUR RESOURCES
YOUR RESOURCES
YOUR PURPOSE
LET'S RUN
IT'S TIME TO... LEARN


ENG


Student Profile
Learning Algorithm
Lesson Bank

The School Program

Urban Agriculture:

This school will train young people to produce food in urban areas using highly efficient and sustainable methods. One of the focuses of the school will be to develop new approaches to Urban Agriculture that will increase the availability of healthy food for the urban population. The goal of this area of the school will be to develop methods of generating between $5 and $10 of yearly income per square foot of farmable space. At this rate a single Chicago lot would generate between $16,000 and $32,000 per year in agriculture income. Based on the current count of more than 70,000 vacant lots on the south side alone the financial potential of this agriculture method is quite high.

Culinary Arts:

This school will train young people to become one of the more than 100,000 people employed in Chicago's growing culinary community. The school will train the culinary innovators of tomorrow as chefs, restaurateurs and food scientists. The school will also strive to spread a greater understanding of health food culture to the surrounding community through partnerships with other organizations and outreach. The school will prepare it's students to be not only successful in the culinary world but also leaders in the development of programs to increase understanding of healthy food.


PLEASE
DO NOT TAMPER
with this site
DO NOT ADD ANYTHING
DO NOT REMOVE ANYTHING
Experiments planned and in progress

Community Infrastructure

This school will include a partnership with a food market, a restaurant and provide food for a series of farm markets. This will simultaneously alleviate food desert conditions for 50,000 people, provide invaluable training for the students and provide a revenue stream for the school in a time of decreased educational budgets. We propose these types of partnerships become a model for school programs and a new paradigm for school funding.

These partnerships will create overlapping benefits for a wide variety of users. The community will have increased access to healthy food at the market, the restaurant and farm markets. Currently there are almost no outlets for healthy and fresh food in the neighborhood. Cooking demonstrations and gardening instruction will be hosted to disseminate knowledge and build community. The students will have the opportunity to participate in professional development in the market and restaurant. Leaving school with real world experience will be invaluable in their future endeavours. The school will be generate additional funding allowing the administration to create even more vibrant and far reaching programs.


AS ADVERTISED
LARGE AVACADOS
.87 EA
SPECIAL PRODUCE
RUSSET POTATOES 8-LB
$2.47
.27 LB
.57 LB
.27 LB
.27 LB

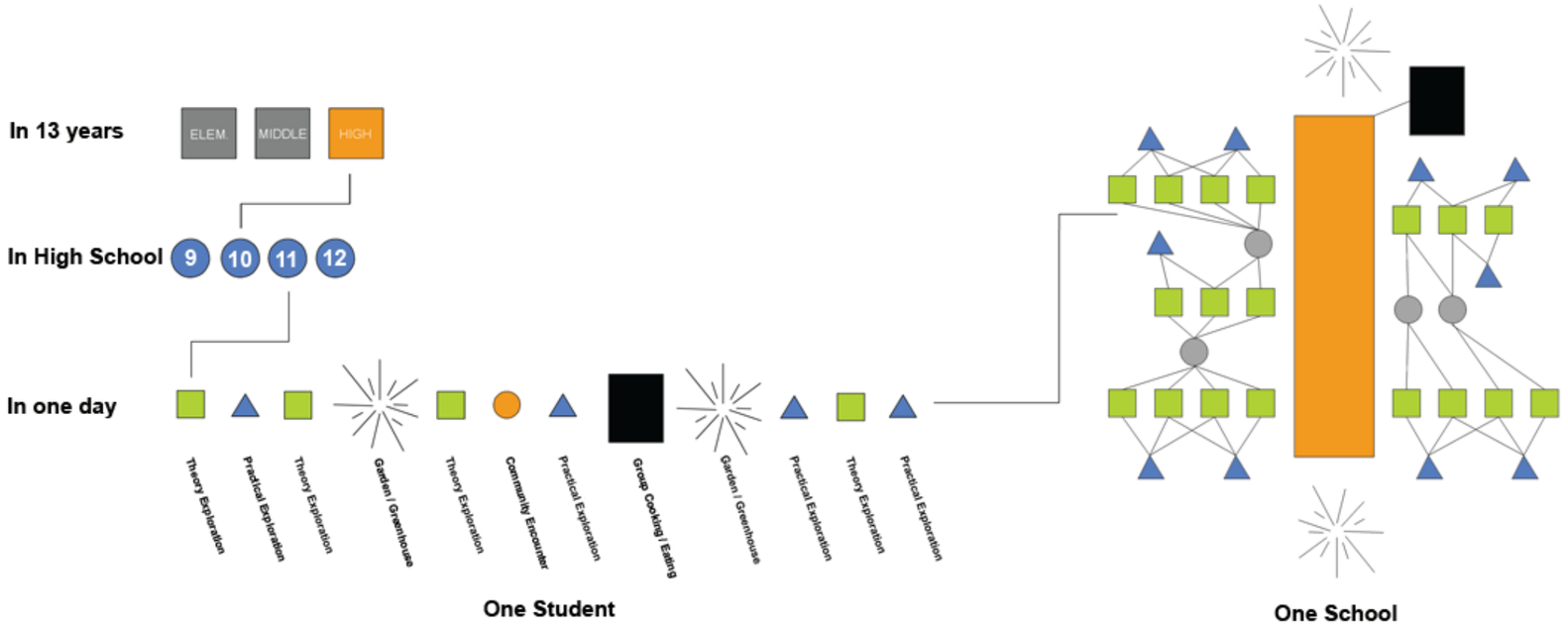
Network building

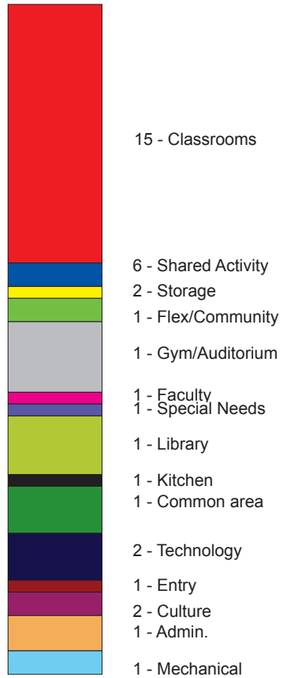
Urban farming and food justice are most successful as community endeavours. The Charles A. Smith School will support this effort by acting as a center of gravity for the disparate organizations currently involved in the community around the school. Creating infrastructure and common ground for these groups will strengthen them and give interested people a place where they can go to learn more and get involved in urban farming. Bringing a wide variety of people together will also help to generate connections that will strengthen the overall community and cross pollinate the various groups with a greater variety of ideas and information. Creating partnerships with established urban farming organizations like Angelic organics and Growing Power will also help the students get involved in their community. The Charles A. Smith School is dedicated to training the students to be leaders in their communities.

ANGELIC ORGANICS
Learning Center

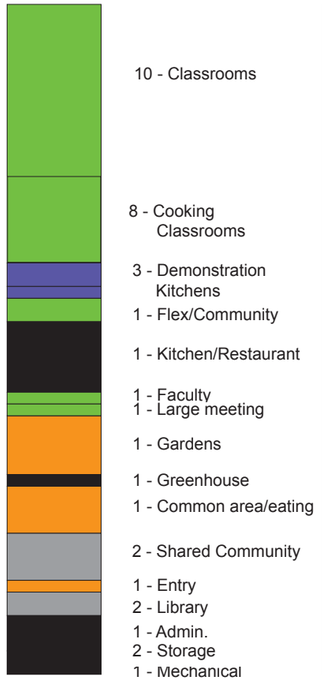
Program Narrative

The program for this school will be approached in a very progressive and innovative manner. Ideally this school will bear little resemblance to traditional box and hallway school model. It is essential that the necessary spaces be interconnected and flexible enough to serve the school as the curriculum and program develop. To this end I have abstracted a traditional model to re-imagine the necessary spaces for this atypical educational model. Therefor I have defined two major types of learning spaces. First, theoretical exploration and second, practical exploration. These two interconnected paradigms will be the foundation for this school. Theoretical exploration spaces will designed to be learning cells that house smaller groups of students who are engaged in intellectual elements of the curriculum. These will be connected to practical exploration spaces that will function more like labs or work shops for participating in hands on work. In conjunction with the research and technical labs these two types of spaces will comprise the most private and dedicated study spaces in the school. These areas will be connected with common spaces including demonstration kitchens, presentation areas, food preparation and eating areas, a social commons, meeting areas, the green house, and gardens of the school. The last space pedagogy will be the most public and include the restaurant and community gardens. This graduated model will help to make the school a vital and vibrant element of its community. I believe that this model of community interaction is crucial for the goals of the school to come to fruition. The focus of the school will obviously be on the study of the production, consumption and sociology of food. However I believe with a well designed and deployed curriculum that more traditional scholastic subjects can be seemliness integrated in to this intention and possibly be more effectively taught through real world applications.

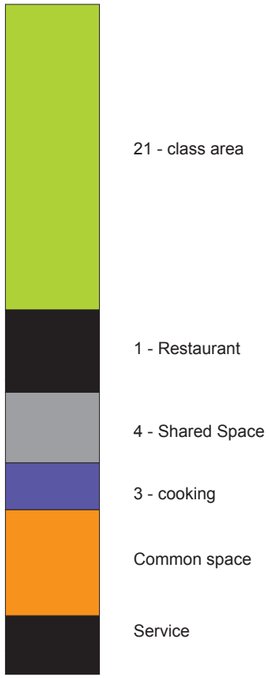




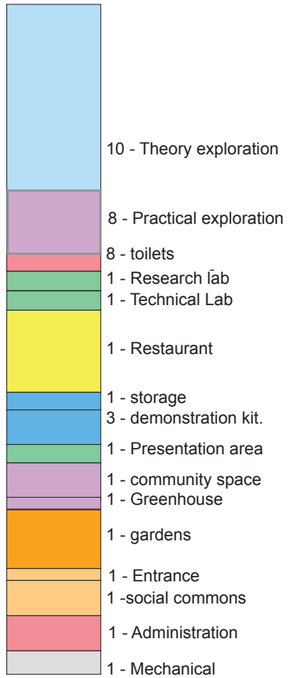
Standard Small
High School Model



Re-imagined for Charter
School and re-grouped based
on networks



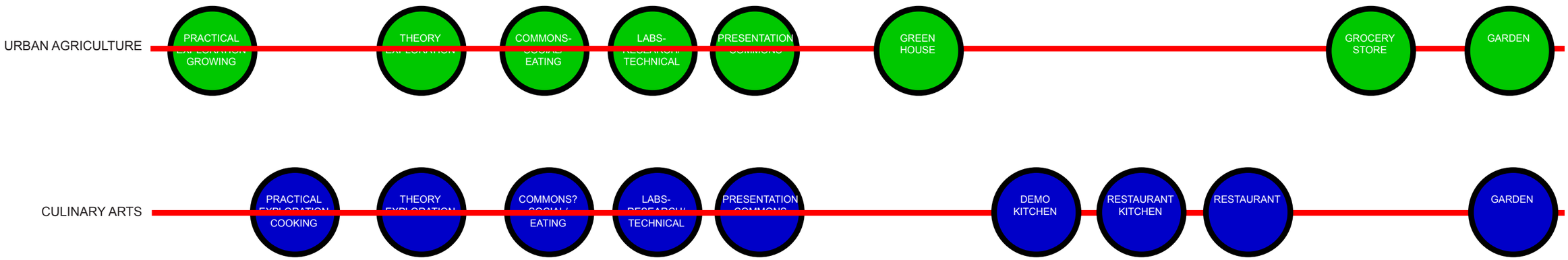
Distilled by Space size
and Type



Proposed Opening
model for Charter
School

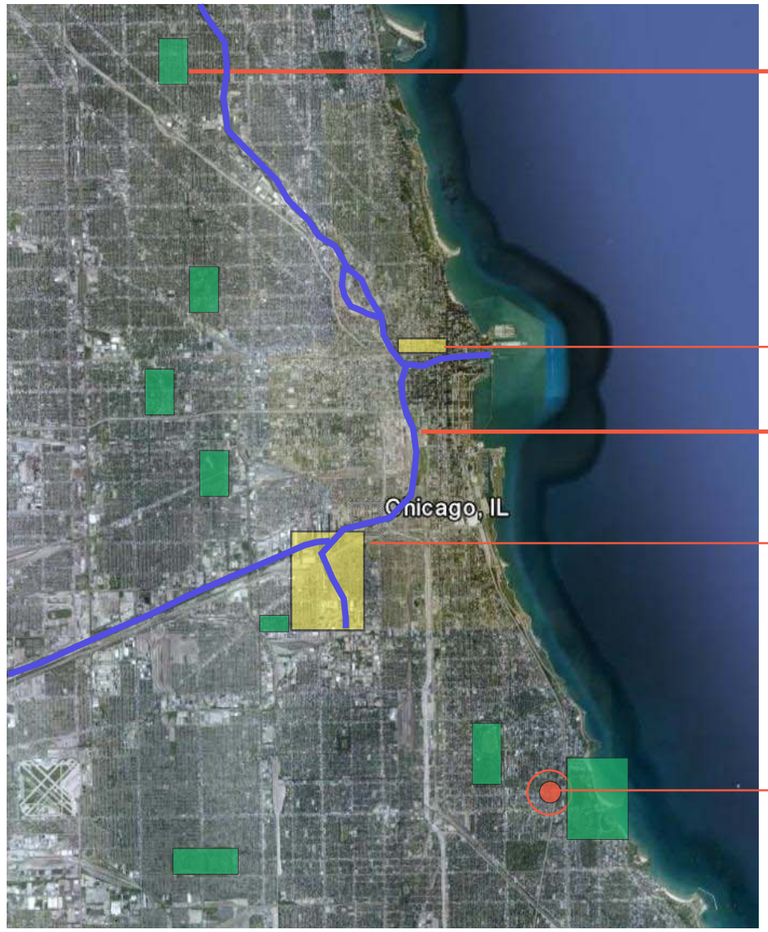
Charles A. Smith Charter School			PROGRAM	
		QTY	SF	NSF
Learning Spaces				
	Theory Exploration	10	900	9000
	Practical Exploration	8	1500	12000
	Presentation Area Devidable	1	1800	1800
	Learning spaces toilets	4	100	400
	Total	**23**		**23200**
Common Spaces		QTY	SF	NSF
	Research Lab	1	2500	2500
	Technical Lab	1	2500	2500
	Demonstration Kitchen	3	1200	3600
	Green House	1	3000	3000
	Garden	3	20000	60000
	Entrance	1	800	800
	Social Commons	1	3000	3000
	Eating	2	1200	2400
	storage	4	400	1600
	Locker room	2	2200	4400
	Total	**19**		**83800**
Administration Spaces		QTY	SF	NSF
	Reception / Office / Workroom	1	600	600
	Head Master	1	200	200
	Stroage	1	150	150
	Nurse	1	150	150
	nurse toilet	1	100	100
	Confrence	1	250	250
	Teacher lounge	1	400	400
	teacher restroom	1	150	150
	Total	**8**		**2000**
Public Spaces		QTY	SF	NSF
	Restrauant	1	10000	10000
	Garden	1	50000	50000
	outdoor kitchen	1	1000	1000
	meeting area	1	1200	1200
	Restroom	2	50	100
	Total	**6**		**62300**
Infrastructure		QTY	SF	NSF
	Circulation	1	5000	5000
	Mech-Elec	1	600	600
	Custodial	1	250	250
	total	**3**		**5850**
	Total Gross Area			**177150**

The school program creates a series of important adjacencies. Determining how the programmatic elements will be utilized by the various user groups will be very important in the success of the school. By recognizing which program elements will be supported by shared usership allows us to focus on the how these nexuses will be distributed around the site. Because the school is designed to support a variety of users and functions focusing on the programmatic overlaps is essential to the success of the project. Many of the scholastic uses overlap, but the public program dovetails with the school program in the greenhouses, demo kitchen, restaurant, food market, and gardens. These areas become opportunities for shared uses.


URBAN AGRICULTURE
PRACTICAL
GROWING
THEORY
COMMONS-
EATING
LABS-
TECHNICAL
PRESENTATION
GREEN
HOUSE
GROCERY
STORE
GARDEN
CULINARY ARTS
PRACTICAL
COOKING
THEORY
COMMONS?
EATING
LABS-
TECHNICAL
PRESENTATION
DEMO
KITCHEN
RESTAURANT
KITCHEN
RESTAURANT
GARDEN
COMMUNITY
GREEN
HOUSE
DEMO
KITCHEN
RESTAURANT
GROCERY
STORE
GARDEN

Location Narrative

Chicago is in many ways the ideal location for this endeavour. The history of Chicago is inexorably linked with the history of food production in America. From the invention of the McCormick reaper and the John Dear plow that allowed the prairies to become the endless the fields of corn and wheat that have feed America for generations. To the first graded grain exchange developed on the banks of the Chicago river that allowed that grain to be sorted and efficiently shipped all over the country. To the butchering operations of the Swifts and Armours that completely revolutionized the meat industry and created the environment that allowed the factory farms of today to thrive. To the foodie paradise that Chicago has become today with many world renown and innovative restaurants and vibrant farmers markets. To the long and successful urban agriculture projects that have taken root in and around the city. Chicago possesses both the history and the passion to foster this project.



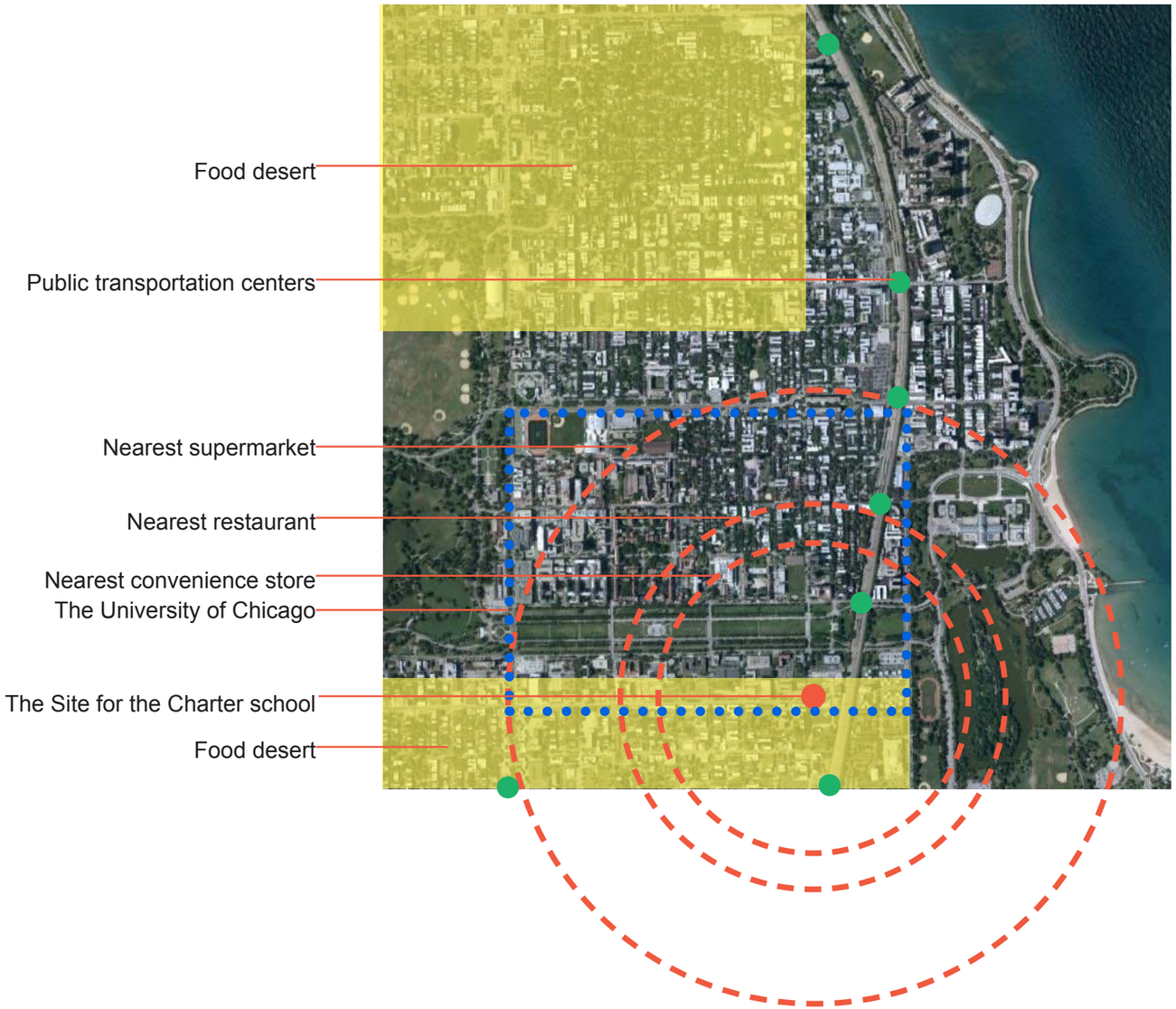
Chicago's Emerald Necklace, a chain of linked parks, two of the largest three are with in walking distance of the site.

The Fulton Market Meat Packing district, a historic and current center of meat production

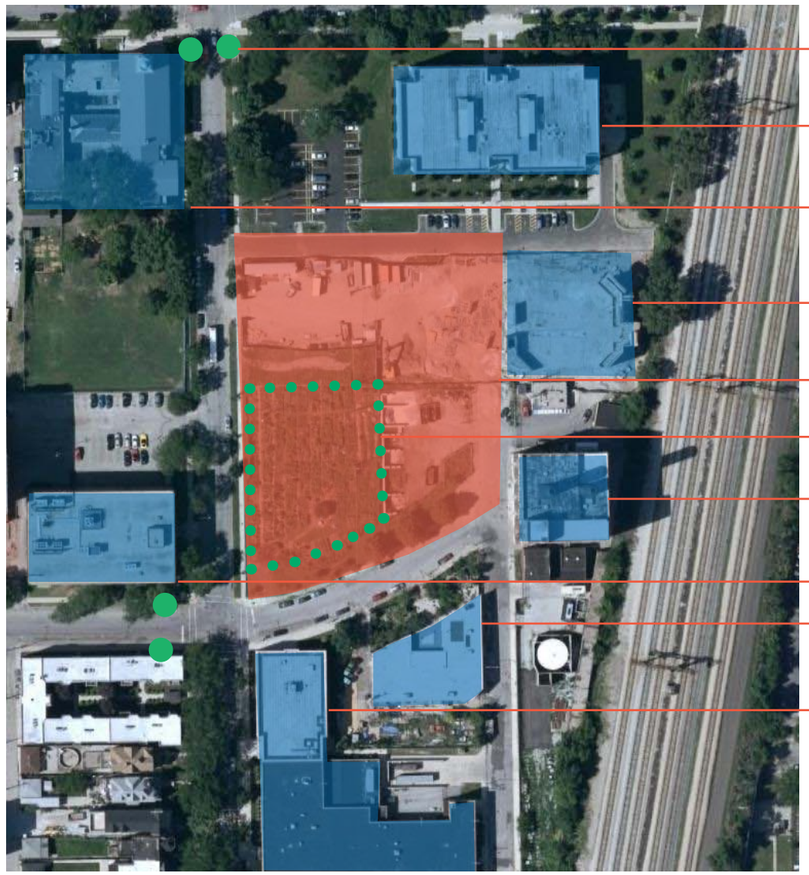
The Chicago River and it's tributaries

The historic Armour and Swift meat packing districts

I have chosen a site on the south side of Chicago in the Woodlawn neighborhood, on the Northeast corner of Dorchester Avenue, and 61st Street. The location is on the border of Woodlawn and Hyde Park and at the Southeast corner of the University of Chicago. While Hyde Park is relatively affluent and reasonably well serviced with grocery stores and restaurants; Woodlawn is part of one of the largest food deserts in the city. There are many efforts in progress to alleviate this lack of healthy food in the area and this project will join this effort. Historically these communities have been actively divided, and the scars of this division will not be easily healed, however creating common cause will serve to benefit everyone. I propose to take advantage of this frontier condition to create a cross border flow of information, resources and produced food to create a mutually beneficial situation. By reaching across this border and utilizing the resources and knowledge present on both sides of the frontier the Charles A. Smith School will be able to begin the reconciliation process by providing desired and needed infrastructure to the greater community.


Food desert
Public transportation centers
Nearest supermarket
Nearest restaurant
Nearest convenience store
The University of Chicago
The Site for the Charter school
Food desert

The site is bordered by the University of Chicago Steam and Chiller plants, the University of Chicago Press, two elementary schools, the Experimental Station; a vibrant community arts and culture organization and soon a new home for the Chicago Theological Seminary. While all of these adjacencies offer exciting opportunities the most interesting site condition is an existing community garden. This garden has been in use for fifteen years, serving as common ground for people from many walks of life and providing 180 people with the opportunity to grow their own produce. The land is owned by the University of Chicago and they have decided to replace this garden with construction staging and then a parking lot. I would like this project to propose an alternate trajectory for the site, preserving it and integrating it with the adjacent buildings into a group of environmentally and culturally sustainable community infrastructure. By preserving this important community infrastructure and generating greater connections between a wide range of existing programs I would like this site to become a nexus for both the neighborhood and the city's food related communities.



Bus 59, access to the red and green line subways, and METRA regional trains.

University of Chicago Press

Hyde Park Day School

University of Chicago Chiller Plant

Site of the school

Existing community garden

University of Chicago Steam Plant

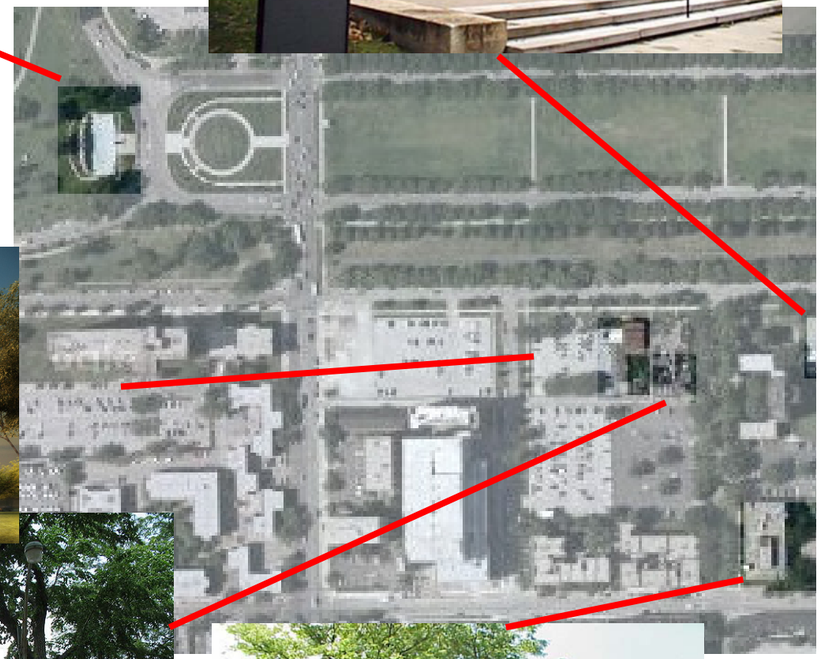
AT&T telephone exchange

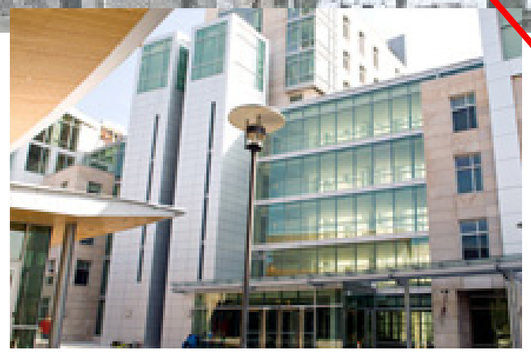
Experimental Station

Andrew Carneige Elementary School

Architectural Precedents

The Charles A. Smith School inhabits a site surrounded by a number of important buildings designed by visionary architects. The area of 60th street from Dorchester Ave. to Drexel is commonly referred to as ‘modernism row.” These buildings include projects by Mies van der Rohe, Eliel Saarenen, Helmut Jahn, Loredo Taft among many other. This project intends to support this history by being sensitive to the history of the site.



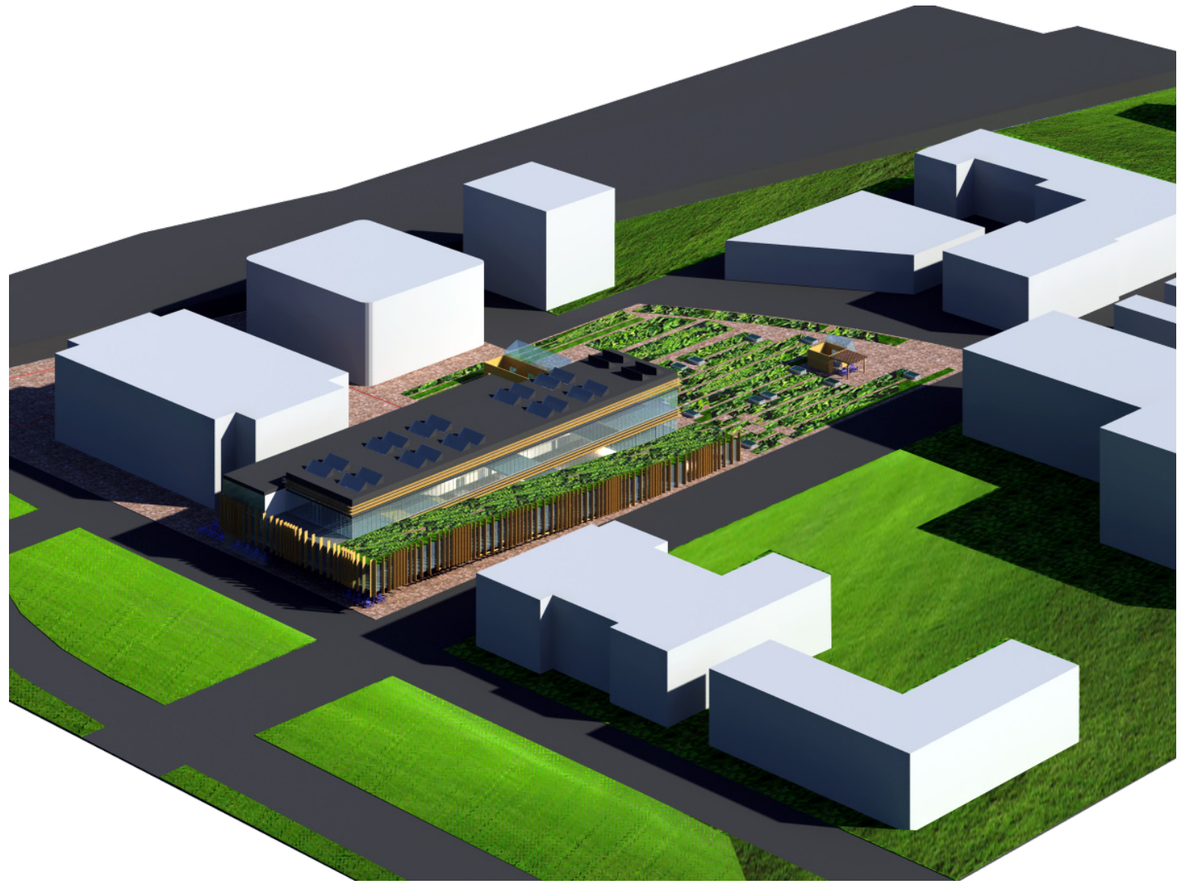


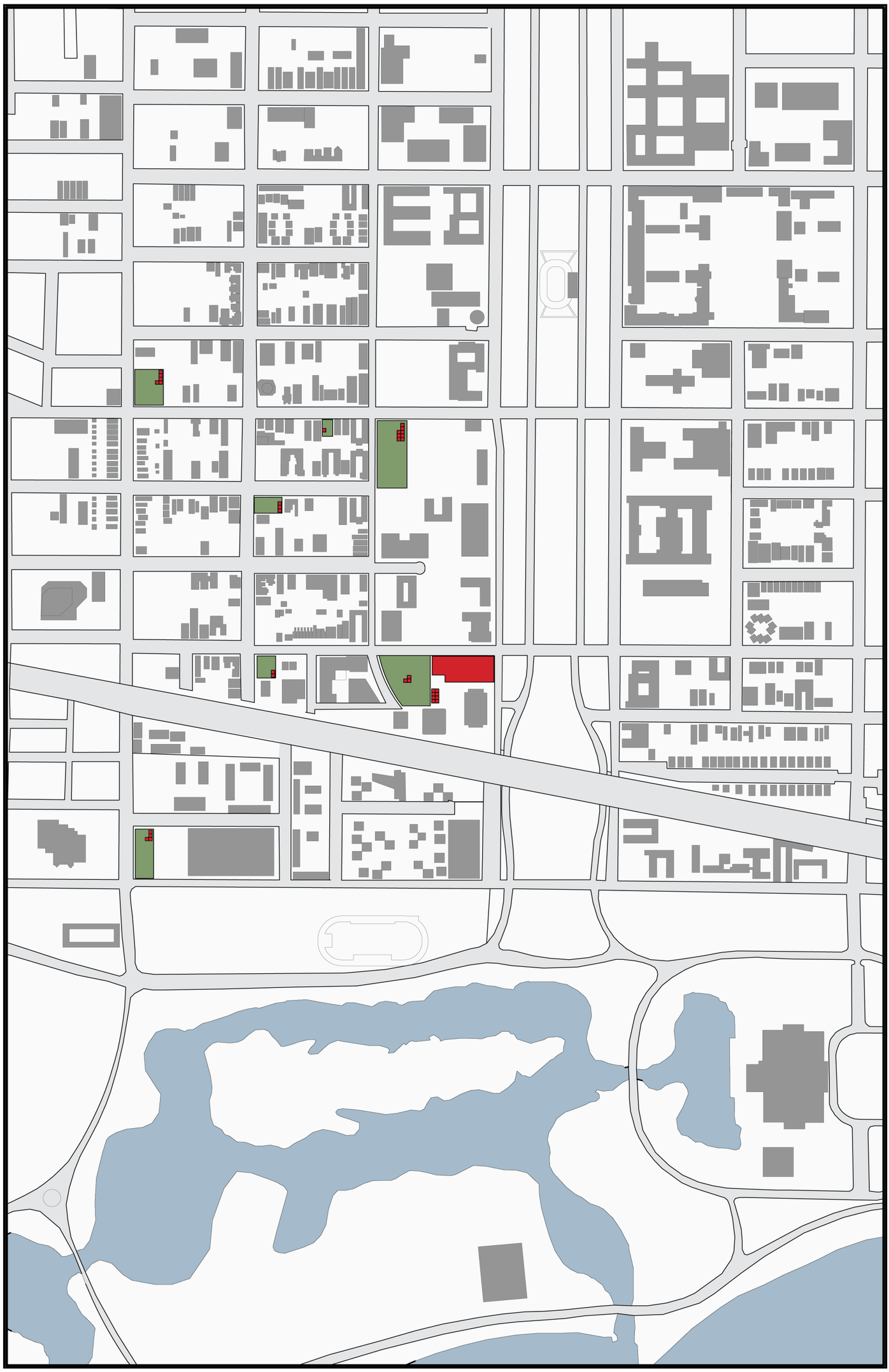
CAS

The school is located in Chicago's Woodlawn neighborhood, on the border with Hyde Park and the University of Chicago. This site has tremendous potential both as an educational institution and for community involvement. By connecting the students and the community around the idea of producing, preparing and consuming food the school strives to create a dialogue that will help to create a healthier more vibrant environment.

Action Plan

The Charles A. Smith Charter School for Urban Agriculture and the Culinary Arts is designed to engage the community in myriad ways and to provide essential infrastructure for educating, farming, eating and shopping. To this end the school will function as a center of gravity supporting a series of satellite interventions that will provide an even larger footprint for the school's influence. The School's urban farming approach will be based on the module of the typical Chicago city lot of 25' x 125'. By focusing on a typical module the school's agriculture program can develop efficiencies based specifically on utilizing Chicago's 70,000 to 80,000 currently vacant lots. Each of the satellite interventions will consist of a farm area of a number of vacant city lots and a building scaled to the size of the farm. These will be used as classrooms and work areas, and eventually turned in to community gardens as the school develops more farms around the neighborhood. The school itself will provide public areas on the North including a food market and restaurant and on the South in the form of public community gardening space mingled with school farms.

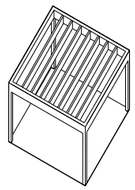




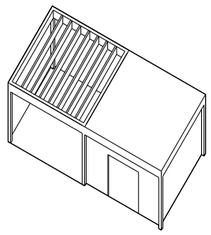
Satellite garden buildings

In addition to the central school building the school will construct a series of satellite gardens on vacant lots in the immediate area. These gardens will be developed by students and farmed as part of their curriculum. However, as building new urban farms is an essential process in understanding urban agriculture the school will periodically develop addition gardens and may turn previously developed areas over to the community gardeners. As each of these interventions are constructed a scalable building will be added. These buildings are scaled to the city lot size and are designed to be easily added to or moved if conditions require. Modularly designed units can be built quickly and added to if the need arises. The structure are designed to provide infrastructure for gardening and class space for the students if the garden is large enough to warrant it. The modularity of the structures allows them to be reconfirmed with relative alacrity, moved easily and even stored in need be.

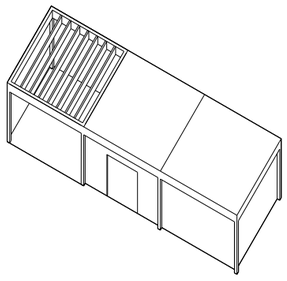
satellite garden building prototypes



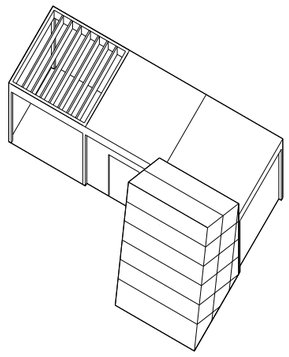
covered area



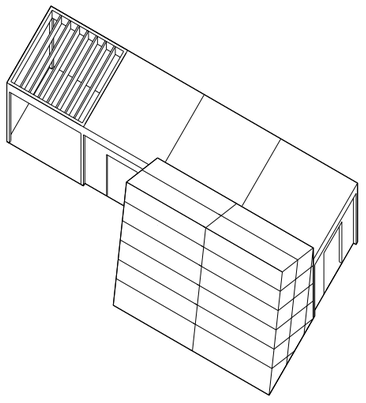
storage + bathroom



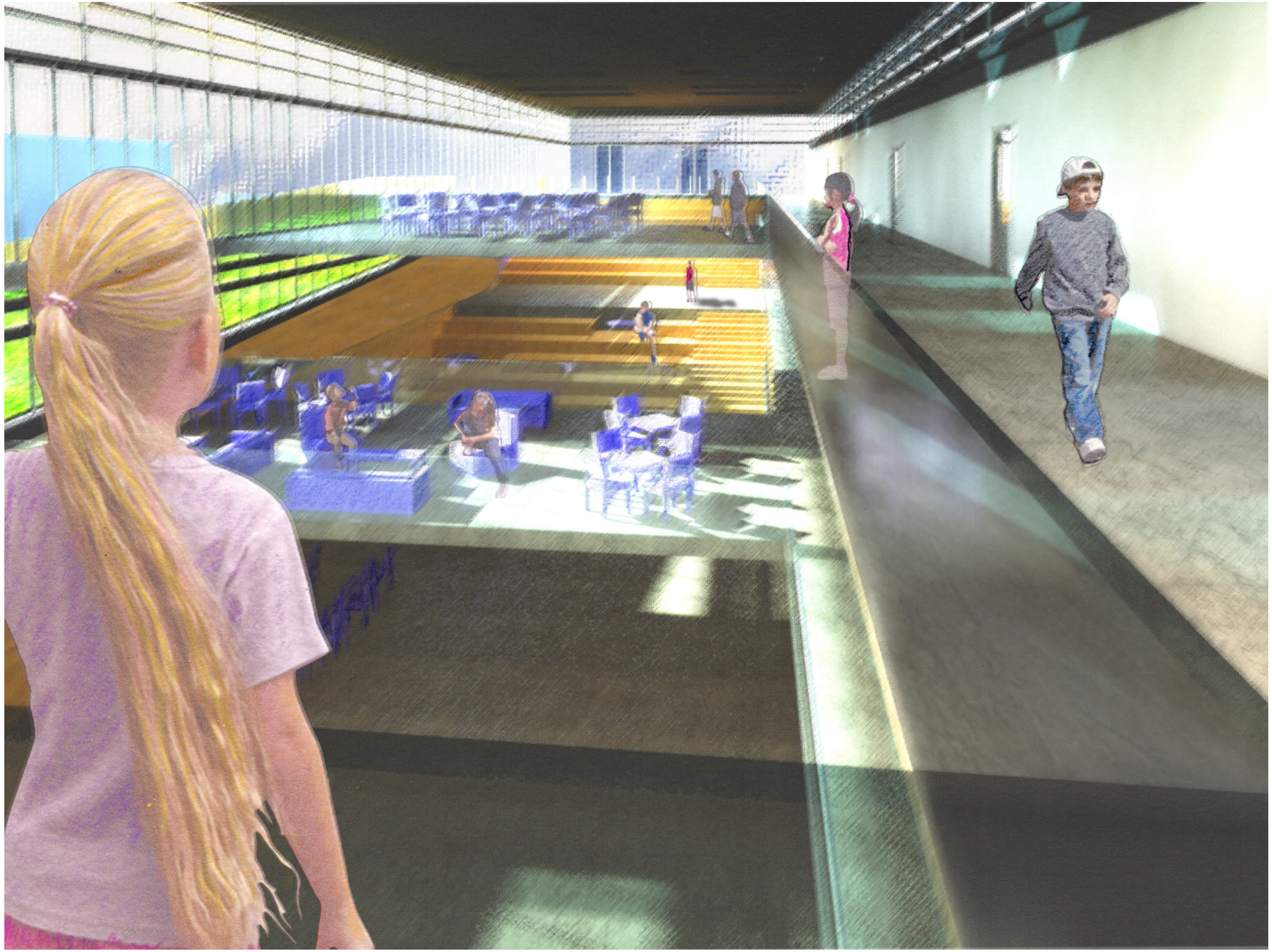
indoor work / classroom



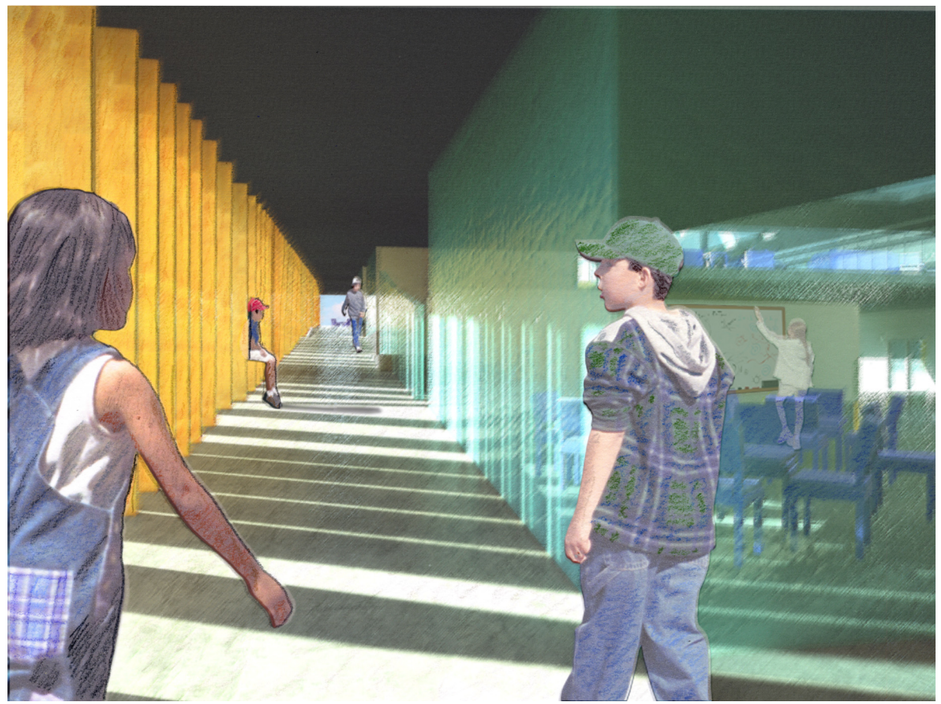
green house



community kitchen

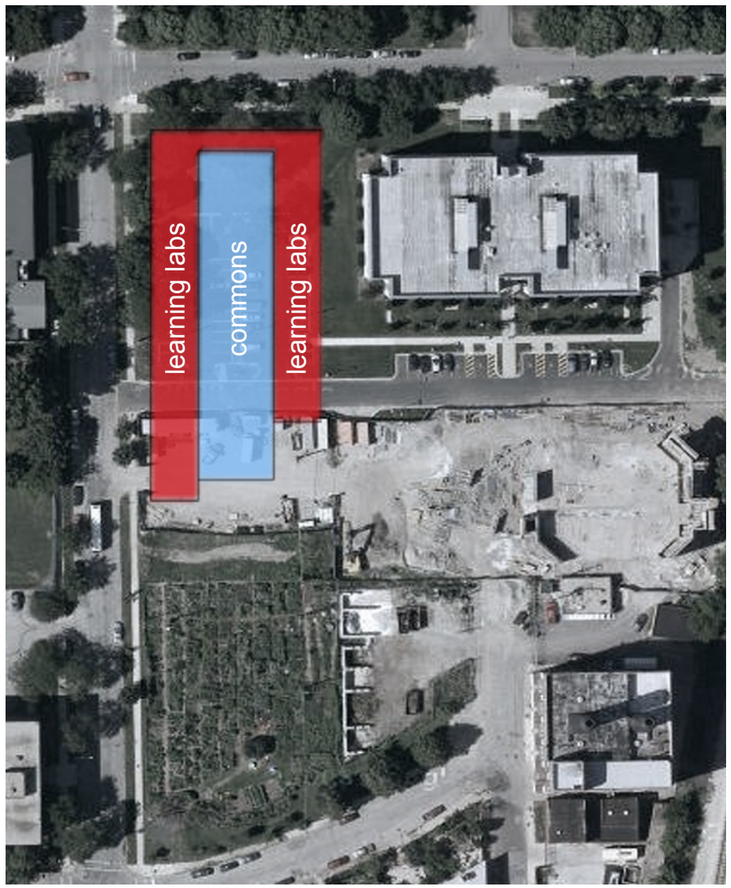


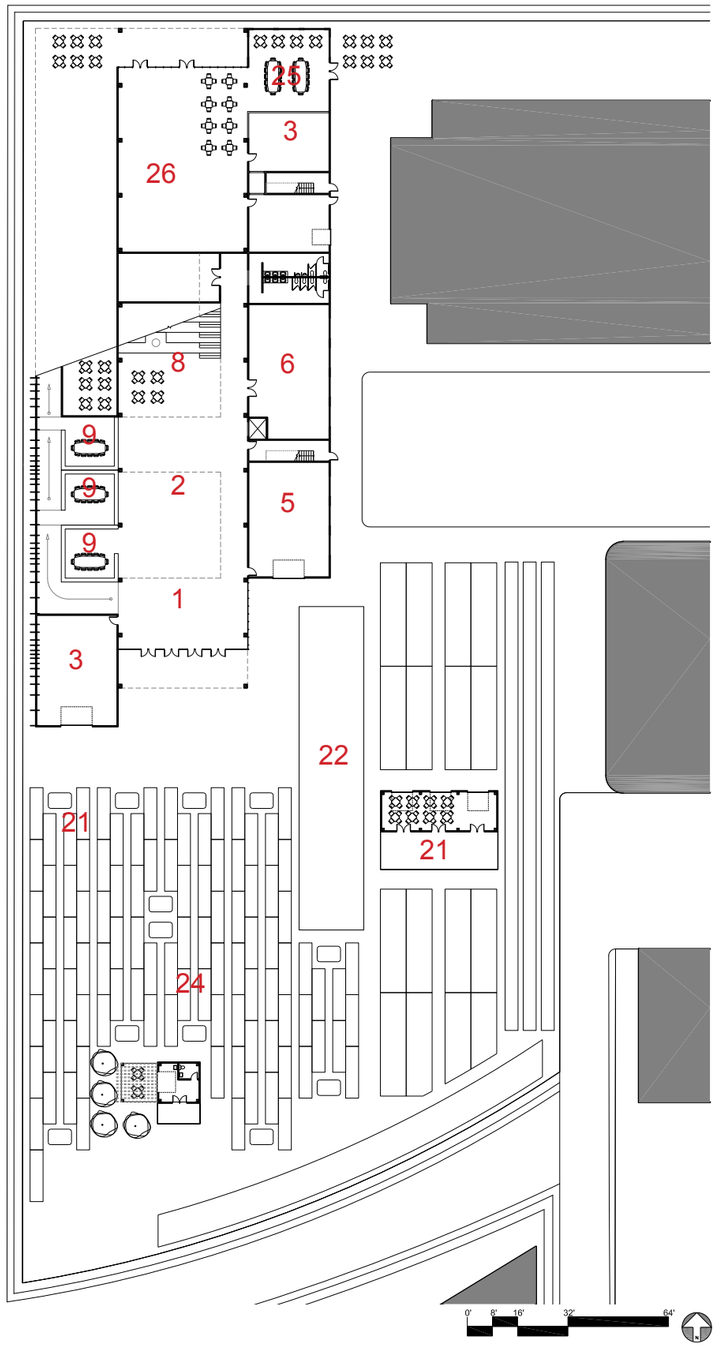
The school is designed around a series of common areas which serve as flexible educational spaces as well as informal gathering and eating areas for the students. The classrooms are intentionally varied both in size and in determinity of function to create an exciting changeable environment which can evolve as new ideas are generated.

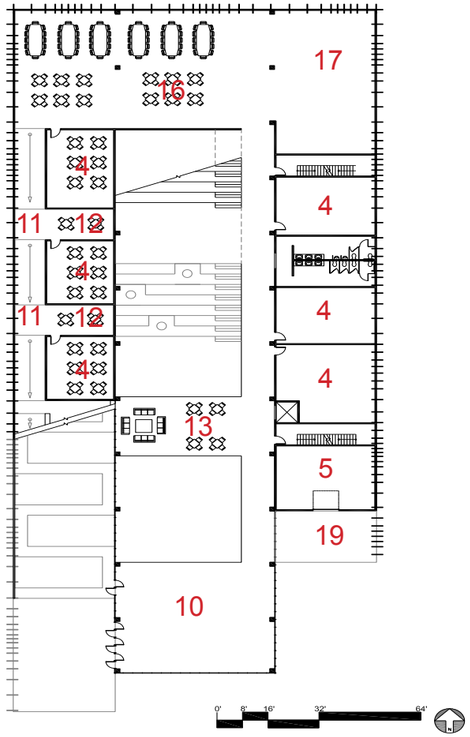


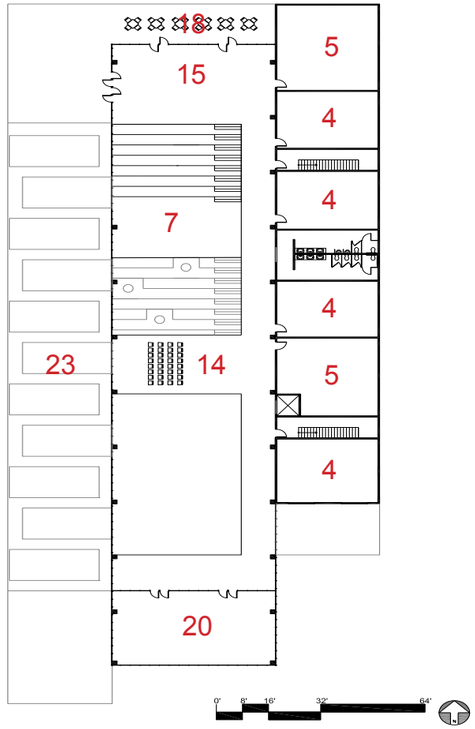
School plan

The school is designed as series of learning labs wrapped around an open area filled with a variety of common spaces. The learning labs are broken down in to three main types. Practical exploration areas are highly determined work rooms housing specific infrastructure like kitchens, greenhouses, bakeries and aquaponics. Theory exploration areas are flexible enclosed spaces that can be reconfigured by a group of students in a mater of moments. Small group areas and break out areas are semi-enclosed spaces that are designed to be used for a variety of learning activities and meetings. The commons are designed to flow from one to the next creating varied adjacencies and gathering areas. Many parts of the school are designed to be used by the public on evenings and weekends when school is not in session. The school kitchen bordering the eating commons will be staffed by students preparing meals designed by students and involving food grown by students. Many of the school rooms spill directly to the outside allowing for direct connections to the gardens.





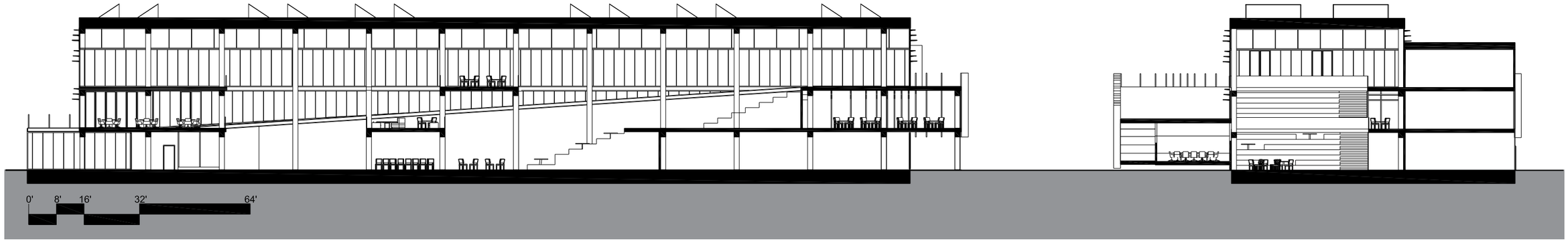




1 entrance / gallery
2 social commons
3 demo kitchen
4 theory exploration
5 practical exploration
6 administration
7 presentation commons
8 the stoop
9 small group meeting
10 research commons
11 window seat
12 break out space
13 gathering bridge
14 small presentation area
15 study commons
16 eating commons
17 kitchen
18 outdoor gathering
19 apiary
20 greenhouse / aquaponics
21 kitchen garden
22 lot size demo garden
23 terrace garden
24 community garden
25 restaurant
26 grocery store

The commons are the heart of the school. They are designed to flow from one to the next, eliminating the need for traditional hallways and activating the spaces of the school with myriad functions. Each commons is designed to foster a variety of activities and gathering so that it can be highly functional throughout the day.

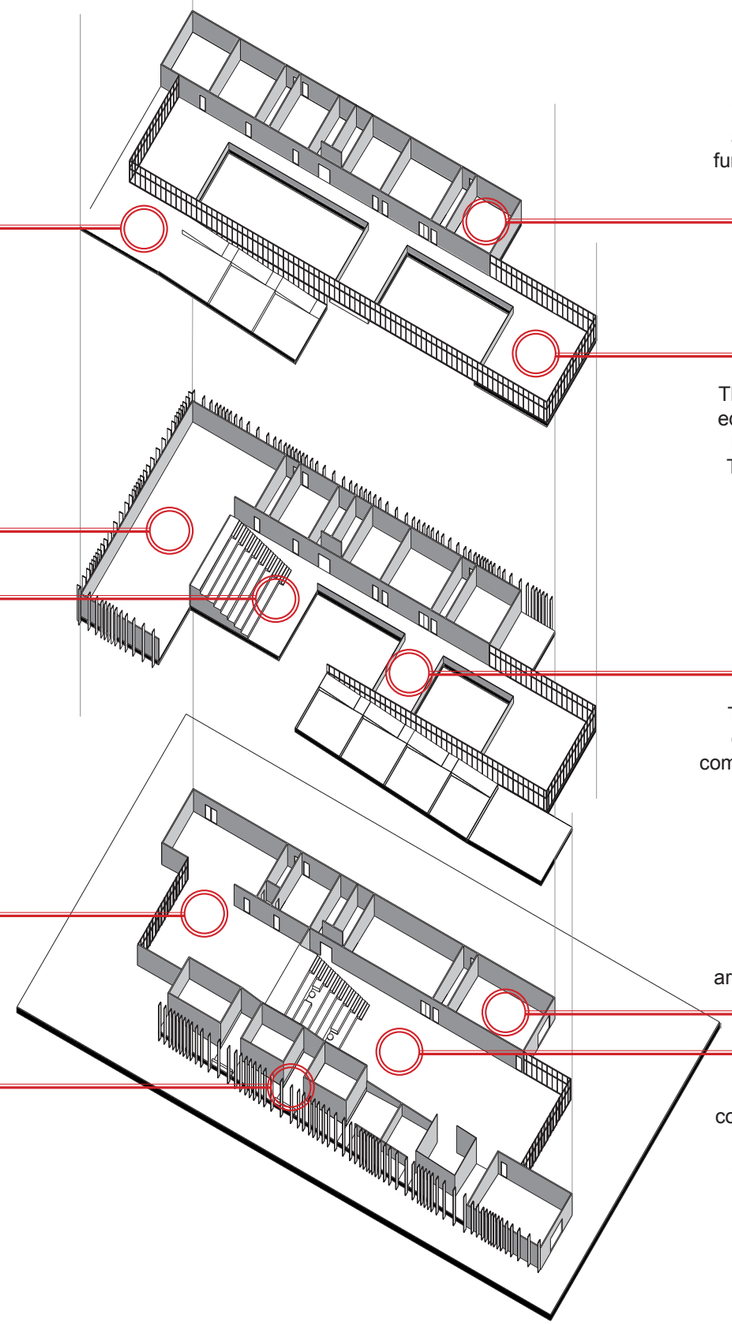
The school is three stories tall with the circulation occurring through the main common spaces and through the ramp on the west side of the building. In an effort to insure openness and public activity the common spaces open up to each other and provide a variety of gathering and work spaces. The ramp is covered with a terraced garden that can be accessed from the research commons and the study commons creating an outdoor circulation option. All interior spaces are designed to be provided with sufficient daylighting to alleviate the need for electric lighting during the day.



the terrace garden
The roof of the connecting ramp is used as a garden space to test ideas and theories of urban gardening. The south facing stepped growing area is connected to the research commons and the study commons. It utilizes rain water that is stored as it runs off the roof of the building.

the eating commons
M.F.K Fisher famously said “First we eat, then we do everything else.” Supporting this idea, the eating commons is designed to be heavily integrated in to school life. Students will cook and eat meals together designed by the Culinary Arts students in this connective space at the top of the ramp and above the stoop.

the presentation commons
This area is designed to function for assemblies, student and teacher presentation and as gathering space. The space is open to many other common areas so that the work presented is shared with the school. This area may also be used for community meetings and gatherings when school is not in session.



partnership spaces
In an effort to both provide essential infrastructure for the community and to re explore methods of school funding a restaurant and market is integrated with the school. A sixty seat restaurant with an open kitchen may function for demonstrations as well. The 4000 square foot market will bring healthy food to a desperately undeserved area.

window seat and break-out area
Tucked between classrooms on the ramp the break out areas provide semi-private study and meeting spaces. The window seats located along the ramp in three places offer a pleasant space to for student to study or converse. These areas not only provide exciting spaces but also active the ramp circulation.

theory exploration
These class areas are designed to be able to be re configured by a group of students in less than five minutes. This allows them to function in a variety of ways in a single day. This flexibility supports the myriad educational methodology necessary in a healthy and successful learning environment.

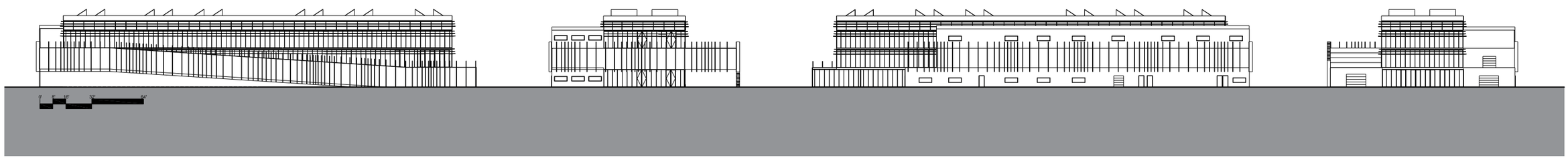
green house
The third floor overlooking the outdoor garden is designed to be an educational green house. This area will integrate indoor gardening techniques with high efficiency growing methods like aquaponics. This area will also be visible from a distance, becoming one of the identifying features of the school

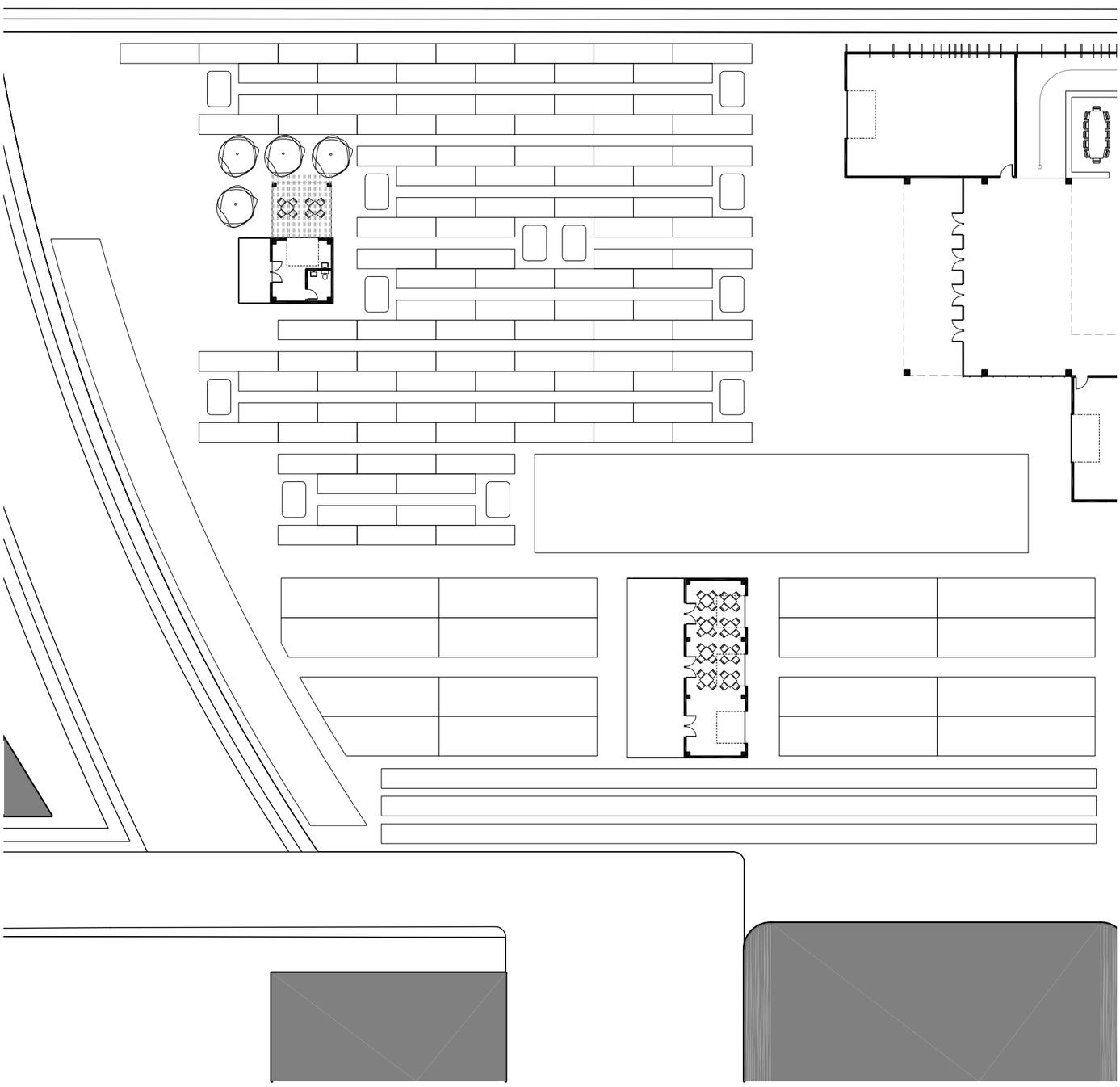
bridge gathering area
The second floor bridge across from the presentation commons is designed to be a free form gathering area for students. This area commands a full view of the entry and social commons and is central to the life of the school. Soft seating will provide students with comfortable and integrated area to relax.

practical exploration
These class areas are a complement to the theory exploration area. These rooms have more determined functionality allowing for a higher level of infrastructure. These classrooms will include kitchens, baking areas and gardening labs. May of these areas are visible form the out side of the school to engage the interests of people passing the school

commons and the stoop
This is the heart of the school. The progression from entry to commons to stoop will be deeply integrated in to the daily life of the school. The commons will provide gathering space and areas for displaying of student work. The stoop is a gathering and meeting area with small table areas worked in to the stair structure.

The gardens attached to the school include a Chicago lot sized demonstration and study garden, a series of educational production farms, community gardening spaces, two modular farm buildings, water reclamation and storage and gathering areas. By combining the school and community gardens The School will foster additional collaboration and educational opportunities for students and gardeners. The lot size garden will allow students to practice and develop practices designed to create efficiencies based directly on the land size typically available in Chicago. The two modular buildings will house class and work space, storage, facilities and greenhouses. These buildings will provide both the students and community gardeners with support and directly in the gardens.



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Conclusion

The problems that we face with our relationship with food are varied and multi-faceted. We believe that a more aggressive and comprehensive urban agriculture and culinary education approach can begin to address them, particularly if this approach includes sensitive thinking about educational spaces. I believe that the best solutions will be the ones that engage a wide participant base, foster creative approaches and create connections and networks between diverse people and institutions. This project represents a responsive approach that integrates top down and bottom up potentials in striving to create a healthier urban environment. By taking advantage of the potential community partnerships and the inclusion of robust community integration this project strives transcend typical schools and to be actively involved in the generation of a salubrious and vibrant community.

Ben Spicer - May 1st 2010

Resources

-The Botany of Desire, In Defense of Food: An Eater's Manifesto, and The Omnivore's Dilemma: A Natural History of Four Meals by Michael Pollan

-Cuisine and Culture: A History of Food and People by Linda Civitell

-The Food Museum Online

-Living History Farms, Iowa

-Agropolis Museum

-Agropolis: The Social, Political and Environmental Dimensions of Urban Agriculture by Luc J. A. Mougeot

-Culinary Art and Anthropology by Joy Adapon

-For Hunger-Proof Cities: Sustainable Urban Food Systems by Mustafa Koc, Rod MacRae, Jennifer Welsh, and Luc J. A. Mougeot

-The Language of School Design: Design Patterns for 21st Century Schools by Prakash Nair, Randall Fielding and Dr. Jeffery Lackney

-Designing the Sustainable School by Alan Ford

-Educational Environments No. 3 by Roger Yee

-Making Sense of Education: An Introduction to the Philosophy and Theory of Education by David Carr

-The Montessori Method: Scientific Pedagogy as Applied to Child Education by Maria Montessori