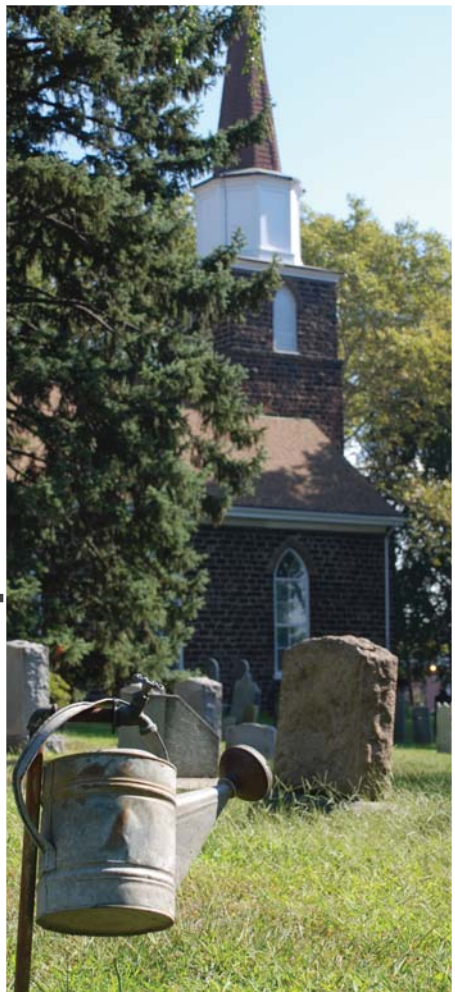
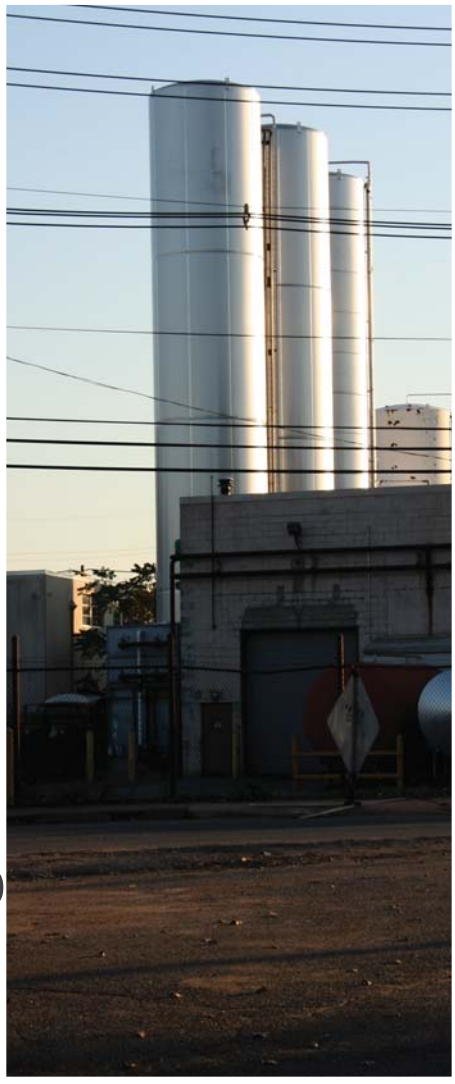
Ridgefield Waterfront Redevelopment Plans





Senior Studio Fall 2008
Rutgers University Department of Landscape Architecture
Dr. Wolfram Hoefer

550:431 Advanced Landscape Architecture I
Rutgers,
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Department of Landscape Architecture
Fall 2008

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1.0 Introduction

1.0 Introduction

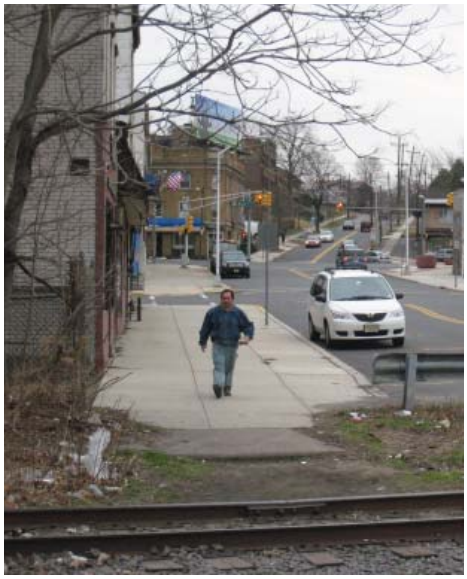
Wolfram Hoefer

Ridgefield is one of the suburban New Jersey towns that are on the edge of developing an urban character. The first settlement in the area dates back to 1662. Predominately English settlement activity developed a set of towns, one of them became the Borough of Ridgefield in 1894.
In the Early 1900's the little town at the foot of the palisades, overlooking the Hackensack River and the meadowlands, attracted American and international artists who formed a small artists colony.

Later development has been stimulated by train and ferry services. The town population increased dramatically in the 1920's and 30's and the positive population trend continued into the 1960ies. Over that period the town has grown into the meadowlands with a mix of housing and light commercial uses.

Today most commercially attractive uses have moved on and left behind an area of vacant land interspersed with small commercial units, housing and even some culturally significant structures.

At this point there is no clear vision in which direction future development should go. Conversations with local stakeholders mentioned plans for additional housing but there were no definite proposals. In this situation the academic exercise of a design studio provides the opportunity to explore different possible solutions and urban designs for urban renewal.



There are numerous difficult questions that have to be addressed: How much did the historic development damage this part of the meadowland? What are possible strategies to improve the ecological value of the site? How will the challenge of a rising sea level impact development options? And what would be an appropriate density for new residential development?

These questions guided the work of this semester-long studio. After an initial discussion phase about the values and goals that each of the senior students brought into the class room, the groups were asked to develop criteria for site inventory and analysis. Chapter two documents site context, conditions, opportunities and constraints that were explored by the students. Chapter three documents our discussion about density. For landscape architects, density is more than just a reaction on available infrastructure justified in economic means; density creates spaces. The class looked at different densities and how they impact the spatial experience.

Loaded with all this preliminary work the groups of three or four students each developed a masterplan for urban renewal that addressed housing concepts in accordance with ideas of sustainability and smart growth. There was no density assigned, but the students were asked to develop urban design concepts appropriate for the site. Chapter four shows theses plans and individual open space design that explore some parts in more detail.

We thank the Environmental Board of the Borough of Ridgefield for the very kind support.

2.0 Site Inventory and Analysis

2.1 Regional Inventory

Mike Browarny
Matthew Meo

Our site in Ridgefield is a location with a great deal of opportunity found within the Eastern Bergen Palisades region. The site is located within close proximity to many of North Jersey's major highways, amenities, and directly adjacent to the Overpeck Creek. It is also located within five miles of New York City. It is this combination of highways, natural features and absolute location that presents a truly unique opportunity to truly become a regional destination.

The town of Ridgefield is easily accessible from many of the areas local highways and existing infrastructure. Ridgefield is bordered by the New Jersey Turnpike and US Route 46. Both roads provide access to Ridgefield as well as both ending at the George Washington Bridge. There are also numerous trains within the area that connect into New York City. While there is no direct passenger line from Ridgefield into the current rail infrastructure, there is a freight line that runs directly through the town adjacent to our proposed site. Currently there are plans for a light rail to run along the freight line. The line would connect to the south into North Bergen Junction, which does have access into New York City as well as the existing regional infrastructure and to the North through many of the boroughs of Northern Bergen County

The current road infrastructure consists of US highways, regional routes as well as local roads. Some roads such as the New Jersey Turnpike and Route 80 can handle high volumes of traffic while experiencing very few holdups along the way. These roads each have four plus lanes as well as no traffic lights to impede movement along the road. These roads also span the length of the United States, the NJ Turnpike as US95 going from Maine to Florida and US80 going from San Francisco to New York City, and therefore are a part of a much larger system. Next on a more regional scale, Routes 3 and 4 both provide major East West access through the area, largely un broken by traffic lights. Route 4 is a more important road however due to its closer proximity to Ridgefield. Route 46 is a major road through the area, as well as serving as a border for the site, however due to narrow road with as well as multiple traffic lights it is a more difficult road to travel across the region. It is important to note however that located 3 miles West along route 46 is Teterboro Airport, and while it cannot accommodate large jumbo jets, is one of the busiest airports in the United States as well as the oldest in the New York Metropolitan area.

At first glance it appears that there is a great deal of green space within the region, and for the most part it is true. However upon close examination of the various uses of all of this green space, it becomes clear that there is a true lack of function. The five different categories of green space used were wetland, active recreation, passive recreation, golf course and cemetery. After determining each plots use, one by one the areas of larger concentration were removed to determine which, if any, uses of green space could most benefit both the site as well as the residents of Ridgefield. The first criteria removed were wetlands. Wetlands accounted for nearly 50% of the green space within the region. Next, golf courses, which are largely unusable by the majority of the population, accounted for nearly one quarter of what was left. Next, cemeteries, which accounted for nearly one third of what was left, were removed. While viewed as a permanent green space, currently they are socially unusable spaces

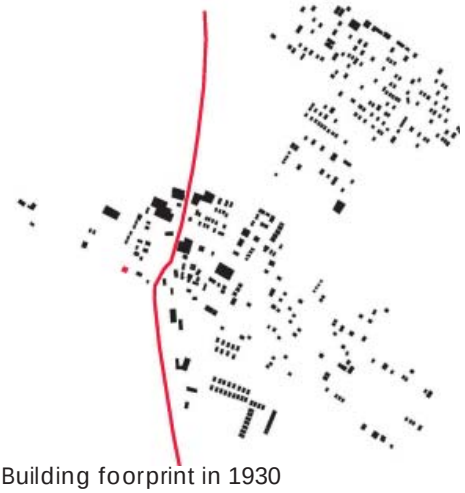
for recreation and aare best served as a place of mourning and to be solemn.

Last, it was interesting to see there was only a small patch of green space found within the border of Ridgefield. Interesting enough, it was a football field that wasn't even really green but rather plastic artificial turf. More important, there were no real significant patches of passive recreation space within the town. There was however, a large tract of passive green space directly north of the site found within Bergen County Overpeck Park. This presents a unique opportunity not only to provide the side with much needed passive recreation green space, but also the ability to connect the large tract of green space to the north to the wetlands to the south.

2.2 History

Disembodied Development

Kyle Gaugler
Raymond Schobert
Yilu Zhang



Building foorprint in 1930

Building foorprint in 2008

"It is change; all yields its place and goes". Euripides

In order to understand the current reality of anything you must first look to its beginning. Ridgefield New Jersey is a township that has undergone an enormous amount of change and is still in the process of evolution.

Overpeck Creek is a crucial part in order to understand the city of Ridgefield. Not only did its geographical form help carve out the boundaries of the town, it helped to bring more settlers to the township by means of boats. The Overpeck Creek was used to ship freight north, as well as a reliable source of clean water for irrigating crops, drinking, cleaning, and cooking. The deep slope along the western edge of the Palisades contrasts starkly with the high ridge halfway between Hackensack and the Overpeck Creek. The view of the ridge from this valley is where the township took its name, Ridgefield.

The earliest identified settler to Ridgefield was Robert Earle. In 1650 he purchased an expansive piece of land in the valley and intended to divide it into parcels and sell them to other English settlers, thus creating a permanent English settlement**.** As the English neighborhood began to settle, the residents decided to build the English Neighborhood Reformed Church in the property donated by Thomas Moore on November 18th, 1768. The Dutch Reformed Church in the English neighborhood was organized on July 1, 1770, and is still standing today, making it the oldest building in the borough. The surrounding graveyard contains many of the early settlers of the area.

In 1871 Ridgefield Township was officially formed. The early immigrants of Ridgefield were primarily farmers and the area quickly became known for its strong English community. Ridgefield experienced constant growth into the 19th century because of two main reasons, strong infrastructure and strong industries. The improvement of Ridgefield's circulatory infrastructure, coupled with the area's economic development created a reason and means to travel to Ridgefield. The Bergen Turnpike was built running directly across Ridgefield and allowed for direct access to the surrounding towns. By 1876, Ridgefield had a railroad depot which supplied an efficient

means to New York City and a growing number of amenities. The township bolstered a post office, general store, clubhouse, public school, as well as industrial employment opportunity. Ridgefield's early industries included lumber mills, chemical development, and excavation. The crown jewel of this surge in industrialization is the Lowe Paper Company, established in 1906. This is the first major employer of the area and had a major impact on the town's future development.

Ridgefield's development can be linked to the enormous amounts of exposure it received, and its means for acquiring building loans. In 1889, the Oritani Building and Loan Association provided the area with a means of rapid growth. As the township grew it demanded more attention. The major landholders of the time decided to advertise the area to new settlers by creating a brochure. The brochure then went on to describe the natural beauty of the region. "The view is grand and picturesque in the extreme. The valleys of the Hackensack River and of Overpeck Creek, with their silver streams and spread out before you, with the Orange Mountains terminating with Old Bald Top on the north overlooking the City of Paterson, and tailing down, apparently to the city of Newark on the south, forming a background conspicuous and bold". Ease of access and healthfulness were other great selling point of the region within the brochure. This is especially prominent after the dedication of the George Washington Bridge in 1931. The brochure stated that "The accessibility of these grounds for persons having business in New York; and other neighboring cities is a feature of great importance". They understood the emerging opportunity that was Ridgefield New Jersey.

With all of this interest, and growth and hope surrounding Ridgefield's past; one cannot but wonder how it evolved into its existing context. It was originally settled as an English community and since these days has taken in a wide range of cultures. The existing English community has assimilated very little with the incumbent Asian population. Its establishment as a primarily English region has hampered the formation of any real cultural identity today.

The greatest single contributor of Ridgefield's industrialization and consequent growth was the Lowe Paper Company. This building employed the majority of the region and was instrumental to its development. This building has recently been demolished. It was the epicenter for the towns existing progression and the loss of this building deprives the surrounding industrialization of any sense of context and history. Also, the Dutch Reformed Church in the English neighborhood being the oldest building in the Borough is one of a few structures with historical values left on site. Its significant historical values should be taken into considerations in any future development.

1. Lowe's Paper Company
2. Borough Hall / Fire Department
3. Dutch Reformed Church
4. Railroad Passenger Depot

Edgewater Ave.

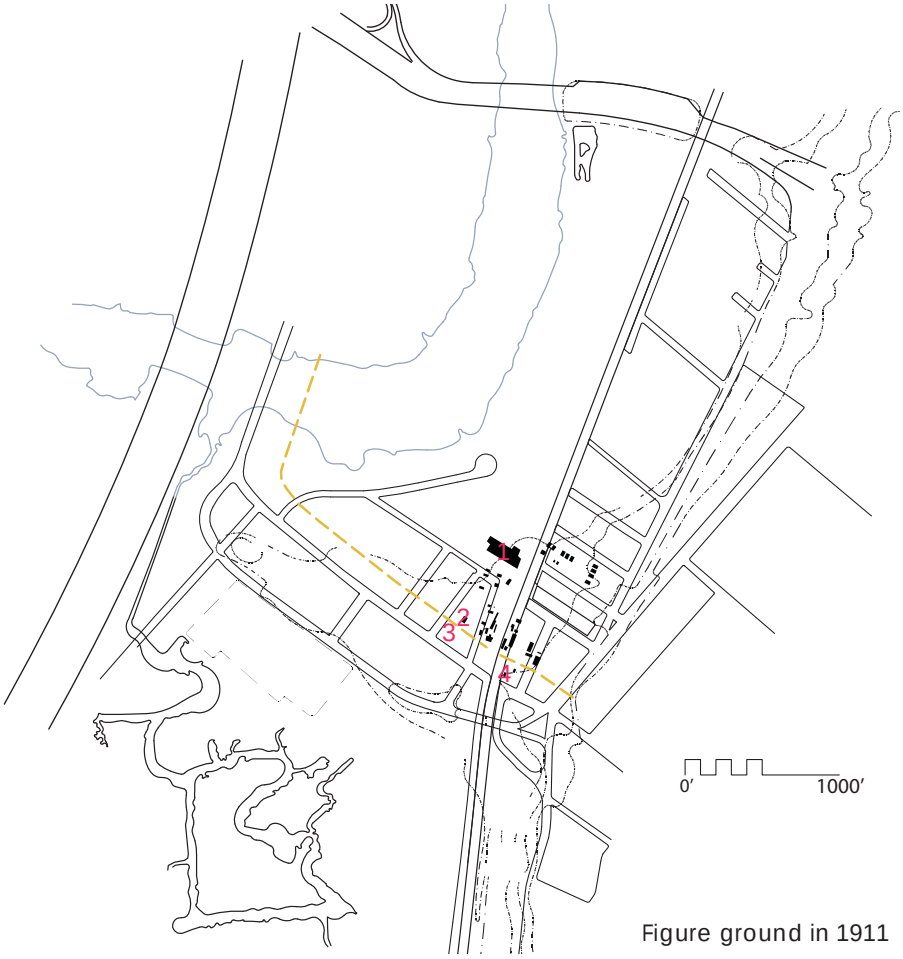


Figure ground in 1911

1. Lowe's Paper Company
2. Borough Hall / Fire Department
3. Dutch Reformed Church
4. Railroad Passenger Depot

Edgewater Ave.

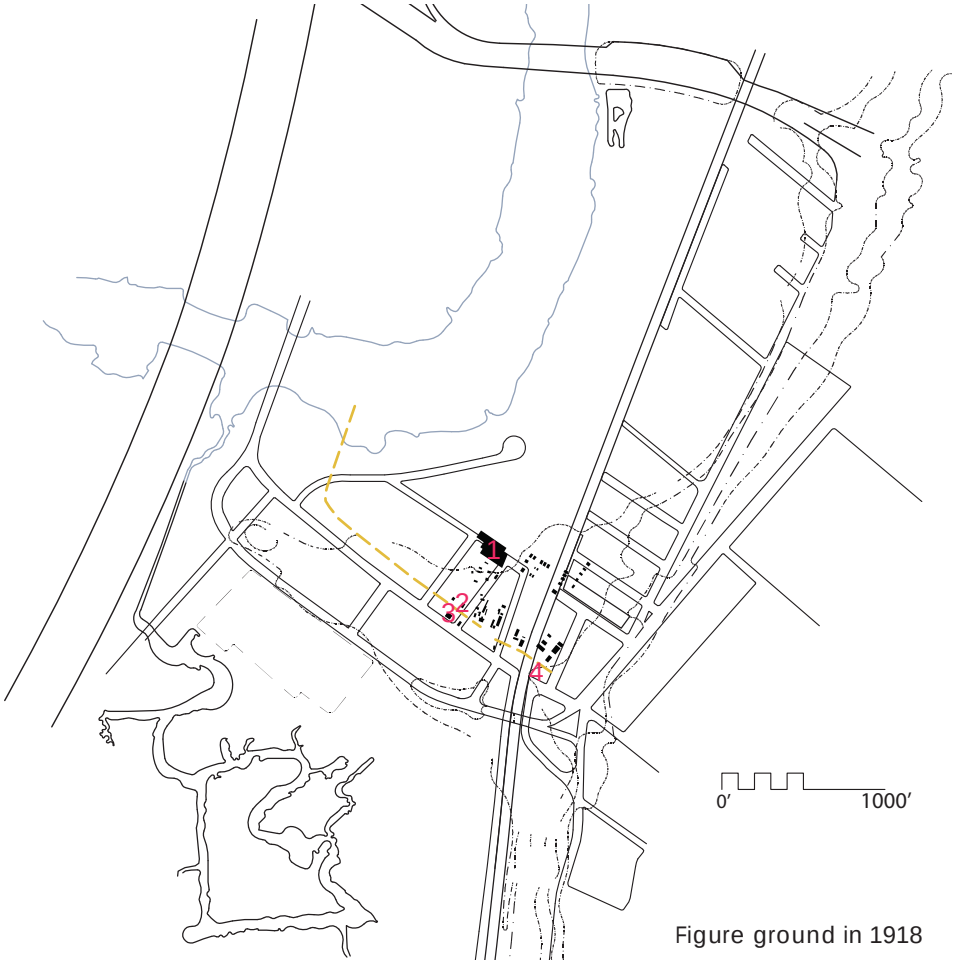


Figure ground in 1918

1. Lowe's Paper Company
2. Borough Hall / Fire Department
3. Dutch Reformed Church
4. Railroad Passenger Depot

Edgewater Ave.

Figure ground in 1930

1. Lowe's Paper Company
2. Borough Hall / Fire Department

Edgewater Ave.

Figure ground in 2008

2.3 Building Uses

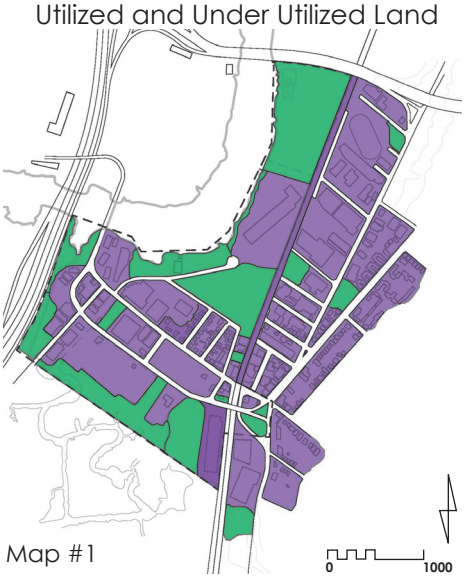
Lauren Basset
John Novak
Pete Symanski

Our group had the task to roam the town of Ridgefield, New Jersey and conduct a site analysis and inventory of all the building uses within our site boundary. We spent two afternoons walking in and around the site and came up with a number of ideas for maps. Together, we narrowed the maps down to four, well thought out inventory and analysis maps. The first, and most obvious map for us was analyzing the utilized and underutilized areas within our site boundary. Map number one was made to indicate the land had not reached its full potential. We looked at industrial sites, areas with vacant land, vacant buildings, deteriorated buildings etc. The message behind this map is that we wanted to convey the areas of our site that could possibly initiate thought for the design process. Our results were that the residential areas were much utilized and well maintained, and 70% of the industrial areas were utilized. There were patches in between the commercial and industrial areas that were not utilized and there are two very large and distinguished plot towards the northern end of the site that are vacant. There is a wonderful section of the waterfront that we felt was underutilized. There were vast amounts of invasive species and no paths along the waterfront to enjoy the views of Overpeck Creek.

Map number two is composed of privately owned land and borough owned land. We analyzed Ridgefield's tax maps and we were shocked to see the small amount of area that the Borough of Ridgefield actually owns. This area is less than an acre of our entire 44 acre site. This map was useful to understand the real world situation of our site, but we see this map playing a less important role in aiding the groups' designs. We went back to the Utilized and Under Utilized map and tried to convey that even though the land is privately owned it does not mean that we could not influence the way that it is designed, that we could still go forth and try to push sustainable and ecological design methods in hopes that the owners would try to develop a valuable and environmentally sound property.

Map number three indicates the pervious and impervious surfaces of Ridgefield. This town is known for its Industrial businesses and being a part of one of the most studied ecosystems in the northeast. It's no surprise that Ridgefield has a high business opportunity considering there is prime access to the George Washington Bridge, Lincoln Tunnel, and the New Jersey Turnpike. Ridgefield is also located in the Northern area of the Meadowlands district so whatever happens in Ridgefield will affect the meadowlands south of the site. Putting industrial businesses and a fragile ecosystem together without the correct planning may cause potential problems for the city of Ridgefield and to the future of the meadowlands. Since Ridgefield has a large Industrial and commercial sector, a lot of impervious surfaces are created to gain access to these businesses. These impervious surfaces all along the watershed create an increased amount of sheet flow that end up in the meadowlands. This sheet flow causes flash flooding that disrupts the fragile ecosystem in the meadowlands. This sheet flow from parking lots, streets, rooftops, and other impervious surfaces contain pollutants from vehicles and other sources of contaminants. These pollutants can disrupt life in and around Ridgefield and can damage the ecosystem downstream from the site. Decreasing impervious surfaces in and around Ridge-

Utilized and Under Utilized Land



Under Utilized Land
Utilized Land

Public and Private Property

Public Property
Borough owned Property

Pervious and Impervious Surfaces

37% Impervious Surfaces
Pervious Surfaces
Impervious Surfaces

field can help filter condiments that are entering the watershed and help save the ecosystem in the meadowlands. Ways of decreasing impervious surfaces would be to use porous paving in all parking lots and roads. Bio retention basins and bio-swales would enable sheet flow runoff from other landscape surfaces to filter through plant material and specific soil media. Reclamation of the waterfront is important to let the certain areas flood into the surrounding vegetation. This would create natural filtration of the meadowlands waterfront and enable any debris to filter in the riverbank vegetation.

Map number four is composed of building uses throughout the site. The borough of Ridgefield is composed of residential, commercial and industrial uses which have a confusing and conflicting arrangement. Currently this site has a few challenges that would benefit the community if they were addressed. Large commercial industries provide revenue to the town and jobs to those in and around the community. An issue that we noticed from visiting the site is the lack of zoning organization. The current layout of the site uses seems to be unbalanced. The residential zone is engulfed by an unhealthy and unsightly industrial environment, which occurred as a result of poor city planning. The residential areas are adjacent to the industrial factory zones with noticeable high pollutant smoke stacks. There are retail businesses and a few restaurants near the Northeast portion of the site which just seem lost. It seems this lack of functional layout leaves this small town in disarray. The current traffic patterns reflect these problems.

Building Uses

Historic - Church
Public Space - Public Works
Commerical - Retail
Commercial - Wholesale Retail
Commercial - Restaurants
Commercial - Automotive services
Commercial - Offices
Commercial - Warehouses
Commercial - Light Manufacturing
Industrial Property

2.4 Demographics

Cindy Cheung
Joseph Clomera

The Borough of Ridgefield is located in the northeastern part of New Jersey – in the southern part of Bergen County. The entire borough covers 2.6 square miles (1664 acre). According to the 2000 U.S. Census it has approximately 11,000 residents.

This Borough is well organized and self-sustainable. Ridgefield offers many community services for its residents. Public safety services include Police Department, Fire Department, and Office of Emergency Management. Other community-based services are public library, recreation and parks department, welfare department, health department, building department, Municipal Court, and a community center. It also has several commissions such as Environmental, Rent Leveling, Assessment, Cable Television, and Landlord Security. Thus, this community is well developed.

The Environmental Commission was recently awarded with a $3,500 Smart Growth Planning Grant from ANJEC (the Association of New Jersey Environmental Commissions). The Borough is looking into completing an Environmental Resource Inventory (ERI) for open spaces and parks. The ERI will use multiple sources of data to reveal all possible environmental features within this borough. This ERI will then be submitted into the Master Plan of the Borough. The Environmental Commission also received another grants of $20,000 from the Federal Recreation Trail program. This award will go into the establishment of proposed trails that connect existing trails, parks, greenways, streets, and school. This project will be completed by July 1, 2010. (ridgefieldboro.com)

Further researches on the Borough were done regarding the ethnic diversity, median age, population density, health care, school syste, education attainment, household income, and crime rate.

Ethnic diversity

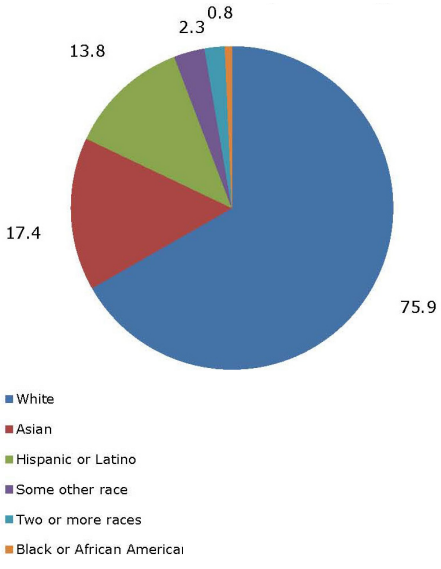
The majority of residents, which make up 75%, are white. However, there are sizable Asian and Hispanic groups. The Asians population makes up 17.4 % of the Borough, with the second largest being Hispanics at 13.4%. In comparison with the rest of Bergen County, both groups exceed the county average. Bergen County actually contains eight of the top ten in percentage of residents with Korean ancestry, which includes Ridgefield.(US Census Bureau)

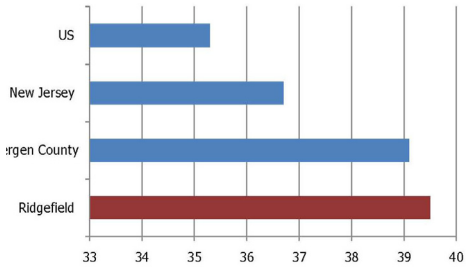
Median age

The median age for Ridgefield residents is 39.4 years old. This is slightly younger than the county average (39.1), but older than the median age for New Jersey (36.7) and the nation (35.3). (US Census Bureau)

Population Density

The population density of Ridgefield, according to the 2000 US Census, is 4,149.8 people per square mile. This is only slightly higher than that of neighboring Fort Lee, but vastly higher than those of the county and state. Since that Census, the population of Ridgefield has risen 0.3 percent(Population).





Health Care

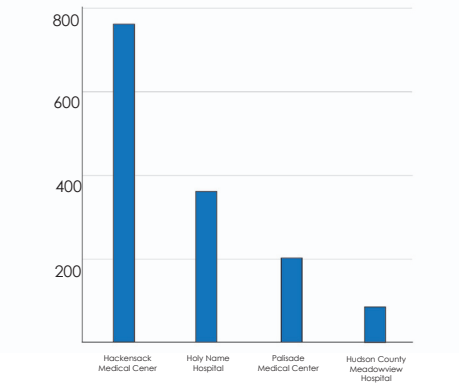
The high population density and increase of total population seem to lead toward a strain in the local health care system. An less dense area like Northern Monmouth county can offer more inpatient beds than that of the hospitals in the vicinity of Southern Bergen County. Their hospitals, all within 8 miles of Ridgefield, are Hackensack Medical Center, Holy Name Hospital, Palisade Medical Center, and Hudson County Meadowview Hospital(Wikipedia).

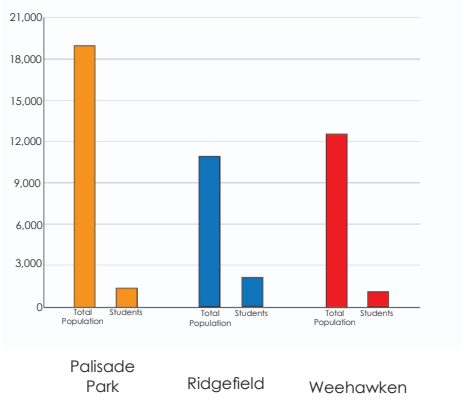
School System

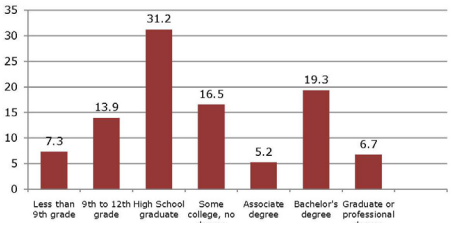
The school system, however, seems to be overpopulated. In comparison with towns of similar population, such as Palisades Park and Weehawken, NJ, the amount of children in the school district is nearly double(NJDOE).

Education Attainment

The educational attainment of current Ridgefield residents is average in comparison with the municipalities that surround it (US Census Bureau).





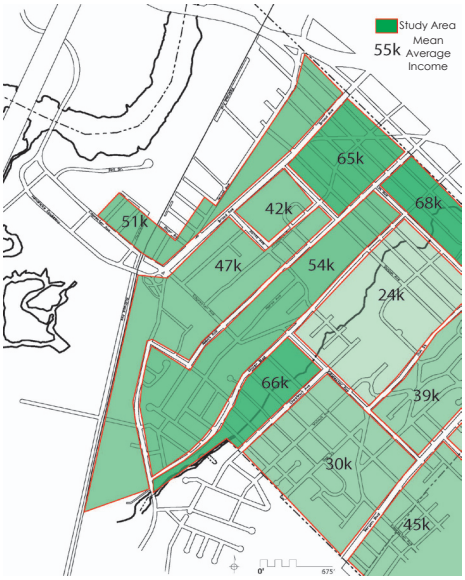


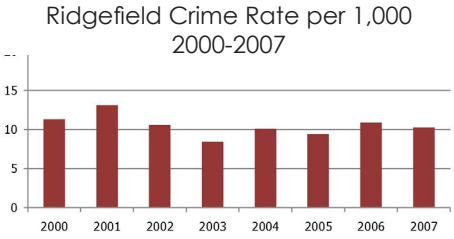
Household Income

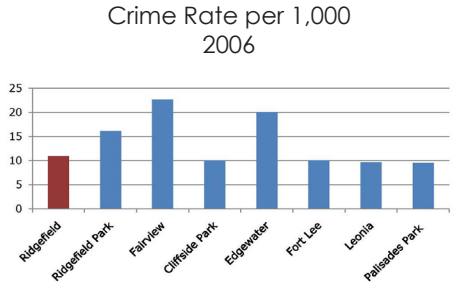
The mean household income for the borough of Ridgefield is slightly higher than those of surrounding municipalities. But in comparison with the rest of the county, it is about average. The mean household income is on par with the rest of the borough. The national average is slightly higher at $55,000(Income).

Crime Rate

This Borough is a safe neighborhood. The 2006 Uniform Crime Report conducted by New Jersey State Police shows that Ridgefield's crime rate per 1,000 inhabitants is 10.9, which is just about average in comparison to nearby municipalities. Ridgefield's crime rate per 1,000 from 2000 to 2007 has been relatively stable. Bergen county crime rate per 1,000 in 2007 is 26.0, which is much higher than Ridgefield. New Jersey crime rate per 1,000 in 2007 is 25.3. (New Jersey State Police Uniform Crime Reports)

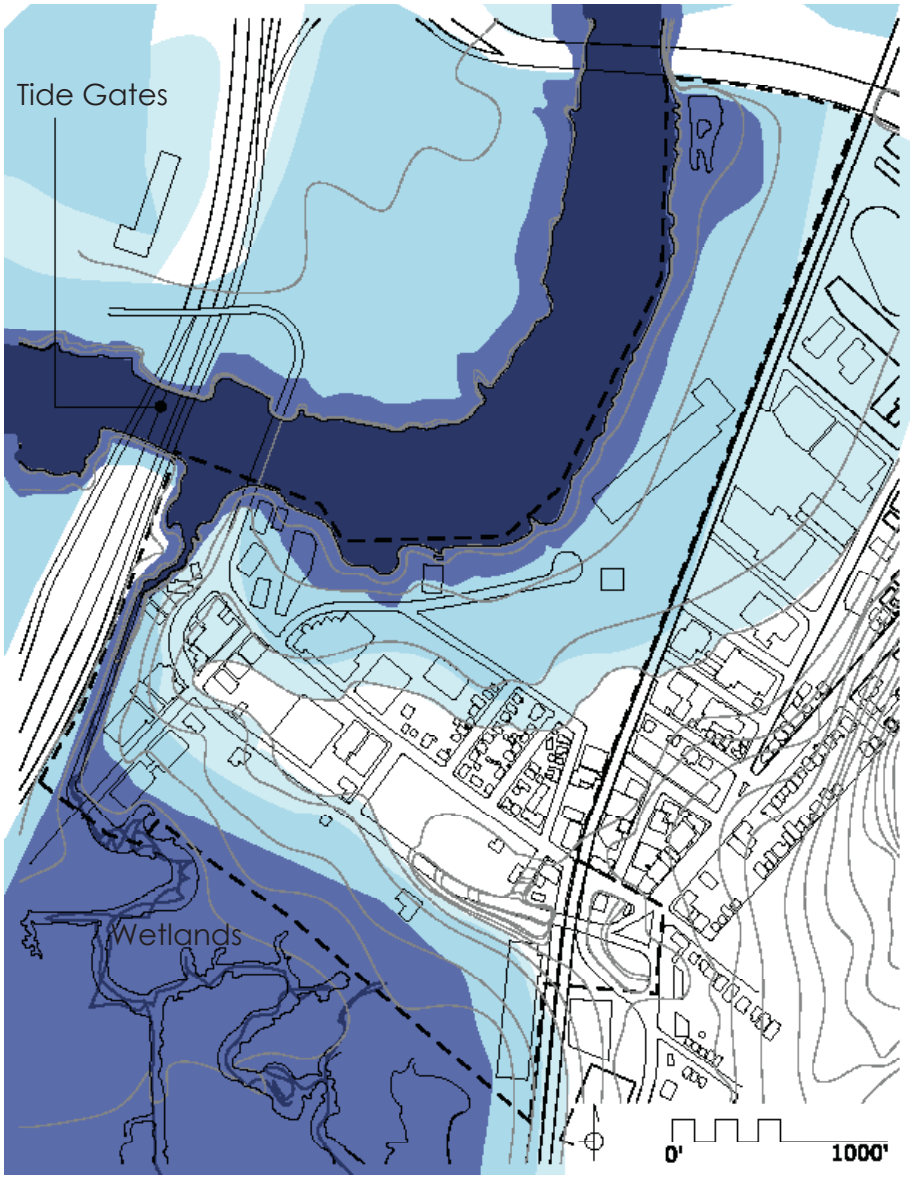






2.5 Hydrology

Ryan Miller, Josephine Grayson



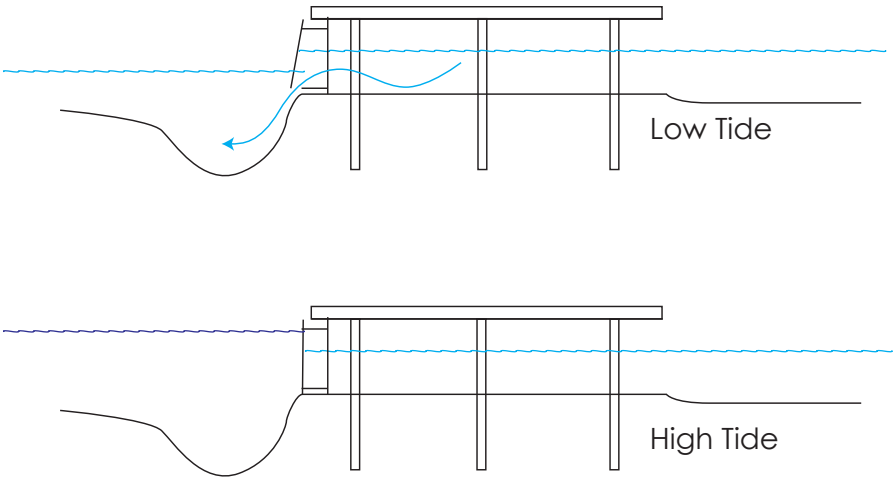
The site nds itself interestingly at the juncture of active hydrologic processes, with some, if not all of which, contributing to questions about the future sustainability of the site along with its safety for human settlement. Primary among these concerns is the presence of signi cant ooding over roughly 70% of the project's delineated boundary, a problem that promises to exacerbate with future concerns of global climate change and sea level rise. Moreover, the issues of chemical contamination, drainage, soil stability and erosion add a degree of complexity in ascertaining where within the site's boundaries is most appropriate for varying forms of usage and construction. The following results derive from a detailed process in which each of these fundamental concerns was inventoried for the site; that data extrapolated for trends and future potentials and then analyzed for a general understanding of how water will in uence social and ecological usage of the site

From a very early stage in the project the team became aware that the site sat at the very north ends of the Meadowlands, adjacent to the Overpeck Creek, a tributary of the tidal Hackensack River, with a watershed reaching from the western parts of Ridge eld, north up into Fort Lee, and Leonia. Using USGS data, we ascertained that not only did the site have existing problems with ooding, but that with it sitting so near to the Hackensack river it may be affected by sea level change.

Arriving on the site added to the general confusion regarding surrounding Hydrology. Due to a PSEG transformer station on the site, the mouth of the Overpeck Creek (which is more of a lake) has been blocked by a tide gate that prevents tidal back ow from the Hackensack River from contributing to ooding.

The presence of these tide gates, combined with the over ow channels underneath the turnpike has a very complex effect on the site's hydrological processes by turning the area behind them into a giant basin. They provide a degree of control over peak ood level behind them on the Overpeck and its associated wetlands, however they are no guarantee that run-off waters will not build up behind them in a signi cant storm event, nor do they ensure that in the future water will be unable to

Tide Gate Operation



pass over the highest points of the wetlands to the south of the site, effectively mitigating their effectiveness. These sort of questions point at the long term sustainability of tide gates as a flood prevention measure, not to mention the strong deleterious changes they cause to aquatic ecology (Giannico). However should we assume that the tide gates will remain for at least the foreseeable future, the problems presented by sea level change, which the IPCC has predicted to rise between 2-4 feet within the next 100 years, will still change hydrology within the Overpeck Creek watershed (IPCC). Should the high tide line stay higher than the Creek's water level, the creek will eventually be unable to drain in such a scenario, meaning an increased base water level and worsened flooding for the site. Were it not for the large swaths of impervious surfaces, clay based urban fill soils, and the high slopes found on the back sides of the Palisades, this scenario might be relatively sustainable. However we can be sure that if at present the site is experiencing flooding from excessive peak run off, it will at very least continue into the future on a Geologic time scale.

Water drainage around the site is similarly complex. Ridgefield truly contains two major ridge signatures in its topography, moving along a section cut along Edgewater avenue (west) we would find first the ridge that demarcates the boundaries of the Overpeck creek's watershed, before dipping back down to the Wolf Creek, which appears to convey most of the Borough's water coming off the back of the Palisades to the still tidal wetland directly south of the smaller wetland swath bordering our site. The position of the first ridge and the city's existing storm water management system means that relatively little of the city's flood water is draining over the site boundaries. Moreover, it also means that our wetlands to the site's south are likely to stagnate , considering that they are blocked from ground water flow by surrounding high clay urban complex, from tidal inundation by the gate system, and that they do not even receive much water from run-off in anything short of a flood event.

View of Wetlands South of Site

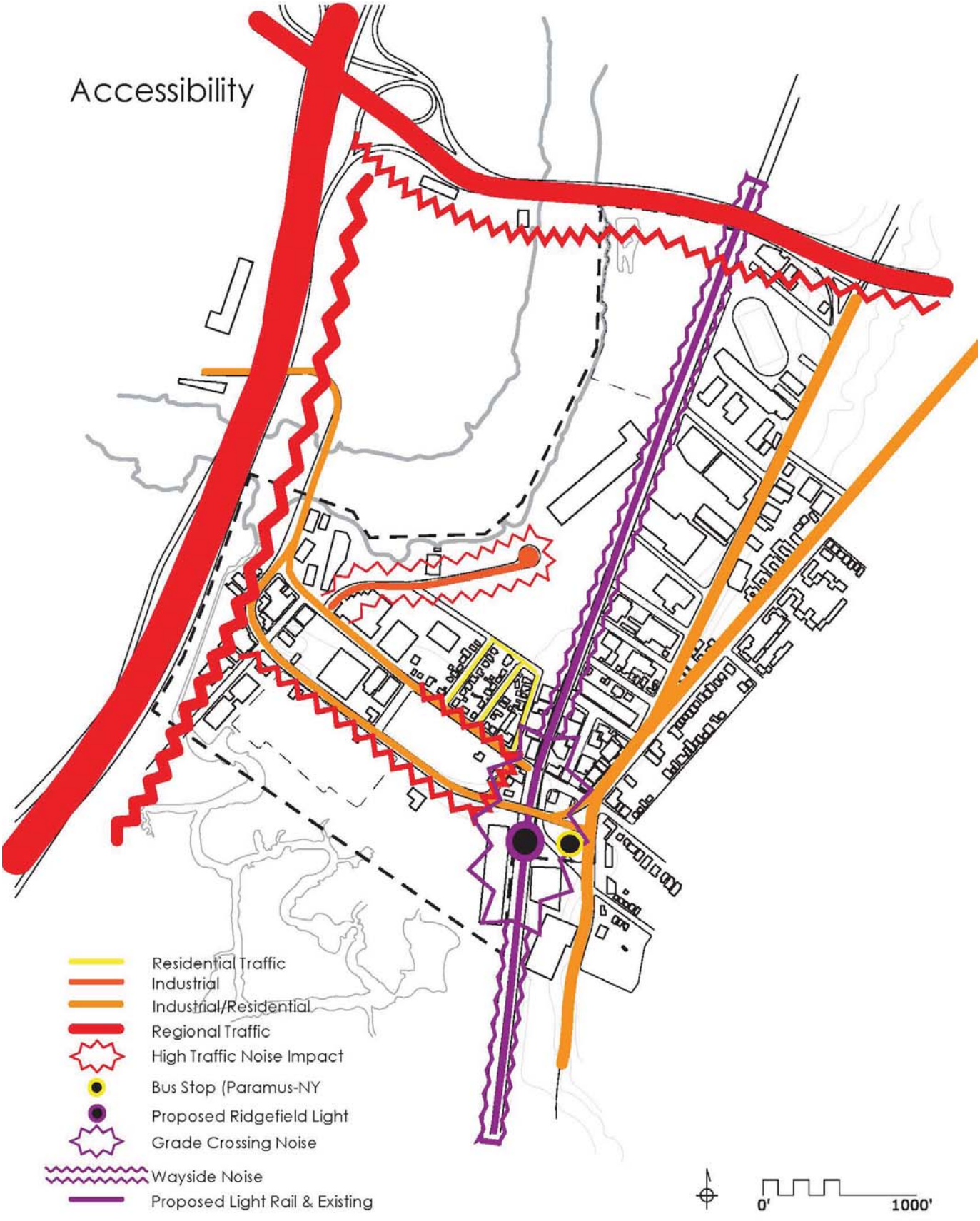
2.6 Local Traffic Patterns

2.6.1 Accessibility

Anne Marie Kappus

Analyzing the access onto and throughout the site will be pertinent in designing successfully. How are most people entering and exiting the site? Is it convenient for both small cars and trucks to drive on the same road? Could we as designers provide a better alternative based off our ndings and improve the experience onto the site? In order to understand the traf c we spent two weekdays on the site between the hours of 10 am to 3 pm. Though we did not conduct traf c counts, we did observe what types of vehicles were using the road, where the traf c was coming from and where it was going. Based off of these personal observations we were able to weigh which roads were used the most by what type of traf c (industrial, residential or both).

The major roads surrounding our site are the New Jersey Turnpike and Route 46 both serving as major arteries for commuters, as seen in the Regional map in the previous section. Route 46, serves as a connection between the Regional Highways to the local roads found in Northern New Jersey. Routes 1 & 9, located on the Eastern side of our site, connects to the Hendricks Causeway which is the only way onto our site. The traf c found on Hendricks Causeway either continues towards route 1 & 9 or turns onto Church Street towards the industry located on and off of Edgewater Avenue. Throughout the day, there is a lot of traf c on the Hendricks Causeway and Edgewater Avenue, both industrial and residential, which makes for very noisy streets. Another noisy and highly industrial road is Bell Drive. This road is loaded with constant truck traf c, which is a concern for pedestrian safety as well as a noise problem. Crossing Edgewater Avenue is a set of industrial railroad tracks that will be used for the Hudson-Bergen Light Rail that will bring people to and from New York City. Based off of researched information, the noise emitted from both the traveling light rail and freight trains is show in purple along the rail line. The larger purple polygon is the greatest area affected by the blown whistle when the trains are at the grade crossing.


Accessibility
Residential Traffic
Industrial
Industrial/Residential
Regional Traffic
High Traffic Noise Impact
Bus Stop (Paramus-NY
Proposed Ridgefield Light
Grade Crossing Noise
Wayside Noise
Proposed Light Rail & Existing
0'
1000'

2.6 Local Traffic Patterns

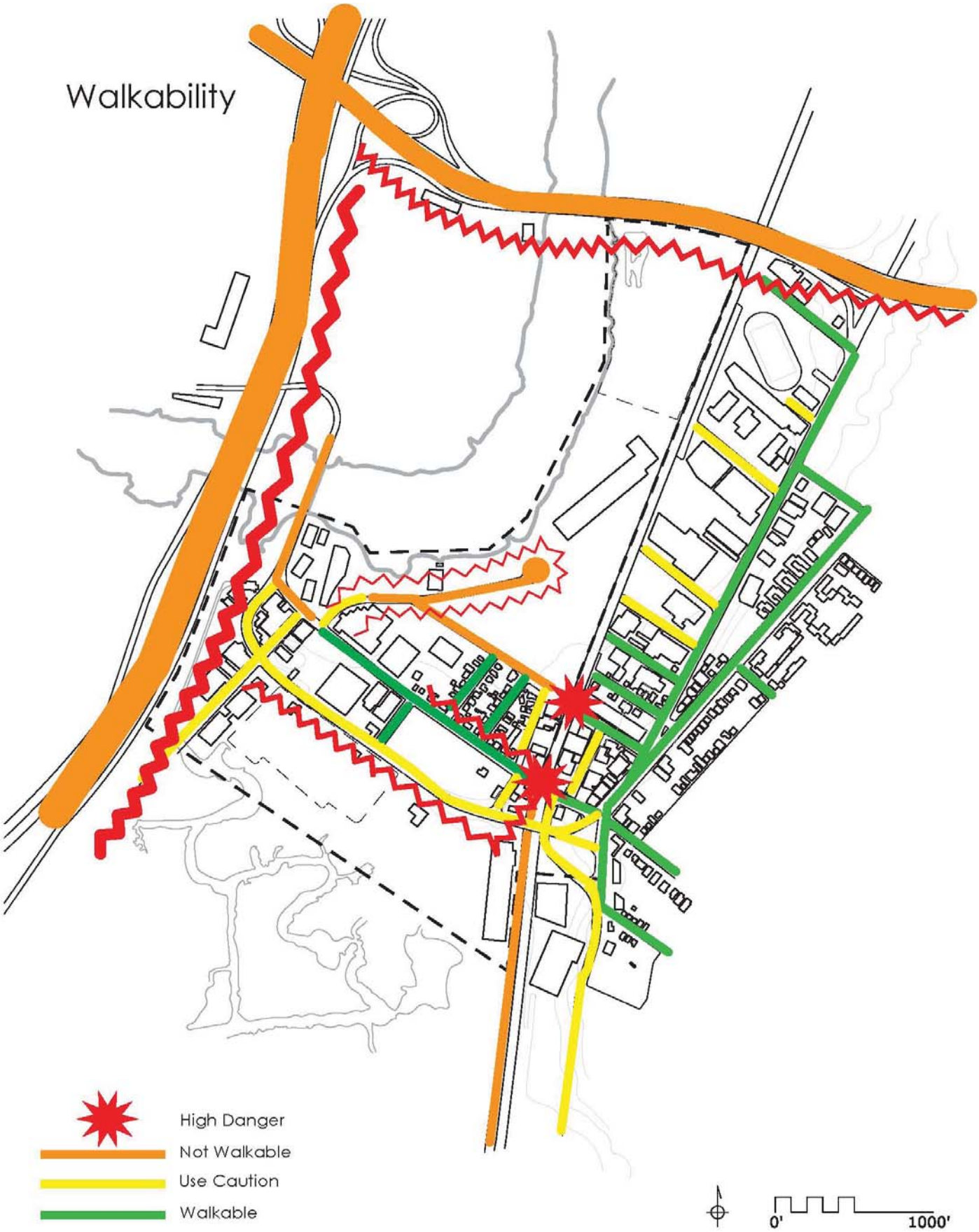
2.6.2 Walkability

Anne Marie Kappus

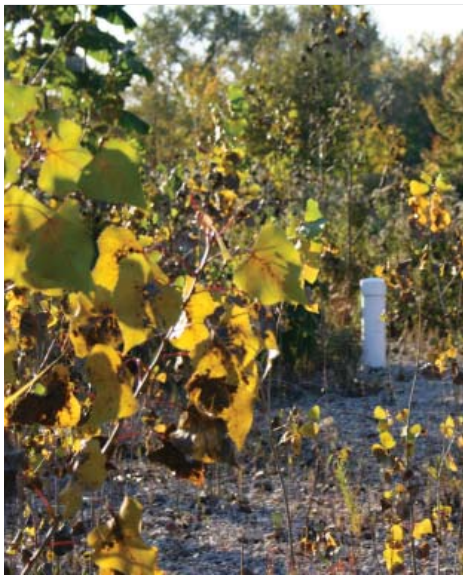
As Landscape Architecture students in the 21st century, it is vital that we promote walkability in any newly designed area or implement characteristics that make an area walkable. What are those characteristics that make an area so pleasing that people would rather walk than drive? Are street trees and wide sidewalks enough? Is it critical to segregate vehicular traf c from pedestrian traf c for a streetscape to be highly walkable? The idea to compile a walkability map stemmed from the second site visit in September. If we want to design something better, we have to know why it isn't working and then we can begin to gure out ways to x it.

In order to determine what roads are walkable, we looked for three streetscape characteristics on all roads going into and throughout the site: adequate sidewalk coverage, location of crosswalks and the amount/type of industrial and residential traf c that travels on that road. As a group we took an inventory of what streets had all, some or none of these characteristics and are shown in Figure 1. A street with adequate sidewalk coverage (either the majority or the entire street has sidewalks on either side) and crosswalks at all streets as intersections with industrial and/or residential traf c is shown in green, representing a highly walkable street. A street with inadequate sidewalk coverage and crosswalks (more than half the street does not have side/crosswalks) with industrial and/or residential traf c is shown in yellow, representing a somewhat walkable street. If a pedestrian must walk this route, they would not be in immediate danger; however, they would need to be very aware of their surroundings. A street with no sidewalk or crosswalk coverage is shown in orange. These streets are not walkable because of the lack of streetscape characteristics and the danger that is associated with them. While taking inventory of the street characteristics, we saw that both River Street and Edgewater Avenue are intercepted by the railroad tracks. We labeled these areas as High Danger because they are not built for pedestrian use but are continuously used by pedestrians on a daily basis because of the highly walkable streets on either side of the railroad tracks. We also labeled the New Jersey Turnpike, Route 46 and even Hendricks causeway and Edgewater Avenue as areas with High Danger because of the massive amounts of traf c on these roads.

It is clear, after having compiled the map, that the residential area on our site is surrounded by somewhat walkable and not walkable well as areas with high danger. This is a problem for the people living in those homes because it is not safe for them to walk towards route 1 & 9 where there is a large commercial strip. As designers we need to improve this situation so that we can create a seamless connection between our site and the rest of Ridge eld.


Walkability
High Danger
Not Walkable
Use Caution
Walkable
0'
1000'

2.7 Vegetation



2.7.1 Inventory

Salvatore Fischetti
John Hencken
Katie Lawnik
Mike Malko

On site, we collected data of all woody species and located native specimen trees. We carefully plotted the location of invasive species growth, private gardens, and lawn space. Some locations were inaccessible for several reasons including safety, property laws, and requests of local residents. These locations were marked on the inventory and analysis maps. An inventory map with an accompanying plant list was created show this information.

Next we collected information regarding the ecological and aesthetic bene ts and drawbacks of the vegetation found on site.

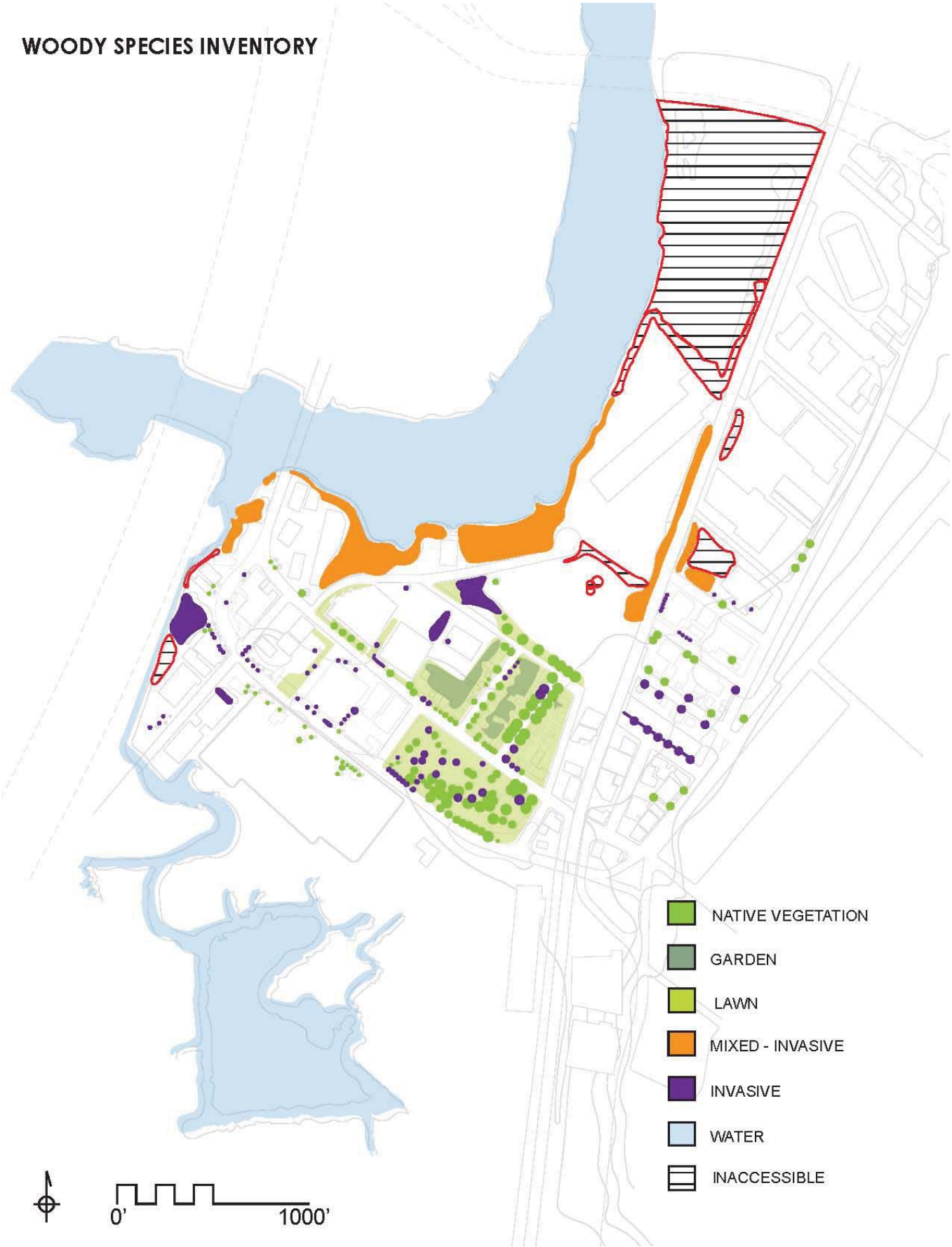
2.7 Vegetation

2.7.1 Inventory

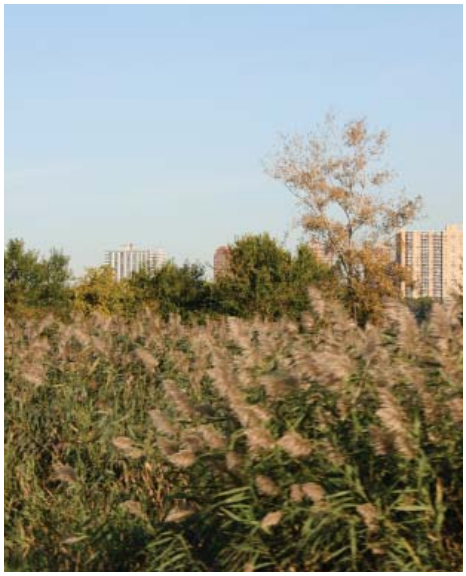
Salvatore Fischetti
John Hencken
Katie Lawnik
Mike Malko

Abb	Scienti c Name	Common Name
AA	*AILANTHUS ALTISSIMA*	TREE-OF-HEAVEN
AM	*AMPELOPSIS BREVIPEDUNCULATA*	PORCELAINBERRY
AP	*ACER PLATANOIDES*	NORWAY MAPLE
AR	*ACER RUBRUM*	RED MAPLE
AS	*ACER SACCHARINUM*	SILVER MAPLE
BP	*BETULA PAPYRIFERA*	PAPER BIRCH
CAG	*CEDRUS ATLANTICA 'GLAUCA'*	BLUE ATLAS CEDAR
CO	*CELTIS OCCIDENTALIS*	COMMON HACKBERRY
CO1	*CHAMAECYPARIS OBTUSA*	HINOKI FALSECYPRESS
EA	*EUONYNUS ALATUS*	WINGEED EUONYMUS
FA	*FRAXINUS AMERICANA*	WHITE ASH
FJ	*FALLOPIA JAPONICA*	JAPANESE KNOTWEED
FP	*FRAXINUS PENNSYLVANICA*	GREEN ASH
FS	*FAGUS SYLVATICA*	EUROPEAN BEECH
GB	*GINKGO BILOBA*	GINKGO
GT	*GLEDITSIA TRICANTHOS*	HONEY LOCUST
JN	*JUGLANS NIGRA*	BLACK WALNUT
JSPP	*JUNIPERUS SPP*	UNKNOWN JUNIPER SPECIES
JV	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR
MA	*MORUS ALBA*	WHITE MULBERRY
MFS	*MALUS FLORIBUNDA 'SARGENTII'*	SERGEANTS FLOWERING CRABAPPLE
MR	*MORUS RUBRA*	RED MULBERRY
PAW	*PAULOWNIA TOMENTOSA*	ROYAL PAULOWNIA
PA	*PICEA ABIES*	NORWAY SPRUCE
PA1	*PLANTUS X ACERIFOLIA*	LONDON PLANE
PC	*PRUNUS CERASIFERA*	PISSARD PLUM
PC1	*PYRACANTHA COCCINEA*	FIRETHORN
PC2	*PYRYUS CALLERYANA*	CALLERY PEAR
PSP	*PRUNUS SUBHIRTELLA 'PENDULA'*	WEEPING CHERRY
PM	*PSEUDOTSUGA MENZIESII*	DOUGLAS FIR
PM1	*PRUNUS MAACKII*	AMUR CHOKECHERRY
PO	*PLANTUS OCCIDENTALIS*	AMERICAN SYCAMORE
PS	*PINUS STROBUS*	EASTERN WHITE PINE
PS1	*PRUNUS SEROTINA*	BLACK CHERRY
QA	*QUERCUS ACUTISSIMA*	SAWTOOTH OAK
QP	*QUERCUS PALUSTRIS*	PIN OAK
QR	*QUERCUS RUBRUM*	RED OAK
QV	*QUERCUS VELUTINA*	BLACK OAK
SN	*SALIX NIGRA*	BLACK WILLOW
TC	*TSUGA CANADENSIS*	EASTERN HEMLOCK
TC1	*TAXUS CUSPIDATA*	JAPANESE YEW

WOODY SPECIES INVENTORY



2.7 Vegetation



2.7.2 Analysis

Salvatore Fischetti
John Hencken
Katie Lawnik
Mike Malko

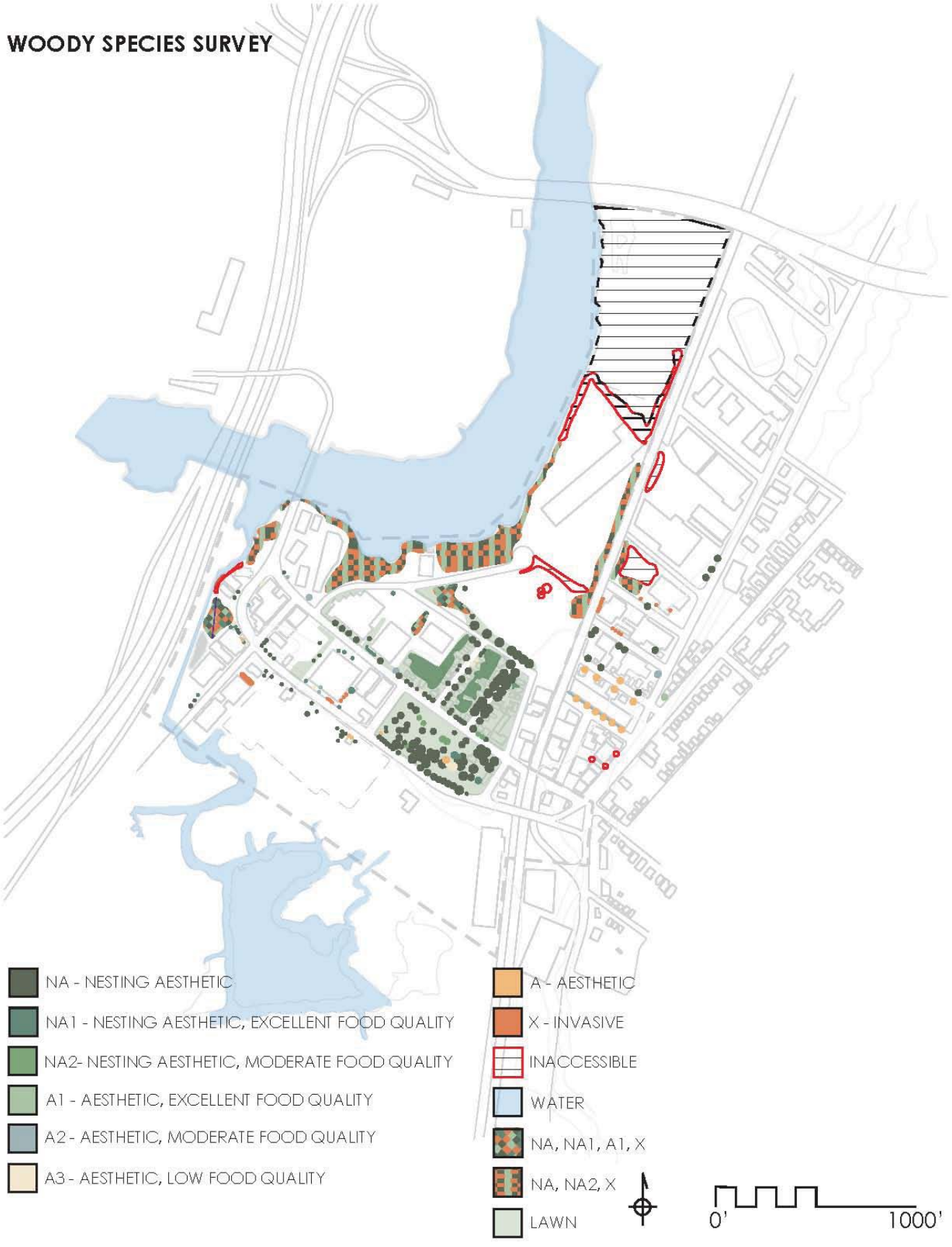
To in uence our design decisions, it was important to utilize the information from the inventory of species and their characteristics by weighting and rating the vegetation based on important ecological criteria to determine the upper and lower extents of vegetative importance. The criteria utilized for the weight and rate procedure were nesting and food quality, aesthetic quality, and invasive quality. There were 8 rates, including (1) nesting; aesthetic; excellent food quality (2) nesting; aesthetic; moderate food quality, (3) nesting; aesthetic (4) aesthetic; excellent food quality, (5) aesthetic; moderate food quality, (6) aesthetic; low food quality, (7) aesthetic, and (8) invasive.

The weighting of each aforementioned criteria was based on the quality of each trait. For instance, a tree may provide no nesting habitat yet provide an important food source in the fall when birds are preparing for migration. Another example might show where invasive species are completing a function ecologically that offsets their invasive value, such as stabilizing a river bank or improving water quality.

Aesthetic consideration was held to extreme importance when this analysis was completed. Aesthetic value of vegetation is important to de ning spaces outdoors and in turn de ning how people experience the site. Around the historic church and exsiting residential development, several trees spoke to the feeling of the site and its transition through history. The allées located in the existing residential section created beautiful low-density street scape conditions and signi cantly improved the aesthetic value for the lives of the residents.

As shown in the woody species survey, an analysis of this type can and should be in uential to the design process and outcome.It could be advantageous to work with the existing vegetative infrastructure to create connections between new development and existing development, while also providing important bene ts to the environment. This analysis, in conjunction with other analysis completed for this project has the potential to in uence design decisions on the master plan scale as well as on the individual site scale.

WOODY SPECIES SURVEY



3.0 Housing Density Case Studies

3.1 Tewksbury Township New Jersey

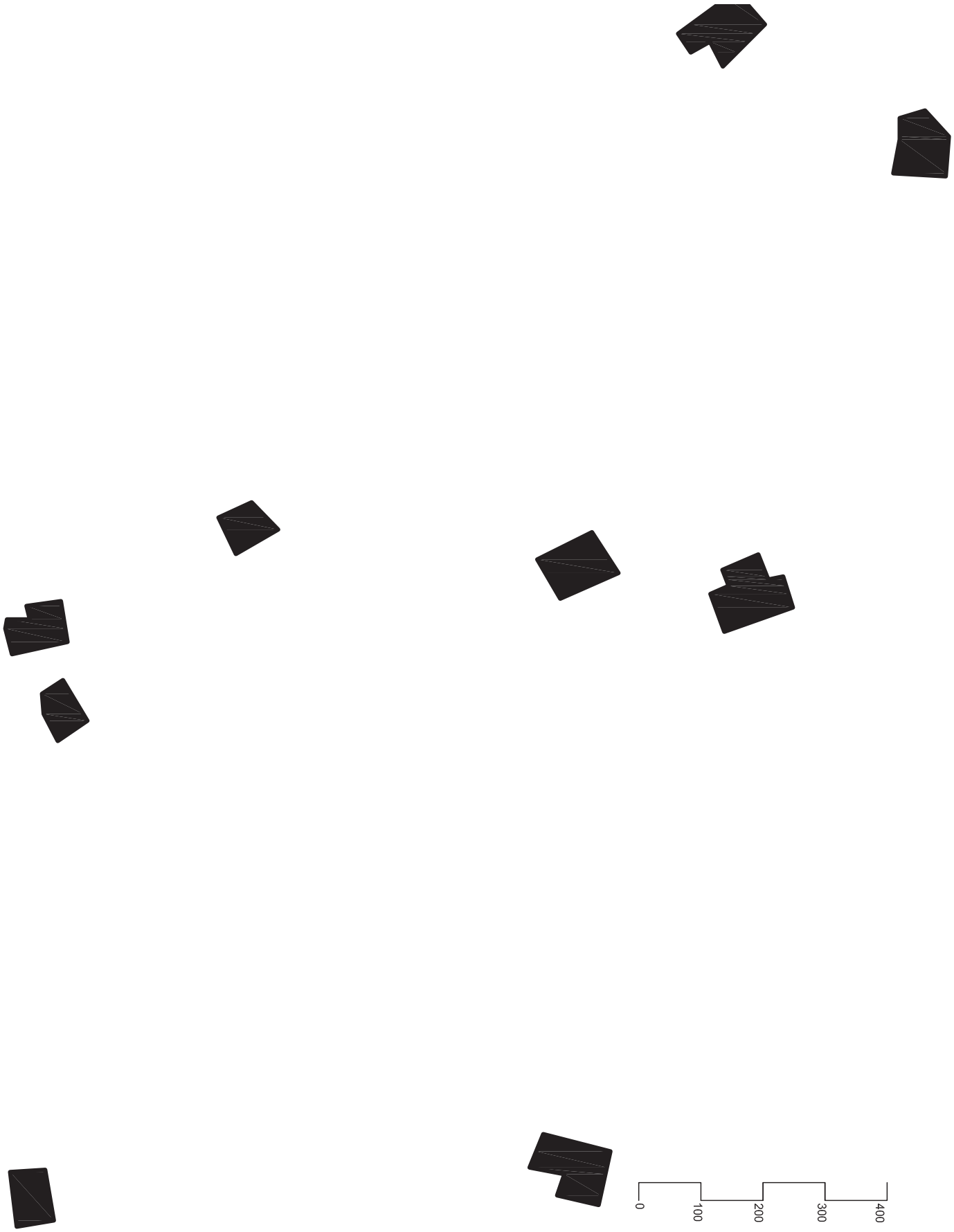
Housing Density:
.01 units per Acre

Anne Marie Kappus

Tewksbury Township, located at the north-east tip of Hunterdon County, is approximately 31.6 square miles of farms with large open fields, homes, schools, parks and small town general stores. In 2006, there was approximately 6,088 (175.2 people/sq mi) people living in the township. While the population in the town has been increasing, the percent increase has been dropping most likely due to the increasing amount it costs to live here. The furthest population counts go back to the 1930's when there was approximately 1,100 people, though the township was actually founded in the late 1700's. There was a large boom in the 1970's (55.1% increase) due to New Yorkers seeking a vacation spot and fresh air. Since then, the population has increased comprising mostly of homeowners with "New" Money in search of a private getaway that is still close enough to New York and Philadelphia for work or day trips.

There is a grand mix of small, cozy cottages to Old Mansions built in the 50's to McMansions so many of us see throughout New Jersey. In the 2000 Census data, there were 2,052 Housing Units recorded. Of those 1816 were Owner Occupied and 170 were Renter Occupied. The town is compiled of different age groups, certainly not catering to one age bracket. There is however, a pattern arising from new parents moving into the town. Once the child has grown up and moved to college (or moved out for job-related reasons), the parents find no reason to stick around themselves. This means many homes are being recycled to new families that are moving in for different reasons (primarily education, work and setting).

Because of the loose connectivity of the area (as you can see in the image outside of the text), it is very difficult to getto place to place without a car. Everyone in the town must rely on vehicular transportation which is very inconvient. But is that the price you pay? I think no matter where someone lives, there is something they will need to give up inorder to gain something else. For most of the people living in this area, they would rather have their peace and quiet, large home with a large backyard in exchange for traveling expenses, home heating costs, mortgage, etc.


0
100
200
300
400

3.2 Intercourse Pennsyvania

Housing Density:
0.32 Units per Acre

Lauren Basset

Image 1

They speak Pennsylvania German, derived from Palatinate German The Amish community are Christian and feel they are the "chosen rase". The do not have a church, but have services in their homes. A church district is measured by the number of households, rather than by the number of baptized persons in the congregation. Having many children, raising them and socialization with neighbors and relatives are the greatest functions of the Amish family. Each member of the family has a job within the family, a responsibility, and a status. They work on the farms and sell their produce, they are also very talented carpenters and seamstresses, and are famous for their quilts and wooden furniture. The Amish believe in corporal punishment, some punishments used are a razor strap, a willow switch, or a buggy whip may be administered to their bottoms. They live by a set of rules illustrated by the Ordnung. The Ordnung is a set of 'blueprints' that dictate how to behave, worship, live an Amish life. It however is not their Bible. There are usually many houses on a farm, this indicates how many generations are living and working on the farm. The immediate families all live together and extended families live on surrounding farms. Many of these farms have been in production for 200 years.The children are educated to the 8th grade, and thier main form of transportation are horse, buggies and unmotorized scooters. They do not actually ride the horses as they feel animals are not clean.The pros of being in an Armish community are: they have a strong sense of Family, they are hard workers, they are treated as very special individuals within their own community, and they have a strong sense of community. The cons of the comminty are; they do not embrace modern technologies, and they have no sense of the modern world around them. Diseases, birth defects are prevalent in Amish communities due to a restrictive gene pool. The layout of the land is unique to each church community, as each farm produces a different crop or livestock to sustain the whole community. For instance the Stoltzfus family owns a dairy farm; the Zimmerman family run a fresh fruit and vegetable produce farm, the Kinisger family is carpenters, and all of the families' trade with each other. So the farm lands are structured in a way that the community firstly benefits. They have a strong of family and the family as a whole work towards the farms ultimate success.

Image 2

Image 3


N
0 25 75 175ft

3.3 Branchburg, New Jersey

Housing Density:
1 Unit per square acre

John Hencken

1. House on Vollers Drive

Township population: 14,566
# of households: 5,272
# of families: 4064

Demographics:

90.44% White
1.95% African American
0.10% Native American
6.17% Asian
0.03% Pacific Islander
0.39% Other races
0.92% Two or more races
2.69% Hispanic of any race
39.7% of the households had children under 18
69.6% were married companies
5.5% had a female householder with no husband present
22.9% were non-families
18.9% were individuals
5% had someone living alone who was 65 or older
Average household size was 2.76 and the average family size was 3.19

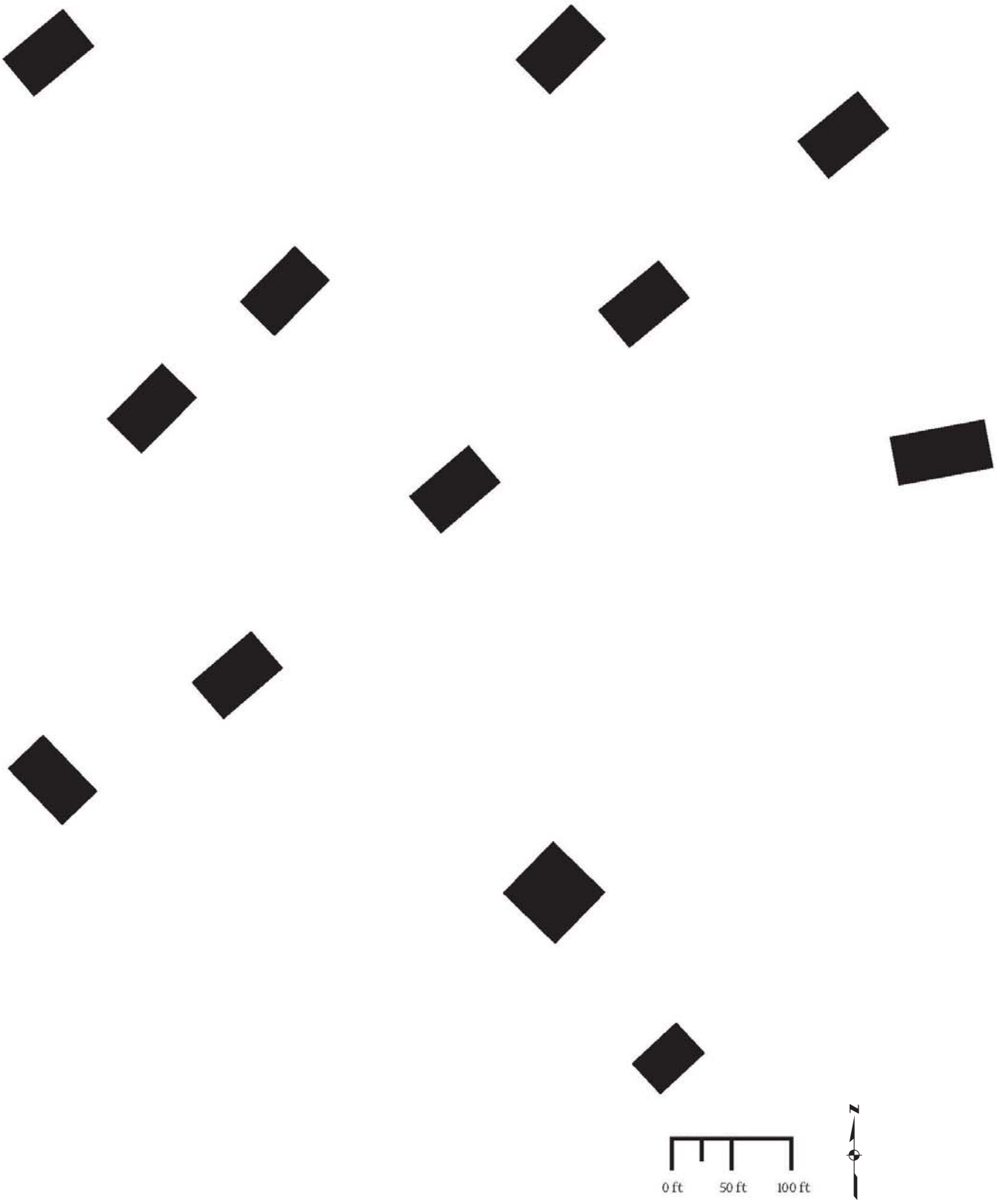
Population Information:

27.3% under the age of 18
4.5% from 18 to 24
34.6% from 25-44
25.3% from 45-64
8.3% over 65
Median age- 38
Median income- $96,864
Median income for families- $110,268
Males income- $70,726
Females income- $47,786

Branchburg is a 20 square mile town located in the Upper-Raritan watershed. It is bounded by the North Branch and South Branch Rivers. The zoning ordinances allow for residential, farming, industrial, office, manufacturing, and laboratory uses. The majority of housing units are single family homes sited on 1-3 acre lots. Raritan Valley Community College is located on the north side of town and draws 5,000 students. The Raritan Valley train line of the New Jersey Transit train system has a station in Branchburg as well. It is nestled between Rt. 202 and Rt. 22, and is close to Rt. 78 and Rt. 287. The entire town is safely navigated by bicycle and provides a safe home for children to grow. The rustic preserved farmland provides fine esthetic value for the residents of the town, while also providing food for local animals, places to horseback ride, and places to work. Several large biotechnical corporations have headquaters in the local area, so many of the residents do not have to travel far to work, while the seperate housing allows many to retain their sense of identity and privacy. 6 parks are well maintained and provide valuable open space for recreation, excercise, and relaxation.

2. House on Oriole Lane

3. Farm on South Branch Road


0 ft
50 ft
100 ft
N

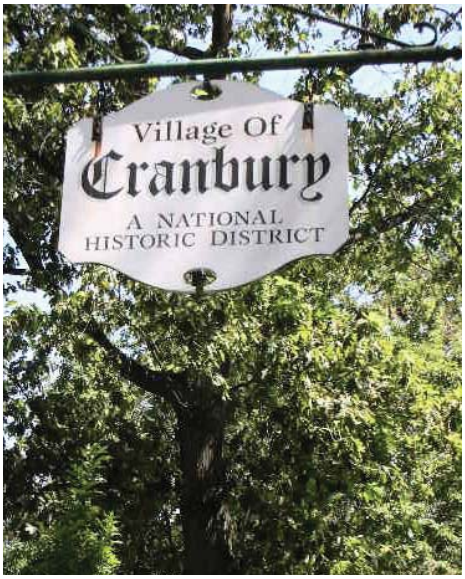
3.4 Cranbury, New Jersey

Housing Density:
1.8 Units per Acre

Mike Malko

Key Numbers

Population: 2,103
Population Density: .13 Sq. Acre
Size: 13.4 Sq. Miles
Median Household Income: 123,500
Estimated House/Condo Value: 686,000
Lot Size: 4,500 - 16,000 Sq. Ft.
Setback: 12 - 25 Ft.
Sideyard: 0 - 15 Ft.
Building Height: 2 - 3 Stories
Parking: On-Street and Garages



Location

Cranbury is located in Middlesex County, New Jersey. It lies within a mostly agricultural region which also contains some low-density suburban development. The surrounding topography is mostly flat to gradual rolling hills.

Community Character

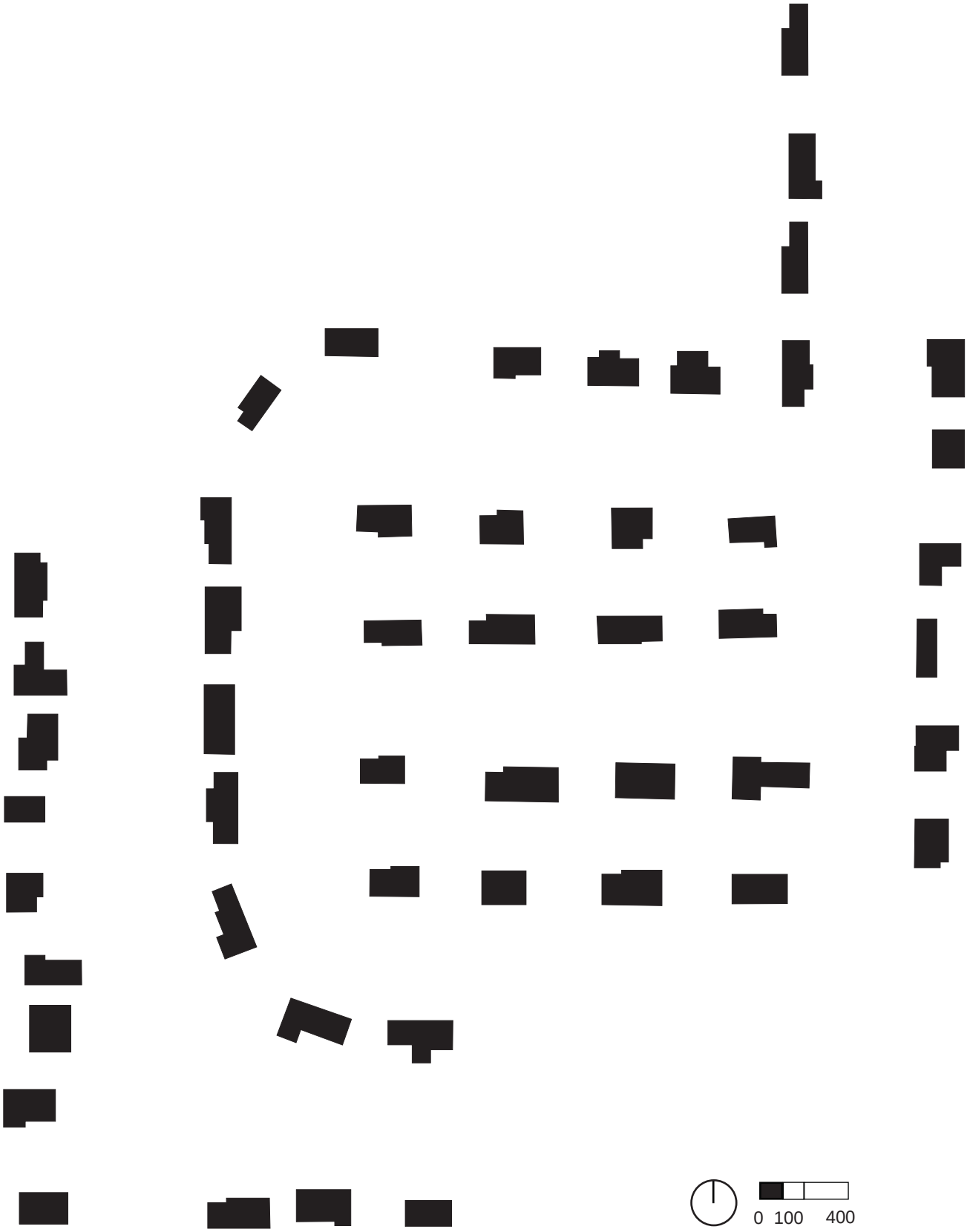
The identity of Cranbury revolves around the back bone of the community, Main Street. Situated in the center of town, Main Street provides the community with social and commercial life.

Land use

As Cranbury is essentially a residential village, most of the land use is residential. The municipal building, post office, schools, churches, museum and other community facilities are located in the hub of the village.

Accessibility

The majority of the community is within 2,000 feet of the down town village. There is a pedestrian walkway network that connects most of the residential buildings to the nucleus and public facilities.


0 100 400

3.5 Lake Mowhawk, New Jersey

Housing Density:
1.9 units per acre

Kyle Gaugler

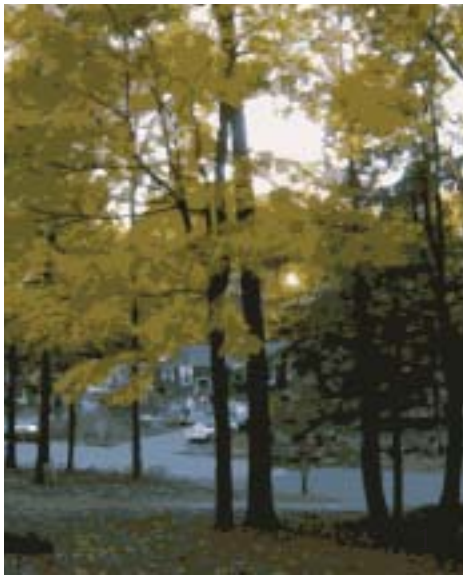
Total Area: 6.2 square miles
(5.0 Land 1.2 Lake)

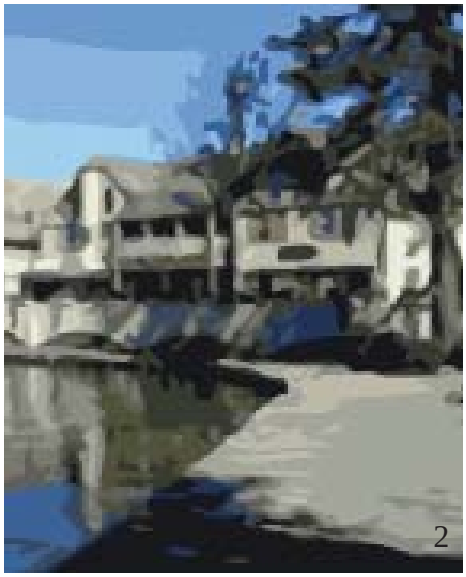
Population:9755
27% under 18
4% 18-24
30% 25-44
27% 45-64
10% over 65
Median age: 39
100 femaler per 91 males
96% white 2% latino 1% asian

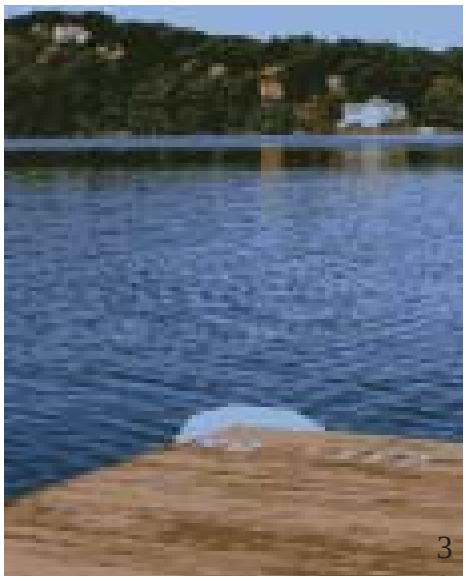
Households: 3692

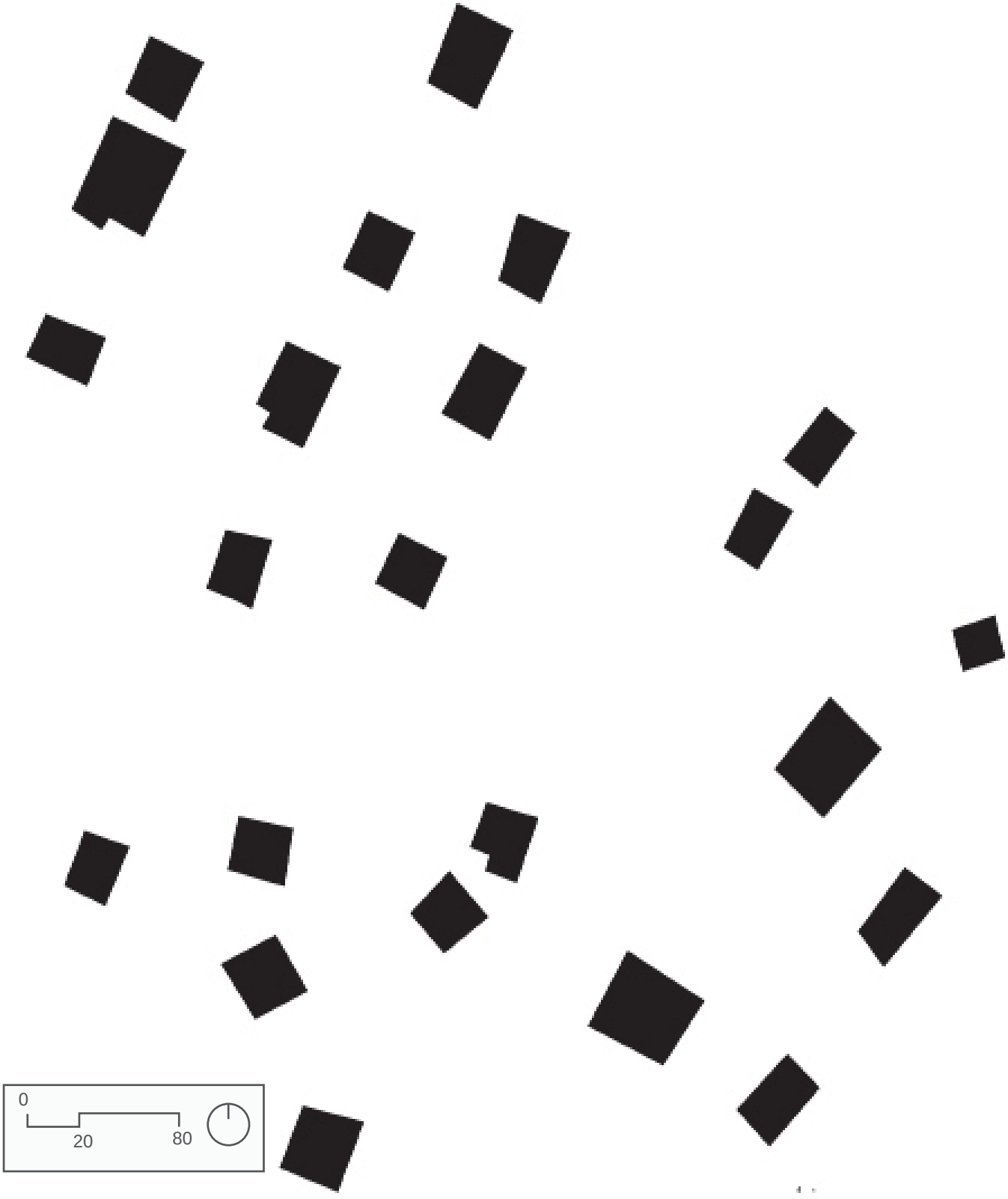
Families: 2,787
66% unmarried couples
38% married with children
7% of houses run by single moms
24% of houses contain non families
10% of houses run by elderly
Median Income: $81,699 a year per household

The entire town is designed around an alpine motiff. This was a contributing factor when it was listed on the National Register of Historic Places. The housing pattern circles the lake then radiates out from the southern edge of the lake. The northern edge is dominated by a vast central golf course. This configuration preserves and maximizes the attractive views of the water and the lush golf course. While minimizing views of neighboring houses. The town contains several amenities such as restaurants, service space, a post office, and window shopping. A tiered boardwalk was constructed along the northern edge of the lake adjacent to the town center. A landing was provided along the boardwalk that can be used to tie a boat up to. Artificial beaches were created along the edge of the lake, spaced in a manner that promotes residents to walk to them. This development is special for a number of reasons. It is located extremely close to the New York City Metropolitan area, but the interstate highways are configured to wind around the settlement limiting exposure to road noise and pollution. This provides tremendous accessibility without taking away from the areas natural beauty. It is a perfect example of an area in New Jersey that hasnt been spoiled due to over development. Miles of ecologically rich forests encompass the town and help to bolster its aesthetic value. The major drawback of this settlement has to be its obtainability. The country club seems to cater to one type of client. A quick glance at the census data supports this observation and it becomes glaringly apparent that Lake Mohwak is a monoculture. This blatant lack of diversity hinders the area in incalculable ways.








0
20
80

3.6 Kentlands, Maryland

Housing Density: 4 Units per Acre

Josephine Grayson

1

Culture

Kentlands Arts Barn 4 Artists-in-Resident Studios, Art Gallery, Museum Shop, 99 Seat Theatre

1

Designed by Urban Planners, Andres Duany & Elizabeth Plater-Zyberk, in 1989. The community is divided into several districts, including 'Old Farm' and is among the largest, and one of the most successful New Urbanist projects in the United States.

2

Sustainability

Minimal environmental impact of developement and its operations. More walking less driving

3

Density

Enabling a more efficient use of services and resources as well as a more convenient, enjoyable place to live.

4

Old Farm District

Approx. 20 acres, of which 11 are designated as openspace. Multi-family to single familyhomes ranging from $500,000 to $1,200,000.

5

Walkability

Pedestrian streets free of cars. Most things are within a 10 minute walk.

6

Quality Architecture

Homes ranging in size from town-houses (approx. 900 sq.ft.) to Single familyl homes (approx. 5,000 sq.ft.)


0
50
100

3.7 Maasbommel, Netherlands.

Housing Density:
4 units per acre

Ryan Miller

As a small and densely populated nation, the Netherlands are forced into extreme planning solutions to accomodate the people living there. Since more than one third of the nation lies below sea level, most of Lower Holland and the Zeeland to its south are at high risk for flooding, especially with the predicted rising sea levels assoicated with global climate change. After the Great North Sea flood of 1953 which burst several dikes near Maasbommel, going on to flood a tremendous chunk of the country, the Dutch have taken on 'The Delta Project', an immense engineering feat that aims to ensure flood protection for up to a thousand year storm even. With the subsequent refortification of the dikes and levees and a growing population, the Netherlands are looking for a way to use the land along these barriers without risking human life.

Four years ago, the Rotterdam based firm Factor Architecten, in conjunction with construction giant Dura Vermeer began construction on a series of amphibious homes at the Harbor of Maasbommel. Fourty Eight homes in all run along the river's edge housing more than 150 people directly on the flood prone side of the dikes. Each home is equipped with steel pilings in each corner and a hollow concrete pontoon for a foundation. When water levels rise, the pilings allow for the pontoon to raise the house up keeping it clear of the flood's destructive power, additionally, unlike in a houseboat, they provide great stability and an ensurance that the structure will not be swept away or rock continually through an intense storm. The low center of gravity of the pontoons make the structure incredibly stable.


0’
500’

3.8 North Wildwood New Jersey

Housing Density:
6.5 units per acre

Matt Meo

Located on the eastern side of the New Jersey cape is the city of North Wildwood. The city consists of approximately five thousand people; however that number can easily expand five times in size during the summer months. Every year North Wildwood is the vacation destination of thousands of people looking to take advantage of the cities beaches, boardwalk, amusement piers and water parks. For close to eighty years, North Wildwood has been accommodating visitors, it's most prominent time occurring in the 1950's, where the city saw a decrease in single family homes being constructed, replaced by twelve to twenty room motels.

These motels, built in the Doo Wop style, with flashy colors and neon light, attracted hoards of people from New Jersey, New York and Pennsylvania, all looking to just get away from city life for a short while. This trend continued into the mid nineties when North Wildwood then experienced another kind of building boom. Motels made way for condominiums, a great deal of the original character of the city went with it, however recently since the housing market has slowed down, many motels and condos have been left standing side by side.

The median household income in North Wildwood's permanent residents is $39,200; however the median home value is $328,000. Newer construction in North Wildwood however is much higher. The median cost for homes bought in 2008 was $525,000, which means people currently buying in North Wildwood are vacationers or people looking to rent their properties, and not necessarily living in North Wildwood all year round.

What is interesting about North Wildwood is the relationship between density and open space. The population density in Wildwood is close to 2,700 people per square mile, yet the only usable recreation space aside from a small pocket park or two is that found on the beach. Many motels and condos have just enough room for parking and the building situated on the site. Some are accompanied by a pool and sundeck, usually elevated off the ground so parking can fit underneath. However, because of the high volume of guests, little green space is implemented on individual properties. As a result, almost everyone visiting North Wildwood looking for recreational activities will travel to the beach and boardwalk. North Wildwood however uses the scale of spaces along with the natural axis of the island to make the entire city very walk able. The whole city is only six block wide so the beach and boardwalk are never more than a 15 minute walk away. Also, the city's has many streets separating narrow blocks so there are many points of access to the beach, which cuts down on the number of people walking on each street. The long boulevards that run the length of the island are also spaced close together so that walking blocks is quick and easy. Coupled with small strips of green space across some of the boulevards, it breaks up the landscape of the relatively flat, sandy island. There are also no real forms of mass transit to the city, so almost everyone visiting the island travels by car. If the island was not designed to be walk able, the volume of vehicular traffic would be unbearable, however a majority of the time, even in the summer there is minimal traffic found in North Wildwood.

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2

3


0
50’
100’

3.9 Seaside, Florida

Housing Density
9.2 units per acre

Pete Symanski

1

Seaside, Florida is a neo-tradional planned community located on the panhandle of the sunshine state. it was inherited and built by robert davis in 1979. seaside is thought to be the first example of new urbanism style of community planning. this town is implemented as self-sustainable meaning food market, restaurants, etc are in walking distance. automobiles are present but pedestrian and bike traffic is encouraged. high density housing and low density housing encourages shared green spaces and mix uses. these green spaces and plazas create a small town feel where everyone knows each other evokes conversation. a downside to these standards can be a lack of architectural diversity. these homes have character but they are much the same from one to the other. vehicles are parked in a central location and kept off the street or driveways. the front porch is encouraged on every residence for neighbor conversing.

2

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50'
100'

3.10 Whippany, New Jersey

Housing Density: 9.5 Unit per Acre

Yilu Zhang

As of 2007, Whippany's population is 8,925 people, with a population density of 1,331 people per square mile. Since 2000, it has had a population growth of 6.45 percent. 86.01% of people are white, 1.30% are black, 10.92% are asian, 0.08% are native american, and 1.72% claim 'Other'. 4.43% of the people in Whippany (zip 07981), NJ, claim hispanic ethnicity.

The median home cost in Whippany is $600,000. Compared to the rest of the country, Whippany 's cost of living is 39.81% Higher than the U.S. average. The income per capita is $47,280, which includes all adults and children. The median household income is $96,501.

It's public schools spend $11,440 per student. The average school expenditure in the U.S. is $6,058. There are about 14 students per teacher in Whippany.

There are 4 parks in Whippany. The largest of which is the 89-acre Bee Meadow Park off Reynolds Road. The most widely used park in the village is the 31-acre Central Park, off South Jefferson Road. There is a shopping center in town, though Whippany is lack of it's own places for leisure.

Sunrise at Hanover is a community that was built in the 1990's, contains townhouses, condos.

Each town house in Sunrise Drive is varied with built area, and interior structure. The community consists of green spaces, small lawns, walkways for people to jog and dog-walking, pathways for bike riding. There is a community center, a small playground, a community swimming pool, and a tennis court as well.

The entire community consists of about 12 acres of total area, and the residence buildings occupy 2.7 acres; there are 5 acres of impervious area including parking lots. The rest are green spaces.

There are 5 parking lots for the residents, with 20 parking spots for each lot. At least one more spot of parking spaces outside of each garage of each house.

The greening of the community is done by the landscaping crew that is hired by the community development. There are green corridors with trees, shrubs, seasonal planting along all the walkways, and paths. The cost is included in the property tax. The service that the development provides also includes the remodeling and redemolition of the exterior of the houses, as well as the repairment of the roads, curbs, etc.

The community is located right off of Parsippany Road, Whippany. It is easily accessible to major highways such as interstate highway 287, 80, route 10, route 24, route 46; it is within 40minutes to one hour driving distance to New York city. The Morristown airport is located in Whippany too.

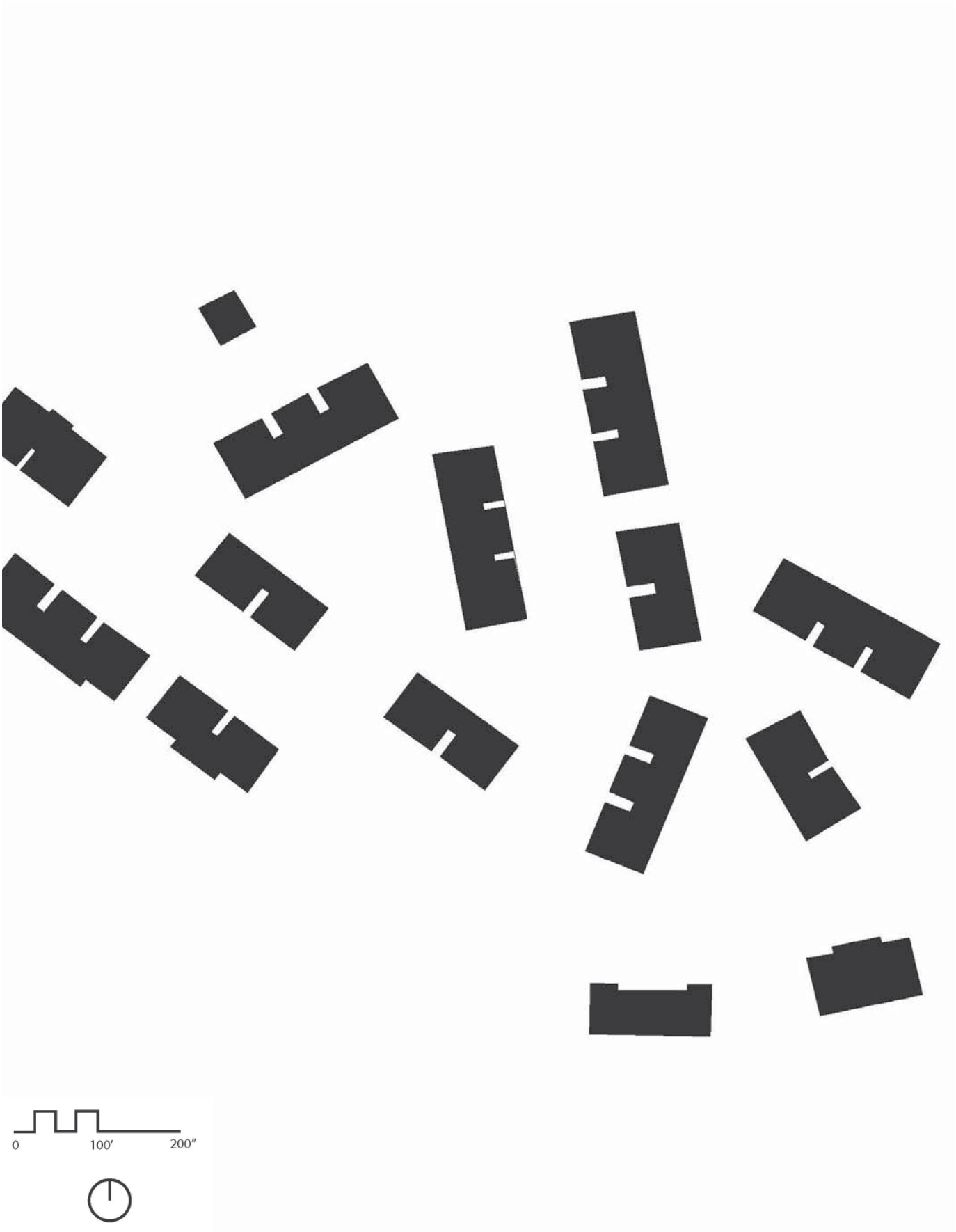
The only negtivity I can think of is it's exterior design of each condo. There are at least 4 separated houses in each condo, with garages on one side of the condo, all the major entrances and doors to each home are relatively close to one other. It'd be more comfortable if I didn't have to go pass by other houses' doors in order to get into my own house.

Location in Whippany, NJ

Sunrise community @ Whippany, NJ


Black Brook Park, Whippany


Whippany River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3.11 Glenard Estate, Eaglemont, Victoria Australia

Housing Density:
10 units per acre

Cindy Cheung

Walter Burley Griffin, an American architect and landscape architect, designed the Glenard Estate in 1915. The Glenard Estate is a residential estate located in Eaglemont, Victoria, Australia and it was owned by Peter Keam, a founding member of the Town Planning Association of Victoria. The Glenard Estate is currently protected by the heritage act in Victoria due to the historic significance related to the designer. There are also heritage guidelines for any new development on the estate provided by the City Council of Banyule. Griffin's design of Glenard Estate is similar to the ideology of garden city movement. This movement is an urban planning approach founded by Sir Ebenezer Howard in 1898. Garden cities were planned to be self-sustained communities by careful planning for areas of residence, industry, and agriculture. The Glenard Estate is built upon this ideology where the neighborhood acts as a physical and social community unit.

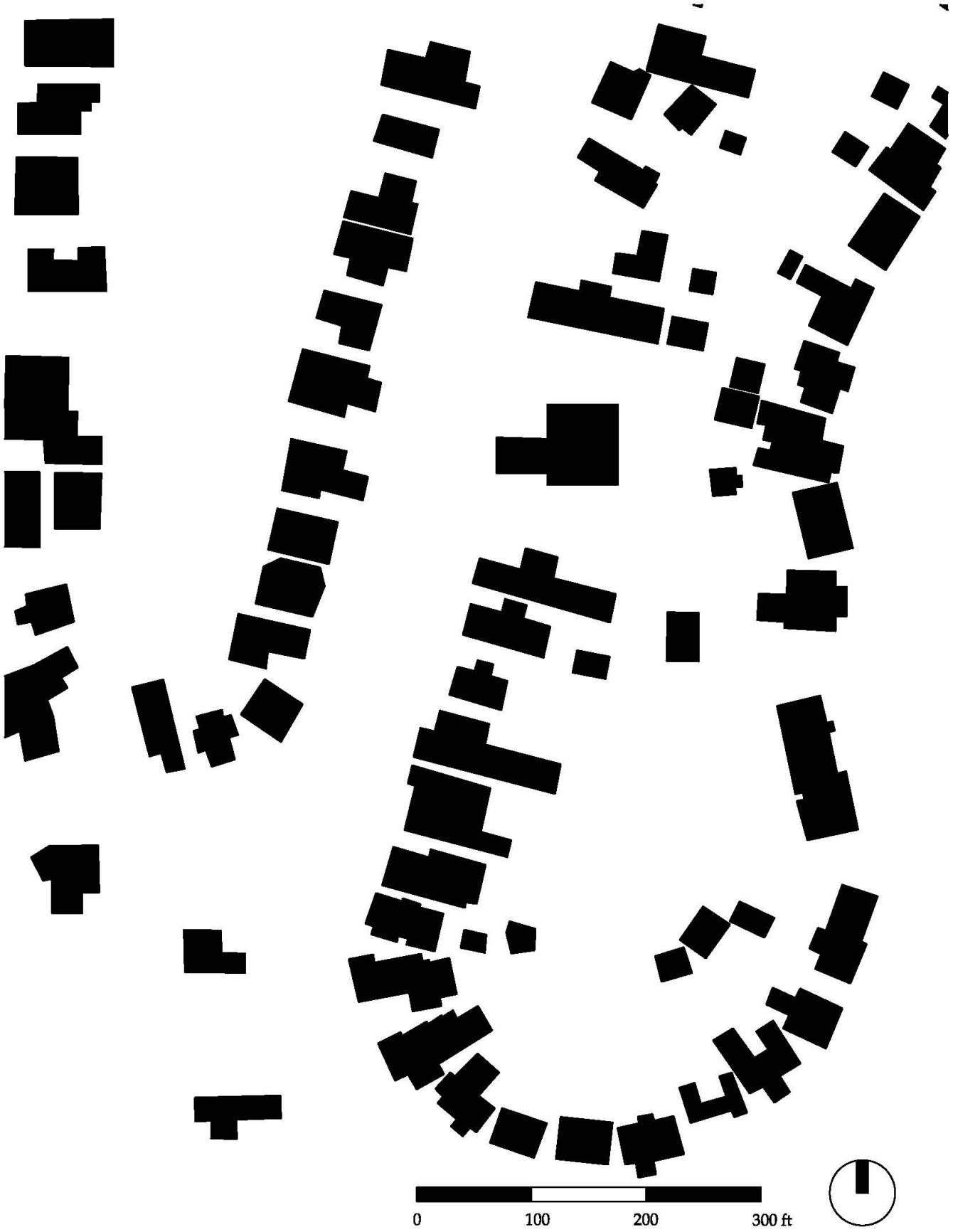
Griffin's design is sensitive to the topography and native plants. The curvilinear streets are planned according to the topography of the site where the allotments are placed along the curvilinear streets. The Glenard Estate consists of 120 allotments in 1915. Griffin's design aims for creating a safe public space within the estate. He successfully planned a safe public space by using the area inside the roads. This space in the middle acts as a safe community space, because the public space can be viewed by every allotment. This community space is also planned as a safe playing space for children. There is also a segregation of vehicular and pedestrian traffic through a separate network of open space from the street system. Griffin's design follows a hierarchical approach in street design where residential streets are narrower than the main streets. (Glenard Estate)

1

Eaglemont
Population 2006: 3,767
~ 37.6:1000 sq ft
Area: 448 acres
Total Private Dwellings: 1,455

Glenard Estate
Area: 68.52 acres
Allotments: 150
Impervious Area: 15 acres
Pervious Area: 53 acres

2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100
200
300 ft

3.12 DayBreak
South Jordan, Utah

Housing Density:
10 units per acre

John Novak

Daybreak is being built by Kennecott Land Development Corp with a vision to provide the most sustainable living possible in today's society. Daybreak is a community that will have a mixed use town center, dense mixed residential housing, community centers, schools, transit, and the appropriate amount of green space. You name it Daybreak will have it.

Daybreak is located along side the Oquirrh Mountain Range (West Bench) in South Jordan Utah. South Jordan is one of the fastest growing citys in Utah with a population growth of 47,967 from 1960 to May 2007. The forecasted growth for South Jordan is expected to be 85,000 in 20-25 years. With the second highest annual growth rate average of 9.4% from 1990 to 1999, it makes South Jordan one of the largest cities in Utah. Over 75% of South Jordan make more than $50,000 a year, with 95% having a high school diploma (30% with a B.S. or higher).

Daybreak currently has a population of 7,200 with only about a quarter of the site developed and is forecasted to grow to a population of 47,250 upon completion (final completion forecast was not available). The total site development consists of 4,200 acres with 1,000 acres dedicated to parks and open space. On site is a 60,000 acre lake (Oquirrh Lake) that is used as the community's storm water management and conservation. The lake is lined with native plant material and has surrounding active and passive green spaces.

The residential areas were designed to model Salt Lake City's older neighborhoods. The median price for a home in Daybreak would be about $221,800 and range from high to low density housing. They will have front porches, diverse styles, and are in walking distance to everything. Residential properties are located near parks, retail, restaurants, Oquirrh Lake, schools, and two new proposed light rail transit lines called the TRAX. The commercial properties and schools are designed following LEED standards.

Daybreak is going to set the standard for the future of New Urbanism. The site is only about a quarter complete and there was no say on when the projected year of completion is. Daybreak is setting an example for sustainable community planning and development and should be used as a template for other developers, planners, architects, and designers. This type of community designing will help decrease our carbon footprints and lead the way for a sustainable lifestyle.

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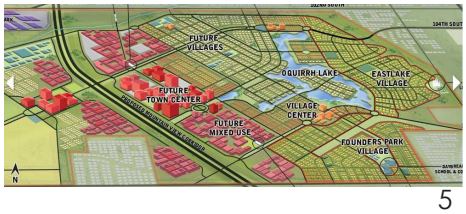

5


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25
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100'

3.13 Burlington City New Jersey

Housing Density:
10.3 Units per Acre

Raymond Schobert

Burlington is the first, original city in what is now Burlington County, New Jersey. It is located on the Delaware River and is considered a suburb of Philadelphia. It has a 19th century town character due to its grid pattern of blocks of attached row homes.

Burlington City occupies an area of 3.7 square miles, 3 square miles of which is land and .7 is water. As of 2007, the total population was 9,485 people and contains 4,181 housing units. The average household size is 2.48 people, while the average family size is 3.09 people. The median household income is $43,115 and the median family income is $47,969.

Burlington is filled with a rich history and was officially founded and settled in 1677, primarily by a group of Quakers who purchased the land from the Lenape Native Americans. The town is New Jerseys 1st recorded European Settlement. Burlington City is also home to the state's oldest library, "Library Company of New Jersey", New Jersey's oldest fire company, "Endeavor Fire Company", and the 1st pharmacy in New Jersey, "Wheatley's Pharmacy", which also served as a link for the Underground Railroad.

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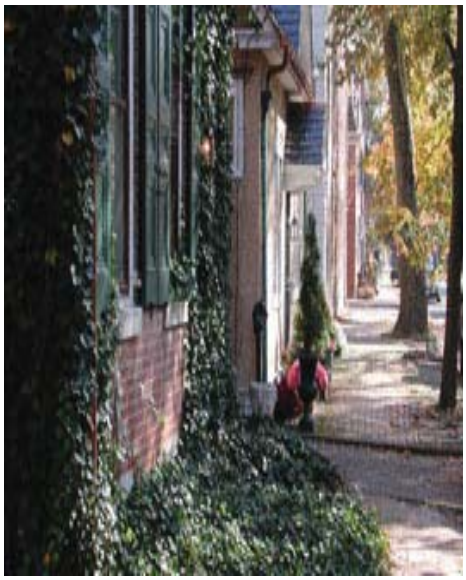

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200

3.14 Battery Park City New York

Housing Density:
54 units per acre

Michael Browarny

As of the 2000 census, there were 7,951 people living in Battery Park City. 41,032 people per square mile Almost double that of New York City it's self Battery Park City is a densely populated area that has a great passive and active recreational open spaces, as well as great views. Some of the residences have green roofs, and provide water re-use programs. The residences are all in high-rise buildings however, being located on the edge of the Hudson there is great open space to building height ratio. Initially Battery Park City had a main problem of cost in construction of buildings and foundation of landfilling, however it has paid it self of over the years making $130 million for the city of New York.

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3


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50
100
200

3.15 Forte Greene, Brooklyn, NY

Housing Density
60.4 Units Per Acre

Salvatore Fischetti

1

2

3

Fort Greene is a neighborhood in the New York City borough of Brooklyn. Fort Greene is listed on the New York State Registry and on the NationalRegister of Historic Places, and is a New York City-designated Historic District. It is located in north west Brooklyn, above Prospect Park. The neighborhood is named after an American Revolutionary War era fort that was built in 1776 under the supervision of General Nathanael Greene of Rhode Island.Fort Greene contains many superb examples of mid-19th century Italianate and Eastlake architecture, most of which is well preserved. Fort Greene is known for its many graceful, tree-lined streets and elegant low-rise housing. Fort Greene is also home to the Williamsburgh Savings Bank, the tallest building in Brooklyn. The neighborhood is geographically desirable and close to the Atlantic Avenue train station, with access to most major subway lines. It is also home to several important cultural institutions like the Brooklyn Academy of Music, the Brooklyn Music School, The Paul Robeson Theater, The Museum of Contemporary African Diasporan Arts.


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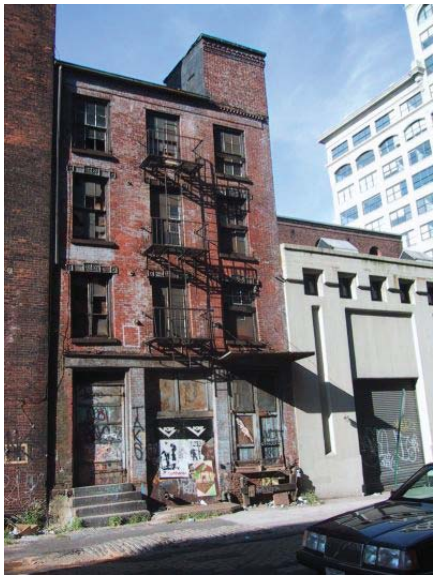
50
100

3.16 DUMBO, Brooklyn, New York

Housing Density
60.4 units per acre

Katie Lawnik

Formerly an industrial neighborhood, Dumbo was infiltrated by artists during the late 20th Century, enticed by the large loft/ live work spaces. Now, these old fashioned warehouses converted into high priced lofts have a whole new face, feel and residency. Known for architectural gems and 85 acres of waterfront parkland, Dumbo has become increasingly popular in the past decade. Rent has out priced many of the starving artists, making way for young professionals and families alike. Small businesses, art galleries, restaurants and cafes are now thriving in this once vacant neighborhood. Culture thrives in every nook and cranny. History is prevalent with cobble stone streets and current arts growing as The Brooklyn Bridge Park is host of many art instillations and exhibitions year round. Home of the best pizza in Brooklyn and one of the most spectacular views of Manhattan, Dumbo is a wonderful living and working urban community adored by many.



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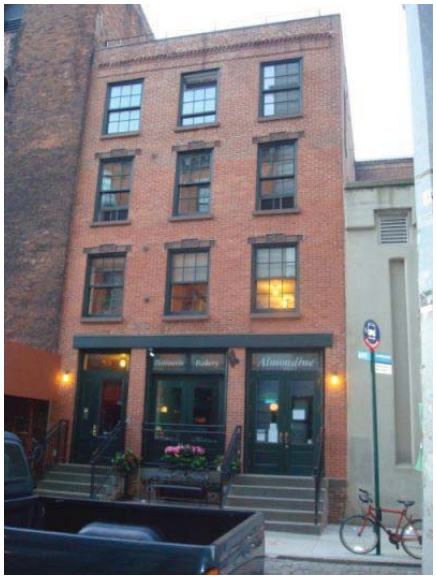
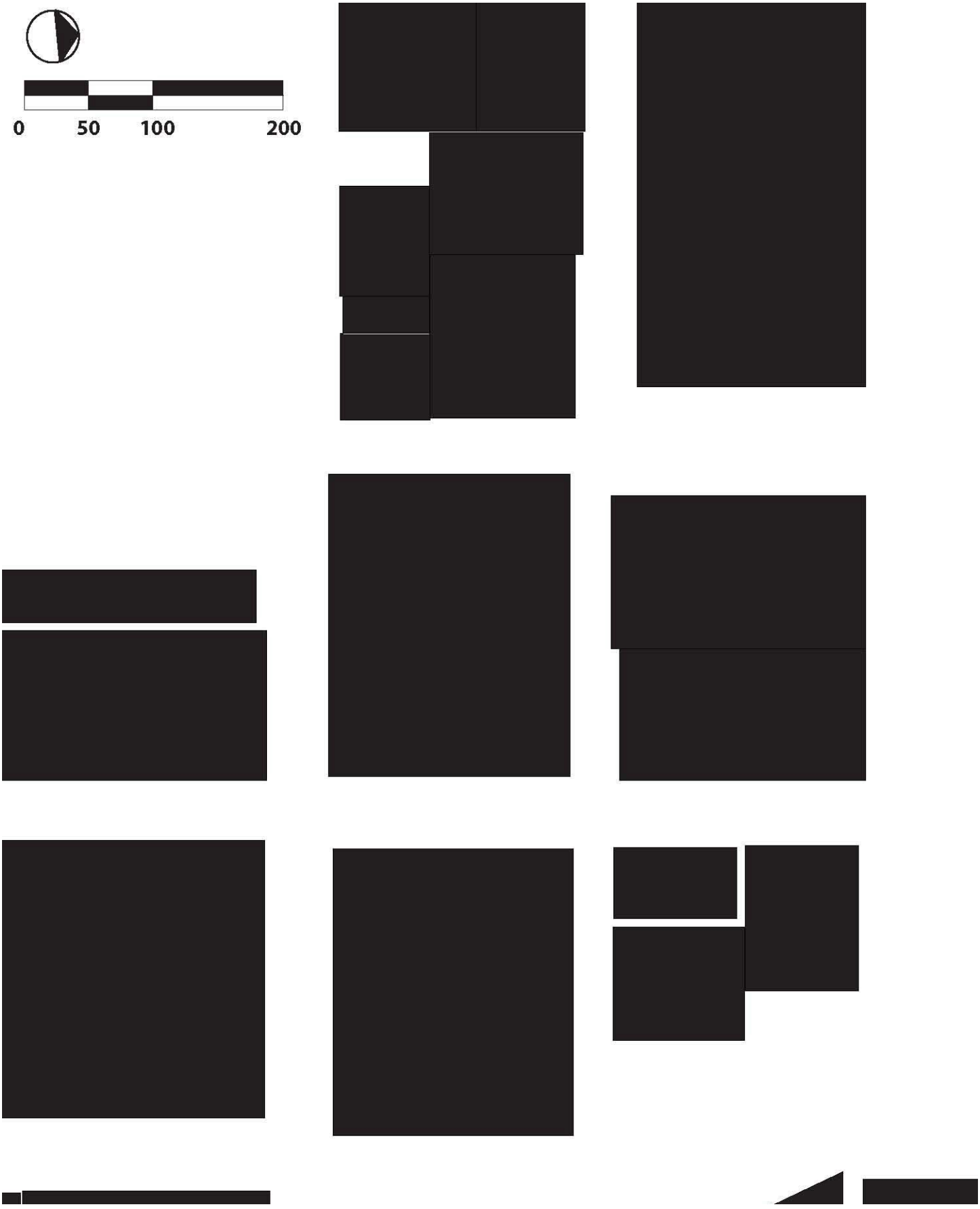


Now 2

Brooklyn Bridge Waterfront Park 3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3.17 San Francisco, California

Housing Density:
220 Units per Acre

Joseph Clomera

The Tenderloin District of San Francisco is a dense residential district known for its cheap single room occupancies (SROs), large homeless and immigrant populations, squalid conditions, crime, bars and clubs and liquor stores (60 in 2008). It is home to the most children in the City of San Francisco. This area has also been intensely resistant to gentrification.

Because of the lack of space to build lower incom housing in areas like the Tenderloin District, San Francisco Housing Authority (SFHA) provides rent-controlled early 20th century hotel rooms to those who are on a fixed income and in need of perminent residence. Unfortunetly, because of the same constraint, the amount is inadequate; further contributing to argueably the worst case of homelessness in any major American city.

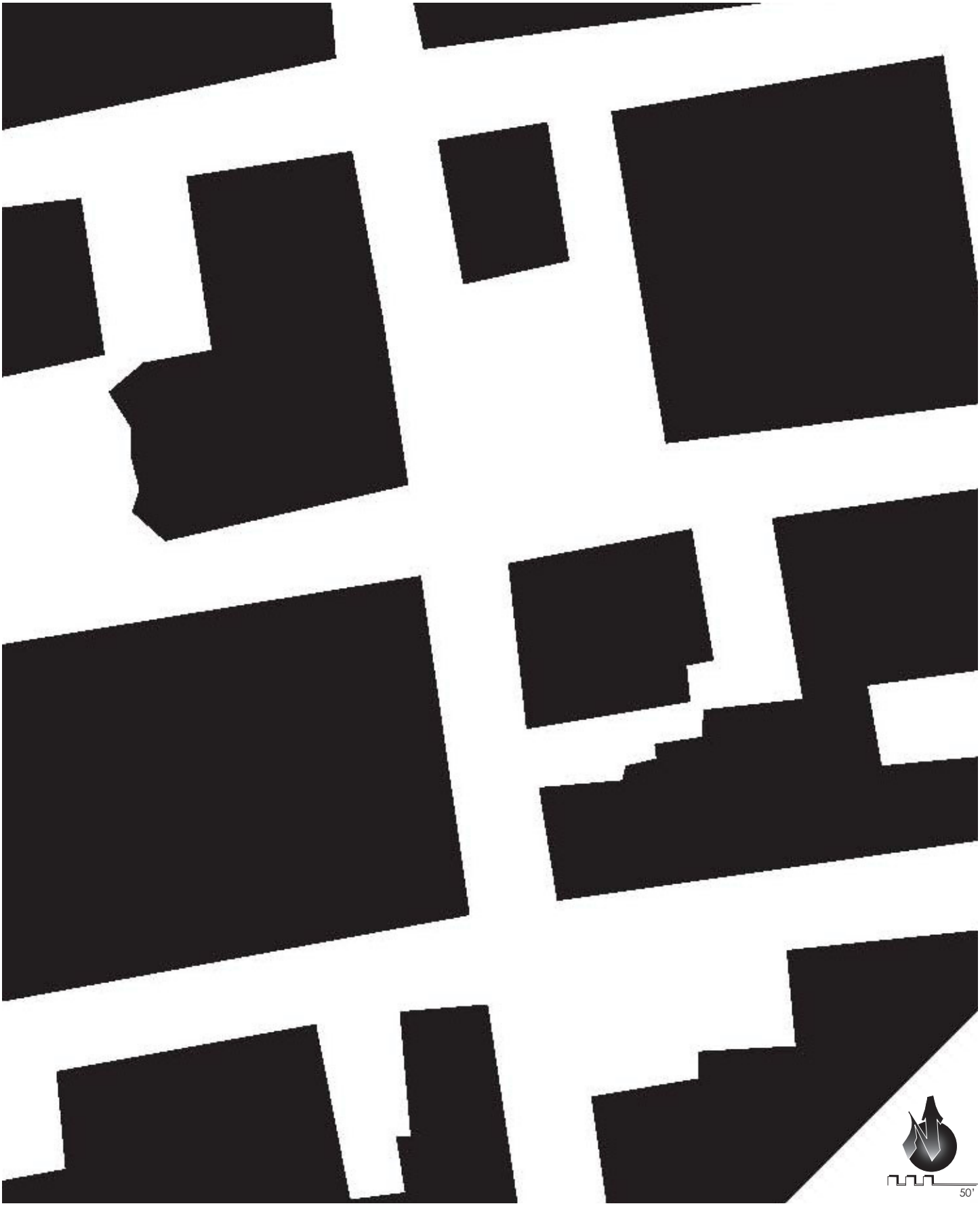
Area:
35 City Blocks
0.51 sq. mi.

Population:
28,991 People

Population Density:
56,845 people / sq. mi.

Picture Taken by Joseph Clomera

Picture Taken by Joseph Clomera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4.0 Site Designs

4.1 Reshaping the Community

Lauren Basset
Cindy Cheung
Josephine Grayson

Housing Density
12 units per acre

The Borough of Ridgefield's historic past, commercial success and long established residential community can be instantly viewed as one crosses the railroad tracks, toward Church Street. The railroad tracks divide the borough and essentially cut most of the town off from the waterfront. However, what was clearly noted on our initial visit was how well these deeply diverse uses of the site continue to comingle in a relatively harmonious manner. As economic shifts have recently occurred and large parcels of land have become available for new uses the borough finds itself in a position to develop guidelines that will allow it to reshape the growth of its environment. The first priority is gaining access to the waterfront and expanding its open space. There is also an interest in changing some of Ridgefield's economic dependency from the heavier, commercial industry to the retail sector. The community is also experiencing an increasing demand for more housing, particularly higher density housing.


Create More Open Space


Expand Residential Community

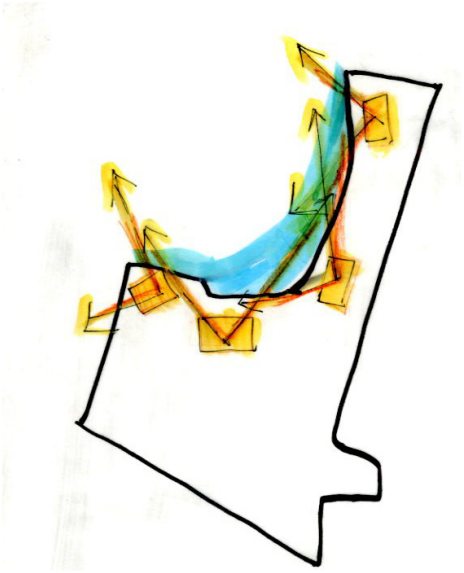
Promote Retail Businesses


Provide Access to Waterfront

Proposed Master Plan

Analysis

The site's physical boundaries are the railroad crossing on the east side, Overpeck Creek on the west side, and Route 46 along the north side. As we visited the site on foot the first impression we got was that it was very busy and noisy due to the heavy commercial traffic to and from the local warehouses and factories. The vehicular circulation is dangerous and lacks a hierarchy. The pedestrian circulation is unclear and unsafe at numerous intersections. There is also no designated bike lane. We created a proposed traffic pattern map (figure A). An inventory was made of the existing physical conditions, including the flood plain, and uses, which we created into maps (figures B - C). Through analysis we developed constraints and opportunities maps (figures D - E). Karen Riede, of The Ridgefield Environmental Commission, shared with us the borough's Recreation Trail Program. The program includes establishing a proposed trail system that would connect existing trails, parks, greenways, streets and schools. Our design proposal takes these plans into consideration by continuing the trails and greenways so that all of Ridgefield is connected (figure F). The biggest impression made was how well the established residential area is. Most of the homes were built around 1924, are well maintained and holding their property value. We also observed a strong sense of community as we met a resident who inquired on our business on his street. He was highly protective of the safety and well being of his neighborhood. Between this and learning that the last of Ridgefield's historic area is adjacent to it we walked away knowing this was an integral part of the site we wanted to maintain.



Desirable Viewsheds

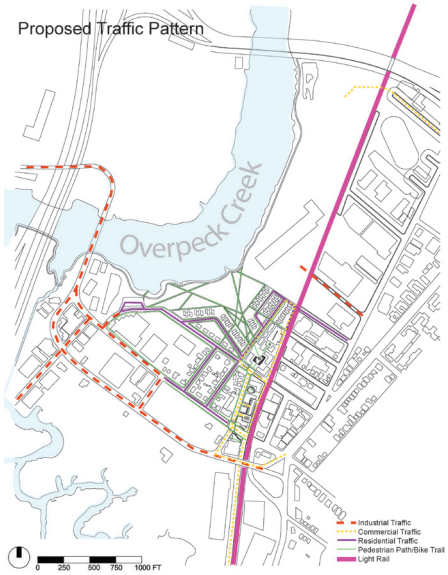


figure A

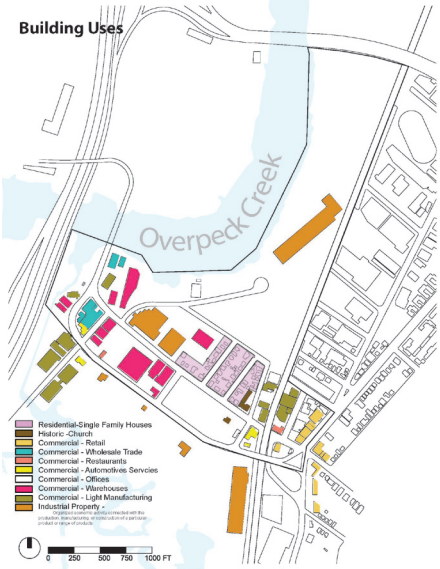


figure B

Environmental Approach

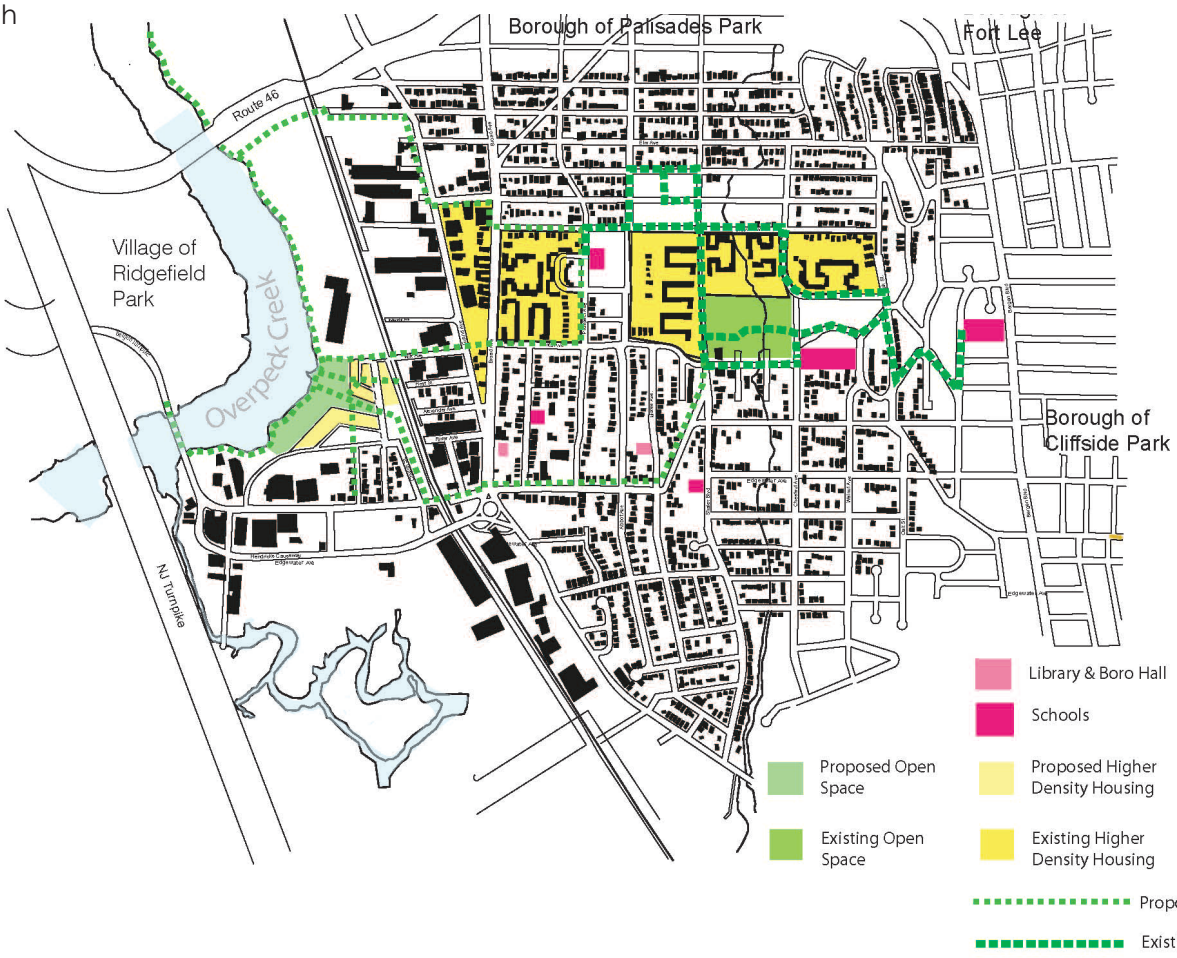


figure F

figure C

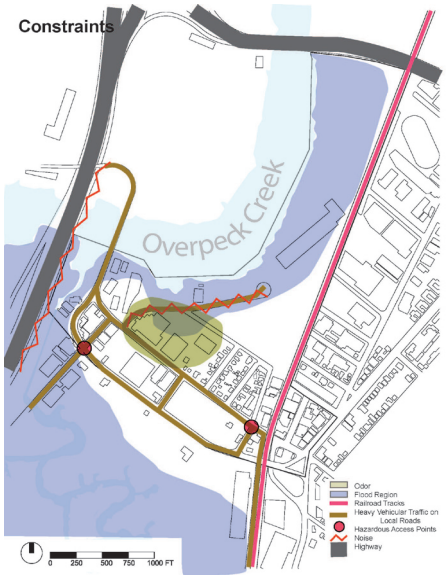


figure D

figure E

Design Development

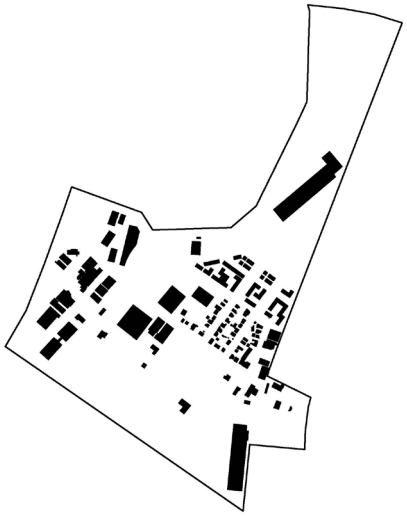


figure H

The five maps we developed persisted to be the driving forces behind our master plan. It was decided that the site needed an entrance point, preferably entailing the proposed light rail stop. Further research showed that Church Street, near the public works building was once the center of town. Through the exploration of the design process two approaches emerged. The first was to continue the already existing grid pattern (figure G) with the established residential community by introducing a mix of single family homes and higher density housing (figure H). The second approach was to break away from the grid and form a more organic design that created an open space between the existing and proposed residences (figure I). However, the result of the latter approach appeared to separate the two areas rather than connect them. Based on our inventory and analysis we returned to the grid pattern and expanded on it with a continuation of the single family homes that then evolves into slightly higher density housing (figure J). At the same time it was important to provide access to the waterfront as well as creating additional open space for the Borough of Ridgefield. Acknowledging the interest to promote growth in the retail sector we integrated into our plan several plazas that include retail businesses and small offices. The plazas are strategically placed to provide meeting places as well as a pleasant walking experience to the park and trails near the waterfront.

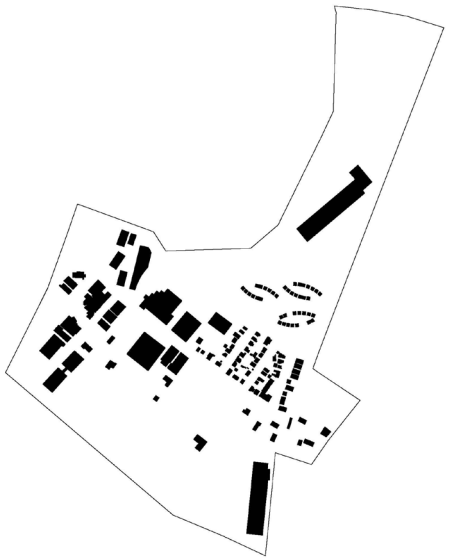


figure I

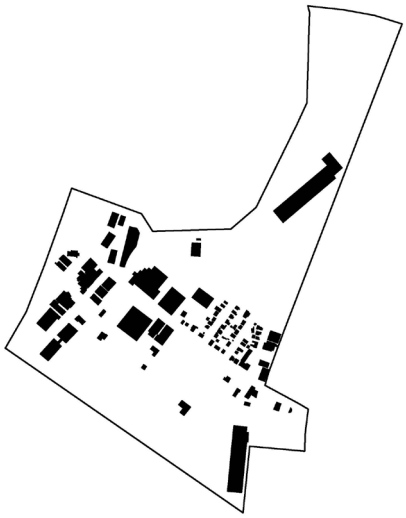


figure G

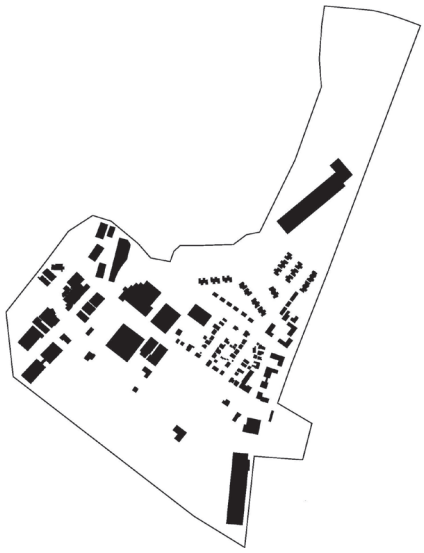
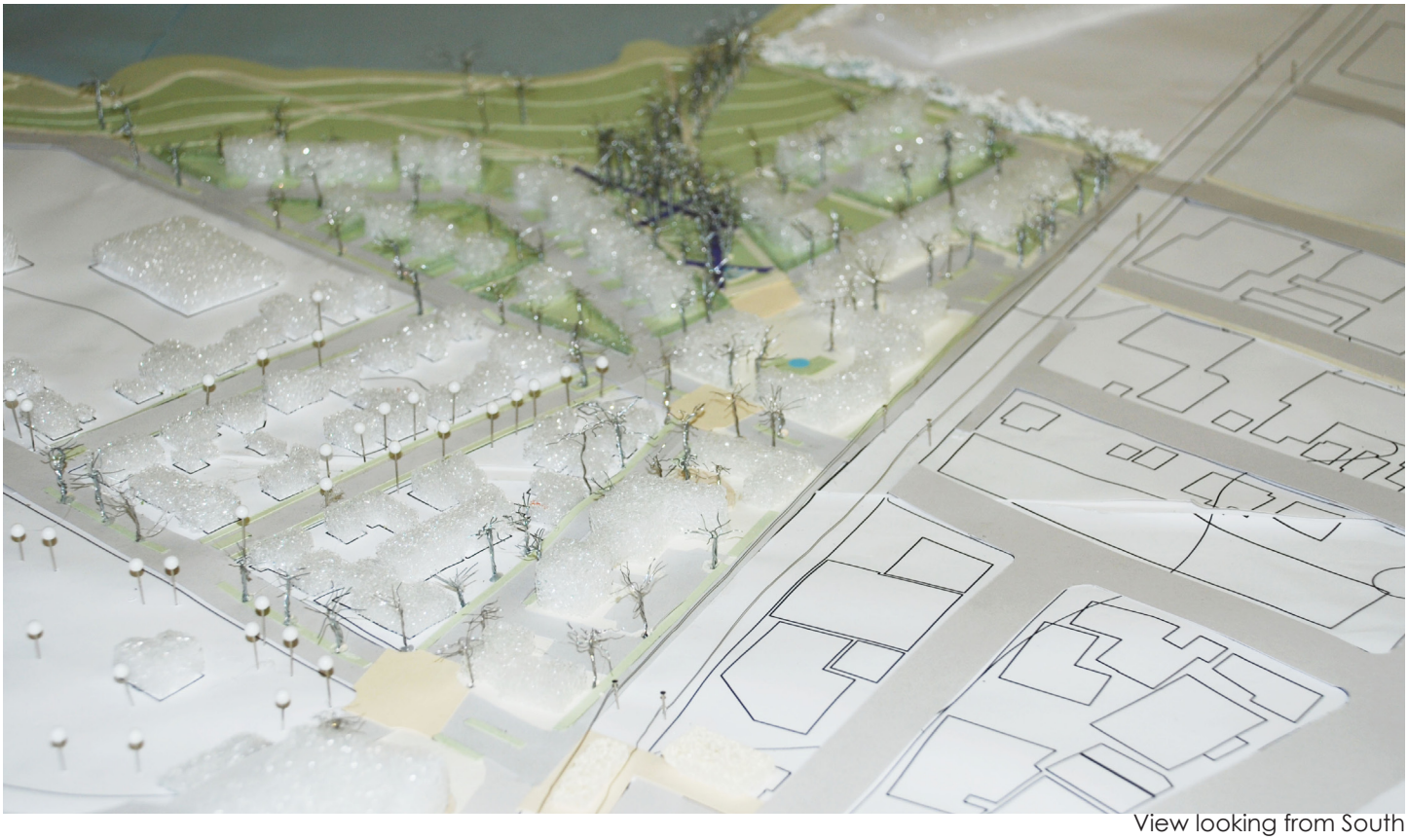


figure J



View looking from South

View looking from North

4.1 Reshaping the Community

4.1.1 The Key to the Community

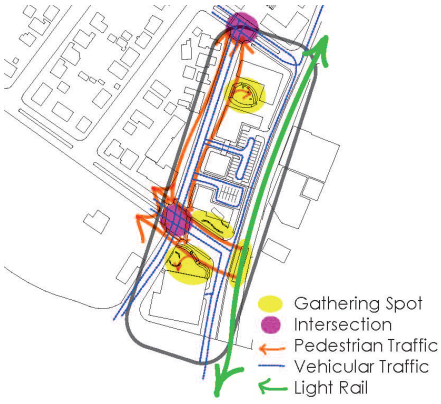
Cindy Cheung

The main focus for my site design is creating an entrance for our site. This design represents the entrance experience to our site via mass transit, vehicular, and/or pedestrian traffic.

The light rail station that NJ Transit is proposing will eventually connect to the North East Corridor line, which connects to major cities like New York City. Thus, locating a light rail station within my site is an advantage for Ridgefield to expand its connection to major cities. The light rail station is located in a spot that shows a clear connection between our site and the rest of the Borough. The light rail station also directs one's view to the historic church on Edgewater Ave., one of the few historic remnants of the Borough. Nearby the light rail station is a public plaza to welcome mass transit users and the community. A parking deck is located across the street from the station for easy transition from vehicular to mass transit mode of transportation. The street level of the parking deck is directly connected to the public plaza with storefronts to keep an active streetscape.

My design also acts as a guide for people to go to the Ridgefield Community Plaza (Lauren's design). Thus, a major component of the design is keeping the streetscape engaging and active. Along Church Street there will be new retail businesses such as small coffee shops and small delis. These buildings will not be more than 20 ft, maintaining a comfortable ratio between the width of the street and the building heights, thus the vertical façade will not dominate the street. Church Street will have street parking for visitors and bike path to promote sustainable transportation. There are small pockets of parking lots for easy access to the buildings located behind them to maintain an active street frontage. An office building is located in the middle of Church Street to create job opportunities for new residents and bring new people to Ridgefield. The width of the sidewalk is 12' creating a comfortable walking experience along Church Street. There will be new street trees on both side of Church Street to enhance the streetscape. The other side of Church Street will retain the existing historic public works building and the few existing residential houses. A small courtyard is located in the northern part of Church Street to provide more public open spaces for people, ideal for employees to sit for lunch. The street trees on Church Street then guide people to the Ridgefield Community Plaza.

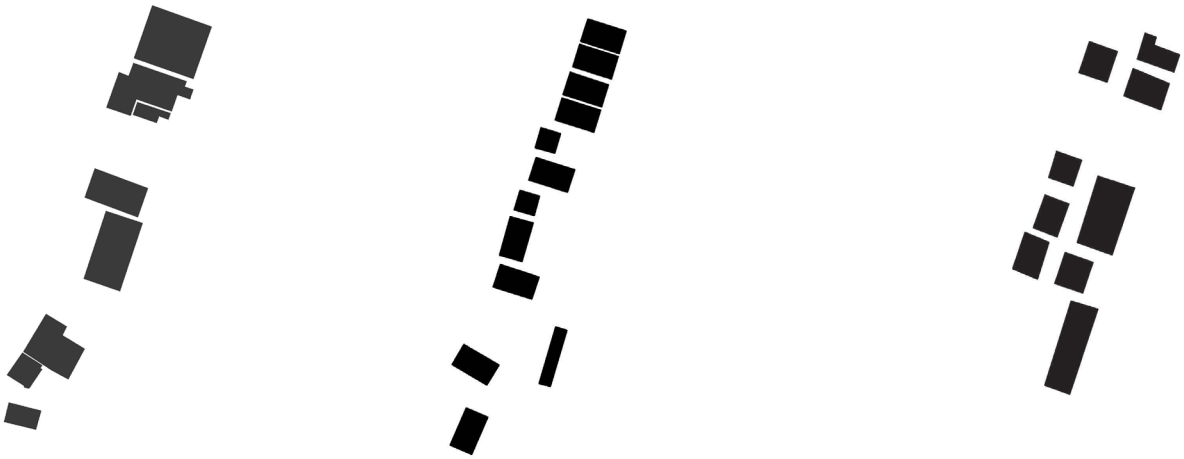
This design addresses a few of the main problems with the site. It promotes clear pedestrian walkways and defines vehicular and bike circulation. This design also enhances the streetscape for visitors' and residents' pleasure. It provides a public urban plaza for visitors. And the light rail station provides a connection beyond the Borough of Ridgefield. It unlocks the existing and proposed community to a greater place.



Conceptual Diagram

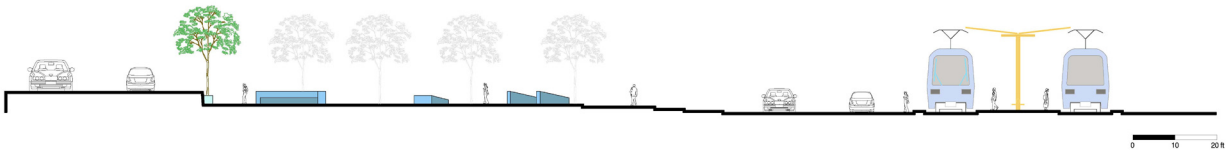

Section B
Retail
Courtyard
Offices
12
Edgewater Ave.
Section A
Church St.
Offices
Retail
Church
13
Section C
Plaza
Light Rail Station
Parking Deck
0
20
60 ft

Site Design

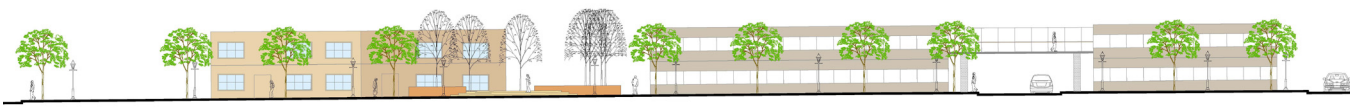


Existing Midterm Revision 1

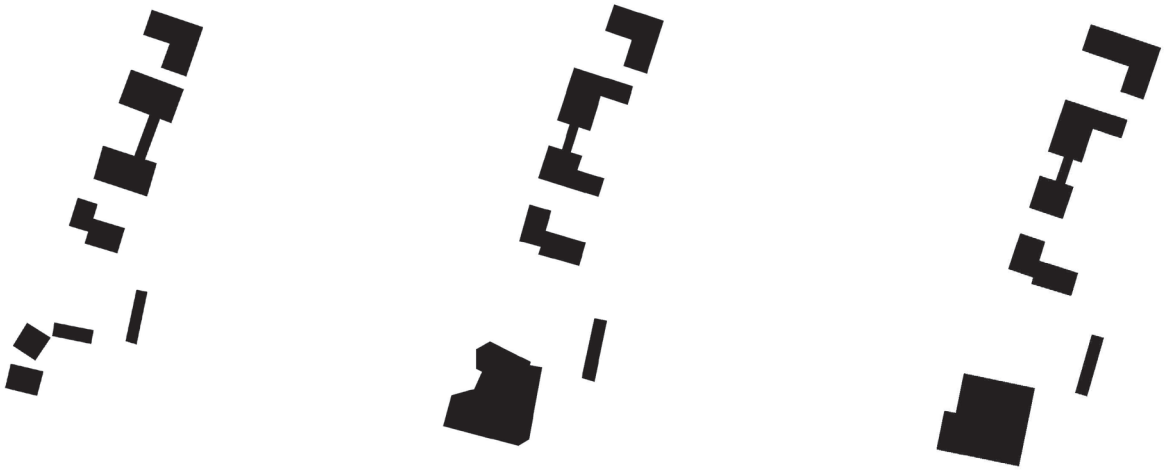
Courtyard



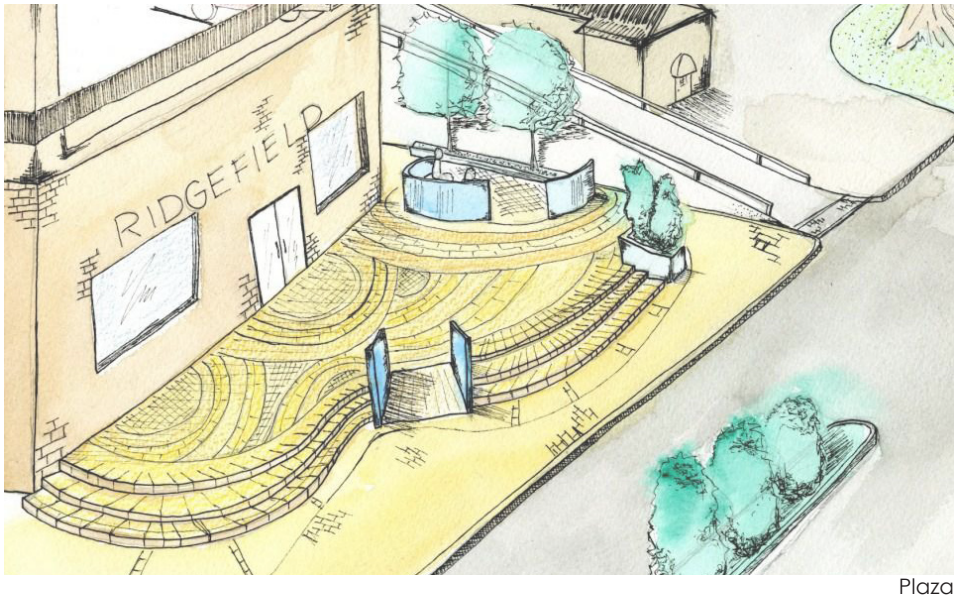
Section C - Plaza



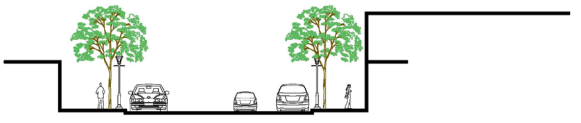
Section A



Revision 2 Revision 3 Final



Plaza



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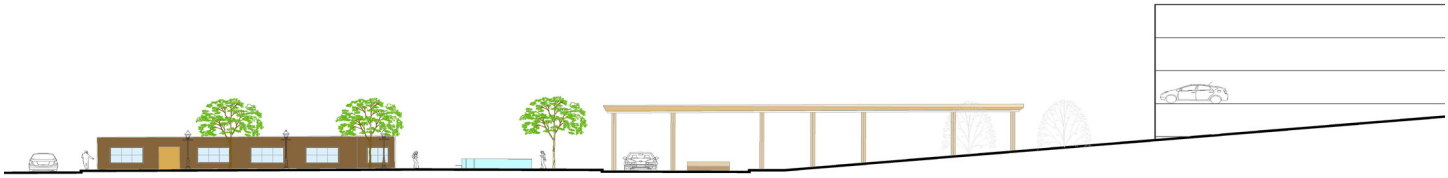


4.1 Reshaping the Community

4.1.2 Connecting the Community

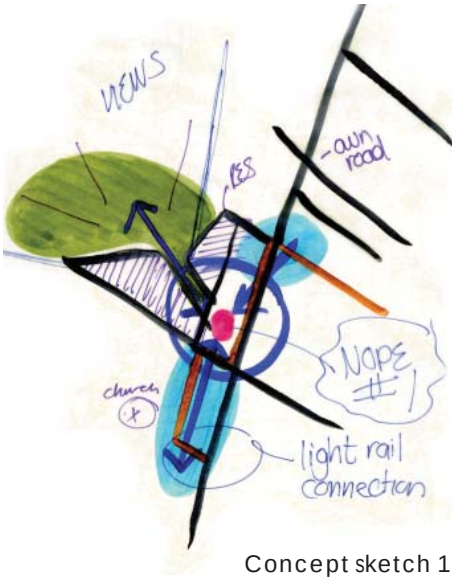
Lauren Basset

The Ridgefield Community Plaza My site was an interesting yet challenging site as it was the connecting piece between Josephine Grayson's' design and Cindy Cheung's design. I wanted my site to be the central node for the residents and visitors of Ridgefield, New Jersey. As I started to design I found the juxtaposition of the other two designs to be rather awkward as their central light of sight was both through my site. I wanted to create a space that allowed a transition between the two other designs but simultaneously allowed the residences and visitors a comfortable space to enjoy, relax, shop and dine. I began the design by defining where the transition zones would be and then looked at different options to enclose that node. I created a plaza space that has an enclosed and protective feel, but I also wanted people to have views of the other two important designed features. Josephine's design had an important view of the waterfront and Cindy's design had an important view toward the historic church and the new light rail station. The plaza has a central fountain water feature that is the node where four view lines are directed off. As previously stated the waterfront and the light rail station are the two main view lines routes, but the line of sight to the parking lot and the slight of sight to the Corner Bistro are also featured in the design. I created the corner Bistro with the intention that the people dining would have a view of the fountain area but also a view of the waterfront in the distance. The upper plaza walking space is elevated 1 ½ feet above the fountain plaza space. My intention in doing this is for the people relaxing by the central turf area to feel that they have their own private space but are able to be aware of what is going on around them. The fountain is designed so that people can play and cool off in the water but the edge is high enough that infants and small children can't fall in or drown. The stairs leading up to the storefronts are 4 feet wide, which is enough for people to sit on if they chose. It is very important for people to feel that they are a part of a close nit community and I had that thought throughout my design process in creating the Ridgefield Community Plaza.

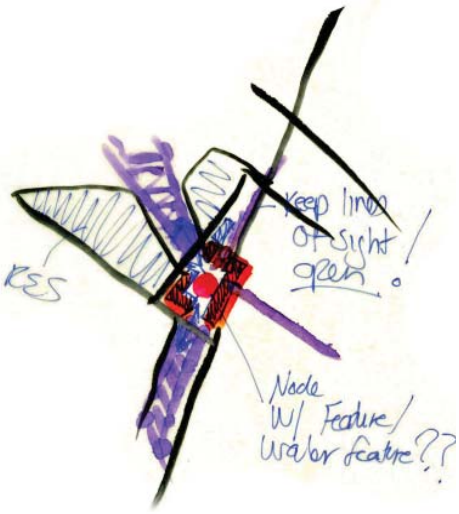
Site Design

The location of my site

I started my design by doing rough sketches and figuring out the dynamics of this area. In concept sketch number 1, I high lighted the other focus areas of our master plan and realized that these areas all had a common focal node which is located in the south eastern section of my design. In concept sketch number 2, I started to decipher how to accentuate the node and pointed out the view sheds that are important to our master plan design.



Concept sketch 1

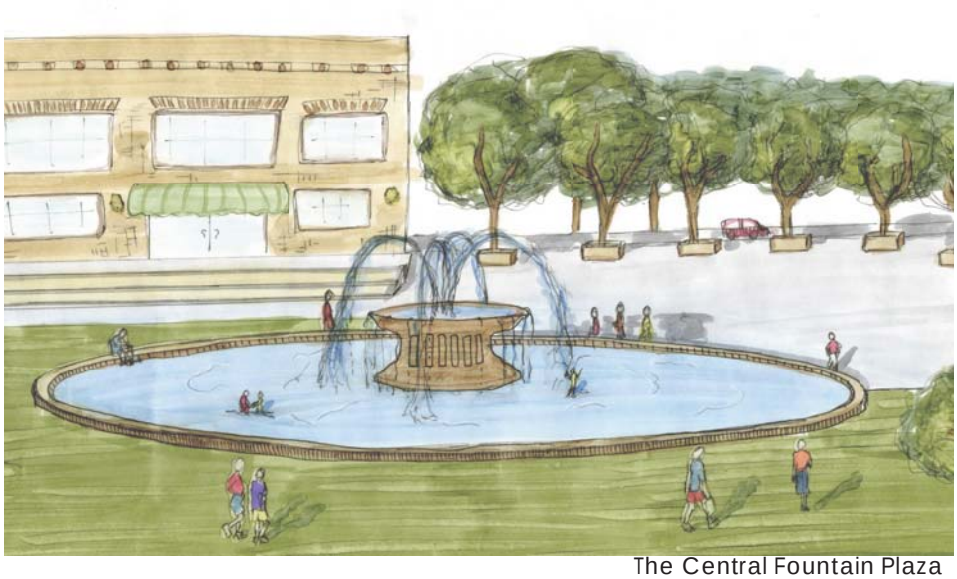


Concept sketch 2

Section elevation between the car park, north of the site directly through to the center of the site to the southernmost part of my design to the middle of the intersection.

The Corner Bistro

The Corner Bistro area is located on the main plaza square and I chose this location for the Bistro as it would have a view of the shops, central water feature and the open space area towards the Overpeck Creek. I designed the buildings to be 2 stories high and every building has a different intricate design on its face. The water fountain is large enough that people can walk in, and shallow enough that children are not put in harms way. The perimeter of the fountain would 1/2 ft. high, which is a comfortable seating height for people to engage the scenery.



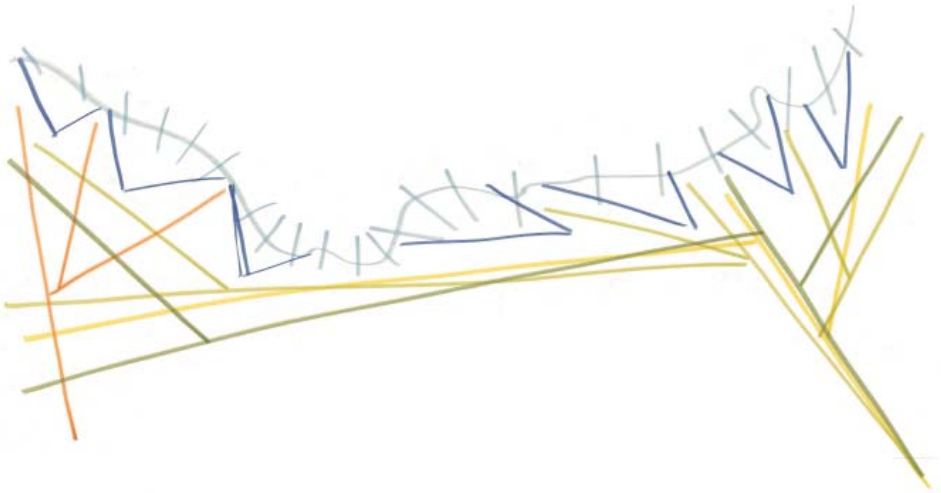
The Central Fountain Plaza

This section elevation is drawn from the direct line of site from the open space area through to where the Corner Bistro is located in Ridgefield Central Plaza

4.1 Reshaping the Community

4.1.3 Open Space for the Community

Josephine Grayson

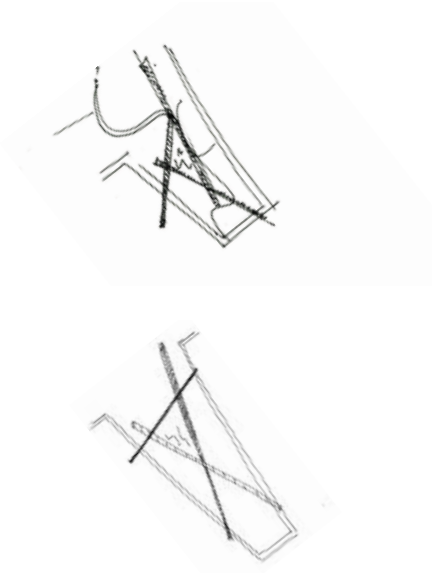


Conceptual Diagrams

The Borough of Ridgefield is in the position of reclaiming some of its natural resources. With two large parcels currently vacated near Overpeck Creek, off of Bell Drive, the community is able to finally gain access to the waterfront from the other side of the borough. I have proposed that Bell Drive be removed so that pedestrians and cyclist can safely travel through the park to the waterfront. Allowing the vehicular traffic for the existing warehouse to cross the light rail on Industrial Way eliminates the need for Bell Drive. The adjacent parcel just north of the warehouse is owned by a developer with the borough expressing interest in it becoming a hotel. It has its own exit ramp off of Route 46 as well as an existing drive to Linden Avenue. Providing these alternate routes gives Ridgefield the tremendous gain of up to 8 acres of continuous waterfront open space.

An important part of our master-plan includes providing trails and greenways that connect with the existing neighborhoods. In my individual design I have developed this further acting in conjunction with the Environmental Commission's plans to refurbish and add new trails. I have designed pedestrian and bike pathways that would for the first time enable people to enjoy a healthier, more environmentally responsible approach to traveling around town. It was important to include higher density housing with the goal of orienting them to the park space ultimately creating views of the waterfront. Since the homes are within a flood prone area all living space would be located on the upper floors. The ground floor would entail a garage with a three season room adjacent to it that opens out to the backyard. The backyard would have its own gate accessing the residences to the park. All homes would have green roofs and balconies on the top floor.

The park may be approached from several directions with the main entrance located across the street from the central plaza. At the entrance on either side are 10' paths for mix use of pedestrians or cyclists. The water feature is 18" high allowing for playful interaction and comfortable seating. The lawn areas may be used for gatherings or small pick up sports. The paths crossing the park are lined with large canopy trees that lead one to the water. Closer to the water, off of the paved paths, are more rugged natural trails that follow the contours. Along the water is a trail that would be adjacent to a small canoe launch and would continue north along the shore line going under Route 46 and would eventually connect with the other trails Bergen County is currently building. As communities come together one greenway at a time and the natural resources are cleaned up the quality of life for all involved vastly improves.




A
Open Field for Pick Up Sports
Playground
Pedestrian & Bike Paths
Residential Housing
Raised Water Feature
A
Main Park Entrance
0
20
80

Site Design

A. Main Entrance to Park

B. Pathway Along Waterfront

C. Canoe Launch

D. Cross Section from Park Entrance to Overpeck Creek Looking West

A

B

C

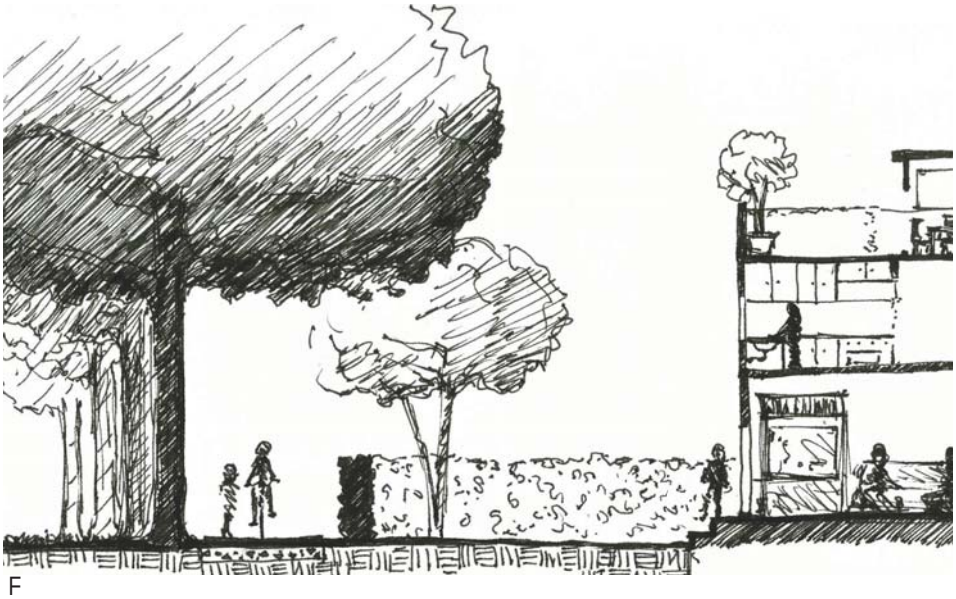
D

E. Townhouses Facing the Park

F. Cross Section from Townhouses to Park Pathway

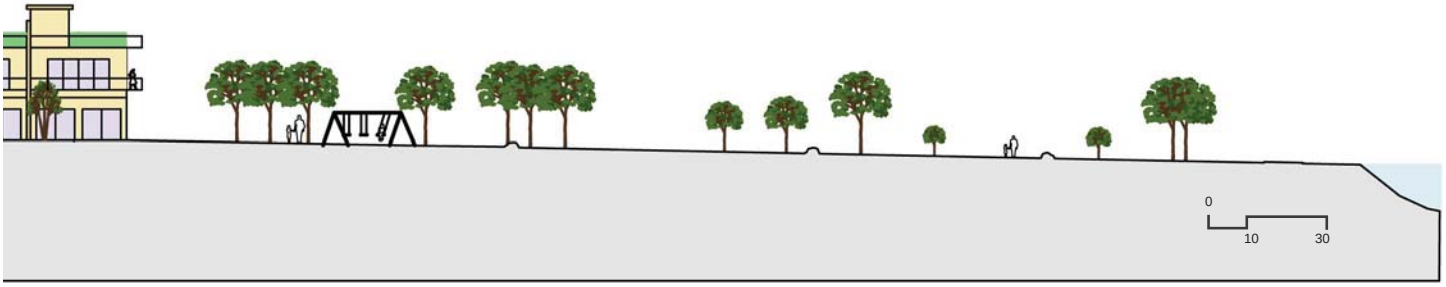
G. View of Townhouses from the Street Side

E



F

G



4.2 Reimagining Rigefield

4.2.0 Filling the Gaps

Mike Malko
Matt Meo
Yilu Zhang

Within the confines of the Township of Ridgefield lies a site that is teeming with potential to become one of the best town centers in Bergen County. The site is situated between many of the area's major highways, which makes it highly accessible by car. The promise of a light rail that will border the site also lends the opportunity for quick, easy access to New York City. To the West spanning the length of the site is the Overpeck Creek, and with it a waterfront area waiting for public use. Sharing the southern border of the site is the beginning of a 31 square mile tract of land known as the New Jersey Meadowlands District, which is a state protected tract of wetlands and green space. Sharing the Northern border of the site is a 1.27 square mile Bergen County park that mixes both passive and active recreation. Within the site is a historic church which can trace its stonework back to the days of the Revolutionary War and has remained in its current location since 1793.

Currently however, the site is all but separated from the rest of Ridgefield and the surrounding roadway infrastructure by a freight line that disconnects every road that might cross it. The light rail is only a distant dream, and the only public transportation system is a bus system that gets caught up within local traffic as well as forcing users to transfer to rail lines miles away from Ridgefield to gain access into the city. The current waterfront is dominated by invasive species and intermittent industrial development and lacks any real public points of access. The green space areas directly to the North and South lack any real connection due to the fact that currently on the site the only public green space is the cemetery attached to the historic church. Even the historic English Neighborhood Reformed Church feels disconnected from the rest of the site, despite being situated between two of the busier streets in the area. The busiest street and the one that provides the most access to the site, mainly because the Church is built with its main entrance not facing either one of these roads. The roads also lack any real connection to the community because of the traffic patterns currently found on the roads. Because buildings with various uses all located within the same two or three blocks, mixed traffic patterns can develop which can result in potentially dangerous walking experiences for pedestrians.

The current freight line is known as the Northern Branch, owned by CSX Transportation, and it travels north into New York State and south into Jersey City. As increasing amounts of industry leave the area and are replaced by residential development along the corridor, CSX Transportation recognizes the need to transform the use of the tracks as a primary vehicle for industry, as one to meet the growing transportation needs of Northeastern Bergen County. Through a study completed by CSX, it was found that only 17% of Bergen County residents regularly utilize rail service, as opposed to 60% in Union County, and nearly 50% of residents in Morris, Middlesex and Essex Counties. The light rail would be start at its northernmost point in Tenafly, New Jersey. It would culminate at North Bergen Junction which provided direct rail access into New York City. The transformation of the Northern Branch to a commuter line would provide much needed rail access to the residents of eastern Bergen County. With the proposed light rail running directly adjacent to the site in Ridgefield, it offers the opportunity for the site to become a major point of new development, transforming the current landscape of the site.

The current waterfront is an area that has seen neglect since industry had first settled along the banks of the Overpeck. For years, the waterfront was dominated by industry and distribution centers, although recently the area has begun a transformation. Within the last few years, the removal of both the Pfister Chemical Plant as well as the Lowe Paper Company has almost completely opened up the northern part of the site. While the Argix Direct Distribution Center has recently undergone complete modernization and renovation, and is unlikely to be moved, the dismantling of the other large holdings on the site has created the opportunity to create a link between the Overpeck County Park and the New Jersey Meadowlands District. The realization that the overall corridor is no longer best suited for industry allows the opportunity to deem other parts of the site, specifically those in close proximity to residential units, unsuitable for industry and allows the overall master plan to call for their removal for development better suited to meet the needs of Ridgefield. The decision to create a green corridor connecting the park to the north to the wetlands to the south forms a

bond between Ridgefield and the surrounding green spaces.

The historic church on site is the English Neighborhood Reformed Church, and because of its historical significance to the area, lends it to be a key focal point within any development that may occur. The church itself was constructed in nearby Leonia in the year 1968 as the Dutch Reformed Church. After the American Revolution it was dismantled and re-erected at its current location in Ridgefield, which was once the farm of Cornelius Vreelandt, who is coined as the founder of the Church and is buried in the attached cemetery. The church once was the tallest structure over the Meadowlands and was used as a landmark for surveyors in the surrounding areas. Currently, the church feels disconnected, even from the adjacent roads. As development grew around it, the church more or less got lost in the growing necessity for buildings and roadways. Currently the entrance to the church is flanked by another building and does not face any main road. Rather it is situated on an axis that finds the front facing the town and the back facing the Overpeck. In effort to recall the significance of this church, the master plan calls for a plaza to be constructed at its entrance as well as plaza to be formed at the light rail station that will guide visitors from the station to the entrance of this plaza. The orientation of the majority of commercial development along this axis reinforces the importance of the church by making it a bookend of the development to take place.

Upon discovering the problems and potential goals for each of these areas, the rest of the site could be designed within the basic framework developed by both the accomplishment of goals as well as site analysis. As noted earlier, the need for industry within the region is decreasing, while the demand for residential units along the North Branch has been increasing. In order to accommodate the need for growth, as well as the housing demand that a proposed light rail stop would bring, the industry located between Bell Drive, Edgewater Avenue and River Street has been removed. In its wake will be housing at 11 units per acre. The residential development west of Russell Avenue will be all new construction. All of the existing homes east of Russell Avenue will be maintained. In order to create a similar level of density within the existing residential area, infill between the existing houses where appropriate will occur.

Infill is a progressive idea that builds upon the density of a given area without completely developing new infrastructure. To determine where infill is to occur, an analysis of the space between each building, as well as what is being displaced, is to occur. If there is adequate space for a comfortable dwelling, in this case twenty feet was the minimum, and enough space to accommodate parking for both the new and old dwelling on the street as well as somewhere on the property, infill was deemed suitable. Where infill was said to be appropriate two adjacent properties were merged and then subdivided so that a third property is developed between the two existing lots.

One concern, if not now than in the near future, for this site is the threat of rising sea level which will cause Overpeck Creek to flood much of the existing site. In order to protect the buildings being constructed the entire site where new development is to occur will have to be filled and raised to a minimum of 8 feet above sea level. All new construction will occur within the new 8 foot elevated area and the contour lines will match up with the existing contours around the perimeter of the area not being regarded. The main area being regarded will be around the existing residential area and will work with those existing contours as well as the ones running into building surrounding the site perimeter.

As a result of a large portion of industry being removed from the site, there exists an opportunity to create roads that will have distinct uses. By closing the southern section of Church Street adjacent to

To Be Demolished

To Be Constructed

Current Flood Plain

Proposed Flood Plain

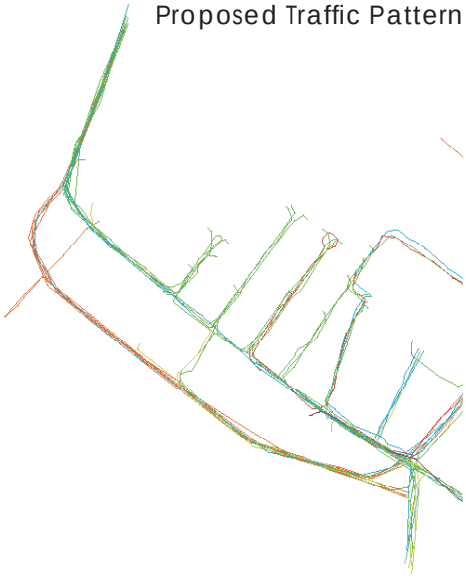
the Hendricks Causeway, industrial traffic on the Hendricks Causeway en route to route 46 and the New Jersey Turnpike will be directed away from the residential development on the site. Bell Drive will be removed and the primary access route to Argix Direct will be relocated to Industrial Ave. This will completely eliminate the need for industrial traffic, as well as higher speed traffic, to transverse the site.

In order to make residential streets more pedestrian friendly, through access from each residential road was removed. This ensures the only vehicular traffic on residential streets is by the residents of those streets. At the end of each road a cul-de-sac is fitted. The cul-de-sac is meant to be open, rather than enclosed with houses. The open end allows pedestrian through traffic and a connection to the green space around the site perimeter.

At the other end of the newly formed Church Plaza, is the light rail station, which will be the major point of entry for many visitors to the site. The station will allow people to travel in three directions after leaving the platform, towards the historic church, through a greenway that will connect to all new residential streets and will culminate at a waterfront park and in the complete opposite direction back towards the existing center of Ridgefield.

The second portion of the green way consists of both active and passive recreation split upon both sides of the corridor by a controlled wetland. The heavily planted area is flanked with seating areas for quiet sitting. The median is the winding path that is adjacent to the rock wall and controlled wetland. Along the opposite side is a playground that incorporated rock formations from the surrounding region.

Current Traffic Pattern



Proposed Traffic Pattern

Current Building Use

Proposed Building Use

The pictures below showcase the working model of the design.

Plan

Street Scape

The Church Plaza

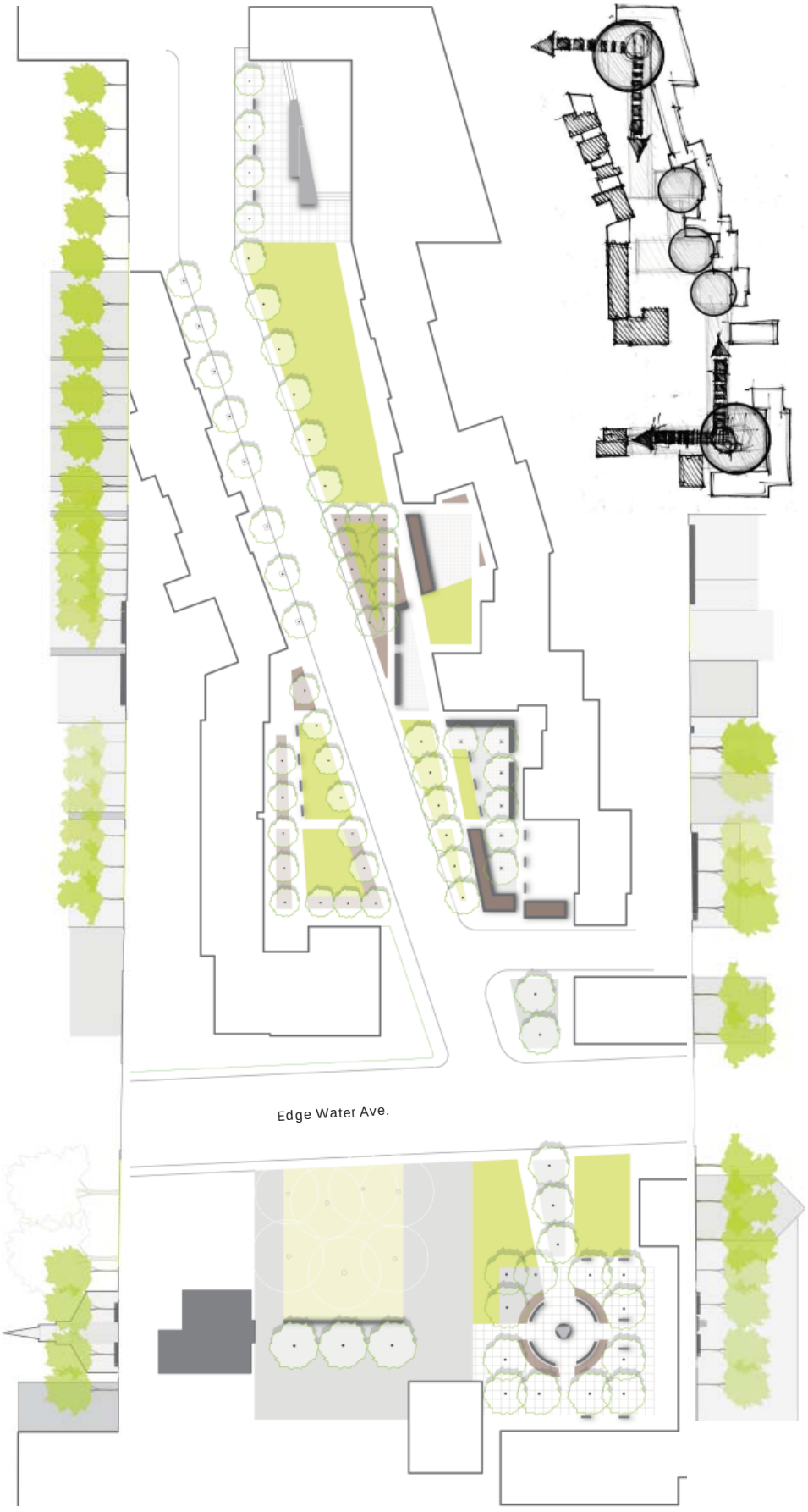
Ridgefield Greenway

Ridgefield Waterfront

4.2 Reimagining Ridgefield

4.2.1 The Church Plaza

Mike Malko



A linear space that encourages community interaction through a pedestrian realm connecting two main axis defines Church Plaza. It offers multiple destinations for residents and workers as it is a principle passageway to retail stores, markets, and the rail line. A double layer of London Plane trees intersects Church Plaza and filters noise of the passing vehicular activity of Church Street. As intimate interactive space is often influenced by the vernacular of its surrounding architecture, intimacy within Church Plaza reinforces the structural in-filled geometry of residences, stores, and markets teamed with a sequence of dynamic elements. Plaza elements are conceived as a sequence of vertical and horizontal layers. Planters and custom seating make for spontaneous interaction and frame a pleasant pedestrian route joining separate nodes within this space. Church Plaza demonstrates the potential of reclaiming social space in conjunction with paying homage to Ridgefield's old English Neighborhood Reformed Church.

Each elevation shows the relationships between the pedestrian pockets within the plaza. The vibrancy of trees illustrates the depths of meandering circulation in addition to the subtle vertical and horizontal layers that define each space.

The area that defines the rail station is elevated slightly above the surrounding walkway and views are deliberately controlled in and out of the space. A vibrant fountain provides a linear curtain between the lower seating area and the pedestrian platform. It is an easy-flowing linear route that enables users to efficiently circulate in and out of the rail station.

The space located at the southern fringe of the site serves Ridgefield with much more than just an attractive destination. It is a pivotal anchor connecting the rail station and the local church. As its spherical form may appear misplaced within the profusion of rectilinear geometry, it is a symbolic bond between visiting pedestrians and local residents. A frame of Honey Locusts combined with curved planting beds and seating inform a central gathering place at this momentous location.

Transformed from a temporarily utilized impervious parking lot is a clean, permeable, multi-purpose area with potential for flea-markets, fairs or other civic functions. A subtle path bordered by an elegant trio of Honey Locusts on one side, and a stone wall on the other screens cars from the main entry of the church. In respect to the lofty set of existing Beach and London Plane trees that stand gracefully on the adjoining lawn, the current parking lot's shape and simple functionality was implemented.

4.2 Reimagining Ridgefield

4.2.2 Ridgefield Waterfront

Yilu Zhang

The site design is located in the space where the Overpeck creek meets the Ridgefield Greenway as per the group master plan. This space is meant to act as the connection between the waterfront and the Greenway, as well as the rest of the Borough. The Ridgefield waterfront is not a normal waterfront park to draw visitors in, but more of a "backyard space" for the entire neighborhood.

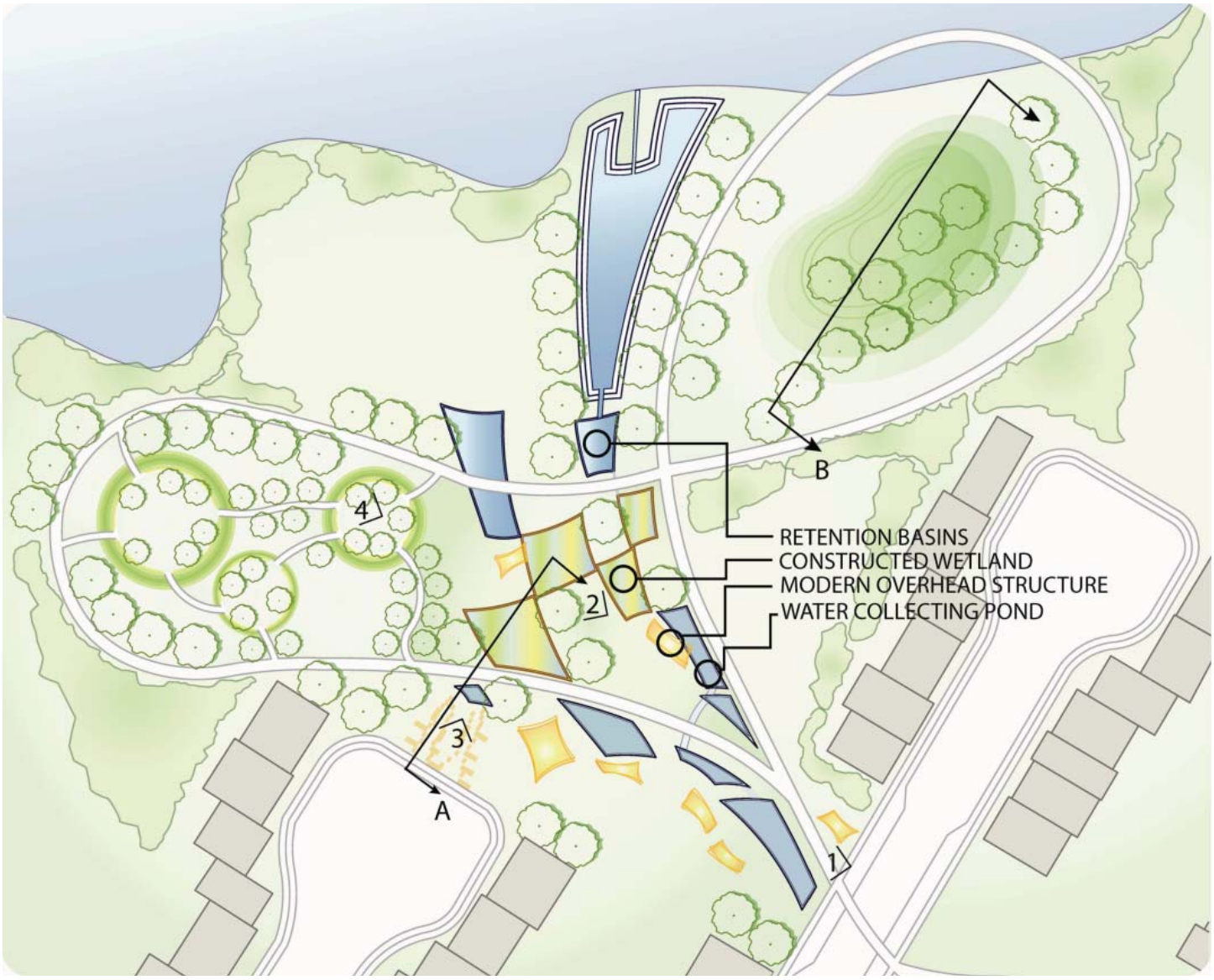
Unlike the Church plaza, which is intended to attract people from in and outside of Ridgefield to hangout and shop, this site is meant to serve as an informal designation where local residents could exercise and appreciate the beauty of their hometown.

This environmentally friendly design infiltrates rainwater before it flows into the Overpeck Creek, reducing stormwater runoff becomes major concerns because of the unique site location. A series of rainwater collection, filtration and retention systems are proposed elements of the site. Rainwater is gathered into the collection ponds on the lower right hand side of the plan where water flows either through underground pipes or through the 1 foot wide channels that are visible from above the ground, giving visitors the option of walking on the paths above floating water rather than on a normal path. The water then flows into the hard-edged constructed wetlands that have changes in elevation of the high points that allow rainwater to overflow and infiltrate the pollutants. Switch grass, cattail, jewelweed, swamp milkweed and other vegetation will be planted in the wetland area of 4000 square feet for infiltration pollutant removal. The retention basins are located right next to the wetlands area could convey the rainwater to the Overpeck Creek, but also restore some of the storm runoff during flood seasons. As roughly two thirds of the proposed housing area are lawn and pervious surface, and constructed wetlands and retention basins could also absorb adequate amount of stormwater runoff as ground water recharge, it is expected the peak run off rate from the site would be reduced.

Storm water collection and infiltration is dramatically celebrated on site. Walking right next to the constructed wetlands and the retention basins, and being able to hangout and play at the cul-de-sac area that has unique rainwater features, make the site an example of incorporating storm water management into community life; storm water management is rather being appreciated than ignored or concealed.

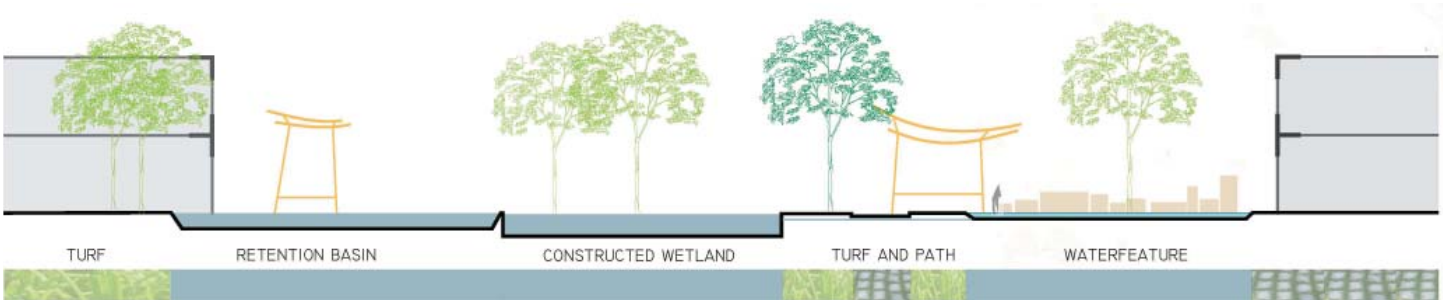
Landforms are used to create varied spaces on site. The landform on upper right corner of the plan is raised 5 feet high, with a relatively flat area of1800 square feet on top, provides a higher ground for people to look out to the water and enjoy the views of Overpeck Creek. The landforms to the left hand side of the plan are raised 3 or 4 feet high, forming semi-enclosed spaces for people to read books, or take naps. Instead of using traditional planters to define spaces, the ring-landforms are children friendly. Compared to the bigger landform on the top right corner, the ring-shaped landforms create privacy within a public space.

Pockets of the spaces right next to the residential housing, and along the water are created by the surrounding vegetation; they are open for community gatherings such as barbeques, soccer, or spontaneous Frisbee games.



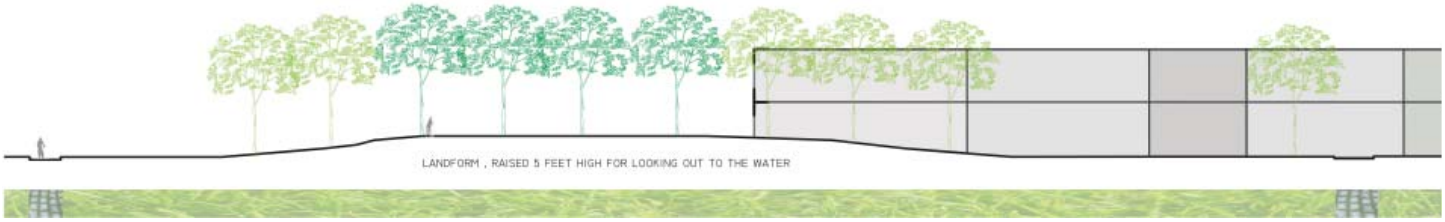
Plan view of the site

0 20 40



Section A
Showing where the rainwater flows into the water collection pond then flow through underground pipe to the constructed wetland.

0 10 20



Section B: showing the landform that is raised 5' high, for people to look out to the water.

0 20 40

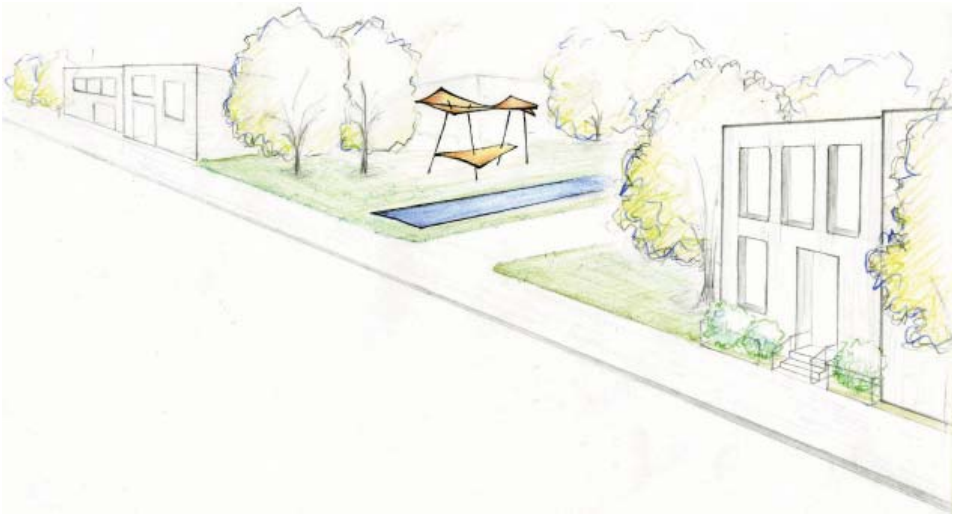


Image 1: Show the path entering the waterfront with rainwater collection pond and the modern overhead structure that provides seating and place to rest on a rainy day.

Image 2: People taking walks along the water collection pond and the vegetated, constructed wetlands.

Image 3: Rainwater trickles out from the residential area, flows through rocks and stones to the collection pond; people could hangout and play in this far-from-normal cul-de-sac area, and have a better understanding of rainwater collection system.

Image 4: Using landforms to shape up semi-enclosed spaces with seating; are good places to hangout, read books, or for children to play.

Diagram 1 shows how water travels from the collection pond, and from the residential area to the constructed wetlands, then flows to the Overpeck Creek.
Diagram 2 shows the major travel paths for bikers and pedestrians.

Line weights in both diagrams indicate the volume of traffic.

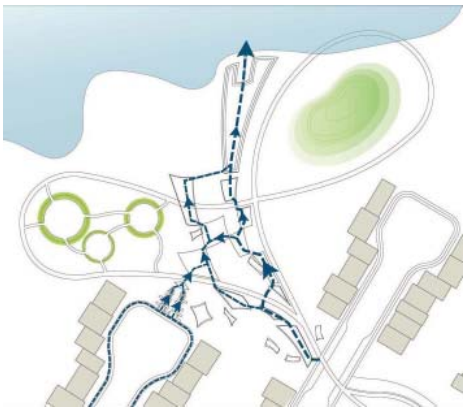


Diagram 1

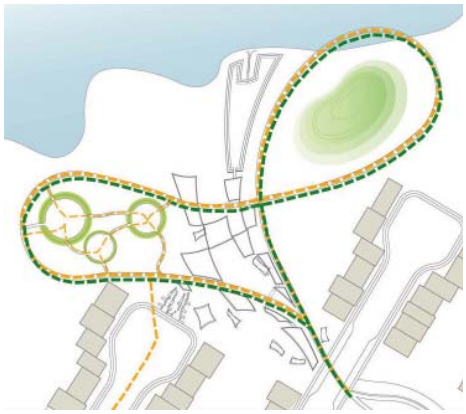


Diagram 2

4 Reimaging Ridgefield

4.2 The Ridgefield Greenway

Matt Meo

The process of the design began with an analysis of the redesigned master plan, and the implications it would create both physically, socially and in regards to the bigger picture, within the greenway space. Physically, the master plan would cause certain conditions, specifically in regards to grade change and storm water runoff that would need to be addressed. Socially, there is a set of circumstances created that would define what this greenway space would become as a whole, and what the smaller spaces within the greenway would be defined as. In reference to the surrounding context of the site, it would also be important that the greenway relates to the regional context within which it sits.

The initial form was chosen to convey the relationship this site has with the Overpeck Creek. A path, whose form was derived from the water body itself, flows through the site from the train station to the waterfront. The path is an independent representation, separate from other walkways and roads that may cross it. Due to its significance to the design, the form itself becomes the element of greatest hierarchy among the ground plane.

As a result of the master plan, runoff is expected to increase due to the increased development through the site. There are two major solutions being implemented to help alleviate that situation. First, all water collected from buildings will runoff into the street and will enter street planting rain gardens through curb cuts. These small rain gardens will collect some of the water during storm events and allow it places to infiltrate into the soil along the surface. Excess water unable to be retained within these rain gardens will be channeled towards the greenway and will enter a larger controlled wetland that spans the length of the greenway and works with the shapes created by the paths.

The train station will serve as the entry to the greenway for many people using the site. They will be greeted when they step outside by a system of four, brushed steel arches varying in heights from thirty to forty feet, spanning close to one hundred feet in length. These arches are meant to serve several purposes. Initially, they are meant to bring a visual identity to the site, when people step through the station and see the arches, they

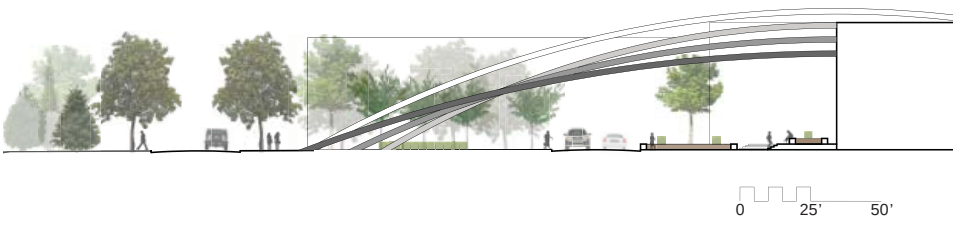
will immediately know they are in Ridgefield. Also, the modern form will balance the historical form found at the opposite end of Church Plaza. The arches will also serve as a storm water movement system, collecting water from the large continuous building and channeling it though the arch into the controlled wetland.

The path winds through the three individual spaces, tying them all together, much like individual municipalities are tied together by a river. Each space is meant to be similar, yet unique to the one before it. The space closest to the train station is the busiest area within the master plan. It is the drop off area to the light rail station as well as the entrance to the main parking garage on site. To make this a comfortable, quieter space, the site is dropped three feet below grade. The plaza is surrounded by planting to enclose the space from the street, and is lined with multi-level undulating benches around the perimeter. The pattern is meant to create even smaller spaces within the plaza for conversation to take place.

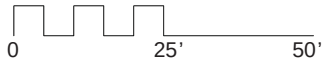
Within the next space there are two separate things happening. Along one side of the path is a rock wall/water feature that starts at grade on each end and cuts four feet below grade at the center. Along the other side of the path is a heavily wooded area with a secondary path traversing through it. The plantings frame the one side of the path creating a promenade looking out over a controlled wetland and playground. The distinct spaces within the wooded area are quieter areas, meant for relaxation over longer periods of time.

The space closest to the waterfront is a seating bowl that forms an amphitheatre. The amphitheatre is set furthest away from the train station to engage more people through the site when events are occurring. The area is meant to be primarily an area of informal recreation, which can be used occasionally as a programmable space, such as summer concerts in the park. The path is mainly open to the amphitheatre on one side and lined with a rock wall/water feature. The water feature starts at each end at grade and rises to eight feet at the center. The opposite side of the stage area will be separated by a wall that contains the controlled wetlands.

Along with the form pulled from the Overpeck, other elements from the region will be incorporated throughout the design. The site is located just north of the meadowlands district, so the controlled wetlands area will be planted with native species to resemble the meadowlands region. The major difference will be the missing Phragmites, an invasive species dominating the meadowlands. In its place will be plants and grasses native to the New Jersey area. The rock walls are derived from the formations found at Palisades Interstate Park. The walls are meant to be unique, naturalistic features that resemble some of the local character of the surrounding region.



The first portion of the greenway combines an interesting entrance condition as well as a seating plaza adjacent to the train station. The greenway entrance isa pathway that follows the signature created by the steel arches. The seating plaza is constructed three feet below grade to separate the space from the busy road that surrounds it on three sides.



The second portion of the green way consists of both active and passive recreation split upon both sides of the corridor by a controlled wetland. The heavily planted area is flanked with seating areas for quiet sitting. The median is the winding path that is adjacent to the rock wall and controlled wetland. Along the opposite side is a playground that incorporated rock formations from the surrounding region.

The third portion of the green way is a public ampitheatre, flanked by another rock wall/water feature. The ampitheatre is a large grass bowl where small gathering event can take place. Trees are located within the seating bowl to provide shade, however a minimum canopy of 12' will ensure no obstructed views. Behind the stage a canal which is a continuation of the constructed wetland can be found.

The form of the Overpeck Creek played a major role in this design. The blue line found here was used to form the main path that extends the length of the green way, as well as serve as a guide for the vertical undulation of the rock walls and steel arches.

The rock formations and waterfalls found within Palisades Interstate Park are replicated within this site to tie the green way to the local character of the region.

The Greenway at the University of Cincinatti by Hargreaves Associates served as an inspiration for this design. The braided path represents a stream moving through the site.

An idea of how the controlled wetlands along the greenway would be planted.

Curbside rain gardens will allow storm water runoff that would normally travel along the curb or underground in storm water sewers surface points of infiltration.

A canal like this can be built with stone native to the region that can channel storm water runoff above the surface.

4.3 ReDensifying Ridgefield

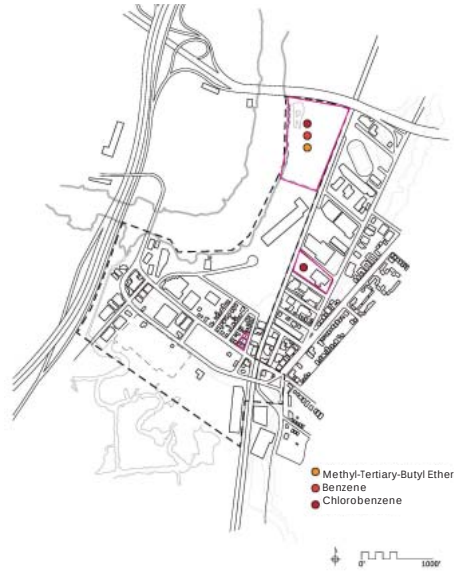
Pete Symanski
Joseph Clomera
Anne Marie Kappus

20 Units per Acre

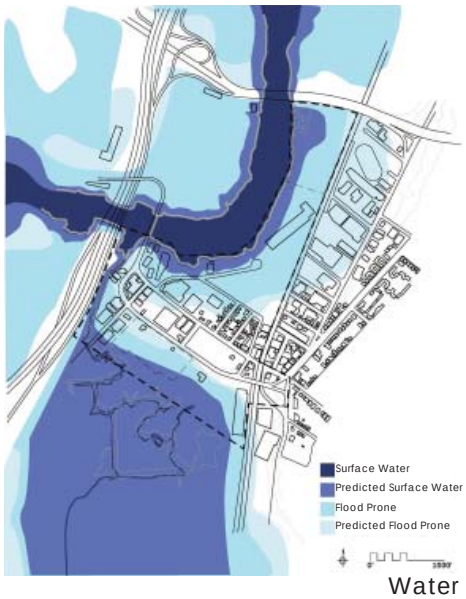
Soils

With the heightened concern over sea level rise, Landscape Architects are faced with the difficulty of this added constraint in the design process. With an increase of just one meter, developable land will become scarce in coastal regions, such as Bergen County. Now more than ever, land must be developed in a highly efficient manner. In the borough of Ridgefield, where population and sea level are gradually increasing, how will the municipality handle this conflict? Development must be implemented wisely taking into account the increasing need for housing and decreasing amount of land.

Once having completed a thorough class wide inventory, it was time to analyze that information in order to begin our design process. We combed through the information and decided to construct a physical suitability analysis to determine where to build new development with the use of Ian McHarg's "Ecological Planning Method"(Corbett). This method overlays inventory to seek out patterns of the landscape which then should guide the designers to where development should take place at the site. Our Physical Suitability combined four separate inventories, including: contaminated sites, soils and slopes, rising flood waters and underutilized areas. For each layer, we weighted and rated what would be appropriate for building. The categories were Highly Suitable, Somewhat Suitable, Moderately Suitable, Least Suitable, and Not Suitable. After rating each layer, we then put all of them together to create a "layer cake". With the layers combined, we then added the weighted and rated sections to create a Physical Suitability Analysis. In the physical suitability analysis, dark green symbolizes the most suitable areas to be built on because of no contact to increasing water levels of the Overpeck creek, little or no slope, sturdy soils and little or no contamination.

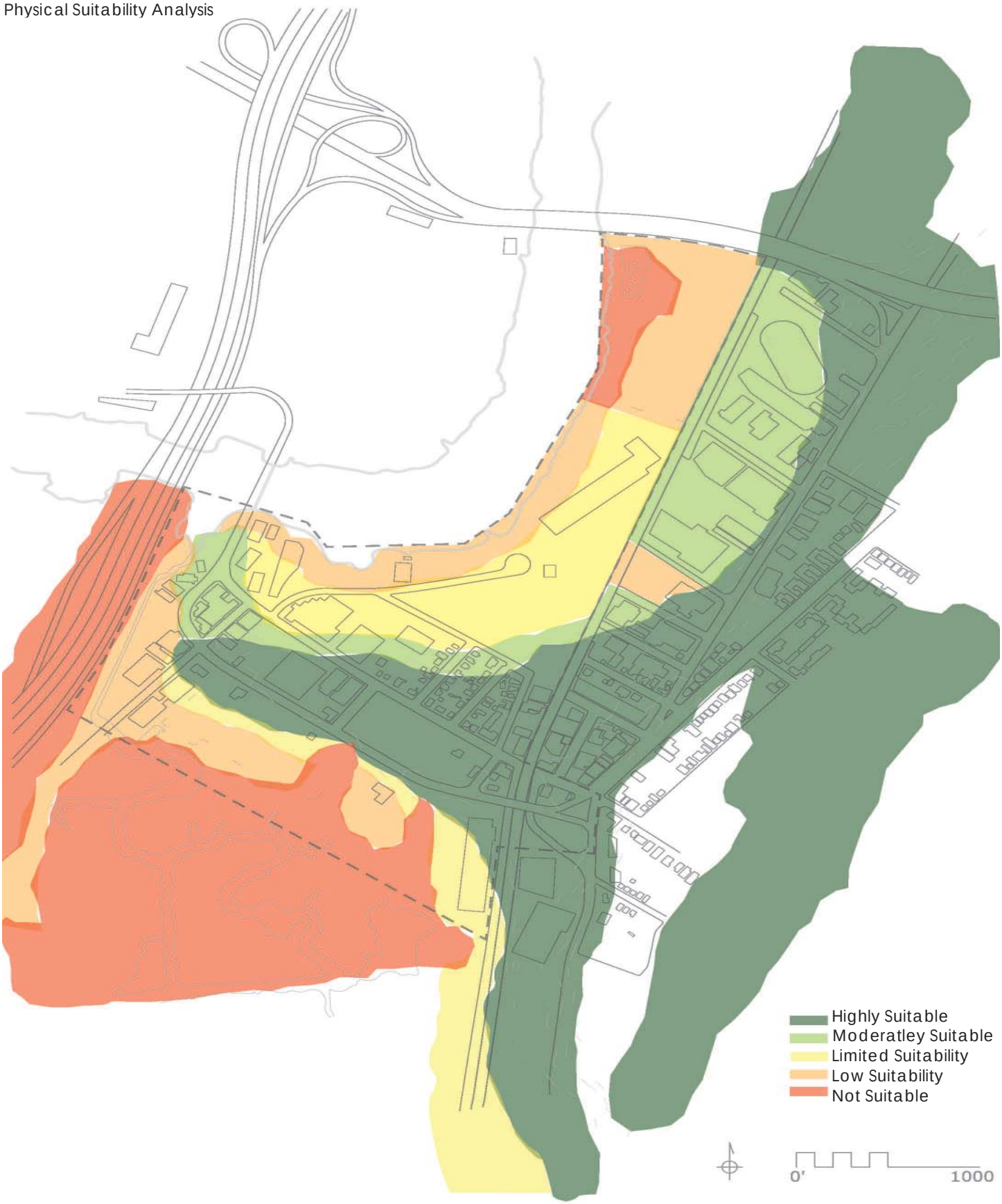


Contamination



Water

Physical Suitability Analysis



Overpeck Creek

Location of Old Lowe Paper Company

Opportunities and Constraints

We looked at what opportunities the site and context already had to offer, as well as its constraints. We found that the Overpeck Creek was a great opportunity for the people of Ridgefield. It serves the purpose of congregation for passive and recreational activities and provides great views. Another opportunity we found was the connection where Edgewater Avenue meets with Broad Avenue. This area would be ideal to design a connection, possibly the light rail station, from the proposed development to the eastern boundary of the site. One of the other opportunities was the void left by the former Lowe Paper company, which would be a prime area for development. The last opportunity we found was the English Neighborhood Reformed Church and Cemetery located on Edgewater Avenue. With the thriving church community and historical significance, these landmarks would be an asset to our site.

Along with opportunities, come constraints, as we found many of them on the site. One of them was the demolished industry at the northern tip of our site, directly under Route 46. This site was highly contaminated with chemicals. Though treated, we thought there was too much of a threat to build any homes on top of it. To build on this lot, which is adjacent to Route 46, an economic rational approach is necessary. With this approach, we found it appropriate to propose a convention center. Another constraint was the industry found between the newly proposed convention center and the existing residential. Our first reaction was to remove this building because of the massive amount of traffic that was found on Bell Drive; however, we solved our problems by rerouting the entrance from Route 46 instead of Hendricks Causeway.

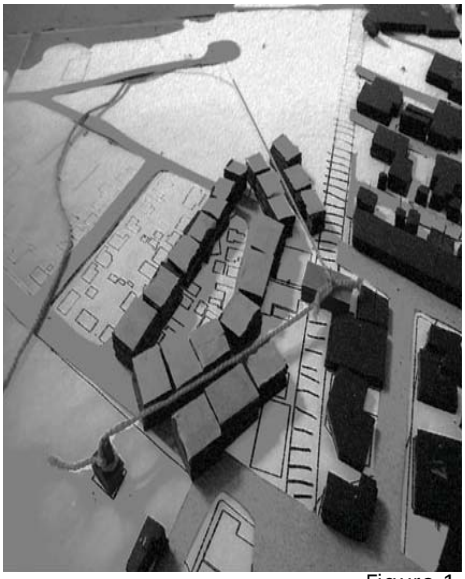


Figure 1

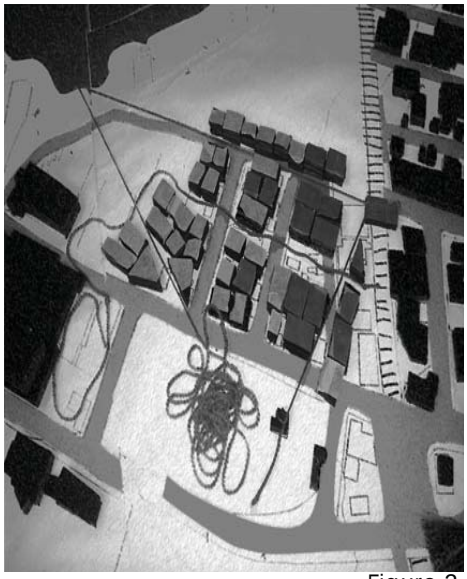


Figure 2

Figure 3

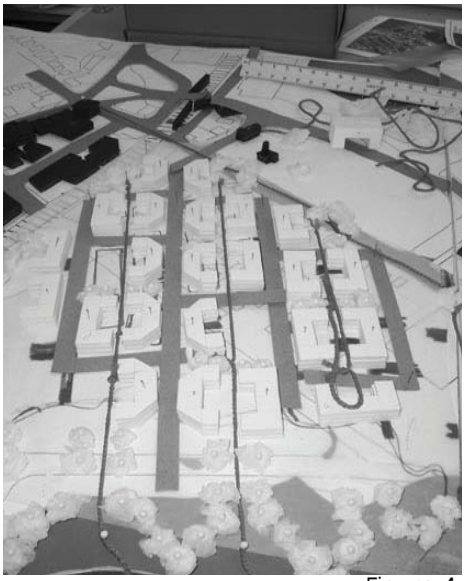


Figure 4

Figure 5

Figure 6

Based off our analysis, the area found to be the most suitable for development is the location of current single family housing. As the population of the Ridgefield increases, the proficiency of single family housing will become unsatisfactory. Our proposal will replace the present amount of housing with much more dense development.

At the start of our design process, we set important characteristics into prioritized order. First, was the physical suitability of development on the site, with the various opportunities and constraints taken into account. We then set points of interests to be used as nodes. These were the historical church, the waterfront, and the proposed light rail station for the extension of the Hudson-Bergen Light Rail Line. Figures 1-6 show the process of how we experimented with form, nodes and axes.

Existing Figure Ground

Midterm Figure Ground

Final Figure Ground

As New Jersey's population increases, the municipality will struggle with space for its rising population. Ridgefield's current population density is actually three times that of the state average. As it stands, the site's current residential density is 6 units per acre. This is far behind the borough average of 24 residential units per acre. This is mainly due to the fact that unlike most of the rest of the borough, the site consists of single-family. Our proposal will more than double the current capability of housing. Our design provides 20 residential units per acre in three floor apartment complexes and multi-purpose buildings which will be comparable to the rest of the borough.

Following the mapping out of suitable development areas and existing variables, axes were created connecting the church, waterfront and light rail station. At the midpoint of the process, the light rail station was slightly north of where we locate it now, with lines of sights toward the other two points of interest. It was semi-functional as the street layout counteracted these design intents. Our final proposal is a vast improvement as the streets and boulevards connect and frame the church, light rail station and waterfront.

With a finalized layout, detail was paid toward scale and context. Along the main boulevard, which doubled as the primary line of sight between the waterfront and light rail station, entrepreneurial opportunity was realized. The buildings along this corridor will have first floor commercial space with apartments above. These buildings would provide an ever so slightly downhill view of the Overpeck Creek.

As soon-to-be Landscape Architects, we were excited to take on a situation that will be at the fore front of the profession for the duration of our careers. As stewards of the land, it will be our responsibility to guide development. Designing for areas that will be strongly impacted by sea level rise be a difficult paradigm. As the water claims more of the earth, man must be efficient with what he is left with. In the case of Ridgefield, density must be increased in order to meet the needs of an expanding population.

Model

Master Plan


Route 46
Conference Center
New Jersey Turnpike
Overpeck Creek
Informal Athletic Fields
Edgewater Ave.
Industrial Ave.
Wilt Ave.
Hoyt Ave.
Alexander Ave.
Grand Ave.
Route 1 & 9
River St.
Orton Ave.
Edgewater Ave. W
Fulton Place
Hendricks Causeway
Edgewater Ave.
Slocum Ave.

4.3 Densifing Ridgefield

4.3.1 Individual Design

Joseph Clomera

Bird's Eye View

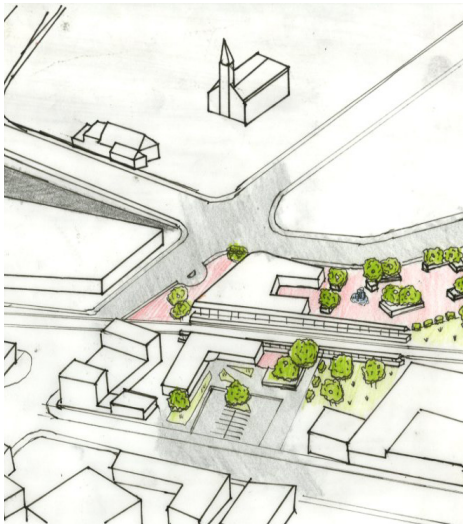
On the southeastern section of the site, the focus of my design is the experience of entering the new development. The majority of visitors will enter at this point whether it is by foot, car or light rail. All streets on and leading to the site have been fitted with a six-foot minimum sidewalk. Those with higher projected foot traffic patterns will be wider(Fig.1). Along Edgewater Avenue, the meshing of the proposed light rail station and existing commercial space should give a sense of continuity. To further this idea, the height scale shall be comparable to its surroundings. The two-level parking deck is roughly the same height as Hendricks causeway, and the light rail stop is even with the surrounding buildings.

Entrance by car will mainly be through Hendricks Causeway and Edgewater Avenue(Fig. 1). All industrial traffic will be barred from Edgewater Avenue, as well as the roads in the new development, as shipping trucks will be using Hendricks Causeway as their throughway. Currently, Edgewater Avenue is disjointed at the railroad tracks. Because of the lower profile of light rail lines than that of freight lines, cars can drive over.

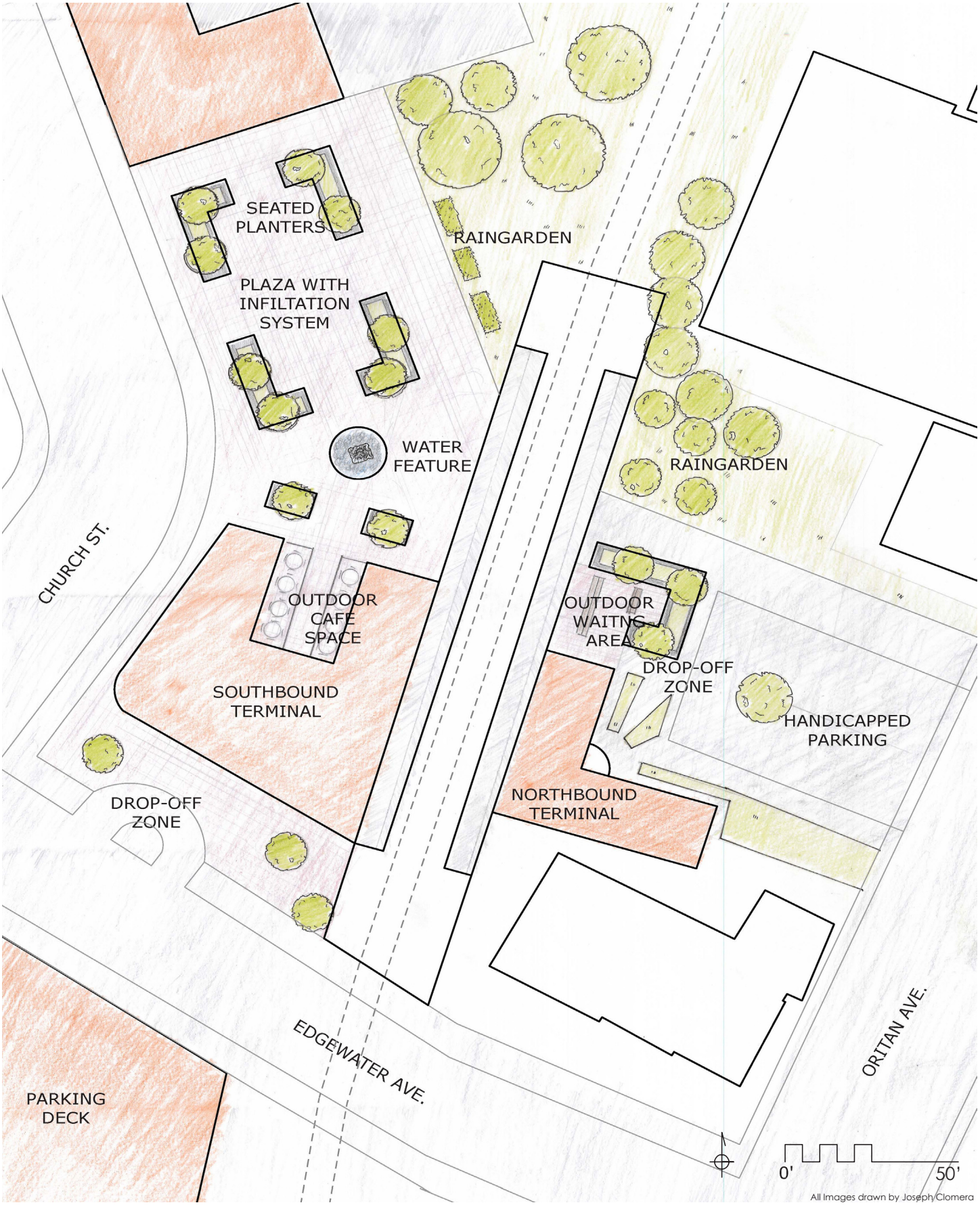
When arriving at the Ridgefield Light Rail Station, there will be many inviting view from each entry point(Fig. 2). The views will encourage a visit to all of the new developments. Intentionally placed planting and specimen trees will frame these specific views, either down the main boulevard, to the church or into the many intimate congregation spaces attached to the glass paned terminals(Fig. 6).

Within the terminals will be entrepreneurial space, along with the usual ticketing machines and waiting areas(Section CC'). They will range from food and beverage carts to small-scale coffee shops serving on-the-go commuters.

At the Northbound terminal, outdoor café space will line the entrance. The most striking spaces will be between large seated planters containing ornamental trees(Fig 5). This area is designated for congregation, outdoor waiting for the light rail, and possibly a bi-monthly farmers market(Fig. 3). Covertly, the site will be an example of sustainable design. The entire plaza, and walks leading to it, will make up of porous pavers made for storm water infiltration. Below the surface will be perforated pipe which will feed the



water feature and drain into a rain garden in overflow situations(Section BB'). The southbound entrance will have a smaller plaza space solely used as an outdoor waiting point(Section AA'). Besides the obvious spatial situation, the northbound terminal area is larger because of the clientele of the riders of those light rail cars. This side will serve as an attraction for those people traveling from the major travel hubs of New York and Hudson County.



All Images drawn by Joseph Clomera

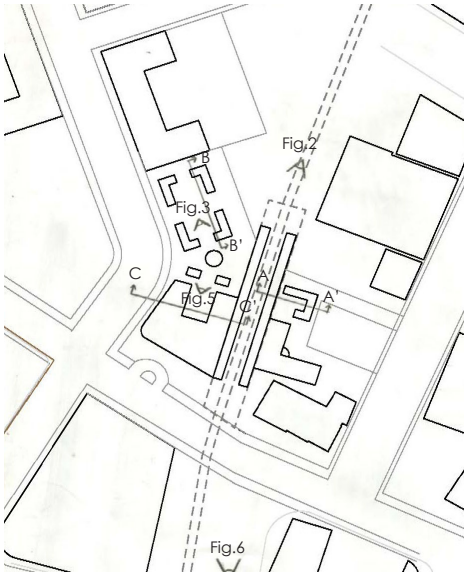
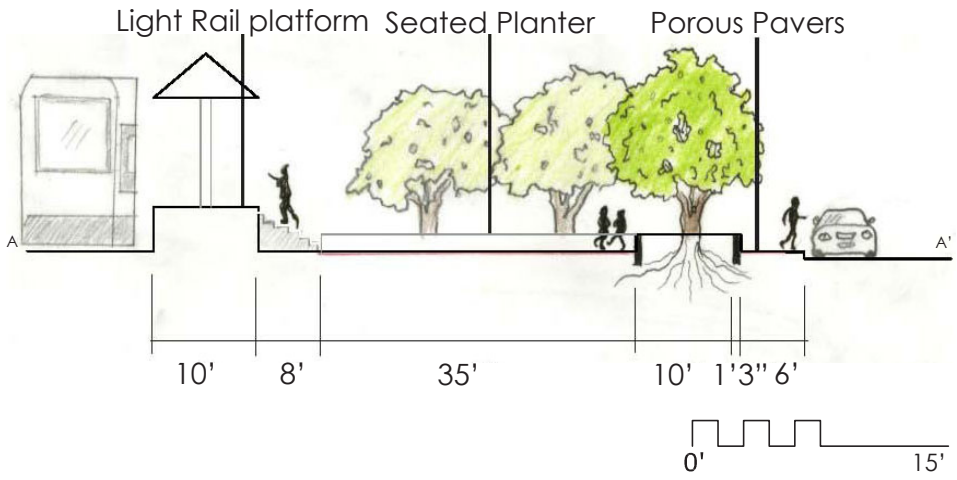
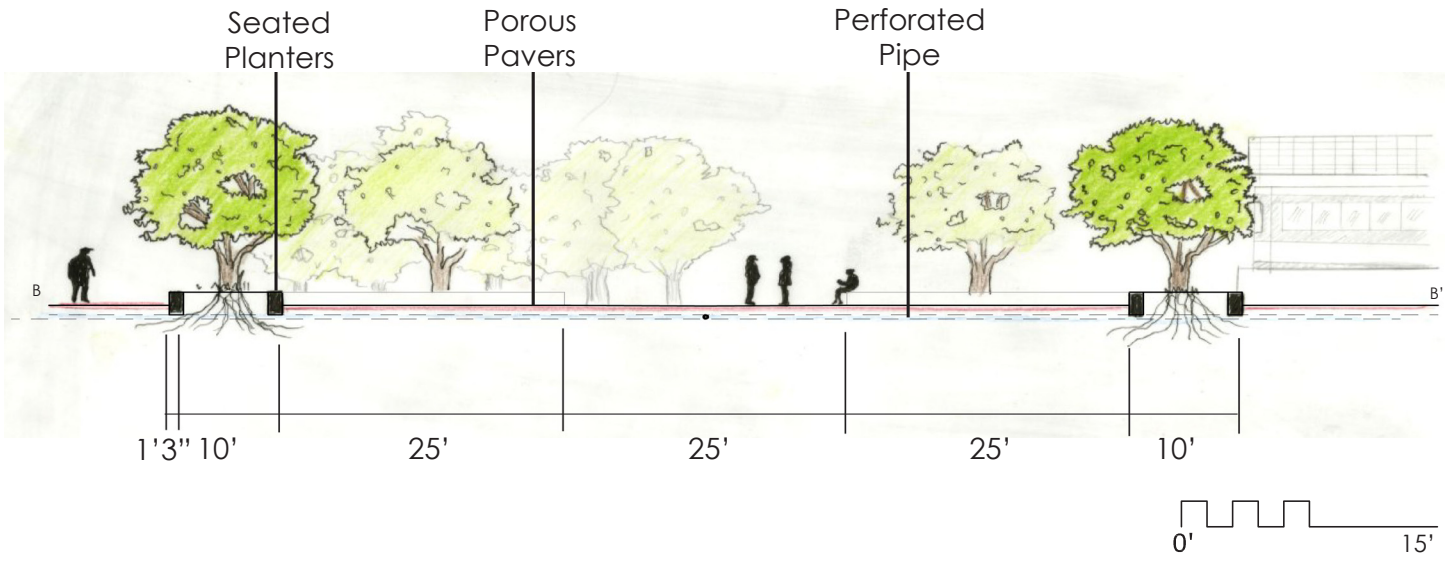


Fig.2
Fig.3
Fig.5
Fig.6
A
A'
B
B'
C
C'


Light Rail platform
Seated Planter
Porous Pavers
A
A'
10'
8'
35'
10'
1'3"
6'
0'
15'


Seated Planters
Porous Pavers
Perforated Pipe
B
B'
1'3"
10'
25'
25'
25'
10'
0'
15'

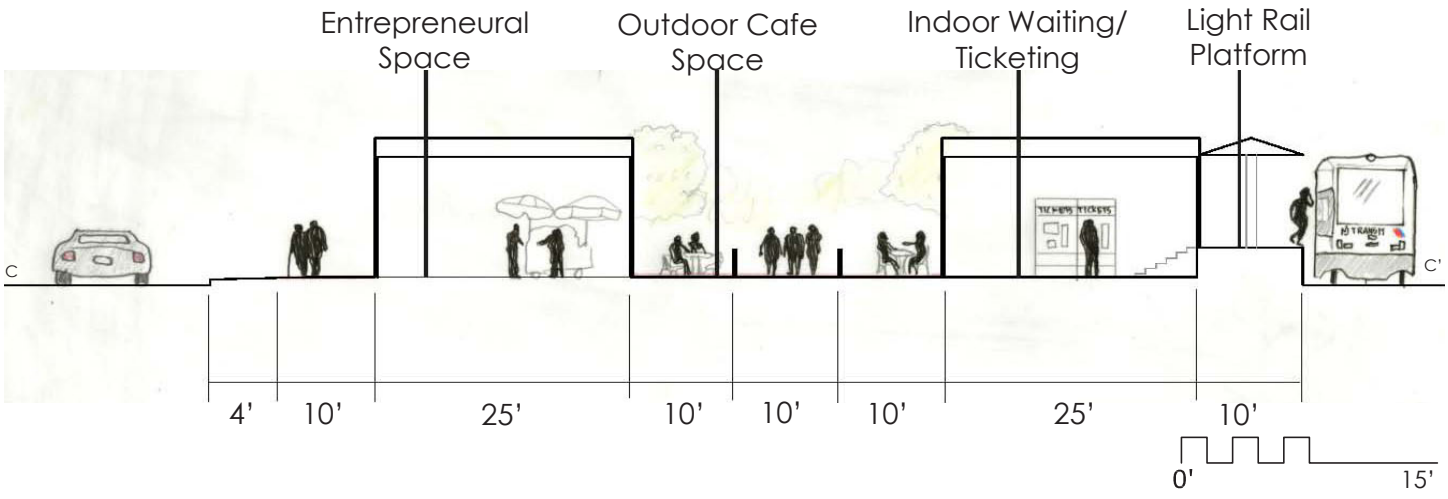

Entrepreneural Space
Outdoor Cafe Space
Indoor Waiting/ Ticketing
Light Rail Platform
C
C'
4'
10'
25'
10'
10'
10'
25'
10'
0'
15'

Fig. 1-Pedestrian Circulation

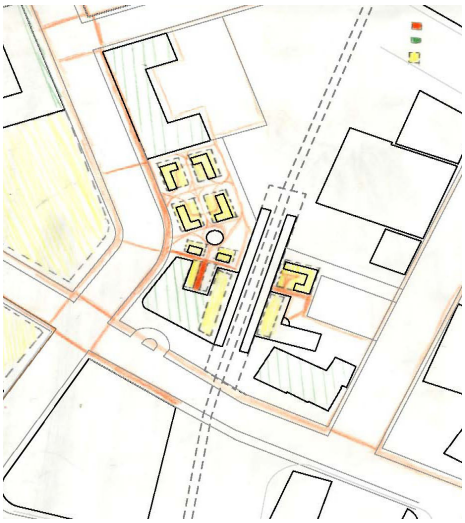


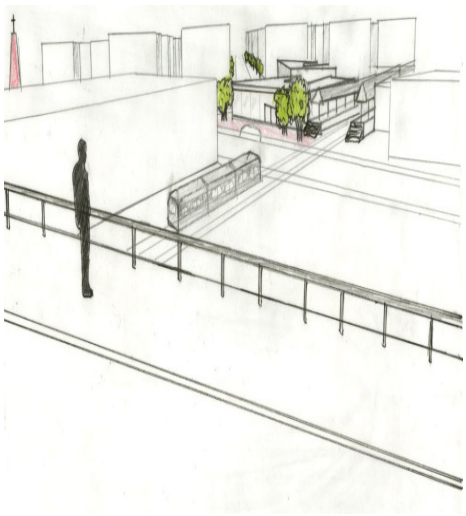
Fig. 2-Southbound Arrival

Fig. 3-Market Time

Fig. 4-Vehicular Circulation

Fig. 5-Northbound Plaza

Fig. 6-Hendricks Causeway



4.3 ReDensifying Ridgefield

4.3.2 Courtyards

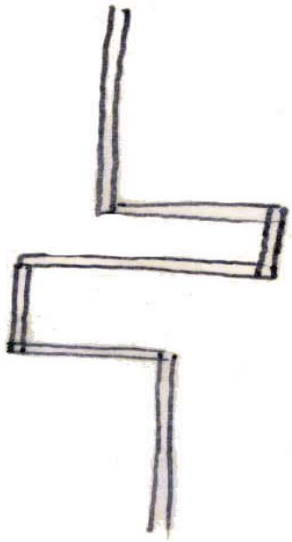
Anne Marie Kappus


Context Diagram

Courtyards are spaces surrounded by buildings that are designed as an entrance to a building, an area for neighbors to gather on a Saturday morning or even for children to play in after school. For some, courtyards are nothing more than something they walk through to get from point A to point B. For others, this is their private getaway that allows them to break free from their house or apartment.

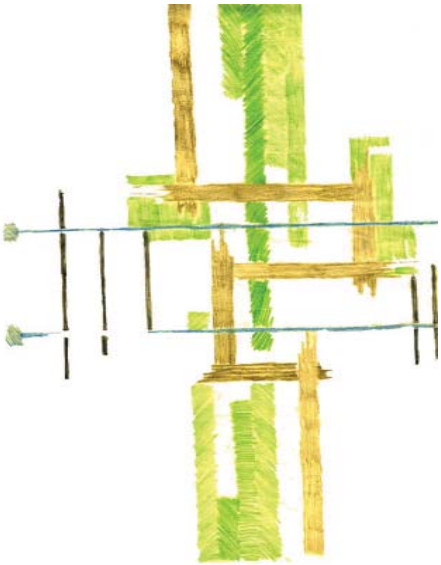
There were many things to consider when designing the courtyards in between the residential and mixed use buildings. Who do I want using these spaces? What kind of activities would be there? How would I separate public use and private use? Would the aesthetics be more important or the actual segregation between these public and private functions? Through sketching I experimented with different concepts but made sure that the segregation of these spaces was a primary aspect of the sites courtyards and layout. The concepts of my designs were formulated off existing places or things that are found throughout our site boundary. The importance of the rail line running through Ridgefield inspired me to design a space with straight, narrow lines. The Overpeck Creek inspired me to design a space with fluid, non-linear features. These two concepts were very different from one another and I would need to design a transitional space to go between them. I wanted to have a seamless connection between the two and found that by combining my first concept with my second concept, I might be able to create a successful design. Because I had based my conceptual designs to fit in the three buildings that are to the left of our development, the concept wouldn't work in a row that had five buildings in it. I had to make sure that the design was flexible enough to be placed within the other courtyards through our development. I decided to break free from my rigid concept and not take it so literally. Instead of keeping them in any particular order, my only rule was that two designs could not be back to back and could only repeat every other building.

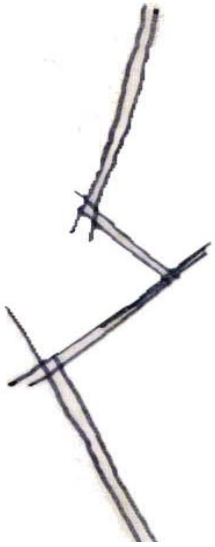
Now that my design concepts were on their way, I had a new obstacle of designing and incorporating the parking lots on my site. With the large amount of people visiting and living on the site, side street parking and multiple parking, garages were not an option. I decided that first floor parking would be a great solution, but how would I keep the first floor alive on the outside without have dead windows that cover the façade of the building? There is plenty of space in between the buildings (80' x 120') which will not take away from any proposed retail space/apartments with the exception of the entrance into and exit out of the parking lot. With the implementation of these parking lots, that means that the courtyards are going to have to be raised up one floor level from the ground. One of my original plans was to have stairs at the beginning of each courtyard going from street level up to the courtyard and then back down to street level at the end of the courtyard. This concept would create segregation between each courtyard in the row which will keep the public from experiencing the fluidity of the design. To solve this problem, I incorporated bridges in between each courtyard so that the viewer could experience an entire row of courtyards without having to leave the second floor. For handicap accessibility and emergencies, there would be public entrances into the building providing elevators and stairs.



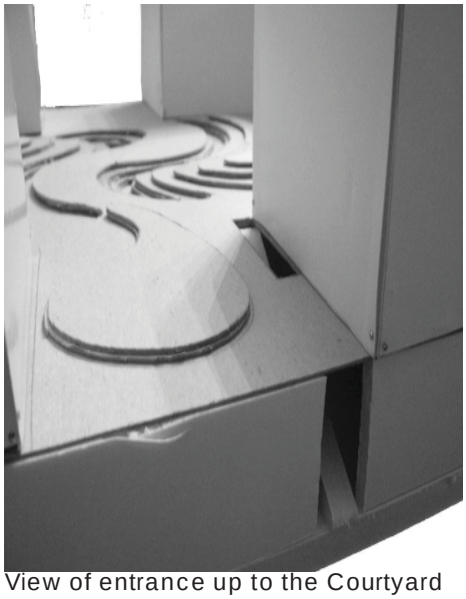
The conceptual sketches to the left were the first step towards my final design. The first thumbnail sketch was inspired by the Overpeck Creek. These fluid lines represent the banks of the creek and the movement of water. The second thumbnail was inspired by the rail road tracks that run through Ridgefield. These hard lines represent the rigid steel that make up the tracks. The last thumbnail was inspired by a combination of the first two concepts. The asymmetrical layout of the rigid lines reflect the fluidity found in the first thumbnail.

The sketches to the right are more detailed with land features and structures that define space.

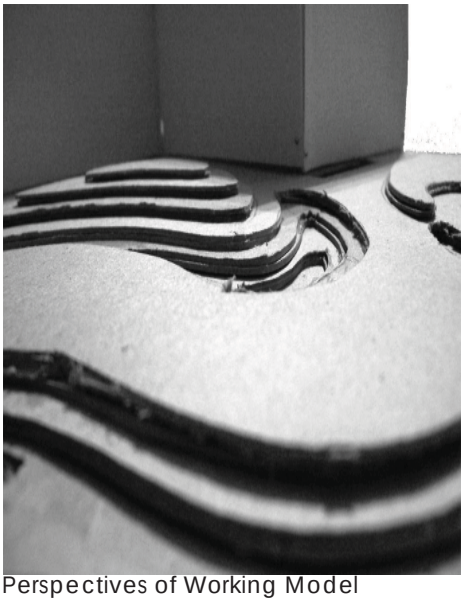


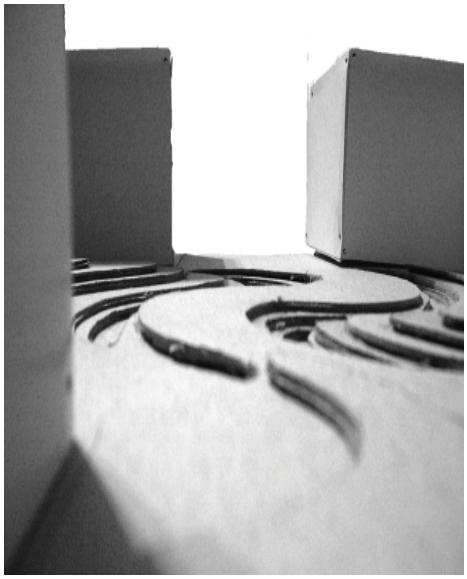


View of Working Model from Above

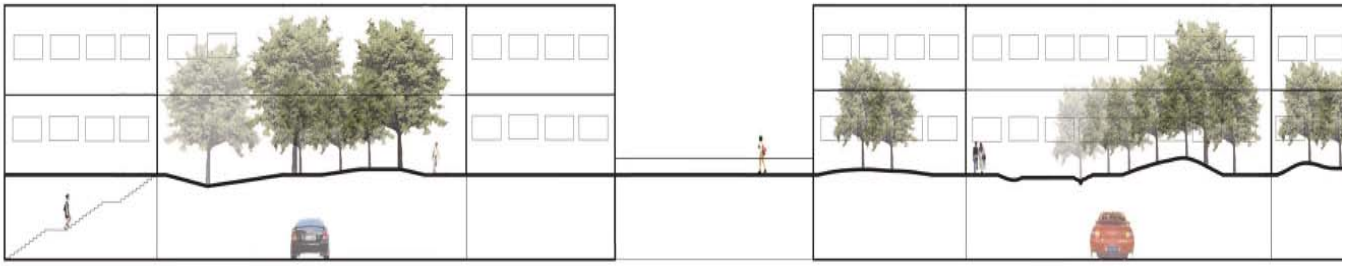


View of entrance up to the Courtyard

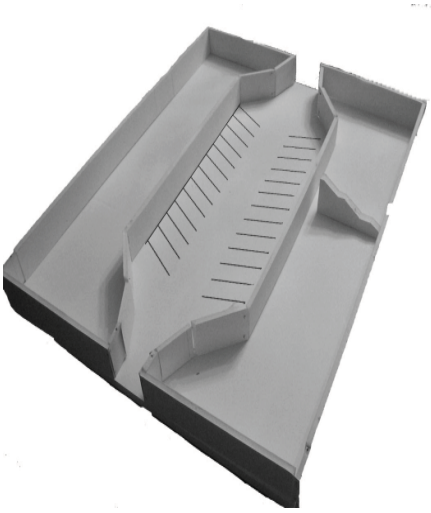




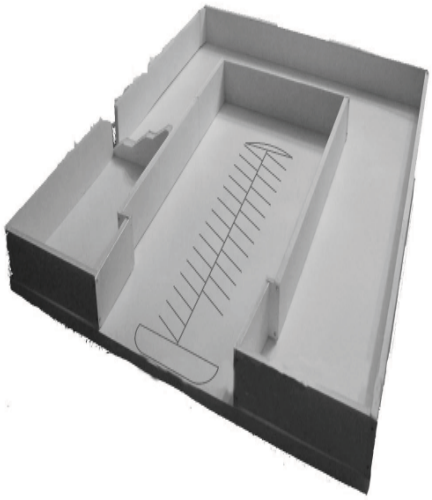
Perspectives of Working Model



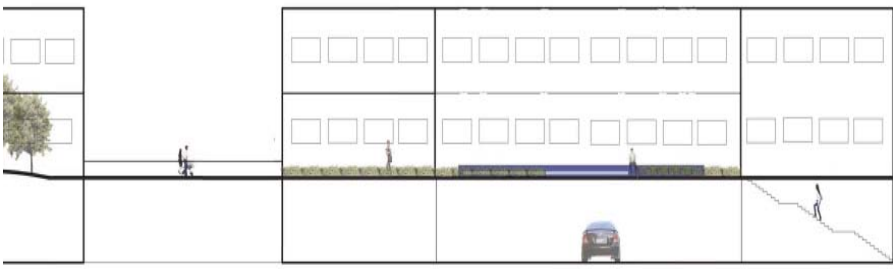
Section Cut through buildings

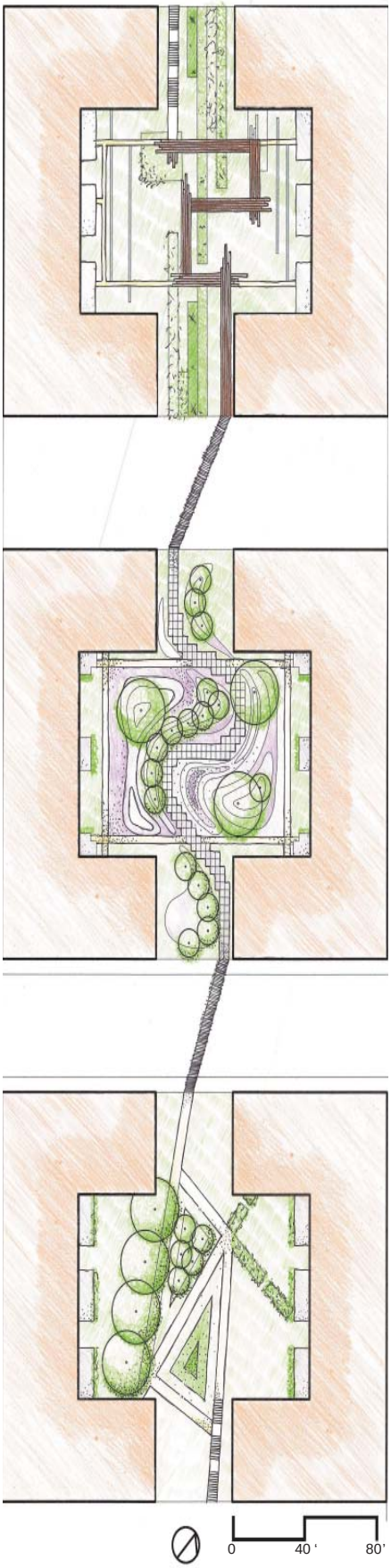


First floor Parking in Residential Buildings



First floor Parking in Mixed Use Buildings





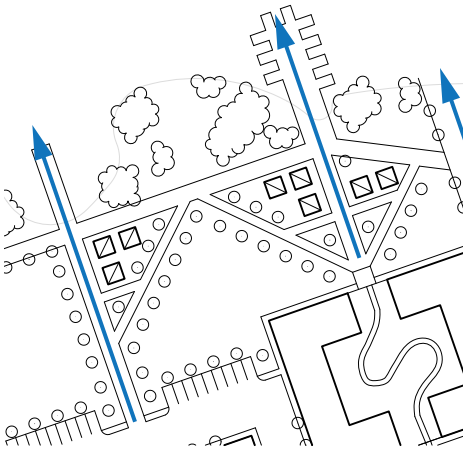
4.3 Ridgefield, NJ Masterplan

4.3.3 Promenade

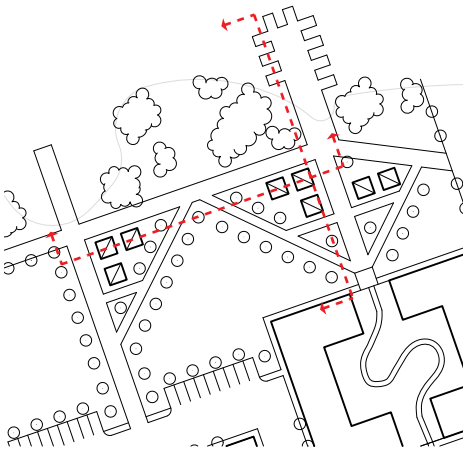
Pete Symanski

Site Location

My individual site design is the waterfront promenade at the Borough of Ridgefield. My first impression of my space was how I can create an experience for the residents and the visitors of the community. Not only can it be a public open park but a space where waterfront activities and socializing can take place. The geometry and layout of my portion of the site was based on the orthogonal shapes and positioning of the high density community that our group created. The main street boulevard is perpendicular to the waterfront. This area acts as a final destination to the main street and provides a continuous interest upon arrival. Adequate visitor parking and pedestrian pathways maintain a safe and functional experience at the site. The promenade at the waterfront is available as a multiuse park with limitless possibilities of recreation. A bike and pedestrian boardwalk was implemented along the waterline for waterway access and enjoyment. This entity creates a necessary experience through vegetated spaces of seclusion and opens to endless views of the shoreline. The boardwalk is approximately twenty feet wide for easy movement and variable traffic situations. Along this space is a series of docks at different lengths to allow multiple views. At one of these docks is a large central dock with kayaks and paddle boats at easy access. Kiosks are located at and around this main dock and provide refreshments, food, restrooms, etc for enjoyment. Formal alee of trees run along orthogonal paths leading out of the residences to draw the visitor to the waterfront. This vegetation is essential in creating a visual perception of where you should be walking. The trees at the waterfront are what divide and creates a visual cue of separation between the different spaces.

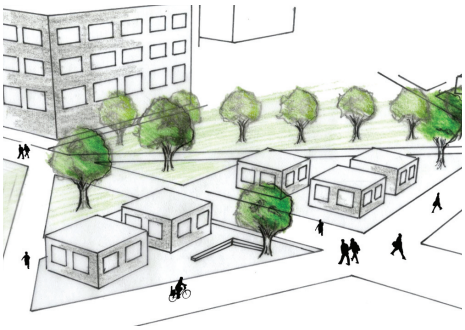


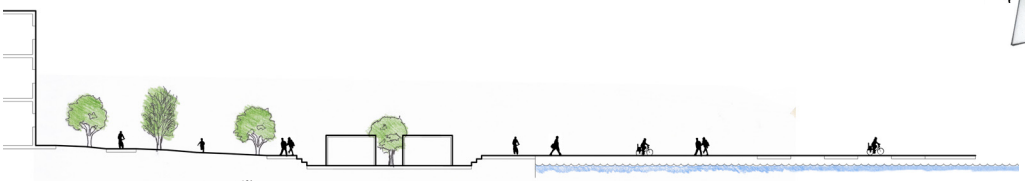
Views



Section lines

Section 'A'





Section 'B'

Site Plan

4.4 Repairing a Fractured Landscape

Michael Browarny
Katie Lawnik
Salvatore Fischetti
Raymond Schobert

Housing Density
14.5 units per acre

A successful town is one that supports adequate housing, a school system, optimal open space, sufficient job availability, convenient roadways, accessible public transportation, and the opportunity of sufficient pedestrian walk ability. A neighborhood should provide convenience and much comfortability. A town center should attract visitors, and allow for easy arrival and departure. It should be attractive in quality and character, providing commerce and the ability to walk to all locations in convenience. Open space is a very important quality that every neighborhood should have, for reasons of ecological concern, recreational opportunity, and aesthetic quality. A town center should have its own identity, character, and accessibility. A major concern in environmental planning is sustainability, to design in a manner of having all desirable wants and needs of the community within the community. These points are truly what make a successful neighborhood function.

With these ideals in mind, our design process began with a class wide inventory of the existing site, followed by an analysis process which helped us to understand the status quo of the site better. The major problems we found were of the flood zone, the haphazard mix of industrial-commercial-residential, and how this part of town is sectioned off from the rest of Ridgefield. The existing, obsolete railroad tracks literally divide the site and the surrounding community. We found this problematic because the current residents on site seem distanced, access to Overpeck Creek is ignored, and the historical church is seemingly living much more in the past. With these topics in mind, we began designing for the future.

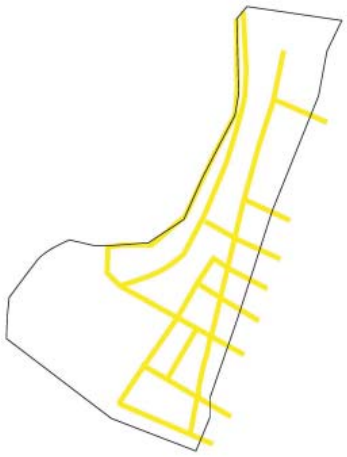
Analysis

Residential/Commercial/Industrial

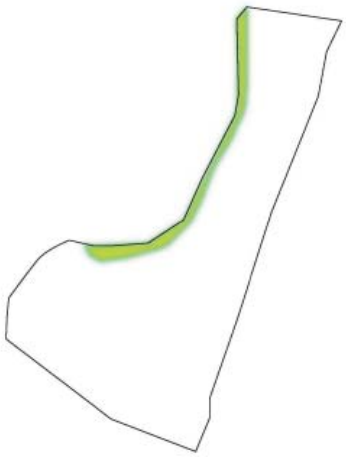
Industry very much so, dominates this section of Ridgefield. The residences on site are literally surrounded by either a tall industrial building or by truck shipment traffic. From anywhere on site, industry can be seen, smelled or heard. Contamination of the north end of the site has marked it as a Brownfield. Litter has polluted the ecologically sensitive vegetation and waters. Considering the negative aspects of the close proximity of the industry to the residences and commerce, it became a goal for us to separate the industry from the current community. We do not want to remove the industry completely from the site primarily because of the revenue that the industry generates for Ridgefield.

In the current state of the site, commercial lots are mixed with industrial. This makes it hard for a business to thrive, being overshadowed by big industrial buildings. This led us to ideas of expansion of the sites usage, to create a new and upcoming commercial area, while zoning off the industry to its own area. As of now, the

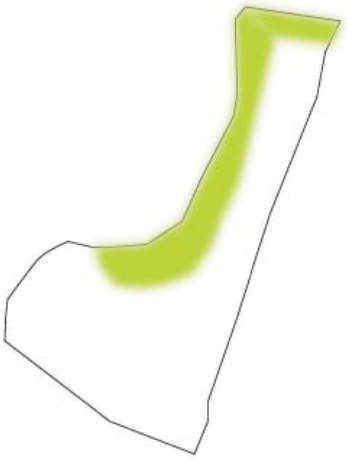
Analysis Solution Diagrams



Pedestrian Circulation



Flood Plain Solution



Open Space

residential area is on its own truly separated from all goings on of the community and shadowed by industry. In expanding the site we also began a process of designing new housing.

On the other side of the tracks is Ridgefield's Grand Avenue. In experiencing its character, a noticeable thriving functionality as a main street was lacking. It seems as though it serves more as a throughway for Routes 1 and 46. Many shops have been abandoned and industrial business lines much of the Avenue. Our analyses led us to understand, Ridgefield is missing a town center.

Circulation

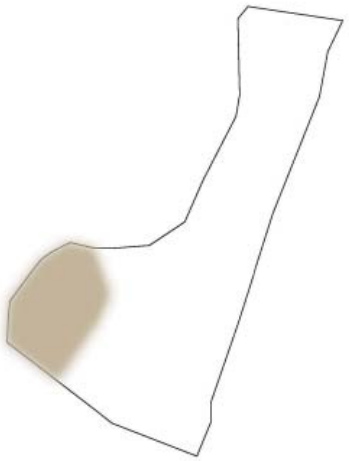
As previously noted, trucking traffic dominates the sites circulatory flow. It isn't very pedestrian friendly, nor would it be very enjoyable to extend your bicycling route into the site. Residential traffic is basically limited to coming and going. The only major access to the site is via Hendricks Causeway. This seems like a mishap in convenience as well as a battle with industrial traffic, daily. During the inventory process we noted some extremely unsafe pedestrian areas because of high traffic flow. Along the roads of the residences there are trucks both moving and parked, which creates safety hazards. These are all things we have taken in consideration during the design process, where we consider zoning of different areas.

Open Space

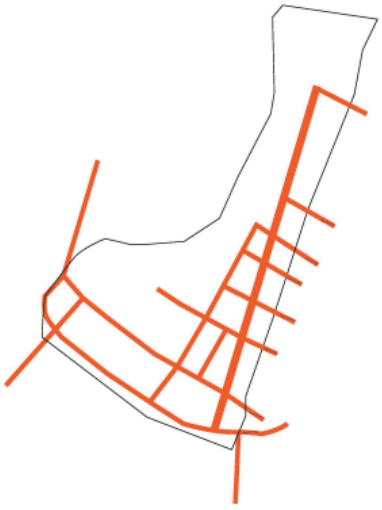
The open space of the site is primarily of Overpeck Creek and the church cemetery. As we analyzed ways in which to deal with the unsought of future flooding, we realize building in or on the flood plain may cause potential damage and danger in the future. We decided that the best way to deal with it would be to leave the area open and keep residences, businesses, and other buildings out of the flood zones. This decision actually allows for an addition of open space parkland. The church cemetery is an important piece of Ridgefield history, therefore it would serve best untouched.

Flood Plain

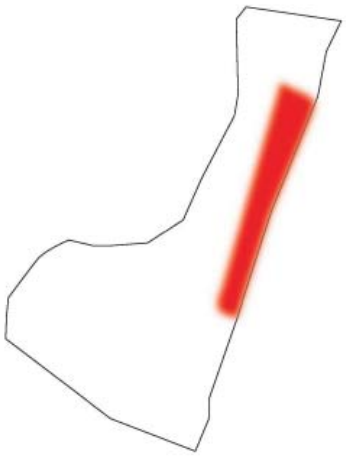
There are flood predictions for the area based on the mean estimate of a 1 meter sea water level rise over the next hundred years as reported in The Sea Level Rise studies published by The Intergovernmental Panel on Climate Change. In response to this issue we have reviewed many different options for a resolution. A natural approach is seemingly the best resolution to this problem. "Wetlands function as natural sponges that trap and slowly release surface water, rain, snowmelt, groundwater and flood waters. Trees, root mats, and other wetland vegetation also slow the speed of flood waters and distribute them evenly throughout the floodplain. This combined water storage and braking action lowers flood heights and reduces erosion. Wetlands within and downstream of urban areas are particularly valuable, counteracting the greatly increased rate and volume of surface-water runoff from pavement and buildings. The holding capacity of wetlands helps control floods and prevents water logging of crops. Preserving and restoring wetlands, together with other water retention, can often provide the level of flood control otherwise provided by expensive dredge operations and levees." [1]



Industrial



Vehicular Circulation



Mixed Use - Commercial/Residential

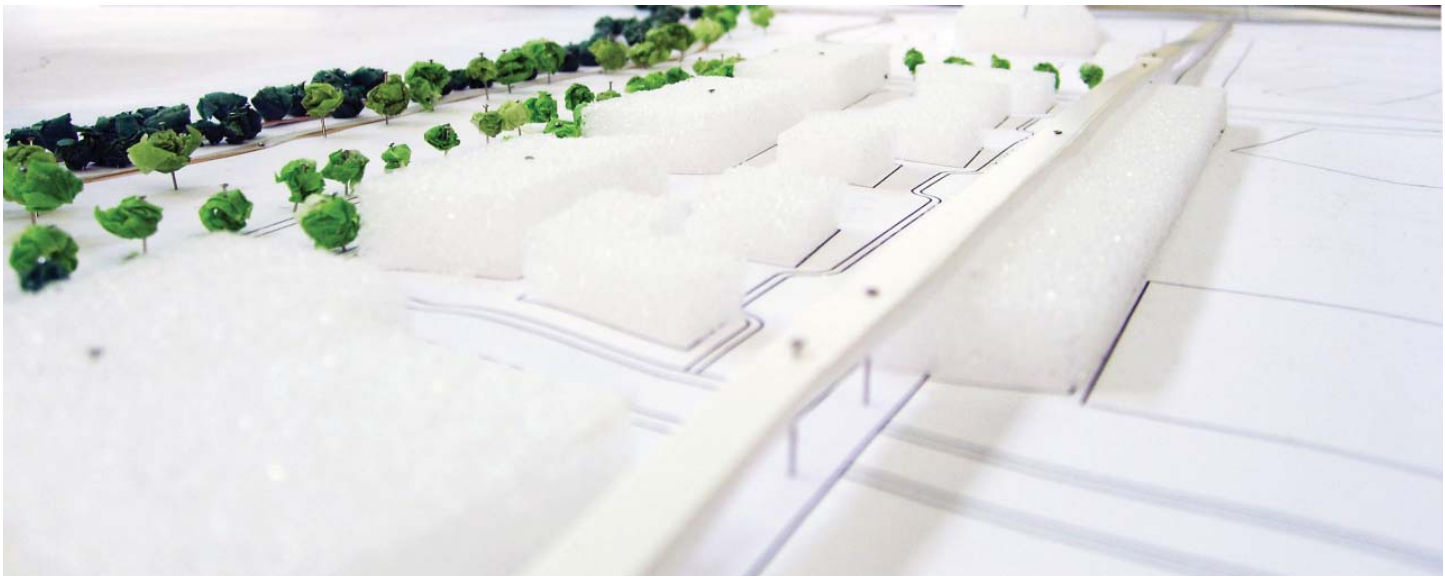
Advanced Landscape Architecture Studio Fall 2008

Process

With all of these considerations in mind, we've focused back on the needs of a functional community to begin the design process. We understand that the existing residents are in need of more of a community tie to Ridgefield, the open spaces should expand, and with the proposal of a new transit hub, this place must serve as an attraction to visitors as well.

In consideration of the analysis problems we have found for the industrial, commercial, and residential mix, we began to understand just what the new development may need. A necessity of separating the industrial area from commercial and residential became more apparent in achieving the community goals we have set. In this desgin, we have removed the Argix Industrial facility, allowing for northern expansion. Going back to the need of a town core, we designed a whole new Boulevard which will serve as a community gathering place. Along the boulevard will be new commercial shops, restaurants and grocery markets to provide a sustainable living space for new residents, as well as to invite visitors. We will also invite all existing commercial business in the mixed industrial area to move to the new boulevard. Above the commercial spaces, new 3 story apartments are proposed, as well as 2 story condos behind, with sufficient private open space. Some additional single family housing has been integrated into the design, extending from the existing neighborhood. This will expand the neighborhood into the new development, providing an easier transition from current to the new proposal of a relatively high density residential area. We have also designated some office spaces behind the main boulevard's commercial and residential buildings. This type of mixed use area will prove much more successful than the current state of mixed use on the site. The development of the buildings and the spaces in between the buildings are designed with three main criteria: to offer high density living space, to minimize the overbearing feeling of the high density, and to create easy and direct connections to the open space bordering the Overpeck Creek. The new boulevard is hoped to serve as the true main street, providing residences with a community and commercial buildings that will attract people

Old and New Housing intergration



Mixed Use Commercial and Residential

from outside the community. It will create a new, better place and it is our hope that it will inspire and eventually transform the rest of Ridgefield.

A high unit density is a necessity for any new development as it pays for the initail construction and makes the development finiacially feasible. In our plan we propose a 14.5 unit per acre density. This is not as high density as we initially designed, however a higher density would create undesirable outdoor spaces.

In the addition of new residences and the current demand for a new school, we have designed a new school zone. It will anchor the bottom of the open space parkland, providing optimal play area for the students, as well as easy accessibility for public buses and pedestrians.

The open space will not only serve as a solution to the flood plain, but will also provide for recreation and views. With new housing lining the boulevard, the sunset through the windows over Overpeck Creek view will prove to be quite pleasurable. We first designed the open area with programmed paths, connecting each section of the town to one central destination. We later decided this would not be the best approach and felt one path leading to the waterfront from the main avenue would suffice. The reasoning behind this is due to the density of the new town proposal, with such high density it is absolutely crucial to keep the common area as open as can be, to allow people to do as they please. We have provided a boardwalk through the wetland area and along the waterfront, which will allow park goers an interesting experience inside the ecologically sensitive wetland. A bicycle path will also be provided on the outer rim of the wetland area, which connects with sidewalks at the south and north ends of the open space area, allowing for a complete bicycle route.

Light Rail Station

The light rail system is proposed to be built and to circulate through the site over the unused tracks. Our design of the light rail was one of the most difficult problems our group had to deal with throughout the design process. From the beginning, we decided the rail to be elevated in order to create street connection underneath the rail from Grand Avenue. This will provide that connection that this site is lacking. Keeping in mind of truck traffic to the new commerce, clearance was necessary to elevate the rail 25 feet from the ground level. As this is very high, the introduction of tall buildings, street lined trees and a 60' tall clock tower will prove the spaces much more of a habitable, pleasant place. A problem did continually arise with placement of the new train station. In our first design the train station would be centered within the site. An issue with this was that it would be necessary for a large parking deck to compliment the train station, leading us to decide against a central location. A decision was made to design the station at the south end

where there is more room for large spaces. We also realized it is possible to develop two train stations; one more at the far north end of the site. This will allow travelers the most convenient possibilities to all locations of the site, as well as easy access for hotel visitors.
The elevated rail is a key element in our design. As breifed upon earlier, the optimum height for the rail is concluded to be 25 to 30 feet high, depending on the the specific topograhic location on the site. The site has a gradual slope towards the center and down toward the Overpeck Creek. The slope is gradual but resembles a half of a bowl, with the Overpeck Creek at the bottom. The elevation of the site increases as you get closer to Route 46 and the Hendricks Causeway, as well as outward toward Grand Avenue. The elevations along the rail at the Hendricks Causeway and Route 46 are 17 and 18 feet above sea level, respectively. The major obstacle in building a functional railway is the elevated Causeway; it will have to be removed and the road connecting to Grand Avenue will be brought down to grade. The elevated rail must decline at a maximum of a 2% slope to meet grade at 18 feet above sea level to pass under Rt. 46. This is accomplished by a decline over roughly 1200 feet starting at the north side of Slocum Road.

Perhaps the most significant struggle we had designing was the creation of new areas that arose beneath the elevated rail. The elevation of the rail will thoroughly connect the two sides of Ridgefield together however; the spaces on the other side of the tracks from the site were less than desirable to connect to. Initially by raising the rail we believed a view shed would be created toward the Overpeck Creek and open space area. Although it does create a connection, the visual destination would be blocked by the light rail. Grand Avenue is ten to twenty feet higher at ground level then that under the rail, which would make the rail eye level (being that it is 25' high). The solution lies in creating a beautification program which would provide street lined trees to the existing connector streets of Ridgefield. This will advertise the idea of open space, as well as partially block out the view of the existing industrial buildings.

Perspective View of Boulevard

Design Intent

As this site was once isolated and dominated by industry, the master plan proposal is designed to connect the site to the region, bring new commerce, new residents, and exciting new waterfront parkland. The existing housing will remain, as well as the historical church and cemetery. A new development including single family homes and apartments above commercial space will increase population density, new jobs and town character. A new public school will be built on site, open to new residents, as well as current students of the surrounding town. Along the main boulevard a commercial sprawl will rise, creating a fresh new cultural center with many places to dine, shop, and work. Open space will be aplenty, lining the boulevard and spreading across the site toward the waterfront. In response to the 100 year sea water level rise, an ecological design for wetland habitat will line the water's edge. This will help fight future flooding onto the site, as the wetland acts like a sponge to the rising water level. The north end of the site will be host to a conference center with easy access to nearby highways. A light rail system is actively being planned along the existing obsolete railway, welcoming much opportunity for travelers to and from the site. The rail will be raised at our site from ground level to allow regional street access as well as views down to the water. Two stops will be provided in the development, one located at the south end of the site, as well as the northern area allowing easy access to the conference center. The two stations will allow for walk ability and sufficient parking. Easy transportation from other parts of New Jersey and New York City will make visiting and living in Ridgefield very desirable. People will be able to easily walk anywhere on the site, shop for their daily needs, possibly work in the area or take the light rail to Jersey City, Bayonne and Hoboken as well as across the Hudson River to New York. This proposal should provide a fully sustainable, urban living and work space for all new and existing residents.

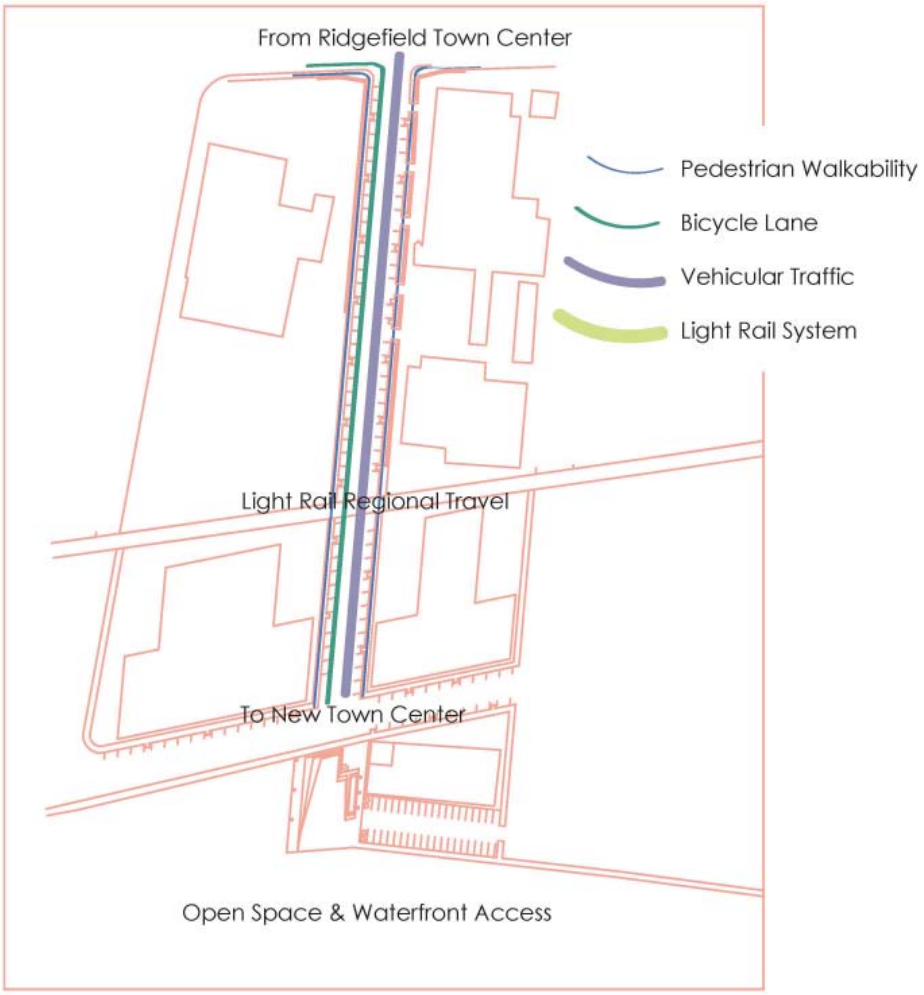
4.4 Repairing a Fractured Landscape

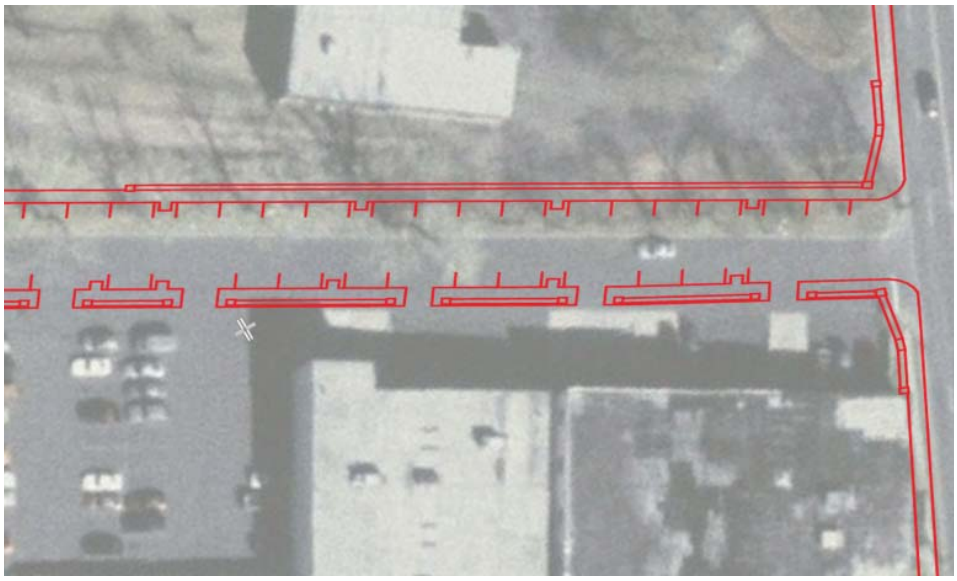
4.4.1 Connectivity

Katie Lawnik

Connectivity is the main goal in repairing the fractured landscape of Ridgefield, NJ. In designing this new urban development, I have re-invented Wilt Avenue, making this the major throughway to the new town area. The road has been shifted 22 feet north east to make room for new spaces, separating the industrial business area from the throughway. This has allowed room for new sidewalks, street parking, a bike path and a green wall. The green wall will be implemented by building a stone wall, allowing for vinery to flourish upon it. This will be done to disconnect the existing parking lot and street, which now are flush. Parking on the street will be visually separated by street trees. The street trees will be extended from the sidewalk by 5 feet, creating a canopy overhead and spaces enough for 3 or 4 cars in between. This will break up the line of cars, making the landscape more visually appealing. This street design will be followed throughout the entire new development. Following down the Wilt Avenue Extension, the end of the avenue will be anchored by a new town hall clock tower and plaza area. At 60 feet tall, the clock tower can be viewed from the top of Wilt Ave, as well as by passersby riding the light rail.

Connectivity Diagram





Status Quo of Wilt Avenue Proposed Changes Overlayed in Red

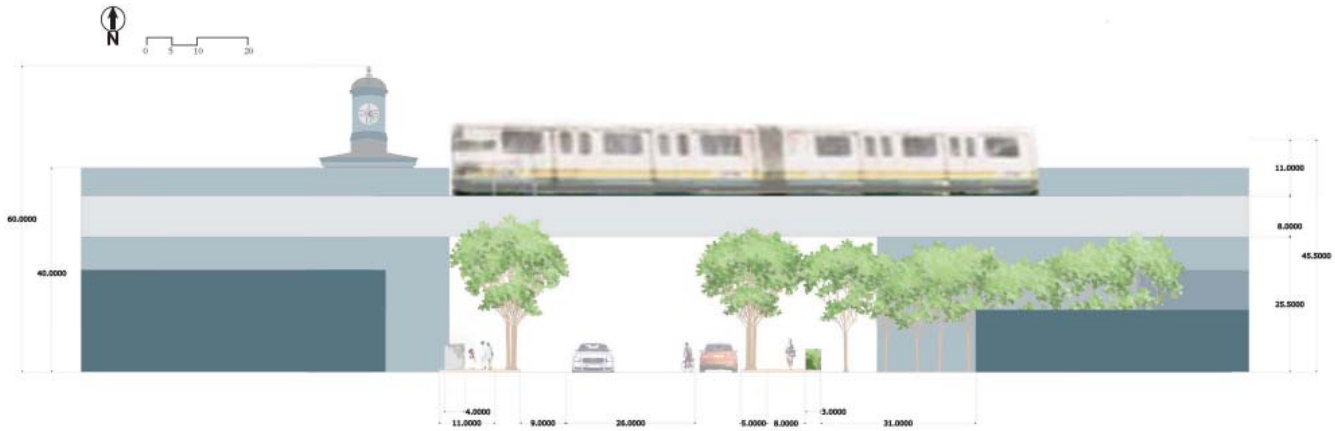
Example Images

Street Parking intergrated with Trees 1

Green Wall 2

Plan View of Wilt Ave

Original Scale: 1" = 20'



Section Cut of New Wilt Ave

Original Scale: 1" = 10'

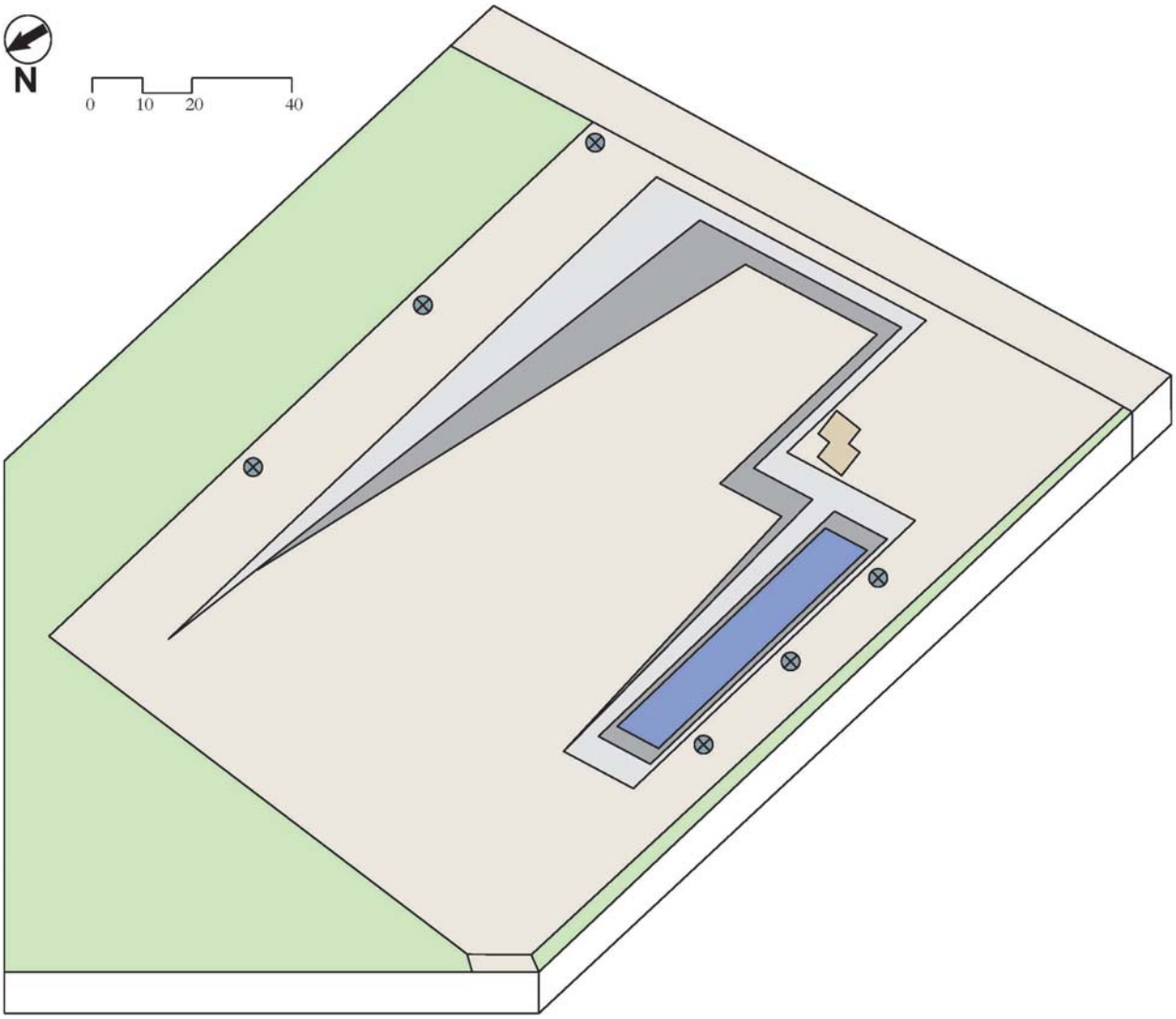
Overview of Main Connection

The new plaza was designed to create interesting spaces as well as a place for people to gather. The top level of the plaza will be flush with the sidewalk; there will be three steps down to the bottom level. The size of the step will vary in different locations, allowing for a larger seating space. A small pool will be located in the west area of the plaza, with a bubbling water feature trickling down from the second step. The water feature is proposed to create pleasant sound and visual stimuli. Two square tree potters will be located on the top level near the pool, shading the lower step seats. Four more tree potters will be placed 2 by 2, separating the Town Hall parking lot from the plaza area. When entering the area, one will step down to the ground floor, the walk will be at a slight grade upward toward the end of the plaza, becoming flush again, yet this time with the park area grass rather than sidewalk. This design will allow for interesting seating, and a smooth effortless entry back to ground level. The open space is a very key element to the new development, having a smooth transition from the impervious spaces to pervious grassland will prove a successful and enjoyable experience.

Section Cut of Plaza

Original Scale: 1" = 10'

Perspective View of Plaza



Plaza Plan View

Original Scale: 1” = 20’

4.4 Repairing a Fractured Landscape

4.4.2 The Waterfront Connection

Raymond Schobert

Open space is a vital part to any community, and given the lack of open space, our master plan worked to connect the residents of Ridgefield with the Overpeck Creek. Open space becomes the meeting grounds for residents within the community, and helps provide a town with an identity. The design of Ridgefield, NJ calls for a need for open space, and as a group we deemed the waterfront along Overpeck Creek the most suitable area. Therefore I designed The Waterfront as a passive recreation area, left open to be used however the citizen feels necessary.

The first aspect of my design I had to deal with was the entrance into The Waterfront. Because we are proposing a new town hall at the end of the Wilt Ave Extension, my concept demanded this be the entrance into The Waterfront. It is centrally located within our proposed development; therefore it would see a large amount of pedestrian circulation in the immediate area. A civic square would complement the town hall and surrounding area to great extent, providing many experiences, uses, and an identity.

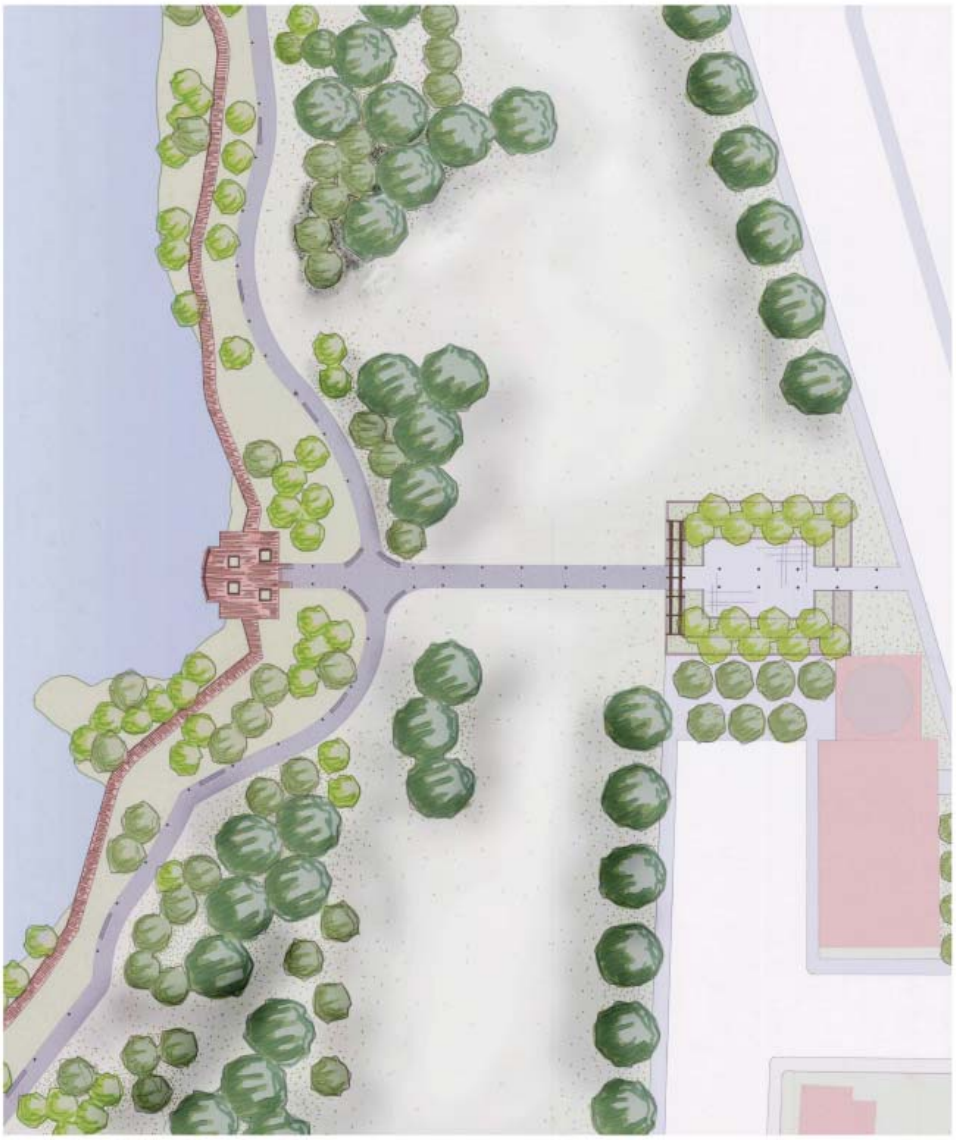
The civic square is designed to give the feeling that you are part of The Waterfront, but also a part of the street life, a transitional zone. As you walk down into the square, surrounded by trees and vegetation, you feel as if you are leaving the town behind, but because of the pavement you are not totally connected with The Waterfront. However, the surrounding turf steps of the plaza begin to create a connection with the vegetation of The Waterfront.

This section / elevation shows the spacial qualities of the proposed pier along the Overpeck Creek

This section shows the spaces of the civic square with Wilt Ave. on the right

The square can provide different experiences and serve a multitude of events, such as an entrance to the open space, a congregation area, a place to hold town meetings, or a place to simply relax.

Throughout my design, I used different materials to designate different uses and experiences. The bike path runs near the edge of the Overpeck Creek to give a view towards the creek and the town, but it also provides a different experience then the board walk would. These two paths are left separate to help create different experiences depending which path you choose. While on the bike path, an active feeling is created as bikes, rollerblades, etc are whizzing by enjoying the open space. On the board walk, one would feel almost connected to the Overpeck Creek, and be able to see firsthand how the reclaimed wetland buffer is restoring the ecology of the Overpeck Creek. Overtime, residents may start to see the boardwalk as an escape from the dense urban life.

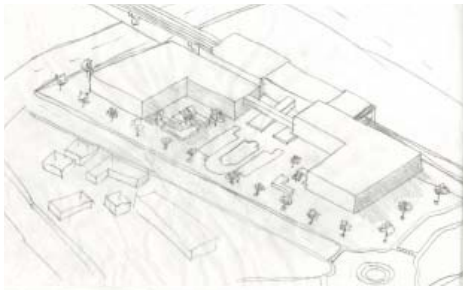


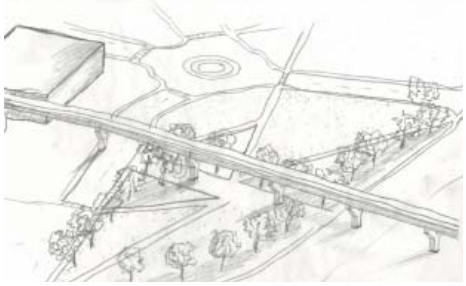
The Waterfront Masterplan

4.4 Repairing a Fractured Landscape

4.4.3 Light Rail Station

Salvatore Fischetti



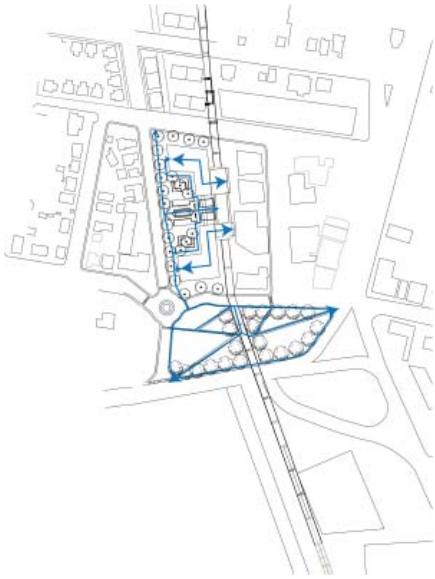


Upon further analysis of the site one major problem occurred to me that required further analysis and implication of a more functional design. The train station how it was to be integrated into the proposed design to make it an enjoyable experience as well as something understandable and functional. With this it was realized that there needed to be more of a connection between the entrance to the site from Edgewater Avenue to the east of the tracks to Edgewater Avenue on the west side of the tracks.

The section of the site in which I had to further designed greater detail was the train station and put together the pieces to make this functional with the rest of the site. The train station is located towards the southern end of the site on Church Street between River Street and Edgewater Ave. West. The main reason for the train station to be located here was to provide a connection between the mixed use areas of the site to the north including commercial and residential, with the proposed school, and existing residential of the site to the west which we are keeping as status quo and untouched. This provides easy access to the train station for people that are visiting the site as well as for people that currently live at the site.

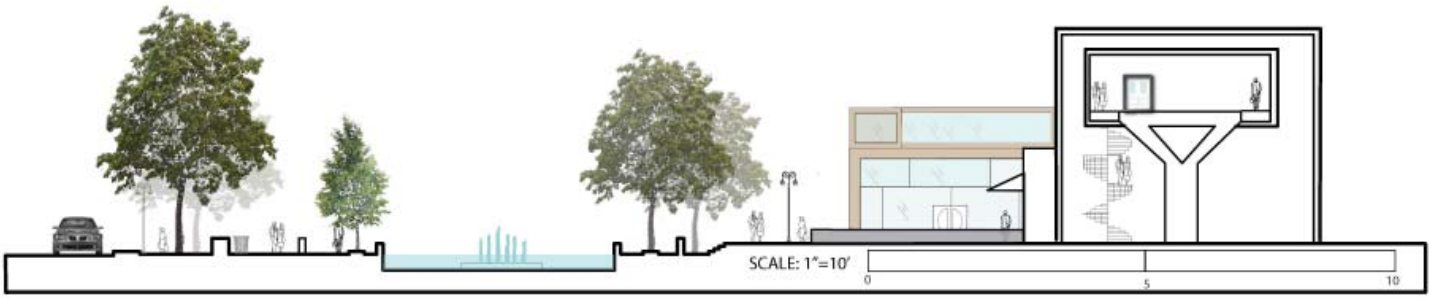
Being that the rail line is raised, this creates more of an undesirable feel to be underneath the tracks. For this reason I decided it would be most appropriate to have the train station encompass the entire track, closing off underneath the tracks to all vehicular traffic giving pedestrians a safe way to navigate from either side of the track simply by entering the building on either side of the track.

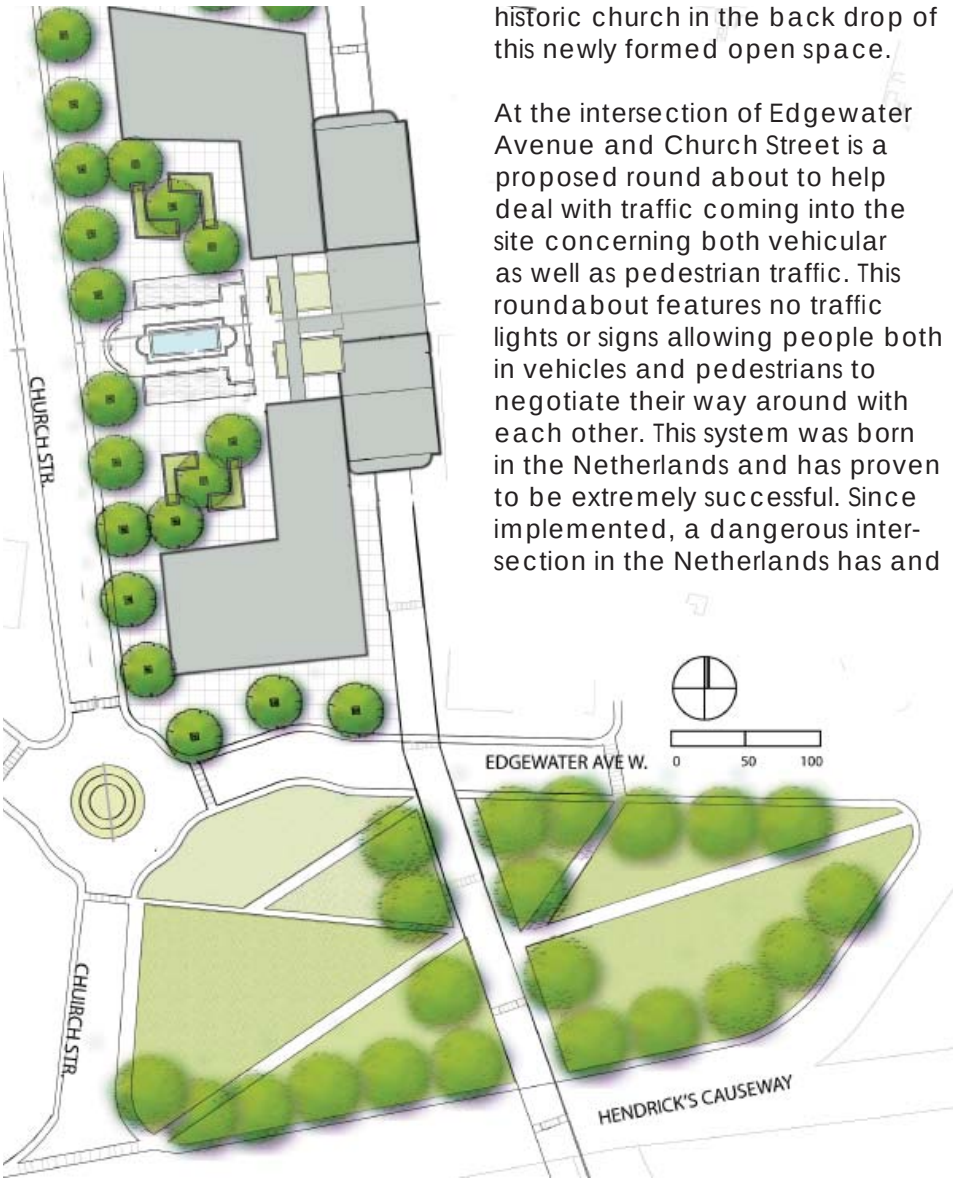
In addition to the train station there is a plaza area that is complemented with a fountain, celebrating water as well as plantings of honey locust giving a slightly open canopy in which the passing trains can be seen from above. Parking for the train station and its commerce will not be located directly at the station but will be made accessible one block away. This is due to the existing residential located across the street but more importantly due to the school which is located down River Street two blocks away. With concern to high pedestrian traffic consisting mainly of children we thought it would be best to locate all parking one block away in a three story parking garage which



will also be used by visiting vehiclar traffic for the rest of the site.

Crossing over Edgewater Avenue just south of the train station an open space was added to help link together the two side of the train tracks. With a more open view of the site as well as a place to congregate this greats a inviting experience hand is meant to help bring in people from Broad Ave. as well as Edgewater Ave which leads into the site. This provides an opportunity to allow people unfamiliar with the site see the site with a picturesque view of the old





historic church in the back drop of this newly formed open space.

At the intersection of Edgewater Avenue and Church Street is a proposed round about to help deal with traffic coming into the site concerning both vehicular as well as pedestrian traffic. This roundabout features no traffic lights or signs allowing people both in vehicles and pedestrians to negotiate their way around with each other. This system was born in the Netherlands and has proven to be extremely successful. Since implemented, a dangerous intersection in the Netherlands has and gone from experiencing 75 accidents a year to experiencing one per year. The designers say that this is due to the experience created by the roundabout forcing people to become more aware of their surrounding rather than following a preset of rules giving them the false impression that they can proceed whenever they believe the right of way is theirs, and theirs only.

4.4 Repairing a Fractured Landscape

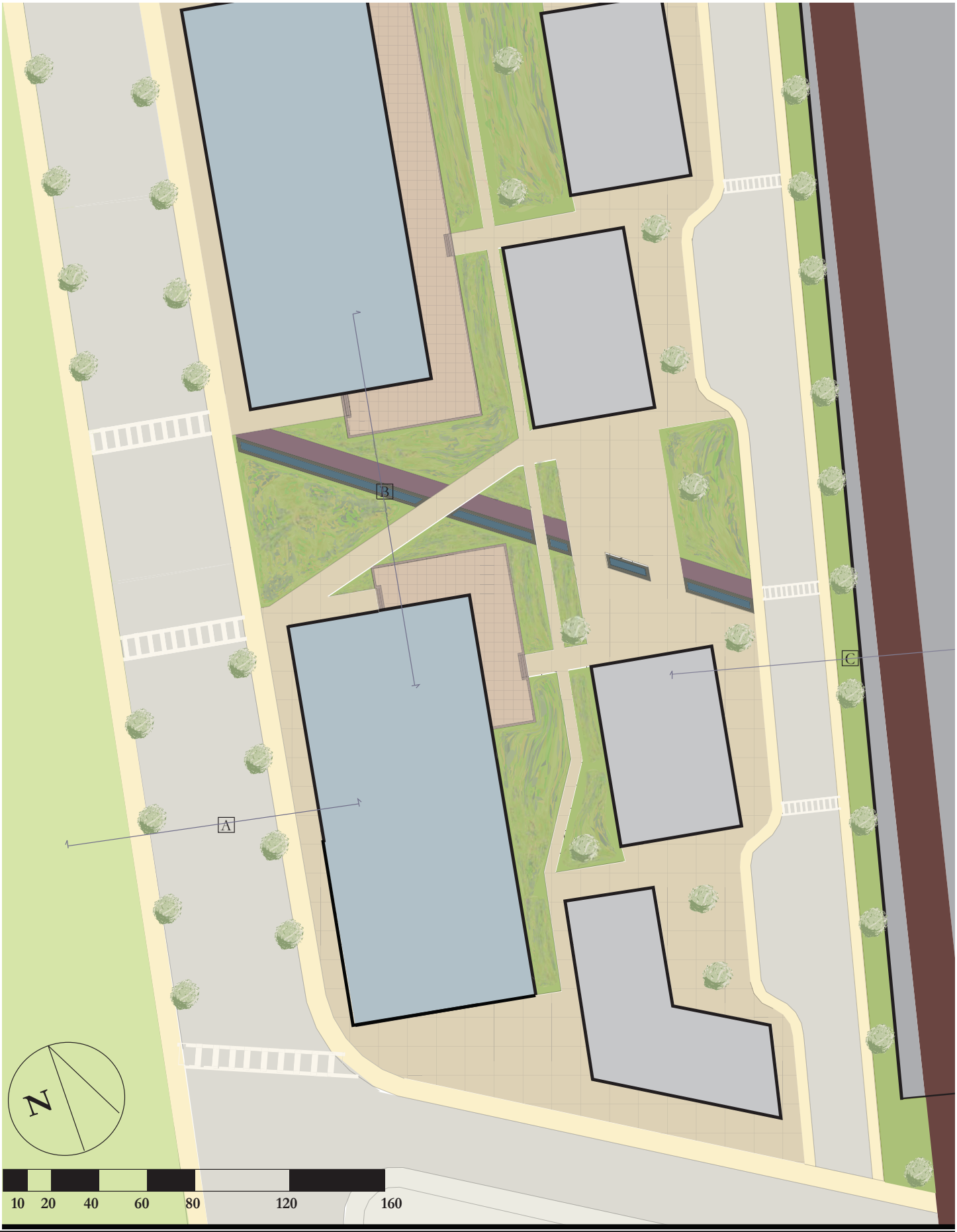
4.4.4 Open Spaces

Michael Browarny

The mixed use area of the site incorporates residential, commercial, and office buildings. It attracts consumers to the site and the inhabitants to the water front, and open space. The best way to attract people to the site is a high density of residential and commerce areas. However it is undesirable to create an uncomfortable claustrophobic and shadowed area of multi-story, highly functional mixed area. Between the elevated rail and the 4 story buildings it was difficult to design the area to have both visual and physical connections to the open space, parking, residences, and commercial buildings. I considered walking distances, views, and proximity to street, sunlight, impervious surfaces and walking paths.

The product of my analysis is a four-story building main street with commercial on the first floor and residential on three floors above. Additionally commercial and office buildings are placed in-between the elevated rail line and the back of the four-story buildings on the main street. The element that is necessary for the design is the walking paths that run east and west that connect all the buildings to the open space. My original design called for a long continuous line of four story buildings along the main street to provide maximum density and usage. However from observing the building foot prints I realized that the space in between the residences and the elevated light rail had become too isolated. The lighting and views were also an issue. By creating a model of the buildings in Sketch-UP, I realized that the space in between the rail and the 4 story mixed use buildings blocked the sun for most of the day. Since the row of buildings was aligned from north to south (along the main street) it not only blocked out the afternoon and evening sun, it also ruined the view and the connection to the water front. As a solution I placed walking paths running perpendicular to the main street and the mixed use buildings. The linear paths expend from the parking deck to the open space connecting the two areas visually and physically. The linear paths also create through ways for the inhabitance and the visitors to get from the parking, to the shops, to the apartments, finally to the open space. To enhance the visual connection, physical connection, and provide seating it is beneficial to add a raised reflecting pool. The spaces in between the linear paths were originally low level grass and shrubs. The plantings need to be low in order for these corridors to

work so that they do not hinder the view to the water front. However grass and shrubs I felt was too inviting for people to interact with. It is not necessary or desirable for pedestrians to interact with the outdoors in-between the buildings for too long. It is a necessity to move and encourage people to experience the wide open space just across the street. The solution is to heavily plant the area in between the paths to create areas that people will visually enjoy, but will not experience it physically.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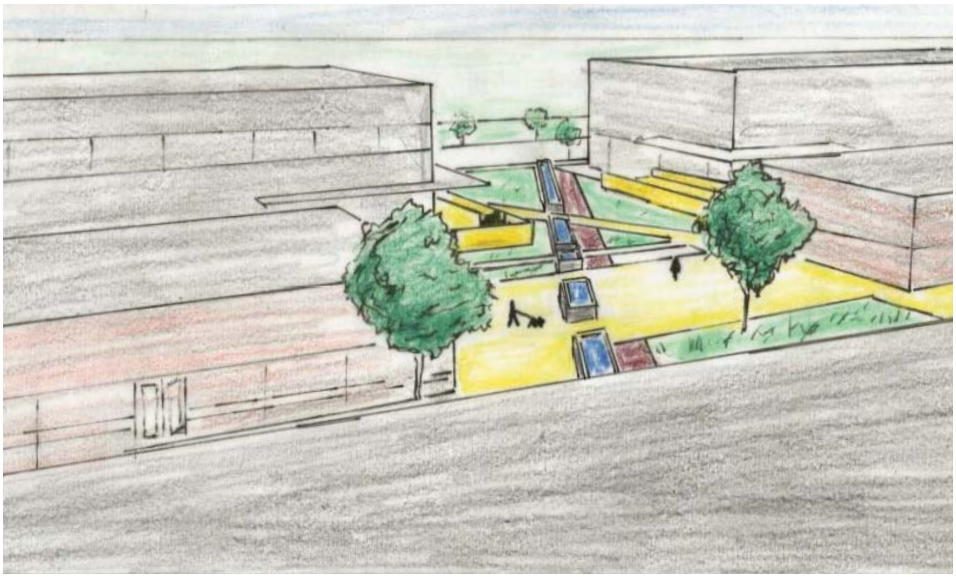
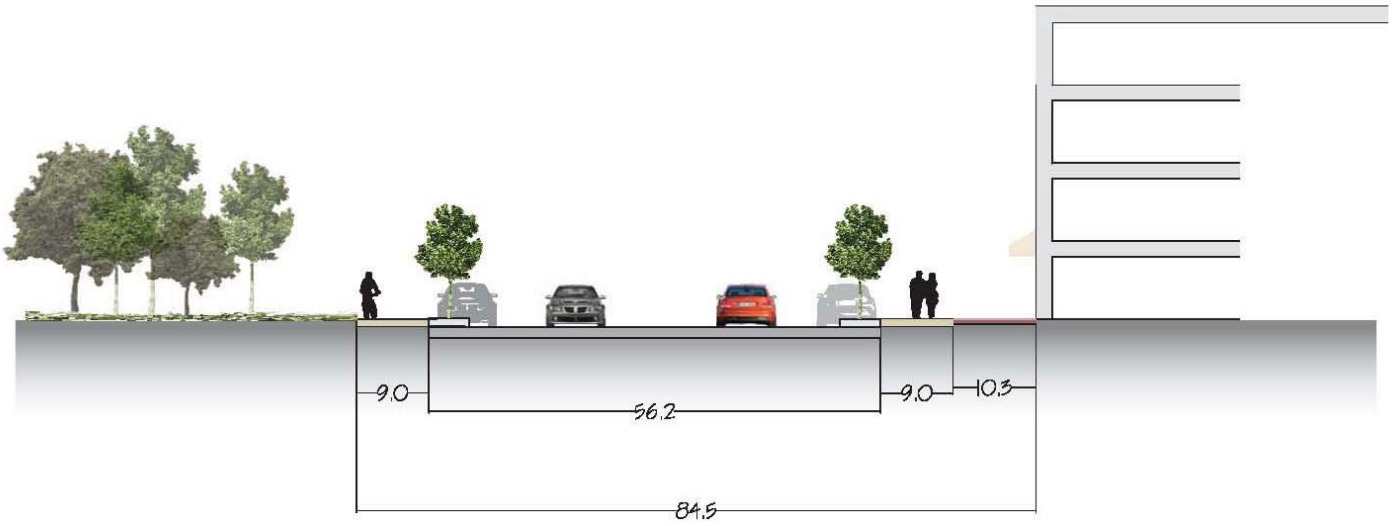
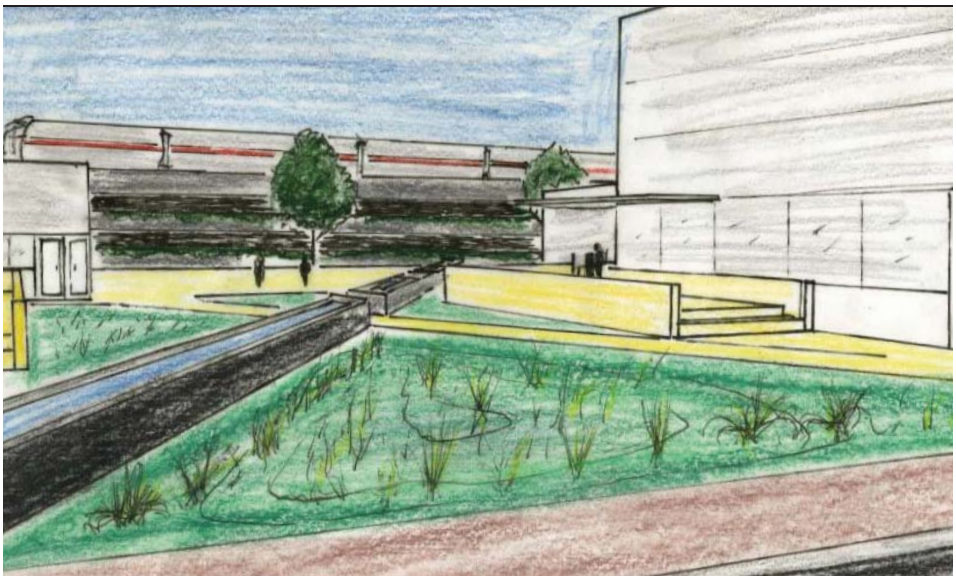
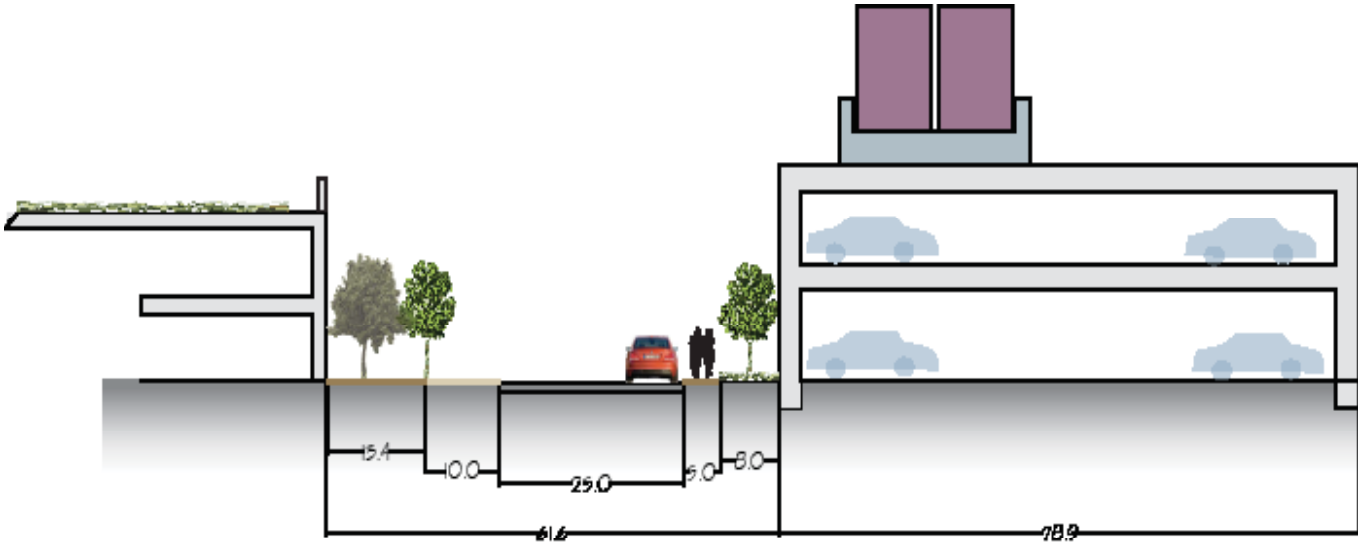


The section on the right is of the parking garage with the elevated rail line going above it. The perspective on the left is looking down from the elevated rail west toward the mainstreet

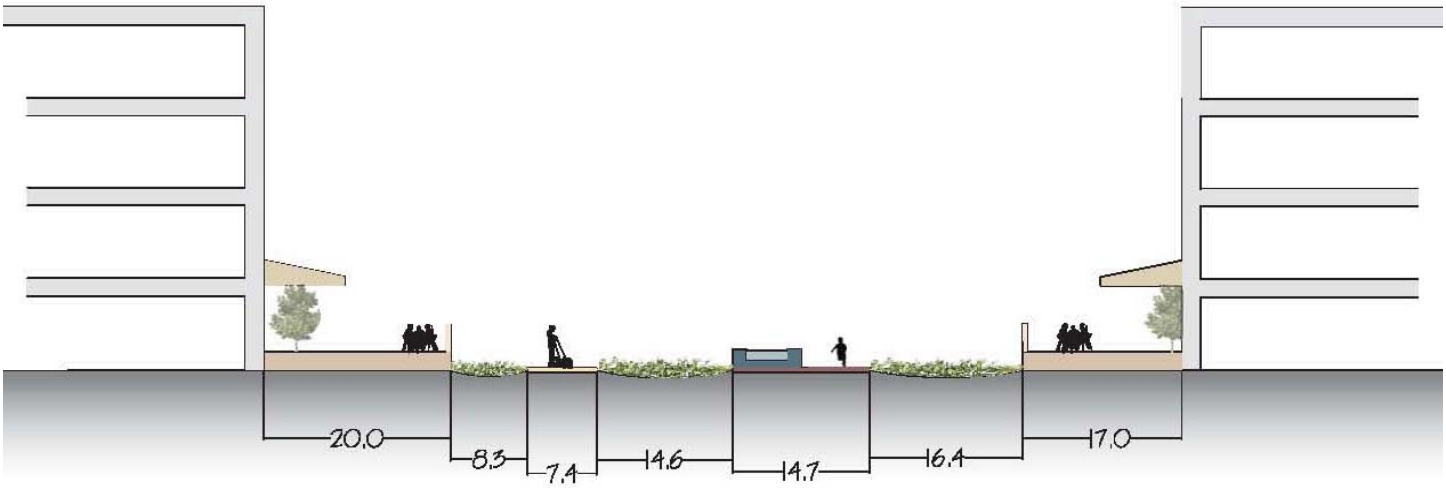




The section on the right is of the spaces inbetween the mixed-use buildings. The view to the left is looking east toward the elevated rail from the mainstreet.



The section on the left is of the main street the four-story mixed use buildings and the open space. The view to the right is looking north down the main street next to a outddoor resturant



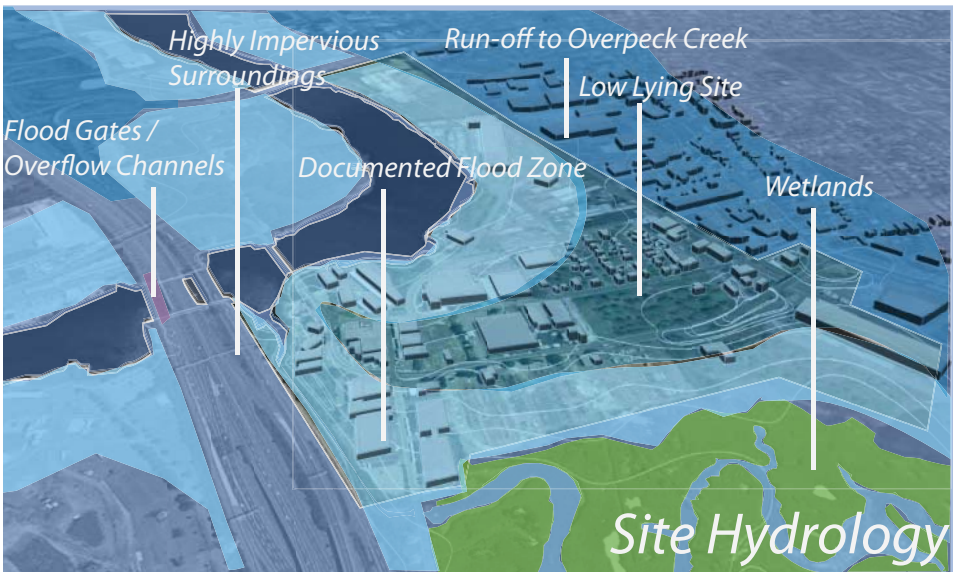
4.5 Reconnect

4.5.0 Master Plan

John Hencken
Ryan Miller
John Novak

This 150 acre site in Ridge eld sits on the ood plain of Overpeck Creek, a tributary of the Hackensack River, directly west of the Palisades on a mound of ll that was once mostly wetlands. Over nearly 400 years of settlement, the area has, in phases, been radically changed from its natural condition, creating an impractical environment in which human efforts and natural process con ict diametrically. At this basic understanding of the site, the team's design aimed to investigate how the town could develop by the Overpeck Creek, so as to maximize social and economic bene t to Ridge eld as a whole, while respecting and even engaging the overwhelming environmental constraints at play on the site. In other words, we explored the possibility of reconnecting the physicality of the site with its natural identity.

Toward the end of our project we came to the realization that our design process had swung back and forth like a pendulum, between two sides, two ways of looking at our site ,one anthropocentric the other focused on nature. Through many iterations of design, our desire to integrate human and natural process pushed us to

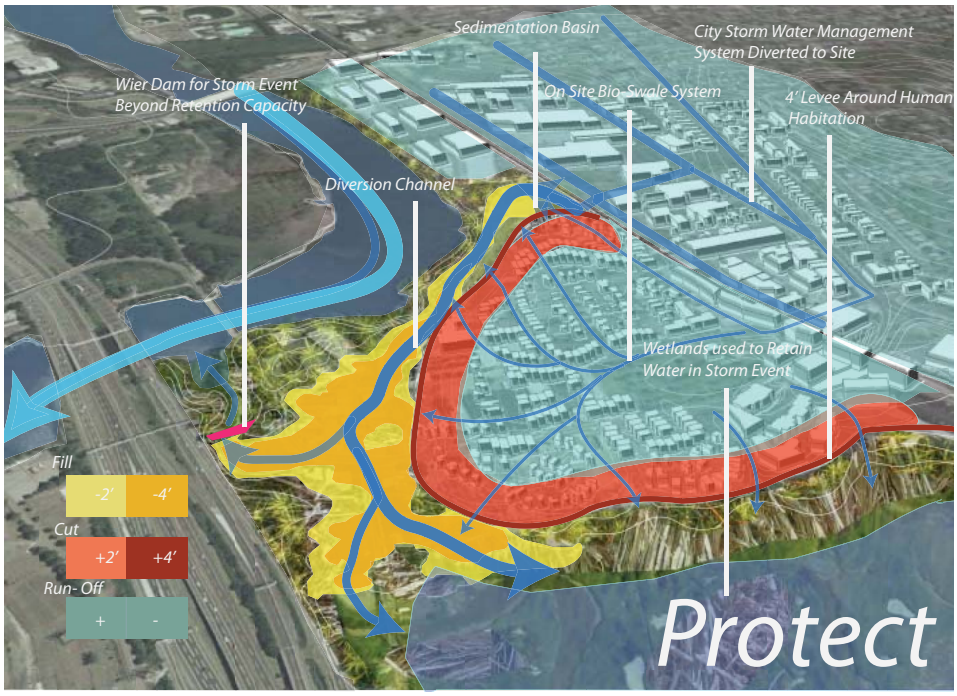


extreme solutions on either side, engendering designs that, while thoroughly impractical, looked for the greatest bene ts for our client or the greatest ecological restoration for the site.

Ultimately we discovered that these two goals were one in the same -- if we could only combine the most signi cant solutions for each argument into a cogent whole, with the general understanding that what is best for natural processes and the ecology of the site was in most instances best for man and his relationship with that place, and that what was most sustainable and smartest for the town would best bene t its natural environment. The team believed strongly from the start that the signi cance of nature on the site should not be underestimated. Given its location at the very northern end of the Meadowlands district, it has the potential to become part one of the last great remaining open spaces in the New York Metropolitan area, and in doing so expand and enhance the identity of the town.

Nevertheless many barriers stand in the way of this presumed objective. As we were to discover through the months of design, the great number of questions that arise in trying to expand and reorganize settlement with respect to the urban context of Ridge eld while simultaneously re ecting on ecological restoration and respect to natural process lead to questions such as "How close should wetlands be to residential development?" and "to what extent can forest penetrate high density housing before too much parking or semi public outdoor space is forfeited?" More importantly this lead us toward recognizing systems, both contrived and natural, that share common functions, patterns, and geometries, and served as a starting point toward integrating, or combining structures in our planning efforts to maximize the usage of space and increase long term sustainability.

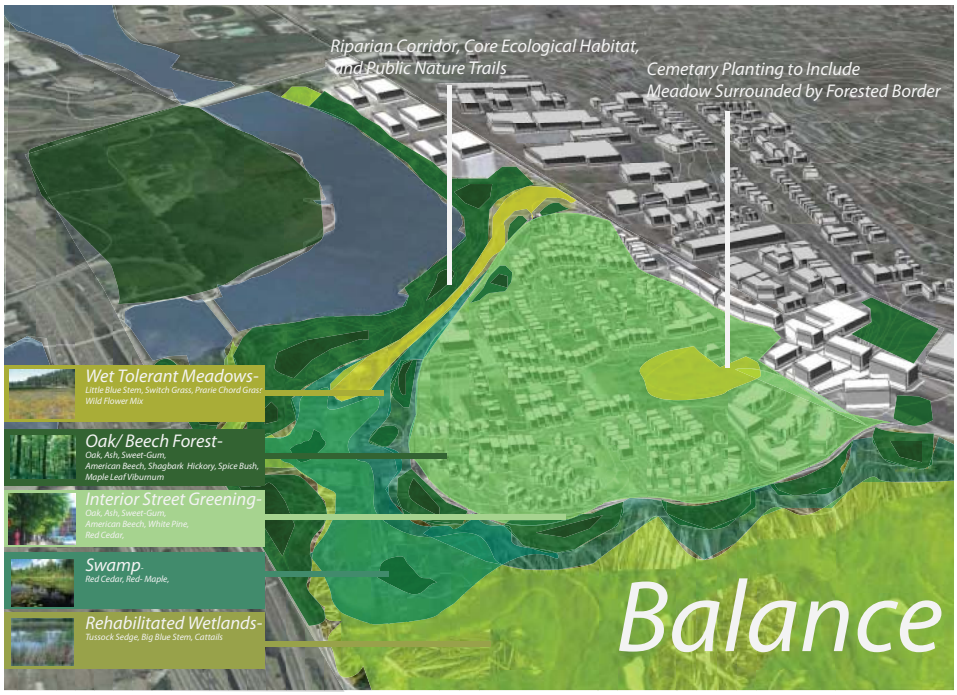
Our exploration of combining functions began with the concern about ooding. Our analysis clearly indicated that despite the efforts of The Public Service Electric and Gas Company, and their elaborate and ecologically costly ooding measures, the site would continue to be inundated in seasonal storm events. The team's assessment suggested that its current ood prone areas would be essentially unsuitable for human development in the future due to sea level rise. As such new development would need to be safely situated away from ood waters, older structures used to the end of their usefulness or design life would then be removed permanently from the ood zone, including the transformer station, while additional protective

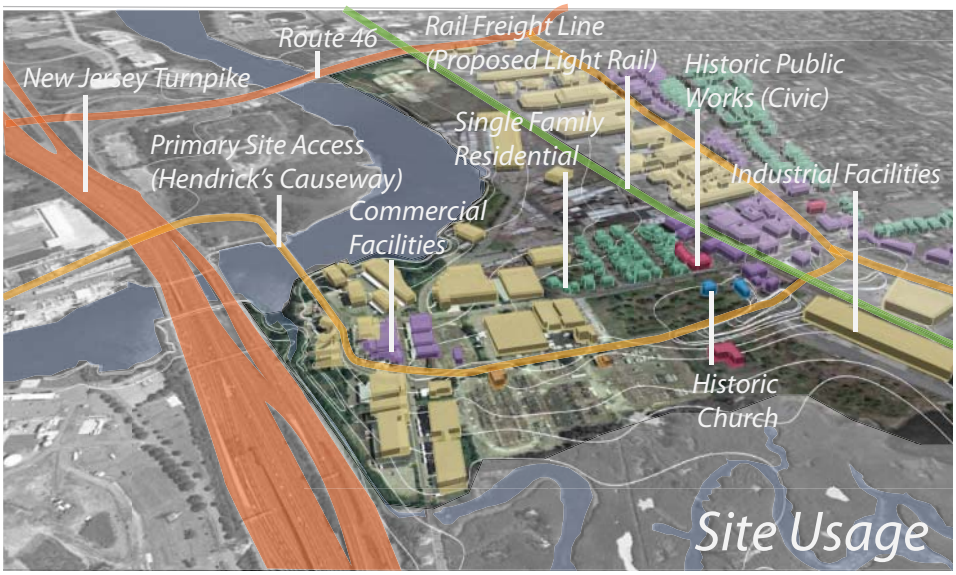


measures, such as a levee would be crucial toward preventing damage in major storm events. However, this desire to protect human development was simultaneously perceived by our group as a strong act of separation between man and nature, something we had not wanted to do. The basis of a levee is a structure meant to separate water from land, and in doing so, would act strongly against our intent of connecting the people within the developed area from the Overpeck Creek's waterfront by placing a large mound between them. Our solution was to modify the typology and grading of the levee, so that rather than a large obvious structure, our levee begins as shallow back ll within the development around the 14' contour line and extends outward at that elevation, rising to 16' above sea level and then terminating at a 4' wall of steel pilings meant to hold back soil from erosion. Below that level begins, for most of its perimeter, oak forest, swamp, and meadow plantings. The walkway, a 15' wide gravel pathway which we refer to as 'The Promenade' sits atop the levee's 16' crest. It begins at the south end of the central plaza and terminates, after completing a loop around the exterior, at the northern most point of residential development along the sedimentation basin.

Controlling ooding did not however stop at our efforts to raise and protect much of the site above the documented ood zone. Regional and town analysis pointed out that the primary reasons for ooding within the Overpeck Creek watershed were the buildup of impervious surfaces over the bulk of the palisades and lling the absorbent soils of most wetlands. While we understood simply that our site design would be unable to directly affect these existing conditions within the region, that it would be possible to use the site for controlling some of the town's excess run off as an example of responsible water management, and an opportunity to improve the hydrologic conditions within the wetlands.

Class analysis of the wetlands to the south of our site indicated to the project team that they were not receiving adequate water to maintain ecological health because of the tide gates and the high clay urban soils surrounding them that would hinder if not block ground water migration. We saw the convergence of these two problems as an opportunity to use a portion of the towns excess storm water discharge which would normally ow into Overpeck Creek and out through the tide gates toward improving conditions within the wetlands. Such a system might be used for sequestering peak rainwater discharge from Ridge eld's industrial district up onto the rst short ridge before Wolf creek, and additionally perhaps for a stretch

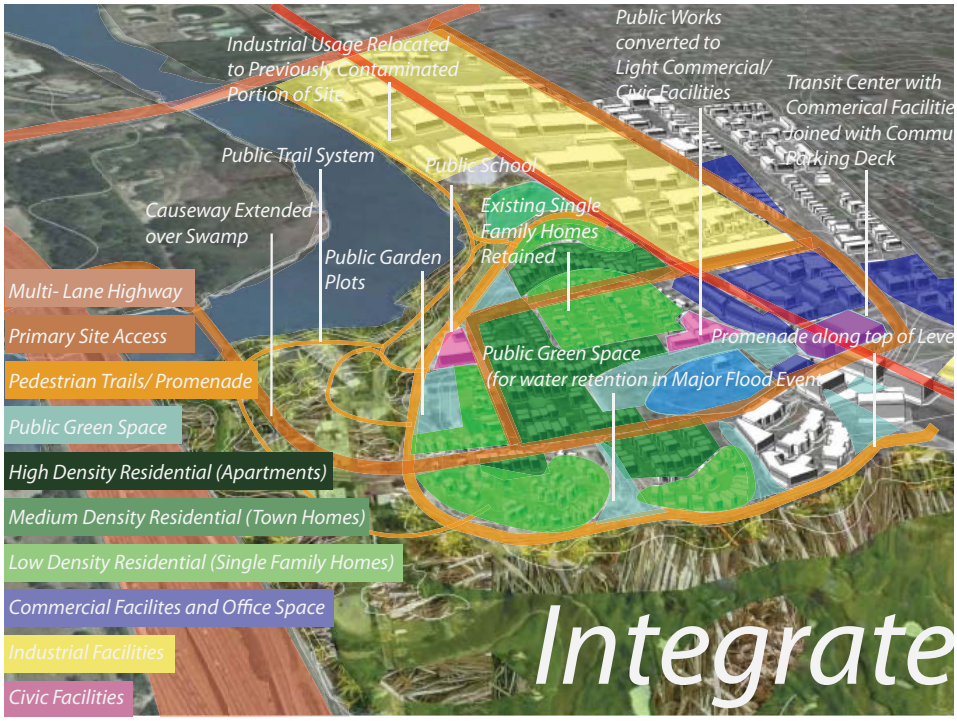


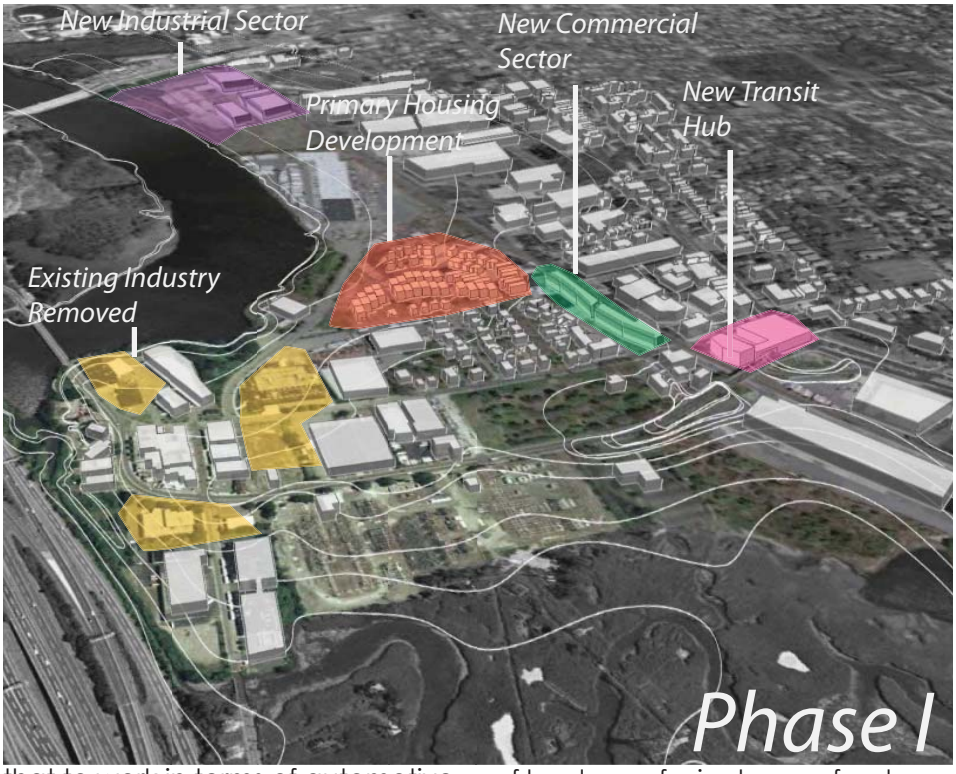


of the turnpike and route 46. Using information obtained from research done by Dr. Beth Ravit and colleagues for the Teaneck Meadowlands center, our group determined that it would be possible to predict and model the amount of runoff that Ridge eld would produce in various storm events, making it possible to size for the amount of run off the wetlands could store, simultaneously bene tting ecological restoration and responsible water management.

The immediate problem in this solution was that the wetlands are to the south, while the bulk of the area that would be draining into the Overpeck creek is to the north and west. The only solution we could see would be to excavate a channel across the site to convey water between the towns existing integrated water management system, and the intake channel leading to the wetlands. The channel could be situated on the outside of the levee, and be relatively shallow allowing for swamp and wet tolerant meadows to grow, acting to slow storm waters during a discharge event to prevent erosion. However the true beauty of excavating such a channel for water management is that it would act toward balancing our cut and ll calculations and provide the necessary ll for creating the levee. Lastly for the end of managing water we looked toward the residential interior of the site. We felt that both within and outside of the site water should be a major focusing point and in some way dictate the spatial arrangement of development on the site. When, in the nal phase we began to develop a dentritic system of pedestrian spaces that formed a spectrum of most public to most private space across the site, it became a clear choice to combine this with the path of water over the site from its highest points at the center and its lowest points at the edge. Together the system of shallow swales and paved walkways that border on them, follow from the central plaza, which is mostly hard-scape, across the central axon along what is now Edgewater Avenue, into the core open space of our residential development and from there diffusing into a series of smaller swales to interface with the levee before being discharged into the swamps and wetlands. The process through which water actually diffuses out of the site involves a series of small over ow weirs to slow the water's velocity and ultimately an elevated invert for nal discharge through the levee meant to prevent ood waters from forcing their way back into the site, but also allowing run off to escape the interior before it rises above the level of the promenade or rst oor of homes.

Developing a concept for the interior of the site, and then forcing

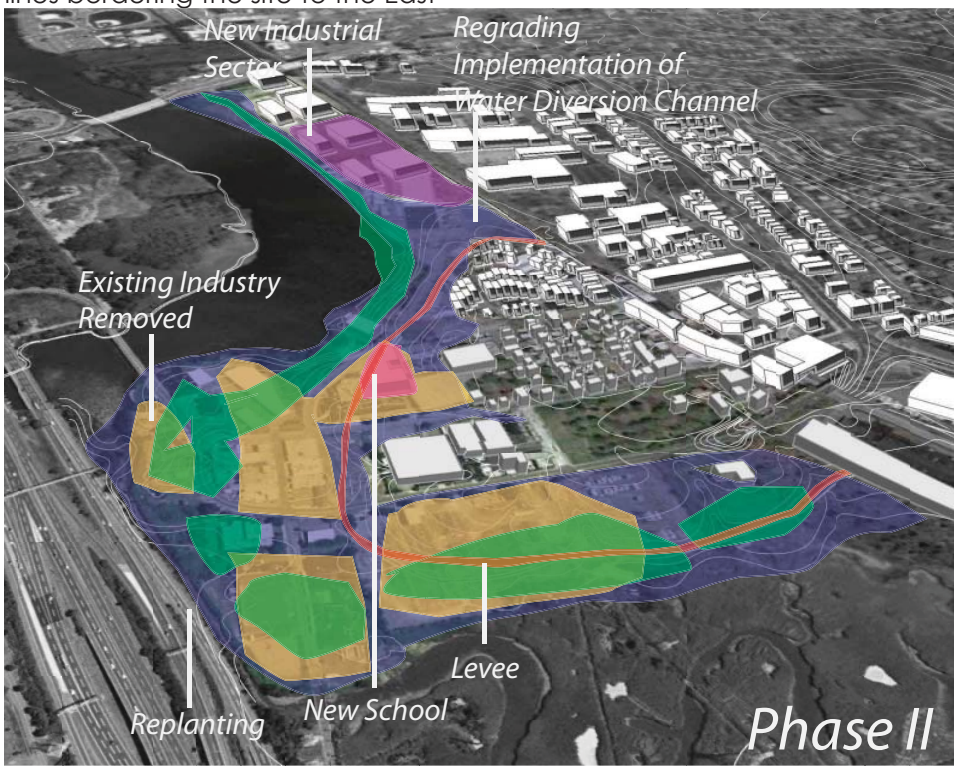


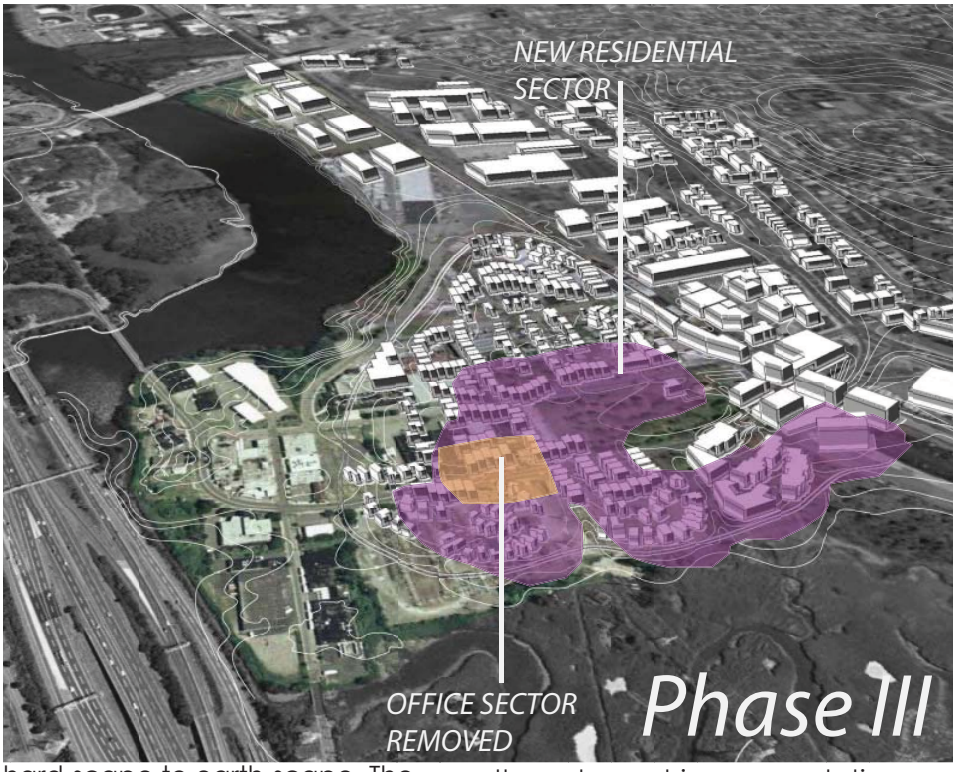


that to work in terms of automotive circulation, distribution of public and semi public space, necessary building space for each given density's residential needs, while respecting a reasonable timeline in which the bulk of this project could be approached, loomed for much of the project as a major obstacle. The rst major critique for the project team's master plan was met with considerable apprehension primarily for this reason, that the scale and arrangement had no relation with the town or the type of experience we were trying to create. The only recourse toward confronting such harsh critique was to reinitiate an in depth inventory and analysis phase, developing new goals, and coming to an understanding of how to integrate nature throughout the site rather than fortifying against it. Still we were still able to retain aspects of our earliest design moves, such as removing buildings from the ood zone or moving the industry to the northern end of the site to provide access from route 46 and grant a use for the contaminated portion of land, an ef cient way of reducing the truck traf c around residential areas.

We began at the understanding that light rail tracks were proposed along the existing freight lines bordering the site to the East and that a light rail stop would be situated at an unknown location along them, bordering the site. The sites location, directly adjacent to the meadowlands, 5 miles west of central Manhattan, and near to the center of a Super City Region of over 20 million people, makes it an ideal place for residents working in the New York area who would ideally want to live in a more naturalized setting. However, after completing the conceptual basis of our plan, the need for proper circulation, ample parking, de ned land use, and ideal residential densities required the project team to revert to planning mode. The predisposed requirements of the project team outlined speci cally the desire for the human aspects of the site to work like a well oiled machine, agreeable for its functionality.

Beginning again at the point of highest usage, and highest elevation, the transit hub, is designed for heavy density usage radiating to low density single family units around the periphery, from





hard-scape to earth-scape. The decrease in density radiating from center ensures that the greatest investments will be the most secure in the face of ood concerns, and simultaneously given the assumption that high density social usage will require impervious surfaces; this zone will create the greatest amount of runoff, making for a start of such an alluvial discharge system.

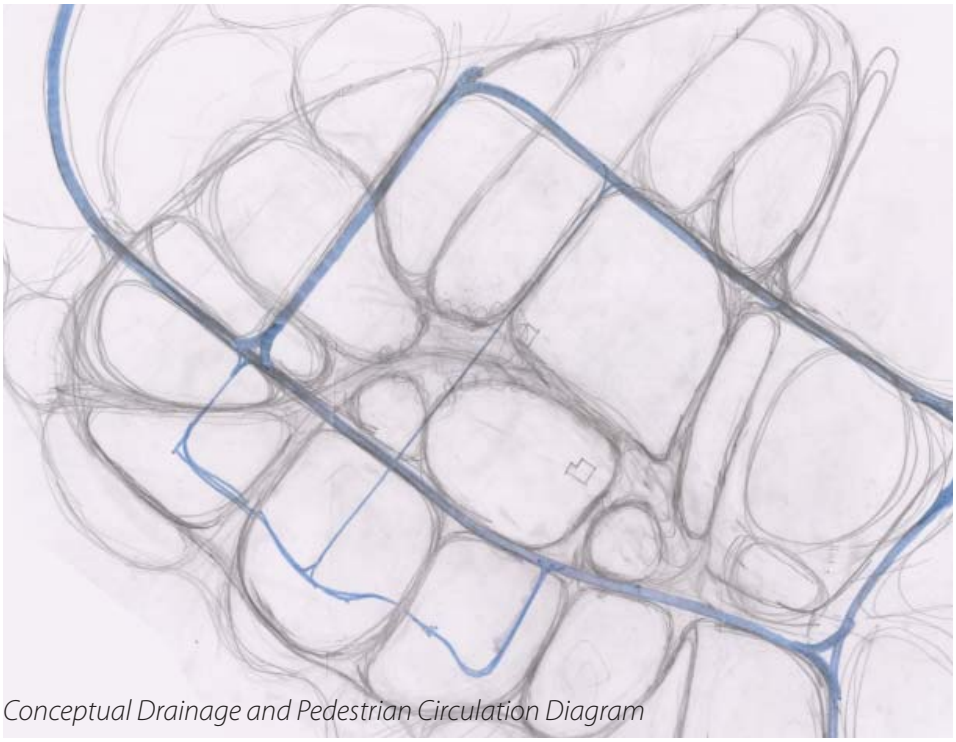
Another intention, combined with community interaction and the availability of easy transportation via the new transportation hub, was to decrease the number of streets and the width of the remaining streets. Throughout this box design phase, the street pattern remained oriented on the grid pattern and all of the buildings and various spaces were de ned as different combinations of squares. The box designs began to represent a functional, but once again, heavy handed approach to designing the site.

Armed with new information through graphic representations of ideal solutions. Hack and Lynch (1984) provided the framework for density information, street size, and typical human usage patterns. A 1000 square foot box was interspersed throughout the site, with various patterns through several

necessary to t our planned units into the de ned geometries and spaces we'd created, the nal concept began to unfurl. The project team stepped away from a primarily planning driven model to utilize the strong concepts promoted by landscape architecture. The experience of the users on a daily basis, the combination of several complex natural and human functions, and the beauty of solving all of the problems concerning a speci c community by relating the landscape to the people, the natural context and the urban fabric all became important factors to the success of the project. The church remained, not as a dainty symbol representing poor planning practices in the past, but as the gurehead of the central social space of the site, to provide context and relation to the cultural landscape.

As a rst attempt the project team developed a series of desired typologies for the site. A wetlands unit, a parking unit, a street unit, a housing unit, an industrial unit and an open space unit were de ned

Early Stage Illustative Concept Plan (Modular Boxes)

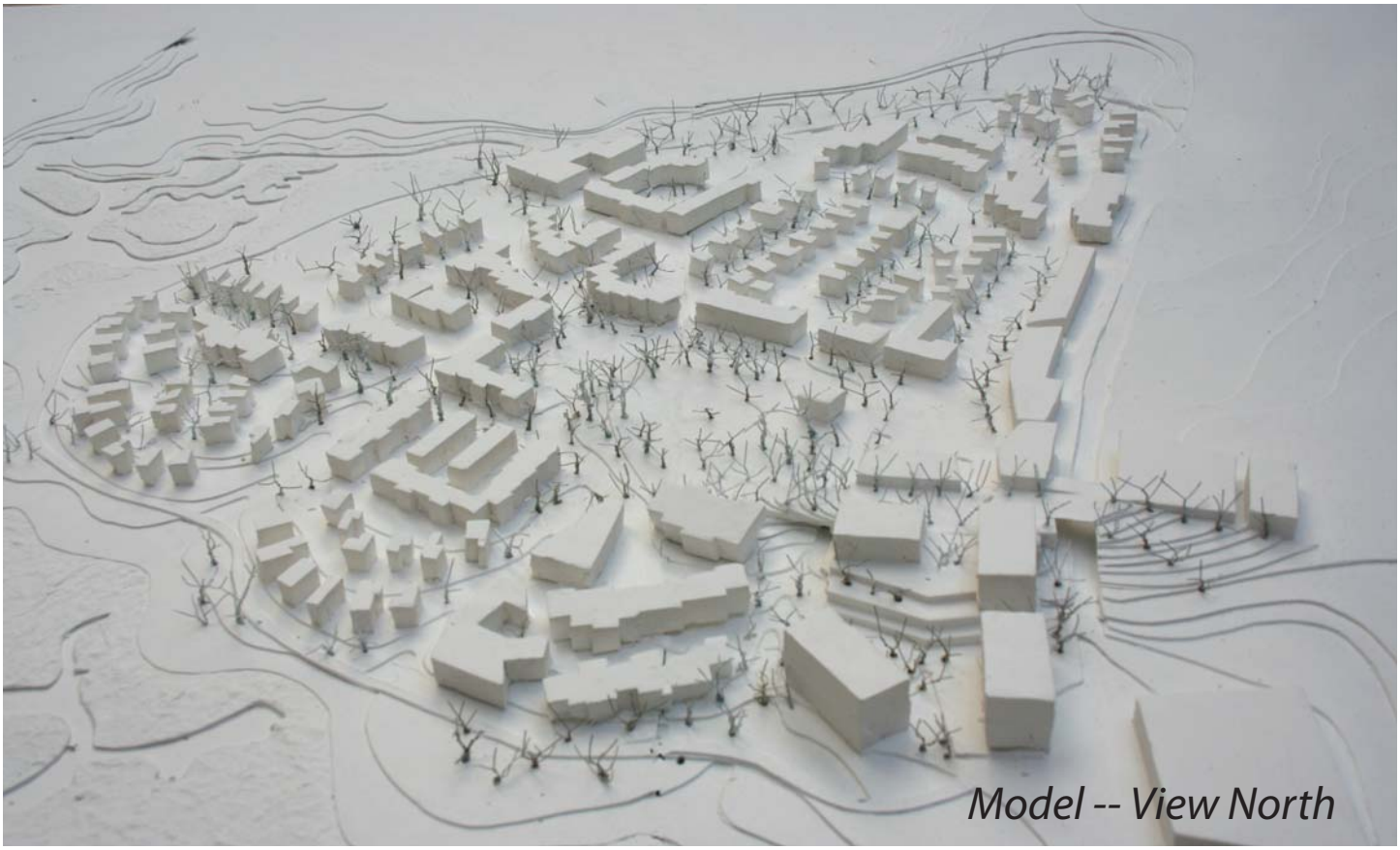


Conceptual Drainage and Pedestrian Circulation Diagram

iterations, each box representing one of the de ned typologies. This modular approach was an effective method of imposing measured and metered requirements on the site while retaining exibility for our ever evolving spatial organizations. We began with a working density of around 32 units per acre, around that of Hoboken.

Inspired by a lecture given by Dr. Kyle Beidler on his thesis work, we took toward creating residential districts that catered to community interaction. We understood intrinsically that the central plaza spaces would be highly social public spaces and that in order for many of the residential development to engender a true sense of community and place it would be necessary to treat the pedestrian throughways as a common public space on the interior, similar to how Radburn is arranged. Backed to this space would be the smaller semi public back yards and patio spaces of town homes and single family units. The entranceways of each structure on the site will be traditionally fronted toward the street for simplicity and easy accessibility, however many of the front spaces are meant to be semi public as many of the frontages are pulled away from the street. For townhouses, front car parks are optional as ample street parking is provided for the residents, and each single family unit has its own driveway. This community interaction would help maintain the integrity of the design and allow the users of the site to retain safety and identity amongst themselves. When all the chips were nally down and a nal master plan produced, we completed one last inventory and analysis of what we had made. Where we had started aiming for 32 units per acre, we came up with an average of 10 units per acre for the area we had developed for residential use, with distinct low density (6-8 housing units /acre) areas, over 140 medium density town homes (10-12 units/ acre), and a cluster of higher density apartments directly adjacent to the transit stop (40 units/ acre). Over 550 units would be created to bring the total maximum population of the development to around 1300-1400 individuals assuming 2.5 persons per unit.

Late Stage Illustrative Concept Plan



Model -- View North

Model -- View North East

4.5. Reconnect

4.5.1 Central Plaza Site Design

Ryan Miller

The plaza is intended to be the central social space for the community developed in the project team's master plan. Moreover it is the body, the root of the axons that extend into the pedestrian circulation routes and the beginning of a spectrum between public and private spaces. It must act as an entrance and a dismemberment point from where residents can reach New York through the light rail lines which border on its east, or from where visitors could head south along the promenade for a walk through the wetlands.

In the center is a large gently sloped interior plaza of brownstone pavers, creating a depression around which two terraces of concrete retaining walls act to enhance spatial de nition and de ne circulation around the plaza while creating seating under the shade of sugar maples.

The plaza itself is envisioned as a place for public performances or events, group gatherings, weekly open air markets, or just for casual people watching. Between the brownstone center and the terraces would be a 12' wide rain garden meant to create a visual connection between this social core and the naturalized planting materials used on the exterior of the site in the wet tolerant meadows. This rain garden would be the beginning of the run off management system of swales that moves in conjunction with pedestrian public space.

Its exterior ring acts to easily convey traf c around the central plaza itself. At its boundaries is the Church to the west, which will remain in operation and have its parking lot moved around back at the border of the cemetery. To the south is a four story building that will act to mediate the grade change between the top of the bridge the passes over the rail road tracks, providing additional pedestrian circulation, and providing four 1000 ft2 per oor commercial facilities to a total of 16,000 feet, these facilities will ideally contain small retailers, a restaurant or café, for which outdoor seating room is provided beneath a second row of sugar maples.

Parking for these facilities will be accommodated both on Hendricks's causeway and the adjoining parking deck situated on the eastern side of the tracks. Next to this facility is the grand staircase for pedestrians entering the site on Hendricks's causeway. It will also act to facilitate circulation between the high density apartments directly to the south of the site. To the west is the transit center, it provides public circulation options including escalators and elevators to connect with the Parking deck and Hendricks's Causeway bridge to allow access down to the tracks. Inside, basic commercial amenities such as a convenience store and or deli would be suggested, all fronted toward the plaza.

Directly north of this four story structure is the primary pedestrian track access point, leading to a set of stairs and a handicap access ramp that lead down to the waiting platform. Between this space and the three story commercial and of ce space building cited just to the north would be over 1500 ft2 for bike parking, large enough to t over 200 bikes.

The last major structure to front this space is the public works building to the north. I see this structure being converted into a type of town civic structure that could either act as a town museum or archive, or contain commercial facilities dependent upon need.

Having the church and transit hub situated directly across the plaza from one another helps to de ne the space, but moreover the line of site between them serves as a connection between these two most prominent aspects of the sites cultural landscape, the connection between them symbolic of the link between the sites history and its future.

As people cross through the space toward the church through the central plaza they are encouraged to consider the sites past and the various elements of the natural and cultural landscape that exist within it.

4.5 Ridgefield New Jersey

4.5.2 High - Density Residential Development

John Hencken

The high-density section of the site was an important part of the design to highlight as an individual design. By sticking to the guidelines outlined by the master plan, the constraints that guided included spatial orientation, physical location, context, views, and density requirements. The concept was to create a high density living arrangement that provided adequate private space for the inhabitants, retain semi-public space for the residents of the larger community, and engage the users of the site with the natural processes that occur on and around the site continuously throughout time, specifically rain events. It was important to make the site elements functional at ground level but also provide interest for residents when viewed from above.

The design process began with a problems and opportunities diagram that carefully delineated the private, public, and semi-public sections of the site, the vehicular and pedestrian circulation, the main entrances and exits, and the potential problems encountered with organizing the outdoor spaces on the site. Throughout the process, the design focus changed from an infiltration of nature throughout the site, to a focus that allowed for more open ended user defined activity. This was necessary to promote healthy living space for the sheer quantity of people inhabiting the site. The central access through the site retained the concept of infusing natural processes with daily living by engaging the inhabitants with the natural processes occurring there over the seasons and during storm events.

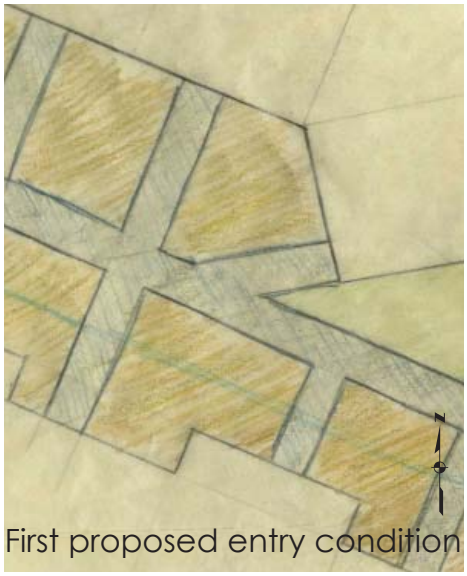
The desired elements included high-density high rise buildings with supreme views of the site, town, and related wetlands. Ample parking for the residents was required, while the west and north sections of the site needed to remain unobstructed, because the transit hub and the main entrance to the promenade from the transit hub should be exemplified to provide opportunities for other residents and visitors to interact with the site and engage with the site elements without disturbing the private quarters of the inhabitants. Access to the transit hub should be easy from any part of the site, due to the close proximity and probable typology of transit oriented resident. This site offers a real natural experience with an easy commute to New York City via the proposed light rail line.

To accommodate parking, a two level parking structure was created under the two northern building complexes, bringing the open space on the site up to grade with the Hendricks Causeway and the proposed transit hub. Since flooding on site was reduced through the efforts made in the master plan, the proximity of the high-density housing section to the elevated portion of the Hendricks Causeway made the parking structure feasible and desirable. The entrance to the parking structure would initiate across from where Church Street currently begins and would spiral two stories down to the bottom floor, similar to the long term parking garages at Newark International Airport. The parking structures offer 40,000 sq. ft. of parking and access space, which allows for one space per residential unit and also provides spaces for visitors. Each building above the parking structure would have its own internal access. Entrances and exits would also be provided on each parking level directly into the outdoor environment at strategic locations.

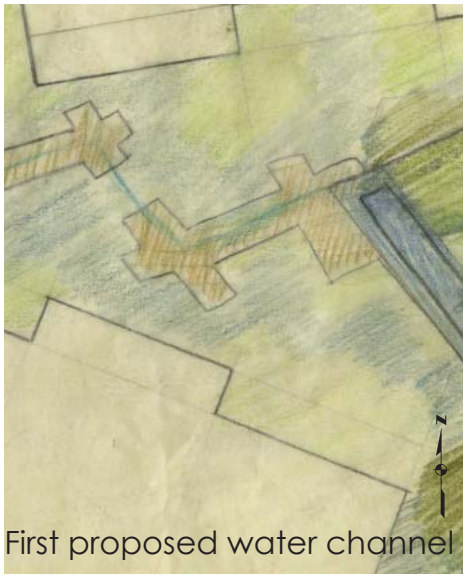
The buildings were designed to provide a high-density situation on site. 194 units of 1000 sq. ft. were implemented, with adequate room for indoor access and an additional 200 sq. ft. of outdoor living space. This provides the site with a high-

density section that approaches 40 units per acre. They were oriented based on sun and shade patterns, spatial requirements, desired views, and entrance and exit placement. The exterior space on the ground level would be demarcated by hedges, while the upper levels of each building would receive balconies. Every effort was made to create entrance and exit conditions that allowed for easy access to each building.

The available outdoor spaces within the private areas developed into mostly open lawn space, where unprogrammed activities could occur, while the problems created by the grade change required for the parking structures allowed for interesting forms to create safe and easy access. These forms are the intersecting art desired for view from above. The grade change also provided an opportunity to explore the interaction of the human interface within the ever changing natural interface. During storm events, rain generated by the impervious surfaces of the buildings was utilized to enhance the pedestrian paths. Trough systems were developed to transfer water gathered on site through elevated vegetated boxes, bringing the water up to an interactive height.



First proposed entry condition

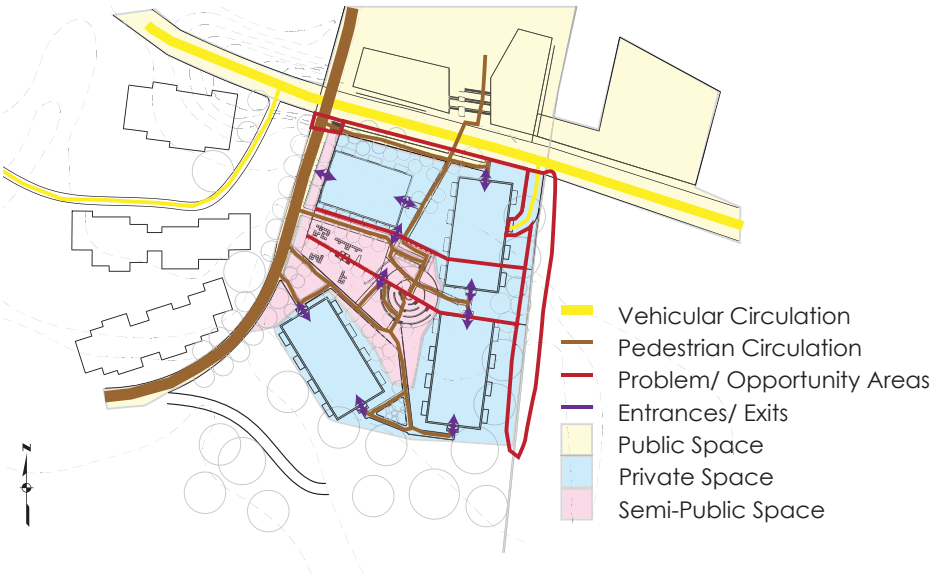


First proposed water channel

Vegetation utilized in these boxes would be similar to those found on the edge of the wetlands throughout the master plan. Vegetation was utilized to provide shade and define spatial composition of open spaces found within the site. It was utilized to buffer the rail road, and engage the users with the change from the upland condition found in the Township of Ridgefield, to the wetland and swamp condition found on the site.

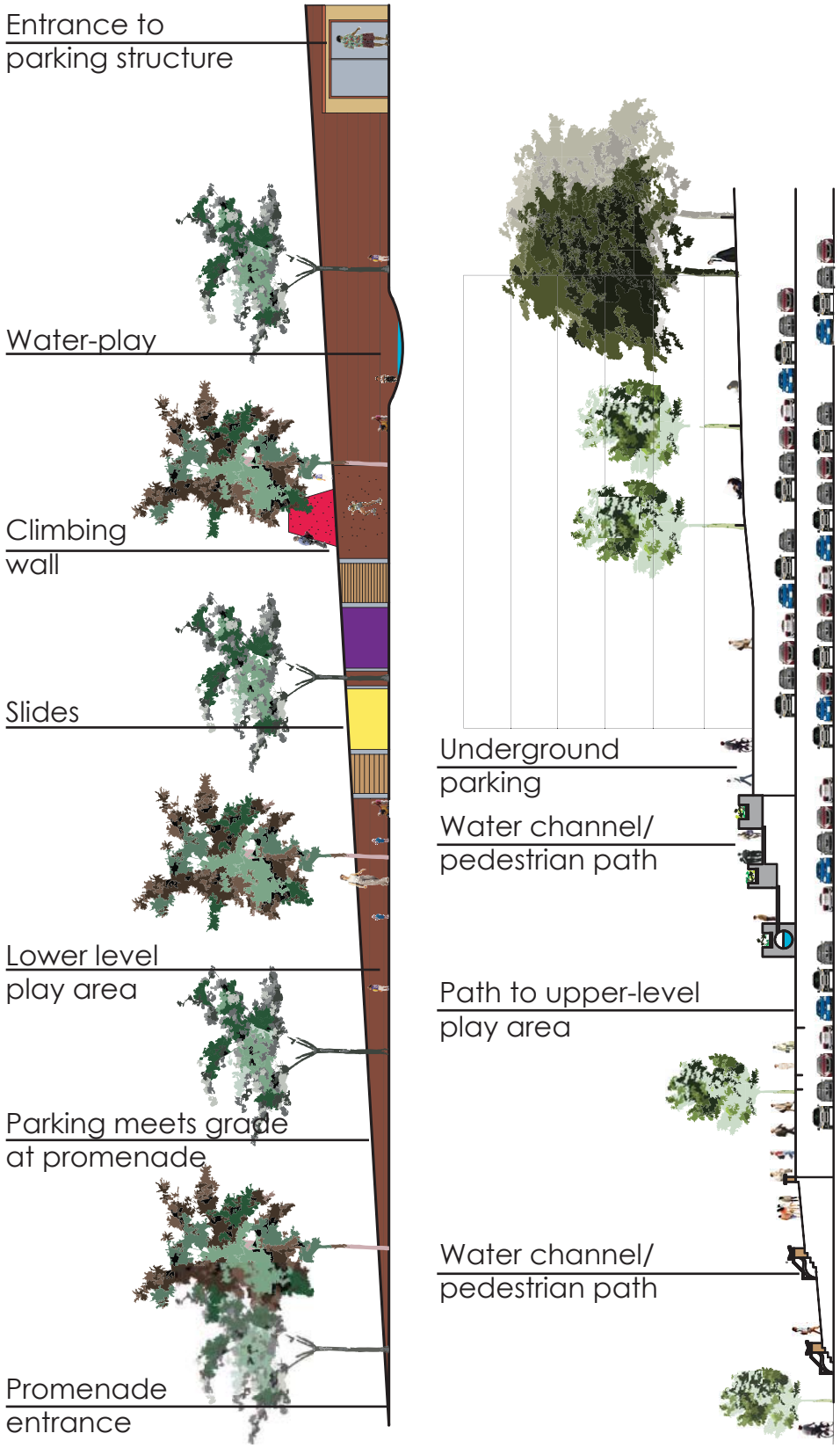
A play area located close to the promenade entrance and placed between two of the buildings on site was an interesting use of the semi-public space and provided an interesting opportunity for site details with regard to the grade change encountered there. The location of the play area provides the most safety available on the site, while still remaining accessible to the public. It also provides easy viewing from many of the apartments, which furthermore increases the safety and allows for parents to watch their children at play. The play area includes a climbing wall and slides that would be interactive with the wall created by the parking structure. A water feature that stems off of the radial forms defining the uphill space and access situation, would provide an interactive stream and puddle where children could engage with rainwater as a rain event is happening and shortly thereafter.

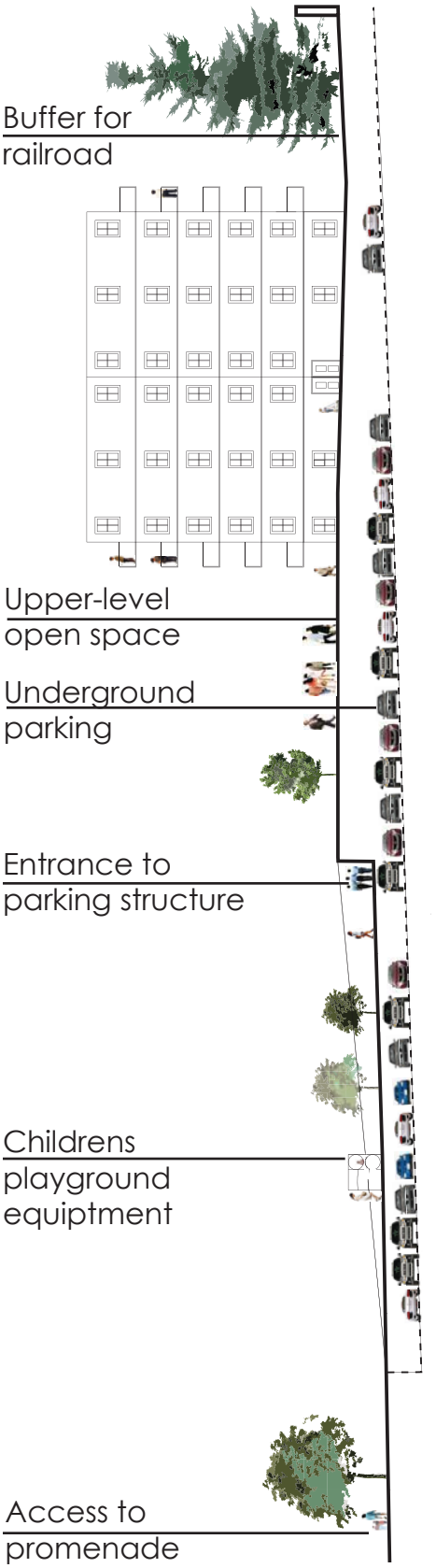
The concept was carried through the design consistently and was explored in 1" = 10' scale sections and enlarged plan view. The sections detail the play area, and the two water systems with highlights of how the parking system would begin to work and how the interactive storm water system would begin to work. The plan view exemplifies the view of two opposing forces acting on each other and coming to life during storm events. To be viewed from above, this plan, while offering



Design diagram

the pedestrian circulation and defining spaces for the users on ground level, also provided an artistic gesture for the inhabitants with inward facing boundaries.





Plan

View - looking southwest

View - looking north

4.5 Reconnect

4.5.3 Transistion

John Novak

This site is located within the core of a newly designed Ridgefield. To the east is the proposed transit center that has commercial areas for shopping and represents a fast-paced community center atmosphere. This area is linked to high density housing and the original Ridgefield housing units to the east. To the south-east is an existing cemetery that has access to public spaces and also has access to the historic church. The west and northern areas are two/three story housing units with the back of the unit facing the center of the green space. Two to three story housing units surround the site on the north and west sides. This central open space provides a backyard condition for these residents.

The newly designed Ridgefield helps to link the urban core environment with the natural environment. The concept for this central open space is to help the transition between urban hardscape and the urban softscape. The natural open environment can be absorbed throughout by accessing the outer pedestrian promenade of the site. Accessing open space is limited to the regions along the perimeter of the site putting a restriction on open green space to the various mid density housing sectors.

Open green space is necessary within the core of the site. Providing a pedestrian oriented hardscaped transit center to the less dense residential properties would be an essential transition for an open green space to be present along this corridor. This space is essential for positive community interaction. Active and passive recreation, social activities, community events can all take place in this area while still providing public and private spaces that offer refuge for residents of the surrounding units. There would be public, semi public, private and semi-private areas programmed in this site that would allow for pedestrian access to the entire site allowing the need for vehicular traffic. As one would walk from the transit area and through the site there would be wide walkways which acknowledge that those walkways are public corridors for bicycle and pedestrian traffic. As you walk along the public walkways there is a display of landform transition from the hardscape areas to the softscape areas. As you walk along the public corridor the land displays a timeline from hardscaped material, followed by vegetation, then followed by landforms that gradually give into the green open space. These turf landforms can be used for all types of recreation. Kids can use them to play and adults could use them to lay and relax.

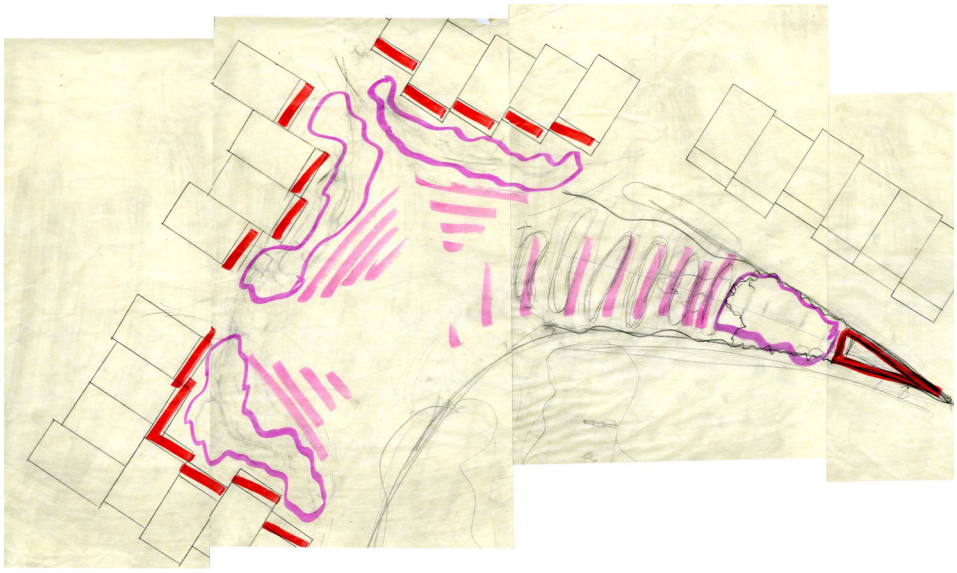
These wide public walkways branch off into smaller walkways that have access to the back of the housing units. The semi private spaces are defined by smaller pedestrian paths that lead to each individual residential unit. The spaces provided within offer residents a private space to gather while still remaining close to the urban core. These smaller walkways are surrounded by trees, other vegetation, and landforms. All of these combinations would create a semi-public space entering into the private space of the housing units. This would enable privacy for the residents in the area and would allow the appropriate pedestrian circulation.


Perspective A


2
1
Lawn
A
Cemetary
0
37.5
75
150'

Concept Trace

One of my first concept sketches shows how the urban hardscape gets blended with the urban softscape. The red indicates the hardscape housing units and the brick planting bed east of the site. The purple indicates the vegitation buffer that consists of hard and soft textured planting material and landforms. The landforms would then gradually blend with the open green space in the middle of the site.



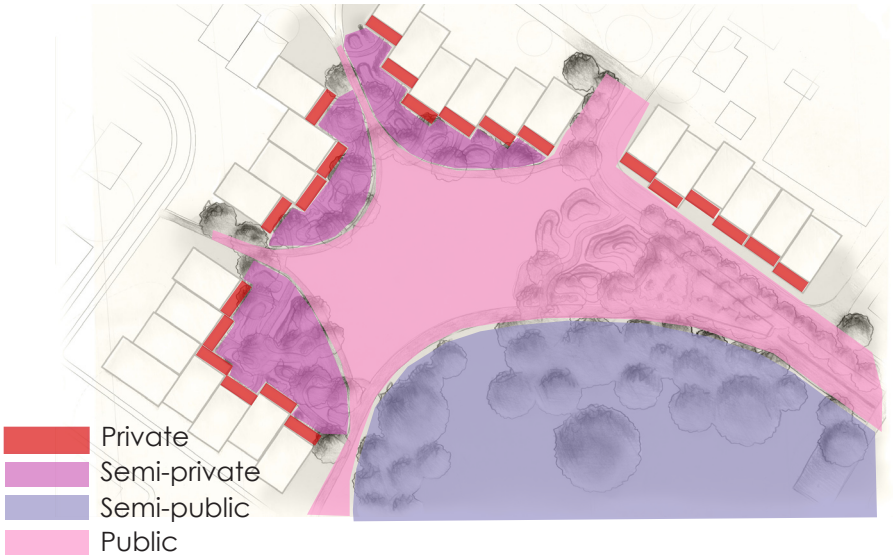
Circulation Trace

Circulation is important considering this site is the transistion point from the transit/commercial area to the residential units. Pedestrians would have to notice which aras are public and which are private. Vehicular would also have to be accessed but but hidden since it is a predominatly a pedestrain friendly designed community.

Section 1

Spaces

Taking my ideas from the trace concept, I designed the private spaces to be buffferd by semi-private areas. The semi private spaces are defined by smaller pedestrian paths that lead to each individual residential unit. The spaces provided within offer residents a private space to gather while still remaining close to the urban core. There would be a large open space in the middle of the site for passive and active recereation.

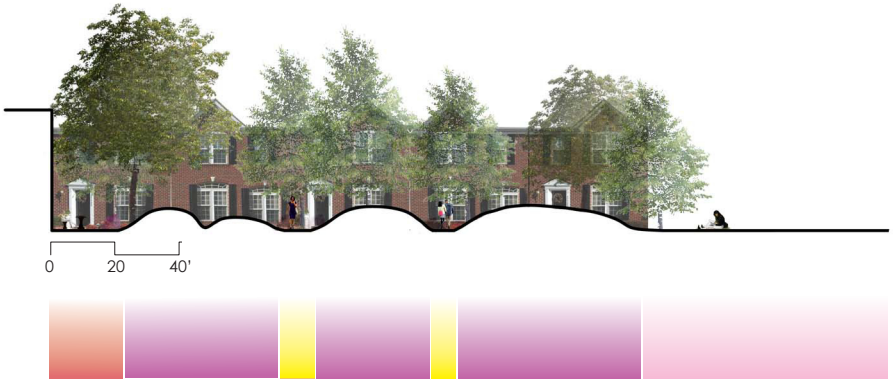


Circulation

The circulation displayed in this diagram shows the appropraite pedestrain and vehicular paths for this site. The vehicular traffic paths enable would still enable emergency access and allow for the vehicles to no be apart of this pedestrain dominated site. The pedestrian paths along the public corridor display a timeline that helps create an understanding of how the transition of urban to natural occurs through landforms and vegitation

Section 2

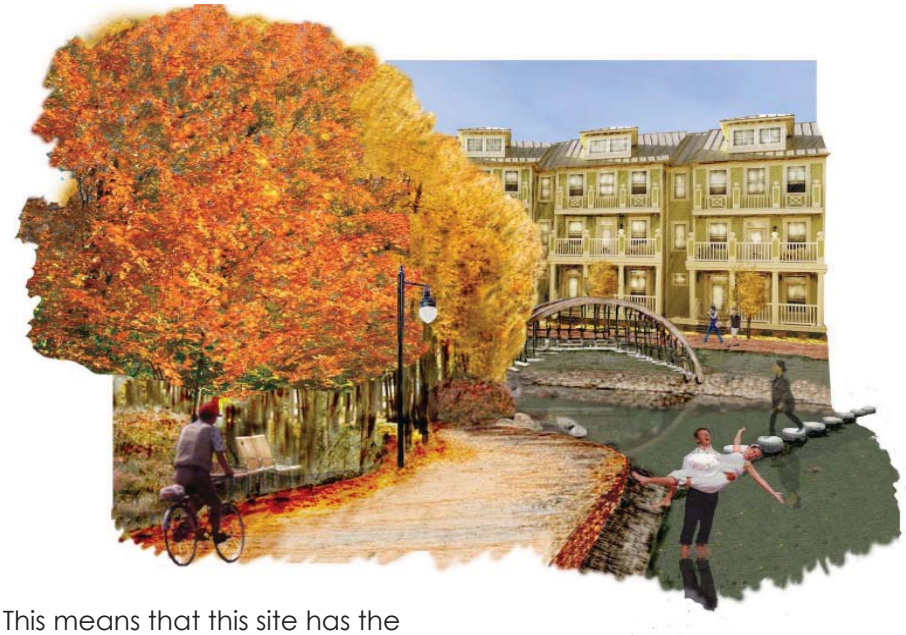
These two sections show the transition from urban hardscape to urban softscape. The housing units acting as the hardscape feature, vegitation and landforms as the gradual blend into the sodtscape. The private and public spaces are defined using the same colors as displayed above. Pedestrians in the semi-private spaces have a canopy overhead and four foot tall landforms that make for slightly secluded area. This space provides a transition to the public and private spaces.



4.5 Reconnect

4.5.4 Creating a Destination Wthout a Conclusion

Kyle Gaugler



There are several central factors inherent to this site that any design must respond to. First there is the stormwater that runs through Ridge eld and follows the topography lines down through the extent of the corridor and terminates into the meadowlands. This is the core of the Wetlands Conveyance Corridor. Creating a mode of transportation for the water on site and returning it to the wetlands. Secondly there are a variety of low density and higher density residences surrounding the site. The single family houses have lots and backyards where as the three story townhomes have no yards. This means that this site has the opportunity to serve as a gathering place for both densities and also as a primary means for outdoor recreation for the higher density residents. Looking at the density maps and taking into account the water runs through the middle of the corridor I found it important to not allow the water to divide the two types of residents. Lastly there is the green passageway that starts at the Ridge eld cemetery and runs through my site and ends at the levee. When the shape of this greenway is looked at in relation to the planned wet conditions on site, an interesting opportunity presents itself. These two forms overlap perfectly onto the levee. The whole site culminates on the levee. This is the mission of the design. Provide a area with recreational opportunity but also make an accessible, functional, beautiful means of getting to the waterfront and the meadowlands.

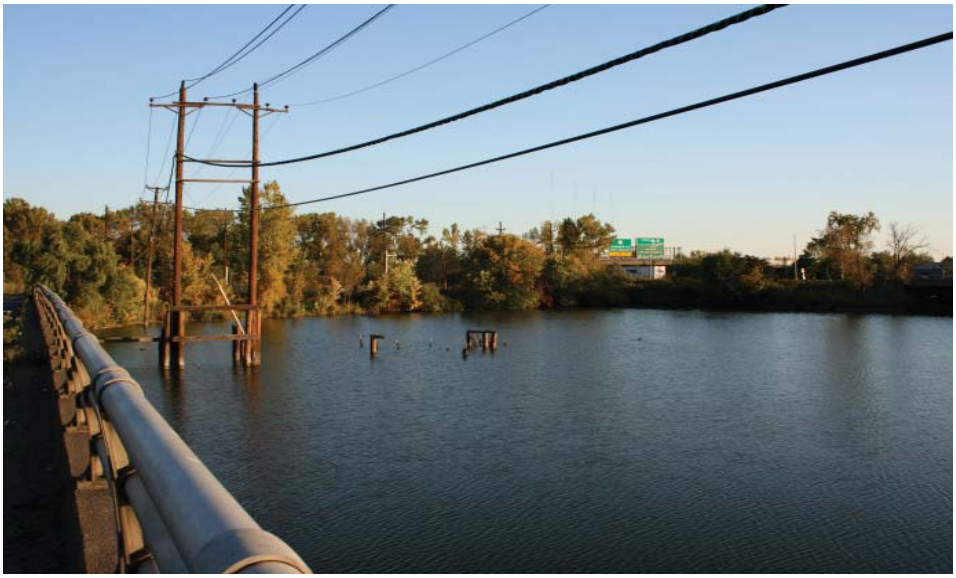
Waterflow and Slope

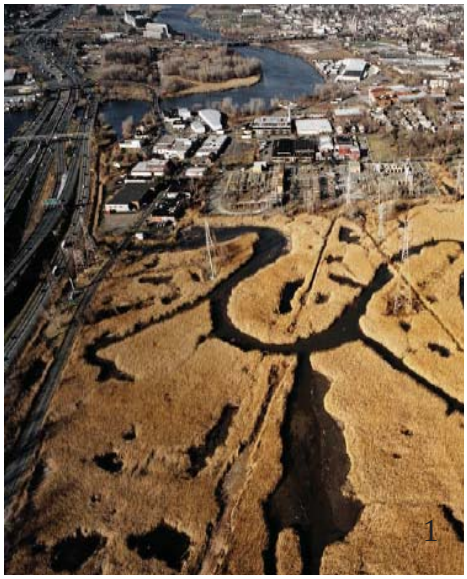
Housing Density

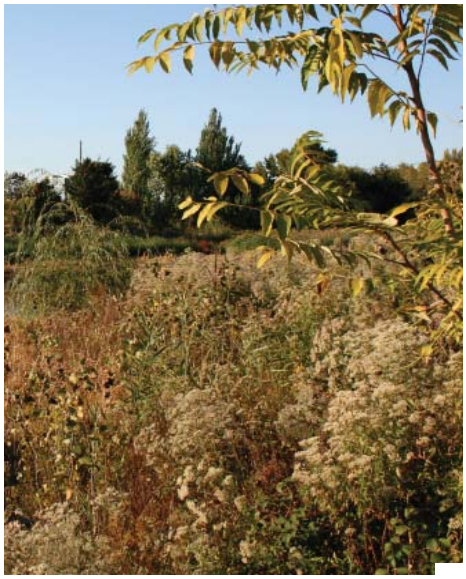
Opportunity

Plan


Parking
Townhouses
Parking
Retention
Lawn
Wetlands
0
20
80







This enormous opportunity can be exploited by increasing the views into the corridor by opening up the sides and the crown of the site to allow for vehicular view sheds. This will increase the sites exposure and ultimately bring more people into the design. These views are amplified through a smart planting design which partially buffer certain residences while reinforcing users view of the levee and ultimately the wetlands. The success of any park design can be measured by how many people use it. The existing vehicular circulation was expanded to include pull offs at two of the major viewpoints into the site. This allows for spontaneous exploration as well as provides handicapped parking spots. The pedestrian circulation reinforces the idea of pulling people through the site and terminating at the levee. The greenway intersects a busy two way street but is supported by a planted pedestrian island. The sidewalks all curve into the levee and really encourage walking through the site.

Views and Vegetation

Circulation

The sections across the depression show the opportunity for traversing the swale. It was extremely important to not allow the topography or the water to serve as a barrier between the two sides. The first are a series of elevated stepping stones which are designed to allow for comfortable walking across the swale and also serve to redirect the flow of water between the pillars. This allows for active recreation opportunities while creating a reliable means for crossing the swale in wet or dry conditions. The second section shows a more active way of crossing with monkey bars. This is designed for wet and dry use and would be a more vigorous way of crossing the swale while providing an element of excitement in wet conditions. The long section runs through the entire site from the entrance of the greenway to the wetlands. The existing slope allows for comfortable walking for the residents of the townhouses while providing access and views of the levee. The site serves as a vessel for bringing people and water to the wetlands. Once you reach the end of corridor you are presented with the levee which allows patrons to rediscover the wetlands which surrounds this township.

Swings Section

Steps Section

Full Site Section

5.0 Conclusions

5 Conclusion

Wolfram Hoefer

New Jersey is a great laboratory for the exploration of urban renewal concepts. The state is one of the first in the nation where space for development is becoming limited; only abandoned spaces are available in abundance. In most cases these locations are well equipped with traffic infrastructure, because that was put in place to serve former industrial production. The history of mixed development in New Jersey, placing housing and commerical areas close to each other, has the effect that today most brownfields are near existing settlements. This gives the opportunity to discuss adaptive re-use in a more complex way than just changing the zoning from industrial to residential and assigning a housing density that is only driven by expected market demands.

The Senior studio of 2008 studied the existing urban patterns and natural conditions of the western section of Ridgefield. The students developed proposals well worthy to be considered a significant contribution to the ongoing discussion, how to approach the modernization of New Jersey.

However a well developed infrastructure is one of the major assets of the state, the roads and railroads form barriers that intersect communities. In our case the north south running cargo line separates the western of Ridgefield from the major part of the town. With the introduction of a new light rail service on these tracks that situation might even become worse. Group # 4 saw this separation as the major obstacle for new development and proposed the elevation of the future light rail. It became obvious that this would solve the connectivity issue but would cause new difficulties.

A second large issue in New Jersey is how to approach the often very confusing mix of residential and commercial, how much to acknowledge the existing or to dear down old structures and work from a clean slate. At our site the historic paper mill was taken down. The students discussed the options of continuing the demolition process and building a new and more efficient residential development (see group # 3) or respecting the still existing community and limit new development to readily available land (group # 1). Group # 2 developed a proposal that would maintain existing homes but would increase density though significant infill. However all students took the proposed sea water level rise in consideration, group # 5 draw the conclusion that settlement should give way to the water to some extend.

Most remarkably was how the focus shifted over the course of the semester. At the beginning the students were mostly looking into the existing building infrastructure elements, later the focus shifted to the natural resources. It became more and more clear that Overpeck Creek and the adjacent Meadowlands are a major asset for Ridgefield and this part of Bergen County. All proposals relate to these landscape elements and enhance accessibility and ecological value.

These solutions can be considered inspiring proposals that show the opportunities how the existing natural features can become the spine for urban renewal in New Jersey and how a smart integration of abandoned sites in such concepts can be highly beneficial.

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3.0 Housing Density Case Studies

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mage 1: http://farm2.static.flickr.com/1316/997141225_80a2c47ad3.jpg?v=0

Image 2: http://farm1.static.flickr.com/225/5166982577

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Image 1 – http://www.beachblockneighbors.com

Image 2 - http://www.sojo1049.com/seven_wonders/index.htm

Image 3 – Photo courtesy Allyson Meo

3.9 Seaside, Florida

Image 1: www.dkolb.org/.../full-size/seas.hss.st.jpg

Image 2: faculty.evansville.edu

Image 3: www.dkolb.org

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"Image 2 : PROV H2103 glenard extent plan". Victorian Heritage Database. Heritage Council, Victoria. Dec 12, 2008. <http://vhd.heritage.vic.gov.au/vhd/heritagevic#detail_places;14277>

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3rd Image: Katie Lawnik

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4.4.1 Katie Lawnik
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2 "Raleigh City Market, Blake Street, Raleigh, NC" Google Maps. 2008, <http://maps.google.com>

4.4.2 Ray Schobert

Picture 1
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Picture 2
http://www.burlprocampus.com/
Picture 3
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