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# Revitalizing Liberty: Creating a Train Station—Community Center—Business Incubator

Magan M. Baxter

Roger Williams University, mbaxter196@gmail.com

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**Independent Project submitted to  
Roger Williams University, SAAHP  
In fulfillment of the requirement for B.Arch degree in Architecture  
May 2008**

**By**

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**Megan M. Baxter**  
Class of 2008

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**Stephen White**  
Dean  
SAAHP

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**Andrew Cohen**  
Advisor

# **Revitalizing Liberty**

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**Creating a Train Station—Community Center—Business Incubator**

Architecture at its best should have the ability to inspire and initiate change—to revolutionize the way a site functions. Architecture should have the ability to take a town with nothing and bring a sense of importance, create pride, create jobs, provide a safe place for people of all walks of life to come together. In its ideal form architecture is for everybody—the young, the old, the handicapped, the athletically endowed, rich, poor, all races, all religions, all family types and backgrounds. Architecture should provide a means of blending. It's about the people, for the people—giving them everything they need, even if they don't know it yet.

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# OO1 Introduction

# Introduction

Small, rural town in much need of revitalization



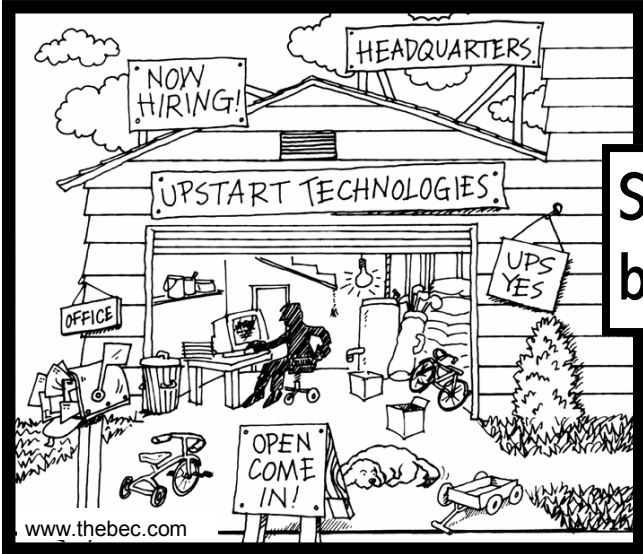
Reinstitute Railway

Light rail connection to NYC



community center

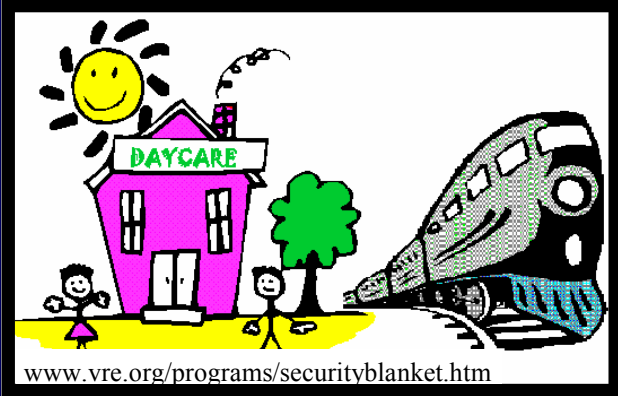
train station = beacon



Start-up small businesses

Affordable Housing

Advice  
Collaboration  
Accommodation







# POSS

## Problem Statement

# Problem Statement

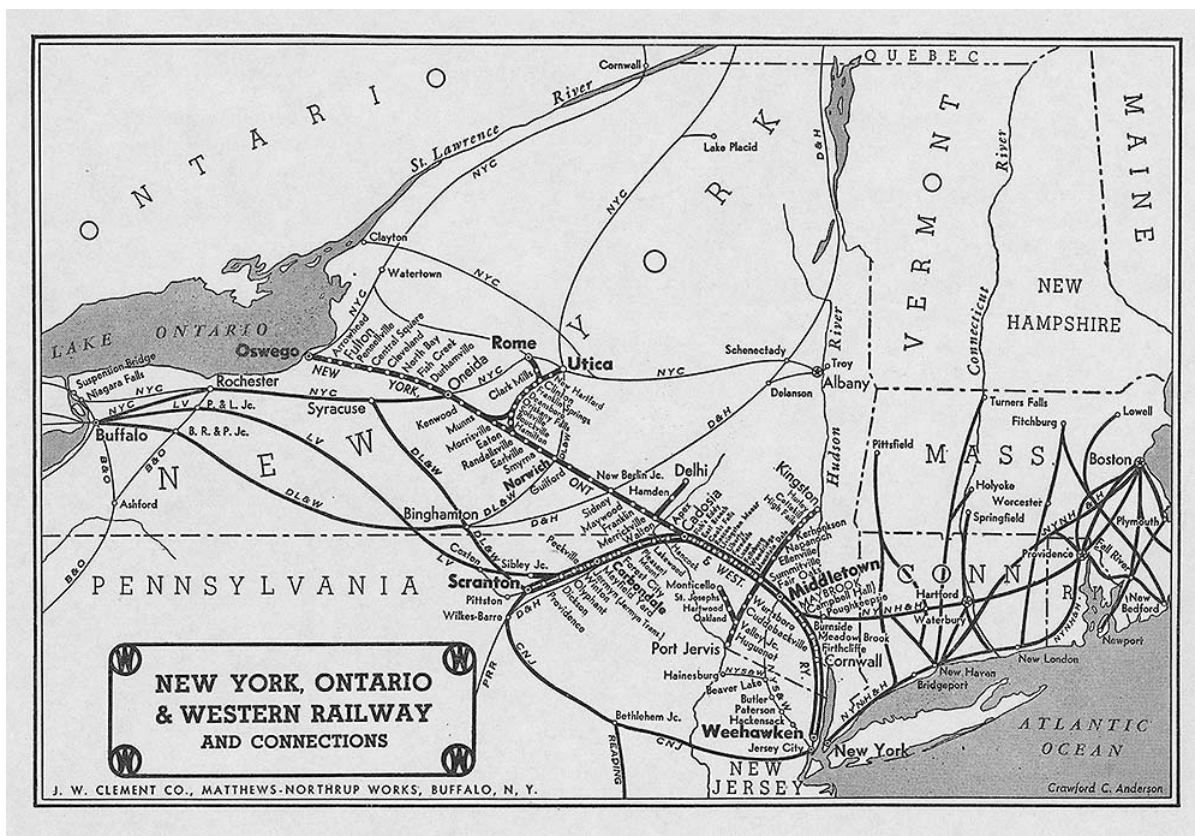


Liberty is a small town located in upstate New York, about 80 miles outside of New York City. Once a thriving and vivacious location for both locals and tourists, Liberty has since deteriorated and now has little to offer economically. The New York Ontario and Western Railway ran from Weehawken, New Jersey (across the Hudson River from Midtown Manhattan) to Oswego, New York (along Lake Ontario). Connecting many upstate towns to NYC, the train was an important source of transportation, and one important station for both coal and milk was located in Liberty. The Liberty Station closed in 1957, and the tracks and trestles in the area have been removed. Many people say that taking the train away is one of the biggest mistakes that was ever made.

The median household income for Liberty, New York is approximately \$17,000 below the national average, and even \$10,000 below the Sullivan County average. Liberty's population is about one-half that of Bristol, Rhode Island, but in comparing land size Liberty is eight times larger than Bristol. At 15% Liberty's poverty level is three times greater than that of Bristol, and that doesn't include the many families in Liberty that are just above the poverty level. The compact organization of Bristol and the reliable public transportation provided by RIPTA, no doubt has a large impact on the success of Bristol residents.

Many people in Liberty cannot afford to own cars, never mind pay for incredibly expensive gas to fuel their cars. With half of the shops downtown with empty storefronts, people don't have many options for places to work. The nearest train station is about 40 miles away, and although there is an infrequent bus that runs to NYC it costs \$64.00 roundtrip, it's at least a three hour ride (as opposed to half that driving), and the earliest bus doesn't arrive in NYC until 9:50 am. Needless to say, this doesn't make for an easy daily commute into the city. Unless you have the means to travel into the city, or at least to the nearest train station, working in the city becomes impossible, and thousands of job opportunities that could exist, don't.

In addition to transportation and job-related issues, Liberty doesn't have much going on for its residents. The movie theater in town opens for business for about a month or two before the owner decides to sell it, but there is a bowling alley which does provide some entertainment. But as far as after school activities are concerned, or weekend activities for students, there are very few options. The students that aren't involved in sports and clubs don't have a place to go after 3:00 Monday through Friday,



so where do they end up? On the streets of Liberty causing mischief, buying drugs from the local dealer (which isn't just a problem for teens, but people of all ages in the area), promiscuous activities (Sullivan County has the second highest AIDS rate in New York State, second only to the city), gang-related activities, going to the liquor store that has never bothered to card anyone, and essentially getting into unnecessary trouble and selling themselves short of their true potential. One of the most dangerous things anyone can have on their hands is bored teenagers, and Liberty is full of them.

Liberty, New York terribly needs something to come in and revitalize the town. Transportation, the creation of jobs, opportunities for the youth in the town, a source of positive activity, and a beacon to bring people back into the area, are in high demand. They need inspiration to get Liberty into better shape, and the economic means to keep it that way.



# 003 Project Statement

# Project Statement

This project will include a train station located in the Town of Liberty, instating a light rail line that will connect Liberty to the Middletown Station (currently the closest train station at approximately 40 miles away), which is directly connected with New York City. The city of Middletown itself has plenty to offer, with a shopping mall and several department stores adjacent to station, although currently there isn't a pedestrian path connecting the train station to anything; so this project will also provide pedestrian access to these amenities. The rail line will travel from Middletown to Liberty, with the possibility of following the old Ontario & Western route all the way to Oswego. One up and coming location in the area is Bethel (the town adjacent to Liberty), which is the site of the original 1969 Woodstock Festival and currently houses Bethel Woods Center for the Arts. The rail would provide access to this site as well; if not directly, at least to another means of public transportation that could take people to and from concerts and shows.

The train station will be more than a place for arrivals and departures, and will become a major hub along the rail line and as a community center and business incubator for the people living in Liberty. The Liberty Community Development Corporation (CDC) consists of local families, individual residents, institutions and government representatives, and they have made it their goal to improve the economic and social conditions in Liberty, on a long term basis. The organization focuses on three areas: Economic, Youth, and Housing Development. The proposed project would become a headquarters for the Liberty CDC, allowing them the space to provide help to small business, organizations for youth involvement in the community, and planning for affordable housing in the immediate area. Master planning of housing adjacent to the train station will also be a portion of the proposal.



The proposed project is meant to alleviate the problems brought on by the current conditions of the town. By reinstating a rail line that will connect Liberty to Middletown and New York City, a plethora of job opportunities will be opened for residents of the town. Creating a business incubator will allow otherwise financially unable people to receive the help they need to start up their business. A small amount of space can be rented, and common facilities and services will be shared amongst the various businesses; for example, secretarial services and meeting rooms. It would also provide small businesses with the opportunity to work one-on-one with the CDC, helping them work out the details and allowing the CDC to provide business owners with invaluable information and assistance. The community center offers a place for the youth of Liberty to go before/after school, on weekends, and during summers, with the possibility of integrating education with business related ventures. By giving the youth more options immediately in town, and giving them a direct connection to Middletown, there will be fewer problems with the juvenile delinquents, and hopefully more students will be afforded the opportunity for greater success.

The old fashioned town of Liberty needs to be revitalized, kids need a place to go after school, adults need a better means of transportation, and there needs to be some kind of positive activity in the town. And the proposed project will do just that by supplying Liberty with a direct route to Middletown and all its amenities with a pedestrian path, a connection to New York City and all its job opportunities, providing low-income housing adjacent to the train station, offering space and assistance for start-up businesses, creating a space for the youth of the town, and in turn creating a community center to fuel and inspire the long awaited changes Liberty desperately needs.





# OO4 Program

# Program

The programmatic demands of this proposal include providing the typical amenities of a train station, ample space for small businesses to rent, shared meeting rooms, CDC office space, youth rooms, and low-income housing.

## Program Narrative

At 6:30 am adults begin to arrive at the train station, boarding the line rail train that will take them into Middletown where they will catch the train into New York City. Some people have walked from the low-income housing development adjacent to the train station, others walked or rode their bikes from relatively close locations within Liberty, and others drove into town and parked at the station. Between 7:00 and 7:30 am more people arrive, several adults bringing their children with them. Children are dropped off in the youth room where they are provided with entertainment and activities until the school bus departs at 7:45, and daycare is provided for children too young for school. Adults either move onto the incubator portion of the building where they'll work for the day, the CDC center where they work, or board the train and head into Middletown.

People working in the incubator spaces work collaboratively throughout the day, sharing common areas and services. Clients of the upcoming businesses come to the building either by train, foot or car, and meet with business owners in their private offices or in meeting rooms. The CDC makes a point of monitoring the success of each small business owner, offering their expertise when necessary, and they also make future plans for the Town of Liberty to further improve the quality of life for the residents. When potential business owners come in the CDC provides that person with assistance, giving general and specific information invaluable to start up a business, and they also help the person determine the appropriate space for that person to rent, although the square footage is flexible and can be changed at any time.

Around 3:00 some students return for tutoring services in the youth rooms and other educational and recreational activities provided by the CDC. At 4:00 many of the small business owners pick up their children and head home for the day. Other students remain here until their parents get off the train, with the last child usually leaving around 7:00 pm. For children staying later, there is a kitchen to provide snacks, and the occasional meal.

## Train station

| Space        | Size [sf]                    | Quantity |
|--------------|------------------------------|----------|
| Ticket       | 250                          | 1        |
| Waiting area | 2000                         | 1        |
| Platform     | 1000                         | 2        |
| Restrooms    | 400                          | 4        |
| Bike Storage | 250                          | 1        |
| Information  | 100                          | 1        |
| Lobby        | 2000                         | 1        |
| <b>Total</b> | 6200 net sf<br>6800 gross sf |          |

## CDC Services

| Space             | Size [sf]                        | Quantity |
|-------------------|----------------------------------|----------|
| CDC office        | 1000                             | 4        |
| CDC meeting room  | 2000                             | 2        |
| Youth Rooms       | 5000                             | 3        |
| Incubator Offices | 10,000                           | tbd      |
| Incubator Common  | 2000                             | 3        |
| Postal Service    | 200                              | 1        |
| <b>Total</b>      | 39,200 net sf<br>43,000 gross sf |          |

**TOTAL:** ±50,000 SF

## Housing

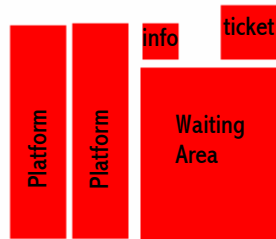
| Space        | Size [sf]   | Quantity |
|--------------|---|----------|
| Singles      | 400   | 10       |
| Doubles      | 600   | 10       |
| Triples      | 800   | 5        |
| <b>Total</b> | 14,000 net sf<br>15,000 gross sf<br><small>(not set in stone)</small> |          |

# Program

## Program Spaces



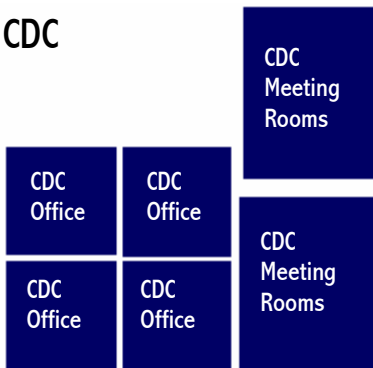
### Train



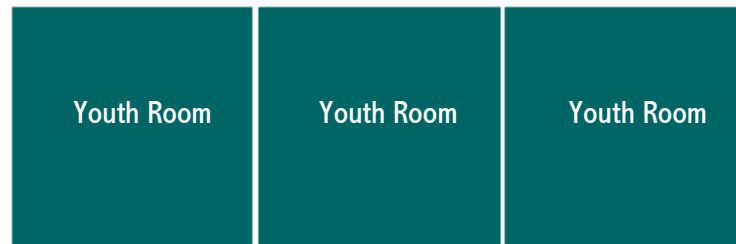
### Support



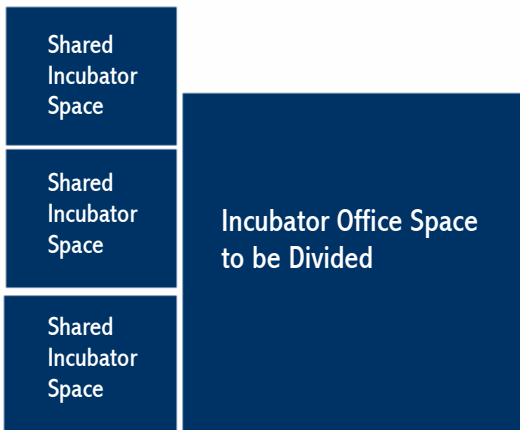
### CDC



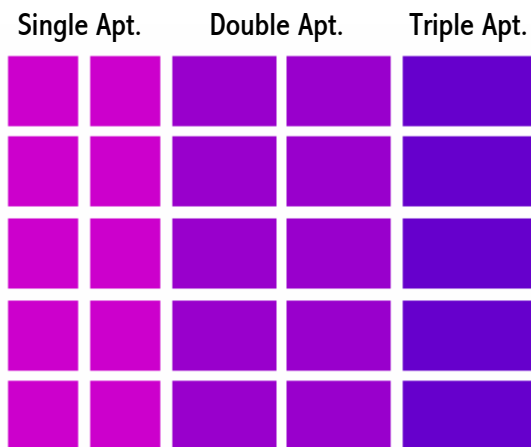
### Youth



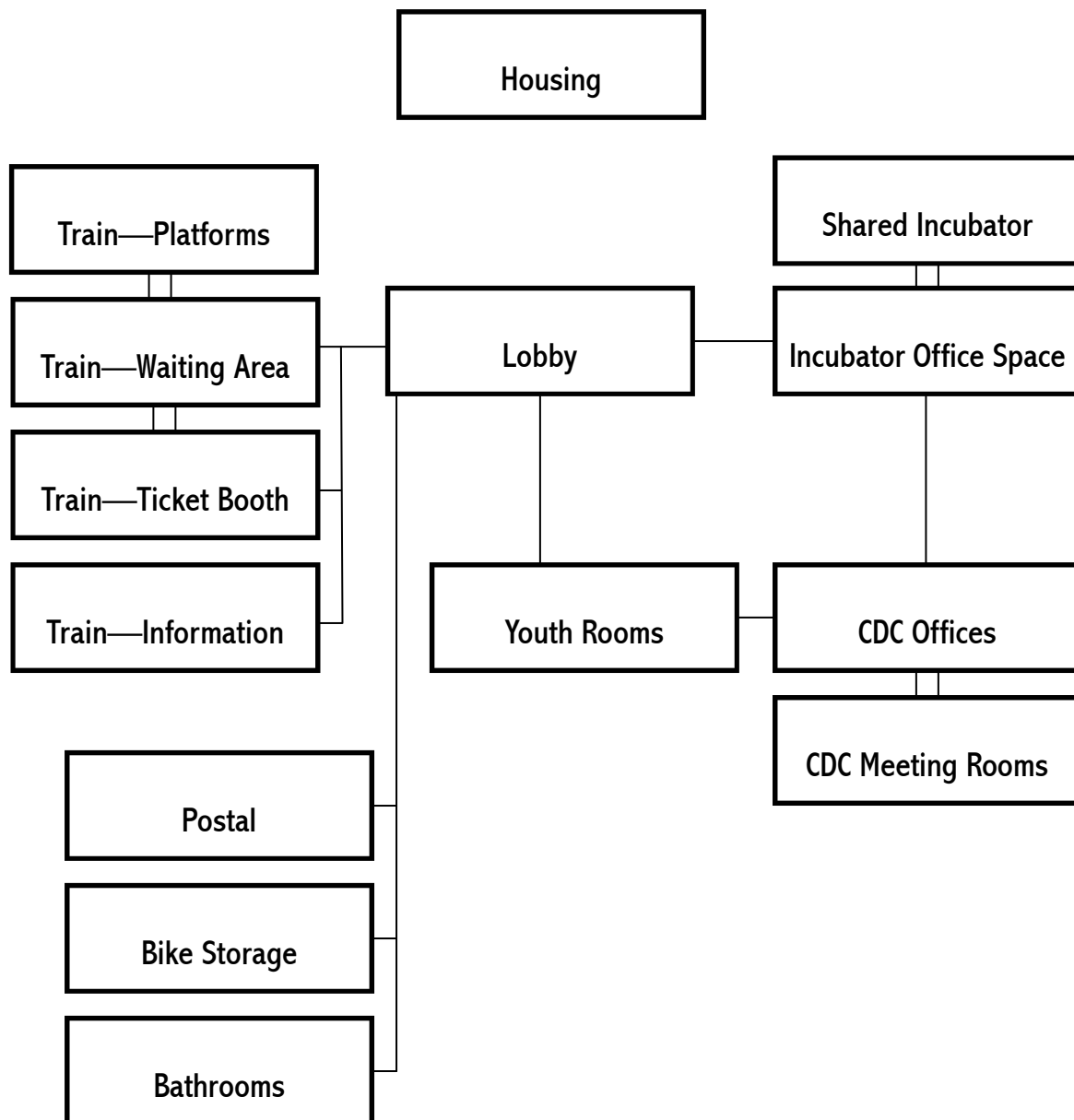
### Incubator



### Housing



## Program Diagram—Adjacencies





# FOUR Problem Themes & Architectural Intentions



# Problem Themes / Architectural Intentions

## Personal Statement

I do not believe that architecture needs to be important in order to be successful, and I think that many architects (or at least architecture students) forget this. A lack of a visual declaration of importance does not equate to a boring building. I do not believe in an architecture that declares “I’m a Baxter” but rather an architecture that is conscious of its context, knows its role, and serves its purpose in terms of functionality and aesthetics, and is still an interesting combination of spaces. Important architecture has its place, but it’s not a necessity to create architecture that says “Here I am!!!” every time a building is designed. Generally, I believe that every building, every house, should be unique and reflect the character of the site, the client, and the architect. In the case of the Proposed Liberty Station, it will be necessary to create “important” architecture, much in the same way the Guggenheim became a beacon and created a sense of place for the suffering city of Bilbao.

In terms of architecture and its influence on the world, I think that architects have an incredible responsibility to educate and stimulate. On an earth that has been destroyed for generations by careless, wasteful actions, it’s time to take action. Architects should be at the front of this movement, demonstrating the abilities of Green Architecture and inspiring people around the world (and especially the wasteful USA) to make changes in their everyday lives. The Proposed Liberty Station will capitalize on the opportunity to provide a sustainable design for the community.

Mathematics can be found at the root of everything, and the mathematical implications found in architecture are astounding. Through analysis of angles and fractal dimensions, complex schemes and shapes evolve with an overarching system that brings everything together in a cohesive manner. Through the analysis of mathematics that an architectural problem presents a program unravels that finds a mathematical, aesthetically pleasing solution that provides the ideal place for the inhabitants.

## Themes and Intentions

The basic intention of the proposed project is to revitalize Liberty; to help small businesses grow and prosper, to take the youth off the streets and give them more opportunities, provide affordable housing for residents, and create job and travel opportunities by creating a connection to Middletown and New York City. Architecturally, the intentions are to provide spaces that allow all these things to happen successfully, collaboratively, and to create a building that serves the people as well as inspires them.

There is a need to provide a method to express architectural intentions. Instead of arbitrary placement or pure sculptural work, order is required. Mathematics is a tool to help determine the interaction and arrangement of spaces and the characteristics of the façade (which should reflect the activity of the interior). There is not one mode that is appropriate for all architecture, but rather an independent system for each project based on the requirements, site, and inspiration.

The language of the existing site and surrounding architecture should always be analyzed and taken into careful consideration when designing architecture. Sometimes it is best to abide by the 'rules' set in place, and other times it is necessary to break the mold. The proposed project will break the mold (without creating a monstrosity), creating a new language for the dying town of Liberty, providing inspiration, and hopefully creating a beacon to help draw in people from surrounding towns.

In order to execute the proposed project, three important architectural themes will come into play: Sustainability, Mathematical Relationships as an Ordering System, and Form Follows Function.

*Sustainability*— To turn one's back on sustainability is ignorant and foolish. It's something that should be incorporated in all aspects of life, not just architecture and its construction. LEED documents and sustainable precedents will provide direction.

*Mathematical Relationships as an Ordering System*— This is where studies of fractals and proportions come into play. It's not something that is necessary to create architecture, but it's a means of determining geometries and rhythms in architectural designs.

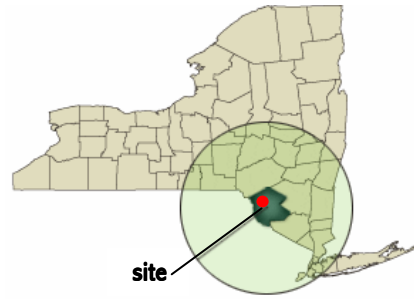
*Form Follows Function*— The most important thing about architecture is the way people use the spaces, and how well the spaces have been designed to suit the needs of its users. If the building doesn't serve its function, the aesthetic quality means nothing.



# OSG Site Identification

# Site Identification and Rationale

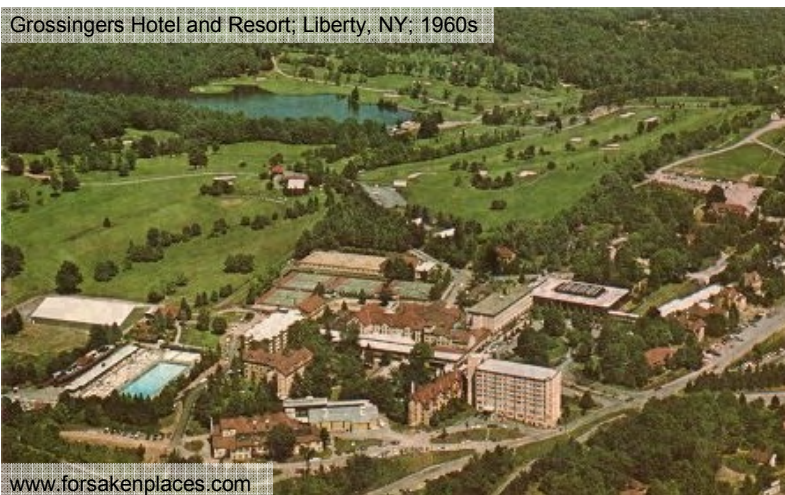
Location: Village of Liberty  
County of Sullivan  
Catskill Mountains  
State of New York



## Brief History of Liberty, New York

The first settlers came from Connecticut to area in about 1797, and soon there after tanneries and dairy farming became popular forms of industry. Due to the area’s natural, rural beauty and fresh air, many people began coming to the area for summer visits, and also, in the 1900s, for treatment of tuberculosis. The Catskills’ economy depended greatly on “summer people”, and as a result several hotels and resorts sprung up all over. Through the 1960’s the Catskills were a booming tourist attraction boasting golf courses, concerts, comedians, concerts, shows, and all sorts of entertainment. But as the popularity of air travel grew, the tourist population in the area drastically degraded, as did the economy. Currently the condition of the hotels has deteriorated (a result of both natural causes and vandalism), but Grossingers, Kutchers, The Pines, and the Concord are still standing as a reminder of what used to be, and also as a glimmer of hope for future prosperity in the area.

Today Bethel Woods Center for the Arts is the main attraction in the area, and the golf courses at Grossingers and the Concord are still maintained and used. In the town of Liberty there are several renovation projects, including the restoration of the historic Town & Country building shown below. Along Main Street The Liberty Museum displays both historical information and current artwork, Serendipity Café is opened during the school year and run by students, the Liberty Theatre (1924) has been converted into a movie theater that open and closes for business on a regular basis, and Lapolt Mini Park provides a small green space for the town and also has a small outdoor stage.



# Liberty Then and Now



<http://townofliberty.org>



<http://www.sc-democrat.com>



[www.buysullivancounty.com](http://www.buysullivancounty.com)



<http://www.sc-democrat.com>



<http://townofliberty.org>



<http://www.sc-democrat.com>

# Site Identification and Rationale

## Location

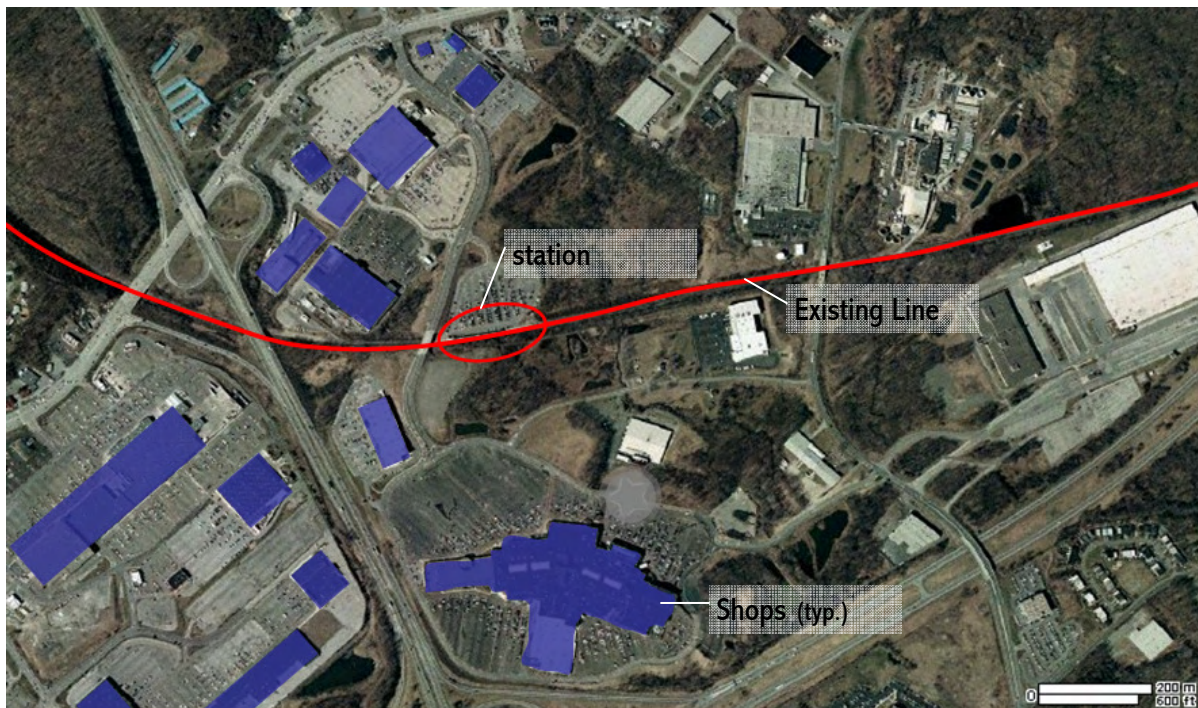
The site is located in the state of New York, in the heart of the Catskill Mountains, in Sullivan County, in the Town of Liberty and more specifically in the Village of Liberty on the corners of Lake Street, State Street, and Railroad Avenue. The site is across the street from the original train station, which is currently an AGWAY Pet Center. The proposed site currently houses a building that is used for storage and auctions, and there are also several removable storage units adjacent to the building. The site is near the heart of the town, and within walking/biking distance for much of the town's population. On a larger scale, the Liberty site will directly connect to the Middletown Station, which will then provide a connection to New York City. At the Middletown site, pedestrian bridges will be implemented to facilitate pedestrian travel from the train station to the commercial amenities adjacent to the station.



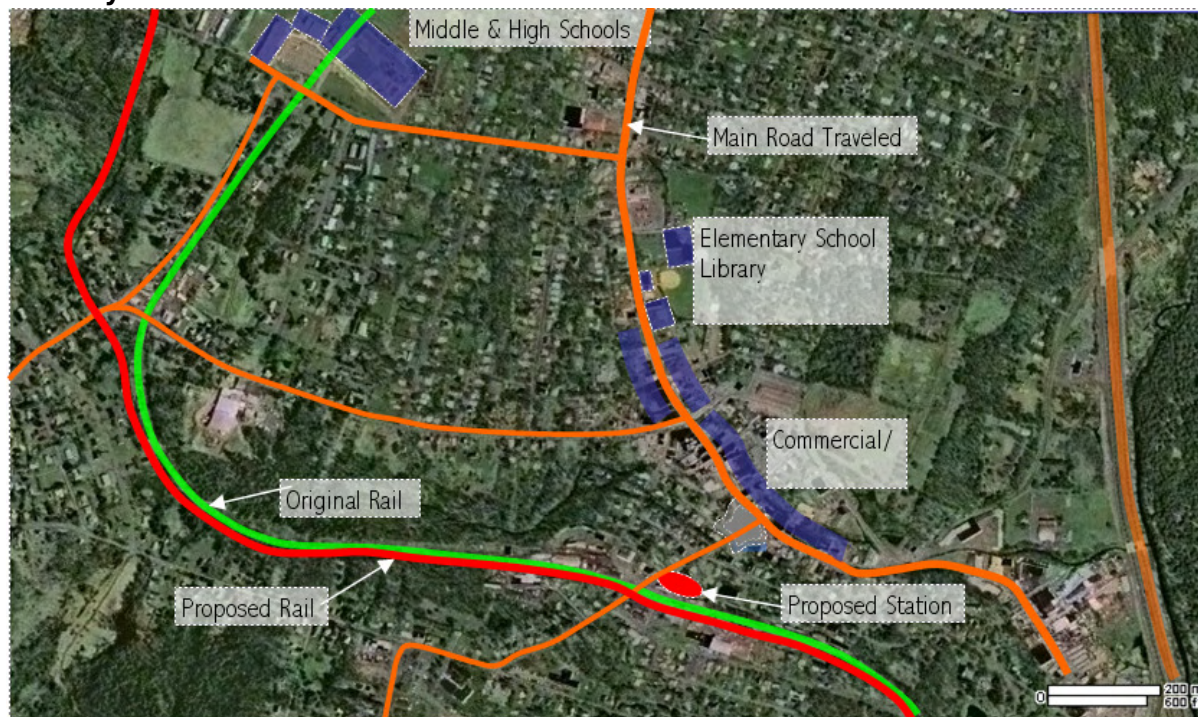
## Liberty—Middletown Connection



### Middletown Station



### Liberty Station





# Site Identification and Rationale



Existing Building to be used for Train Station

State Street  
Original Location of O&W

Storage Units to be Removed

## Proposed Site Boundaries

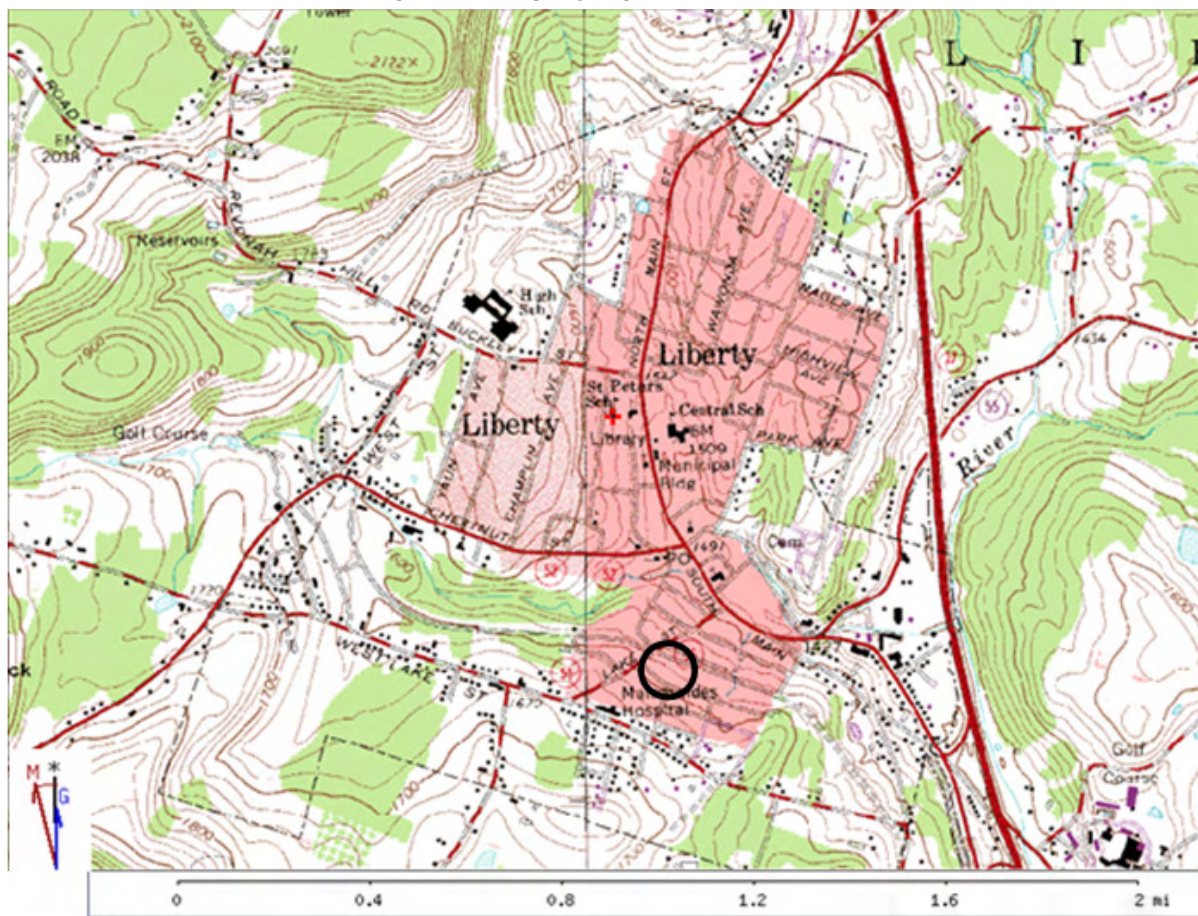




BOCES building to be preserved (?)

AGWAY Original Station Location

### Broader Site Location Map with Topographic Information

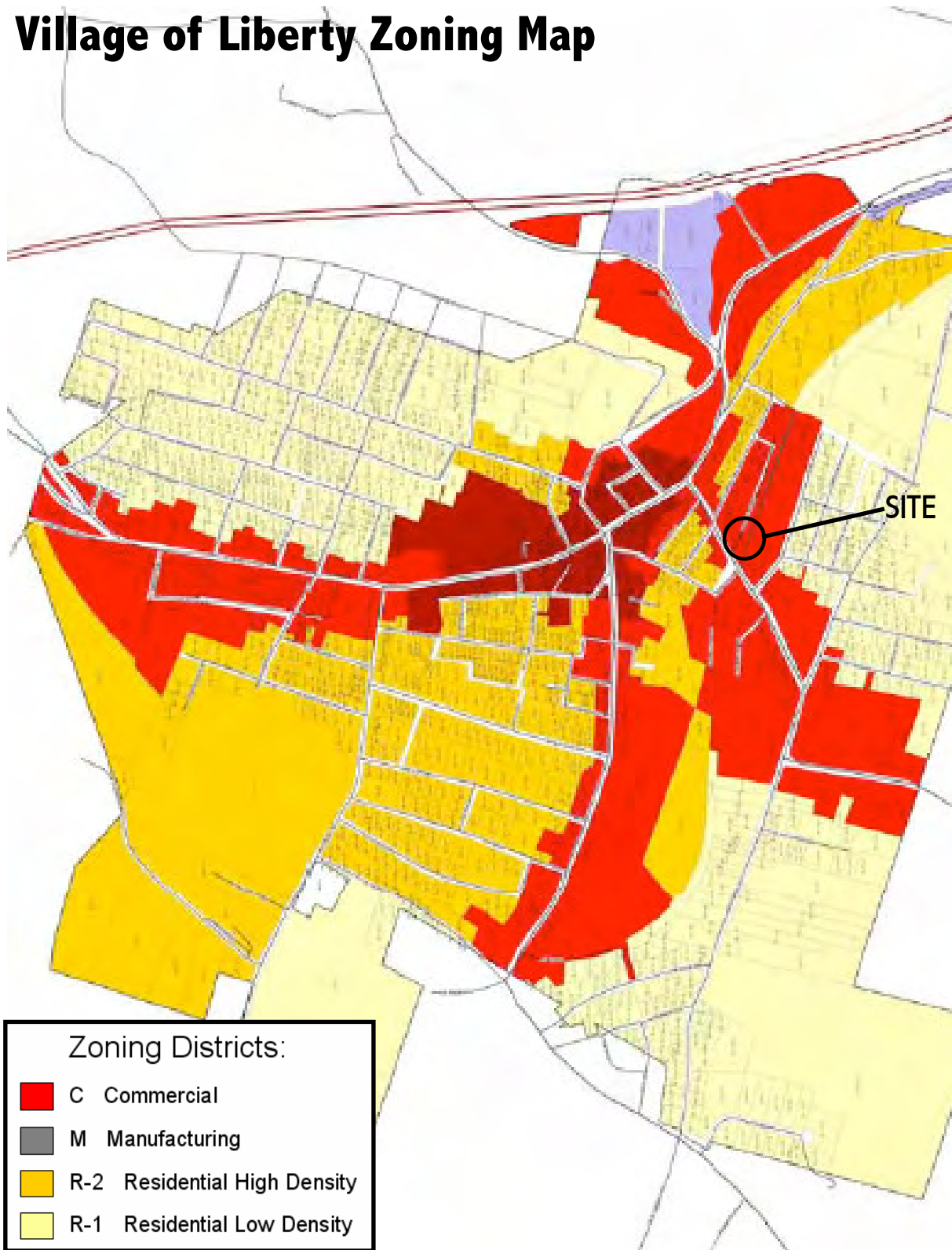




# OOZ Regulatory Environment

# Regulatory Environment

## Village of Liberty Zoning Map



|                                  |   |          |
|----------------------------------|---|----------|
| <b>District Intent:</b>          | <b>C Commercial:</b> This District is intended to provide areas within the Village for the development of commercial businesses and enterprises that serve the service needs of Village residents as well as the traveling public.  |          |
| <b>Principal Permitted Uses:</b> | Agriculture (§87-00)<br>Bed and Breakfast (§87-00)<br>Cemeteries<br>Essential Services (§87-00)<br>Nurseries and Greenhouses<br>One-Family Detached Dwellings<br>Personal Service Shops<br>Places of Worship, Parish Houses & Parsonages<br>Public Buildings<br>Public Parks and Playgrounds  |          |
| <b>Special Uses (§87-61) :</b>   | Animal Hospitals<br>Auto Body Repair<br>Auto Service Stations<br>Bowling Alleys<br>Building Supply and Lumber Yards<br>Business and Professional Offices<br>Day Care Facilities (§87-00)<br>Eating and Drinking Places<br>Funeral Homes<br>Health and Senior Care Communities (§87-00)<br>Home Occupations (standard)<br>Laundry and Cleaning Establishments<br>Machine Shops<br>Manufactured Home Parks<br>Multi-Family Dwellings (§87-00)<br>Nursery Schools<br>Outdoor Sales<br>Planned Unit Development (§87-00)<br>Printing Operations<br>Private Community Recreational Facilities (§87-00) |          |
| <b>Accessory Uses (§87-15) :</b> | Customary incidental uses and structures<br>Minimal impact home occupations (§87-00)  |          |
| <b>Development Standards:</b>    | Minimum Lot Area:   | 4,000 sf |
|                                  | Minimum Lot Width:  | 50 ft    |
|                                  | Minimum Lot Depth:  | 80 ft    |
|                                  | Minimum Front Yard:   | 20 ft    |
|                                  | Minimum Side Yard:  | 30 ft    |
|                                  | Min. Side Yards Combined:   | 60 ft    |
|                                  | Minimum Rear Yard:  | 30 ft    |
|                                  | Min. Floor Area/Dwelling Unit:  | 800 sf   |

A Special Uses Permit will be required for the Business Incubator spaces and the Daycare facilities. Although 'Public Buildings' are included, most likely a variance will be required to build a train station on the grounds; it would most probably be granted since the old rail ran through there, and the station would provide a great service to the community.

# Regulatory Environment

## New York State Building Code

### Chapter 3: Use and Occupancy Classification

#### 303.1 Assembly Group A

A-3: Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to:

- Community Halls
- Exhibition Halls
- Waiting Areas in Transportation Terminals

**304.1 Business Group B:** the use of a building or structure for office, professional or service-type transactions, including:

- professional services (architects, attorneys, dentists, physicians, engineers, etc.)

#### Educational Group E

305.1 Educational Group E

305.2 Day Care

### Chapter 10: Means of Egress

Ceiling Height: Minimum of 7'-0"

Floor: Slip-resistant surface

Egress Continuity; path shall not be interrupted by any building element

Occupant Load:

Maximum Floor Area Allowances per Occupant:

Assembly

- Concentrated (chairs only, not fixed) 7 sf
- Standing Space 5 sf
- Unconcentrated (tables & chairs) 15 sf

Business Areas: 100 sf

Educational (classroom): 20 sf

Egress Width per Occupant Served

Without Sprinkler System

Stairways: 0.3 inches per occupant

Other: 0.2 inches per occupant

With Sprinkler System

Stairways: 0.2 inches per occupant

Other: 0.15 inches per occupant

Minimum Number of Exits for Occupant Load:

1-500 Occupants: 2 Exits

501-1000 Occupants: 3 Exits

More than 1000: 4 Exits

## New York State Building Code

### Chapter 11: Accessibility

#### Section 1104: Accessible Route

- Provide: accessible routes within site, accessible parking, accessible passenger loading zones, accessible sidewalks
- At least one accessible route connecting buildings/facilities on site
- Common use circulation paths within employee work areas shall be accessible routes
- At least one accessible route shall connect all levels of the building
- Accessible route(s) shall coincide with general public circulation

#### Section 1105: Accessible Entrances

- at least 50% of all entrances shall be accessible

#### Section 1106: Parking and Passenger Loading Facilities

| Parking Spaces | Minimum Required<br>Accessible Spaces |
|----------------|---------------------------------------|
| 1-25           | 1                                     |
| 26-50          | 2                                     |
| 51-75          | 3                                     |
| 76-100         | 4                                     |
| 101-150        | 5                                     |
| 151-200        | 6                                     |
| 201-300        | 7                                     |
| 301-400        | 8                                     |
| 401-500        | 9                                     |
| 500-1000       | 2% of total                           |

- provide signage with international symbol
- located at shortest accessible route

#### Section 1109: Other Feature and Facilities

- accessible toilet and bathing facilities
- accessible drinking fountains
- passenger elevators on an accessible route

#### Section 1110: Signage

- directional signage indicating nearest accessible route



# Regulatory Environment

## Town of Liberty Code

### Parking:

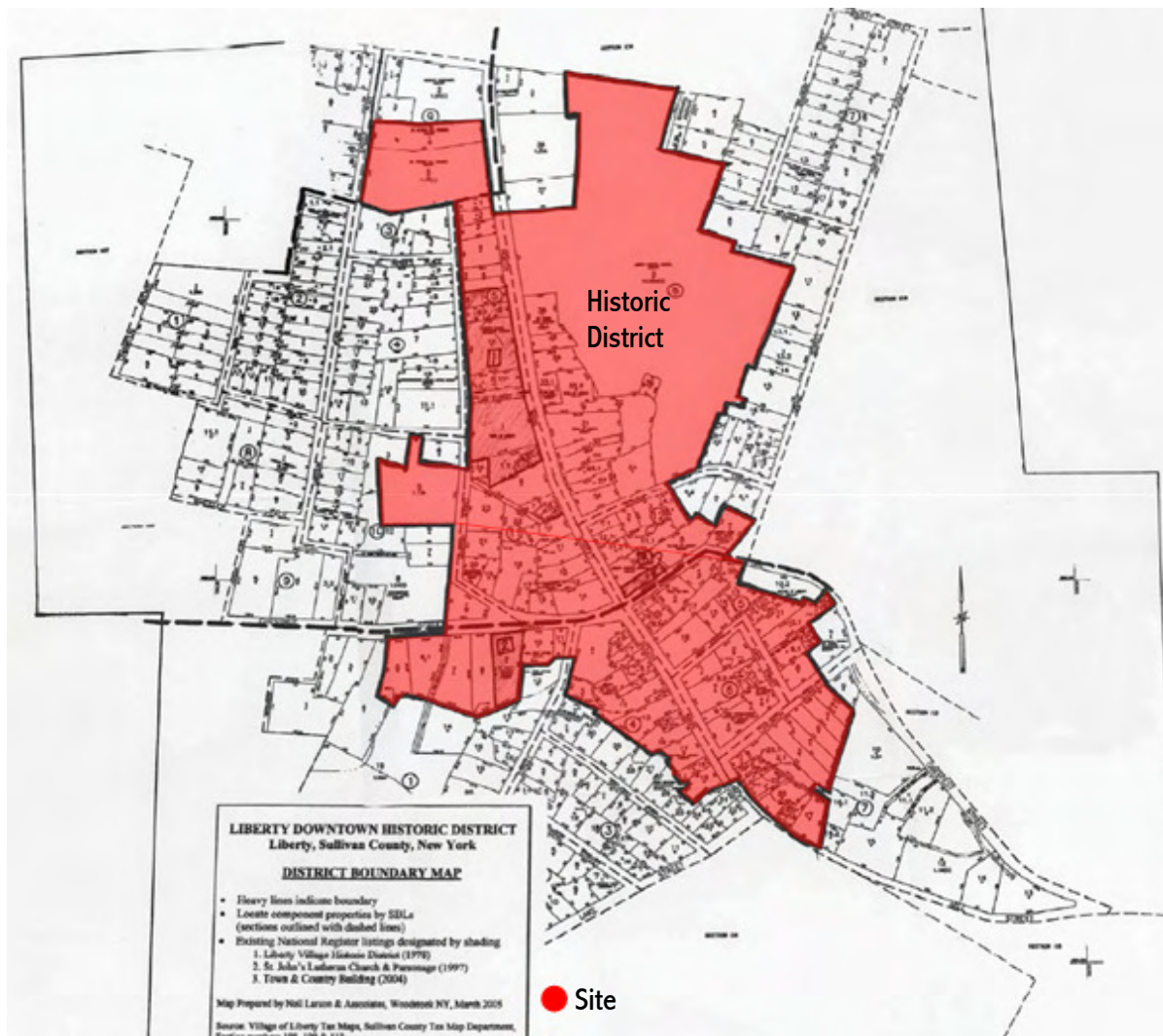
Commercial Uses: 1 space per 250 sf floor area

Offices: 1 space per 300 sf floor area

### Landscaping:

- All lots shall be graded and seeded
- Landscaping, trees, and plants required shall be planted in a growing condition
- Landscaping to be protected by barriers, when necessary
- preservation of mature shade trees, ridgelines, vegetation, and unique site features (like stone walls) shall be required to the maximum practical extent
- if adjacent to residential area, a 30' buffer zone is required
- Front landscaped area is required
- landscaped parking area
- each separate landscaped area shall contain a minimum of 100 sf, shall be planted with grass or shrubs and shall include at least one tree of not less than two-and-one-half-inch caliper
- a landscape plan shall be prepared, promoting attractive development, defining vehicular and pedestrian ways and open spaces, and plant materials should be of complementary character to buildings, be realistic in terms of maintenance, and plants must be winter hardy to Zone 4.

## Village of Liberty Historic District



The Site is located outside of the historic district, so those regulations do not need to be taken into account. Although the proposed project will be considerate of the existing language, the response will be more rebellious, allowing the building to take on its own forms and be born from an architectural language unique to the area.



# 008 Precedent Analysis

## Incubator Buildings

Incubator buildings house small companies (often start-up firms) and are organized to allow for tenant-shared secretarial services, conference rooms, telecommunications equipment, etc. Often, buildings lease an average of 500-2000 square feet of flexible office space, usually for a term no longer than two years. The train station at Liberty will house similar facilities, providing a flexible work environment that contains shared services and spaces, and also has learning and community involvement components.



### Manchester Incubator Building

- Goal: get early-stage companies up and running as quickly as possible
- Program/Services include: offices, meeting rooms, large informal interaction areas, restaurant, broadband access, general office and cleaning services; In-house mentoring and professional services

### Cambridge Innovation Center

- Program includes: reception area, 4000 sf meeting space, corner conference rooms & board room, equipped kitchen, showers
- Largest flexible office space in Boston, housing over 150 companies
- Individual offices available for 1-4 people
- "bays" offer configurations for 1-36 people
- Close to Red Line MBTA station



### UCSF Mission Bay Community Center

- Place for intellectual and cultural stimulation, socialization, recreation and relaxation
- Program Includes: recreation fitness complex, business center with "open office" workstations, conference center, assembly room, pub, kitchen, banquet room, student services and activity center, day-care, pool, lockers
- Focal point on campus; landmark

### Beddington Zero Energy Development (BedZED)

- zero fossil energy development
- UK's largest eco-village
- 100 homes, community facilities, workspace for 100
- Affordable, attractive, environmentally responsible
- Sustainable features include: recycle water & materials, solar energy, low energy lighting, sustainable materials, etc



# Precedent Analysis

## Hanawa Station and Civic Center

Location: Hanawa, Japan

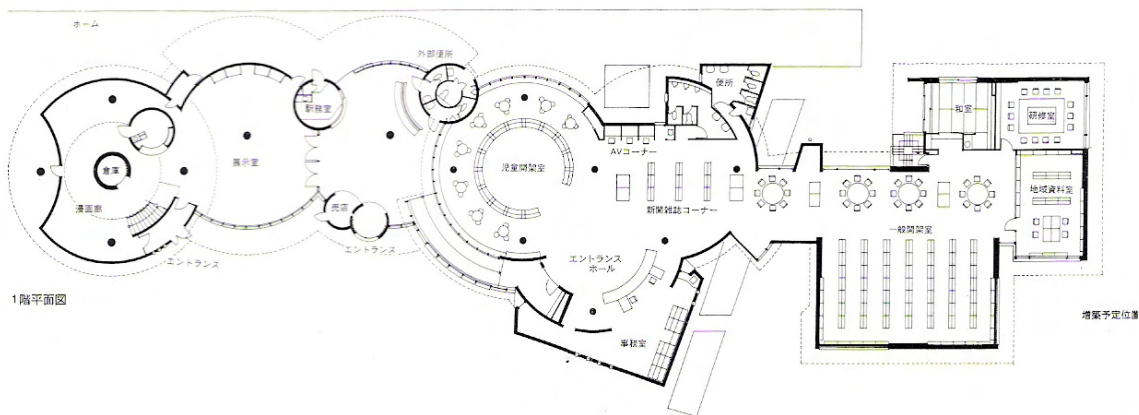
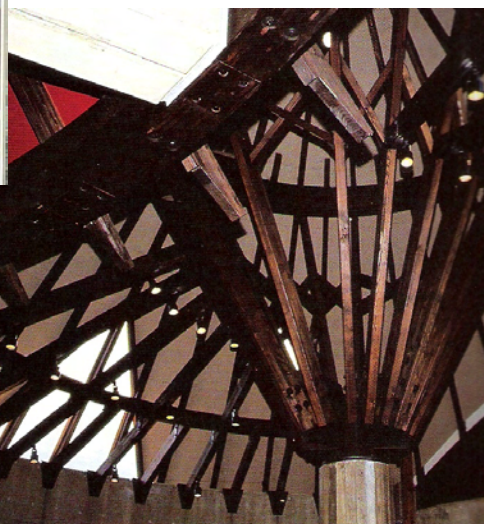
Completed: 1996

Architect: Kuniaki Ito

Engineers: Shigeru Aoki, Yutaka Miwa, Hiroshi Yashiro

The Hanawa Station and Civic Center was built in a mountainous area in Hanawa, Japan - a town with a population of 12,000 people. The town faced problems with a desertion, and when a new train station was needed it was decided that it should help revive the town center. The station serves civic function by including a library, tearoom, and an exhibition gallery, in addition to the regular amenities of a train station.

The design is meant to be conscientious of the natural surroundings and respond to the nearby mountains, and traditional Japanese elements have been incorporated as well. The building is composed of six circular huts, and the unique building has succeeded in increasing the number of visitors to the area.

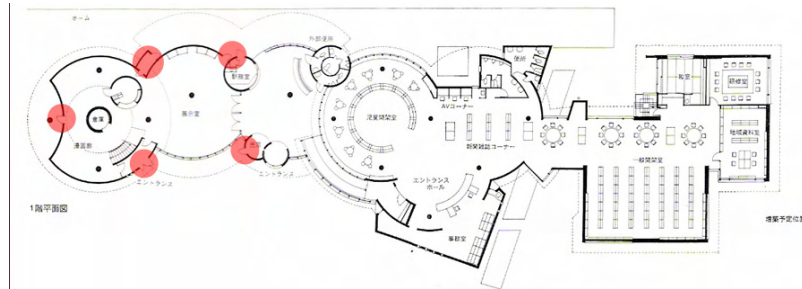




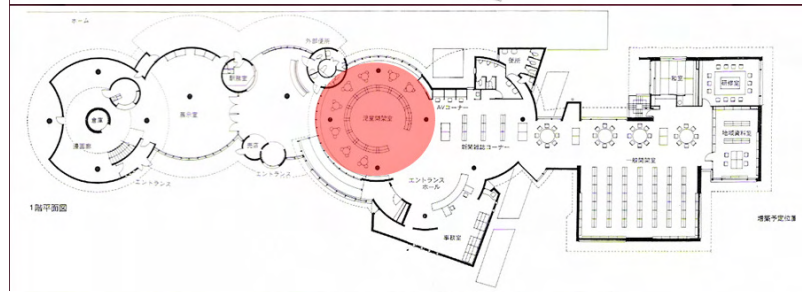
# Precedent Analysis

## Hanawa Station and Civic Center

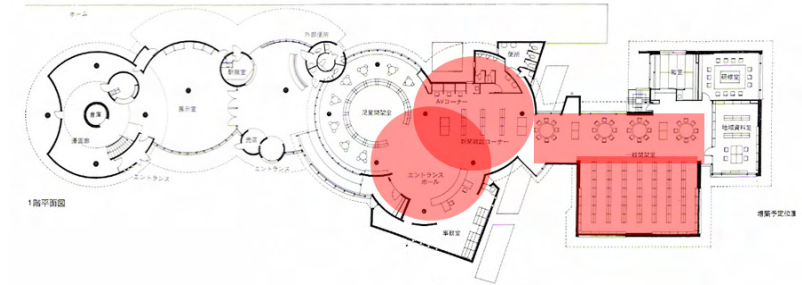
Entrances



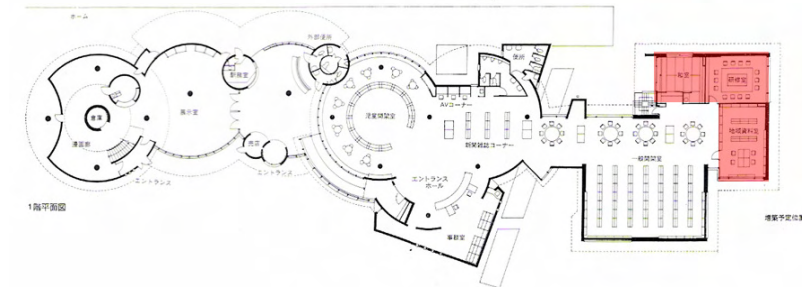
Station Facilities  
Waiting Area  
Ticket Office



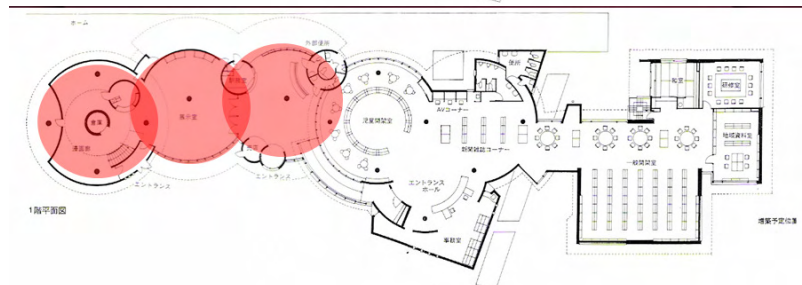
Library



Traditional  
Tatami room  
Tearoom



Exhibition Space







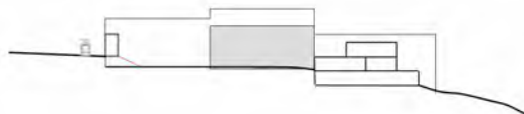
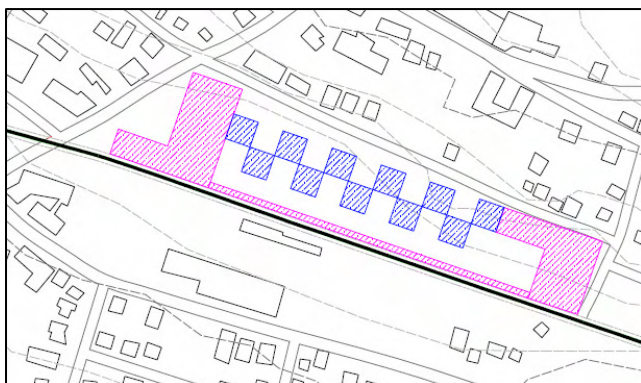
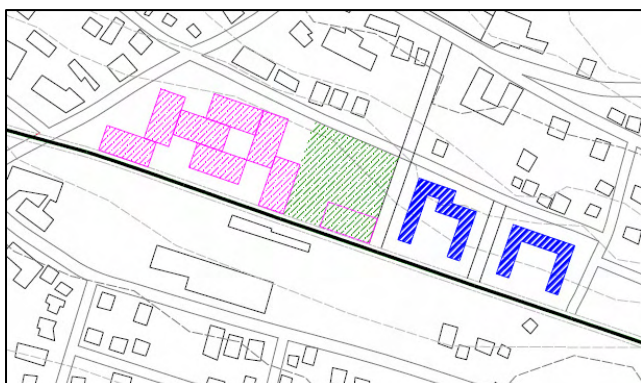
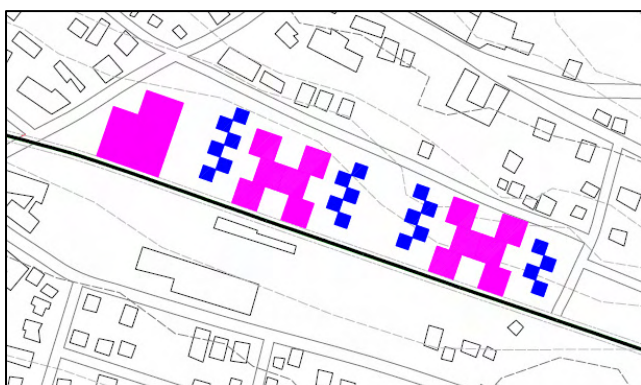
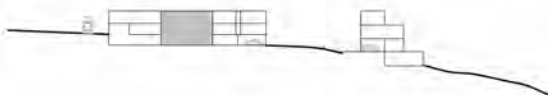
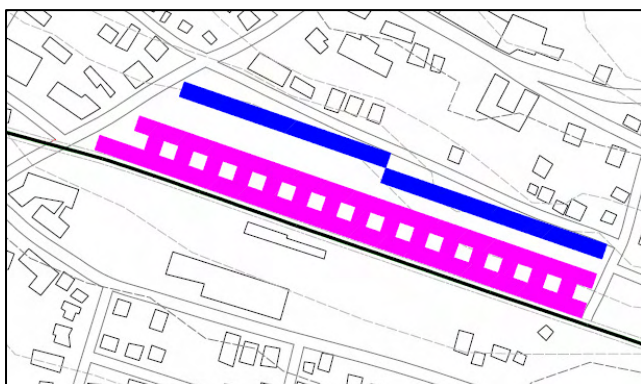
# OOO

## Design Process

# Design Process

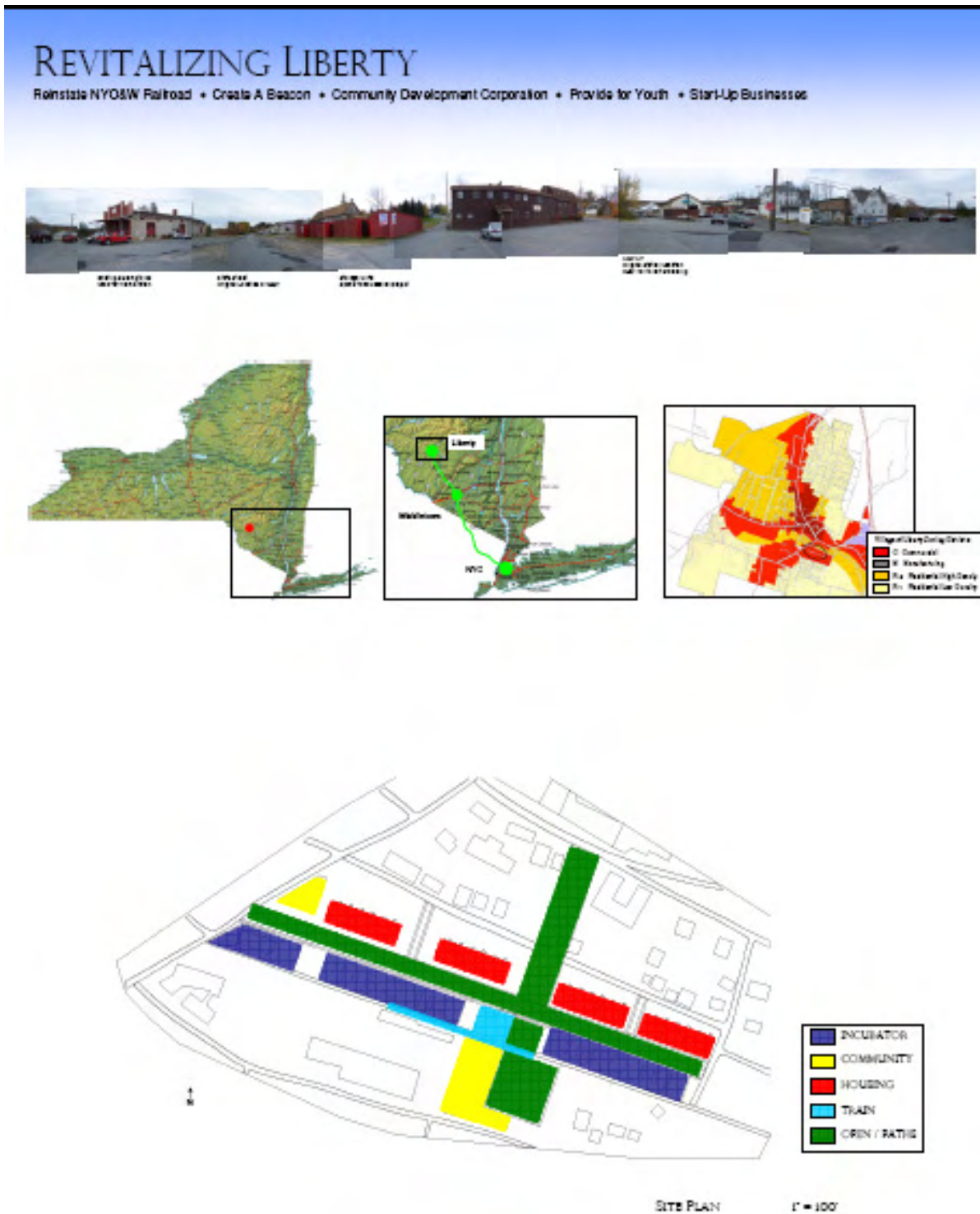
## Organizational Alternatives





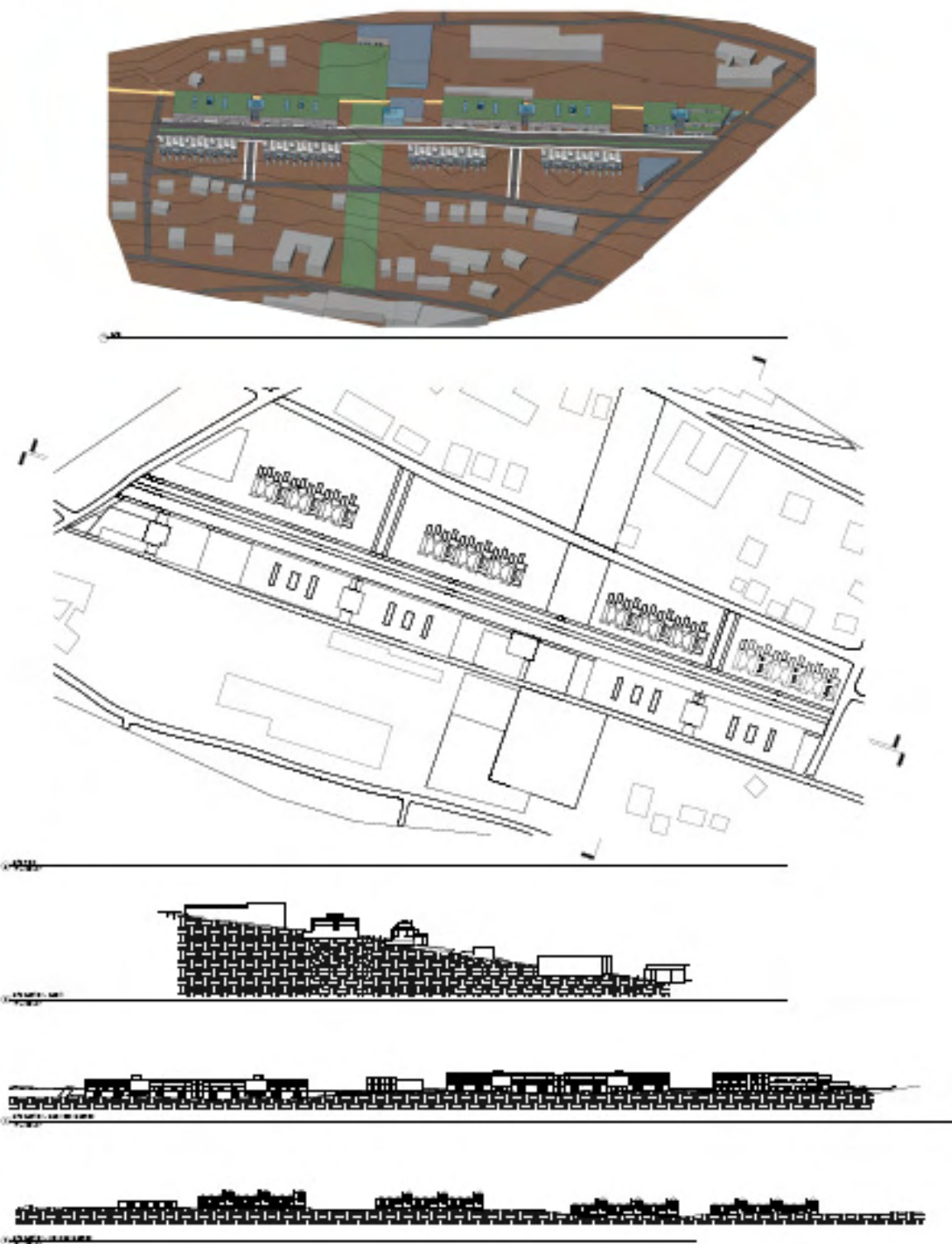
# Design Process

## Status at Mid-Review



# Revitalizing Liberty

Rehabilitate NYC&W Railroad • Create a Basecase • Community Development Corporation • Provide for Youth • Start-Up Businesses • Housing

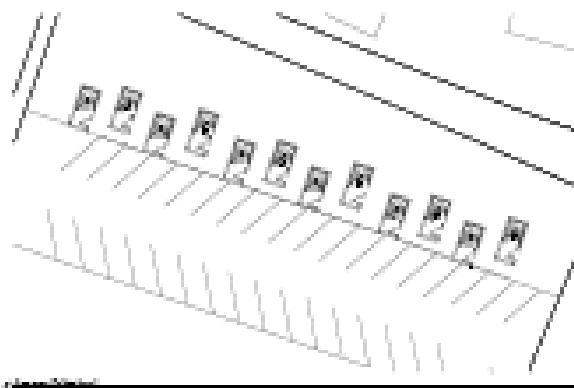
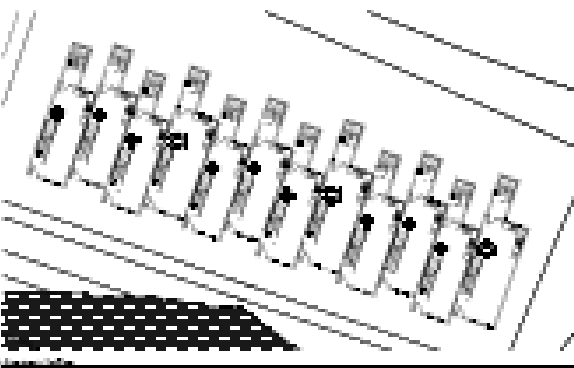
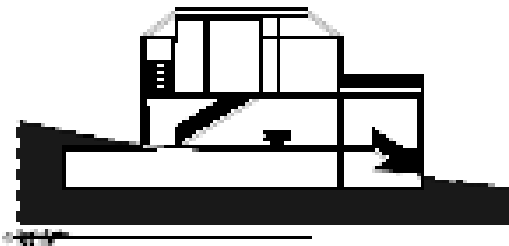
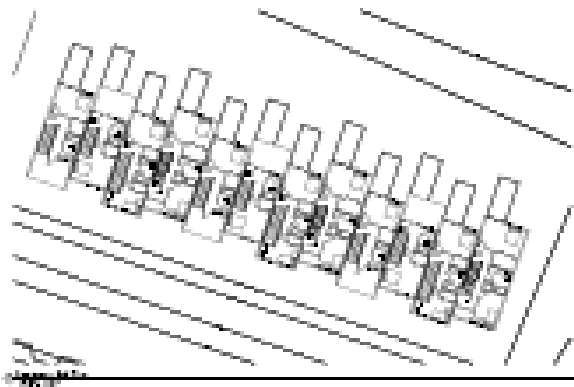




## Revitalizing Liberty

RENTAL HOUSING PROJECT • CHINA BARRACKS • COMMUNITY DEVELOPMENT CORPORATION • POINTS OF VIEW • BUILT UP BUSINESS • HOUSING DESIGN CENTER

### Housing



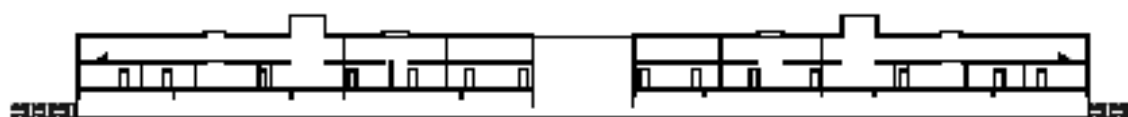
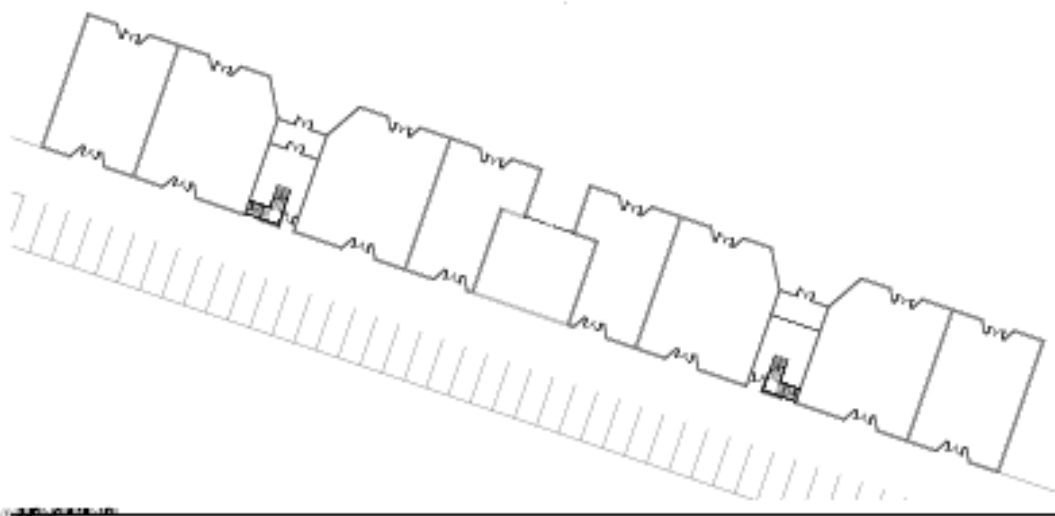
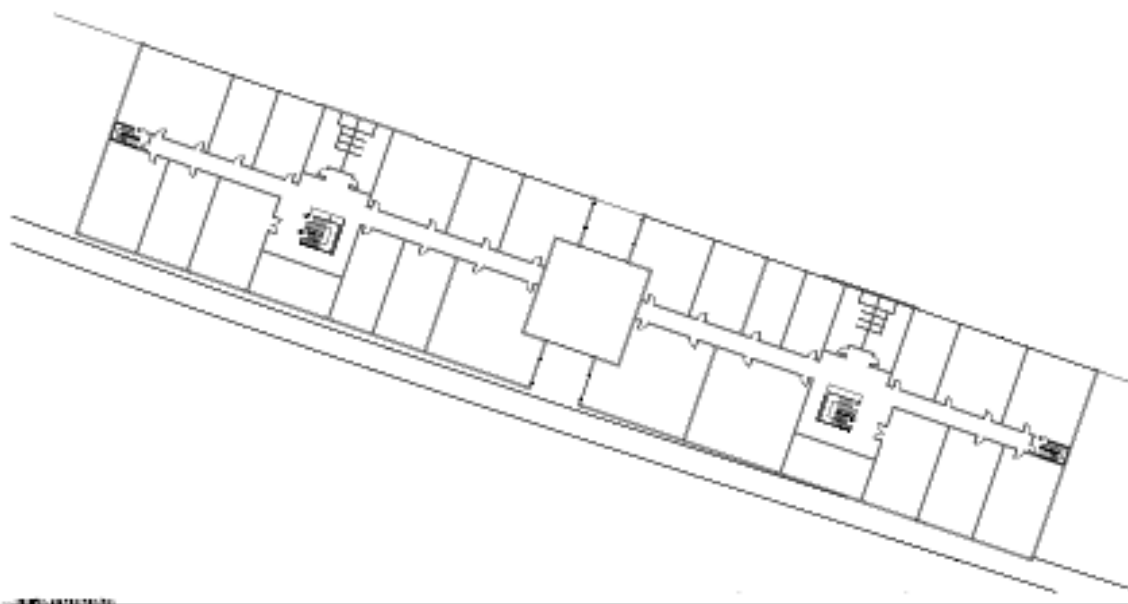
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# Revitalizing Liberty

Reinstate NYC&W Railroad • Create a Base • Community Development Corporation • Provide for Youth • Start-Up Businesses • Housing

Megan Carter

## Business Incubator

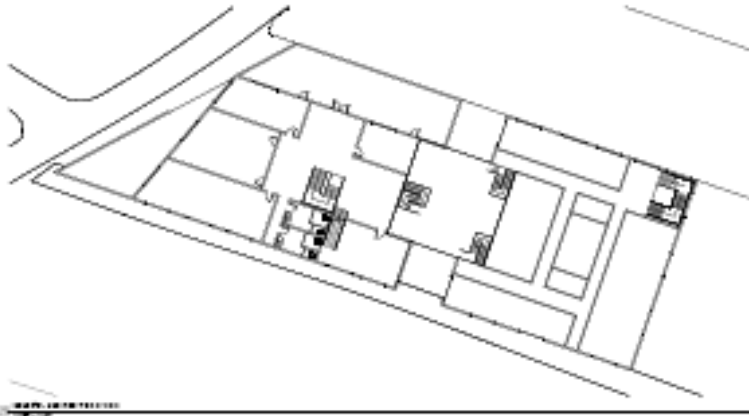


# Design Process

## Revitalizing Liberty

Reinstate NYC&W Railroad • Create a Beacon • Community Development Corporation • Provide for Youth • Start-Up Businesses • Housing  
Megan Ginter

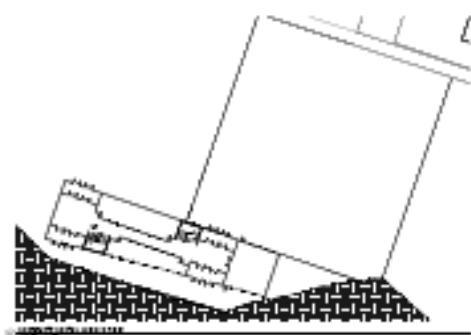
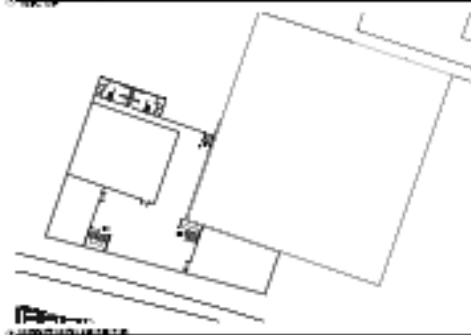
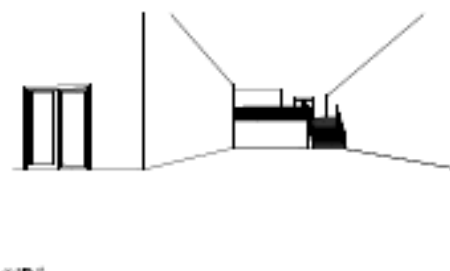
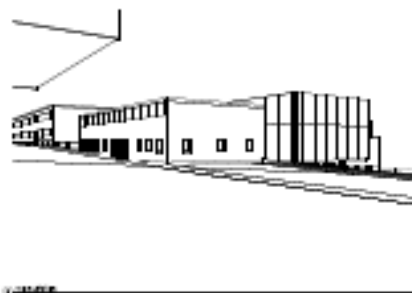
Business Incubator - at corner



# Revitalizing Liberty

Reinstate NYC&W Railroad • Create a Garage • Community Development Corporation • Provide for Youth • Start-Up Businesses • Housing

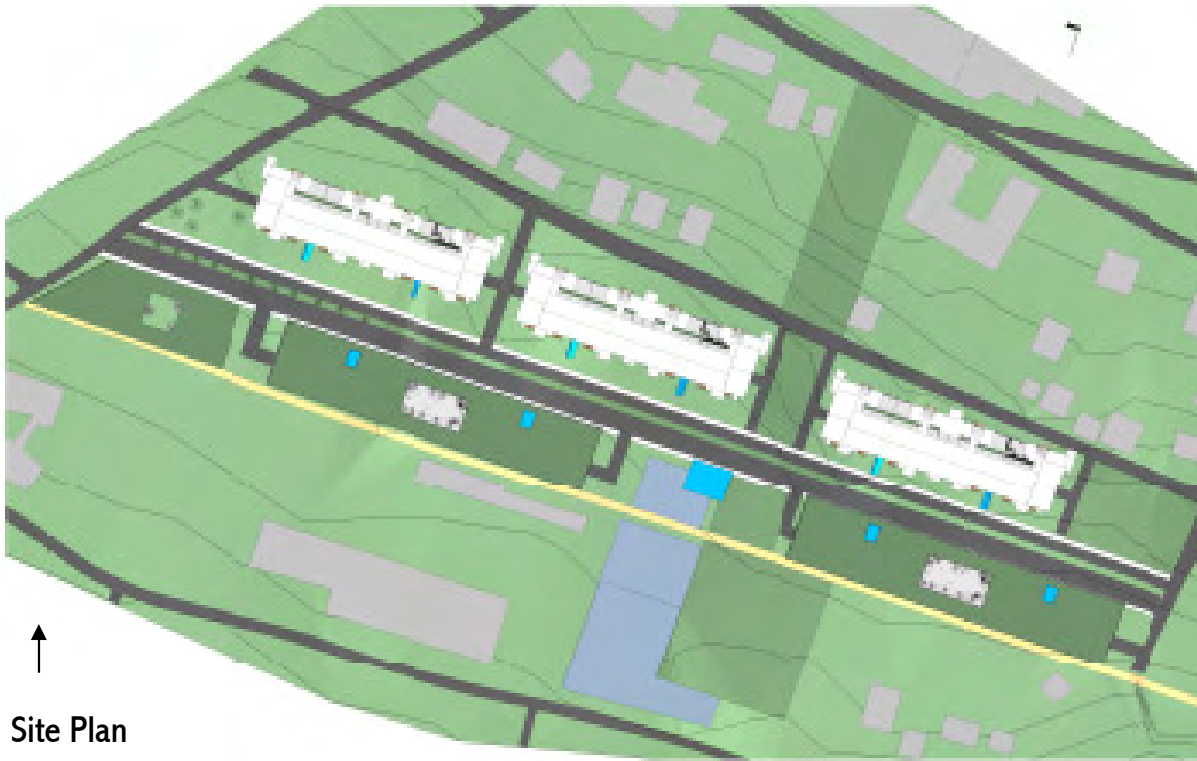
Megan Carter





# Final Project

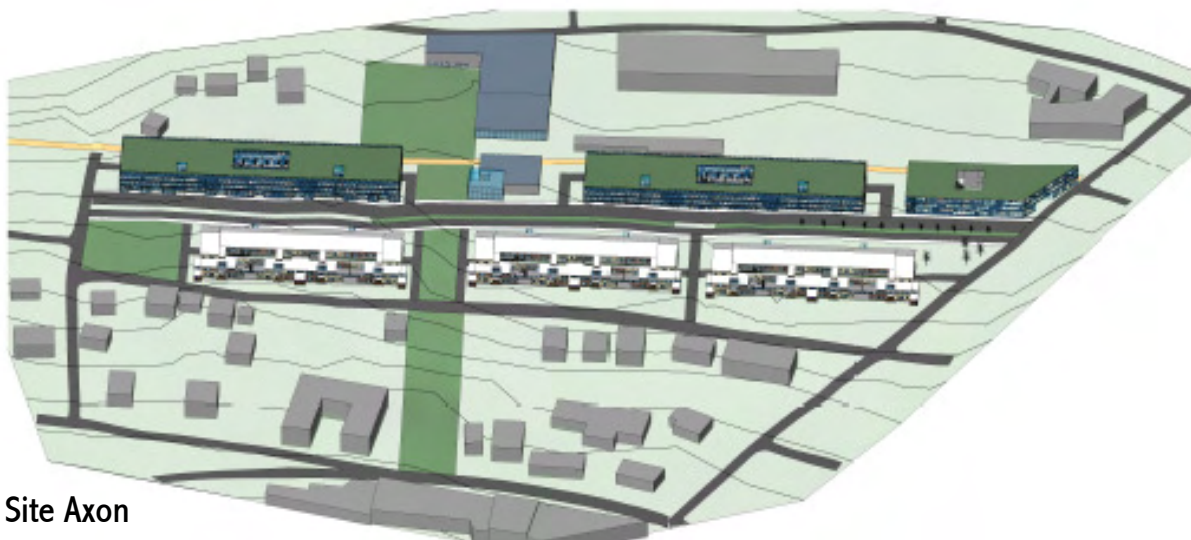
# Final Project



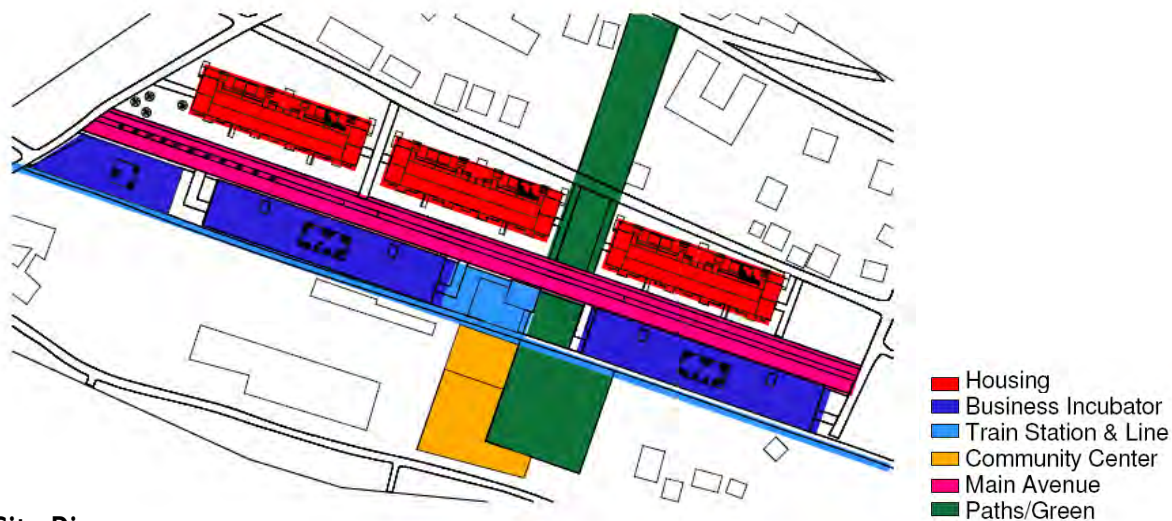
Site Plan



Site Section



Site Axon



Site Diagram

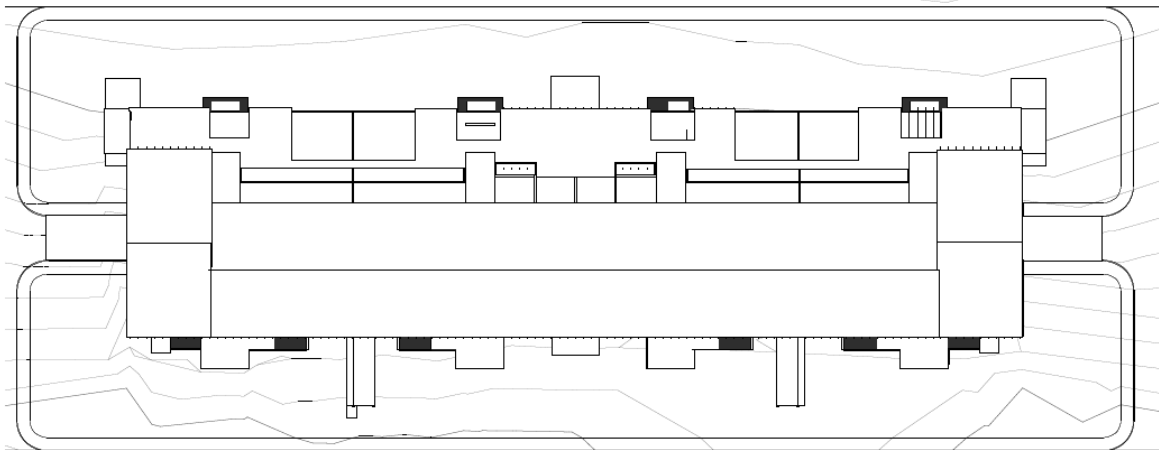
This project is designed to become its own mini-community, providing all the necessary amenities (housing, travel, retail, work, exterior spaces), creating opportunities, and bringing people of all walks of life together as a community. In a town that is currently lacking a center and a sense of pride, this project aims to bring the community together and create an example of what the town could start to become.

The site is divided along the longer axis into three main 'bars': housing, exterior space/avenue, and the business component. The avenue dividing the incubator/retail and the housing both acts as a buffer, and provides the primary access to the site, becoming a main road and an important place for interaction. A path creates a direct connection between Main Street and the site, terminating at the community center and serving as an exterior gathering space. This space is intended to be used as a very open, public area used for barbeques/picnics, to play, for town events, showing movies at night on a screen on the side of the community center, etc.

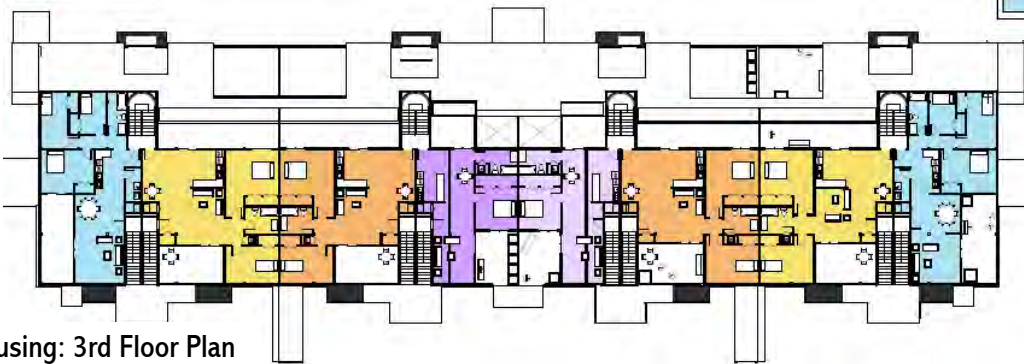
| Program                            |                   |
|------------------------------------|-------------------|
| Business Incubator Buildings       | 200,000 sf        |
| Facilities for Start-Up Businesses |                   |
| Retail                             |                   |
| Small Businesses                   |                   |
| Housing                            | 135,000 sf        |
| 36 One-Bedroom Apartments          |                   |
| 33 Two-Bedroom Apartments          |                   |
| 6 Three-Bedroom Apartments         |                   |
| Train Station                      | 12,000 sf         |
| Community Center                   | 30,000 sf         |
| <b>Total Size:</b>                 | <b>377,000 sf</b> |



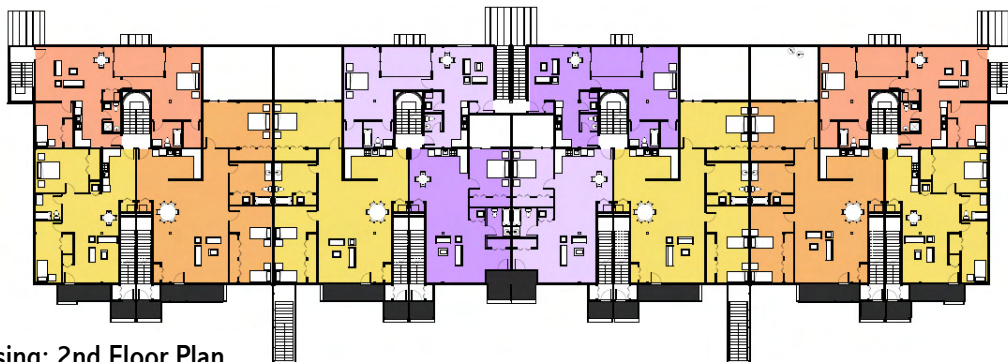
# Final Project



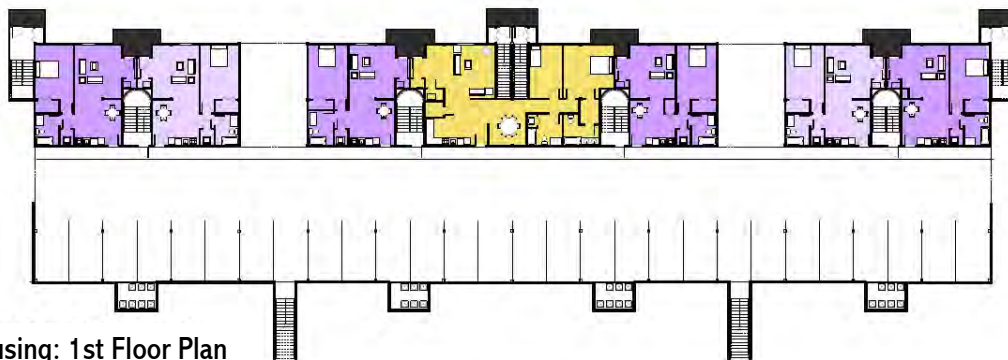
Housing: Site Plan



Housing: 3rd Floor Plan

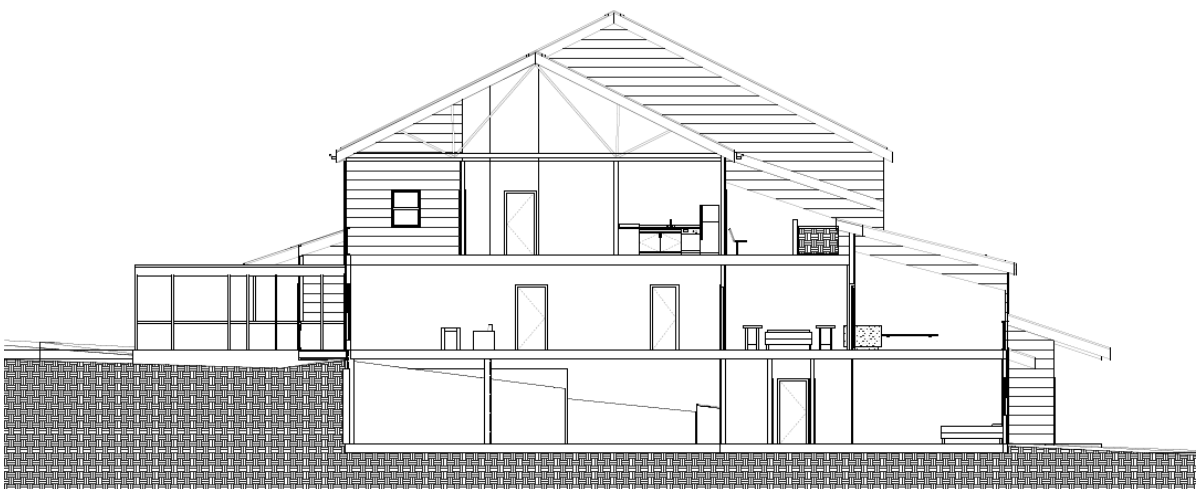
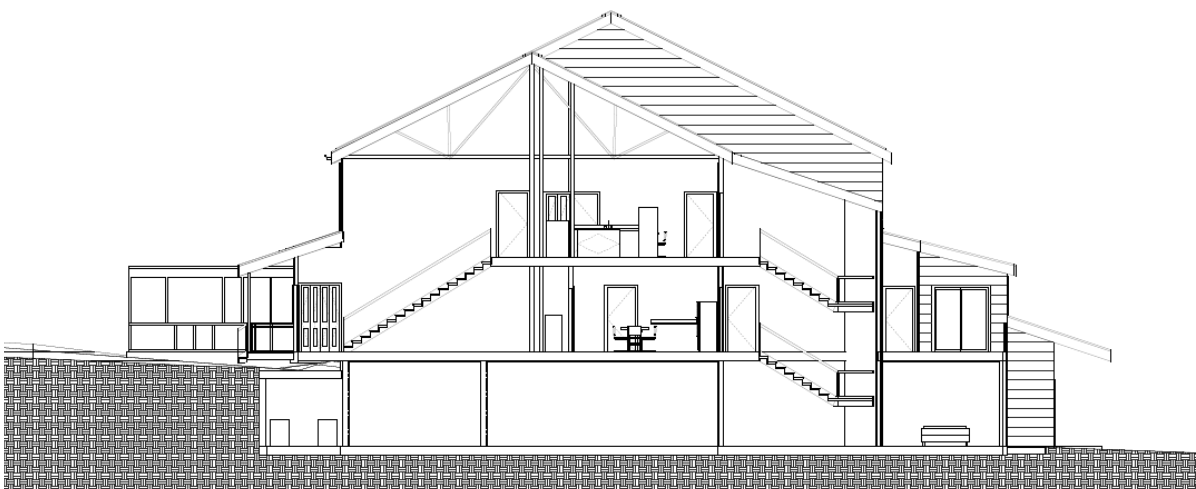
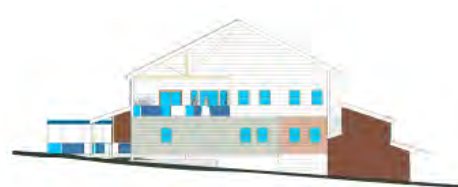


Housing: 2nd Floor Plan



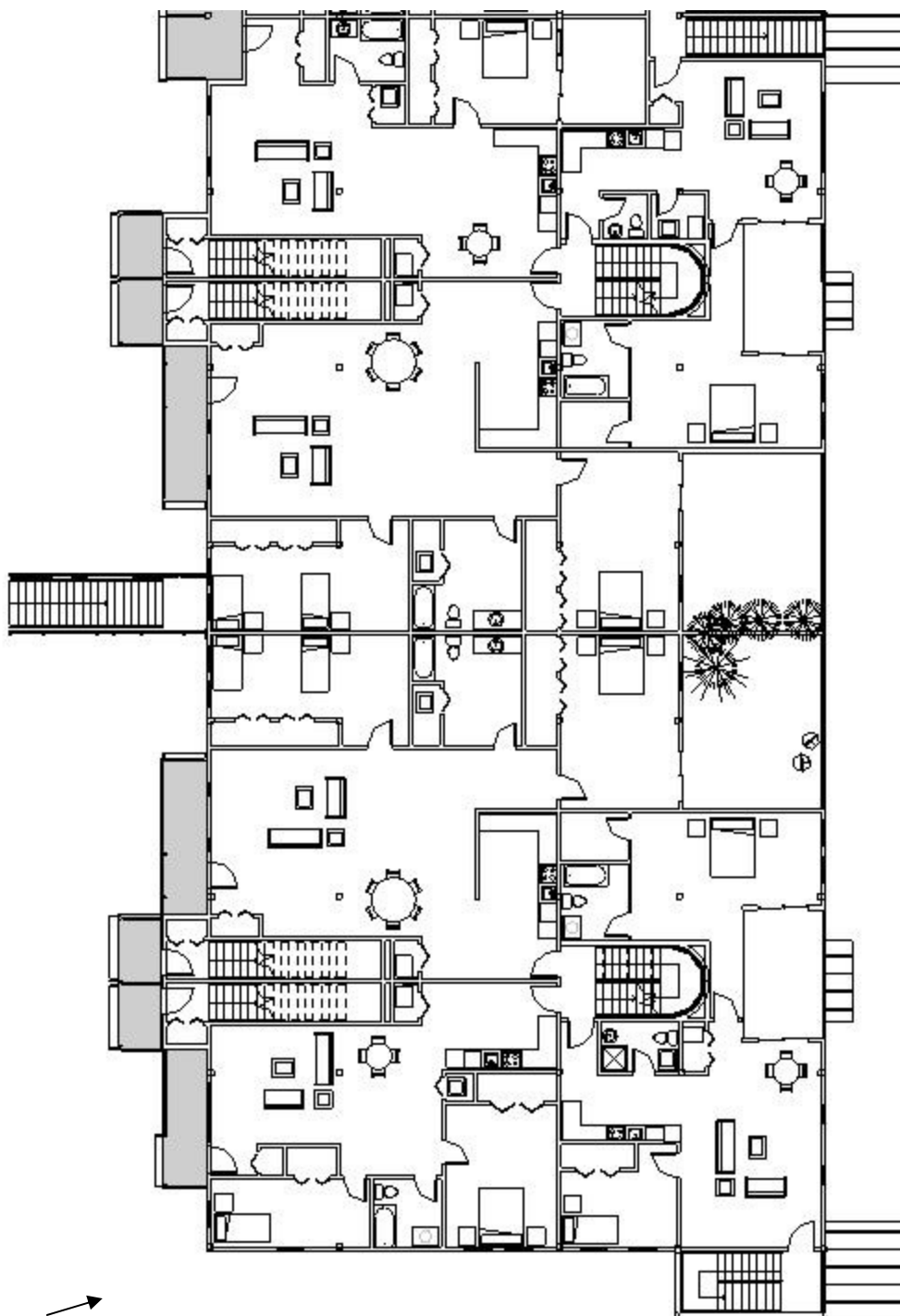
Housing: 1st Floor Plan





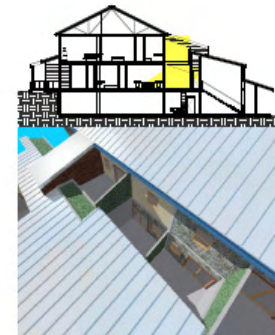
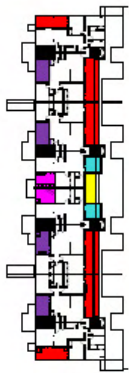
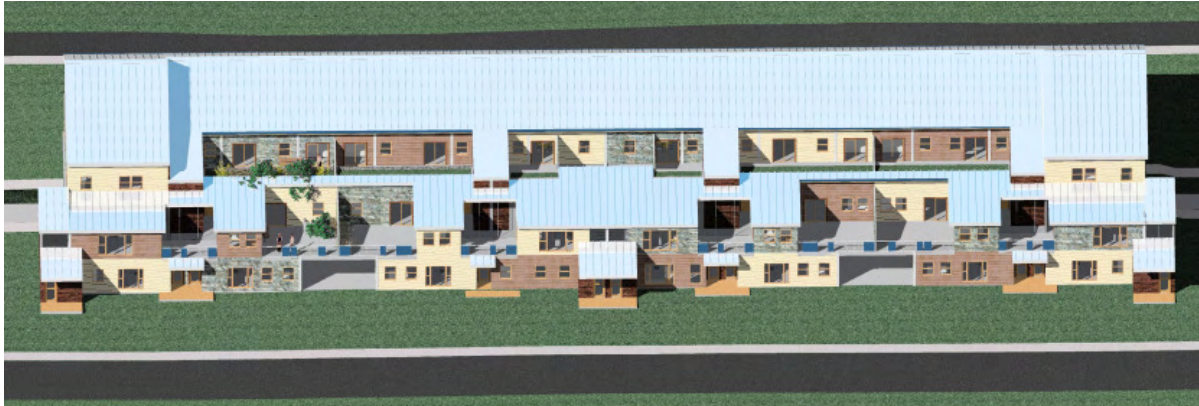
# Final Project

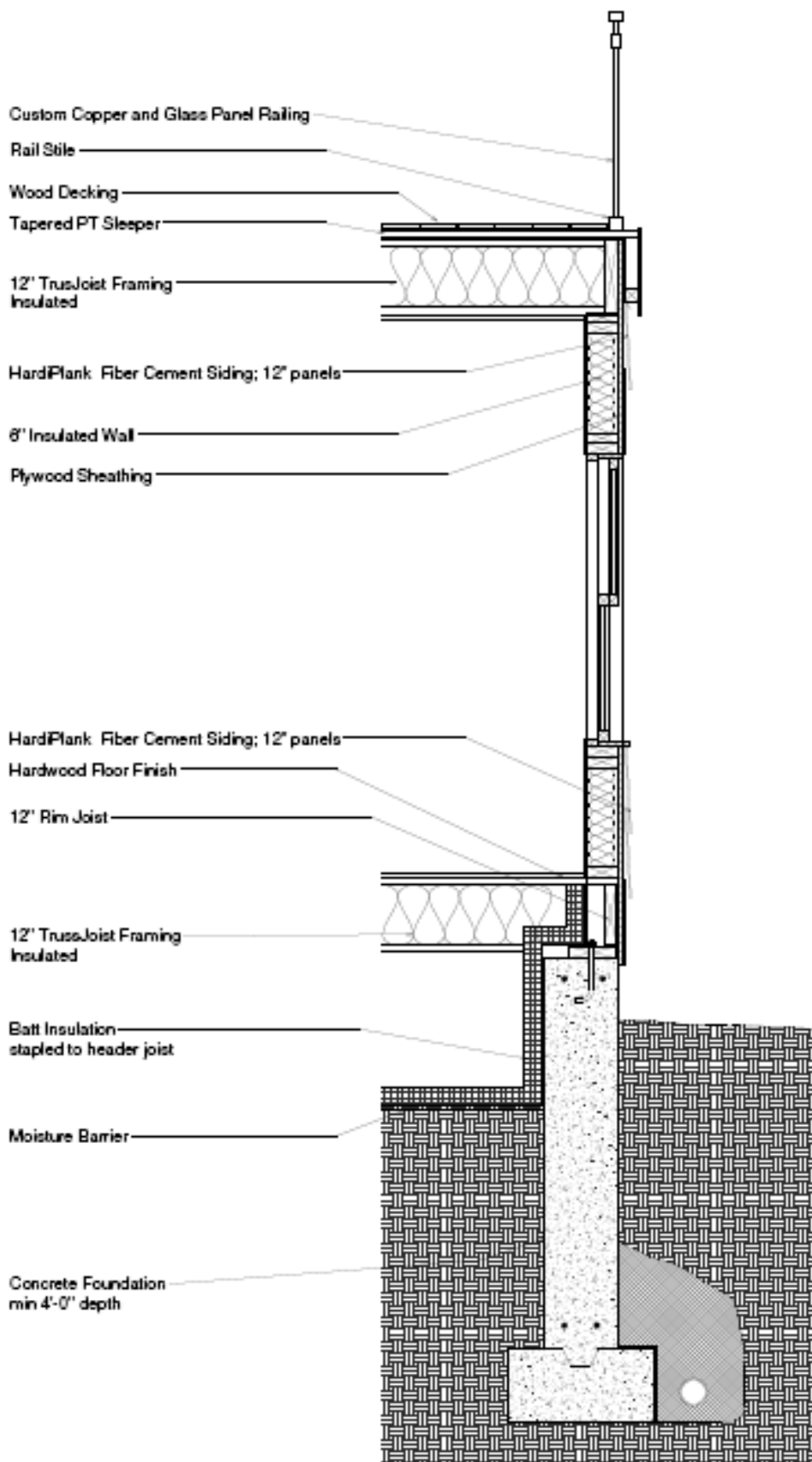




2nd Floor Plan—Apartments on Eastern side of Housing

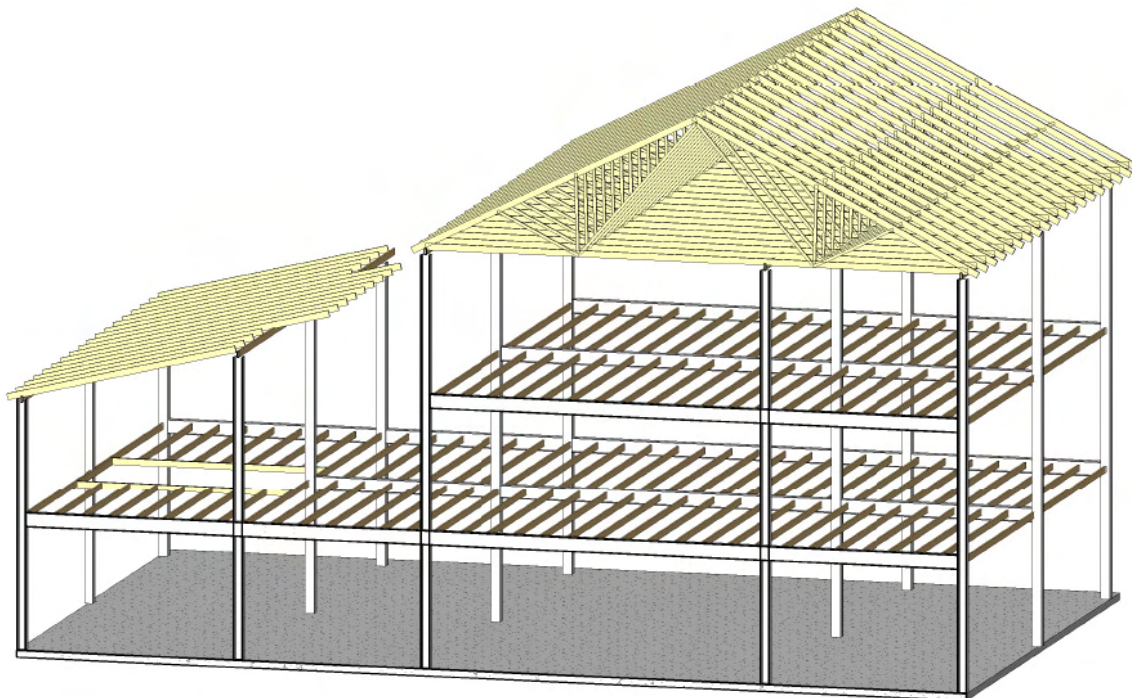
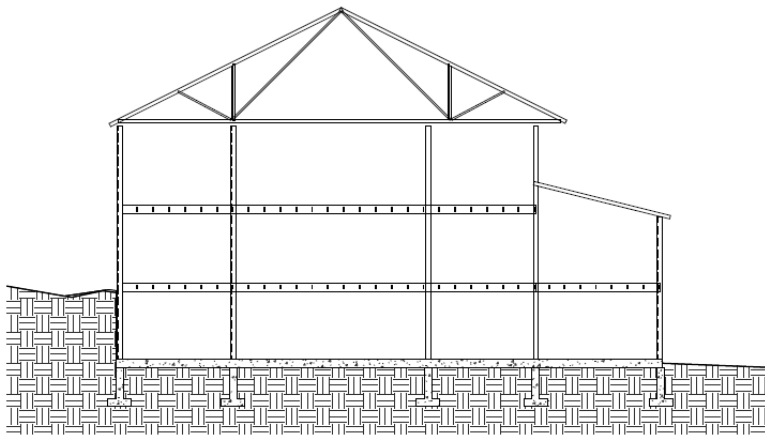
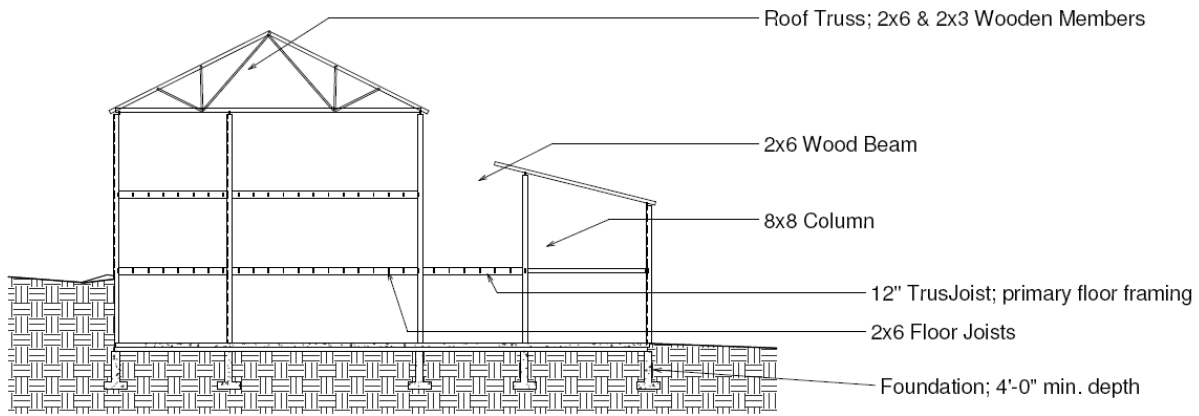
# Final Project

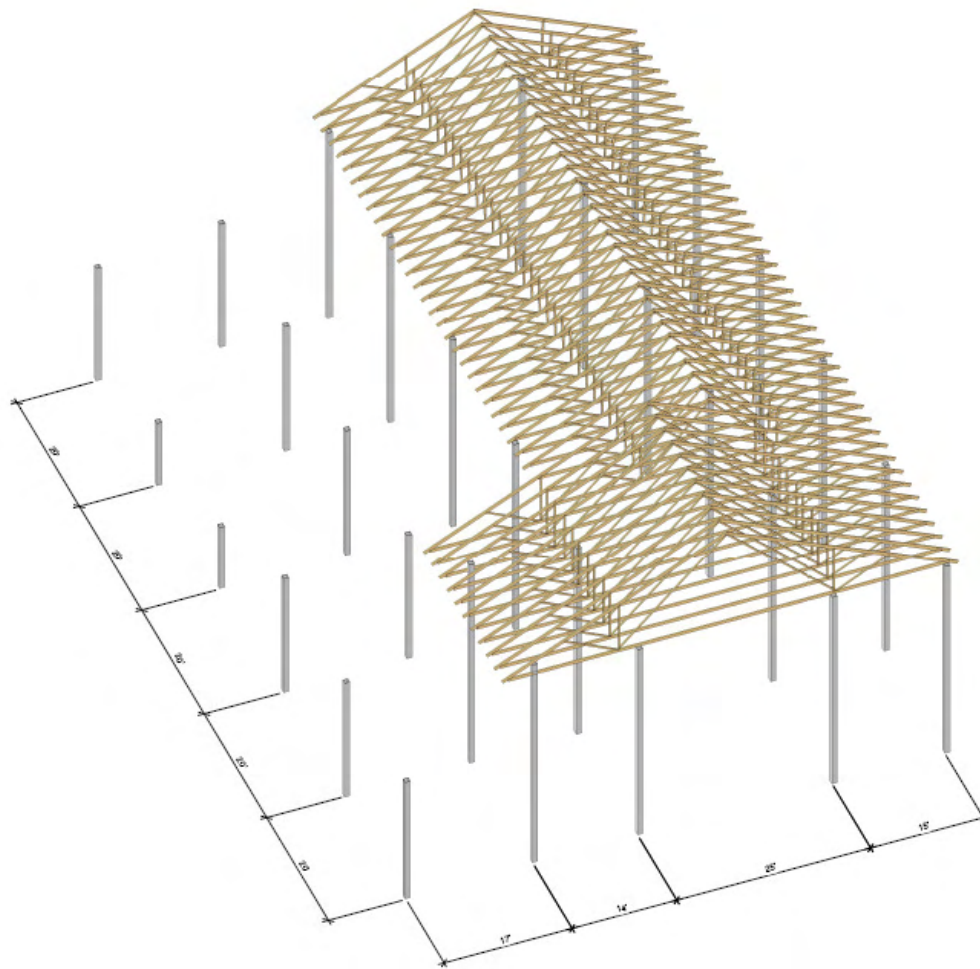




# Final Project

## Structure



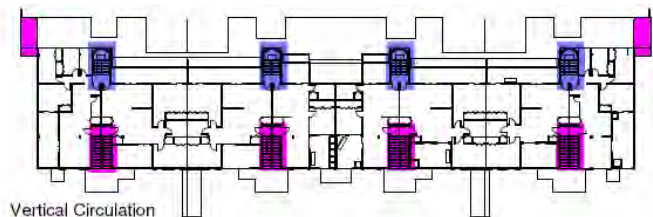
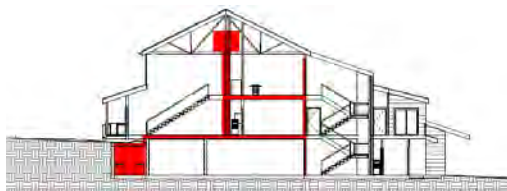


Circulation



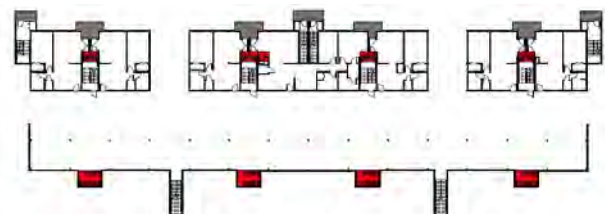
Section showing Path from Incubator (left) to Parking and North side of Housing

Mechanical



Vertical Circulation

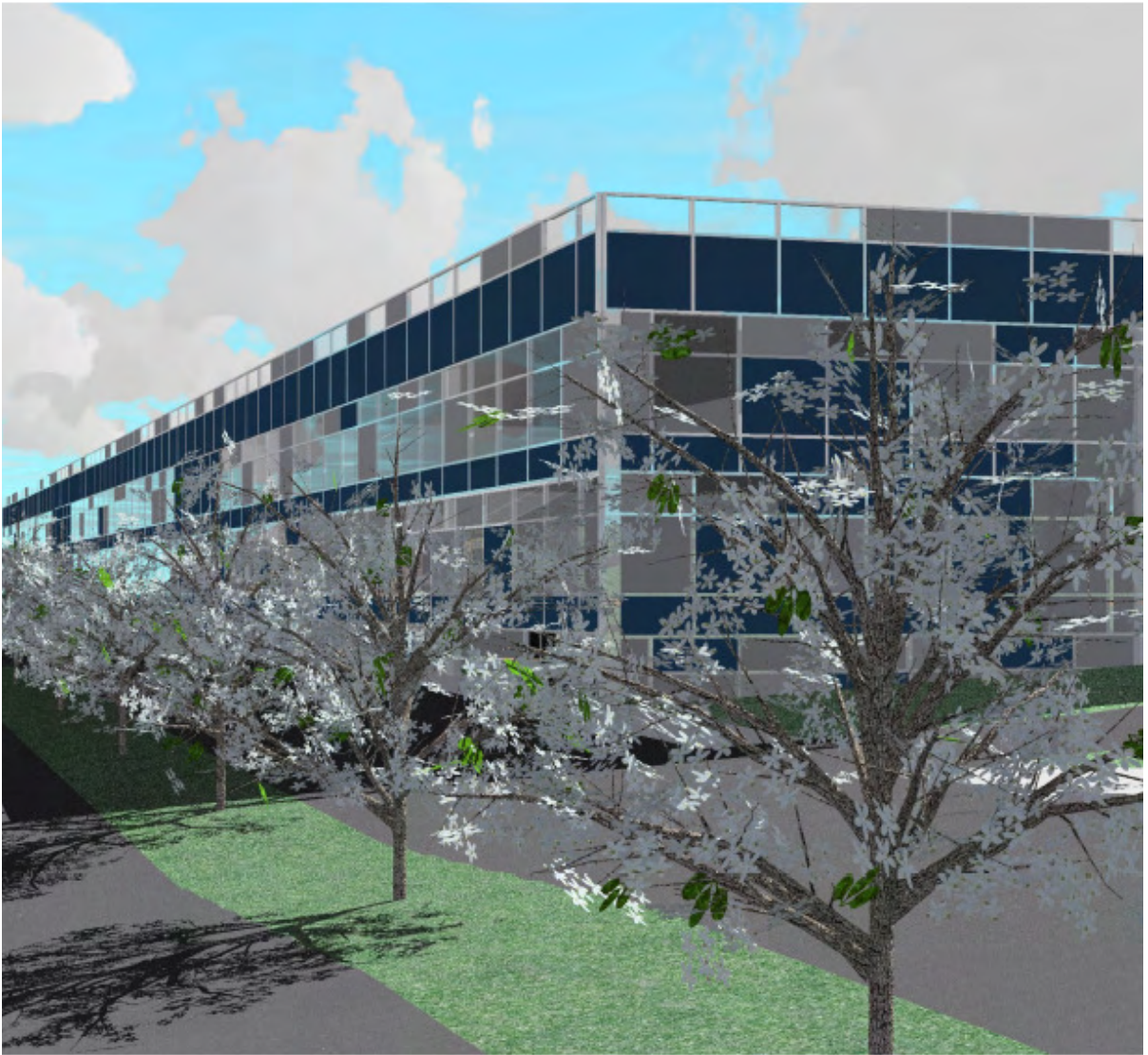
- Private Stair
- Shared Stair





# Final Project

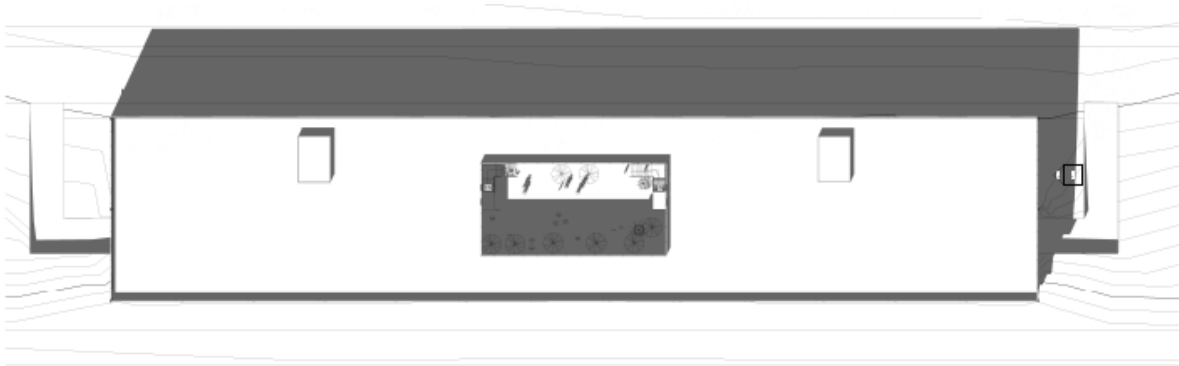




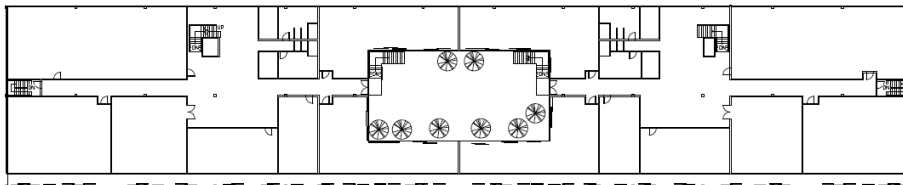
# Final Project

## Incubator Building

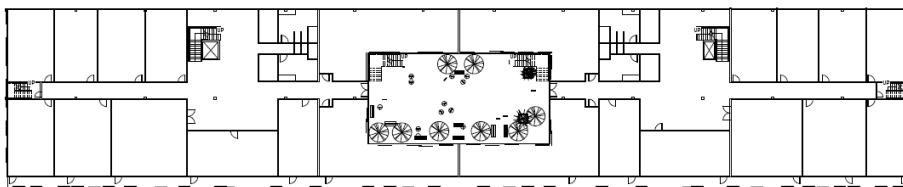
Retail and small independent business spaces are located on the ground floor of the Incubator building, as well as the underground parking on the South side of the building. The smaller incubator spaces are located on the second floor with common spaces, including conference rooms, copy rooms, secretarial services, and general service spaces. The third floor contains larger incubator spaces for businesses that have graduated to a larger size. The centrally located courtyard serves two purposes: to bring light into the building, and to function as a place for social interaction between employers and clients, and also as a place for business owners to interact and share ideas. The façade of the building is composed of three different materials and varying transparency/opacity: glass, frosted glass, and copper with a dark blue patina. The shifting, pixilated façade reflects the flexibility and constant transformations occurring within the building.



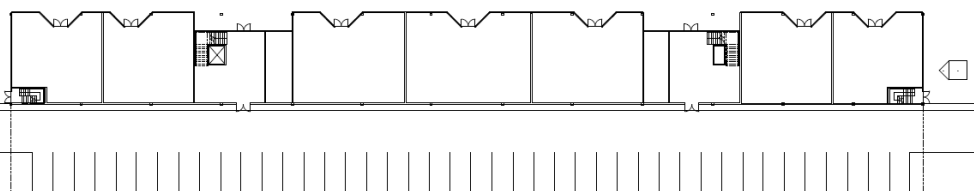
Site Plan



3rd Floor Plan

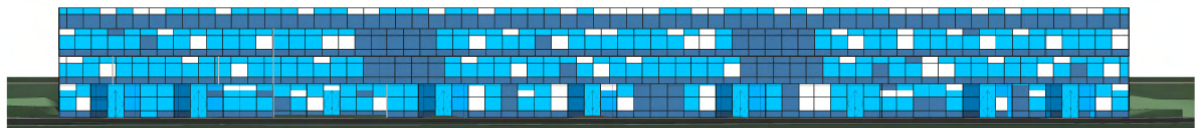


2nd Floor Plan

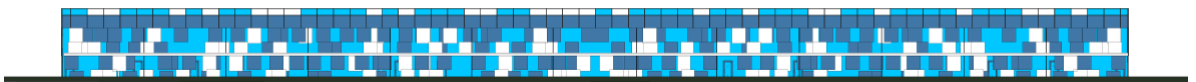


1st Floor Plan

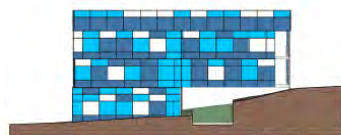




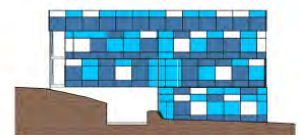
North Elevation



South Elevation



West Elevation



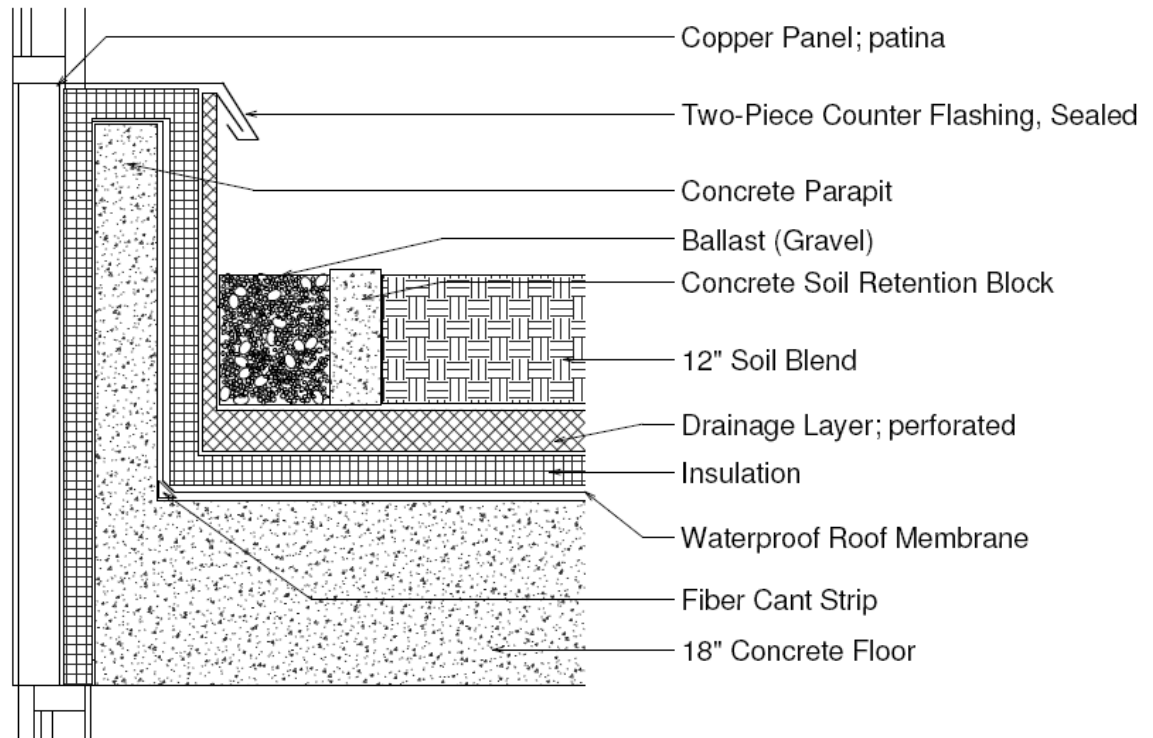
East Elevation



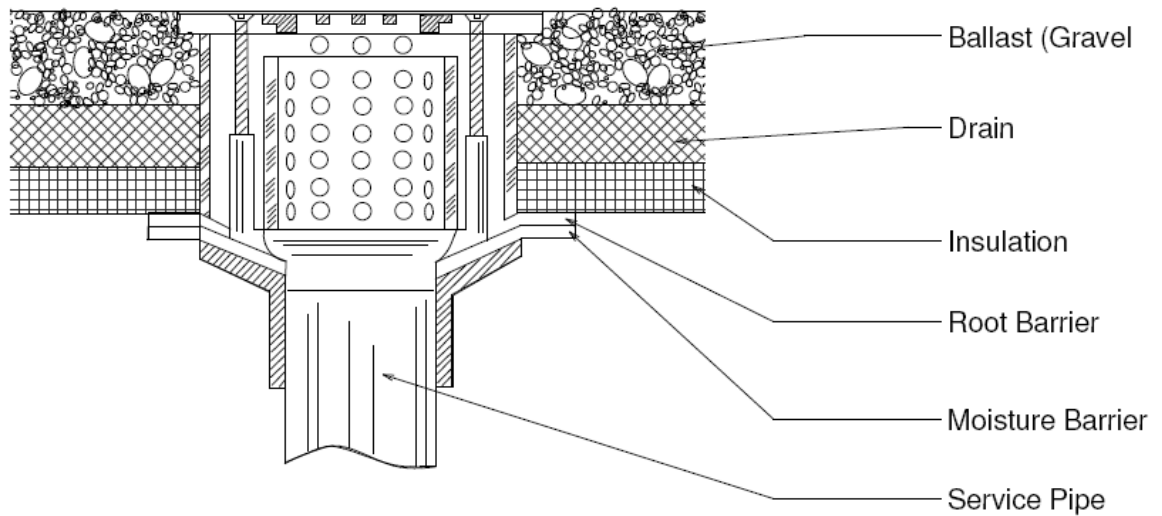
Long Section through center of building

# Final Project





Roof Detail Section



Roof Drain Detail Section



# O 11 Bibliography



# Bibliography

**Bovill, Carl. *Fractal Geometry in Architecture and Design*. Boston: Birkhauser Boston, 1996.**

This is a book that most would look at and say “Why bother?” But it's a book that I've used in the past, both for studio and other classes, and I find the mathematics and theories intriguing. I don't want to limit myself by making it a necessity to incorporate the ideas from this book, but it is a book I respect and enjoy; and I appreciate the thought that goes into unraveling the endless puzzles that are generated through various analyses. It's a way of bringing mathematics into architecture on a deeper level.

**Leyton, Michael. *Shape as Memory: A Geometric Theory of Architecture*. Switzerland: Birkhauser – Publisher for Architecture, 2006.**

This book is about different architectural shapes and their meanings, and how certain geometries create a sequence that can be traced back in time. The author aims to “maximize memory storage” unlike conventional architecture, which he argues minimizes it (although I'm not yet sure how much I agree with his arguments). The author is a true Renaissance man (architect, mathematician, composer, etc.) and I find his ideas interesting; although perhaps a little over my head, it's something I would like to delve into.

**Lincourt, Michel. *In Search of Elegance: Towards an Architecture of Satisfaction*. European Union: Liverpool University Press, 1999.**

This book offers suggestions, not rules, for producing an architecture that is elegant (hence the title) by following successful archetypes. But instead of following a predetermined footprint, the book emphasizes the need for unique qualities that grounds the project in its site. Maybe this book won't provide me with much, but it sparked my interest and I think it's worth a look.

**Zevon, Susan. *Outside Architecture: Outdoor Rooms Designed by Architects*. Massachusetts: Rockport Publishers Inc, 1999.**

I believe that outdoor spaces are just as important as indoor spaces, and deserve equal importance when it comes to design. I tend to prefer landscape architecture, and was intrigued by this book. I come from a town in New York, located in the heart of the Catskills, and adjacent to the site of the original Woodstock Festival (which took place in Bethel, New York; not Woodstock). Recently an extremely wealthy man bought Yasgur Farms and it became Bethel Woods Center for the Arts...just about the only place worth going to in the county. It has become a site like the one I described in my Manifesto – a place for people of all backgrounds to come together. It is completely outdoors (with the exception of the Museum that is being built to commemorate the 1960's, and specifically the original Woodstock Festival). The work that has been done is beautiful on a multitude of levels, and this book that speaks of outdoor rooms reminded me of such a space, and I hope to find inspiration within its pages

Edwards, Brian. *The Modern Station: New approaches to railway architecture*. E & FN Spon. London. 1997

Summary: This book has a section titled *Station layout and design* which I think will be very useful, as well as several precedent studies, benefits of having railways, etc.

Grow, Lawrence. *Waiting for the 5:05: Terminal, Station, and Depot in America*. Main Street Press. New York. 1977

Summary: The section of this book that I particularly like is Chapter 12: The Station as Office Building. It goes through the history of train stations and the incorporation of train-related businesses expanding into all types of business.

Thorne, Martha. *Modern Trains and Splendid Stations*. Merrell Publishers Ltd. London. 2001

Summary: This book has several well documented examples of train stations, and I think it will be good to look at the various layouts and adjacencies, and the various approaches that other architects have taken when designing train stations.



Architecture is powerful  
Architecture is change  
Architecture is a stimulus.  
Architecture is historical  
contemporary  
It tells a story.

Architecture is a never-ending exploration  
—aesthetic, theoretical, mathematical, environmental,  
structural.

Understanding the architectural process changes the way one views the world (much as a soldier that has gone to war is forever changed), and you can never approach life the same way you did before...you see too much, you want to dig deeper. It's a completely different way of thinking, and most things in architecture only someone with a background in architecture would notice, understand and appreciate.