

8-1-2012

Community Reclamation: the Hybrid Building

Laura Maynard

Roger Williams University, lmaynard116@gmail.com

Follow this and additional works at: <http://docs.rwu.edu/archthese>



Part of the [Architecture Commons](#)

Recommended Citation

Maynard, Laura, "Community Reclamation: the Hybrid Building" (2012). *Architecture Theses*. Paper 84.
<http://docs.rwu.edu/archthese/84>

This Thesis is brought to you for free and open access by the School of Architecture, Art, and Historic Preservation Theses at DOCS@RWU. It has been accepted for inclusion in Architecture Theses by an authorized administrator of DOCS@RWU. For more information, please contact mwu@rwu.edu.

C o m m u n i t y R e c l a m a t i o n :
T h e H y b r i d B u i l d i n g

Laura Maynard
Bachelor of Science of Architecture
Architecture Department
School of Architecture, Art and Historic Preservation
July, 2012

Community Reclamation: The Hybrid Building

Graduate Thesis Project submitted to Roger Williams University, School of
Architecture, Art and Historic Preservation In fulfillment of the requirements
of the M. Arch Degree in Architecture In August 2012

By

Laura Maynard
Class of 2012

Stephen White
Dean
School of Architecture, Art and Historic Preservation

Robert Dermody
Advisor
Associate Professor of Architecture

Community Reclamation: The Hybrid Building

Laura Maynard

Committee:

Edgar G. Adams, Jr., Professor of Architecture

Hasan-Uddin Khan, Distinguished Professor of Architecture and Historic Preservation

Roberto Viola Ochoa, Adjunct Faculty

Project Proposal Advisor:

Hasan-Uddin Khan, Distinguished Professor of Architecture and Historic Preservation

Table of Contents

Preliminary Pages		Appendices	46
Signature Page	i	A: Site Images	47
Acknowledgements	ii	B: City Zoning/Regulatory Data	53
Table of Contents	iii	C: City Mapping	57
List of Figures	iv	D: Environmental Conditions	59
Personal Manifesto	v	E. Ecological Systems	67
Project Brief	vi	F. Precedents	76
		Ricardo Bofill Taller de Arquitectura	77
Site Story: Hartford CT	2	Pompidou Centre	79
The Beginning	3	Neues Museum	81
Statistics	5	Tate Modern Gallery	83
Revitalization Initiatives	7	ICA	85
Downtown City vs. Outer Neighborhoods	8	Columbia Northwest Corner Building	87
		Indianapolis Children's Museum	89
Parkville Neighborhood	10	Habitat for Humanity	91
Historical Parkville	11	Carpenters Center	93
Architectural Value	12	Steel Yard	95
Accessibility	13	Visitor Information Center	99
Neighborhood Statistics	15	Old West Photography Project	
		G. Poster Proposal	101
Bartholomew Industrial Corridor	18	H. Bibliography	103
Project Introduction	19		
City Proposals	21		
169 Bartholomew Avenue	22		
Site Overview	23		
Program Breakdown	24		
Design Drawings	26		
Site	27		
Phase 1	29		
The Hybrid	31		
Merging New and Old	35		
Theater Design	41		
Technical Information	42		

List of Figures

1. Jean Nouvel, Louvre Abu Dhabi, UAE
2. Herzog and De Meuron, Dominus Winery Facade, Napa Valley
3. Children in a slum in Mumbai
4. OMA, Seattle Public Library, Seattle Washington
5. L. Maynard, Thesis Development Storyboard
6. Old State House, 1796
7. State Street, 1890
8. Hartford Settlement, 1640, *The Colonial History of Hartford*
9. View north from Capital building, 1900
10. Bushnell Park and State Capital, 1905
11. Google Earth, Connecticut
12. Google Earth, Hartford County
13. Google Earth, City of Hartford
14. Street View, Hartford
15. Street View, Downtown Hartford
16. Connecticut Science Center
17. Aerial View, Rentschler Field
18. Downtown Park
19. Riverfront Development
20. Brick Buildings along the train tracks
21. Interior, Spaghetti Warehouse, Parkville Neighborhood
22. 1934 vs. Present, Before and After the Highway, Uconn MAGIC Maps
23. L. Maynard, Multi-family housing in Parkville
24. L. Maynard, Image of Park Street
25. Vehicular Accessibility, Existing vs. Proposed
26. Public Transportation, Existing vs. Proposed
27. Existing Zoning Map of Industrial Corridor and Surrounding Area
28. Levels in Education in Parkville
29. Age Groups in Parkville
30. Parkville Racial Study 1900, <http://ontheline.trincoll.edu/maps/>
31. Parkville Racial Study, 1970, <http://ontheline.trincoll.edu/maps/>
32. Parkville Racial Study, 1990, <http://ontheline.trincoll.edu/maps/>
33. Parkville Racial Study, 2010, <http://ontheline.trincoll.edu/maps/>
34. View north down Bartholomew Industrial Corridor
35. Industrial and Residential side by side, Industrial Corridor
36. Map of Bartholomew Industrial Corridor and Major building call-outs
37. TPA Design Group, Bartholomew Business Park Proposal
38. Google, Whitney-Chain Manufacturing Co.
39. L. Maynard, Image of 169 Bartholomew Ave
40. Google Earth, 169 Bartholomew Avenue, Industrial Corridor, Parkville
41. L. Maynard, Programmatic Breakdown
- 42-44. L. Maynard, Site Plan
45. L. Maynard, Street View Render, Conceptual
46. L. Maynard, Theater Lobby Render, Conceptual
47. 1' = 1/128" Roof Plan
48. The Steel Yard, Camp Metalhead 2007
- 49-53. 1' = 1/64" Floor Plans
54. Flexible Floor Plan Diagrams
55. 1' = 1/32" South Elevation
56. Diagrams
57. L. Maynard, Aerial View of Courtyard
58. L. Maynard, "Bridge" Connection between Existing Building and New Theater
59. L. Maynard, View from I-84
60. 1' = 1/64" East Elevation
61. 1' = 1/64" Section through Existing Building
62. 1' = 1/64" Section through New Theater
63. 1' = 1/64" Sectional Elevation through Courtyard
- 64-65. Theater Precedent, Auditorio de Leon
66. 1" = 3/16" Wall Section
67. Mechanical Diagrams for Theater Systems
68. CAV Diagram
69. Architectureweekly.com, GKD Metal Fabric Installation
70. Popidou Centre, Precedent for Mechanical System
- 71-76. L. Maynard, Site Images
77. 169 Bartholomew Zoning Card
- 78-80. City Maps
- 81-90. Environmental Conditions Images
- 91-115. Ecological Systems and Native Plant Images
- 116-170. Precedent Images

Personal Manifesto

Architecture can become a vehicle for growth in a community that has the inclination to make social, political or economic changes by providing new types of functional spaces. “Architects don’t invent, they transform reality.” By using architecture in this way, the buildings become not only the end product of the architect’s personal creative expression, but rather the heart and soul of the community they serve and inspire.

Program is the expression of how the architect transforms reality. The concept of cross-programming combines spaces in an unconventional way to improve the quality of life for the building's users, while increasing flexibility of the space and prolonging the life of the building. A building with a wider variety of spaces and functions provides more options for the use of the building presently and in the future.

Every new building should explore a new spatial relationship. It is the quality of space in relation to light, material, and purpose that makes a design succeed or fail. The concept is derived from the design problem presented by the client and should not simply reflect an abstract thought or whim of the designer. It should instead come from careful study and analysis of the site, the surrounding area, the programmatic requirements, and with the community overall. Site plays a particularly important role as it informs the designer of the environment, the spatial conditions, the vernacular architecture and culture of the community.

Materiality is the matter with which we transform reality. By designing with a clear knowledge of the materials being used as well as the building techniques, it is possible to construct buildings that are all at once functional, efficient and most importantly, beautiful. If every seemingly minor detail is resolved, the result is an elegant, functional and good quality building. Quiet and simple are words to be embraced. Inspirational and functional design does not need to be overdone to be appreciated. Design can be simple provided the details are attended to.



1. Quality of Light



2. Materiality



3. Recognition of Culture



4. Unique Programming

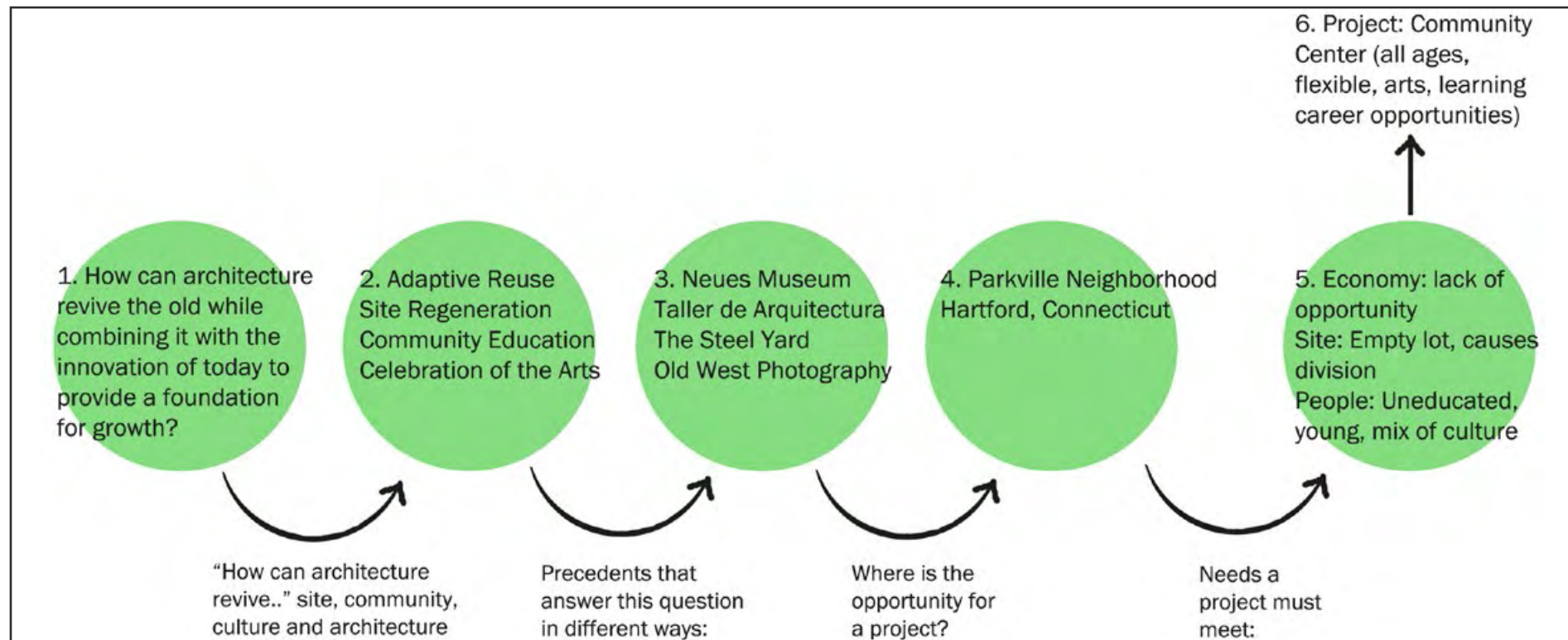
Project Brief

“Cities arise out of man’s social needs. . . remote forces and influences intermingle with the local. . . through the concentration of means of intercourse in the market, alternative ways of life arise.” Lewis Mumford

How can architecture revive the old, while combining it with the innovation of today, to provide a foundation for growth?

Reclamation of a city involves reusing abandoned buildings in conjunction with new construction. These negative spaces of disuse generated by a changing infrastructure are often overlooked or destroyed. If they are instead viewed as positive spaces for reuse, a city’s infrastructure and its residents can adapt and grow.

Recognizing these newly positive spaces produces a chance to examine what social needs of the community are not being met. Pushing the modern concept of the hybrid building creates a unique opportunity; flexibility of use derived from flexibility of space. A community building can best serve the social needs of it’s residents by having the ability to adapt to changes in those needs.



5. Thesis Development Storyboard

S I T E S T O R Y : H A R T F O R D C T

The Beginning

Dutchman Adrien Block explored the Connecticut River in 1614 and established a trading post in Hartford in 1633. Three years later the first settlement was founded at the end of the navigable portion of the Connecticut River by a group of English settlers led by Reverend Thomas Hooker. The colony made a significant impact on the new American society with its Fundamental Orders; the first document to establish a government by the consent of the people. The framers of the US Constitution later followed this pattern.

Hartford evolved from an agricultural economy into an important trading port. Molasses, spices, coffee and rum were distributed from warehouses in the city's merchant district. The insurance industry was created when groups of merchants began to share the risks of fires, pirates, accidents, and storms. In 1810 the Hartford Fire Insurance Group became the country's first formal insurance company. The company, known today as the Hartford Insurance Company, is still in existence. The city is still referred to as the "Insurance Capitol of the World." Beyond insurance, Hartford was also prominent in the area of precision manufacturing. The experiments of Samuel Colt, founder of Colt Manufacturing, one of the oldest gun manufacturers, created the basis for today's assembly line manufacturing methods and developed techniques that made mass production possible. With the industrial growth in the area, waves of immigrants settled in the city; making Hartford a critical part of the Industrial Revolution.



6. Old State House, 1796



7. State Street, 1890



9. The fertile Connecticut River Basin provided an ideal location for agriculture. Various pastures, fields and meadows are called out on this early map of the English Hartford Settlement



9. View north from Capital, 1900



10. Bushnell Park and Capital, 1905

Statistics

Today manufacturing, retail, finance, insurance, and health care are the top industries statewide. The Insurance and healthcare industries employ the highest number of people in Hartford. However these industries exclude those who have been poorly educated; often the people living in the city. The majority of the business people working in the city live in the suburbs and commute each day. This leads to a vocational gap where the lowest positions are the only jobs available to the residents, resulting in Hartford's status as one of the poorest cities in New England

According to the 2000 census the average poverty rate in Connecticut was 7.6%, while the poverty rate in Hartford alone was a staggering 29.4%. Today that number is estimated to be closer to 31.2%. There are over 35,000 people in Hartford living below the poverty line. The median family income of Hartford are also far below state averages. The median family income for Connecticut is \$65,521 yet only \$27,051 in Hartford.

As of January 2011, Connecticut Department of Labor statistics show that metro Hartford has the highest unemployment rate in the state, at 17.1%.



11. Connecticut



12. Hartford County



13. City of Hartford



14. Street view of Hartford



15. Street view of Downtown

Revitalization Initiatives

Over the past 20 years there have been several projects focused on redeveloping Hartford. The Capitol City Economic Development Authority (CCEDA) completed several projects in the 1990s. Among them the Adriaen's Landing project on the eastern edge of the city near the river which became the site of the Convention Center, the Connecticut Science Center and Front Street; a bustling riverfront with historical significance. The Hartford Marriott Hotel, completed in 2005, is adjacent to the Convention Center. The Science Center, designed by Cesar Pelli, was opened in 2009 and surpassed the estimated attendance numbers in its first week, making it a major attraction for Adriaen's Landing and the City of Hartford.

Additional projects include Rentschler Field, Hartford 21 and Riverfront Recapture. Rentschler Field opened in 2003, helping to revitalize Hartford and elevate the University of Connecticut's football program to national status. The stadium includes a club room that can be used for banquets, conferences and other functions year round. Hartford 21 is a recently completed project initiated by the Hartford Economic and Urban Design Action Strategy to form a 24-hour neighborhood of housing, shops, restaurants, and public space. There are also neighborhood revitalization zones that are spread throughout the city in an effort to rehabilitate buildings, many of which are architecturally valuable. Riverfront Recapture is project aimed at creating pedestrian links and activity near the Connecticut River. The project involves several access points along a pedestrian walkway connecting Constitution and Phoenix Plaza to Riverfront Plaza and Riverwalk downtown.



16. Connecticut Science Center



17. Rentschler Field

Downtown City vs. Outer Neighborhoods



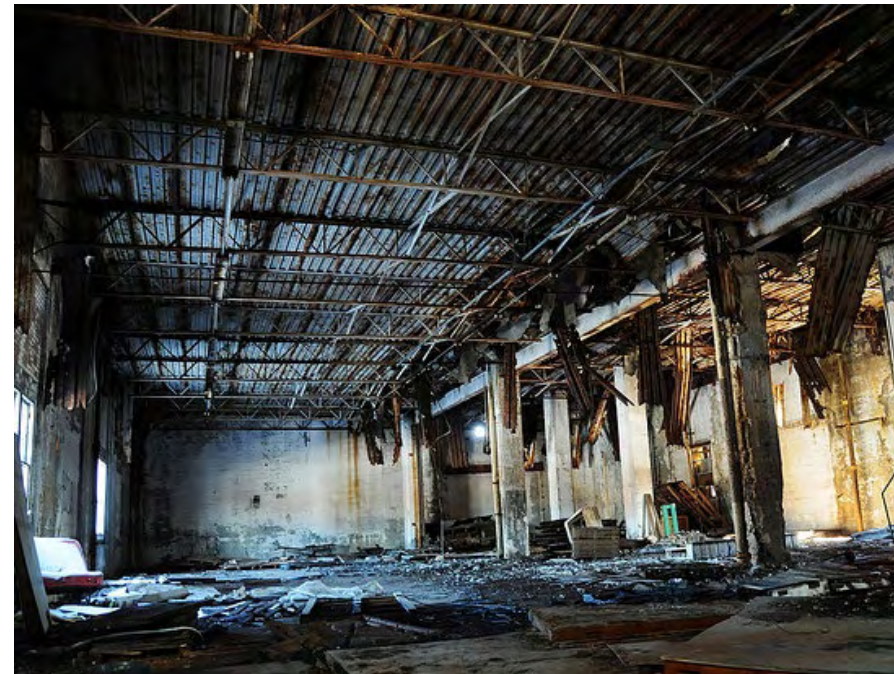
18. Downtown Park Space



20. Brick Buildings along the Train Tracks



19. Riverfront Development



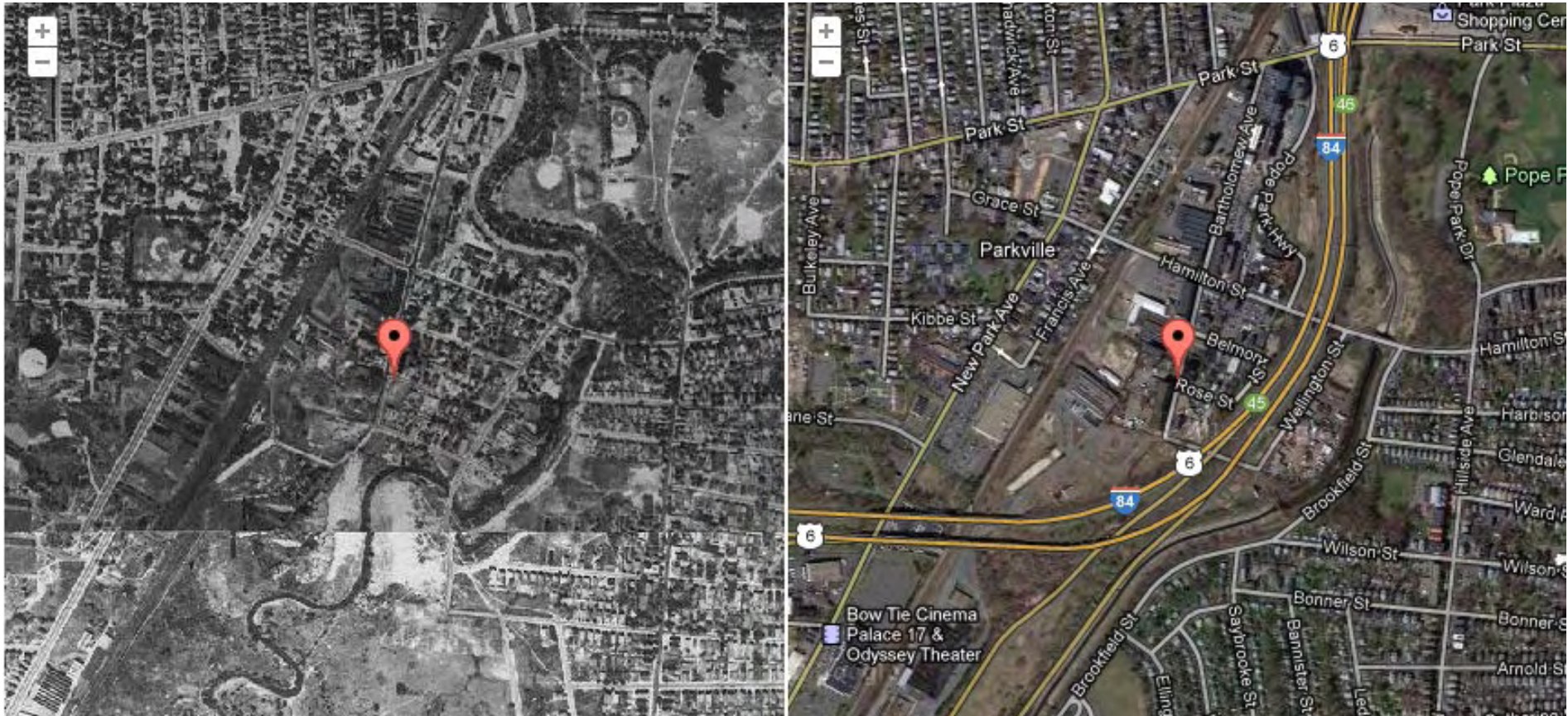
21. Abandoned Warehouse Interior

P A R K V I L L E N E I G H B O R H O O D

Historical Parkville

Parkville is the most historic neighborhood in Hartford. Similar to the other areas of the city; Parkville was primarily farmland throughout much of the 19th century. However in the early 1880's the extension of the railroad line southwest effectively divided Parkville from the adjacent Frog Hollow neighborhood. In 1907, the Royal Typewriter building was built along the railroad tracks and soon other factories moved into the neighborhood, stimulating the need for worker housing. Parkville expanded as a classic mill town, with an influx of immigrant workers, including Irish, French Canadian, Scandinavian and German.

Today Parkville is bordered by the south branch of the Park River as well as I-84 on the east, increasing the neighborhood's isolation from downtown Hartford and creating a void zone. Most of the once thriving factories now stand vacant and a few adaptive reuse attempts have been made to breathe new life into the area. However the community still retains its working class character and minority population of Portuguese, Brazilians, Vietnamese and Puerto Ricans.



22. Before and After the Highway

Architectural Value

Parkville's history as a working class neighborhood is reflected in the predominance of multi-family houses and apartment buildings. Stepped gables are a predominant architectural element and there are examples of uniformly designed streets of various styles, which contributes to the mill town atmosphere. The majority of the early industrial factories and buildings are clustered along the Bartholomew Avenue Industrial Corridor.

Park Street, the main commercial thoroughfare runs east to west from Frog Hollow through Parkville to the West Hartford city line and is lined with a variety of buildings in Italian, Victorian and 1920s apartment styles. Many of the storefronts have been altered but the upper floors retain their Queen Anne decorative features and Italianate cornices, which reflect both the history and the minimal transformations the buildings have undergone.

Much of the industrial corridor is zoned for industry, however adaptive reuse projects in the past 10 years and recent neighborhood proposals involve rezoning several areas for commercial, residential and office space.



23. Mult-family housing

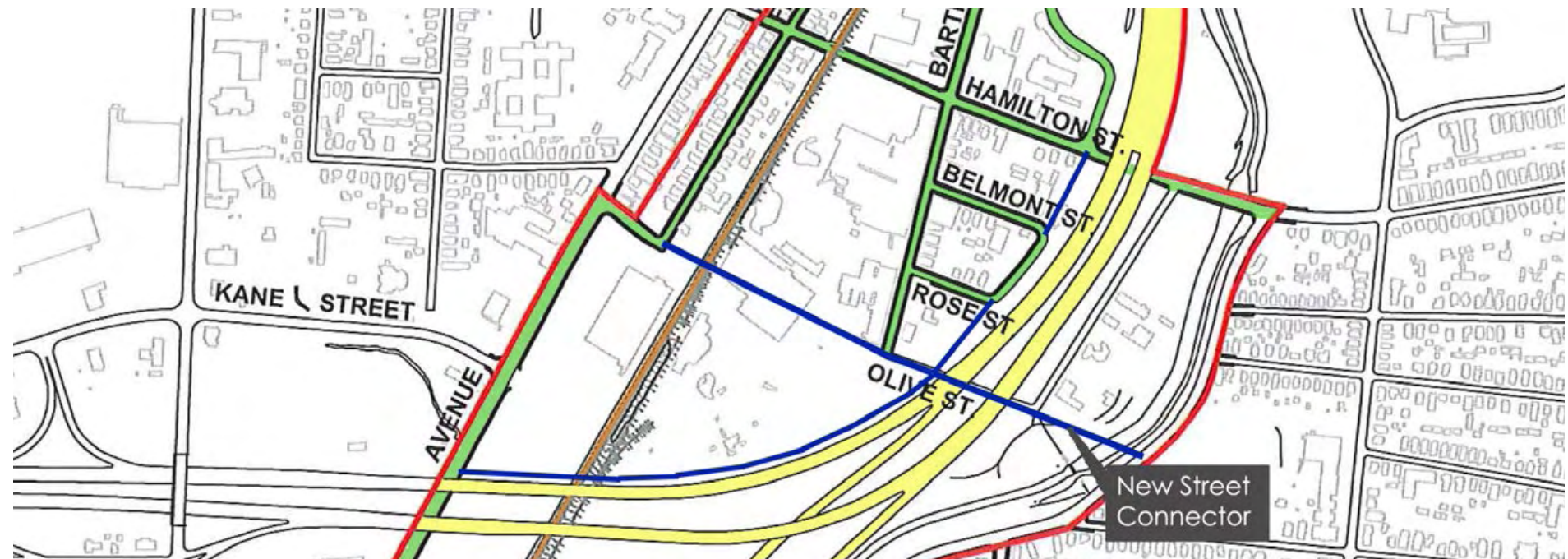


24. Park Street

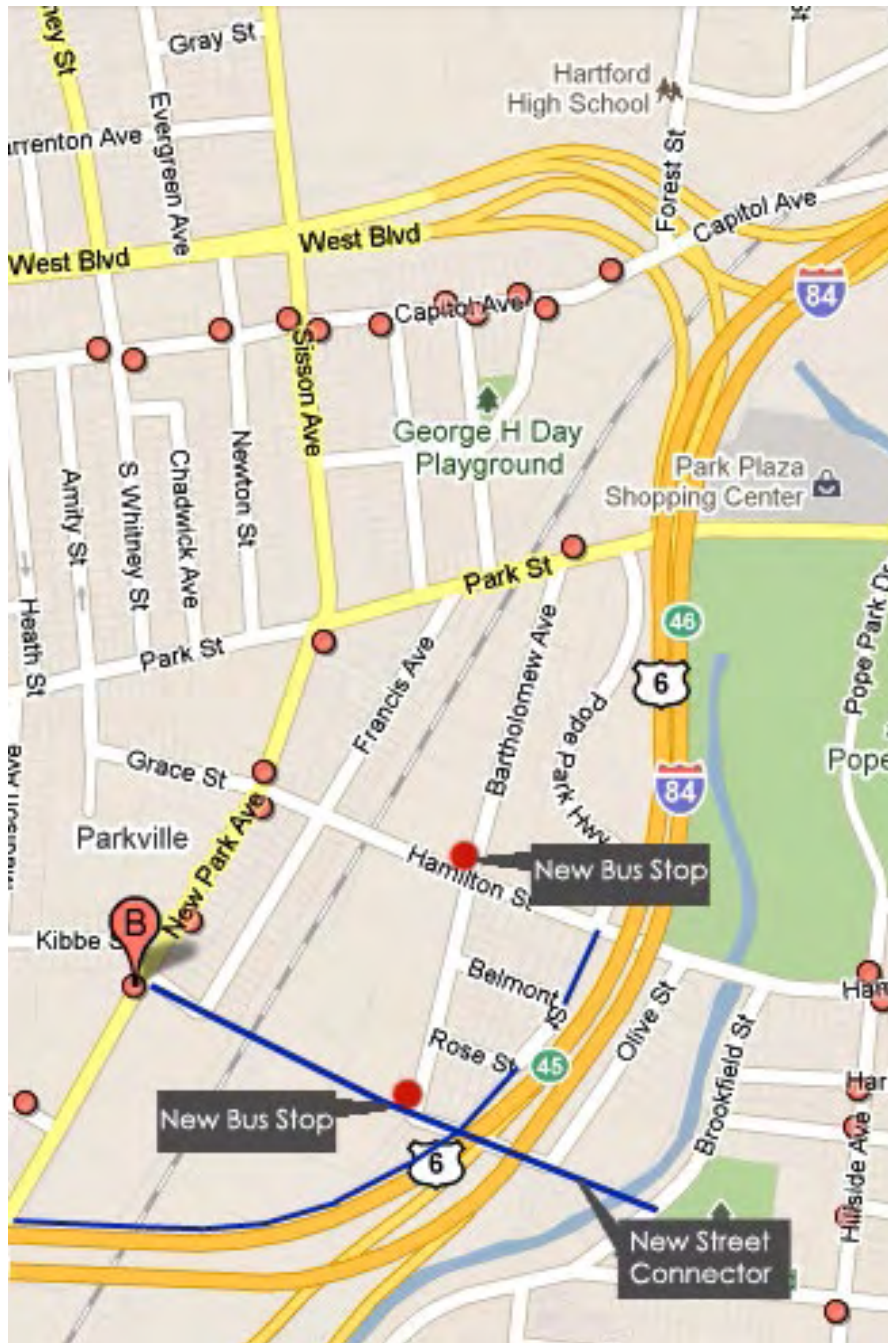
Parkville is connected to downtown Hartford on the east by Capital Avenue and Park Street. These main thoroughfares are lined with retail shops and restaurants. New Park Avenue runs north and south through Parkville and has several important community buildings; including the library, senior center, public school and several churches. Public transportation is also easily accessible along all three main routes. Bus stops at the corners of Park, Bartholomew, New Park and Hamilton provide access to the Bartholomew industrial corridor, however future site development must include additional stops to improve accessibility throughout the community.

Currently Bartholomew Avenue dead ends as Olive Street no longer crosses under the highway. A new vehicular connection from New Park Avenue to the south end of Bartholomew Avenue and continuing on to connect to Brookfield Street across the river would be vital to reconnecting the entire Bartholomew Corridor to the surrounding neighborhoods. An additional connector further south on New Park running parallel with I-84 and connecting to Pope Park Highway would complete the loop.

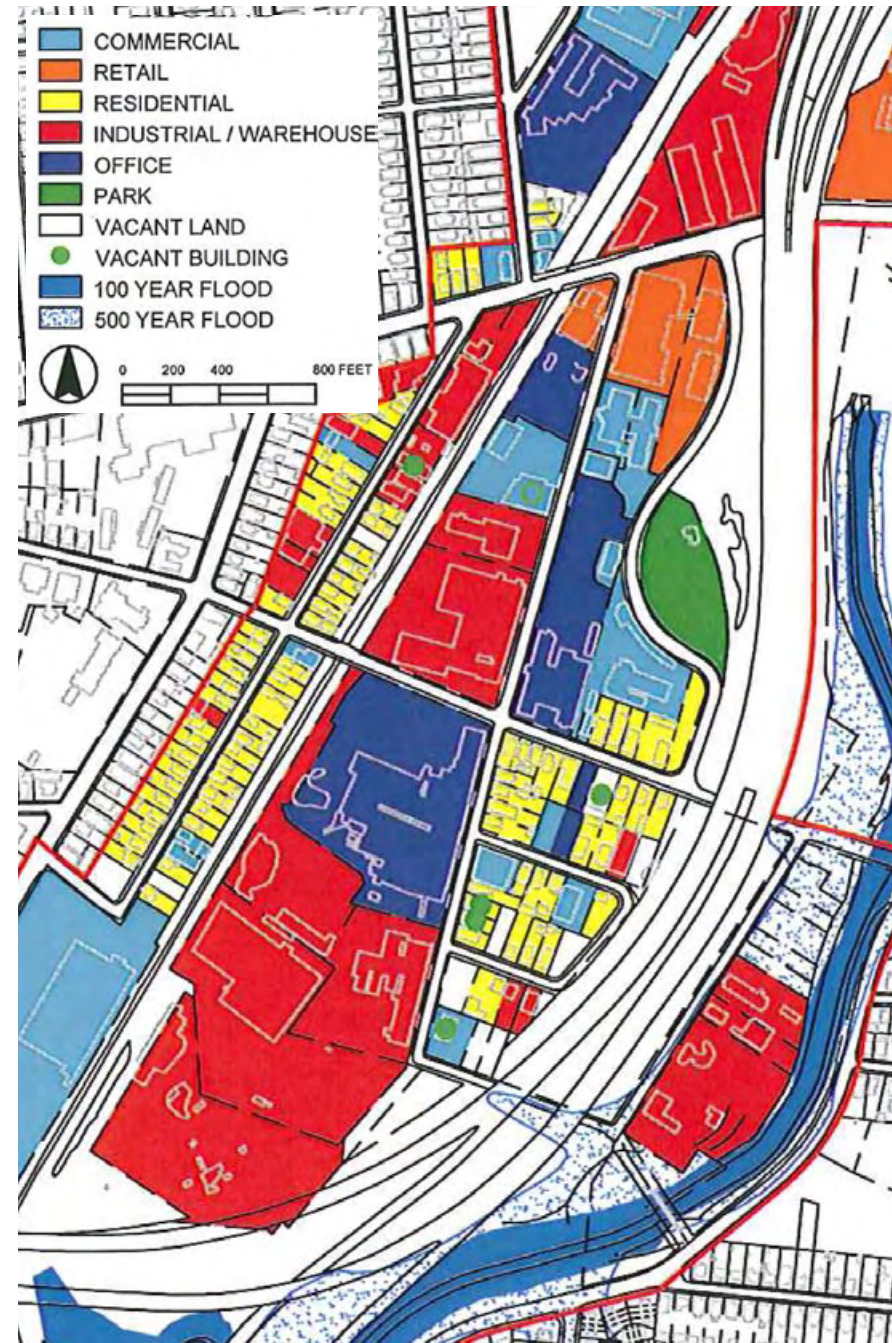
The Bartholomew Industrial Corridor runs just .6 miles making it pedestrian friendly. Additional paths and improved streetscape will enhance the walkability factor and support a sustainable, healthy lifestyle for the community.



25. Vehicular Accessibility



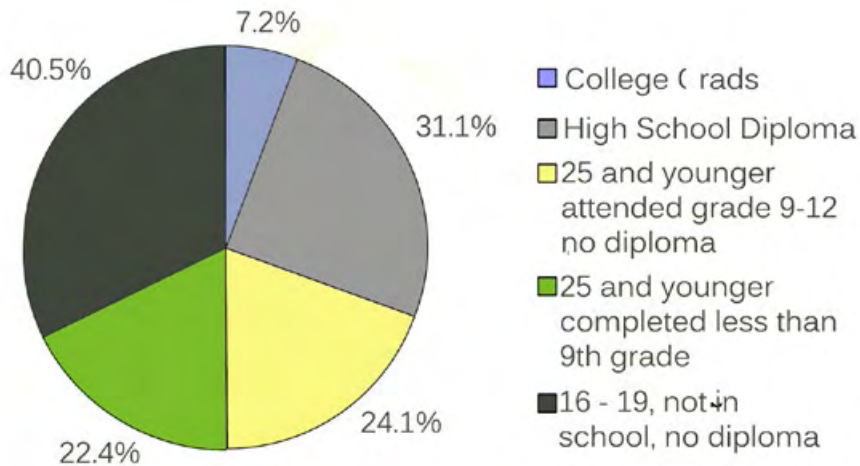
26. Public Transportation



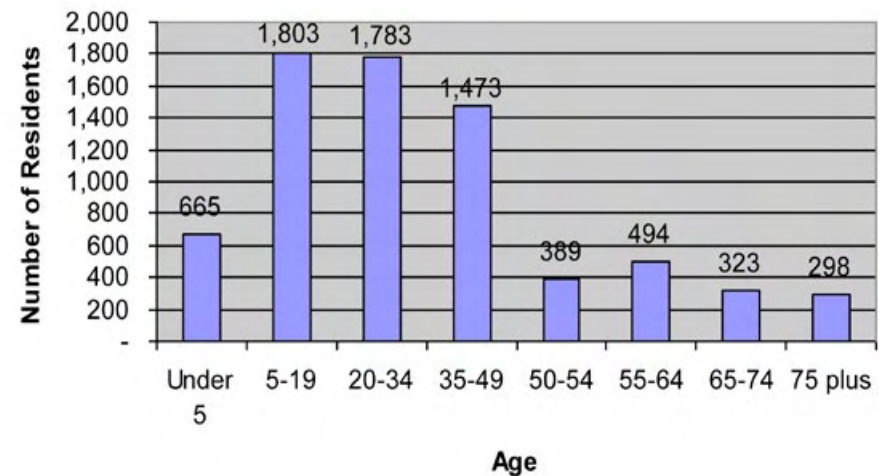
27. Existing Zoning Map

The physical disconnect of Parkville is compounded by a lack of educational and career opportunities available to its residents. Opportunities for Hartford residents is limited, and poor education has a significant impact on unemployment in the neighborhood. The percentage of residents age 16 to 19 not enrolled in school and without a diploma is a staggering 40.5%. Only 31.1% of residents have graduated high school. This disadvantage is costing residents jobs. Twenty years ago Parkville's employment rate compared to the rest of Hartford was significantly better. Today unemployment in Hartford has decreased, yet the unemployment rate in Parkville has drastically increased.

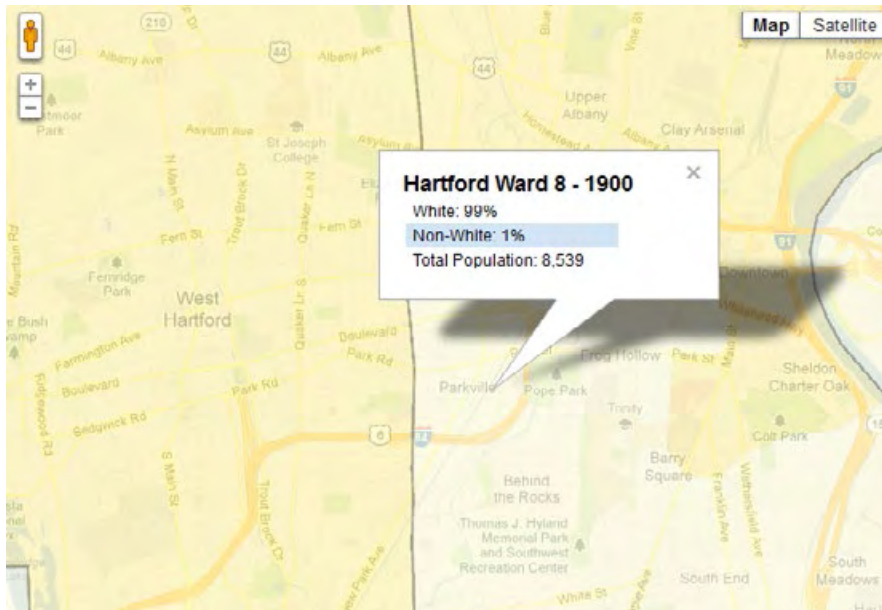
The racial structure of Parkville has been shaped by the history of the area. Hartford County was predominately white until demand for factory workers led to an influx in the immigrant and minority populations. This influx began in the North End and expanded southward until it reached the West Hartford line. This abrupt change in racial demographics is largely due to restrictive covenants that were once in place in West Hartford, preventing minorities from moving into the suburbs and encouraged the phenomenon called "White Flight." These racial policies within and around the city inhibited the ability of home values to follow natural patterns and contributed to the distinct economical gap between Hartford and the surrounding areas.



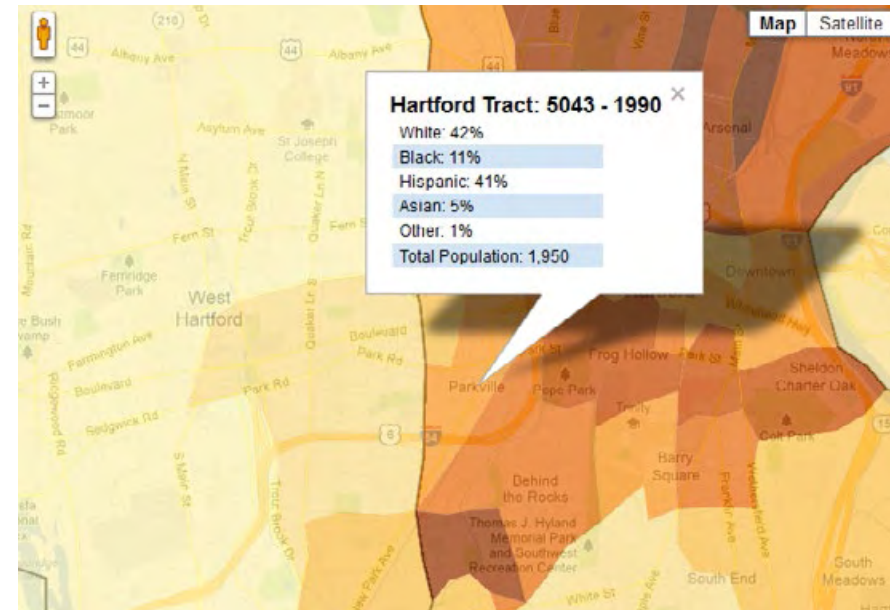
28. Levels of Education in Parkville



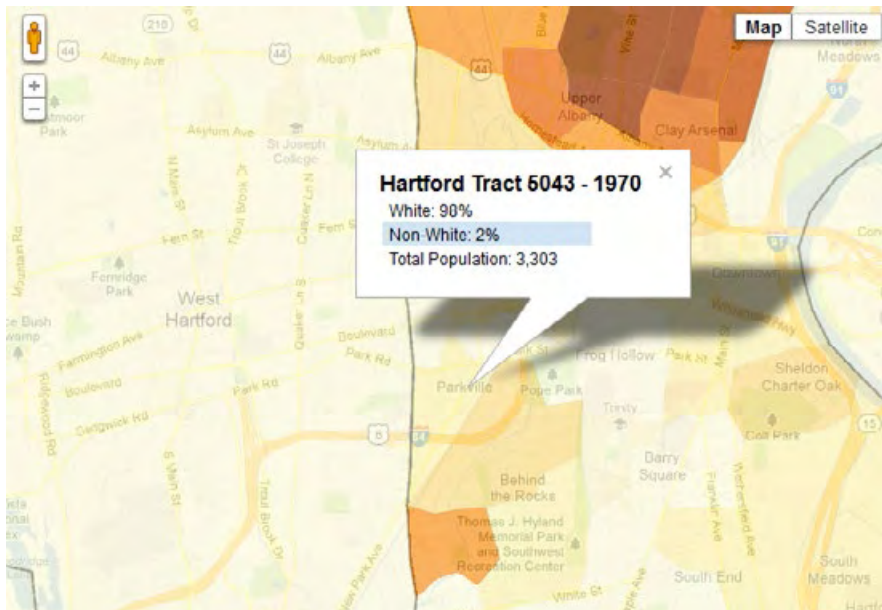
29. Age of Residents in Parkville



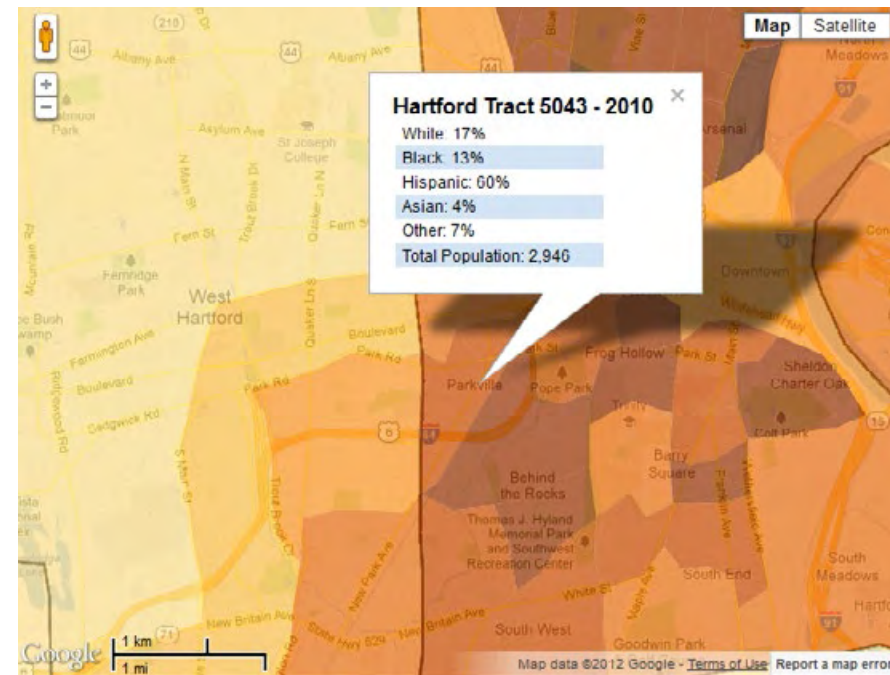
30. Parkville Racial Study 1900



32. Parkville Racial Study 1990



31. Parkville Racial Study 1970



33. Parkville Racial Study 2010

B A R T H O L O M E W I N D U S T R I A L C O R R I D O R

How can architecture revive the old, while combining it with the innovation of today, to provide a foundation for growth?

Parkville is the ideal location for an adaptive reuse project due to its complex connectivity issues. Lack of connectivity in all aspects of life continues to inhibit the growth of the neighborhood. Reclamation of Parkville involves reusing the abandoned buildings, in conjunction with new construction, along the Bartholomew Industrial Corridor. As it currently exists, Bartholomew Avenue is a negative space of disuse generated by a changing infrastructure following the end of the industrial era.

In 1993 the Champlin Box Company building located midway along the corridor, was renovated into the Spaghetti Warehouse in an attempt to revive Parkville. Unfortunately, the now closed family restaurant was not enough to address the social and economic needs of the community. If the Bartholomew Industrial Corridor is viewed as a positive space for reuse, Parkville's infrastructure and its residents can adapt and grow. The unusually low-density area is a chance to examine what social needs of the community are not being met. To completely reclaim the area will involve several phases, the first of which is developed in this project.

Currently, the northern end of Bartholomew has been reclaimed by developer Carlos Mouta; with several buildings being renovated for artist, design and other small business use. This project will focus on the southern end where several industrial buildings remain abandoned, in an effort to anchor the corridor and support the growth of the smaller business and residential buildings in between.



34. View of Industrial Corridor



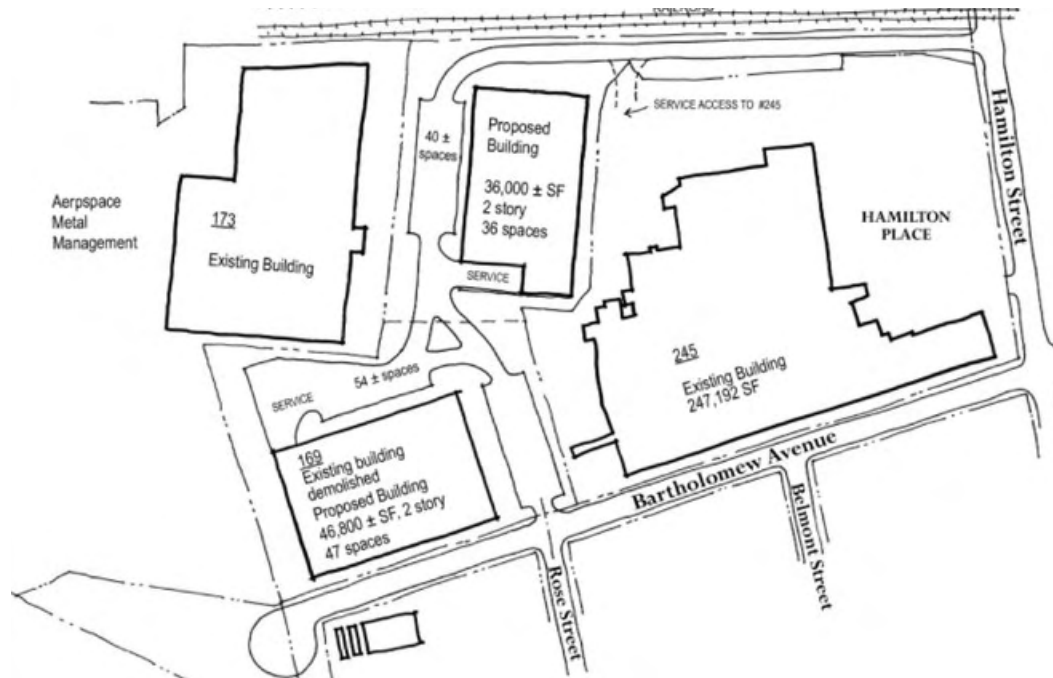
35. Buildings along Corridor



36. Bartholomew Ave Map

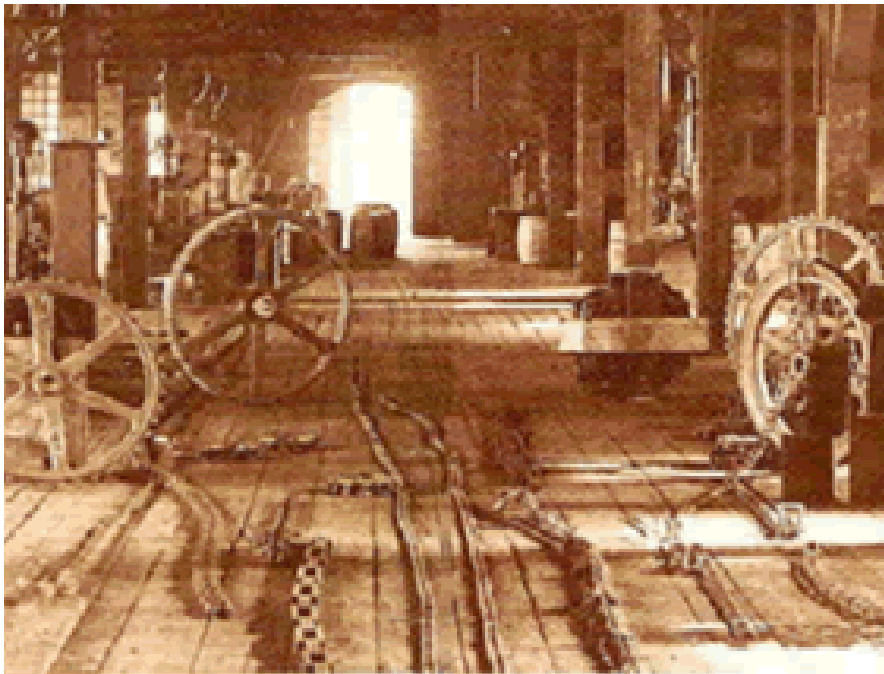
The Parkville Revitalization Association and the City of Hartford have marked the Bartholomew Industrial Corridor as the Parkville Municipal Development Plan (MDP) Project Zone. The city plans to address the need for neighborhood linkages to the area and bring in new businesses in order to revive the negative spaces. Many of the proposed plans, both by the city and outside design firms, involve the creation of a “Bartholomew Business Park,” which involves new vehicular connections and parking areas as well as demolition of existing structures, such as the former Whitney-Chain Manufacturing Company building at 169 Bartholomew Avenue, to make way for new office buildings.

These plans only address the needs of the commuters and not those of the residents while cleaning up Bartholomew Avenue and bringing people and jobs to the area. Parkville has remained a working class neighborhood; the majority of its residents work in retail. A new office park would provide jobs primarily for a more skilled workforce who commute into Hartford daily rather than the residents who live there. It also would not integrate these commuters into the Parkville community; the two would remain independent of each other as there are no plans for new residential areas. Finally, the city plans do not include any outdoor green space; they would instead increase the open paved areas and further debilitate the health of the site.



Founded in 1896 by Clarence Whitney, Whitney-Chain Manufacturing began as a small company in the West Armory of the Colts Patent Fire Arms and Manufacturing Company. Mr. Whitney was very interested in the chain mechanism of bicycles and quickly became a leading developer and distributor in the field. As the company expanded, Whitney built two new factories; one in 1906 at 169 Bartholomew Avenue and one at 237 Hamilton Street. Whitney-Chain soon expanded into the automotive field and during World War I the company played an important role in the production of power transmission drives of all kinds. A separate division was set up during World War II to produce Bendix airplane engine starters and to continue to supply basic products for boats, tanks, guns and other materials of war. After the war the company returned to supplying chain drives for every aspect of the industrial market. In 1948 Whitney-Chain merged with Hanson to become Hanson-Whitney Manufacturing Company. During this time the company worked internationally, occupied 250,000 square feet of floorspace in multiple buildings and employed over 1,000 workers.

At the southermost point of the Industrial Corridor, the Whitney-Chain building will be the proposed site for a hybrid community building that melds new and old to best serve the social needs of the Parkville residents by having the ability to adapt to changes in those needs.



38. Whitney-Chain Manufacturing



39. Whitney-Chain Manufacturing

Site Overview



40. 169 Bartholomew Avenue Site

Program Breakdown

169 Bartholomew Avenue 65,720 Sq. Ft

Flexible Spaces:

Wedding/Banquet Hall (150 - 300 people)
Storage and Service (Tables, Chairs, Linens, Centerpieces,
Av Equipment)
Catering Access

Lecture Space (60 - 100 people)
Storage and Service (Floor raisers, chairs)

Neighborhood Meetings/Parties
Larger Spaces to be divisible
Catering Access
Storage and Service (Tables, Chairs, AV Equipment)

Art Programs

Divisible Space for Breakout Sessions
Storage and Service Space (Tables, Chairs, Supplies)

Exhibit Space

Large open space
Storage and Service (Tables, Booths, Pinup Boards)

Permanent Spaces:

Computer Lab
Offices
Storage and Mechanical Spaces
Kitchen and Janitorial

Bartholomew Avenue Theater

Program	Net Sq. Ft.	Quantity	Total Sq. Ft.
Gathering Space	900	1	900
Community Space / Restaurant	9,500	1	9,500
Theater	14,000	1	14,000
Rehearsal / Office Space	2,500		2,500
Costume and Set Design	5,000	1	5,000
Dressing Rooms	400		400
Bathrooms	600	4	2,400
Storage / Equipment	10,000	1	10,000
Total			44,700
Gross Sq. Ft. (1.4)			62,580

Community Sports Complex and Park

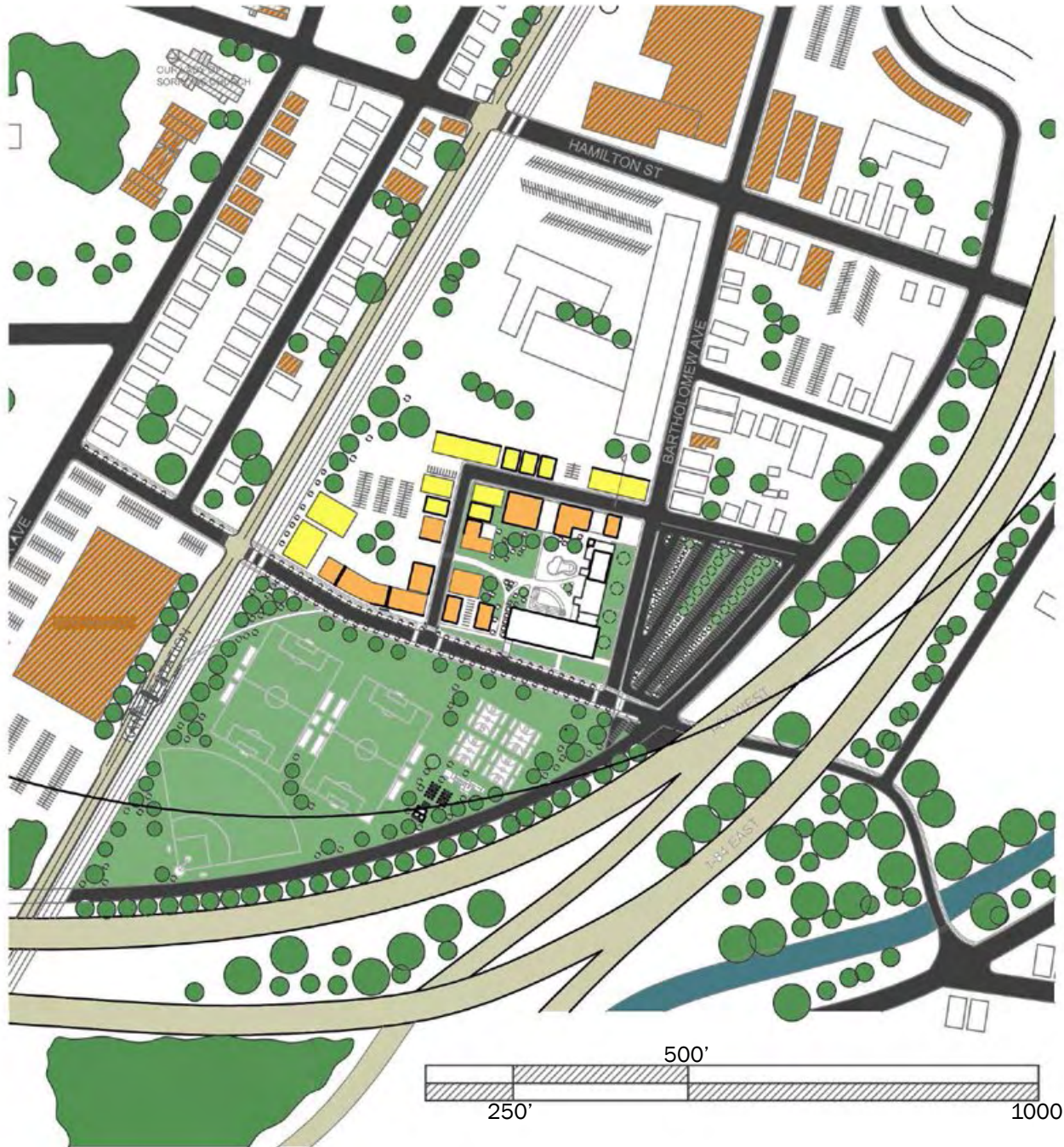
Program	Net Sq. Ft.	Quantity	Total Sq. Ft.
Basketball Court w/ Bleachers	7280	6	43680
Little League Field	10,000	1	10,000
Soccer Field	7,500	2	15,000
Concessions/Bathrooms	600	1	600
Covered Picnic Pavilions	900	6	5,400
Playground	3,400	1	3,400
Bathrooms/Changing Area	600	1	600
Flexible Park Space	230,000	1	230,000
Total			308,680
Available Land			300,000

D E S I G N D R A W I N G S







42. Site Plan

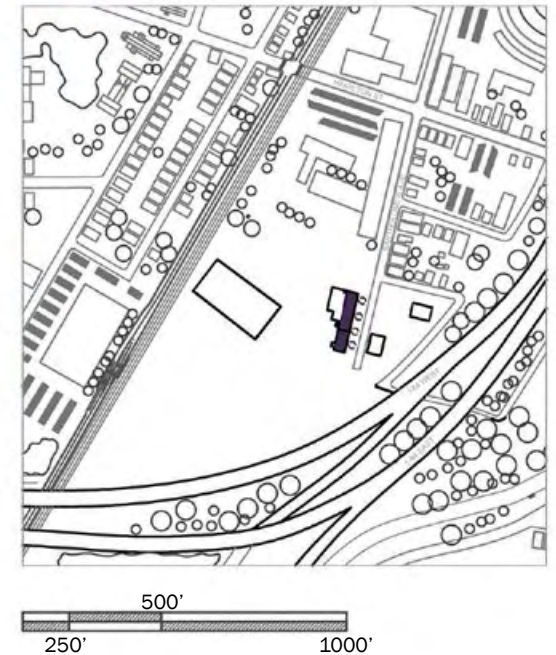
1/2 mi radius circles around 169 Bartholomew Avenue and the Parkville public school.



43. Site Plan

The revitalization of Bartholomew Avenue is a multi-phase project involving community elements, adaptive reuse of existing structures, high density new construction and creation of green space.

-  Existing Commercial
-  Existing Building for reuse - Phase 1
-  Proposed Residential - Phase 2
-  Proposed Commercial - Phase 2



44. Existing Site Plan

Phase 1

Phase 1 - Reclaiming the Whitney-Chain Manufacturing building for a community center

Construction of the Bartholomew Avenue Theater that interlocks with the existing structure

Development of a community sports complex and park space

Proposal of commercial and residential buildings to be developed in Phase 2

Beyond reclaiming the Whitney-Chain building for community use, the land itself is in need of revitalization. Decades of industrial use have left expanses of cracking pavement and soil that lacks nutrients. There is enough open space at the southern end of Bartholomew Avenue to support densification as well as a community park. This is a unique opportunity for a large sports complex and park space; something that is usually only found in the suburbs. The health of the residents and the land will be able to improve simultaneously.

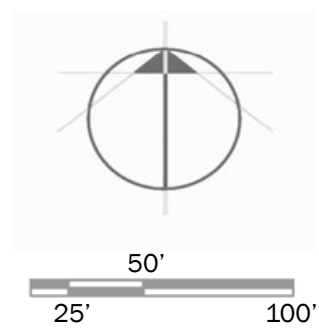
The industrial corridor is extremely low density compared to the surrounding neighborhoods. The new park and community center will create an influx of visitors. The addition of new commercial and business space will boost the economy of the neighborhood and provide job opportunities for residents. Additional residential space will allow the community to spread back into the industrial corridor and help with the safety of the area; a well-lit populated area is much safer than a dark abandoned area. Locations for these buildings in relation to the proposed community center have been proposed for further development in Phase 2.



45. Conceptual Street Render



46. Conceptual Lobby Render



47. Roof Plan 1' = 1/128"

The Hybrid

Program is the expression of how the architect transforms reality. The concept of the hybrid building combines spaces in an unconventional way to improve the quality of life for the building's users and increases flexibility of the space.

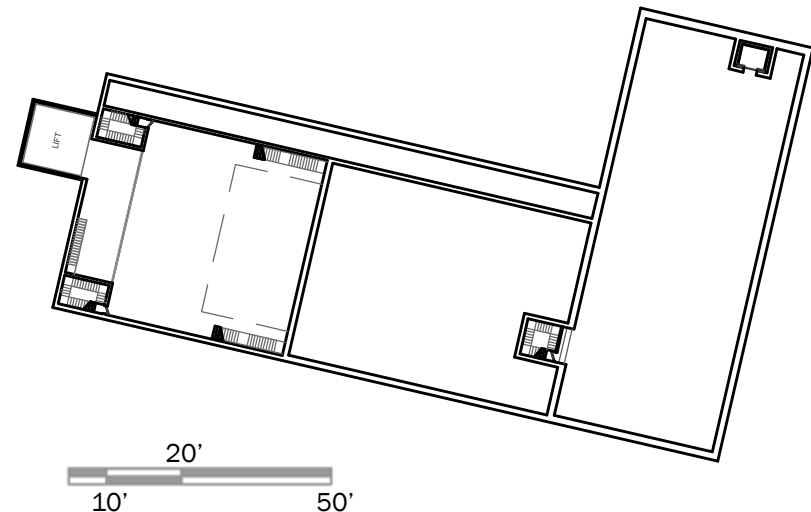
The proposed community center pushes the idea of the hybrid building to the extreme in order to revitalize the Parkville community. The existing building envelope is the ideal dimension to articulate a wide variety of functions. It will be used to create new spaces within the larger shell of the existing structure with the goal of creating the ultimate flexible space. Reclaiming the Whitney-Chain building also respects the historical character of the neighborhood while creating a place for the residents to grow and develop.

The Bartholomew Avenue theater is the perfect modern compliment to its historic counterpart; celebrating the technical and materialistic advances society has made while paying homage to the scale and proportions of the existing building. Like the rest of the building, the theater space is flexible to accomodate various types of performances.

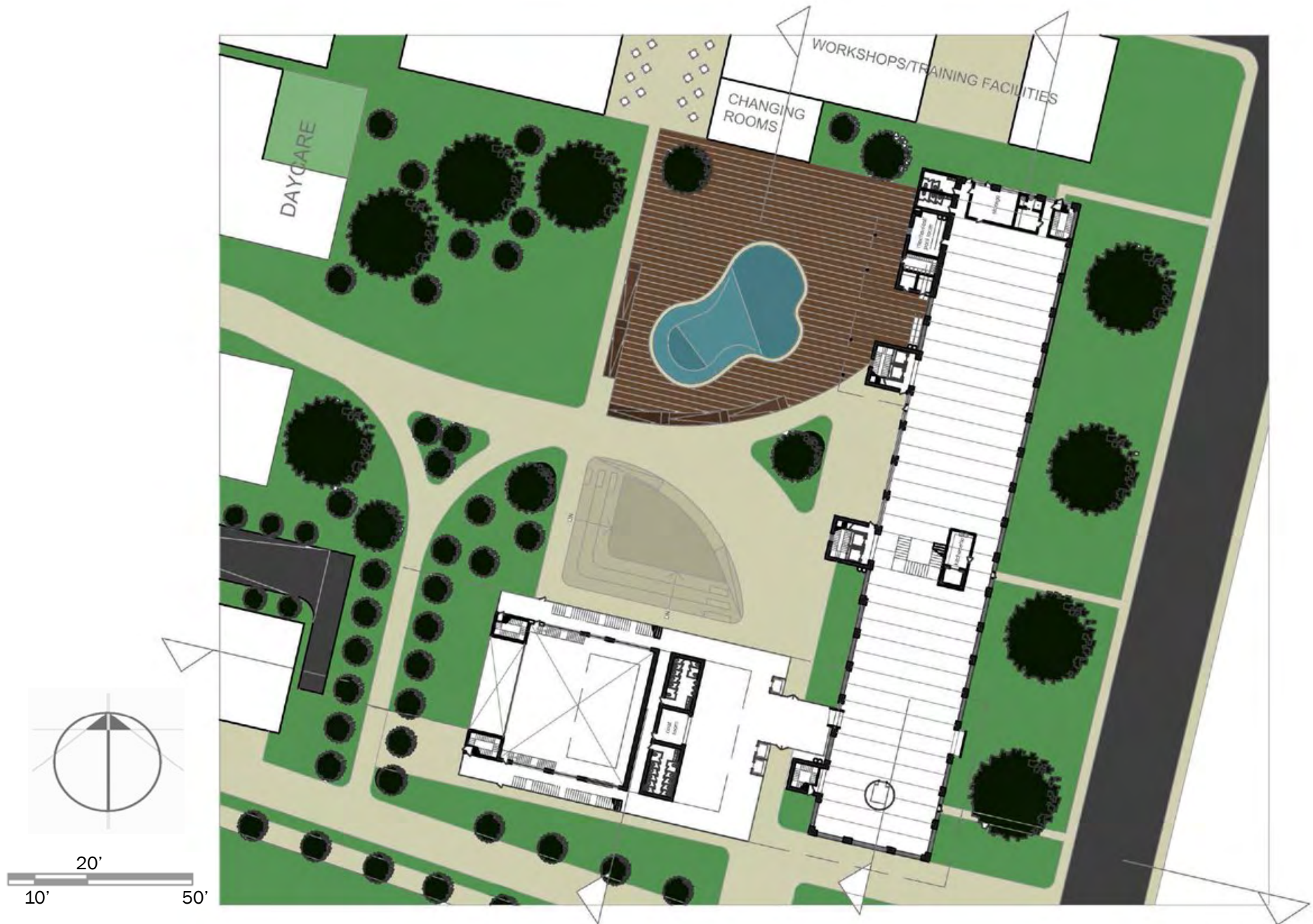
Part of Phase 2 will be an adjacent workshop promoting many of the same values as the Steel Yard in Providence RI, which demonstrates that if you create a place that reconnects the people to how things are made and teaches them about process, it will act as a catalyst for innovative approaches to urban revitalization, arts promotion, workforce development, and community growth.



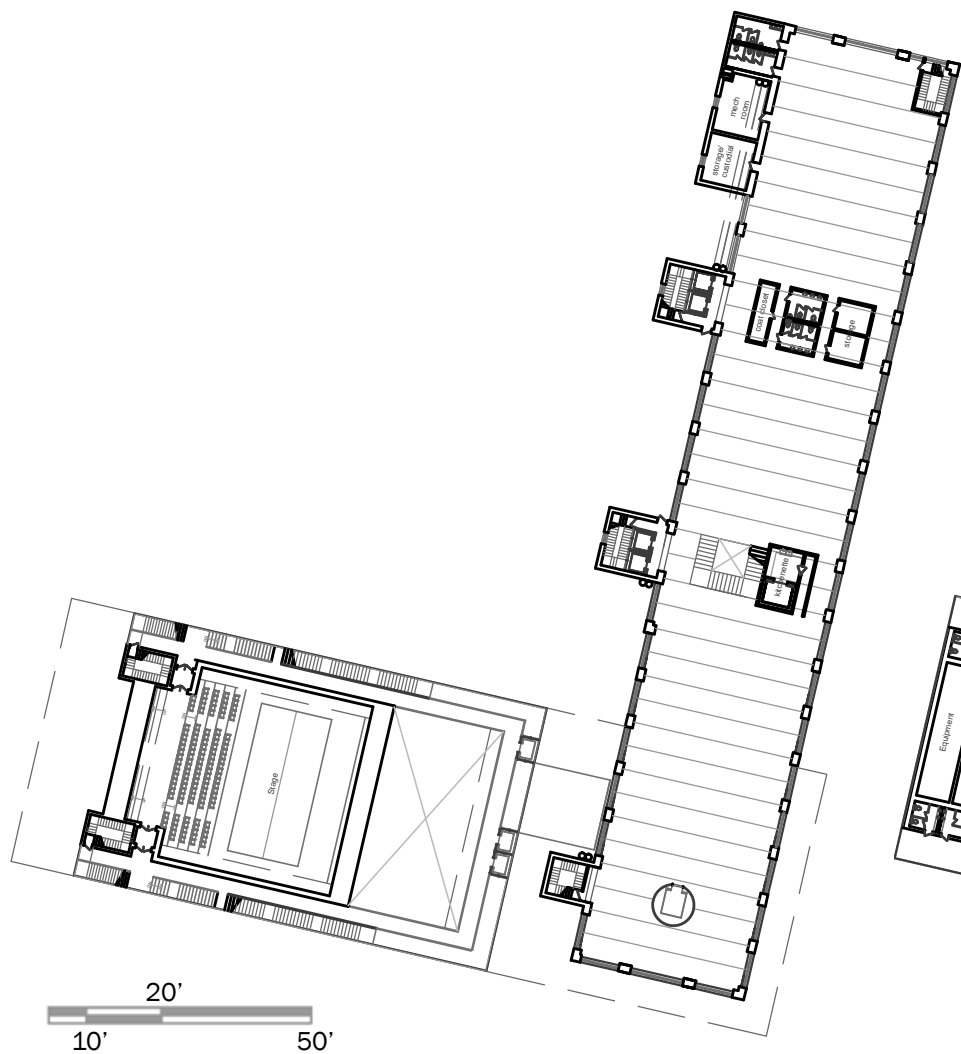
48. The Steel Yard Youth Camp



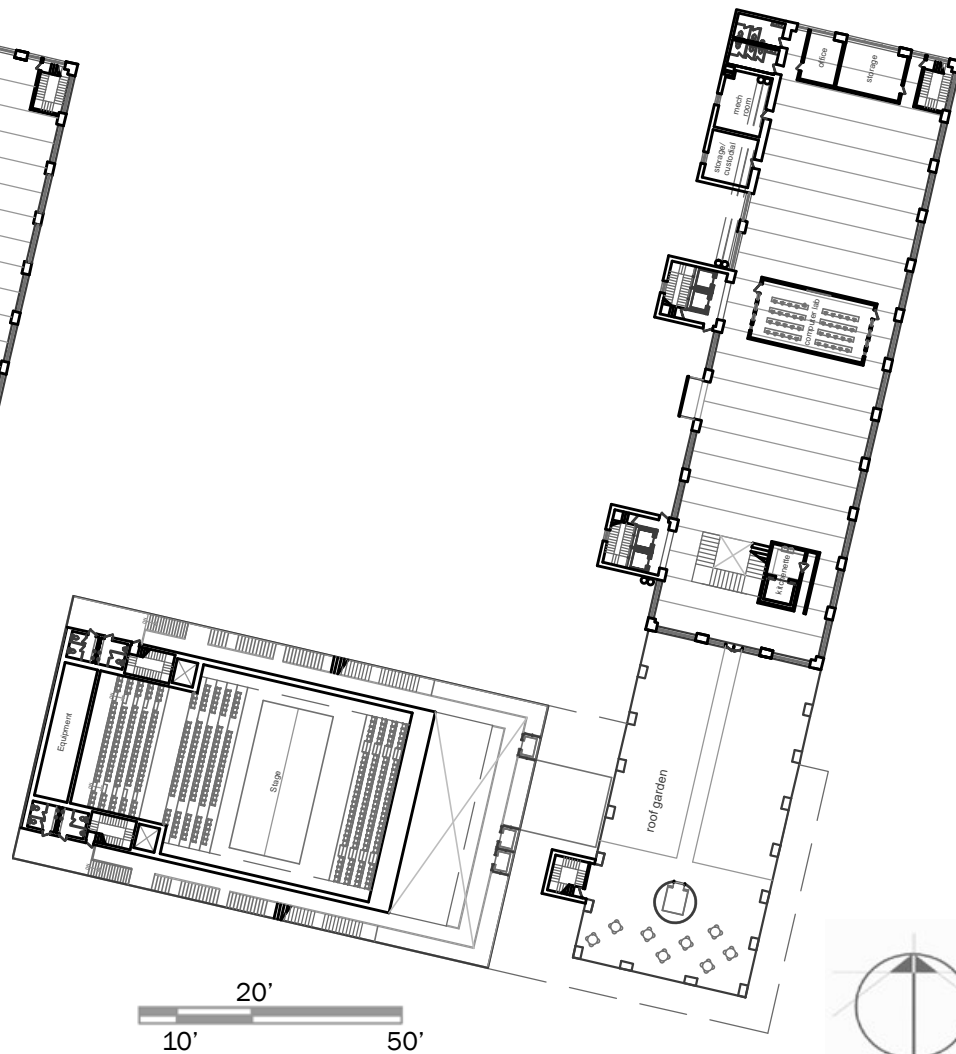
49. Basement Plan 1' = 1/64"



50. Ground Floor 1' = 1/64"

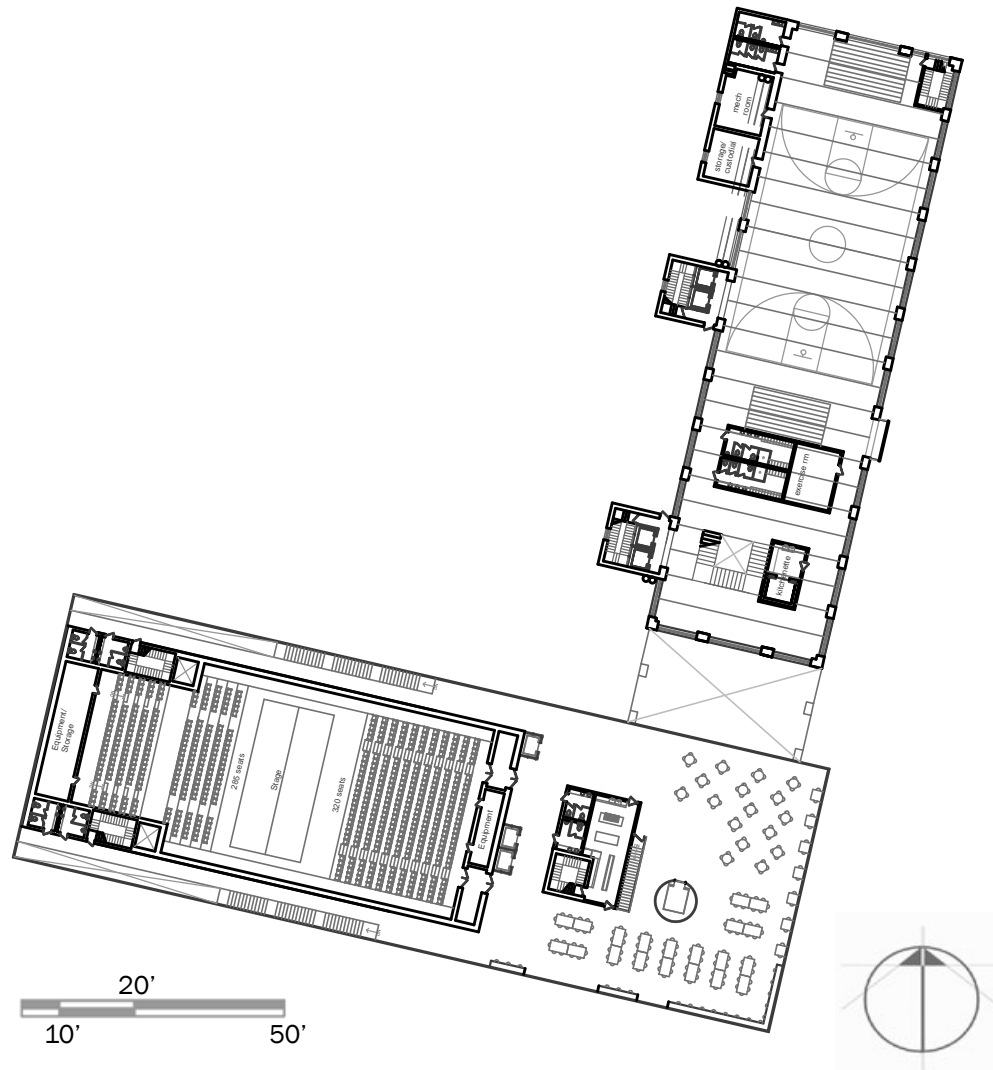


51. Second Floor 1' = 1/64"

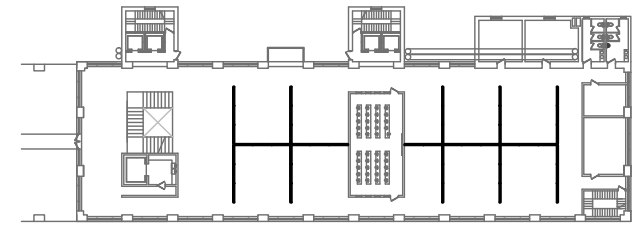


52. Third Floor 1' = 1/64"

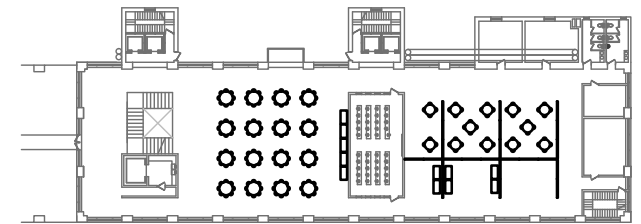
The community center is not just a building that houses program inside its shell, it is a building that morphes into whatever the residents of Parkville need it to be.



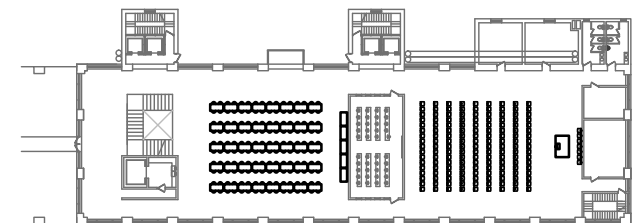
53. Fourth Floor 1' = 1/64"



Breakout rooms for small group sessions

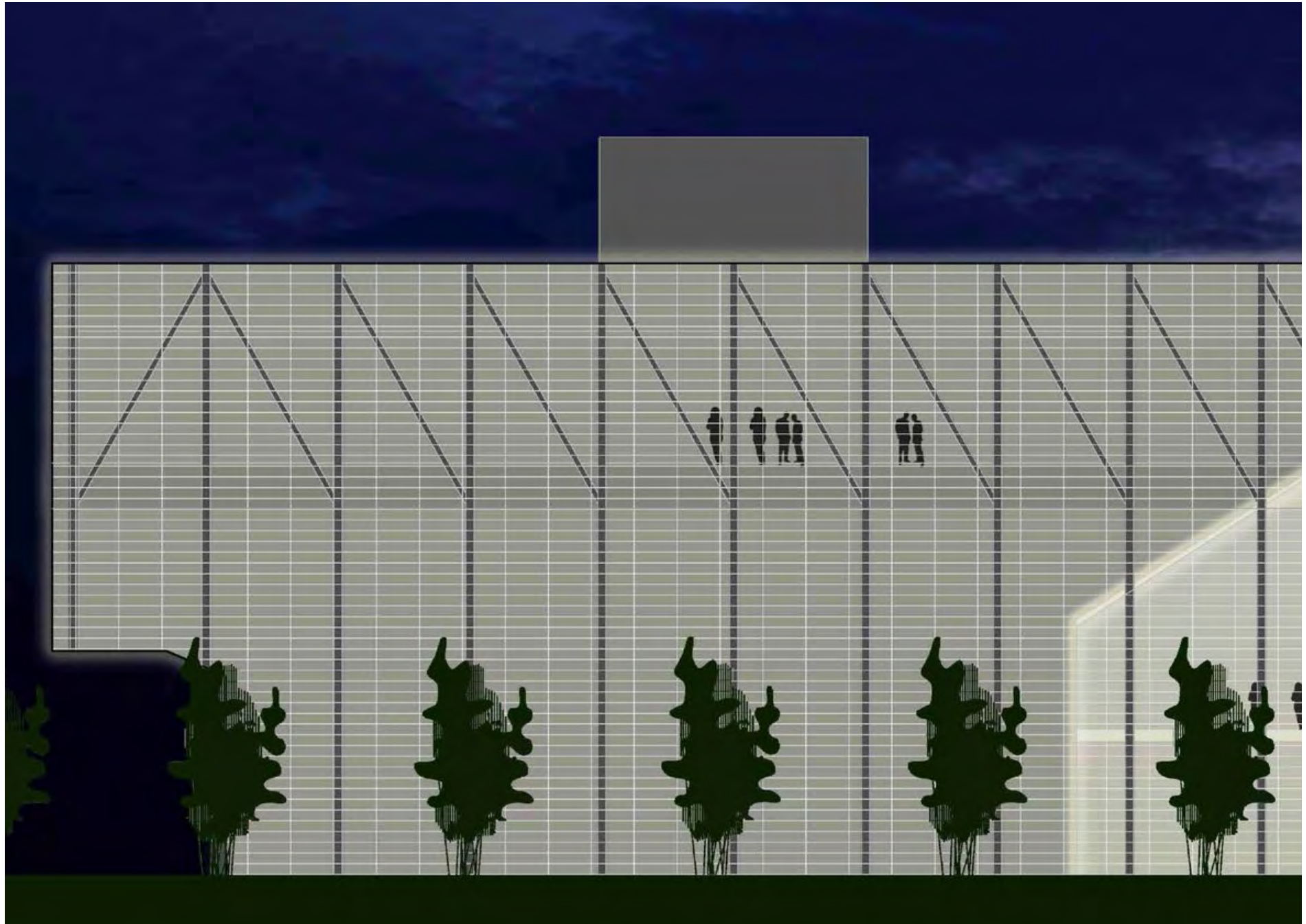


Large buffet style dining with breakout rooms



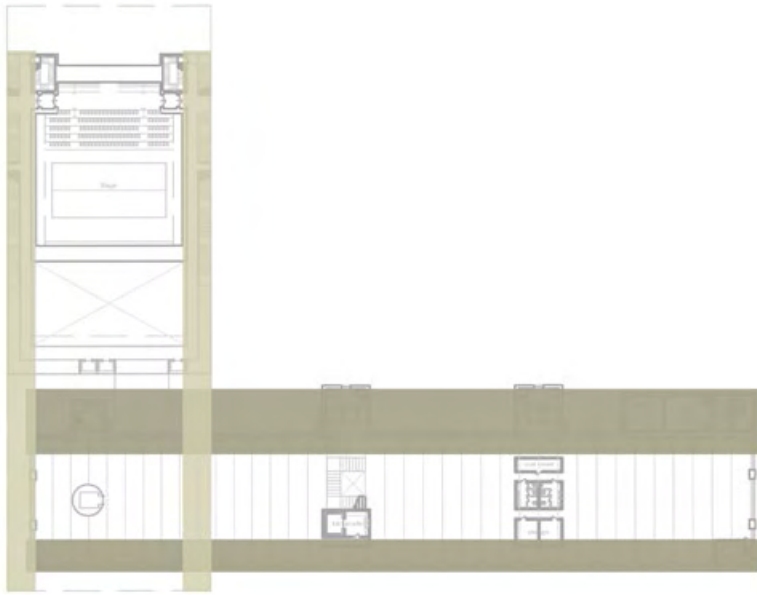
Presentation space with follow-up dining space

54. Flexible Floor Plan Diagram

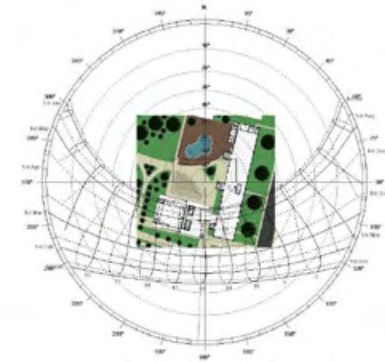


55. South Elevation 1" = 1/32"





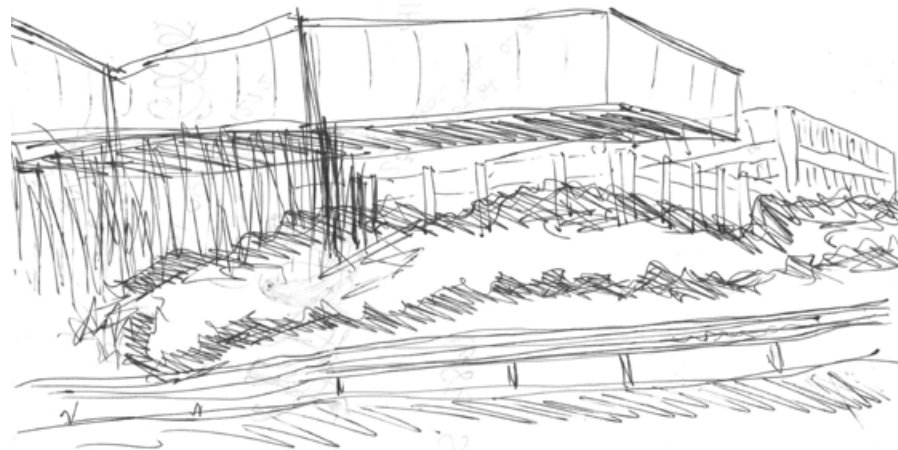
Circulation Diagram



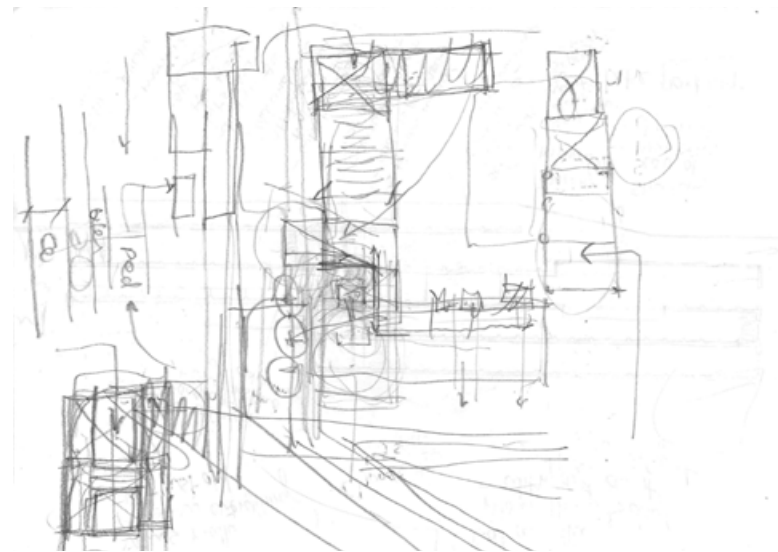
Sun Diagram



Interlocking of New and Old Diagram



Concept Sketch: Perspective from Highway



Concept Sketch: Site Plan

The Bartholomew Avenue theater is the perfect counterpart to the Whitney-Chain building because it respects - and even mirrors - the existing geometry but doesn't hide behind it. Steel trusses, large panes of glass and a metal mesh curtain wall provide a light, seamless contrast to the existing heavy masonry column and beam structure. The new wing also pushes its structural capacities with a massive 60 foot cantilever that thrusts over the southern corner towards the highway; creating a dynamic interlocking of new and old.

The connection between the two buildings is minimal. A 12 foot tall lobby funnels visitors through an opening that is proportional to the existing structure of the Whitney-Chain building. This low point of tension keeps the buildings' respective spaces distinct so each one can be appreciated in it's own right.



57. Aerial View of Courtyard

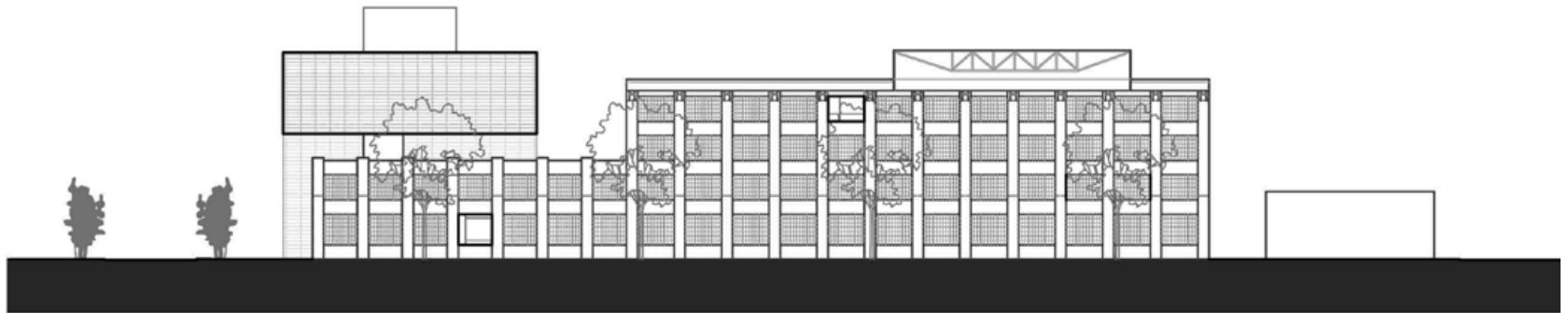


58. Connection between New and Old Building

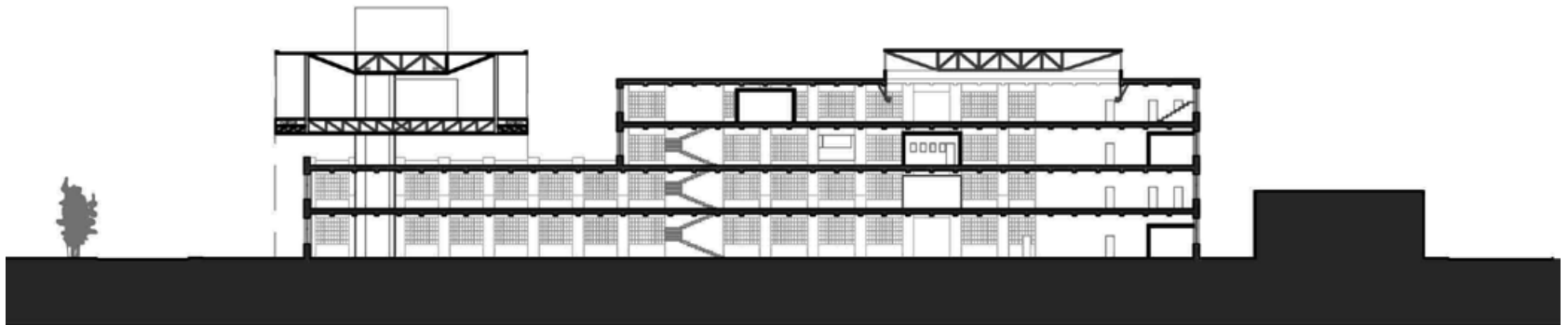
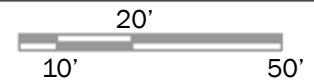


59. View from Highway

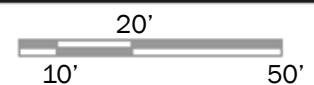
The Bartholomew Industrial Corridor is bounded on its western edge by Interstate - 84. As commuters, tourists and visitors drive through Hartford, the entire corridor is visible. Anchoring Bartholomew Avenue, the community center is visible on three sides which is extremely important to the growth of Parkville and Hartford as a whole. The park and community center will bring in visitors from the surrounding area which will support local business in Parkville. It may also attract additional revitalization projects which have thus far been focused in the downtown area.

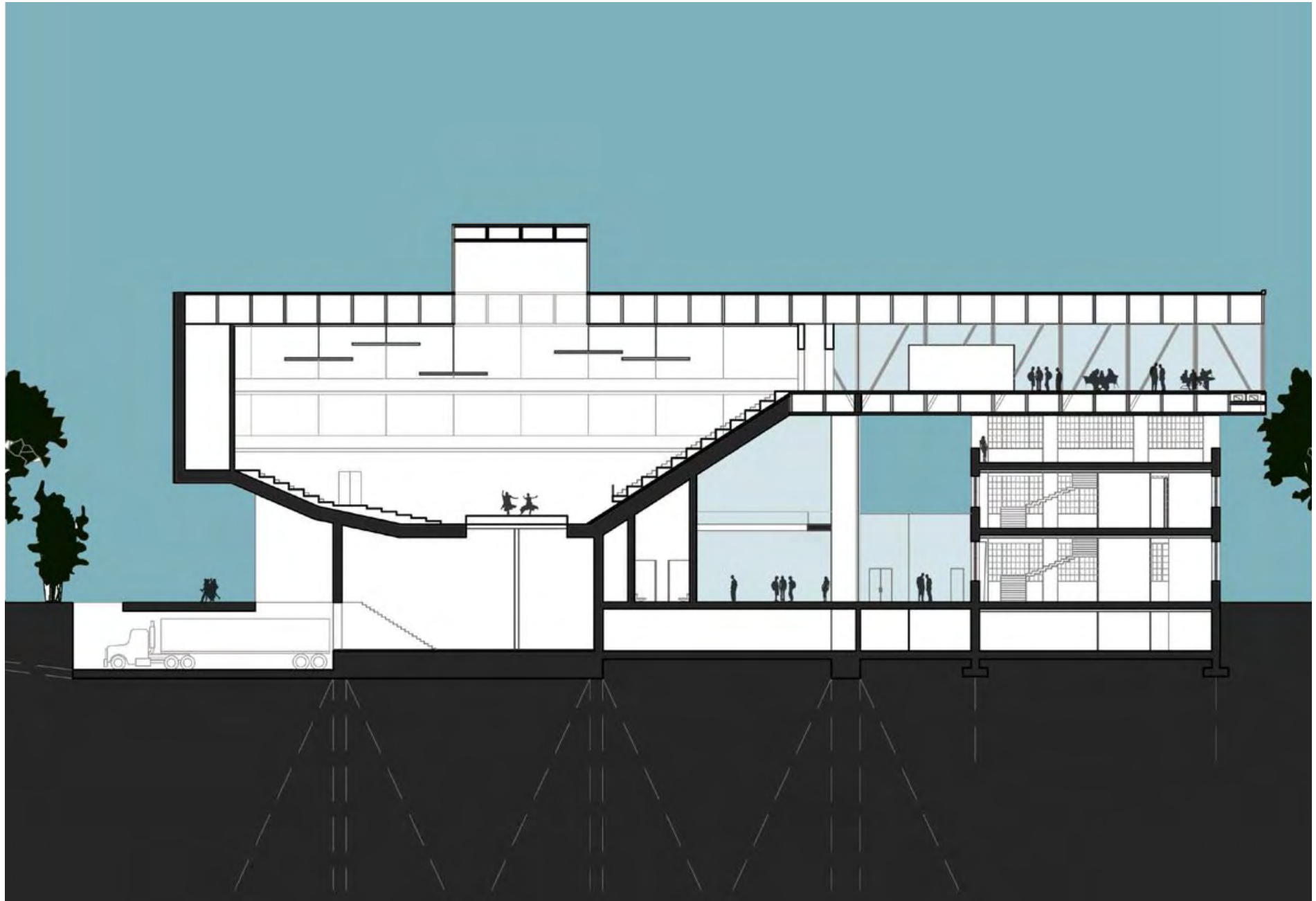


60. East Elevation 1" = 1/64"



61. Section through Existing Building 1" = 1/64"





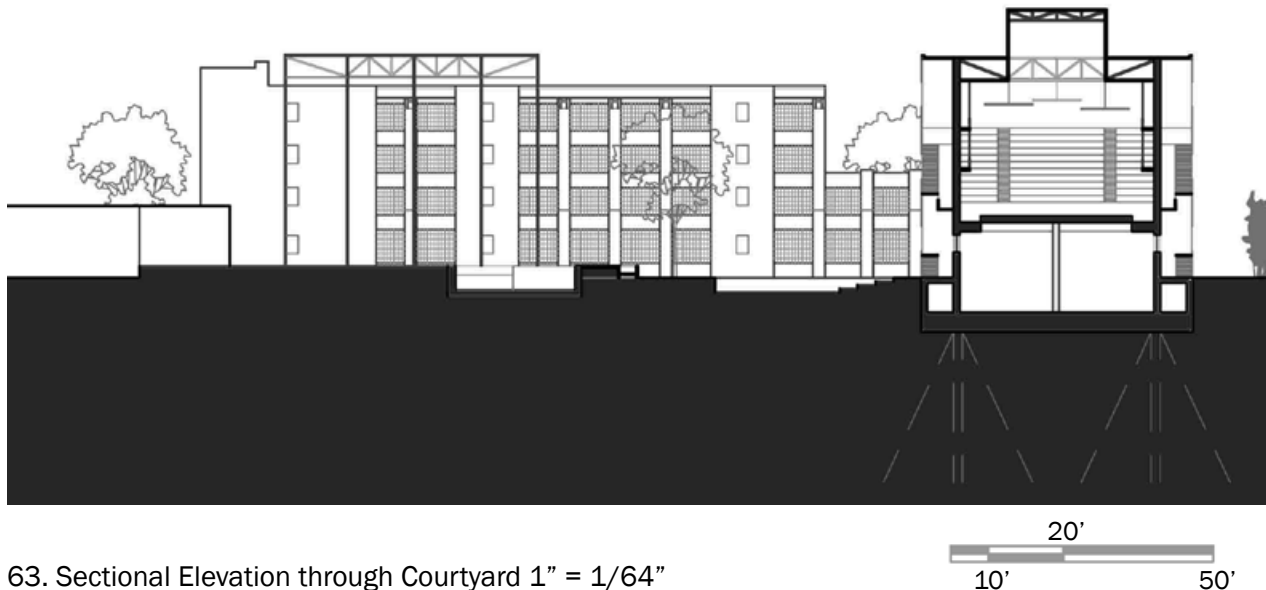
62. Section through New Theater

Theater Design

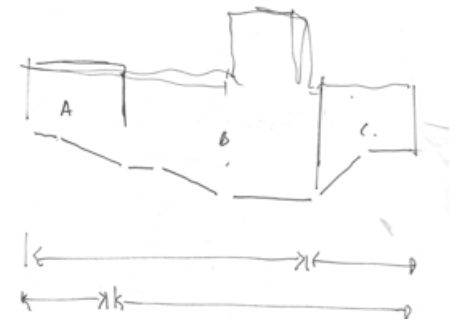
The theater itself is as unique as the building it is housed in. There is seating on either side of the stage; one side shallow for projections and other events, the other steeper for a more intimate performance. The fly tower can hold various sets as well as a center divider that may be lowered to divide the theater in two; allowing for two events to occur simultaneously. This flexibility is critical to support a wide range of community functions while maintaining a modest square footage in an effort to increase the density of the industrial corridor.

The sequence of spaces in theater is almost as important as the performance. When theater was at its most possible it was a place to “see and be seen.” The Bartholomew Avenue theater celebrates this tradition; beginning in a three story atrium where theater-goers can gather and mingle. Visitors then proceed to one of two long staircases on either side; one with a view of the park and one with a view of the courtyard.

The gallery level that cantilevers over the Whitney-Chain building may have a length similar to it’s industrial counterpart, though the quality of space is very different. A Pratt truss supports the roof and encloses mechanical systems, creating a 19’ space down the center that angles up to 21 feet at the edges. Two vertical 27’ Parallel Cord trusses which support the cantilever are pulled off the facade into the space to allow for seamless views in either direction.



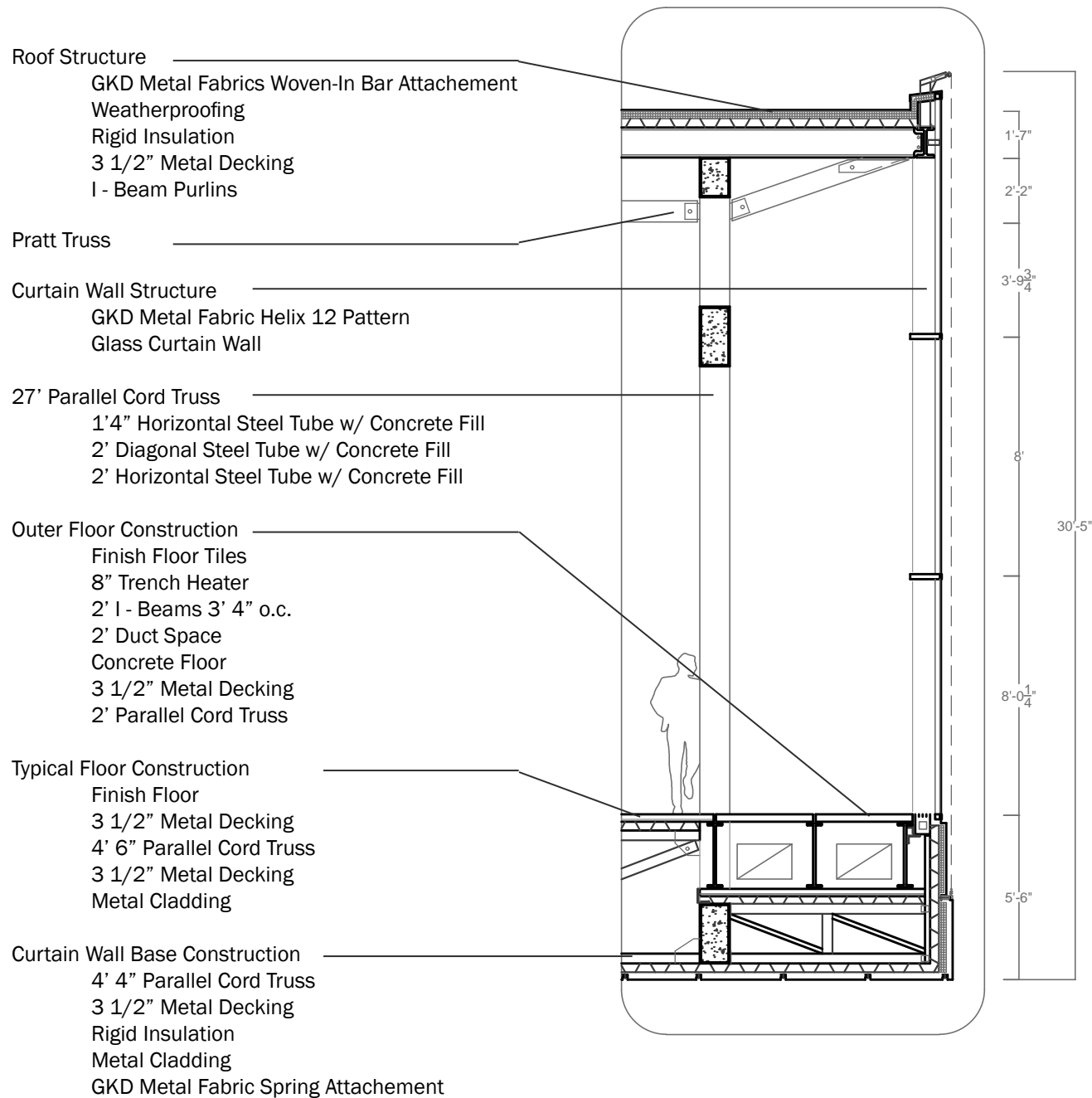
63. Sectional Elevation through Courtyard 1" = 1/64"



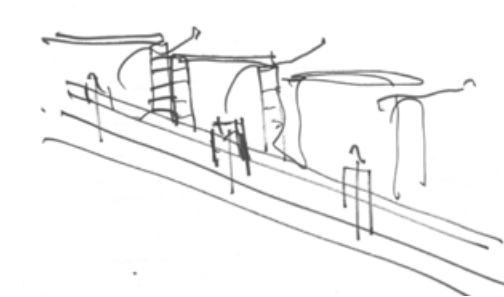
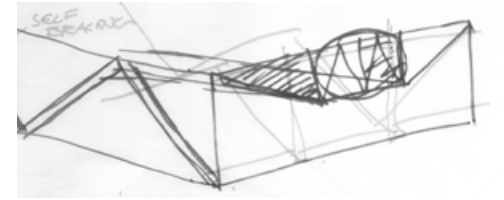
64. Auditorio de Leon Diagram



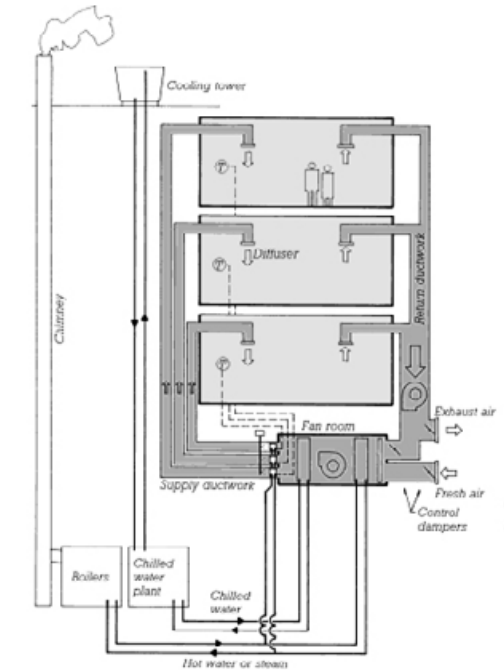
65. Auditorio de Leon Precedent



66. Wall Section through Cantilever 1" = 3/16"



67. Mechanical Diagrams for Theater



68. CAV Diagram

Because of the wide expanses of glass facing south on the Batholomew Avenue theater a metal mesh facade screen will be used to soften the effects of the sun and still allow for wide views. GKD Metal Fabrics Helix 12 was selected for its large open area, 69%, and the ability to use a woven-in bar with spring system. This system is the least intrusive and creates a seamless edge at the top of the facade. At the base, the spring system will be visible above the metal cladding which wraps underneath the cantilever. This is one more detail that highlights the modern technology used to contrast the new construction with the existing structure.

The Whitney-Chain Manufacturing building will need a new mechanical system to function at today's standards. Since there is already a chimney and cooling tower with adjacent mechanical room in place, these spaces will now hold the new system. A Constant Air Volume (CAV) system was selected for the ability to pull the ducts and pipes to the edges of the facade to create an uninterrupted space inside. The theater will not show the mechanical systems on the facade, they will instead be within the Pratt truss at the ceiling and under the floor tiles at the edges of the space. The theater space will feature vents on the floor at each row of seats and the ducts will be embedded under the floor; this will minimize noise in order to maintain the quality of the space. The two seating areas will run on its own system so that each can be controlled separately.



69. Precedent: Pompidou Centre



70. GKD Metal Fabric Installation

A P P E N D I C E S

Unofficial Property Record Card - City of Hartford, CT

General Property Data

Parcel Identification	160-482-001	Property Location	0169 BARTHOLOMEW AV HARTFORD
Property Owner	PARTNERS FOR HARTFORD RENAISSANCE LLC ET AL	Property Use	MANUFACTURNG
Mailing Address	2252 MAIN ST	Most Recent Sale Date	10/4/2004
City	GLASTONBURY	Legal Reference	05154-0240
Mailing State	CT	Grantor	HONEYREEF, LLC,
Zip	06033-2209	Sale Price	0
ParcelZoning	I2	Land Area	2.970 acres

Current Property Assessment

Fiscal Year	2010	Total Value	210,000
Land Value	121,012	Building Value	88,988

Building Description

Building Style	MFG/PROCESS	Foundation Type	Concrete	Flooring Type	CONCRETE
# of Living Units	0	Frame Type	Wood Frame	Basement Floor	N/A
Year Built	1919	Roof Structure	GABLE/HIP	Heating Type	Unit Heat
Building Grade	Average	Roof Cover	Metal	Heating Fuel	Gas
Building Condition	Dilapidated	Siding	Brick/Block	Air Conditioning	0%
Finished Area (SF)	82577	Interior Walls	OTHER	# of Bsmt Garages	0
Number Rooms	0	Number Beds	0	# of Full Baths	0
# of 3/4 Baths	0	# of 1/2 Baths	0	# of Other Fixtures	0



72. 169 Bartholomew Avenue



73. I - 84 Underpass



74. I - 84 Underpass



75. 170 Bartholomew Ave



76. 170 Bartholomew Ave

B. City Zoning/Regulatory Data

P: Public Property and Cemetary District

The purpose of the P district in the city is to establish a separate category for park and recreation uses so that appropriate regulations may apply including as permitted uses, skating rinks, public swimming pools, refectories and zoos. Residential structures (except those of a caretaker), general commercial and industrial uses are not permitted.

P off-street parking and off-street loading shall be provided in accordance with the provision of article V (see page 79). Special permits for parking lots in the P zoning district for the purpose of meeting the requirements are available.

IROD: Industrial Re-Use Overlay District

The purpose of the IROD district in the city is to allow for the re-use of industrial structures built generally before World war II that have become obsolete for modern single story production processes. Structures that are appropriate for the district are located primarily in the industrial corridors that were developed along the railroad lines. IROD's shall be overlain only on properties located in the I-2 and C-1 zoning districts.

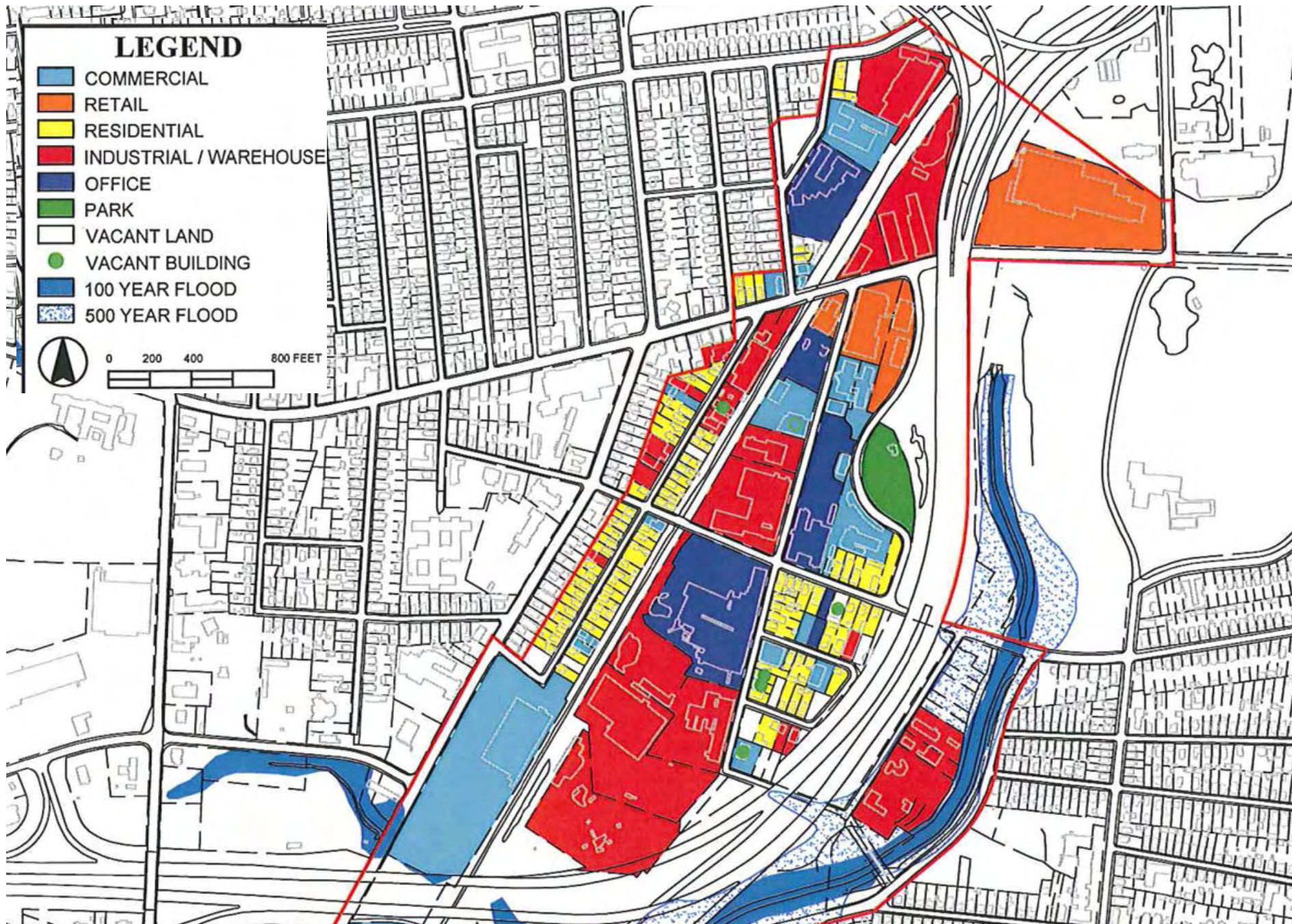
The maximum density for an IROD is seventy-five people per acre. Required lot area, lot width, and setbacks shall be that of the underlying zoning district. There shall be no IROD maximum height limit. Required usable open space is 150 SF per person

I-2: Related Permitted Uses

Bazaars and Festivals (conditional), Parks - Leisure and Ornamental, Auditoriums and Coliseums, Exhibition Halls, Gymnasiums, Fabricated Metal Products and Manufacturing, Furniture Manufacturing, Jewelry, Silverware and Plated ware Manufacturing, Office, General and Professional Uses, Work Studio/dwelling (conditional), Employment Services, Other Business Services, Day Care Center, Technical, Trade and Vocational Education, Photographic Services, Community Health Centers, Brew Pubs, Drinking Places (alcoholic beverages), Eating Places with and without Drive-in or curb services, Private and Public Parking lots, Arterial, Collector and Local Access Streets (no freeways, expressways or parkways), Bus transportation Passenger terminals (intercity and local), Railroad Transportation Passenger terminals

IROD: Related Permitted Uses (in addition to I-2 uses):

Art Galleries, Libraries, Museums, Community Center, Motion Picture Theater, Residential (multiple), Art, Dancing, Music and Dramatic Eductaion Services



77. Existing Zoning Map

Zoning Conditions:

Bazaar, Festival, Carnival or Circus: Permitted in the I-2 and P districts with: proof of permission, proper insurance, and minimum lot area of one-half acre.

Work Studio/dwellings are permitted in the I-2 district if: confined to structures existing at the time of adoption of this section, is not enlarged or structurally altered, shall be subdivided into joint residential/work quarters having a combined gross floor area of less than 650 SF and the residential portion of the work studio/dwelling quarters shall contain a minimum of 400 SF of usable floor area. Shall be authorized for a period of not more than 2 years and shall be renewable by the zoning administrator.

Additional information:

Usable open space: The area of the front, side or rear setbacks which is not used for driveways and parking or loading may be computed in determining the required usable open space.

Restoration of unsafe buildings: Nothing in these regulations shall prevent the strengthening or restoring to a safe condition of any part of any building declared unsafe by the director of the division of licenses and inspections or where required by any lawful order.

Width of private streets: No private street except driveways, providing direct access to or from a public street shall have a width of less than twenty-four feet.

Article V: General Provisions for off-street parking:

A parking space shall have an area of not less than 18 feet by 9 feet. Up to 30% of the total number of spaces in a lot or garage may have a minimum width of 7 feet 9 inches provided they are marked and located separately. Each space designed for persons who have mobility impairments shall be not less than 15 feet in width including 3 feet of crosshatch and shall be designated by above-grade signs. All spaces and means of ingress and egress shall be laid out on the parking surface with paint or plastic striping. Parking shall not occupy any part of any front setback or any setbacks lying adjacent to streets on corner lots. Parking spaces for multifamily residential uses shall be located not more than 500 feet and not less than 10 feet from a main entrance to the structure. Parking spaces for nonresidential uses shall be located not more than 1000 feet from a main entrance to the structure. Parking requirements for mixed use buildings shall be the sum of the requirements for the various uses computed separately. Parking for more than five vehicles shall be effectively screened on each side which adjoins or faces premises in a residential district. Shall be surfaced with asphalted, bituminous, cement or other properly bound pavement so as to provide a durable and dustless surface and shall be properly graded and drained to dispose of all surface water accumulation.

Parking Requirements:

Office Use: Direct Walk in - One space per 500 SF, General Office - One space per 1000 SF

Residential: One and one half space per dwelling

Public Assembly: One space for every four persons based on maximum capacity

Amusements and related: One space for every four persons based on maximum capacity

Playfields, Athletic Facilities and Parks determined by zoning administrator

Handicapped Parking (Required Spaces / Total Spaces)

1 / <25	7 / 201-300
2 / 26-50	8 / 301-400
3 / 51-75	9 / 401-500
4 / 76-100	2% / 501-1000
5 / 101-150	20 + 1 for each 100 over
6 / 151-200	1000 / Over 1000

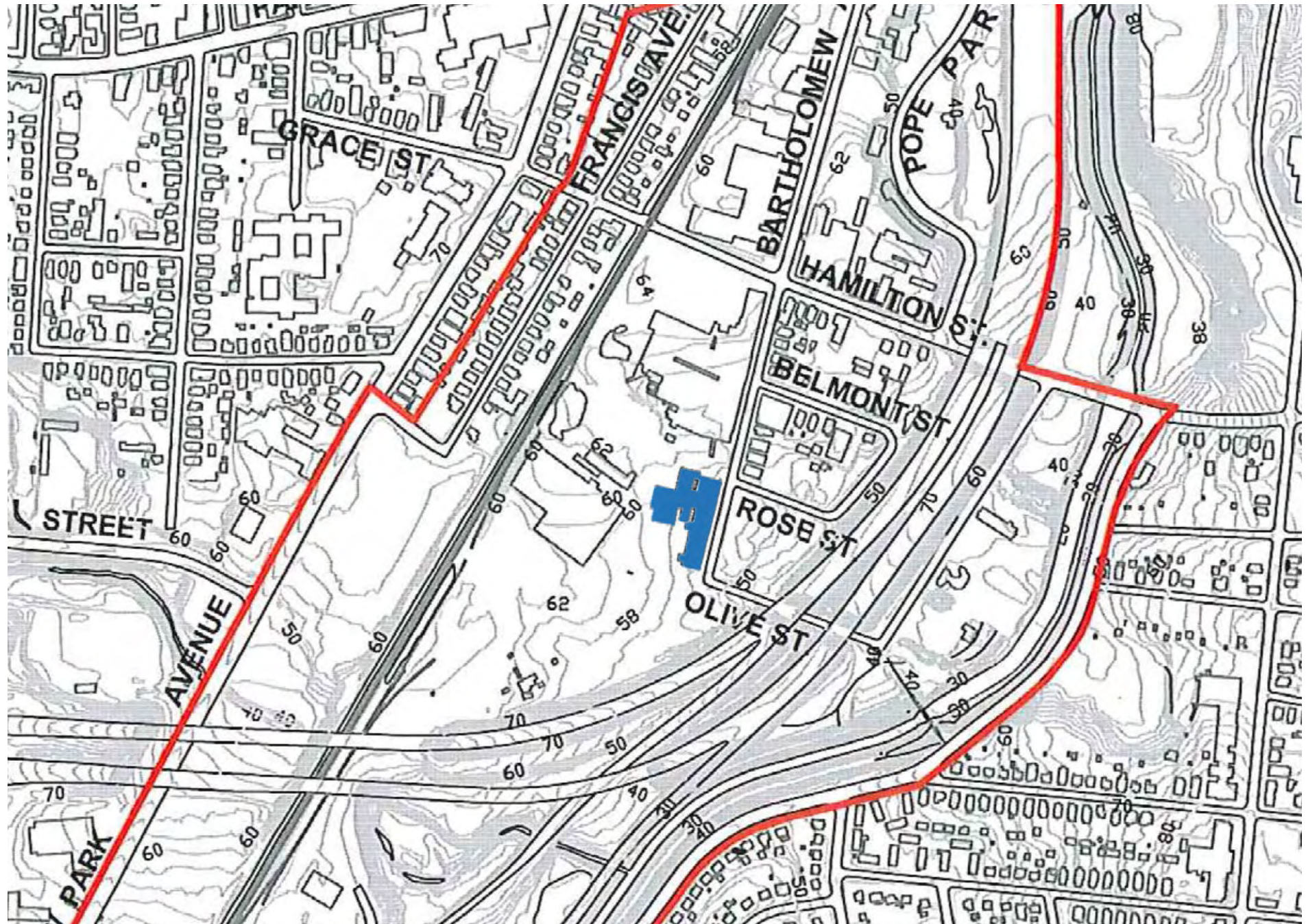
Up to a 30% reduction in the number of required spaces is permitted when 3 of the following are provided:

Vanpools or subscription bus services for employees and/or subsidy of employee use of high occupancy vehicles such as carpools and vanpools.

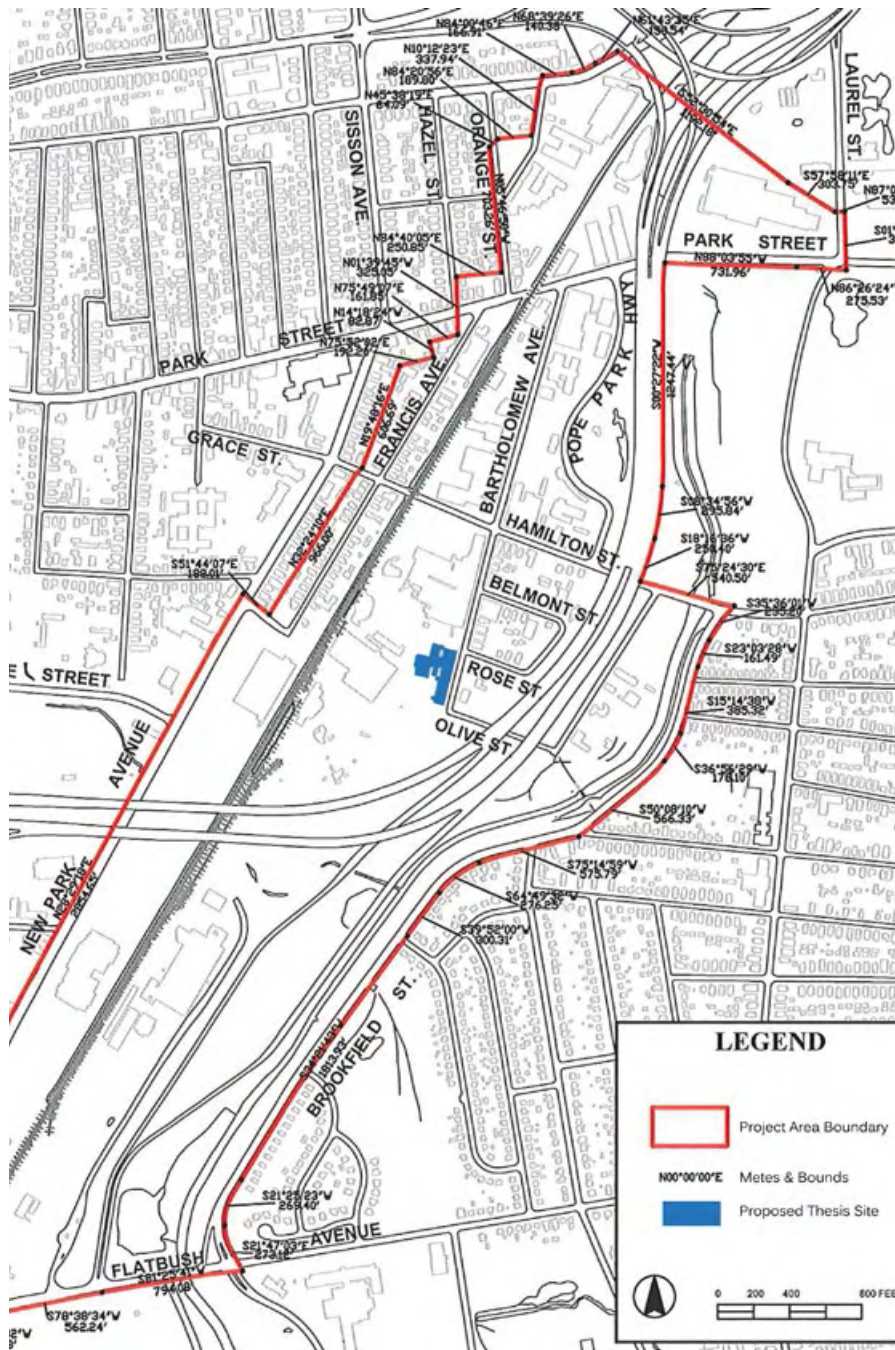
Shuttle services from off-site parking facilities owned or leased by the applicant or tenants of the applicant.

Subsidized transit passes

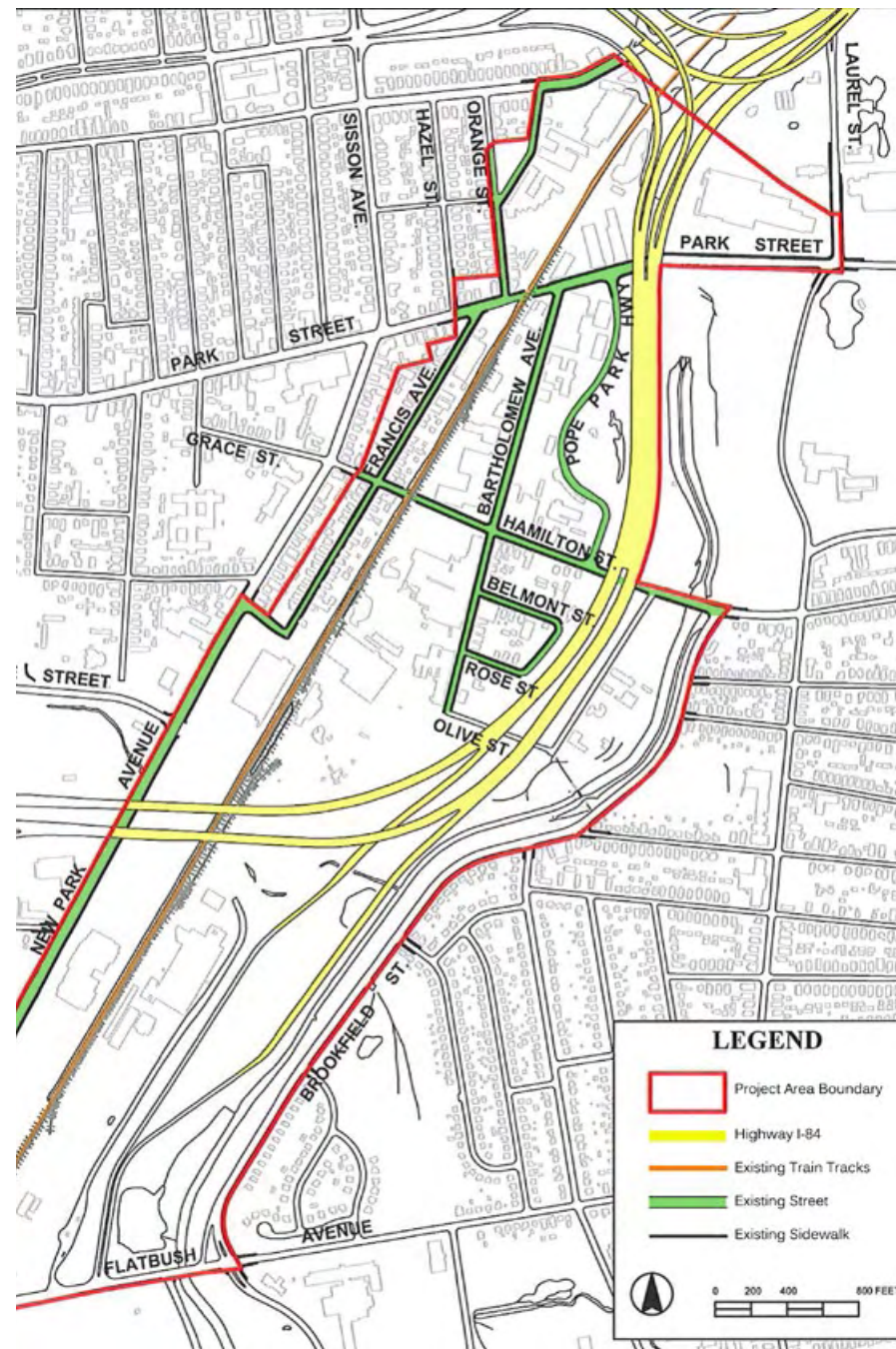
Bicycle commuters including but not limited to bike racks



78. Existing Topography



79. Bartholomew Project Area



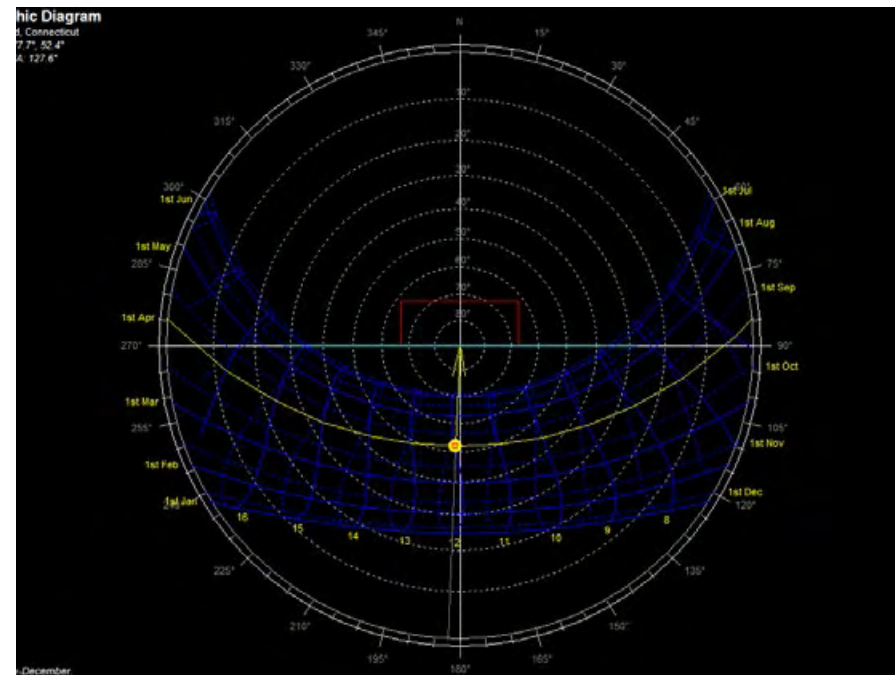
80. Existing Roads and Sidewalks

D. Environmental Conditions

Hartford is located in the fertile Connecticut River Valley in central Connecticut. Poised on a rise above the west side of the Connecticut River, the city is set within a gently rolling landscape with extensive level areas. Hartford has a generally mild climate, with only 19 days in the summer surpassing 90° and 6 in the winter reaching 0° or below. Winters are typically in the 20's and summers in the 70's and low 80's.

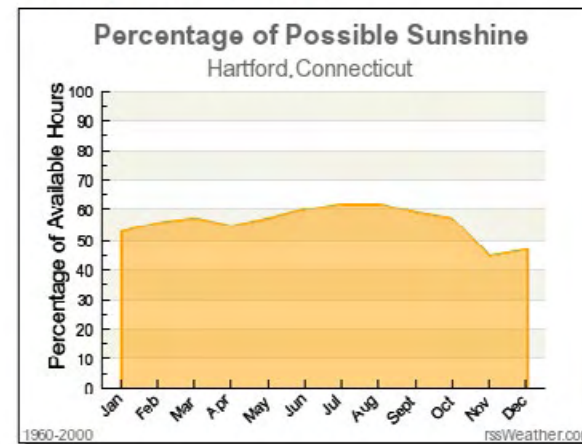
Storm activity moving eastward from the northern branch of the Appalachian chain accounts for the city's many summer thunderstorms. The Atlantic Ocean to the south contributes the famous wind and rain storms known locally as "northeasters." Precipitation is generally consistent throughout the year, averaging 44.1 inches of rain and 49 inches of snow.

Cloudy skies are a regular feature of Connecticut, with the annual percentage of possible sunshine averaging 55 - 60%. Late summer and early fall tend to have the most clear days. Temperature variations between night and day tend to be moderate. During summer there can be an approximately 20° drop and winter is similar, averaging a 19° drop in temperature.



81. Sun Diagram

Monthly Sunshine Hours



Month	Sunshine Hours
Jan	53%
Feb	56%
Mar	57%
Apr	55%
May	57%
Jun	60%
Jul	62%
Aug	62%
Sept	59%
Oct	57%
Nov	45%
Dec	47%

82. Monthly Sunshine Hours



83. Connecticut River

Rainfall averages 3-5 inches a month. Most snowfall occurs between December to March, though storms can occur into April as well. These averages can be misleading, however because Connecticut weather can also be extremely unpredictable. Environmental conditions often change from year to year in the same season, and can change in a very short period of time. For example, the spring drought in 1999 was the worst of the century, yet that September was the wettest of the century, bringing over 10 inches of rain (the only exception being 1938 when a major hurricane hit the state.). The Connecticut River Valley is particularly vulnerable to flooding. In 1955 two floods hit the state in one year, the first in August 19th and the second on October 16th. The Connecticut Flood Recovery Committee declared that Connecticut was the “hardest hit victim of the worst flood in the eastern United States.”



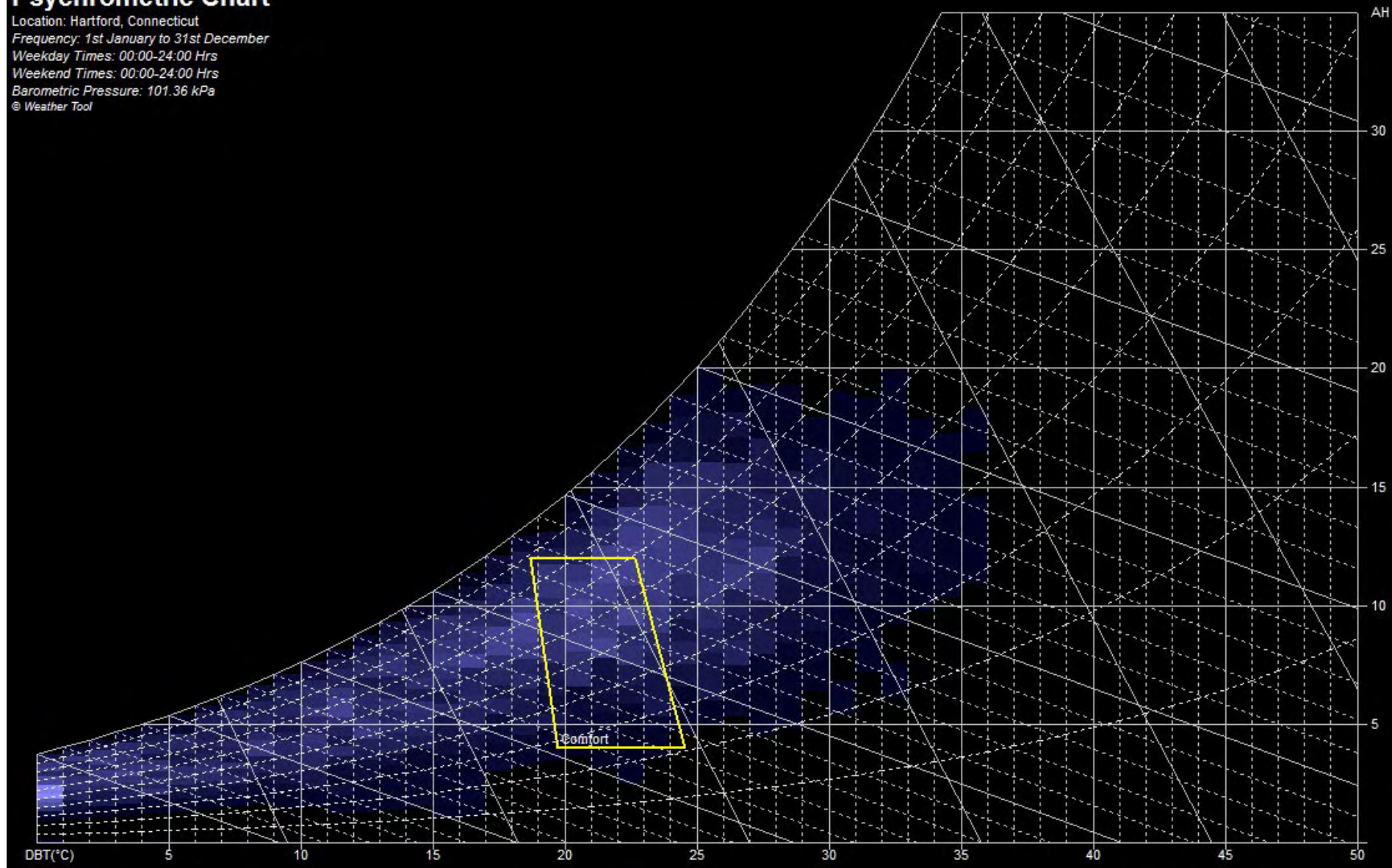
84. Image of 1955 Flood



85. Image of 1955 Flood

Psychrometric Chart

Location: Hartford, Connecticut
Frequency: 1st January to 31st December
Weekday Times: 00:00-24:00 Hrs
Weekend Times: 00:00-24:00 Hrs
Barometric Pressure: 101.36 kPa
© Weather Tool



Prevailing Winds

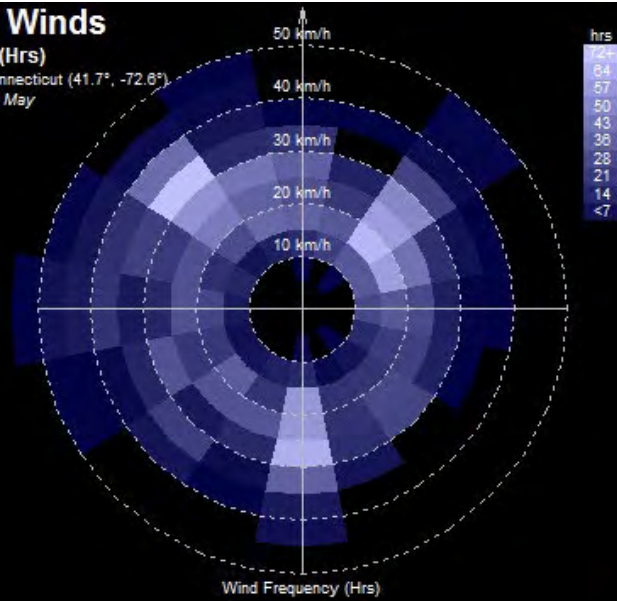
Wind Frequency (Hrs)

Location: Hartford, Connecticut (41.7°, -72.6°)

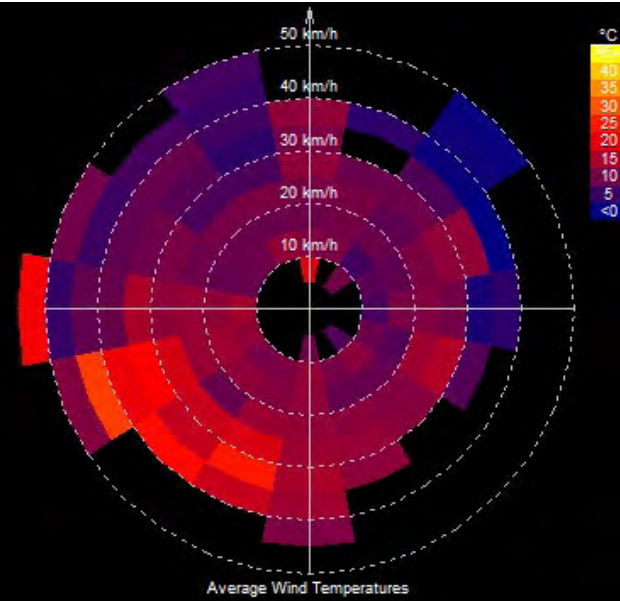
Date: 1st March - 31st May

Time: 00:00 - 24:00

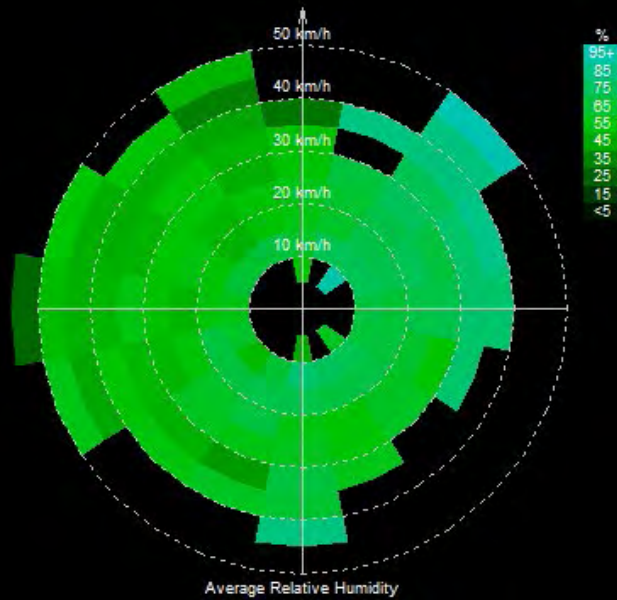
© Weather Tool



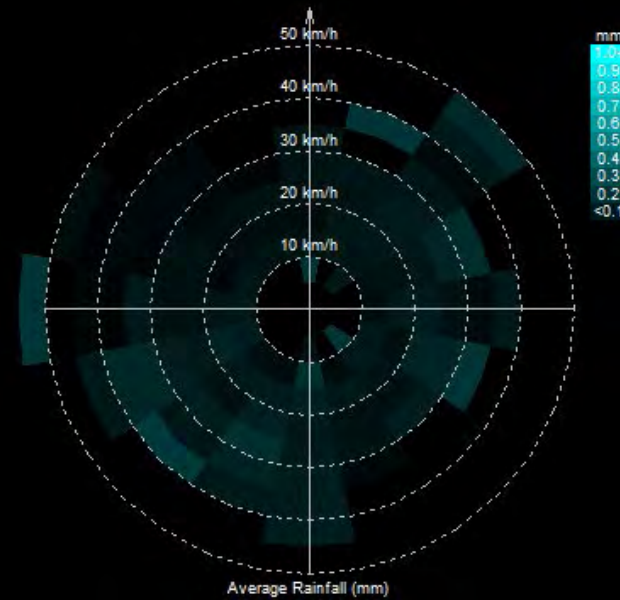
Wind Frequency (Hrs)



Average Wind Temperatures



Average Relative Humidity



Average Rainfall (mm)

Prevailing Winds

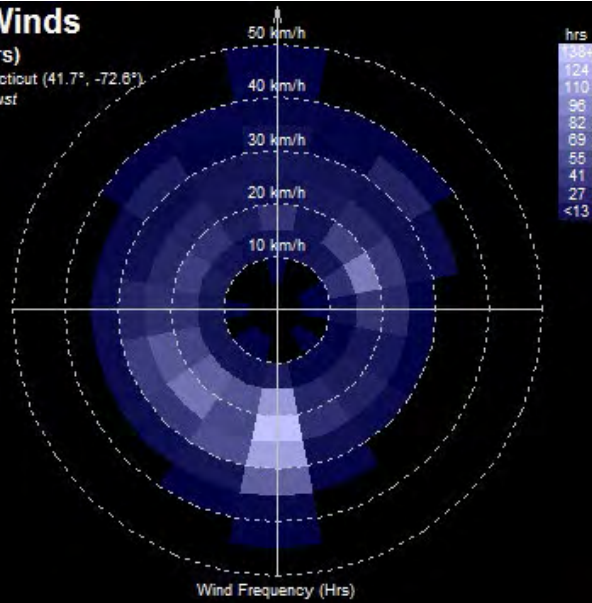
Wind Frequency (Hrs)

Location: Hartford, Connecticut (41.7°, -72.6°)

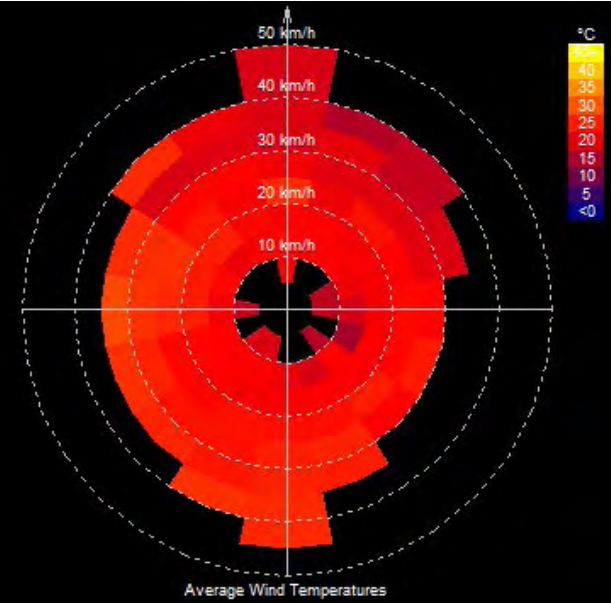
Date: 1st June - 31st August

Time: 00:00 - 24:00

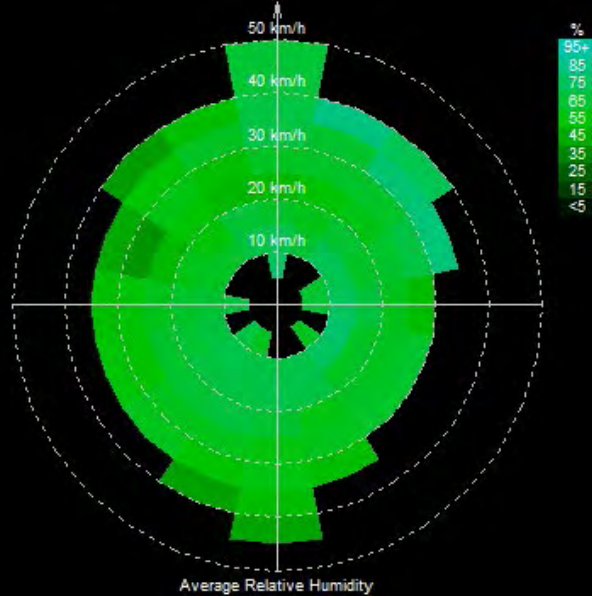
© Weather Tool



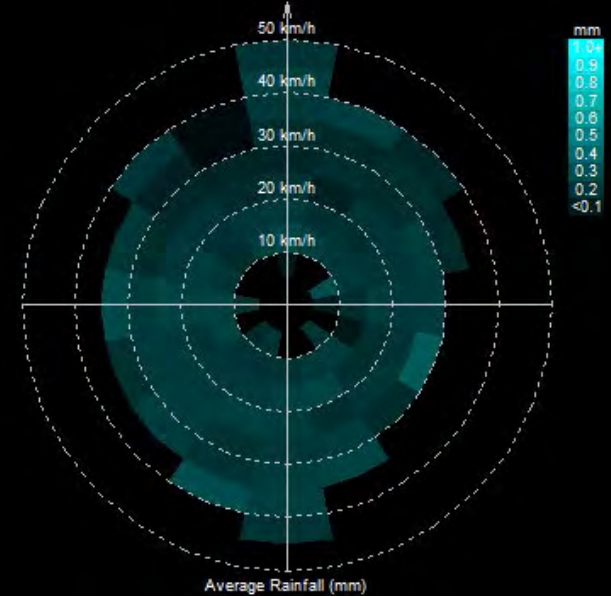
Wind Frequency (Hrs)



Average Wind Temperatures



Average Relative Humidity



Average Rainfall (mm)

Prevailing Winds

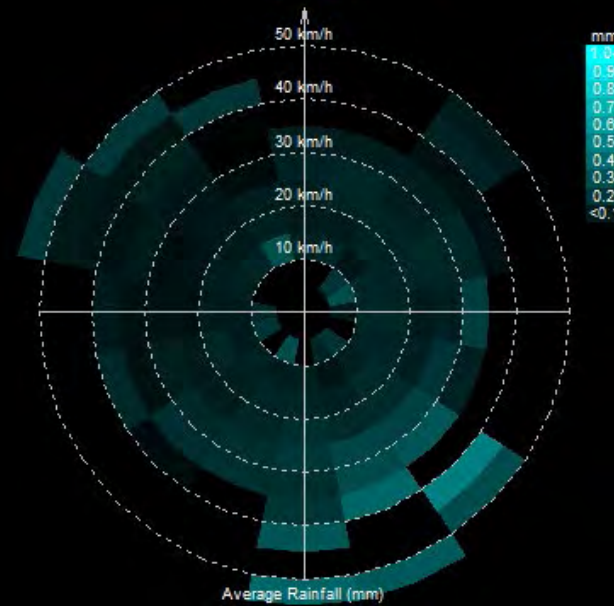
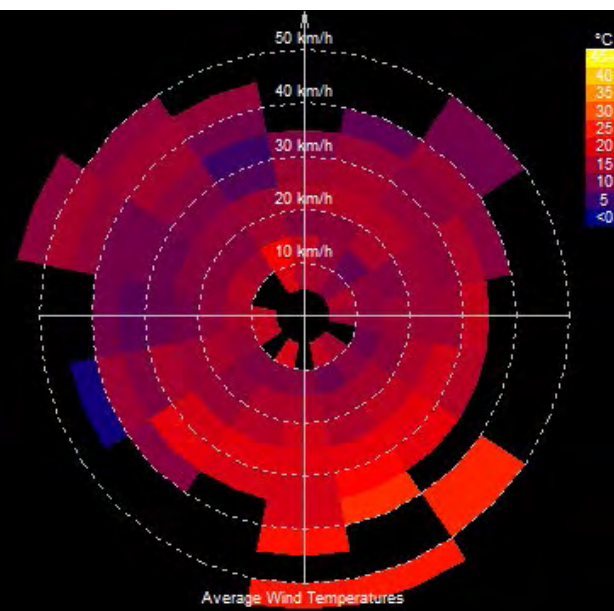
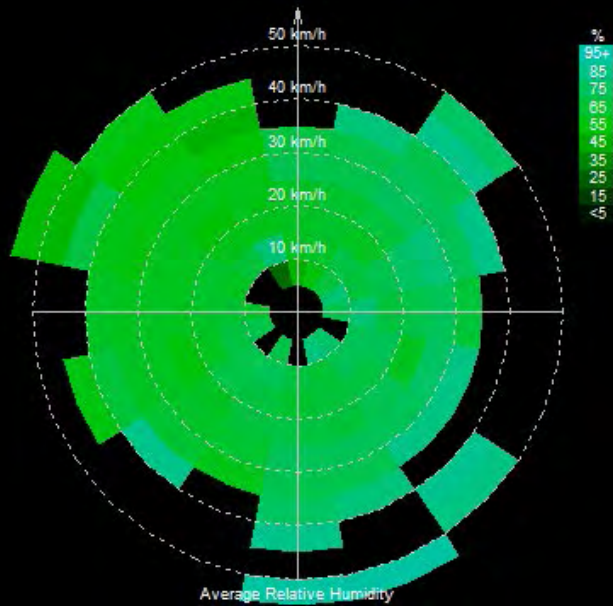
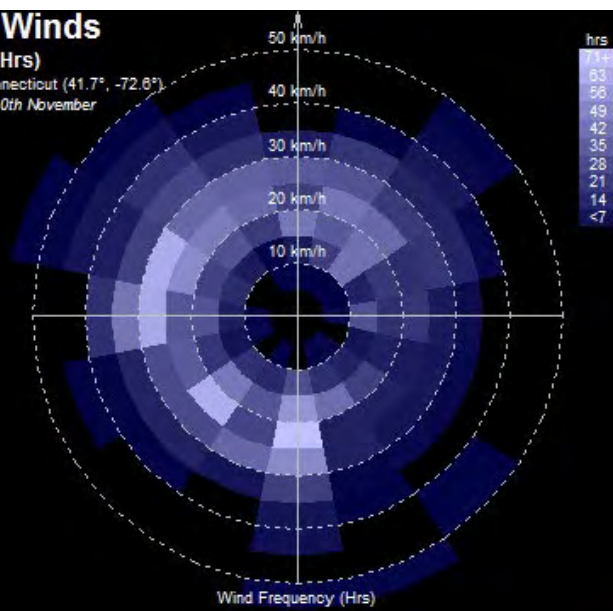
Wind Frequency (Hrs)

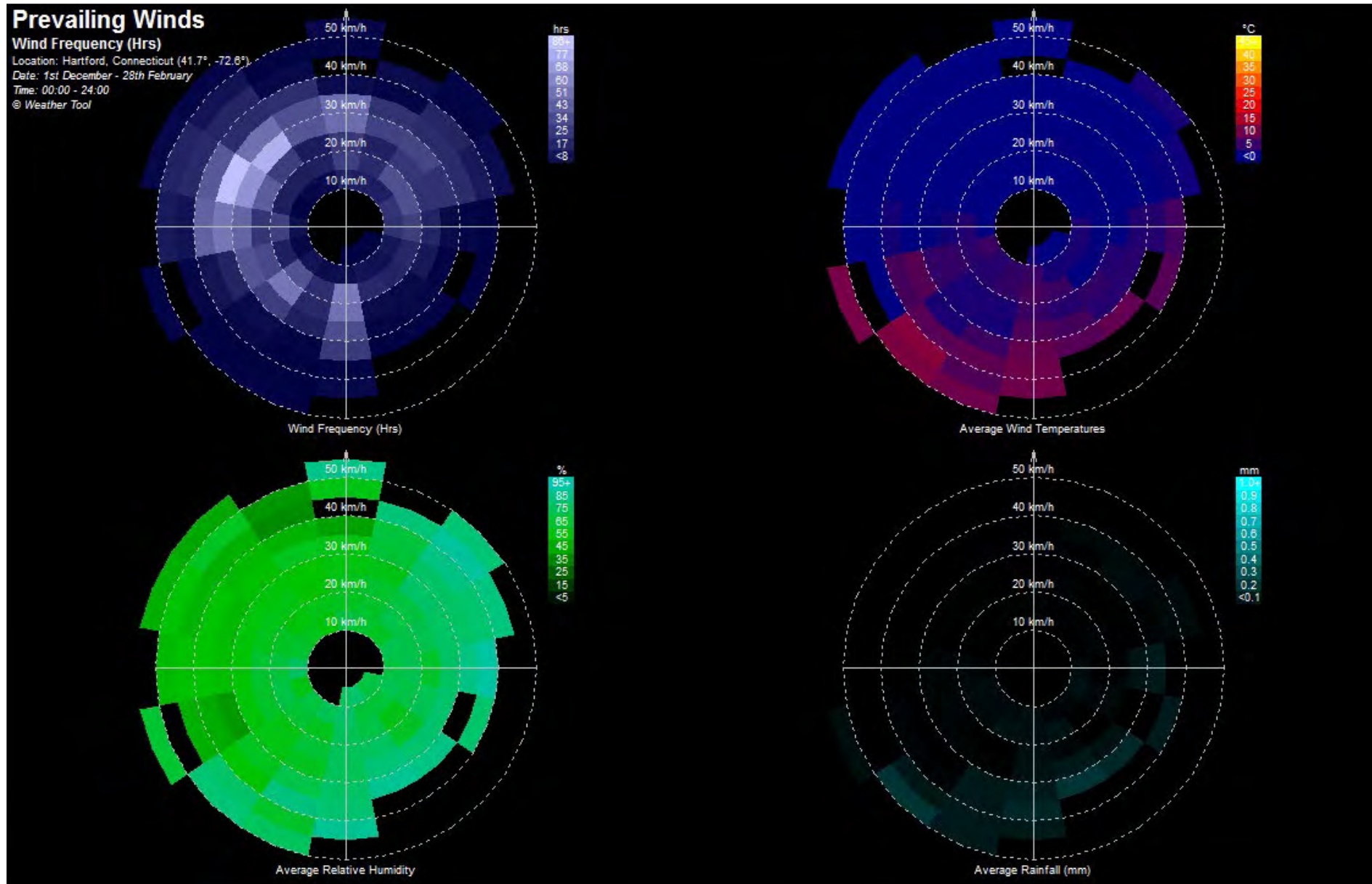
Location: Hartford, Connecticut (41.7°, -72.8°)

Date: 1st September - 30th November

Time: 00:00 - 24:00

© Weather Tool





E. Ecological Systems

For the most part, Connecticut consists of moderate hills with some fairly large flat areas, particularly along the coast and in the Central Connecticut River Valley. This landscape is fairly young, as Connecticut was buried under a sheet of ice about 20,000 years ago and the state was not fully uncovered until 15,500 years ago.

After the deglaciation of Connecticut, the state was dominated by a tundra landscape until about 10,000 years ago, followed by a conifer-dominated forest as woody vegetation became more common. A widespread mixed-hardwood forest gave way to a forest dominated by oaks, hickory, chestnuts, maples, birches, and hemlocks. The current species composition of Connecticut forests has only been around for the past few thousand years.

Human impact on the environment began soon after deglaciation, about 10,000 years ago, when the first Native Americans arrived. The emergence of open forests rich in blueberries and huckleberries, cultivation of food plants rich in nuts, seeds and fruits along with fishing, shellfish gathering, and hunting of caribou and other mammals and birds also affected the ecosystem.

Settlements by the Europeans in the 1630's resulted in widespread clearing of forests for agriculture and fuel for industry, so much so that by the early 1800s three-quarters of the state was deforested. This resulted in extensive erosion, drainage of wetlands, water pollution and decimation of native wildlife species.

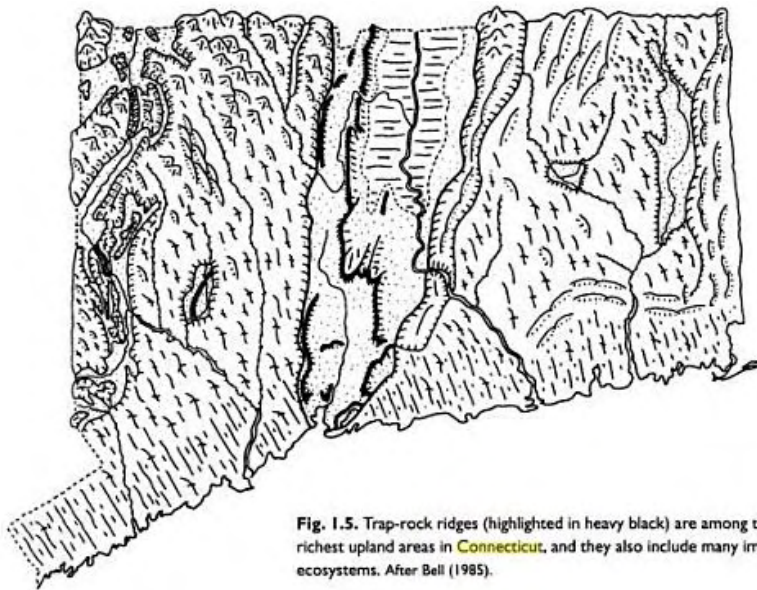
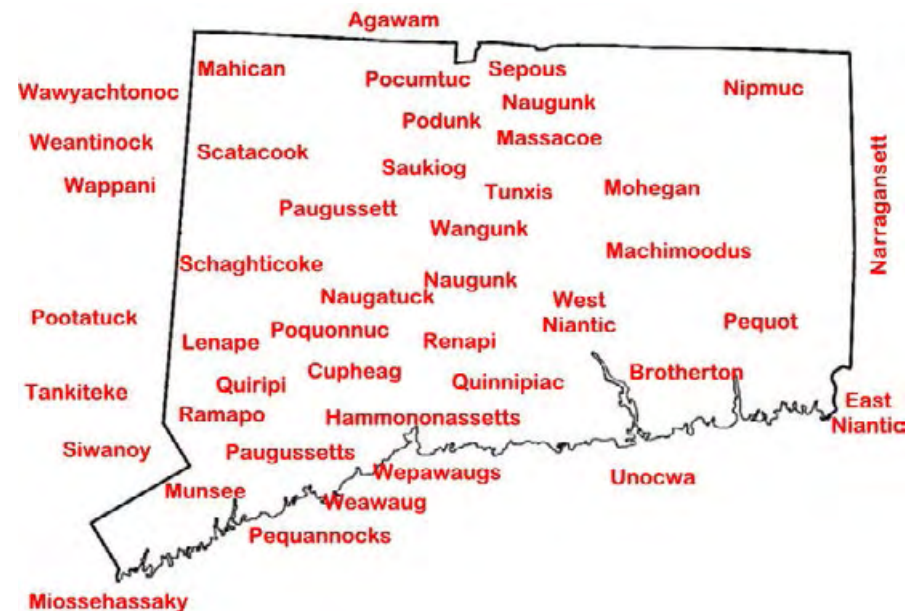
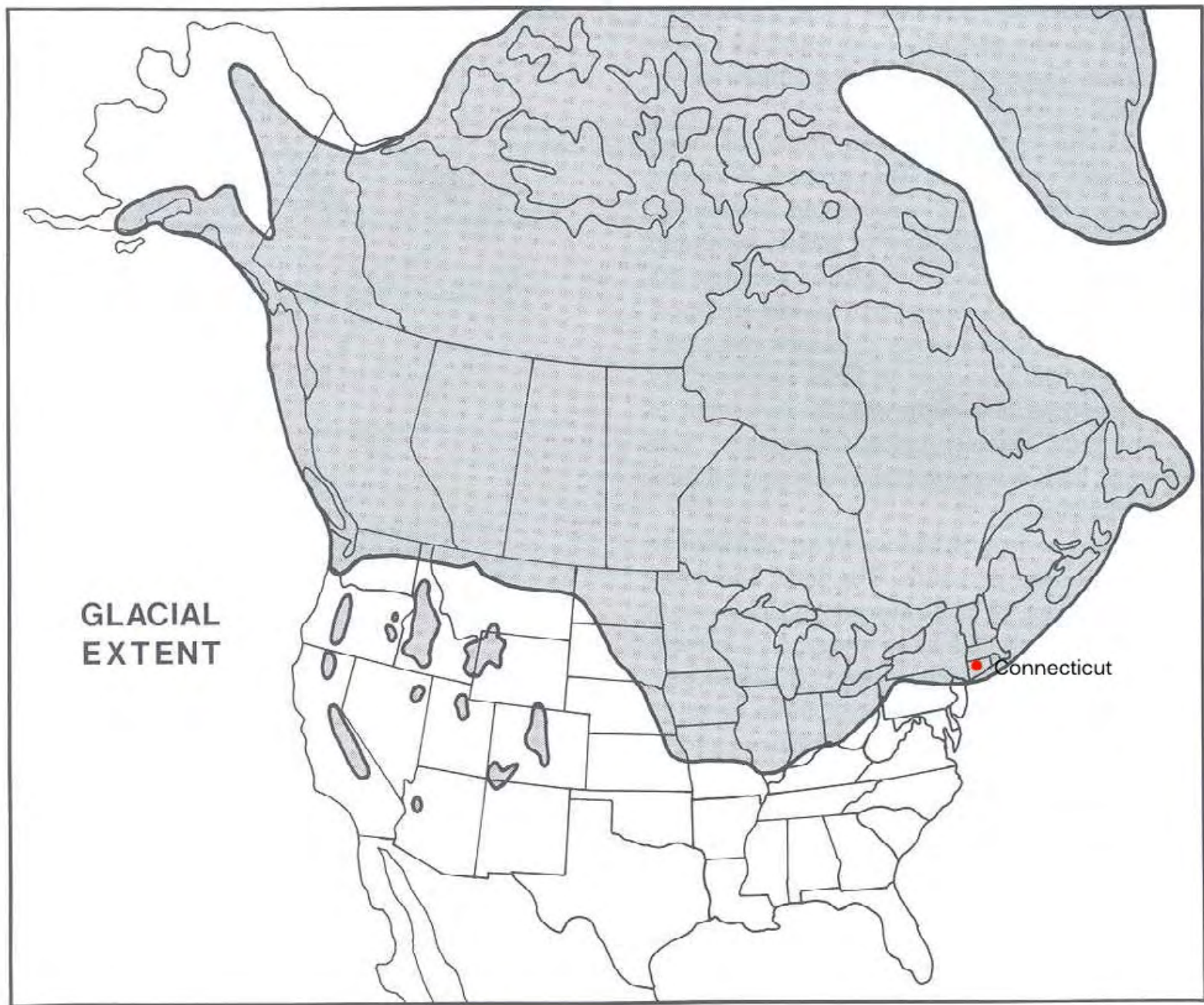


Fig. 1.5. Trap-rock ridges (highlighted in heavy black) are among the biologically richest upland areas in Connecticut, and they also include many important wetland ecosystems. After Bell (1985).





After Johnson 1980.

93. Map of Glacial Extent

Connecticut has an exceptionally high ozone level and atmospheric deposition of nitrogen due to air and water pollution begun during industrialization and continuing today due to emissions carried on prevailing winds from New York City. Currently the state has been focused on reforestation; 60% of Connecticut is now forested.

Hartford sits in the center of the valley; a lowland zone of softer sedimentary shales and sandstones of the Triassic Age. The valley around the city is interrupted by several north-south trending “trap-rock” ridges. These areas, including the nearby Avon Mountain and Talcott Mountain, consist of an exposed western facing edge of a tilted layer of basalt. The steep cliffs and slopes have formed because the basalt, a remnant from the ice-age, is more resistant to erosion than the softer brownstone in other areas. The soil in the Connecticut River Valley still contains the remnants of a huge ice-age lake (Glacial Lake Hitchcock); there are surface deposits of alluvial sand, silt, clay, gravel, and organic material with interposed silt or clay.

The site, along with the rest of Hartford, is highly urbanized and primarily impervious. The predominant soil units in the area are UD Udorthents - Urban Land Complex (54%) and Ur Urban Land (46%). Both soil types reflect areas that have seen changes due to cutting, filling and construction. The site is composed of sand overlying fines, characterized by layers of well-sorted to poorly sorted gravel, sand, silt and clay. It is underlain with the Portland Arkose Formation, a sedimentary foundation.



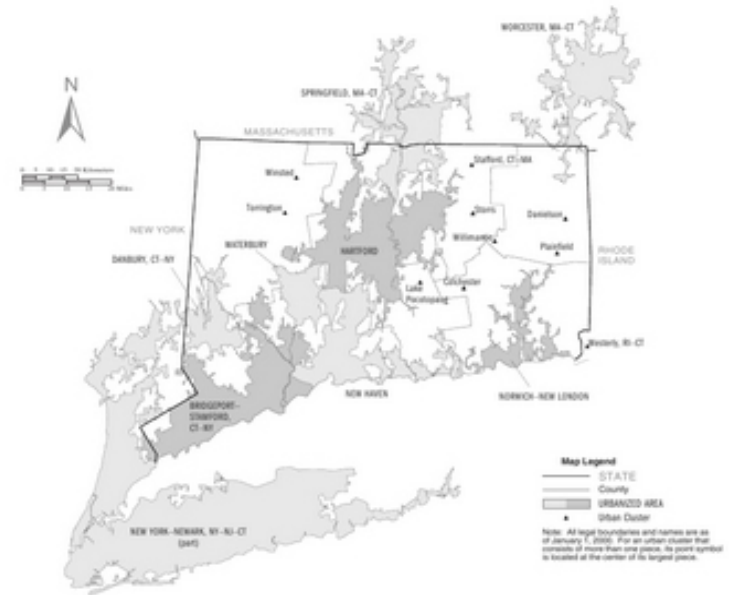
94. Talcott Mountain, Simsbury CT



95. Heavy Forest on Avon Mountain



96. Basalt Ridge



97. Map of Urban Areas of Connecticut



98. Aerial View of Hartford

Bringing native plants to the proposed park at the end of the industrial corridor will help the land to revitalize itself and create a healthy, well balanced landscape within the city. The following trees were selected for their varying heights, colorings, and fruits:

Red Maple (*Acer rubrum*): Silvery bark, red flowers in early spring, and clear red foliage in fall. Fairly fast-growing tree. 40-70' tall.

Downy Serviceberry (*Amelanchier arborea*): A graceful small tree or large shrub. It has clusters of white flowers in spring and its edible fruits taste a bit like blueberries. Beautiful fall foliage in shades of yellow, orange, and red. 20-25' tall

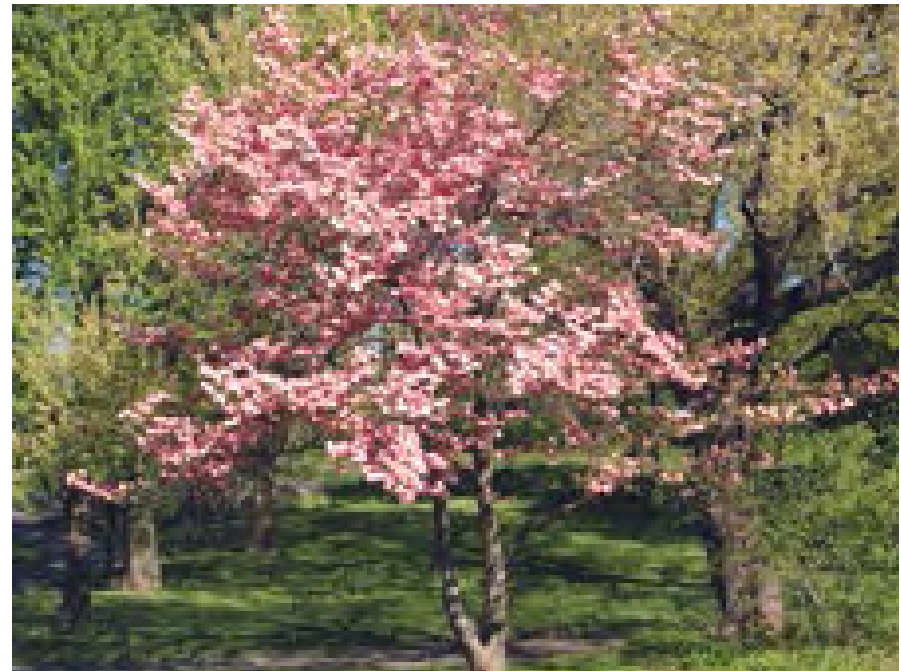
River Birch (*Betula nigra*): Excellent large landscape tree. The bark ranges from tan to cinnamon brown in color; it has several trunks that form a clump and its peeling bark is attractive. Seldom troubled by insect pests, tolerates summer heat well. 40-70'

Flowering Dogwood (*Cornus florida*): Ornamental tree with low gracefully curving branches. In spring it has large white flowers. The shiny red fruit is also attractive, and it provides important winter food for wildlife. A sunny location with good air circulation is best. 20-30'

White Oak (*Quercus alba*): Connecticut's state tree develops a broad crown with many branches nearly horizontal. The foliage is dark red to reddish-purple for a long period in fall. White oaks can live for centuries and are excellent trees for wildlife. 50-80'



99. River Birch



100. Flowering Dogwood



101. White Oak



102. Red Maple



103. Downy Serviceberry

The following grasses were selected for their varying textures, colorings, and flowers to create a rich self-sustaining ecosystem:

Red Chokeberry (*Aronia arbutifolia*, *Photinia pyrifolia*): Thrives in a wide range of conditions. Flowers in spring, followed by berries. 5-10' tall.

Sweet Pepperbush (*Clethra alnifolia*): Fragrant white flowers in mid-summer are a magnet for butterflies and bees. 6-9' tall.

Winterberry Holly (*Ilex verticillata*): Keeps its beautiful red berries all winter for a splash of color. Loves wet soil. Typically 6-10'

Mountain Laurel (*Kalmia latifolia*): Connecticut's state flower. In spring, its pale pink flowers can attract hummingbirds. The leaves stay green all winter. Very versatile; will grow in full sun with moist soil, but flourishes in shade as well 5-12' tall.

Little Bluestem (*Schizachyrium scoparium*): A highly ornamental grass that deserves to be used more. Thrives in poor or rocky soil. In fall, the grass turns reddish-gold, with fluffy white seed clusters. Its gold color and columnar form persist all winter. 3' tall.

Switchgrass (*Panicum virgatum*): Forms tall, stately clumps. In early fall, it has airy purplish flower-heads. The seeds provide food for birds. The grass is yellow in fall, and tan in the winter. 3-5' tall.



104. Switchgrass



105. Little Bluestem



106. Red Chokeberry



108. Mountain Laurel



107. Sweet Pepperbush



109. Winterberry Holly

The following flowers were selected for their variety in color, flowering times and attractiveness to butterflies and hummingbirds.

Butterfly Weed (*Asclepias tuberosa*): Bright orange flowers in July and August are marvelous for attracting butterflies. Butterfly weed has a long tap root that makes the plant highly drought-resistant. 2-3' tall.

Wild Blue Phlox (*Phlox divaricata*): Lightly fragrant clusters of lilac-colored flowers grace this woodland plant in spring. 1 foot tall.

Barren Strawberry (*Waldsteinia fragarioides*): Excellent ground cover. Has evergreen leaves and yellow flowers in the summer. 4-8 inches tall.

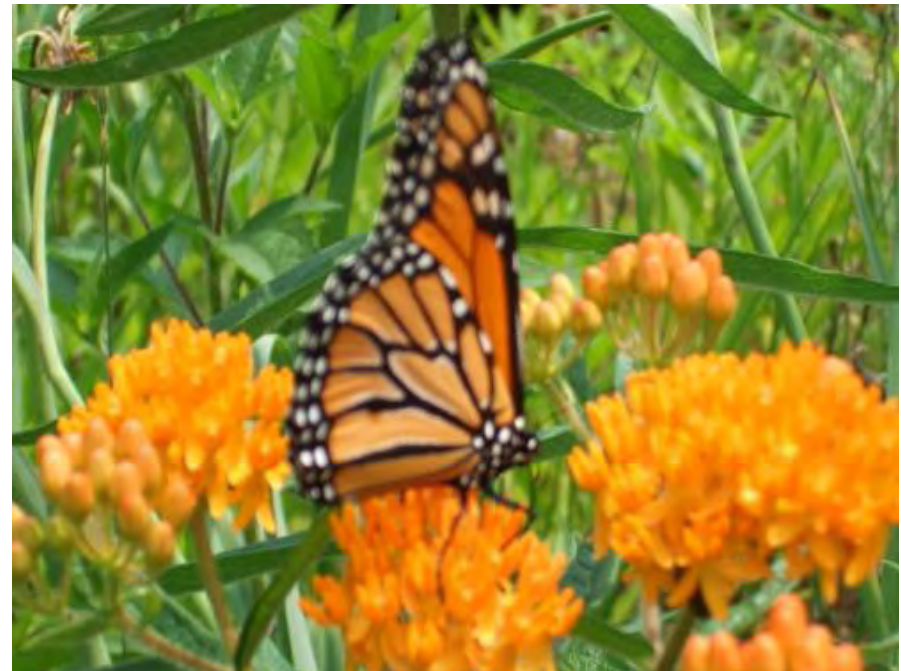
Foamflower (*Tiarella cordifolia*): Spikes of fluffy white flowers rise above a carpet of soft green leaves. Blooms strongly in late spring, and with consistently moist soil, will continue to produce the occasional flower spike until frost. 8-12 inches tall.

Trumpet Honeysuckle (*Lonicera sempervirens*): Showy vine with scarlet flowers in summer and autumn is a favorite with hummingbirds. The leaves are dark green on top and pale blue-green beneath. Needs a trellis, fence, or large shrub to climb on. Climbs 10-20'.

Virgin's Bower (*Clematis virginiana*): Rapidly growing vine with late-summer flowers. Climbs 5-20'.



110. Wild Blue Phlox



111. Butterfly Weed



112. Trumpet Honeysuckle



114. Virgin's Bower



113. Barren Strawberry



115. Foamflower

Ricardo Bofill Taller de Arquitectura in Sant Just Desvern, Barcelona ,1973, Ricardo Bofill

In 1973 Ricardo Bofill discovered an old cement factory, part of an industrial complex from the turn of the century, which was comprised of over 30 silos, underground galleries and huge engine rooms. He decided to transform it into his main office. Remodelling lasted two years. The factory, abandoned and partially in ruins, was a compendium of surrealist elements; stairs that climbed up to nowhere, mighty reinforced concrete structures that sustained nothing, and pieces of iron hanging in the air.

Once the spaces had been cleaned of cement and enhanced with surrounding, newly-planted greenery, Bofill began adapting the site to the new program. Eight silos were left standing, and turned into offices, a modeling laboratory, archives, a library, a projection room and a huge space known as 'The Cathedral'; the venue for subsequent exhibitions, lectures, concerts and a whole range of activities.

"The factory is a magic place where strange atmosphere is difficult to be perceived by a profane eye. I like the life to be perfectly programmed here, ritualised, in total contrast with my turbulent nomad life." Ricardo Bofill



116. Greenery covered Silos



117. Exterior of Cement Factory



118. Outdoor Meeting Space



119. Double Height Space



120. Meeting Space

Pompidou Centre
Paris, France, 1977, Renzo Piano and Richard Rogers

The National Centre for Art and Culture Georges Pompidou (aka. the Pompidou Centre) was the brainchild of President Georges Pompidou with the goal of creating an original cultural institution entirely dedicated to creating modern and contemporary art. Today it is one of the most visited attractions in France.

The international design competition called for “interdisciplinary, free movement and opening of the exhibition spaces.” The winning proposal by Renzo Piano and Richard Rogers called for the mechanical and circulation systems to be stowed on the outside facade, resulting in a vast interior gallery that is flexible enough to house a wide range of exhibitions and activities. The mechanical shafts, integrated into the skin of the structure, stand out with their bright colors; blue for air, green for fluids, yellow for electrical conduit and red for circulations. Transparency of the main facade to the west allows observation of the center from the Piazza; a vast space that the architects considered a place of continuity between the exterior and the interior; the city and the institution.



121. Facade of Popidou Centre



122. Color-coded Pipes



123. Interior Gallery

Neues Museum Berlin, Germany, 2009, David Chipperfield

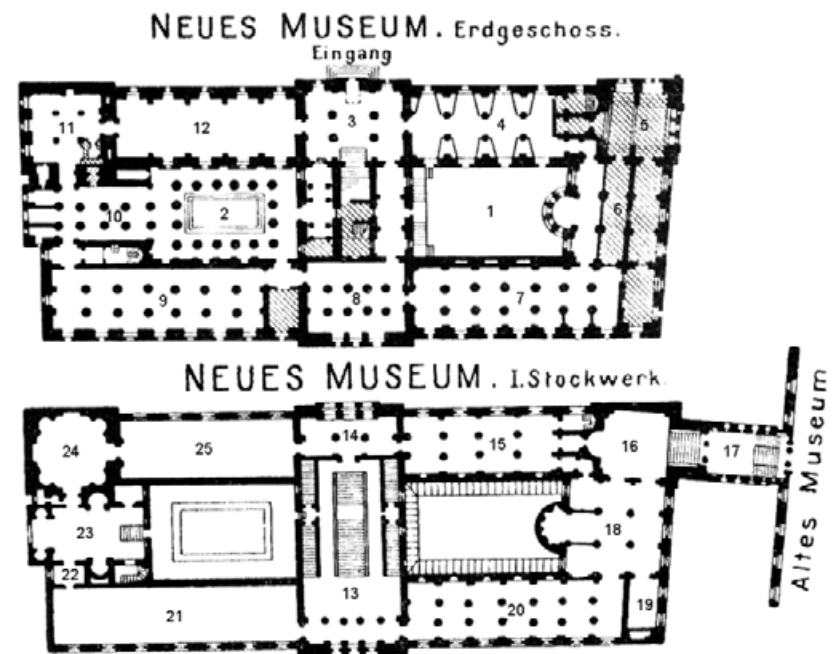
Originally built between 1843 and 1855 by Friedrich August Stüler, a student of Karl Friedrich Schinkel, the museum was closed in 1939 at the beginning of World War II. Due to heavy damage, English architect David Chipperfield was hired to design the renovation. The museum officially reopened in October 2009 and received a 2010 RIBA European Award for the design.

Both as a part of the Museum Island complex and as an individual building, the museum testifies to the neoclassical architecture of museums in the 19th century. Since the classical and ornate interiors of the Glyptothek and of the Alte Pinakothek in Munich were destroyed in World War II, the partly destroyed interior of the Neues Museum ranks among the last remaining examples of interior museum layout from this period in Germany. Chipperfield respected this history in his plans for the renovation, preserving much of the original structure and wall surfaces.

The Chancellor of Germany described the museum as “one of the most important museum buildings in European cultural history”. However, it has been a subject of debates by those who preferred a more traditional reconstruction.



124. Interior Gallery Space



125. Neues Museum Floor Plans



126. Main Staircase after Renovation



127. Damages Original Staircase



128. Bomb Blast Damaged the Museum

Tate Modern Gallery
Bankside, London, 2000, Herzog and De Meuron

The Bankside Power Station was built by Sir Giles Gilbert Scott in 1947. After an international design competition, the space was reclaimed as the Tate Modern Gallery by Herzog and De Meuron.

Positioned on three levels and running the full length of the building; the power station consisted of a huge turbine hall, thirty-five metres high and 152 metres long, with a boiler house parallel to it. The turbine hall became a dramatic entrance area with ramped access as well as a display space for very large sculptural projects, and the boiler house became the galleries. The Tate collection of modern art is displayed on two of the gallery floors and the third is used for temporary exhibitions. Above the original roofline of the power station the architects added a two-story glass penthouse known as the lightbeam. The glass panels maintain the verticality of the original building's windows. The top level of this houses a café-restaurant with stunning views of the river and the City, and the lower level is a members room with terraces on both sides of the building. The 99 meter high chimney remains to maintain the historical integrity and relation to the skyline, and was capped by a coloured light feature designed by the artist Michael Craig-Martin, known as the Swiss Light. The north/south hall on the ground floor also became a public concourse beginning with a pedestrian bridge designed by Norman Foster.



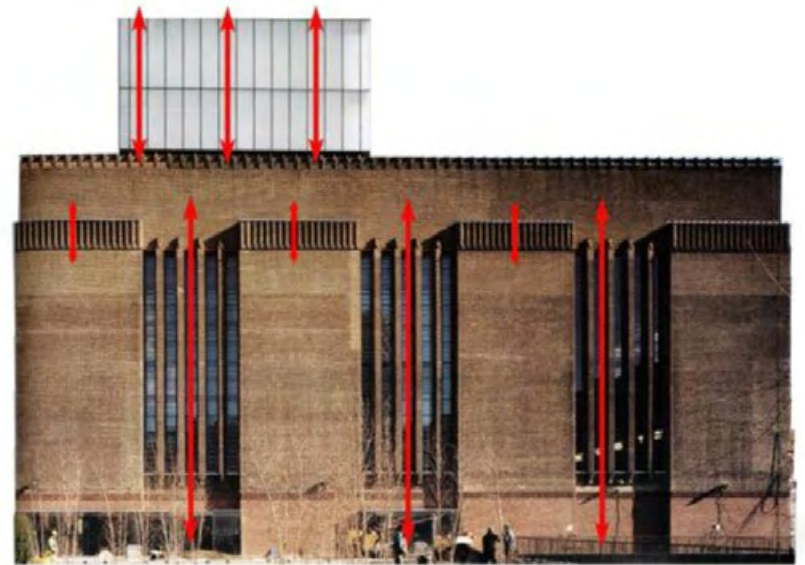
129. View from the Thames River



130. Turbine Hall



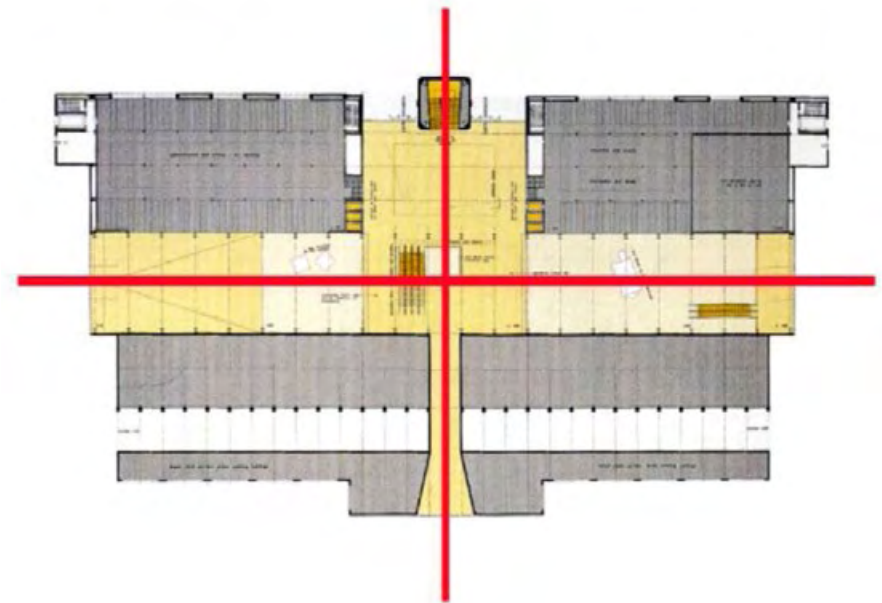
131. Londoners relaxing outside the Gallery



133. Facade Gridlines



132. Bridge by Norman Foster



134. Floor Plan and Axes

ICA

Boston, MA, 2002, Diller Scofidio + Renfro

In 1999, the city of Boston selected the ICA as the recipient of an available site on the waterfront for construction of a new museum that would be the cultural cornerstone of the Fan Pier development.

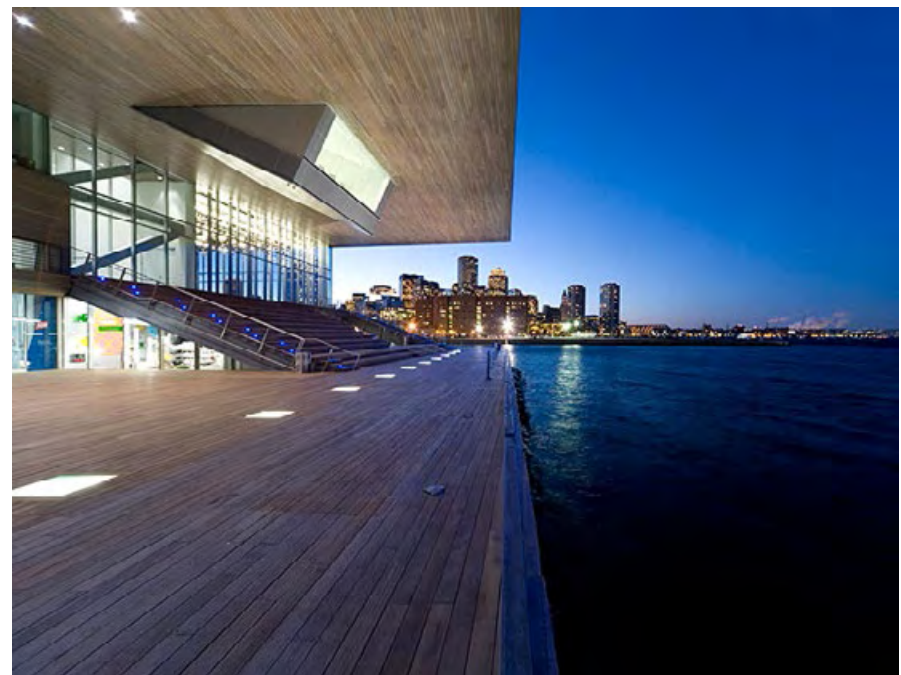
“Award-winning architects Diller Scofidio + Renfro designed the ICA, conceiving the building both ‘from the sky down,’ as a contemplative space for experiencing contemporary art, and ‘from the ground up,’ providing dynamic areas for public enjoyment. The design weaves together interior and exterior space, producing shifting perspectives of the waterfront throughout the museum’s galleries and public spaces.”

The design of the new ICA was displayed in NEXT: The Future of Architecture, at the 8th Annual International Architecture Exhibition at the Venice Biennale, and a retrospective of the architects’ work was displayed at the Whitney Museum of American Art in 2003. It became the first new art museum built in Boston in nearly one hundred years.

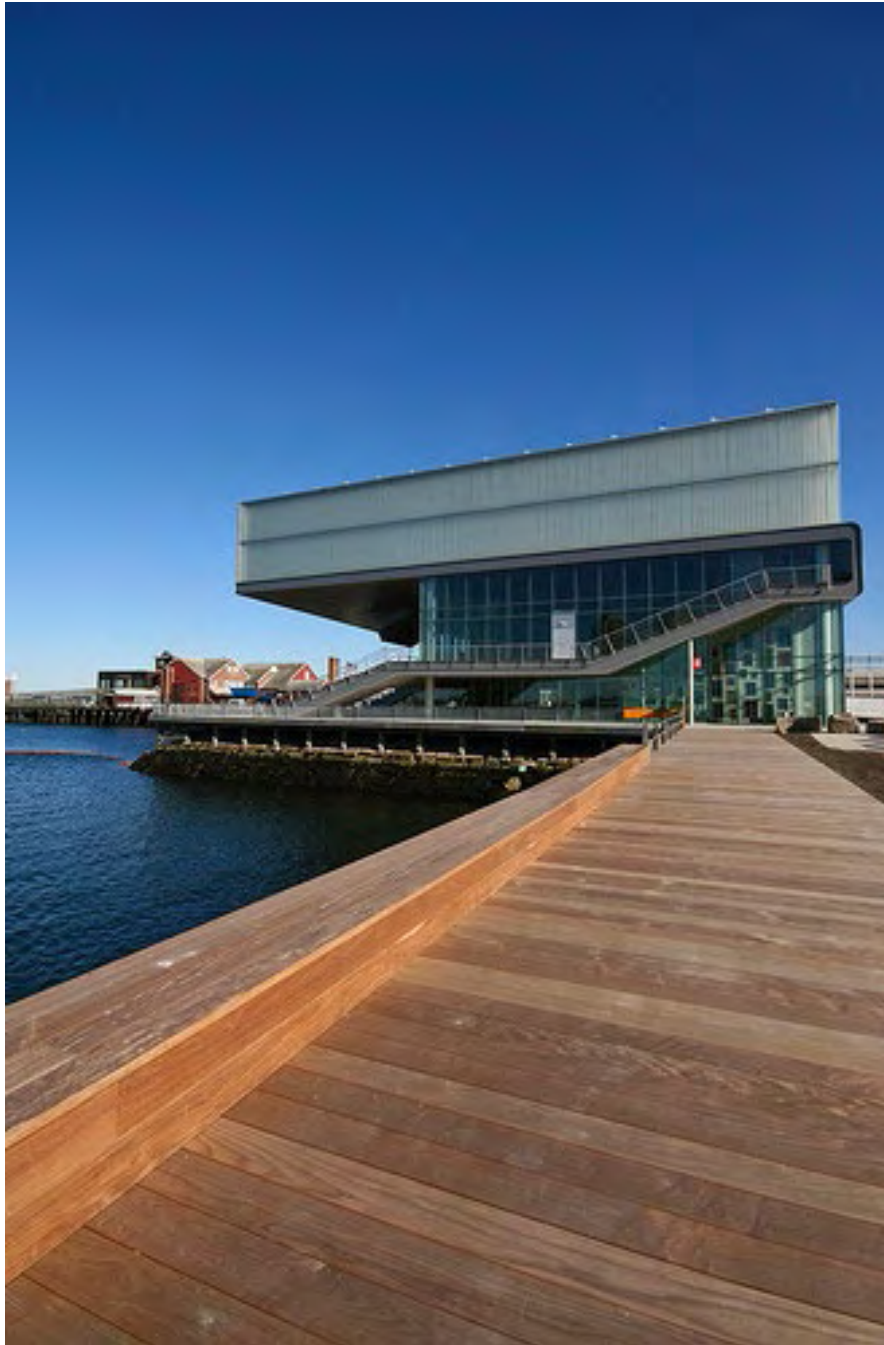
“The ICA’s visionary building captures the stimulation of contemporary culture and the excitement of a revitalized waterfront area.”



135. ICA Building



136. Under the Cantilever



137. Structure Visible on the Facade



138. Night View from River



139. Enormous “Floating” Upper Level

Columbia Northwest Corner Building NYC, New York, 2011, Rafael Moneo

The new interdisciplinary science building at Columbia University designed by the Spanish architect José Rafael Moneo, draws on a range of precedents from the austere Modernism of Adolf Loos to the original McKim, Mead & White master plan for Columbia's Morningside Heights campus. Moneo's design is carefully grounded in the original campus plan. The building's base, made of the same rose-colored granite as the adjacent buildings, is conceived as an extension of the existing street wall. Its 14-story height echoes the brick and limestone gothic tower of the Union Theological Seminary which stands across the street. It may seem a direct contrast to the significantly lower brick buildings, however the McKim, Mead and White plan originally called for a tower in its place.

The tension between new and old brings the building to life. The upper floors are clad in aluminum siding following a steel grid filled in with an irregular pattern of diagonal steel braces and aluminum louvers. The braces reflect the uneven loads and stresses on the building which is supported on an enormous truss.

The transition from one level to the other is minimal to bring together two distinct worlds — the campus and the public — to create places of intense social communion. The upper floors also encourage openness and exchange; the large spaces are designed to be reconfigured to fit the needs of various researchers.



140. Close-up Aluminum Cladding



141. Interior Gallery Space



142. Facade Comparison - New vs. Old

Children's Museum of Indianapolis

The Children's Museum of Indianapolis is built upon the initial stewardship and inspiration of Mary Stewart Carey in 1925. The museum's first homes were a carriage house on the Old Northside of Indianapolis and the Garfield Park Shelter House. In 1946 it moved into its permanent home at 30th and Meridan Streets.

The museum is 472,900 square feet (43,933.85 m²) with five floors of exhibit halls and receives more than one million visitors annually. It's generous lobby and atrium is a vast, brightly lit space that provides views to activities on the upper floors. Because the museum's targeted audience is children, most exhibits are designed to be interactive, which allow children to actively participate.



143. Atrium Space



144. Atrium



145. Ground Floor Atrium



146. Facade View

Habitat for Humanity, U.S.A.

Habitat is a non-profit organization that builds homes for individuals and families who would otherwise be homeless. The unique aspect of the organization is that the new homeowners are fully involved in the construction process and are required to work along side Habitat volunteers to build their home. The driving force behind Habitat for Humanity is to involve the recipient homeowners in the construction process to foster a feeling of pride and accomplishment. The care and maintenance of the home in the future will increase ten-fold because of the pride of ownership that the homeowner gains during this process; the hope is that this sense of pride and hardwork will carry over into other aspects of their lives.

Habitat for Humanity is also taking steps to partner with other groups to work more sustainably. In 2008 Habitat announced their first LEED Platinum house; working in conjunction with students and professors at Drury University's Hammons School of Architecture in Springfield, Missouri to make the project a reality. Habitat for Humanity has made it a goal to incorporate similar affordable green homes on a national scale.



147. The Project Team



148. Volunteers



149. Drury House



152. Volunteers Putting up Walls



150. Volunteers Putting up a Wall



153. Family Receiving a Habitat House

Carpenters Center, Dorchester MA

The New England Regional Council of Carpenters recently opened their new Carpenters Center in Dorchester, Massachusetts. The Center is the new NERCC headquarters as well as the new Boston Carpenters Training Center. The 70,000 square foot facility combines the old training center and various offices into one cohesive unit. Designed by ADD, Inc. and constructed by Suffolk Construction, the bold use of materials represent the ideals of the NERCC; a traditional organization that takes pride in also being modern and open to change.

The Carpenters Center is also an example of cross-programming and integration; it is officially the NERCC headquarters and the Boston Training Center, combining several other groups as well, including First Trade Union Bank, Helmet to Hard Hats, MA Carpenters Benefit Fund, United Brotherhood of Carpenters and Joiners of America, and Wentworth Institute of Technology.



154. Carpenters Center



155. Main Staircase



156. Facade Projection Screen



157. View from the Highway

The Steel Yard, Providence RI

“The Steel Yard acts as a catalyst in the creative revitalization of the industrial valley district of Providence, Rhode Island. In fostering the industrial arts and incubating small business, the Corporation seeks to cultivate an environment of experimentation and a community strengthened by creative networks.”

Founded in 2001 by Nick Bauta and Clay Rockefeller the Steel Yard is a non-profit organization built around the idea that by reconnecting people to how things are made and teaching them about process, endless possibilities open up. It is meant to be a place that would serve as a sponsor and catalyst for innovative approaches to urban revitalization, arts promotion, workforce development, and community growth. Both the interior and exterior spaces of the former Providence Steel and Iron (PSI) complex have been redeveloped to be used for the fabrication of products, the creation of works of art, open houses, workshops, demonstrations, exhibits, and performances.

“As the Steel Yard serves as a point of exchange for individuals from a variety of social, professional, and economic sectors. The student learning to cast bronze, the auto specialist restoring an antique car, the artist hanging an installation, and the tradesman building slate roofs have worked side by side, encouraging cross-disciplinary collaboration, mutual learning, and the creation of links between individual endeavors and their applications in wider society.”





159. Camp Metalhead 2007



160. Camp Metalhead 2007



161. Pottery Studio

Visitor Information Center
Criewen Germany, Anderhalten Architekten

The Criewen VIC is an adaptive re-use project that reclaims an old barn for a new program. Erected in 1820 as a single-story brick structure, the barn was raised in height for use as a tobacco drying store. Eventually it fell into disrepair and was unused: the walls were damp, and the entire internal timber construction and roof had to be removed.

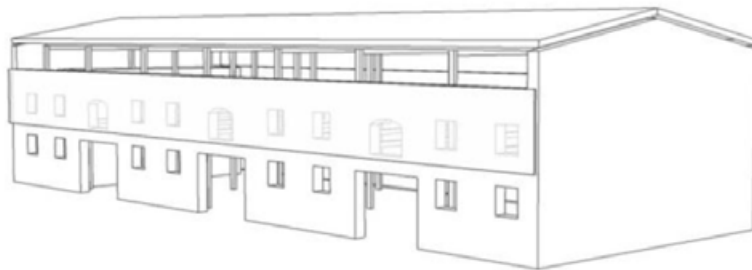
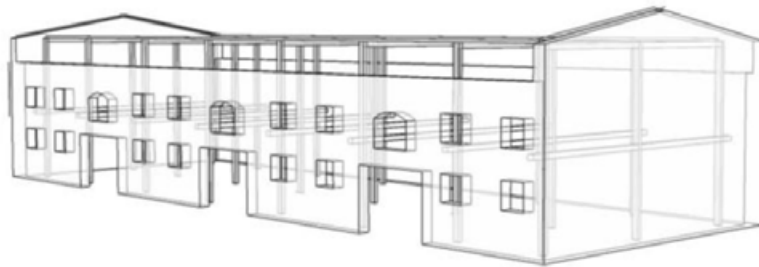
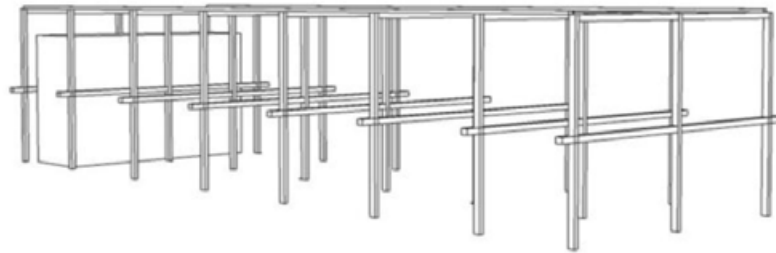
Anderhalten Architekten decided to maintain the integrity of the original building, so they inserted the new steel structure within the existing fabric, leaving a space between the two layers all around the building. This facilitated permanent ventilation and control of the walls. The exhibition area is raised on a platform above the level of the former barn floor. There are three lobbies that penetrate the outer facades and bridge the gap between the old and new. The striking 45-metre-long facade screen, which lends the barn its identity for visitors, provides protection against driving rain and acts as a light filter.



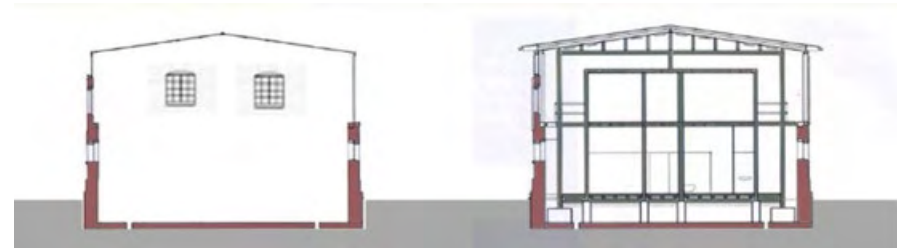
162. Criewen Visitor Information Center



163. Scale of VIC to 169 Bartholomew Ave



164. Structure of New vs. Old



165. Structure of New vs. Old



166. Interior; New Steel vs. Old Brick

Old West Photography Project

HEART OF THE OLD WEST is a non-profit photography project spear-headed by professional photographer, Christia Maria Jermiin Dieserud of Denmark. Working with children of the Pine Ridge Indian Reservation, in South Dakota, Dieserud has worked to increase pride among the residents of the Reservation through the use of photography.

“I believe that all kids should be given opportunities of creative expression as a birthright . . . I also believe their creative work will help them discover pride in their rich culture and heritage and build confidence in who they are.” (*Christia Maria Jermiin Dieserud, Heart of the Old West Photography Project.*)



167. Children's Photographs



168. Children's Photographs



169. Children's Photographs



170. Children's Photographs

G. Thesis Proposal

Thesis Research Seminar
Original Project Proposal
May 2011

Architectural Activism: Community Reclamation
Adaptive Reuse in Hartford CT

“Reclamation of a city involves reusing abandoned buildings in construction with new construction and intervention. These negative spaces of disuse generated by a changing infrastructure are often overlooked or destroyed. Reclaiming historically significant buildings as community generating spaces can instill pride and unity back into an area.

Parkville is the most historic industrial neighborhood in Hartford. The neighborhood grew up as a mill town, complete with worker housing, churches and stores. Today Parkville proper runs along New Park Avenue; which includes a library, church, school and senior center. However the pride of the Parkville residents was the adjacent Bartholomew Avenue Industrial Corridor.

Disconnect: Extension of the railroad line in the early 1800s divided a portion of Parkville from itself creating the industrial corridor. The neighborhood is now bordered by I-84 to the south and east, effectively cutting it off from the rest of Hartford. Lack of connectivity is more than just a physical problem. The demise of the industrial corridor combined with a lack of education and career opportunities severely separates them from the middle class workforce commuting into the city everyday. In addition language barriers due to the large immigrant population prevent residents from uniting as a community.

Reconnect: Many residents of Parkville worked together in the former Whitney-Chain Manufacturing building. the pride that the factory once brought to the neighborhood has been diminished. Reclaiming the factory and surrounding land for their benefit can rejuvenate the strength and unity this former mill town once had. Utilizing the building for a large market space, career center and youth center will provide the community with much needed services. A surrounding community park and recreation area will provide space for building connections and improve connectivity.

‘Cities arise out of man’s social needs. . . remote forces and influences intermingle with the local. . . through the concentration of means of intercourse in the market, alternative ways of life arise.’ Lewis Mumford”

ARCHITECTURAL ACTIVISM: COMMUNITY RECLAMATION

adaptive re-use in hartford connecticut

Laura Maynard Thesis Proposal

Reclamation of a city involves **reusing** abandoned buildings in conjunction with new construction and interventions. These negative spaces of disuse generated by a changing infrastructure are often overlooked or destroyed. Reclaiming historically significant buildings as **community generating** spaces can instill pride and unity back into an area.



SITE

Parkville is the most historic industrial neighborhood in Hartford. The neighborhood grew up as a mill town complete with worker housing, churches and stores. Today Parkville proper runs along New Park Avenue; including a library, church, school and senior center. However, the pride of the Parkville residents was the adjacent Bartholomew Avenue Industrial Corridor.

DISCONNECT

Extension of the railroad line in the early 1800s divided a portion of Parkville from itself creating the industrial corridor. The neighborhood is now bordered by I-84 to the south and east, effectively cutting it off from the rest of Hartford. Lack of Connectivity is more than just a physical problem. The demise of the industrial corridor combined with a lack of education and career opportunities severely separate them from the middle class workforce commuting into the city everyday. In addition, language barriers due to the large immigrant population prevent residents from uniting as a community.

RECONNECT

Many residents of Parkville worked together in the former Whitney-Cham Manufacturing building. The pride that the factory once brought to the neighborhood has been diminished. Reclaiming the factory and surrounding land for their benefit can rejuvenate the strength and unity this historic former mill town once had. Utilizing the building for a large market space, career center and youth center will provide the community with much needed services. A surrounding community park and recreation area will provide space for building connections and improve connectivity.

"Cities arise out of man's social needs... remote forces and influences intermingle with the local... through the concentration of means of intercourse in the market, alternative ways of life arise." Lewis Mumford

H. Bibliography

Arvanitakis, Diane. "Activism through Architecture and Urban Design." SHiFT. Print.

The article defines activism through architecture as the "creation of integrated and sustainable communities through the design of quality and humane living environments." It explains that activism starts within the context of the nation, the city, the neighborhood, the street and then the home.

Castro, Soledad. "Alejandro Aravena." Invitacion. Print.

The architect Alejandro Aravena is a part of the for profit company ELEMENTAL, which operates in contexts with scarce resources. "Its field of action is the city: the development of housing, public space, infrastructure and transportation projects that can perform as an effective and efficient upgrade in the quality of life of the poor."

City of Hartford Assessors Office. Web. 10 May 2011. <<http://www.hartford.gov/>>.

The assessors office provided information about 169 Bartholomew Avenue, including its current and past owners, uses and current value.

Connecticut Department of Labor. Web. 12 May 2011. <<http://www.ctdol.state.ct.us/>>.

This site was used for statistics about Hartford and the Parkville community; including

Del Real, Patricio. "'Ye Shall Receive'" Journal of Architectural Education (2009): 123-26. Print.

This article discusses the effects, for good or for worse, that Rural Studio, a model social laboratory has had on its community. A response to static and elitist education, Rural studio steps "outside the magic circle of the academy and into the community. . . a collaborative practice that integrates knowledge and service.

"Department of Development Services - Planning Division." Web. 12 Apr. 2011. <<http://planning.hartford.gov/webfiles/pln-geo-information.htm>>.

This website is a resource for maps of neighborhood revitalization zones, historic districts, boarded buildings, census tracts, and zoning.

"Further Review Urged for Design of Park and Main." Hartford Preservation Alliance. Web. Apr 2011 < http://www.hartfordpreservation.org/images/HPANewsletter_2005Winter.pdf>

This article calls for a second look at redevelopment project proposed by the city of Hartford. The project is very similar to the one proposed at the site of this thesis, and the article questions its compatibility with the adjacent historic Frog Hollow district.

"GKDMETALFABRICS." GKDMETALFABRICS | Home. N.p., n.d. Web. 03 Aug. 2012. <<http://www.gkdmetalfabrics.com/>>.

GKD manufactures metal fabrics which can be used in facade design.

Hammerson, Geoffrey A. Connecticut Wildlife: Biodiversity, Natural History, and Conservation. Hanover: University of New England, 2004. Print.

This book explains the history of Connecticut's ecology and was critical in understanding the climate of the area and determining how to regenerate the park area with new wildlife.

Hartford Department of Development. Parkville Municipal Development Plan. Rep. Hartford, 2009. Print.

This booklet put out by the Parkville Development Committee discusses the needs of the neighborhood and areas where they are lacking in resources. It contradicts development plans proposed by the city of Hartford.

“Historical Maps of Hartford.” Maps of Hartford. N.p., n.d. Web. July-Aug. 2012. <www.kenyonstreethartford.org/map_historical.html>.
This site is a collection of maps from various books and universities charting the foundation and growth of the city of Hartford.

“History of Whitney Chain Company.” Web. Apr 2011 <[“ICA | The Institute of Contemporary Art/Boston | Welcome.” ICA | The Institute of Contemporary Art/Boston | Welcome. N.p., n.d. Web. 03 Aug. 2012. <<http://www.icaboston.org/>>.
As it’s name suggests, the newest museum in Boston is a very contemporary building referenced for it’s advanced structure.](http://www.google.com/#q=history+of+whitney+chain+company&hl=en&sa=X&tbs=tl:1,tl:1900,tl:1919&prmd=ivnsb&ei=NyGWTcnYC4eQ0QGE6NDuCW&ved=0CCwQyQEoAw&fp=1&bav=on.2,or.r_gc.r_pw.&cad=b>”.
Available on google is a timeline of articles written about the Whitney Chain Company which provided the background information on the site of this thesis</p></div><div data-bbox=)

Love, Willam De Loss. The Colonial History of Hartford Gathered from the Original Records. Hartford, CT: Author, 1914. Print.
This book provides historical information on the growth of Hartford as a supplement, and sometimes explanation, of the historical maps used in this thesis.

“Native Trees and Shrubs for the Landscape.” Connecticut Botanical Society. Web. 12 May 2011. <<http://www.ct-botanical-society.org/garden/garden2.html>>.
The Connecticut Botanical Society is a resource for all the native wildlife in Connecticut. This website was used to select the different trees, shrubs and flowers to be used in this thesis.

“Neighborhood Merchants Feed off Popularity of Spaghetti Warehouse”. Courant.com. Web. Aug 2011. <http://articles.courant.com/1993-08-08/business/0000006301_1_retail-outlet-neighborhood-cramer>.
The Spaghetti Warehouse was a restaurant chain that went into economically declining neighborhoods and opened restaurant style restaurants in an attempt to revitalize the neighborhood. This article discussed its initial success in the Parkville neighborhood.

Marschall, Sabine. “Architecture as Empowerment.” Transformation [South Africa] 1998. Print.
This paper focuses on “architecture as a vehicle of empowerment through community participation.” A participatory approach to architectural design achieves a sense of ownership and pride and is the only way towards a true architecture of self-expression. This shifts attention from the building as an end result to a process of empowerment which “becomes the basis for sustainable development.”

Planning and Zoning Commission. Zoning Regulations. Rep. Hartford, 2011. Print.
This document provided all the zoning regulations for Hartford, including definitions of the various zoning groups as well as requirements and descriptions for each. It also provided streetscape, public transportation and parking requirements.

Popescu, Carmen. “Space, Time: Identity.” National Identities. 3rd ed. Vol. 8. 2006. 189-206. Print.
This paper explains that “architecture is intimately related to identity. . . Identity represents a key concept of the modern era, and its appraisal results from changing perception of space and time.”

H. Bibliography

Ouroussoff, Nicolai. "ARCHITECTURE REVIEW; A Building Forms a Bridge Between a University's Past and Future." The New York Times. The New York Times, 09 Feb. 2011. Web. 03 Aug. 2012. <<http://www.nytimes.com/2011/02/09/arts/design/09moneo>>.

Ouroussoff's article discusses Moneo's new Northwest Corner Building for Columbia University and its relationship to past and present, public and private.

Spaghetti Warehouse. Company History. Web. Aug 2011. <<http://www.fundinguniverse.com/company-histories/Spaghetti-Warehouse-Inc-Company-History.html>>.

The Spaghetti Warehouse was a restaurant chain that went into economically declining neighborhoods and opened restaurant style restaurants in an attempt to revitalize the neighborhood.

"The Connecticut Floods of 1955." Connecticut State Library Home Page. Web. 13 Apr. 2011. <<http://www.cslib.org/flood1955.htm>>.

The Connecticut State Library has extensive records of events in Connecticut's history. Information about the floods was critical to charting the climate history of the area.

"The Steel Yard." The Steel Yard. N.p., n.d. Web. 03 Aug. 2012. <<http://www.thesteelyard.com/>>.

"The Steel Yard acts as a catalyst in the creative revitalization of the industrial valley district of Providence, Rhode Island. In fostering the industrial arts and incubating small business, the Corporation seeks to cultivate an environment of experimentation and a community strengthened by creative networks."

TPA Design Group. Bartholomew Industrial Corridor. Rep. 2009. Print.

TPA Design Group designed the office park proposals commissioned by the city of Hartford for various revitalization zones.

"Uconn MAGIC Maps." Uconn MAGIC Maps. University of Connecticut, n.d. Web. 1 Aug. 2012. <onheline.tricoll.edu/maps>.

Uconn has several interactive maps comparing present satellite images to historical ones in addition to mapping economical and social changes over time.

Image References

www.google.com/images
www.flickr.com/photos
en.wikipedia.org
www.flickrriver.com
www.arts.mit.edu
www.archrecord.construction.com
www.nytimes.com
www.places.designobserver.com
www.e-architect.co.uk
www.designboom.com
www.culture360.com

