

# CONTENTS

## Children and the Town Core

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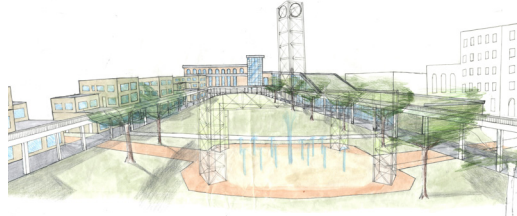
### ABSTRACT

The migration of families and businesses out of the urban core has been as detrimental to American small towns as American cities. Architectural solutions to blighted small towns focus on economic revival, street design, residential development, but rarely connect children with the town core.

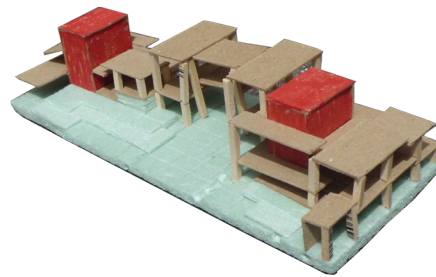
### INTRODUCTION

Towns in America possess a combination of community closeness, along with countryside and seclusion that distinguish them from cities and suburbs, and which can make them an ideal habitat for many families. But when the residents live, work, and shop in the ever

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13



28



36

## Returning Children to the Core

### Thesis Design Addendum

#### INITIAL RESEARCH

(Spring 2013)

My research began by reflecting on my own experience of growing up Tiffin, Ohio, a rural community of less than 20,000 people. These types of towns, particularly in the Midwest are losing people, and struggling economically, but I still held on to the idea that they provided an ideal setting for raising children. This was challenged during my thesis research class in the spring of 2013. I began to see

the enormously broad "small town" topic down to a topic comprehensible for a design project.

#### TRANSITION FROM PAPER TO PROCESS

(Fall 2013)

How to harmonize children with the revitalization of the core of a town? By the time I gave my oral presentation in the fall of 2013, I had decided on downtown Middletown Ohio as my site. I felt sure that returning children to the core of the town had to be a

60

# Children and the Town Core

CRAIG GENET

Miami University

## ABSTRACT

The migration of families and businesses out of the urban core<sup>1</sup> has been as detrimental to American small towns as American cities. Architectural solutions to blighted small towns focus on economic revival, street design, residential development, but rarely connect children with the town core. This link is crucial. For towns to prosper rather than die from neglect, the next generation needs to personally connect with their town and absorb the world outside home and school through real life experience. **How can architects revitalize the core of a small town so that it connects harmoniously with children?**

This investigation explores how children benefit from a healthy town core, and how children, in turn, improve the social and economic life of a town core. These relationships disappear in a town core that is deprived of population and businesses, such as Middletown, Ohio, the primary case study in this research. The work of urbanists, as well as personal experience shows that the town core is safer at a greater density, and designed to balance cars and pedestrians. Designing for children is critical to achieving density, high pedestrian traffic, and livable neighborhoods. Therefore, children are vital to the revival of a town core, for a town core without children is simply incomplete and ultimately unsustainable.

## INTRODUCTION

Towns in America possess a combination of community closeness, along with countryside and seclusion that distinguish them from cities and suburbs, and which can make them an ideal habitat for many families. But when the residents live, work, and shop in the ever sprawling edges of town, abandoning the core, the entire town loses the qualities that make it ideal for families.

Many Midwestern small towns are losing, or have lost these qualities. Main streets that were once filled with shops and restaurants now struggle with high vacancy rates. Traditional neighborhoods, where children once walked to school and played in the streets, turn into sparsely populated dangerous parts of town. The decay of the town core is often accepted as normal, or even inevitable. But it's not inevitable. The most successful small towns are strongest where it counts, in the core.

A decayed town core is especially problematic for the youth, the people who will lead small towns in the future. The approach to this problem for the last 60 years has been reactive: avoid the town core and build at the edge, but the approach implies to children that the core of small town has little value. Ironically, Americans gladly vacation in faraway towns with traditional thriving commercial main streets. Any small town, tourist region or not, has the ingredients to make a strong town core, but this does not simply happen. A proactive approach is necessary to revive struggling towns, and it must address the town's children.

**How can architects revitalize the core of a small town so that it connects harmoniously with children?**



The core of a small town, much like the inner city, is safer and more dynamic with greater human density, especially when both children and adults watching out for children<sup>2</sup> are present. Small towns that cater to pedestrians, which include children, are safer, whereas small towns that cater primarily to cars are more dangerous<sup>3</sup>. Yet banishing cars makes these towns dead. The most successful small towns, including towns that are destinations for vacationers, strike this balance and thrive economically with a dense concentration of pedestrians and cars in relative harmony.

Adults who observe that the core is safe and healthy for children are much more likely to live in or near the core, which boosts the town core economically. In return, the healthy town core will have far reaching benefits for the children who are able to explore it safely. Children learn better through experience than through reading or demonstration<sup>4</sup>, and children who engage the town core by their own volition experience more of the real world than those without such freedom.

## **METHODOLOGY**

The method of research for this paper is a combination of literature review, precedent studies, and personal experience. Reviewed literature ranges from Christopher Alexander and Jane Jacobs, to more recent work of Duany & Plater-Zyberk. Most of the research stems from case studies of small towns, which, for this project, are considered between 10,000 and 80,000 people and distinct from larger metropolitan areas larger than 80,000<sup>5</sup>. These case studies range from tourist to manufacturing towns, including Estes Park, Colorado; Columbus, Indiana; and Woonsocket, Rhode Island. These towns engage children in the core with varying degrees of success. The primary case study, Middletown, Ohio, has a heavy industrial background and a dying town core. The research also includes personal investigation of small towns, observation of people within the core of small towns, and historical research of these small towns. The research then informs the selection of a site for intervention and theorizes how child-centered design can improve the vitality of the town core. The project could be a school, a community center, or it could be an urban park, but it must work in concert with the entire community to be successful.

## THE CORE VALUES

On a sunny Saturday, Elkhorn Avenue, the main street of Estes Park, Colorado, is packed with traffic. The downtown parking lots are filled; the sidewalks, river walk, and even narrow passages between buildings are full of pedestrians. Meanwhile, children are playing in the creek, eating ice cream, and competing for their parents' attention. One can get lost in the sights, smells, noise and excitement.



Fig. 1,2 downtown Estes Park, top, and Downtown Middletown, bottom (images by author)

On a sunny Saturday, Central Avenue, the main street of Middletown, Ohio, traffic is light and pedestrians are scarce, parking is plentiful, and the children...well, they are nowhere to be found.

Why such a stark contrast between the two towns, especially when Middletown contains about 40,000 more permanent residents? Geography does not tell the whole story. Much of the difference lies in the social and economic magnets within each town's core, how safe people feel in each core, and how each town engages all members of the community, including children.

Historically, small towns offer a quality and variety of life that is very distinct from any city or suburb. Their downtowns have the density and multiplicity of use types present in cities, at a scale that is much more comprehensible than the center of a big city. Meanwhile, people who live within small towns are never far from the countryside. The scale of small towns makes them easier to govern and safeguard, which is attractive to families. While people of all ages benefit from the compactness and security of a healthy town core, it is especially important for children.

When children are free to explore the public realm, they actively learn about the world outside of school through numerous voluntary, yet meaningful experiences. Children who walk to and from school develop a cognitive map of their locale, learn to approach vehicular traffic, and heighten their sense of self and civic responsibility<sup>6</sup>. In addition when children develop a personal connection to certain place, they are much more likely to care about that place when they reach adulthood.

Unfortunately, real world experiences and learning opportunities are greatly reduced when children are isolated in their school or their homes, and travel by car or bus driven by an adult. The Local Government Commission found that only 10% of children walked or biked to school in 2005 compared to 50% in 1980<sup>7</sup>. This is especially problematic because these children will lead the town in the future. Christopher Alexander explores this issue in the well-known 1977 book, *A Pattern Language*:

"If children are not able to explore the whole of the adult world about them, they cannot become adults. But modern cities are so dangerous that children cannot be allowed to explore them freely."<sup>8</sup>

This is no longer just a city problem. In small towns where the local economy has struggled, the town core may decay and develop the same social problems as inner cities. Today, there is a heightened sense of fear of the public realm and children are no longer able to roam free outside of their home and school.

Jane Jacobs addressed the safety problems in cities as largely a problem of density. Time after time, most crimes, and the most violent

crimes, took place in sparsely populated parks and between housing project towers. Children preferred to play on the sidewalks and the streets, where large numbers of adults deterred crime by their mere presence. Even today, the most frightening parts of small towns and cities alike are those public places with few people around and largely out of the public eye.

In *Suburban Nation*, Duany and Plater-Zyberk discuss the consequences for children growing up in most new residential environments. Suburban sprawl-type development takes place at the edges of small towns, and often produces *cul-de-sac kids*, children who are “prisoners of a thoroughly safe and unchallenging environment.”<sup>9</sup> Because of vast distances and separation of uses, children are utterly dependent on others for transportation via car, and lack the “opportunity to make serious choices and exercise judgment.” Duany and Plater-Zyberk, identify poor neighborhood design, rather than overprotection, as the main

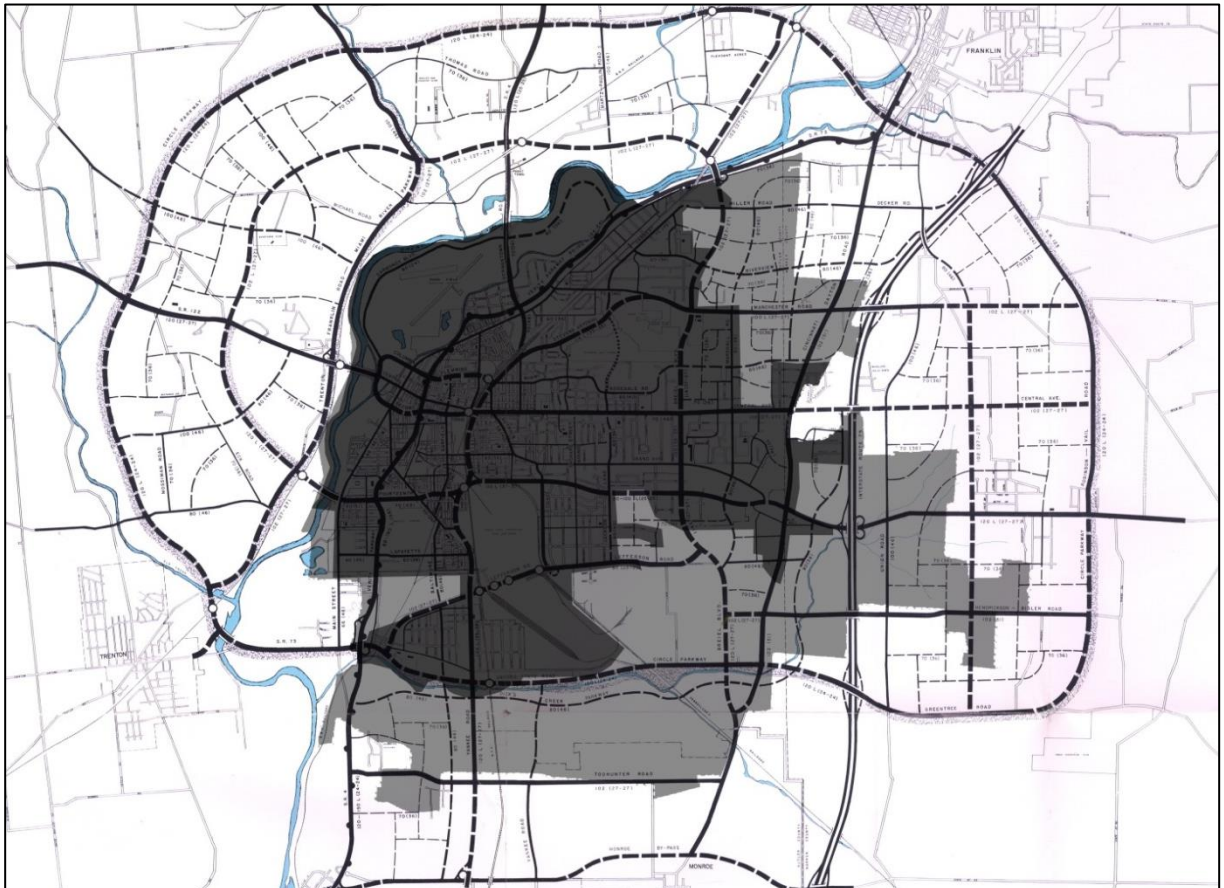
culprit. They argue vehemently for more walkable, traditional neighborhood design, which would not only give children more freedom and safety, but also greatly benefit the elderly, parents. Because traditional neighborhoods reduce car-dependence, they also benefit the environment.

## CASE STUDIES

### Middletown, Ohio

Architects and planners design communities with the best intentions for all residents, but unforeseen factors lead to adverse consequences. For example, in the 1963 master plan for Middletown, Ohio, shown below, planners expected population and economic growth to remain close to baby boom levels<sup>10</sup>. Numerous new neighborhoods were expected to radiate from the center of town, each with its own elementary school. The automobile would handle all transportation increases, so the town planned for sprawling development served entirely by Interstate 75

Fig. 3 1961 approx city limits (dark gray) and current city limits (light gray) superimposed over the projected 20 year growth pattern of Middletown from 1963 master plan.





and a series of broad ring roads. But Middletown saw no population growth, and never crossed the river. Instead, most of the population and business lurched away from the old core towards Interstate 75 and its promise of financial gain.

The Interstate 75 interchange created a popular car-centric commercial district. To combat this, by 1970, Middletown turned two busy downtown streets into enclosed pedestrian streets, provided huge parking garages, but kept separate buildings with their storefronts. For reasons such as over scaling, impeded vehicular traffic, and the upheaval of construction, the City Centre Mart did not attract business and shoppers as hoped<sup>11</sup>; it did more to drive them away. The enclosure was removed and the exterior streets were restored in the early 2000s in hopes of reviving downtown, but the core continues to struggle attracting people and businesses.

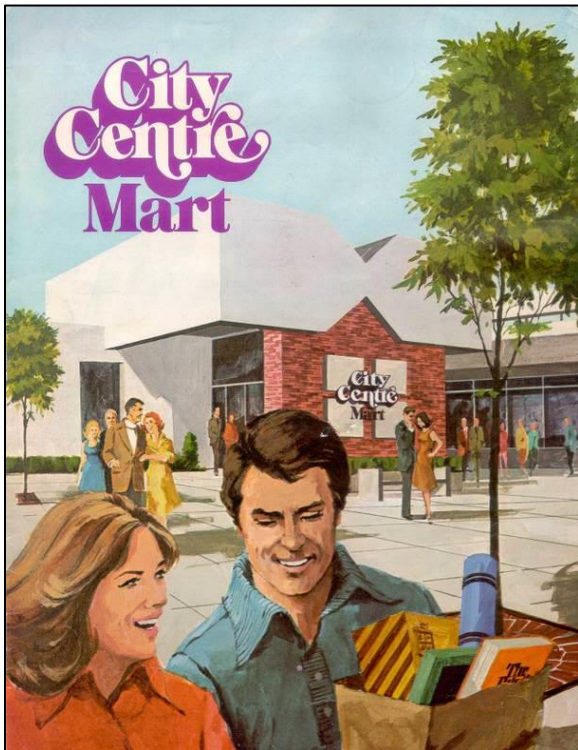


Fig. 4 Cover of Marketing Brochure image from urbanohio online forum

### Woonsocket, Rhode Island

Woonsocket Island (pop 43,000) recently invested heavily in its institutions rather than a commercial center to stem similar outward

spread in its population. Woonsocket, like Middletown, is a historically industrial town, with 440 acres of unused brownfields within the city's limits<sup>12</sup>. Nineteen acres of brownfield in the form of abandoned factories sat within a couple blocks of the aging middle school, representing a major crime and fire hazard. Rather than build a new school outside of town beyond walking distance, the city acquired most of the brownfield site through tax title in 2004<sup>13</sup>, and deemed it the site of the new school. Public meetings were held to address the citizens' concerns about a school on a brownfield site, and any environmental reports about the site as well as the cleanup process were made public, earning the trust and the support of the public.

The long term success of the project will take years to determine but the city has cited the future long-term energy savings on busing, and the increased safety of the neighborhood, and additional development in the area, while the former middle school site is to be repurposed as a senior housing complex, bringing seniors and children into close proximity of the town's core. Still, the \$72 million price to clean up the contaminated site and build the largest middle school facility in New England<sup>14</sup> is beyond the budgets of most town core revivals. In many cases, towns may be able to revive their core through more cost effective alternatives.



Fig. 5 Woonsocket Twin Middle Schools, image from Ai3 Architects Website

### Estes Park, Colorado

Estes Park is a tourist destination with countless trendy shops and eateries in its historic main street, but also has several examples of budget friendly strategies that could improve the core of a town. These were gleaned from the author's summer experiences, exemplified by a Saturday bike

trip from a rural residence into the town core. Starting east of Estes Park, one can follow an extensive system of bike paths that begin at city limits, and ride through a lakeside park, beside a golf course, and over a couple pedestrian bridges. The path to the core tunnels under the busiest intersection, avoiding vehicular traffic until a pedestrian-only stop light is reached. Traversing the crosswalk marks the arrival at the public library, a popular meeting place. Several others typically arrive on bike and hundreds more by car with the same idea. A bike or car is no longer necessary, for the entire vibrant town core is with walking distance.

One of the most walkable places is the river walk, where restaurants have rear patio dining in addition to street frontage and apartments above feature balconies. In several designed spots, people can step down to go fish or play in the water. The rear yards of downtown buildings are often the most pleasant places to walk, thanks to the shaded and landscaped promenade and an apparent ordinance to conceal service entrances<sup>15</sup>. Here, couples sit and relax and children let off energy without the concern of running into traffic. These rear yard parks work majestically with the urban strategy parking in the back, as they make the pedestrian journey from car to Main Street a pleasant experience.

Prevalent parking is needed in a vibrant town core, and Estes Park devotes large quantities of land to parking. However, parking is either in back of downtown buildings or shielded with street trees and the lots are often small and broken up with landscaping. Estes Park does its best to work nature in with the parking, with success. The parking lots are not a concrete desert as they are in most towns.

Yet, the qualities of Estes Park's inner core are largely absent through the rest of the town. The town has few old growth neighborhoods. Most residents live in sprawling developments that stretch ever further into the valleys and the hills<sup>16</sup>. This makes the town more car-dependent than any I have experienced.

Although biking to downtown is entirely feasible, Estes Park's successful core is supported not by bike-riding locals, but by the thousands who drive untold miles to see a

novel place, a relationship not available to most Midwestern small towns.



Fig 6-8 Main Street (top) and rear yard (middle) of shops in Estes Park both filled with pedestrians. Families with children enjoy the small urban parks (bottom) adjacent to Main Street. Images by author





Fig. 9 Small park within Prospect, the neighborhood appears older than 16 years, image by author

### **Prospect, Longmont, Colorado**

Unlike Estes Park, Prospect, a smart growth neighborhood within south Longmont, Colorado, promises to be more self-sufficient, walkable, and environmentally friendly. While new urbanism is often criticized for being too traditional or too much of the same thing, Prospect was lauded by Dwell magazine in April 2002 for its architectural variety. Begun in 1997<sup>17</sup>, Prospect now has the look of a community that has come of age. The first outstanding trait is the tree canopy, the result of rapid growth trees such as Bradford Pears lining the streets. In addition to lending age value often missing in newer communities, the trees define public spaces, help slow traffic, and improve the pedestrian experience by effectively shielding pedestrians from traffic and the Colorado sun.

Instead of isolating itself, Prospect connects well with adjacent neighborhoods and street patterns, forming a symbiotic relationship. Families from adjacent neighborhoods often come there for their evening walk. Prospect also reduces lot size and yard space in return for small public parks which dozens of households share as community front yards. Other design features include alleys for garages and public services, houses and their front porches close to narrow streets<sup>18</sup>, side yards, garages with apartments on the upper

level, successful restaurants without parking lots in residential areas, allowing only local businesses in the commercial center, a few public playgrounds, but most of all, calm traffic. Only 20 mph or less felt comfortable through Prospect, and that alone makes it much safer for children.

Despite its successes, some planning challenges remain for Prospect. While the lot sizes are small, the houses are huge, contradicting the new urbanist platform of living smaller and more efficiently. Prospect appears to be an affluent neighborhood, and people with low to middle incomes are likely priced out of the community. This leads to social stratification, which is problematic for raising children. If this community were part of small town core revitalization, such design would be socially irresponsible. With growing cities like Boulder and Denver close by, there is a sufficient upper class to fill such neighborhoods, unlike most Midwestern small towns. Also, Prospect and its surroundings lack accessible institutions for families with children, such as schools, libraries, athletic facilities. Finally, while it represents smart growth in a micro sense Prospect was still built on a greenfield site at the fringe of Longmont, and it is somewhat isolated from the core of Longmont.



Fig. 10 YMCA of the Rockies, numerous activities on recreation field on a summer evening, image by author

### YMCA of the Rockies, Estes Park, Colorado

A combined resort, community, and retreat center a couple miles outside of Estes Park, the YMCA also conjures the small town core at a micro scale. With private space reduced to single rooms and apartments, visitors spend most of their time in communal places, meeting and mingling with other visitors. One of these places, the recreation field, lies in direct view of the surrounding public buildings such as the dining hall and the administration building. Juxtaposed on the recreation field are a wide range of activities<sup>19</sup> that attract people of all ages. With so much activity at the edge of that place, and visitors subconsciously policing the area, children can explore safely yet unmonitored by their parents. Meanwhile, the general public can enter the grounds without a fee or security checkpoint.

The athletic fields of the YMCA evoke the goal of a magnet in the core of a small town: to bring together people of all ages in a safe and healthy setting.

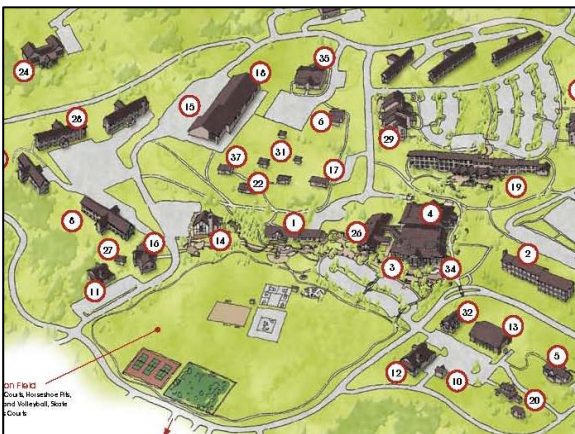


Fig. 11 Site plan of YMCA of the Rockies, Image from YMCA of the Rockies Website

### Columbus, Indiana

Closer to home in the Midwest is Columbus, Indiana, which has a population that is similar to Middletown. Its economy is also dominated by a single global industry, Cummins Diesel. However, Columbus is desirable for families while Middletown lacks such a reputation. This is partly due to the Cummins Foundation, which has patronized civic art and architecture throughout the town for decades, and continues to do so. But also, the city has taken its own initiative catering to children and families. A small network of bike paths around the town has proven successful, enough that master plans from the mid-2000s include a major expansion of this network, which extends into the country. Meanwhile, heavy investment in the core of Columbus continues through mixed use projects.

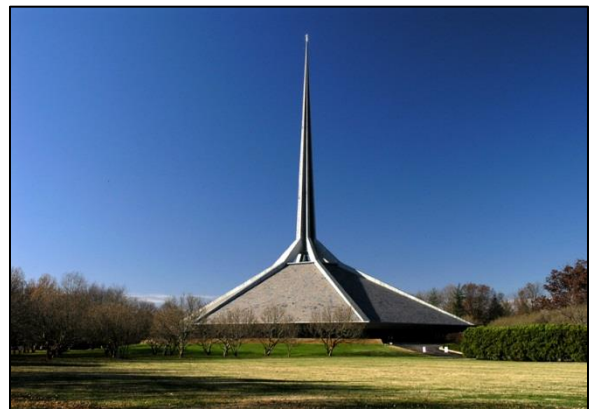


Fig. 12 North Christian Church, Columbus IN, funded by Cummins Foundation, image from Wikimedia commons Website

### Middletown, Ohio, Revisited

Analogous to Cummins Diesel and Columbus, the steel industry once had a comparable

symbiotic relationship with Middletown, and AK Steel still has the capability to do the same. But an opportunity was lost a decade ago when AK Steel moved their corporate headquarters out of Middletown, rather than intervene in the blighted neighborhood that surrounded it<sup>20</sup>. Much of Middletown's population has followed the same core-deserting pattern. Through the author's discussion with Middletown city planner, Marty Kohler and several other residents, the general impression is that the core is dangerous with homelessness, crime, and other problems usually associated with inner cities, and parents do not want their children in the core.



Fig 13 Image from Middletown Public Library

Meanwhile, the public schools have evolved so that children rarely set foot in the core of Middletown. The consolidated elementary schools are still neighborhood based, covering the vast area of the town about as well as six schools can, but all lie beyond a 15 minute walk from the core. These schools are in place for decades to come, with six of the seven built in the last 10 years<sup>21</sup>.

The next school on the list to be replaced is the 90-year-old Vail Middle School, which is the closest school to the core, and the adjacent blighted neighborhood. Many locals consider it a beautiful school, but poorly outdated, and they acknowledge safety issues in the area. Meanwhile, plans have been made to build a new middle school next to the current high school<sup>22</sup>, which will further distance children from the core. The high school was built much less elaborately in the late 1960s, near Miami University of Middletown at the edge of town. While a high school would benefit the core economically and socially, parents and the school board prefer the more secure, car-

centric location and the proximity of Miami University of Middletown, rather than somewhere closer to the core<sup>23</sup>.

## Conclusion

The exodus of education is a typical issue for many small town cores. Architects are taught to support urbanism and density, but in traditional walkable neighborhoods in a depopulated town core, upkeep drops off, property values plummet, and community assets such as a corner store or a playground become scary or dangerous places for children<sup>24</sup>. Families are reluctant to move into such marred locales. Yet, these neighborhoods are critical to the success of the town core. When blighted neighborhoods surround the core, they form a barrier, depriving the decaying core of that which sustains it. The decay is autocatalytic.

This decay has taken place in Middletown. Here, the opportunity exists to test the thesis that the presence of children and the revival of a small town core go hand in hand. The case studies show that no single strategy will bring children safely into the town core; the approach must be multifaceted. Human density is paramount, since it deters crime, supports business, and attracts more people. This density must be dependable, implying the need for permanent residents in the core. However, there must be magnets for people of all ages, such as schools or community centers, to initially attract people. Businesses of the core must work with these magnets so they catalyze each other to maintain this density. Cars must be accommodated, but their needs must not overwhelm all other needs. Alternative forms of transportation such as a bike path network are imperative for children to travel autonomously around the town. Coordinating this and more is a major design challenge.

The barriers to children in the core of a small town range from nationwide trends down to local issues. But the solution is not to avoid issues. Small towns must be proactive in their approach to problems in the core. To paraphrase Winston Churchill, "We shape our town, and afterwards, our towns shape us and our children."<sup>25</sup> Children must have the opportunity to safely explore their town if we expect them care about the town in the future.



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<sup>1</sup> Throughout the paper, I will typically mention the “core” of the town, and this refers to “downtown,” the “center of town,” the “historic center” or “main street district”. In theory, the town core contains all the elements necessary to define a town, from government down to shopping and residential, and is entirely walkable.

<sup>2</sup> Jane Jacobs “The Death and Life of Great American Cities” pg 143-151

<sup>3</sup> Duany, Plater-Zyberk, “Suburban Nation” pg 60-70, 115-120

<sup>4</sup> Ovid K. Wong “High-Poverty, High-Performance Schools”

<sup>5</sup> Many “small towns” either start as suburbs or become suburbs to much larger metropolitan areas. I am considering towns outside of the metro statistical areas (MSA’s) of cities larger than 70,000. The exception is “Prospect” a development within the city limits of Longmont, CO, (pop. 80,000)

<sup>6</sup> Mayer Hillman, “The Impact of Transport Policy on Children’s Development

<sup>7</sup> Connie Chung, “Connecting Public Schools to Community Development”

<sup>8</sup> Christopher Alexander, “A Pattern Language” 293-296. In this case, the city can be interpreted as the town core.

<sup>9</sup> Suburban Nation pg 116

<sup>10</sup> City Planning Commission. (1963). *Master Plan Middletown Urban Area*. Middletown, Ohio. Plate 23

<sup>11</sup> The Project took several years to complete, and many businesses closed or moved out while the main streets were inaccessible for years. Others were torn down and replaced to fit the design scheme. The mall never reached close to full occupancy. Closing off the major street severely upset vehicular traffic flow through the core. Aside from the entrances, the mall was entirely inward looking, with harsh blank facades turning away would be customers.

<sup>12</sup> Environmental protection Agency “Opportunities for Petroleum Brownfields Pg 23

<sup>13</sup> The brownfield site had been used by various industries until 2003, when a massive fire rendered the factories useless

<sup>14</sup> Environmental protection Agency “Opportunities for Petroleum Brownfields Pg 25

<sup>15</sup> This has not been confirmed; most commercial buildings of Estes Park have rear yards that face a natural water feature and may just do this in their own self-interest. Those without such water access do have typical service entries off side streets.

<sup>16</sup> So many people want their dream home and piece of land in Estes Park. To satisfy everybody takes enormous amounts of space, and roadways that are often not bikable. Even the author had to walk 8 min from his apartment before reaching bikable roads.

<sup>17</sup> Dwell Magazine, April 2002 pg. 52-61

<sup>18</sup> This has been an area of great complaint from the fire and trash departments. The narrow streets are uncomfortably small for the fire department’s massive fire trucks, and the alleys are short of the 30 ft width that

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trash services desire for the mechanized arms on their trucks, which were designed for the wide streets of sprawling suburbs. These are minor compared with the societal benefits of small alleys and narrow streets.

<sup>19</sup> Sand volleyball, mini golf, playground, kickball field, concrete basketball court, walking trail with workout stations, playground etc. all in plain sight

<sup>20</sup> Interview with Marty Kohler, planning director of Middletown

<sup>21</sup> A look at the historical maps on google earth will show the approximate date that each school was replaced or rebuilt within 2 or 3 years.

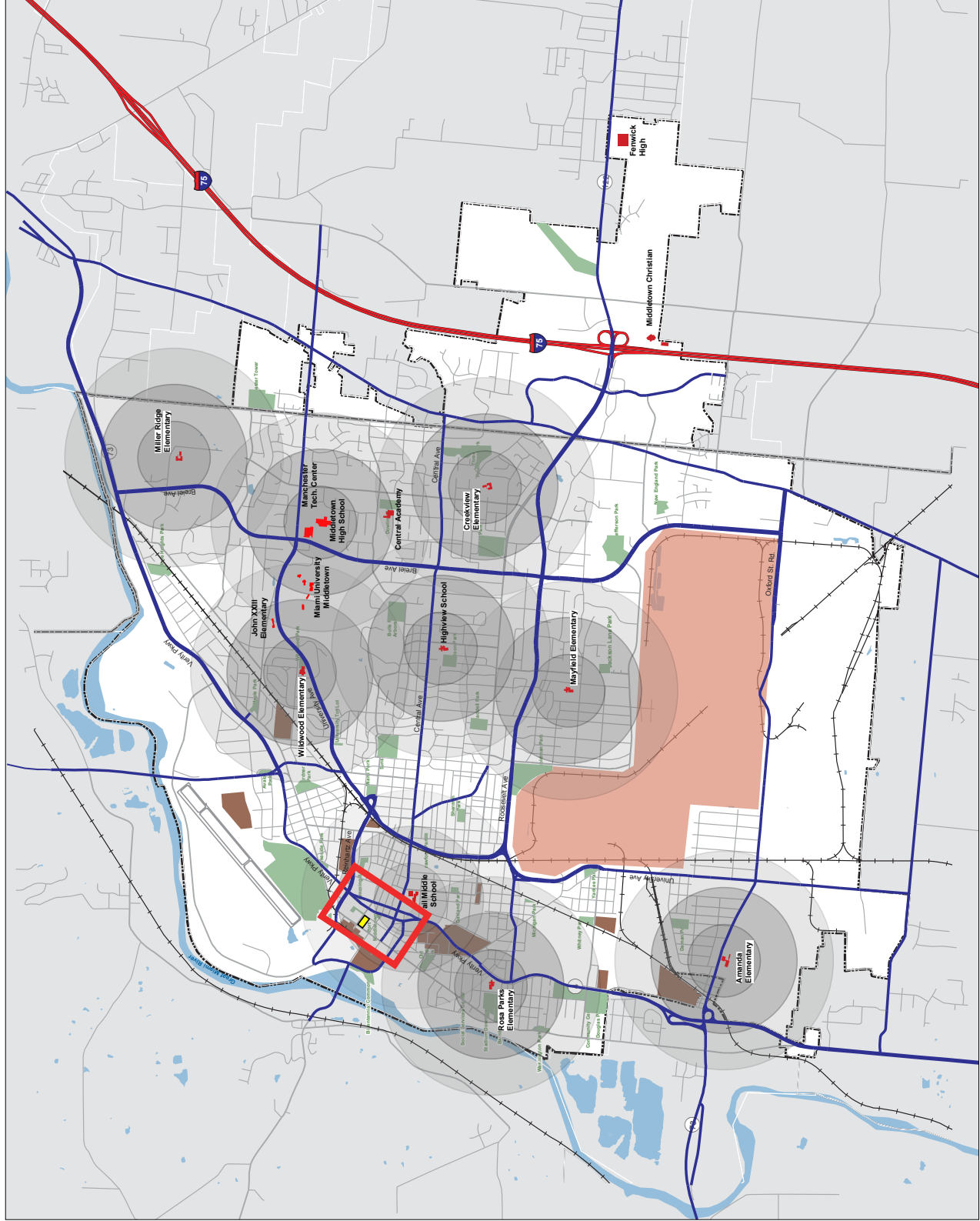
<sup>22</sup> Hannah Poturalski, "Plans move ahead for new Middle School" Middletown Journal, July 8 2013

<sup>23</sup> Interview with Marty Kohler, planning director of Middletown

<sup>24</sup> In the case of Middletown, the neighborhood corner store is little more than a poorly lit cigarette and beer outlet

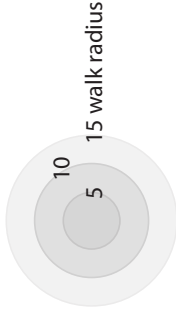
<sup>25</sup> "We shape our dwellings, and afterwards our dwellings shape us."

According to author, Dr. Mardy Grothe, Winston Churchill declared this in a speech to the British House of Commons, October 28, 1944



Middletown City Map with Schools and Major Roads

- City Boundary
- Railroad
- Interstate
- Arterial Roads
- 1:100 map of Downtown With proposed site
- School
- Public Elementary School
- Brownfield Site



Vail Middle School is shown lighter because it will soon be demolished

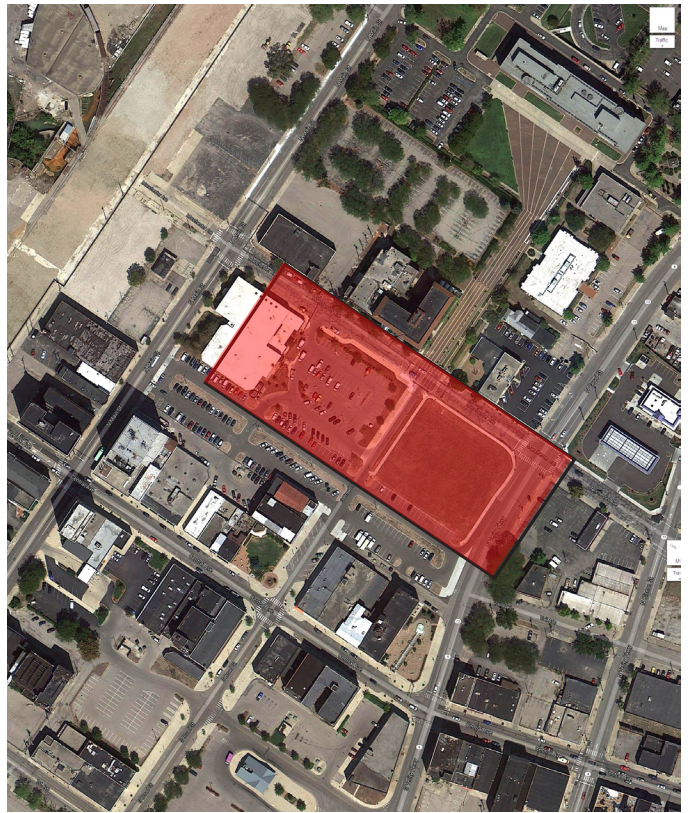


STUDY OF PUBLIC SCHOOLS AND THE TOWN CORE





Current YMCA, nondescript, uninspiring from all sides



The Vacant Manchester Hotel Across the street

# SITE 1 (Chosen Site)

The site of the current YMCA in the middle of downtown Middletown is severely underused. It has tremendous potential as a magnet to bring people, especially parents and children back into the town core. Anything placed here will reverberate throughout the surrounding buildings.







# POTENTIAL SITE 2

The Brownfield site is the site of the original Armco Steel Works, and also the former site of the AK Steel Headquarters. AK Steel sits on the land leaving it vacant. It is suspected that the site is severely contaminated and that cleanup costs would be tremendous.



2004, AK Steel Corporate Headquarters



2013, Vacant Contaminated Brownfield Site



Former Site of Original Steel Plant



PROCESS FALL 2013



# BIG IDEAS

## TRANSPARANCY

- VISIBILITY INTO THE COMPLEX
- VISUALLY WELCOMING TO THE COMMUNITY
- NO UNSAFE AREAS, NO AREAS COMPLETELY OUT OF SITE
- BUILDINGS LOOK OUT TO THE COMMUNITY

## PERMEABILITY

- PEDESTRIANS, BIKE EASILY PASS THROUGH THE COMPLEX
- BUILDINGS ARE PERMEABLE TO FOOT TRAFFIC
- CONNECTION B/W INDOOR & OUTDOOR SPACES



## MIX

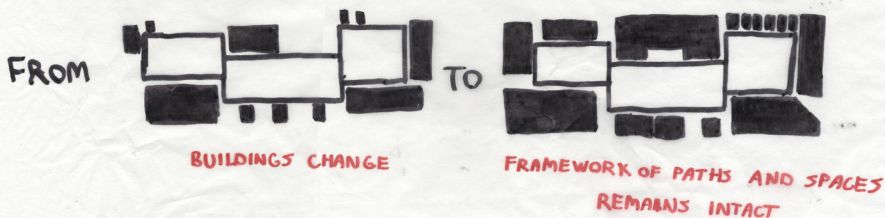
- MANY DIFFERENT USES, NORMALLY SEPERATED, INTERCONNECTED
- CONNECT WITH NEIGHBORING USES

## OUTDOOR SPACES

- CREATE THE SPACES, DESIGN THE BLDGS. AROUND THESE SPACES
- NO BACKSIDES TO ANY BUILDINGS
- CURRENTLY FEW DEFINED "SPACES" IN DOWNTOWN MIDDLETOWN

## FRAMEWORK

- DON'T BUILD THE WHOLE COMPLEX AT ONCE
- DEVELOP A FRAMEWORK FOR WHICH NEW PROGRAM, NEW USES CAN BE ADDED
- A FRAMEWORK THAT EXTENDS TO SURROUNDING COMMUNITY
- GIVES THE PROJECT ABILITY TO GROW & EVOLVE



# POTENTIAL USERS

and their needs

## Young Children

- Classrooms
- Daycare
- Preschool
- Playground(s)
- Safe areas to run
- Connection to work areas
  - so they can see, participate in the adult world

## Nearby Residents

- Housing?
  - gardens
- work/employment
- Recreation/fitness
- Need the place to be well-lit at night

## Older children

- Classrooms
- Workspaces (to work w/ local artists)
- Outdoor Recreation
  - basketball ct.
  - Skate park
- Indoor Recreation
- Bike friendly access, amenities

## Comm College students

- Recreation/fitness
- Place to relax, eat lunch
- Parking
- Nearby food
- Day care (if they have kids)

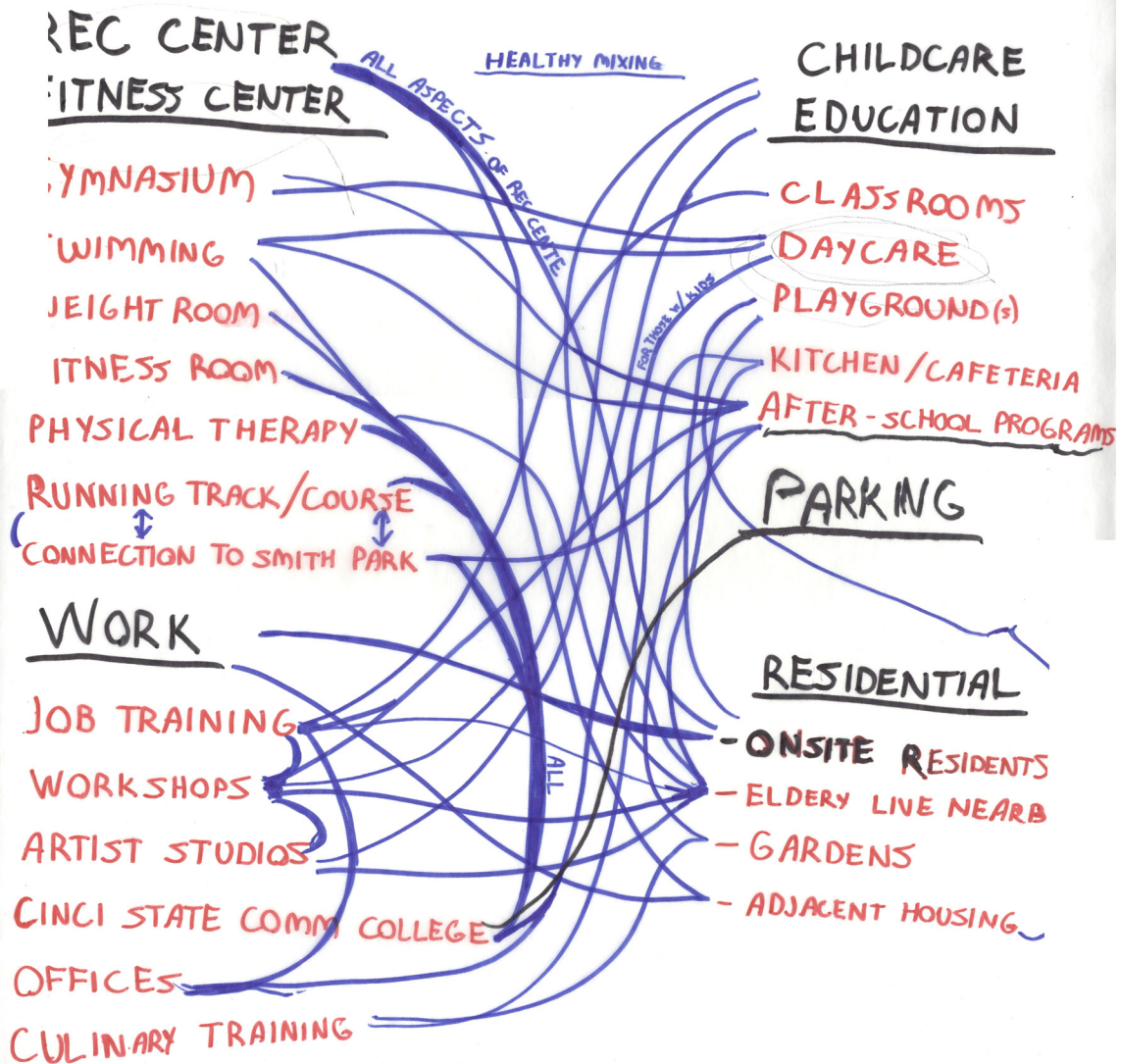
## Elderly

- Nearby Residence
  - Manchester INN?
- Work areas
  - To keep active & interact w/ young people
- Physical Therapy
- Interaction w/ children
- Places to relax outdoors

## Adults

- Place to relax, eat lunch
- Recreation/fitness
- Nearby food
- Day Care (if they have kids)

# ROUGH PROGRAM





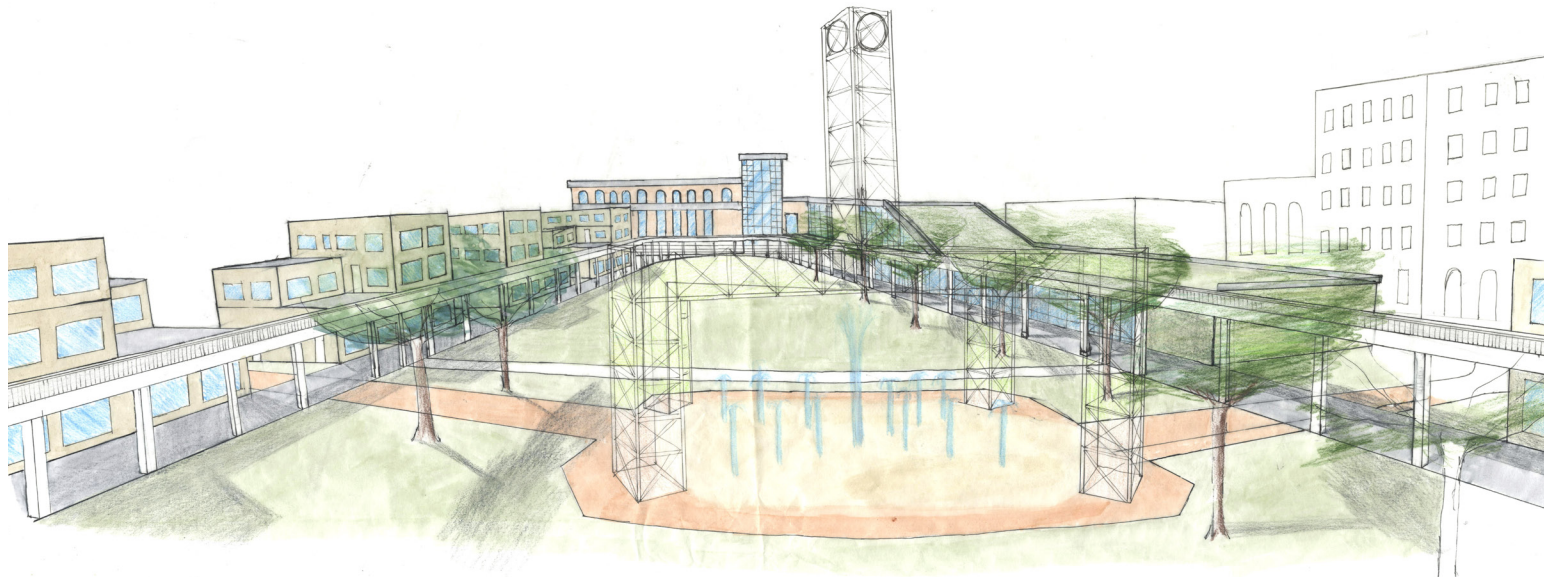
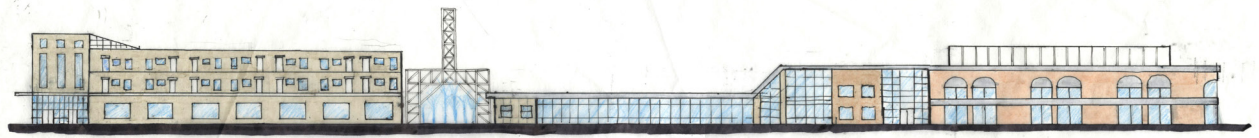
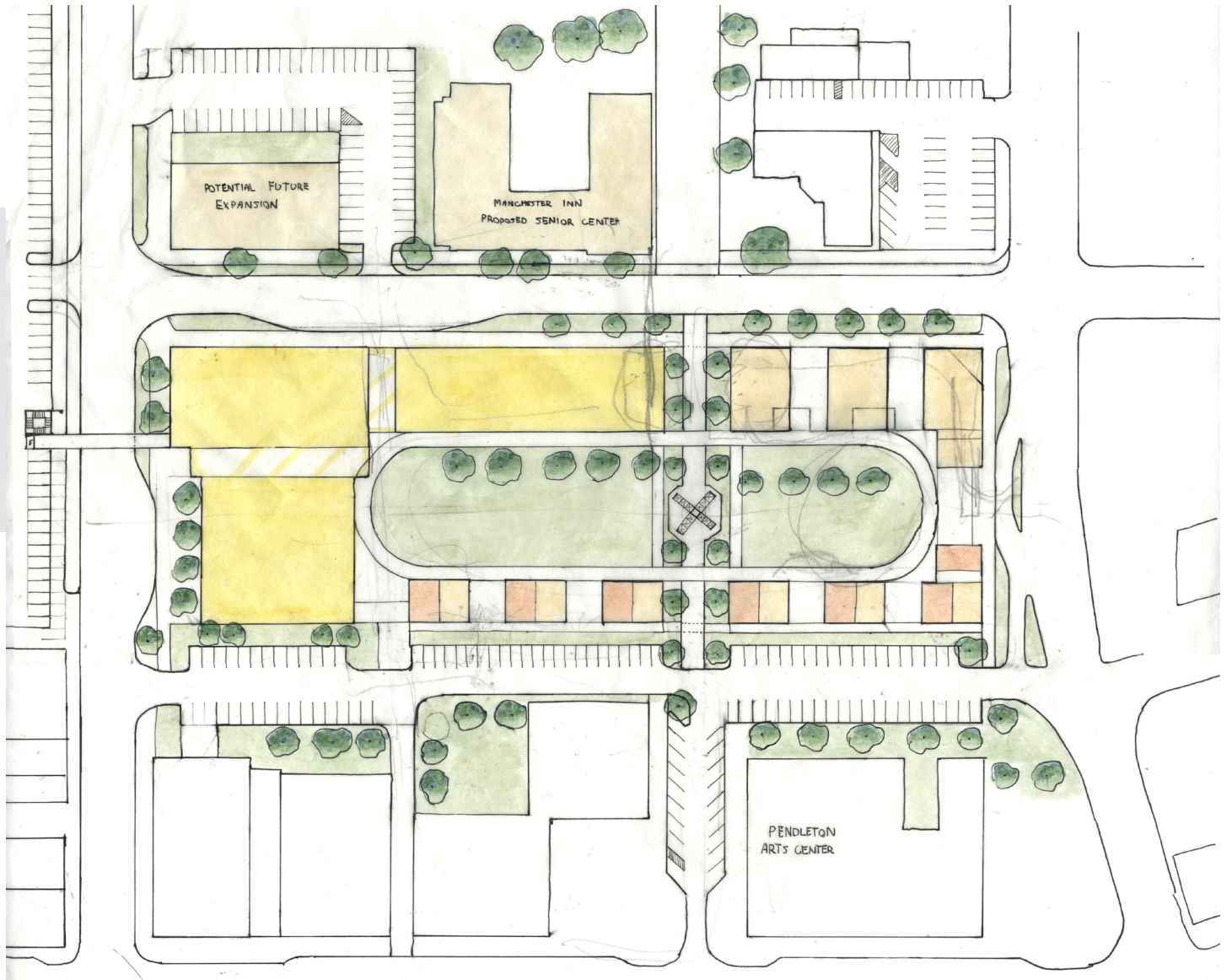
□ VACANT (MOSTLY)  
■ OCCUPIED (MOSTLY)



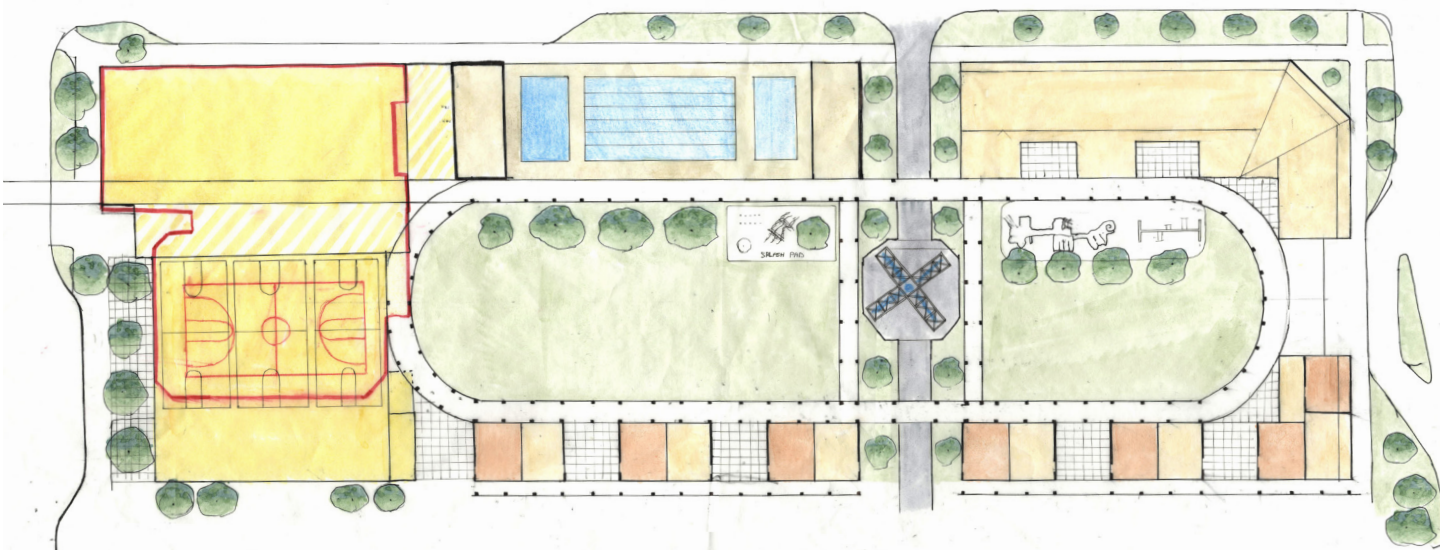
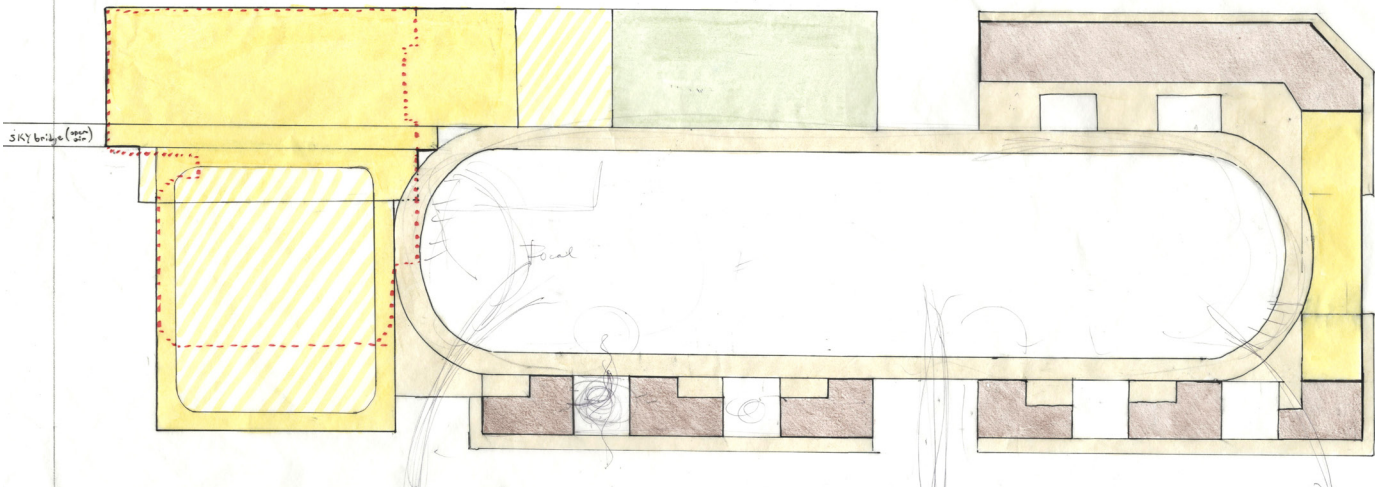




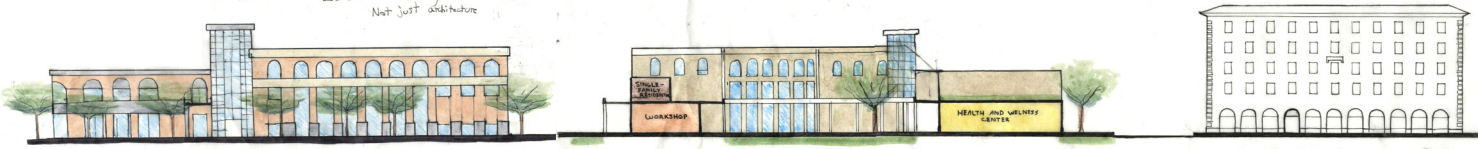








LOOK at Inspiring Spaces  
Not just architecture



SITE SECTION BB



SITE SECTION AA LC

SINGLE FAMILY HOME ABOVE

SINGLE FAMILY HOME

SINGLE FAMILY HOME





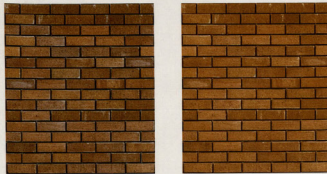


# Children's Center

**Goal:** Create a Place that brings together people from all over the city, especially children

- Where the adult world is on display to children
- Where the children's play is on display to all

Craig Genet  
12-4-2013



**Red or Brown Brick**  
(Renovated YMCA, Apartments)  
Matches much of context



**Exposed Concrete**  
(Swimming Pool, Daycare, other)  
Like Slate, the façade itself should be a chalkboard



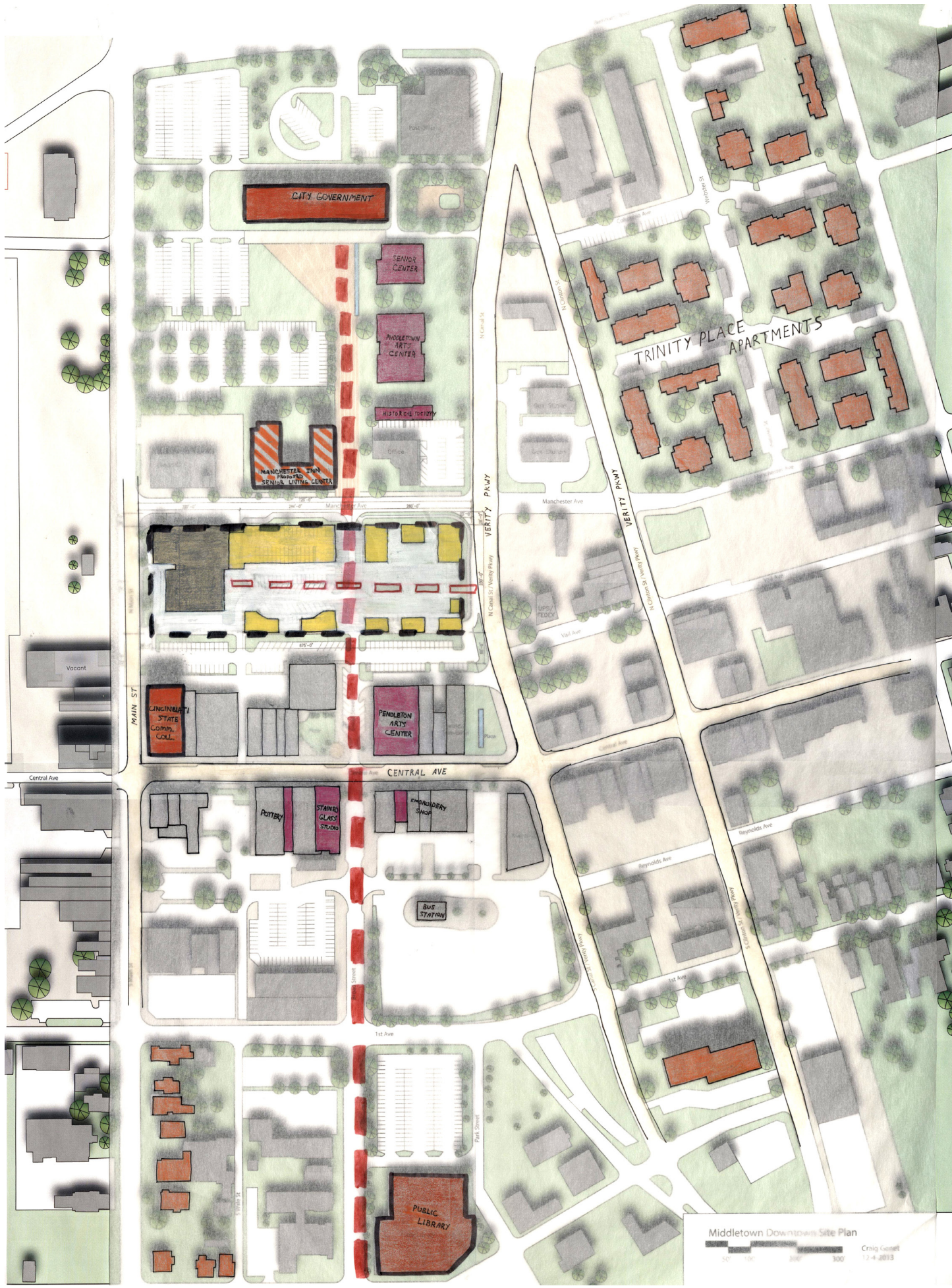
**Wood**  
(Residential, Pergolas, Playgrounds)  
Convey a sense of warmth and welcoming, Allows for variability with adventure playgrounds



**Slate Brick**  
(Workshops, Daycare/Preschool)  
The façade itself should be a chalkboard, and invite people to personalize it.

## Materials



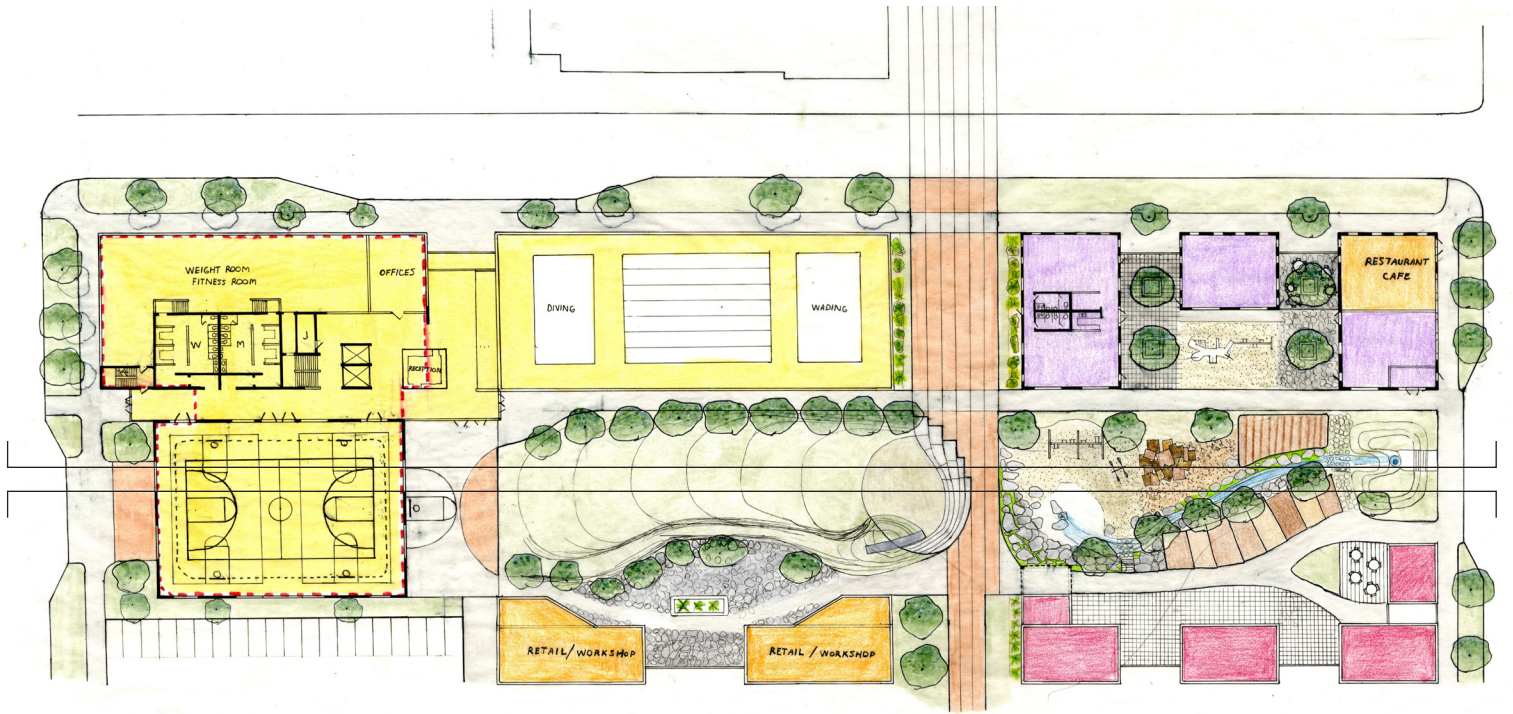


Middletown Downtowns Site Plan  
 Scale: 0 100 200 300  
 Craig Condit  
 12-4-2013

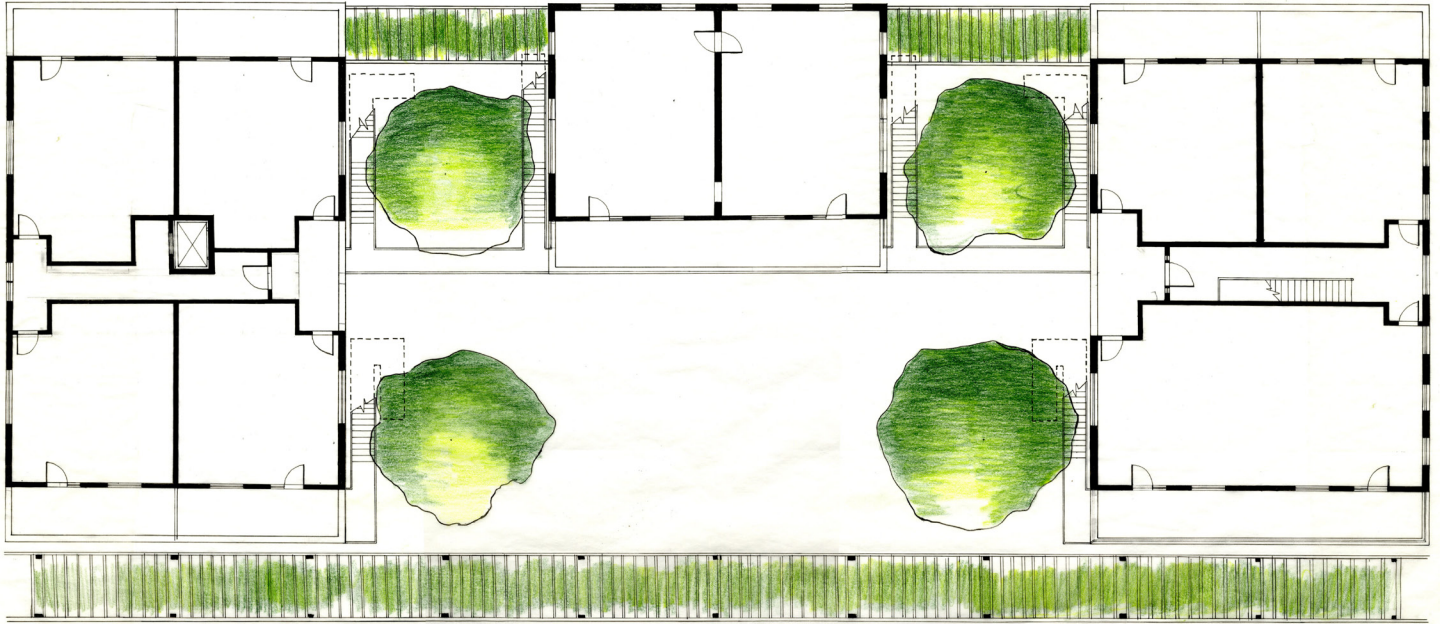




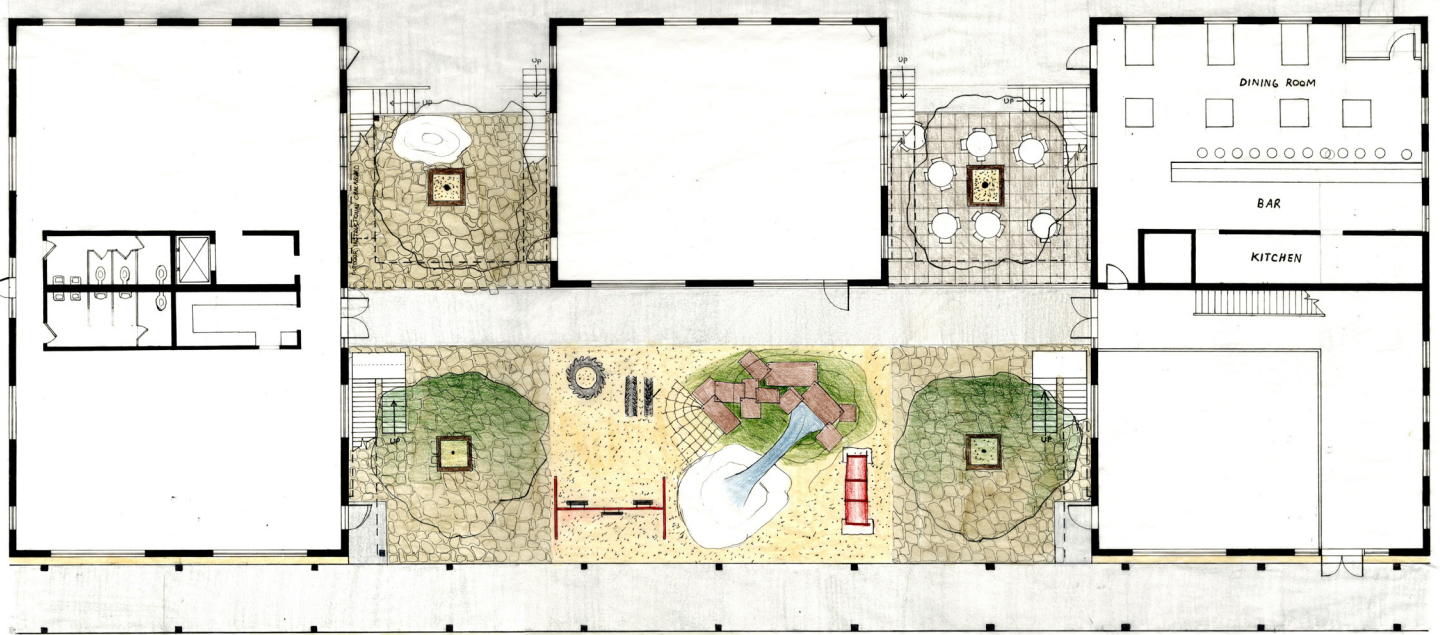








Level Two



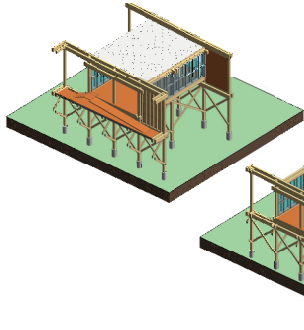
Level One







# Type IV Timber Frame I

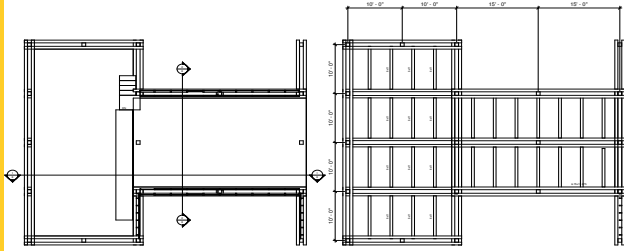


## Advantages

- Constructed much like a wood playground
- Good Tactile quality for kids
- Exposed structure has aesthetic appeal
- Conveys Warmth

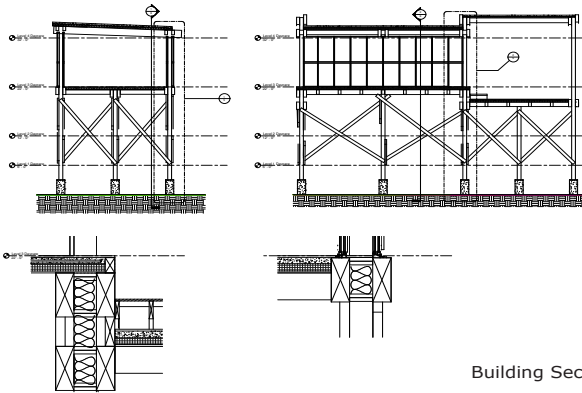
## Drawbacks

- Maybe inappropriate for Middletown
- Massive structural members just to meet fire codes
- Columns don't meet code
  - \* Where a horizontal separation of 20 feet or more is provided, wood columns and arches conforming to heavy timber sizes shall be permitted to be used externally

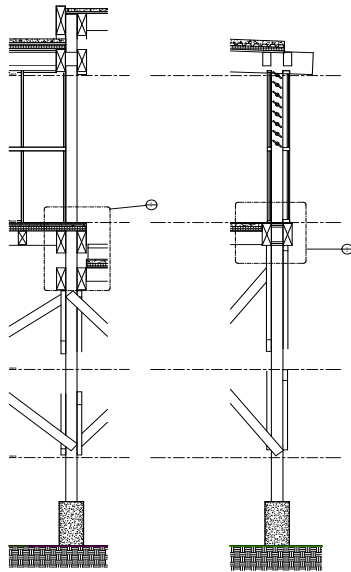


Partial Floor Plan

Framing Plan

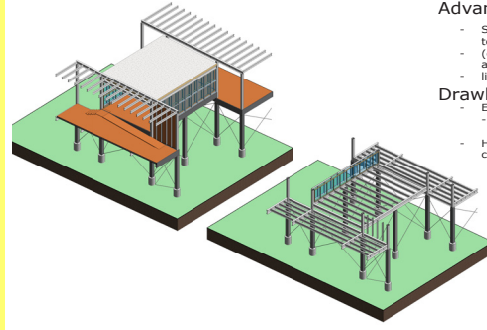


Building Sections



Wall Sections

# Type II Steel Frame

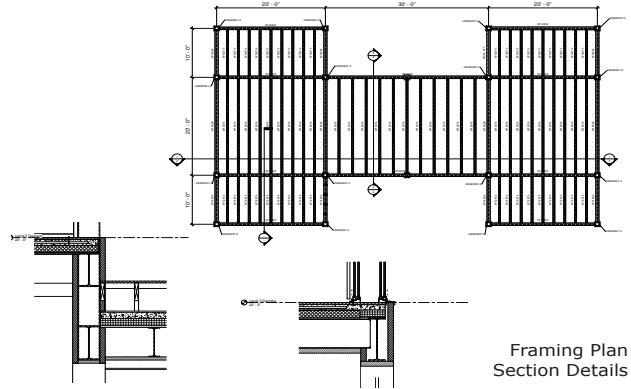


## Advantages

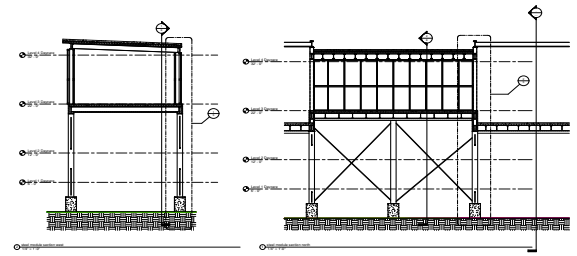
- Steel is appropriate for Middle town
- (exposed) Steel appropriate for a playground
- light structure (aesthetically)

## Drawbacks

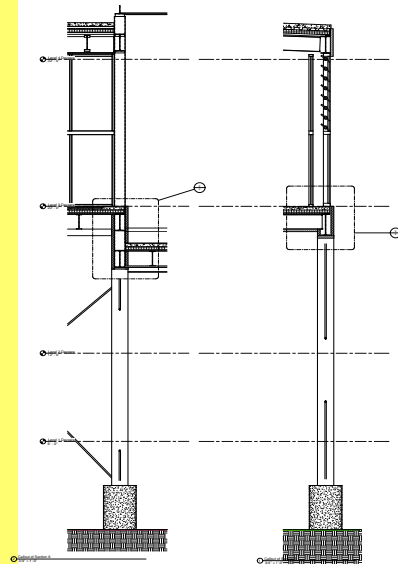
- Everything must be fireproofed
- Loses the visual appeal of exposed structure
- How can this look good and not cheap



Framing Plan  
Section Details

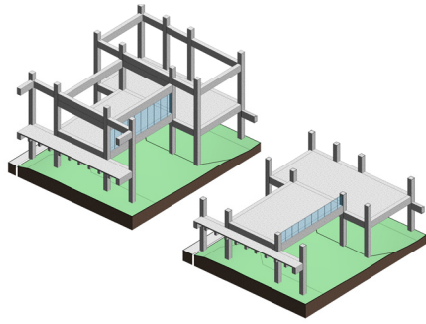


Building Sections



Wall Sections

# Type I Reinforced Concrete

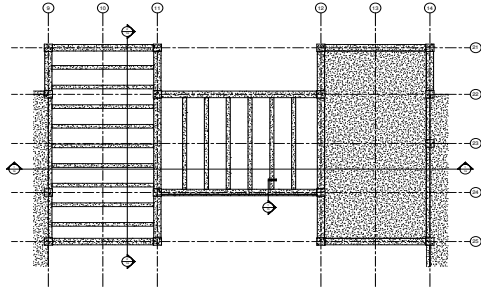


## Advantages

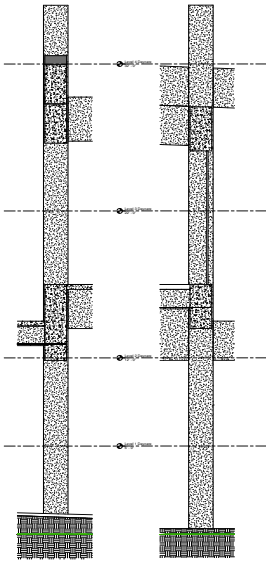
- Type I construction, meets any fire code
- Flexible
- continuity b/w structural pieces
- precedent: Riverview East Academy in Cincinnati

## Drawbacks

- Grey concrete, unappealing, not a warm material
- Unsustainable, high embodied energy
- Heavy Structure aesthetically
- Does not embody playground material



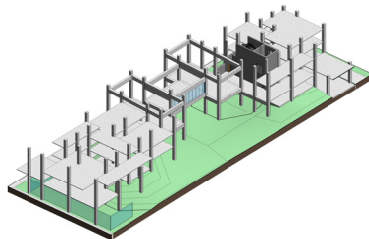
Partial Framing Plan; Floor Plan



Wall Sections

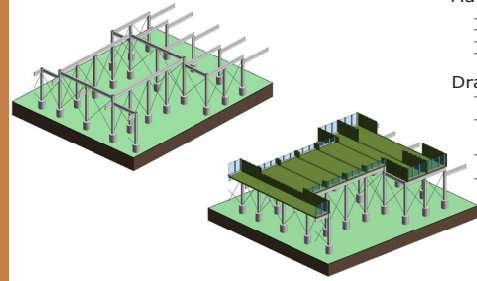


Precedent elevated school: Riverview East Academy



Birds Eye View

# Type II, Shipping Containers

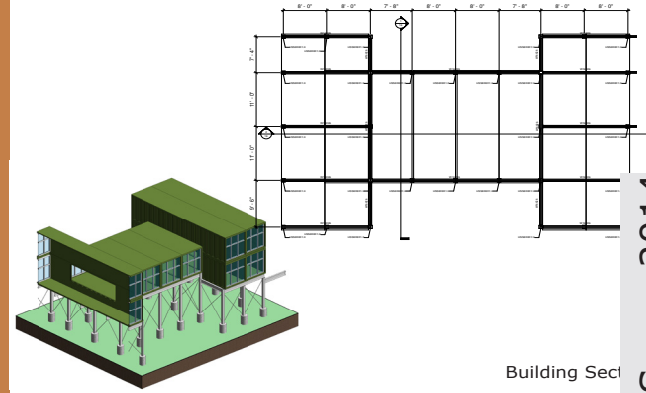


## Advantages

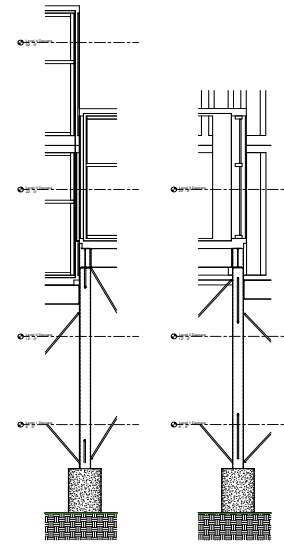
- Works well with modularity
- Adaptive reuse of materials
- Playful architecture
- steel containers, appropriate for steel city

## Drawbacks

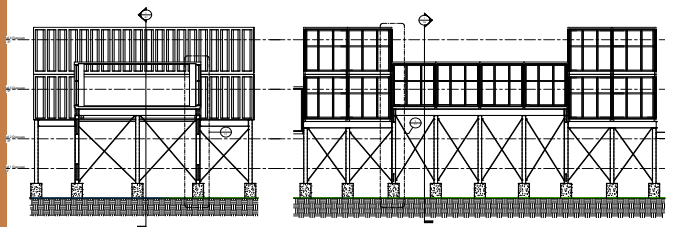
- This thesis is about children, not about material reuse
- labor intensive and expensive to customize these containers
- Questionable aesthetic for downtown Middletown
- Fireproofing the substructure



Building Section



Wall Sections



Building Sections

PROCESS SPRING 2014



# Precedent: St Louis City Museum

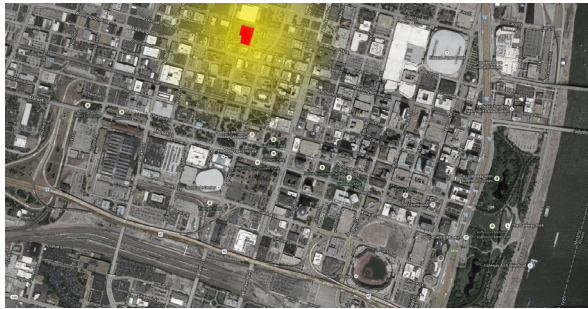
## Place of Youthful Activity

I took the committee's advice over Spring Break. **I had Fun!**

I visited the St. Louis City Museum with some old friends from High School, and we had the time of our life. To the right is a journal excerpt.

*We walked by the Arch...then through downtown to our destination: the city museum, which was awesome, even better than expected! A giant playground for people of all ages. All sorts of tunnels, big slides & such to climb through. So much fun!, for everybody. Here, we were four 24-yr-olds crawling around like the 6-yr-olds next to us. And the place was packed. It was like something out of a Dr. Seuss drawing*

The museum embodied just about everything I am trying to do with my thesis project.



Children should feel safe downtown, and want to be there...

It is located in the heart of St Louis within walking distance of the Arch (above)

...The buildings themselves should be more like playgrounds

One can go floor to floor, room to room through tunnels, slides, or the conventional stairs

...people of all different ages and ethnicities should mix

There were probably more adults here crawling through everything than children.

...children should have access to nature, even in an urban setting

A large part of the museum is outdoors. Natural elements are limited, though they seem more prevalent on the roof (below), which was closed when we visited.

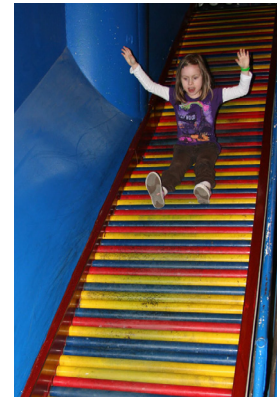
...mixed uses are beneficial in blurring the harsh line between the children's world and the adult world.

It's more than a playground. The "museum" aspect has many elements of St. Louis Natural History. The museum also contains a reception hall, reasonably priced dining, and a fully stocked bar, (below) all on different floors adjacent to playground areas.

### Other areas of Interest

Much of the playground aspect of the museum is constructed using repurposed materials, giving the entire place a very genuine, industrial feel, unlike static conventional playgrounds. The ceilings, walls (far right, cooking pans) and floors are also mostly repurposed materials. Thus any surface is unconventional, and therefore interesting.

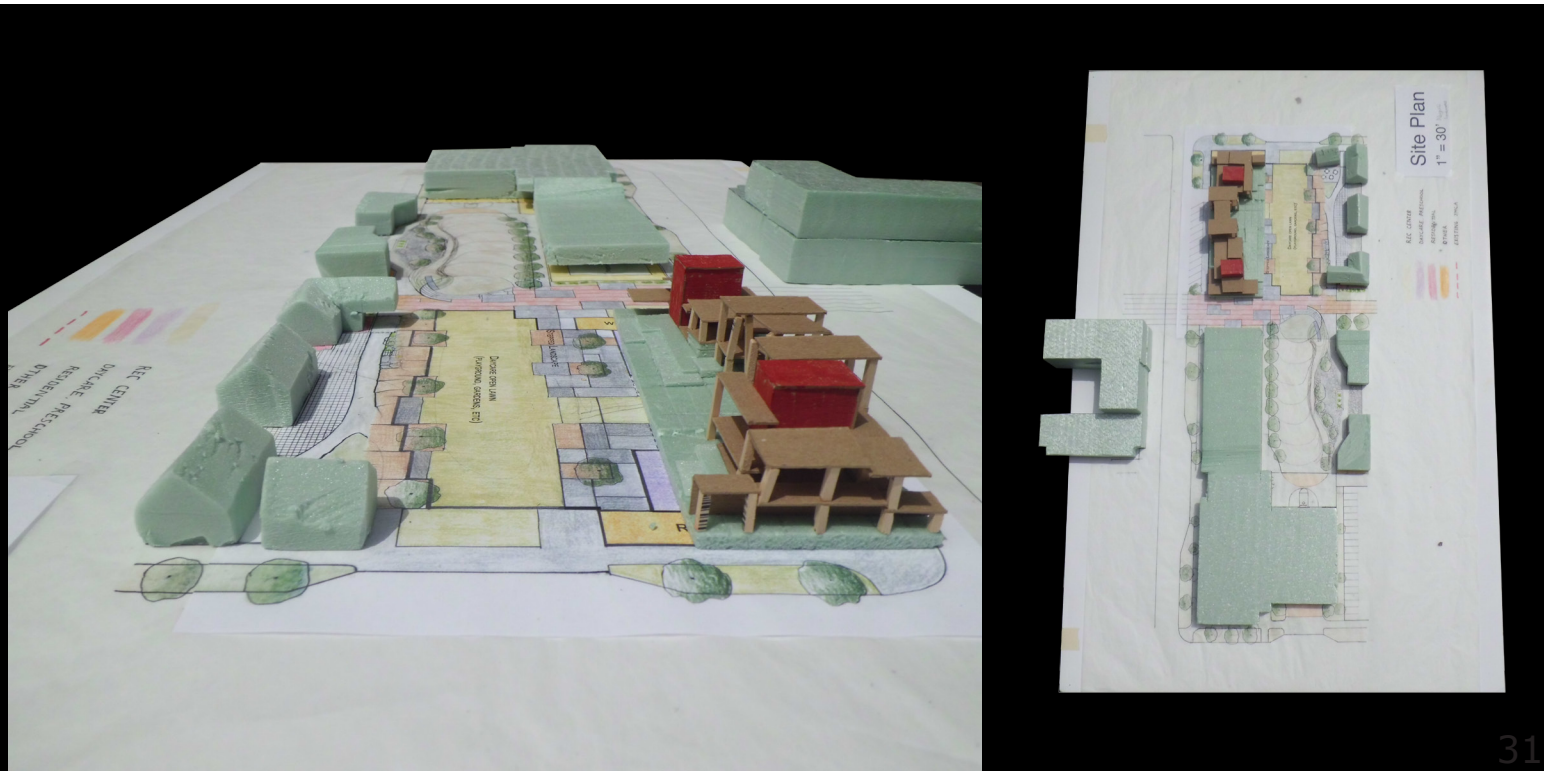
I was struck by how a building like this can exist in an age of liability and strict codes, but the fact that it exists and is very popular is encouraging.







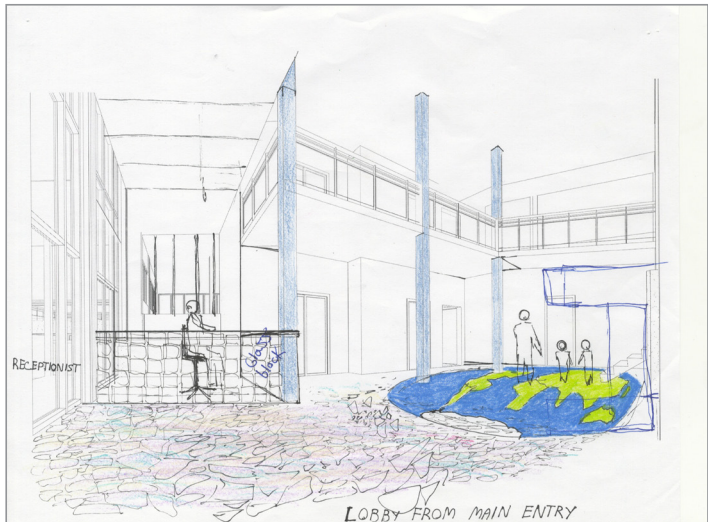
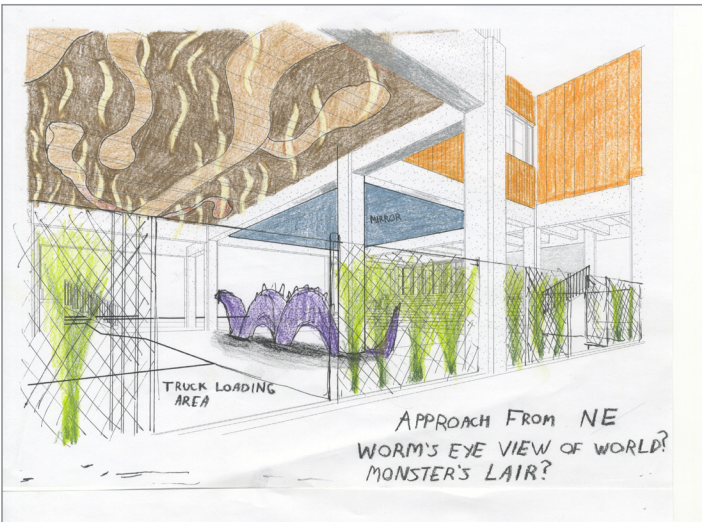
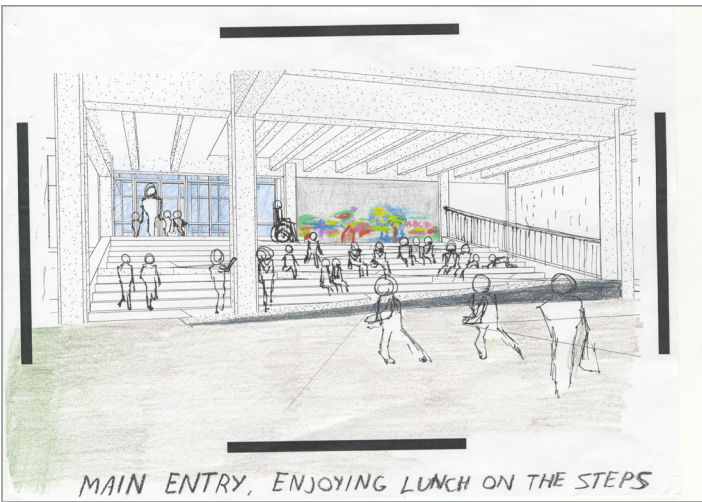
Study Models





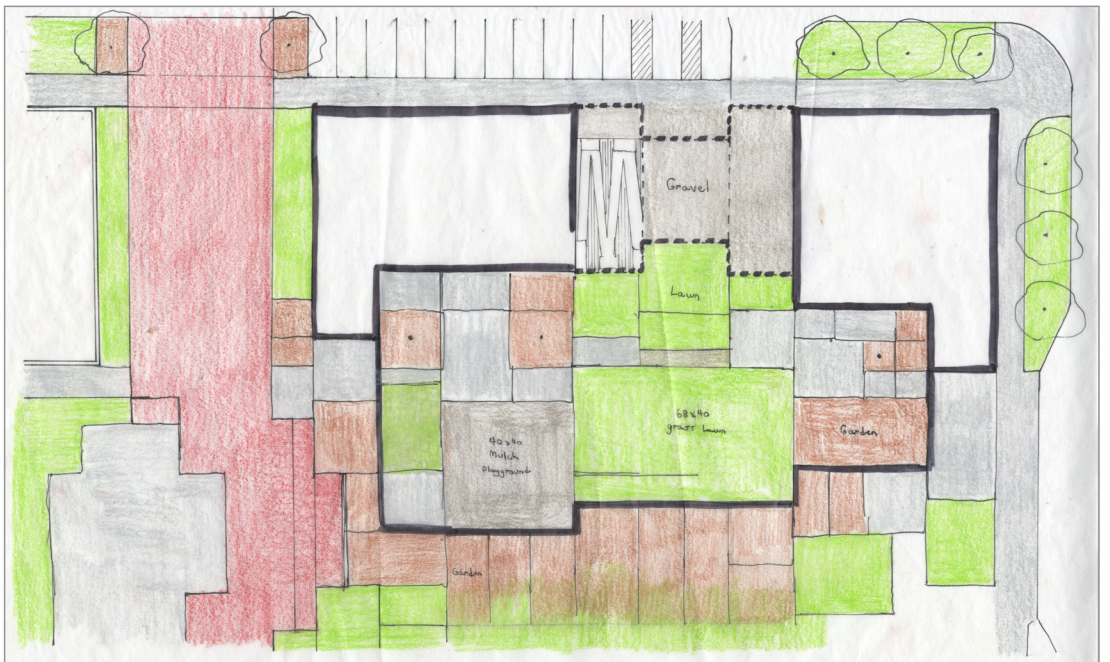






PROCESS SPRING 2014

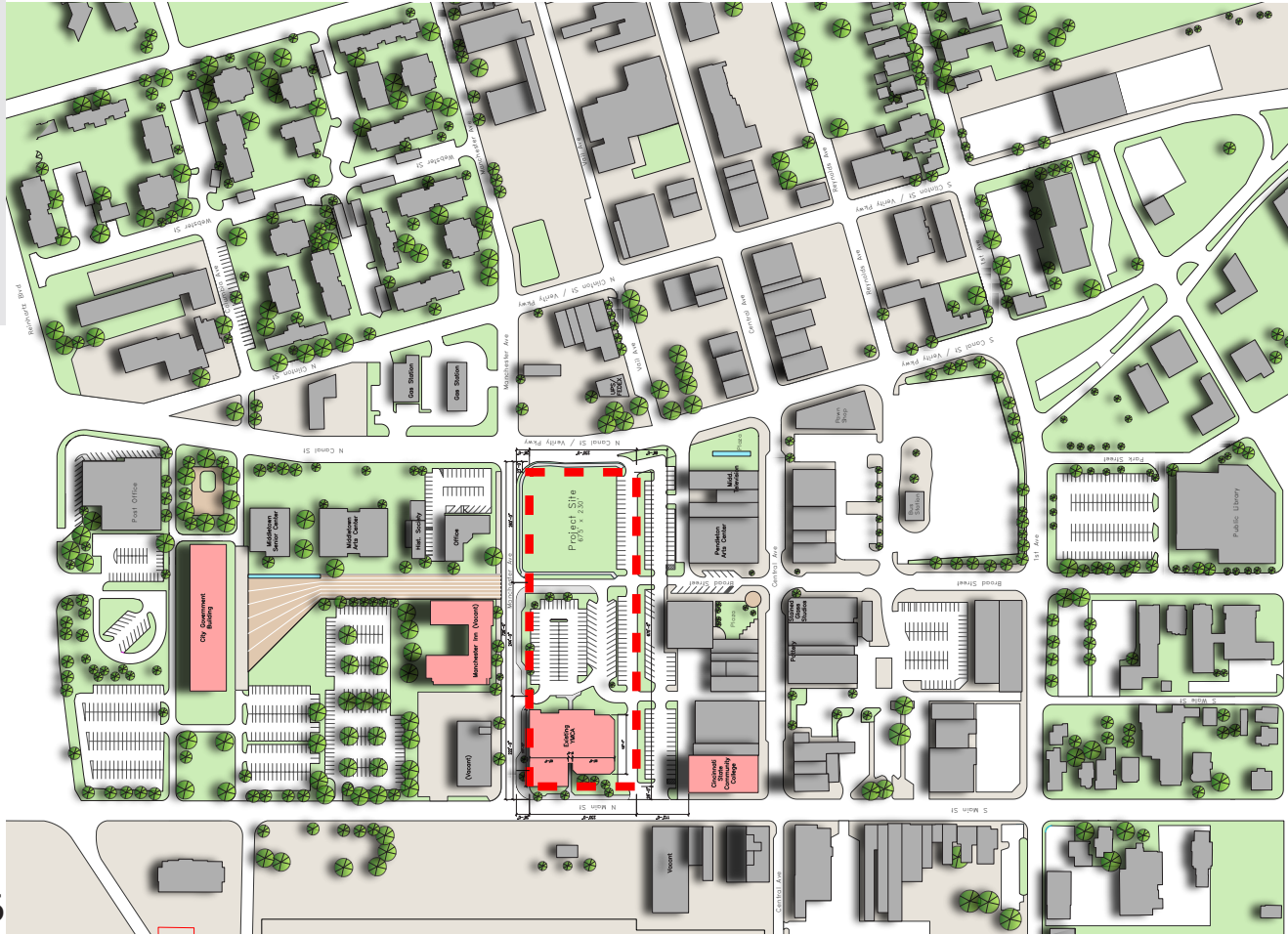




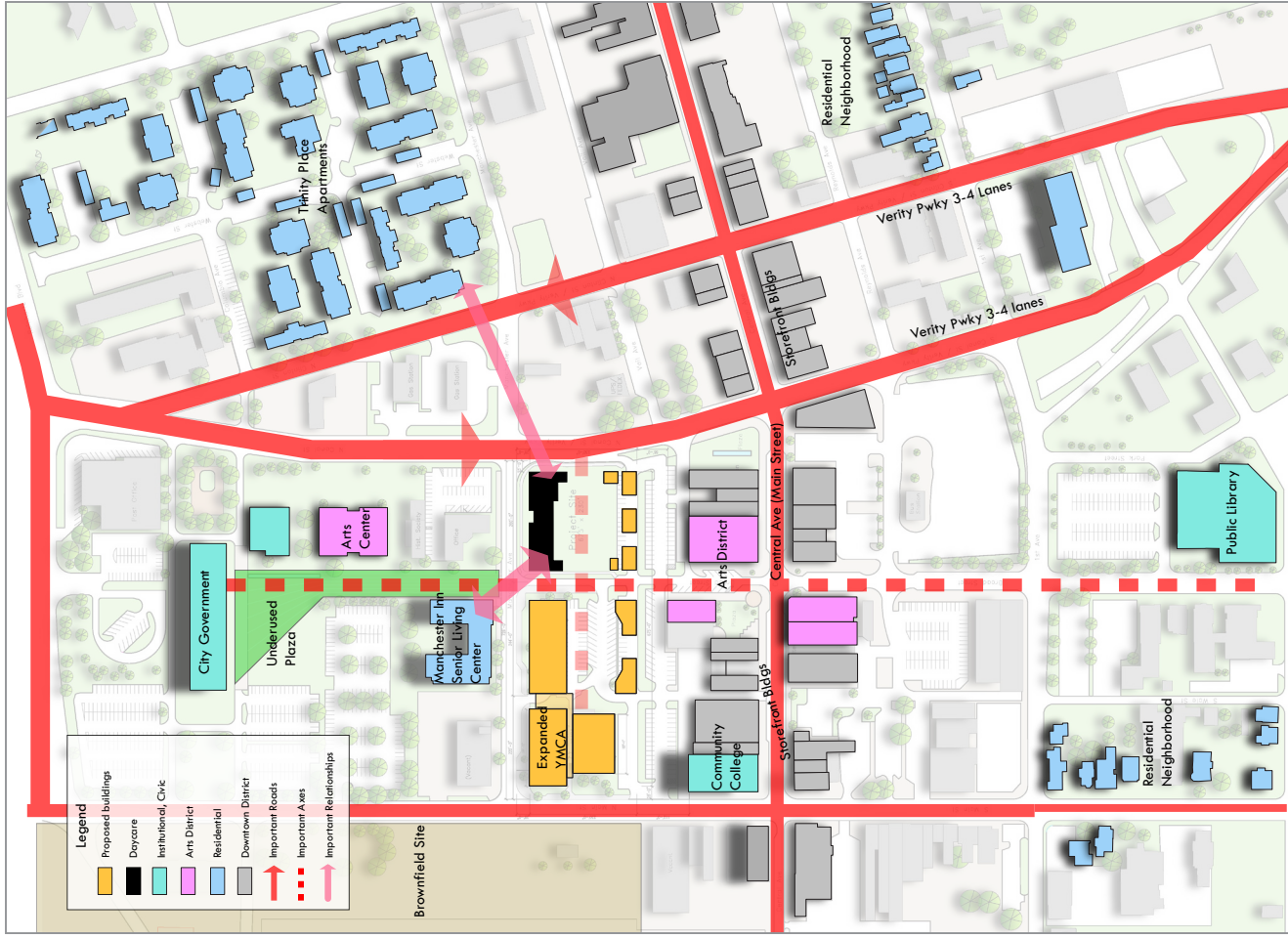






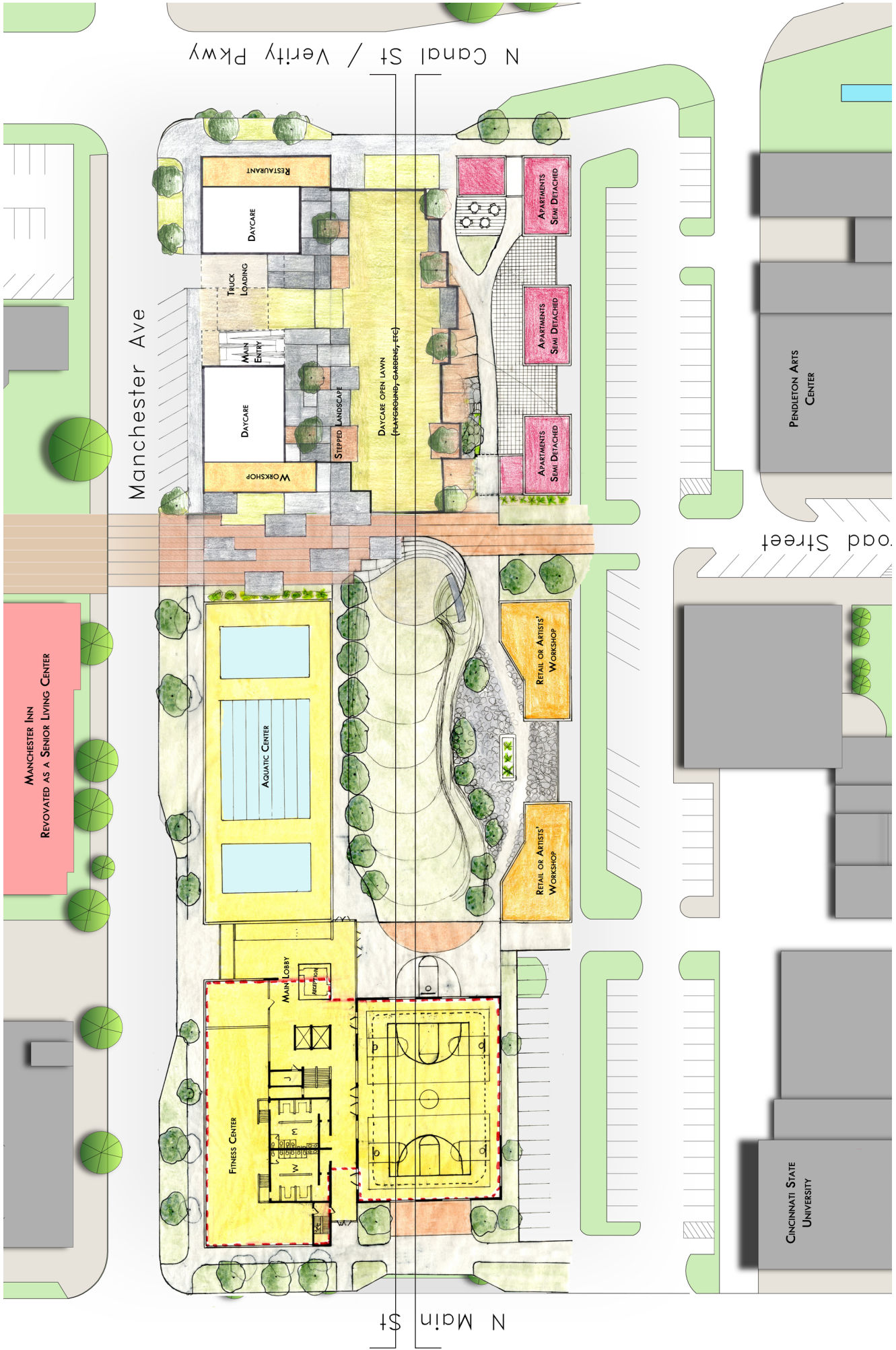


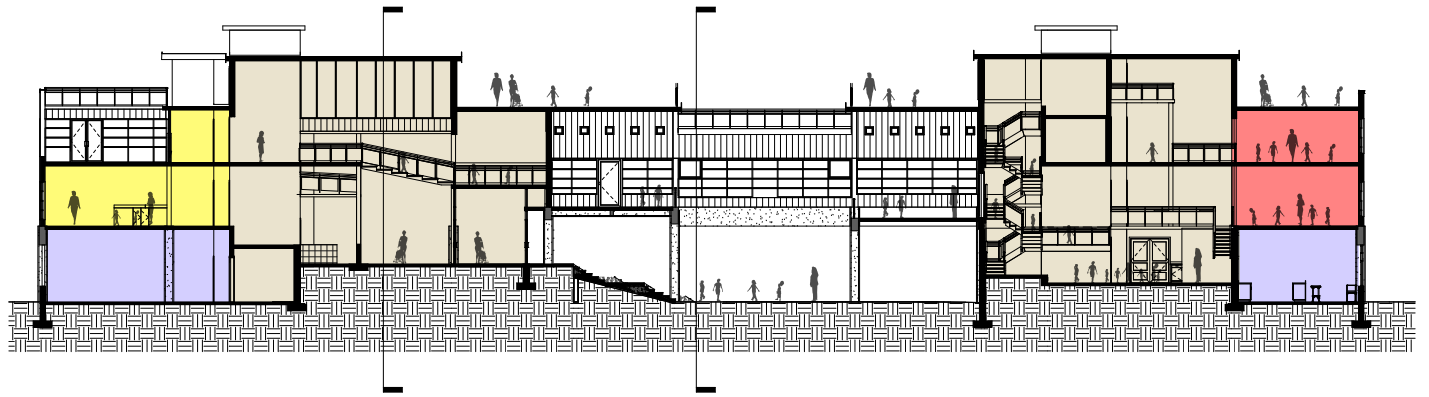
Downtown Area Plan



Downtown Concept Diagram





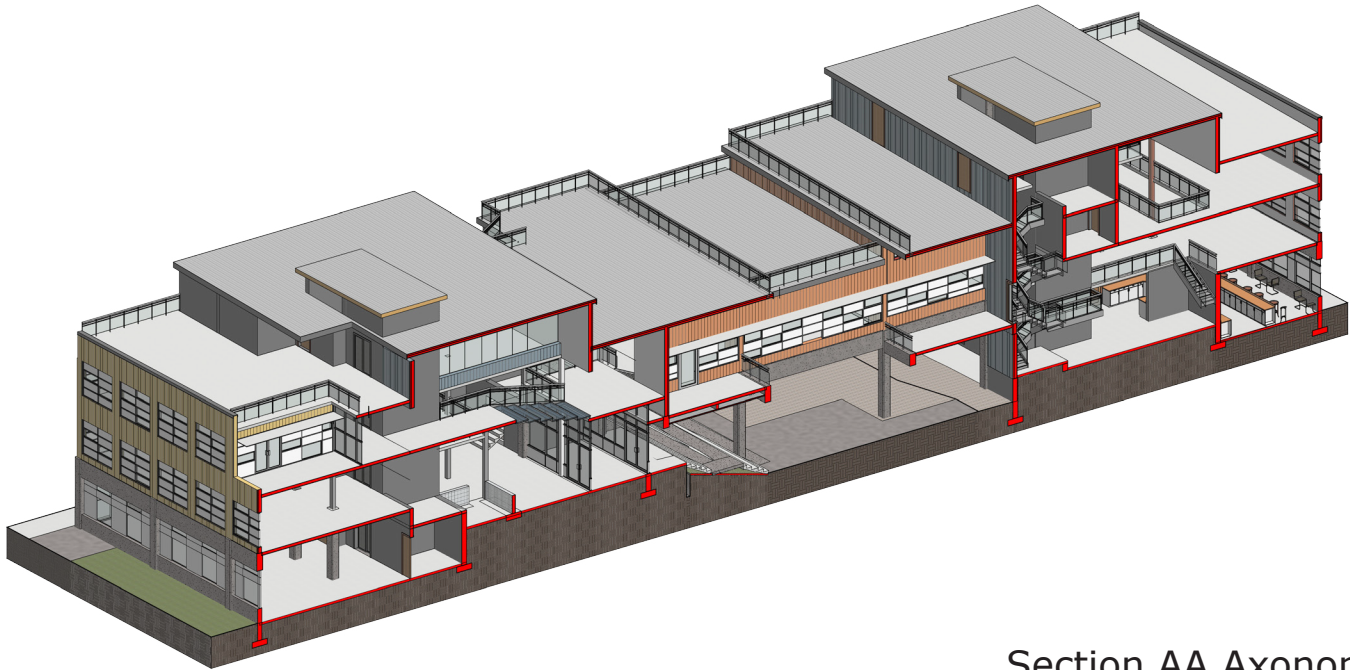


Section AA

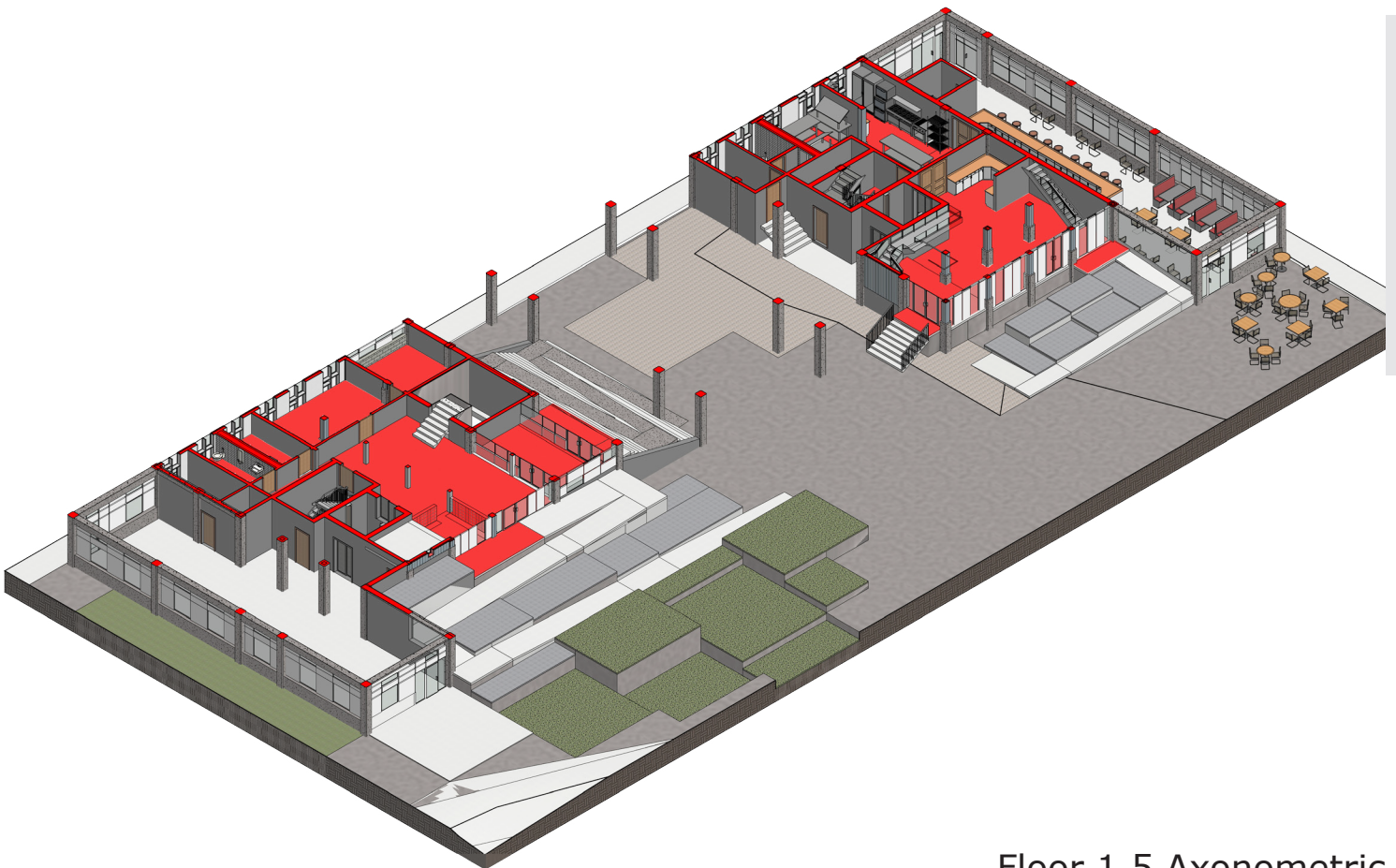


Floor 1.5



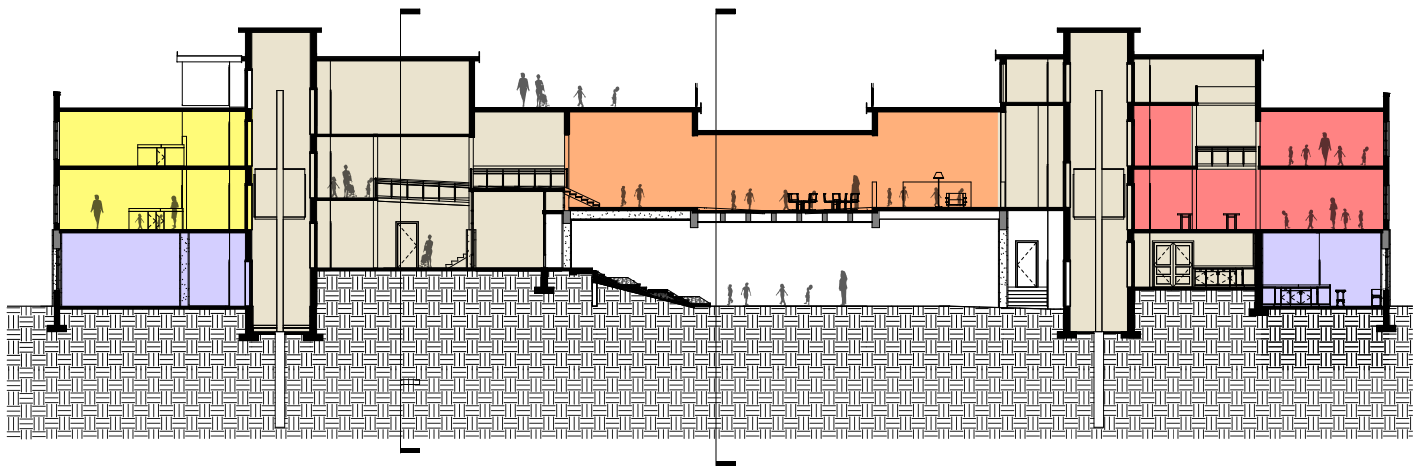


Section AA Axonometric



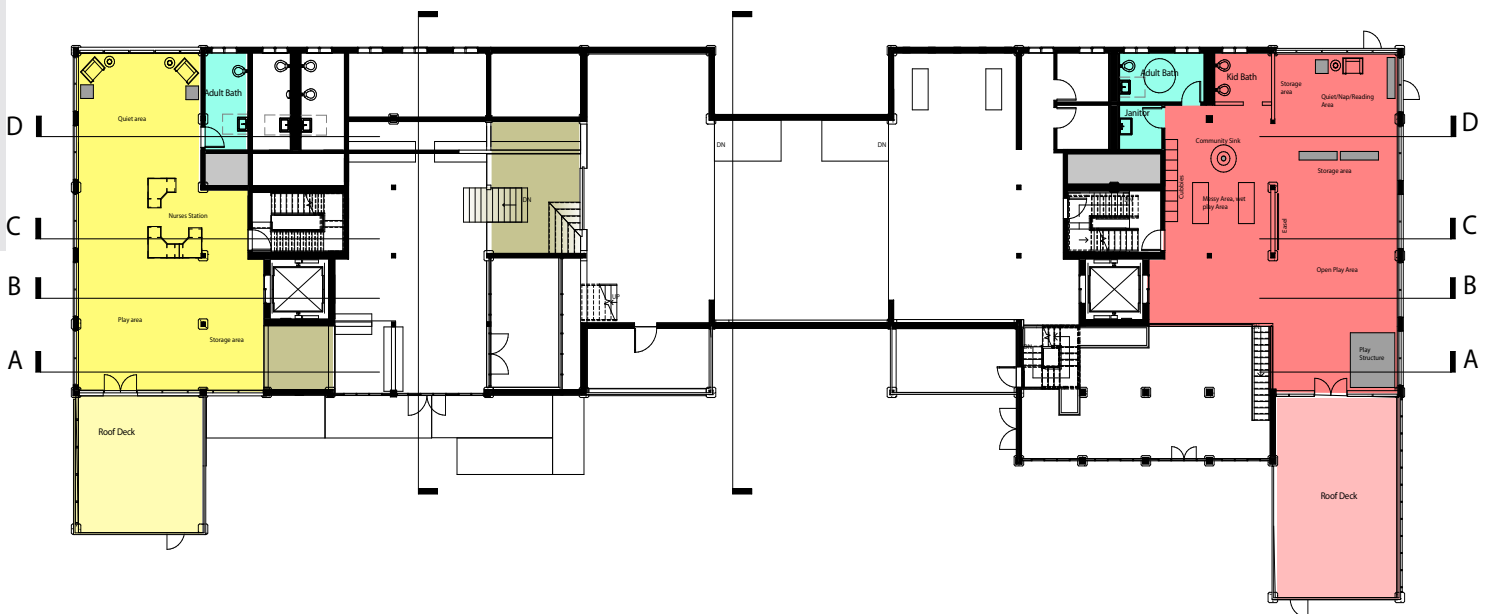
Floor 1.5 Axonometric

FINAL PRESENTATION



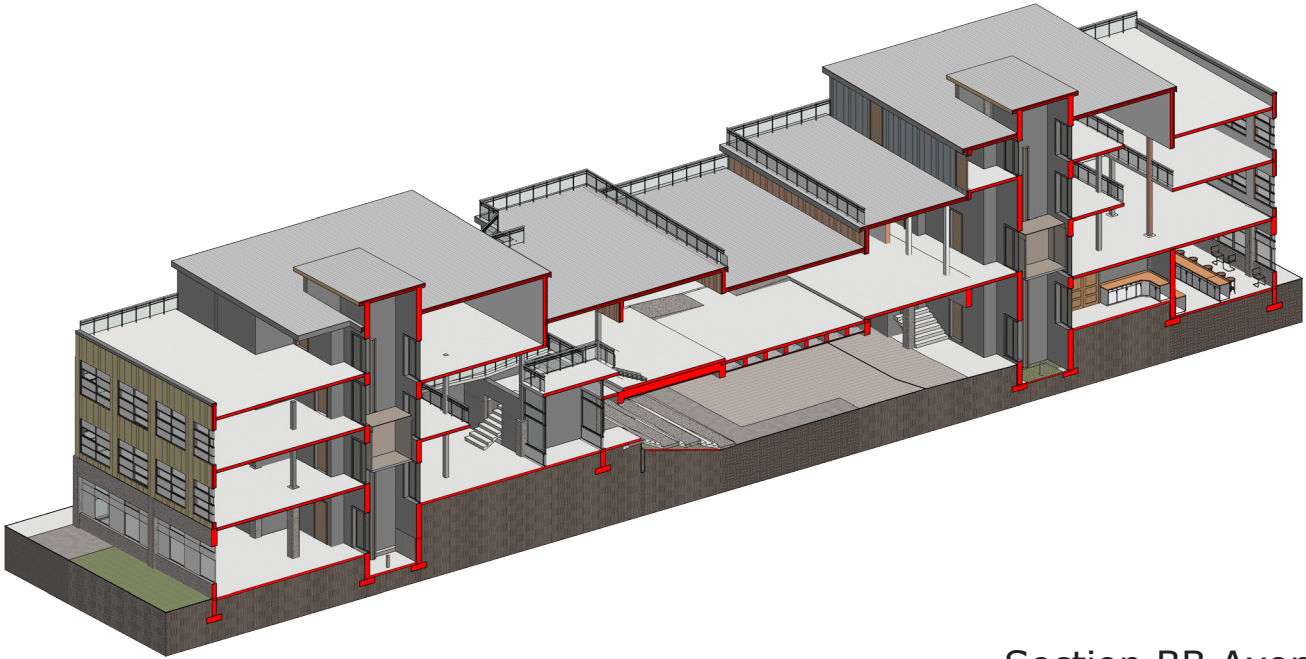
Section BB

FINAL PRESENTAION

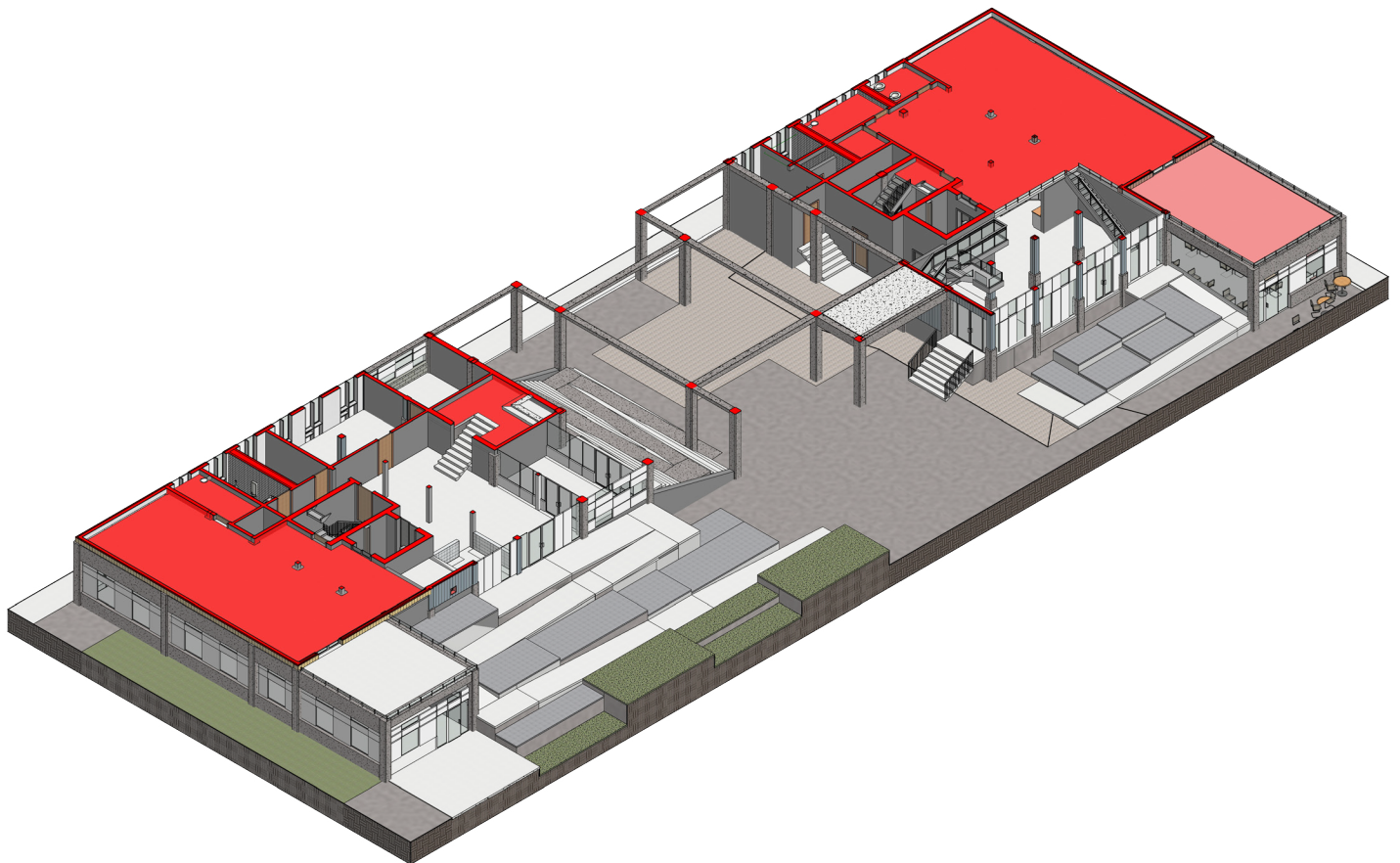


Floor 2.0

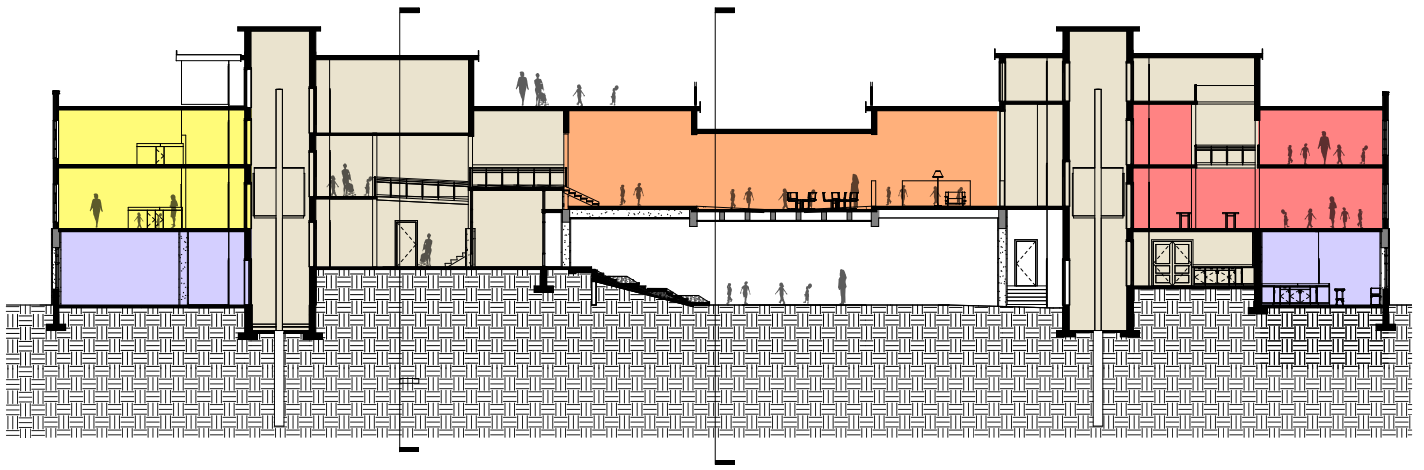




Section BB Axonometric

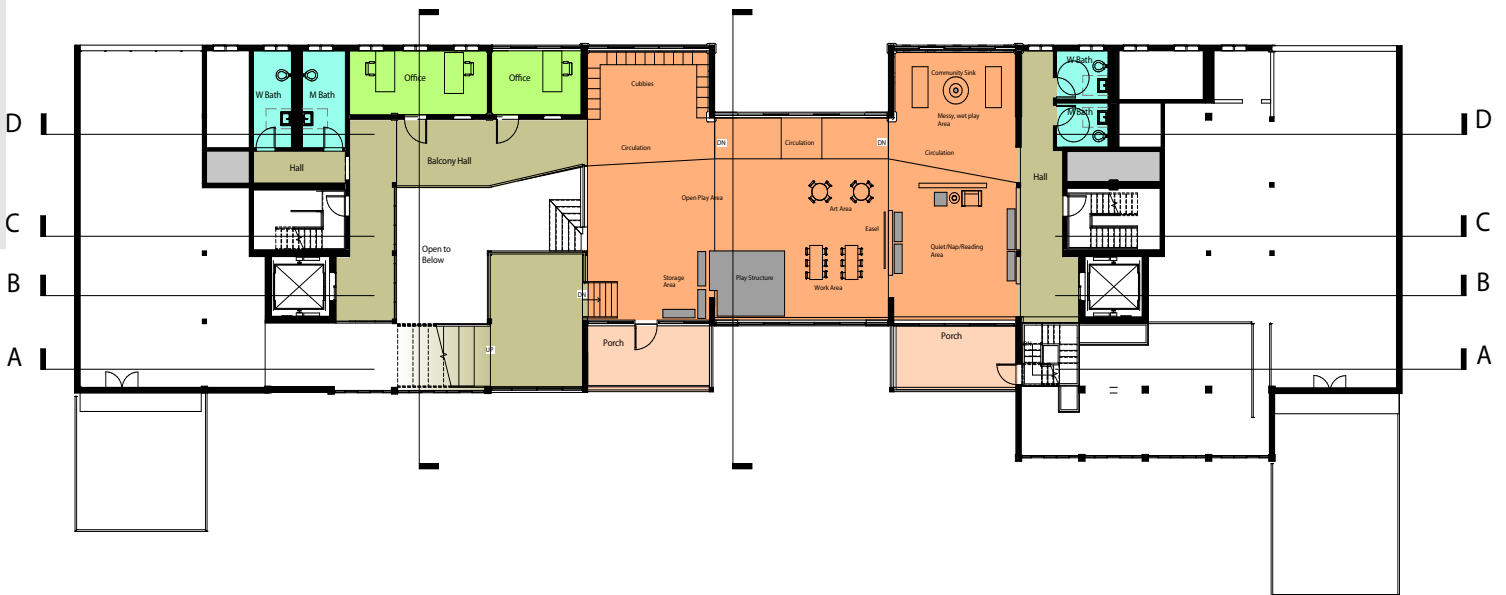


Floor 2.0 Axonometric



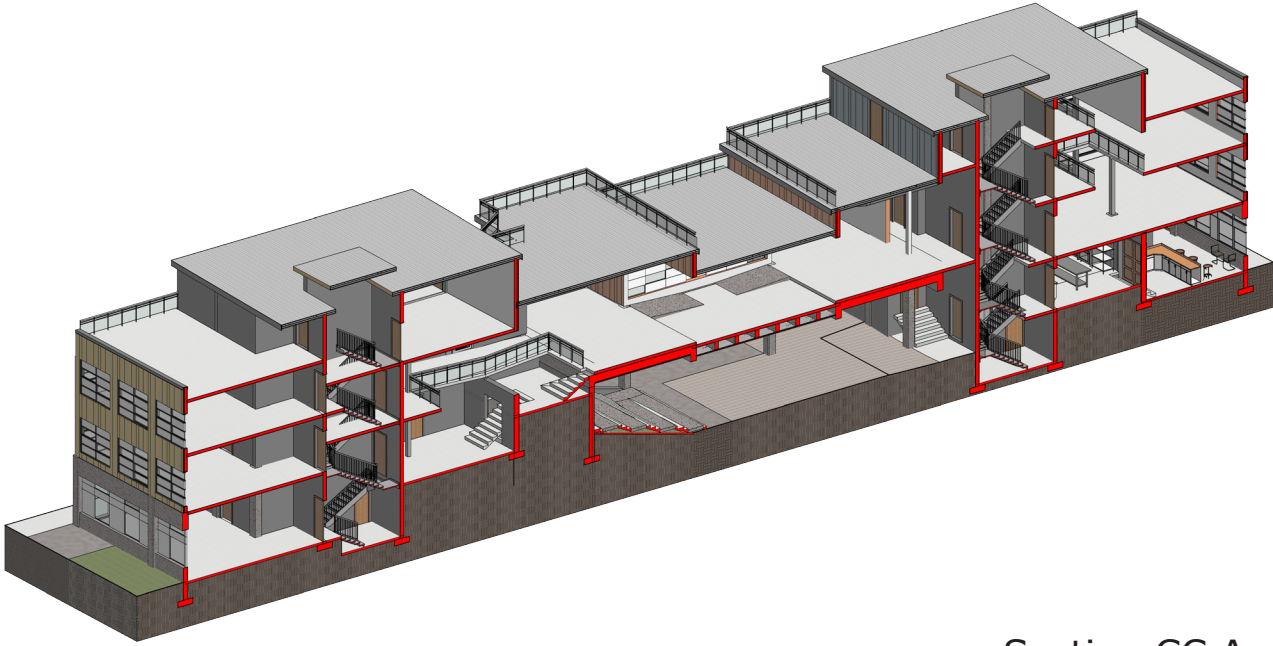
Section CC

FINAL PRESENTATION

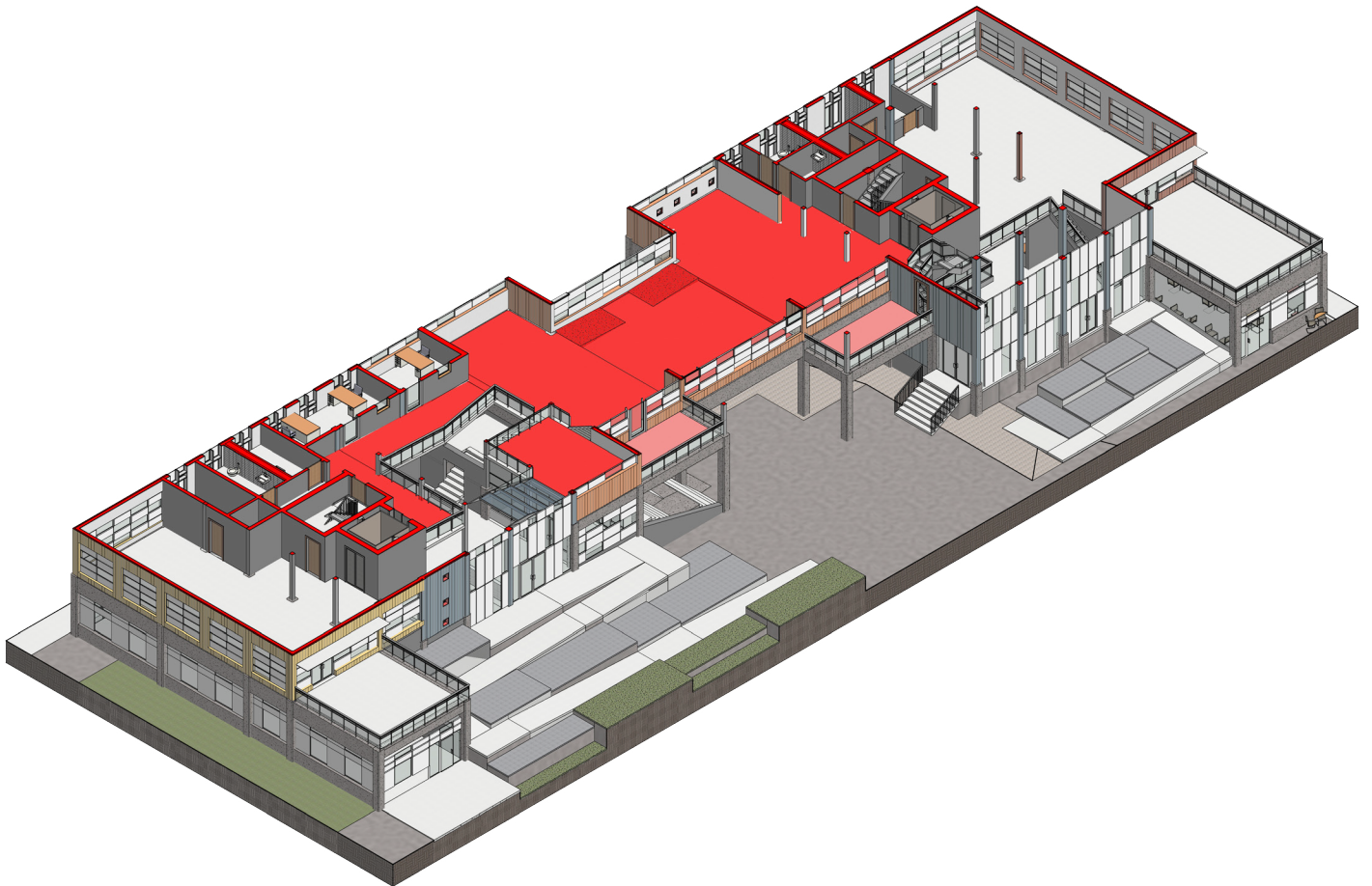


Floor 2.5

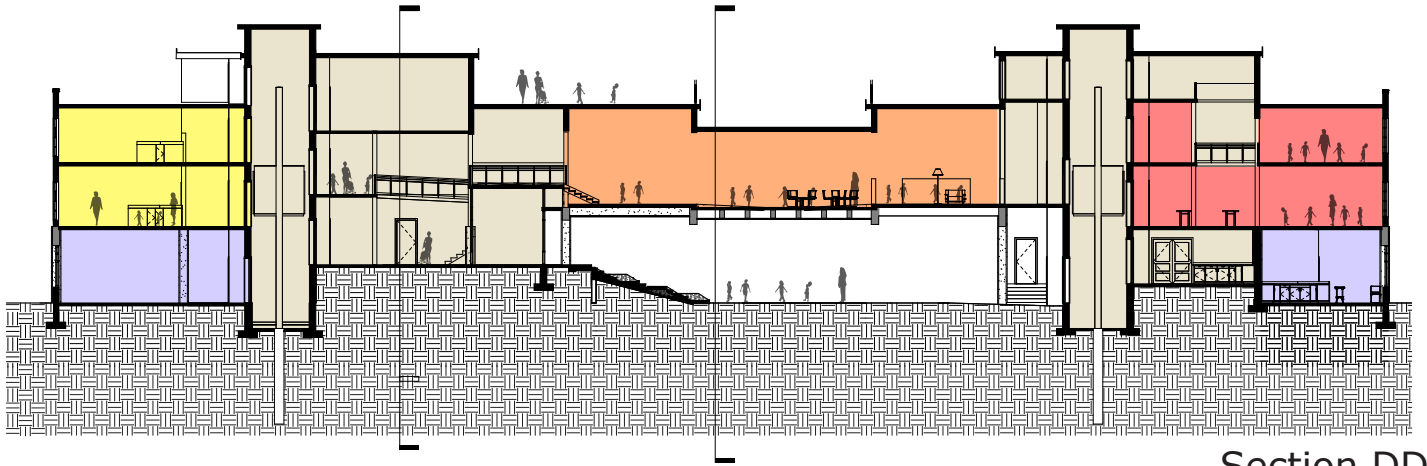




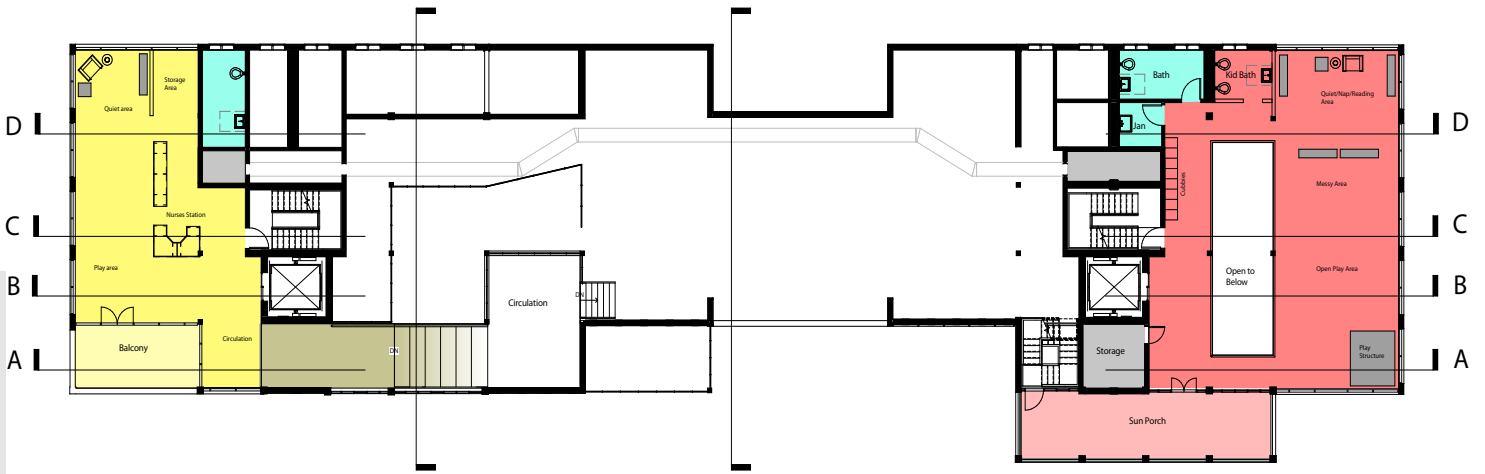
Section CC Axonometric



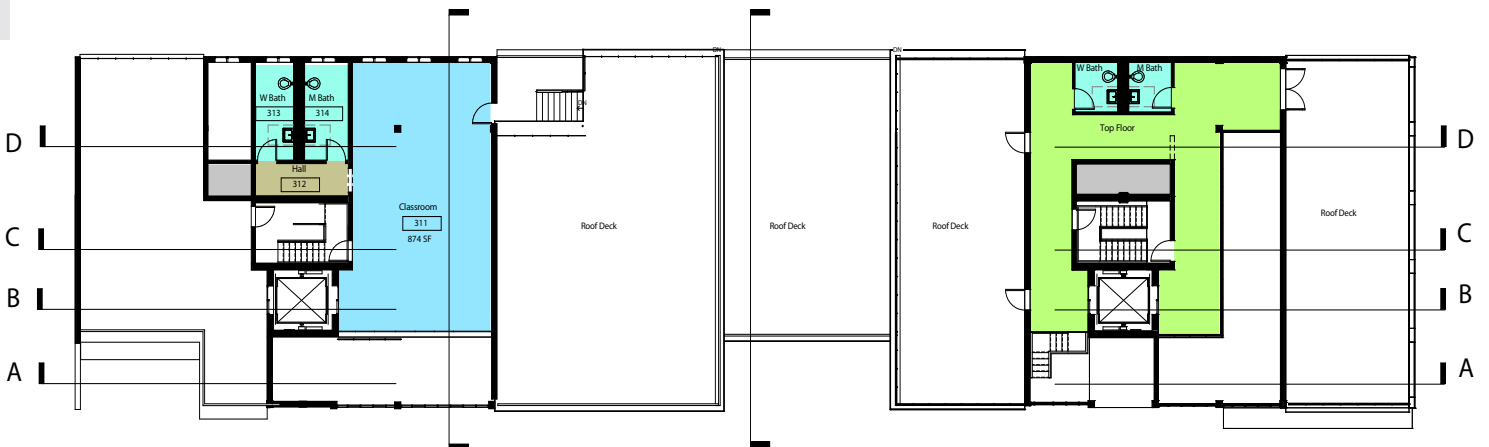
Floor 2.5 Axonometric



Section DD

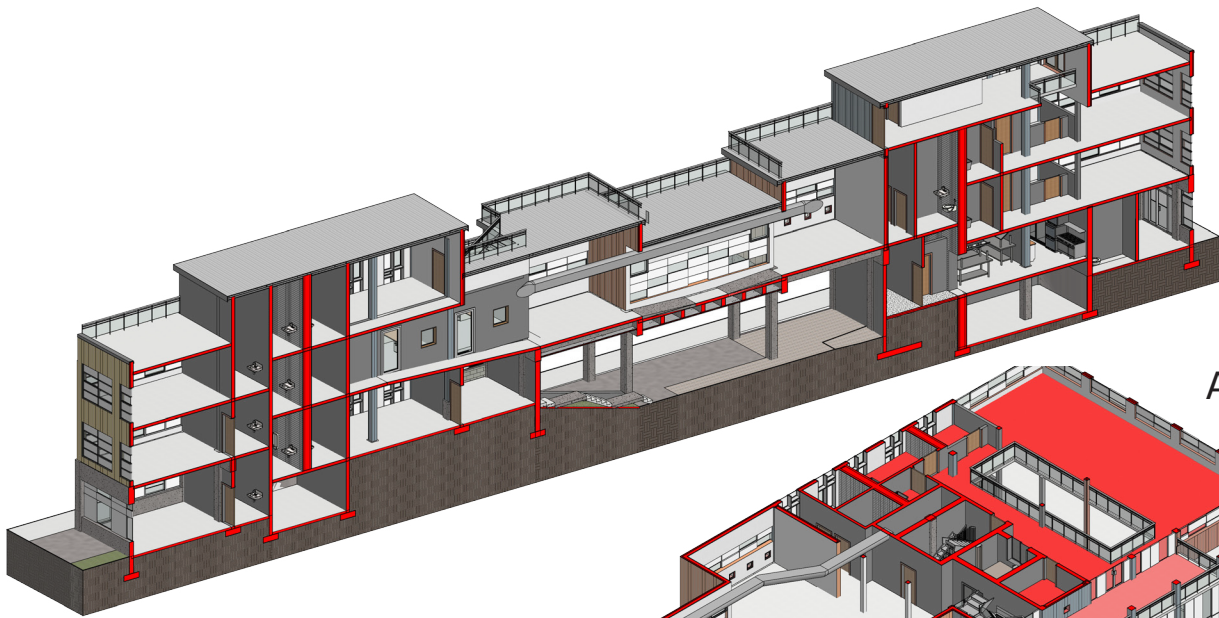


Floor 3.0

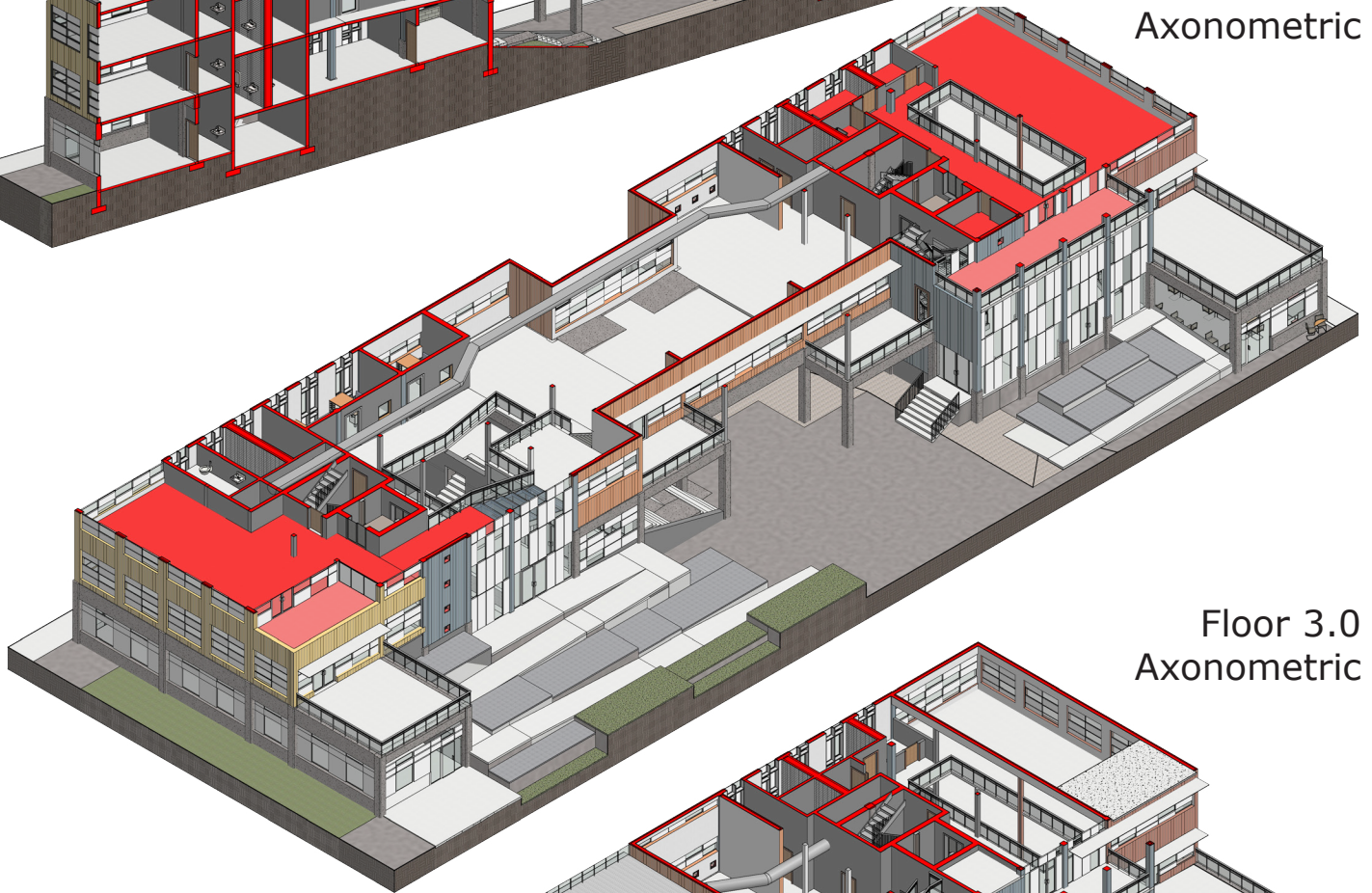


Floor 3.5

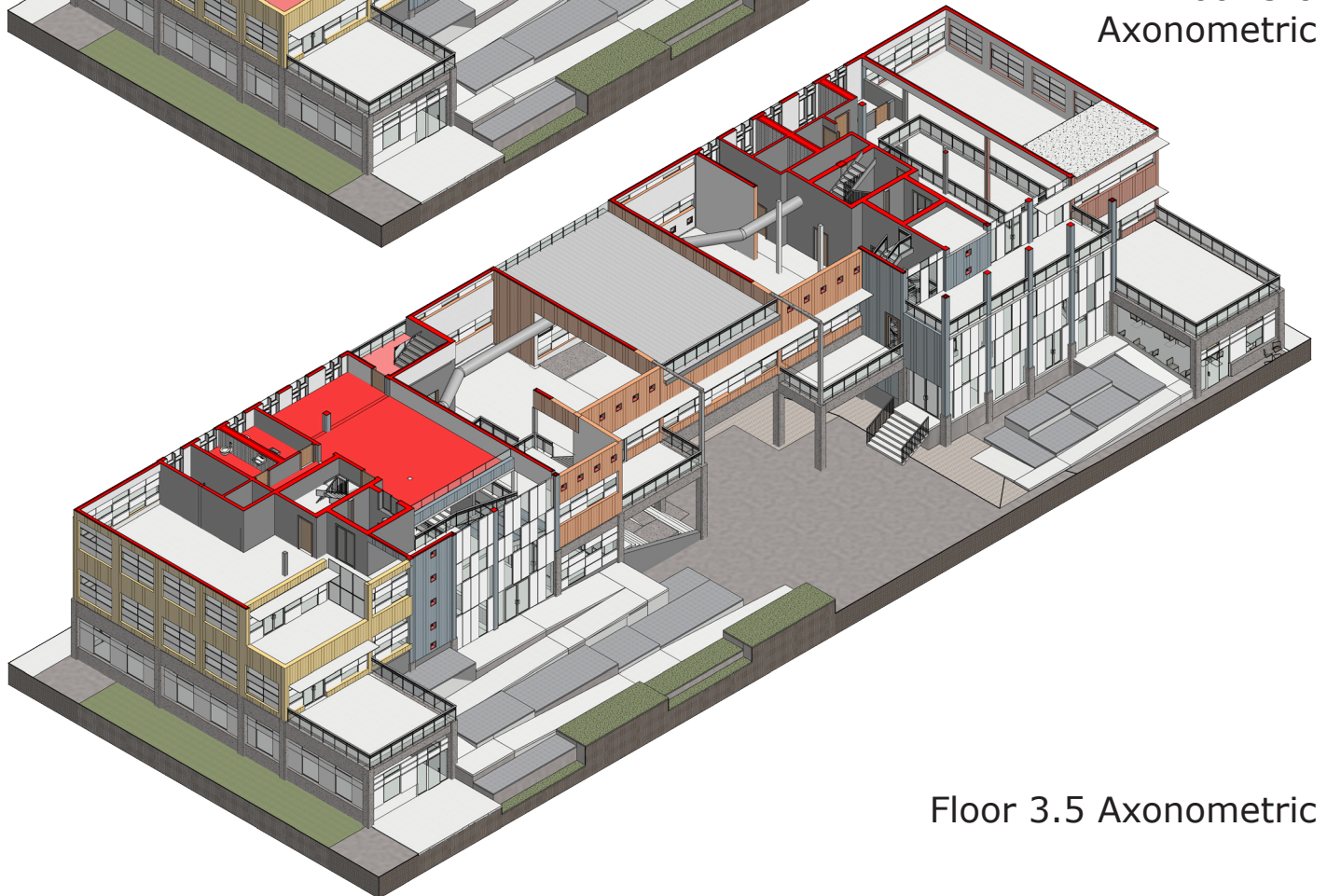




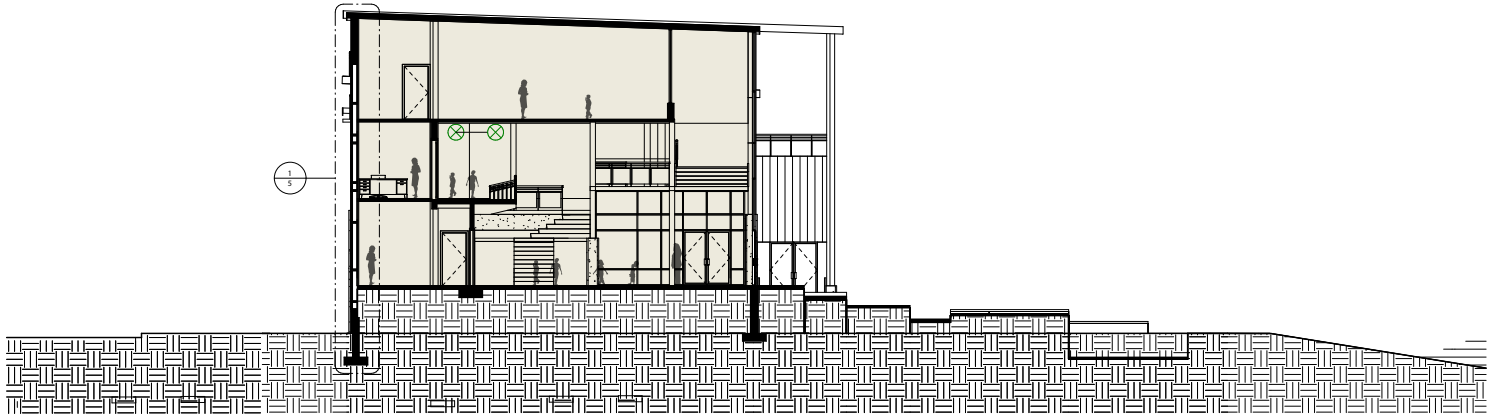
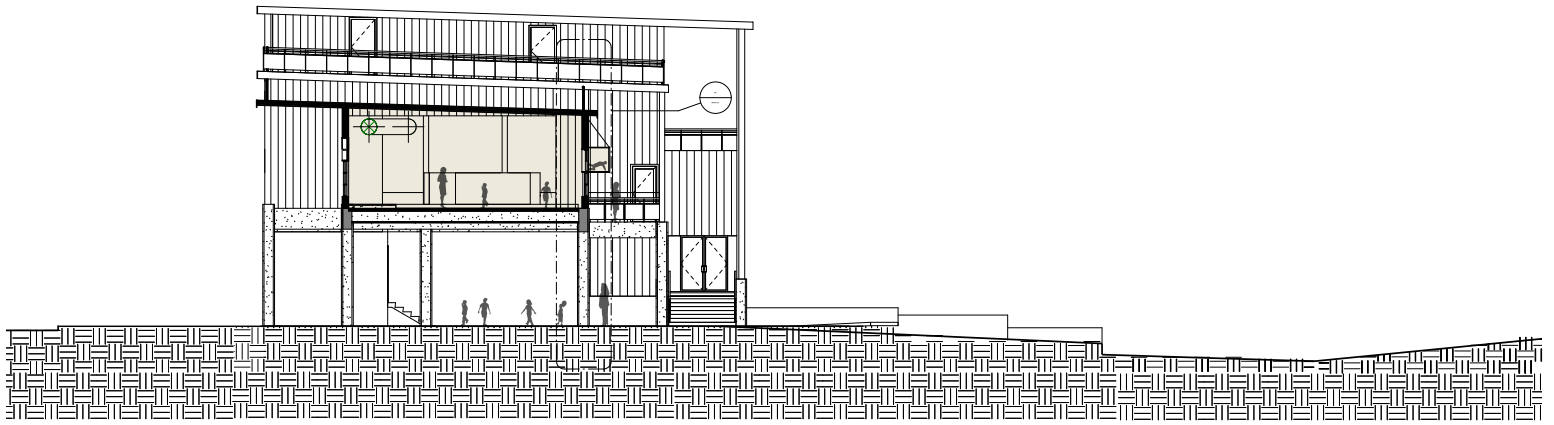
Section DD  
Axonometric



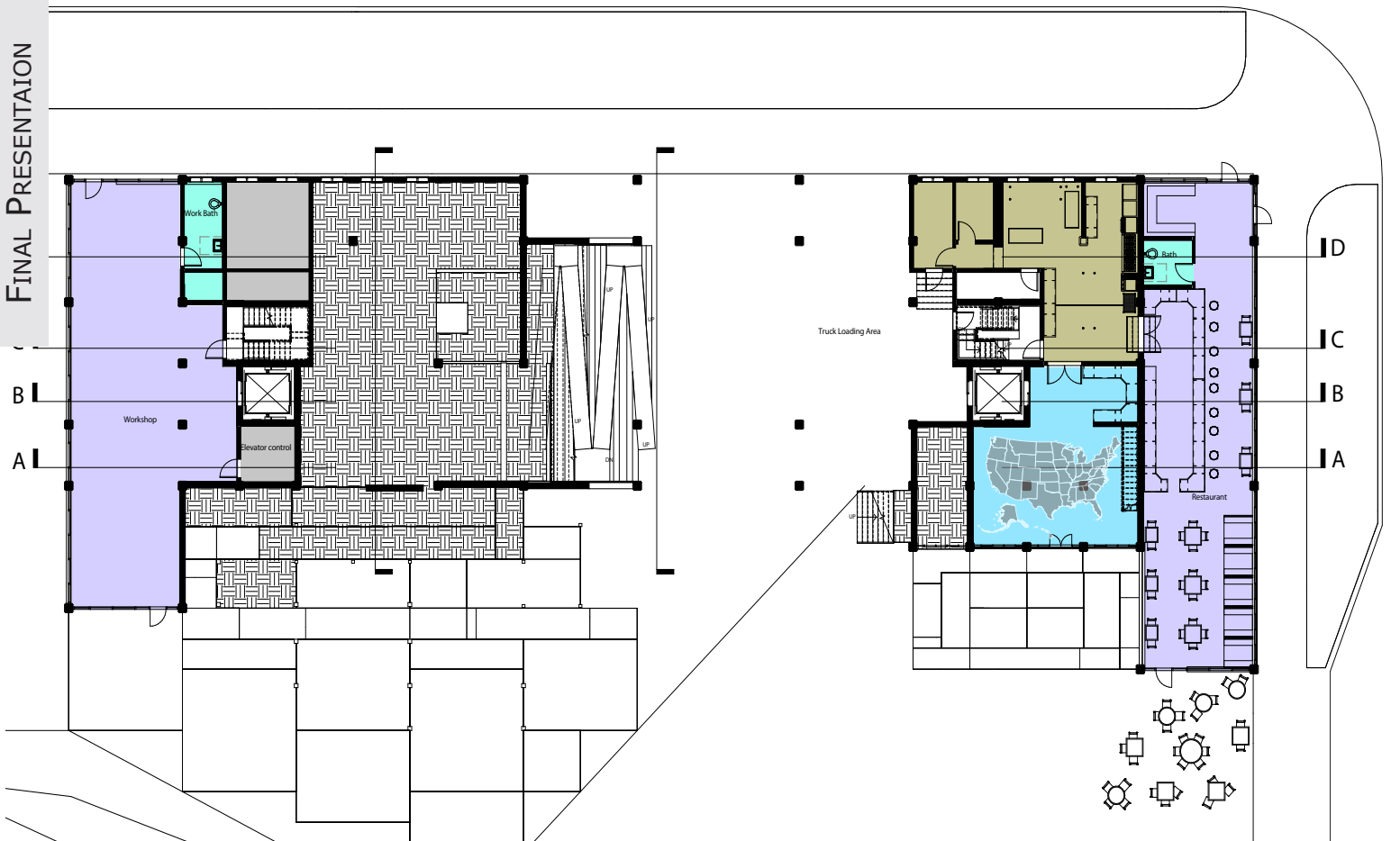
Floor 3.0  
Axonometric



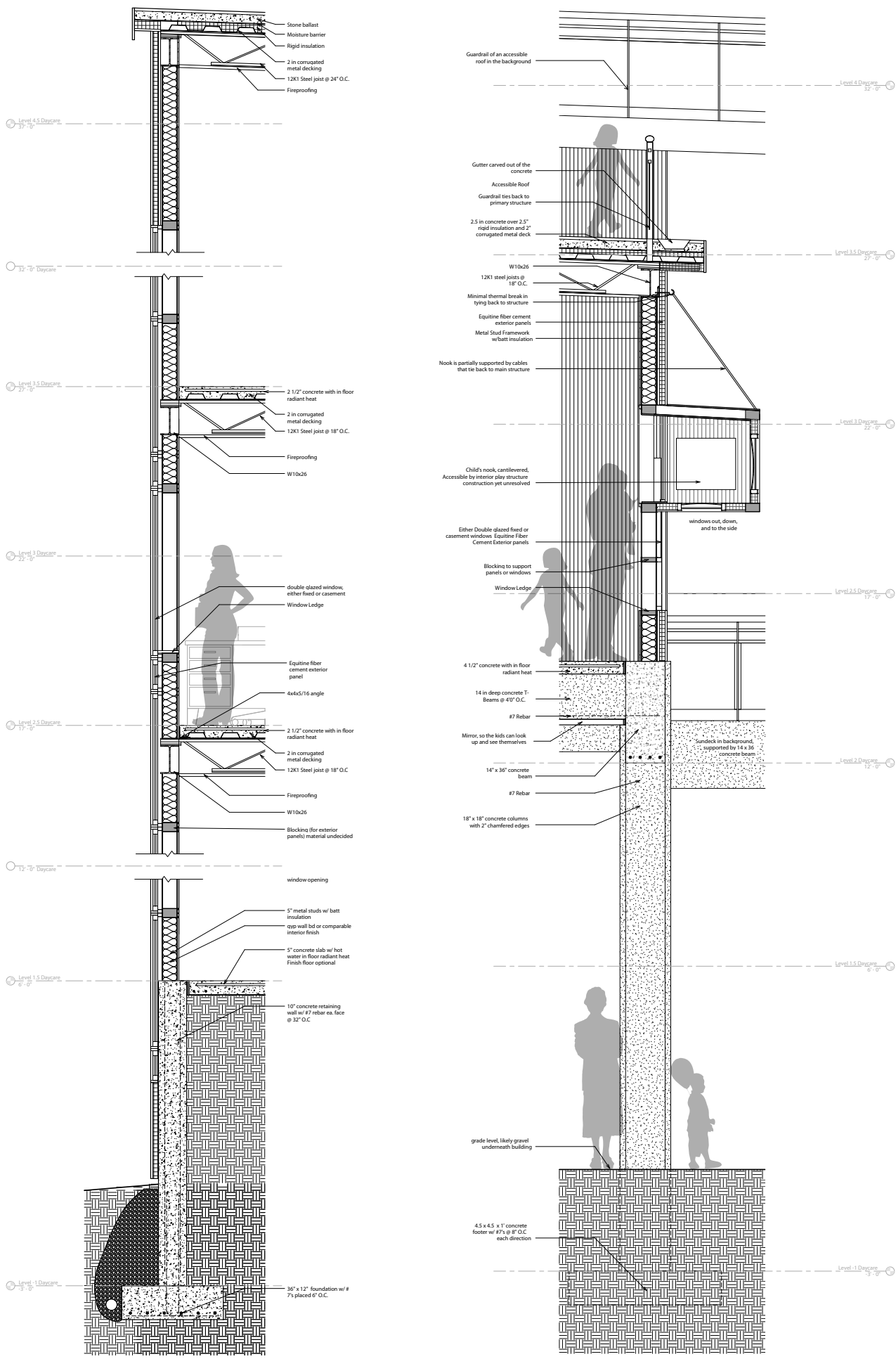
Floor 3.5 Axonometric

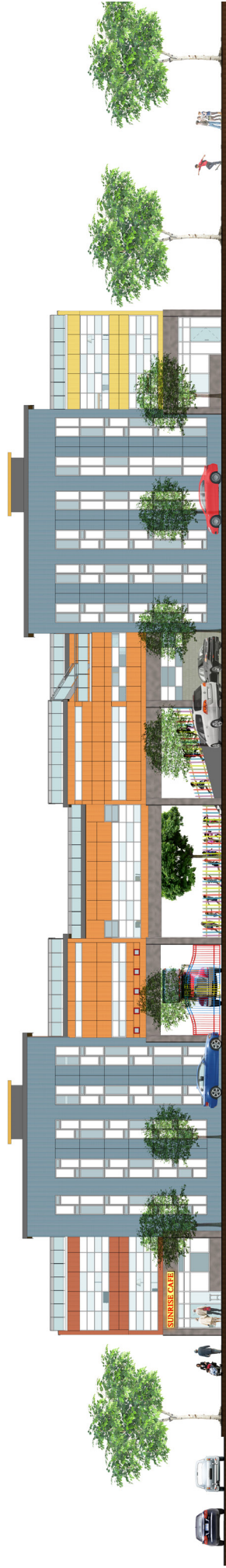


Sections Looking East









North Elevation



South Elevation





East Elevation



West Elevation







Approach from NE



North Side Entry

FINAL PRESENTATION





Approach from SE



Stepped South Landscape

FINAL PRESENTATION





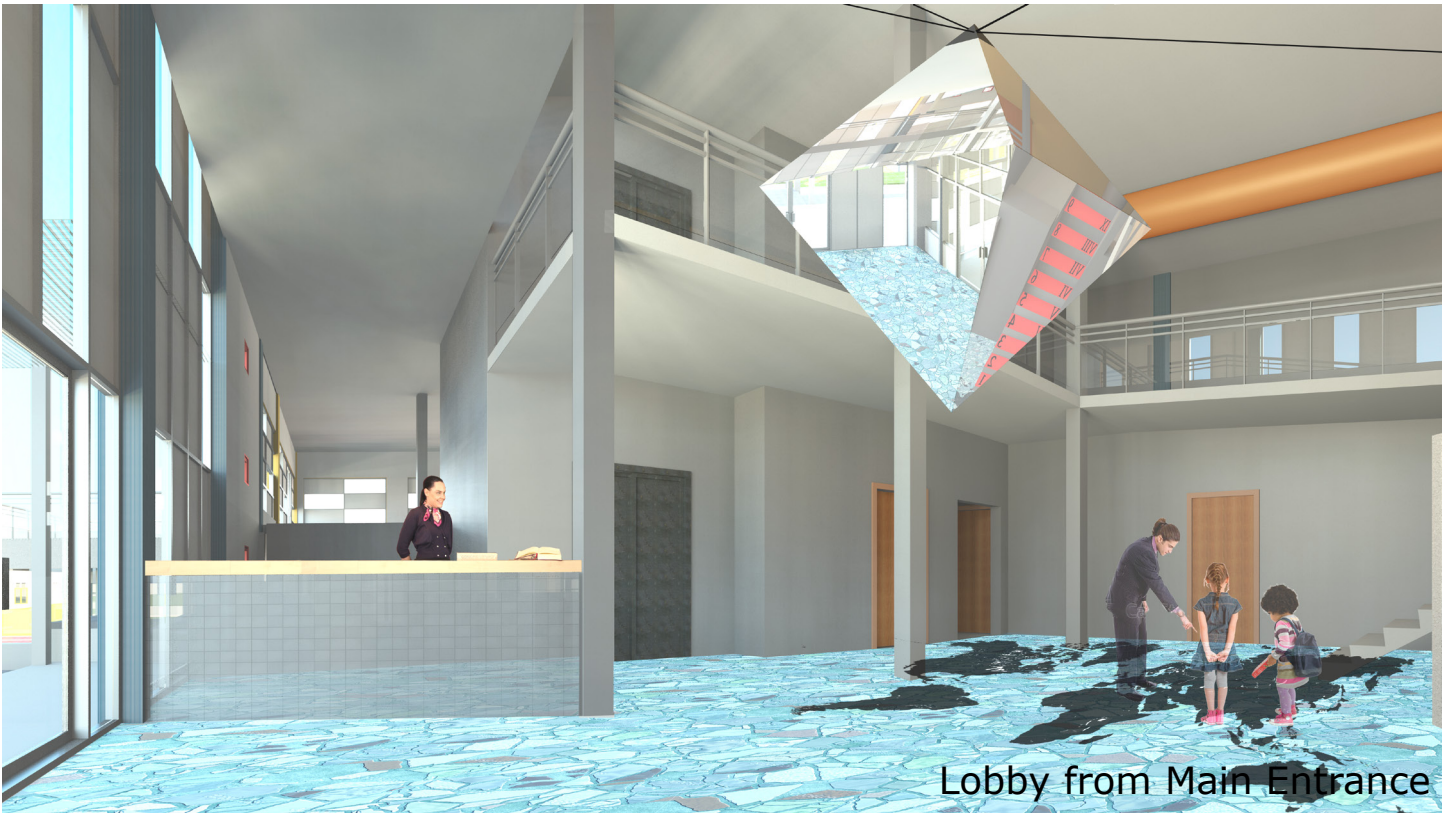
Rainwater  
Cistern, Garden

FINAL PRESENTATION



Lobby from Preschool Space





Lobby from Main Entrance



Lobby towards Main Entrance





Lobby from Preschool Space





Lobby From Balcony





Preschool Primary Space





Dining Hall



# Final Model



FINAL PRESENTAION







FINAL PRESENTATION

# Returning Children to the Core

## Thesis Design Addendum

### INITIAL RESEARCH

#### (Spring 2013)

My research began by reflecting on my own experience of growing up Tiffin, Ohio, a rural community of less than 20,000 people. These types of towns, particularly in the Midwest are losing people, and struggling economically, but I still held on to the idea that they provided an ideal setting for raising children. This was challenged during my thesis research class in the spring of 2013. I began to see towns of less than 50,000 people that are decaying from the inside out like cities ten times that size. Unlike cities, towns do not just lose people and business to their suburbs. They lose people and business altogether.

My exploration of Middletown, Ohio made a few things clear: all economic forces were pulling away from the original core of the town. The businesses, the residents, the schools, even the traffic was largely absent. It was a town without a center, without life, a town that was losing its identity, and becoming the residue of its industrial past.

Again, I thought about my experiences growing up, how I was able to explore rather freely my hometown, identify with so many places within it, and enjoy so many experiences. It is a town that grew to love. But I have the impression that these opportunities are not available to the children of Middletown. It soon may be the same in Tiffin if it continues its economic slide and sprawling development pattern.

Children must have the opportunity to safely explore their town if we expect them to care about the town in the future. With this statement, I focused my thesis project from

the enormously broad "small town" topic down to a topic comprehensible for a design project.

### TRANSITION FROM PAPER TO PROCESS

#### (Fall 2013)

How to harmonize children with the revitalization of the core of a town? By the time I gave my oral presentation in the fall of 2013, I had decided on downtown Middletown Ohio as my site. I felt sure that returning children to the core of the town had to be a multi-faceted approach, one that involved many different uses and people of all ages. Jan Wompler, our Thesis respondent, echoed this sentiment, but warned against making a fake New Urbanist type project, or being so reductive as simply putting a school into the center of the town. This led me to increase scope for the project.

My original intention was to work with the positive attributes of downtown, and expand the existing downtown YMCA. The facility is functional, but is also nondescript, uninspiring and introverted; not the type of building that will pull people into downtown. I wound up expanding the scope into a mixed use development that combined the rec center with daycare, retail, artist studios, apartments, and a senior living center. Much of the remaining fall semester was devoted to master planning an urban place that would provide the safety and mixture of activity that is ideal for children and families.

### BUILDING DESIGN

#### (Spring 2014)

By the end of 2013, I had provided a satisfactory urban design solution in response to my thesis question. But architecturally, the



design said nothing about children. It could be understood as simply a series of conventional buildings around an undulating landscape. With the master plan in place, I decided to reduce my scope back down to a single building within that plan: the daycare. I did away with what were essentially placeholders in the master plan and started over with a form that took its cue from an overnight epiphany: the building and the playground should be one and the same.

This form entailed a building design that defied continuous floorplates and clearly defined rooms. Instead, the building would offer a plethora of spatial experiences, indoor and outdoor, with floors constantly stepping up and down, back and forth, spaces blurring into one another, and many opportunities for children of different ages to mix. This energy was also carried through on the facades. To help increase positive interaction between adults, especially seniors and children, a workshop and a café restaurant were included in the buildings. At the same time, the building also had to meet the programmatic requirements of a daycare, and comply with universal design standards.

Between the beginning of February and the design freeze in early April, some of that playground energy was lost as the design drifted more towards conventional daycare design. The resulting building design was certainly more playful than any other building in central Middletown, and it resulted in some very appealing interior spaces. But it could have been pushed much further.

### **DESIGN CRITIQUE**

The jury for my final review included thesis respondent, Jan Wompler, as well as J Micheal Abbott, John Grosvenor, and Glenn Gardiner of Northeast Collaborative. They felt similarly that the design could have been pushed much further. Jan thought the presentation was successful in conveying the youthful energy of the design, but he felt that I had not accomplished perhaps my greatest imperative from the fall: I largely failed to mix children of

different ages, and failed to mix children with adults and the elderly. I partially agree, since I did include other uses in the program and developed a semi-open floor plan, but I admit these were rather half-hazard design moves. The other jury members were impressed with the building portion of the design, but felt that I had not resolved the safety and security issues regarding the outdoor play areas. I agree with them completely, since the site plan was glossed over in the effort to complete the building design in a short time frame. They also felt that the building and the landscape could have merged much more than they did in the end design. Also, just like all the other projects, they wanted to see more attention devoted to sustainable strategies.

### **FINAL THOUGHTS**

In the end, I was very happy with the design of my building, and I still felt inspired by the parti and proud of the end product. As a result, I was able to present it and defend it with much enthusiasm, and I genuinely enjoyed presenting the project and receiving all the feedback, both positive and critical.

That said, there a few things I would have changed. For one, I would have been more decisive in my master plan, and begun designing the daycare with this parti in the latter part of fall semester. This would have helped me work out many aspects of the design that were merely glossed over, such as site design, and sustainable strategies, which is especially difficult for me because I feel we must be designing carbon neutral buildings yesterday. Two, I would have made far more effort to discuss my design with other, more experienced designers, especially Jan Wompler. "You failed to accomplish what you set out to do," is not the best thing to hear at a final review, and could have been addressed with a March skype date. Looking back, far more great design ideas came out of a 30 minute committee meeting than an entire Saturday of solitary work in the studio. At the conceptual stage, it may have helped to

charrette with young children, as many of the child-centered design moves were based on my own biased childhood experiences. Thirdly, I would have looked primarily at Montessori schools, and other European daycares as precedents, given less attention to the American daycare model. This would have helped me stay on task at symbiotically mixing children of different ages and mixing children with adults.

What I have learned, more than anything else though, is that thesis project is more about the process than the end product. I have come away from all this with a portfolio piece, but much more valuable is the knowledge I have gained about daycare design, about small town economics, and about the design process in general. The world of practice is all about the end product, but the academic world is all about the process, and the end product is not going to be right without the right process.