

2014

Logothium: Reunification and Improvement of the Community through Logos

Karin J. Hirose

Roger Williams University, khirose449@r.wvu.edu

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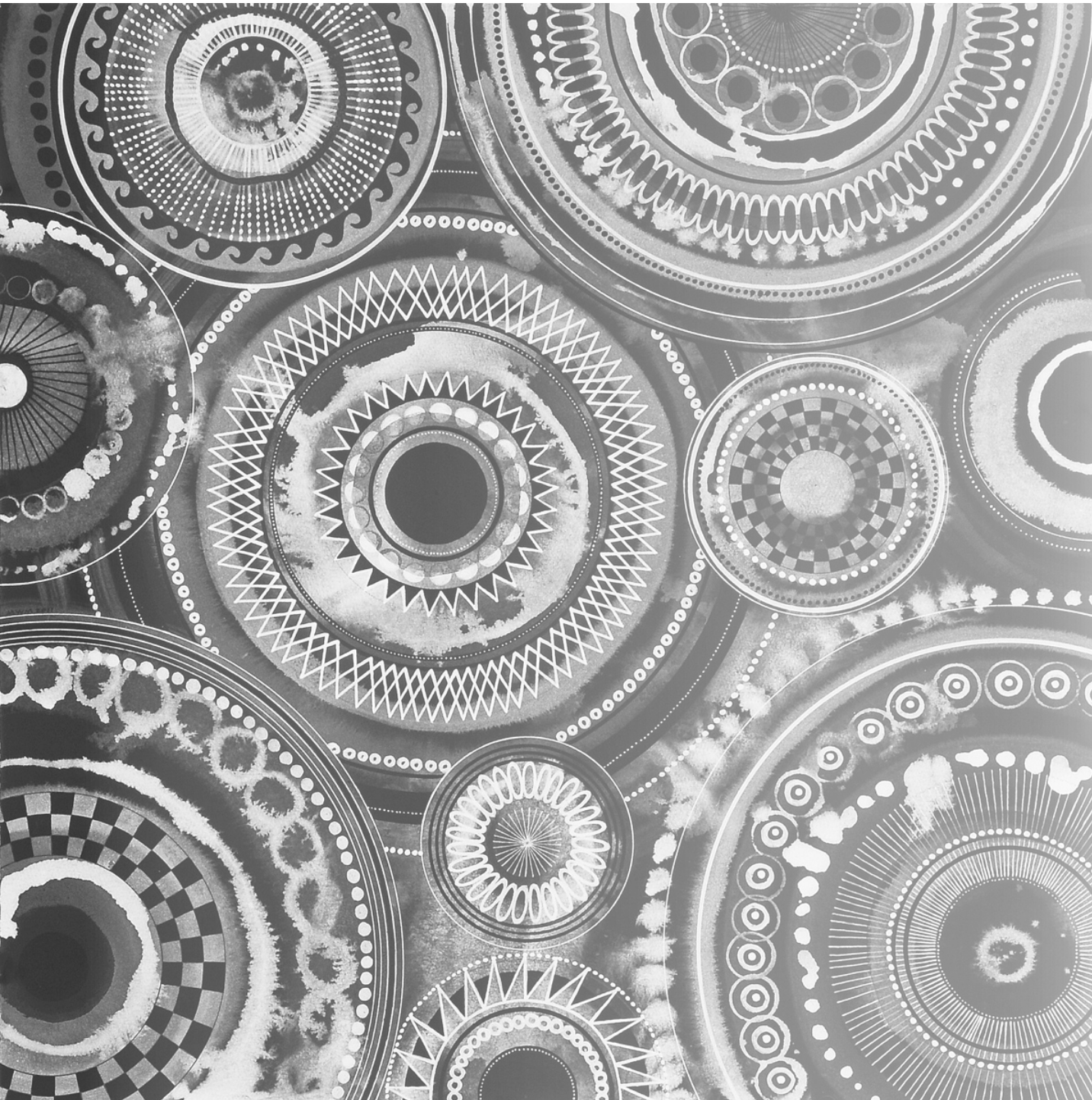
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Logothium

-Reunification and improvement of the community through logos-

1300 Fairmount Ave,
Philadelphia, PA.

Logothium

-Reunification and improvement of the community through logos-

Karin J Hirose

Thesis project submitted to Roger Williams University,

School of Architecture, Art, & Historic Preservation

in fulfillment of the requirements of the M. Arch Degree in Architecture

December 2014

Signature: _____
Karin J Hirose
Class of 2014

Date: _____

Signature: _____
Stephen White, AIA
Dean, SAAHP

Date: _____

Signature: _____
Andrew Cohen
Thesis Advisor, SAAHP

Date: _____

Abstract

The proposal for this project is to create a branch library and a branch collage in city center Philadelphia that offers the possibility to reunification and improvement of a community.

The project is going to take place at 1300 Fairmount Ave, Popular, Philadelphia, PA., that currently is a vacant lot and it is adjacent to the Fairmount subway station and the Devine Lorraine Hotel. While the chosen site, nearby lots and some adjacent properties are a vacant or abandoned, or consists of public housings. The area is anticipating a major rehabilitation projects that create groundwork for a successful urban fabric that reinforces the urban pedestrian bond from the city center to lower North Philadelphia. The project accommodates proposed revitalization plans and it takes account of future need and change in the area with its program, use and design.

By providing academic and cultural opportunity, the project will reconnect area with local communities and beyond. Also it is anticipated to function as a cultural incubator of the area for general improvement of the life standard of current and future generations. As representation of broad cultural activities held within the project, the word “Logos” is employed.

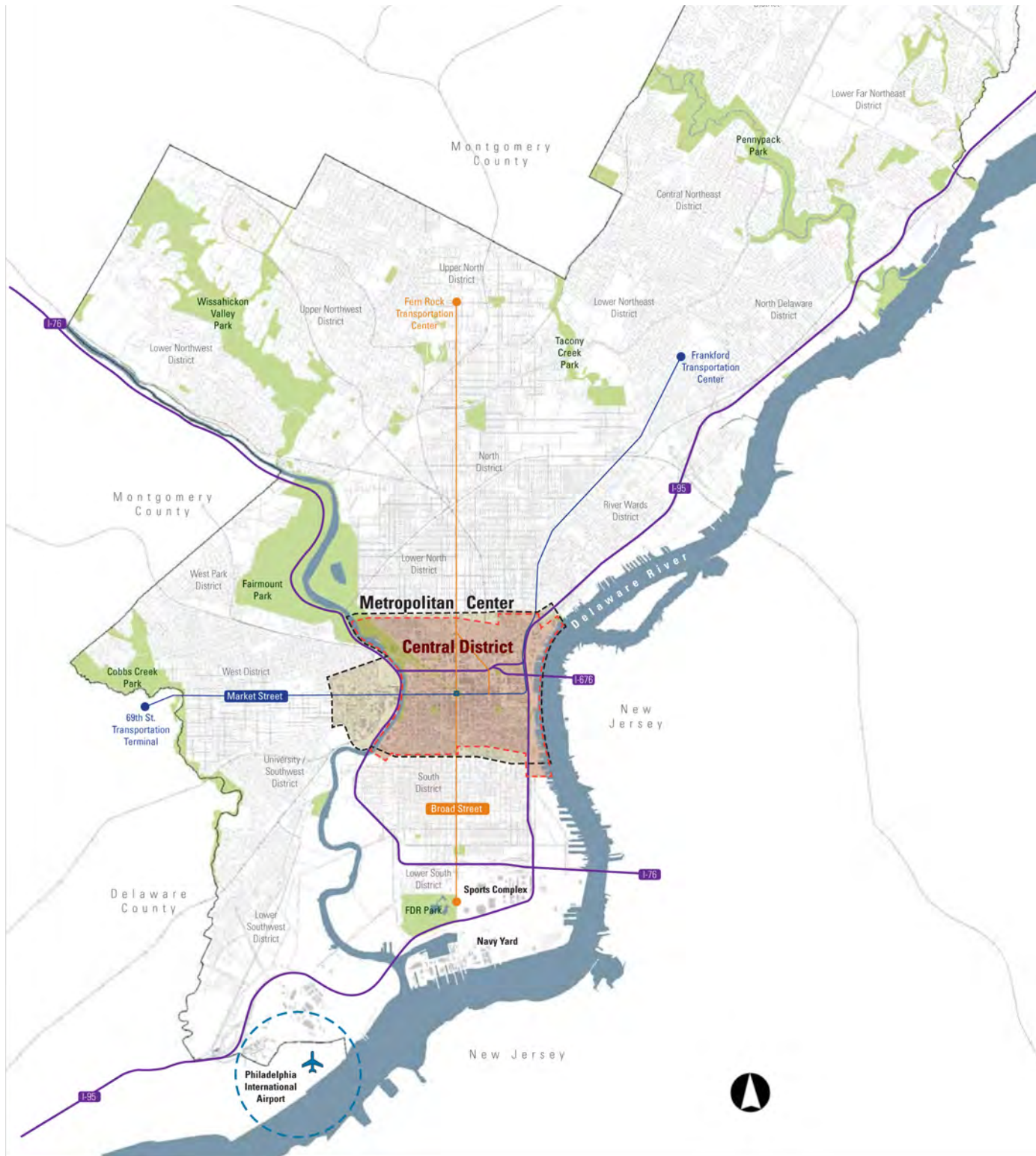


Figure 1

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Purple pentagons are locations of branch library across the city

Figure 2

Introduction and Problem Statement

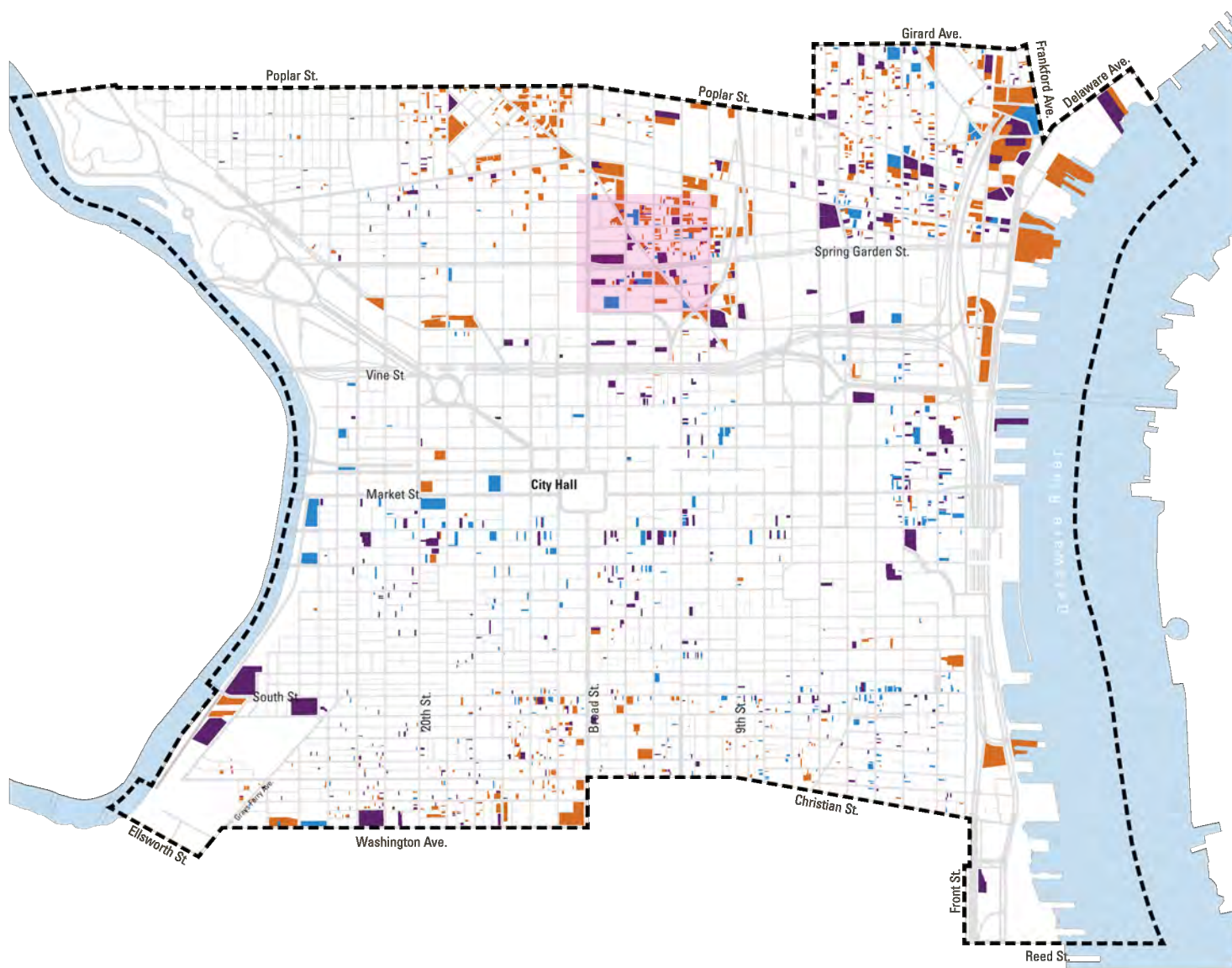
The city of Philadelphia used to have trouble with abandoned urban properties in the 80s and now it struggles with urban vacancy. The City of Philadelphia, department of License and Inspections, started a vacant property strategy in April 2011 after realizing that over 25,000 structures were vacant across the city.¹ There are over 40,000 vacant lots, and over 12,000 lots are publically owned.² There are over 100,000 tax delinquent properties, and delinquency is approximately 10% of their taxable real estate.³ Vacancy and abandonment is a considerable problem in the city from a safety as well as a financial aspect.

The situation has been improving ever since, yet it is in an unacceptable condition. Especially in the city center area where the appropriate level of density is required as urban fabric. The site of the project is located where the last of the vacant lots exist in the urban area. It is half way to Temple University campus area and further North of the city along North Broad Street, which runs from the heart of the city, City Hall. Aside from Main Street that runs by the site, there are existing subway and bus stations right by the property as well. The site has great potential for further development from both an accessibility and economic stand point.

Due to its great potential in economic and accessibility, the focused revitalization plan for the area is proposed for city master plan of 2035.⁴ The site is surrounded by public housing, some of which are private dwellings under a low-income house ownership program by Philadelphia Housing Authority. The site already has a subway station adjacent to it, so it has great accessibility from anywhere in the city. From the private sector, the rehabilitation of the Devine Loraine Hotel and nearby properties are proposed by developer Eric Blumenfeld.⁵ The Lorraine adjacencies to the proposed site and the Lorraine are historically and culturally significant property to the area. Considering all the near future plans, and existing infrastructure, the area around the site has great potential. It's accessibility, history, culture, and future economic development creates proper groundwork for a successful location.

About 1 mile north of the site is the Temple University campus that technically belongs to Northern Philadelphia. The project is a great opportunity to work as an incubator to create academic environment to connect North Philadelphia and the city center. Also, the area is surrounded by urban residential and commercial mixed use properties which raises the need for cultural opportunity in the area.

While the Free Library of Philadelphia have library branches across the city, there are none of on the North west side of the city center. Having a library branch of the Free library of Philadelphia for the site will fulfill the need of the local community. Offering this service to the local residents, and academic community would attract a different crowd throughout different times of the day and week. This also reinforces the urban pedestrian bond from the city center to lower North Philadelphia. Having a Temple University campus branch and a Public Library for the site will create great opportunities for a mixed use project for both academic institutions and the local community.



Vacant Land and Structures

- Vacant Land - Land with no development or active uses (such as parking lots)
- Partially Vacant Building
- Fully Vacant Building

** Vacancy recorded as part of the land use survey completed in the summer of 2012 by PCPC staff*

Figure 3

Project Statement

The logos

λόγος. The logos represents most of the cultural activities related to the words in Ancient Greek. Originally a word meaning “a ground”, “a plea”, “an opinion”, “an expectation”, “word”, “speech,” “account,” “reason,” it became a technical term in philosophy, over time. Nowadays it is an important term in philosophy, psychology, rhetoric, and religion. In Judeo-Christian culture, the word become representation of the god.

The project is driven by the logos and logos is going to be the new characteristic of the area.

As the resolution to the problem of the site, the project is an urban mix use building with a Temple University city center campus branch and a Free Library of Philadelphia branch that serves the lower North, and Northwest of the city. The project is going to take place at 1300 Fairmount Ave, Popular, Philadelphia, PA., that currently is a vacant lot and it is adjacent to the Fairmount subway station and the Devine Lorraine Hotel. While the chosen site, nearby lots and some adjacent properties area vacant or abandoned, the area is anticipating a major rehabilitation project that creates groundwork for a successful site.

The Devine Lorraine Hotel, a currently abandoned property is anticipating rehabilitation in near future. It represents the logos in Judeo-Christian term associated with its historic use. On the other hand, the project, new academic and cultural mixed use building, is going to represent the logos in academic term. Within the new building, logos is going to be represented differently and with qualities depending on use. For the academic community, it is going to provide an institutional space for “Logos”. It will be defined by Aristotle, reasoned discourse that is associated with organizational nature. For the local community, it is going to provide a cultural space for “Logos”. It will be defined by Heraclitus, which means ‘reason’ or ‘explanation’ in the sense of an objective cosmic law to ‘saying’ or ‘wisdom’ that is more basic and broad definition and represents content of the knowledge provided to the user.



Figure 4

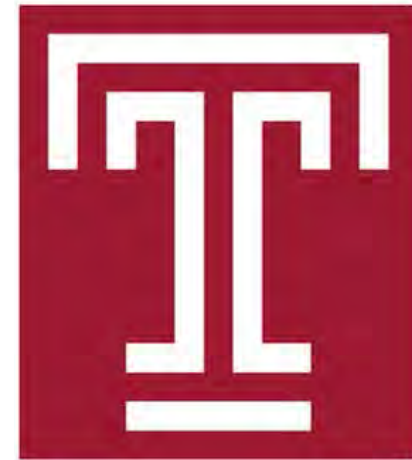


Figure 5

Throughout A weekday

During early morning time to early afternoon parent with toddlers and elderly from near by assisted living facilities come in. Some read books to kids, while some kids watches movies or play with interactive software with supervision of their parent.

During this time of the day several groups of the Temple University student for the day classes come in for their classes and spend time before and after classes at the library lounge. Some checks out the latest novels or movies, while some works on their homework with library's digital collections.

By the after noon, after school teens from neighborhood hangs out and work on their school projects or spent their leisure with library multimedia.

Around this time of the day some early after work adults uses comes out from near by subway station and some comes in for traditional library services, or to stream the novels or movies for the night. Some goes night classes for the university section of the building for continuing education. Some achieving teens attend night classes for university credits for future.

By evening, only adults after their work come in for library services or night classes. Occasional carrier advisement is going to be held during this time of the day in library section as well. v

Throughout its Life

For the first twenty years of the operation, the buildings serves for local community and academic institution inside as originally intended and organizations matures as local community matures with redeveloped iconic building on side.

By the time of the twenty years of the operation, the environment is going to be more commercial oriented and active following the characteristic of changed zoning circulation by the site from master plan of the city.

By the time of the thirty years of the operation, some of the original single family dwellings would be gone, due to the increase in the market value of the area and change of the environment to the busy urban space. There would be lesser need of the cultural facility and more need of the commercial and mixed use property. The building would to reach its first need of rennovation as well. Remove library with rennovation and put street level commercial could be adopitve way to maintain the building.

Themes/Architectural Intention

1. Raise presence of “Logos” in the life of users
2. Interactive urban campus and library for local communities for future need
3. Reinforce pedestrian friendly environment for reconnecting area to surrounding community
4. Library as cultural spaces for gathering that is friendly to variety of generations

Client & Users

The Free Library of Philadelphia and Temple University is going to occupy the building. The user of the Library would be Philadelphia citizens, primarily residents of the Popular and Fairmount area, and the Fairmount subway station users. While university branch is dedicated to Temple university students and include students for continuing education classes, the library space for general public.

Figure 6



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© Michael Moran/ottoarchive. Courtesy of 1100 Architect

Figure 7



Children's Library Discovery Center

Architects: 1100 Architect

Location: Jamaica, NY, USA

Project Year: 2011

Total Area: approx. 30,000 sq. ft. (2 story high)

The project is an addition to original building, and a part of master plan for the renovation and modernization of the 275,000 sq. ft Queens Central Library.

The glass façade is employed to integrate surrounding community and increasing the library's visibility. It is the attempt of reintroducing library as central cultural and social destination. Taking advantage of its exposure to the street, it tries to create a dialogue between the interior and exterior.

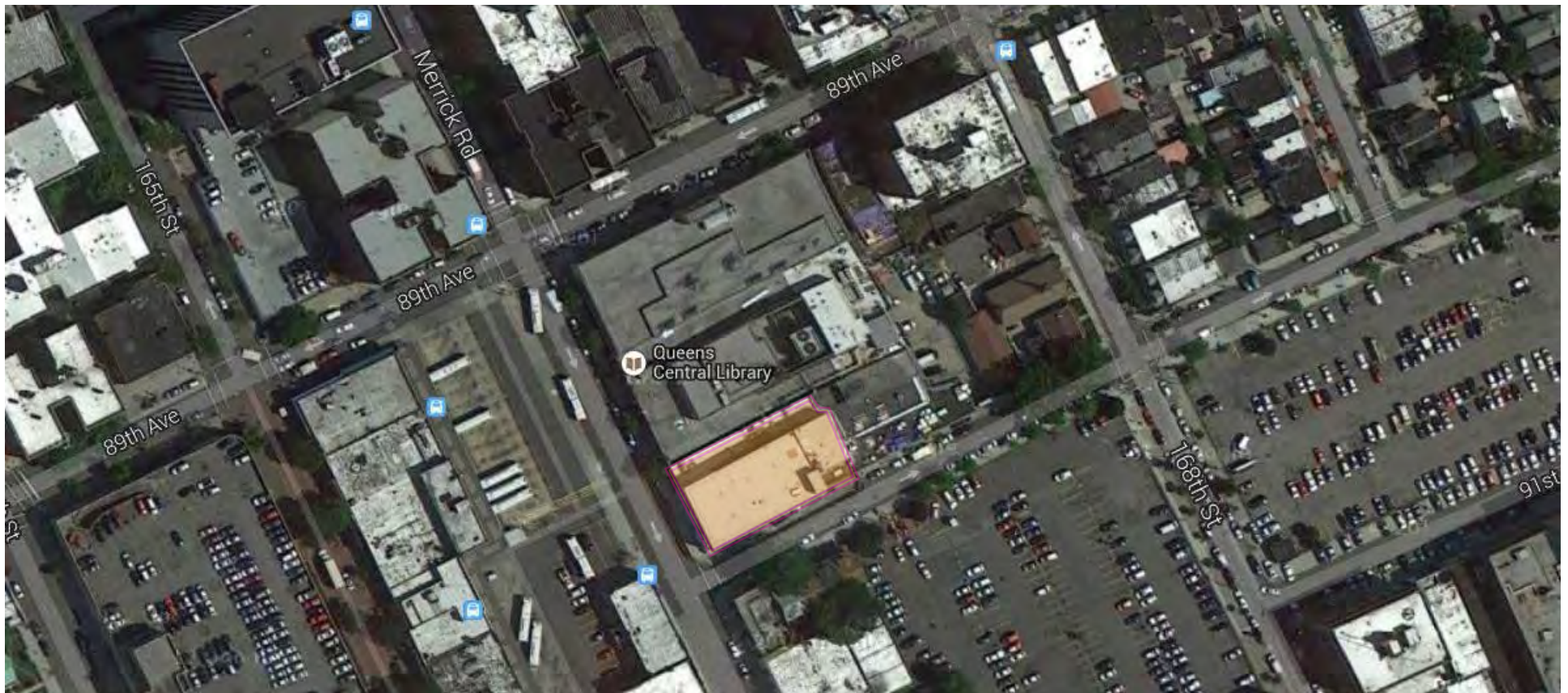


Figure 8



© Michael Moran/ottoarchive. Courtesy of 1100 Architects
Figure 9

Figure 10



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Figure 11



Figure 12

FIRST FLOOR PLAN



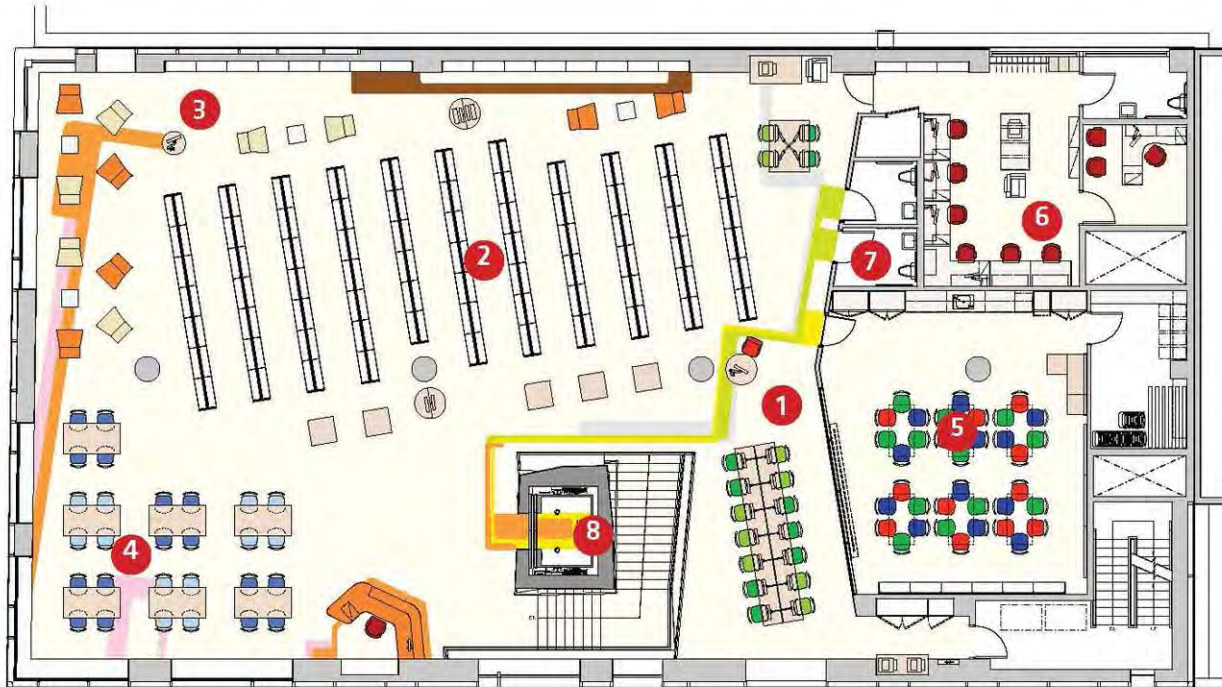
- 1 ENTRANCE FROM CENTRAL LIBRARY
- 2 MAP OF QUEENS
- 3 EXHIBITS
- 4 LIBRARY SHELVES

- 5 EARLY CHILDHOOD AREA
- 6 READING AREA
- 7 RESTROOMS
- 8 STAIR / ELEVATOR

© 1100 Architect

Figure 13

SECOND FLOOR PLAN

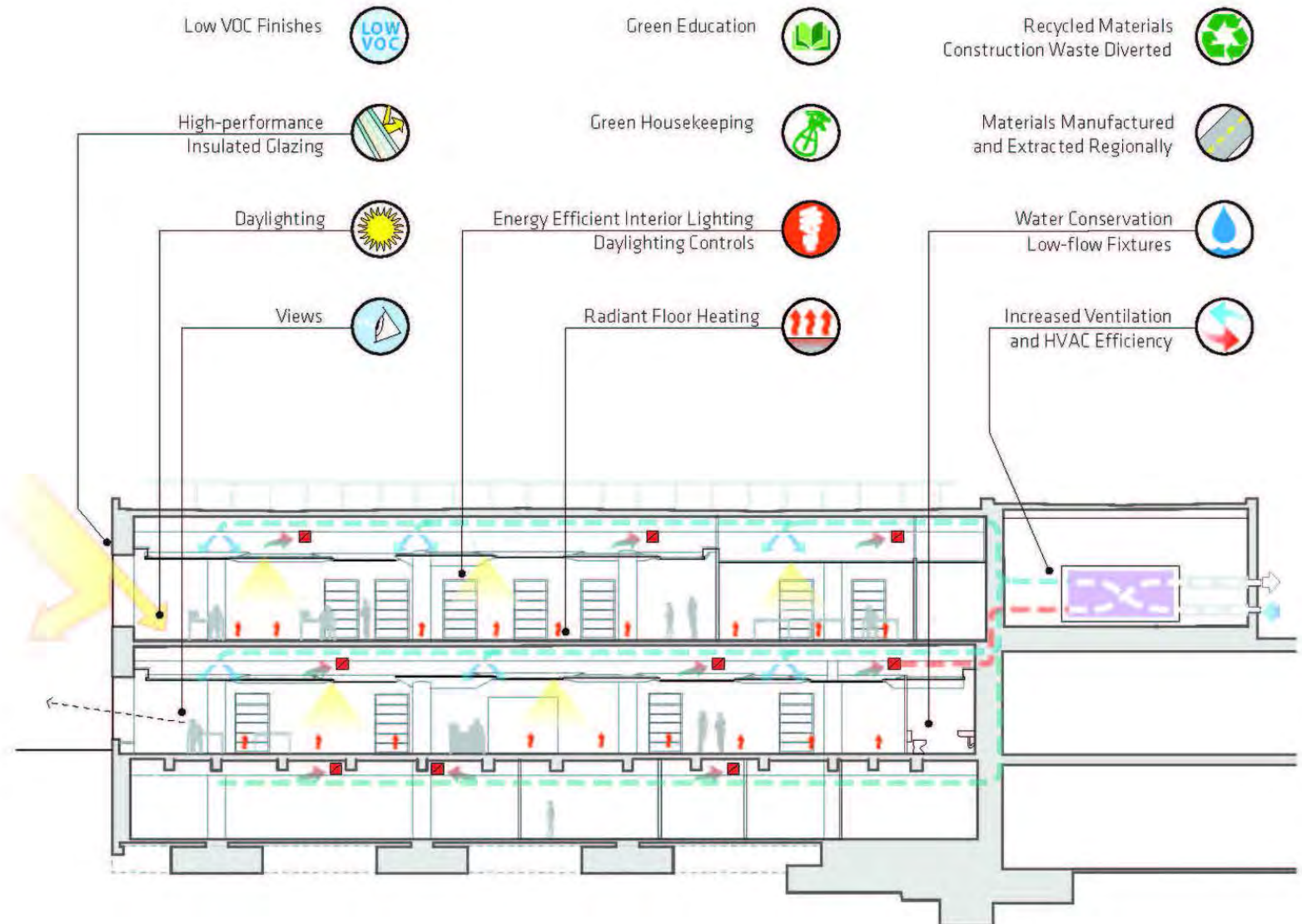


- 1 CYBER CENTER
- 2 LIBRARY SHELVES
- 3 READING LOUNGE
- 4 READING AREA

- 5 MULTIPURPOSE ROOM
- 6 OFFICES
- 7 RESTROOMS
- 8 STAIR / ELEVATOR REDUCTION STRATEGIES

© 1100 Architect

Figure 14



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Figure 15



Figure 16

Figure 17

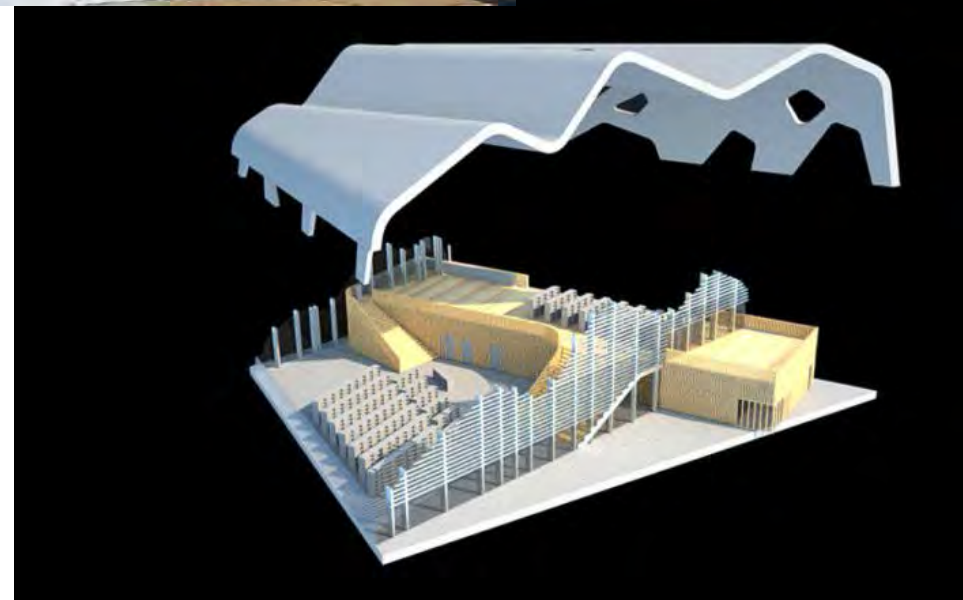


Figure 18

JasperPlave Branch Library

Architects: HCMA/Dub Architects

Location: Edmonton, AB, Canada

Year: 2012

Total Area: 1400.0 sq.m (approx. 15,000 sq.ft.)

The project replaces the original library and new library is about creating an open and memorable presence in the community. The sustainable design was required to fulfill present and future library needs and uses.

The new library is twice in area to the library it replaced, however the number of items in the collection is reduced due to a variety of factors including e-books and the access to online information.

The focus of project shifts from maximizing collection to maximizing the potential for social space.



Figure 19

Figure 21



Figure 20

Figure 22



Figure 23



Figure 24

Figure 25

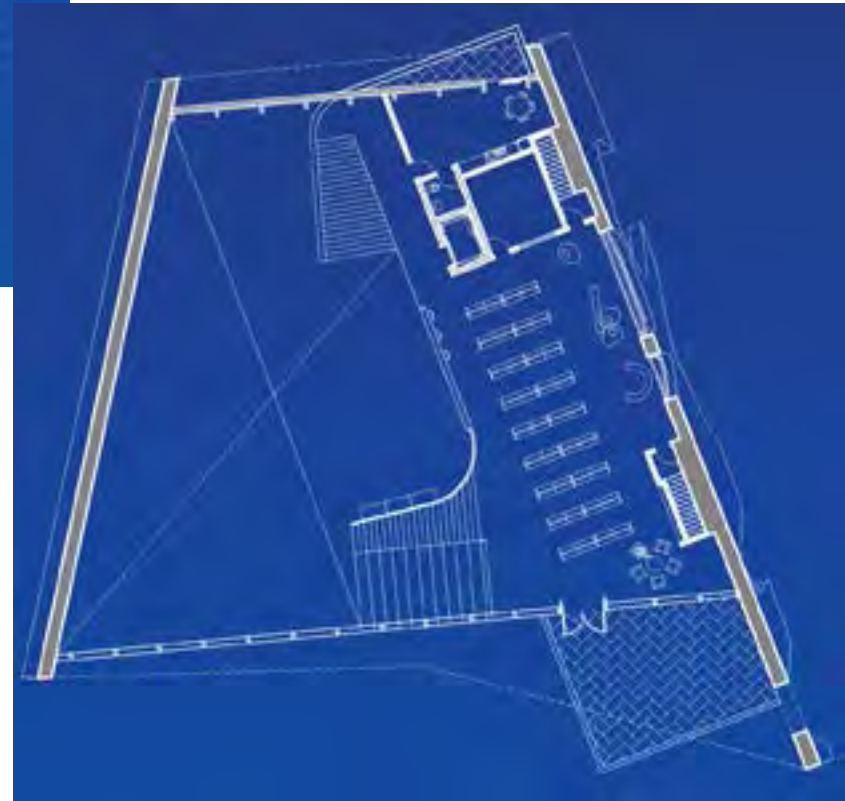
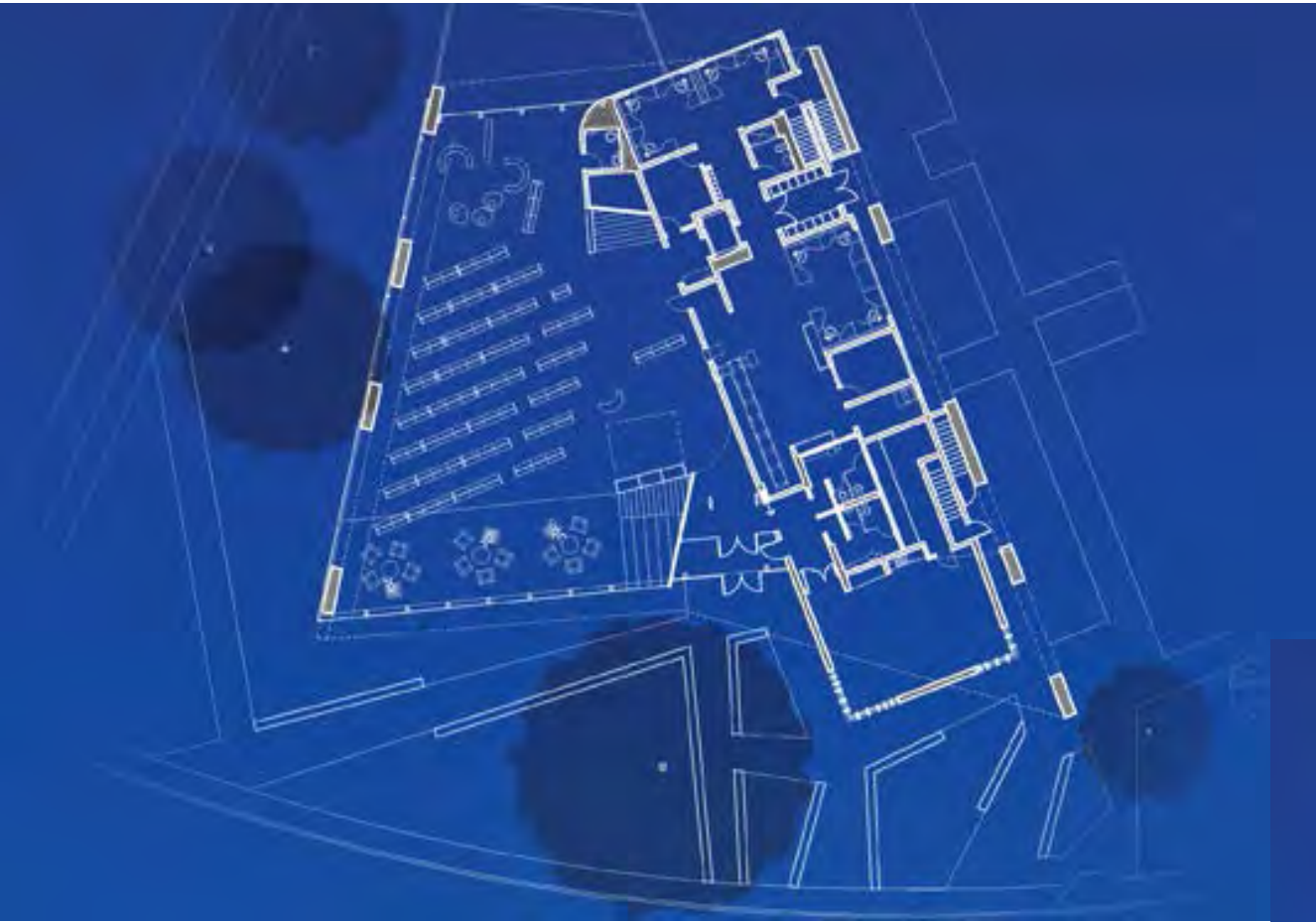


Figure 26

Figure 27

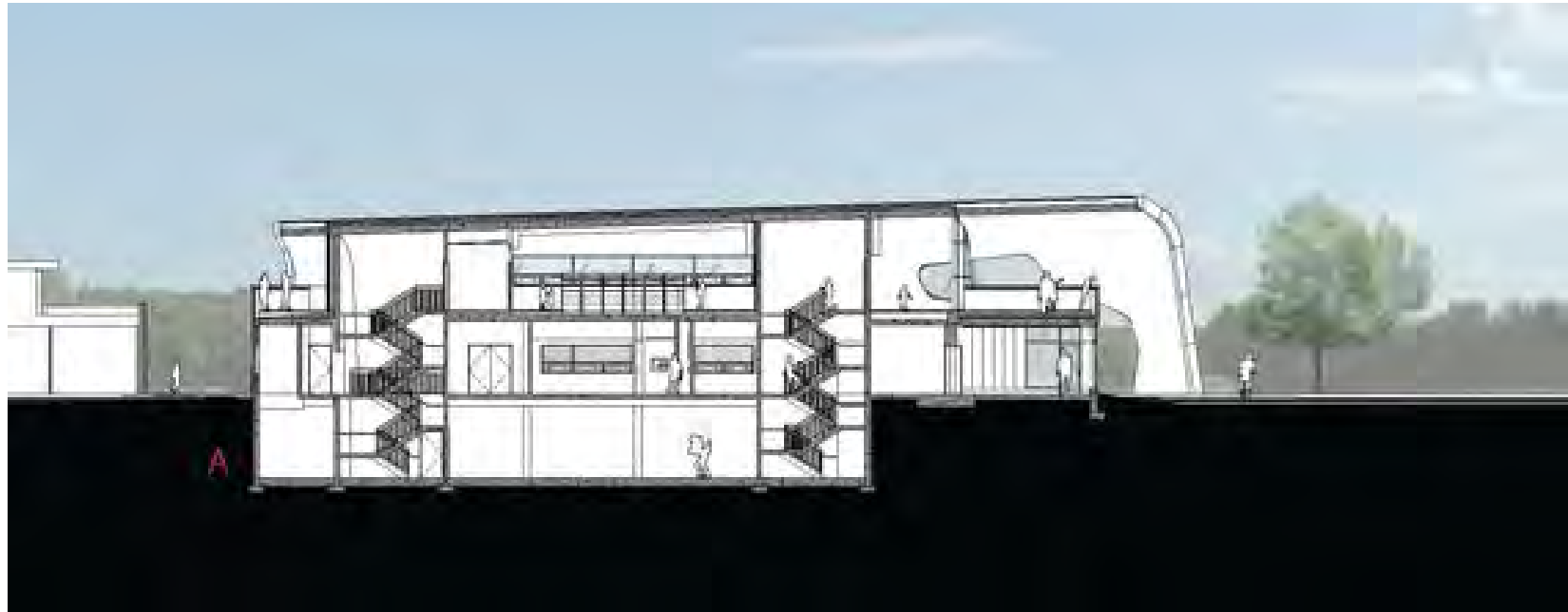


Figure 28

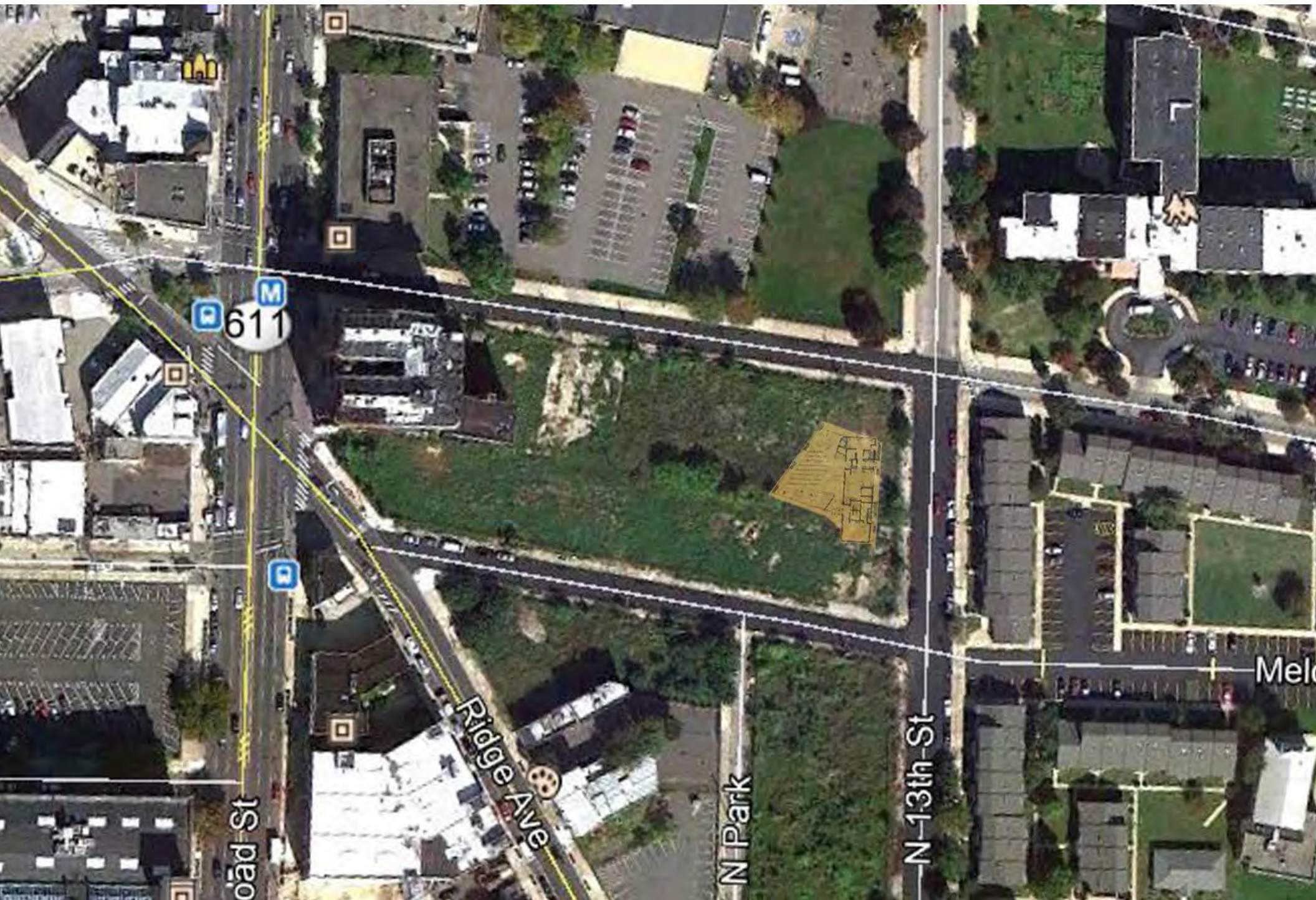


Figure 29

The library is going through social change from technological renovation as pointed out by Michael Stephens on ALA TechSource “Library 2.0 will be a meeting place, online or in physical world, where need will be fulfilled through entertainment, information, and ability to create in stuff to contribute to the ocean of content out there.”

The project Logothium is going to be a branch library run by city library for urban residential neighborhood, adjacent to major streets and served as cultural space for reunification of the community. As part of the president analysis, two libraries were chosen from North America. One is Children’s Library Discovery Center, Queens, NY, USA., and Jasper Place Branch Library, Edmonton, AB, Canada. Whereas they locate different country, both locate adjacent to the residential neighborhood, major streets of their municipalities, similar in scale with project Logothium and run by local municipal library organization. **More importantly they shares the same objective; making library that accommodates ongoing changes within the field, serves as cultural spaces for community, for future.**

However they do served their community in different manner. While Discovery Center is programmed to accommodate kid age of 3-12, Jasper library is programmed to accommodate all ages of the community.

At Discovery Center the natural science exhibition is accommodated to improve interactivity and learning experience, which is considerate decision based on interest of the user age group. It serves as educational facility to the community. Architecturally, transparency and visibility is employed for creating connectivity between the library and community. The glass is chosen as façade material to integrate surrounding community while distinguish itself from traditional library building adjacent to the Discovery Center. This separation and transparency represented with the material is attempt of reintroducing library as central cultural and social destination. The building also takes advantage of its exposure to the streets in order to create a visual dialogue between the interior and the street.

On the other hand, Jasper library, is focusing on serving community in different manner. They serves as combination of library and community center and monolithic shell that covers two different geometry represent unification of community space and library. Aside from architecturally celebrated community spaces with projected geometry, the community space is mean to serve for community after library hours. It also actively corporate with private and public local primary to high school, and the library systems were integrated with school system.

Site Information



Figure 30

About Philadelphia 39°57'12"N, 75°10'12"W

Philadelphia is the largest city in the Commonwealth of Pennsylvania, the second largest city on the East Coast of the United States, and the fifth-most-populous city in the United States. It is located in the Northeastern United States along the Delaware and Schuylkill rivers. As of the 2010 Census, the city had a population of 1,526,006, growing to 1,547,607 in 2012 by Census estimates. The Philadelphia is growing community and according to The Citywide Vision a forecast for population and employment in 2035 of an additional 100,000 people and 40,000 jobs.

The city encompasses 142.6 square miles of which 135.1 square miles is land and 7.6 square miles is water. Bodies of water is mostly from Delaware and Schuylkill Rivers. Also Philadelphia sits on the fall line that separates the Atlantic Coastal plain. The lowest point is 10 feet above sea level, while the highest point is in Chestnut Hill, about 445 feet above sea level.

The city is divided into 18 districts by Philadelphia City Planning Commission and the site locates at Popular, the north of Center city district between lower North Philadelphia district where is exactly one mile away from city hall, considered as Metropolitan Center area.

The Central District covers 5.67 square miles and has a total population of 117,132, according to the 2010 census. Center city is the home of Philadelphia's historic districts and properties, as well as upcoming area that is attracting new residents and subsequently, businesses to the city. As evidence, the residential population in the Central District has grown by over 17,000 residents during the last two decades and making it the third largest residential downtown in the country. The residents between the ages of 21 and 44 account for almost 80 percent of the surge, and almost two thirds of residents have college level degrees.

The transportation system is critical aspect of the Metropolitan Center's success including sustainable aspect. SEPTA, Southeastern Pennsylvania Transportation Authority serving Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties operates regional rail and bus service that brings commuters into the city. The two major highways (I-95 and I-676), passes through the Metropolitan Center, links in and out of the region. The tight grid of streets that has been historically constructed offers pedestrians friendly environment and a growing network of bike lanes offers commuters future alternative means of transportation.

District Plan Schedule

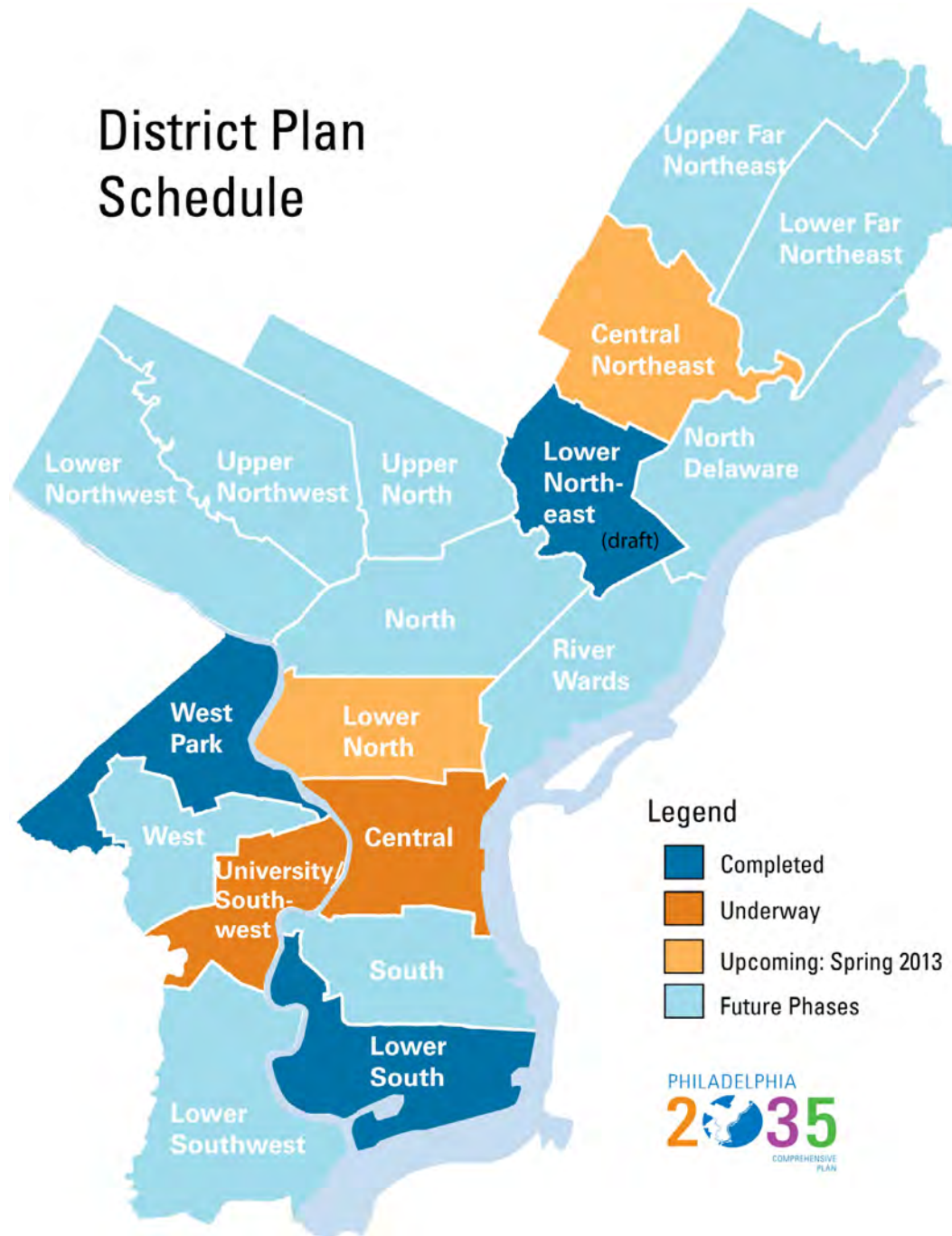


Figure 31

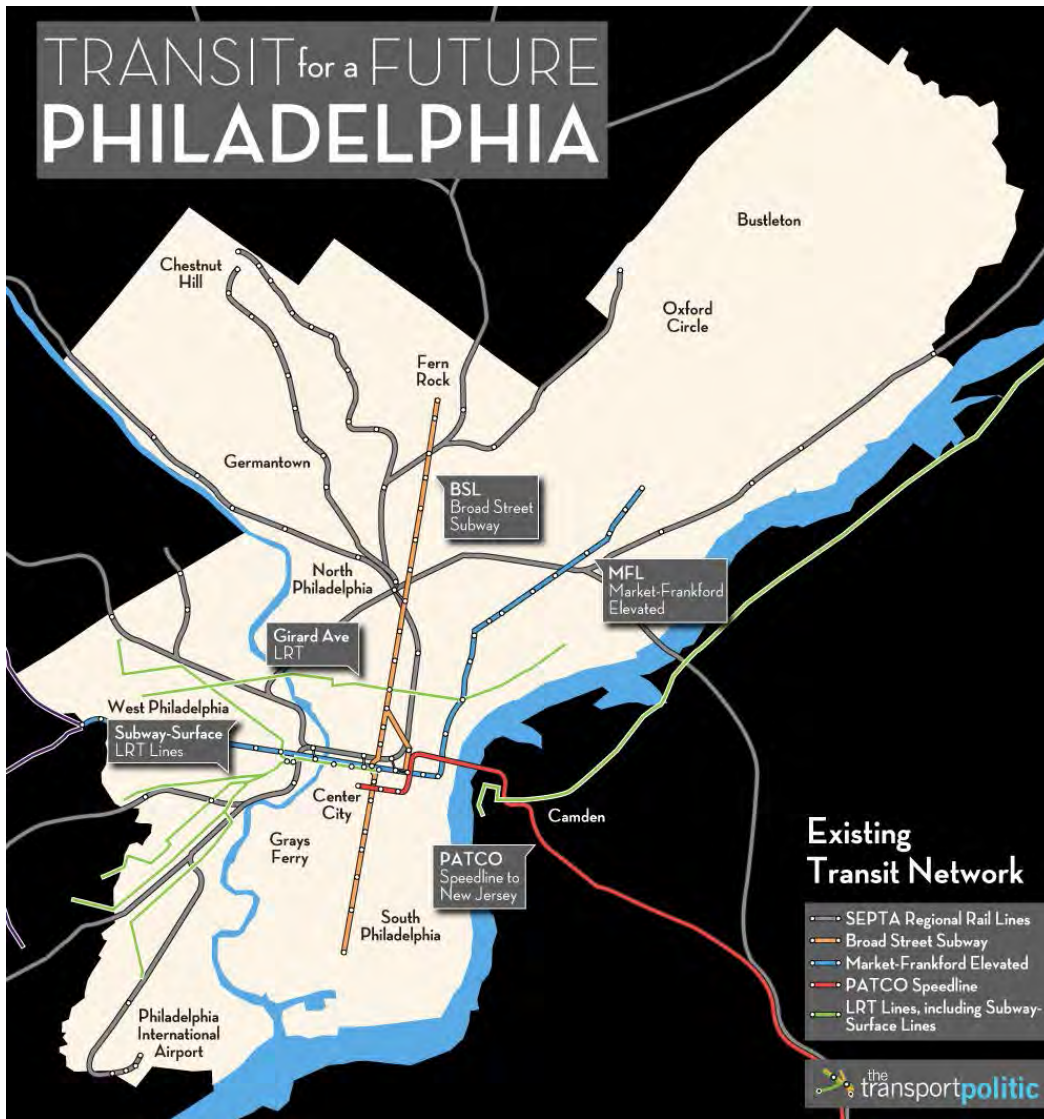


Figure 32

Figure 34

Figure 33

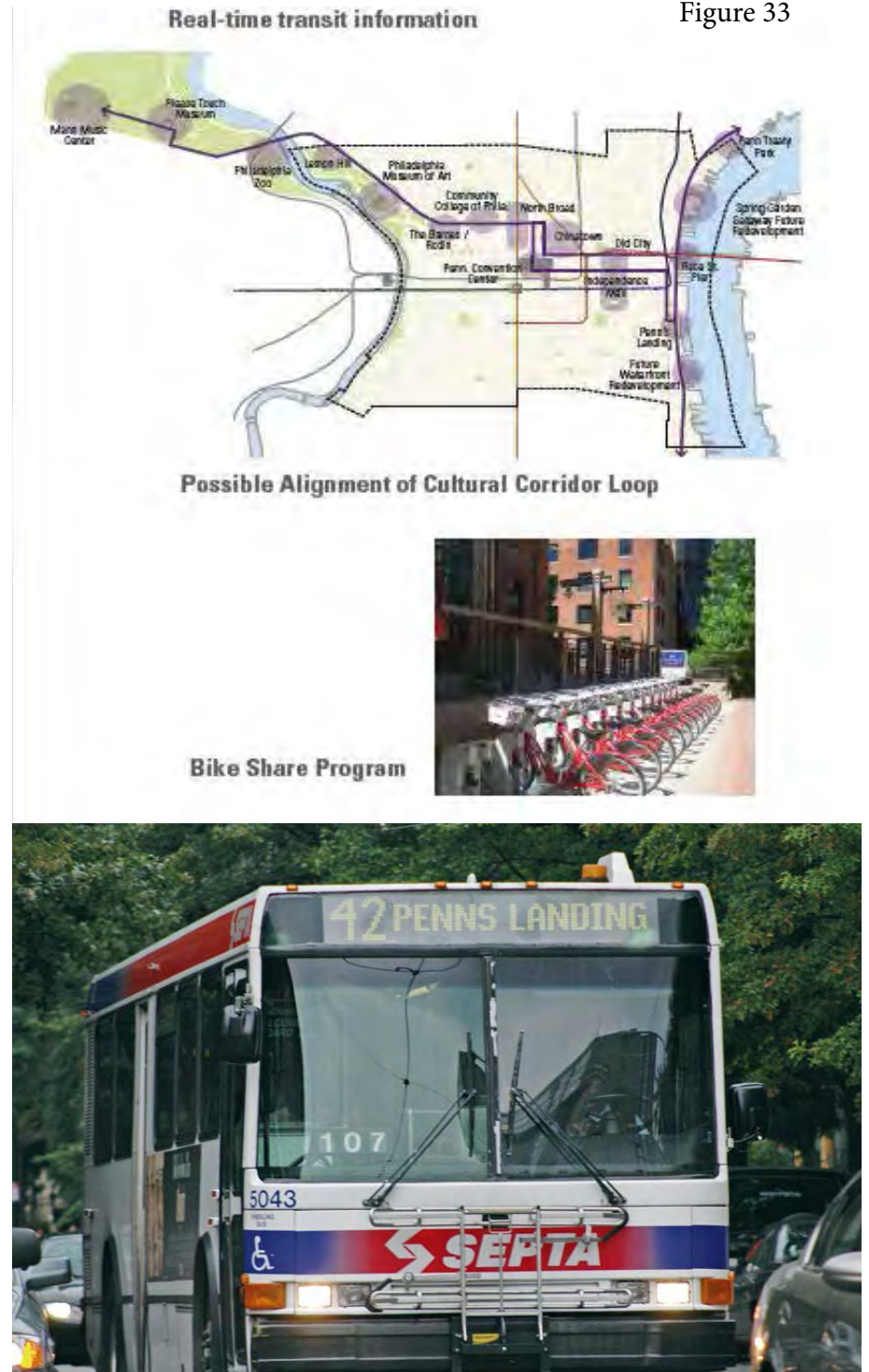


Figure 33

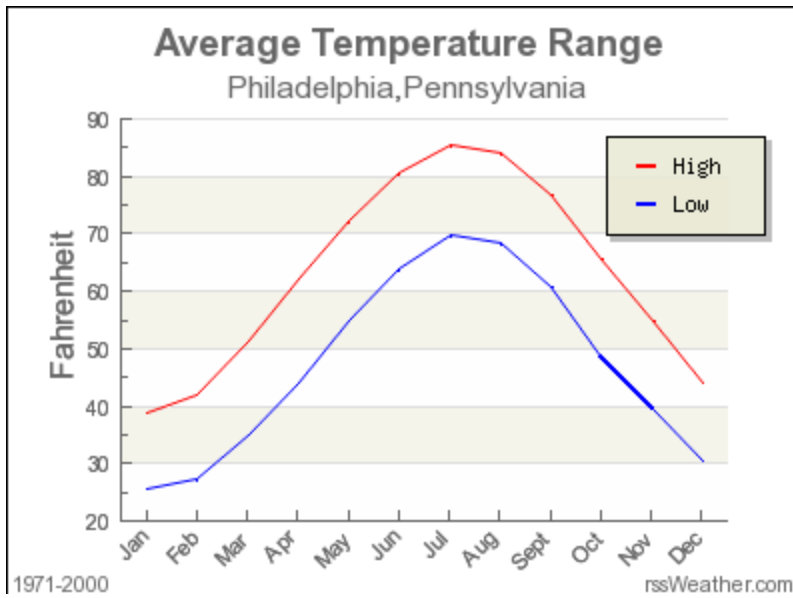
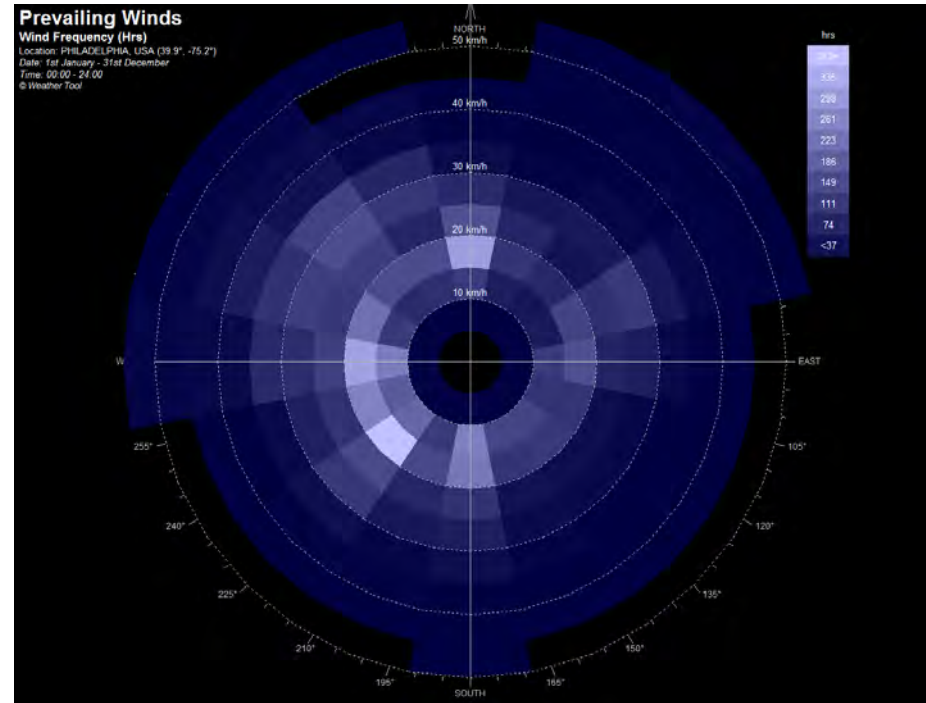
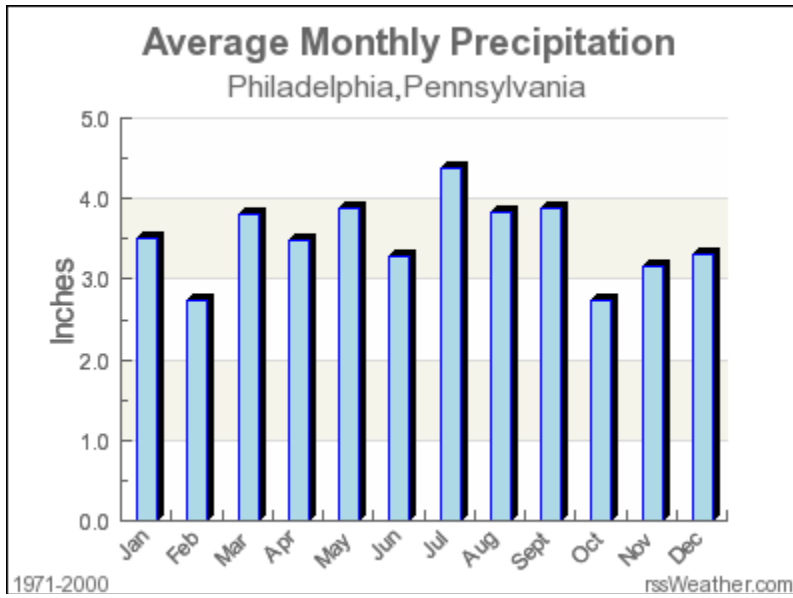


Figure 35

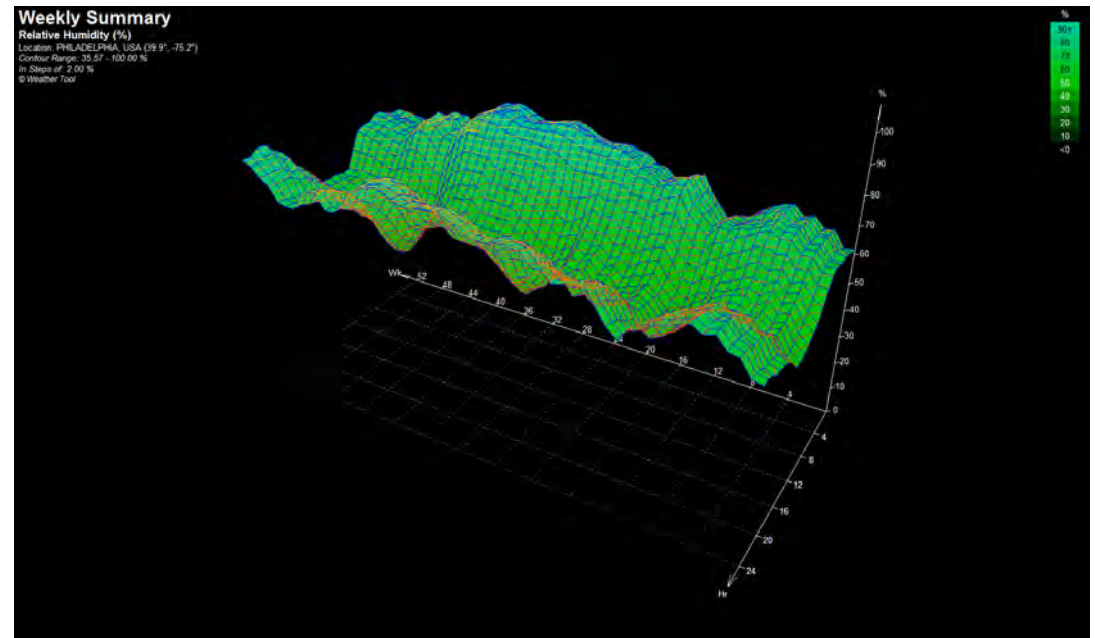


Figure 36

About Climate of Philadelphia

Philadelphia has humid warm climate throughout year. It reaches mid 80s during summer while it reaches mid 20s during winter. It certainly rains a lot throughout a year, and snows about 20 inches per year.

Typical summer philidelphia days are hot and muggy from rainfall, which turns generally mild and humid during fall and spring. During the winter, rainfall occasionnaly truns snow, which makes it wet and cold. It generally winds from North and West, however most of the humidity is brought from South and East by Western wind that brings moisture from Schuylkill Rivers. The hourly change of sun radiation is constant throughout year and as well as the relative humidity. The hourly relative humidity also indicates that never drops below 50% during day and usually reaches 90% at night. South East is optimum orientation based on annual average.

Considering the constant rainfall throughout the year and the fact that the site belongs to the urban setting, the onsite water management is required.

Site Information



Figure 37

Project Site 39°57'59.05"N, 75°9'33.50"W 1300 Fairmount Ave, Philadelphia, PA.

The site of the project is located where the last of the vacant lots exist in the urban area. It is half way, 1mile to Temple University campus area and further North of the city along North Broad Street, which runs from the heart of the city, City Hall. Aside from the main street that runs by the site, there are existing Fairmount subway station and bus stations along North Broad Street, Fairmount Ave, Ridge Ave, North 13th and 12th Street by the property as well.

The east side of site is occupied by public housing, some of which are private dwellings under a low-income house ownership program by Philadelphia Housing Authority. Also among public housings there is a Spring Garden School. The west side of site across the North Broad Street, is occupied by high density urban housings and mixed use commercial properties, creates great economic and cultural flow to the site.

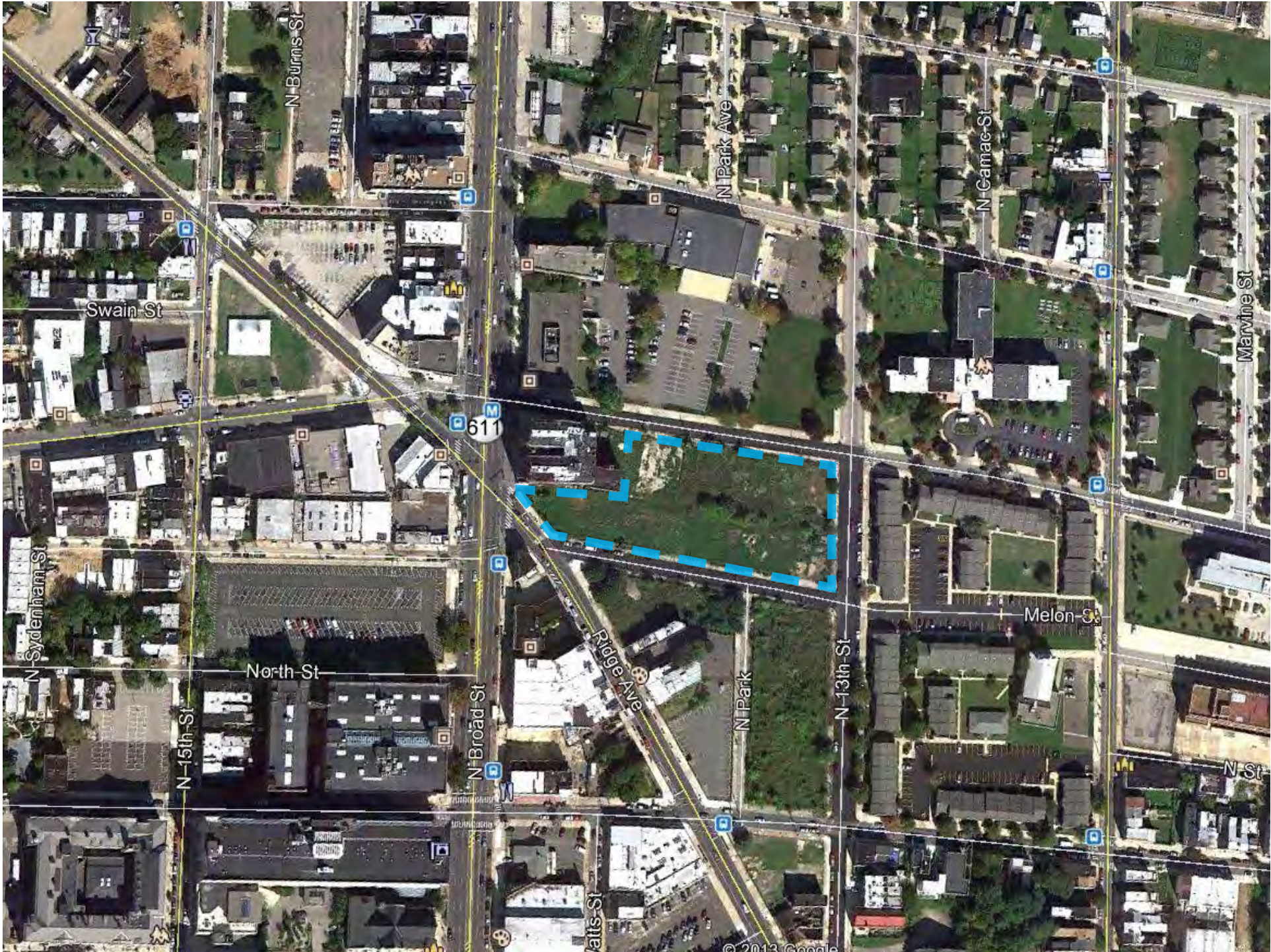


Figure 38

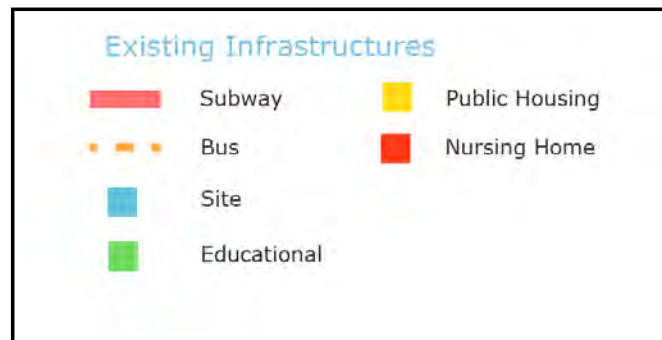
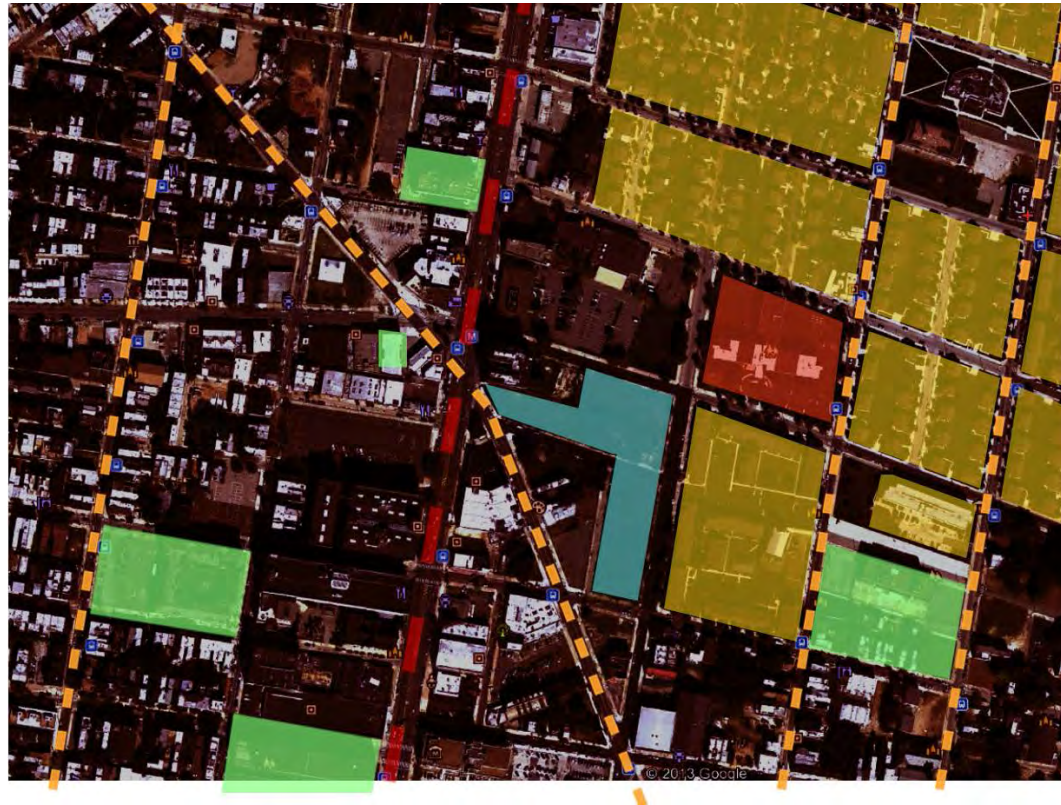
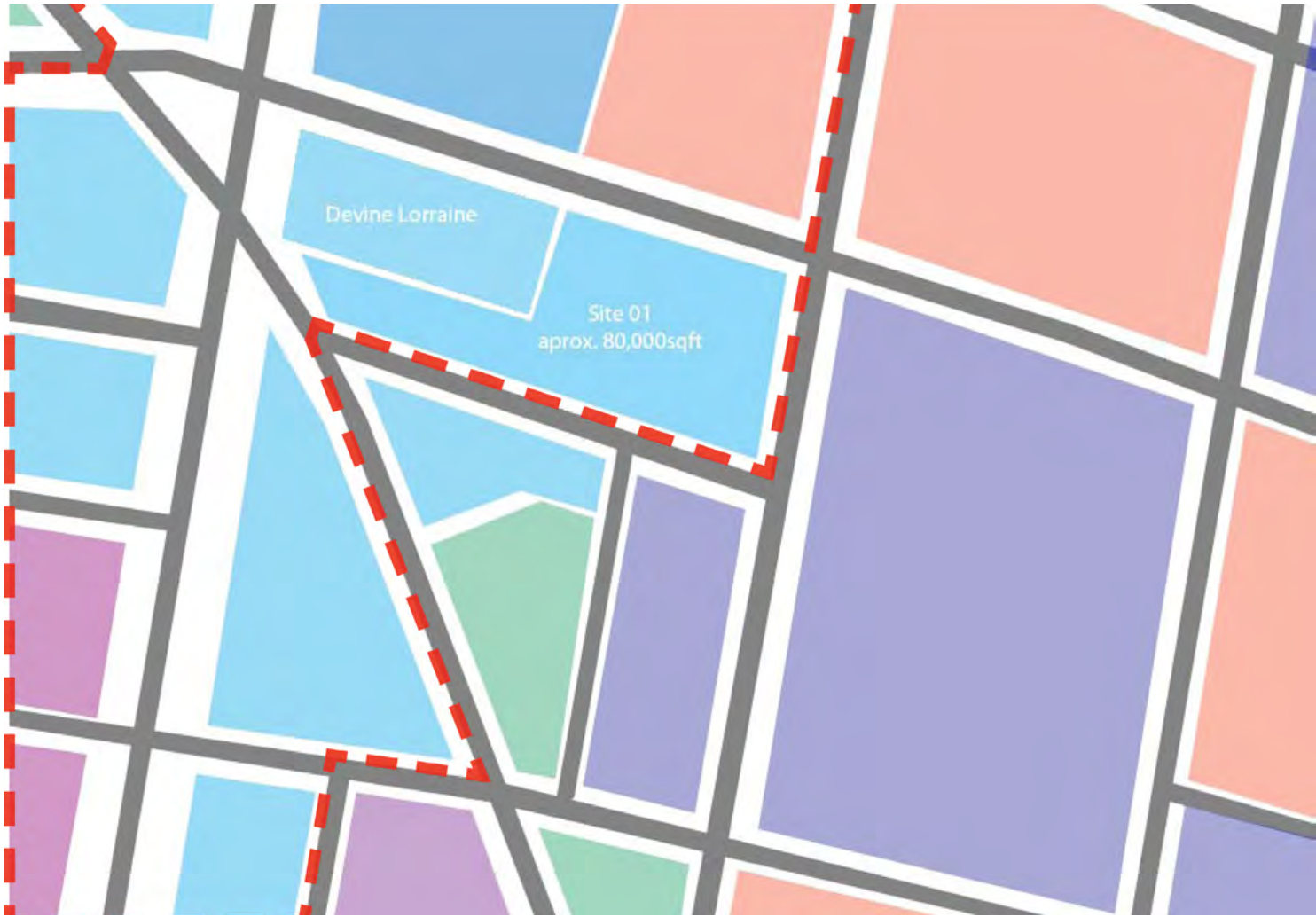


Figure 39

Broad Street area, North
Citycenter overlay District Boundary



- CMX-2
- CMX-4
- ICMX

- RM-1
- RSA-5

Figure 40

Zoning and Use around the Site

The site belongs to CMX-4 zoning while it is adjacent to RSA-5, RM-1, and CMX-3 zones. The CMX-4 is Center City Commercial Mixed Use. It anticipates high density uses that frames the face of the street, which does not necessary fulfill the need of community at this point, however considering future development that area anticipates, it is appropriate zoning.

Based on the Philadelphia zoning code, the CMX-4 does not interfere with the project proposed uses and occupation. Also the overlay zoning applies to site and it exists for supplemental use control for Broad Street Area North, which does not interfere with the project proposed uses and occupation neither.

Quick Reference Guide

Commercial Districts

ZONING DISTRICT	TYPICAL PLAN/BUILDING FORM	TYPICAL BUILDING	DIMENSIONAL STANDARDS	
CMX-4*				
<p>Description: Center City commercial mixed use</p> <p>Uses permitted as of right: Household Living; Group Living; Recreation; Day Care; Educational Facilities; Fraternal Organization; Hospital; Libraries and Cultural Exhibits; Religious Assembly; Safety Services; Transit Station; Utilities and Services, Basic; Wireless Service Facility; Office; Building Supplies and Equipment; Consumer Goods (except Drug Paraphernalia and Guns); Food, Beverages, and Groceries; Pets and Pet Supplies; Sundries, Pharmaceuticals, and Convenient Sales; Wearing Apparel and Accessories; Animal Services; Assembly and Entertainment (except Amusement Arcade, Casino, and Pool or Billiards Room); Building Services; Business Support; Prepared Food Shop; Take-Out Restaurant; Sit Down Restaurant; Financial Services (except Personal Credit Establishments); Funeral and Mortuary Services; Maintenance and Repair of Consumer Goods; Non-Accessory Underground Parking; Personal Services (except Body Art Services); Radio, Television, and Recording Services; Visitor Accommodations; Personal Vehicle Repair and Maintenance; Personal Vehicle Repair Sales and Rental; Gasoline Station; Vehicle Equipment and Supplies Sales and Rental; Moving and Storage Facilities; Artist Studios and Artisan Industrial; Research and Development; Community Garden</p> <p>Uses requiring special exception approval: Non-Accessory Above-ground Structured Parking</p>	<p>*See §14-702(1): Floor Area Bonus Summary</p> <p>Bonus FAR = Up to 700% Lot Area</p> <p>FAR = 500% of lot area</p> <p>Max. height 65' if 100% lot coverage</p> <p>Lot Line</p> <p>Building Setback: *See §14-701(5): Bulk and Massing Controls</p>		<p>Max. Occupied Area</p> <p>Buildings ≤ 5 stories with 1 or more dwelling units: 90%; Others: 100%</p>	<p>Min. Front Yard Depth</p> <p>NA</p>
			<p>Min. Side Yard Width</p> <p>If used buildings ≤ 4 stories with 3 or fewer dwelling units: 5'; Others: 8'</p>	
			<p>Max. FAR</p> <p>500%; up to 700% with bonuses</p>	

Figure 41

ZONING AND PLANNING

Table 14-502-2: Supplemental Use Controls in the City Center Overlay District¹⁶⁵

	Chestnut and Walnut Street Area, East	Chestnut and Walnut Street Area, West	Broad Street Area, South	Broad Street Area, North	Chinatown Area	Old City Residential Area	South Street/Head House Square Area	Use-Specific Standards
N = Not allowed (expressly prohibited) S = Special exception approval required Blank = No overlay-specific regulations apply See § 14-502(5)(a),(6) (Notes for Table 14-502-2) for information pertaining to bracketed numbers (e.g., "[2]") in table cells.								
Public, Civic, and Institutional Use Category								
Utilities and Services, Basic		[1]	N			N		
Retail Sales Use Category								
Adult-oriented Merchandise	N	N	N	N		N		
Retail Sales of Consumer Goods, Furniture, Appliances, and Equipment (as noted below)								
Drug Paraphernalia Sales	N	N	N	N		N		§ 14-603(13)
Gun Shop	N	N	N	N		N		§ 14-603(13)
Commercial Services Use Category								
Adult-Oriented Service	N	N	N	N		N		§ 14-603(13)
Assembly and Entertainment					N	N	N	§ 14-603(13); § 14-603(18)
Eating and Drinking Establishments (except as noted below)		S[4]	S[4]			S[4]		§ 14-603(6)
Take-Out Restaurant	N	N	N	N		S[4]	N	§ 14-603(6)
Financial Services (except as noted below)		[2]						
Personal Credit Establishment	N	N	N	N		N		§ 14-603(13)
Parking	N	N	N		N	N		
Personal Services (except as noted below)				N				
Body Art Service	N	N	N	N		N	N	§ 14-603(2); § 14-603(13)
Fortune Telling Service	[3]	[3]	[3]	[3]		[3]	[3]	
Vehicle and Vehicular Equipment Sales and Services Use Category								
All Uses	N	N	N	N	N	N	N	
Wholesale, Distribution, Storage Use Category								
All Uses	N	N	N	N	N	N		

Figure 42

Program Outline

-Temple University city center branch-

Main Office	1@ 700ft ²
Individual Office	10@ 100ft ²
Class Rooms	14@ 600ft ²
Seminar Room	2@ 700ft ²
Interactive Lounge	2@ 1000ft ²
Locker Room	4@ 400ft ²
Bathrooms and Utility	2000ft ²

Total: 17,100.ft² (*19,665.ft²)

-Philadelphia Library Fairmount branch

Cafe	1@1000ft ²
Community Garden	1@4000ft ²
Lobby	1@ 2500ft ²
Reading room	1@ 2000ft ²
Exhibition Room	1@1200ft ²
Library	1@5000ft ²
Workshop	2@600ft ²
Bathrooms and Utility	2000ft ²

Total: 18,900.ft² (*21,735ft²)

*In addition to that mechanical room based on appropriate system and 15% for circulation.

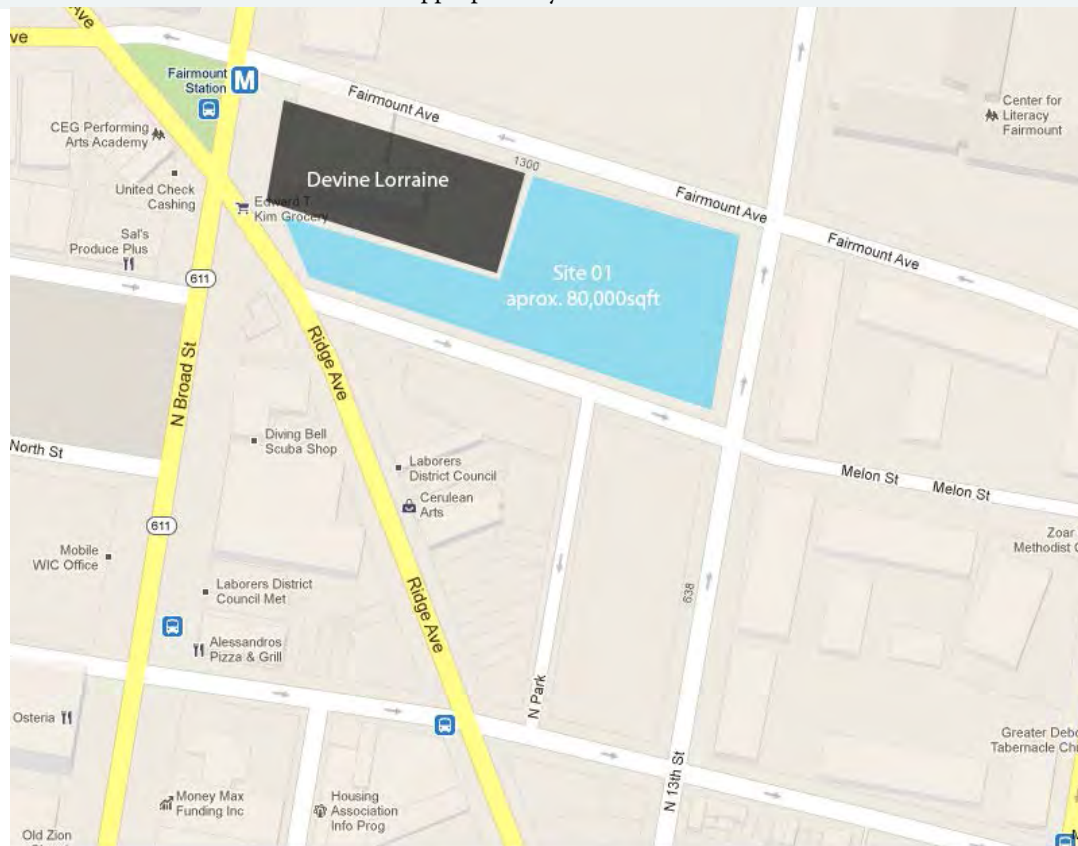


Figure 43

FOCUS AREA > Revitalizing Ridge Avenue and North Broad Street

> Right-sizing the Commercial Corridor

- Support nodes of commercial activity between residences



A re-visioned commercial node at Ridge Avenue and Mt. Vernon Street

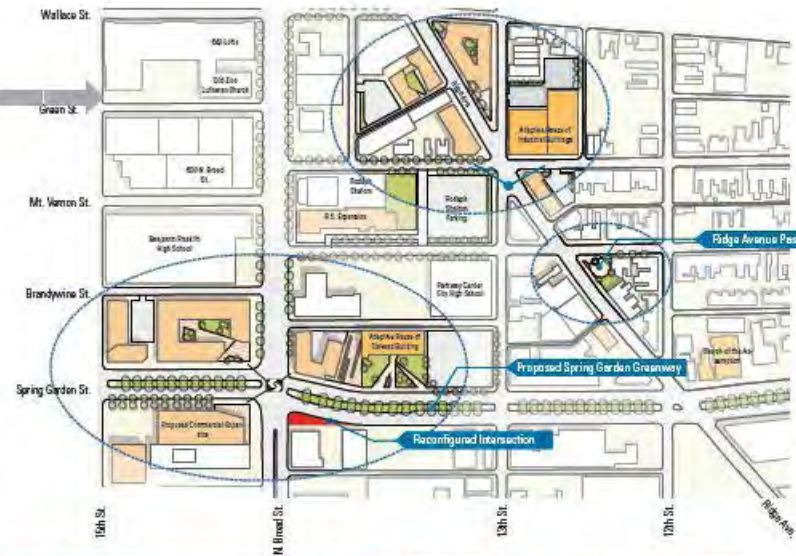


> Commercial Zoning

- Remapping Ridge Avenue to CMX-2.5
 - > Boost commercial presence
 - > Promote pedestrian activity
 - > Allows additional density

> Build East / West Connections

- Create streetscapes that are perceived as safe
- Attract Broad Street visitors to Ridge Avenue
- Boost economic success of Ridge Avenue



> Greening the Corridor

- Diagonal Ridge Avenue creates several triangular parcels
- The Ridge Avenue Spur makes normal street greening difficult
- Triangular parcels are difficult to develop
- Neighborhood underserved by open space
- Triangular lots are unique opportunity for open space



> Allow Higher Density at Transit Nodes

- Parcels on Broad Street provide opportunity for density located adjacent to Broad Street subway stations
- Adopted zoning code encourages use of FAR bonuses at transit



Figure 44

Building Life Expectancy

For “Interactive urban campus and library for local communities for future need”, learning the tendency of the building life cycle and the future development of the area would help determining future need of the community, and change in function of the library itself should be noted.

For building life cycle, according to Information Bulletin #4, “What happens over the life of the building?” by CHOA, RDH Building Engineering Ltd. and the Real Estate Foundation of BC. They summarize life cycle of the buildings from asset point of view as all the property are different by material and details and in general life, they goes through five stages and they require different attention. Pre-Natal, Childhood, Adolescence, Adulthood, Old Age. The buildings are capable for capital development during pre-natal stages, which is first two years of their life.⁶

In contrast, “Survey on actual service lives for North American buildings” by O’Conner, Jennifer provide lifespan relationship to the structural materials and the reasons for demolition in relation to structural materials based on the building that has been demolished during the three years.⁷ The research is not take building use and scale in account yet defines the reasons for demolition.

Both O’Conner and CHOA, indicates that material and initial establishments decide the service life and life cycle of the building. The future development view of the site neighborhood has been propose within the Philly2035, city comprehensive plan. Also from change in nearby zoning, the area is identified as a part of walkable commercial and green corridor that connects Northeast city center to downtown Philadelphia. To accommodate this change, establishing interaction with the street would be preferred quality for the proposed buildings.

Considering the use of the proposed buildings, iconic quality and durability is required. Expected life span of them are not yet determined, however the future change should be accommodated and considered. According to a diagram of the O’Conner, the most common structural material of the building for age group 25-50 years is concrete, then steel comes in the second. Twenty to fifty years would

be conducive time scale for the city planning as well. Therefore for proposed building design, concrete and steel frame structure should be considered as structural material.

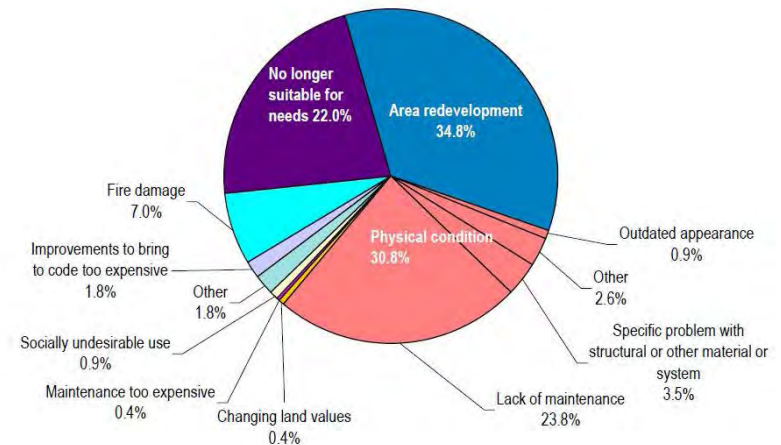


Figure 7 Distribution of “reason for demolition” responses for all 227 buildings.

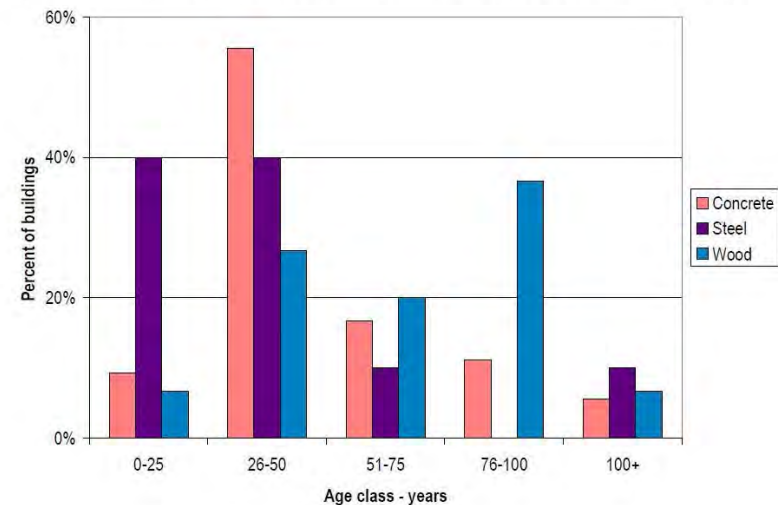


Figure 6 Distribution of 94 non-residential buildings by age class and by structural material (buildings with combinations of materials excluded).

Graphical Annotation

The cover page

Matt W., Moor. B/W Series #6 (2011). < http://mwmgraphics.com/black_white_b6.html>

1. Philadelphia City Planning Commission. Philadelphia2035: Central District Plan. 2013.
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17. "Jasper Place Branch Library / HCMA/Dub Architects" 12 Jul 2013. ArchDaily. Accessed Dec 2013. <<http://www.archdaily.com/?p=398988>>
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39. Karin Hirose.
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41. Philadelphia City Planning Commission. Quick Reference Guide. Sept 2012.
42. Philadelphia City Planning Commission. "Philadelphia Zoning Code". Title 14. [http://www.amlegal.com/nxt/gateway.dll/Pennsylvania/philadelphia_pa/title14zoningandplanning?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:philadelphia_pa](http://www.amlegal.com/nxt/gateway.dll/Pennsylvania/philadelphia_pa/title14zoningandplanning?f=templates$fn=default.htm$3.0$vid=amlegal:philadelphia_pa)
43. Google Map. 2013.
44. Philadelphia City Planning Commission. ibd.

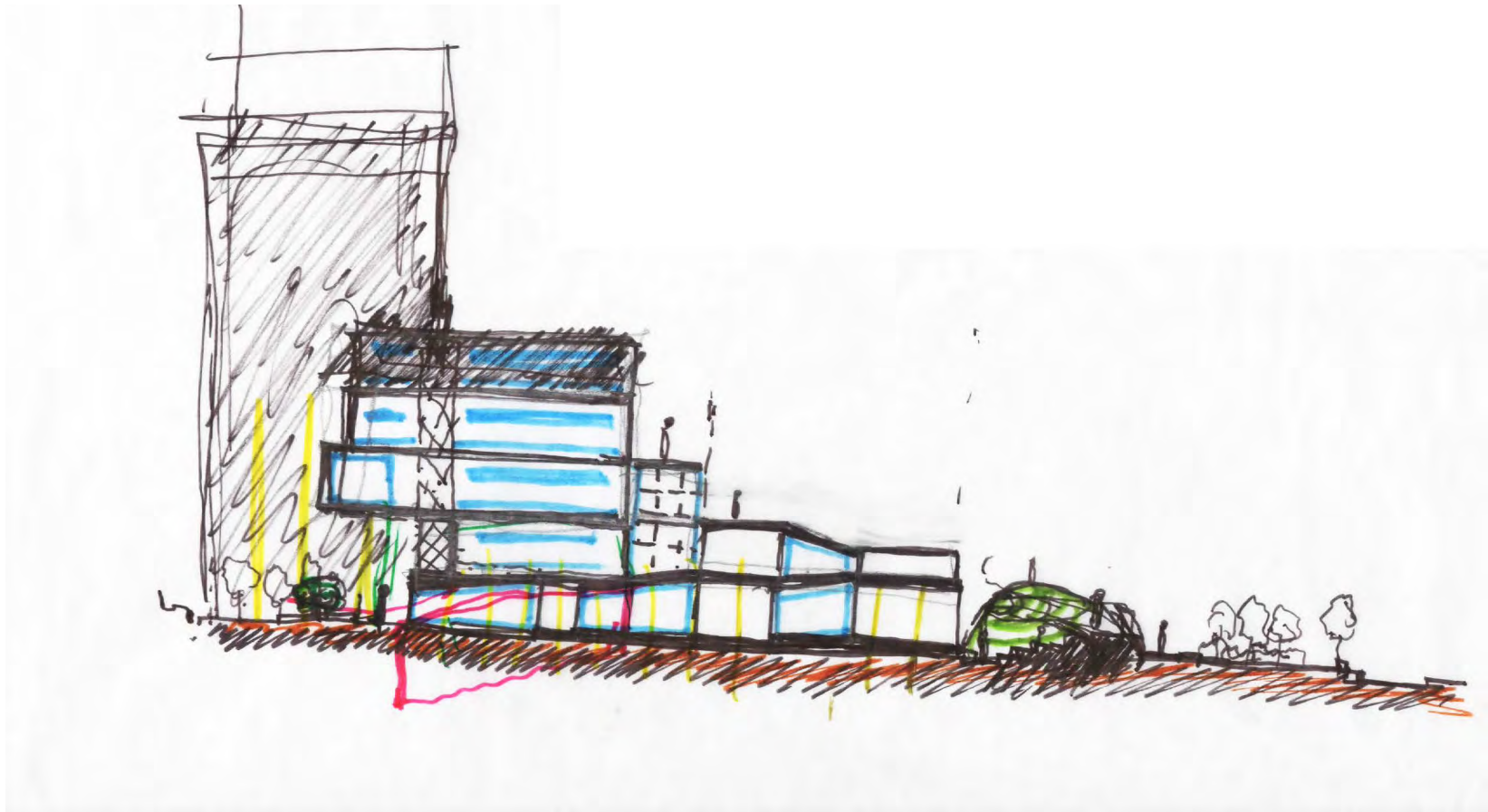
45. Jennifer, O'Connor. "Survey on actual service lives for North American buildings" Presented at Woodframe Housing Durability and Disaster Issues conference, Las Vegas, October 2004. Accessed Dec 2013. < http://www.cwc.ca/documents/durability/DurabilityService_Life_E.pdf >

Note

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3. Kerkstra, Patrick. "Property-tax debt is ravaging Philadelphia." Philly.com., March 11 2013. http://articles.philly.com/2013-03-11/news/37600646_1_delinquent-properties-delinquent-real-estate-tax-base
4. Philadelphia 2035. March 20 2013. <http://phila2035.org/homepage/district/central/>
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7. Jennifer, O'Connor. "Survey on actual service lives for North American buildings" Presented at Woodframe Housing Durability and Disaster Issues conference, Las Vegas, October 2004. Accessed Dec 2013. < http://www.cwc.ca/documents/durability/DurabilityService_Life_E.pdf >



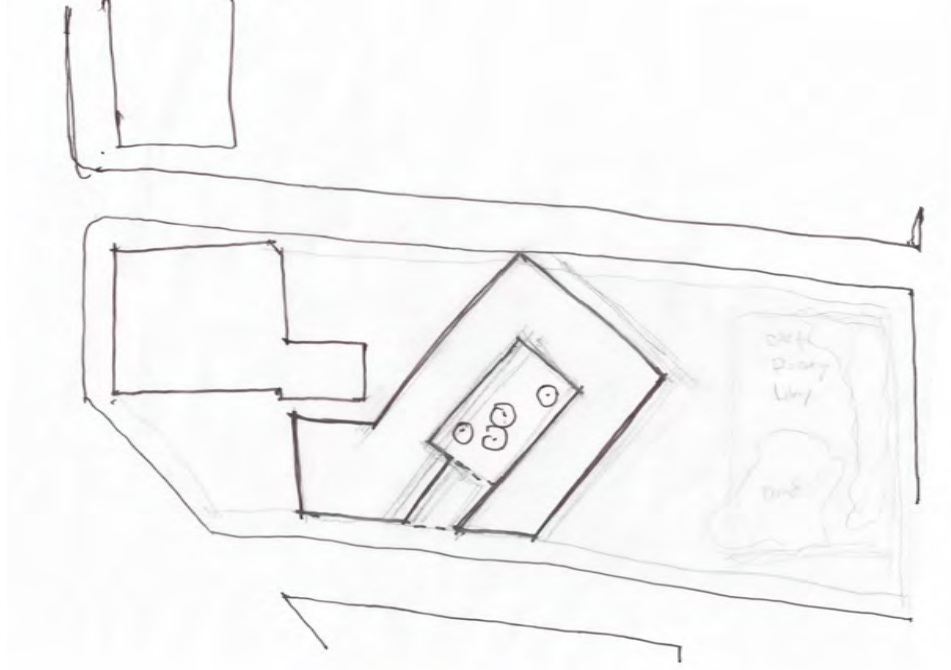
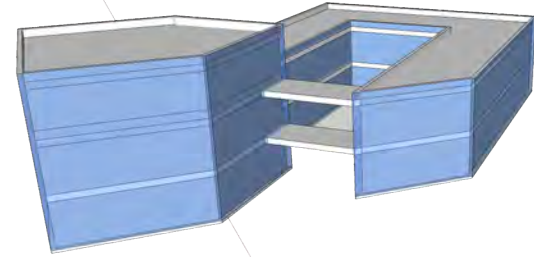
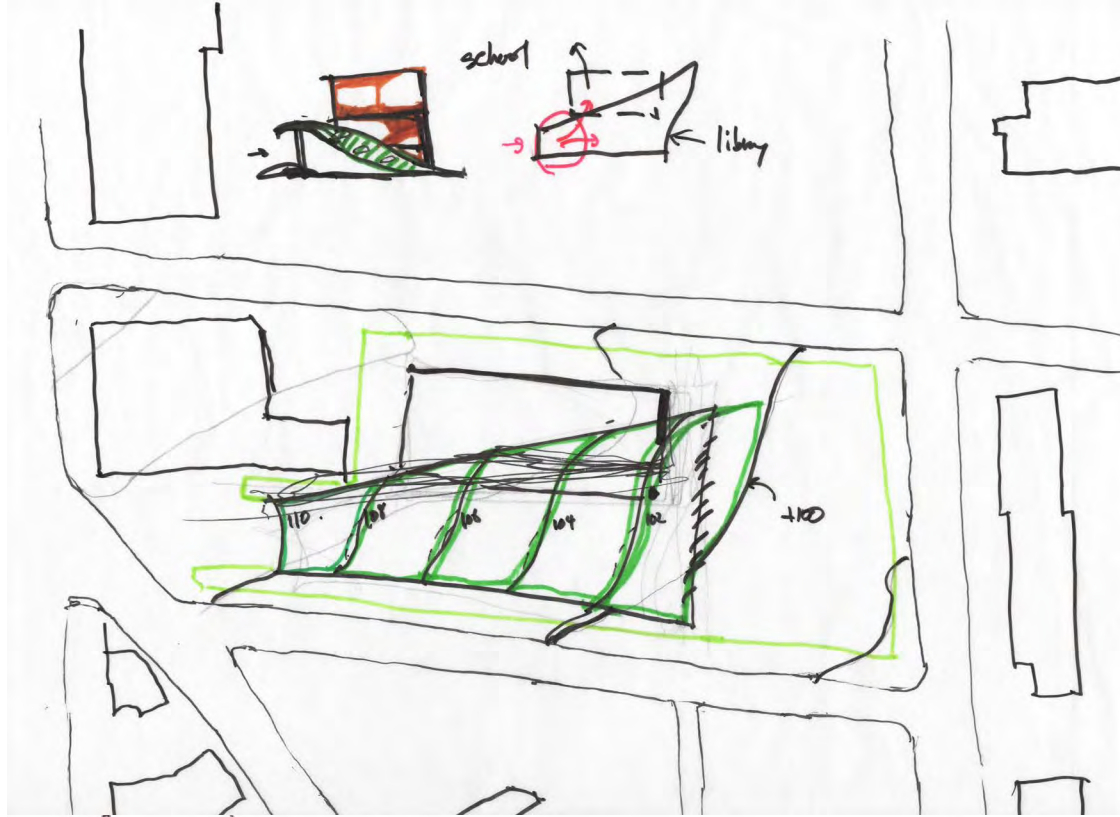
Design Documentation

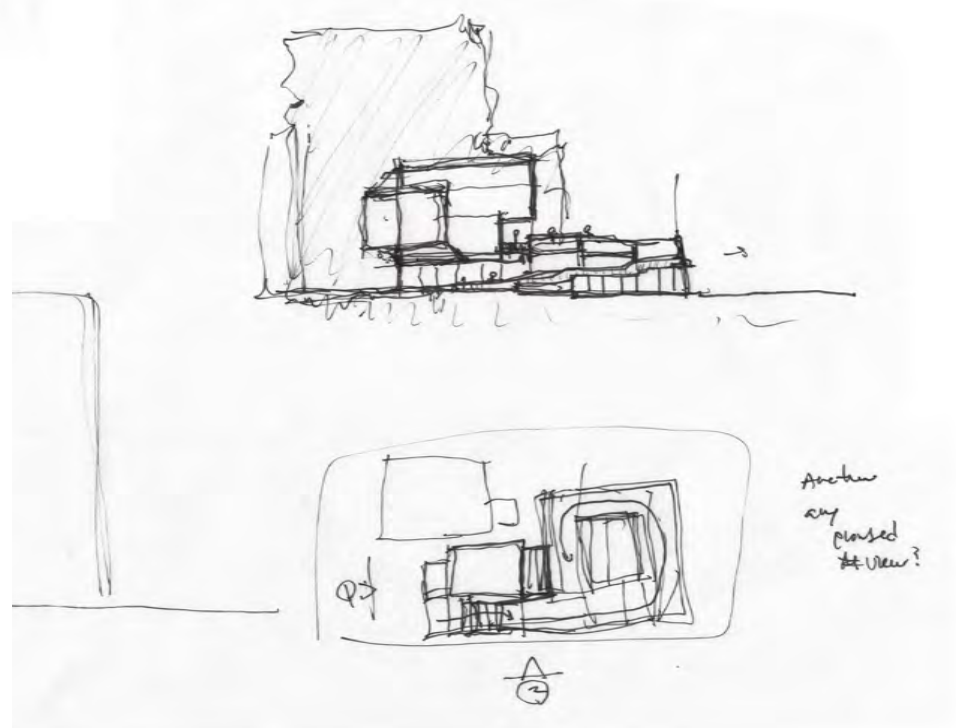
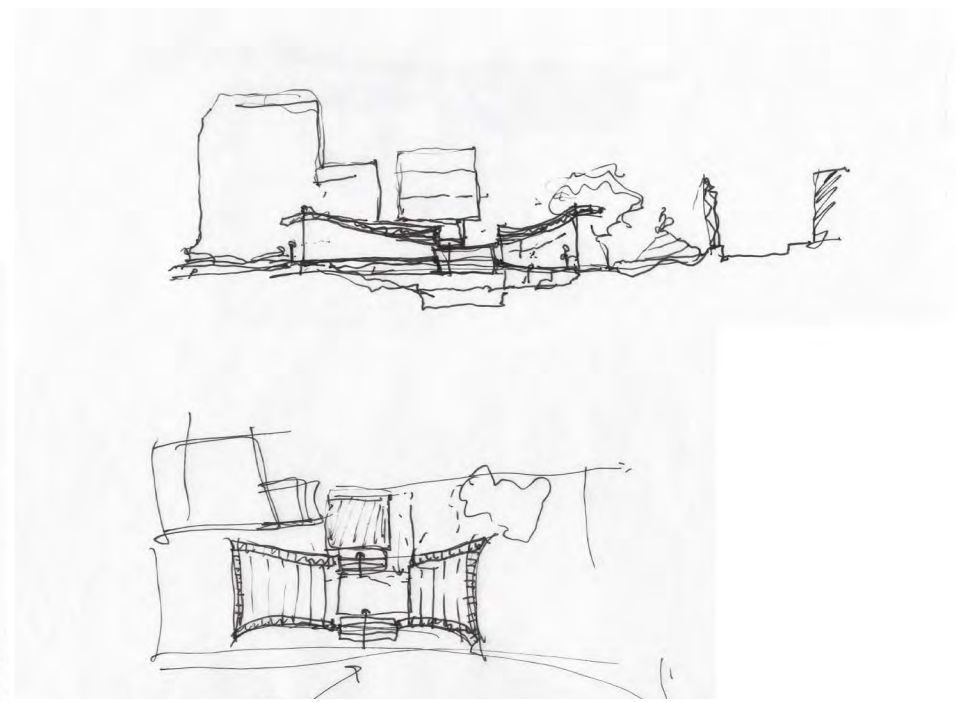
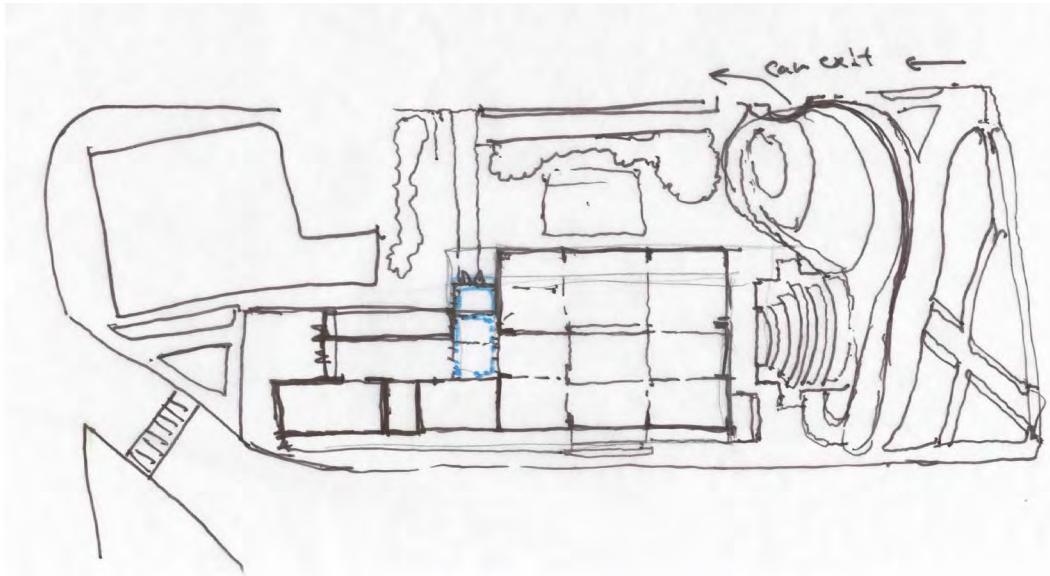


Design Development

Stage 1

-Conceptual exploration-





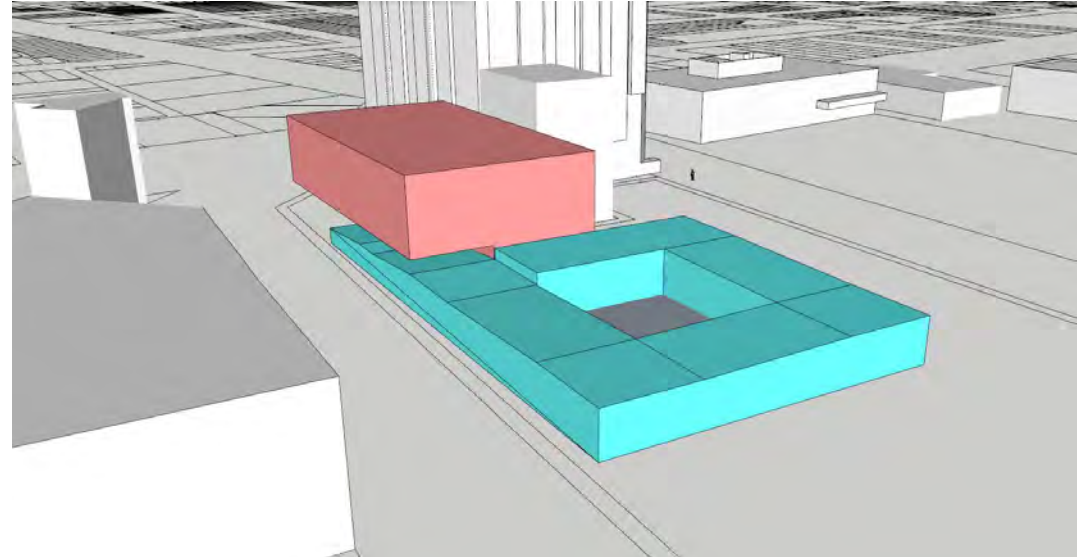
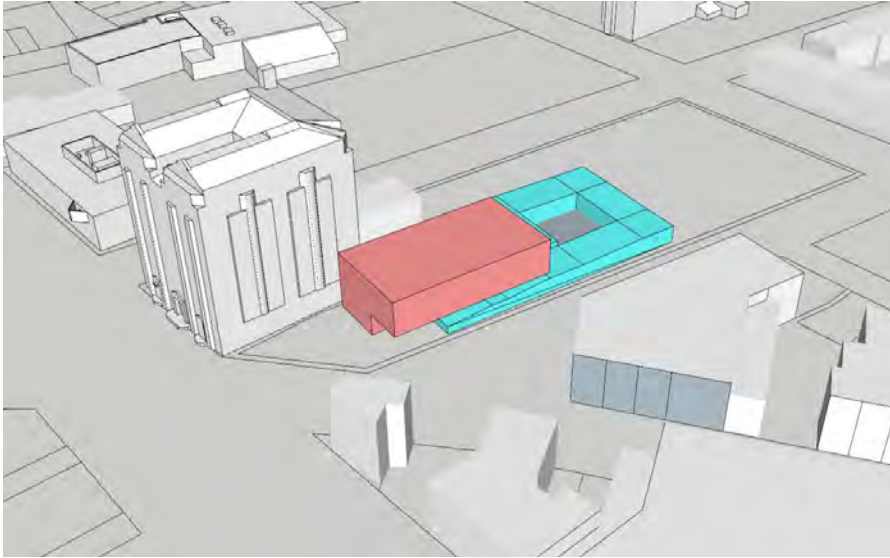
At this point designs are exploring the possible strategies on site as well as programmatic options. The idea of front plaza toward North Broad Street, shared entry space for two buildings, roof garden, and community space are present.

Stage 2

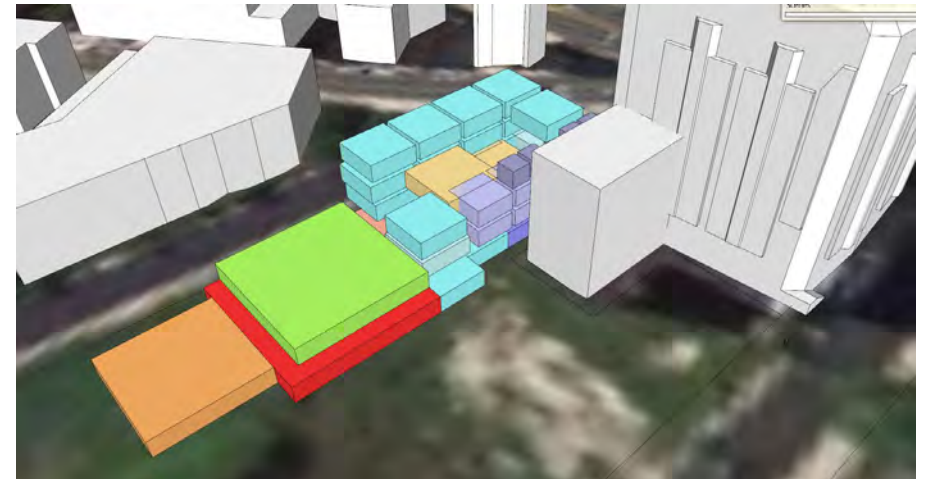
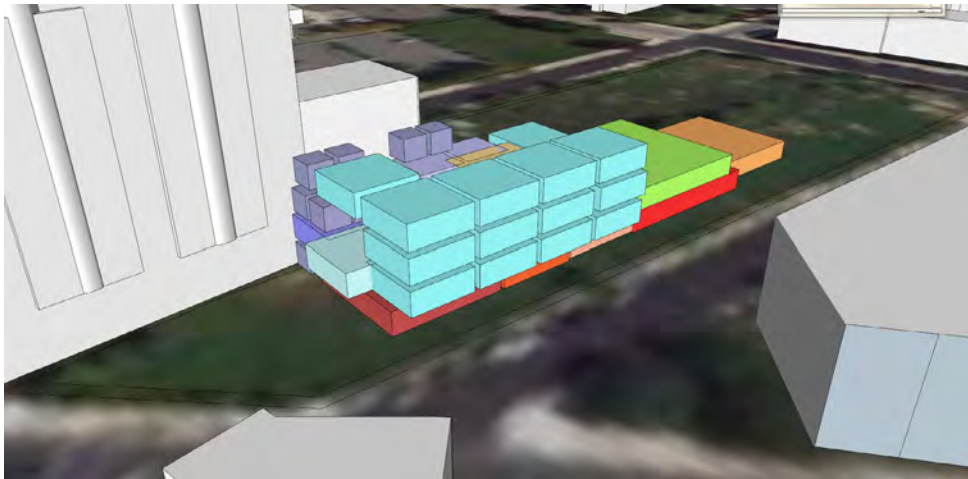
-Parti design-

The general direction of the buildings are consolidated. Such as sculptural library building with roof garden, college building in multistory tower, and programmatic layout by the type of building.

Design 1



Red is college building and blue is library building.

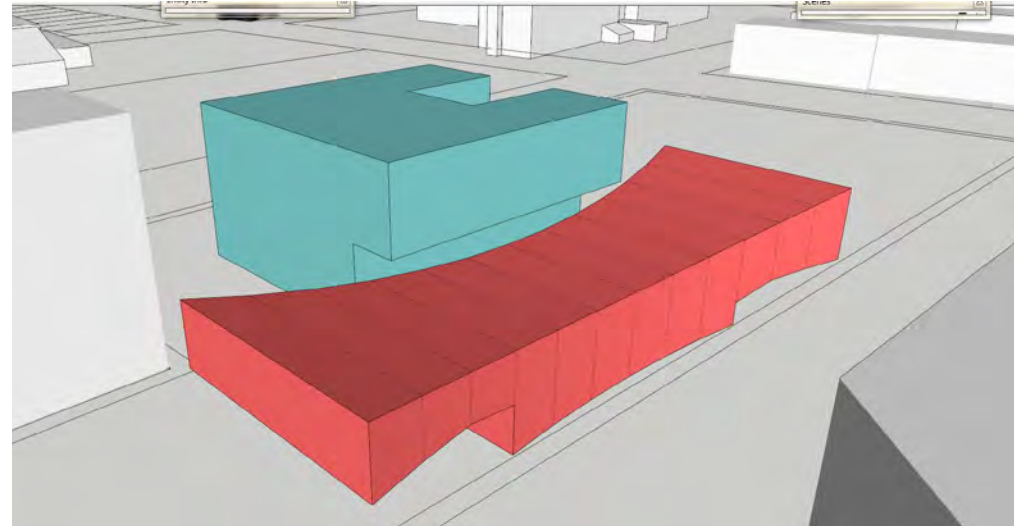
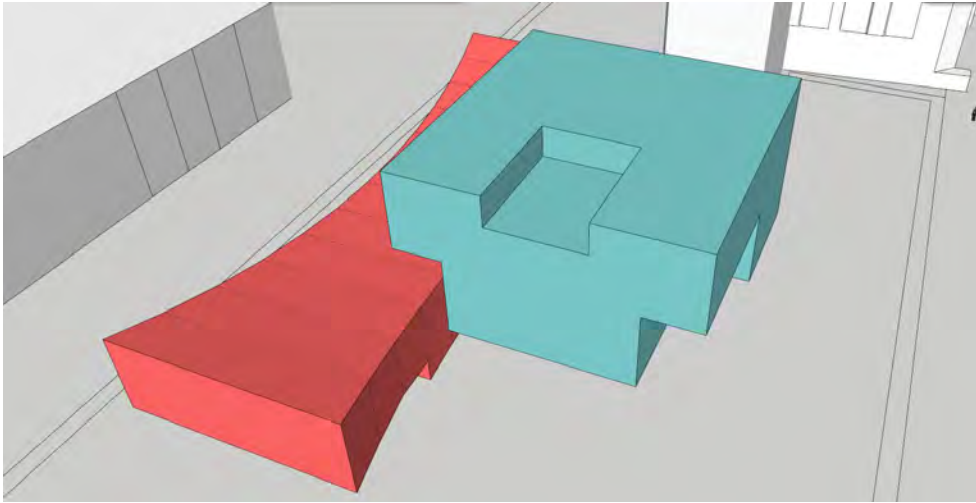


Program layout

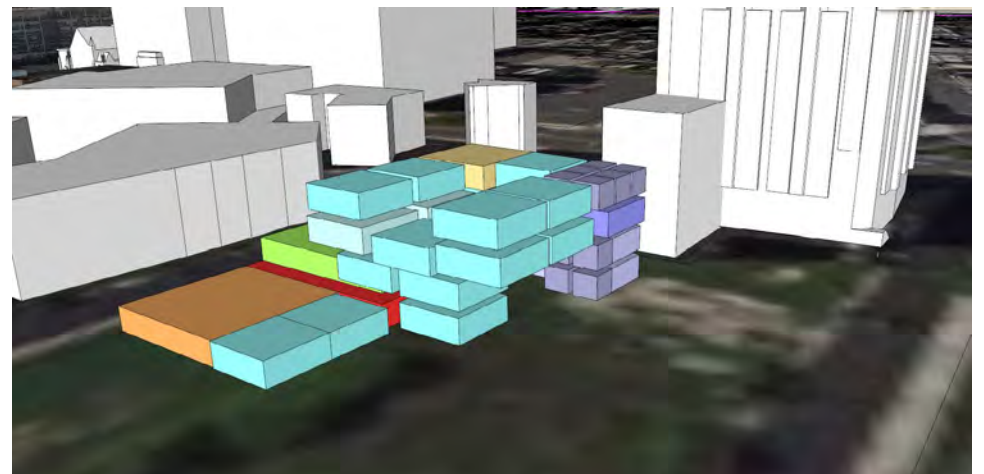
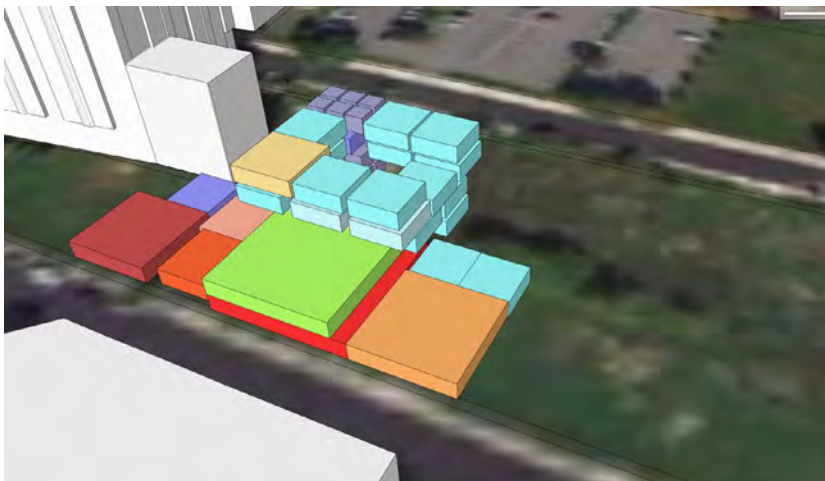
College Building- Blue is Class room, Pale blue is Seminar room, Tan is Interactive open space, and Purple is Service space.

Libaray Building- Carmine is shared entry space, Orange is Library reception, Red is Library stack, Pale orange is Reading space, Green is Roof garden

Design 2



Red is library building and blue is college building.

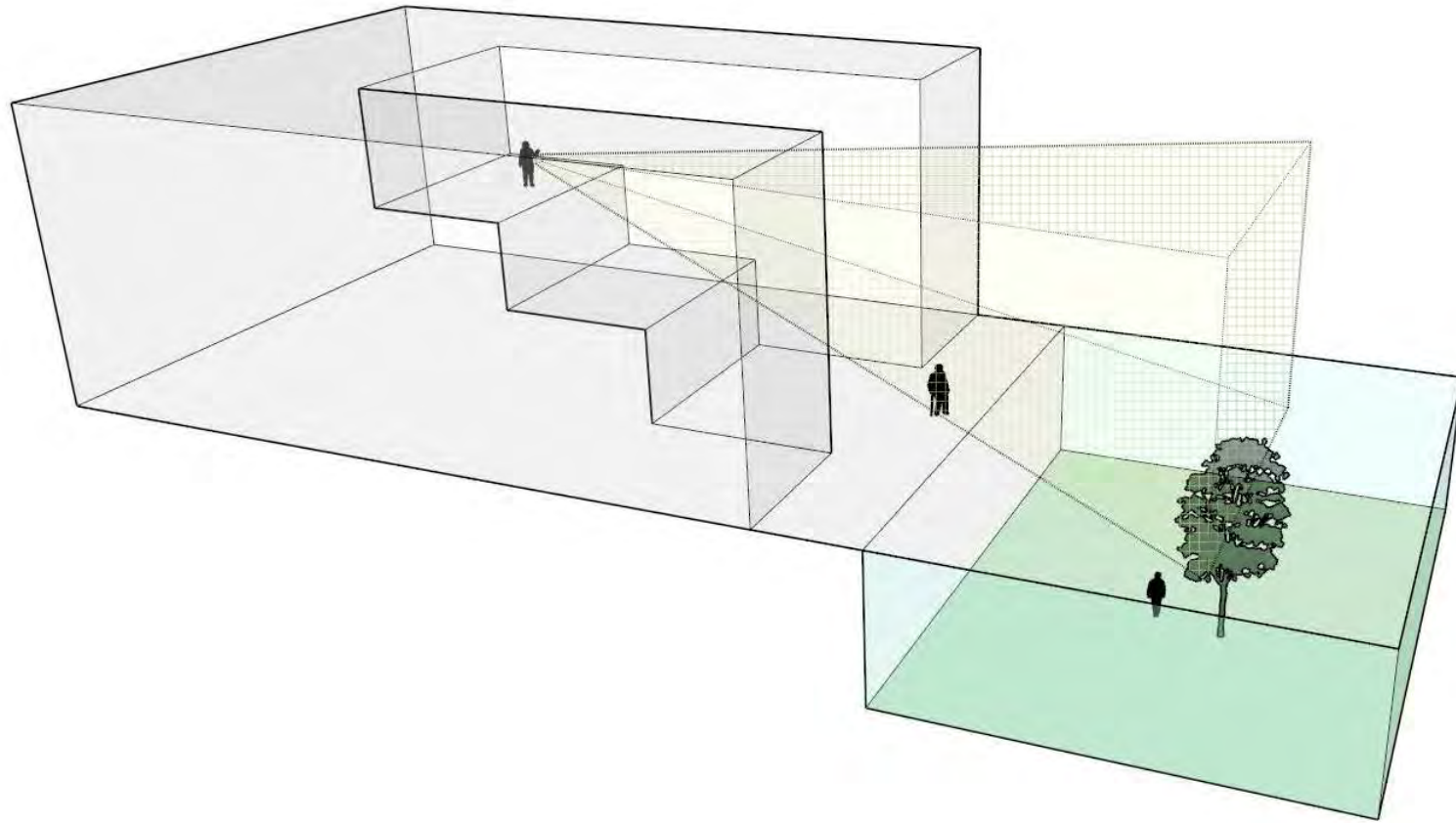


Program layout

The spaces are color coded the same with program layout of design 1.

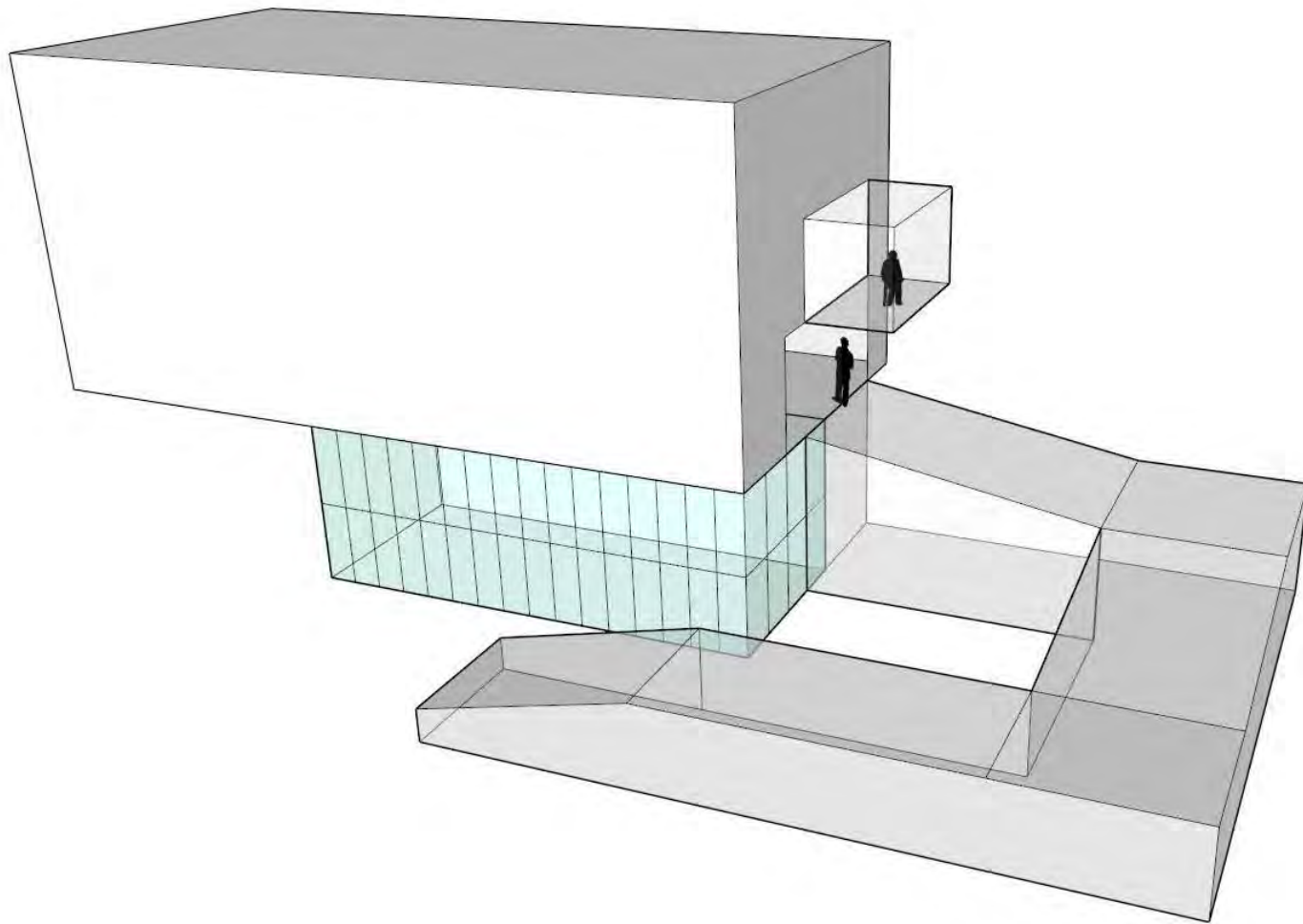
Stage 3

-toward Mid-review-



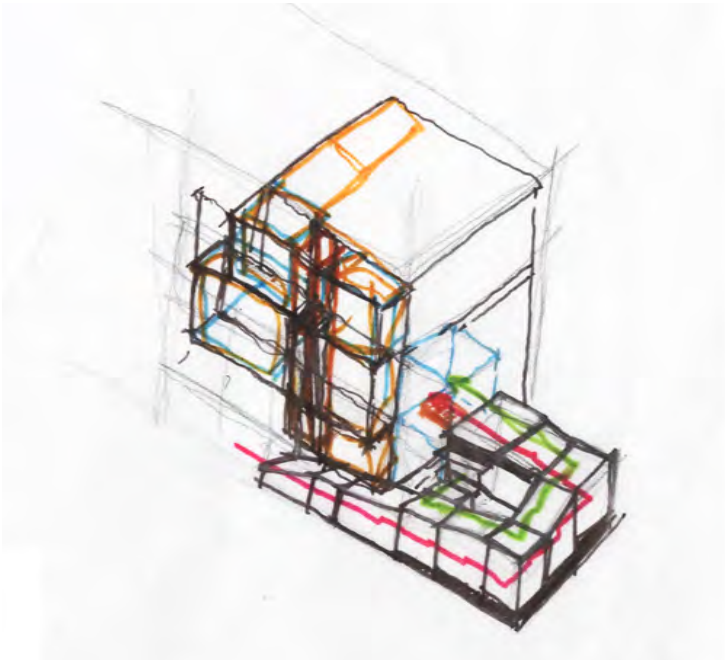
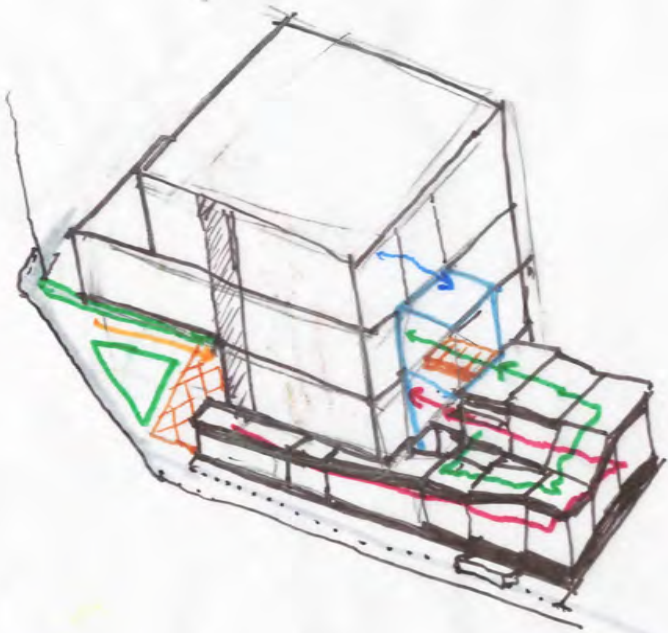
The general form of the buildings and arrangements are decided. More detailed relationship between two buildings and materiality are considered.

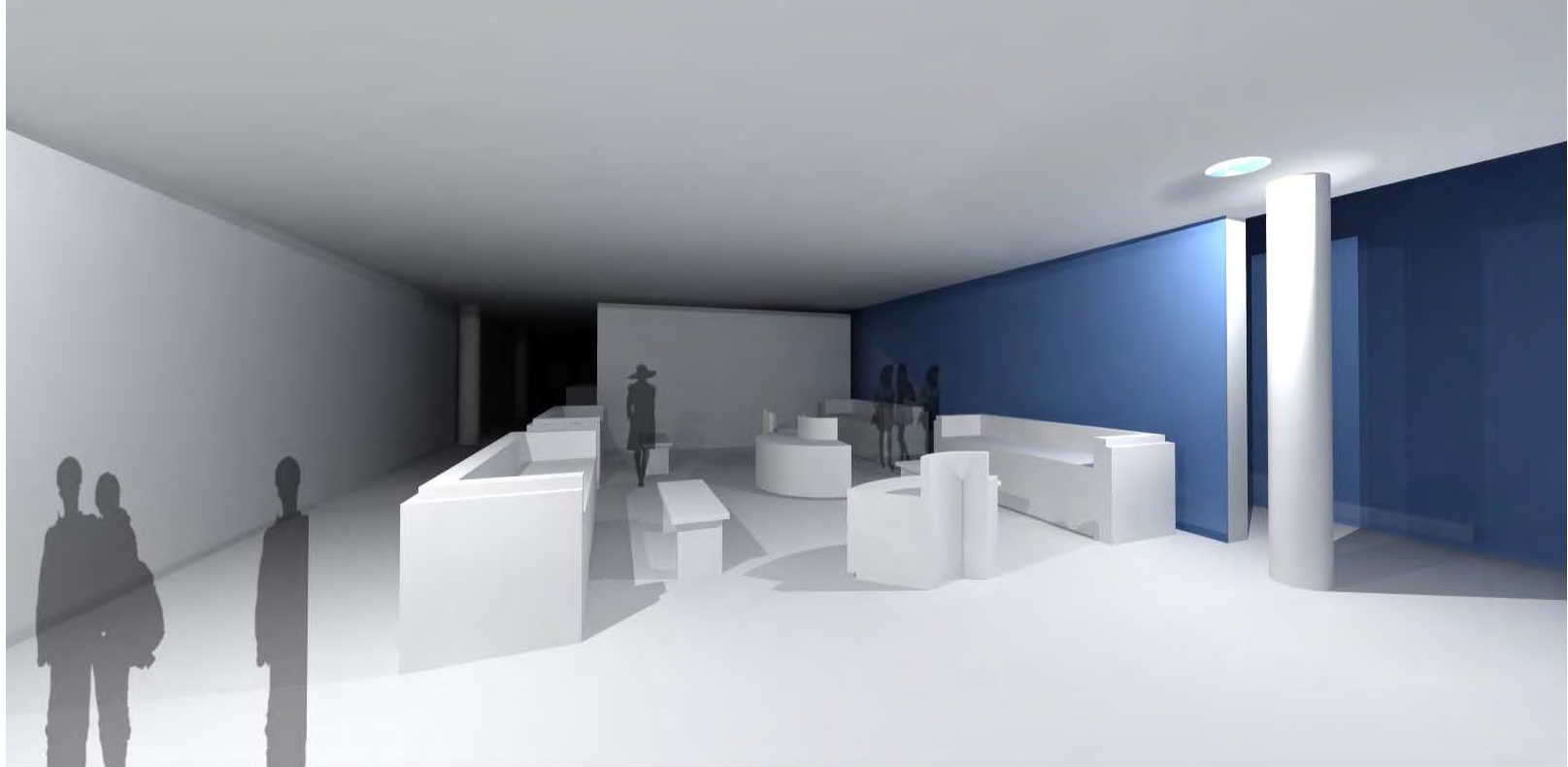
The open communal spaces of college building are visually connected and also visually open toward Library building include its courtyard.

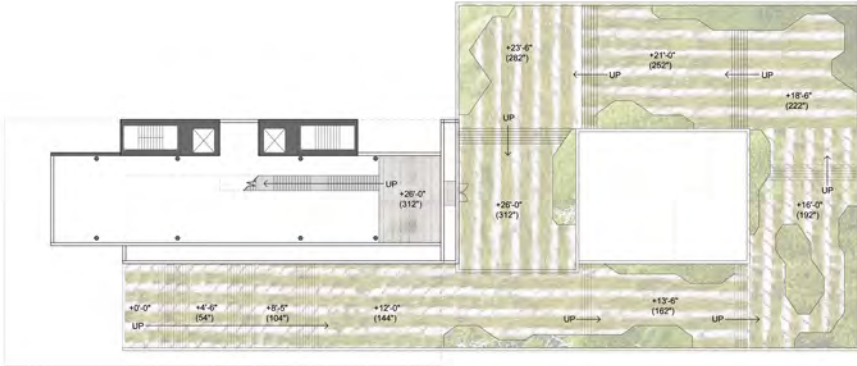


The shared entry space is two story high glass envelope and college building is placed on top. The cantilevering building over entry plaza emphasize its presence to high traffic North Borad Street, while the building is not at the ground level and recessed from the property line in urban area.

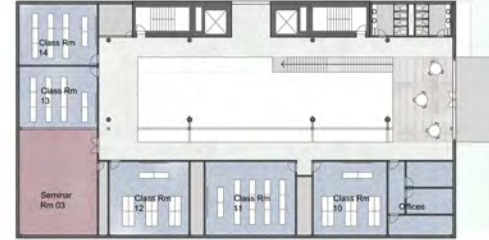
The sculptural roof garden has ground level entry and has one of the exist at the college building, this allows alternative access to the college building.



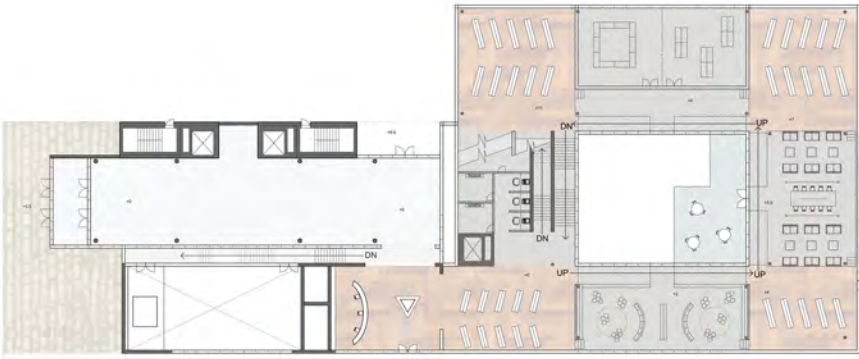




Third Floor



Seventh Floor



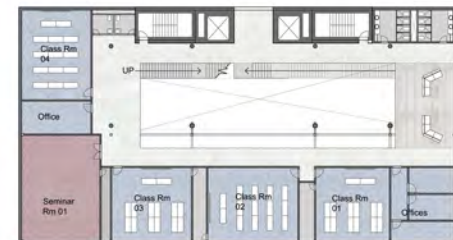
Ground Floor



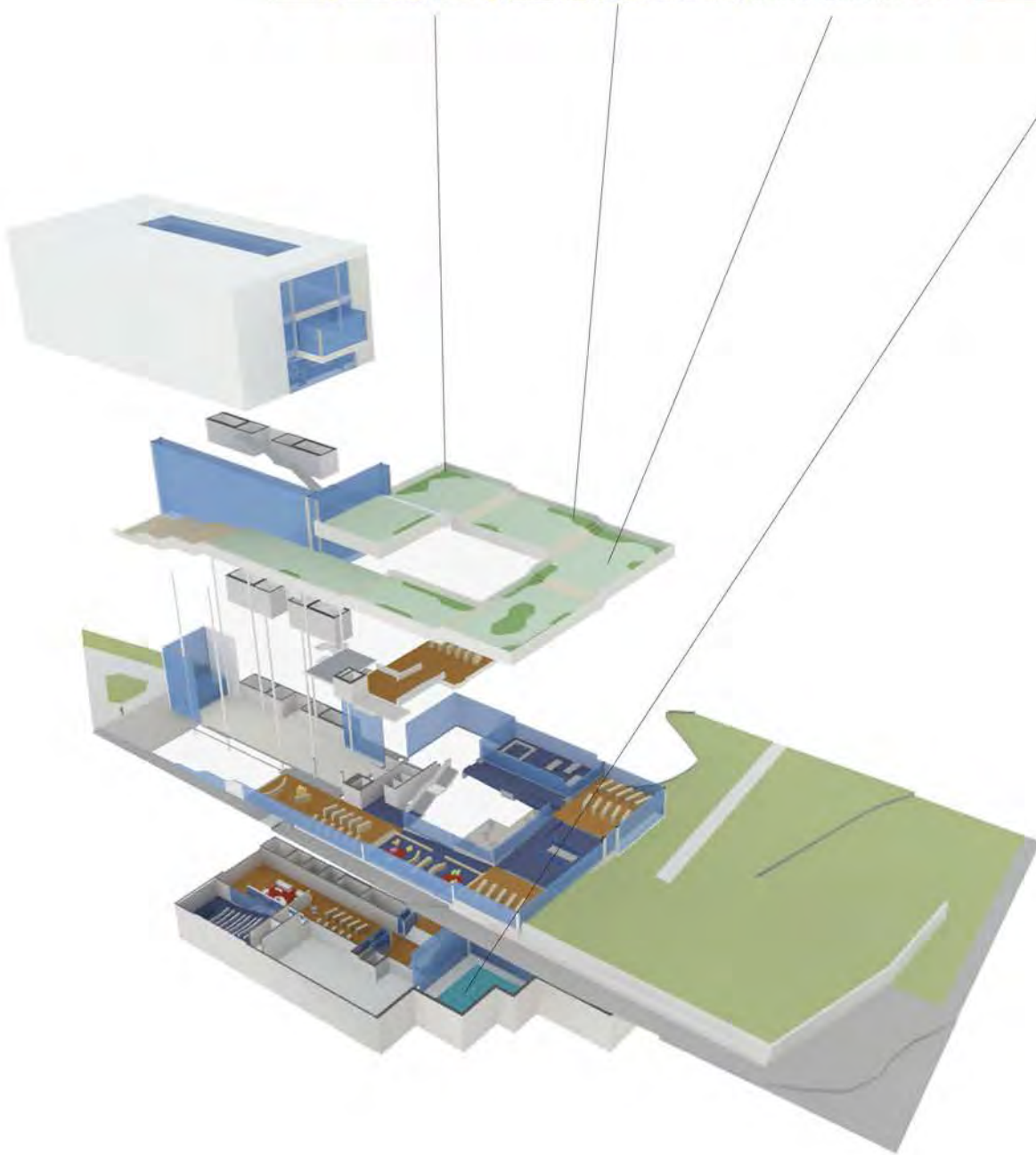
Sixth Floor



Basement Floor



Fifth Floor









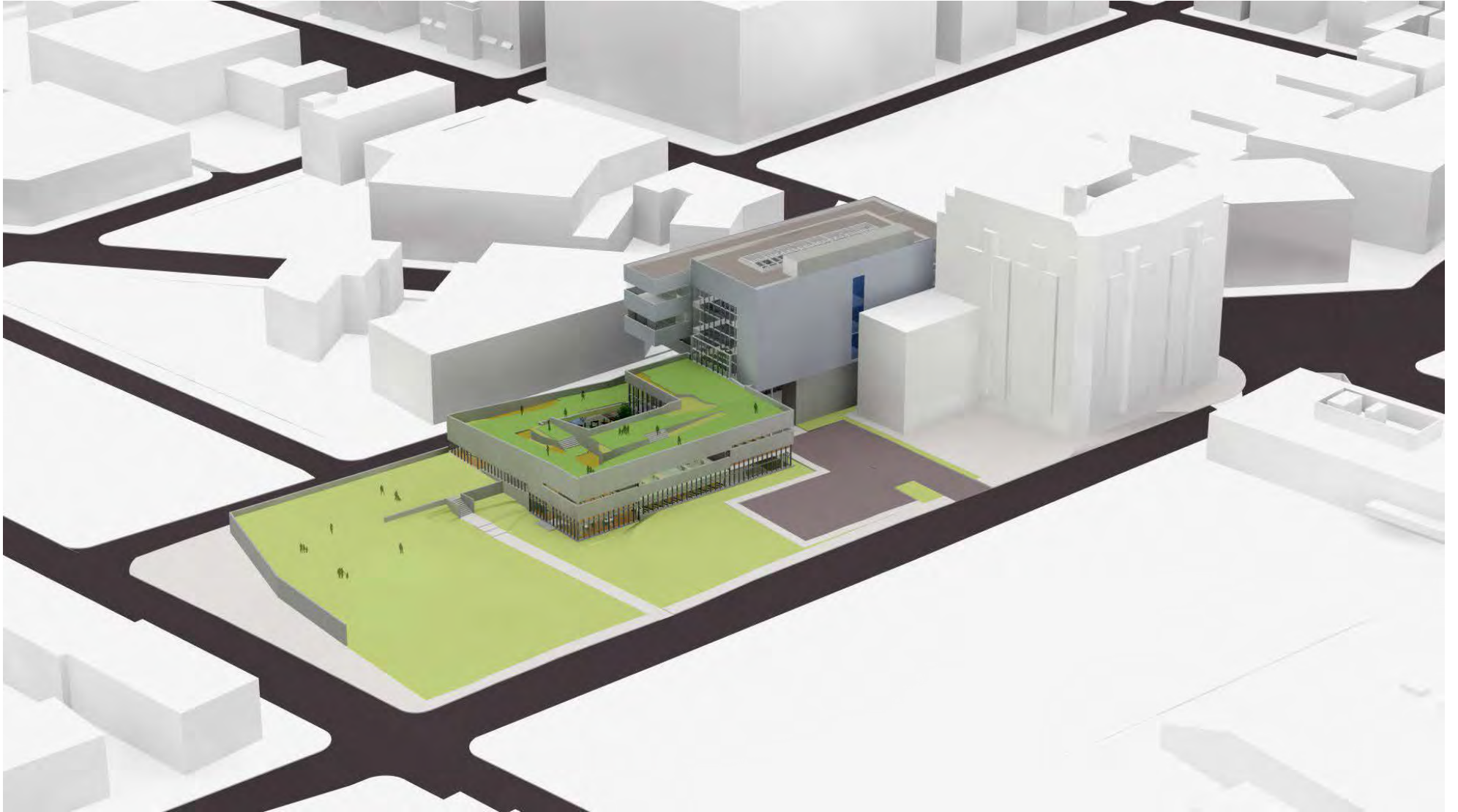
Final Design



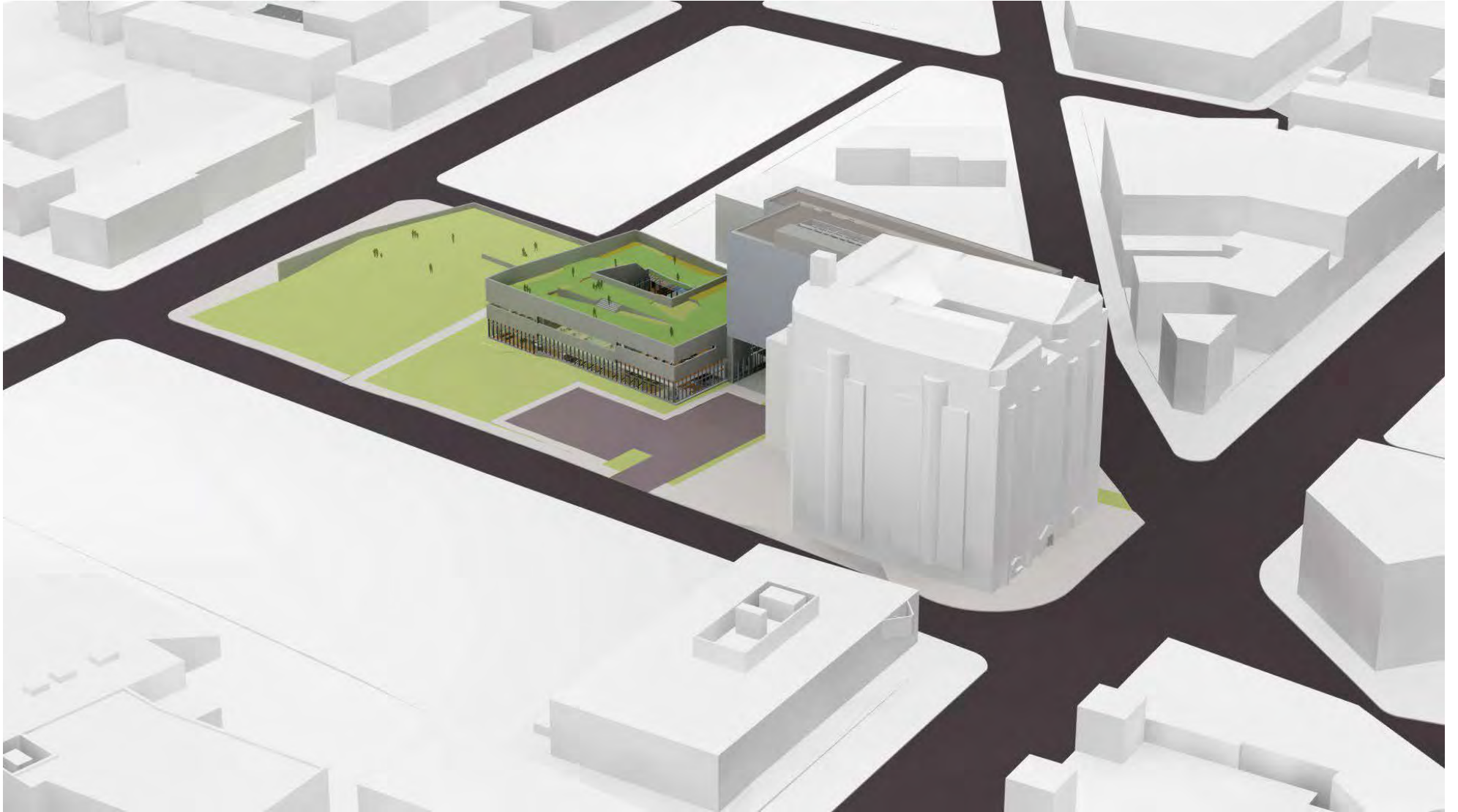
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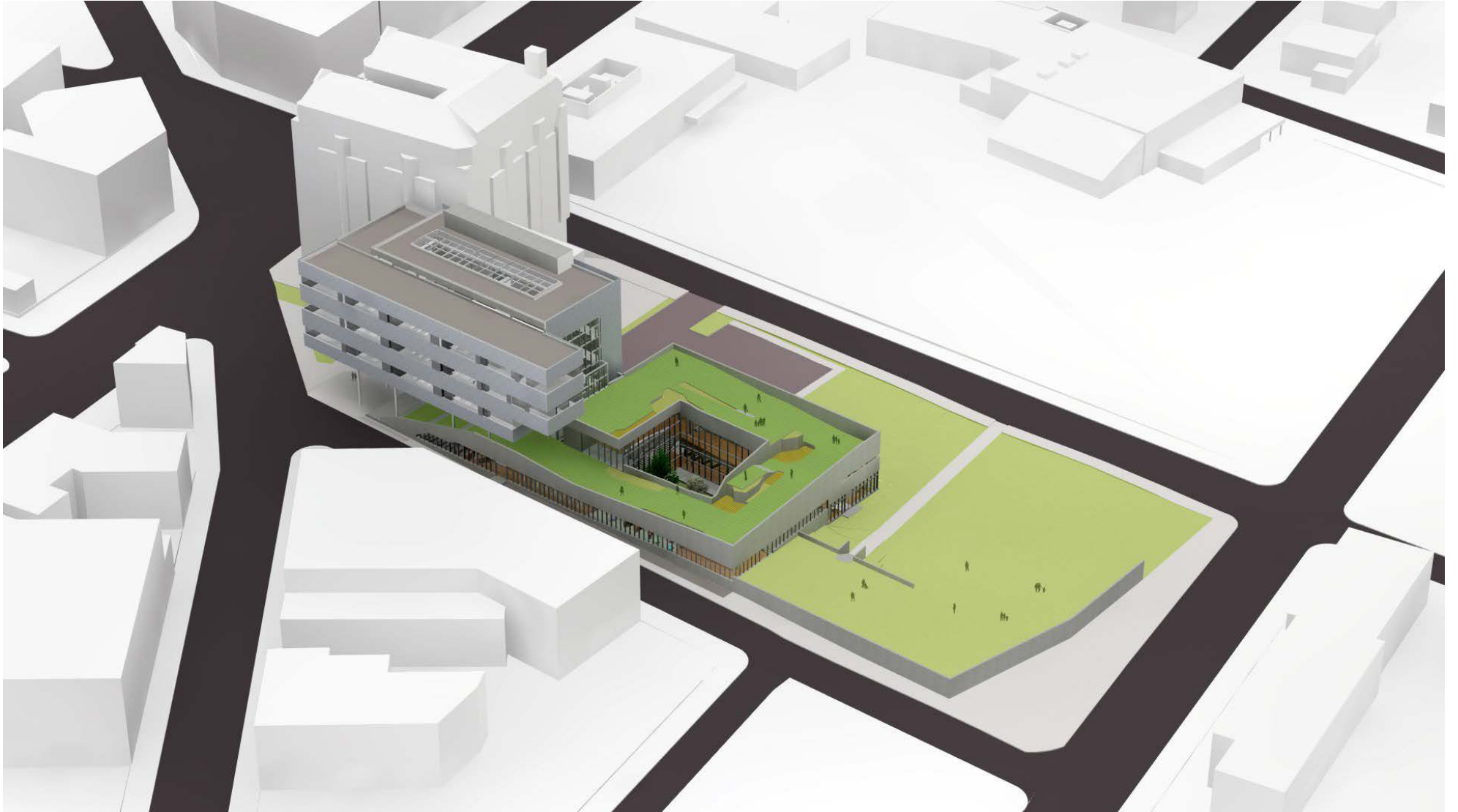
1"=1800' scale



From Northeast



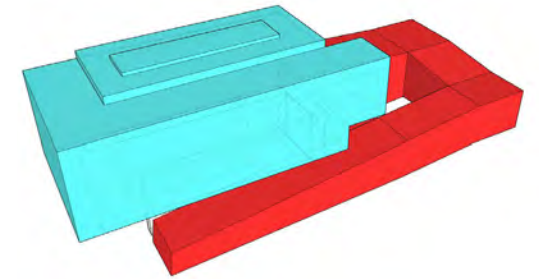
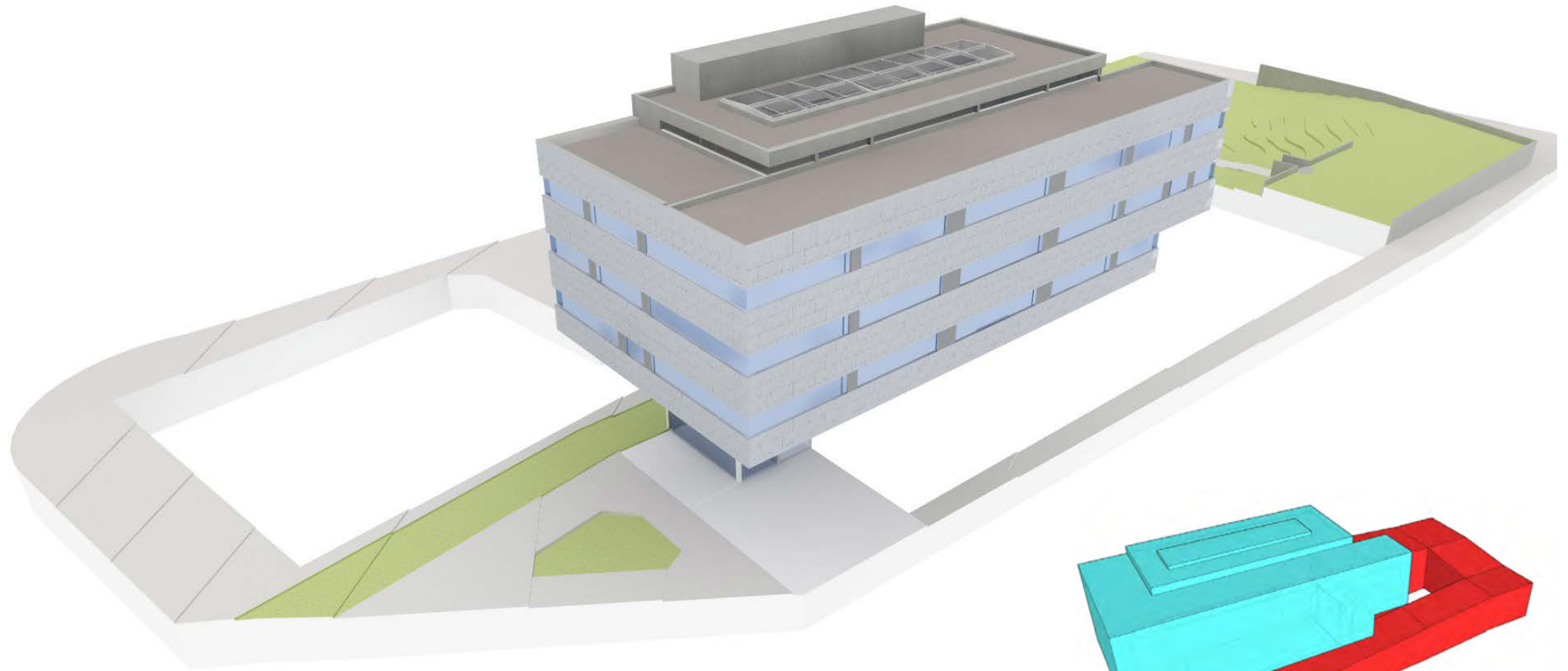
From Northwest



From Southeast

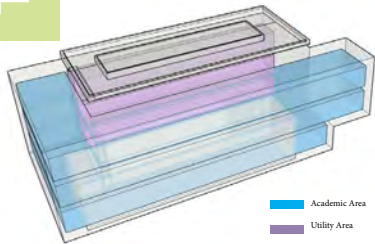


From Southwest



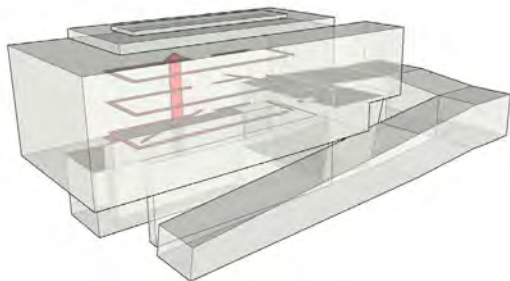
Program Outline

Entry Plaza.....	3400 sqft
Shared Entryhall.....	3400 sqft
Class Rooms(14).....	8750 sqft
Seminor Rooms(3).....	2760 sqft
Lounges(3).....	1710 sqft
Offices(11).....	2200 sqft
Conference Room.....	569 sqft
Bathrooms.....	950 sqft
Storages.....	250 sqft
Mechanical Room.....	1650 sqft



Academic Area
Utility Area

Programmatic Organization -Branch University



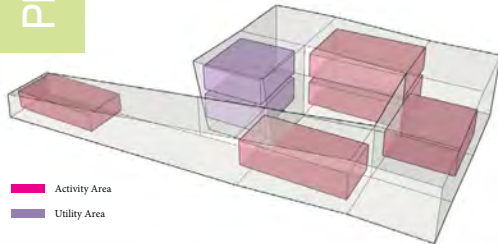
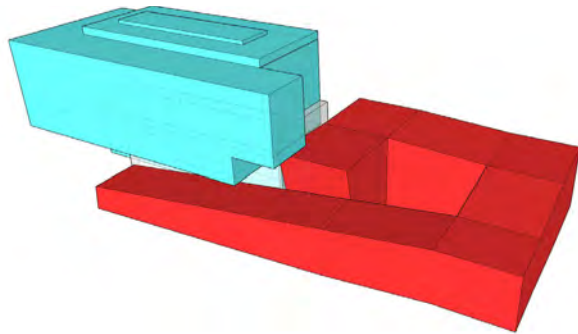
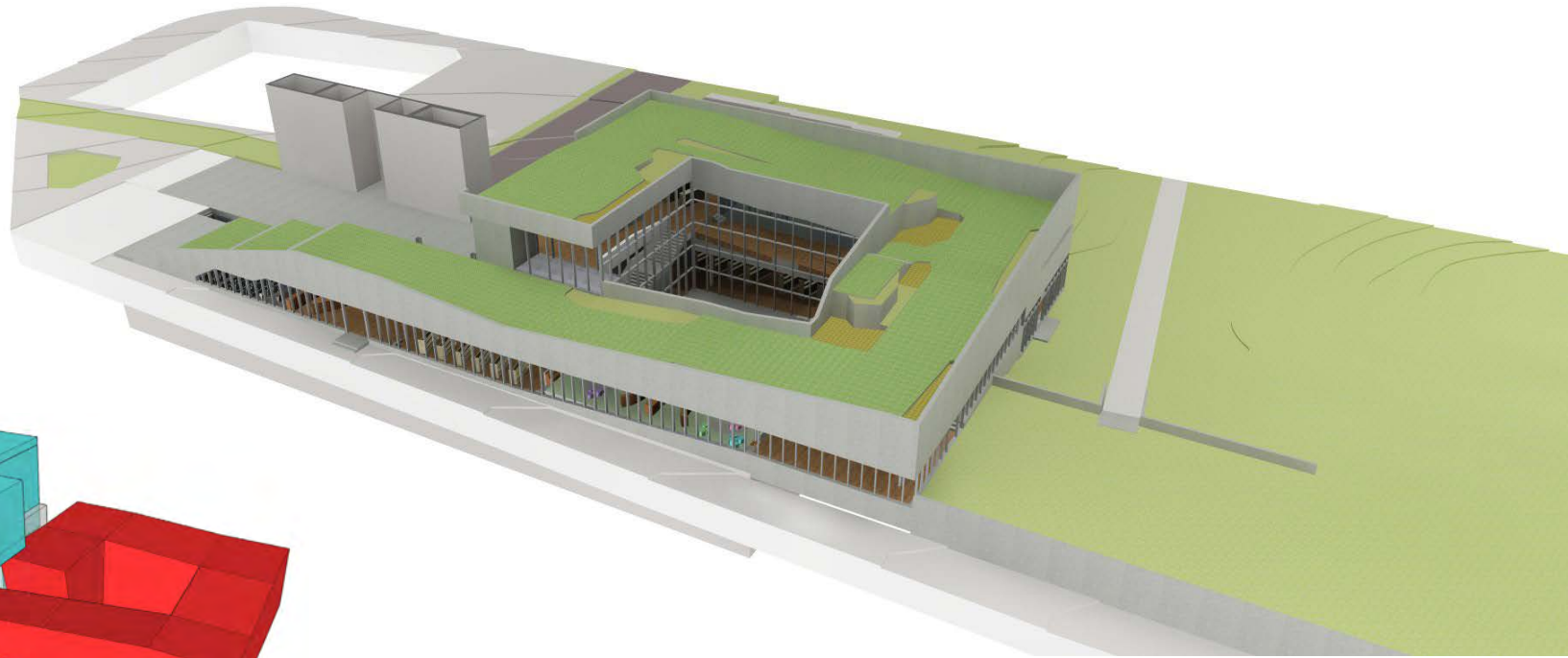
Building Circulation-Branch University

The Entry Plaza and Shared entry halls are the major path of the entry to the property and both University and Library buildings.

There is a secondary means of entry to the University Building which is through the shared community garden which is over the Library building.

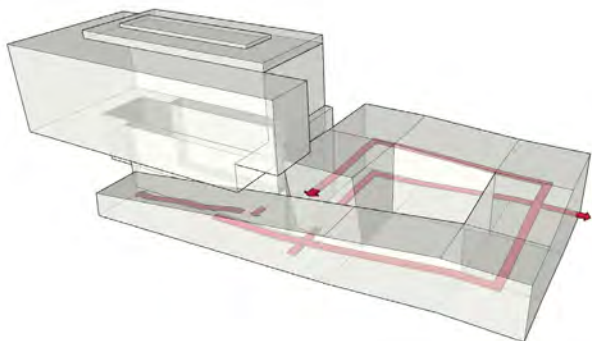
Branch University Building has two story high entry hall and all of the University programs locate within Third to Fifth Floor.

The Classroom floors are arranged in U-shape that open towards garden spaces of the Library Building. Steel bar grating bridges with Lounge spaces are between the the end of U-shape. This gives sence of separation from the rest of the space and transparency, while allowing visual interaction with the garden spaces.



Activity Area
Utility Area

Programmatic Organization-Branch Library

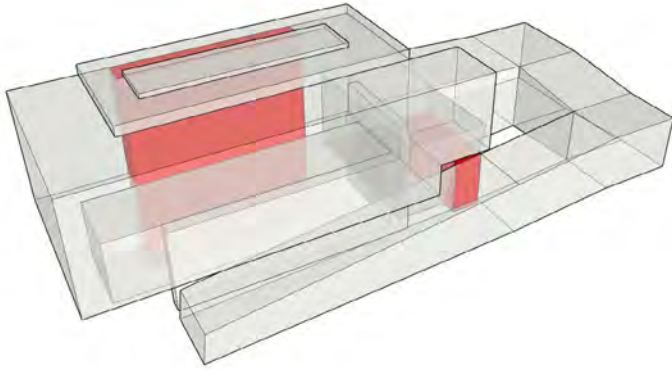


Building Circulation-Branch Library

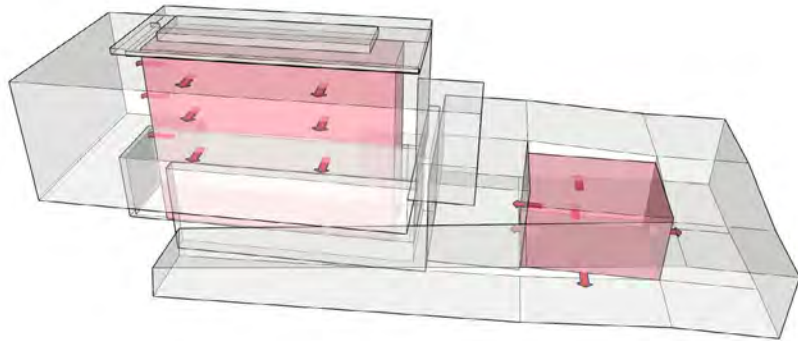
Program Outline

Shared Community Garden.....	15,650 sqft
Front Desk.....	1200 sqft
Auditorium.....	1880 sqft
Meeting Room.....	1270 sqft
Reading/Study/Lounge Space.....	6570 sqft
Stacks.....	6100 sqft
Workshop Room.....	1280 sqft
Courtyard.....	2390 sqft
Bathrooms.....	500 sqft
Mechanical Room.....	800 sqft

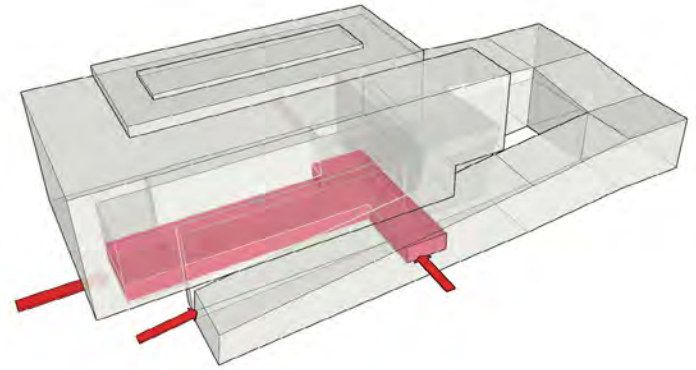
The Library is primarily targeting children to young adult in the neighborhood. The Ground to second floor Reading Spaces and Stacks level is programmed for U15 while the basement floor Reading Spaces and Stacks are programmed for Adults due to the Difference in activity. Over the Entire Library building there is a shared walkable community garden that is accessible from the second floor of the building. On the other hand, the quiet courtyard locates at the basement floor. The community garden also allows the access to the University Building as well.



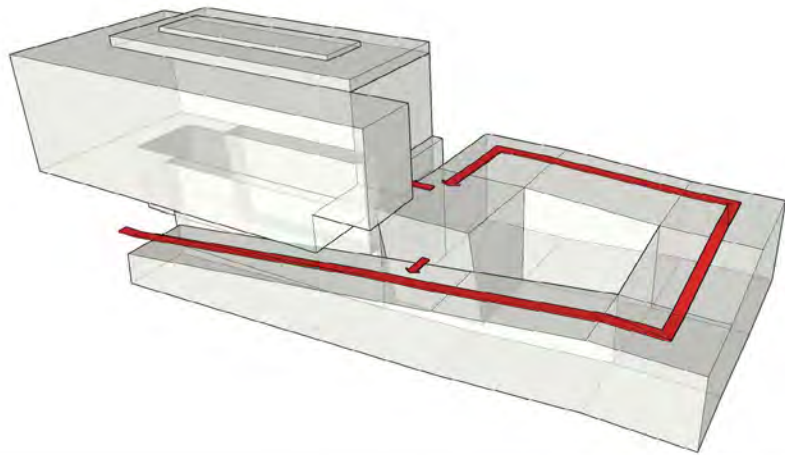
Building Circulation Cores



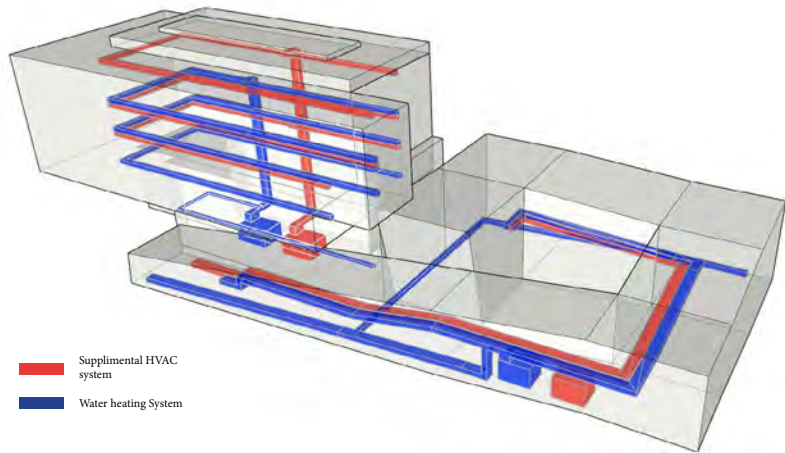
Void-community space



Building Entry

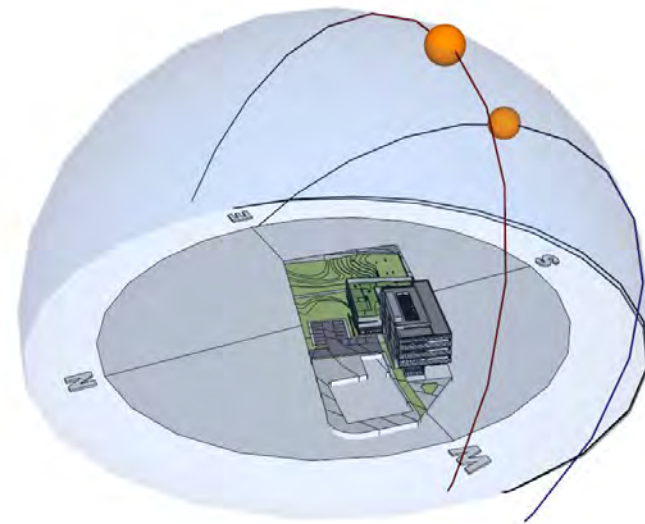


Roof garden Circulation



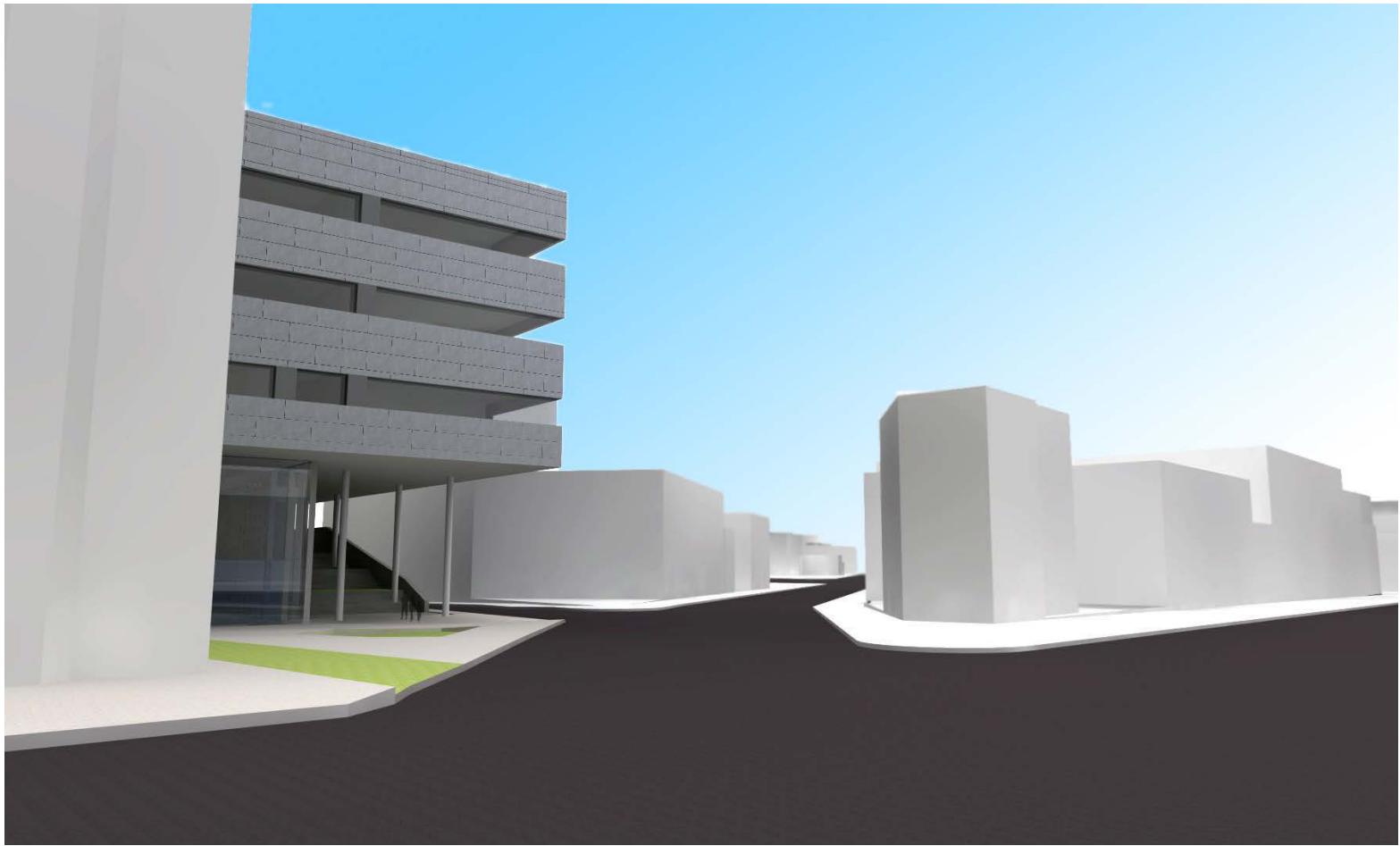
- Supplemental HVAC system
- Water heating System

Heating/Cooling system



- Midsummer day's path
- Midwinter day's path

Sun path in relation to the buildings



From intercession of North Broad St and Ridge Ave



From North Broad St. to property





From intersection of
Ridge Ave. and Melon St
to property





From intersection of Melon St. and North 13th St. to property



From South of roof garden to branch college building



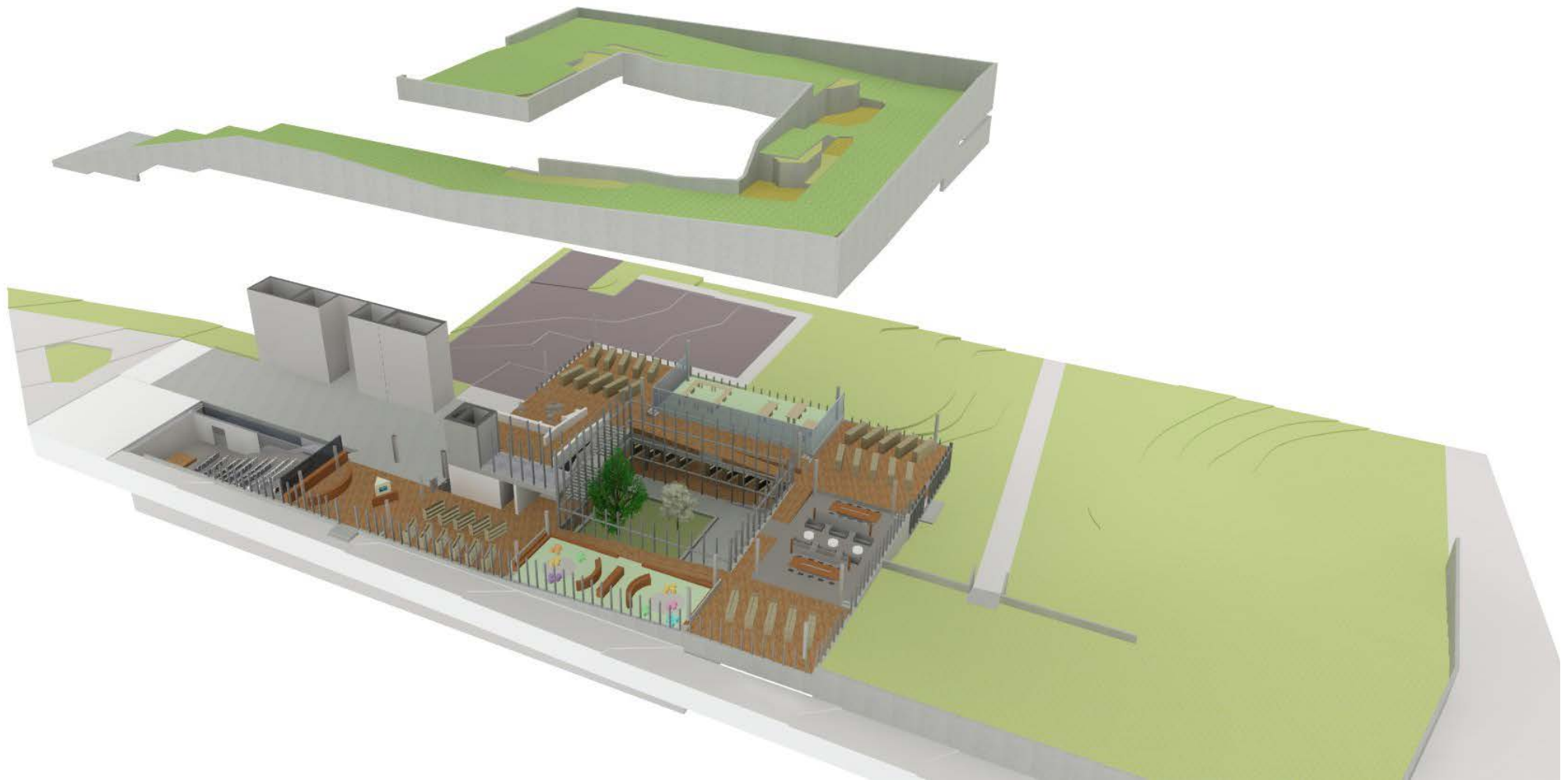
From roof garden to South



From North of roof garden to West

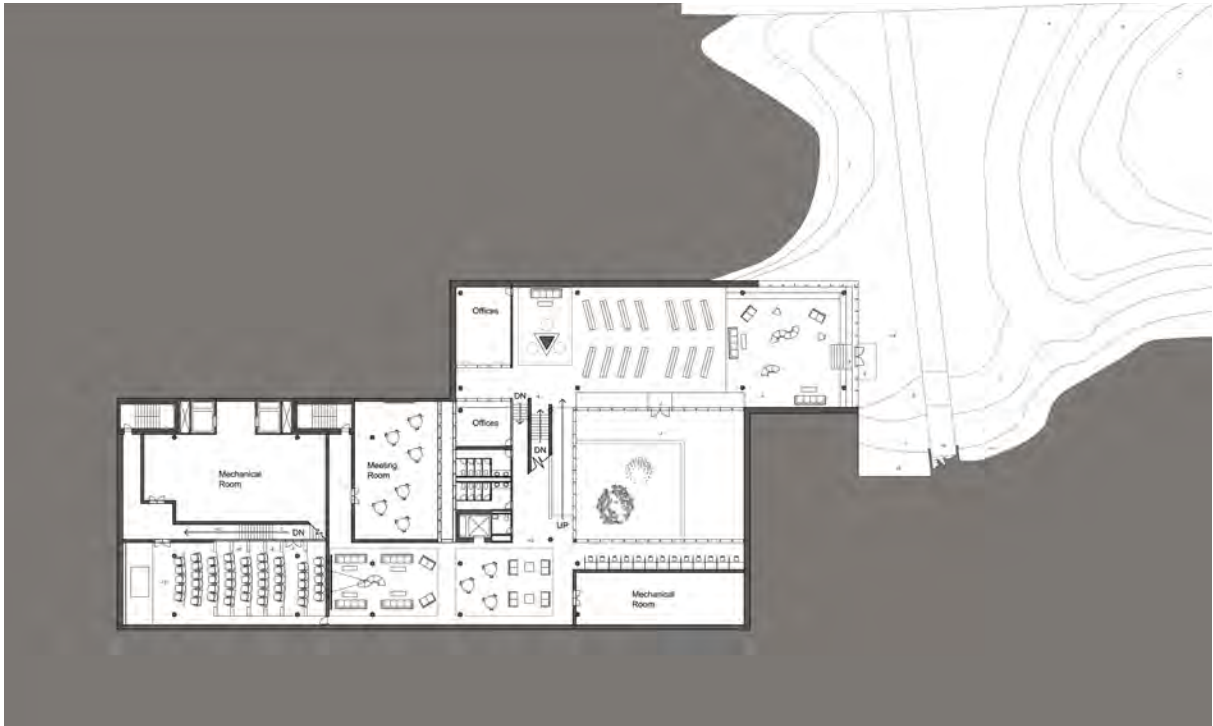


From North of garden to buildings



Plans, Elevations, and Sections

at 1'-0"=1/64" scale

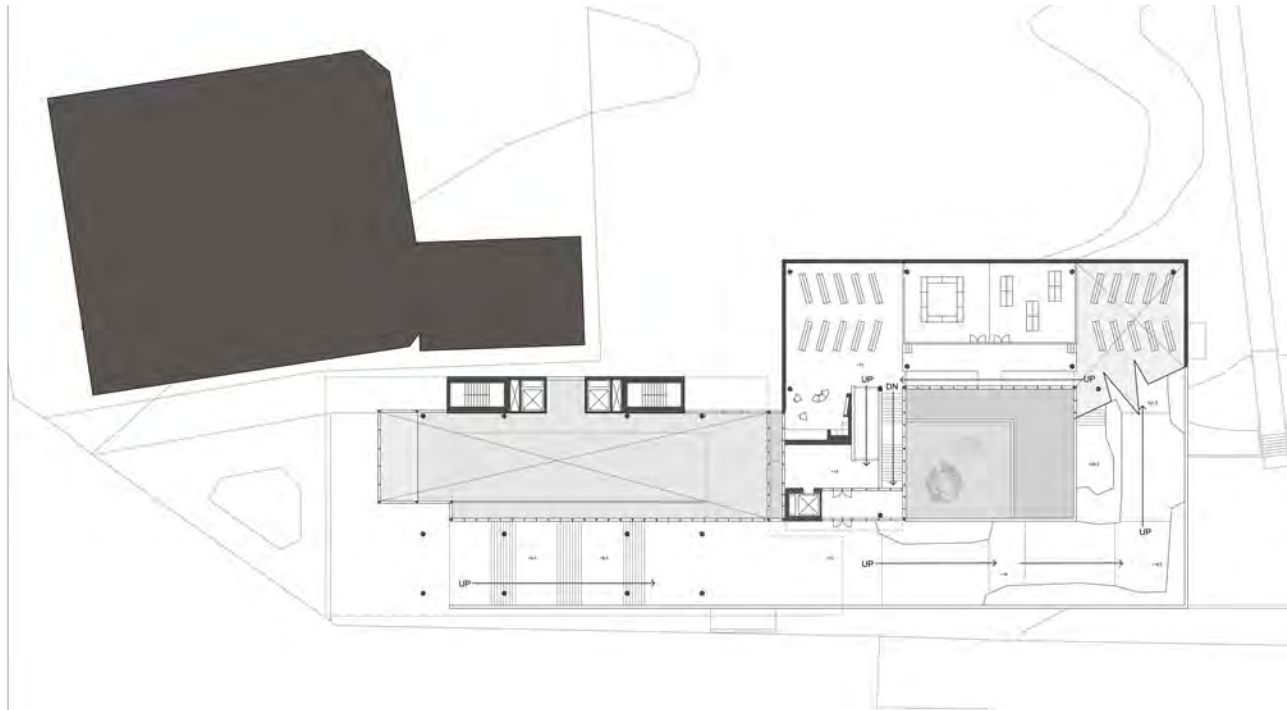


Basement Floor



Ground Floor

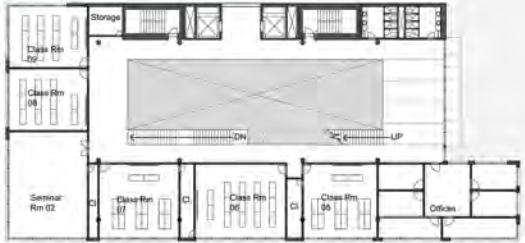




Second Floor



Third Floor



Fourth Floor



Fifth Floor

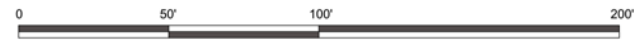




North-West Elevation

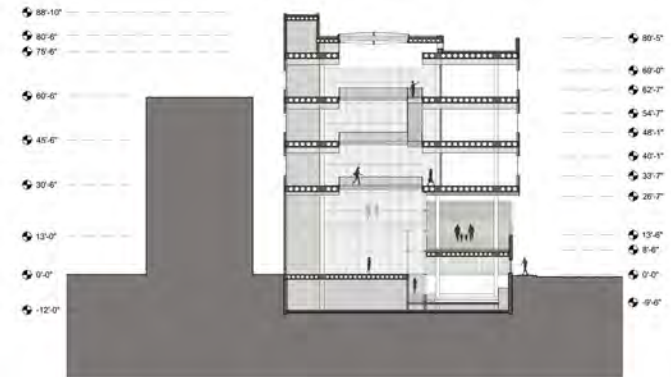


South-East Elevation





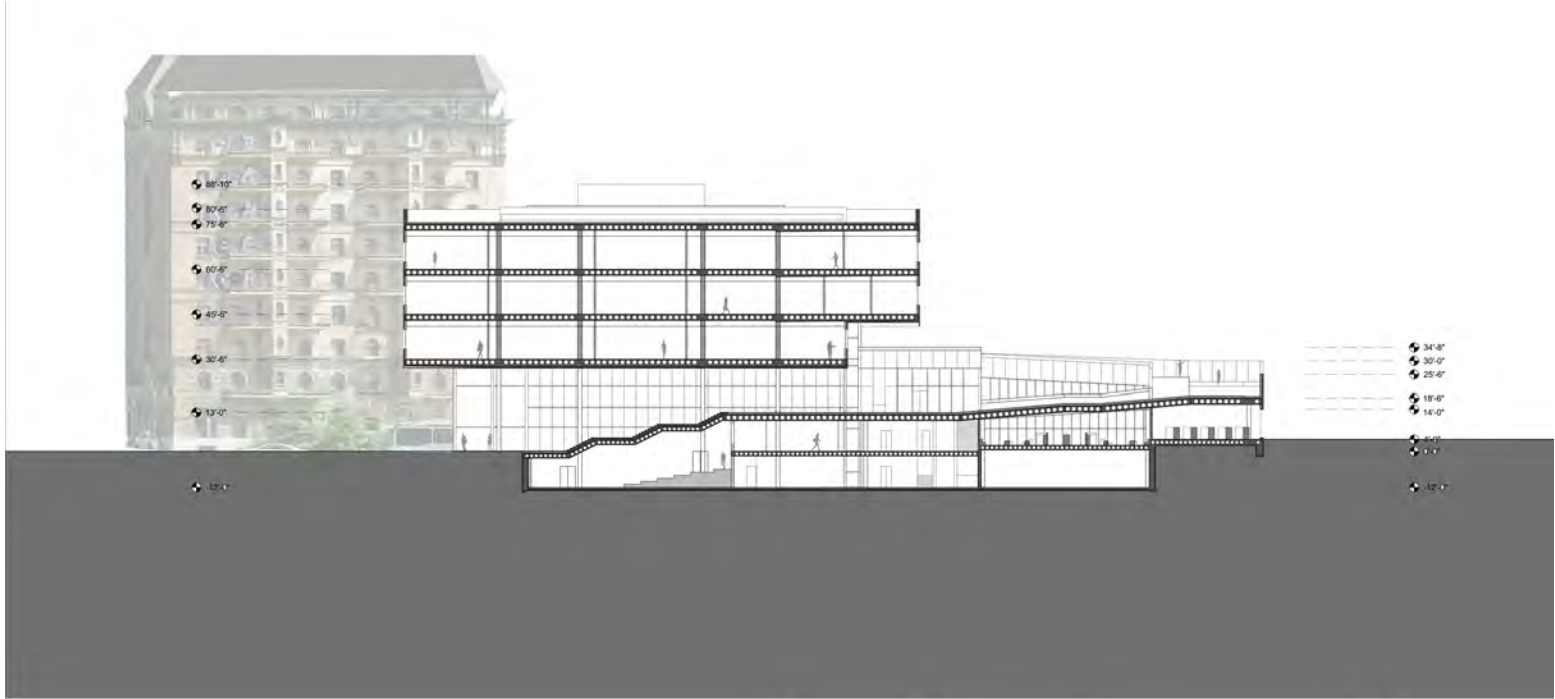
Section A



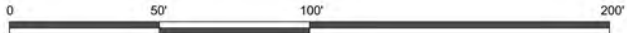
Section B



Section C



Section D



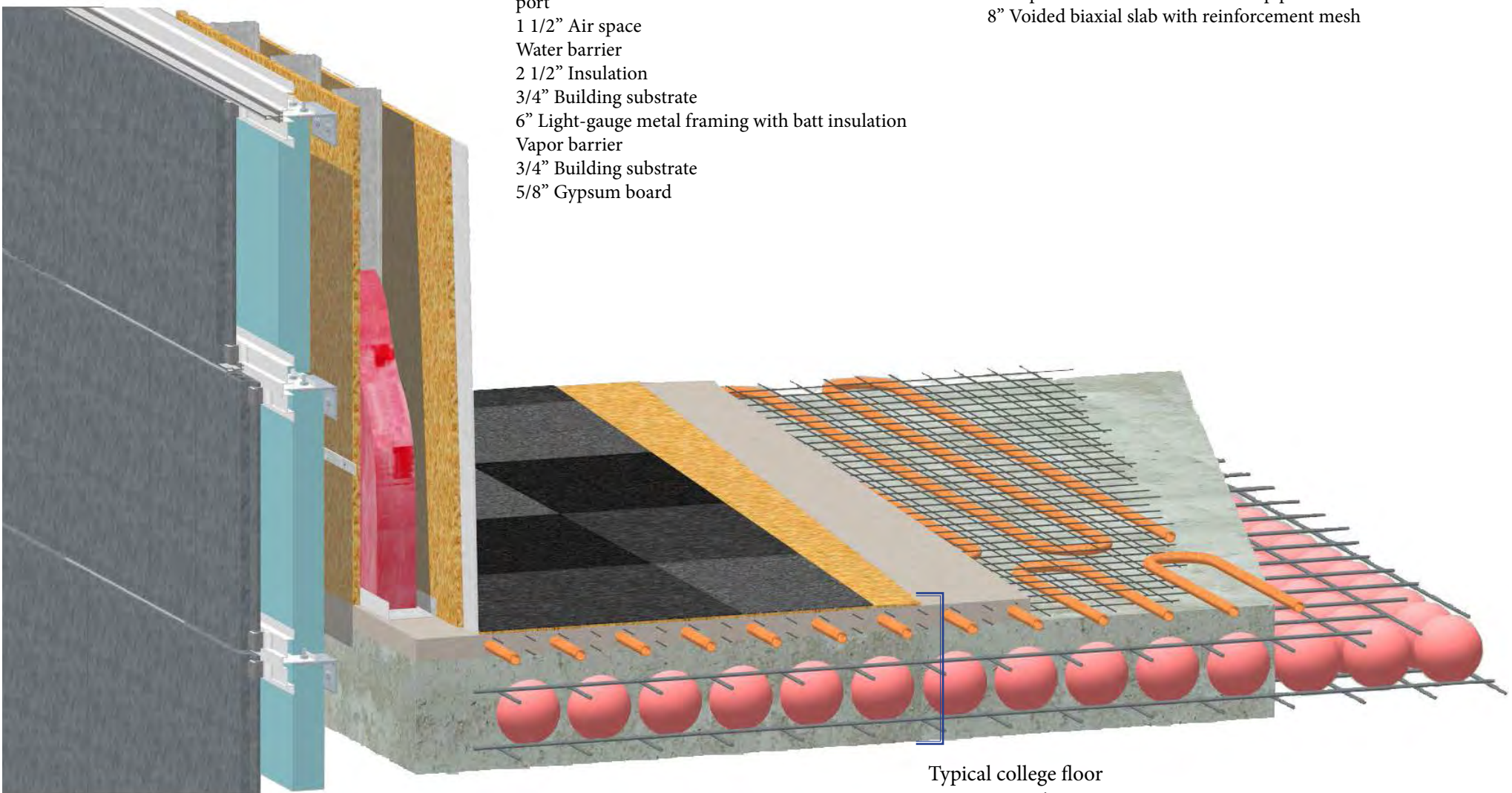
Typical college exterior wall construction

Typical college exterior wall construction

- Concrete panel rainscreen system with horizontal support
- 1 1/2" Air space
- Water barrier
- 2 1/2" Insulation
- 3/4" Building substrate
- 6" Light-gauge metal framing with batt insulation
- Vapor barrier
- 3/4" Building substrate
- 5/8" Gypsum board

Typical college floor construction

- 2'x 2' Tile carpeting system
- 3/4" Building substrate
- 2" of poured concrete with 1" PEX pipe attached to wire mesh
- 8" Voided biaxial slab with reinforcement mesh



Typical college floor construction

Typical floor and exterior wall construction of college building

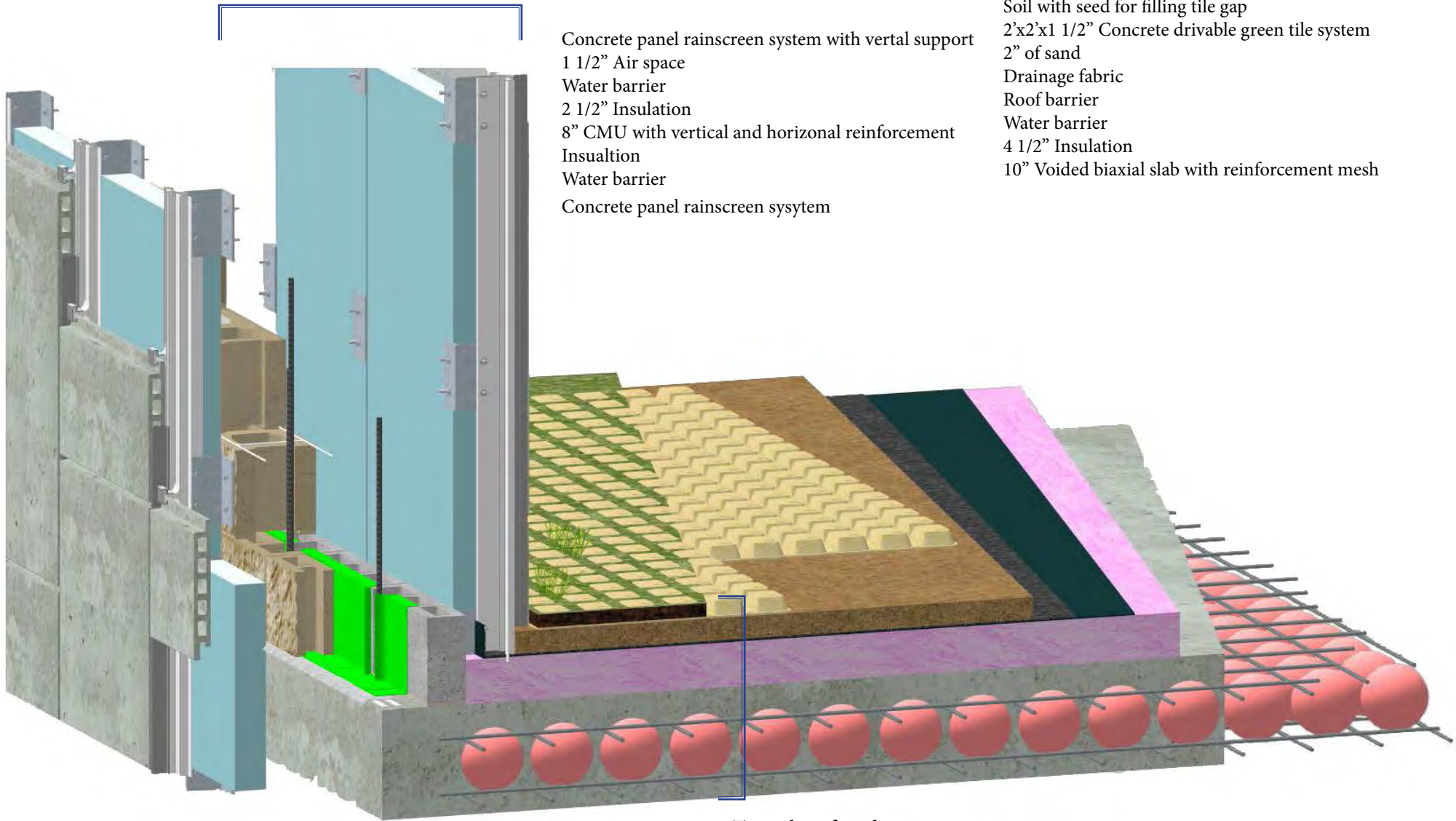
Typical library exterior wall construction

Typical library exterior wall construction

- Concrete panel rainscreen system with vertical support
- 1 1/2" Air space
- Water barrier
- 2 1/2" Insulation
- 8" CMU with vertical and horizontal reinforcement
- Insulation
- Water barrier
- Concrete panel rainscreen system

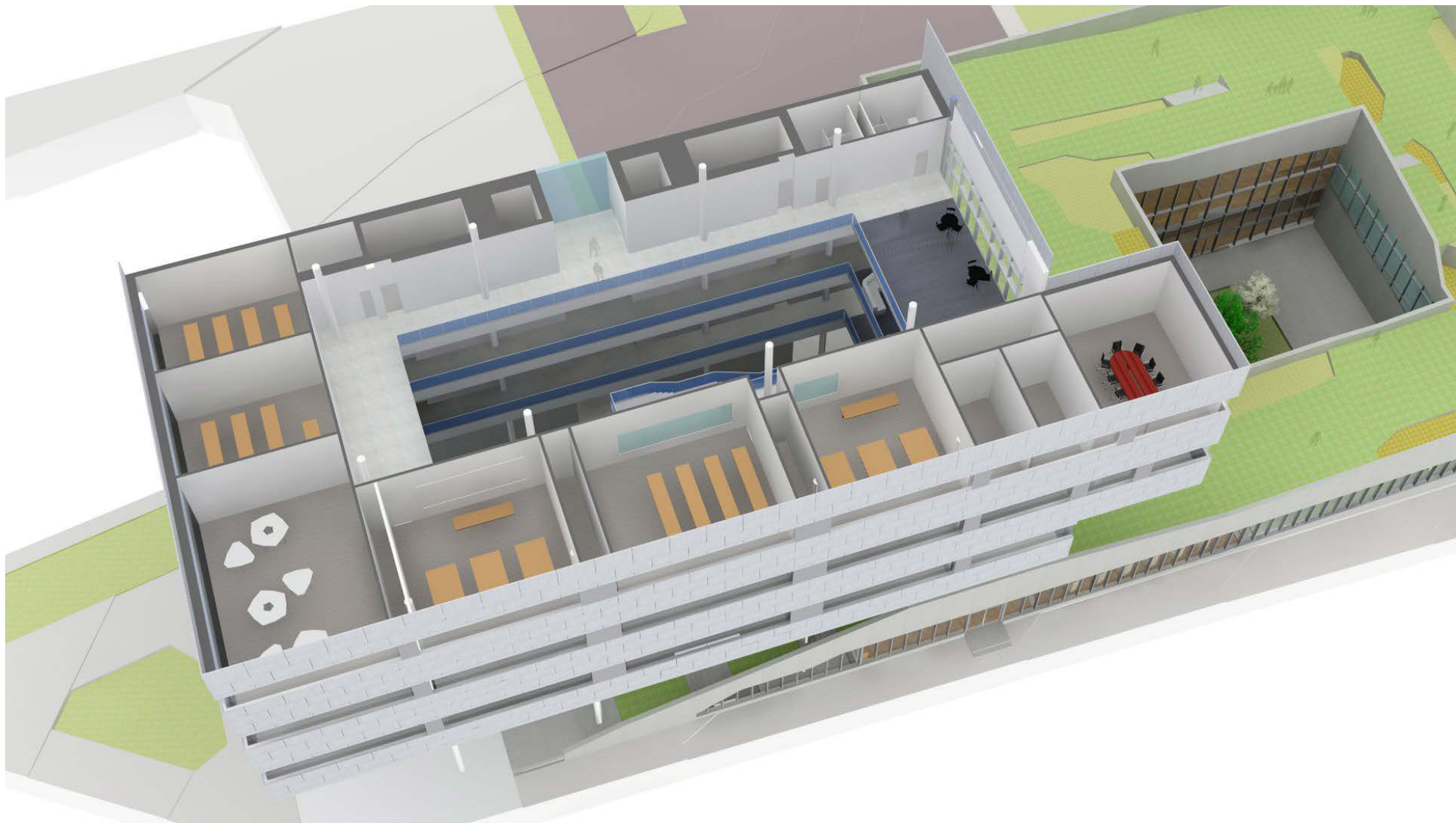
Typical roof garden floor construction

- Soil with seed for filling tile gap
- 2'x2'x1 1/2" Concrete drivable green tile system
- 2" of sand
- Drainage fabric
- Roof barrier
- Water barrier
- 4 1/2" Insulation
- 10" Voided biaxial slab with reinforcement mesh



Typical roof garden floor construction

Typical roof garden floor and exterior wall construction of library building



General Views



College entry hall



Interior of the top floor of the college building



From Plaza to Roof garden entry



Roof garden-1



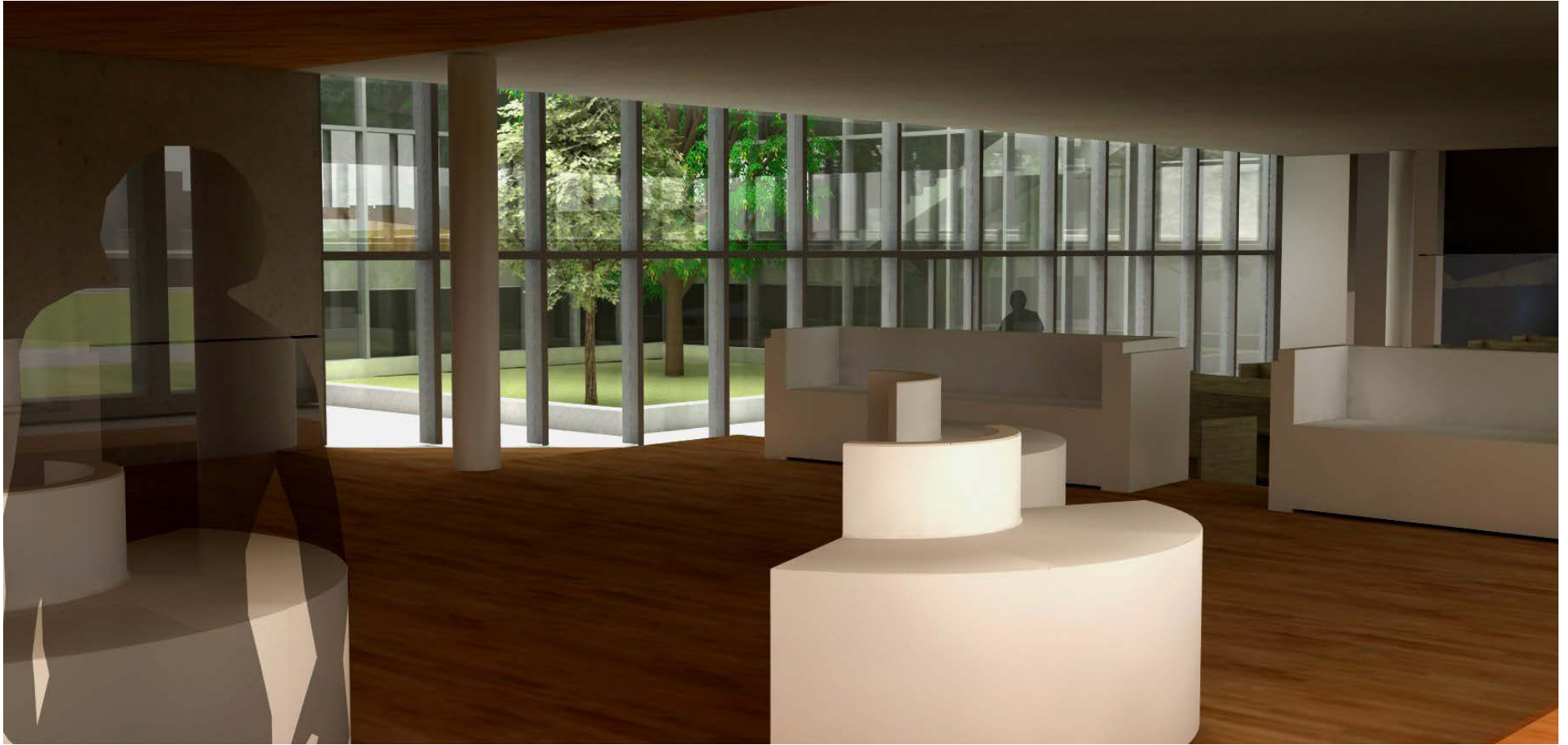
Roof garden-2



Roof garden-3



Roof garden-4



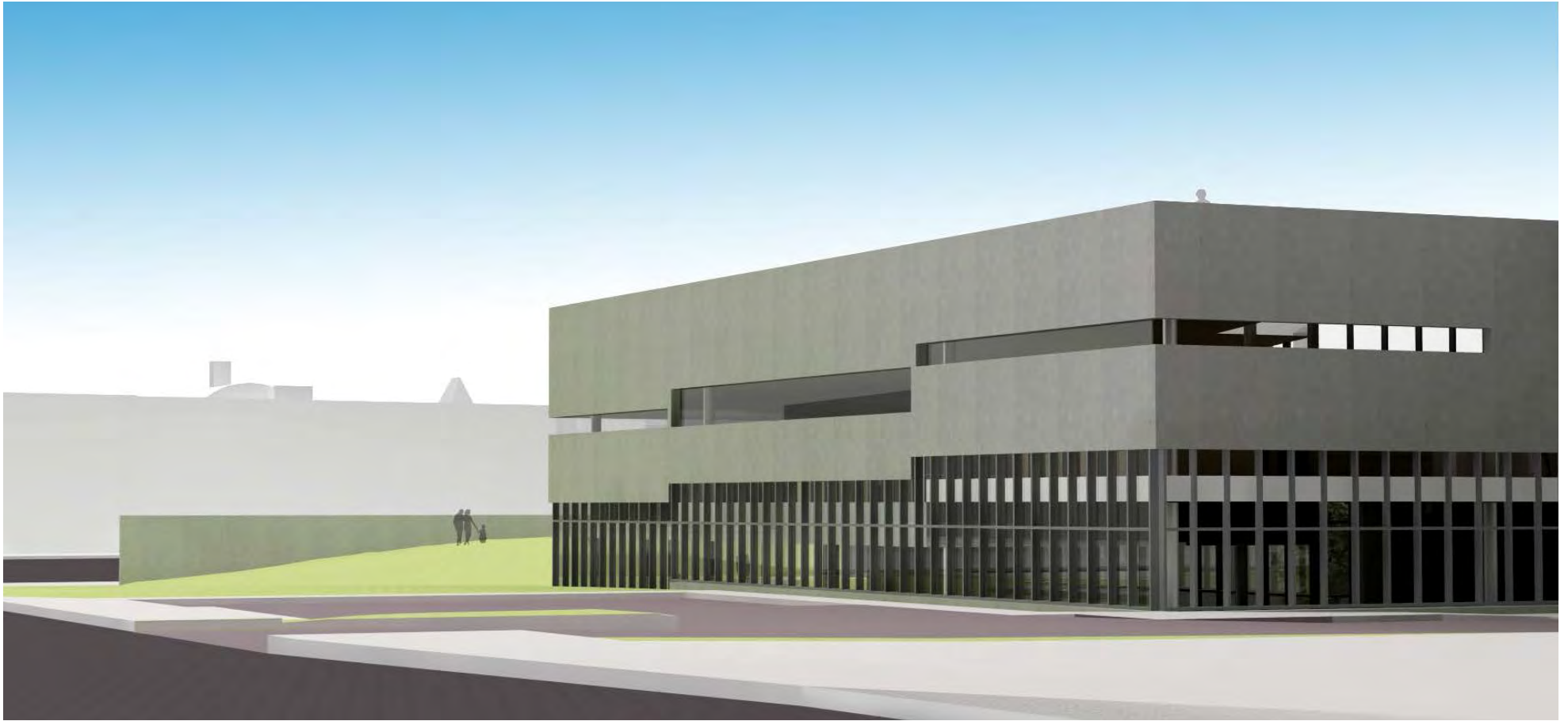
Library basement floor lounge toward courtyard



Library courtyard



From north of roof garden to branch college building



From Fairmount Ave. to library building and yard

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